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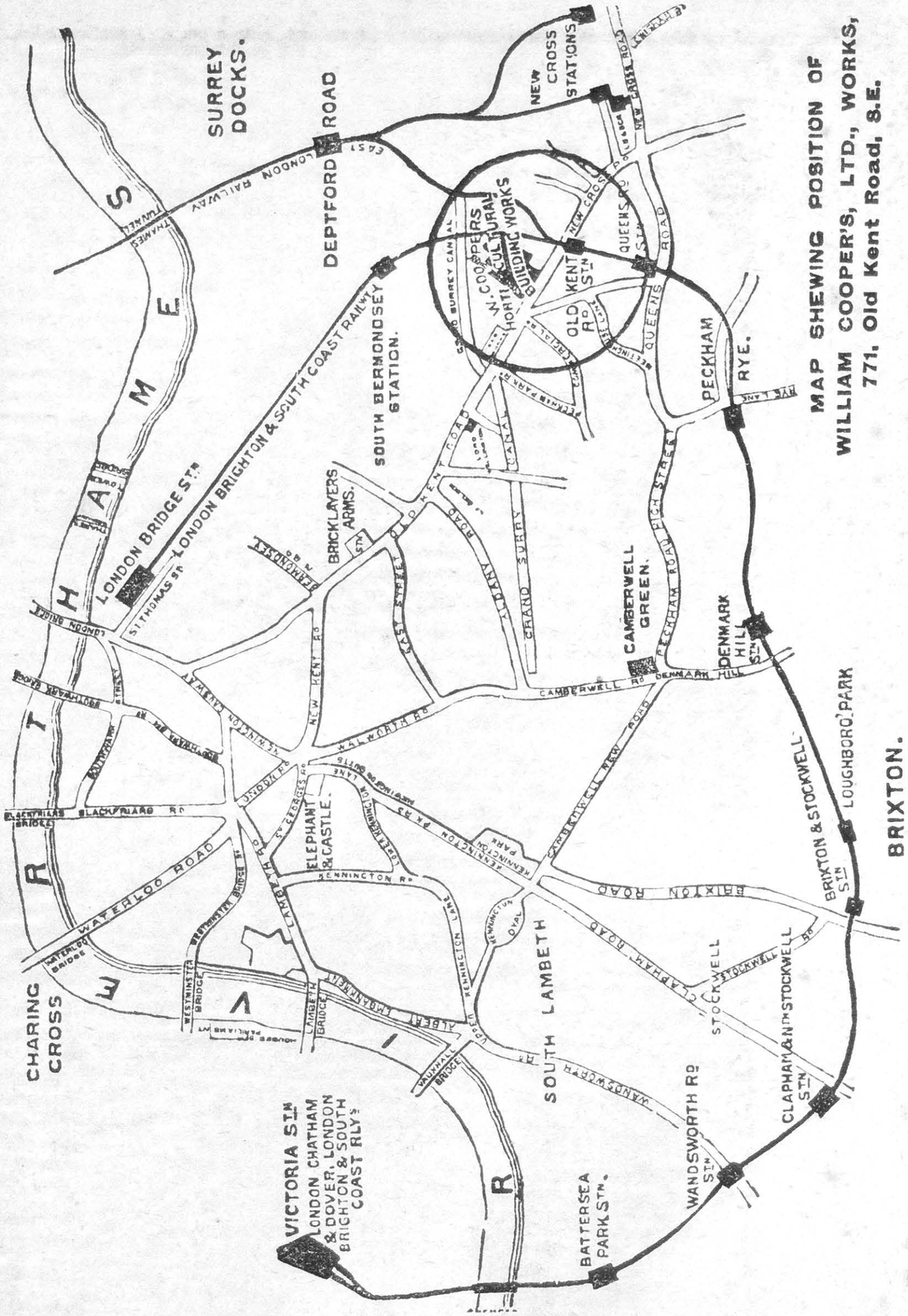
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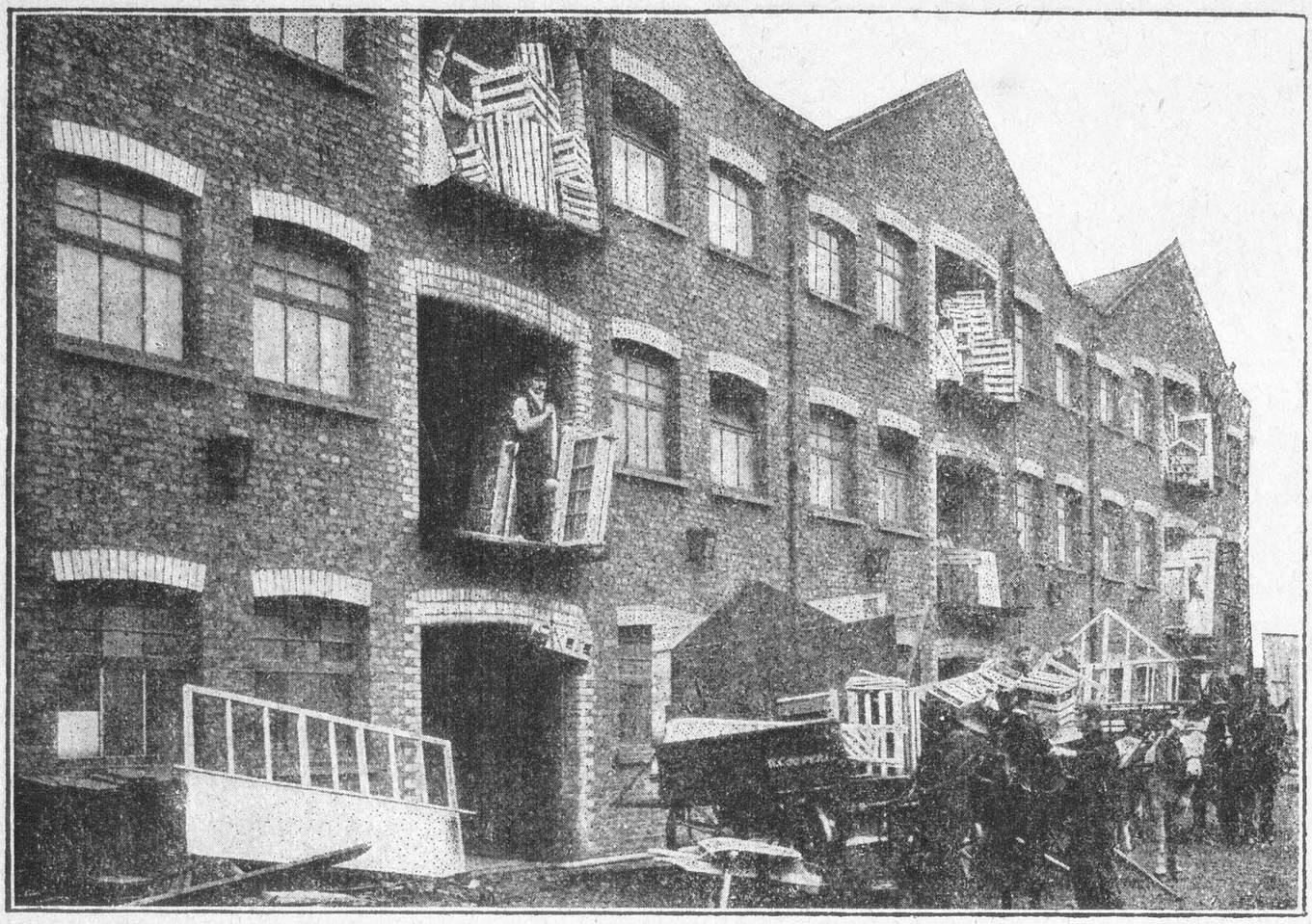
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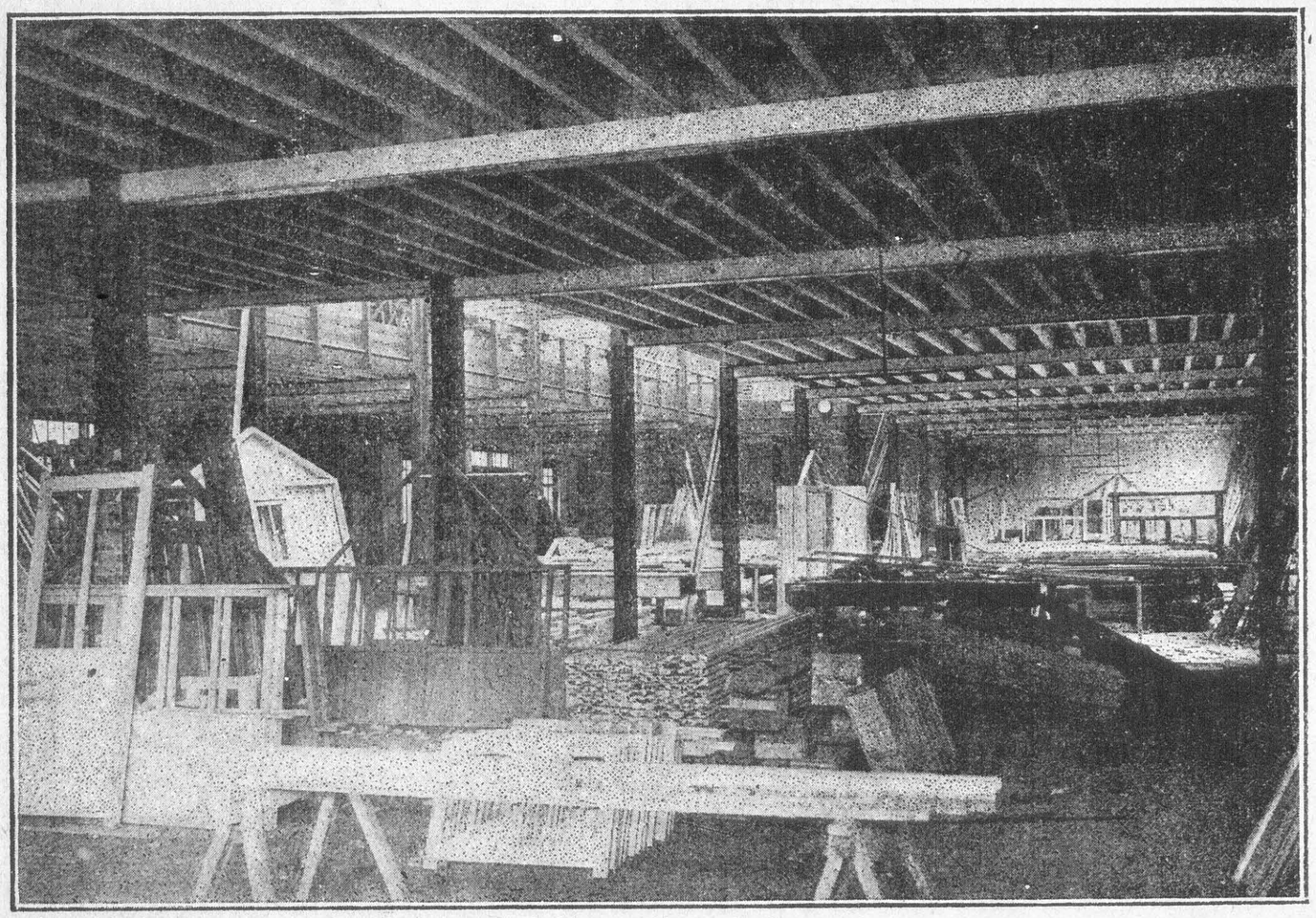
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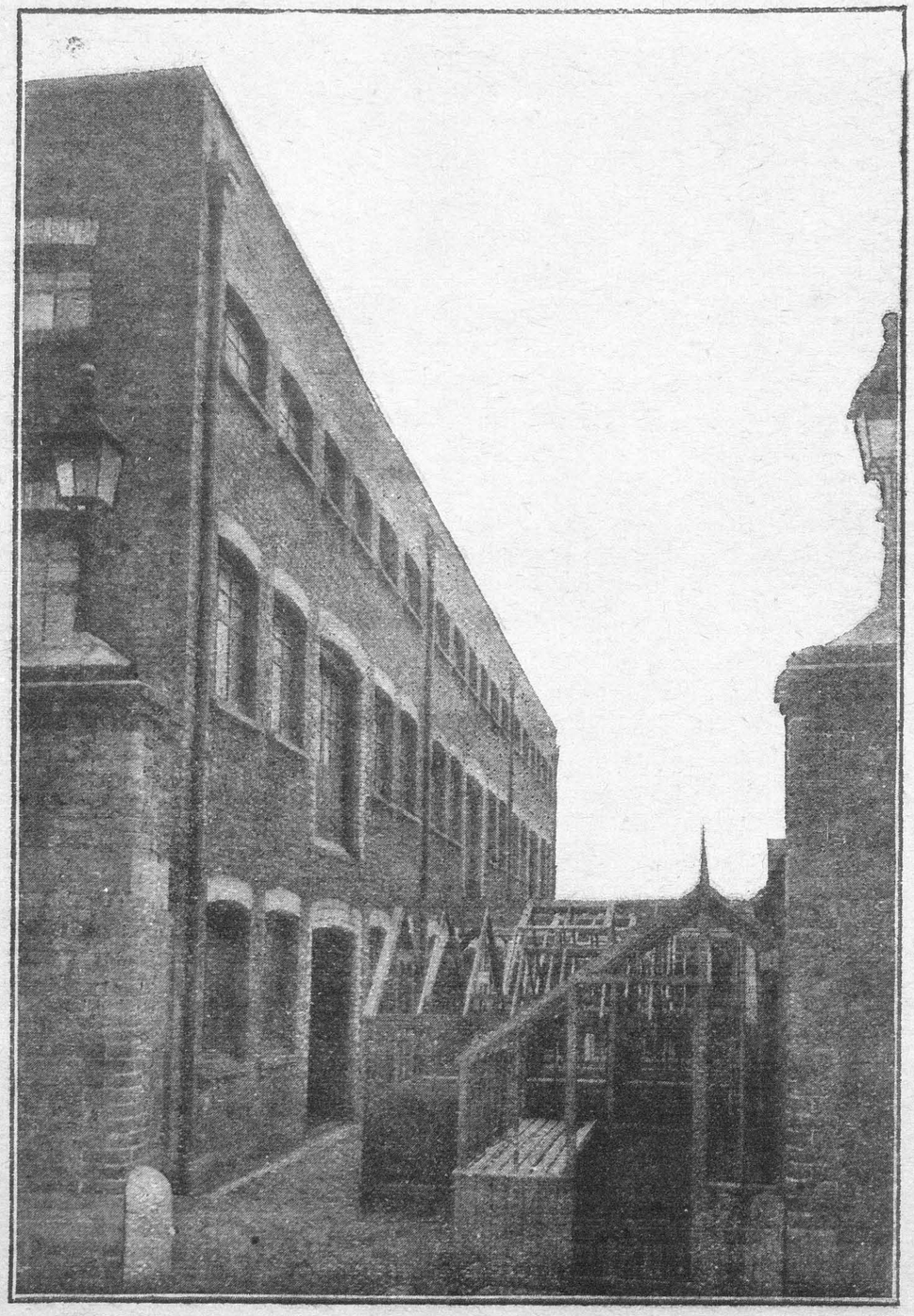
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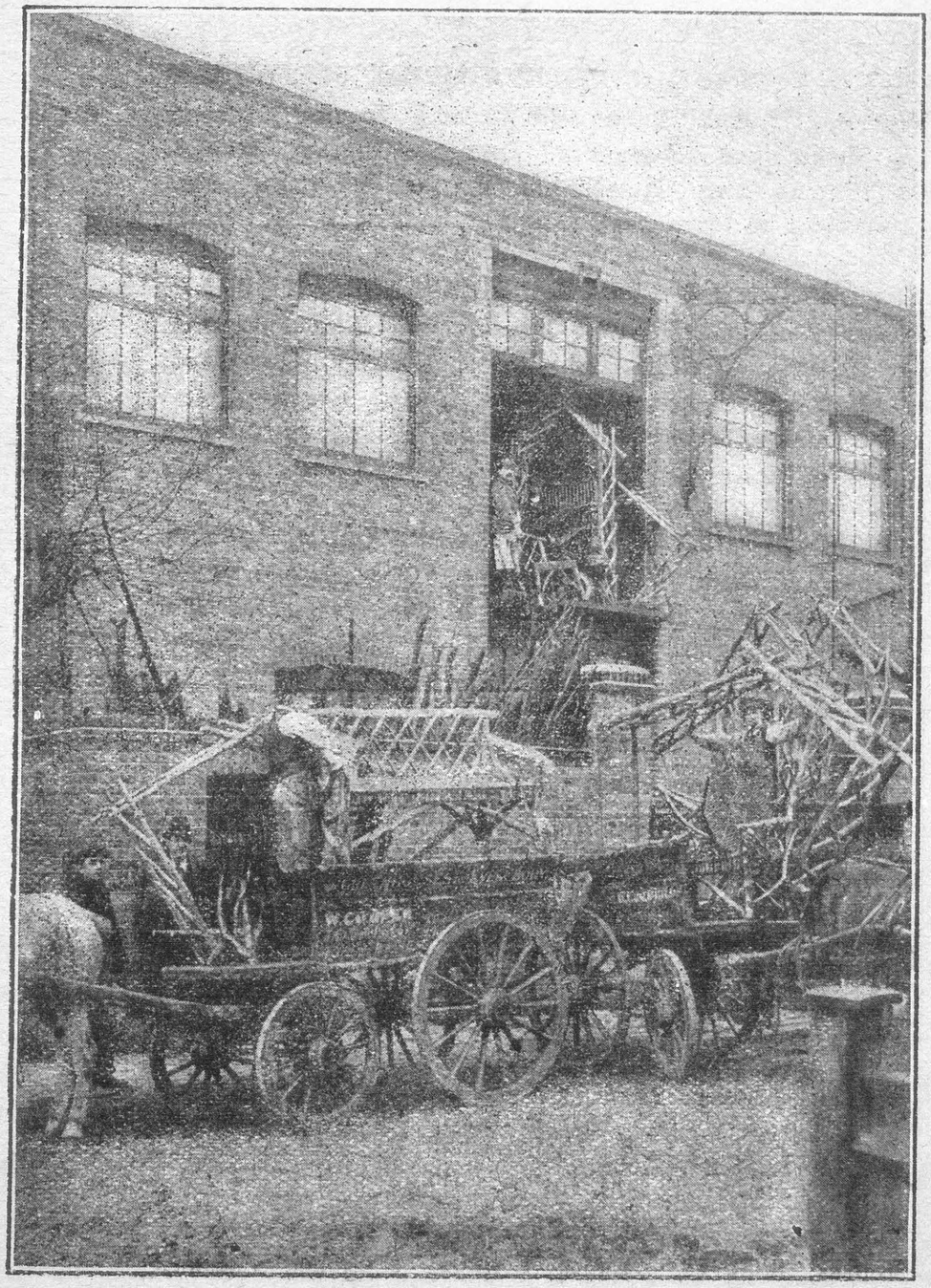
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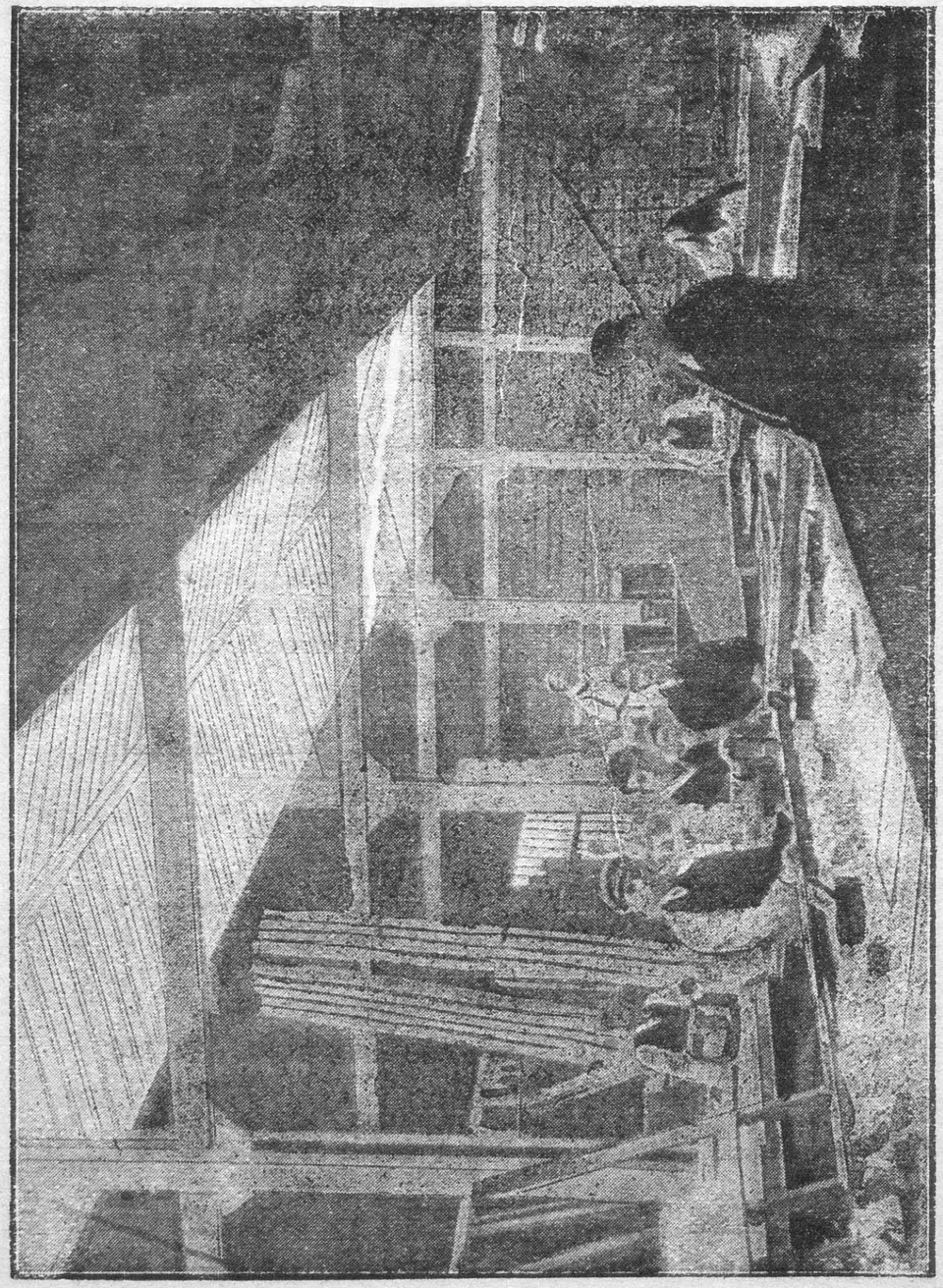
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A CORNER IN OUR AMATEUR GREENHOUSE DEPARTMENT.

WILLIAM COOPER, Limited,

761, Old Kent Road, LONDON, S.E.

SECTION I.

The GARDENERS' GUIDE

AND

Illustrated Catalogue

OF

CONSERVATORIES, GREENHOUSES, VINERIES, ORCHID HOUSES, PLANT AND FORCING HOUSES,

MELON and CUCUMBER FRAMES,

Garden Frames, Forcing Pits,
Handlights, French Gardening,

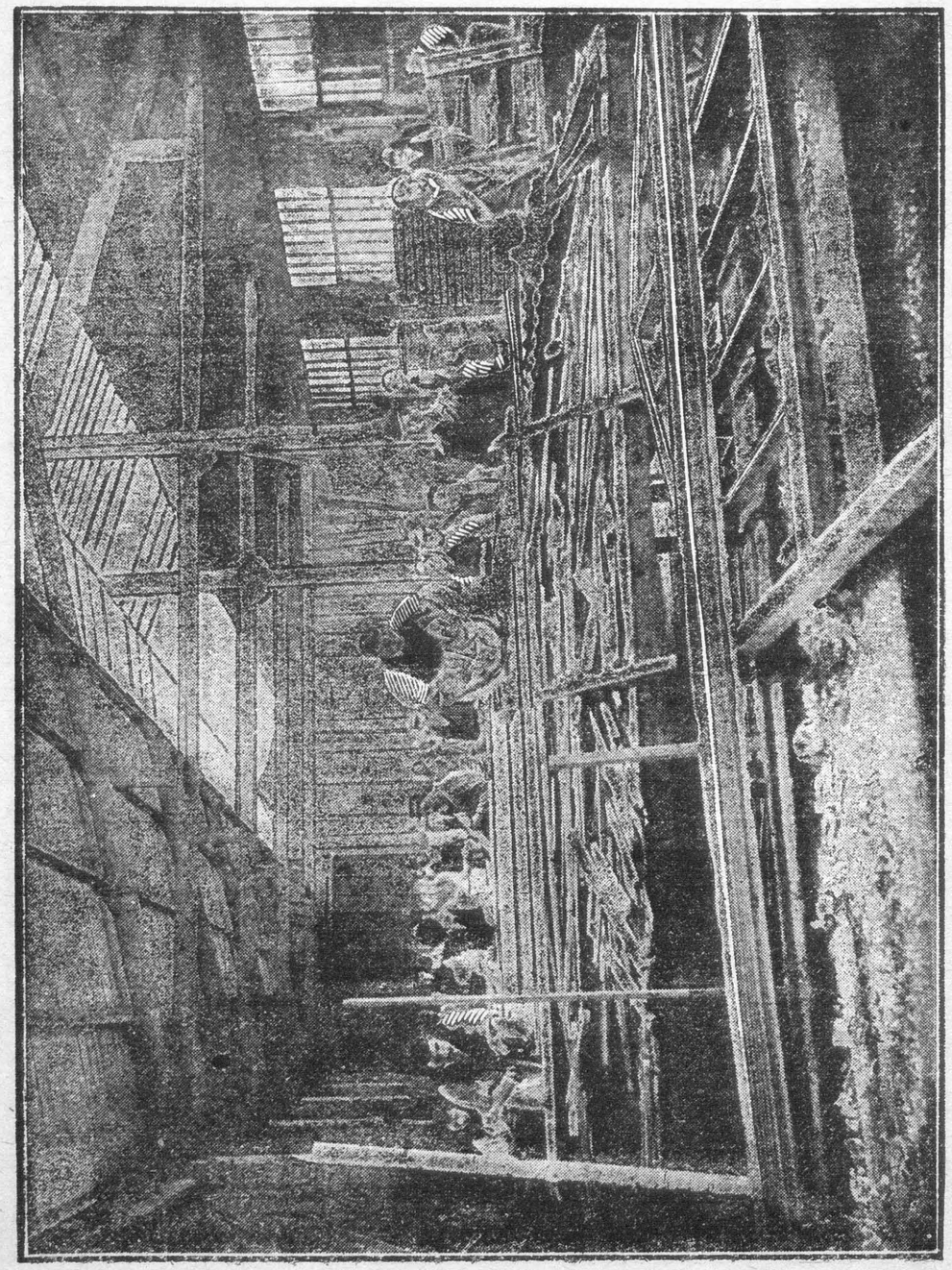
&c., &c.

EXTENSIONS AND REPAIRS.

We undertake these to any extent, and give Estimates for alterations of, or additions to, existing Houses and Heating Apparatus.

SURVEYS BY APPOINTMENT.

When any special designs are required we shall be pleased to let one of our Representatives wait upon Ladies or Gentlemen at their residences, in any part of the country, to take all necessary particulars, and we will then submit designs and Estimates in accordance with his report.



A CORNER IN ONE OF OUR CARPENTERS' SHOPS.

AMATEUR GARDENING.

Amateurs' gardens, spread throughout the land, more particularly in the suburbs of the Metropolis, as well as all towns, are as variable in form and matter of detail as they are numerous —each, in fact, so far a pleasance of its owner, so far as he can make it, in accordance with its site, size, time at his disposal, or an inevitable outlay permits.

The diversified forms of gardens enforce a demand for the special treatment of each, demanding more or less space for shrubberies, trees, lawns, fruit trees, or vegetables. It is obvious, therefore, that what arrangements conforming with these features may suit one will not be desirable for others, or, if desirable, may be improved upon from the decorative point of view as individual taste suggests, or the innumerable cultivated plants and subjects at command dictate.

Where all gardens and their contents are approximately alike, individual owners need not be so exercised in mind as to their arrangement and furnishing, and it would be an easy matter to give all necessary details succinctly in regard to them; where infinite forms and contents have to be dealt with, it is more difficult to meet all difficulties as they arise. This is, as far as practicable, the aim of the proprietors, with which the writer, with his more than fifty years of strenuous practice, will conform, by treating the subject more simply and in greater detail than would otherwise be necessary.

For practical purposes and ready reference monthly headings are given, under which seasonable details for each department will be found, with lists of desirable subjects to grow.

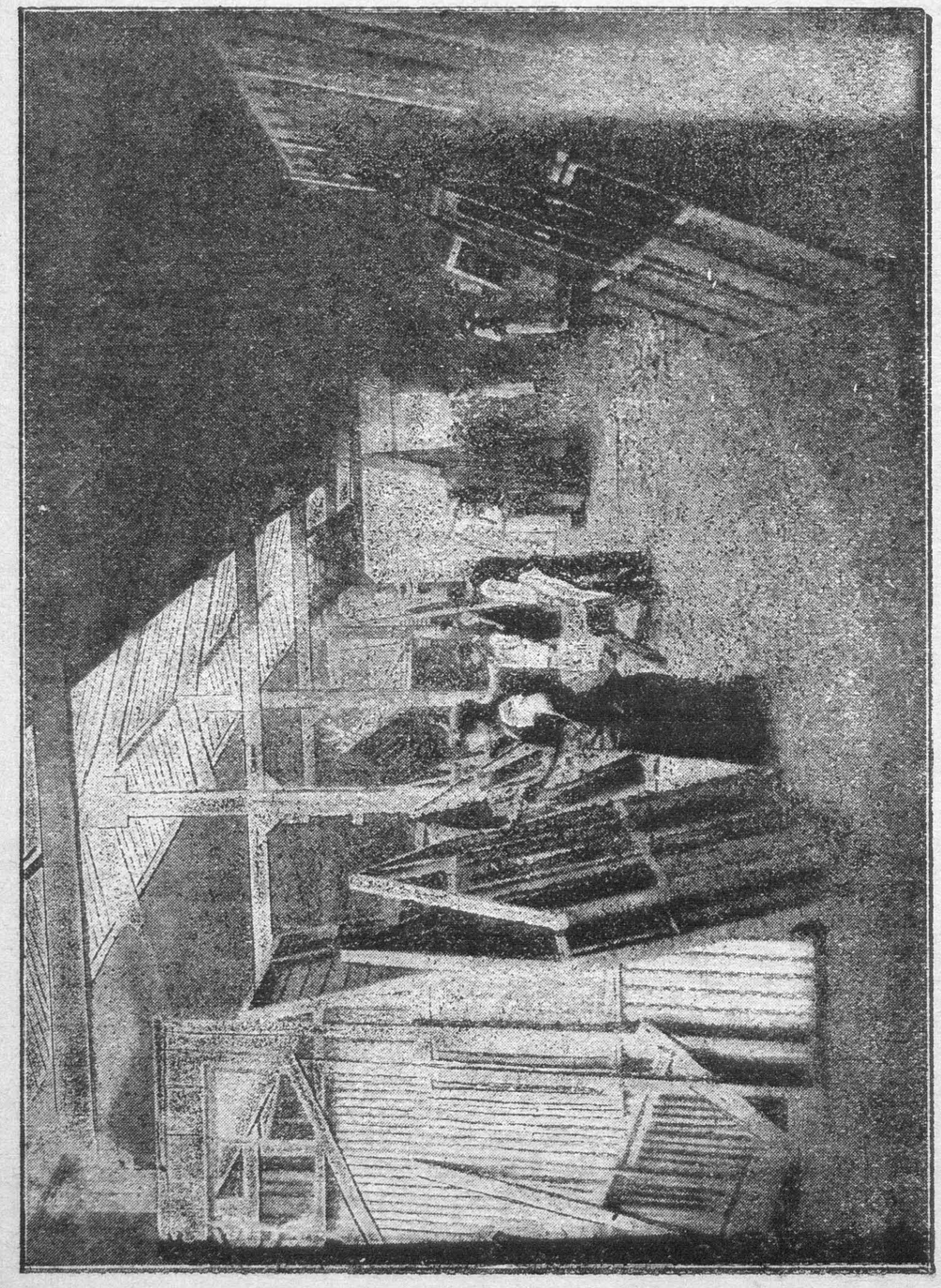
JANUARY.

THE FLOWER OR DECORATIVE DEPARTMENT.

OUTDOOR WORK will be subservient to weather conditions. When favourable delayed ground work, consisting of the alteration of ground surfaces, such as the making of new flower beds or borders, laying turf, making new walks, or renovating existing ones, tree, shrub, and flower-root planting keeping lawn surfaces clean and well rolled, &c., may be pursued.

FLOWER BEDS should not be so large as to unduly minimise the appearance of the lawns or grass swards, they are intended to decorate, and in forms suitable to respective sites. Round or elliptical shapes make better displays when planted than those with acute angles, are more easily furnished and kept in order.

TURF LAYING will not give satisfaction if not well done, but will result in uneven and bare parts, causing endless trouble to put it in order. The ground must be dug up,



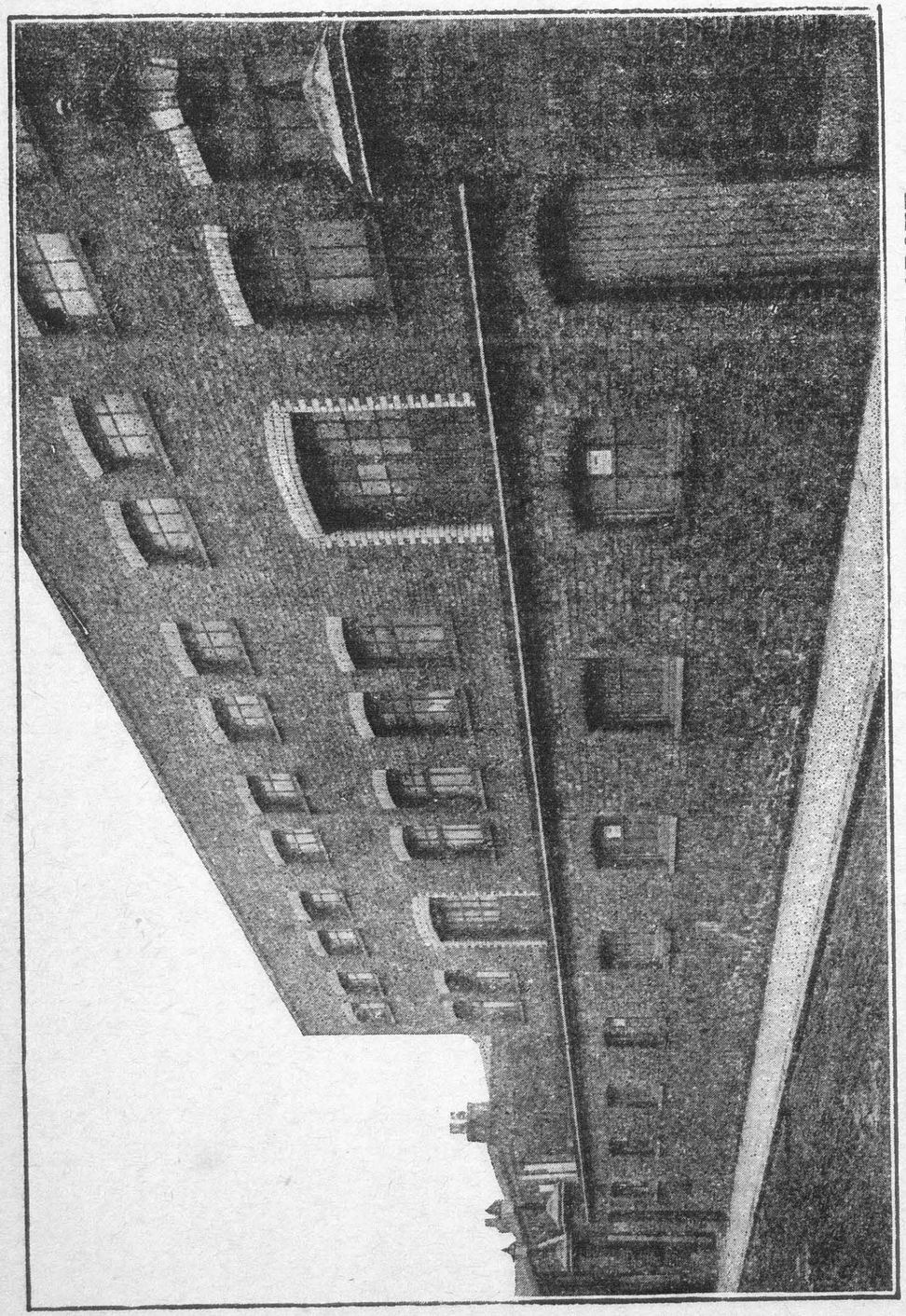
A CORNER IN OUR PAINTERS' SHOP.

broken into fine mould, trodden, levelled with an iron rake, again trodden, and well rolled until perfectly level. To ensure the efficient laying of the turf, it should be obtained, as free from weeds as possible, in the customary 1ft. wide by 3ft. long measurement, and should cost one shilling per hundred for cutting, irrespective of carting and ground claim. It should be carted and laid as soon as possible; hence its procuration and laying should not be attempted in frosty weather. Take care to make the edges of all dual turves firmly meet; when laid, tread and beat them down with a heavy turf-beater; then well roll, repeating the process occasionally. Lawns may be somewhat more cheaply formed by seed sowing, but not invariably with the same success nor so quickly. Prepare the ground as for turf. Seeds are procurable specially prepared for light or heavy soils and shady sites. Sow somewhat thickly, preferably during showery weather late in April; cover with very fine mould half an inch in depth; frequently roll and protect from sparrows.

WALKS should be completely made, having perfect drainage and a bottom of 3in. to 6in. of hard core, or re-gravelled if that only is necessary, during the winter season, or before the drying winds of March arrive, so that the well-rolled surface becomes firm and set, and cannot be injured by traffic during dry summer weather. Gravel paths the worse for wear and weedy, if not sunken too low, may be renovated by turning over their surfaces with a spade after heavy rains, more particularly during a thaw after a sharp frost. Afterwards rake into shape, highest at the middle; well bury any over-large pebbles collected by the rake, and thoroughly roll.

TREE AND SHRUB PLANTING, too generally deferred until late in the season, cannot be completed too soon after the advent of October, at a time when select lists of desirable kinds are given. The nearer the New Year is approached the colder the ground becomes, which is inimical to them, and soon after that adverse drying March winds prevail. Avoid at this, or any other date, haphazard planting, or simply making a hole in the ground to thrust the roots into. Break up the ground to the depth of the surface soil, if practicable, or as near thereto as possible, and in this connection, where a reasonable number of trees or shrubs have to be planted, whether in row or bed form, it will be most economical to trench, or bastard trench, the whole space in the manner explained in the month of December.

WALK EDGINGS of a permanent kind are necessary where flower beds or shrubberies approach walks and grass verges do not exist; indeed, the former are the most desirable where too much shade exists, and pedestrians are prone to

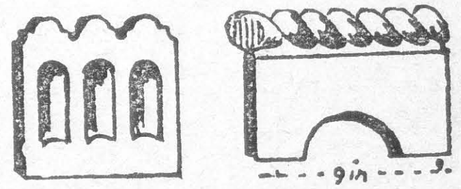


OUR GLASS AND IRON WAREHOUSES, DEVONSHIRE GROVE.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

tread upon and disfigure the latter. Box edgings may be planted between October and sharp weather at the end of the year or in February; but it is essentially necessary to do so on open sunny sites only. In planting them, old edgings alone supply the necessary slips. Pull the old plants into slip divisions, each slip with roots attached, and about three and a half to four inches in length—all of equal size. Then place good soil up to the walk edge, strain a line over the exact position the edging is to be planted, and on the walk side of the same with a spade cut out a drill of even depth to receive the sets in such manner that, when fixed in it, barely touching each other, their apices stand from a quarter to half an inch only above the ground. Pack the soil firmly to the roots, add the gravel, level, well tread and roll. Manufactured garden edging has much to be said in its favour of the following types:—

It is practically indestructible, requires no after attention when fixed, and does not harbour insects as box edgings do. Besides, now that economical weed killers are so generally used, box edgings are not so desirable.



GARDEN BORDER EDGING.

DECIDUOUS SHRUBS.—Proceed with the pruning or thinning of, particularly, Mock Oranges and Spiræas. Cut out dead and small overcrowded brushwood from their centre and base, and slightly shorten the longest shoots of the former. Remove all suckers from Lilacs, &c.

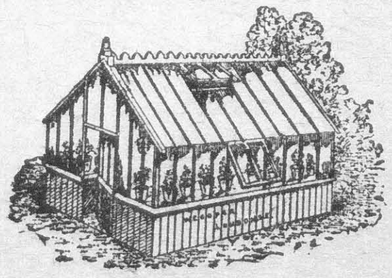
ROSES.—Complete planting during open weather. Having spread out the few roots they possess separately in well-prepared soil, pack fine, rich mould amongst them, making it quite firm. Dwarf Roses worked upon Briar or other stocks, bury below said worked part or the junction of grown bud and stock. Climbing Roses should have all old wood cut out, without making too unsightly pillars or arches, as reliance has to be placed on the young shoots made last summer for future blooming. So-called old garden Roses, including Monthlies, prune reasonably, but not Hybrid Perpetual, Tea, and other tender varieties until late in March.

HARDY PLANTS IN BEDS OR BORDERS.—Keep the surface soil free and open between by occasional hoeings when dry. Wallflowers, Canterbury Bells, Evening Primroses, Forget-Me-Nots, and all early spring flowering plants promptly finish planting where they are to bloom during open weather. Young Carnations, Pinks, &c., having their base unduly exposed by the action of frosts, press into the ground when thaws occur, and draw a little fresh fine mould up around them.

HEDGES, such as Hawthorn, Beech, and (where unduly

overgrown) Privet, well trim back. Pruned inverted hedge shape, with a narrow, flat top, they succeed best, continuing more dense at the bottom than when unduly wide towards their apices. This is a good time to plant such subjects to form new hedges. The Golden Privet (*Ligustrum ovalifolium aureum*) makes an excellent and showy hedge, not other "golden" forms. A mixture of green and golden-leaved is also ornamental and attractive.

PLANT HOUSES require (beyond the indispensable maintenance of the necessary temperatures) less attention than at other seasons, with the exception of forcing houses in active work. All—even ordinary cool greenhouses—are, however, at this time and during the winter season an unfailing source of interesting relaxation and amusement, apart from their all-the-year-round ornamentation and the uses they may be turned to in growing Cucumbers, Tomatoes, Grapes, and a variety of the more tropical fruits. Such structures are to-day brought to the doors of all, either as permanent ornamental additions to gardens or tenants' fixtures, in a great variety of forms and at exceptionally low prices. I shall refer more particularly to the latter, which cost from £5 upwards, according to size. The choice of purchasers lies, of course, between the more modern span-roof and lean-to, each in a variety of forms. On matters of superior culture span-roofs are most desirable, ensuring as they do more light to the inmates in winter, and having staging so arranged on both sides, with a central walk between, as ensures equal advantages to all plants within, and ease of approach and working amongst them, to say nothing of greater freedom for pedestrianism, in accordance with length of structures. These really cheap span-roofed houses are divided roughly into pot plant structures, having side lights, giving greater height to the roof as between eaves and apices, and forcing houses, each well adapted for the purpose in view. The following illustration shows an excellent type of the same:—



AMATEUR SPAN-ROOF GREENHOUSE (Tenant's Fixture). No. 4.

It should be understood, however, they are very suitable for growing Tomatoes—planted in boxes along the sides in summer, also Cucumbers, where proper warmth can be maintained. They can be made far more useful for dual purposes; when of sufficient length, they have an inner division, thereby practically securing two houses in one. For instance, such a structure, 24ft. in length, may be divided into lengths of 10ft. and 14ft. respectively, the former, kept close and moist, being suitable for growing superior Cucumbers between February and September, besides forcing on miscellaneous items; or, if kept dry and airy, without artificial heat, good crops of Tomatoes. Meantime, the other division may be devoted to flowering and foliage plants in the usual way; whilst both divisions lend themselves to conserving the latter, bedding-plants, &c., in winter.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

In the matter of purchasing glass structures, however, purchasers are often, perforce, particularly in gardens of limited size, influenced by the condition as to whether they have vacant wall space, to which houses can be attached, whether permanently or as tenants' fixtures. Where such walls exist, they will do well to utilise them, for the reasons they may fill up an unsightly space, may prove slightly more economical, more conveniently heated, besides being more protected in winter owing to the fact that the back wall is impervious to frost, to say nothing about being often more favourable of approach. The roofs of such may be either a combination of the span-roof and lean-to—whereby they are more decorative, affording ample room for substantial shelves at the back, and more suitable for training under roof climbers, or plain with the back of the roof directly attached to the wall. See pages 34, 40, 42 and 46.

CHRYSANTHEMUMS propagate in greenhouse from strong young cuttings.

THE FRUIT GARDEN.

January being generally a dry, frosty month, with proper attention at other seasons little should remain to be done. If arrears have to be caught up, advantage should be taken of mild periods to finish pruning and nailing all trees grown against walls, except Peaches and Nectarines, best so attended to in the month of March, at the first signs of movement of the flower or other buds.

ESPALIER, PYRAMIDAL, BUSH, AND CORDON TREES.—Finish pruning and staking as necessary. Thin out overcrowded clusters of spurs.

OPEN-AIR GRAPE VINES.—Efficiently prune. See that the main canes are not too numerous; if so, cut one or two of the weakest out from its base. Overcrowding results in indifferent crops. All laterals, or shoots formed last year, cut back to one eye. Manure the roots.

STRAWBERRY PLANTATIONS.—Mulch with decomposed manure.

AGED FRUIT TREES, in gardens, or orchards, if at all dense wooded, well thin centrally, and destroy moss existing on boles or main branches by dusting them over with a mixture of wood ash and lime, or apply a wash consisting of clayey loam, fresh slaked lime, and a little soot.

Cheap Greenhouses.

EXTRACT FROM *The Bazaar.*

WE recently had an opportunity of inspecting the various Greenhouses made by Messrs. Cooper, of 761, Old Kent Road, London, and are pleased to be able to report favourably of them both as regards finish and price. Most of the houses are made portable—that is to say, so constructed as to be easily erected or taken down; and, as no brickwork is necessary, they are simply tenant's fixtures and removable at will—a point not to be lost sight of by persons residing in houses not their own property.

The Amateur's Forcing-house should prove just the thing for many amateurs and professional gardeners; for no brickwork setting is required, and the house, which is made in sections substantially constructed of well-seasoned red deal, can readily be erected by the purchaser, as all parts are carefully marked to show how they should be fitted together. These houses can be had in sizes varying from 7ft. long and 5ft. wide to 100ft. long and 10ft. wide, and at prices ranging from £2 5s. to £35.

Another Greenhouse which is specially worth the attention of amateurs is the Amateur's Span-roof Greenhouse. Like the one previously noticed, the frame-work is of well-seasoned red deal, and the lower part filled in with tongued and grooved match-boards. It is a strong and inexpensive structure, that can be fixed by any handy-man in a few hours. For this class of house of similar dimensions to those previously mentioned the price varies from £2 15s. to £30.

Messrs. Cooper make a number of other very good and cheap houses, as well as one or two varieties of Garden-frames. One very useful kind is their Span-roof Garden-frame, to be had in sizes varying from 4ft. to 24ft., and at prices from £1 8s. to £8 10s.

A very good illustrated price-list of the various Frames, Greenhouses, &c., made by this firm, has been issued, and it will be found very useful to country readers. Those, however, who reside in or near London would find it worth their while to pay a visit to the Works and make their selection, as there is a very large stock from which to choose.

"Invincible" Hot-water Apparatus.

WILL Mr. W. P. Wright please say whether the "Invincible" Hot-water apparatus represented by Messrs. Cooper's advertisement is a good one for a small house?—S. B.

[Yes. This is an excellent boiler, and you would no doubt be quite satisfied with it. It is a broad boiler with a good fire base, with ash-pit, stoking and feeding doors; has 4in. pipes and an expansion cistern.—W. P. W.]

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

AMATEUR GARDENING.—*continued.*

the month of December. By aid of the two last assist air and frost to penetrate, cleave, and disintegrate clods, and so make the soil fine, smooth, more workable, and prolific.

FEBRUARY.

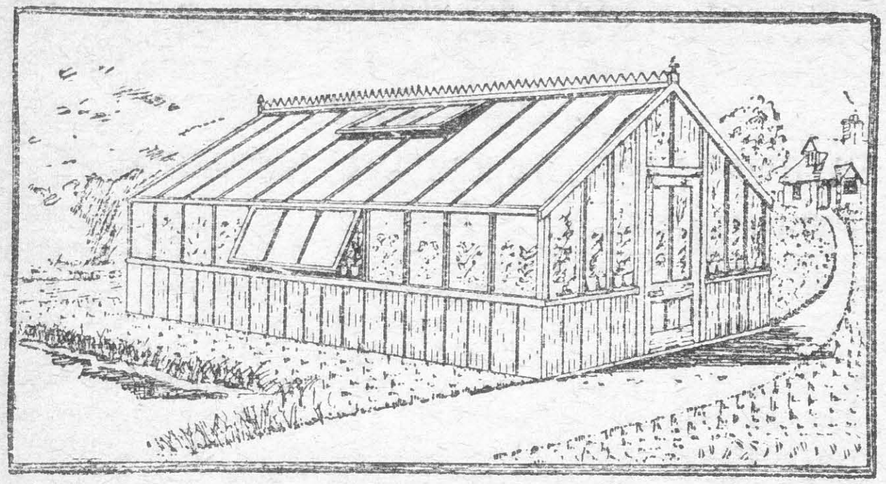
FLOWER OR DECORATIVE DEPARTMENT.

GREENHOUSES during the month have to be treated in accordance with the plants they contain. If containing plants in flower or about to flower, such as Cyclamens, Primulas, Cytisus, Camellias, Azaleas, forced bulbs, and Zonal Pelargoniums, &c., a temperature of 56deg. to 58deg. must be maintained as a maximum by night, with such a slight increase as sun heat (in conjunction with fresh air) will enforce. So-called cool greenhouses, containing miscellaneous hardier plants not in bloom, summer bedding plants, and the like, continue the temperature by night of 40deg. to 45deg., with a slight increase by day should the weather be favourable. In both cases equal care in watering and avoidance of slopping water about on stages and walks have to be avoided, and as dry an atmosphere as possible maintained, because the time has not yet arrived when it will be judicious to permit the non-flowering plants to grow unduly, or prove beneficial to delicate blooms; indeed, excess of atmospheric moisture will limit the duration of flowers, if it does not cause some of them to damp off prematurely. The periodical rearranging of all plants in glass structures, when during the process decaying, vitiating leaves can be picked off, stagings brushed down, &c., is a practice of the utmost importance. In conjunction therewith, single plants, store pots, or boxes containing cuttings, &c., should be half-turned round so that light will be diffused amongst them differently, a simple change they will greatly appreciate. Meanwhile, all plants may be so rearranged as to produce fresh, if not improved, effect, and during the manipulation it will be seen if any are too dry or too wet at the root, and treated accordingly.

SHOW, FANCY, AND REGAL PELARGONIUMS, really as easy to grow as the Zonal varieties—so-called Geraniums—in a variety of forms and colour, must be maintained upon shelves, with their upper leaves not too far from the glass roof. Now, and as the season advances, they must be tied out as necessary, in such manner that the outer branches spread over the sides of the pots and their centres are kept somewhat open, to enable all the young growths to become sturdy and of equal strength and height. If some of the young shoots grow unduly, so as to greatly exceed the heights of the others, pinch off their points. Give them but moderate root

Amateur Span-Roof Greenhouse.

TENANT'S FIXTURE.



No. 4.

This illustration shows a type of Greenhouse eminently adapted for amateurs, and at the exceedingly low prices at which it is offered, in various sizes, it is within the reach of every lover of flowers.

It is constructed in sections marked for putting together, and it can be easily fixed by any handy person in a short space of time.

SPECIFICATION.—The framework is substantially constructed of well-seasoned red deal, the lower part being filled in with good, sound, tongued and grooved matchboards. The House is fitted with door, complete with rim lock and brass furniture, painted one coat, supplied with all necessary ironwork and stages for each side, and good 21oz. glass throughout. Put on rail at our Works, or delivered, erected and glazed complete, with extra coat of paint at Works, within 20 miles of London Bridge, at the following prices (beyond this distance proportionate prices will be quoted on application):—

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.	Extra, if roof made in Sashes' £ s. d.
7	5	7 0	4 0	2 15 0	4 0 0	0 7 6
8	5	7 0	4 0	3 5 0	4 15 0	0 7 6
9	6	7 3	4 0	3 15 0	5 10 0	0 10 0
10	7	7 6	4 6	4 10 0	6 10 0	0 15 0
12	8	8 0	5 0	5 15 0	8 0 0	1 0 0
15	9	8 6	5 0	7 10 0	10 5 0	1 5 0
20	10	9 0	5 6	9 15 0	13 10 0	1 12 6
25	10	9 0	5 6	12 10 0	17 0 0	2 0 0
30	12	9 0	5 6	18 0 0	24 0 0	2 15 0
35	14	10 0	6 0	26 0 0	34 0 0	3 10 0
40	14	10 0	6 0	30 0 0	40 0 0	3 15 0

Zinc Gutters and Connections, 6d. per foot run extra.
Iron Gutters and Connections, 9d. per foot run extra.
Tarred Timbers to erect this house on, 3d. per foot run.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

waterings for the next six weeks, and keep them free from aphis, which is partial to them.

FUCHSIAS, so simple of culture, which in the case of old plants have been dried off at the roots and winter-stored in dry frost-proof places, should now be pruned, preliminary to forming young shoots. It will be found, when pruning them, some of the branchlets have died during the season of rest. Cut out all such dead parts, and give the roots a little water, and another watering in a fortnight. Afterwards, as soon as practicable, place them in a lighter position to accelerate growth. At the first signs of forming young shoots, remove the roots from the pots, shake the soil from them, and re-pot into sandy compost and as small-sized pots as the roots can be conveniently forced into. Young Fuchsias, to ensure their surviving the winter, must be kept green and growing in greenhouses and small pots. These may at this time be shifted on into one-sized larger pots and an open loam, leaf mould, and sandy compost. Cuttings of young shoots may be readily rooted even in ordinary greenhouses in sandy compost whenever obtainable, though if covered with a bell-glass or inverted tumbler for seven or ten days they will root more readily. Fuchsias will not succeed in much warmth; a temperature of 55deg. to 58deg., somewhat shaded, with overhead vaporisings, and a moderately moist atmosphere, suits them best.

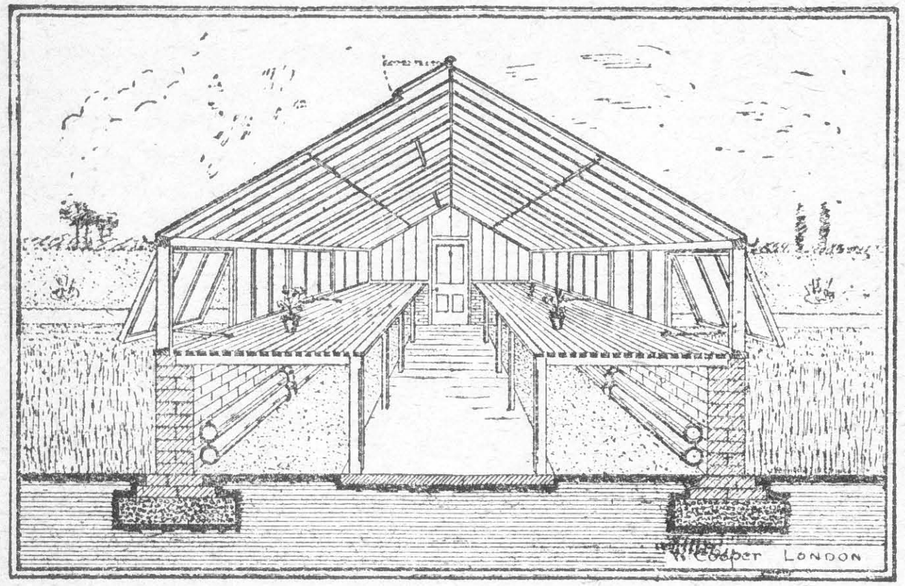
EDGING LOBELIAS grow best in a cool temperature down to a few degrees above frost; hence autumn-rooted cuttings and seedlings from autumn-sown seed may now be pricked out separately in rows in comparatively shallow boxes, therein to grow and form sturdy plants for planting out when the season arrives. Seed of the same may also be sown, but avoid thick sowing.

AURICULAS AND POT CARNATIONS.—Keep moderately dry at the root, the former in particular, and freely expose to fresh air during all but frosty intervals or when fogs prevail. The Malmaison group of Carnations are attractive amateurs' pot plants, because they produce such immense blooms, and only require protecting from frost, but must not be overpotted.

SWEET PEAS.—Sow singly in small pots for planting out in April.

SEED OR CUTTING PROPAGATION, a fascinating hobby with amateurs who possess glasshouses, will be uppermost in the thoughts of many during genial weather as the month advances, but I warn those who own the cooler forms of greenhouses only not to attempt propagation by means of either until the first or second week in March. To do so will be to risk losing the cuttings or seed not germinating, owing to cold weather which usually prevails and normally after the

Inside View of Span-Roof Amateur Greenhouse and Villa Conservatory.



No. 5.

We undertake all Brickwork (in 9in. work) with necessary footings at 1s. 6d. per foot super., measuring from concrete, also door space. Plans for bricklayer free of charge to customers supplying their own brickwork.

Cranog House, Cadwgan Street, Nantymoel, near Bridgend, S. Wales.

SIR,—Sorry for not writing you sooner, but I consider it my duty to inform you that glasshouse arrived safely, and I must say it is far better than I expected, and am fully satisfied with it. I have shown it to my friends and neighbours, and they are astonished at it also. I may state that many of my neighbours intend ordering with you in the near future, and one of them has sent you specifications beginning of this week.

I have called a local builder to see it, and he valued it worth double the price I paid for it. I shall be pleased to make further dealings with you, and shall always recommend you to my friends.—I remain, yours truly,

THOS. REES.

(You may make what use you like of this.)

New Town, Henfield.

SIR,—Glad to say the forcing house you sent arrived in excellent condition, not a single breakage anywhere, and I am very well satisfied with it. —Yours truly, H. BURT.

4, Brixton Road, S.W.

Re 67, Norbury Gardens, Melfort Road, Norbury.

GENTLEMEN,—I have much pleasure in thanking you for the way in which you carried out the work of the conservatory you built for me at the above address. You carried out the work most promptly and also in a thorough workmanlike manner to my entire satisfaction. I shall be pleased to recommend you to any of my friends.—Thanking you again, yours faithfully, F. J. REYNOLDS.

148, Bradwall Road, Sandbach, Cheshire.

DEAR SIR,—I received the greenhouse on the 4th, and I am very pleased with it.—Yours truly, E. D.

former period. Such propagation can be carried on in warmer structures and hotbeds, to the latter of which reference is made under its proper heading.

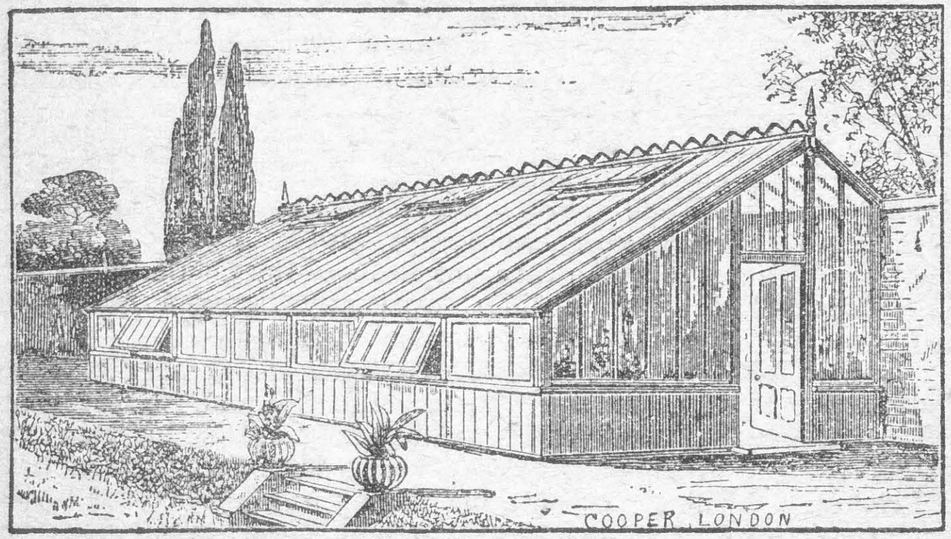
SPRING FLOWERING PLANTS IN BEDS OR BORDERS, comprising bulbous ones, autumn-sown annuals, &c., as they push through the ground and advance in growth and bloom, should have the surface soil neatly stirred between them with a small, capable, clean hoe, and broken into fine mould form; this will not only neutralise the penetrating power of sharp frost, but also enhance appearances. In hoeing Tulips rising above ground take care not to force the mould into their cup-like leaves. Such hoeings, especially between prostrate annuals, should be performed during dry weather.

ANEMONE AND RANUNCULUS roots may still be planted either in groups or rows in vacant ground. The former, in particular, is free growing and inexpensive, by planting which at six or eight weeks' intervals between October and March there will be forthcoming displays of bloom over ornamental foliage. The varieties *A. fulgens* (lovely single-flowered scarlet) and *A. appenina* (sky-blue, of British origin) are desirable, to say nothing about the larger double-flowered sections or improved florists' forms and the single-flowered varieties of the same.

SHRUBBERIES.—Definitely look through towards the end of the month, to determine whether any deciduous kinds are overgrowing a desirable limit and encroaching upon more permanent evergreen kinds, before they commence their spring growth. If any groups are overpowering in density, the better plan will be to remove an occasional one, as it will be better to do so than permit all to become so drawn up together as to cause bareness near the base, which cannot be corrected without so cutting them down as to cause unsightliness. Much discrimination is required in this regard, for not only has it to be determined whether the evergreen forms shall have the mastery owing to the warm garniture they give during the winter months, or deciduous ones which, notwithstanding their bare wood in winter, produce desirable summer flowers.

RHODODENDRONS are, considering their merits as permanent, very hardy evergreens, amongst, in season, the most showy flowering plants. They transplant well during mild intervals at this season, and, owing to the compactness of their unbreakable basal balls, full of fibrous roots, bear transplanting, including transit, better than most subjects. If there is a drawback associated with them, it is that they succeed best in peat soil, and to do exceptionally well should be planted in a moderate surrounding of the same. They succeed, however, in unctuous loams, particularly with leaf mould and decomposed leaves intermixed, and thrive reasonably planted in the

Amateur Three-quarter Span-Roof Greenhouse.



No. 6.

The advantages of this House will be apparent on a glance at the illustration, which shows a combination of the span-roof and lean-to principles.

SPECIFICATION.—The framework is substantially constructed of well-seasoned red deal, the lower part being filled in with good, sound, tongued and grooved matchboards. The House is fitted with door, complete with rim lock and brass furniture, painted one coat, supplied with all necessary iron-work and staging along one side. Good 21oz. glass throughout. All parts are carefully marked, and put on rail at our Works, or delivered, erected and glazed complete, with extra coat of paint at Works, within 20 miles of London Bridge, at the following respective prices (beyond this distance proportionate prices quoted on application):—

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.	Extra, if roof made in Sashes. £ s. d.
7	5	7 0	4 0	2 15 0	4 0 0	0 7 6
8	5	7 0	4 0	3 0 0	4 15 0	0 7 6
9	6	7 3	4 0	3 15 0	5 10 0	0 10 0
10	7	7 6	4 6	4 10 0	6 10 0	0 15 0
12	8	8 0	5 0	5 15 0	8 0 0	1 0 0
15	9	8 6	5 0	7 10 0	10 5 0	1 5 0
20	10	9 0	5 6	9 15 0	13 10 0	1 10 0
25	10	9 0	5 6	12 10 0	17 0 0	1 17 6

Zinc Gutters and Connections, 6d. per foot run extra.

Iron Gutters and Connections, 9d. per foot run extra.

When ordering, kindly state height of existing wall forming back for proposed Greenhouse, also at which end door is to be fitted.

Tarred Timbers to erect this house on, 3d. per foot run.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

chopped-up turves from loamy pastures. The old species, *R. ponticum*, is commonest and cheapest, and were it not that so many superior hybrid varieties exist, would, with its annual masses of bright pink flowers, be far more abundantly grown; in these regards, it is superior to Laurels, both common and Portugal. Named hybrid varieties, obtainable in dwarf and standard form, make grand single specimens upon lawns, but are of necessity comparatively expensive. Amongst hybrid varieties, however, nurserymen hold numerous meritorious seedlings which fall little short of the merit of those they give distinctive names to, and as these have not been grafted do not cost half as much. For suburban gardens Rhododendrons are particularly suited, and succeed admirably in fair-sized pots suitable to their variable sizes for the decoration of the sides of steps approaching front doors, &c. Plants with flower buds force easily and well.

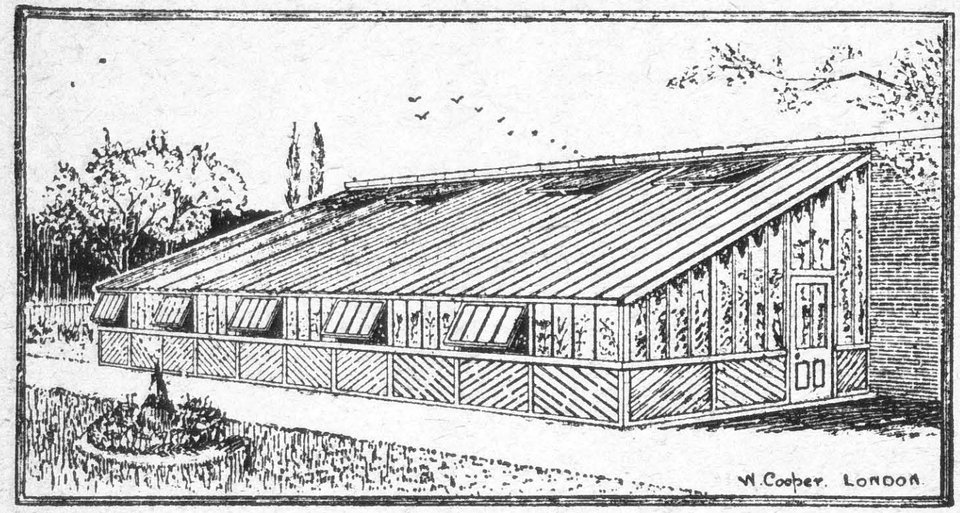
ROCKERIES AND FERNERIES, where space permits, are particularly suitable additions to gardens, the former on sunny and the latter shady sites, and should be found more frequently than they are verging on walks, where the objects grown come more directly under the eye. Moreover, when formed contiguous to walks, by placing a front row of minor stones or tree roots as an edging outline, other edgings such as grass verges, &c., are dispensed with, and much seasonable work in keeping them in order. Many forms of stone may be used for both, but over-burned or "run" clinker bricks are easiest obtained and cheapest, which, if laid slantwise all one way, but not even, make desirable rustic edges. Tree roots, however, are most desirable, artificially fixed upside down for ferneries. Special features connected with both rockeries and ferneries are they may contain greater variety without being more chaotic than other divisions in gardens, herbaceous borders excepted, which take up room, and, as regards the former, afford the only suitable space whereon to cultivate a great variety of desirable prostrate growers and others, including valuable nick-nacks which could not be induced to prosper elsewhere. This is a good season to create and plant both. To ensure continuity of success, a mound, great or little, in conformity with the requirement of sites, should be placed over the normal ground level, consisting of rich loamy soil, after the former has been well broken up. Whether stonework or block-roots are employed, they should not be overpoweringly numerous or crowded together; luxuriance of plant growth with these accessories cropping up here and there gives the best effect. The following is a select list of

PLANTS SUITABLE FOR A ROCKERY.

Achillea argentea, Alyssum montana, Androsacea sarmentosa,

Lean-to Villa Conservatory.

TENANT'S FIXTURE.



No. 7.

This lean-to Conservatory is of superior construction. It is a necessary adjunct to all well-appointed walled-in gardens, and it will be found useful for a variety of purposes to which a conservatory can be applied.

SPECIFICATION.—The framework is substantially built of well-seasoned red deal, the lower part being enclosed with matchboards, tongued and grooved in diagonal panels. The House is provided with half-glass door, complete with rim lock and brass fittings, lattice staging for plants, footpath the entire length of House; gutters and downpipes, glass 21oz. throughout, and all necessary fittings, and is painted one coat. All parts are carefully marked and put on rail at our Works, or delivered, erected and glazed complete, with an extra coat of paint at Works, within 20 miles of London Bridge, at the following respective prices (beyond this distance proportionate prices will be quoted on application):—

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.	Extra, if roof made in Sashes. £ s. d.
7	5	7 0	4 0	4 0 0	5 7 6	0 7 6
8	5	7 0	4 0	4 15 0	6 5 0	0 7 6
9	6	7 6	4 6	6 5 0	7 15 0	0 10 0
10	7	7 6	5 0	7 0 0	9 0 0	0 15 0
12	8	8 6	5 6	8 0 0	10 10 0	1 0 0
15	9	8 6	5 6	10 5 0	13 0 0	1 5 0
20	10	9 0	6 0	14 0 0	17 10 0	1 10 0
25	10	9 0	6 0	17 0 0	21 0 0	1 15 0
50	12	9 0	6 0	35 0 0	45 0 0	3 5 0
100	12	9 0	6 0	55 0 0	75 0 0	6 0 0

If required for brickwork, deduct 10 per cent.

When ordering, please state which end the door is required (when facing front of structure from outside).

Tarred Timbers to erect this Conservatory on, 3d. per foot run.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Antennaria tomentosa, Arenaria balearica, Astragalus monspessulanus, Aubrietia græca, Campanula turbinata, Cerastium Biebersteini, Coronilla rosea, Dianthus alpinus, Geranium argenteum, Hypericum decussatum, Lithospermum prostratum, Lychnis alpina, dwarf Phloxes in variety, Potentilla ambigua, Prunella grandiflora, Saponaria cæspitosa, Saxifragas in variety, Sedums in variety, Sempervivums in variety, particularly the House Leek—one named S. arachnoideum; Soldanella alpina, Veronica repens, &c., and the many forms of Rock Rose, &c.

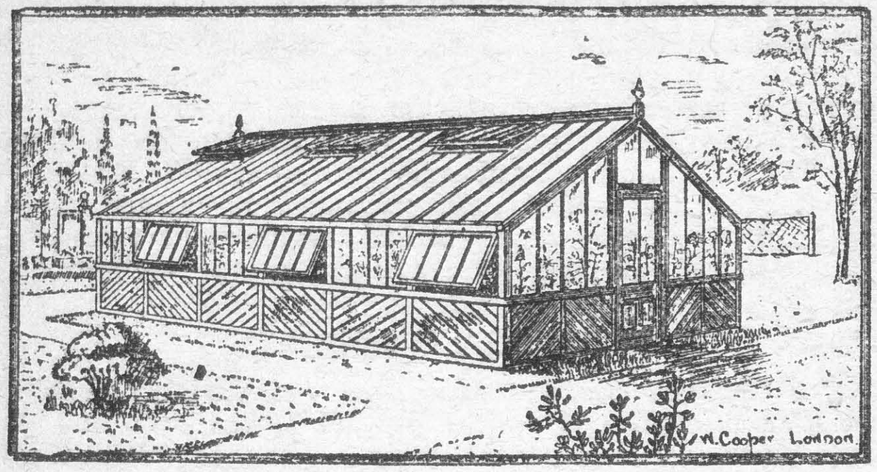
HARDY FERNS.

For hardy ferneries, so-called evergreen varieties should be planted more extensively, as, to say the least, they retain their fronds quite into the winter months, some, such as the indispensable Scolopendriums, in particular. Others are Polystichums, Blechnums, Polypodiums, &c. If normal or wild forms only are grown, the aim should be to plant an example of each kind for either back or front row, according to their respective heights. Certainly the Royal Fern (Osmunda), the Lady Fern (Athyrium filix-fœmina), Beech, Oak, Lastræas, &c., should be included. To make hardy ferneries additionally interesting, however, abnormal or improved forms of most of these should be planted, such as the so-called bifid and tassel-fronded, some of the older forms of which are not so very expensive, yet highly interesting as illustrating the quaint and elegant sports which emanate, it is difficult to say how, as the result of cultivation.

THE FRUIT GARDEN.

GRAPE VINES, to secure fairly early crops, should be started growing as the month advances, provided a necessary warmth can be maintained. For the first fortnight simply shut the structure up close, and maintain within it a temperate mean of 55deg., with an advance from sunshine of another 5deg. or 8 deg.; afterwards advance the warmth for a week another 5deg., and besides syringing the rods about ten o'clock a.m. and 3 p.m. daily, sprinkle at the same time floor and walls to cause a moist atmosphere. Subsequently take 60deg. for a night minimum, allowing an advance by day from increasing sun heat up to 75deg., always in conjunction with the admission, without undue draughts, of fresh air. Grape Vines in amateurs' cool greenhouses must be permitted to start of their own accord, under the influence of increasing spring warmth, unless owners can ensure to them without fail such temperatures as are suggested above; and should an abnormally warm weather period happen to occur they must neutralise it by increased admission of fresh air. If they start too early there

Span-Roof Villa Conservatory.



No. 8.

This illustration shows a well-made Span-Roof Conservatory, placed in grounds away from the house. Being exposed, not only to view, but to the elements, it is proportioned, both in substance and design, as to render it durable and effective.

SPECIFICATION.—The framework is of well-seasoned red deal. The lower part is lined with tongued and grooved match-boards, in diagonal panels, giving artistic finish. The house is fitted with a half-glass door, complete with rim lock, brass fittings, and key, and is supplied with lattice staging for each side; footpath the entire length of house; gutters and down-pipes; top and side ventilators, according to size, and necessary ironwork for opening same. All woodwork painted one coat; good 21oz. glass throughout, and all parts put on rail at our Works (being properly marked), or delivered, erected and glazed, with an additional coat of paint at Works, within 20 miles of London Bridge, at the following respective prices (beyond this distance proportionate prices will be quoted on application):

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.	Extra, if roof made in Sashes. £ s. d.
7	5	7 0	4 0	4 5 0	5 12 6	0 7 6
8	5	7 0	4 0	5 0 0	6 10 0	0 7 6
9	6	7 0	4 6	6 10 0	8 5 0	0 10 0
10	7	7 6	5 0	7 10 0	9 10 0	0 15 0
12	8	8 0	5 6	9 0 0	11 5 0	1 0 0
15	9	8 6	5 6	11 0 0	14 0 0	1 5 0
20	10	9 0	6 0	15 0 0	18 15 0	1 12 6
25	10	9 0	6 0	18 0 0	22 10 0	2 0 0
30	12	10 0	6 0	26 0 0	32 10 0	2 15 0
35	14	10 0	6 0	35 0 0	45 0 0	3 10 0
40	14	10 0	6 0	40 0 0	53 0 0	3 15 0

Deduct 10 per cent. if required for brickwork.
Tarred Timbers to erect this house on, 3d. per foot run.

93, Medway Road, Gillingham, Kent.

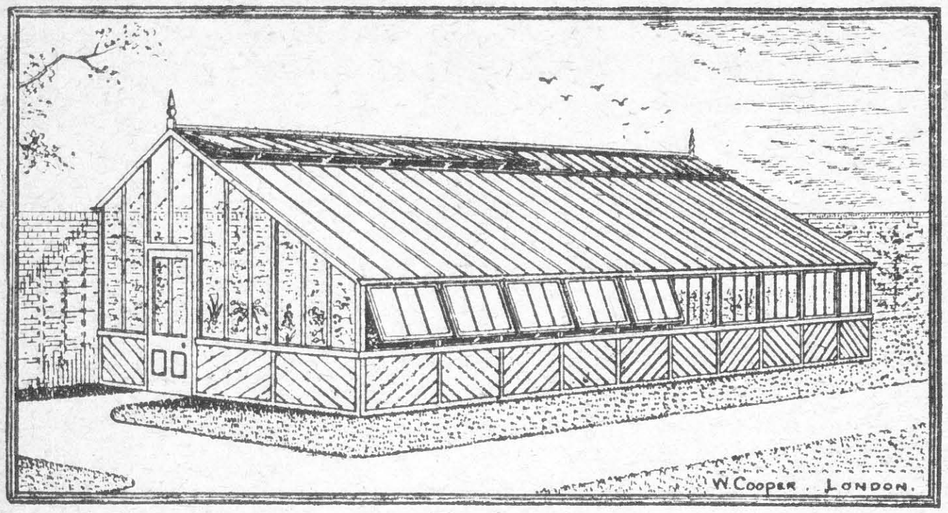
DEAR SIR,—Greenhouse arrived to-day, and I am very pleased with it, and wish your firm every success.—Truly yours, W. MAYS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

is a possibility that cold April weather will give them too great a check. Should mildew habitually attack the foliage or fruit of the latter during the growing season, advantage should be promptly taken of this, their resting season, to paint the whole of the canes with a mixture of paint-like consistency comprising equal parts of flowers of sulphur, clayey loam, with a slight addition of lime and soot. At the same time internal walls should be well washed with a mixture of lime and the aforesaid sulphur. Vine borders, both within and without, dress with old, decomposed manure, and slightly fork it in, in such a manner as not to disturb the roots. Vines in the dormant state may now be planted, or growing ones late in the month of May. To succeed well, properly-prepared beds must be provided for the roots over good drainage; outdoor ones to be elevated mound form 6in. at least above the height of the normal level of the surrounding ground. Proper compost for the beds consists of a mixture of good, fibrous loam (yellow maiden for preference), two parts out of three, the other part to contain equal quantities of old lime rubbish, manure, and liberal additions of crushed bones, bone-meal, and charred vegetable matter.

NEWLY-PLANTED HARDY FRUIT TREES are not treated uniformly in the matter of pruning after planting, as there is considerable divergence of opinion as to the best practice to follow. On the score that the more surface the branches possess the larger the incitement and demand there is for root action; on the score—and a proper one—that surface growth incites root formation and growth, not that roots start growing first and surface growth follows. On these grounds, we do not advise pruning newly-planted trees until mid-April, when the sap is moving. At that time judicious pruning is advised. It comprises thinning out the young shoots where they are too numerous by cutting them out bodily down to the base; also an occasional one where it grows across other better-placed ones. If any young tree can be made more shapely and thin-branched enough by tying cross-growing shoots into good positions, all the better. When the number of main branches are so reduced in number as to ensure each will have ample room in the whole future, then shorten each back by one-third its length. This is necessary (*a*) because nurserymen pride themselves on sending out well-branched young trees, and (*b*) if the young leader-branches are not cut back at this time they will only during the succeeding summer form indifferent prolongations at their apices, leaving their base naked, whereas if cut back they will form more numerous duplicate ones, and these will grow more vigorously than will those at the apices of such as were not shortened.

Three-Quarter Span-Roof Conservatory.



No. 9.

This is a very useful form for Plant-houses or Vineries, more especially where the back wall is not high enough for a Lean-to; as by adding extra cost for brickwork to the price of latter it will then at once be perceived to be in favour of the Three-quarter Span; moreover, plants will grow much better, the House being thoroughly lighted.

This House is made of the best materials, well and substantially built, and so constructed that any handy man can put it together, and is artistically finished with diagonal panels. The whole of framework consists of good sound 3in. by 2in. and 3in. by 3in. red deal, the lower part doubly lined with tongued and grooved match-boards. The House is supplied with 21oz. glass throughout, half-glass door, rim lock, key, and brass fittings for same, two plant stages the length of both sides, and foot-path for centre. Continuous ventilators the entire length of the House, at ridge and in front, and necessary Ironwork for opening same, also gutters and down-pipes. Woodwork is painted two coats good oil colour. Houses are put on rail at our Works (all parts being carefully marked), or delivered, erected, and glazed, with an extra coat of good oil paint after glazing, within 20 miles of London Bridge (beyond this distance proportionate prices will be quoted on application) at the following respective prices :—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.	Extra, if roof made in Sashes.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.	£ s. d.
7 ..	5 ..	7 0 ..	4 0 ..	4 10 0 ..	6 10 0	0 7 6
8 ..	5 ..	7 0 ..	4 0 ..	5 10 0 ..	7 15 0	0 7 6
9 ..	6 ..	7 6 ..	4 6 ..	6 10 0 ..	9 9 0	0 10 0
10 ..	7 ..	8 0 ..	5 0 ..	7 10 0 ..	10 10 0	0 15 0
12 ..	8 ..	8 6 ..	5 6 ..	9 0 0 ..	12 10 0	1 0 0
15 ..	9 ..	9 0 ..	6 0 ..	11 0 0 ..	15 10 0	1 5 0
20 ..	10 ..	9 0 ..	6 0 ..	15 10 0 ..	21 0 0	1 10 0
25 ..	10 ..	9 0 ..	6 0 ..	19 0 0 ..	26 0 0	1 17 6
50 ..	12 ..	9 0 ..	6 0 ..	42 0 0 ..	56 0 0	3 5 0
100 ..	12 ..	9 0 ..	6 0 ..	70 0 0 ..	96 0 0	6 0 0

Deduct 10 per cent. if for brickwork.

For Heating Apparatus suitable for above house, see Section VII.

VEGETABLE DEPARTMENT.

EARLY FRAME CUCUMBERS AND MELONS will not be forthcoming unless a commencement is made in collecting fermenting materials early in the current month and preparing them for bed-building. Early hotbeds, bear in mind, are also most useful for striking early cuttings of a variety of subjects, seed sowing, &c. The best of progress made after above date will not admit of such beds being ready for work before the year has so advanced as to ensure there will be ample sunshine and light to assist the growth of the most delicate subjects. The initial considerations in hotbed making comprise collecting sufficient materials for the size of the bed to be constructed, and sweetening them by process of successional fermentation in such manner as not to destroy unduly their fibre and cause them to become prematurely rotten.

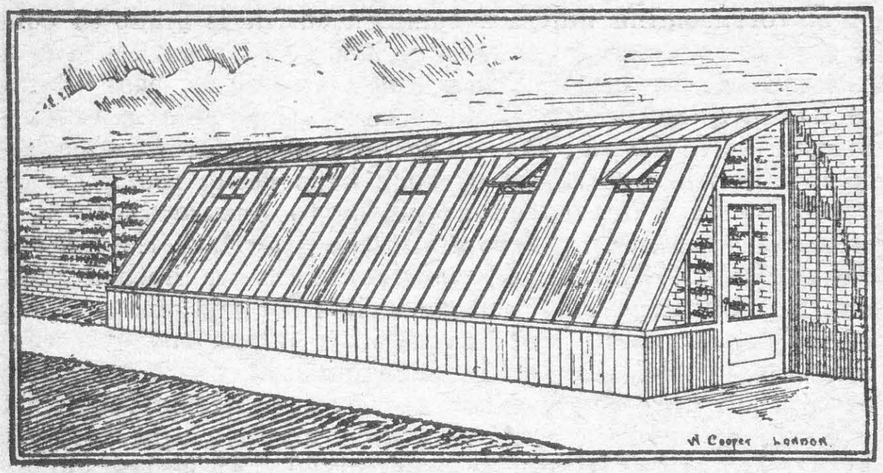
Proper materials consist of stable manure and fallen tree leaves, used either singly or intermixed. If leaves alone are used, they are sweeter, ready more promptly for bedding, but rather more of them will be necessary to give sufficient and lasting heat; a mixture of the two cannot be improved upon. In view of keeping them from decaying too quickly when they lose their power of fermenting, they should not be permitted by rainfalls to become unduly wet or sodden.

The process of sweetening them is very simple. Toss them up lightly in bulk (well separating the particles) into a conical heap on a dry ground site. When the heap becomes heated throughout, again turn them over in the same way, placing the outsides in the middle and the inside outside. This may suffice with good, wholesome materials, but if the heat following the second turning is very strong and the steam issuing from it rank, another turning and partial heating will be necessary. Tree leaves alone will not require more than one such heating before they are ready for making into a bed.

Building up the bed has to be done neatly and to measurement. In size it should be not more than 2in. wider and longer than the frame it is to carry, on all sides, said sides to be built up perfectly perpendicular and with square ends. The object of this is to permit of 14in. to 16in. of additional fermenting materials, as so-called linings, to be packed up against the central bed on all sides, to be made higher than the same, and so packed against all the woodwork of the frame as to warm it, and in a measure force warmth through it. This is not all; the original square bed with its oblong square sides is formed so to admit of the latter-placed lining being removed when its heat wanes, and a fresh one, formed of the same material, with the addition of fresh, warm material, and well shaken up together, being built up in lieu of it, whereby

Glazed Cover for Fruit Walls.

Invaluable to those who value their fruit, and are desirous of protecting it, thus securing a heavier crop.



No. 10.

This illustration shows a Cover, with sloping front, which allows for a narrow walk and for fruit trees in pots near the glass. It can be adapted to walls of different heights, and is also made in three widths.

SPECIFICATION.—Framework substantially constructed of well-seasoned red deal; the whole of sides, and 2ft. 6in. of ends, boarded with tongued and grooved matchboards. Half-glass door, complete with lock and brass fittings, in one end; glass 21oz. throughout; ventilators supplied, according to size, and necessary ironwork for opening same; stages for plants entire length of Cover. All woodwork painted one coat, and the whole structure put on rail at our Works (being carefully marked in readiness for erection), or delivered, erected, and glazed, with extra coat of paint at Works, within 20 miles of London Bridge, at the following respective prices:—

Length.		Width.		On Rail.		Erected within 20 miles complete.
ft.		ft.		£ s. d.		£ s. d.
20	.....	6	.....	10 0 0	.....	13 10 0
40	.....	6	.....	17 0 0	.....	23 10 0
60	.....	7	.....	28 0 0	.....	38 0 0
100	.....	8	.....	48 0 0	.....	66 0 0

Please state height of back wall when ordering, also which end door is required when facing house.

Other sizes and for erecting in any part of the country at proportionate prices.

For Heating Apparatus suitable for above Cover, see Section VII.

Tarred Timbers to erect this cover on, 3d. per foot run.

40, Birch Road, Oxton, Birkenhead.

SIRS,—The greenhouse has arrived, and gives great satisfaction.

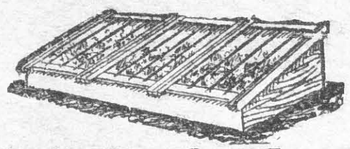
A. PARSONS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

fresh heat will be engendered in it and an increase of heat in the central bed.

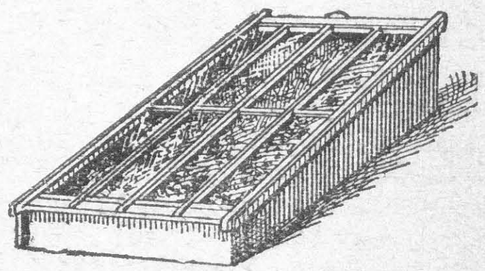
Desirable frames for such hotbeds are usually formed in three sizes, *i.e.*, with one, two, or three lights, or sashes. Illustrations of the first and third are given below.

For the full culture of both Cucumbers and Melons the three-light is far the most desirable, one plant of either to be planted under each light, and that for the simple reason it gives so much better supplies in season. Another important reason is that such a bulk of material as is necessary for it produces a longer and more constant heat than do smaller ones under smaller lights. Very good returns, however, are forthcoming from two-light frames. If more than three-light frames are required, duplicate ones should be employed, placed end on end.



No. 46.—THREE-LIGHT FRAME.

The one-light frame in practice is used for growing seedling Cucumbers or Melons in pots, preparatory to turning them out into mounds in the larger-sized ones when they are ready to receive them; and their use is the more desirable, because they can be made up of a small quantity of fermenting material compared to what is required for the larger sizes, and, what is of great importance, if the latter are prepared for rearing the seedlings the warmth in them becomes unduly exhausted by the time said seedlings are planted out and reach the heyday of their vigorous growth and chief early fruiting conditions.



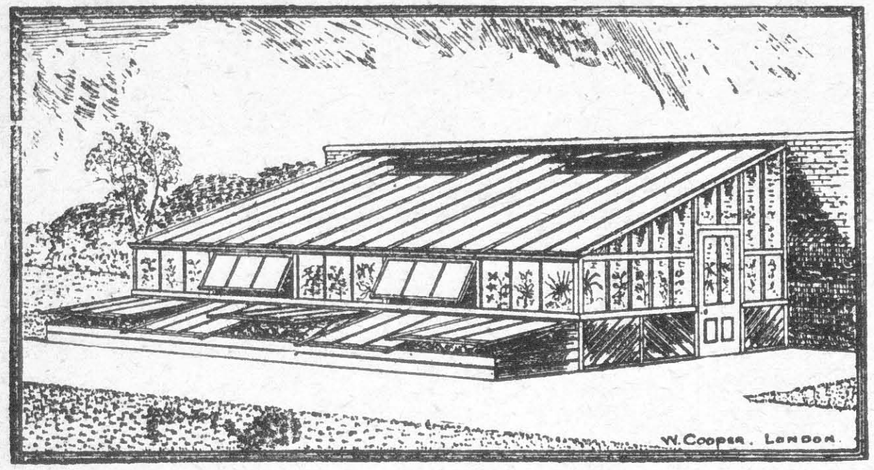
No. 44.—ONE-LIGHT FRAME.

Per contra, the one-light frames are very suitable for amateurs and others for raising early seedlings, striking cuttings, &c., requiring such a modicum of material, beyond which even such as are used for rearing the seedlings aforesaid will subsequently come in most handy for these purposes.

As is observed, these frames are made higher at the back than the front in view of giving them a proper slope for discharging rain-water and facing sunshine. When set to work thus early in the year, however, this slope is not quite enough, because the sun is so much nearer the horizon than in summer; hence, in building the aforesaid hotbeds, they also must be made to slope from back to front in a similar manner.

Frames should be placed firmly upon the beds as soon as the latter are made, the lights placed upon them, and shut down close. When they become warm, tilt the said lights to admit

Lean-to Conservatory with Pit.



No. 11.

This Lean-to Conservatory, with Pit, is of superior construction. It is a necessary adjunct to all well-appointed walled-in gardens, and it will be found useful for a variety of purposes to which a Conservatory can be applied.

SPECIFICATION.—The framework is substantially built of well-seasoned red deal, the lower part being enclosed with matchboards tongued and grooved, and the front finished with diagonal panels, as illustrated. The House is provided with half-glass door, complete with rimlock and brass fittings, lattice staging for plants; footpath entire length of house; gutters and downpipes; glass 21oz. throughout, all necessary fittings, and is painted two coats. Houses are put on rail at our Works (all parts being carefully marked), or delivered, erected, and glazed, with an extra coat of paint after erecting, within 20 miles of London Bridge, at the following respective prices (beyond this distance proportionate prices will be quoted on application):

Length.	Width of House.	Height.	To Eaves.	Width of Pit.	On Rail.	Erected within 20 miles.	Extra, if roof made in Sashes.
ft.	ft.	ft. in.	ft. in.	ft. in.	£ s. d.	£ s. d.	£ s. d.
7 ..	5 ..	7 0 ..	4 0 ..	2 0 ..	5 10 0 ..	7 10 0	0 7 6
8 ..	5 ..	7 0 ..	4 0 ..	2 0 ..	6 0 0 ..	8 5 0	0 7 6
9 ..	6 ..	7 6 ..	4 6 ..	2 0 ..	7 0 0 ..	9 10 0	0 10 0
10 ..	7 ..	7 6 ..	5 0 ..	2 6 ..	8 10 0 ..	11 5 0	0 15 0
12 ..	8 ..	8 6 ..	5 6 ..	3 0 ..	10 0 0 ..	13 10 0	1 0 0
15 ..	9 ..	8 6 ..	5 6 ..	3 0 ..	12 10 0 ..	16 10 0	1 5 0
20 ..	10 ..	9 0 ..	6 0 ..	3 0 ..	16 10 0 ..	22 0 0	1 10 0
25 ..	10 ..	9 0 ..	6 0 ..	3 0 ..	20 0 0 ..	27 0 0	1 15 0

When ordering, it should be stated at which end the door is required, when facing front of House from outside.

For Heating Apparatus suitable for above House, see Section VII.

Fairlight Lodge, Park Road, Southend.

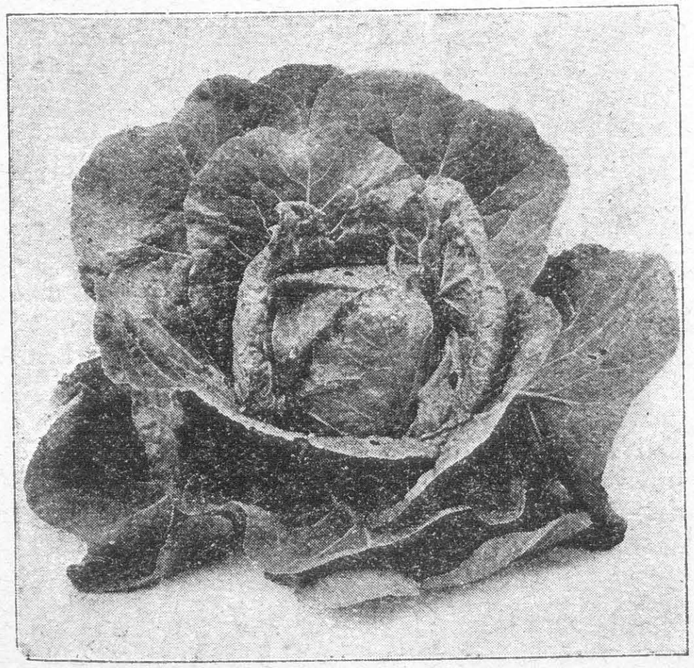
DEAR SIRS,—The greenhouse you put up for me year before last is very satisfactory.

R. NEWTON.

air freely and give egress to steam, and occasionally shake up their surfaces within the frames with a fork. When the heat in the material falls approximately to 90deg. Fahr., mounds of rich, loamy soil should be placed with acute apices under the centre of each light, and when the heat in them attains a permanency of about 80deg. plant the seedlings into them without unduly burying their stalks, and upper leaves up near to the glass. Then, or before, linings must be placed around the beds, as previously suggested, and the lights covered with two thicknesses of matting, or their equivalent, at night time to keep out cold and frost.

At this stage great care has to be exercised to neutralise the injurious—damping, &c.—effects of excess of steam by air giving at the backs of the sashes, but only such quantities as will let off excess of steam, dry the leaves of the plants daily, yet keep up a warmth of 65deg. by night and 75deg. by day, to ensure which it is desirable to place a thin wedge of wood under one corner of one or more of the sashes during the night.

When a root or two protrudes through the mound add sufficient soil to the latter to cover it, and continue this practice until goodly-sized mounds are formed and the time arrives when the whole surface of the bed has to be soiled over. To ensure greater fruitfulness it is desirable to pinch out the points of the above seedlings beyond the second or third rough leaf, and it is best to do this whilst they are in pots. The Pride of the Market Cucumber and Hero of Lockinge Melon are recommended.

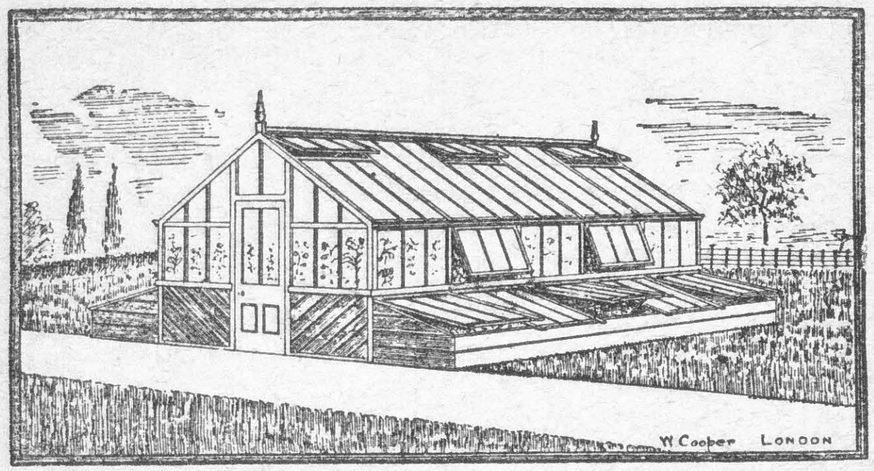


CABBAGE. DWARF SPRING.

PEAS, dwarf William Hurst.—Sow on a warm border during mild weather towards the end of the month.

BROAD BEANS, Early Longpod.—Sow late in the month in rows 30in. asunder.

Span-Roof Conservatory with Pits.



No. 12.

This illustration shows a well-made Span-roof Conservatory, with pits each side, placed in grounds away from the house; being exposed not only to view, but to the elements, it is so proportioned, both in substance and design, as to render it durable and effective.

SPECIFICATION.—The framework is of well-seasoned red deal, the lower part lined with tongued and grooved match-boards, as illustration.

The House is fitted with a half-glass door, complete with rim lock, brass fittings, and key, and is supplied with lattice staging for each side; footpath the entire length; and side and roof ventilators, according to size, and necessary ironwork for opening same; gutters and downpipes. All woodwork painted two coats, good 21oz. glass throughout, and all parts put on rail at our Works, being properly marked, or delivered, erected, and glazed, with an additional coat of paint after erecting, within 20 miles of London Bridge, at the following respective prices (beyond this distance proportionate prices will be quoted on application):

Length.	Width of House.	Height.	To Eaves.	Width of Pits.	On Rail.	Erected within 20 miles.	Extra, if roof made in Sashes.
ft.	ft.	ft. in.	ft. in.	ft. in.	£ s. d.	£ s. d.	£ s. d.
7 ..	5 ..	7 0 ..	4 0 ..	2 0 ..	6 6 0 ..	8 8 0	0 7 6
8 ..	5 ..	7 0 ..	4 0 ..	2 0 ..	7 0 0 ..	9 5 0	0 7 6
9 ..	6 ..	7 0 ..	4 6 ..	2 0 ..	8 0 0 ..	10 15 0	0 10 0
10 ..	7 ..	7 6 ..	5 0 ..	2 6 ..	9 10 0 ..	12 10 0	0 15 0
12 ..	8 ..	8 0 ..	5 6 ..	3 0 ..	11 5 0 ..	14 15 0	1 0 0
15 ..	9 ..	8 6 ..	5 6 ..	3 0 ..	14 0 0 ..	18 10 0	1 5 0
20 ..	10 ..	9 0 ..	6 0 ..	3 0 ..	17 10 0 ..	23 10 0	1 12 6
25 ..	10 ..	9 0 ..	6 0 ..	3 0 ..	22 0 0 ..	29 10 0	2 0 0

For Heating Apparatus suitable for above House, see Section VII.

Tarred Timbers to erect this House on, 3d. per foot run.

AMATEUR GARDENING.—*continued.*

CABBAGES.—Make up blanks in rows, and finally plant any existing autumn-sown seedlings.

ONIONS AND PARSNIPS.—Finally prepare the ground for both crops. Deep digging or trenching, also deep manuring, are necessary for both. For the former the surface ground cannot be made too fine. If previously manured and dug so that the warm strata settle down somewhat firmly it will meet its requirements. As an additional surety for good crops now scatter soot and salt (in small quantity) over the surface and point it into the ground with a fork. If this is done when the previously-worked ground is hard with frost so much the better.

JERUSALEM ARTICHOKES.—Plant upon any odd piece of ground in the same way as Potatoes are planted, to get the work done and off hand before the busy season arrives.

ENDIVE, LETTUCE, SPINACH, and all autumn-sown seedlings.—Stir the surface of the ground between.

SHALLOTS.—Plant in fine, mouldy surface ground. Press each root, divided or otherwise, well into the ground with the hand.

POTATO SETS intended for early crops (especially Ashleaf variety, amongst which Rivers's form is best).—Select and lay in single layers in shallow boxes; then transfer to a light, airy greenhouse or the like, to form sturdy sprouts.

RHUBARB STOOLS, not being forced, will give earlier, better-coloured produce if they are now covered with light litter an inch or two in thickness.

AUTUMN-SOWN ONIONS.—Transplant.

MARCH.

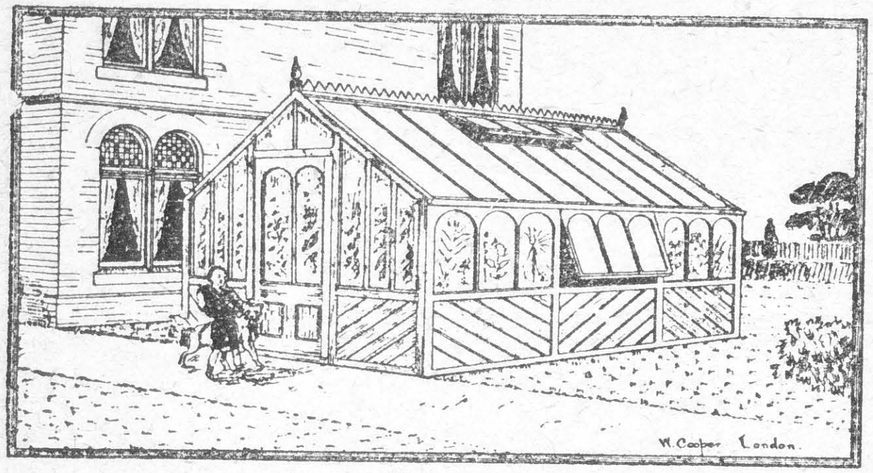
FLOWER OR DECORATIVE DEPARTMENT.

March is pre-eminently the favourable month for well-managed greenhouses or conservatories. The latter name was given in contradistinction to the former, because it was supposed to be a place wherein to conserve and display forced and other plants in flower collected from forcing houses and all other forms of glass structures; wherein, in fact, such desirable subjects could be best maintained, shaded, and attended to generally in such manner as to make them last, individually, as long as possible, and form a collective display such as is not possible where but a solitary structure is in possession, or such as contain mixed plants belonging in matter of flowering to all seasons of the year.

It is owing to this fact that more lofty, more ornamental structures are built near dwelling-houses, in keeping with them architecturally, wherein permanent roof-climbers may be grown along with foliage plants, &c., which form a set-off and background to introduced flowering plants, previously referred to.

Span-Roof Circular Light Conservatory.

TENANT'S FIXTURE.



No. 13.

This Conservatory is of ornamental design and artistic finish, and the materials employed in its construction are selected with the greatest regard for substantiality.

SPECIFICATION.—The framework is made of thoroughly seasoned red deal, and the lower part is enclosed with diagonal panels, with tongued and grooved matchboards, lattice staging for plants on each side of the house; footpath the entire length; gutters and downpipes. Ample ventilation on the most approved plan is given, according to the size of the House; rim lock, with brass fittings and key for door; and all necessary ironwork and fittings provided, including 21oz. glass throughout, carefully packed. Each House is carefully marked, so that any handy person can fit it in a few hours. The whole of the woodwork is painted one coat, and put on rail at our Works, or delivered, erected, and glazed (with extra coat of paint at Works) within 20 miles of London Bridge, at the following respective prices (beyond this distance, proportionate prices quoted on application):

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.	Extra, if roof made in Sashes. £ s. d.
7	5	7 0	4 0	5 10 0	7 0 0	0 7 6
8	5	7 0	4 0	6 0 0	7 10 0	0 7 6
9	6	7 0	4 6	7 0 0	9 0 0	0 10 0
10	7	7 6	4 6	8 10 0	10 10 0	0 15 0
12	8	8 0	5 0	10 0 0	12 10 0	1 0 0
15	9	8 6	5 3	14 0 0	18 0 0	1 5 0
18	12	9 6	5 6	19 0 0	24 0 0	1 15 0

Tarred Timbers to erect this House on, 3d. per foot run.

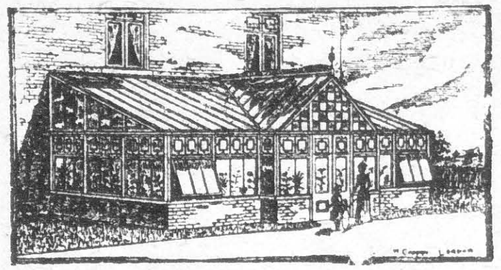
290, Dallow Street, Burton-on-Trent.

GENTLEMEN.—Thanks for greenhouse, safely to hand. No parts broken and all in good order. Am delighted with same.

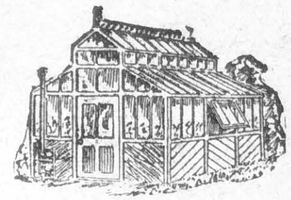
Sorry I have not written before, but have been busy fixing greenhouse.

—Yours faithfully, PAUL RAVEN.

The following illustrations describe such structures, suitable



No. 32.—LEAN-TO CONSERVATORY.

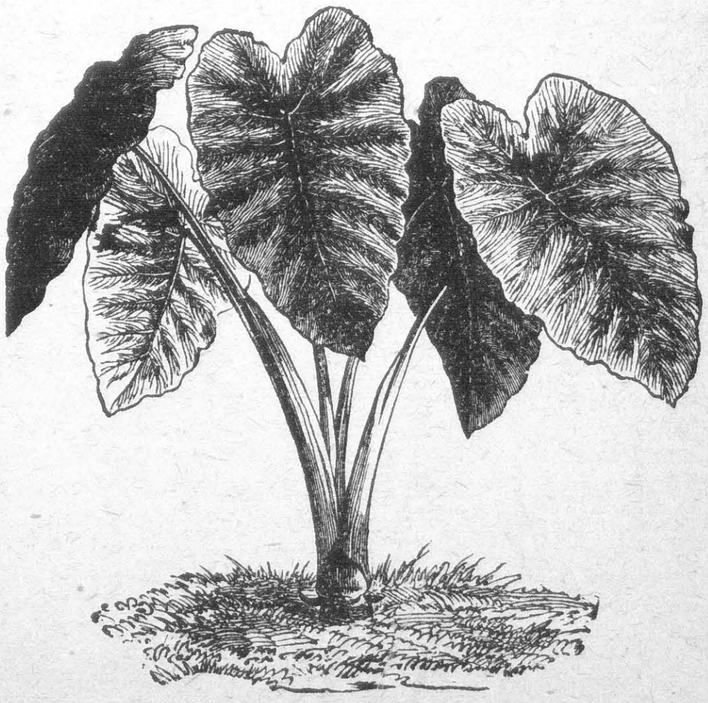


No. 14.—CONSERVATORY WITH LANTERN.

respectively for attaching to dwelling-houses or standing alone contiguous to such on specially-selected sites.

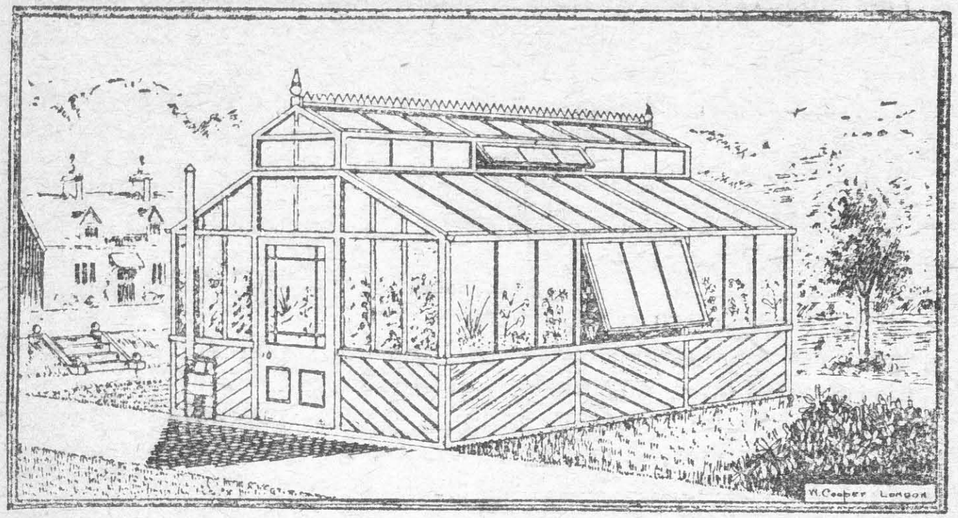
It must not be thought, judging by the preceding remarks, such structures as these are not suitable, when standing alone in a garden, for growing superior collections of miscellaneous plants. By comparison with low span-roofed houses, more generally devoted to the intensive culture in these modern days of certain kinds of plants, they have the advantage in that such gorgeous climbers can be grown trained under the roof, trained to wires with pendent flowering branches, as cannot be grown in the low-roofed ones; as, for instance, such kinds as Lapagerias (red and white flowered), Solanum jasminoides, Tacsonias, Passifloras, which require free headroom, to say nothing about many others.

CALADIUMS, GLOXINIAS, TUBEROUS BEGONIAS, &c., require careful attention when starting them into growth. Only maintain a latent moisture in the sandy soil, and maintain a warmth of 58deg. to 65deg. as constantly as possible. Also stately Palms, Araucarias, Camellias, Oranges, Tree Ferns, Acacias, Daturas, Dracæna indivisa Veitchii, and all fine specimens of both flowering and foliage greenhouse plants,



CALADIUM ESCULENTUM.

Lantern-Roof Conservatory.



No. 14.

This handsome elevation is recommended for a prominent position in the grounds of a villa residence. Artistic in design, and finished with the utmost care, it will prove ornamental and durable wherever established.

SPECIFICATION.—All timbers employed are of thoroughly seasoned and carefully selected red deal; the lower part enclosed with diagonal panels of tongued and grooved matchboard, half-glass door in one end, 21oz. glass throughout; staging along each side; footpath the entire length; gutters and downpipes; ample provision for ventilation made, and necessary ironwork for ventilators; painted one coat. Carefully put on rail at our Works, and marked ready for fixing, or delivered, erected, and glazed complete (with additional coat of paint at Works), within 20 miles of London Bridge, at the following respective prices (beyond this distance, proportionate prices quoted on application):

Length.	Width.	Height.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	£ s. d.	£ s. d.
10	7	10 6	9 0 0	11 10 0
12	7	10 6	11 10 0	14 0 0
15	9	10 6	14 15 0	18 10 0
20	10	10 6	18 10 0	23 10 0
25	12	10 6	24 0 0	32 0 0

Proportionate prices for other sizes.

Deduct 10 per cent. if required for Brickwork.

For Heating Apparatus suitable for above House, see Section VII.

Tarred Timbers to erect this House on, 3d. per foot run.

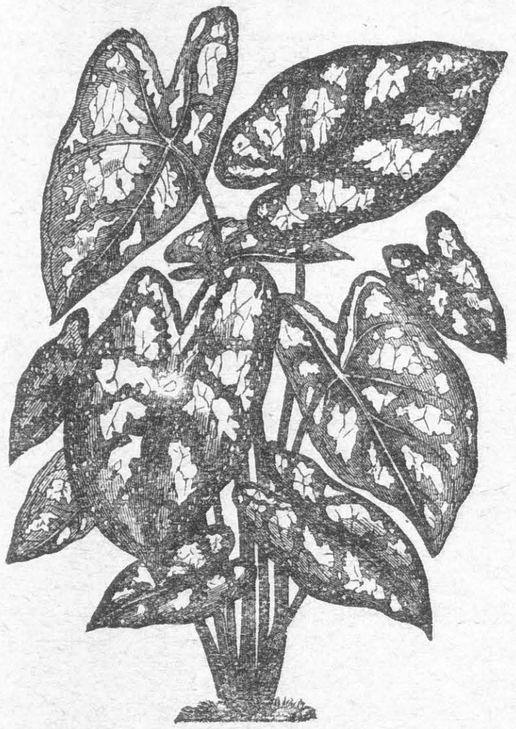
High Street, Pershore.

DEAR SIR,—The greenhouse I had from you at Christmas I have now erected, and am very pleased with same. I now want a heater for it—which do you recommend? The size of the house is 12ft. by 8ft.—Yours faithfully,

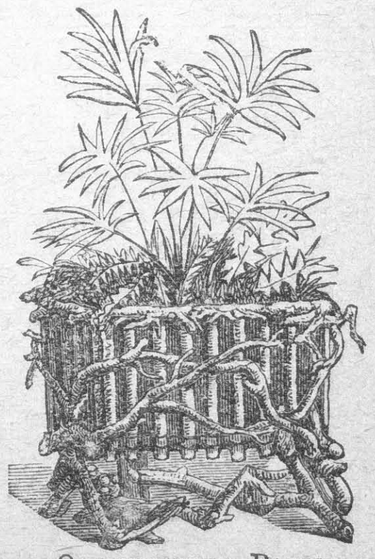
J. J. COOKE.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

for which there is not head-space enough in lower-roofed houses. There is, besides, the question of planting out such subjects in borders or beds, whereby their after-culture becomes of the easiest, and they are practically a permanency. There are, moreover, the side stages, which are well adapted for younger plants, and the many flowering ones grown on from seed amongst annular types, as well as subjects of more lowly repent habit, for garniture of the edges of the stages, Ferns, &c.; indeed, the latter, along with Selaginellas (Club Mosses), might have room found them in lean-to structures upon artificial rockwork, erected against the back wall on the two outer sides. Even winter stores of bedding plants may be maintained upon side shelves properly secured upon artistic brackets, and there would be space aloft for hanging baskets, which, well furnished, are always a feature under glass roofs. There is one plant peculiarly suitable for hanging baskets which ought to be more generally grown. It is named Sedum carneum variegatum, with flesh-tinted exceptionally white variegated foliage which grows and hangs *en pendant* from them. The shoots when they become too long need but to be shortened and their base buried in the soil in the outer edges of the baskets, and is as good in winter and summer. Amongst other plants rambling Campanulas, Tradescantia viride, its whitish-yellow variegated counterpart, Saxifraga sarmentosa, and the fine cut-leaved sweet-scented Pelargoniums are eligible. An important consideration when preparing these baskets for planting is to first place firmly a good thickness of moss against the wire-work within, and it is also desirable to place a layer of the same over the surface of the soil after planting. During the winter months

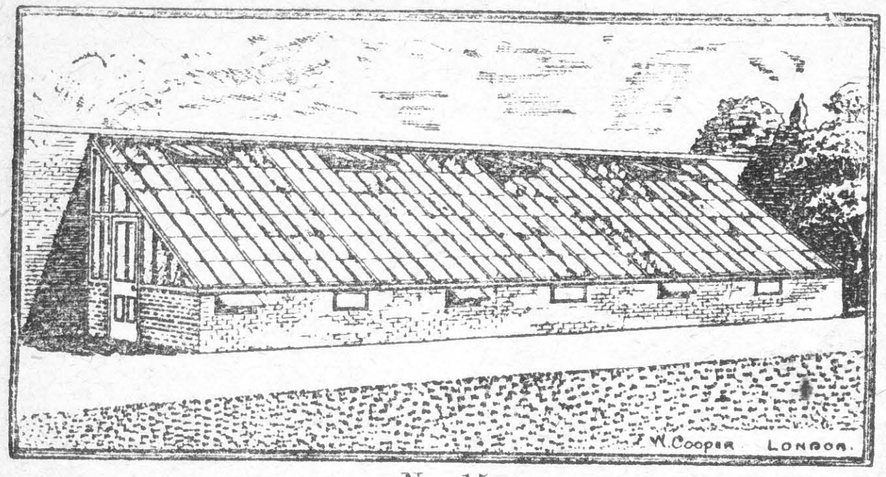


CALADIUM CHANTINI.



ORNAMENTAL PALM

Lean-to Forcing House.



No. 15.

The value of this House for forcing purposes will be at once apparent by the illustration; inexpensive in design and economical in space are its characteristics. It is indispensable to the private gentleman or professional grower of cucumbers, melons, tomatoes, &c., and one cropping should repay its cost of construction.

SPECIFICATION.—Built for brickwork 3ft. high; framework throughout 3in. by 2in. well-seasoned red deal; door complete, with lock, and brass furniture at one end; roof ventilation according to size, necessary ironwork for opening same, and good 21oz. glass throughout. House painted one coat, carefully marked, and put on rail at our Works at the following prices:—

Length.	9ft. wide.	12ft. wide.	14ft. wide.
ft.	£ s. d.	£ s. d.	£ s. d.
20	7 0 0	9 0 0	11 10 0
30	9 10 0	12 10 0	16 5 0
40	13 0 0	16 0 0	19 0 0
60	19 0 0	22 10 0	27 0 0
100	28 0 0	31 0 0	37 0 0

Ventilating Boxes for Side Walls, 3s. 9d. each extra.

If made with strong wood base instead of for brickwork, add 15 per cent.

Estimates for Stages, Footpath, Heating Apparatus, also for erecting Forcing Houses in any part of the country, free on application.

For Heating Apparatus suitable for above House, see Section VII.

West View, Grove Lane, S.E.

SIRS,—The greenhouse has been fixed satisfactorily, and I am very pleased with the way your men have carried out the work.

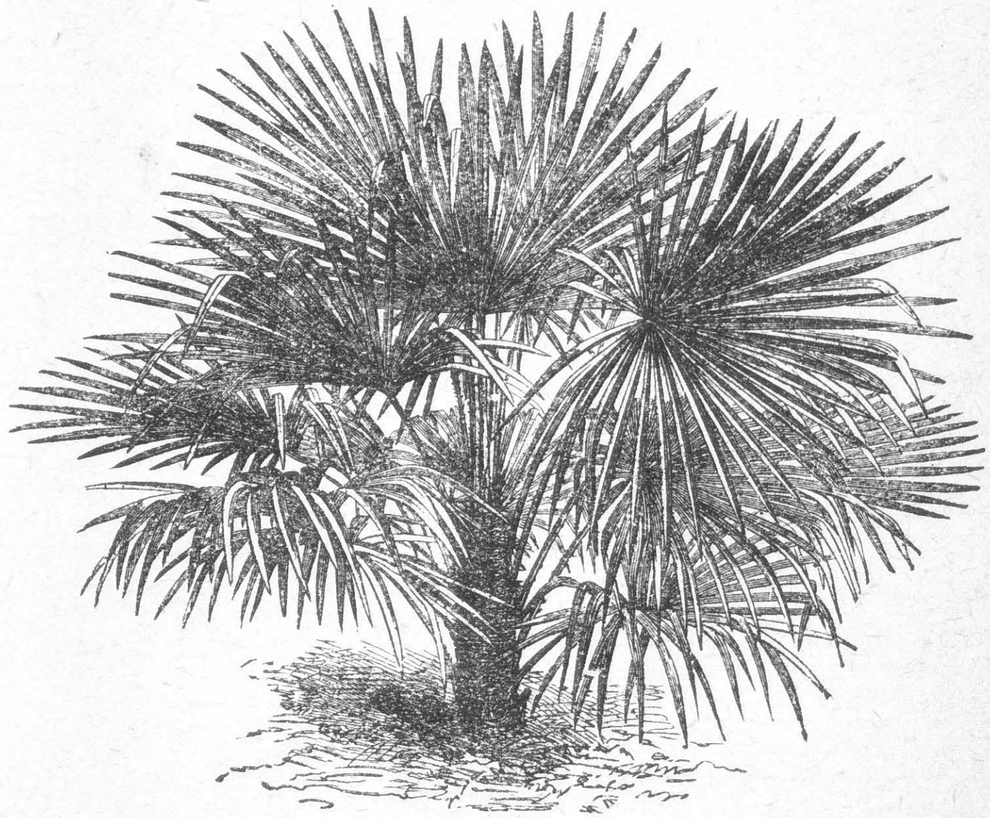
R. H. BARTON.

DEAR SIRS,—The greenhouse I had of you for £25 four years ago has done very well indeed.

A. HEMMING.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

occasional surface soil waterings alone are necessary, but during the summer months the baskets should be plunged in water. No more endurable and enduring plant for baskets—and the hint should be valuable to window gardeners—exists than the ever popular Aspidistra, when subject to above treatment. Rooted leaves with portions of their knotted rhizomes attached may even be pushed through the sides of the basket.

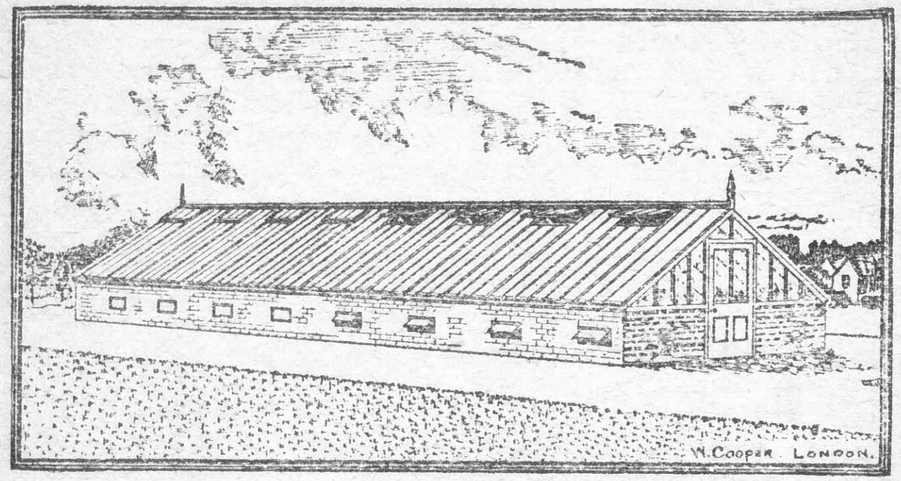


FAN PALM.

In such a position the variegated leaved forms are, of course, the most showy, as the particoloured foliage makes such a good show in mid-air.

INTEREST IN GLASS STRUCTURES is more pronounced during this and the early spring months than at other seasons. They are now most enjoyable and can be made profitable. This is more particularly the case in regard to the solitary structures owned by amateurs. Owing to the variety of subjects grown in them, particularly greenhouses, it has been necessary during winter to maintain a suitable cool temperature, both to prevent the plants making undue weakly growth and prevent them from damping. Now that is altered. The power of the sun, with increased length of days and higher

Span-Roof Forcing House.



No. 16.

This illustration shows a Span-Roof Forcing House, the advantages of which are apparent where space will admit of its erection. It is indispensable to every grower of cucumbers, tomatoes, melons, &c., where a succession of crops is required in all seasons. Though cheap in construction, it is soundly built, and will repay its cost in a season.

SPECIFICATION.—Built for brickwork 3ft. high; framework throughout 3in. by 2in. well-seasoned red deal; door complete, with lock, and brass furniture at one end; roof ventilation according to size, necessary ironwork for opening same, and good 21oz. glass throughout. House painted one coat, carefully marked, and put on rail at our Works at the following prices:—

Length.	9ft. wide.	12ft. wide.	14ft. wide.
ft.	£ s. d.	£ s. d.	£ s. d.
20	7 10 0	9 0 0	12 0 0
30	10 0 0	13 0 0	17 0 0
40	14 0 0	17 0 0	20 0 0
60	20 0 0	24 0 0	28 10 0
100	30 0 0	33 0 0	40 0 0

Partitions, with extra door, 9ft., £1 10s.; 12ft., £1 15s.; 14ft., £2 each.
Ventilating boxes for side walls, 3s. 9d. each extra.

If made with strong wood base instead of for brickwork, add 20 per cent.

Estimates for Stages, Footpaths, Heating Apparatus, also for erecting Forcing Houses in any part of the country, free on application.

We have erected several hundreds of these Houses, complete with Brickwork, Heating Apparatus, &c., in all parts of the Kingdom. Satisfaction guaranteed; good, sound materials and workmanship. Competition defied.

For Heating Apparatus suitable for above House, see Section VII.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

temperatures without, permits of more warmth being maintained and the commencement of active growth all round, provision being made to combat such frosts as occur. This, however, is readily met by shutting up the structure betimes in the afternoon and giving a much less amount of artificial heat than was necessary in the near past. Blue Amaryllis griffinia blumenavia now flowers.



GRIFFINIA BLUMENAVIA.

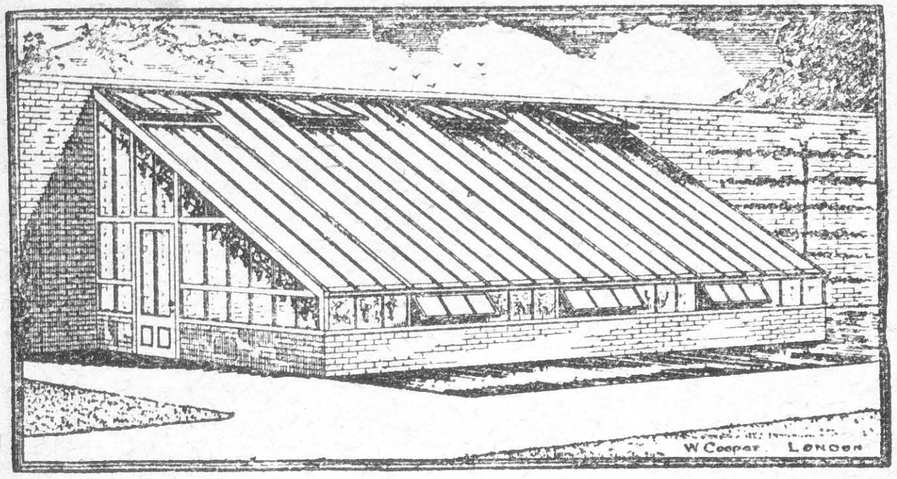
INCREASED HEAT up to 55deg. or 60deg. at the best part of each day will incite all plants to grow vigorously and well.

SWEET PEAS, now so popular, should be sown during the month and the seed will germinate, and the seedlings succeed better if from sowings made towards the end of it, or if indifferent weather prevails early in April. Like culinary Peas they appreciate deeply broken up, highly-manured ground. Modern varieties, to be well grown, produce really superior flowers, and continue long in flower, should be so sown and grown singly so as not unduly to interfere with each other, or four inches or more asunder; though if only grown for the supply of cut blooms for epergnes, &c., seeds not too thickly sown in drill rows will produce them. It is strongly advised, however, that growers obtain, even in the form of mixed seeds, selections from Eckford's or other improved forms, and do not rely upon ordinary mixtures. The following are amongst the best of modern varieties:—Helen Lewis, The Marquis, Clara Curtis, Mrs. Hardcastle Sykes, Etta Dyke, Elsie Herbert, Mrs. A. Ireland, Evelyn Hemus, Marjorie Willis, John Ingram, Prince of Asturias, and King Edward Spencer.

BEDDING PLANTS, included in above category, even in the case of stores maintained in boxes, pots, or pans, will in process of such growth form more eligible cuttings for immediate propagation. On the other hand, it will put such stores in the best possible condition for potting off separately into single pots or dividing, as in the case of Lobelias, and setting out singly in other boxes.

THE SOWING OF SEEDS of tropical foliage and half-

Lean-to Greenhouse or Vinery.



No. 17.

A well-made Lean-to House, suitable for Greenhouse or Vinery, built to fit against existing wall, and for 2ft. 6in. of brickwork at base.

SPECIFICATION.—Constructed of the very best materials, well and substantially built, all woodwork consisting of good, well-seasoned red deal; 21oz. glass throughout; alternate ventilation as shown in illustration, with necessary ironwork for opening same; gutters and downpipe; door in one end fitted with lock, brass furniture, and key; woodwork painted two coats, all carefully put on rail at our Works, marked ready for erection, or delivered and erected by us at the following respective prices, with extra coat of paint after glazing, within 20 miles London Bridge, exclusive of brickwork, or made with wood base instead of for brickwork as illustration, 10 per cent. extra:—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	8 0	4 0	12 0 0	15 15 0
20	10	8 6	4 6	14 0 0	18 15 0
30	12	9 0	4 9	25 0 0	35 0 0
40	12	9 6	5 0	33 0 0	46 0 0
50	14	10 0	5 3	45 0 0	62 0 0
100	14	10 6	5 6	82 0 0	116 0 0

Proportionate prices for other sizes and for erecting in any part of the kingdom free on application.

For Heating Apparatus suitable for above House, see Section VII.

The Hall, Harlington, Middlesex.

DEAR SIRS,—We are very pleased with the greenhouse, and if opportunity occurs I shall be pleased to mention you to any of my friends.

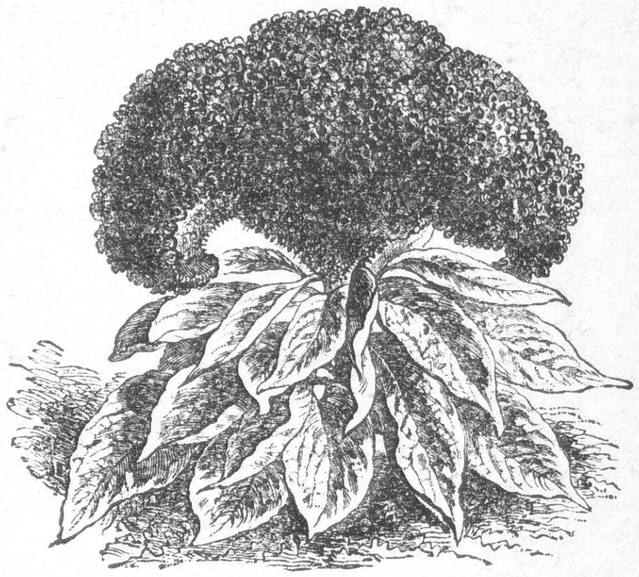
H. W. LARGE.

3, Grosvenor Terrace, Teignmouth.

SIRS,—Mr. S. Manning is extremely pleased with the greenhouse sent.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

hardy plants in variety may be commenced about the middle of the month, including such subjects as Sensitive Plant, Grevillea, Eucalyptus, Amaranthus, Petunias, Cockscombs, dwarf Antirrhinums, Stocks, Balsams, Summer Climbers, Carnations (including Margarita varieties, which bloom so promptly), Castor Oil, Single Dahlias, Dianthus, Gaillardias, Godetias, Helichrysums, Marigolds, Schizanthus, Solanums, Tropæolums, Zinnias. Ornamental Grasses, and many others. Sow in light sandy compost over good drainage, and cover the more tender with sheets of glass.

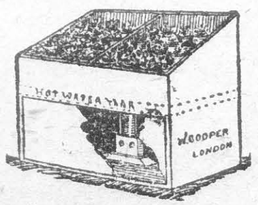


COCKSCOMB.

TUBEROUS BEGONIAS conserved in a dry state during the winter bring forth and half bury in light fibre or very sandy soil. Take care to place the hollow or growing side upwards and the round side below. The latent moisture existing in the soil will be ample for the first two or three weeks.

THE "RAPID" PROPAGATOR is an invention which is very helpful in raising seedlings of the more tender plants and striking cuttings, &c., at this season in particular, where the cooler forms of greenhouses alone are at command.

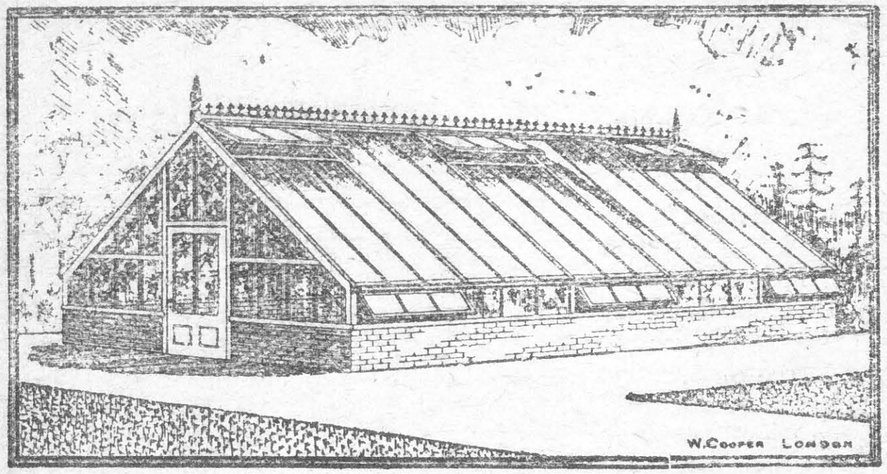
It is so constructed that its internal central platform, made of metal, forms a bed whereon to place fibre or similar material whereon to place pots or boxes, being enclosed with a hinged sash above; below this bed or central platform being a metal tank for water, which by means of an oil lamp can be heated to the necessary degree and kept in constant circulation. Its greater advantage is that the lamp supplied has been so regulated as to produce a desirable warmth. Great care is necessary to keep the tank supplied with water through the inlet within. If this is neglected the invention becomes inoperative. The burner being a small one the quantity of oil consumed is very little, whilst its chimney, made of metal, is practically indestructible.



THE "RAPID" PROPAGATOR.

FLOWER FORCING may be carried out under the most

Span-Roof Plant House or Vinery.



No. 18.

A well-made Span-roofed House, suitable for Plant House or Vinery, built to fit on 2ft. 6in. of brickwork at base.

SPECIFICATION.—Constructed of the very best materials, well and substantially built, all woodwork consisting of good, well-seasoned red deal; 21oz. glass throughout; alternate ventilation as shown in illustration, with necessary ironwork for opening same, gutters, and downpipes; door in one end, fitted with lock, brass furniture, and key; woodwork painted two coats, all carefully put on rail at our Works, marked ready for erection, or delivered and erected by us at the following respective prices, with extra coat of paint after erecting within 20 miles London Bridge, exclusive of brickwork:—

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.
15	9	8 0	4 0	14 0 0	18 10 0
20	10	8 6	4 9	16 0 0	21 10 0
30	12	9 0	4 9	23 0 0	38 10 0
40	12	9 6	5 0	38 0 0	52 0 0
50	14	10 0	5 3	50 0 0	68 10 0
100	14	10 6	5 6	90 0 0	125 0 0

If supplied with wood base in double lined panels, 15 per cent. extra.

Proportionate prices for other sizes and for erecting in any part of the kingdom free on application.

For Heating Apparatus suitable for above House, see Section VII.

Old Headington, Oxford.

DEAR SIRS,—I wish to tell you how very much pleased I am with the greenhouse. It is so well made and put up, and I am more than satisfied.

MISS S. R. PRICE.

AMATEUR GARDENING.—*continued.*

favourable conditions, as the springtide may be considered to be quite a month in advance within glass structures what it is out of doors. The proper procedure is to place all subjects to be forced first for about a fortnight in an intermediate temperature averaging 55deg., then placing them in a slightly higher warmth, which should be gradually increased until it reaches 70deg. or 75deg., and this along with an equally gradual increase of both root and atmospheric moisture. Bottom heat is of the utmost assistance up to a maximum of 87deg., upon which the pots may be stood, or into which they may be plunged. When the plants are forming and developing blooms, they will be materially assisted with occasional weak manurial waterings.

HYACINTHS, TULIPS, and similar bulbous plants intended for forcing must be prepared by potting or boxing them in October and burying them in fibre in a cool place (out of doors will do) to a depth of two inches above pots or boxes. When they have made roots somewhat freely and their crowns start growing they may be either forced or brought on slowly under glass.

HERBACEOUS BORDERS demand attention. Finish dividing all roots necessary in process of propagation, and break up the surface of the ground between others.

RANUNCULUS, plant four inches deep in well broken-up rich ground.

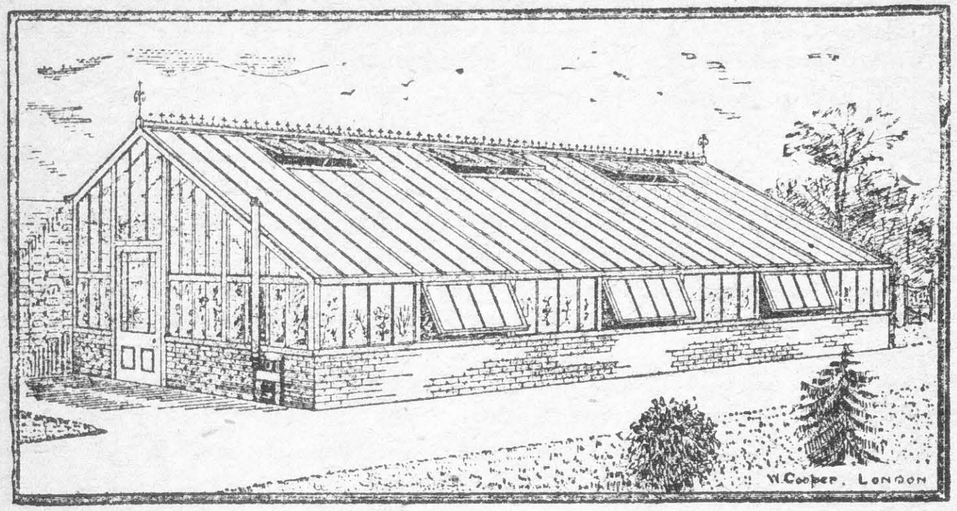
DAHLIA TUBERS, if to be started early, bury in boxes, and when they form young shoots take them out, divide them each into two or three, having shoots with roots attached, and pot them singly, or re-box them to continue their growth in a light place until May 22, when they may be planted out. Dahlia tubers succeed fairly well if planted directly into the open ground where they are to grow and bloom, but a little light litter should be placed over them until danger of frost is past.

BEDDING CALCEOLARIAS in frames should have the lights removed from the frames except during possible frosts.

HARDY FRUIT GARDEN.

PEACH AND NECTARINE TREES are habitually pruned and re-nailed when they show the first signs of swelling their flower or wood buds. As all old branches (except the thicker ones which form the framework of the tree) which fruited last season are to be cut out, and only those among younger ones are to be retained for fruiting, long and thin, which were formed last summer, it is necessary to unnail practically each tree. This done, pruning as suggested follows, and all are as neatly re-nailed as possible. Whichever way the branches point they should be nailed quite straight from base to apex.

Three-Quarter Span-Roof Conservatory.



No. 19.

This House is constructed of the very best materials, and is well, substantially, and handsomely built, all woodwork consisting of good, well-seasoned red deal; ventilators at top and in front, with necessary ironwork for opening same; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key, lattice stages, footpath the entire length, gutters, and downpipes, &c. All woodwork painted two coats. Carefully put on rail at our Works, with every part marked ready for fixing, or delivered, erected, and glazed, with extra coat after erecting, within 20 miles of London Bridge, at the following respective prices (exclusive of brickwork):—

Length. ft.	Width. ft.	Ridge. ft.	Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.
20	9	9	5 0	22 0 0	29 0 0
24	10	9	5 6	27 0 0	35 0 0
36	12	10	6 0	36 0 0	48 0 0
60	12	10	6 6	62 0 0	82 0 0
100	14	12	7 0	115 0 0	150 0 0

Proportionate prices for other sizes, and for erecting in any part of the kingdom, free on application.

Plan for brickwork supplied free on receipt of order.

In ordering, it should be stated at which end the door is required; also height of back wall.

For Heating Apparatus suitable for above House, see Section VII.

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68 and 70, High Street, Margate.

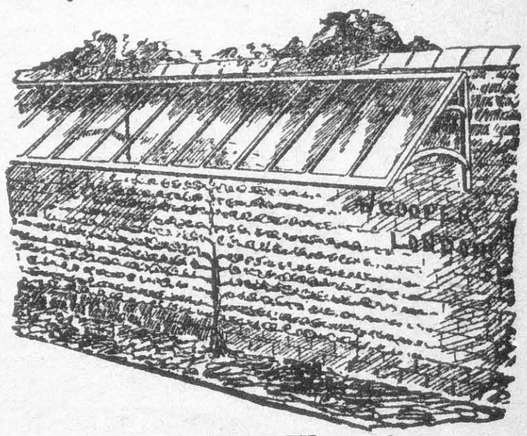
GENTLEMEN,—I have to-day received from you the forcing house ordered by me. I am obliged by your prompt attention, and will in future be only too pleased to recommend you.

E. K. ROWE.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

BLOOM EXPANSION being imminent, attention must be given to the efficient protection of it, which is possible in regard to it under the practice of close wall training. Various materials are used for this purpose, including old fish netting in two thicknesses; Frigi Domo, a coarse woolly form of great width and length; Hessian cloth, also of considerable width, whereby joining of pieces is obviated; the last being thinnest and cheapest. It is necessary that all such forms of protection should hang free from the trees, to ensure which a projecting board coping should be attached to the top of the wall.

GLASS COVERS for wall-trained trees are readily obtained, and the wonder is they are not more generally utilised. Such can be purchased for less than a five-pound note per fifty feet length, which, as they are permanent casts, cost in the long run little, if any, more than the inevitable outlay for temporary materials, with their manipulation, considered in the aggregate year by year. The following illustration represents such a wall cover, and it really has its beneficial influence in ripening crops:—

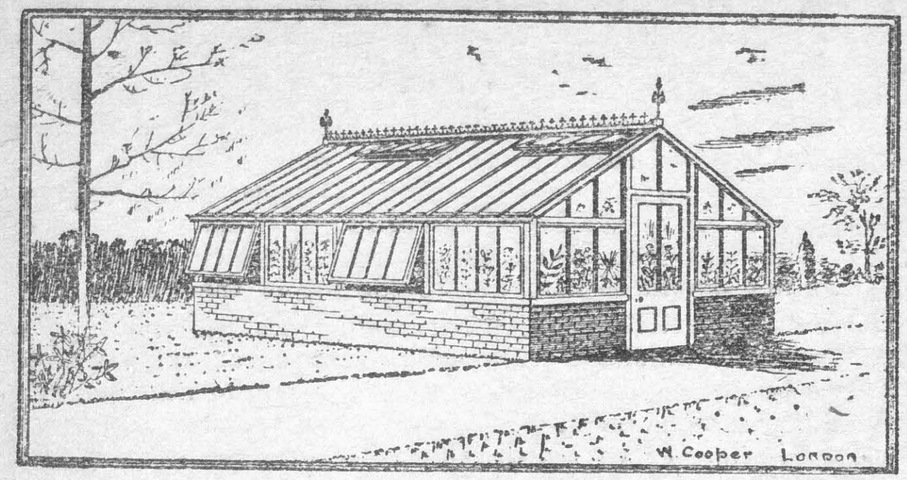


No. 34.—GLASS WALL COVER.

Made in 10ft. length sashes, by means of strong cast-iron brackets, is expeditiously fixed, hence particularly suitable for suburban and other garden walls. For wall Tomato culture it is just what is wanted to promote growth and fruitfulness even in adverse seasons. It has been suggested other protecting material could, for the protection of the flowers of fruit trees, be hung from its outer edge. This, however, I do not consider necessary, because March and April frosts—to describe a fact in erroneous words, "fall in a straight or perpendicular line," the real fact being such severe frosts attack horizontally—do not occur at this season, whilst such a coping intercepts the radiation of heat from the brickwork, whereby a more equable temperature is maintained.

GRAFTING, in so far as it relates to outdoor hardy trees, should be finished betimes in the month. The grafts always take better if in form of thick last year's shoots. They are selected, cut off at their base, and the latter buried three or four inches deep in the open ground in January or February. Small to comparatively large branches can be grafted on to, but the bark of at least one side of both scion or stock and graft should be made to exactly meet. The upper part of each graft should be cut off. The wood of both must be so cut as to

Span-Roof Conservatory.



No. 20.

This well-proportioned design represents a commodious and substantial structure, suitable either for the garden, or annexed to a house.

SPECIFICATION.—Constructed of the very best materials, all woodwork consisting of well-seasoned red deal; ample ventilation is given at ridge and sides according to size, with necessary ironwork for opening same; 21oz. glass throughout; stages each side; footpath the entire length, half-glass door, complete with lock, brass fittings, and key, and handsome ornamental iron cresting at ridge, giving an artistic finish; gutters and downpipe; all woodwork painted two coats. Carefully put on rail at our Works, marked ready for fixing, or delivered, erected, and glazed, with extra coat of paint after erecting, within 20 miles of London Bridge, at the following prices, exclusive of brickwork, or made with wood base instead of for brickwork, as illustration:—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft,	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	9 0	6 0	15 0 0	19 10 0
20	12	10 0	6 6	22 0 0	28 0 0
25	14	10 6	7 0	28 10 0	38 0 0
30	15	11 0	7 0	40 0 0	54 0 0
40	16	11 6	7 0	62 0 0	80 0 0

If supplied with wood base in double lined panels 15 per cent. extra. Proportionate prices for other sizes and for erecting in any part of the kingdom free on application.

For Heating Apparatus suitable for above House, see Section VII.

2, Muswell Rise, Highgate, N.

DEAR SIRS,—The conservatory is very well put together, and I am pleased with it. Several gentlemen have inquired who were the builders, and from its proximity to the railway station I daresay I may have the pleasure of recommending you to others.

ALEX. W. BAIN.

AMATEUR GARDENING.—*continued.*

fit each other closely. They must be tightly bound together from above to below the lower junction, then efficiently covered with an adhesive mixture of clay and cow dung, and this must be maintained intact until the following March.

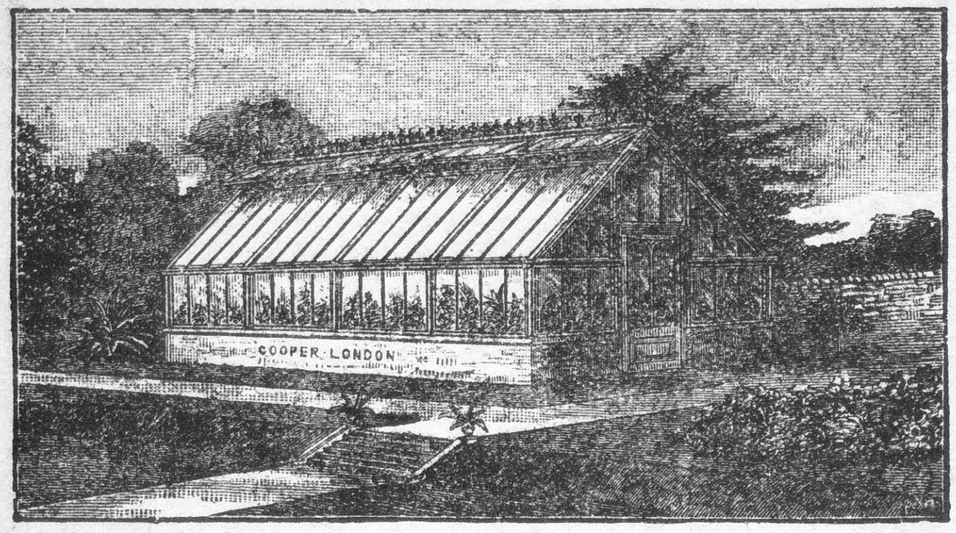
BUSH FRUITS should all be finally pruned before they begin forming leaves, at which time birds will cease to pick out their buds. Gooseberries must be severely pruned centrally to admit light into and throughout them; also remove such lower branches as will rest on the ground when weighted with fruit and such other branches as unduly crowd, or lie across better ones. Do not shorten the shoots retained upon them, these bear fruit throughout. Currants, Red and White, become more permanent crop-bearers if trained upwards in four or five distended branches, hollow in the centres, requiring their young shoots cut back to two buds about annually only. If growing half-standard on single stems young shoots want cutting back similarly annually, leaving three or four of the strongest only two-thirds their length. Black Currants only require dead or weakly shoots cut out down to their base.

VEGETABLE DEPARTMENT.

WITH FAVOURABLE WEATHER this is a busy month, but vegetable growers must be subject to weather conditions. If wet and cold, particularly if the ground is unduly surcharged with water, it will be wise to defer early sowings until it is drier and in good working order. To commit good dry seed to the ground in such adverse position is to court disaster, because large percentages of seed sown under adverse conditions will rot, seedlings which do appear will be weakly and make poor progress. On the other hand, given suitable weather early sowings have much to be said in their favour, because if they do succeed they will gain strength and consistency to take full advantage of the best May weather, a more extended summer, earlier and better crops. Try to make sowings of subjects as suggested below during the month, being guided by the weather as to whether it be early or late therein.

TOMATO CULTURE UNDER GLASS is, during the spring and summer, extremely simple. Amateurs who possess an empty glass structure should secure good strong plants reared in heat and plant them out either in large boxes, pots, or in a bed made upon the floor of the house. The best compost for them is a fibrous maiden yellow loam. Plant somewhat firmly, do not over-water the ground until they commence growing freely, maintain a warmth of 56deg. for minimum, with as goodly a one as is possible compatible with free air-giving by day during fine weather. Keep the atmosphere and house always as dry as possible. For other par-

Span-Roof Conservatory.



No. 21.

This Conservatory, as designed, makes a handsome addition to any garden, and will harmonise with, or can be adapted to, many gentlemen's residences in town or country.

SPECIFICATION.—Constructed of the very best materials, and is well, substantially, and handsomely built, all woodwork consisting of good, well-seasoned red deal; ventilators at top and front, according to size, with necessary ironwork for opening same; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key; stages each side; footpath the entire length; ornamental iron cresting along ridge; iron O.G. gutters and downpipes, &c.; all woodwork painted two coats. Carefully put on rail at our Works, with every part marked ready for fixing, or delivered, erected, and glazed complete, with extra coat of paint after erecting, within 20 miles of London Bridge, at the following prices (exclusive of brickwork):—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	9 0	6 0	17 10 0	22 0 0
20	12	10 0	6 6	25 0 0	31 0 0
25	14	10 6	7 0	32 0 0	42 0 0
30	15	11 0	7 0	45 0 0	60 0 0
40	16	11 6	7 0	70 0 0	88 0 0

Proportionate prices for other sizes and for erecting in any part of the kingdom, also for Heating Apparatus (see Section VII.), free on application.

Plan for brickwork supplied on receipt of order.

Moorland Glen, Carshalton Grove, Sutton, Surrey.

DEAR SIRS,—The greenhouse is in every way satisfactory, and I am very pleased with it.

EDWIN W. BROADBRIDGE.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

ticulars, see ensuing advice. To rear seedlings in greenhouses for planting out of doors, sow the seed in light soil at the beginning of the month.

ONIONS (Improved White Spanish), sow in drills 9in. apart. Parsnips: in drills 16in. apart. Broad Beans: sow a row each of Early Longpod and Windsor Peas: make one or two sowings of Duke of Albany. Turnips: sow a small bed of Early Dutch. Potatoes: the sooner main plantings are made the better; in any case, get in all early and second early varieties as soon as possible. The ground cannot be too well broken up for them with fine surface mould. They should be planted from 15in. to 24in. apart in the rows, in accordance with the vigour of the haulms of each variety. The following are desirable varieties: Rivers' Ashleaf and Sir John Llewelyn (earlies), Beauty of Hebron, Windsor Castle, and Supreme (second earlies), Up-to-Date and the Factor (late varieties).

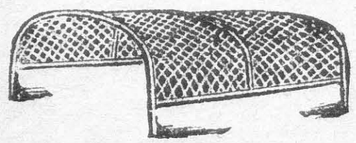
A GOOD ARTIFICIAL MANURE FOR POTATOES is made thus, the complete mixture sufficing for a rod of ground: 2½lb. superphosphate of lime, 2lb. of kainit, and 1lb. of nitrate of soda. Dress the prepared ground with it at the time of planting.

SOW SMALL SEEDS, in small quantities, of Brussels Sprouts, Lettuce (Paris Cos), Parsley, Spinach, Radish (French Breakfast), and Cabbage.

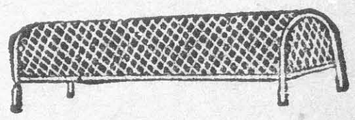
TOMATO SEED.—Sow in light soil under glass.

PROTECTORS OF SEEDS are very desirable, especially in suburban gardens. Besides the glass surface protector referred to in a previous month, the galvanised seed and Pea guards are very desirable.

The outlay for these is amply repaid in the long run. Besides the actual destruction of seeds, sparrows so destroy or



SEED GUARDS.



PEA GUARDS.

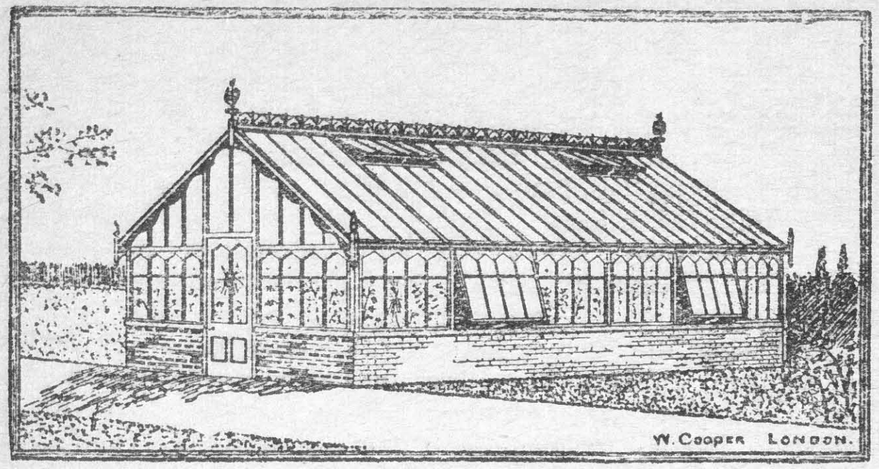
lacerate the tender seedlings that they cease to grow, and never thrive afterwards, whereby loss, to say nothing about annoyance, results. These protectors, whilst well safeguarding both seed and seedlings, can, when not in use, be packed away in limited space.

APRIL.

THE FLOWER OR DECORATIVE DEPARTMENT.

PLANT STRUCTURES assume their most delightful aspect during this month. The growth of all subjects may be

Span-Roof Conservatory.



No. 22.

The Illustration represents a House 30ft. by 15ft.

This Conservatory, as designed, makes a handsome addition to any garden, and will harmonise with, or can be adapted to, many gentlemen's residences in town or country, all the materials—wood, glass, and paints—being of the very best.

SPECIFICATION.—Constructed of the very best materials, and is well, substantially, and handsomely built, all woodwork consisting of good, well-seasoned red deal; ample ventilation according to size of house, at top and front, with necessary ironwork for opening same; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key; lattice stages each side; footpath the entire lengtr; iron O.G. gutters and downpipes, &c.; all woodwork painted two coats. Carefully put on rail at our Works, with every part marked ready for fixing, or delivered, erected, and glazed complete, with extra coat of paint after erecting, within 20 miles of London Bridge, at the following prices (exclusive of brickwork):—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	9 0	6 0	20 0 0	25 0 0
20	12	10 0	6 6	27 10 0	34 0 0
25	14	10 6	7 0	34 0 0	45 0 0
30	15	11 0	7 0	48 0 0	64 10 0
40	16	11 6	7 0	70 0 0	90 0 0

Proportionate prices for other sizes.

Estimates for erecting in any part of the kingdom free on application.

For Heating Apparatus suitable for above House, see Section VII.

Crescent House, Pembroke Crescent, Hove.

DEAR SIRS,—The greenhouse is up, and I write to express my entire satisfaction with same, as also the very capable man you sent to erect it.

HENRY T. ELLIS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

encouraged either in preliminary degree or fully, in accordance with kinds cultivated and the seasonable flowering of early bloomers.

FORCING OPERATIONS, with weather all in their favour, become a very simple process. Simply induce all subjects to be so treated as to commence growing in a moderate warmth of from 55deg. to 60deg., then increase the heat up to 60deg. by night and 70deg. by day, with a possible increase of another 5deg. during sunshine; and ply the syringe upon them freely about 9 a.m. and 3.30 p.m., keeping up a goodly atmospheric moisture by damping the floors on bright days. A little artificial heat may be required to maintain this state of things during adverse weather conditions and on cold nights, but from now onwards a little goes a very long way, as it will not have to contend with the low outer temperatures of the near past. Admit, meantime, as much fresh air as possible compatible with maintaining necessary warmth, for on no account must the temperature be permitted to fall away to a lower one after an advance of the same has been established. Shade flowering plants.

BULBOUS PLANTS IN POTS potted in October, or near that date, particularly Hyacinths, Tulips, Narcissus, and the like, and buried in ashes, will all be rooted and found to be growing freely. All should be bared, and the most forward selected in batches and placed in warm, sunny positions in greenhouses, whether maintained at a forcing warmth or not, as they will succeed and bloom well. All showing their embryo flower spikes will be best so treated.

HARD-WOODED YOUNG PLANTS, such as Genistas, Epacris, Heaths, &c., not flowering, may be pinched back to cause them to become more bushy, and as soon as they begin forming young shoots shifted into pots one size larger. If they do not require stopping and their pots are full of roots they should also be shifted.

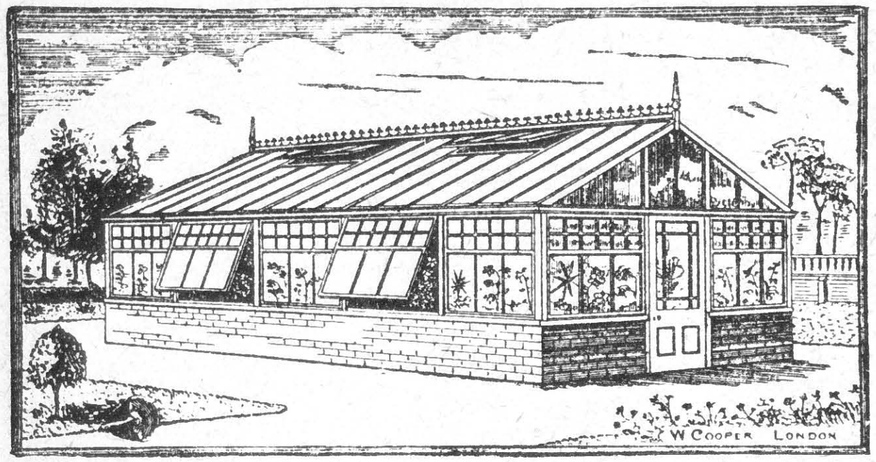
CINERARIAS, PRIMULAS, ZONAL PELARGONIUMS, &c., in bloom, give occasional weak manurial waterings. Keep them dry overhead to make each bloom last as long as possible.

BEDDING PLANTS.—Finish propagating, and potting off separately into single plants so as to ensure their preparedness for planting out late in May.

HALF-HARDY ANNUAL SEEDS, such as Asters, Phlox Drummondii, Zinnias, &c., sow for the production of seedlings for planting out when frosts are past.

HARDY ANNUALS.—Sow for summer flowering, especially Shirley Poppies, Calliopsis, Schizanthus, Larkspurs, Scabiosa, Marigolds, Mignonettes, and Love-Lies-Bleeding, for a back row.

Ornamental Span-Roof Conservatory.



No. 23.

Illustration shows a building, neat in design, which may be used for either a greenhouse or conservatory, and can be well recommended for a prominent position in the grounds of a villa residence. The upper side lights are filled in with tinted glass.

SPECIFICATION.—All timbers composed of good, well-seasoned red deal; 21oz. glass throughout; staging each side for plants; footpath entire length; ample ventilation, according to size; with necessary ironwork for opening same; iron O.G. gutters and downpipe; ornamental iron cresting along ridge; woodwork painted two coats. Carefully put on rail at our works, marked ready for erection, or delivered and erected by us (and painted an extra coat after erecting), at the following respective prices, exclusive of brickwork:—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	9 0	6 0	20 0 0	25 0 0
20	12	10 0	6 6	27 10 0	34 0 0
25	14	10 6	7 0	34 0 0	45 0 0
30	15	11 0	7 0	48 0 0	64 0 0
40	16	11 6	7 0	68 0 0	88 0 0

Proportionate prices for other sizes and for erecting in any part of the kingdom free on application.

If supplied with wood base in double lined panels, instead of for brickwork, as illustration, 15 per cent. extra.

For Heating Apparatus suitable for above house, see Section VII.

Boylagh House, Ballymoney, Co. Antrim,

Mrs. Boye received Greenhouse in good condition. She is very well pleased with it and thinks it good value.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

VIOLAS, PANSIES, CARNATIONS, HOLLYHOCKS, &c., in small plant form, finish planting where they are to bloom.

HERBACEOUS PLANTS.—Divide as necessary, and well hoe the surface of the ground between them.

SPRING FLOWERING PLANTS IN BEDS, whether bulbous, such as Tulips, or autumn-sown annuals, such as Myosotis, Silenes, &c., should have the surface ground well stirred between them.

ROSES.—During the first promise of fine weather early in the month finish pruning all. Dominant considerations are:—



Rose Aster.

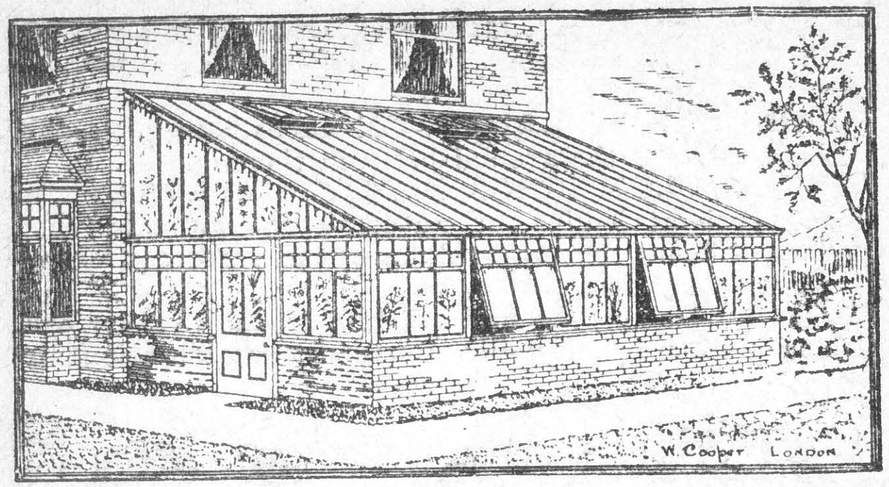


Aster.

Each plant requires little or much cutting back, in accordance with its respective vigour or size. Strong young branches as a rule cut back to three or four eyes; Teas a little longer if vigorous and exceptionally fine blooms are desired; other more weakly young shoots cut back to an average of two eyes, but really each young shoot has to be cut back, bearing above in mind, on its merits, and taking thought of the existing form of each plant.

VACANT FRAMES.—Utilise towards the end of the month for protection of the hardier forms of bedding plants, &c., removed from glass structures to make room for the increasing number of plants introduced, potting off of seedling and cutting bedding plants. Henceforward, frames will prove sufficient protection for such, particularly if covered with mats or the like during casual slight frosts.

Lean-to Conservatory.



No. 24.

This chaste design is eminently suitable for addition to most residences, and a delightful entrance may be had from an inner room if desired. The upper side lights, as shown in the illustration, represent tinted glass, which affords an agreeable and subdued shade of light.

SPECIFICATION.—Constructed of the very best materials, all woodwork consisting of well-seasoned red deal; ventilators at top and front, with necessary ironwork for opening same; gutters and downpipes; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key; lattice stages; footpath entire length; all woodwork painted two coats. Carefully put on rail at our Works, marked ready for fixing, or delivered, erected, and glazed, within 20 miles of London Bridge, with extra coat of paint after erecting, at the following prices (exclusive of brickwork), or made with wood base instead of for brickwork, as illustration, 10 per cent. extra :—

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.
15	9	10 0	6 6	19 0 0	24 0 0
20	12	10 6	7 0	26 0 0	32 0 0
25	14	11 0	7 0	32 0 0	42 10 0
30	15	11 6	7 0	45 0 0	60 0 0
40	16	12 0	7 0	63 0 0	82 0 0

Proportionate prices for other sizes, and estimates for erecting in any part of the kingdom, free on application.

In ordering, it should be stated at which end door is required when facing House; if required, it can be fixed in front at same price.

Plan for brickwork supplied free on receipt of order.

For Heating Apparatus suitable for above House, see Section VII.

HARDY CLIMBING PLANTS attached to walls, archways, pergolas, bowers, &c., should have winter coverings removed and generally pruned, nailed, or securely fastened in position; Passion Flowers cut back to two-year-old wood, Clematis to live wood, after the removal of dead leaves and flowers. A frequently-grown member of the last, i.e., C. montana, with dense clusters of starry white flowers, should have all young shoots, often of great length, retained, as the blooms form upon them. Climbing Roses only bloom well upon the young shoots formed during a preceding summer; hence these should be tied out advantageously, such old minor shoots as exist, which can be spared, to be cut down to their base.

VINERIES.

AMATEURS' GRAPE VINES existing in cool greenhouses should not be caused to start growing through erratic treatment, consisting of permitting the structure to become overheated by sunshine, unless it can, once the buds burst and leaves are forming, be maintained at a growing warmth day and night, all weathers, of for very minimum not less than 57deg. Fahr.; to do so will cause them to receive a check such as will militate against their whole summer's success. To avoid this, keep the temperature down by free admission of fresh air and maintaining it between 40deg. and 52deg., with the dry atmosphere so constantly recommended. Those who have already started their Vines, conform as regards warmth with the aforesaid conditions, and as growth advances gradually increase the heat, along with atmospheric moisture, including foliage vaporisings in the morning and afternoon of each fine day.

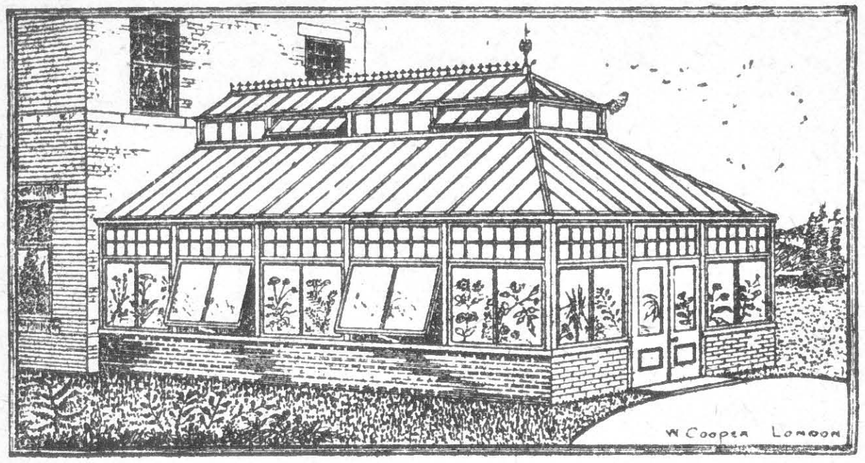
VEGETABLE DEPARTMENT.

ASPARAGUS growing, requiring practically a minimum of outlay by contrast with its productiveness, should be more generally followed. First outlay, in preparing ground for it, also well manuring the same as deep as may be, is the only considerable outlay, and bears favourable comparison with other vegetable crops. Break the surface of prepared ground up fine, and either plant three rows along 4ft. beds, or rows 2½ft. apart, of one- or two-year-old seedling roots (obtainable cheap by the hundred) late in April or when said roots are commencing to grow.

SEEDLING CAULIFLOWERS, LETTUCE, CABBAGES, AND ENDIVE which have stood successfully through the winter, finish transplanting in positions where they are to complete their growth.

SEED SOWING, as regards all forms of vegetables—which it is unnecessary to fully enumerate, bearing in mind last month's suggestions—should be continued until all main crops

Lantern-Roof Conservatory.



No. 25.

This design can be made detached if desired. Prices on application. The upper side lights are filled in with tinted glass.

SPECIFICATION.—Constructed of the very best materials, and is well, substantially, and handsomely built, all woodwork consisting of good, well-seasoned red deal; ventilators at top and front, with necessary ironwork for opening same; 21oz. glass throughout; half-glass doors, complete with lock, brass fittings, and keys; lattice stages each side; footpath the entire length; iron O.G. gutters and downpipes, &c.; all woodwork painted two coats. Carefully put on rail at our Works, with every part marked ready for fixing, or delivered, erected, and glazed complete, with extra coat after erecting, within 20 miles of London Bridge, at the following prices (exclusive of brickwork):—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	10 6	6 0	25 0 0	32 10 0
20	12	11 0	6 6	40 0 0	50 0 0
25	14	11 6	7 0	55 0 0	68 0 0
30	15	12 0	7 0	72 0 0	88 0 0
40	16	12 6	7 6	95 0 0	118 0 0

Proportionate prices for other sizes.

Estimates for erecting in any part of the kingdom free on application.

Keewaydin, Upper Gordon Road, Camberley.

Miss Tucker is much pleased with the greenhouse.

Wilmington Lodge, Keymer.

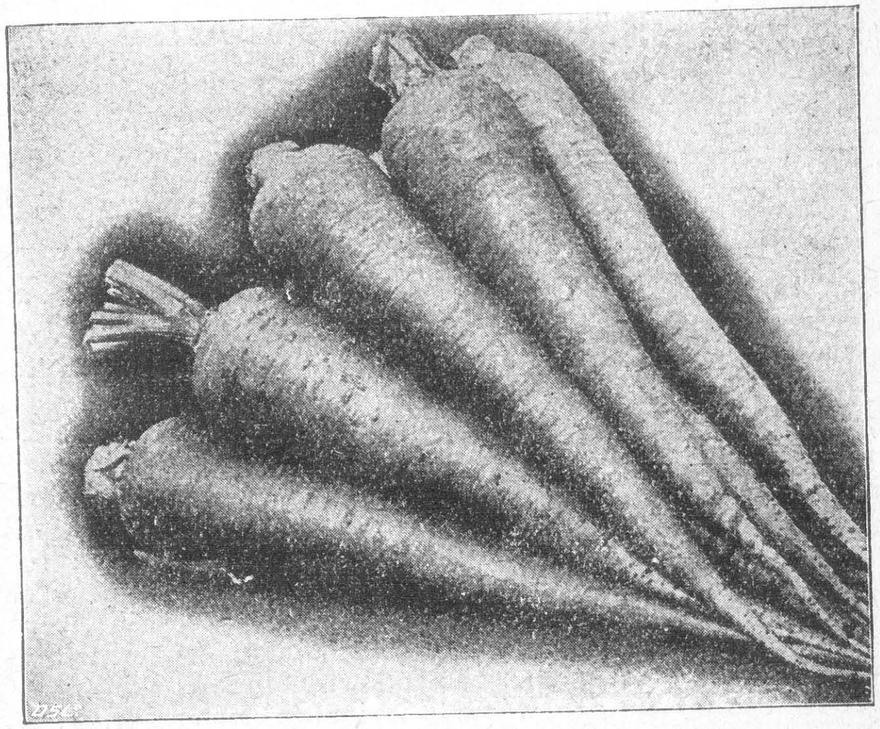
DEAR SIRS,—The forcing house you put up in place of my old one is a great success, as I can get any temperature I wish in it, also the work contracted for on my three glasshouses has been completed to my entire satisfaction.

WILLIAM EDWARDS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

are got in. Reference may, however, be made to Beet, Salsafy, Chicory (roots of which are grown to produce forced blanched crowns for salading in the ensuing winter), and main crop Carrots, of which the new Intermediate is a desirable variety. To avoid sowing Carrot seed too thick, a common error, it is desirable to mix with it an equal bulk of sand or fine earth. Shallow drill rows only should be made for the latter and Onions; these last, when sown, should be pressed down and the soil scuffled over the seed with the feet. Beet seed, being large, should be dropped into half-inch deep drills, two in a place, 3in. apart. Tomato seedlings pot singly in small pots.

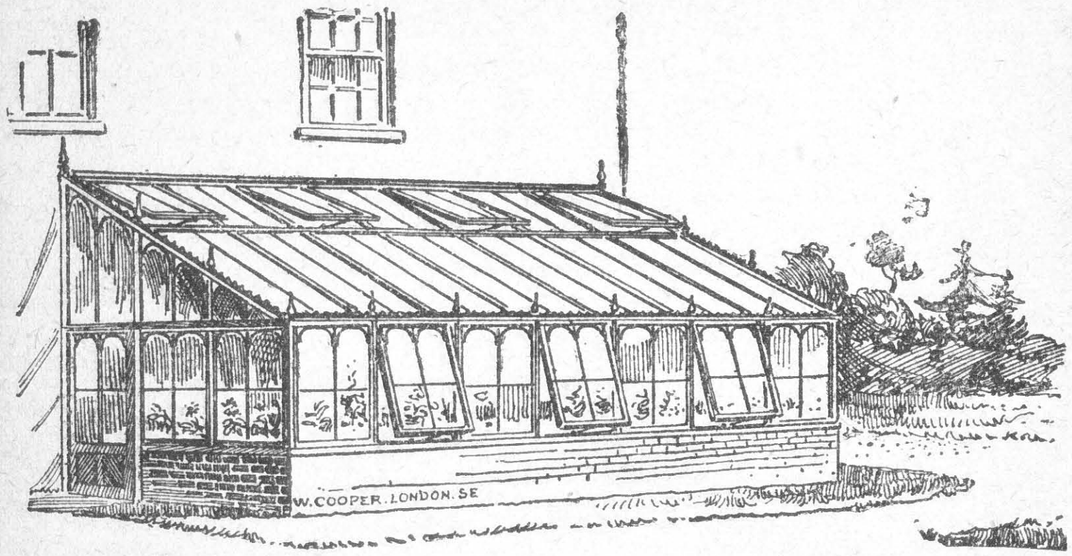
PEAS, to ensure successional supplies throughout summer



CARROT. "NEW INTERMEDIATE."

and autumn, sowings should comprise respectively early and main crops—tall, intermediate height, and dwarfs. Whilst it is desirable to make successional sowings as soon as the young plants from each previous sowing are well above ground, it is well, towards the middle of this month, to sow at one and the same time a row or rows of both an early kind of moderate height and of a tall Marrowfat, as their pods will not be matured for gathering at the same time. Draw the drills 2in. deep, and tread the seed into the drill before covering them with soil. Early Peas,

Ornamental Lean-to Conservatory.



No. 26.

This is a light, but strong and ornamental, design, well adapted for communication with an inner room. It is ventilated at top and front, and forms a cheerful addition to a residence.

SPECIFICATION.—Constructed of the best materials, and substantially built; all woodwork of well-seasoned red deal; necessary ironwork for opening ventilators; gutters and downpipes; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key; lattice stage along front; footpath entire length; all woodwork painted two coats. Carefully put on rail at our Works, marked ready for fixing, or delivered, erected, and glazed, within 20 miles of London Bridge, with an extra coat after erecting, at the following prices, exclusive of brickwork, or made with wood base instead of for brickwork, as illustration, 10 per cent. extra:—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	9 6	6 6	17 10 0	22 10 0
20	12	10 0	6 6	25 0 0	32 10 0
25	14	10 6	6 6	30 0 0	40 0 0
30	15	11 0	6 6	42 0 0	56 0 0
40	16	11 0	6 6	65 0 0	83 0 0

Proportionate prices for other sizes, and estimates for erecting in any part of the kingdom, free on application.

In ordering, it should be stated at which end door is required when facing House; if required, it can be fixed in front at the same price.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

whether autumn or spring sown, should be sticked as soon as moulded, and the latter should be done when the seedlings are a couple of inches high, as it protects their base from cold winds.

SMALL SEEDS, such as Cauliflower, Broccoli, Coleworts, Savoys, Kales, Spinach, &c., sow in small, separate beds in quantities such as will supply the necessary number of plants for summer planting. Brussels Sprouts, if last month's sowing was not a success, Autumn Giant Cauliflower, Red Cabbage (where appreciated) should also now be sown.

RIDGE CUCUMBERS and Vegetable Marrows, sow under glass.

MAY.

FLOWER OR DECORATIVE DEPARTMENT.

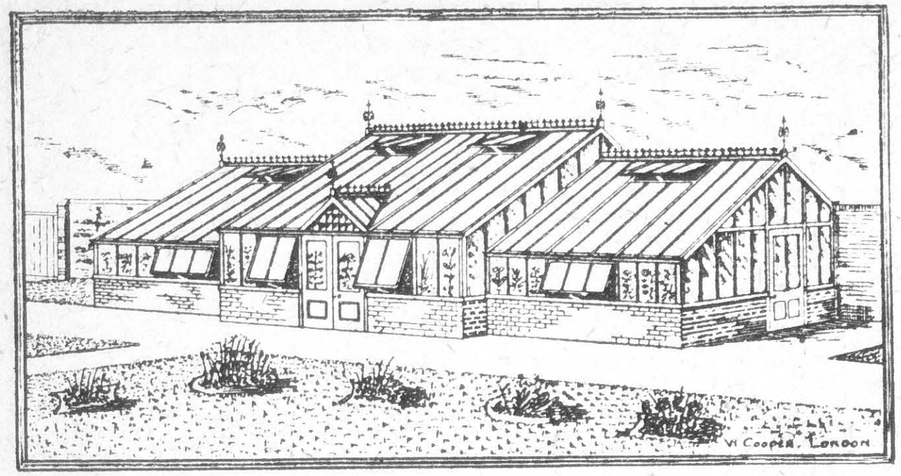
FLOWERING PLANTS must be shaded, to ensure proper duration. No greater mistake can be made than making an outlay upon flowering plants, spending a long time—in many cases a twelvemonth—on attending upon and growing them, and then allowing hot sunshine to shorten their display.

THE EFFICIENT SHADING OF GLASS STRUCTURES takes a variety of forms. Too generally, growers for market and amateurs whitewash the glass externally with various mixtures having whiting for their bases, and in a too general way they prove so evanescent as to be washed off with the first heavy rainfall. This enforces subsequent duplicate washings, causing endless trouble, not to say injuries to plants in the interval often occurring between them; it will, therefore, well repay growers to obtain a preparation made specially for the purpose which will last the summer. Such a one is William Cooper's Sunshade, in white, pale green, or pale blue colours, the second when applied being least conspicuous and most desirable. Roller blinds are, however, far more desirable, as they can be rolled up or let down according to weather exigencies, so ensuring that structures within are not unduly darkened in dull weather. Formerly woven materials were employed for this purpose, but were far from perfect owing to possible displacement by high winds, occasionally becoming inordinately wet and having a tendency to rot when stored away in winter.

The modern and far more useful plan is to fix lath roller blinds, which fit to the roof admirably, as the following illustration shows.

Made of thinly-planed laths, they roll up easily, can be fixed or taken down readily, and, what is of greater importance, admit more light, though properly subdued, than any form of woven material. There is, besides, another thing to be said in their favour: by allowing them to remain up during the

Range of Houses.



No. 27.

This is a very useful range of Three-quarter Span Houses, divided into three parts, the centre part projecting 2ft. more than the ends. This is about the most economical in form that can be devised. It can be varied in form to almost any extent.

Designs and Estimates for Ranges of Houses, including Conservatory, Peach Houses, Vineries, &c., prepared and furnished free.

SPECIFICATION.—Constructed of the very best materials, and are well, substantially, and handsomely built, all woodwork consisting of good, well-seasoned red deal; ventilators at top and front, with necessary ironwork for opening same; 21oz. glass throughout; half-glass doors, complete with lock, brass fittings, and key; lattice stages for plants; footpath the entire length; iron O.G. gutters and downpipes, &c.; all woodwork painted two coats. Carefully put on rail at our Works, with every part marked ready for fixing, or delivered, erected, and glazed, with extra coat after erecting, within 20 miles of London Bridge, exclusive of brickwork, at the following respective prices:—

Length.	Width.	Width of Centre.	On Rail.	Erected within 20 miles.
ft.	ft.	ft.	£ s. d.	£ s. d.
36	10	12	40 0 0	52 0 0
48	11	13	50 0 0	66 0 0
60	12	14	65 0 0	85 0 0
72	13	15	80 0 0	104 0 0
84	14	16	105 0 0	132 0 0
96	15	18	125 0 0	155 0 0

Proportionate prices for other sizes. Estimates for erecting in any part of the kingdom free on application.

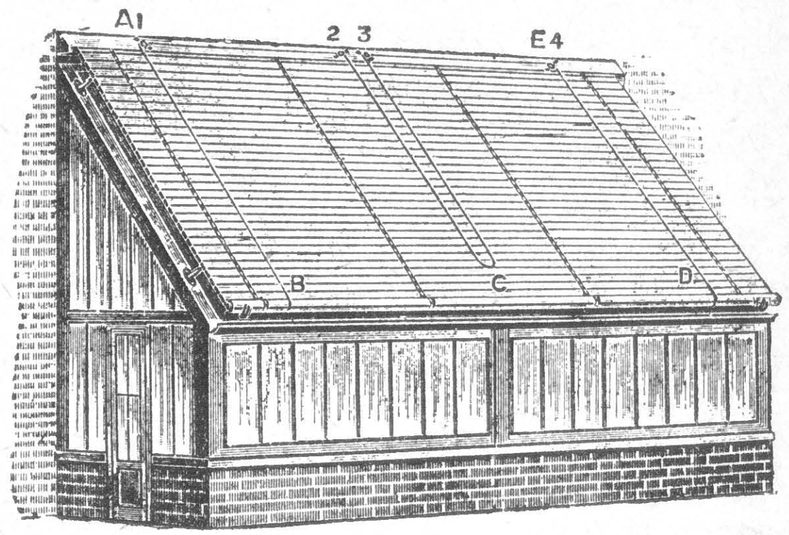
For Heating Apparatus suitable for above House, see Section VII.

28, Grosvenor Avenue, East Sheen.

DEAR SIR,—At my old address we had one of your greenhouses for some years, and it is still giving every satisfaction.

W. J. SMITH.

winter months they are a protection against frost and a desirable safeguard if let down on those nights when it is doubtful whether a frost will occur.



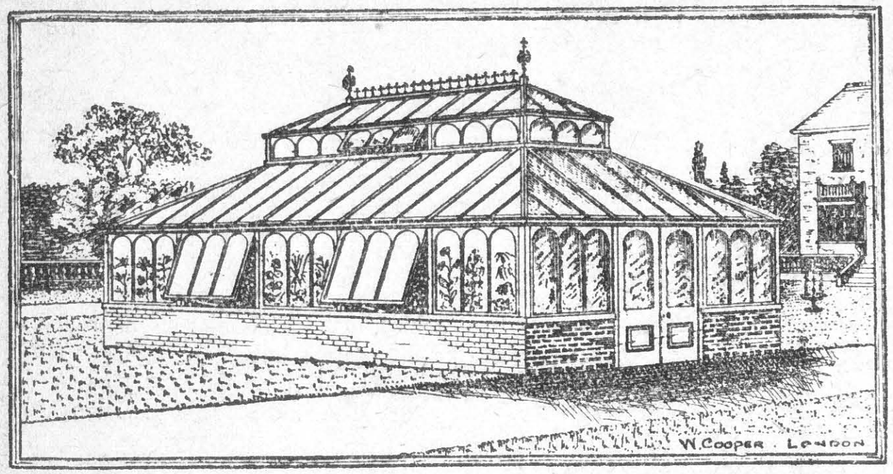
LATH ROLLER GREENHOUSE BLINDS.

GREENHOUSES.—Continue to keep comparatively cool during the month, ranging between 46deg. and 55deg. if they only contain non-flowering and bedding plants, to ensure which abundance of fresh air must be given during sunny periods. If, on the other hand, flowering plants exist, and it is desirable to flower Azaleas, bulbous plants, &c., without undue forcing, it may have a range of temperature 5deg. higher.

FORCING, in the proper sense, can now be successfully undertaken where a moist heat of from 56deg. by night to 65deg. by day can be maintained. Roses, Shrubs, Dielytras, Spiræas, Lilacs, Solomon's Seal, dig up out of the ground; bulbs and an endless variety of subjects will, under these conditions, answer readily to the call of spring as intensified under glass. None need hesitate to syringe them freely; scatter water on floors, and give weak manurial waterings occasionally.

AMATEURS' GLASS STRUCTURES, neglected during the past winter, or which may now be empty or partly so, may with the advent of this month be furnished with certain plants at a cheap rate, and by the subsequent growth and flowering of these made gay during the summer and autumn months. These plants comprise such things as rooted cuttings of Fuchsias, Pelargoniums (erroneously called Geraniums) in great variety, Heliotropes, &c., and seedlings of Balsams, Musk, Calceolarias, Aralias, and more succulent ones. Many are procurable in boxes, and these require placing in single pots; others existing in pots to be shifted into larger ones. They will

Hipped-Roof Conservatory with Lantern.



No. 28.

An ornamental Conservatory of a design adapted to secure the maximum of light with thorough ventilation.

SPECIFICATION.—Constructed of the very best materials, and are well, substantially, and handsomely built, all woodwork consisting of good, well-seasoned red deal; ventilators at top and sides, with necessary ironwork for opening same; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key; lattice stages each side; footpath the entire length; iron O.G. gutters and downpipes, &c.; all woodwork painted two coats. Carefully put on rail at our Works, with every part marked ready for fixing, or delivered, erected, and glazed complete, with extra coat after erecting, within 20 miles of London Bridge, exclusive of brickwork, at the following respective prices:—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	10	10 6	6 0	25 0 0	33 0 0
20	12	11 0	6 6	35 0 0	45 0 0
25	14	11 6	7 0	50 0 0	62 0 0
30	16	12 0	7 0	65 0 0	78 0 0
35	18	12 6	7 0	85 0 0	105 0 0
40	20	13 0	7 6	105 0 0	130 0 0

Proportionate prices for other sizes. Estimates for erecting in any part of the kingdom free on application.

For Heating Apparatus suitable for above House, see Section VII.

36, Audley Gardens, Seven Kings.

DEAR SIRS,—The glass and irons came to hand, and on unpacking them I find the glass to be practically intact, which says much for the excellent way in which it has been packed. Please accept my best thanks for the excellence throughout greenhouse.

S. A. C. LEESMAN.

succeed without fire or artificial heat provided the structure is shut up quite close about 4 p.m. daily. Such climbers for decorating the roof, where desirable, as the better forms of Tropæolum Lobbianum, Cobæa, Smilax, &c., may be obtained in the same way, as may be Palms and Ferns.

SUMMER CLIMBING PLANTS for outdoors, such as Maurandyas, Lophospermum, Canary Creeper, Eccremocarpus, Tropæolums, &c., placed in small, single pots at the beginning of the month, tied to sticks, will be ready for planting out late in May.

HARDY ANNUALS.—Sow during fine weather, about the middle of the month, in beds, borders, amongst herbaceous borders, and Roses, also on vacant ground amongst or in front of shrubberies, especially Shirley Poppies, Alyssum, Mignonette, Calendula, Calliopsis, Chrysanthemum tricolor, Cyanus, Larkspur, Dianthus, Nigella, Scabious, Nasturtium (dwarf varieties).

HALF-HARDY ANNUALS sown in boxes early in the month will be useful for planting where they are to bloom when large enough, and include Zinnias, Amaranthus, Antirrhinums, Aquilegias (spur-flowered), Asters, French Marigolds, Dianthus, Gaillardias, Godetias, Helichrysums, Schizanthus, &c. When the seedlings appear well above ground well inure them to sunshine and fresh air.

SHRUBBY CALCEOLARIAS should be planted out in beds during the third week of the month.

BEDDING OUT plants for summer display is usually commenced on May 20, after which frost is not anticipated, but the plants should have been previously inured to the full outer air for a week or two, with the precaution that some slight protection should be given them should a frost occur. It is wise to plant out the hardiest forms first, such as Zonal Pelargoniums, Verbenas, Violas, &c. More tender subjects, and they are numerous—such as Tuberous Begonias, Iresines, Alternantheras, Coleus, Ageratums, Fuchsias, &c.—will succeed best planted out the first or second week in next month.

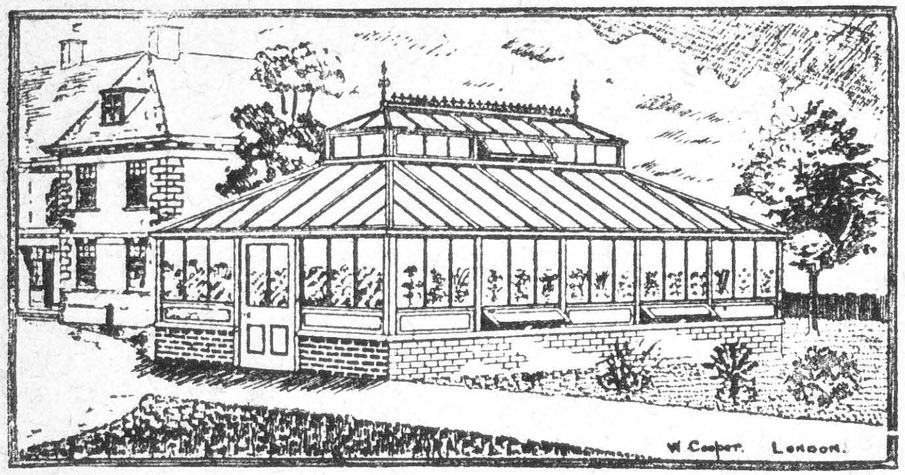
VIOLETS.—Plant rooted slips out singly in open positions.

WALL IVIES, including those grown over arches, bowers, or as edgings to walks, if unduly grown over with shabby, aged foliage, well clip back during the first week in the month. This will ensure promptly the formation of a mass of young leaves, more uniform in size, and a delightful green tint.

VINERIES.

GRAPE VINES, even as regards those in amateur houses, if at all forward in growth, or leaves are expanding, should have a temperature of not less than 57deg. by night, with an advance of 5deg. on dull days and 10deg. on bright days, under

Hipped-Roof Conservatory.



No. 29.

SPECIFICATION.—Constructed of the very best materials, and is well, substantially, and handsomely built, all woodwork consisting of good well-seasoned red deal; ventilators at top and front, with necessary ironwork for opening same; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key; lattice stages each side; footpath the entire length; iron O.G. gutters and downpipes, &c.; all woodwork painted two coats. Carefully put on rail at our Works, with every part marked ready for fixing, or delivered, erected, and glazed complete, with extra coat after erecting, within 20 miles of London Bridge, at the following prices:—

Length.	Width.	Height.	To Eaves,	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	10 6	6 0	24 0 0	32 0 0
20	12	11 0	6 6	40 0 0	50 0 0
25	14	11 6	7 0	55 10 0	67 0 0
30	15	12 0	7 0	65 0 0	79 0 0
40	16	12 6	7 6	85 0 0	104 0 0

Proportionate prices for other sizes.

Estimates for erecting in any part of the kingdom, free on application.

For Heating Apparatus suitable for above House, see Section VII.

Brooklyn House, The Cliffs, Southend.

DEAR SIRS,—I am more than pleased with the greenhouse you supplied me, and consider it more than value for the money I paid. Should I require more I shall have much pleasure in sending you my order.

STONE-STONE.

The Poultry Farm, Old Wardour Castle, Tisbury, Wilts.

DEAR SIRS,—You will no doubt remember that I am one of your numerous customers. I had a greenhouse from you in 1905, with which I am much pleased.

CYRIL A. SMITH.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

which condition syringe them each morning and towards 4 o'clock p.m., when the structure should be shut up quite close for the night. If partially blind young shoots form amongst the vigorous ones, rub them off. More forward vines about to flower will be better maintained, if convenient, at a warmth of 62deg. to 64deg. by night, and 70deg. by day, if the weather is comparatively dull, but during bright weather 80deg. to 85deg., with fresh air, is permissible, for there is all the difference possible between sun and artificial heat. Of course the greater the heat from any cause the more atmospheric moisture must be engendered in the structure by means of frequently damping internal surfaces.

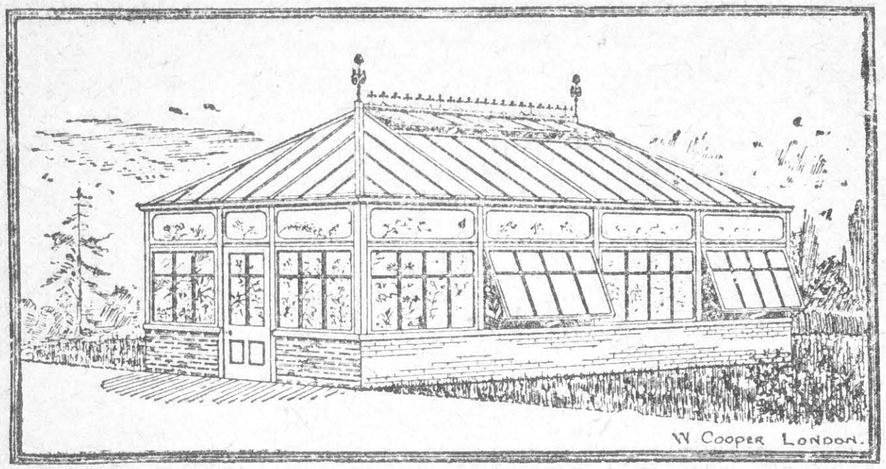
FRUIT GARDEN.

WEATHER INFLUENCE will greatly affect work in this department. During cold late months of May little advance will have been made in the matter of young growth, and blooming will have been set back. Wall fruits, Peaches, &c., protected with coverings, may be wholly uncovered if towards the last week or two the weather is genial; if not so, it is better deferred until the first week next month. When the covering is removed, the trees should be copiously syringed to wash dust off them and the walls, and to dislodge insect pests which may be forming.

BUSH FRUITS, Gooseberries in particular, are often attacked by one of two forms of caterpillar. Those of the saw-fly appear first, and exceptionally early, and are followed by others, the progeny of the magpie moth. Scrutinise the foliage frequently, and if any leaves are seen to have four or six minute holes, like pin-pricks, punctured through them, there will be found on their under sides a colony of very young caterpillars, which may be crushed with the finger and thumb, and which, if undisturbed, soon grow into large size and spread themselves throughout the branches and foliage. Wherever the latter occur, they must be immediately sought for, hand-picked, and destroyed, or the bushes will be defoliated. A wash composed of a decoction of Quassia chips applied to the bushes at this juncture is another antidote. It is made as follows: Boil 4oz. of Quassia chips in five quarts of water for twenty minutes; then dissolve in it 4oz. of soft soap, and thoroughly moisten the bushes with the decoction.

APPLE TREES seem increasingly subject to caterpillars, including those of the winter moth, which by boring holes into the core of the fruit, practically destroy them. A modern antidote is to well vaporise the trees when the petals are falling off the flowers, with the following wash: Well stir a quarter of a pound of Paris green in sixty gallons of water along with a little flour or lime, and syringe therewith, taking care to keep

Hipped-Roof Conservatory.



No. 30.

This is a very striking and attractive structure of a new design.

SPECIFICATION.—Constructed of the very best materials, and is well, substantially, and handsomely built, all woodwork consisting of good well-seasoned red deal; ventilators at top and sides, with necessary ironwork for opening same; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key; lattice stages each side, with footpath the entire length, iron O.G. gutters and downpipes, &c.; all woodwork painted two coats. Carefully put on rail at our Works, with every part marked ready for fixing, or delivered, erected, and glazed complete, with extra coat after erecting, within 20 miles of London Bridge at the following respective prices (exclusive of brickwork):—

Length.	Width.	Height.	To Eaves.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	ft. in.	£ s. d.	£ s. d.
15	9	10 0	6 6	22 0 0	27 10 0
20	12	10 6	7 0	36 0 0	44 0 0
25	14	11 0	7 6	48 0 0	58 0 0
30	15	11 6	7 6	58 0 0	72 0 0
40	16	12 0	7 6	80 0 0	98 0 0

Proportionate prices for other sizes. Estimates for erecting in any part of the kingdom, free on application.

For Heating Apparatus suitable for the above House, see Section VII.

10, Cambridge Road, Horsham.

GENTS,—I am writing to thank you for greenhouse and fittings, with which I am very pleased, and shall be glad to show it to all my friends as an advertisement for you.

A. SHORT.

The Gardens, Norbiton Hall, Kingston-on-Thames.

DEAR SIR,—I beg to say that Lady Henrietta Guiness is very pleased with the greenhouse you put up for her at Windsor.

C. H. ADAMS.

the water moving, else the powder will sink to the bottom. The above paint powder is not kept in stock by all oilmen; in its lieu London purple may be used, applied not too strong, in dull weather, but is more likely, used in excess, to injure the delicate young leaves. It is desirable to vaporise the trees on two successive occasions, twenty days between the applications.

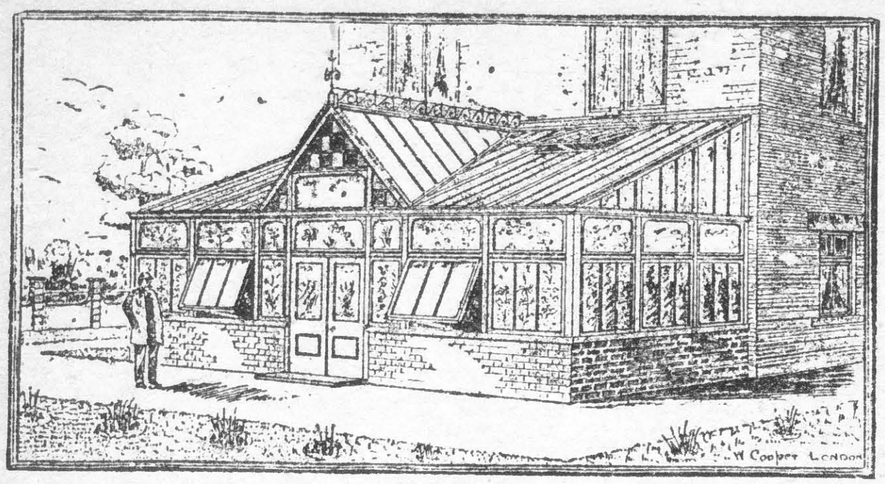
VEGETABLE DEPARTMENT.

KEEP THE HOE AT WORK between all crops in such manner as to maintain a fine loose surface mould. This is the acme of surface culture, which permits the air to penetrate more freely down to the roots, helps to maintain moisture in the ground during dry weather, disturbs insect pests and seedling weeds. Cabbages, well mould up to just below the lowest leaves. Peas, draw mould up in goodly ridges towards the rows, leaving a kind of drill about their actual stems to catch and economise water from heavy rains. Seedling Onion, Carrot, Parnsip, and others, stir the soil neatly beside the rows as soon as they are large enough. Potatoes cannot have the ground broken up and stirred too freely right up to their roots, without injuring them, from the time they appear above ground until they are finally moulded up.

PEA STICKING should not be delayed after they are finally moulded or are 2in. high, as the sticks, besides proving a protection against high winds, attract and cause them to grow more freely. Take care in sticking them not to press the tops of the sticks close together, as so doing will cause them to grow through the sides and fall over. The sticks should be placed about equally apart at bottom and top, so as to form what may be called a cradle or support. Peas are not twiners, though they will partly support themselves with the tendrils existing upon their leaves. Said tendrils they spread out arm-like and clasp the stick when fairly wide apart, holding themselves up centrally between the sticks by clinging to each other. To economise the sticks, they want cutting to a uniform length, be it long or short, and should be thrust into the ground in a slanting direction, the row on one side pointing to the south, the other to the north, in view of the fact that all Pea seed should be so sown. Make successional sowings, whether of one or more rows at a time, as soon as preceding sowings are well above ground, or three distinct sowings during the month. These should include tall Marrowfat varieties, of which there are so many superior forms in the market. These strong-growing kinds sow thinner than the earlier ones, and always tread the seed into the drills when sown.

CELERY SEEDLINGS, finish planting out singly somewhat thickly into finely-worked light rich soil. If this can be

Lean-to Conservatory.



No. 31.

This elegant lean-to Conservatory is designed for the side of a modern residence. It is made in various sizes, according to requirements, and entrance can be had either from the garden or the house.

The upper lights over the door, as shown in the illustration, represent tinted glass.

SPECIFICATION.—Constructed of the very best materials, all woodwork consisting of well-seasoned red deal; ventilators at top and front, with necessary ironwork for opening same; gutters and downpipes; 21oz. glass throughout; half-glass door, complete with lock, brass fittings, and key; lattice stages along front and ends; footpath entire length; all woodwork painted two coats. Carefully put on rail at our Works; every part marked ready for fixing, or delivered, erected, and glazed, with extra coat after erecting, at the following respective prices (exclusive of brickwork), or made with wood base instead of for brickwork, 15 per cent. extra:—

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	On Rail. £ s. d.	Erected within 20 miles. £ s. d.
15	9	10 0	7 0	25 0 0	34 0 0
20	12	11 6	7 0	40 0 0	50 0 0
25	14	12 0	8 0	60 0 0	72 0 0
30	15	12 6	8 0	80 0 0	96 0 0
40	16	13 0	8 0	100 0 0	120 0 0

Proportionate prices for other sizes. Estimates for erection in any part of the kingdom, free on application.

For Heating Apparatus suitable for above House, see Section VII.

Wateringbury.

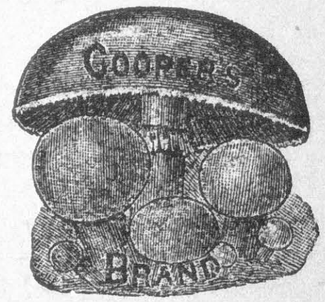
DEAR SIR,—Received the glass safe, and am very pleased with the greenhouse. I think it a bargain.

R. M. HARRIS.

done over a slight bed of fermenting material, or in cold frames, so much more vigorous will the plants be—which is important when ultimately transferred to trenches in the ordinary way. Seed sown in a close frame early in the month will produce useful seedlings for midsummer and late supplies.

SMALL SEED SOWINGS may again be made, by way of succession to previous sowings, of Broccoli, Colewort, Brussels Sprouts, Turnips, Parsley, Thyme, Savoy, Cauliflower, Lettuce, Endive, Radish, &c., or to make good unsuccessful previous sowings.

MUSHROOM BEDS may be successfully made out of doors. The best form for them is the ridge, or mound, formed some 3ft. or more in height, by 4ft. or more in width at the base. The materials should consist of horse droppings intermixed with the finer stable sweepings—not to include the longest litter, though a layer of this may be advantageously spread upon the ground to receive the bed. Keep the materials dry, and when enough is collected to make up such a bed, 6ft. or more in length, toss it up into a conical heap to ferment. If the materials are tolerably dry, they will then be ready for bed-making; if not, they must be again turned over, and tossed up lightly into another conical heap, making what was outside previously now lie inside. When heated through, and they possess a warmth of 75deg. to 80deg., build the bed with them. In doing so, make it as firm as possible by treading upon it and beating into mound form with the back of a heavy spade. Keep it dry by covering it a foot deep with light litter. When it again heats and obtains a permanent or stationary heat of 57deg. to 75deg., fix prepared spawn firmly into its surface, barely covering it. The usual prepared bricks of spawn should for this purpose be broken into four or six pieces. Again well beat the surface, then place evenly over the mound an even thickness of ½in. of loam—yellow loam for preference; pat it down slightly, damp it, and draw the back over it in such a manner as to make an adhering smooth surface, and cover with such an amount of litter as will protect from the heaviest rains. In five or six weeks buttons should form, and shortly the perfect mushrooms—vide illustration—when the whole mound should be carefully uncovered and slightly watered, other uncoverings being necessary to collect successional supplies.

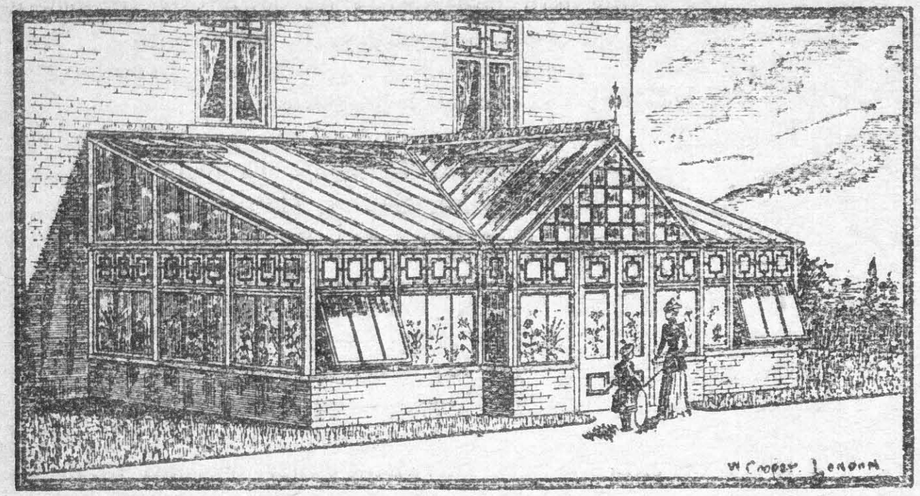


MUSHROOMS.

ONION BEDS, in favourable seasons, will, towards the end of the month, require thinning to 6in. asunder.

ARTIFICIAL WATERINGS will immensely benefit young, actively growing crops, should the weather be dry with hot sun-

Lean-to Conservatory.



No. 32.

This elegant lean-to Conservatory, with projecting gable front, is designed for the side of a modern residence. It is made in various sizes, according to requirements, and entrance can be had either from the garden or the house.

The front of gable over door, as shown in illustration, represents tinted glass.

SPECIFICATION.—Constructed of the very best materials, all woodwork consisting of well-seasoned red deal; ventilators as shown, with necessary ironwork for opening same; O.G. gutters and downpipes; 21oz. glass throughout; one pair of doors complete with lock, brass furniture, key, and bolts; stages along front and ends; footpath entire length; all woodwork painted two coats. Carefully put on rail at our Works, every part marked ready for erection, or delivered and erected by us, painted an extra coat after erection, within 20 miles of London Bridge, at the following respective prices, exclusive of brickwork, or made with wood base instead of for brickwork (as illustration) 15 per cent. extra:—

Length.	Width.	Project in centre.	On Rail.	Erected within 20 miles.
ft.	ft.	ft. in.	£ s. d.	£ s. d.
20	9	2 0	40 0 0	52 0 0
20	12	2 0	50 0 0	64 0 0
25	14	2 6	70 0 0	86 0 0
30	15	2 6	96 0 0	116 0 0
40	16	2 6	120 0 0	144 0 0

Proportionate prices for other sizes. Plan of brickwork Free on receipt of Order.

For Heating Apparatus suitable for above House, see Section VII.

Pendeford, Church Road, Roby, Liverpool.

GENTLEMEN,—I bought a greenhouse off you over ten years ago. It is still in good condition, and has been removed.

WM. EVANS.

shine. Manurial waterings should be given if practicable. The best time to do so will be towards evening, or early in the morning, and they should be applied to the roots copiously with the spout of the waterpot.

KIDNEY BEANS, Climbing and Dwarf, sow about the sixth of the month.

JUNE.

FLOWER OR DECORATIVE DEPARTMENT.

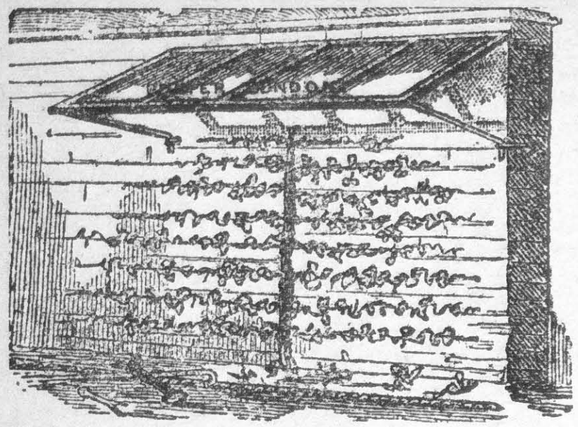
CONSERVATORIES AND GREENHOUSES, it should be said, ought now to be made bearable, that owners and their friends may be able to loiter in them and enjoy their floral displays. This assured, sunshine will be so moderated by shading and fresh air abundantly admitted as to exactly suit the various plants occupying them. The earliest part of the month will find forced Roses, Cinerarias, Primulas, and the all-important Pelargoniums ("Geraniums") in great variety of form and colour in the heyday of blooming, whilst others will be making goodly growth, showing the fuller freshness of spring.

WATERING POT PLANTS, in all glass structures, is a very different operation from what it is during the adverse winter; whilst what are known as hard-wooded kinds, such as Indian Azaleas, Heaths, Camellias, &c., must never be so watered at the roots as to cause them to become sodden; they will require comparatively liberal supplies, while plants in flower, such as are mentioned above, will not be injured by a little manure water, being in comparatively small pots which are full of roots.

HARDIER NON-BLOOMING GREENHOUSE PLANTS, stand out of doors.

THE REPOTTING OF VALUABLE PLANTS has to be performed with judgment. Strong growers, such as Abutilons, Fuchsias, and the like, may be shifted at any season when their existing pots are full of roots, and require a compost more enriched with decomposed manure than harder wooded ones. Camellias, pot, if necessary, just as they finish making their young shoots. Heaths, when they commence forming young shoots after being sparingly pruned. Azaleas, just as they finish flowering. Other stove and greenhouse plants early in the month, or after they start growing. The softer seedlings, Balsams, and the like, when roots appear freely through the balls. Orchids and ferns preferably in the spring. Never repot a plant when it is about to flower, and endeavour always to have their pots full of roots before the flowering season.

BEDDING OUT, or planting semi-hardy flowering plants in beds, borders, &c., should be finished as promptly as possible after the advent of June. Plant all moderately firm by pressing the soil about the roots of each. In planting beds it is best to plant the outside rows first. If grass swards are at all long



No. 33.

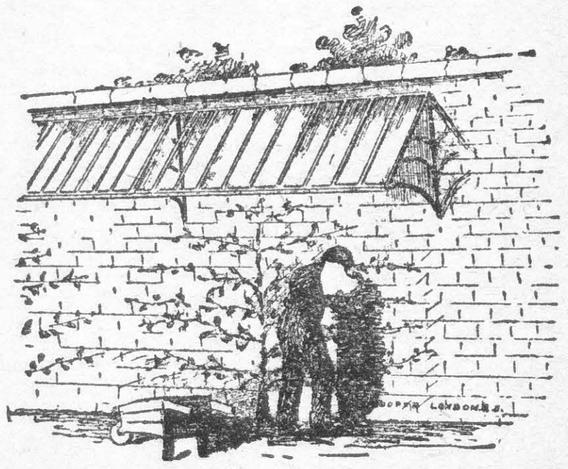
Improved Wall Fruit Protector.

This form of Wall Fruit Protector will be found most convenient, it being easily detached or attached at will. It is also the cheapest form introduced, and it is strongly recommended. The price includes the wall fittings, 21oz. glass, and the necessary lights; painted one coat.

Price: 1s. 7d. per foot run. If less than 25 feet is ordered 1s. 10d. per foot.

Wall Cover.

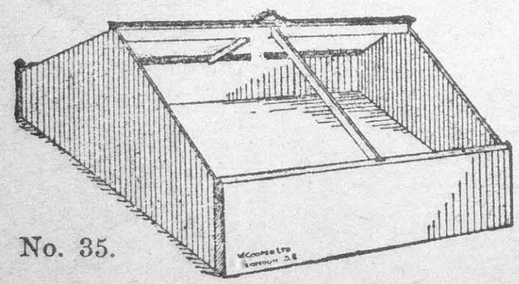
This Cover is made in sashes in lengths of 10ft. of good sound, well-seasoned deal; the stiles, which are 2in. by 3in., being well mortised and pinned to tenoned rails, properly rabbeted for the glass, and fitted with 2in. sash-bars. Complete with 21oz. glass; and strong cast-iron brackets necessary for fixing same. All woodwork painted one coat. The whole put on rail at our works (being marked in readiness for erection) at the following respective prices:—



No. 34.

Length.	Width.	£	s.	d.	Length.	Width.	£	s.	d.
10ft.	2ft.	0	18	6	10ft.	2ft. 6in.	1	2	0
20ft.	2ft.	1	10	0	20ft.	2ft. 6in.	1	16	0
30ft.	2ft.	2	6	0	30ft.	2ft. 6in.	2	10	0
40ft.	2ft.	2	15	0	40ft.	2ft. 6in.	3	3	0
50ft.	2ft.	3	10	0	50ft.	2ft. 6in.	4	5	0
60ft.	2ft.	4	5	0	60ft.	2ft. 6in.	5	0	0

From the eaves of the glass coping, tiffany or other protecting materials may be suspended.



No. 35.

Portable Hand Light.

Superior Quality. Very substantial. Made of best Material. Grooved ready for glass to slide. No putty required. Fitted with Handle. Painted One Coat. Glass 21oz. Ready for immediate use. Put on rail at our Works.

Size 2ft. by 1ft. 6in. .. .. Price 6 for 15s., 12 for 28s., 50 for £5 10s.
Size 3ft. by 2ft. .. .. .. Price 6 for 24s., 12 for 45s., 50 for £8 10s.

Materials alone in the ordinary way would cost double the money.

If less than six are ordered, please remit 6d. for packing.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

machine them and clip the edges before planting. When the lawn is first machined after the winter, set the machine moderately low to reduce the length of wiry and dead blades. Of course, the planting of Asters, Phlox Drummondi, and other annuals cannot be too quickly attended to.

AGAPANTHUS, ALOES, MYRTLES, &c., in tubs or pots, place in their allotted summer quarters.

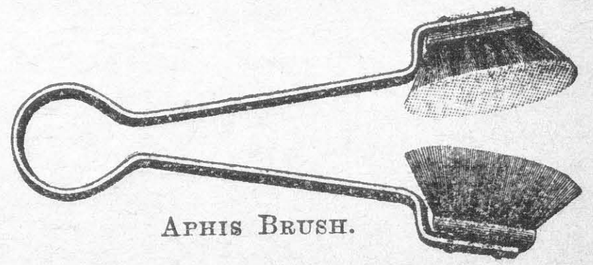
CHRYSANTHEMUMS, shift, stick, and stand out of doors early in the month.

VASES, BASKETS, WINDOW BOXES, &c., furnish by the advent of the month. Petunias, especially the modern large flowered and the small flowered self-coloured ones, are admirable for this purpose.

SPRING FLOWERING PLANTS, such as Narcissus, Tulips, Hyacinths, Garden Primroses, Polyanthus, Double Daisies, &c., dug up out of beds to make room for the summer flowering plants, planted thickly together in a shady place, can be made use of for next year's similar displays; the bulbous ones to be taken up, dried and stored when their leaves die, and the others utilised for propagating next August and beyond.

CLIMBING PLANTS, attend to, thin out young shoots where they appear too numerous upon old wood, train, and tie to the best advantage. See that Roses planted out under glass are free from aphis, which are prone to infest their young growths at this season.

OUTDOOR ROSES, watch as they grow to detect if leaves are curling and aphis forming; if so, wash them with the decoction of Quassia chips previously referred to, strong tobacco water, or one of the numerous forms of prepared insecticide. Owing to the peculiarity of Rose-leaf surfaces, these pests are with difficulty dispelled without a great waste of wash, for which reason an aphis brush, as shown, is very desirable.

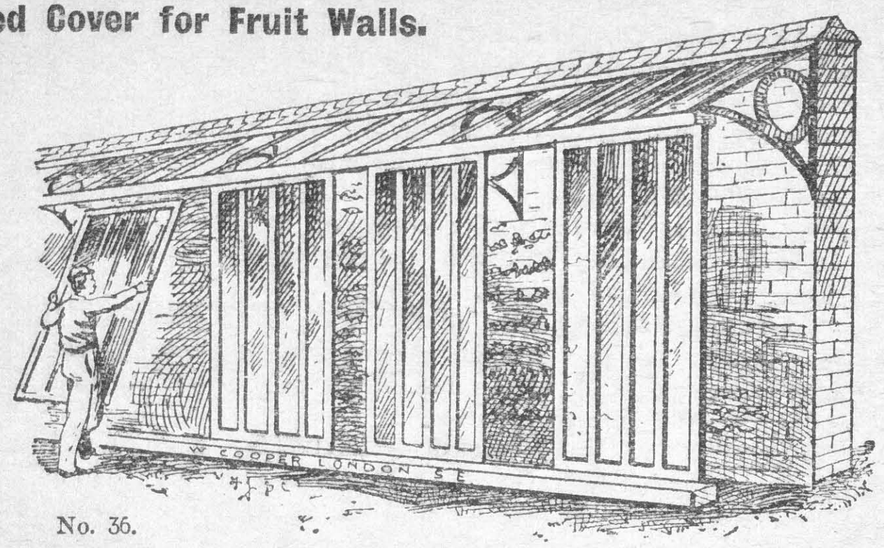


APHIS BRUSH.

It is preferable to the common ineffectual process of dislodging them with the hand.

FLOWER BEDS, as the month advances will, if sufficient rain falls, show vigorous growth, hence attention will have to be given to surface hoeings, pegging Petunias, Verbenas, &c., and maintaining all tidy and neat. If, per contra, dry weather intervenes, artificial waterings such as reach the lower roots must be given betimes. To reap the reward of well filled beds and abundant flowers in July and beyond, a free early growth is necessary. With anything like an early summer drought,

Glazed Cover for Fruit Walls.



No. 36.

ADVANTAGES.—Complete Protection of trees from frost. Perfect Ventilation. Cheapness—will repay its cost in one season. Simple in Construction—can be fixed by any handy man. Ventilation is gained by means of the front sashes, all of which slide, thus also enabling the whole of the foliage to be syringed.

CONSTRUCTION.—The front sashes are entirely removable; the roof lights are supported on strong iron brackets bolted to wall. The framing is of good sound, well-seasoned deal, painted two coats, carried on iron supports. Glass 21oz. throughout. All parts carefully marked before leaving Works, and can be fixed by any handy man.

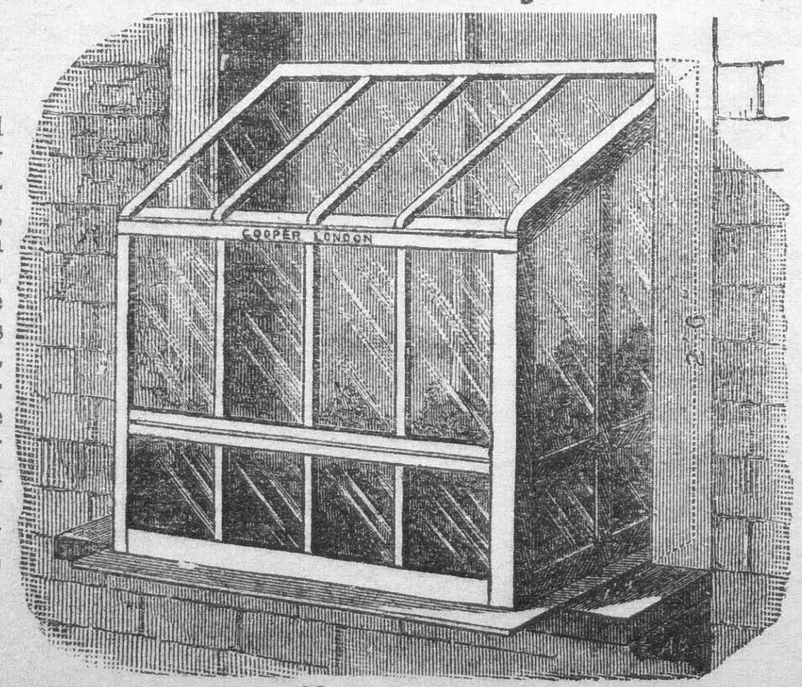
The Cover—with Front Lights, Iron Supports, Roof Lights, and Brackets for a Wall 10ft. high—costs 7s. 6d. per foot run; Ends extra, 30s. each. If front sashes to slide, 9s. per foot run. Put on rail at our works. If less than up to 25 feet run is ordered, 1s. 6d. per foot run extra.

Window Conservatory.

No. 37.

It is well and strongly made of well-seasoned deal, glazed with 21oz. glass, painted three coats, and is fitted with a set-open for opening the ventilating lightprovided at top.

PRICE.—Any size made to order at 1s. per inch run.



much picking off of old blooms and discoloured leaves will be necessitated.

HERBACEOUS PLANTS, including Dahlias, Hollyhocks, &c., securely tie to efficient stake supports.

CARNATIONS AND PICOTEES, tie the flower stems to small, neat sticks—loop them up, in fact, as they spindle. Put pipings of Pinks into sandy compost under a handlight.

AURICULAS, POLYANTHUS, CARNATIONS, CYCLAMENS, LACHENALIAS, &c., as soon as past flowering, stand on a bed of ashes, on a shaded site, out of doors.

BIENNIALS, PERENNIALS, SPRING FLOWERING PLANTS, &c., sow in the open ground.

GRAPE VINES.

EARLY GRAPES, thin the bunches when the berries are the size of small peas, or before, cut out two-thirds existing on each bunch, taking care to thin them most centrally, and at their lower extremities. Cease syringing them, but give increased atmospheric moisture. Late Grapes, when the flower trusses show prominently select to the necessary number the best upon the strongest laterals, then snap off at their base unnecessary minor laterals. Pinch off the points of all laterals retained in advance of one leaf above the upper flower truss, and any sterile laterals existing stop just beyond the fourth leaf. To ward off mildew scatter flowers of sulphur upon all sunny shelves within the structure.

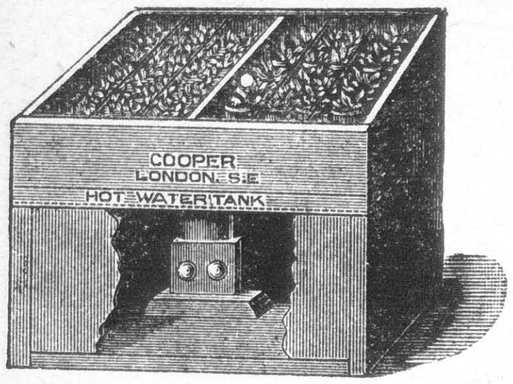
FRUIT GARDEN.

STRAWBERRY PLANTATIONS, freely water—with manure water for preference—if dry weather intervenes. When the fruit begins to get heavy, give a good hoeing between the rows, and place a goodly mulching of straw, to protect the fruit from grit, between the plants. Barley or oat straw, as being more pliable, is better than wheat. If short stable litter is used, the longer it is placed before the fruit ripens the better, in the hope that rains will wash and cleanse it somewhat.

TRAINED HARDY FRUITS in all positions look through, and remove bodily all young growths not required, forming upon boles and main branches.

PEACH AND NECTARINE TREES must have foreright and other young shoots removed or thinned where too numerous for forming young wood for next year's fruiting. It should be understood that it is absolutely necessary to permit as many young shoots to grow their full length as can be tacked in between existing older branches. Well syringe the trees occasionally towards evening. If any leaves curl destroy the aphides which cause it with strong tobacco water and soap. If leaves blister or form bladder-like protuberances, bodily remove them.

The "Rapid" Propagator.



No. 38.

A perfect Propagator for raising plants from seeds, slips, or cuttings.

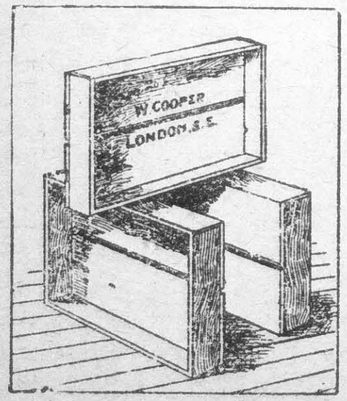
This Propagator is the best and cheapest now before the public, and will be found especially serviceable to amateurs and gardeners who require to strike cuttings and raise seeds in a short space of time.

One of these propagators will raise large quantities of plants in the spring, thus—to a great extent—dispensing with the necessity for striking cuttings in the autumn, it being well known that many cuttings fall victims to the frost and damp atmosphere so prevalent in this country. This method of propagating saves the trouble and annoyance resulting from the loss of so many plants in the winter time, and also makes it unnecessary to occupy so much space in storing a large quantity of autumn cuttings.

The Propagators are composed of an outside casing with hinged glazed sash on top. The bed or bottom is formed of a tank, in which a constant circulation of hot water is kept up by the heater (see illustration), the pots being plunged in a bed of cocoanut fibre refuse, which should be kept moist. It is heated by oil, one pint of which will last 30 hours. Put on rail at our Works complete at the following respective prices:—

		£	s.	d.
Lean-to shape,	1ft. 8in. by 1ft. 6in.	1	1	0
,, ,,	2ft. 6in. by 1ft. 10in.	1	10	0
,, ,,	4ft. by 2ft.	2	10	0
Span-Roof shape,	4ft. by 4ft.	4	10	0

Estimates for larger sizes free on application.



No. 38A.

Wood Propagating Trays.

No. 38A.

For sowing seeds, sticking cuttings, &c., in bundles, ready for nailing together.

Length. in.	Depth. in.	Width. in.	100 s.	d.
12	9	2	8	0
15	10	2½	10	0
18	12	3	15	0

Outside measure. Other sizes to order.

AMATEUR GARDENING.—*continued.*

The next consideration will be to moderately thin the young fruit where obviously too numerous. Take care when doing so to remove any growing in contact with the wall, and such as press against others.

GOOSEBERRIES AND CURRANTS, well watch to detect whether recurrent colonies of caterpillars attack the leaves.

AMERICAN BLIGHT, a white cotton-wool-like pest, so general upon Apple trees, watch for, and on its appearance upon bole or main branches brush it over with a stiff painter's brush dipped in turpentine. If not attacked on its first appearance it rapidly increases, causing cankerous holes in the bark and wood, to the extent often of destroying young trees. Such corrugations never heal.

VEGETABLE DEPARTMENT.

EFFECTIVE HOEINGS, i.e., deep surface ground stirrings, breaking it up to fine mould form, leaving a rough light surface, is imperative during the period of active growth of respective crops; by its means alone—in conjunction with efficient artificial waterings—are the heaviest crops of best quality obtained. None should imagine the only use hoes are is to destroy weeds when they appear; forsooth, if they are permitted to grow and claim notice, they are a true sign of indifferent culture.

ARTIFICIAL WATERINGS, attend to on the basis of last month's suggestions; never wait until the crops receive such a check as is likely to arrest their progressive growth. If you do bulk, or weight and quality, will be sacrificed.

CAULIFLOWERS, bend the leaves over the hearts of such as are forming embryo flower heads, anon cut the latter before they become too "frothy." Prick out spring sown seedlings, and, when large enough, finally plant them out in highly enriched ground.

PLANT OUT as soon in the month as possible seedling ridge, Cucumbers, Vegetable Marrows, Tomatoes, Leeks, Chillies, Brussels Sprouts, Broccoli, Kales, &c. It is quite a mistake to imagine the three last may be planted out permanently any time in the future; to make really fine growth they cannot be got out too soon, Brussels Sprouts in particular. Press the well-worked soil firmly about the roots of all subjects when planted out, and, if it be possible, give each a root watering during dry weather, to settle the necessarily loose ground about the roots, and neutralise the check they receive when transplanted.

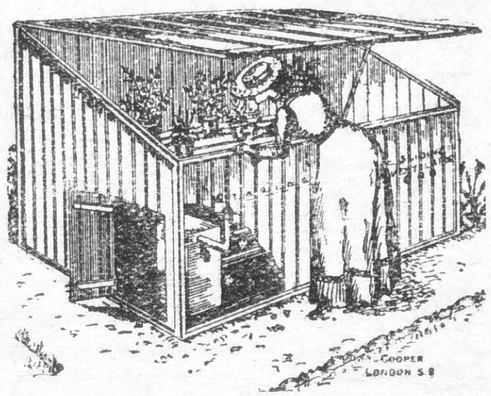
AN EARLY ROW OF CELERY cannot be planted into a trench too soon, or during the month. Make the trench 9in. to 12in. in depth, and the width of a large spade, and dig into it an abundant quantity of good manure. Plant two or three seedlings at one end of the trench, then place a foot on each

Plant Store.

SOMETHING NEW. SPECIALLY RECOMMENDED.

Can be used as a Propagator, Cucumber Frame, Forcing Pit, and numerous other purposes.

The outside casing is of good, sound boards, in four sections; simply screwed together. A strong stage is supplied for the full length and width; also a very strong light to form top, with hinges fitted, sufficient glass to glaze, and complete with set-ope. The construction is so simple that a boy can fix in a few minutes.



No. 39.

We also supply with these structures a specially constructed hot-water apparatus (the burner to burn oil or gas), complete with 2in. flow and return pipes, and feed cistern. Will heat the structure from 45deg. to 60deg. above outside temperature. Put on rail at our Works.

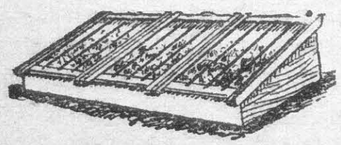
Size 6ft. by 4ft. Price 60/-.

FRENCH GARDENING.

Intensive Cultivation.

Frames, Bell-Glasses, &c., for this Money-Making Culture.

Plots equipped with Frames and Bell-glasses have produced a gross revenue of over £600 an acre.



No. 40.

3-light French Frames. Made good sound 1½in. planks, 13ft. long, 4ft. 5in. wide, 9in. deep at back, sloping to 7in. front, strongly braced together at ends. Each frame consists of three lights, painted one coat, and glazed with 21oz. glass.

Each 35s., 25 frames 32s. 6d. each, 50 frames 31s. 3d. each, 100 frames 30s. each. Lights only, painted and glazed, each 6s. 6d., 25 6s. 5d., 50 6s. 4d., 100 6s. 3d. each. Put on Rail at our Works. Special quotations for larger quantities.

CLOCHES OR BELL-GLASSES (English and French make) supplied. Prices on application; size required should be stated, and with or without knob.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

side of them to tread the ground firmly towards them and over their roots. Follow this up by planting others, moving the feet in consonance for the same purpose. When planted give them a copious watering. Proceed with the pricking out of successional batches of seedlings in preparation for later plantings.

PEAS.—Continue to make successional sowings as often as previous sowings appear well above ground, comprising tall or other varieties suggested last month. Sowings made at this time may with advantage be in shallow trenches, where their surface roots will be kept cooler, and can be more efficiently watered during arid periods. Well mould and stick successional rows, and when the last has been done place, if possible, a mulching of manure beside the rows.

BEANS.—Make successional sowings early in the month of dwarf Kidney Beans. Canadian Wonder produces the largest pods; Negro pods in more quickly. Sow also Windsor Broad Beans for succession.

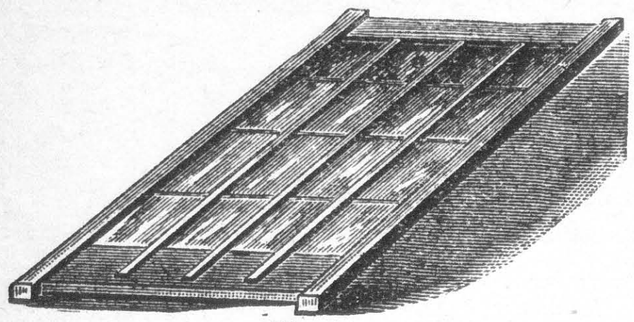
JULY.

FLOWER OR DECORATIVE DEPARTMENT.

GLASS STRUCTURES simply require that the internal atmosphere be assimilated with the natural one without; the better to assure this in practice it is necessary to consider they are prone at all times, especially when they are swathed in sunshine, to become too hot and insufferably dry, unless this is, as far as practicable, neutralised by more or less attention. The aim of owners or their representatives should be to make them feel bearable and pleasant to themselves—a condition plant inmates will appreciate. Artificial shading has to be applied to all in bloom, and is desirable for others—particularly Ferns, Mosses, and such more delicate subjects, so long as the sun's rays too powerfully encompass them. It is difficult to name the hours when such inmates should be shaded on hot cloudless days, owing to the numerous aspects houses occupy, and the varying altitude of localities, causing some to be fully subject to its influences from 5 a.m. to midday, others from midday to evening, &c. Sufficient to say, when sun heat causes thermometers to rush up to higher temperatures than are desirable for given structures, notwithstanding the admission of abundant fresh air, then is the time when blinds must remain unfurled. Internal dryness should always be counteracted by damping floors, side walls, &c. This must not be considered an unnecessary trouble, because by attention to it the soil in pots dries less rapidly, whereby less frequent waterings are required, these entailing, when applied in excess, washing valuable root nutriment out of the

Garden Lights.

Average Output 420 Lights per day.
Several Thousands always in Stock.



No. 41.

SPECIFICATION. — These lights are substantially constructed of good, sound, well-seasoned deal; the stiles, which are 2in. by 2in., being well mortised and pinned to tenoned rails properly rabbeted for the glass, and fitted with 2in. sash bars. The glazed lights are painted one coat, and the glass in same nailed and bedded in superior oil putty. Put on rail at our Works at the following respective prices:—

	ft.	ft.	in.	Each. s.	d.	Per Doz. £	s.	d.	Per 100. £	s.	d.
Unglazed Lights.	6 by	4	0	3	0	1	12	6	12	15	0
	5 by	3	6	2	9	1	9	0	11	0	0
	4 by	3	0	2	6	1	7	0	10	5	0
	3 by	2	0	1	8	0	18	0	6	17	6
Lights glazed with 21oz. glass.	6 by	4	0	9	0	5	0	0	37	10	0
	5 by	3	6	7	6	4	5	0	32	0	0
	4 by	3	0	6	0	3	7	6	25	15	0
	3 by	2	0	4	0	2	5	0	17	0	0
Unglazed Lights with sufficient 21oz. glass to glaze same.	6 by	4	0	7	0	3	15	0	28	10	0
	5 by	3	6	5	9	3	3	0	24	0	0
	4 by	3	0	4	6	2	10	0	19	0	0
	3 by	2	0	2	9	1	10	0	11	10	0

Iron Strengthening Bar, 1s. extra.

Prices given by return of post for all kinds of sashes and doors, glazed and painted.

Special quotations for larger quantities and other sizes by return of post.

We have a number of specially constructed machines always making these lights from one year's end to the other, planing all four sides and rabbeting at one operation, and for making sashbars at the rate of 25ft. per minute.

Special strong market gardeners' light for rough use, 3in. by 2in. stiles with iron bar, 6ft by 4ft., 4s. 9d. each, 54s. per dozen, unglazed.

Sanded Mastic Roofing Felt.

In rolls of 15yds. by 1yd. wide. Requires no tarring. Makes splendid watertight roof. 2s. 9d. per roll; 30s. per dozen.

pots. Overhead syringings before sunshine makes itself felt in the early morning are a great assistance in the above regard, and both assist growth and neutralise drought in general.

SOW SEEDS of Cinerarias, Calceolarias, and Chinese Primulas very shallow in fine sandy compost, and place a sheet of glass over them until they germinate, then remove the same and place them up near to the glass until they are large enough for pricking off. A succession of flowering plants is secured by sowings made both early and late in the month.

SHIFT INTO LARGER POTS early in the month Fuchsias, Balsams, and other plants intended for summer and autumn blooming, and encourage them to fill the new pots with roots before they commence flowering.

CHRYSANTHEMUMS must receive their final potting into rather more fibrous loam and less manure, with a little bonemeal. If specimen plants require stopping, it should be done a fortnight previously. Should insect pests, including aphis, attack any at the tips of the shoots, destroy them with strong tobacco water or an insecticide. Mildew on the under sides of the leaves destroy by laying the plants and well dusting with flowers of sulphur. Arrange all in full sunshine; stake and tie securely.

CARNATIONS, winter flowering or tree varieties, promptly propagate from small side shoots inserted into sandy soil beneath glass.

AURICULAS, finish re-potting early in the month. Such side growths as exist upon the plants carefully remove and put singly into small pots.

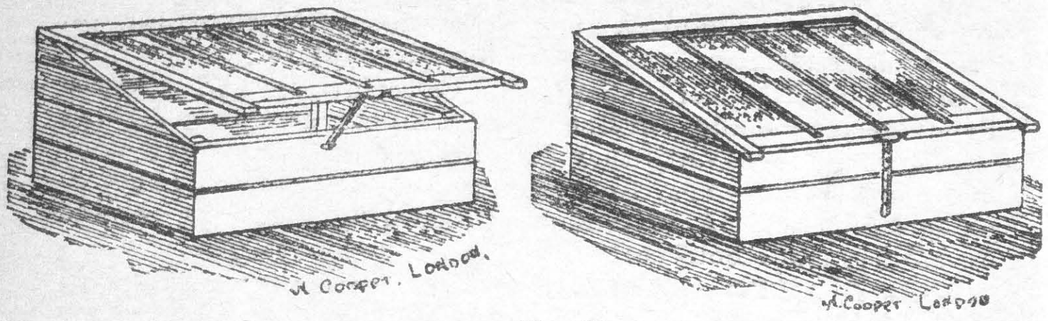
DAHLIAS, HOLLYHOCKS, AND HERBACEOUS PLANTS attend to, remove useless side shoots, and effectually stake and tie against high winds.

PENTSTEMONS AND PHLOXES.—Propagate from young shoots dibbled out under a glass protector.

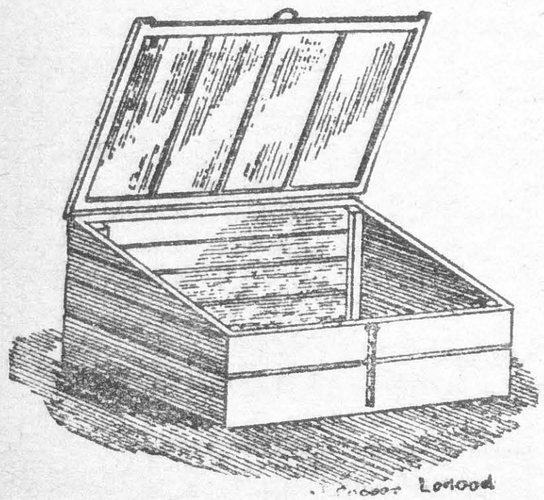
BULBS dug out of beds in the spring and buried elsewhere, collect, dry, and store.

ROSES.—Cut away any minor non-flowering shoots, which unduly crowd the centres of plants, apply manure water to the roots, cut away old blooms down to a healthy leaf and promising bud to induce Hybrid Perpetuals to give successional blooms. Encourage young basal shoots to grow upon climbers, and wage constant war upon insect pests, the most troublesome of which will be aphis and maggots. Frequent syringings with an insecticide and the use of the brush previously referred to should cleanse the plants of the former, hand searching being most effective with the latter. Mildew, which often attacks the foliage and flower-buds, is best overcome with flowers of sulphur applied direct in powder form.

The "Amateur" Plant Frame.



No. 42.



Made of 1in. thoroughly well-seasoned deal boards. Lights are 2in. thick, hinged at back, and are glazed with good 21oz. glass, nailed and bedded in oil putty, and fitted with iron set to open for ventilation, &c. Painted two coats, and put on rail at our Works.

	£	s.	d.
4ft. by 3ft.	1	1	0
5ft. by 3ft.	1	5	0

Cooper's Ready-mixed Paint.

The Most Reliable Quick-drying, Ready-mixed Paint in the Trade.

Will stand any weather.

Made in All Colours. Tins free.

Put on rail at our Works.

7lb., 2s. 14lb., 3s. 9d. 28lb., 7s.

56lb., 13s. 6d. 112lb., 25s.

Packing, if desired, 3d. per 7lb. extra.

Try a Sample Tin. State colour required when ordering.



No. 43.

Rotherwood. St. Ives Road, Maidenhead.

GENTLEMEN,—The Plant Frame reached me yesterday in good condition. I am well pleased with it.—Yours truly,

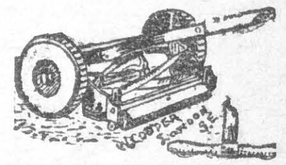
JAMES MORRIS.

PINKS.—Propagate from pipings, or cuttings dibbled under plant protectors.

CARNATIONS.—Finish layering in mounds of rich soil.

BOX EDGINGS, ALSO HOLLY AND PRIVET HEDGES, should be well and shapely clipped.

LAWNS, though best machined somewhat often during rainy seasons, ought not to be cut too frequently and close in dry ones. To do so will be to cause the grass to suffer more, and swards to assume a browner tint. Daisies may at such times be removed with a Daisy rake or long-bladed double-edged knife. Mowing machines vary greatly, easy running, or the reverse. I can recommend Cooper's "Beatall" as regards the former and for general efficiency, being of the improved Archimedean pattern and of reasonable price.



LAWN MOWER. COOPER'S "BEATALL."

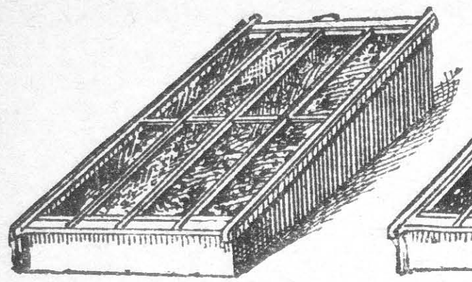
GRAPE VINES.

AMATEURS' GREENHOUSE VINES, in continuation of last month's suggestions, existing young laterals, having been pinched back up to one leaf from the flower truss and all other young shoots decisively stopped, should, when the flowers are about to expand, have selection made of those which have to be retained and carrying the best promise, and all others cut out bodily, unless wanted to fill up vacancies between canes. From then up to the time when the fruit is colouring, all young shoots and tendrils that appear have to be stopped, the former immediately beyond the first leaf. Berry thinning to be begun where the most forward bunches are when they are the size of small peas, and continued until all are done. Do not err on the side of leaving the berries too numerous; better too thin, as they will swell all the more; two-thirds should be cut out at least, and these mostly from the centres and lower extremities of the bunches. The shoulders or upper parts, if of goodly size and independently branched, may be looped up with raffia as thinning progresses. When all are thinned, keep the structure warmer, or about 60deg. at night ranging up to 75deg. by day. Increase atmospheric moisture by floor dampings and the like, but cease syringing the vines, or the berries will be discoloured. Vines having their roots within structures should, at the time of fruit swelling, be liberally watered at the roots.

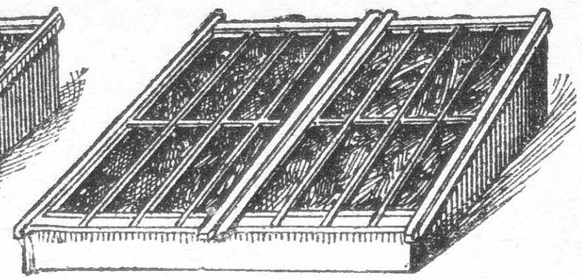
FRUIT GARDEN.

APRICOTS, PEACHES, AND NECTARINES, busily at work carrying crops of fruit and forming young wood, require definite attention in the matter of efficiently and for the last

Melon and Cucumber Frames.



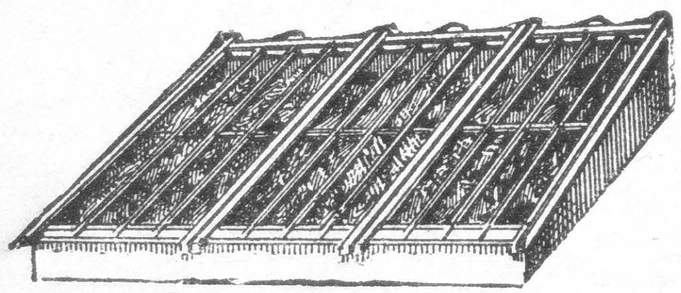
No. 44.
SINGLE LIGHT AND FRAME.



No. 45.
TWO LIGHTS AND FRAME.

These are very useful Frames, being suitable for the storage of plants in winter, and well adapted for the cultivation of melons, cucumbers, &c., in summer. The illustrations show One-, Two-, and Three-light Frames. Height at front 11in., and at back 16in.

They are composed of 1¼in. thoroughly well-seasoned deal boards, have necessary parting pieces, and runners for the



No. 46.
THREE LIGHTS AND FRAME.

lights, which are 2in. thick, and which are glazed with good 21oz. glass, nailed and bedded in oil putty, and fitted with an iron handle. All parts painted two coats, and put on rail at our Works, at the following prices:—

	ft.	in.		ft.		£	s.	d.
One-Light Frames	3	6	by	3	.. ..	0	15	0
,, ,, ...	4	0	,,	3	.. ..	0	16	0
,, ,, ...	4	0	,,	4	.. ..	0	19	0
,, ,, ...	5	0	,,	4	.. ..	1	2	0
,, ,, ...	6	0	,,	4	.. ..	1	4	0
Two-Light ,, ...	6	0	,,	4	.. ..	1	6	0
,, ,, ...	8	0	,,	4	.. ..	1	14	0
,, ,, ...	8	0	,,	6	.. ..	2	2	0
Three-Light ,, ...	0	0	,,	6	.. ..	2	15	0
,, ,, ...	12	0	,,	6	.. ..	3	0	0
Four-Light ,, ...	16	0	,,	6	.. ..	3	15	0
Five-Light ,, ...	20	0	,,	6	.. ..	4	15	0
Six-Light ,, ...	24	0	,,	6	.. ..	5	15	0

Estimates submitted for special sizes free.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

time thinning the fruit where too thick. Green Apricots make excellent tarts. Disbudding must also be continued until only such a number of young shoots remain as can be nailed in between the main branches. This done, and the longest young shoots secured, the two last trees cannot be too copiously syringed after the sunshine passes off them towards evening. The water should be so forced against them as to dislodge insects and accumulated dust, from both them and the wall, for which and other purposes there is nothing so efficient as a garden engine.

Considering that such engines carry from twelve to thirty gallons (according to size) direct from mains, and do away with the too limited supplies of laboriously-carried water pots, they should be included in the furniture of all reasonably sized gardens.

STRAWBERRIES—all soft fruit, in fact—must, as it begins to colour, be protected from birds. Netting, whatever form is used, must be so fixed as to prevent them from reaching it, even by inserting their heads through the meshes. Apart from the consideration of a little additional outlay, netting can be quickly arranged upon thin poles supported by uprights, so as to be quite free from the plants, and permit of the owner entering and culling the fruit at his pleasure. Strawberry runners layer—preferably in small pots—to prepare young plants for forcing, or forming future plantations.

RASPBERRIES, thin out the young shoots forming at the base of the fruiting canes to three or four.

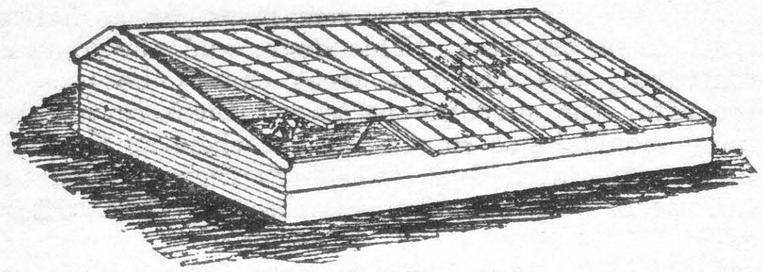
APPLES AND PEARS, in form of trained trees, look through, and remove bodily all misplaced adventitious shoots not required upon the trees. Tack the growing extremities of the above, and other fruit trees growing against walls, securely and straight in position; also tie similar shoots upon cordons, espaliers, &c., to suitable stakes.

VEGETABLE DEPARTMENT.

ARTIFICIAL WATERINGS must not be neglected by any who desire good crops of superior quality during dry periods, when latent moisture is unduly limited. Apply it copiously with the spout of the water-pot, or, if a hose is at command, to the roots rather than to the surface ground. Slight superficial applications may please the operator, but will not satisfy the crops. Always, after giving crops such a treat, stir the surface of the ground between the plants as soon as it is dry enough to do so without adhering unduly to boots and hoe.

CROP PLANTING, or the final setting out of all the varieties of so-called Winter Greens, Celery, &c., proceed with, during

Three-Quarter Span Garden Frame.



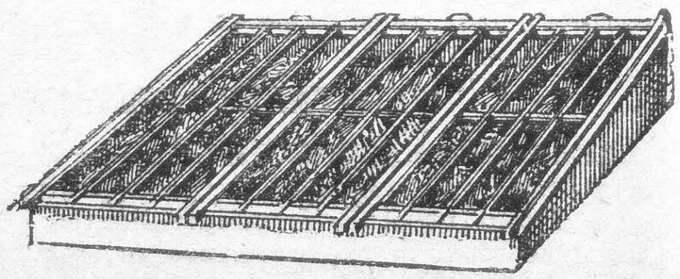
No. 47.

This Frame was introduced a short time ago from a suggestion made by a celebrated grower of picotees and carnations. Its advantages are in height and light; the part span diffusing the sun's rays, while economy in space is effected. It is generally admitted to be without a rival in the trade.

SPECIFICATION.—It is made of 1¼in. thoroughly well-seasoned deal boards. The lights are 2in., and are glazed with good 21oz. glass, hung with iron hinges, and painted two coats. With set-opes complete. Put on rail at our Works at the following prices:—

Size. ft. ft.	Price. £ s. d.	Size. ft. ft.	Price. £ s. d.
4 by 4	1 8 0	16 by 6	5 10 0
4 by 6	1 16 0	20 by 6	7 0 0
8 by 6	3 3 0	24 by 6	8 10 0
12 by 6	4 5 0		

The Market Gardener's Violet Frame.



No. 48.

These frames are used very largely for Violet growing by Nurserymen, &c., but are suitable for a number of purposes. Very strong. Composed of good sound well-seasoned timbers, 1¼in. thick, with necessary runners for lights, &c., and Painted inside and out. The lights are 2in. thick. Glazed 21oz., fitted with iron handle, and put on rail at our Works, at the following prices:—

Three-light frames, 10ft. 6in. long, 5ft. wide, 11in. high at back, 9in. in front, £2 5s. each. £25 per doz.

showery intervals, wherever spare ground exists, until spare seedlings are all disposed of.

WINTER ONIONS, SPINACH, PARSLEY, TURNIPS, &c., must be sown by the 11th of next month; allot and prepare the necessary ground for the same upon an open, sunny site.

PEAS, make last sowings of a row or two each of both a tall and a comparatively early dwarf variety.

SALADINGS, including Endive, Lettuce, Mustard and Cress, Turnip Rooted Radishes, &c., sow small batches every three weeks.

CUCUMBERS AND MELONS, growing and, as regards the former, now cropping freely, require the following attention: Upon one regular afternoon in each week, about 3.30 p.m., remove the sashes, thin out the vines, if necessary cutting away discoloured leaves and aged ones where they cause too much shade, freshen up the surface of the soil, then apply a good root watering of water warmed somewhat by standing in sunshine or otherwise, then replace the lights, and shut them down quite close. They will only require this one root watering weekly. Let it be understood that Cucumber plants, to continue in bearing, must always have young shoots forming, each of which is not to be stopped or pinched back until it approaches the side of the frame. This will result in the formation of fruit-bearing laterals. Daily attention consists of giving a little fresh air betimes in the morning, and increasing it during the chief part of the day as weather demands, so as to maintain a somewhat uniform warmth of about 75deg., sprinkling the plants and internal surfaces between 3.30 p.m. and 4 p.m., and shutting the sashes down close. Melons require the same treatment, with the exception that the plants have to be grown until sufficient vines to fill the frame reach the sides of the frame, then they must all be pinched back the same day. This will ensure that all laterals they subsequently form will show female flowers at the same time. Pinch off the points of these laterals, as soon as these blooms are observed, at one leaf beyond each, and encourage growth until the blooms expand, at which keep the plants, &c., as dry as possible, until they set and the young fruit show themselves; then again encourage vigorous growth on the above lines. It is important that the blooms all form and set together, because if a solitary one or two begin swelling before the others there is the risk that later ones will not be forthcoming.

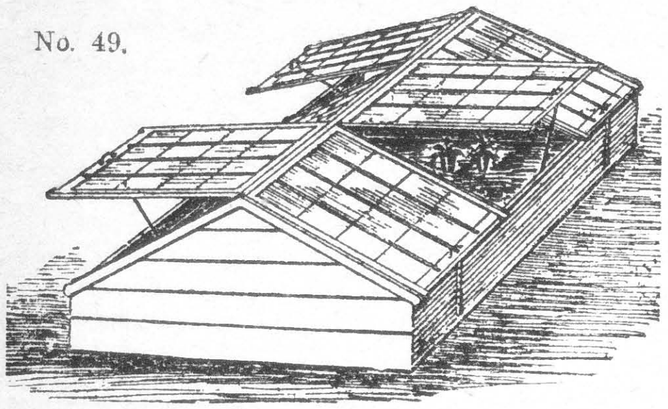
AUGUST.

FLOWER OR DECORATIVE DEPARTMENT.

AZALEAS, CAMELLIAS, and such other hard-wooded plants as have been kept in glass structures, after being shifted to perfect their young growth, along with Heaths, Epacris, &c.,

Span-Roof Garden Frame.

No. 49.

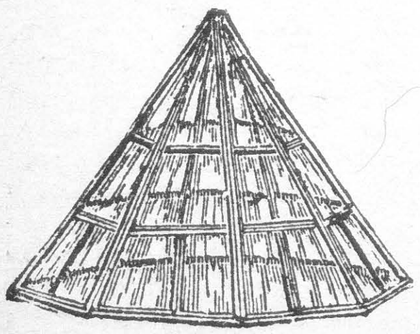


The Span-Roof Garden Frame claims the highest advantages in the matter of light and air, and is more convenient to work than the lean-to. Cucumbers, melons, &c., thrive well in it, and it is handy for storing plants in the winter.

SPECIFICATION.—The illustration shows a Six-light Frame 12ft. by 6ft., height at sides 11in., and ridge 24in. These frames are composed of 1¼in. thoroughly well-seasoned deal boards. Painted two coats. The lights are glazed with good 21oz. glass, bedded in superior oil putty; and are fitted with iron stays, which safely support them for ventilation. Put on rail at our Works at the following prices:—

ft.	ft.	£	s.	d.	ft.	ft.	£	s.	d.
4	by 4	1	8	0	16	by 6	5	10	0
4	by 6	1	16	0	20	by 6	7	0	0
8	by 6	3	3	0	24	by 6	8	10	0
12	by 6	4	5	0					

Estimates given for larger sizes Free on application.



No. 50.

Cap Glasses.

20in., 2s. 6d. each.

27s. per doz.

Put on rail at our Works.

Single glasses charged 6d. extra for packing. If 3 or more ordered, packing free.

Toddington, Linton, Kent.

DEAR SIR,—Received Frame safe, like it very well. With thanks.—Yours truly,

J. C. SPRADLEROW.

1, Devonshire Colonnade, Buxton.

DEAR SIRS,—Span-roof Frame arrived to-night, and I may say I am satisfied indeed.—Yours truly,

P. GODDARD.

St. Albans, Westley Road, Boscombe.

DEAR SIR,—Frame highly approved. Send me another exactly the same.—Yours truly,

G. MASTERS.

past blooming, place out of doors for a month or two to ripen and harden their wood. See that the pots rest upon a good bed of cinder ash, slates, or boards, to prevent worms entering them, and ensure that they do not stop up the bottom holes and check the free egress of water. Any pot plants stood out of doors earlier, if the surfaces of the balls are contracting moss, should have it removed and the surface soil slightly stirred, and if the pots are becoming green on the outsides scrub them for its removal.

ABUTILONS, shift into one size larger pots, to prolong their season of growth and blooming.

OLEANDERS standing out of doors, the blooms upon which are not expanding properly, place under glass and well souse both foliage and roots with water.

AGAPANTHUS, TUBS, VASES, WINDOW-BOX PLANTS will. if they have abundance of roots, be greatly assisted by manurial waterings.

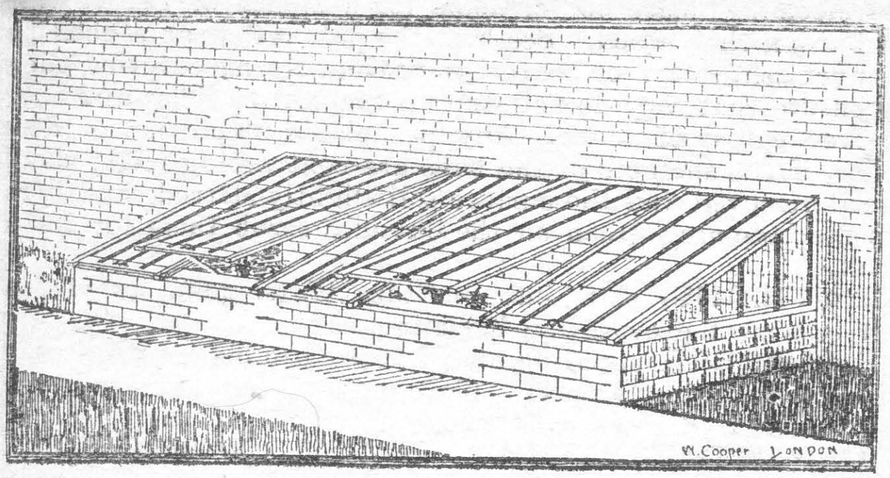
CONSERVATORIES AND GREENHOUSES should be maintained gay for the remainder of the summer season, with Balsams, Coleus, Fuchsias, Gloxinias, Zonal Pelargoniums, Abutilons, &c., besides Palms and other foliage plants. Avoid overcrowding, give abundance of fresh air, manurial waterings to plants having their pots full of roots, and damp the floor occasionally.

CYTISUS, CORONILLAS, EUPATORIUMS, SHOW PELARGONIUMS, and the like past flowering, stand out of doors, and cut back somewhat severely. Propagate the last from the prunings.

CINERARIA, CYCLAMEN, BEGONIA, AND PRIMULA seedlings, prick off singly and pot on when large enough. The first place in a cool, shady place out of doors, the others up near to the glass in a frame.

BEDDING PLANTS PROPAGATE as early in the month as possible, so as to ensure a stock of strong rooted cuttings for preservation. These may be prepared and inserted singly in small pots, several in larger ones, or many in boxes as regards Zonals; but others are best dibbled as thickly as they can be placed into 6in. pots, allowing sufficient space for head room. The first-named cuttings, when prepared, should be placed in a position to dry their wounds for a day or so before they are dibbled into the ground, and will root best if placed subsequently in full sunshine. All others will succeed best in a close frame until they cease flagging, and from thence onward should be gradually inured to the outer air until well rooted, then placed out of doors until the last week in September. Liberal drainage must be given to cutting pots or boxes, and the compost must be light and sandy, to ensure that it does not retain too much water during the winter season.

Lean-to Frame or Forcing Pit.



No. 51.

For small gardens this Lean-to Plant Preserver is entirely without precedent, especially where only a limited space is obtainable. They can be either fixed against a wall or by the side of a greenhouse, to suit convenience. The lights are 2in. thick, glazed with good 21oz. glass, each light being fitted with strong hinges and casement stays, which support lights for ventilating. The framework and lights are of well-seasoned deal, painted two coats. Put on rail at our Works.

	Lengths. ft.	Width. ft.	Height at Back above end wall. ft. in.	Prices. £ s. d.
GLAZED DIVISION 7s. each.	8	3	1 9	1 10 0
	10	3	1 9	1 14 0
	12	3	1 9	1 18 0
	16	3	1 9	2 10 0
	20	3	1 9	3 5 0
	24	3	1 9	4 0 0
	28	3	1 9	4 15 0
	32	3	1 9	5 5 0
	36	3	1 9	5 12 6
GLAZED DIVISION 9s. each.	12	4	2 0	2 15 0
	16	4	2 0	3 7 6
	20	4	2 0	4 5 0
	24	4	2 0	5 0 0
	28	4	2 0	5 15 0
	32	4	2 0	6 0 0
	36	4	2 0	6 5 0
GLAZED DIVISION 10s. each.	16	5	2 3	4 0 0
	20	5	2 3	5 0 0
	24	5	2 3	6 0 0
	28	5	2 3	7 5 0
	32	5	2 3	8 0 0
	36	5	2 3	8 5 0
	40	5	2 3	9 0 0

If made with Strong Wooden Base, 1ft. 3in. high, instead of as illustration, for brickwork; 25 per cent. extra.

AMATEUR GARDENING.—*continued.*

SCHIZANTHUS, DWARF LOBELIA, MIGNONETTE, &c., sow thinly in pots in rich loamy compost, or the second in shallow wooden boxes.

ANEMONE SEED, of one or more of the grand single or double-flowered forms, sow on a sunny border.

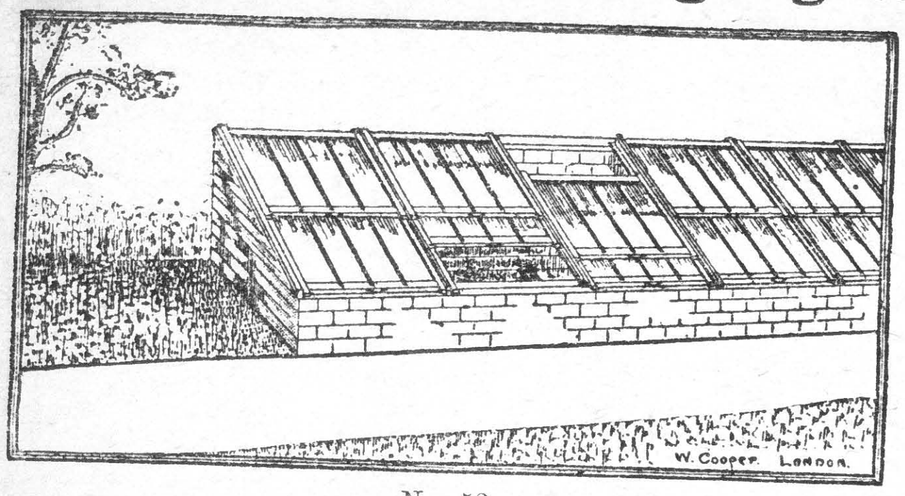
LAWNS, WALKS, AND FLOWER BEDS require frequent attention. Machine the first, so as to maintain it close and trim, roll the second after rain, and pick over the last, as necessary, pegging rambling plants, &c., to maintain neatness and good effect.

DAHLIAS AND PHLOXES like abundance of root water, frequently disbudding the former and supporting young shoots not to be permitted to grow too numerously on flowering branchlets, none from the base.

CHRYSANTHEMUMS, in pots, require now sometimes three waterings a day during sunny, drying weather, and occasional weak manurial waterings, also early morning and late afternoon vaporisings overhead. Attend to training specimen plants before the wood becomes too hard. If upon an occasional plant an early flower bud shows, carefully remove side shoots from around it.

ROSE BUDDING—all budding operations, in fact—should be performed in the first days of this month or before. It is a simple operation, and is usually performed upon tall, old Briars for standards, or upon dwarf briars grown from seed, Manettis grown from cuttings, &c. Primarily strong young shoots grown during the current year are to be budded into. The bark of both the stock and shoot from whence a bud is taken must "run" freely, or so that it can be parted easily from the underlying wood. Buds are selected from strong young shoots, and consist of the base of a leaf with bud at its axil, with ¼in. of the bark above it and ½in. of the bark behind it; these are removed with a very sharp edged knife in the shape of a miniature boat. The actual leafy part is removed, but the base of its stalk retained as a protection to the bud. Then, from the upper side of such boat-like formation, a bit of hard wood existing in it has to be drawn down and out of it. The bud prepared, cut a line through the bark of the stock from near its base upwards, a little longer than the bark containing the bud, and across its upper end make a cross-cut, so that the two cuts become ⊢ shaped; raise the bark and push under it the prepared bud as far as possible without injury. If, this done, the bark of the bud exceeds in length the cut, cut it across level with it, and it will fall in place closely clasping the inner wood under the bark. It only remains to tie it tightly in place over the wounds; this done, pinch off the point of each shoot so operated upon.

Forcing Pits with Sliding Lights.



No. 52.

These Forcing Pits are usually constructed with long heavy lights running over into the path and monopolising double the width of the frame itself. In this design we have entirely done away with these difficulties, having arranged a double row of lights: the upper row slides down over the lower, and *vice versâ*. Bearers are provided between the lights, the latter being 2in. thick, and fitted with a handle. Sills are also provided for the wall. Painted two coats and glazed with 21oz. glass. All ready for fixing on brickwork. Put on rail at our Works.

PRICES:—FOR PITS WITH DOUBLE ROWS OF LIGHTS.

Length. ft.	6ft. wide. £ s. d.	7ft. 6in. wide. £ s. d.	9ft. wide. £ s. d.
8	2 8 0	2 18 0	3 2 6
12	3 8 0	4 0 0	4 7 6
16	4 8 0	5 1 0	5 15 0
20	5 8 0	6 2 0	6 15 0
24	6 8 0	7 3 0	8 5 0
32	8 8 0	9 5 0	11 10 0
40	10 8 0	11 7 0	13 15 0

If made with Strong Wooden Base, 2ft. high at back, 1ft. in front, instead of as illustration, 25 per cent. extra.

Yew Lodge, East Grinstead.

SIRS,—I wish to tell you how delighted we are with the greenhouse. Our friends can hardly believe we only paid £6 12s. It goes together so perfectly and looks so nice. Most likely we shall put a conservatory to the billiard-room later in the year, and shall be glad to give you the order.

ETHEL MAYOR.

37, Wentworth Street, Malton, Yorks.

DEAR SIRS.—Towards the end of last year I ordered a small greenhouse for a customer of mine near Scarborough. Until a week ago I never saw the house, as I have been laid up with a serious illness.

My customer is very much satisfied with the house, and so am I; and as it is put up in a good district I am almost certain it will lead to more business. Will you kindly inform me the best means for heating and the retail cost of same?—Yours respectfully,

R. CUNNINGHAM (horticultural contractor).

AMATEUR GARDENING.—*continued.*

GRAPE VINES.

BERRY COLOURING, which commences after a protracted interval, during which the green berries, after their first swelling, seem to be at a standstill, though hard at work "stoning," or forming seeds centrally, must be watched for. When any are becoming tinted and commence their final swelling, reduce the temperature by 5deg. night and day, keep a drier atmosphere, by admission of more fresh air, thereby assisting them over the most trying period. Too hurried work at such a period —especially if roots are weakly—causes shanking, indifferent colour and flavour, to say nothing about how it detracts from next year's fruit prospects.

FRUIT GARDEN.

PEACH AND NECTARINE TREES, persist in washing the trees, to keep them free from insect pests and dust during hot, dry intervals. Lay in young shoots, stop adventitious growths, and remove leaves which unduly shade the fruit. On the first appearance of fruit ripening, swing netting, boat-shaped, from wall and upright stakes to catch such fruit as fall off. Besides this, gently feel highly coloured fruit each morning, and, without injurious pressure, they will fall into the hand.

APRICOTS, remove misplaced young shoots bodily, tack others to the wall, and see to the gathering of fruit before they become unduly ripe, and receive injury from birds, wasps, &c.

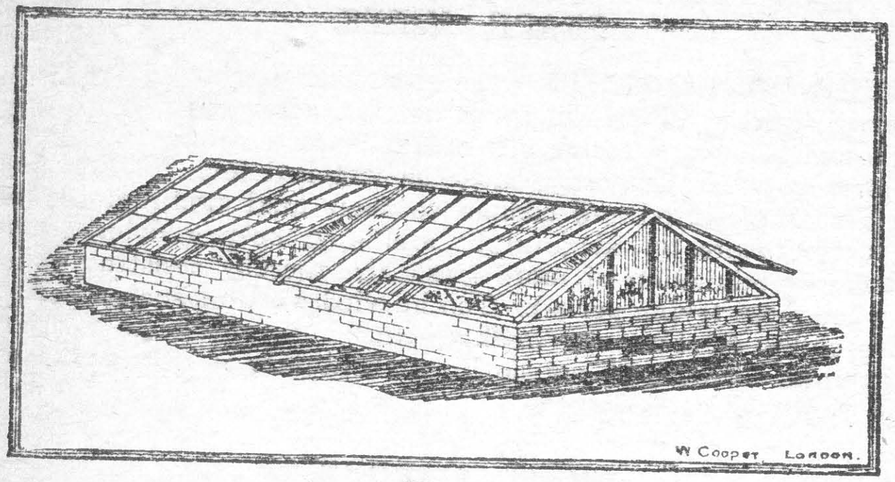
APPLES, PEARS, CHERRIES, AND PLUMS, early in the month attend to summer pruning by shortening all young shoots three-fourths their length upon all trained trees, except such as are required for extension of extremities of branches, or laying in between others that are too wide apart. Tack all such to walls in the case of wall trees, tie others to stakes in the case of cordons, espaliers, &c. Morello and Kentish Cherry trees the extremities of the young shoots upon which are infested with black fly steep in strong tobacco water, or remove by snipping off the infected parts.

FIG TREES carrying goodly-sized fruit will mature them better if the points of the bearing shoots are pinched out, and all suckers removed from the base of the trees.

VEGETABLE DEPARTMENT.

SOWING SEEDS for production of winter and spring crops is an important consideration this month, to be done as follows: Early London Cauliflower, Spinach (prickly seeded), Turnip (Red American), sow from the 11th to the 20th. It is well to make

Span-Roof Pit or Forcing Frame.



No. 53.

These are perhaps the most useful form of Frame before the public, as they are suitable for the storage of plants in winter, and well adapted for growing cucumbers or melons, &c., in summer. For these purposes they are largely used by nurserymen and gardeners. Constructed for building upon brickwork, and made of well-seasoned deal; all the lights are fitted with set-opes, which afford ample ventilation; the framework and lights are fitted and numbered before leaving the Works, so that any handy man can fix them. Lights 2in. thick, painted two coats, and glazed with 21oz. glass, including ends. Put on rail at our Works.

Length of Frame. ft.	5ft. Wide. £ s. d.	6ft. Wide. £ s. d.	7ft. Wide. £ s. d.
10	3 5 0	3 10 0	3 15 0
15	4 8 0	5 0 0	5 10 0
20	5 10 0	6 10 0	7 0 0
25	7 0 0	8 0 0	8 10 0
30	8 10 0	9 10 0	10 0 0
40	11 10 0	12 10 0	13 10 0
50	14 0 0	15 0 0	15 10 0
60	16 10 0	18 0 0	18 10 0

Any size made; estimates free.

For Heating Apparatus suitable for above Frame, see Section VII.

Valewood, Barn's Green, Horsham.

SIRS,—Mr. P. S. Goodman, of Muntham, to whom I recommended you a year or two since, is well satisfied with the goods you have supplied to him. I have erected the greenhouse you sent him, and he seems very pleased with it.

H. WOODHAMS.

Lyndhurst, 90, Adelaide Road, Brockley.

DEAR SIR,—I beg to thank you for the satisfactory way in which you have carried out the greenhouse repairs, and I shall be pleased to recommend you to my friends.

P. A. HORNE.

AMATEUR GARDENING.—*continued.*

two separate sowings of the two first. Towards the 22nd of the month sow Endive (curled-leaved), Lettuce (Brown Cos and All the Year Round), Onions (Globe Tripoli, Giant Rocca, or Ailsa Craig), Radishes (Black and White Spanish and Turnip-rooted). The ground for all, impoverished by summer crops and very dry probably, should be manured and broken up deeply. Except for the salads, sowing in shallow drills across sunny quarters is best.

CELERY, begin to earth up the earliest; thoroughly saturate the roots of all with manure water; dust the leaves with soot to check the maggot pest.

ONION CROPS, bend the necks of such as stand upright, dry and harvest autumn sown, and Potato, Onions, Garlic, and Eschallots.

TOMATOES, persist in pinching off all side shoots from base to apex, stake all securely against high winds, and do not make the mistake of over-watering them at the roots.

WELL WATER GROWING CROPS of Peas, Kidney Beans, Cauliflowers, &c.

WINTER GREENS, finish planting as vacant ground falls in.

RIDGE CUCUMBERS and Vegetable Marrows, thin out, stop the points of growing shoots, and water as necessary.

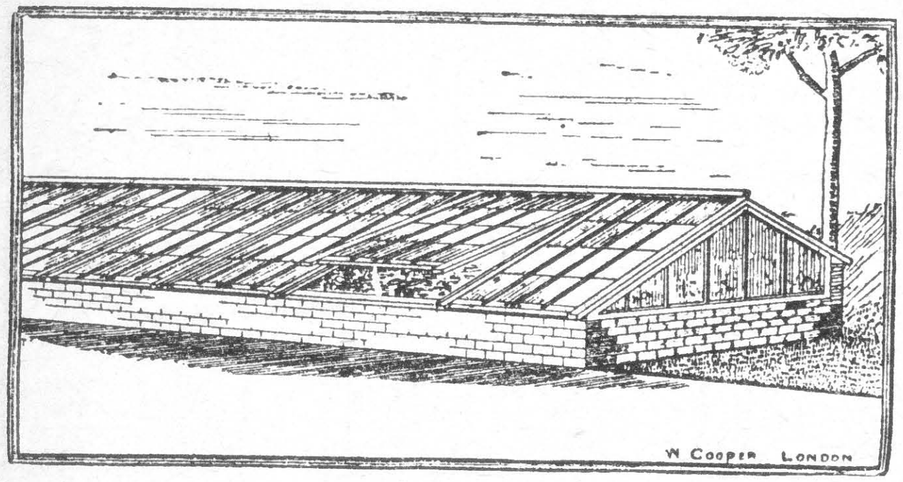
SEPTEMBER.

FLOWER OR ORNAMENTAL DEPARTMENT.

CONSERVATORIES AND GREENHOUSES, treatment for the month must be determined in accordance with the kinds of plants they contain. Filled mainly with softer wooded annuals, &c., they can be maintained by keeping sashes and doors open, except when disturbing winds prevail. Liliums, Fuchsias, Begonias, Gloxinias, Pelargoniums of the many Zonal types, &c., should ensure good displays, and will require shading on sunny days for at least three hours nearest to midday. Where Ferns predominate a larger amount of shading becomes imperative, excepting where climbing plants growing under the roof supply sufficient, consisting as they may do of Solanum jasminoides, Tacsonias, Tecomas, Mandevilleas, &c., as regards lofty rooms, Lapagerias, Fuchsias, Habrothamnus, &c., under low ones.

REPLACE IN GLASS STRUCTURES all real greenhouse semi-hardy and bedding plants—all, in fact, requiring protection—by the end of the month, because frosts sometimes occur early in the ensuing month. To make room for these all soft-wooded annuals, etc., used for summer decoration must give way. Few of them will be of further use; of course

Three-Quarter Span Garden Frame.



No. 54.

This illustration shows a Frame adapted for building on brick walls, making the most useful Frame that can be had for general purposes. Owing to plenty of light and air, plants grow quickly and healthy. The framework is made of good sound well-seasoned deal, and a plate is formed to rest on the wall. The lights are very strong. Two glazed ends are included. Set-opes to each light. Painted two coats and glazed with 21oz. glass. Put on rail at our Works.

Length of Frame. ft.	5ft. Wide. £ s. d.	6ft. Wide. £ s. d.	7ft. Wide. £ s. d.
10	3 5 0	3 10 0	3 15 0
15	4 8 0	5 0 0	5 10 0
20	5 10 0	6 10 0	7 0 0
25	7 0 0	8 0 0	8 10 0
30	8 10 0	9 10 0	10 0 0
40	11 10 0	12 10 0	13 10 0
50	14 0 0	15 0 0	15 10 0
60	16 10 0	18 0 0	18 10 0

Any size made; estimates free.

For Heating Apparatus suitable for above Frame, see Section VII.

Sholebroke, Priest Hill, Caversham.

DEAR SIRS,—The greenhouse you sent me to Hemdean Road I have removed to here. It is still in good preservation, and I think seven years in use speaks well of what you turn out.

JOHN KING.

The Lodge, Basing House, Banstead.

SIR,—I am writing to tell you I am very pleased with the new greenhouse you have just erected.

HORACE VENN.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Achimenes, Gloxinias, Tuberous-rooted Begonias, Hedychiums, Gloriosas will have to be dried and stored away for the winter. Coleus to be wintered in intermediate houses keep best in the form of cuttings struck early in the month.

SHOW PELARGONIUMS which have formed young shoots since they were cut back, must have all the old soil shaken from the roots and be repotted into sandy loam, and as small pots as the roots can be conveniently got into. Cinerarias hitherto exposed in a shady place must either have a frame placed over them or be removed to a greenhouse shelf. Bedding plants pick over and remove every symptom of decay from them before they are placed on the highest shelves up near to the glass. Climbing plants in structures so to be filled with plants should just previously have all least flowering parts severely thinned out so that they do not cause too much shade.

CHRYSANTHEMUMS must all be placed under shelter of some kind by the end of the month. Remove all aged leaves from them which show any sign of discoloration, and where they are arranged in groups avoid packing them too close together. Continue to give abundance of fresh air to these, and all other subjects, so long as outer weather permits. Persist in pinching off such side shoots as form.

DOUBLE VIOLETS plant out in frames up near to the glass. They are often planted over hotbeds after Cucumbers or Melons. These and single-flowered varieties grown out of doors must have all side growths cut away from them.

PLANTS SUMMERED OUT OF DOORS, comprising Agapanthus, Aloes, Hydrangeas, Myrtles, Palms, etc., remove under shelter by the end of the month.

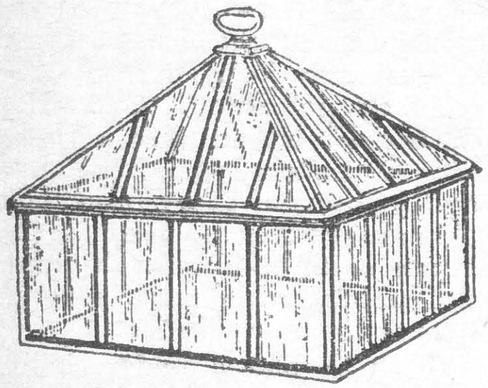
HARDY ANNUALS sow on sunny sites out of doors.

ROUTINE.—Hybrid Perpetual Roses, continue to cut back all shoots which have bloomed to the first prominent eye to ensure a succession of autumn blooms, which some, such as Souvenir de la Malmaison, produce abundantly. Climbing varieties past blooming must have as much of the old wood cut out as can be spared without making arches, &c., too unsightly, in view of assisting young shoots to make vigorous growth. If mildew, which attacks young leaves and flower-buds in autumn, attacks any promptly dust them over with flowers of sulphur. Pick decaying flowers and leaves off all plants; if an arid period occurs assist all desirable subjects by artificial waterings, and maintain lawns and walks neat and tidy, the former by weekly machinings, the latter by edging, frequent verge clippings and rolling after heavy rains. Auriculas, pot off singly offshoots existing, several in a pot. Dahlias require manurial water, and the flowers must be protected from earwigs; trap them in hollow Broad Bean stalks.

Square Zinc Hand Frames.

WITH LOOSE TOPS.

These Frames will be found to be very useful for protecting plants, seeds, slips, or cuttings during the spring, which, if left uncovered, would probably fall victims to the extreme cold so prevalent in this country during that season.



No. 55.

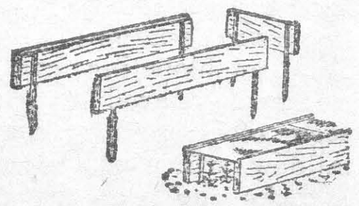
The Frames are made of strong corrugated zinc, fitted with zinc clips for glazing same, no putty or solder being required; therefore the services of a glazier are not requisite for either fixing the glass or repairing, which can be accomplished by any inexperienced person. The glass can be removed instantly from one frame and fixed to another of its size without fear of breakage, glass being interchangeable.

With 21oz. glass, cut to sizes: 12in., 4s. 3d.; 14in., 5s. 3d.; 16in. 6s. 9d.; 18in., 8s.; 20in., 9s.; 22in., 10s.; 24in., 11s. each.

Single Frames charged 6d. extra for packing. If 3 or more ordered, packing free.

Protector for Early Peas, Seeds, Plants, &c.

Here is a very useful arrangement to protect seeds, early peas, plants, &c., from bad weather and birds until well above ground. They consist of two slabs of wood, each 3ft. long (rabbeted for glass), 4in. deep, with strips fixed at each end to go down into the ground. They may be placed any distance apart, so as to take whatever size of glass available. Any number of slabs may be used according to length required. Painted with our Patent Rot-proof Composition.



No. 56.

Put on rail at our Works.

	£	s.	d.
Per doz. Pairs of Sides (to Cover 36ft. in length)	0	5	0
Per gross Pair of Sides..	2	5	0

One pair of ends included with each dozen pairs of sides. Extra ends, 6d. per pair. Glass not included.

Sufficient 21oz. glass, 7in. wide, 3s. 3d. per doz. pairs extra.

" " " 35s. per gross.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

AMATEUR GARDENING.—*continued.*

GRAPE VINES.

LATE GRAPES, if intended to keep well, must be thoroughly ripened hence, notwithstanding a past suggestion that they must not be hurried through the colouring stage; when this is secured somewhat increase the heat up to 75deg. and maintain the house dry. Such as are quite ripe keep also dry, giving more air to ensure this in the absence of fire-heat.

FRUIT GARDEN.

STRAWBERRY PLANTATIONS may be fruited for three years in succession, provided well surface manured annually. Some growers, who plant out very early runner plants this month, only fruit them one year, then destroy them. Such as are to be retained for next year's fruiting should have all litter, runners, and aged dead leaves removed from them as soon as the fruit is gathered and the surface of the ground between the plants well hoed. Old forced plants do well when planted out; indeed, the variety Vicomtesse Héricart de Thury so treated often gives ripe fruit the same autumn. Runners grown on in small pots for forcing transfer to 5in. pots and good fibrous yellow loam with a little old decomposed manure, then place them in full sunshine.

THE SUMMER PRUNING OF TRAINED TREES attend to, checking useless young growths in view of forcing them to form flower buds.

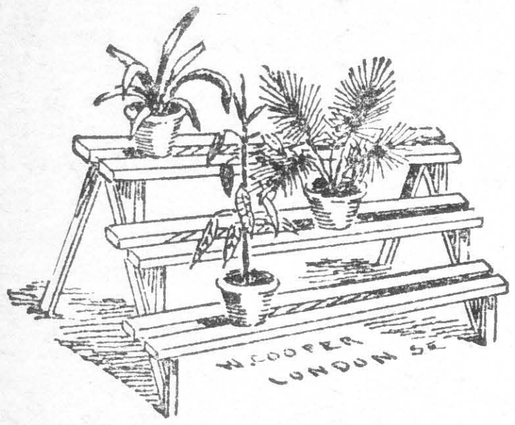
RIPENING CROPS require close attention. Early Pears and Apples gather before they are so far advanced as to fall off or be blown down. When the pips in them become brown, or fairly so, all early or second early sorts of the two kinds named will be best gathered, the former obtaining better flavour if laid on a cool shelf two or three days. Indeed, "Williams'," Jargonelle, Beurré d'Amanlis, &c., last longer if gathered under the above conditions at two separate dates, a fortnight or so between. Late kinds, however, should hang until October.

GOOSEBERRIES, CURRANTS AND CHERRIES, including Morellos, must be protected as they ripen, and subsequently from birds; crops of the second may be kept till the approach of Christmas by placing a mat closely around the bushes, with a small hole at the top to provide for the passing upwards of a volume of fresh air to assist in keeping them dry.

VEGETABLE DEPARTMENT.

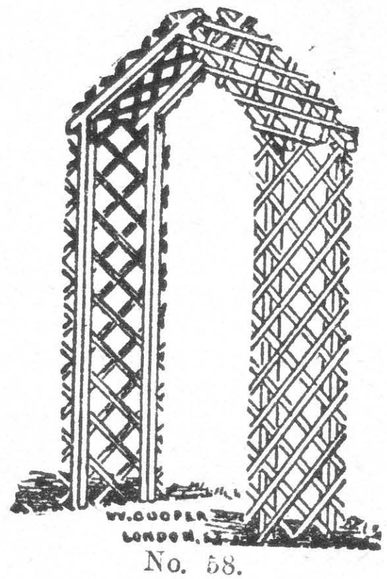
POTATOES, both early and late varieties, should all be dug and stored as soon as their haulms turn fairly yellow.

Portable Folding Flower Stands.



No. 57.
4ft. long, 2ft. 6in. high.
Price 2s. 9d. each.
Suitable for Greenhouse, Garden, Dwelling-house, &c.

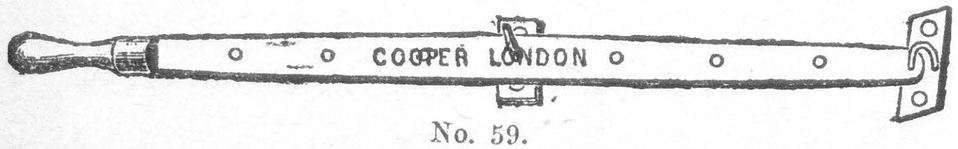
Trellis Garden Arches.



No. 58.
Strong, Portable.
Price 3s. each.

Greenhouse Fittings.

GREENHOUSE LIGHT STAYS.



No. 59.

Size 12in.	15in.	18in.	21in.	24in.	27in.	30in. long.
10s.	12s.	13s.	15s.	17s.	20s.	26s. per doz.



No. 60.
FRAME OR SASH HANDLES.
2s. 6d. per doz.



No. 61.
DOUBLE LINE HOOKS.
2s. 6d. per doz.

Roofing Felt.

Patent Asphaltic Rolls, 25yds. long by 32in. wide, 3s. 3d. per roll. Better quality, 4s. 6d.
Nails for fixing Felt, in boxes of 250, 6d.; 500, 1s.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

AMATEUR GARDENING.—*continued.*

They will be all the better for it—particularly in view of the disease they are subject to—will keep and cook better than if left in the ground, and form better sets for planting the following year. Store them in a dark, dry, frost-proof shed or clamp them out of doors in straw under ample mounds of earth. If any show signs of disease, store them away temporarily only, in a position where they can be turned over and examined three weeks subsequently, and again if any are found to be diseased.

MAKE SOWINGS, small ones, early in the month of Cabbage, Lettuce, and Cauliflower to more certainly secure spring seedlings in consideration of weather contingencies.

CELERY.—Continue to give copious waterings in dry weather, and proceed with moulding up successional rows. This is best done a little at a time. The mould must be broken up quite fine, placed lightly towards the plants, pushed in between in the row with care to keep it out of the hearts; indeed, it is best to hold each stick firmly in one hand with stalks firmly closed and place mould around it with a trowel with the other. If it is thrown in lumps against the sticks it will cause them to become crooked, or what is called "seated," to their irretrievable injury. If you wish to hasten the blanching of a row, press the soil around the apices of the leaves at the tops of the mounds, otherwise do not do this until three weeks before you commence digging.

ONIONS.—Pull up and lay in colony rows as soon as their tops lie down and are shrinking. It is not well to let them become too ripe before this is done. As they dry, turn them half over occasionally on dry days, and when ripe enough store in a cool place.

VEGETABLE PESTS, including Brassica caterpillars, slugs, and mildew, have to be guarded against. The former should be hand picked and white butterflies destroyed. Scatter soot or lime about to scald the second, and apply flowers of sulphur to the last.

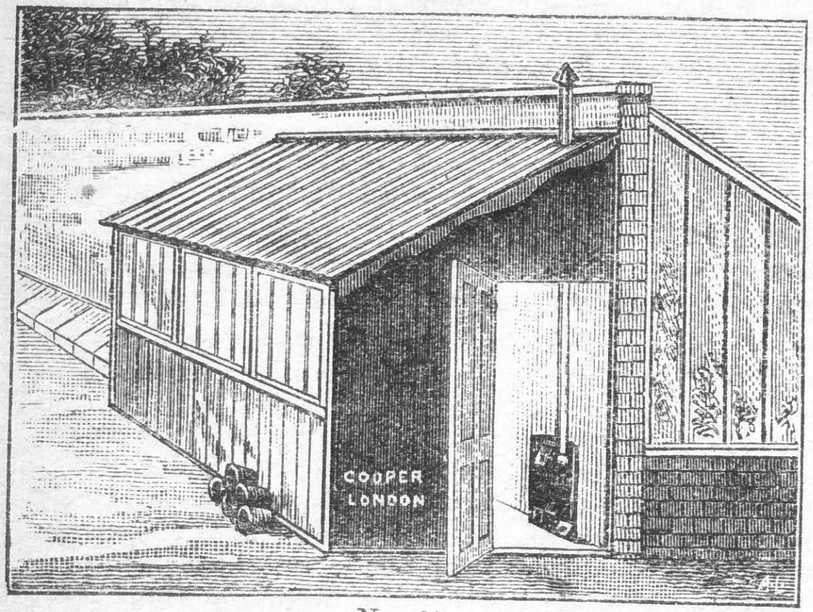
HOEING AND WATERING attend to if the weather is hot and dry. All crops, late Peas and Cauliflowers in particular, will be vastly benefited thereby. Apply the latter towards evening, and next day, as soon as the surface of the ground is dry enough, stir it freely with the hoe.

OCTOBER.

FLOWER OR DECORATIVE DEPARTMENT.

PALMS, DRACAENA INDIVISA VEITCHII, ASPIDISTRAS, CLIVIAS, and similar comparatively hard-enduring foliage plants lend themselves admirably for all forms

Potting Shed, Tool House, Workshop, etc.



No. 62.

Constructed with strong wood framework, and coveredwith tongued and grooved boards, with roof of galvanised corrugated iron. Woodwork painted outside one coat. Made in sections. Door hung and fitted with lock and key. 21oz. glass. Carefully put on rail atour Works.

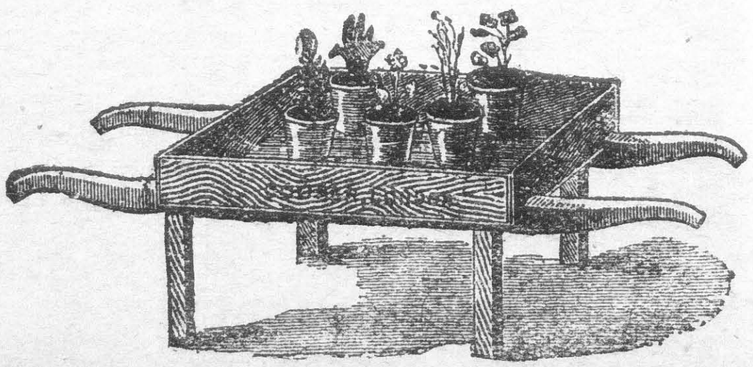
Length. ft.	Width. ft.	To Ridge. ft.	in.	To Eaves. ft.	in.	Lean-to* as Illustration. £ s. d.	Span Roof. † £ s. d.
7	5	7	0	5	0	2 10 0	3 0 0
9	6	7	3	5	3	3 10 0	4 5 0
10	7	7	6	5	6	4 10 0	5 10 0
12	8	8	0	6	0	5 10 0	6 15 0

* Door may be had in end or front as required.

† Both sides glass similar to side in Illustration, with door in centre one end.

Gardeners' Plant Barrow.

Well and strongly made and painted two coats best oil colour.



No. 63.

	£ s. d.
Size 3ft. by 2ft.	0 15 0
„ 4ft. by 2ft. 3in.	1 0 0
„ 5ft. by 2ft. 6in.	1 7 6

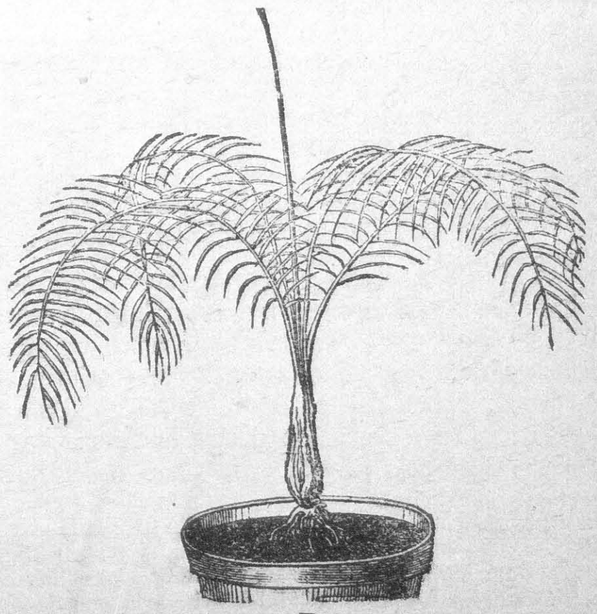
WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.



LIVISTONA OLIVÆFORMIS.

of glass structures, halls, dwelling rooms, &c. At this season and during the winter they become more conspicuous under effective arrangement than at other seasons, and particularly during the Christmas festival. All can be maintained in health better during the winter than if now placed in larger pots. Fresh purchased plants keep somewhat warm for 2or3 weeks, as they are invariably brought for sale out of very warm, moist temperatures.

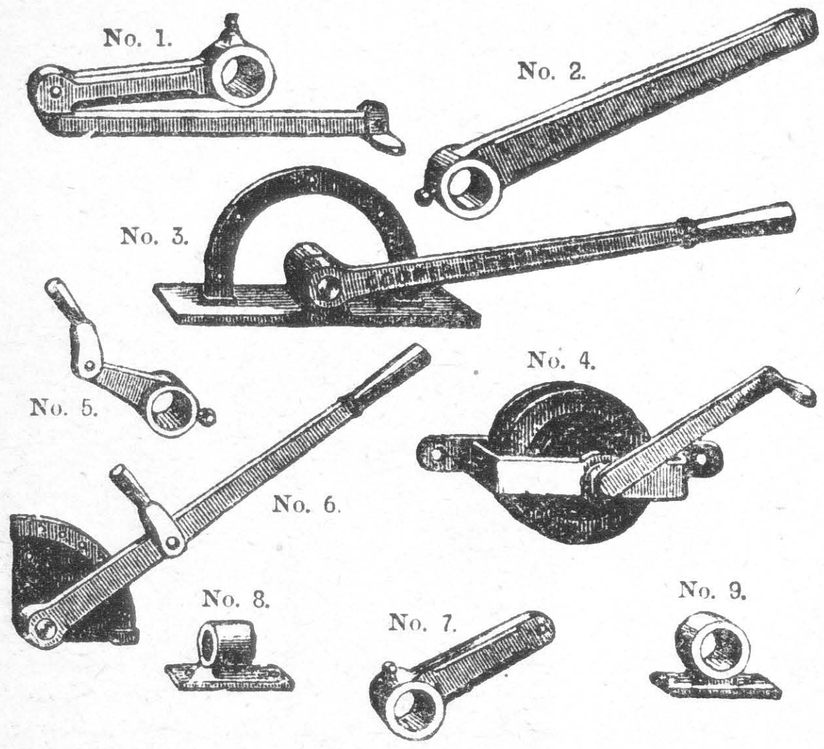
EVERY HALF-HARDY OR TENDER PLANT must for safety be housed or put under protection with the coming of the month, because an injurious frost sometimes occurs during its first week or two. Beyond such tender subjects as it is desirable to conserve, growers need not despair and meet possible trouble half-way. Frosts may hold off and such subjects as remain without may go on blooming for a few weeks, hence the usual summer routine should be continued until the worst occurs, and Dahlias "Geraniums," &c., are really destroyed above ground. Then will commence a busy time, fully taken up by the removal of the remains of summer beauty to the rubbish heap, digging up, drying and storing Dahlias, Tuberous Begonias, Marvel of Peru, and other roots; taking up and



ARECA RUBRA.

Greenhouse Ventilating Gearing.

Size of Barrel Rod ¾in.



No. 64.

	¾in. s.	d.	
No. 1—Elbow Lever to open, 16in. or 18in. ...	1	6	each.
No. 2—Long Arm Lever	1	3	,,
No. 3—Lever and Segment	3	6	per set.
No. 4—Ratchet, with Handle for Chain	10	0	,,
No. 5—Short Arm fitted with Brass Movement	2	6	,,
No. 6—Lever Movement, with 2 Brass Joints	10	0	,,
No. 7—Short Arm	1	0	each.
No. 8—Carriage for Wrought Tubing	0	4	,,
No. 9—Carriage for Wrought Tubing	0	4	,,
Wrought Tube Shafting cut and fitted to lengths	0	5	per foot.

This Ventilating Apparatus consists of ¾in. tube, supported by carriages the entire length of greenhouse, having an elbow-lever for each ventilator, and by the lever movement, with brass fittings at one end, the whole of the ventilators in the roof or front, up to 50ft. in length, may be opened by one movement. In a long length it is necessary that the rods be securely pinned at the joints, and that the elbow-levers work freely upon their centres.

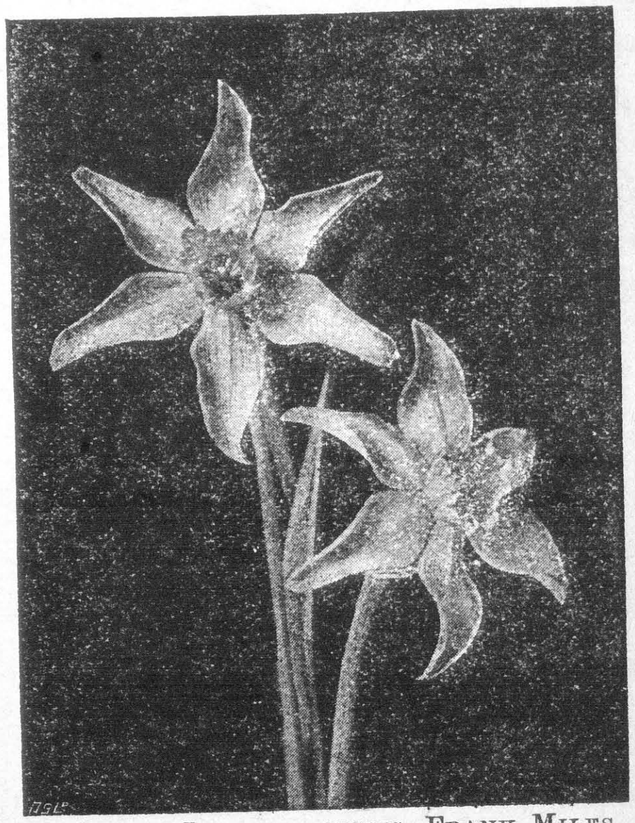
29, Well Lane, Rock Ferry, Birkenhead.

DEAR SIRS,—The Greenhouse Lights have arrived all right. I beg to thank you for your prompt attention.—Yours truly,

THOS. J. P. MASTERS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

placing in boxes scarlet Lobelia and Canna roots after their heads have been cut down and placing them in a frost-proof place. Then follows manuring, digging up flower beds and planting permanently, where they are to bloom in the spring, bulbs, including Hyacinths, Tulips, Narcissus, Crocus, Snowdrops, Scillas, and numerous others. The planting of July sown annuals, such as Forget-me-nots, Silenes, Limnanthes, and of biennials, including Wallflowers, Canterbury Bells, Foxgloves, Honesty, Evening Primroses, and various roots, such as Double Daisies, Garden Primroses, Polyanthus, &c. Strong tufts of the latter may be divided at the time of planting if necessary. Bear in mind all cannot now be planted too quickly; if unduly delayed they will not have time to make fresh roots before winter. Too frequently some of these, especially wallflowers, are not planted until the spring, so late in fact they cannot possibly establish themselves and flower properly.



NARCISSUS INCOMPARABILIS, FRANK MILES.

BULBS referred to above, bear in mind, should be planted as regards all but Crocuses and Snowdrops 2in. deep, in fact, Narcissi succeed best planted at a depth of 4in. All ordinary bulbs succeed well planted also in grass, particularly the grand Trumpet-flowered Narcissi, our native forms of which (Daffodils) always hold their own in fields. Narcissi are according to variety both early and late spring flowering. Though good varieties vary greatly in price, superior trumpet and other forms are obtainable at a cheap rate. Tulips Duc Van Thol and Roman Hyacinths for early forcing.

BULBS FOR POTTING, secure and pot also as soon as possible. To ensure fine blooms it is necessary to plant the largest sized bulbs procurable. These are not necessarily high

Amateurs' Greenhouses.

Urged by the interest all amateurs take in the garden house question, a *Garden Work* representative recently called at Messrs. Cooper's establishment in the Old Kent Road, London, where, he had been informed, greenhouses were turned out by the thousand every year. What he saw confirmed all previous impressions as to the enormous demand for small greenhouses in general, and for those of Messrs. Cooper in particular. The Works are of considerable extent, covering over five acres of brick-built workshops; but although only erected a very few years ago, they are already too small for the rapidly-growing trade, and are likely to be soon extended. A large new show-ground is now open, in which is arranged for inspection the various goods manufactured and supplied by Messrs. Cooper.

Three Hundred Houses a Week represent an average number of the structures sent out in the busy season, and as many as fifty are frequently sent out in a day. This wonderful rate is not, of course, maintained every week in the year; nevertheless, Messrs. Cooper claimed an annual output of 11,000 houses, and in the coming season they estimate, from the rapid growth of their trade, that this number will be considerably exceeded. This, the work of one firm alone, gives an idea of the number of small tenants' fixtures that are erected every year, and there can be no doubt whatever that the demand will continue annually, as amateurs find out what a vast amount of pleasure may be derived from a small house, and at what a comparatively trifling cost one can be procured. To speak of a **Greenhouse at 55s.** a few years ago would perhaps have awakened a smile; but Messrs. Cooper supply a span-roof house 7ft. long, 5ft. wide, and 7ft. high, put on rail at their Works for that figure; and there is a cheaper one still at £2 10s. Where a pound or two more can be afforded, it is well worth paying it, in order to get a somewhat wider structure. Thus, a house 12ft. long, 8ft. wide, and 8ft. high, may be bought for £5 15s., and it is an extremely useful size, affording space for a good amount of staging, with plenty of room for moving about. Two side stages, each 2½ft. wide and 12ft. long, afford room for a large number of plants, and this would leave 3ft. for a central pathway. A lean-to of the same dimensions may be bought for £5 10s. Another very serviceable type of house is a small tenants' right fixture suitable for forcing, and is supplied at corresponding rates; while those who want larger forcing houses for brickwork will find suitable structures offered for that purpose. Growers for profit will find this class of house very useful and economical. Conservatories of various types and sizes are also built in large numbers.

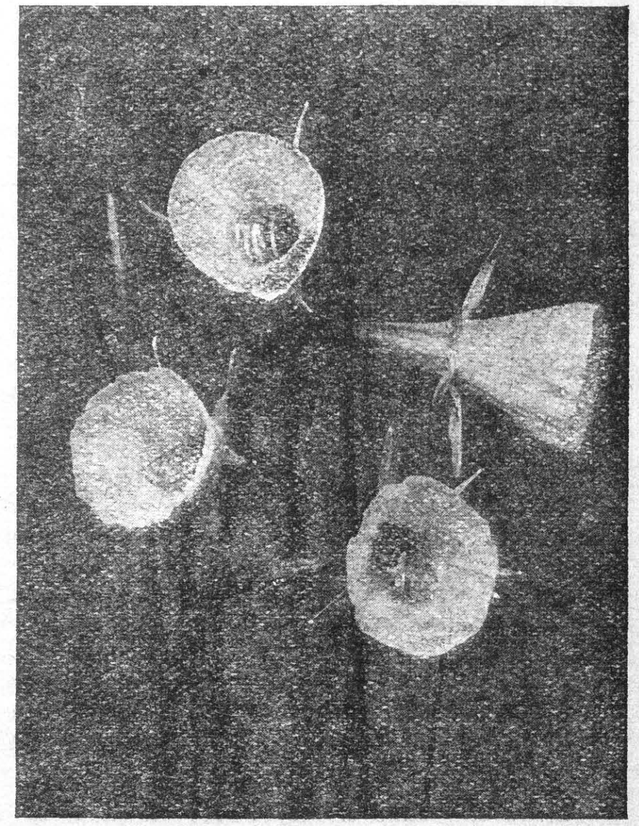
Frames and Lights form a great feature of Messrs. Cooper's establishment. The demand for them is astonishing. In walking through the works our representative pointed to huge stacks of 6ft. by 4ft. frame lights, glazed and painted, ready for despatch, and inquired the price; they are quoted at 9s. each, unglazed 3s. each. They are cheap enough for anyone, one would think. Melon and cucumber frames and span-roof frames are also made and sold at a very low price. The system pursued, and by which the largest amount of work is turned out in the shortest time, is to have each portion of the work done by separate hands, some being employed as cutters and others as fitters. A large number of men are necessarily employed, and with orders flowing rapidly in they do not stand idle. Messrs. Cooper also have a large trade in glass; and **Heating Appliances** form a large department in themselves. Their "Invincible" heater—a fire boiler fitted with iron pipes and expansion syphon—was commented on recently; and they have other apparatus heated by gas or oil. The Improved Hygienic heater, for the diffusion of hot air, and the Amateur's Assistant, which is fitted with 2in. or 3in. pipes and an expansion cistern, may be had to burn either oil or gas, and is in great demand.

As to whether cheapness is or is not allied with good quality in respect to the glass structures turned out in such numbers by Messrs. Cooper, our representative saw nothing that would prompt any doubt in the matter. The materials employed appear to be thoroughly sound, and the workmanship excellent.—*Garden Work.*

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

priced, as the older varieties produce equally good spikes as newer ones, the only difference being new colour tints, &c. The former at 3½d. and 4d. give satisfactory results, and the same may be said about Tulips, Narcissi, etc., at much lower prices by the hundred or dozen. In potting them use rich, sandy soil, press them into it moderately firm up to the crowns, then bury in a mound of ashes or fibre, indoors or out—said covering to be 2in. above the pots—and leave them there until they are rooted and their crowns begin growing.

SHRUBBY CALCEOLARIA cuttings succeed better planted in rows in cold frames than any other way. They may be inserted up to the end of November, or as long as cuttings last. All that is necessary, subsequently, is to keep severe frosts at bay by external coverings.



NARCISSUS CORBULARIA CITRINA.

ALSTROEMERIAS, MONTBRETIAS, ANEMONES AND TURBAN RANUNCULUS.—Plant on sunny sites, the first 6in. deep, the others quite 2in. During hard frosts of any duration a little litter should be placed upon the surface of the ground above all.

POT-GROWN AURICULAS shelter from frosts and rains; they only require root watering every three weeks during the next four months.

CLIMBING PLANTS under glass cut back severely, young shoots to about a couple of buds from their base.

GLASS ROOFS thoroughly cleanse from sooty particles, old whitening shadings, &c.

GLADIOLUS CORMS dug up before the beginning of the month, when thoroughly dried and their stalks removed, store in a dry drawer.

Messrs. Cooper's Appliances.

BEING in the neighbourhood of Old Kent Road the other day we called at No. 761 to look over Messrs. Cooper's premises, and were so delighted with what we saw that we think a short account of our visit will interest many of our readers, who must be conversant with their advertisement which appears regularly in our columns. Messrs. Cooper removed to their present premises some few years ago, and although we knew a pretty brisk business was being carried on, we had no idea of the extent of their work. Passing through their front office, we entered their yards and workshops, which occupy five acres of ground, and where scores of men were as busy as bees, The engines were working merrily and kept dozens of machines going, cutting, slicing, planing, grooving, mortising, and tenoning planks into the various shapes and sizes required, whilst the joiners, carpenters, and painters were deftly plying their various occupations. On inquiry we found that employment is given to some one hundred and fifty men in the Amateur Greenhouse Department alone, and whilst each one is fully engaged, there was no rushing or pushing, each one apparently knowing exactly his own work and sticking steadily to it, irrespective of his next-door neighbour. In passing through the various parts of the Works we stopped every now and again to look on and handle some of the goods in course of construction, and were struck by their solid yet light make; certainly the workmanship all through, so far as could be judged by such casual observation and inspection, left nothing to be desired. We wondered how these goods were turned out so cheaply, but were not long left in doubt on seeing the immense stock of wood and glass that is always kept on hand. These purchases are made in very large quantities, and so can be bought at the cheapest rate. "Small profits and quick returns" is evidently Messrs. Cooper's motto. A tour round the premises reveals any number of greenhouses, forcing houses, propagators, wooden buildings, stoves, boilers, garden lights, melon and cucumber frames, summer houses, loose boxes, motor-car sheds, poultry houses, coops, sitting boxes, pigeon houses, dog kennels, rustic work, &c., both ready for sending away and in course of construction.

Believing that the turnover at such a place must be both large and quick, we ventured to ask for a few figures, which we give for the benefit of those interested. The average number of letters received daily is 1200. During one year there were sent out, amongst other things, 11,000 greenhouses, 16,798 garden lights, 2565 melon frames, and 5791 poultry houses. One house we entered was crammed with hundreds of boxes of glass of various sizes, and on remarking as to the large quantity were assured it was small, and that 3500 boxes were then at the Docks waiting delivery. There are generally in stock some 500 greenhouses, &c., and 700 poultry houses and appliances, so there is little or no delay in despatching orders. Mr. Cooper is a most energetic man indeed, and the life and soul of the whole business, and is well backed up by his manager, Mr. G. Paul, to both of whom we are indebted for a very pleasant and a very instructive visit.—POULTRY, *Feb.* 24th.

AMATEUR GARDENING.—*continued.*

HERBACEOUS BORDERS thoroughly overhaul, cut down old flowering stems and remove those existing on recumbent plants such as Pansies, Violas, &c. The roots of all but delicate plants of the kind may be divided, if necessary, the delicate ones to receive similar attention in the spring; then fork or hoe well the ground between the stools. Biennials, annuals, or bulbs plant in any vacant space existing between them.



RUSTIC POT BRACKET.



DRACÆNA.

BRACKETS and similar accessories to plant houses, porches, &c., prove ornamental and attract pleasurable notice when artistically furnished with flowering and foliage plants, the latter being more enduring in winter, particularly by the use of Palms, Dracænas, Tradescantias, &c., some illustrations of which are given.

FRUIT GARDEN.

APPLES, PEARS AND PLUMS must, of course, all be gathered and stored on the lines previously suggested during the month. As regards late varieties, however, such as Apples: Court Pendû Plat, Golden Russet, etc.; Pears: Easter Beurré, Beurré Rance, &c.; Plums: Blue Imperatrice, Late Rivers, &c., growers influenced by the weather must themselves judge each year how long it will be safe to let them hang. Following dull, cold summers such late varieties do not ripen sufficiently before they are gathered, hence the longer they hang compatible with safety the better.

ROOT PRUNING performed every second year is a good practice with trained Apples grown on Paradise stock and

Horticultural Building.

Extract from THE ILLUSTRATED CARPENTER AND BUILDER.

"Who loves a garden loves a greenhouse too," wrote the pious and pleasant poet, William Cowper, and the wildest induction—based at least on the experience of English humanity—irrefragably proves the soundness of the bard's aphorism. In our changeable and frequently severe climate some kind of protection for the more tender offspring of Flora, and even Pomona, is an inevitable necessity. Hence, from the tiny Wardian case in the window of the artisan in the smoky city to the acres of glass which roof the conservatories of a feudal magnate of the provinces, the constructor of horticultural edifices finds his skill continually called into requisition. Doubtless, many of our readers who visited the Annual Building Exhibition at the Agricultural Hall, London, have been unavoidably struck by the extensive and beautiful display of buildings of this nature shown by Messrs. COOPER, 761, Old Kent Road, London, S.E.

Amongst the useful specialities for the amateur horticulturist produced by Messrs. Cooper, our space will only permit us to allude to some which principally commended themselves to us.

First of these was the Amateur's Span-roof Greenhouse, an excellently-designed and beautifully-made structure of various sizes. These greenhouses are made especially for amateurs at a cheap rate, so that everybody can have one that any handy man or gardener can put together in a few hours, as the framework is made so complete. All the framework is of good, sound, well-seasoned deal. The bottom part filled in with good, sound matchboards, tongued, grooved and beaded, and well seasoned. Ventilation given according to size of each house. The glass is good 21oz., and carefully packed (no charge for packing cases). The house is painted one coat; lock for door, all necessary ironwork for ventilators, stages on each side for plants. All parts carefully marked and put on rail at works, or delivered, erected, and glazed complete, within 20 miles of London Bridge.

Next we would notice the Span-roof Villa Conservatory, made, like the preceding, in various sizes.

This house is very suitable for the lawn of a villa residence, being well and substantially built and constructed of the best materials, as per illustration, or with diagonal panels, made of well-seasoned, tongued, and grooved boards. The framework is all made of good, sound, well-seasoned deal, and the roof is supplied with all necessary ventilators, complete with quadrants, cords, cleats, and pulleys for opening same, and by means of which they can be opened to extent desired. Ventilation given according to size. Lattice staging on each side, footpath, gutters, down-pipes, and all necessary ironwork. Rim lock, with brass fittings. All woodwork painted one coat.

AMATEUR GARDENING.—*continued.*

Pears grown on Quince stocks, which are both fibrous surface-rooting compared to others. The object is to check too luxuriant woody growth deficient of flower buds, and ensure better crops of large fruit of high quality. All that is necessary is this month to lift the roots of each bodily out of the ground with a capable garden fork; shorten the extremities of exceptionally long ones, and promptly replant. Care must be taken not to replant too deep, but rather place a mound of soil over the roots so that it is 3in. higher than the surrounding ground level. In replanting it is important also to spread the roots out on a well-prepared base so that they do not interlace, and place fine soil carefully between and over them. Though it is desirable to bury a little old decayed manure in the lower freshly broken up ground, manure must not, when planting, be permitted to come in actual contact with the roots.

LATE SUMMER PRUNING in a lesser degree will be beneficial for vigorous young trees if the weather proves open and damp, and late young shoots are forming at or near the apices of such as were stopped earlier. Simply pinch out their points and remove adventitious young shoots forming upon boles or main branches.

PEACH AND NECTARINE TREES, all wall fruit, in fact, should have all ripe and dead leaves taken up and removed from the vicinity of trees as soon as fallen. In the case of the two first named the leaves may be helped off by brushing them upwards with a new besom, and when this is done it is best to unnail all the younger wood, loop it up in bundles of five or six, and let them stand free of the wall, in such manner that the bark will not be injured by wind waving.

GRAPE VINES.

PRUNE ALL VINES as soon as the leaves ripen and are falling off. Amateurs must see to it that they do not permit their Vines to become too thick under the roofs. More adverse crop results are due to this than all other causes put together. If not so thin as to let light pervade amongst the foliage, even to the lowermost leaves, strong young shoots (laterals) carrying large leaves of good substance cannot form, and in their absence prominent fruiting buds will not be forthcoming. If, therefore, the main rods or canes grow too thickly together, cut out from base to apex two or three of them and rearrange those retained at greater distances apart. In pruning the last formed laterals cut them back generally to one eye, excepting at the extremities of the canes, where, if the wood is stout and eyes are prominent, two or three buds may be retained for extension or otherwise. When the vines are pruned, thoroughly cleanse the structure.

Omitting any mention of the other horticultural buildings made by Messrs. Cooper, we will next notice the "Invincible" Hot Water Apparatus (tenant's fixture). Concerning this the manufacturers remark:

"This is the simplest, cheapest, and most powerful hot-water apparatus made. The boiler stands in the greenhouse, the front only being outside and flush with the outer wall. It stands on the floor level, so that a sunk stokehole is not necessary. No brick setting is required; a hole is simply made in the brick or boarded front of the greenhouse, and the boiler let in, thus forming a 'tenant's fixture.' The boiler being in the house, the whole of the heat from boiler itself is utilised. This heat, in a No. 1 size, is about equal to that from a 9ft. 4in. hot-water pipe. Being stoked from the outside no fumes can enter the house, and it is perfectly safe from risk of fire. The pipe terminates in an open feed syphon, which takes the place of supply cistern, and only requires filling about twice a week. The joints to the hot-water pipes are made with elastic rings, so that the whole of the apparatus can be fixed by any handy person, a hot-water fitter not being required. The boiler is remarkably economical in fuel, and will burn more than twelve hours without attention, thus entirely dispensing with night stoking."

Lastly, we would mention the "Amateur's Assistant," concerning which the manufacturers remark:

"Considering the number of small greenhouses that do not require much more than sufficient heat to keep out the frost, we are induced to place before the public an entirely new hot-water apparatus, which will answer the purpose required (burning either gas or oil), at a very low price, free on rail at our Works, and consisting of the following, viz.: No. 1. A boiler made of strong metal plates, on our well-known patent principle, and fitted with a suitable lamp if to burn oil, or with atmospheric burner if to burn gas; 8ft. 2in. galvanised steel pipes (4ft. flow and 4ft. return), one feeder stand to receive the ends of the pipes, also for the purpose of filling; four india-rubber rings for joints to boiler and feeder."

86, Rothesay Avenue, Old Radford, Nottingham.

DEAR SIRS,—The four unglazed Lights came to hand on Tuesday at noon, all right. I am entirely satisfied with them and consider my money well spent, and shall be pleased to place any other orders with you that I may have, and will draw the attention of others to your goods.—Yours sincerely,

F. KEELING.

10, Yorkshire Street, Blackpool.

DEAR SIRS,—Garden Lights safely to hand to-day, with thanks.

W. HALL.

The Gardens, Hilton Park, Wolverhampton.

TO W. COOPER, LTD.—Hand Lights safe to hand, which I consider very good.—Yours truly,

U. JONES (Gardener).

Wigborough, Colchester.

SIR,—The Lights have arrived safely, am very pleased with them. Thanking you very much.—Yours truly,

H. HUTLEY.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

VEGETABLE DEPARTMENT.

THE PROTECTION OF USEFUL VEGETABLE CROPS now demands attention. Quite early in the month at latest Beet, Carrots, Salsafy, Chicory, Potatoes (vide last month's suggestion) should be taken up and stored. Take care to fork up the first so carefully as not to break the roots, and twist off the crowns of leaves with the hand, else the roots will bleed and lose their colour when boiled. The same holds good with Chicory, because if their corms are injured they will be incapable of forming nice blanched heads for salads when ultimately buried deeply in warm fibre or soil. Carrots should have their leaves cut off somewhat close. All these roots (with which matured Turnips may be classed) will keep best if clamped after the manner of Potatoes in the open ground, though a moiety may be placed in sheds, covered with soil for preference, for more immediate use.

ENDIVE, LETTUCE, AND PARSLEY growing so large as to be likely to suffer unduly from frost may be packed closely in frames, or spare frames may be placed over the last. Curled Endive when thus transplanted should be inserted somewhat deep in the ground, as by so doing it will form neat blanched hearts; even rather large plants of it left in the open ground may be, at one and the same time, protected from early frosts and blanched for use by laying a slate or board flat upon each.

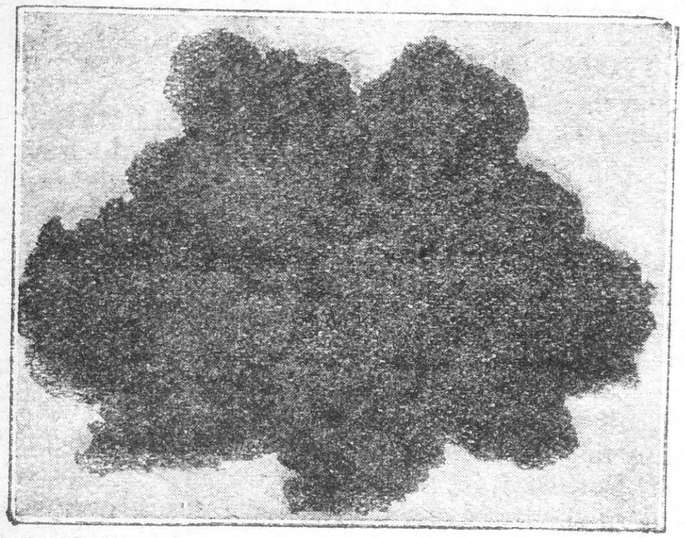
AUTUMN-SOWN CAULIFLOWERS existing as capable seedlings must be planted out somewhat thickly under hand-lights or into frames. Neither these nor the aforesaid vegetable require protection, except when frost prevails, hence they should be fully exposed to fresh air at other times. The zinc hand frames are so much lighter in the handling than the old cast-iron ones that they should be more generally used, particularly when it is considered the glass, held by clips, can be inserted without putty or the aid of a glazier.



No. 55.
ZINC HAND FRAME.

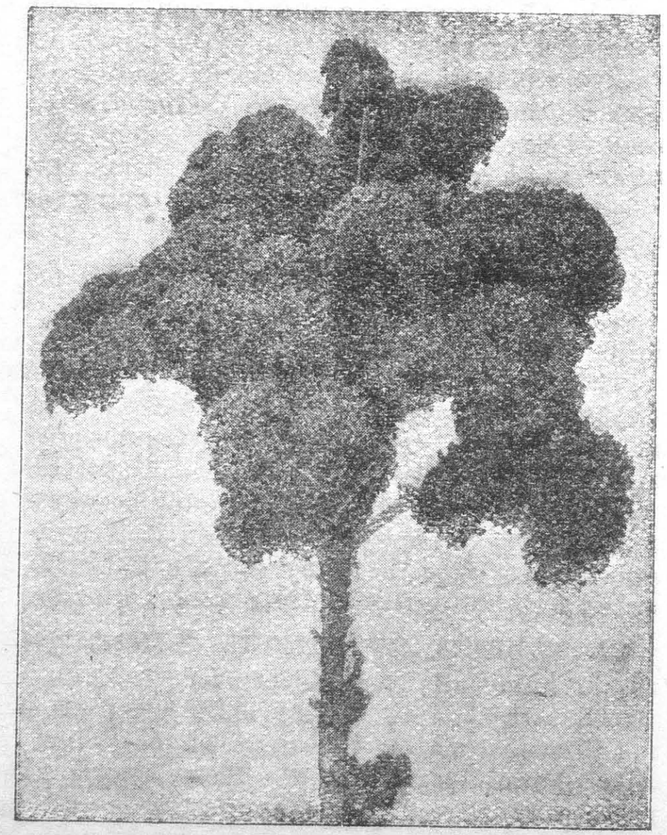
BRUSSELS SPROUTS, BROCCOLI, KALE, ETC., should have all their lowermost decaying leaves removed and carted away, so that they show clear stems as represented by the illustrations on the next page. Then the ground between them should be well hoed. These simple alterations will permit air to play more freely amongst them and greatly harden them, to say nothing about improved appearance.

BROCCOLI of very vigorous growth will be likely to stand severe frosts better if heeled over at the end of the month. The operation is a simple one and will not detract from their future flower heads. Simply take a spadeful of soil from the north side of each, then with the spade force the plant to fall towards the ground from the opposite side with its head towards the north, and lay an inch or two of soil over exposed bare stems.



KALE, EXQUISITE DWARF CURLED.

WINTER SPINACH, LATE TURNIPS, WINTER ONIONS, &c., hoe and thin to a reasonable extent. The first two should be so thinned that the respective plants will not intergrow: the last retain reasonably thick, as they may be drawn occasionally for use for transplanting next February.



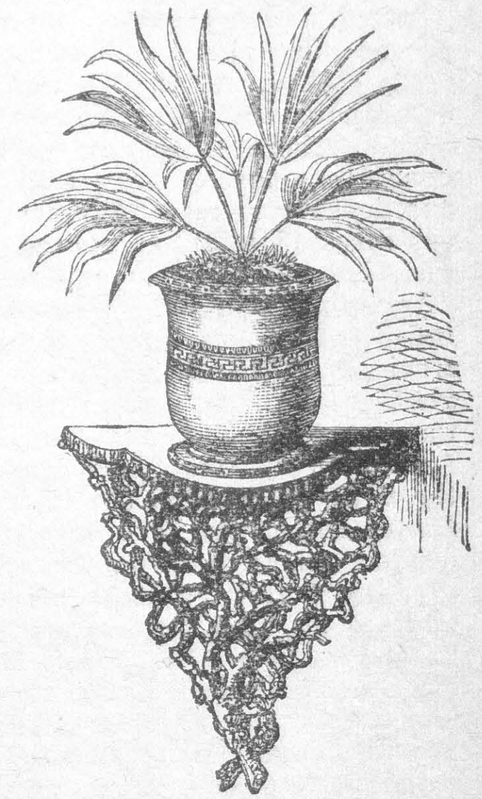
KALE, PARAGON.

NOVEMBER.

GLASS STRUCTURES will for the next four or five months have two unrelenting enemies to contend with, i.e., frost and damp. The first, if permitted entry, may destroy all inmates; the second will, to say the least, destroy all blooms and defoliate plants if not kept in check by the admission of fresh air whenever weather permits, and a little fire heat (making the pipes milk warm) occasionally about midday to drive out the heavy moist atmosphere and dry internal surfaces, including the condensed vapour on the inside of the glass. For greenhouses containing blooming plants, such as Zonal Pelargoniums, Primulas, Cyclamens, &c., a warmth of 56deg. to 60deg. is essential. Cooler ones containing flowerless plants only, such as Azaleas, Camellias, Heaths, Asparagus plumosus, the hardier Palms and greenhouse Ferns, also bedding plants, will be better maintained at a warmth of 40deg. to 45deg., the former for minimum. Meantime, maintain only reasonable latent moisture about the roots of all—bedding plants will suffer less from being a little too dry than too wet—and take every precaution not to slop water about stages and floors, thereby increasing the atmospheric moisture. Chrysanthemums,



ORNAMENTAL.



BRACKETED PALM.

will succeed best when in bloom at this season in the latter, cooler structure.

HEATING SMALL SOLITARY STRUCTURES in such manner as to keep out frost when it occurs is a source of great anxiety to amateurs. The best device for this purpose is the "Invincible" hot-water apparatus, with its proper complement of iron pipes; being self-contained it requires no brickwork, is easily stoked, burns coke well, and gives a maximum heat at a minimum outlay. Where, perforce, this cannot be entertained, there are a variety of expedients whereby structures may be heated with gas or oil. The writer introduced asbestos into "Invincible" boilers instead of fuel, had gas directed to it, and succeeded perfectly by that means; it was, however, rather expensive. Other substitutes comprise "Amateur Hygienic Heaters," formed for either oil or gas, and with connecting pipes to suit. These are efficient certainly, provided no greater length of pipe is attached than the burners, whether one or two, can master and not cool too greatly as the water courses, flow and return, throughout their extremities. Another very important consideration is properly regulating the flame of each burner in instances where oil is used. Such flames, after they have burned until the parts are quite warm, or from ten to twenty minutes, have a tendency to "draw up" or flame unduly, causing smoke, stopping up the air channel, and, it may be, exploding; certainly gas does the latter if turned on in excess. It is therefore absolutely necessary for owners to visit such in the time noted after lighting, and regulate the flame; if this is done there will be no further danger, provided there is reasonable egress for the fumes, without which perfect combustion, which is essential, cannot be assured. Many amateurs use "lamp stoves," without the addition of the aforesaid pipes attached; they are subject to, and must be regulated by, the same law.

DIVIDE OR TRANSPLANT hardy Asters, Hypericum, edging plants, Pæonias, perennial Sunflowers, Phloxes, &c.

SHRUBS AND ORNAMENTAL TREES, plant, breaking up the ground deeply for them. Amongst the former deciduous Azaleas and Rhododendrons take high rank, the latter succeeding well in suburban gardens. Both do best in peat, but will succeed in chopped-up turf, leaf-mould, and sand. Hybrid Rhododendrons produce good blooms and are much cheaper than named varieties.

OTHER SHRUBS should include Arbutus, Althæa frutex, Aucubas (both male and female, to produce berries upon the latter), Cratægus Pyracantha Lælandii, Berberis stolonifera, Cistus ladaniferus, Guelder Rose, Laurustinus, Philadelphus

(in variety), Spiræas (in variety), Persian and double Lilacs, Escallonias, Weigelas, Cupressus Lawsoniana, Cryptomeria elegans, Holly Golden Queen, Yews (both Irish and Golden), Sumach.

FLOWERING TREES.—Acer negundo variegata, Snowy Mespilus, Double-flowered Cherry, Umbrella Robinia, Flowering (as distinct from Fruiting) Apples, French Crabs, Thorns (Paul's Crimson, Single Scarlet, and Double Pink), Golden-leaved Catalpa, Almonds, Laburnums, &c.

WEEPING TREES FOR LAWNS.—Salix cuprea pendula, S. Americana, Sophora pendula, and Weeping Elm.

HARDY CLIMBING should include Magnolias (grandiflora and conspicua), Clematis (in variety), Passiflora cærulea, and its white counterpart P. C. Constance Elliott, Ceanothus (in variety), Ampelopsis Veitchii (self-clinging), Dutch and Scarlet Honeysuckle, Variegated Ivies, Jasminus nudiflorum (winter flowering) and officinalis major.

ROSES, STANDARDS AND DWARFS.—La France, Mrs. John Laing, A. Colomb, Dupuy Jamain, F. K. Druschki, Marie Baumann, Margaret Dickson, Captain Christy, Caroline Testout, A. Guinoisseau, Fisher Holmes, General Schablekine, Gloire de Dijon, A. Richardson, Captain Hayward, Gruss an Teplitz, Madame Pernet Ducher, Princesse de Sagan, Anne Olivier, White Maman Cochet, Viscountess Folkestone, Comtesse de Cayla, Madame Hoste, &c.

CLIMBING ROSES.—Crimson and Blush Ramblers, Dorothy Perkins (numerous long-lasting clusters of small shell-pink flowers), Johanna Sebus, Noella Nabonnaud, Belle Lyonnaise, and Madame Wagram.

TOPIARY GARDENING.—In so far as the clipping of shrubs is concerned, this is a common practice in villa gardens and the suburbs of towns. Apart from considerations of formality, it is useful in gardens of limited size, by limiting the extension of shrubs, &c., causing them to be better clothed from base upwards, with greater permanency. Such subjects as Chinese Juniper, Hollies, Myrobello Plum, Yews, Wistarias, Privet, &c., submit to it without loss of health, provided the clipping is done during the growing season, or just as they finish forming their early summer shoots. By aid of it, better effect than usually obtains might be obtained by cutting them into other than elliptical forms, though nothing objectionable can be adduced as regards the latter, apart from that of monotony. The Golden Privet is an admirable subject for operating upon, from whence, in the Dutch style, golden birds, &c., may be fashioned. Anything out of the common always attracts, and

the wonder is owners of dividing or party Privet hedges do not vary the monotonous flat form in which they fashion the same. Laburnums planted young would grow and look well trained over numerous front purely pedestrian gateways, and there are numerous ways for training trees, as the Japanese so ably prove, as to make them, whether grotesque or endwarfed,



MUMPO HALL ASH.



ELLANGOWAN ELM.

attractive objects showing the owner's skill. We give illustration to the Ellangowan Elm and Mumpo Ash, which attracted some attention in the past.

FRUIT GARDEN.

HARDY FRUIT-TREE PLANTING should, as far as practicable, be done during the month, but the earlier the better. The following are superior varieties:—Apples: Bismarck, Bramley's Seedling, Cox's Orange Pippin, Gascoyne's Scarlet, King Pippin, Prince Albert, Peasgood's Nonsuch, Ribstone, Wellington, Warner's King, and Lord Suffield. Pears: Doyenne du Comice, Duroudeau, Marie Louise d'Uccle, Pitmaston Duchess, Bon Chretien, etc. Peaches: Bellegarde, Early Grosse Mignonne, Royal George, and Late Sea Eagle. Nectarines: Violette Hative, Elruge, and Pine Apple. Apricots: Hemskerk and Shipley's. Cherries: Black Tartarian, Bigarreau, May Duke, and Morello. Plums: Early Prolific, Jefferson, Coe's Golden Drop, Early Rivers, and Victoria. Strawberries: Royal Sovereign, Dr. Hogg, Sir J. Paxton, and President. Raspberries: Superlative and Carter's Prolific. Gooseberries: Whinham's Industry, Lancashire Lad,

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Whitesmith, and Keepsake. Fig: Brown Turkey. Currants: Black—Boskoop Giant and Baldwin. Red—The Comet and Raby Castle. White—Transparent.

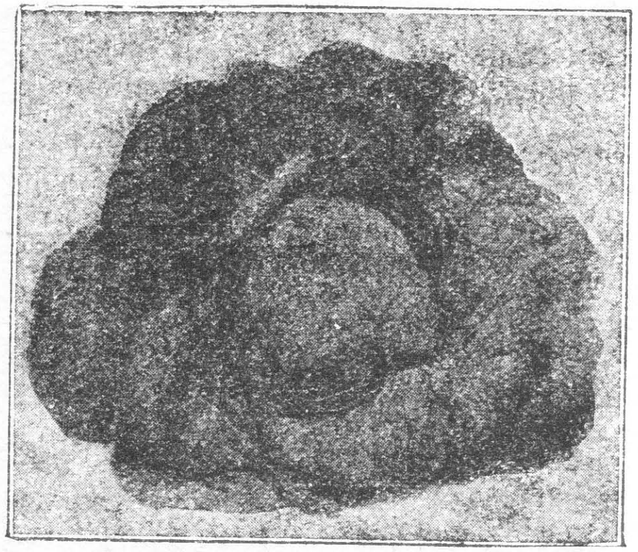
THE DISTINCT FORMS OF FRUIT TREES offered by nurserymen have to be noted, consisting as they do of ordinary standards, bush, pyramid, trained for walls and espaliers, cordons and dwarfs. The first four, being well known, require no description, but it may be desirable to refer to the last two. Cordons, a French name for those grown with one or two long thin stems usually worked upon special stocks, are adapted for bearing upon spurs throughout their entire length, and are employed trained thickly to archways, over walks, horizontally beside walks at an uniform height of four to six inches, or thickly diagonally to walls. Dwarfs, comprising Apples and Pears, are worked on so-called endwarfing stocks possessing exceptional fibrous roots, and are peculiarly suitable for amateur culture in small gardens, because, though they fruit freely, they do not attain to large size, and submit to being transplanted occasionally, to increase their prolificacy. The first is worked upon the Paradise stock, the second upon Quince stocks.

THE EFFICIENT PLANTING OF FRUIT TREES is of considerable importance. Proper vigorous growth and early fruiting depends, if not the very life of the trees, on breaking up the soil deeply and well. Being that they are usually planted for a permanency, manure should be mixed up with it below, but in no case must it be permitted to come in actual contact with the roots at the time of planting. Avoid deep planting; in no case should the upper roots be more than 2in. below the upper crust, and if so planted on a slightly elevated mound the better, particularly in stiff soils or such as are prone to hold undue moisture. Tread the ground somewhat firmly over the roots, but finish off the surface with a little fine, loose mould. Stake and secure all standards or such as are otherwise likely to be subject to wind-waving, else in the spring, when young roots emanate from base of boles they will be destroyed by friction. A mulching of manure placed over the roots after planting, particularly late-planted ones, is very beneficial, keeping out frost, neutralising the adverse drying influences of March winds, casual aridity, and ultimately affording nutriment to the roots.

VEGETABLE DEPARTMENT.

SAFELY STORE ROOT CROPS as the month wanes, to ensure all immunity from the most severe frosts. There is no better way of conserving them than clamping them sufficiently

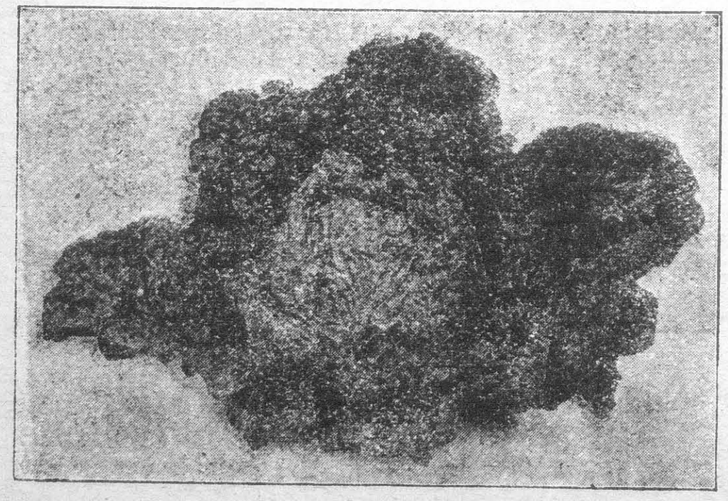
deep out of doors, though a moiety of each ready for more immediate use may be buried in light soil, &c., in sheds. If any are stored in bulk in the latter, see that they are not in actual contact with outer walls, through which frosts of any length penetrate. When clamping them in the open ground, it is desirable to place a layer of straw immediately over them, whereby subsequent visits to them are materially assisted.



CABBAGE LITTLE QUEEN.

OUTDOOR CROPS must be divested of all lowermost decaying leaves and the least hardy ones protected with frames, or other protective material, particularly the largest Endive, Lettuce, and Parsley.

LATE AUTUMN GIANT, WALCHEREN, AND SNOW'S CAULIFLOWERS, or Broccoli, should continue hearting in during this and the succeeding month, grown on from March-sown seed. It is very important, however, to examine the plantations frequently, pull up the whole plant where the flower heads are large enough, and hang them head downwards until required for use; all others, as soon as they show the least sign of flowering, to have the latter well covered up by folding the leaves neatly over the hearts.



CABBAGE ECLIPSE.

SEEDLING CABBAGES succeed very well planted

out temporarily until the middle of the month and fairly planted later on in February, but will not produce equal bulk of heart to such as are put out late in October. See that the latter are well moulded upon. Draw fine mould closely around their stems, but do not unduly bury the base of the leaves, rather let the latter rest upon the mounds. This will keep them from rolling about, to their great injury, during violent winds when the surface of the ground is hard frozen. In procuring ready-grown seedlings, the varieties Eclipse, Little Queen, and East Ham are worthy of note.

RHUBARB AND SEAKALE.—Force readily from the beginning of the month, either under pots, where it grows covered with two or three feet in depth (giving a warmth of 65 to 70 degrees) of fermenting materials, consisting of stable manure or tree leaves, or both combined; or the roots may be dug up and placed into a similar amount of heat in a perfectly dark place.

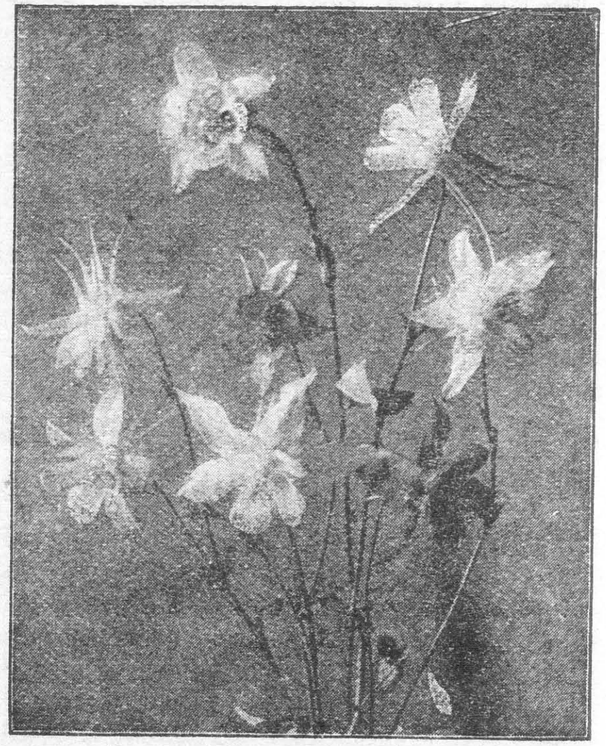
DECEMBER.

FLOWER OR DECORATIVE DEPARTMENT.

PLANT STRUCTURES require a continuance of the treatment suggested last month. To the cooler forms give only so much artificial heat as will keep frosts at bay and maintain the very dry atmosphere advised. Even during frosty weather beware of an excess of fire heat, because it tends to drain the roots and foliage of plants dry, whereby more water will have to be expended than would otherwise be necessary. Attend to the marked difference of treatment required where blooming plants have to be maintained and other structures not devoted to them and containing only the hardier forms of non-flowering and bedding plants, the former requiring only a warmth of 58 to 60 degrees, and the latter only 40 to 45. Sponge large-leaved plants. Cleanse the roofs from accumulations of soot, &c. Take advantage of leisure hours and the resting time of the plants to destroy all insect pests, so easily done in these days by the aid of the superior insecticides at command. Do not permit decayed leaves to exist; whether structures are large or small, richly or poorly filled, see that all within are scrupulousy clean, neat, and in perfect order!

OUTDOOR BEDS AND BORDERS, furnished or empty, now that tree leaves have fallen and been collected, should quite by the beginning of the month be all cleared, cleaned, dug, planted, and be made as trim as possible for the winter season, and the least hardy subjects they contain protected against severe weather.

HERBACEOUS PLANTS of all hardier kinds may be divided and increased, or otherwise transplanted, during mild intervals; the more tender kinds are best treated in the spring. Desirable kinds include Anemone japonica (in variety), Bocconia cordata, Erigeron speciosus superbus, Helianthus multiflorum, Lychnis chalcedonica flore pleno, Rudbeckias, Spiræa aruncus, Thalictrums, Tritomas, Alstrœmeria aurea, Aquilegias (particularly the spur-flowered), Campanulas grandiflora and persicifolia grandiflora, Centaurea ruthenica, Delphiniums, Dielytra spectabilis, Echinops ritro, Doronicum Clusii, Eryngium oliverianum, Gypsophila paniculata, Hemerocallis disticha plena, Monarda didyma, Pæonies, Oriental Poppies (in variety), tall Phloxes, Platycodons (in variety), Pyrethrums, Sedum spectabilis, Statices, Trollius europæus, &c.



AQUILEGIA, LONG SPURRED.

WALL-TRAINED PLANTS.—Trim up, removing any long young growths that cannot be fastened in, and so preparing them for the ordeal of boisterous winds, matting over such plants as are subject to injury by frost, including Magnolia grandiflora, Passion Flowers, and the like.

SHRUBBERIES, neglected thus far, prune, clean, and lightly fork up; also finish autumn plantings.

CHRYSANTHEMUMS, when finished flowering, cut down to within a foot of the ground and place in a frame, to ensure that the prospective cuttings upon them grow short-jointed and vigorous. To secure large blooms or specimen plants another season, cuttings should be inserted late in the month, or early in the succeeding year. They will root readily in a greenhouse if a sheet of glass or a handlight is placed over them until they cease flagging.

POINSETTIAS, HEDYCHIUMS, GLORIOSAS, &c.,

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dry off for resting, and see that Tuberous Begonias, Gloriosas, Dahlias, &c., are kept dry in a minimum warmth of 50deg.

HARDY FERNERIES AND ROCKERIES, the former in shady places, the latter in full sunshine. Stumps of trees, as well as stones, suffice for the former, and there are a variety of stone and spar boulders suitable for the latter. The cheapest and most easily obtainable for both are run or overburnt, brick clinkers. The sites for both should be deeply broken up, leaf mould to be intermixed with the ground elevation for the former, and rotten manure for the latter. Both Ferns and rockery plants are best bought in different varieties by the score or hundred. Superior forms: bifid-fronded, tasselled, &c., amongst Ferns, are numerous and somewhat expensive, and should be bargained for with accustomed trade growers. All should be planted between now and the middle of February.

FERN CASES are desirable adjuncts to dwelling-house windows, or may be displayed upon tables in light parts of rooms, wherein many desirable greenhouse varieties may be successfully grown, one of the best of which is the filmy Irish Fern, Trichomanes radicans, which, once established, increases and lasts a lifetime.

VIRGIN CORK, as a decorative rustic adjunct to plant houses, rockwork, baskets, frontages for window boxes, &c., is not so generally taken advantage of as it deserves to be.

It is admirably adapted for covering blank walls and the roofs of structures, &c., over which climbing plants can be trained, owing to the fact that it increases, if syringed, atmospheric moisture in summer, yet is markedly dry in winter.

WINDOW BOXES, which have such prominent and pleasing decorative effect upon outside window-sills, deserve to be more generally employed. Considering how long well-constructed boxes last, they are reasonably priced compared with household furniture in general. Both artistic tile-fronted (in flat and raised patterns), also rustic designs, are obtainable, and good effects of the latter types can be secured where wooden boxes are faced with virgin cork.



RUSTIC WINDOW BOX.

Such gardening accessories, whilst suitable for all windows, are more particularly desirable where forecourt gardens are small, or do not exist. Planted at proper dates for constant successional display—in the months of May and October respectively—they may be well and constantly furnished.

For spring planting where the boxes occupy warm sunny aspects, Petunias are peculiarly suitable, withstanding, as they do, sunshine and aridity, provided their roots are well supplied with water. The large-flowered, parti-coloured forms are peculiarly attractive and smaller flowered; self-coloured ones, particularly the soft pinks, are chaste. Other summer flowering plants which succeed are Marguerites, but should



RAISED PATTERN TILED WINDOW BOX.

be planted as young plants, not out of small pots with their roots starved when in full flower; Zonal Pelargoniums ("Geraniums"), in great variety (particularly the double-flowered), Lobelias, for edgings, &c. In autumn plant with Wallflowers, Silene, Garden Primroses, or dwarf evergreen shrubs. These are best procured in pots and the pots plunged in fibre or light soil. By this means they may be conserved for future planting to date, if removed from the boxes in May and the pots plunged out of doors. If spring-flowering bulbs are desired, a shell box should be made of thin wood of such size that it will fall readily into the ornamental permanent box. This should be filled with rich soil in October, and planted thickly with Hyacinths, Tulips, or Narcissi—adding, if desirable, an edging of Crocus, these plunged in ashes out of doors to a depth of two or three inches. When these bulbs are growing freely early in May, drop the shell into the permanent window box. For shady north aspects boxes may be filled with hardy Ferns, with an edging of either Musk or Creeping Jenny.

FRUIT GARDEN.

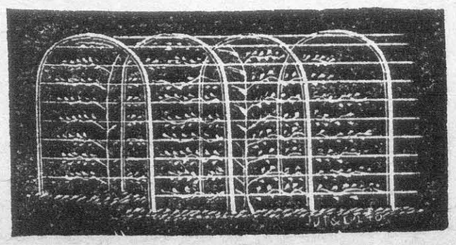
PRUNING, now that the branches are bare, should be carried on assiduously during mild intervals until the work is finished. Where the proper summer pruning, or stopping

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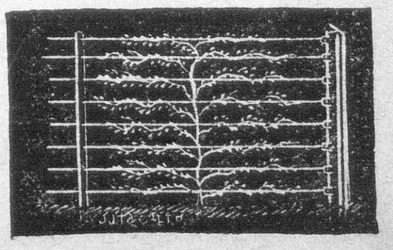
young shoots, has been carried out as regards trained trees, little remains to be done, and that little is to thin out spurs, by removal of the weakest, where the previously stopped clusters are too dense, and neatly shortening misplaced or dead snags. In far too many gardens pruned trees are permitted to form a wealth of young shoots each summer, which only receive the attention of cutting them back in winter indiscriminately. This causes them to continue wood-bearing with little or no fruit. In such instances, summer thinning—or the removal of the more weakly, denser young shoots, selecting sundry of the well-placed strong ones to remain; simply stopping their points in July—would correct matters. Even at the winter pruning the latter should be retained to, in a year or two, carry good crops of fruit. So long as cutting back all young wood severely is resorted to, trees will continue to produce gross, fruitless, successional young shoots. Large orchard trees must have such young adventitious shoots as form upon boles and the thicker parts of branches removed. Other branchlets, at the extremities of the timber, will be the fruiting ones, provided they are not permitted to become so dense as to make efficient bearing impossible, in which case cut out the useless brushwood and such as is unduly shaded existing in the centres of the trees. Encourage free growth at the extremities of the branches, because that in a year or two will bear the largest fruit. Any twelve- to fifteen-year-old standard not fruiting well, will do so if you cut out here and there a weakly branch from apex to bole, and remove all shaded internal brushwood. Trees will be benefited when in bearing by mulchings of manure spread over their roots.

PAINTING OR SMEARING trees subject to insect pests, moss, fungus, American blight, scale, &c., with a mixture of lime, clayey loam, or cow-dung, with a little soot and sulphur, is a beneficial practice applied before they commence growing, and, as far as the said blight is concerned, a wineglassful of paraffin may be stirred into each gallon.

THE TRAINING OF TREES may be materially facilitated by fixing strained wires to secure them to, both as regards wall, espalier, and cordon trees.

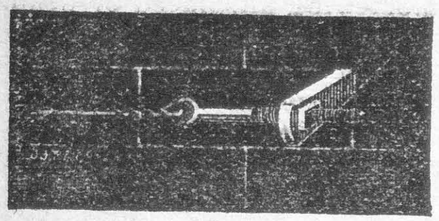


ARCHWAY TRAINING.



ESPALIER TRAINING.

Once such a provision is made, they last for a generation, so that all that is required is to tie up the branches with raffia or twine. Wall-trained trees may in like manner be fastened to strained wire, fixed with eligible fittings into the faces of walls, for which proper straining holdfasts are obtainable.



STRAINING HOLDFAST FOR WALLS.

By use of such, shreds and nails are dispensed with, which are troublesome to manipulate, especially near the ground line and by untrained hands.

VEGETABLE DEPARTMENT.

GROUND TRENCHING is of the highest importance, and indispensable where high culture is aimed at, in this as in all other departments. By means of it alone can the surface soil —consisting of reasonable depth—be efficiently manured throughout and thoroughly broken up. It is only necessary —except when preparing new flower borders, Rose beds, shrubberies, fruit plantations, &c.—to trench the whole of the ground, at least such vegetable lands as are divided into quarters. As regards these last, a quarter, or portion of the ground only, is trenched each winter. By this means the whole is in due time operated upon. Usually, quarters set apart for the following summer crops, *i.e.*, Onions, long roots, or Peas, are selected, with the result that the land becomes in the best possible order for them. Besides manuring and breaking up the ground unusually deep—causing deeper aëration—the top soil is transposed with that which is below, bringing the latter more under the direct influence of the atmosphere, which is of vast importance. Trenching, in practice, may be done in several ways, but the following plan is most generally followed: At one end of the piece of ground open out a trench three feet wide and as deep as the surface soil. If the latter is very deep, a depth of three or four feet only may be excavated, but every succeeding trench must be the same depth. The soil taken out of this one trench has to be wheeled to the farthest end of the ground to fill in the last trench. Having a good supply of manure spread over the ground to be operated on, put a portion into the trench, forking it into the bottom if the latter does not consist of clay. Then measure and dig out a succeeding trench, filling the first made with the soil, adding here and there more manure as the filling-in proceeds, and so continue, trench following trench, until the space of ground is all done.

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BASTARD TRENCHING, practised by some, is taking out a shallower trench and proceeding in the same way as ground trenching. Usually, a good deep spit of soil only is dug out, and then the "crumbs," or loosened soil, are shovelled out, this giving the depth of the first and subsequent trenches.

RIDGING is a good practice, followed with fallow grounds in autumn. It is known as ridge-dug. In digging, which should be done deeply—keeping the handle of the spade upright, instead of making an even surface—pack the soil up in ridges or close ranges of parallel elevations, their sections to be equilateral triangles. By this means two-thirds more surface will be exposed to the elements, the ridges only requiring to be levelled with a fork before sowing or planting.

CROPPING is usually nil at this season, though some make venturesome sowings of Peas, Radishes, and Short Horn Carrots on sunny aspects.

HOEING AMONGST WINTER CROPS is advised during mild dry weather once or twice during the winter season, to assure the benefits explained in previous months.

FORCE successional Rhubarb, Seakale, and Chicory.

PROTECT Endive, Lettuce, Parsley, Cauliflower seedlings, &c., by means of glass protectors previously referred to, placing over the protectors a covering of light litter or mats if frost is very severe. Under similar conditions place litter over the leaves of moulded Celery. See that Potatoes and other roots are effectually protected during intense frosts of some duration, which are capable of penetrating the walls and woodwork of outbuildings.

GROUND WORK must not be attempted when the surface soil becomes so plastic during wet weather as to adhere to shoes and tools, nor when snow of appreciable depth lies upon the ground.

Strong Garden Barrows.

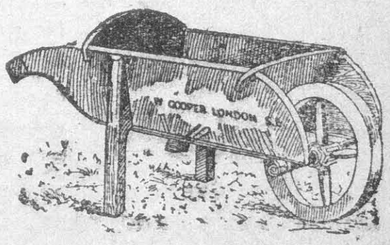
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These have an immense sale. Nothing to beat them on the market.

Strongly made from well-seasoned hardwood, and are light to handle. With wooden wheels.

Shifting Top, 6s. extra.

Painting, 3s. extra.



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9in. sides	0	17	6	12in. sides	1	2	0
10in. „	0	19	6	13in. „	1	3	0
11in. „	1	0	6				

AMATEUR GARDENING.—*continued.*

Small Greenhouses.

I am thinking of building a small greenhouse, say 5 by 7, and shall be glad of your advice in the matter. I enclose a rough sketch of the garden: which would be best—a span-roof in position 2, or a lean-to in position 1? Also say the height in the centre and at the sides, and if the roof should be brought level with the staging, or side lights between the staging and roof. I should be glad of any other hints. I do not propose to heat the house.—A., *Hornsey.*

[So far as aspect goes, it is immaterial which position you choose, as both would get about an equal amount of sun, unless the lean-to were so near the dwelling as to be shaded by it during the afternoon. This we cannot gather from your sketch, as the distances are not indicated. However, we should prefer a span-roof at the end of the garden to a lean-to at the side. Are you proposing to build it yourself? If so, it is doubtful whether you will act wisely, unless you are experienced in the work. You will probably find it cost more, and give you less satisfaction, than if you purchase one of the small structures advertised by Messrs. Cooper. These are cheap, and serve their purpose admirably. They are easily put together with screws, and if resting on a row of loose bricks, are tenant's right fixtures. A house 7 by 5 feet (we presume this is what you mean) might be 7 feet high to the ridge, and 4 feet to the eaves, having the stage about a foot below these. It could be boarded to the eaves. If you could have it 2 feet longer and a foot wider, with the same height to the ridge and eaves, you would have a very nice and useful house. Of course, it would not be of much use in winter unless heated.]—*Garden Work*, Feb. 14.

The Patent Bell or Forcing Glass with Handle.

NO GARDEN SHOULD BE WITHOUT IT.



No. 64B.

Will be found to supply a great want in the garden at all times and seasons. Most useful among other purposes for Raising Seeds and Cuttings in Spring. Raising Tomato Plants for outside growing. Protecting and Growing on, in Autumn and Winter, such things as Lettuce, Parsley, Mustard and Cress, early Spring Onions, Carrots, &c., &c. The illustration shows it consists of a Forcing Glass with hole in top, which can be opened, partially closed, or closed altogether at will, by sliding a piece of glass fixed to the top of the glass by a wire attachment, thus easily supplying air on hot days, and excluding the cold air at night, and prevents having to tilt the glass at side to admit air, thus keeping out slugs, &c.

In nests of 5 only. Sizes about 10in. to 16in.

Cash price, 10s. 6d. per nest, crate included.

Delivered free to any Railway Goods Station in England and Wales.

WILLIAM COOPER, Limited,

761, Old Kent Road, LONDON, S.E.

SECTION II.

The ——

POULTRY-KEEPERS' GUIDE

AND

Illustrated Catalogue

— OF —

POULTRY APPLIANCES,

INCUBATORS,

FOSTER MOTHERS,

COOPS, DUCK HOUSES, FENCING,

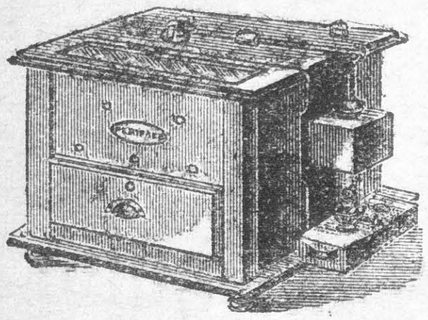
TROUGHS & FOUNTAINS,

GALVANISED CORN BINS,

&c., &c.

"Peripage" Patent Incubators.

(Numerous Prize Medals awarded) have been before the public thirty years. Highest awards Incubator Competition. Absolutely Reliable. Simple to Use. Will hatch every possible egg.



No. 65.

Plain, simple Instructions for Working, so that a child can manage, sent with every Incubator.

Crates for Packing, which we strongly recommend to prevent damage during transit, 1s., 2s., 3s., 5s., and 10s. respectively.

Carefully packed on rail at our Works at the following prices :—

	Cash Price. With Copper Tanks. £ s. d.
No. 1, for 15 Hens' Eggs	1 2 6
,, 2, ,, 60 ,, ...	1 15 0
,, 3, ,, 120 ,, ...	2 17 6
,, 4, ,, 200 ,, ...	5 0 0
,, 5, ,, 400 ,, ...	9 0 0

WHAT THEY ARE AND HOW THEY ARE MADE.—In the following description of our work we have endeavoured to be clear and concise, so as not to confuse any person with a lot of "high-flown terms" (generally misapplied). We wish everyone to thoroughly understand what they are buying.

CASES are of stout and well-seasoned timber of double thickness throughout, and by our special method of manufacture are stronger than any incubator sold. They are well finished and of excellent appearance.

TANKS are all of best copper, with brass fittings. The flues are absolutely leakless, and thus the one great drawback that is so frequently found with Incubator Tanks is entirely removed. These leakless flues are our special patent, and no other maker can manufacture this form of Tank.

In practice, the results obtained from this Tank plainly show its great value, because it radiates heat in such a manner as to give absolute uniformity of temperature over the entire surface of the egg-drawer, and the eggs in one place are not hotter than those in another.

If, through carelessness, the lamp-wick is turned up too high and made to smoke, the flue can be cleaned in a few moments by withdrawing a few screws and brushing out.

DRYING BOXES are not merely made for show, but for use, and are constructed so as always to remain at a good even temperature for drying-off chicks.

REGULATION OF HEAT.—This is secured by a Thermostatic Capsule (patent applied for), which form of regulator has superseded all other methods. It is perfectly reliable and requires no attention.

Other Capsules have a tendency to expand between the centre stud and the outer edge, and do not regulate with that exactitude which is the great point in our Capsule.

It is by no means to be taken for granted that because an Incubator is fitted with a Capsule Regulator it is certain to work well. Rather than trust to a questionable regulator, it would be preferable to adjust the temperature of an Incubator by regulating the height of lamp-flame by hand.

When requested, we fit our improved Capsules to Incubators of other make than our own.

Do not hesitate to make any enquiries of this Incubator on any point that you may wish to know, or come and see the Incubators. They will bear the strictest investigation.

NOTE.—Never buy an Incubator with a Tin Tank, nor one having a Tank with flues that cannot be easily swept.

Fitted with best Copper Tanks with Leakless Flues, Improved Safety Lamps with Burners and Wicks, Thermostatic Capsule Regulators (patent applied for), Sensitive English-made Thermometers, Glazed Top Drying Boxes, Evaporating Trays, Sets of Canvas for Egg Drawer, Water Trays, complete and ready for use.

With full Instructions for Hatching Goose, Turkey, Hen, Duck, or Pheasant Eggs.

OUR OPINION OF AN INCUBATOR.—An Incubator is (practically speaking) a machine that will hatch eggs. If a machine is poorly and faultily constructed it will only spoil eggs, and may fall to pieces after a season's use. If a machine is properly constructed, but is so complicated as to require a resident engineer to run it, it is no good to the busy farmer for hatching. People buy Incubators to make profit by them—not to use them as toys. To make profit by Incubators you want a machine that—

1. Is Simple to Work.
2. Economical to Use.
3. Will Last for Years.
4. Is Inexpensive. And above all,
5. Produces the Largest Number of Healthy Chickens.

The "Peripage" Incubator has been designed to fulfil the above requirements. It is the outcome of years of practical experience and tests, and wherever used is appreciated. We are constantly receiving testimonials from all over the country thanking us for results obtained by our Incubators. Some people have said, on reading our advertisements, that they were afraid the machines were "too cheap to be good." When they have seen and used our Incubators, they have said they are "too good to be cheap."

West View Buildings, Belle Vue Street, Cullercoats.

DEAR SIRS,—Just a line to say I have received Incubator all right, and am very well pleased with the packing of it, as it has come without a scratch. It seems a very remarkable machine for the money, specially being so easily and accurately regulated. I shall do my utmost to give you further patronage, feeling well convinced of the soundness of all materials put out by you. Wishing you every success,—I remain, yours faithfully,

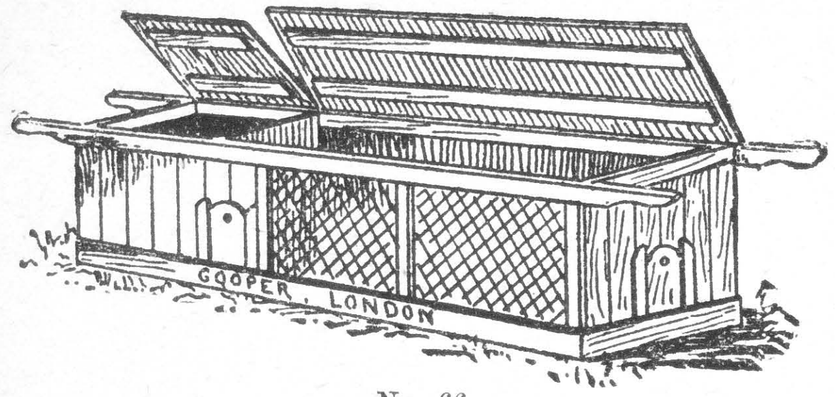
V. PUNSHAN.

Market Deeping.

SIR,—Your Incubator worked splendidly last year.—Yours truly,

H. WATERS.

"Peripage" Patent Hot-Water Rearer or Foster Mother.



No. 66.

Do not confound this with similar Hot-Air Rearers sold, and do not buy a Rearer that will kill your Chicks, and will fall to pieces after a month or two's wear.

Carefully put on rail at our Works at the following prices :—

Chick Size	Length. ft.	Width. ft. in.	Cash Prices. £ s. d.
15	4	2 0	1 2 6
60	6	2 6	1 15 0
120	8	2 6	2 17 6

This form of Hot-Water Rearer is very popular and convenient, and has been pronounced by Poultry Authorities the most perfect Rearer that has ever come under their notice.

The Sleeping Chamber, heated by a Hot-Water Tank (best copper), is spacious and quite devoid of projections of any sort behind or under which the Chicks can be injured or left in the cold. It is double cased, and has a double roof, the floor being raised a few inches from the ground.

The Dormitory obtains light from the lamp fixed in outer run, and is also fitted with a shutter, so that Chicks can have light or be in darkness, as is desired.

The fumes from lamp are directly conducted outside the Rearer, so that the air in both Sleeping Chamber and Runs is always pure, as well as warm.

The Run is fitted with wire netting of small mesh, and is also fitted for glass panes, so that in cold weather the Chicks can be protected from draughts, and the warm air can be kept in the Run.

In warm weather the glass can be partly or wholly removed, so as to give full access to the outer air.

It is constructed for indoor or outdoor use all the year round, and is portable. All parts can be very easily cleaned. There are no corners for the Chicks to be crushed into. It is airy in summer, yet will keep the Chicks warm during the coldest weather, and is absolutely storm-proof.

Chicks entrusted to this Rearer will thrive well, and always be strong and healthy.

All parts are well and strongly made, and the whole outside woodwork is finished with one coat of our Patent Rot-proof Composition.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

POULTRY.

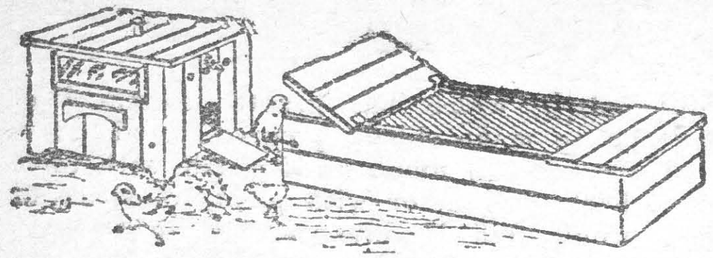
The keeping of poultry, which has greatly increased of recent years, continues to make steady progress in all parts of the kingdom. There are still numbers of people with room for a few hens in a back garden, or with plenty of space at their disposal, who would find it advantageous to take to poultry culture. It is such a luxury to have really new-laid eggs, or a chicken for the table, of one's own growing. A good deal of attention, too, is being devoted to poultry farming, and to keeping fowls in sufficient numbers to add considerably to the means of livelihood.

HOUSES.—One of the first essentials to profitable poultry-keeping is a suitable house. Excellent houses are made at most moderate prices for large or small quantities of all breeds of fowl. The amateur who is going to have half a dozen hens in his back yard will find our lean-to houses just the thing for him. Placed against a wall facing south or south-east, the house, No. 70, makes a most snug and comfortable abode. If the ground inside is rammed tight, raised a couple of inches above the surrounding soil, and a few sifted ashes thrown on the top, it will always be dry and easily cleaned.

Another most useful lean-to house, especially where space is very limited, is No. 73. It is fitted with sliding shutter, and has a raised floor, under which the fowls can shelter in wet or windy weather. Wire runs of various sizes are made to go with this house. A house which is in great request, and of which we sell thousands, is the "Favourite Poultry House," No. 71. It is made in sections that screw together. There is a window at one end, and a raised floor 2ft. from the ground.

Our improved span-roof poultry house, No. 110, is strongly recommended where a lean-to house is not required. For keeping the fowls dry in all weathers our house, No. 111, is invaluable. The whole run is covered with a weather-board roof, and the bottom part of the front and sides is boarded up. This allows of some loose straw, or chaff, being thrown in the run, affording exercise for the birds in scratching for any grain that is scattered about. A specially convenient house is "The Gem." It is a double house, enabling two breeds to be kept apart, yet under the same roof. There are many other houses to meet all possible requirements, including lean-to poultry houses with corn room and run, portable houses, and span-roof houses on wheels.

THE STOCK.—When the house has been decided upon, and purchased, the fowls must be obtained. Although there is still a prejudice in some rural districts in favour of mongrels, there are so many useful and free-laying pure breeds that a beginner should make a start with some recognised variety.



Cooper's Improved Chicken Rearer.

No. 67.

30 to 50 Chick Size—Cash Price 7s. 6d. each, 3 for 21s. Runs, 3s. 6d. each.
60 to 100 Chick Size—Cash Price 10s. 6d. each, 3 for 30s. Runs, 5s. 0d. each.

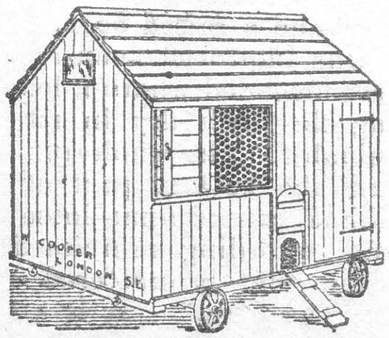
Simple to work. Economical to use. Will last for years. Chickens entrusted to this Rearer will thrive well and always be strong and healthy.

A first-class article for artificial rearing. Equal to any foster-mother yet introduced. Thousands in use.

Made of good, sound, well-seasoned materials. Fitted with our Improved Ventilated Lamp Shutter, &c.

The Sleeping Chamber is spacious, and quite devoid of projections of any sort behind or under which the chicks can be injured, or left in the cold. The floor is raised above the ground. The roof is movable to facilitate cleaning operations, through which all fumes from the lamp are directly conducted outside the Rearer, so that the air in the Sleeping Chamber is always pure, as well as warm. Rearer obtains light from the lamp, also from glazed window on top, through which at all times the chicks may be seen, thus preventing the opening of day-doors or slide, through which the heat may escape. It is constructed for indoor and outdoor use all the year round.

The "Cooper" Improved Poultry House.



No. 68.

This house, which is the most popular yet offered to the Public, is considered the most perfect and up to date, and has more advantages than any other make. It is well made of good sound timbers, on strong framework in complete sections, and simply screwed together; easily erected by anyone in a few minutes. Fitted with improved sliding ventilating shutter, complete with movable perches, slide, ladder, nest boxes, lock, key, &c. The floor is complete in one section (detachable). Mounted on strong wrought-iron wheels with iron axles. Outside Woodwork painted with our Rot-proof Composition. Carefully put on rail at our Works at the following prices :—

Length. ft.	Width. ft.	Height. ft. in.	Complete without Floor. Cash Price. £ s. d.	Complete with Floor on Wheels. Cash Price. £ s. d.
6	4	5 6	1 15 0	2 7 6
7	5	6 0	2 5 0	3 0 0
9	6	6 6	2 15 0	3 15 0

If he selects mongrels he cannot know beforehand whether the hens will lay large or small eggs, whether the eggs will be white or brown, or whether the birds will be prolific or poor layers. He cannot tell if the mongrels will stand confinement well, or the class of chickens that will be produced. The eggs, moreover, will only be of value for eating, and the cockerels will sell solely for killing prices, being of no use for stock purposes.

If pure breeds are kept, the characteristics are at once known. One can be chosen suited for a confined run, or for a free and exposed situation; to lay either white or brown eggs, to be a non-sitter or broody, and to produce free-laying pullets or good table chickens. And the eggs of pure breeds can be disposed of in the spring for hatching, if desired, at from 3s. 6d. to 10s. 6d. a sitting, according to the quality of the birds. Our egg boxes, No. 174, with separate compartments for each egg and movable partitions, enable sittings of eggs to be sent safely all over the kingdom. There are no mongrels that will lay as well as the White Wyandotte, the Black Leghorn, the White Leghorn, or the Minorca. And there are no mongrels to equal the Dorking, the Buff and Black Orpington, or the Indian Game for the table.

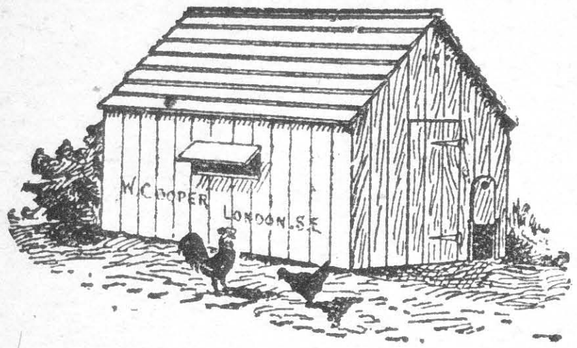
AGE OF STOCK.—To attain success it is necessary that the fowls should be young. Old hens lay but few eggs, and those only at a time of year when eggs are plentiful, and of least value. Pullets in their first season are most prolific. In their second season hens ought to lay enough eggs to be profitable. But when they cease laying as they are about to moult—that is, when they are two and a half years old—they should be killed, or got rid of for whatever they will fetch. If valuable for her good looks, or for having produced high-class chickens, a hen should, of course, be kept longer.

If eggs are required only for eating, and not for hatching, no cock bird is necessary. But if it is wished to rear chickens, the male bird should be either a two-year-old running with pullets, or a cockerel mated with second-season hens. If it can be avoided, it is better not to mate a cockerel with pullets. The progeny seldom fledge well, and there are usually a large percentage of cockerels among the chicks.

EGG AVERAGE.—From a few of the statistics that are recorded of the laying powers of hens, the novice will be able to know if his hens are producing as many eggs as they ought, and whether he is treating them satisfactorily. During a twelve months' laying competition, promoted by the Utility Poultry Club, the first-prize pen of White Wyandottes laid 904 eggs, or an average for the six pullets in the pen of 166 eggs each. The second-prize pen averaged 165 eggs, and the third-prize

Movable Poultry Houses.

(Span-Roof.)



No. 69.

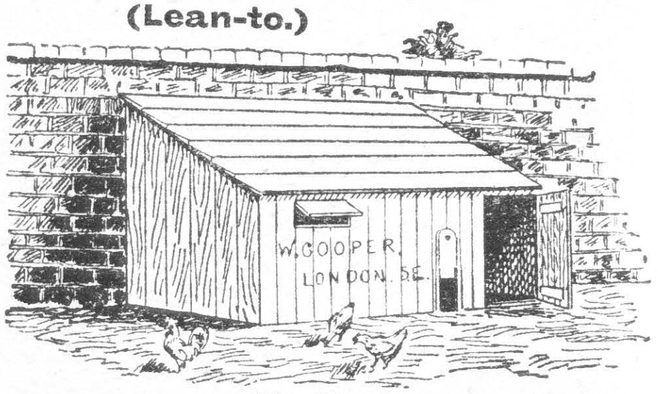
Thousands sold every season.

These houses are made of thoroughly seasoned matchboards, in sections, so that they may be easily put together. Complete with ventilator, sliding shutter, doors fitted with locks, nest boxes, and perches, and painted outside with our Patent Rot-proof Composition.

(Lean-to.)

These Houses are exceedingly adaptable for Potting, Tricycle, Coal, and Wood Sheds.

Put on rail at our Works at the following prices:—



No. 70.

Length. ft.	Width. ft. in.	Height. ft. in.	To Eaves. ft. in.	Span-Roof. £ s. d.	Lean-to. £ s. d.
3	2 6	4 6	2 9	0 15 0	0 12 6
4	3 0	5 0	3 0	1 0 0	0 17 6
5	4 0	6 0	3 6	1 5 0	1 0 0
6	4 0	6 0	3 9	1 10 0	1 5 0
7	5 0	6 6	4 0	1 16 0	1 10 0
9	6 0	7 0	4 3	2 2 0	1 15 0

If No. 69 fitted with Folding Doors for Tricycle House, 3s. extra.

46, North Street, Melton Mowbray.

DEAR SIR,—I received the Poultry House and Hurdles quite safe, and I am very pleased with them.—I remain, your truly,

P. HUBBARD.

16, King's Road, Binstead, Ryde, Isle of Wight.

DEAR SIR,—I have received the Fowl House safely, for which I thank you. I am pleased with it now it is up; it looks very nice and neat.—Yours faithfully,

H. J. DODSON.

"Basildon," Oxon Lane, Tongham.

DEAR SIR,—I beg to acknowledge receipt of Fowl House, &c., which I am very pleased with.—Yours truly,

W. DENYER.

"Heathfield," Norton.

DEAR SIR,—My Hen House arrived quite safely, and I am very pleased with it.—Yours truly,

J. W. RICHARDSON.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

pen 158 eggs. The Irish Board of Agriculture obtained records for the year 1908 from 125 flocks, representing over 5,000 hens. The general average of all these was 120 eggs per hen per annum. The averages at the Utility Poultry Club competition were from selected hens, and can hardly be expected to be realised by the ordinary amateur. But an average of 130 eggs per hen is frequently attained, and ought to be within the reach of all.

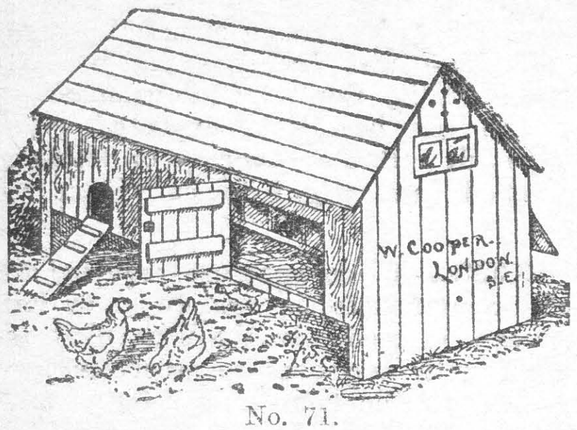
FERTILISING THE EGGS.—When eggs are required for incubation it is sometimes important to be able to know how soon after mating the eggs can be used. In the United States some experiments were made with Leghorns to ascertain this. After the male was introduced to the hens it was found that on the second day two eggs out of eighteen were fertile; on the third day twelve out of twenty-four; and on the sixth day nineteen out of twenty-four. On the eighth day eighteen were fertile out of twenty. This proves that eggs may safely be used for hatching within a week of mating.

FOOD.—One of the first maxims to be strictly followed in poultry keeping is never to overfeed the fowls. They should always leave off after a meal slightly hungry. Directly they begin to pick and choose, that particular feed should be brought to an end. When fowls are kept in confinement they should have one meal of soft food at least three times a week. This is better if given for breakfast, as it is sooner digested than hard grain. The soft food can consist either of pea-meal and middlings, biscuit meal and middlings, or maize meal and middlings, mixed crumbly, and not wet, with hot water. One of these mixtures one day, and another the next. Only a small feed must be given—as much as they can eat eagerly and no more. If they eat a full meal at this time they will sit about afterwards and take no exercise.

About eleven o'clock a handful or two of grain—such as oats or wheat—should be thrown about the run. If there is some loose straw, or dead leaves, in the run, the grain must be well scattered, so that the fowls can find employment in scratching for it. About one o'clock, if the fowls are in a small run, they must have some cut grass or cabbage. If the latter is given, the cabbage should be tied up to hang a couple of feet from the ground, so that the fowls have to jump for it. If green food cannot easily be obtained, a swede or a turnip or two cut in half will answer the purpose.

It is important that poultry in a confined run should be supplied with some animal food. They should, therefore, have some meat scraps from the house, or some fresh cut bone, at least three times a week. This can be given at midday—not more than half an ounce of the cut bone to each hen. At

The "Favourite" Poultry House.



No. 71.

Cheapest House in the Trade.

Thousands sold every season.

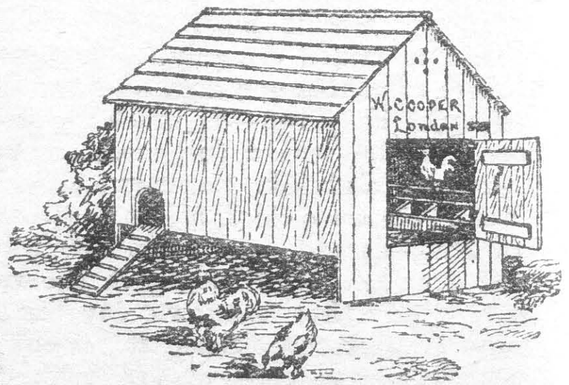
Made in sections, simply screw together, complete, with door in side, lock and key, and window at end, with flap at back for access to nest-boxes. A raised floor about 2ft. from ground, so as to form a dry run underneath nest.

Fitted with perch, ladder, nest-box, &c. Painted with our Patent Rot-proof Composition outside. Carefully put on rail at our Works at the following prices :—

Length. ft.	Width. ft. in.	Height to Ridge. ft. in.	Cash Price. £ s. d.
3	2 6	5 0	0 17 6
4	3 0	6 0	1 4 0
5	4 0	6 0	1 7 6
6	4 0	6 0	1 12 0
7	5 0	6 6	2 0 0
8	6 0	7 0	2 7 6

Span-Roof Improved Poultry House.

These Houses are very roomy and well ventilated, and specially constructed so that they may easily be taken to pieces or erected. They have a door and windows at the ends, a flap at back for easy access to the nest-boxes, are raised from the ground 2ft. so as to form a dry run underneath, made of good sound materials, painted outside with our Patent Rot-proof Composition, and roofed with weather-boarding. Carefully put on rail at our Works at the following prices :—



No. 72.

Length. ft.	Width. ft.	Height to Ridge. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.
4	3	5 9	4 0	1 10 0
5	4	6 0	4 0	2 0 0
6	4	6 3	4 3	2 10 0
7	5	6 6	4 6	3 5 0
9	6	7 0	4 9	4 0 0

roosting time some grain must be given; white oats, or wheat, or maize. Only one kind of grain at a time, not a mixture. On the mornings when the fowls do not have soft food they can have oats, wheat, or peas. Grit must always be within reach.

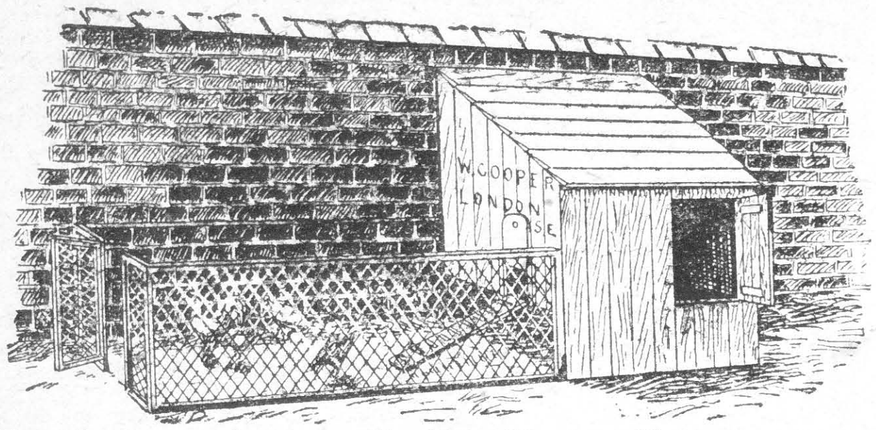
Fresh, clean water must be given at least once a day, placed out of reach of the sun's rays, and where snow cannot fall into it. In the summer the soft food need only be given about twice a week. Maize had better be discontinued then. During warm weather many hens will take a rest from laying. To start them again, also to bring them on to lay after moulting, and to induce pullets to commence, as well as to keep the stock in grand condition, our egg producer should be used. A well-known tonic for occasional use is the "Douglas Mixture," made by dissolving a quarter of a pound of sulphate of iron and half an ounce of sulphuric acid in a gallon of water. A teaspoonful of the solution can be added to each pint of the fowls' drinking water four or five days running, and then stopped for a time. This tonic must be given in earthenware and not in metal vessels.

HATCHING.—Eggs that are intended for hatching must be of normal size and shape. Specially large ones should be avoided, as well as those that are palpably thin shelled and misshapen in any way. If the eggs are to be hatched by a hen, they can be kept for a fortnight or three weeks without fertility being impaired. There are many instances of eggs having hatched freely when they have been laid a month before incubation commenced. None the less, the fresher the eggs the better. If an incubator is to be used, the eggs must not have been laid for more than a week.

In some country places it is thought that the sex of eggs can be foretold before incubation. The shape of the egg is believed to show whether a cockerel or pullet will be produced. Pointed eggs are credited with containing cockerels, and rounder eggs pullets. No reliance is to be placed on this theory. Most pullets when they commence to lay produce slightly pointed eggs. Early in the season more cockerels are hatched than later on. Hence the pointed-egg idea. The position of the air cell at the larger end of the egg is also supposed to indicate the sex. This, however, is fallacious.

THE SITTING HEN.—A hen can be known to be broody, or ready to incubate, when she remains in the nest day and night, coming off only for a few minutes to feed, and clucking and screaming when touched. Before the eggs that she is to hatch are entrusted to her, she must be placed in the nest-box for two or three days, to accustom her to her surroundings. Our hatching boxes are made specially for sitting hens. For several hens sitting at the same time our hatching boxes,

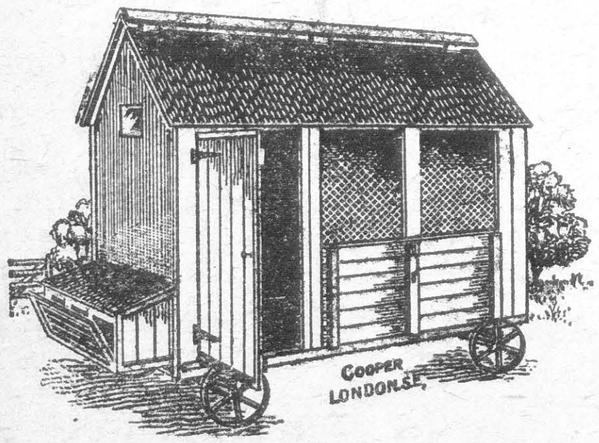
Cheap Lean-to Fowl House. No. 73.



For placing against a wall. This House will be found useful where space is limited. Made in sections; easily fixed against wall, fence, &c. With raised floor and ladder, complete with perches, nest-boxes, sliding shutter, and lock and key to door. Painted outside with our Patent Rot-proof Composition. Carefully put on rail at our Works at the prices given below :—

Length. ft.	Width. ft. in.	Height to Ridge. ft. in.	House only. £ s. d.	Portable Run, Length ft.	Run only. £ s. d.
3	2 6	5 0	1 5 0	4	0 7 6
4	4 0	5 9	1 12 6	6	0 10 0
5	5 0	6 3	2 0 0	7	0 15 0
6	6 0	7 3	2 5 0	8	1 2 6

The "Success" Movable Poultry House.



No. 74.

A very neat design. Strongly made. Constructed in Sections of Tongued and Grooved Boards, on Strong Framing. Roof of Tongued and Grooved Boards, covered with patent Asphaltic Roofing Felt. Easily erected in a few minutes. All modern improvements. Outside nest boxes, as illustration, ventilated ridge, thus avoiding all draughts. Complete, with perches and sliding shutter, as shown in illustration; to close up at night or in bad weather. Outside woodwork painted with our Rot-proof Composition. Made in three sizes at the following prices :—

Length.—ft. in.	Width.—ft. in.	Cash Price.—£ s. d.
6 0	4 0	1 17 6
7 0	5 0	2 10 0
9 0	6 0	3 2 6

Floor and Wheels, strongly made, 12s. 6d., 15s., 17s. 6d. extra respectively.

Nos. 117 and 118 are unsurpassed. For small runs, or where only one or two broods of chickens are required, our sitting-box, No. 121, is constructed. The bottom is hollowed in order that the natural shape of the nest may be preserved. It is made of fine meshed galvanised wire netting, proof against rats.

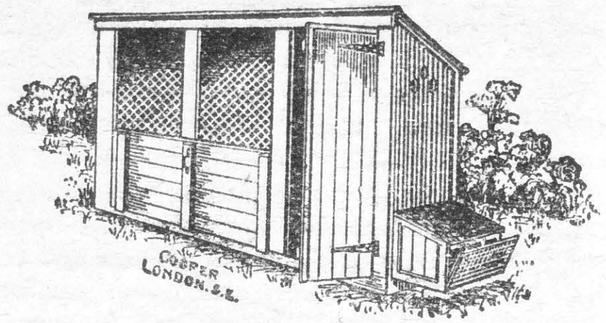
Our range of hatching-boxes and runs, No. 126, is most useful in preventing the hens straying when off the nest for feeding. The tops of the runs are hinged to open, enabling food to be put in, or the hen easily caught. A little fine hay should be put in the nest, and patted down with the hand. The best time to sit a hen is at dusk. She is less likely to be wild, or dash off the nest then. The number of eggs must depend on the size of the hen and the time of year. In cold weather it is as well not to give more eggs than the hen can comfortably cover. The number can be varied from nine to fifteen.

Before the eggs are given to the hen the nest must be well dusted with an insect powder. This helps to keep her free from insect vermin. The eggs can be placed one or two at a time in the nest, just in front of the hen, so that she can see them. She will then tuck them underneath her, one by one, with her beak. The hen need not be taken off the eggs on the first day. If she does not come off to feed on the second day, when the lid of the hatching-box is dropped, she must be gently lifted out, care being taken not to remove any of the eggs with her. From ten to twenty minutes is the time she should be absent, according to the weather. If the hen has not gone on the eggs again of her own accord, she must quietly be induced to do so.

The period of incubation is twenty-one days. The best food for sitting hens is either maize, wheat, or barley, and fresh, clean water. Some dry ashes or sand must be provided near the nest-box, in which the hen can have a dust-bath after feeding. The ashes should have some of our Disinfectas mixed with them.

TESTING THE EGGS.—If several hens commence to sit on the same day, it is advantageous to test the eggs, so that any unfertiles can be removed. To test the eggs, each egg should be taken from under the hen and placed in one of our egg-testers. An unfertile egg will appear clear, as if just laid. One containing a chicken will show a circular spot floating at the top of the egg when held sideways, the top being surrounded by a clouded substance, showing blood vessels. And an addled egg looks turgid and darkish, with no sign of blood vessels. Some experienced poultry-keepers can correctly test the eggs when they have been incubated four days; but a beginner had better not attempt testing before eight days. The unfertile eggs can be removed and used for cooking pur-

Pent Roof Improved Poultry House.



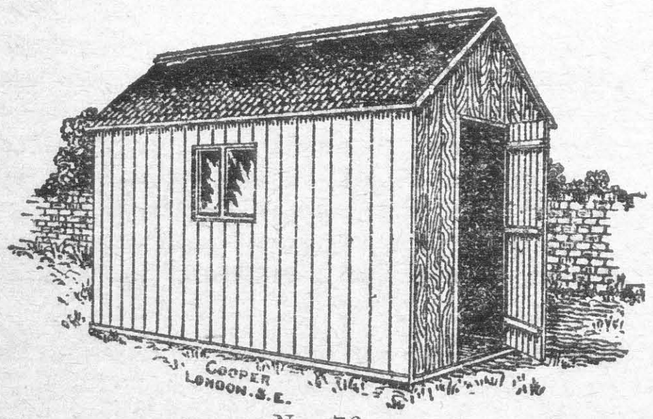
No. 75.

This design has a great advantage over the ordinary Lean-to. Being complete in itself, can either stand against garden fence or out in a field. It is a house built to meet the requirements of the Cottager and Farmer alike. Made in sections, and easily erected. Constructed of Tongued and Grooved Boards, on Strong Frame. Roof of Tongued and Grooved Boards, covered with patent Asphaltic Roofing Felt; complete with perches, outside nest boxes, and sliding shutter. Outside Woodwork painted with our Patent Rot-proof Composition. Made in the following sizes, and carefully put on rail at our works at the respective prices:—

Length. ft. in.		Width ft. in.		Cash Price. £ s. d.
6 0	.....	4 0	.....	1 16 0
7 0	.....	5 0	.....	2 7 6
9 0	.....	6 0	.....	3 0 0

Portable Floors, 4s. 6d., 7s., 10s. extra respectively.

Portable Hut.



No. 76.

This House is Substantially Constructed of well-seasoned Tongued and Grooved Boards, on Strong Framing. Roof of Tongued and Grooved Boards, covered with Asphaltic Roofing Felt. Made in complete sections, and easily erected by any handy man in a few minutes. These huts can be used for poultry, or as Cycle Houses, Workshops, Dark Rooms, Tool and Potting Sheds, and numerous other purposes. Outside Woodwork painted with our Patent Rot-Proof Composition. Made in the following sizes, and carefully put on rail at our Works at the respective prices:—

Length. ft. in.		Width. ft. in.		Cash Price. £ s. d.
6 0	.....	4 0	.....	1 18 6
7 0	.....	5 0	.....	2 12 6
9 0	.....	6 0	.....	3 2 6

If complete with a good stout Floor on strong joists, 4s. 6d., 7s., 10s. extra respectively.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

poses. When they have been taken away there will probably not be enough eggs remaining to employ all the hens. The surplus hens can then be put in a coop, and broken of their desire to sit.

THE CHICKENS.—On the nineteenth or twentieth day after sitting commenced, the eggs, if all has gone well, will begin to chip, and the young birds can be heard. After they are out of the shell the chicks will not require food for twenty-four hours. The hand can be put gently under the hen to investigate. If some of the eggs are still unhatched, yet are chipped and contain live chicks, and if the hen is restless, the young birds should be taken away in a basket containing some warm flannel, and placed near a fire. These can be returned to the hen when the remaining chicks are hatched out. The hen should have a feed of grain while she is on the nest. The next step is to put her in a coop facing south, and when she has settled down the chicks can be given her. We make a variety of excellent coops suitable for all breeds of chickens. There is the Safety Chicken Coop, made in two patterns, of which we sell many thousands, No. 120, very strong and serviceable, with fitted shutter to be used as a shelter from rain, wind, and hot sun; and No. 122, fitted with sliding shutter, with handles to the shutter, enabling it to be used from either right or left side.

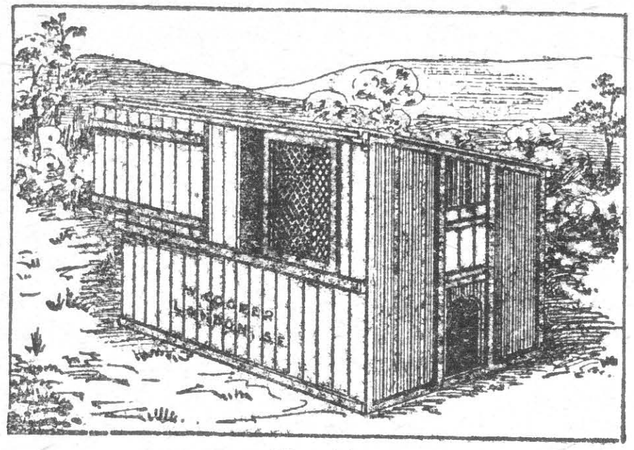
A most useful form of coop, where there is plenty of space, is our coop and run on wheels, No. 134. This can be moved from place to place, and, having a floor, is vermin-proof. We make chicken coops of many descriptions with fitted runs; some with boarded roofs to the runs, with the tops hinged to lift up; others with wire netting that is sparrow- and rat-proof.

Many different ways of feeding young chickens are advocated. The old method, and one by which millions of chicks have been reared, is to give chopped-up hard-boiled egg and breadcrumbs for the first three days at least five times a day, followed by some chicken groats in the evening. At the end of three days the egg food is discontinued. The chicks then have equal parts of ground oats and middlings, mixed crumbly with warm water, with a feed of bruised wheat in the evening. If there is no access to grass they must have some finely-chopped lettuce, dandelion, or onions.

The method followed by some people is to give egg and breadcrumbs only for one day; then to give nothing but dry food for a month. Various mixtures of grain are used for the dry food. The Board of Agriculture has issued a leaflet suggesting that for the first eight days a combination of canary seed, millet, finely-cracked green peas, and hemp seed is the correct thing. This is to be followed by a mixture composed of eight different

The Sussex Pen.

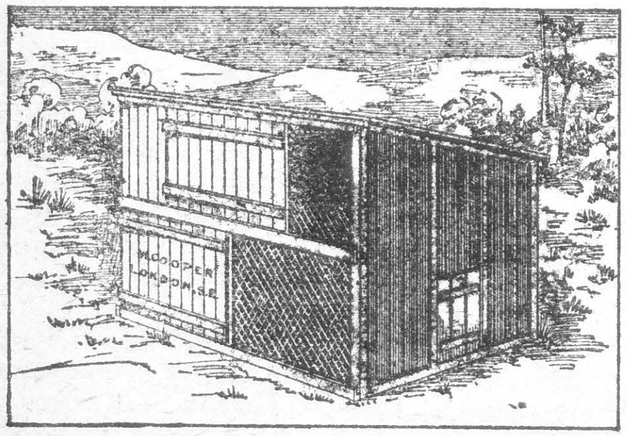
Made of good, sound, well-seasoned, Tongued and Grooved Boards, on Strong Framework. Front partly covered with wire netting, and fitted with improved Sliding Shutter, giving plenty of protection in the winter and ample ventilation during the summer. Complete, with perch, &c. Outside painted with our Patent Rot-proof Composition.



No. 77.

5ft. long, 3ft. 6in. wide, 3ft. 6in. high.
Cash Price, 18s.; Floor, 3s. extra.

The Essex Pen.



No. 78.

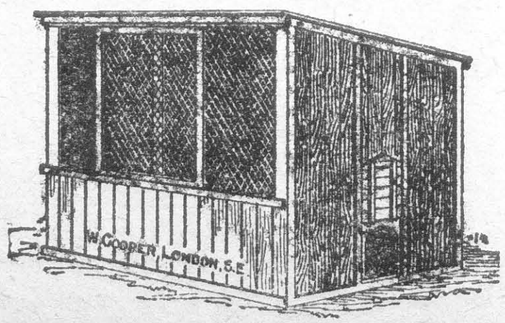
Made of good, sound, well-seasoned, Tongued and Grooved Boards, on Strong Framework, Front partly covered with wire netting, and fitted with improved Sliding Shutters, giving plenty of protection in the winter and ample ventilation during the summer. Complete, with door, perch, &c. Outside painted with our Patent Rot-proof Composition.

5ft. long, 3ft. 6in. wide, 3ft. 6in. high.
Cash Price, 21s.; Floor, 3s. extra.

The "Lincoln" Shelter.

Made of good, sound timbers. Part front covered with wire netting, and fitted with a sliding wire netting door. Trap in end. Constructed with ample ventilation. Very useful for placing in fowl run. Wonderful value. Outside painted with our Patent Rot-proof Composition.

5ft. long, 3ft. 6in. wide, 3ft. 6in. high.
Cash Price, 16s.; Floor, 3s. extra.



No. 79.

items. When the chicks are a month old they are gradually to be taught to eat soft food.

There is little doubt that the dry food method prevents diarrhœa, often a trouble with chicks. The dry food can be bought ready for use at most corn dealers. A good supply of grit must be within reach of the chicks, such as road scrapings or fine gravel, or coal ashes. The food for the chickens should not be thrown on the ground to be trampled on and made dirty. It should be given in our feeding troughs. These are made of zinc, with a guard to prevent the little birds standing on the food. The guard is removable for cleaning. The advisability of supplying water for the young chickens to drink has been questioned. It has been stated that water induces gapes, diarrhœa, and other ailments. But the chicks love it, and if dry food is used it is essential that water be given. Our drinking fountains for chicks always maintain a fresh supply of water, and can be easily filled and cleaned.

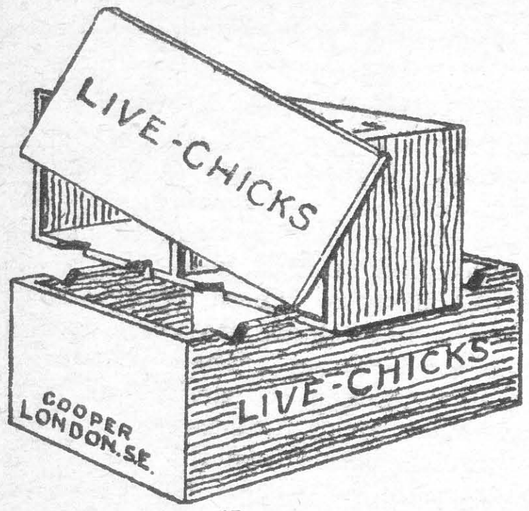
ARTIFICIAL INCUBATION.—Where there are a fair number of fowls, and chicken rearing is carried on, artificial incubation is of great assistance. The advantages of this form of hatching are many. The difficulty in obtaining broody hens early in the season; the trouble of taking the hens off the nest daily, and seeing that they go on again; the risk of broken eggs, and of trampled on chickens; these, and many other annoyances, are avoided by using incubators.

Our Peripage patent incubator has been before the public for years. It continues to make friends wherever used. It is absolutely reliable, is simple to work, will hatch every possible egg, and is absurdly cheap. It has received the highest awards in incubator competitions, it is economical in use, and will last for years. Full and easily understood instructions are sent with each machine. It is important that the incubator be set quite level. A suitable place to locate it is a cellar, if fairly dry and ventilated; or any ordinary room will do, if in a quiet place, where there will be no jars or banging of doors, no draught, and if the floor is firm.

The eggs to be incubated must not be more than a week old. The machine must be started two or three days before the eggs are put in, in order that it may be seen how to maintain the desired temperature. And if the first batch of eggs does not hatch as well as could be wished, the fault will not be in the machine, but in the operator, who has probably not followed the directions correctly.

ARTIFICIAL REARING.—When the chicks have been hatched in an incubator they are usually reared in a foster-mother. Our Peripage patent hot-water rearer, or foster-mother, is very popular. It is constructed for indoor or outdoor

Live Chicken Boxes.



No. 80.

For sending "Day-old" Chicks by rail, strongly made with ventilated side; most perfect Chicken Carrier on the market.

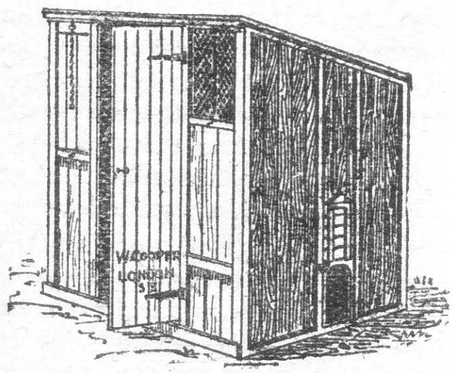
Chickens withstand a 30-hour journey in the severest weather if packed fairly tight and a piece of felt placed in bottom and some hay on top of this. Flannelette hung loosely on top under lid is also recommended.

Cash Prices: To hold 1 doz. Chicks, 2s. 9d. per doz., 30s. per gross.
To hold 2 doz. Chicks, 4s. 6d. per doz., 45s. per gross.

The "Cockerel" Pen.

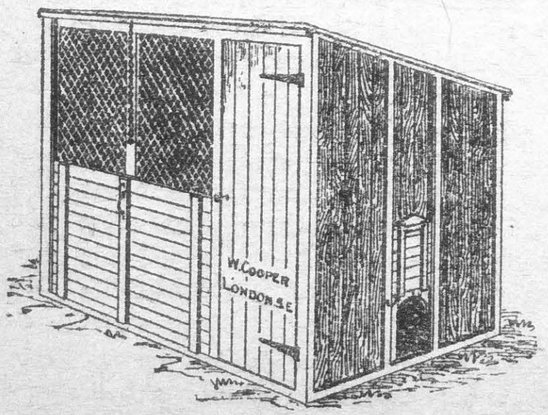
Made of good sound timbers. Upper half of front each side of door covered with wire netting, and fitted with wood shutters to slide up and down. Ample ventilation and well protected. Marvellous value for a Shading House, or Roost for Breeding Pen. Outside painted with our Patent Rot-proof Composition.

5ft. long, 3ft. 6in. wide, 3ft. 6in. high. Cash Price, £1 2s. 6d.; Floor, 3s. extra.



No. 81.

The "Orpington" Pen.



No. 82.

Made of good, sound timbers. Part front covered with wire netting, and a wood shutter to slide up and down. Suitable for Breeding Pen for ducks, fowls, &c. Constructed with ample ventilation during summer, and plenty of protection during winter. Outside painted with our Patent Rot-proof Composition.

5ft. long, 3ft. 6in. wide, 3ft. 6in. high.
Cash Price, £1 5s.; Floor, 3s. extra.

use all the year round. It is airy in summer, yet will keep the chicks warm in the coldest weather. It is weather-proof, and well and strongly made, and there are no corners for the chicks to be crushed in.

As soon as the chickens are settled in the rearer some egg food should be given them. They can be fed in all respects in the same manner as the chicks reared under a hen. Dry food is more useful in the rearer than when a hen is bringing up the chicks. It can be sprinkled in the dry earth, or other litter, to encourage the youngsters to scratch; and this can be done without the grain being consumed at once by the hen. Green food is even more necessary to artificially hatched chicks than to others. The meals must be given at regular intervals. An important matter is not to overcrowd the foster-mother, or to attempt to use a smaller size than will hold the chickens comfortably as they grow.

The usual temperature to begin with in rearers is 90deg. By the end of a week this is reduced to 80deg, and gradually to 70deg. But these temperatures will depend a good deal on the time of the year and the outside atmosphere. The best way to tell if the temperature is as it should be is to notice the behaviour of the chickens. If they are quiet and scattered over the floor of the sleeping chamber, things are going well. But if they are crowding towards the hottest part and are restless and make a noise, more heat is required. If the temperature is too high some of the little birds will be panting and looking exhausted.

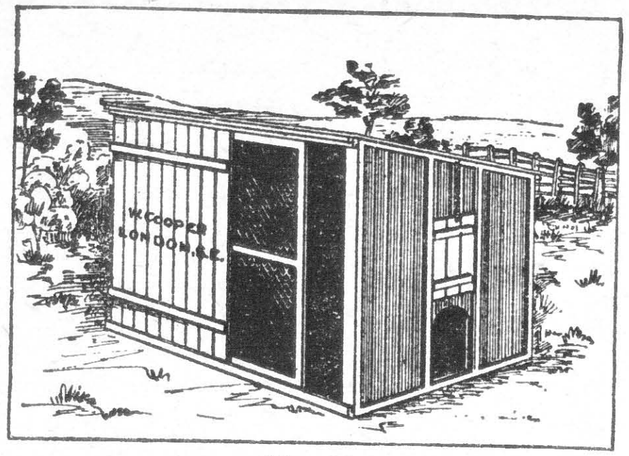
After the chickens have left their mother, or have done with the rearer, they must not be allowed to perch too soon. Crooked breast-bones are considered to be caused by the young birds perching when young. Our cockerel houses are very useful as sleeping places for chickens until they are old enough to roost with the older birds.

TABLE POULTRY.—When the chickens are between three and four months old is a good age to commence to prepare them for the table. There are many breeds suitable for the table and for fattening. The Dorking is unequalled; the Orpingtons are good, and so also are Houdans, Plymouth Rocks, Faverolles, Game, Indian Game, and Wyandottes. All these fowls, and their crosses, are worth fattening when they are intended for killing. The term "fatted" does not mean loaded with fat; only that the quality of the flesh is to be improved and made tender, and the quantity of the meat increased.

The usual method adopted is to place the fowls in a fattening pen. For this purpose we make a most convenient pen, No. 147, to hold either four or six fowls. The floor is of bars, under which is a drawer into which the droppings fall.

The Surrey Pen.

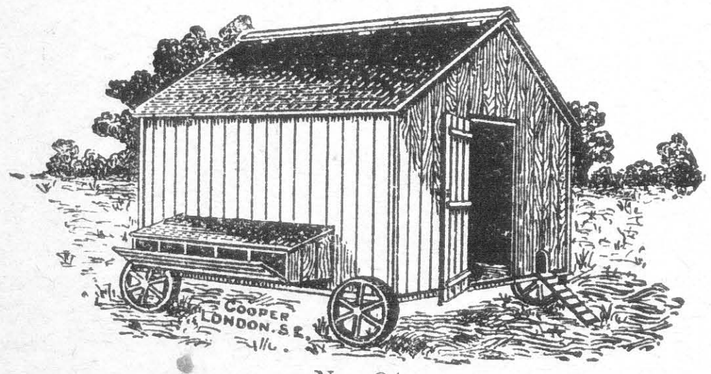
Made of good, sound, well-seasoned, Tongued and Grooved Boards, on Strong Framework. Front partly covered with wire netting, and fitted with improved Sliding Ventilating Shutter, Complete, with perches, &c. Outside painted with our Patent Rot-proof Composition.



No. 83.

5ft. long, 3ft. 6in. wide, 3ft. 6in. high.
Cash Price, 20s.; Floor, 3s. extra.

The "Champion" Poultry House.



No. 84.

These houses are well constructed in sections, and can be erected by any handy man in a few minutes. Specially designed for Poultry Farmers, and can easily be moved from place to place. The Sides and Ends are made of well-seasoned Tongued and Grooved 1in. Boards, on Strong Frame. Roof of Tongued and Grooved Boards, covered with patent Asphaltic Roofing Felt. Complete with perches, and projecting nest boxes at each side, with easy access to same from outside. The Houses are made in the following sizes. Outside Woodwork painted with our Rot-proof Composition, and carefully put on rail at our works, at the respective prices:—

Length. ft. in.		Width. ft. in.		Cash Price. £ s. d.
6 0	.....	4 0	.....	2 17 6
7 0	.....	5 0	.....	3 7 0
8 0	.....	6 0	.....	4 0 0
9 0	.....	6 0	.....	4 5 0

If fitted with Strong Floor and Wheels, as Illustration, 12s. 6d., 15s., 16s., 17s. 6d. extra respectively.

Salisbury Street, Marnhull, Dorset.

DEAR SIR,—I received the Poultry House quite safely last Saturday. I have erected it, and am quite pleased with it. I shall keep your catalogue, and if I want anything at any time I shall certainly send to you. Thanking you for your prompt attention.—Yours truly,

HERBERT GOFF.

The drawer can be taken out for cleaning as often as required. The birds are put in and taken out at the top, which is hinged. A feeding trough runs along the front of the pen.

The food consists of ground oats, barley meal, or maize meal. Ground oats mixed with skim milk give the best results. The meal is given in a semi-fluid state for the first week, placed in the trough. At the end of a week the meal is made thicker, and some beef or mutton fat is added. Fat helps to finish the birds off, and gives tenderness to the flesh. No whole grain is necessary, though some fatteners give boiled barley as the last feed of the day. Three meals a day are generally given. Some grit is placed in a separate vessel. Boiled nettles, or other green food, are allowed three times a week.

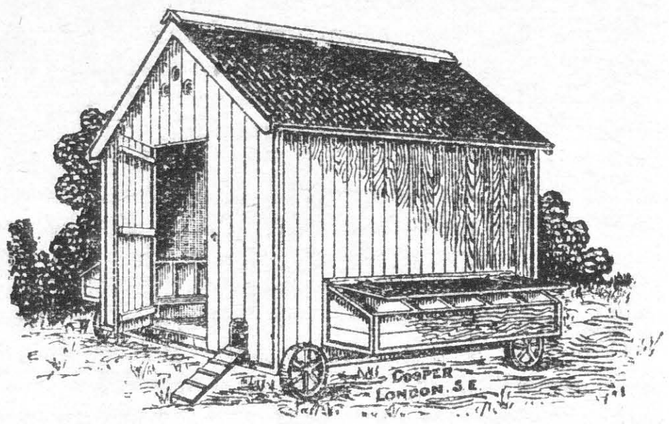
The process does not take so long in the spring as later in the year; but in three weeks the chickens ought to be ready for eating. Some chickens will not fatten at all. If a bird declines to feed at first, it is turned out of the pen for a day, and then tried again.

KILLING.—Fowls should be left for twenty-four hours without food before they are killed. If any food remains undigested in the crop, the whole body quickly decomposes. The most humane way to kill a fowl is to wring the neck. This is the method employed by poulterers. If possible it is advisable to have a practical illustration, although it is not difficult. The operation is performed by placing the bird across the knees, breast downwards, with the head and neck hanging over. The head of the fowl is taken in the right hand, the legs in the left. The neck is then quickly extended, and the head jerked back with some force. By this means the neck should be dislocated just below the junction with the head. If it is found impossible to dislocate the neck, a painless way of killing the fowl is to tie the legs, and stick it with a small and sharp knife in the jugular vein behind the ear.

The feathers come out more easily if the plucking is done while the bird is warm. When this is finished—the short quills as well as the feathers having been removed—the fowl is ready for "shaping." There are several methods of shaping. That adopted with the celebrated Surrey fowls is to tie the legs loosely together, and place the birds in the shaping trough, breast downwards, with the head and neck hanging over the front. The shaping troughs are made like shelves, about 15in. apart. The shelves are sloped so as to be 1in. lower at the back; they are 6in. wide. The fowls are placed tightly together in the shelves, the sterns pressed well back. At the end of six hours they look more compact and meaty.

PRIZE STOCK.—Many amateurs who keep pure bred fowls are anxious to breed some chickens that are fit for prize com-

The "Premier" Poultry House.



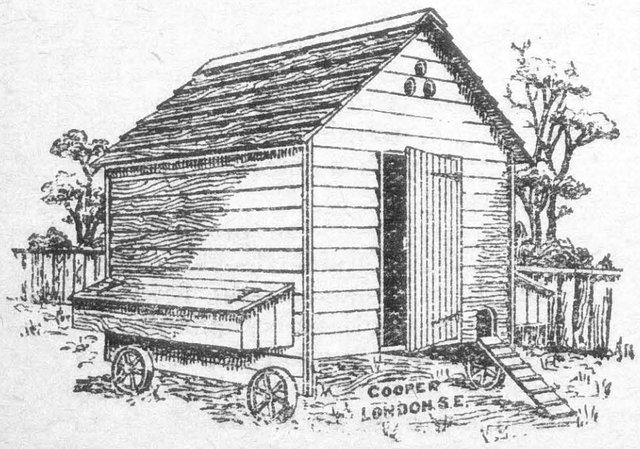
No. 85.

These houses are constructed of good sound, well-seasoned, three-quarter inch Tongued and Grooved Boards, on Strong Frame. Roof of Tongued and Grooved Boards, coveredoutsidewith Patent Asphaltic Roofing Felt. Made in sections, and can be erected by any handy man in a few minutes. Complete with projecting nest boxes, with easy access to same from outside. Perches and Ladder. Outside Woodwork painted with our Rot-Proof Composition. Made in the following sizes, and carefully put on rail at our works, at the respective prices :—

Length. ft. in.		Width. ft. in.		Cash Price. £ s. d.
6 0	.....	4 0	.....	2 7 6
7 0	.....	5 0	.....	2 17 6
8 0	.....	6 0	.....	3 10 0
9 0	.....	6 0	.....	3 17 6

If fitted with Strong Floor and Wheels, as Illustration, 12s., 15s., 16s., 17s. 6d. extra respectively.

The "Pioneer" Poultry House.



No. 86.

A very neat design; specially adapted for Tenant Farmers; constructed of one inch Featheredge Boards. Made in sections to facilitate erection. Complete with floor, on strong joist, and fitted with strong iron wheels. Projecting nest boxes, with easy access to same; perches and ladder. Outside Woodwork painted with our Rot-proof Composition. Made in the following sizes, and carefully put on rail at our works, at the respective prices :—

Length. ft. in.		Width. ft. in.		Cash Price. £ s. d.
6 0	.....	4 0	.....	3 5 0
7 0	.....	5 0	.....	4 0 0
9 0	.....	6 0	.....	5 5 0

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

petition. Not only is it a most interesting and pleasing pursuit, but if the birds are successful a greater value is attached to their eggs and to their progeny. When commencing the novice must first learn thoroughly the points of the breed he selects. Then he must make himself acquainted with a few of the general principles of breeding, which the experience of fanciers has proved to be correct.

A fact to be specially noted is that while the quality of a hen only affects her own chickens, the quality of the male bird affects the chickens from every hen in the same pen with him. In breeding for size it is necessary that the hen should be large, as in this respect the influence of the mother predominates. The hen also has most influence over the general structure and shape, though this does not affect the cockerels as much as the pullets. The chickens of each sex have a tendency to inherit the properties of the ancestors of that sex. It is therefore important to know how the stock birds have been bred.

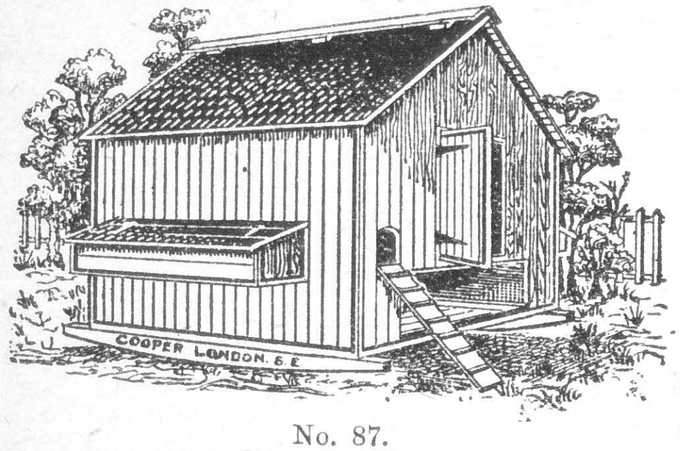
With regard to external points, such as colour or comb, the male parent has usually the greatest influence. It would be of little use to breed from a cock bird having an imperfect comb, as many of his progeny would probably be defective in that point.

If the stock is sound and healthy it will be found advantageous, and, indeed, necessary, to inbreed to some extent. However good the stock birds may be, unless they are related in some measure, the probability is that their chickens will not be as handsome as their parents. So there need be no hesitation in mating the father with his own daughters, or cockerels to their mother. Fertility in the offspring will not be affected, yet good looks will be improved. As the beginner gains experience he will find other rules and principles to guide him in producing exhibition birds.

EXHIBITING.—It is a good thing for a beginner, when he thinks he has bred a high-class bird, to send it to a show where he can have the opinion of a judge, and be able to compare his fowl with others. He must not send a bird that has any prominent fault. However good it may be in other respects, it is not likely to win. About three weeks before a show the fowl should be specially attended to. Hens or pullets must be kept apart from the male, or the plumage will be damaged. A cock or cockerel should be separated from the hens for at least a fortnight. If he is allowed a couple of hens with him for two or three days before the show, it will brighten him up and make him look lively and vigorous.

Be careful to give the bird shelter from cold winds and rain. The diet can be altered somewhat. The morning feed can be cooked meal and bran, with which some linseed is occasionally

The "Invicta" Poultry House.



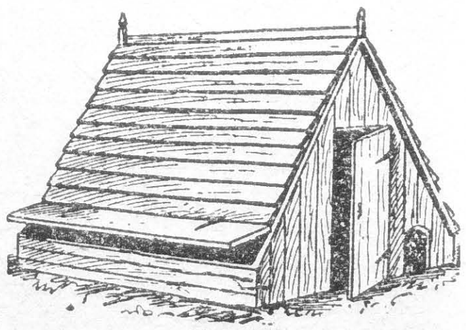
No. 87.

These houses have a distinct advantage over many on the market, being constructed with wooden sledges, covered with iron runners. They are easily moved from place to place over rough and uneven ground; also, being constructed in sections, can easily be erected by any handy man. The sides and ends are made of good, well-seasoned three-quarter inch Tongued and Grooved Boards. Roof of Tongued and Grooved Boards covered with Asphaltic Felt. Complete with raised floor, thus forming a dry run underneath, which is a great advantage to birds in wet weather. Outside Woodwork painted with Rot-Proof Composition. Perches, ladder, projecting nest-boxes at sides, with easy access to same from outside. Made in the following sizes, and carefully put on rail at our Works, at the respective prices :—

Length. ft. in.	Width. ft. in.	Cash Price. £ s. d.
5 0	3 6	2 5 0
6 0	4 0	2 15 0
7 0	5 0	3 5 0
8 0	6 0	3 17 6
9 0	7 0	4 15 0
12 0	8 0	6 5 0

Turkey or Goose House.

This illustration shows a neat design of House for turkeys or geese, and is constructed of good sound tongued and grooved matching; the roof of weather-boards; all outside woodwork painted with our Patent Rot-proof Composition; complete in sections in readiness for erection, and securely put on rail at our Works.



No. 88.

Length. ft.	Width. ft.	Height at Ridge. ft. in.	Cash Price. £ s. d.
8	6	6 0	2 5 0
10	7	6 6	3 0 0
12	8	7 0	3 15 0

Outside painted with our Patent Rot-proof Composition.

mixed. At noon some cooked meat and chopped onions, cabbage, or other vegetables; and at night whole grain—either good wheat, oats, or maize. Now and then a little chopped-up raw meat will do good. Some of the sulphate of iron tonic will help to redden the comb and face. Grit must be within reach. Game and other hard-feathered birds are better for a handful or two of maple peas daily.

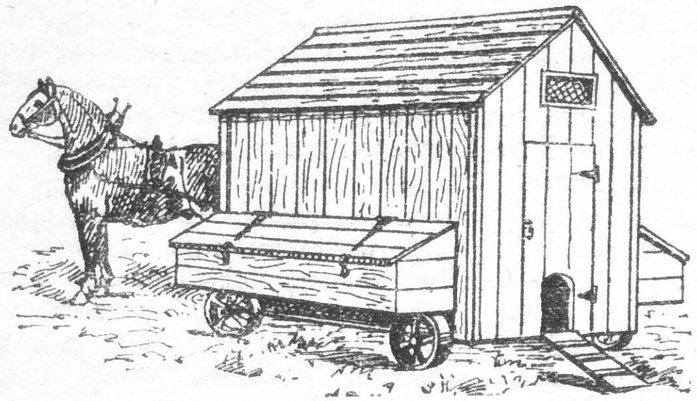
Some practice is required to wash a fowl well; but this is only necessary with light or white plumaged birds. The head, face, feet, and legs want attention. The feet and legs must be cleaned with a damp cloth or sponge. The scales on the legs must be scrubbed with a small nailbrush, the head and face gently brushed with a soft toothbrush that is first rubbed on a piece of soap. When this has been done, the lather is removed with a sponge damped with warm water. The face and head are then rubbed with the sponge, moistened with a mixture of oil and glycerine. Any superfluous oil must be carefully removed. Broken or bent small feathers should be taken away. The whole body must afterwards be rubbed over with a silk handkerchief.

GENERAL HINTS.—When the hens are laying freely in the spring and summer, and prices are at their lowest, it is sometimes advisable to preserve eggs for use in the following winter. The most successful method is to preserve them in water-glass. This can be bought from many chemists and grocers. The mode of using is first to boil the water so as to destroy all germs, and then allow it to cool. Next, add by measure one part of water-glass to ten parts of water, and partly fill the vessels in which the eggs are to be preserved. Put the eggs into the liquid the day after they are collected, washing clean any that are dirty. The topmost layer of eggs in the jar, or other vessel that is used, must be well covered by the liquid. The water must be cooled to the temperature of the air before the water-glass is mixed with it.

The oldest method used, and one that is largely in vogue all over the kingdom, is treating the eggs with lime-water. A pint of unslaked lime is added to a gallon of water. This is boiled, then well stirred, and when cold the clear water is poured into earthenware jars, into which the eggs are packed in layers. The jars are covered over and put in a cool place. A little fresh water is added from time to time, so that all the eggs are under water.

Brown eggs are as common nowadays as white eggs, yet the supposed superiority of the former is still believed in; so much so, that in some neighbourhoods brown eggs sell more readily and realise slightly higher prices than the others. It is difficult to conceive how the colour of the shell can possibly affect

Movable Poultry Houses.



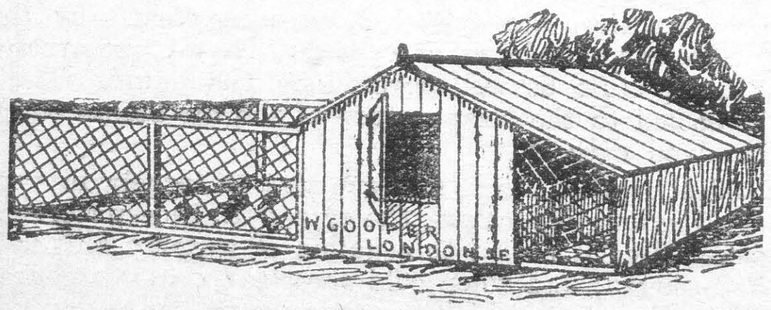
No. 89.

Sides constructed of good sound tongued and grooved, and the roof of feather-edge boards. Fitted with projecting nest-boxes, complete with lid and fastenings. The floor is raised from the ground, and the structure fitted on wheels. Perches and ladder included.

Length. ft.	Width. ft.	Height to Ridge. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.
4	4	6 0	4 0	2 15 0
5	4	6 3	4 3	3 5 0
6	5	6 6	4 6	3 15 0
7	5	7 0	4 9	4 5 0
9	6	7 3	5 0	5 0 0

Outside painted with our Patent Rot-proof Composition.

New Poultry House.



No. 90.

A new style of House, having two distinct Runs, and affording protection in all weathers. A Sliding Shutter keeps the birds in either part, as may be required. The Dry Run has wire-netting at one end for light and air. The Open Run is 6ft. long, 5ft. wide, and 2ft. 6in. high; wired over the top as well as at the sides. The house is well and strongly made, and is fitted with nest-boxes and perches. 6ft. long, 5ft. wide. Cash Price, £3 15s.

Outside painted with our Patent Rot-proof Composition.

the quality of the contents. This is governed by the nature of the food eaten by the hen, and by the way the hen is managed. It is not unusual for artificial means to be employed to turn white eggs brown. The colouring of eggs artificially is not a recent discovery. The shells, after all, are not eaten by human beings. The poultry-keeper, therefore, if he prefers brown shells, can satisfy his taste by keeping a breed such as the Minorca, which lays large white eggs, and staining some of the eggs any shade of brown that he wishes, by dipping them in tea or coffee, or a little permanganate of potash.

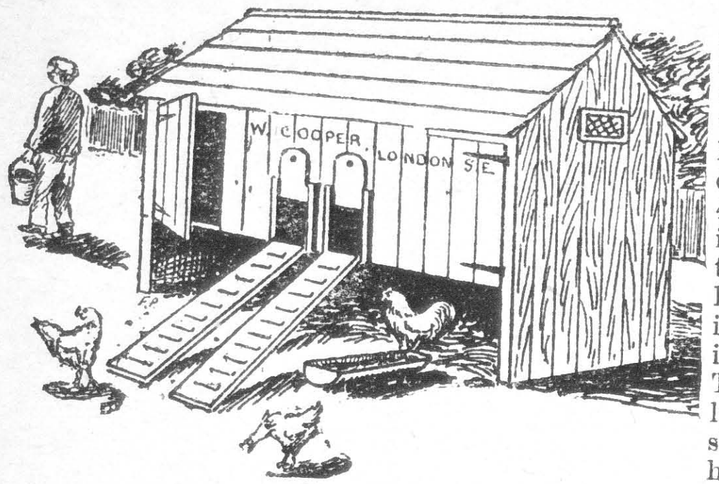
One of the most important matters in successful poultry keeping is never to overfeed the fowls; always to stop giving food directly they begin to hesitate and cease eating eagerly. And another most important detail is never to overcrowd. These are the two chief stumbling-blocks of amateurs. More eggs will be laid by six hens with space enough, than by two dozen crowded and cramped.

Regular feeding is of much importance. Fowls will not thrive if they have no food for a number of hours, and then a double quantity to make it up. Grain should never be left lying about on the ground. That is a sure sign that the fowls are overfed, besides the fact that profit is diminished by the waste of food. The feed of warm meal in the morning in cold weather is one of the greatest incentives to winter laying, though it is often neglected, and cold, hard grain given instead.

Broody hens, valuable as they are in the beginning of the year, are a great nuisance in the summer. When they are not wanted for hatching purposes, they should be taken off the nest directly they are seen there after the fowls have gone to roost, and put in a coop in a light place. If kept in this, and given a moderate supply of grain, some green food, and water, they will get over their broodiness in four or five days, and shortly commence to lay again.

While the hen is sitting it sometimes happens that she remains off the nest until the eggs are cold. It does not follow as a matter of course that in such circumstances the eggs will not hatch. There have been many accounts of satisfactory hatches when the hen has been allowed to continue sitting on the chilled eggs. Another matter of importance is that of assisting the chick when it cannot make its way out of the shell. If the egg is chipped and the beak can be seen, help can be given by gently picking away the shell at the chipped end with the finger-nail. Care must be taken to avoid drawing blood. After a small quantity of the shell has been removed the egg must be put back under the hen. In three or four hours' time, if it has not hatched out, the process can be repeated. After that the bird will generally be found free from the shell—or dead.

The "Gem" Poultry House.



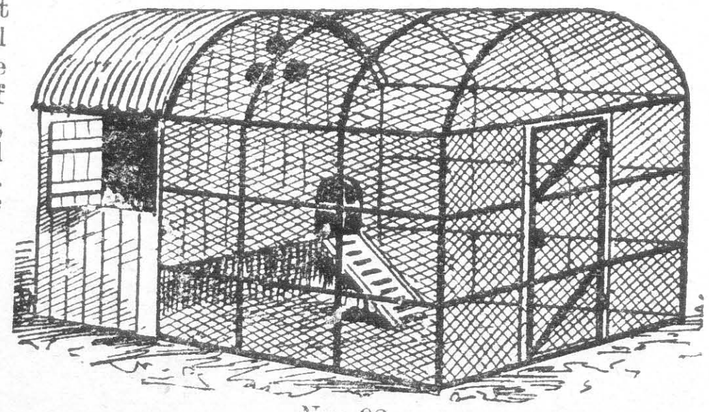
No. 91.

This is a double House, constructed to economise space, and admit of two varieties being kept apart. Each division is 6ft. by 4ft., and the floor is raised 2ft. from the ground, with ladders connecting, as represented in the illustration. The eggs are collected from outside by raising a hinged flap provided for the purpose. The house is made of well-seasoned deal boards, each being tongued and grooved, and put together in sections for screwing together; painted outside with our Rot-proof Composition. Carefully put on rail at our Works. Complete.

Cash price.—8ft. long, 6ft. wide, 6ft. high to eaves, 7ft. 6in. to ridge, £3 5s. Runs 6ft. long, complete for this house, 30s. extra. Making two Houses and Runs. Complete for £4 15s.

Portable Poultry House.

WITH CURVED ROOF.



No. 92.

A very neat design, and well made. The House is constructed of good, sound, tongued and grooved matching; the roof of curved galvanised iron sheets; complete with nests, perches, ladder, and flap for access to eggs. It has a raised floor, thus affording a dry shelter underneath. The run is covered with galvanised wire netting, and is fitted complete with gate; all outside woodwork painted with our Patent Rot-proof Composition, and inside limewashed. Constructed in sections in readiness for erection, and securely put on rail at our Works at the following prices :—

Size.	Sizes over all of Houses and Runs.	£	s.	d.
1.	10ft. by 4ft., 6ft. high to ridge	3	15	0
2.	12ft. by 4ft., 6ft. " "	4	5	0
3.	16ft. by 4ft., 6ft. " "	5	0	0

THE VARIOUS BREEDS.

ANCONAS.—Free layers of white eggs, of not large size. There are both single and rosecombed Anconas, black in plumage, with each feather tipped with white. They mature quickly, are rather wild, and are non-sitters.

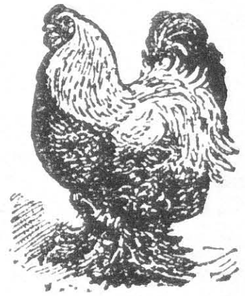
ANDALUSIANS.—Very handsome, slaty-blue plumaged fowls, laying very large white eggs. Are suitable for the small poultry-keeper, or for a free range. The chickens do not come very true to colour. Non-sitters.

ASEELS.—An old breed, celebrated for its indomitable courage. It is heavier for its apparent size than any other fowl. The hen is a poor layer, and very quarrelsome. Aseels are not generally kept. Sitters.

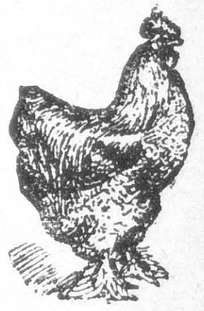
BANTAMS.—The attractiveness of these little fowls consists more in their beauty than in any economic value. Most of the large breeds of fowl are reproduced in miniature amongst the Bantams. The Sebright is one of the most beautiful. It is bred



SEBRIGHT BANTAM.



BRAHMA.



COCHIN.

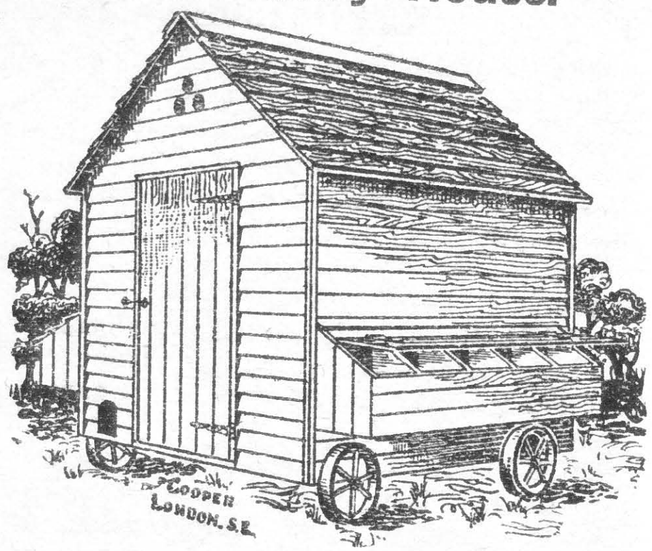
in two varieties, Gold and Silver. The plumage of the Gold is of a golden bay throughout, each feather evenly laced all round its edge with glossy green-black. That of the Silver is silvery-white, laced as in the Gold. The comb is rose, the tail, in both sexes, hen-shaped.

The Japanese Bantam is a most quaint little bird, with large head and immense tail, containing feathers sticking out in all directions. Most of the other Bantams are diminutive counterparts of the large fowls. The weight of the majority of the Bantams should be from 16oz. to 22oz.

Bantams are mostly hardy. They can be kept in health and comfort in very small runs, requiring but little food. Grain, such as wheat, buckwheat, dari, and now and then a little canary seed, and a few scraps from the house, cut up very small, so as not to soil the plumage, are all that is necessary. A little cut grass or green food must be given daily, and fresh water and grit supplied. Our Span-roof Bantam House and Run, No. 104, is unsurpassed for these birds.

The "Renown" Poultry House.

These Houses are strongly made in sections, and can easily be erected in a few minutes. Constructed of good, sound, well-seasoned Featheredge Boards, on Strong Frame. Projecting nests on each side. Complete with perches and ladder. Outside painted Rot-proof Composition. Made in following sizes, and carefully put on rail at our Works, at the respective prices :—

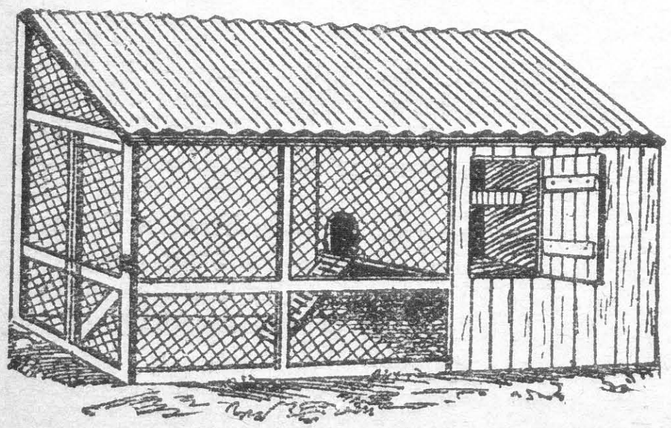


No. 93.

Length. ft. in.		Width. ft. in.		Cash Price. £ s. d.
5 0	.....	3 6	.....	2 5 0
6 0	.....	4 0	.....	2 10 0
7 0	.....	5 0	.....	2 17 6

If fitted with Floor and Wheels, as illustration, 10s. 6d., 12s. 6d., and 15s. extra respectively.

Lean-to Poultry House with Covered Run.



No. 94.

This is a neat structure, and made of the best tongued, grooved, and beaded boards ; with shelter underneath. Roof, feather-edge boards. Door complete, with lock. The run is covered with netting, and is complete with gate and lock to same. Outside woodwork painted with our Rot-proof Composition. Carefully put on rail at our Works at the following prices :—

Length of House. ft.		Width of House and Run. ft.		Length of House and Run. ft.		Height in Front. ft. in.		Cash Price. £ s. d.
4	.....	6	.....	12	....	4 6	.....	3 0 0
6	.....	6	.....	18	....	4 6	.....	4 5 0
8	.....	6	.....	24	....	4 6	.....	5 10 0

BRAHMAS.—Large, handsome, useful fowls, holding their own well in public esteem, notwithstanding the strong competition with more modern breeds. The Light and the Dark Brahmas should both weigh upwards of 12lb. for cock birds, and not less than 9lb. for hens. They are excellent winter layers of rich brown eggs. In the summer they are apt to often become broody. Their weight prevents flying, so that a low fence will confine them. They cross well with many other breeds, especially for table purposes.

COCHINS.—Unequalled for massive beauty. They, like the Brahmas, can be kept without any fear of their flying over a low fence. They are wonderfully placid and tame. The eggs are deep brown, and not very large. Cochins are good winter layers and energetic sitters.

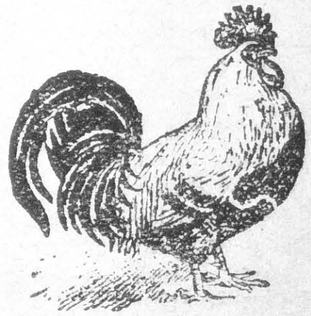
CREVECŒURS.—Large black French fowls, with two horned, V-shaped comb, large crest, and face muffled. Large and square in body, breast-bone long and straight, and legs black or slate. The Crève lays a large white egg, and is a non-sitter. It stands high in estimation as a table fowl in France. It is considered rather delicate in our climate.



CREVECŒUR.



CAMPINE.

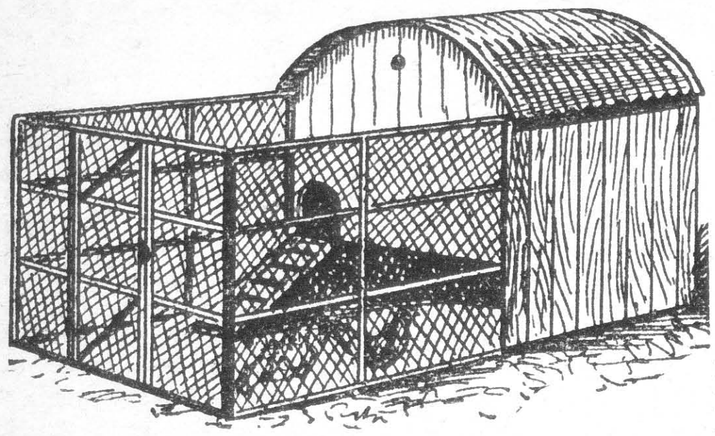


DORKING.

CAMPINES.—Non-sitting fowls, resembling single-combed Pencilled Hamburghs. They are bred in two colours, Gold and Silver. They are good layers of white eggs, and are tame and hardy.

DORKINGS.—These grand fowls, pre-eminently of English breed, are always general favourites. There are four varieties, the Coloured, the Silver-grey, the White, and the Cuckoo. No fowl is superior to the Dorking for the table, and it is used with the best results in crossing with almost every other breed for the production of chickens for eating purposes. The Coloured variety is the largest. Cocks have been exhibited over 14lb. in weight. Dorking hens lay good-sized white eggs, but there are many fowls that are better layers. The hens are first-rate sitters and mothers. Dorkings do not thrive in damp situations, nor in small runs.

Curved-Roof Poultry House with Run.

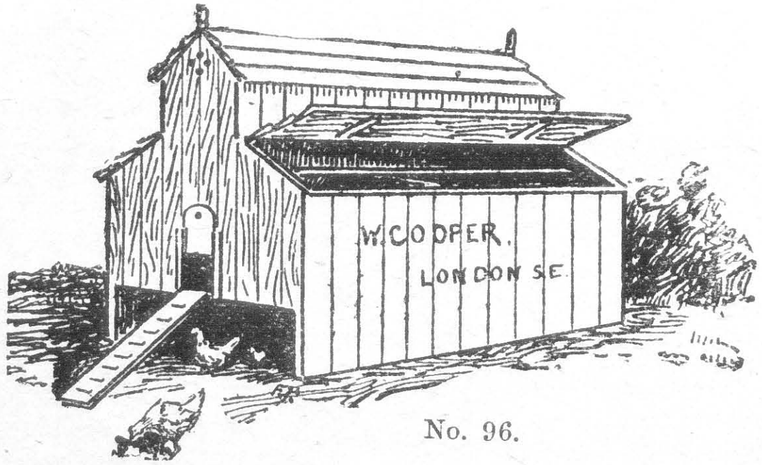


No. 95.

This is a neat design, and is constructed of good, sound tongued and grooved matching; fitted complete with nests, perches, and ladder; the roof is of galvanised corrugated iron sheets; it has a flap at side for easy access to the eggs; the Run is formed of wood framing covered with galvanised wire-netting, and is complete with gate. All outside woodwork painted with our Rot-proof Composition. In sections in readiness for erection. House, 5ft. by 5ft., 5ft. high to eaves; Run, 6ft. by 5ft. Cash Price £3 15s.

New Improved Span-Roof Poultry House, with Extended Sides.

As will be seen by the illustration, this House is constructed to facilitate both cleanliness of the Nests and collecting the eggs without disturbing the birds inside. It has a raised floor with ladder; under this the birds can find shade from sun and shelter from rain. The elevation of this House renders it suitable, with the addition of an extended top, for keeping Pigeons as well as Fowls. Strongly made, painted, and fitted with Nest-boxes and Perches. Carefully put on rail at our Works at the following prices :—



No. 96.

Size of House.	Cash Price. £ s. d.	Run.	Extra. £ s. d.
5ft. long by 5ft. wide	2 10 0	6ft. long	0 12 6
6ft. long by 5ft. wide	3 0 0	7ft. long	0 17 6
8ft. long by 6ft. wide	4 0 0	8ft. long	1 5 0

The above can be supplied with the top extended as a Pigeon House, for which it is very suited, at an extra cost of 12s. 6d., 15s., and £1 respectively.

POULTRY—*continued.*

FAVEROLLES.—One of the most useful fowls we have. Like most of the poultry that have come to us from France, the Faverolle is a fine table bird. It is very hardy, is a free layer of eggs that are mostly light brown, will stand confinement well, and is eminently suited both for the small poultry-keeper and for the man who has a large flock. The Faverolle has a single comb, a swollen throat, slight feathering on the leg, and five toes. It is a good sitter, but quickly broken of the desire.

GAME.—A celebrated race of fowls, bred for centuries for fighting. There are now two separate classes of Game, the Old English Game and the Modern Game. The principal colours are Black-breasted Reds, Brown-breasted Reds, Duckwings, and Piles. The Modern Game is bred with very long legs and thighs. They are splendid table birds, but not very prolific layers. They require a good range, and are not suited for small, confined runs. They are good sitters.

HAMBURGHS.—An old and extremely beautiful breed. Free layers of white eggs, but the eggs being small the Hamburghs have receded in public favour. Of the several varieties—the Silver and Golden Spangled, the Silver and Golden Pencilled, and the Black—the Black is the hardiest, and lays the largest eggs. They are non-sitters.



GAME.



HOUDAN.



LA FLECHE.

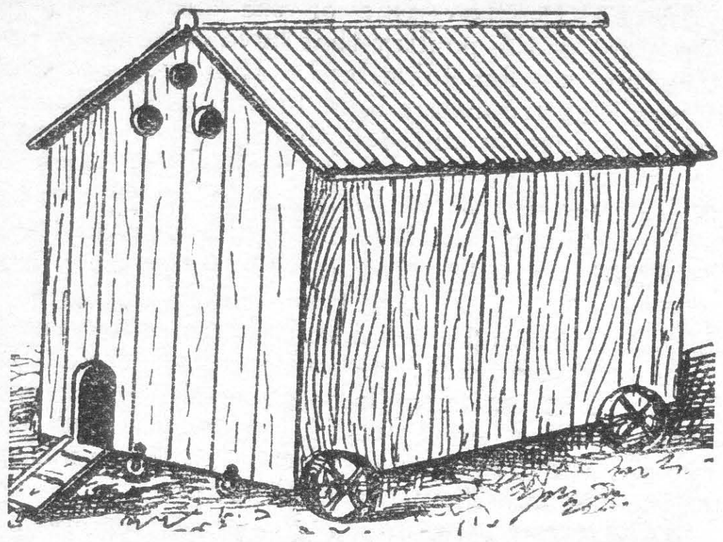
HOUDANS.—Large birds, black and white in plumage, evenly mottled, with pinky-white legs and feet, and five toes. Houdans have a large crest, and whiskers and beard. The eggs are white and of good size; for table purposes this fowl has few superiors; it is hardy, matures quickly, stands confinement well, and can strongly be recommended to all poultry-keepers. The hens do not sit.

INDIAN GAME.—Valuable for table purposes owing to the large size and wide and deep breast. Crossed with the Dorking, it produces chickens that are the perfection of table poultry. The Indian Game is a poor layer, and the hens are good sitters and mothers, but very pugnacious.

LA FLECHE.—Another large black French fowl, excellent for the table, and a layer of large white eggs. It does not thrive in any but a dry situation.

Span-Roof Poultry House on Wheels.

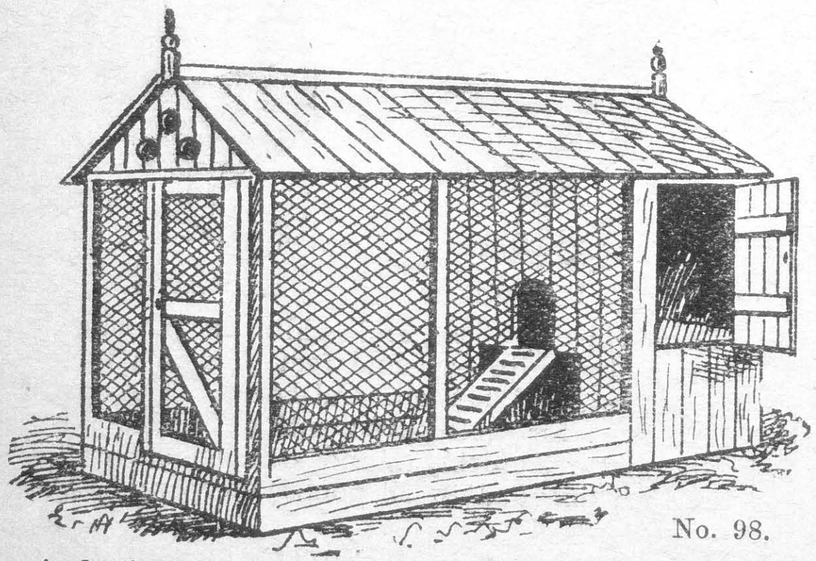
This House is substantially constructed of good, sound tongued and grooved matching; complete with floor, nests, perches, and ladder. It is mounted on four strong wheels. All outside woodwork painted with our Patent Rot-proof Composition.



No. 97.

Cash Prices, 6ft. by 4ft., £3; 6ft. by 5ft., £3 10s.

Improved Span-Roof Poultry House with Covered Run.

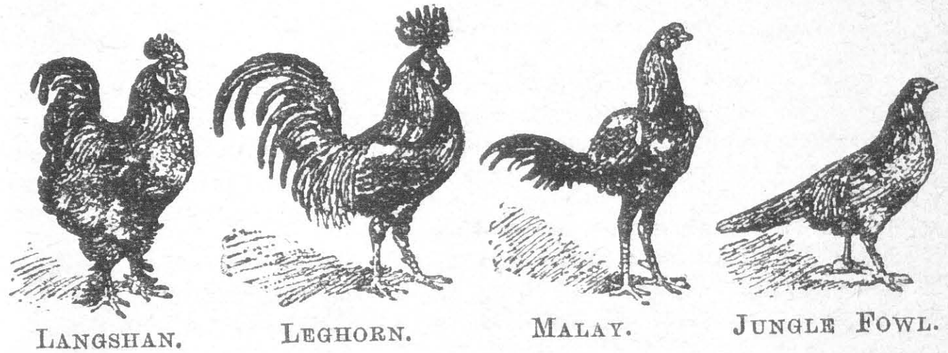


No. 98.

This is a neat design, constructed of good, sound, tongued and grooved matching. The House has a raised floor, and is complete with nests, perches, and ladder. The Run is constructed of wood framing covered with galvanised wire-netting, fitted with gate. All outside woodwork painted with our Rot-proof Composition. Complete in sections in readiness for erection.

ft.	ft.	Height to Ridge. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.
10 by	4	6 6	5 0	3 10 0
12 by	5	7 6	5 6	4 0 0
18 by	6	8 6	6 0	5 10 0

LANGSHANS.—Of the large breeds the Langshans are among the most valuable. There are two types, exhibited as Croad Langshans and Langshans. The Croad Langshan is much the stamp of the Langshan as originally imported by Major Croad in 1871. The Langshan is taller and more leggy. Both these breeds are black in plumage, with white skin. They are first-rate table birds, very hardy, splendid winter layers of good-sized eggs of various shades of brown, and they make a fine cross with the Minorca and many other breeds. The hens become broody, but are easily broken of their desire to sit. There is a Blue Langshan, which is increasing in popularity, and also a White variety, which at present is not in much request.



LANGSHAN. LEGHORN. MALAY. JUNGLE FOWL.

LEGHORNS.—There are six varieties of this particularly useful breed—the Brown, White, Pile, Duckwing, Buff, and Black. The White is a wonderful layer. In America it is largely kept. Instances are recorded of flocks of White Leghorns that have averaged 196 eggs per hen in the year. The Black Leghorn is a more recent variety, but is, if possible, more hardy and prolific than the White. The eggs are white and of medium size. Leghorns are non-sitters.

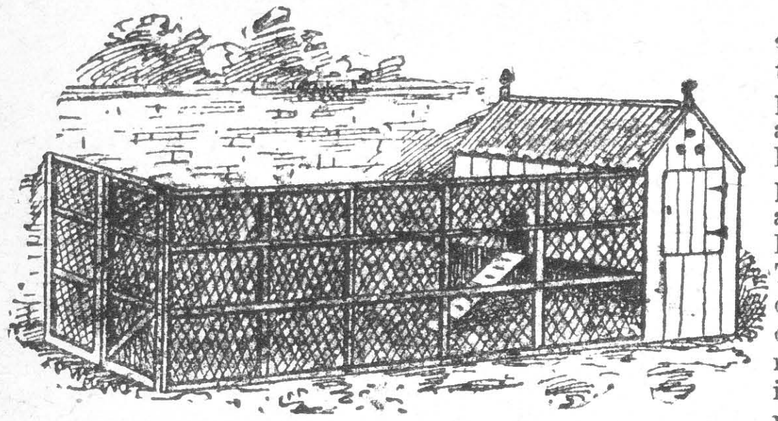
LINCOLNSHIRE BUFFS.—Made by crossing the Buff Cochin with the Dorking. It is hardy, much like a mongrel Cochin in appearance, lays brown eggs, and often becomes broody.

MALAYS.—The tallest member of the poultry-yard, some specimens standing 2ft. 6in. high. It is a good table bird, and a poor layer of brown eggs. The hens become broody.

MINORCAS.—One of the very best and most valuable of fowls. Black in colour, handsome, a layer of large white eggs, a small eater, adaptable either to a free range or a small run, it is no wonder that the Minorca is to be seen in all parts of the kingdom. They are most profitable fowls. Non-sitters.

ORPINGTONS.—There are several varieties of Orpington—the Black, Buff, White, Jubilee, and Spangled. The Black is in appearance much like a short, clean-legged Langshan. The Buff is a very popular fowl, good for the table, and a layer,

Span-Roof Poultry House with Run.

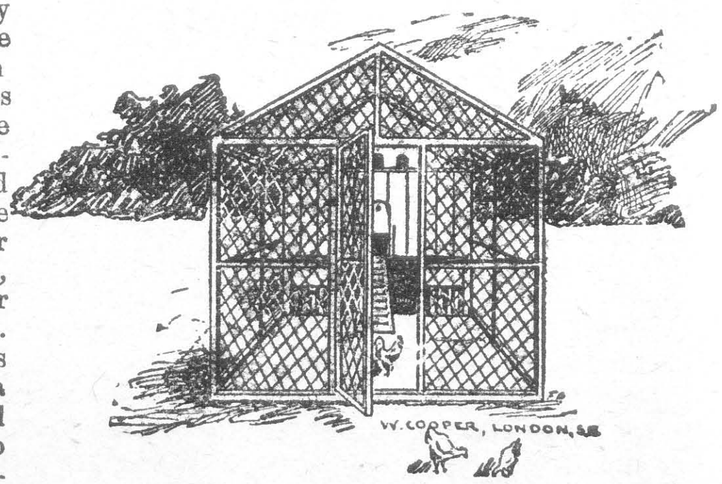


No. 99.

This House and Run is intended to be placedagainst a wall. The house is complete in itself, and the run less one side. The house is constructed of good sound materials,and is complete with nests, perches, and ladder. It has a raised floor, forming a dry run. The run is formed of wood frame hurdles, covered with galvanised wire-netting, including top, and is complete with gate. All outside woodwork painted with our Rot-proof Composition. In sections, in readiness for erection, and securely put on rail at our Works.

House, 6ft. from back to front, 4ft. wide, 7ft. high to ridge, 5ft. high to eaves ; Run, 12ft. by 6ft., 5ft. high, £3 10s. Complete if required to to be fixed independent of wall, £4 5s., including other side to Run.

The New Combination Poultry, Pigeon, &c., House.



No. 100.

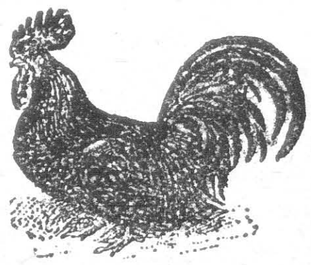
This is a Poultry and Pigeon House combined, with two compartments on each side of the Dry Run underneath the raised floor, that may be used either for hatching - boxes, fattening-pens, or rabbit - hutches. Each division has a separate door; a ladder is provided from the run to the roosting-chamber. It is a compact house, well built, and fitted with nest-boxes and perches. It is roofed with feather-edge boards, and the Run is made of wire-netting strained over a strong frame, and has doors at the end. The outside is painted with our Rot-proof Composition, and the inside is limewashed. Carefully put on rail at our Works. Cash Price £4 10s. House, 6ft. wide, 3ft. deep, 6ft. high to eaves; run 6ft. long, 6ft. wide.

particularly in the winter, of good-sized brown eggs. It is rather too much inclined to become broody in warm weather. The White Orpington is an excellent fowl both for laying and the table. The Jubilee is of a mahogany colour, and the Spangled is black, speckled with white. All the Orpingtons are hardy, useful fowls.

PLYMOUTH ROCKS.—The Barred Plymouth Rock came from America, making its first public appearance at the Birmingham Show in 1873. It is a large cuckoo-coloured fowl, the cocks weighing from 9lb. to 12lb., is hardy, stands confinement well, and is a good layer of nice-sized brown eggs. The Buff Rock is a free layer, two hens of this variety having produced 216 and 206 eggs respectively in the Utility Poultry Club's twelve months laying competition. White Plymouth Rocks are particularly hardy, and good layers. And there is also a Black Plymouth Rock. All the varieties are very good table birds, and the hens become broody.



POLISH.



SCOTS DUMPY.



LA BRESSE.

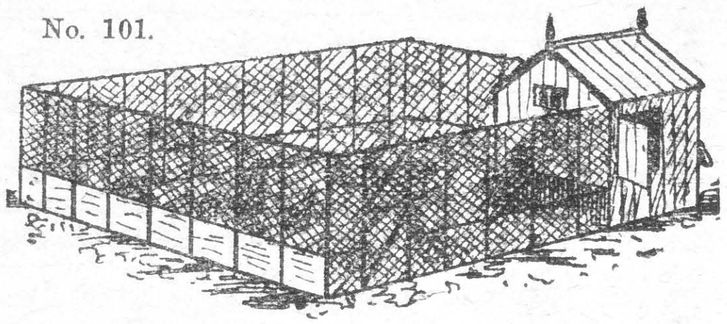
REDCAPS.—An old breed, kept mostly in Derbyshire, Nottingham, and Yorkshire. It has a large, double comb. The plumage of the hens resembles that of the Golden Spangled Hamburgh and of the cock that of the Black-red Game. The hens are prolific layers of white eggs. The Redcap is an excellent table fowl, the weight of the male birds being over 7lb. Where there is a large range this fowl is very profitable; but in a confined space it is not to be recommended.

RHODE ISLAND REDS.—American fowls, known for a good many years. Not having been bred with any care the chickens did not come true. Recently a Rhode Island Red Club has been formed, and the breed has been considerably advertised. It somewhat resembles the Red Sussex, which many poultry-keepers consider a superior fowl.

SUSSEX.—A celebrated old breed of table fowl, for a time almost allowed to die out. The varieties are the Red, the Speckled, the Light, and the Brown. The chickens mature quickly, are high-class table birds, with white legs, are very hardy, and the hens are fair layers of white eggs. They are

Span-Roof Poultry House with Large Run.

No. 101.



Poultry House, with raised floor, forming a dry run underneath, complete with nests and perches. The roof is formed of feather-edge boards, and Run is constructed of strong wooden hurdles, covered with galvanised wire netting, with gate.

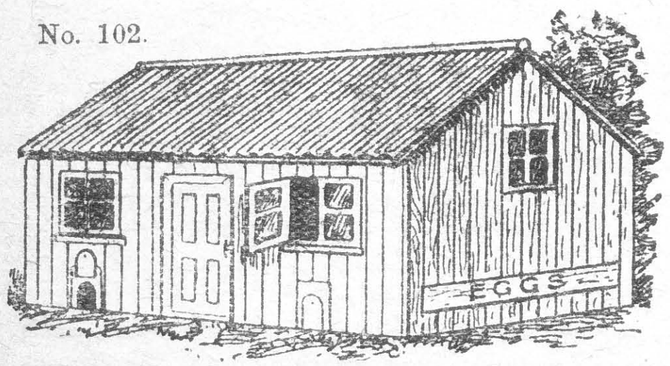
Ground space covered by House and Run is 20ft. by 20ft., of which the House is 10ft. by 8ft., 9ft. 6in. to ridge, and 6ft. 6in. to eaves.

Cash Price £8 10s.

Outside Woodwork painted with our Patent Rot-proof Composition.

Span-Roof Poultry House.

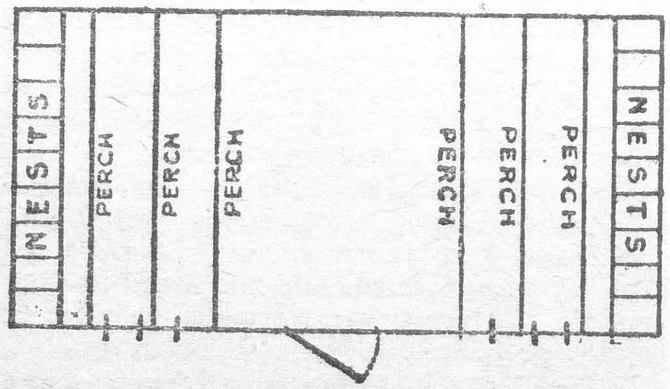
No. 102.



This is a strongly-built, commodious structure, and is adaptable alike for a large quantity of turkeys, geese, or fowls; it is constructed of good, sound tongued and grooved boards on good, strong framing; the roof is of tongued and grooved boards, covered with felt; complete with nest and perches. In sections.

PLAN OF INTERIOR.

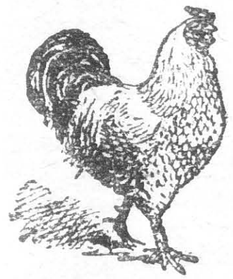
Outside Woodwork painted with our Patent Rot-proof Composition.



Length. ft.	Width. ft.	Height to Ridge. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.
20	10	9 6	6 6	15 0 0
25	12	11 0	7 0	17 10 0

good sitters, and inclined to be frequently broody in warm weather.

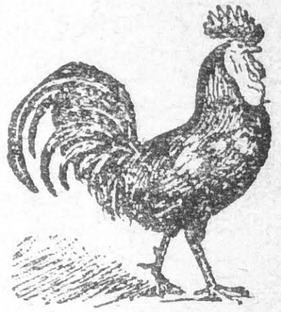
WYANDOTTES.—Most excellent fowls, considered by many people to be the most useful of all the breeds of poultry. There are numerous varieties—Silver, Golden, White, Buff, Partridge, Silver Pencilled, Columbian, Blue Laced, and Black. The White Wyandottes have proved their wonderful laying powers by winning the first prize in the competitions promoted by the Utility Poultry Club, not only for a period of twelve months, but for



WYANDOTTE.



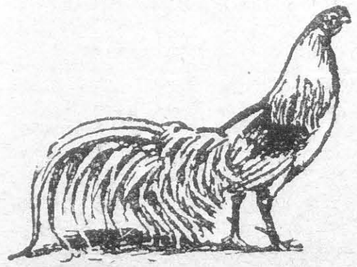
HOLLANDAISE.



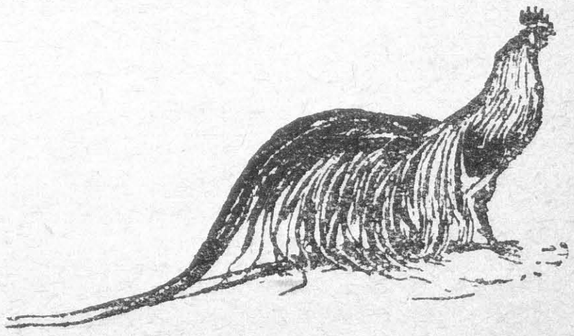
BLACK SPANISH.

shorter terms. They are very hardy, will thrive anywhere, either in confinement or on a free range, and are very good table fowls. The Silver, the Golden, the Partridge, and the Columbian are handsome birds, and all good for culinary purposes, and free layers of medium-sized, coloured eggs. The hens are good sitters, and easily broken of the desire to incubate.

SOME OTHER BREEDS.—There are other fowls not so often kept as the above. The Lakenfelder is a pretty fowl from Holland, white, with black hackle and tail. The Malines and the La Bresse are two French fowls, for which classes are provided at the Crystal Palace Show. The Courtes Pattes are



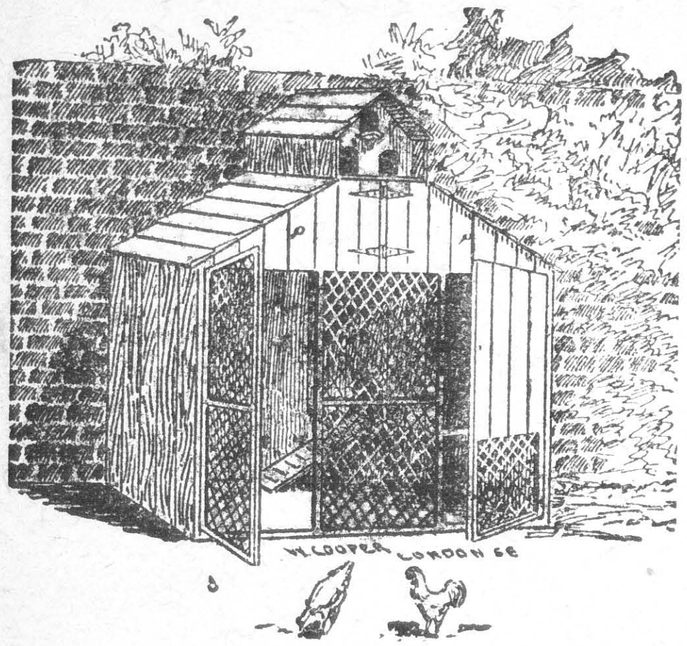
PHŒNIX.



YOKOHAMA.

extremely short-legged, black fowls, with single combs. The Black Sumatra Game is supported by a club, as is also the Yokohama, or Long-tailed Phœnix. Scots Dumpies and Scots Greys are hardy and useful fowls. Silkies are small, and of soft and

Combination Fowl and Pigeon House.



No. 103.

This House will be found useful in both large and small establishments. Its compactness facilitates the keeping of several kinds of stock under easy management. The main body is constructed for Fowls, under which is a dry run. Above the Fowl House are compartments that may be used for other kinds of stock, such as Rabbits, &c., or they may be used as fattening-pens for poultry. At the top is a Pigeon Loft, which will accommodate either three or six pairs of birds, according to the position the house is fixed in. If it stands away from a wall, extra chambers can be arranged at the back by inserting a division board—this would allow a depth of 1ft. 9in. for each of six pairs of pigeons. The Fowl House is supplied with ladder to raised floor, nest-boxes, perches, and all necessary fittings. Two doors, with locks, are hinged to the front of the House, and flap at the end for collecting eggs. The whole is strongly built in sections, and painted outside with our Patent Rot-proof Composition, ready for putting together. Portable for standing out in the open. Carefully put on rail at our Works at the following prices :—

	Cash Price. £ s. d.
8ft. long by 3ft. 6in. back to front, 4ft. 6in. at eaves, and 8ft. 6in. at ridge	4 0 0
Without back, for standing against existing wall	3 0 0

5, Bloomfield Terrace, Bath Road, Devizes.

DEAR SIRS,—The Poultry House has arrived safely, and I am very pleased with it.—I remain, yours truly,

A. J. HILLIER.

49, High Street, Longton.

DEAR SIR,—Poultry House arrived safe and sound, I was very pleased with it. It has gone together splendidly. It is too cheap—not money enough, 45s.; I should not have complained if much more.—Yours truly,

C. HAMMERSLEY.

DEAR SIR,—I beg to say the Fowl House you sent me suits admirably.—Yours,

W. LARBY.

Alpha Cottage, Golf Road, Forest Row.

The Fowl House arrived safely yesterday, and we are very pleased with it.—Yours truly,

E. MUMFORD.

silky plumage; useful for hatching and rearing Bantams and young Pheasants. And Spanish and Polish are old breeds seldom now seen, but formerly held in great esteem.

SOME USEFUL CROSSES.—Considering the number of hardy and free-laying pure breeds, it seems scarcely necessary to use cross-breeds. However, there is little doubt that a first cross between two pure breeds promotes strength and quick maturing. A favourite cross is that from a short-legged Dorking cock and a Light Brahma hen. The produce lay large eggs of various shades, and are fine table fowls. The Langshan crosses well with the Crèvecœur and the Houdan for table chickens, and with the Andalusian and the Minorca for fine free-laying, all-round birds. The Indian Game is used largely for crossing with the Dorking, the Houdan, the Faverolles, and the Buff Orpington. For laying purposes the Houdan-Leghorn,



SULTAN COCK.



SULTAN HEN.



SILKIE.

the Leghorn-Wyandotte, the Leghorn-Faverolles, and the Red-cap-Minorca are excellent.

Of all the breeds above mentioned, the amateur cannot do wrong if he keeps either White Wyandottes, Minorcas, Faverolles, White Orpingtons, Leghorns, or Columbian Wyandottes.

MOULTING.—Some fowls drop their feathers with little trouble. These generally turn out to be good winter layers. Those that are slow in moulting, and appear weak in health, are not likely to be of any use as layers during the ensuing winter. Non-sitting breeds moult rather more slowly than others. The fowls must have access to shelter, so as not to be exposed to wet when shedding their plumage.

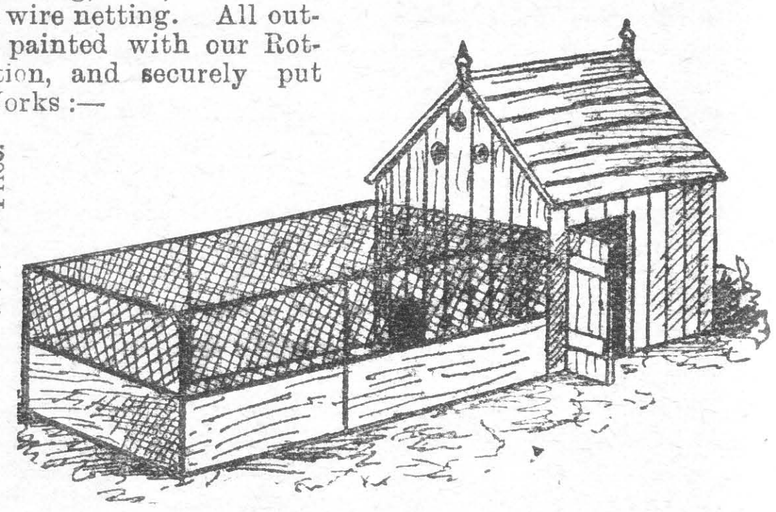
Before they begin to moult it is advisable to let them get slightly below their usual condition. The quantity of food should be reduced and they should have plenty of green vegetables. To bring on the moult the fowls should be placed in a small, warm place, and fed only on a small amount of grain, such as wheat or oats. When the feathers fall freely the quantity may be gradually increased. To keep the hens laying

Chicken and Bantam Houses with Run.

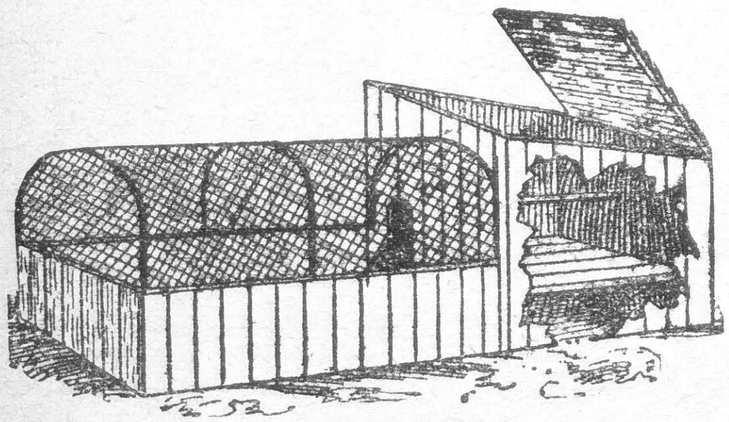
SUITABLE FOR RABBITS AND DOGS.

These are very neat designs. Constructed of good strong tongued and grooved matching, roof, weather-boards. The Runs are covered with galvanised wire netting. All outside woodwork painted with our Rot-proof Composition, and securely put on rail at our Works :—

House Length.	Width.		Length of Run.	Cash Price.
ft.	ft.	in.	ft.	
2	2	6	4	25/-
3	3	6	6	35/-
4	4	6	8	50/-

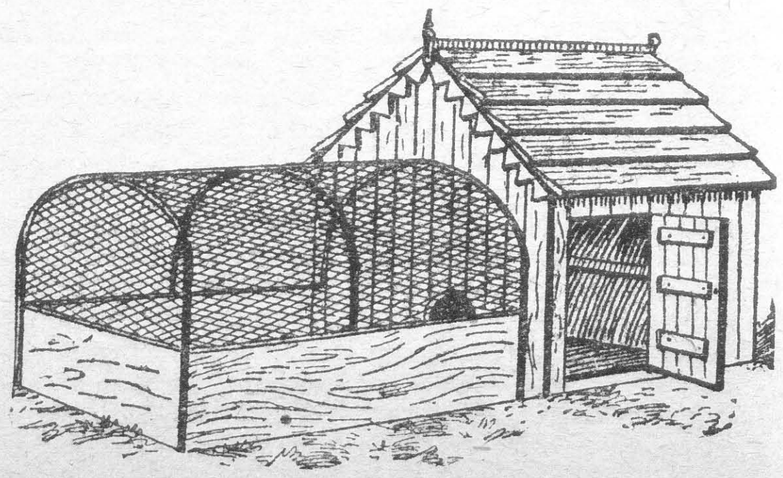


No. 104.



House Length.	Back to Front.	Height of Front.	Length of Run.	Cash Price.
ft.	ft.	ft.	ft.	
2	2	3	4	25/-
3	2	3	6	30/-
4	2	3	6	35/-

No. 105.



House Length.	Width.		Length of Run.	Cash Price.
ft.	ft.	in.	ft.	
2	2	6	4	30/-
3	3	6	6	40/-
4	4	6	8	60/-

No. 106.

as long as possible, the moult may be postponed by keeping the house where they roost cool and feeding as usual without any sudden change of diet. Cocks must be separated from hens when the moult is on, otherwise they will probably illtreat them.

DISEASES.—COLD—The symptoms are running from the eyes and nostrils, sometimes swelling of the face, and loss of appetite. Roup often follows. The cause is exposure to rain, cold winds, or draught. Keep the patient in a fairly warm place, and give eight drops of sweet spirit of nitre in a little milk twice a day. For food, some barley-meal mixed stiffly, and a little raw meat; with whole grain for supper.

COMB, DISEASES OF.—White comb is known by a scurfy appearance like flour, which often spreads over the head, sometimes with loss of feathers. It may be caused by insufficient green food, overcrowding, or dirty condition. Apply carbolised vaseline and give some Epsom salts—a good pinch put dry over the tongue every other day for ten days. Large-combed fowls are occasionally affected by hard frost, the comb first turning pale and then black. A remedy is to rub the comb with compound turpentine liniment.

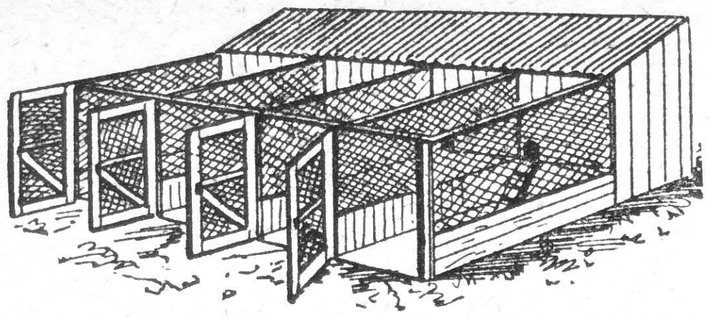
CRAMP.—A complaint to which young chickens are liable, especially if they do not have access to loose earth in which to scratch. Our Cramp Cure is a sure remedy, particularly when the little birds are allowed some dry earth or sifted ashes to scratch and exercise in.

CROP BINDING is known by a distended crop from which nothing can pass out. The cause is irregular feeding and the fowl gorging itself and drinking a quantity of water; or the collection of food round a stone or a feather that the bird has swallowed. The contents of the crop must be gently worked about by the hand, and a teaspoonful of sweet oil poured down the throat. This should be done three or four times a day. If not successful, the crop must be opened and the contents removed, the crop being afterwards sewn up. The patient must be fed on soft food.

DIARRHŒA. — Induced by stale green food, sour soft food, sudden change of diet, &c. It may be stopped by feeding on rather drily mixed barley-meal, and boiled rice sprinkled with powdered chalk. Green food should be stopped until the fowl is well.

EGG-BOUND.—This is usually caused by an exceptionally large egg which the hen is unable to pass. She will visit the nest and come out without having laid and with drooping wings and tail depressed. The hen must be caught and held so that a teaspoonful of sweet oil can be poured into the vent, then returned to the nest. If the egg does not appear in half an

Range of Poultry Houses and Runs.



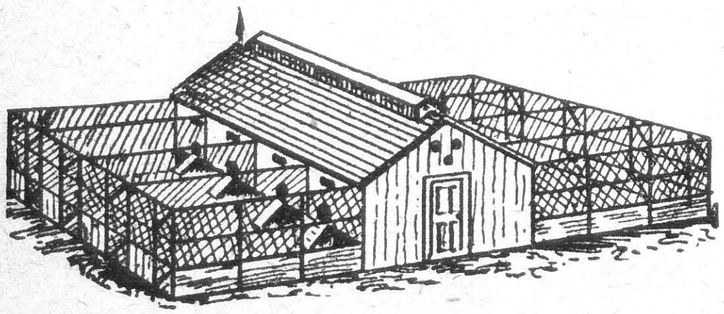
No. 107.

The above illustration shows a very neat range of four Houses and Runs; the Houses are substantially constructed, complete with backs, perches, ladders, and nests; roof of feather-edge boards. Size of each House is 5ft. long and 4ft. wide. Each Run is 14ft. long, inclusive of a covered way under the House, and 5ft. wide, being fitted with gates. All woodwork well painted outside with our Rot-proof Composition. The whole complete in sections, in perfect readiness for erection, and securely put on rail at our Works.

Cash Price ... ... £12.

Special quotations given for any number of Houses and Runs in one range upon receipt of full particulars of requirements.

Improved Range of Span-Roof Fowl Houses and Runs.



No. 108.

The above illustration shows a range of eight Houses and Runs, viz., four on each side; it has a passage-way 3ft. wide down the centre, by which attention to sanitary requirements is facilitated. The Houses are strongly constructed of good sound matching, the roofs being boarded and covered with felt; they have raised floors, thus affording a dry run for the fowls, and each House is fitted complete with nests, perches, and ladder. The Runs are formed of wood framing, covered with galvanised wire netting; each is fitted complete with gate. All outside woodwork painted with our Patent Rot-proof Composition. Complete in sections, in perfect readiness for erection. Size of each House, 6ft. by 5ft., 11ft. high to top of lantern, 6ft. high to eaves. Size of each run, 10ft. by 6ft.; 6ft. high.

Cash Price for eight Houses and Runs ... £30.

Proportionate prices for larger or smaller Ranges on receipt of full particulars.

hour, the hen must be held with the vent over a jug of very hot water. This usually results in the passing of the egg.

EGG-EATING HENS.—If only one or two hens are known to have acquired this vice, it is advisable to kill them. If it has spread to all the hens, it may sometimes be stopped by removing the contents of one or two eggs and refilling them with mustard and snuff and placing them in the nest. Repeated daily for a week or so this may be successful.

FEATHER EATING.—The cause of this habit is not certain. It is supposed to be induced by insufficient green food, insect vermin, or want of animal food. When once the vice is thoroughly established it is incurable. The fowls that are being plucked should have the plumage saturated with Jeyes' Fluid, mixed with twice the quantity of water. Some flowers of sulphur should be added to the soft food, and twice a week enough Epsom salts to make the drinking water taste.

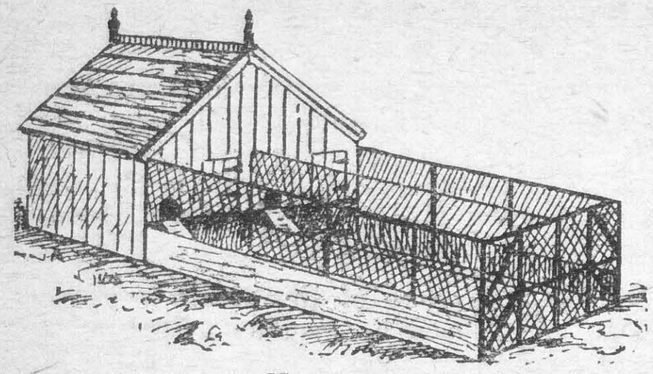
GAPES.—A very fatal complaint amongst chickens when between three and eight weeks old. It can be known by the little birds sneezing at first and afterwards by their gasping and "gaping" for breath. The cause is the presence in the windpipe of small red worms. Many preparations for the cure of gapes are advertised. A cure can sometimes be made by putting the affected chickens into a box, puffing smoke from a tobacco pipe into the box, and keeping the chickens in the box until they begin to stagger. Two or three applications of the smoke will be sufficient, on different days. A small piece of camphor—about the size of a tare—pushed down the throat will sometimes cure.

PARASITES.—These can be kept in check by sprinkling our Disinfectas in the house and run and by the free use of our Insect Powder.

ROUP.—When the running at the nostrils and eyes which occurs in an ordinary cold becomes thicker and smells offensively, the bird probably has roup. The sufferer must at once be isolated, as the disease will otherwise quickly spread. The face and nostrils must be bathed three or four times daily, and the mouth washed with a lotion made of a quarter of an ounce of sulphate of copper dissolved in a pint of water. In addition to this our Roup Pills must be given. The food should consist of barley-meal or oatmeal, mixed with milk, to which some minced raw meat is added. When recovering, our Egg Producer will be found valuable in restoring strength and vigour.

SOFT EGGS are caused by overfeeding, insufficient shell-forming material, or too stimulating a diet. Some Epsom salts should be added to the drinking water and the diet corrected.

Double Improved Fowl House and Run.



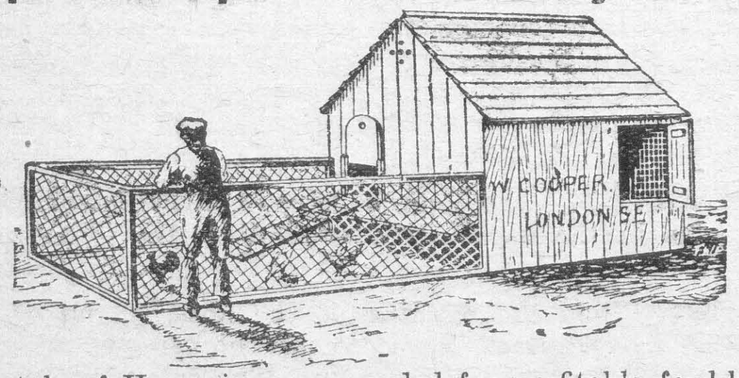
No. 109.

This is a Span-roof Poultry House, with partition through centre, thus forming two complete Houses; each House has raised floor, which forms a dry run underneath; fitted with nests, perches, ladders, and flap for access to eggs. Painted with our Patent Rot-proof Composition. The runs are composed of wood framing, covered with galvanised wire netting at sides, ends, and top; each being fitted complete with gate. Constructed in sections in readiness for erection, and securely put on rail at our Works at the following respective prices :—

Total Size. Length. ft.	Total Size. Width. ft.	Height at Ridge. ft. in.	Height at Eaves. ft. in.	Cash Price. £ s. d.
6	6	6 0	4 0	2 10 0
6	8	7 0	4 6	3 15 0
7	10	7 6	4 6	4 5 0
8	12	9 0	5 0	5 0 0

Improved Span-Roof Poultry House.

No. 110



This style of House is recommended for profitable fowl-keeping. It has a raised floor, sliding shutter, and ladder, as shown in illustration, and is fitted inside with Nest-boxes, with flap at back for access to Nest-boxes and Perches. Lock and key are supplied to both flap and side door. Painted outside with our Patent Rot-proof Composition, and carefully put on rail at our Works complete at the prices below :—

Length. ft.	Width. ft. in.	Height to Ridge. ft. in.	Cash Price. House only. £ s. d.	Portable Run. Length. ft.	Cash Price. Run. £ s. d.
3	2 6	5 0	1 10 0	4	0 7 6
4	4 0	5 9	2 0 0	6	0 12 6
5	5 0	6 3	2 15 0	7	0 17 6
6	6 0	7 3	3 0 0	8	1 5 0

Fitted with Wheels, 10s. extra.

DUCKS.

When properly fed and treated ducks prove as profitable as ordinary poultry. Many ducks are most prolific, laying every day for weeks together. There is a ready sale for duck eggs, and well-fed young ducks can always be disposed of. Ducks can be kept in health without a pond, provided that a good-sized tub is available—sunk in the ground and filled with water. They will lay freely in a small run, and ducklings can be reared in closer quarters than chickens.

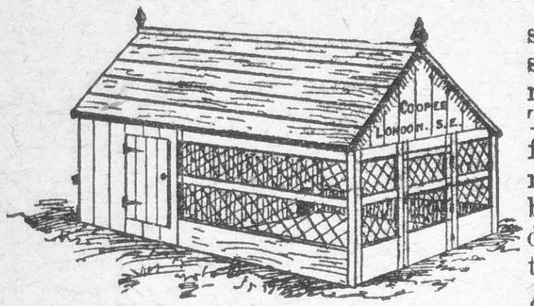
Though a duck is an aquatic bird, the house in which it sleeps must not be damp or sloppy. So the floor must be covered with dry straw or other litter, changed often. Our houses, Nos. 180 and 181, are made for ducks. They are 5ft. long, 2ft. 6in. wide, and 2ft. 6in. high. A division board is inside, forming two compartments, and there are two entrance doors, hinged at the bottom. This enables the ducks to be shut up each evening. Any eggs will then be laid on the bedding, as they usually lay early in the morning. Ducks are not particular where they lay, dropping the eggs about anywhere.

Old ducks are of no more use than old fowls. The stock should, therefore, consist of young birds, if possible, hatched in March, and not more than two years old. Four ducks are enough to run with one drake. If a good number of ducks are kept, our span-roof duck house, No. 183, will be found very suitable. It is 8ft. by 6ft., 8ft. high to the ridge, and 6ft. high to the eaves. Or for an ornamental duck house No. 182 is in much request.

Ducks required for laying must not be overfed. The first meal, especially in the winter months, should be of soft food. Equal parts of middlings and ground oats is a good mixture, mixed stiffly with warm water. At least three times a week some animal food is necessary if the ducks are kept in confinement. Also they require plenty of green vegetables. In the evening they must have a feed of grain—either oats, barley, or wheat thrown into a pan of water. With this some coarse sand or grit to aid digestion. Fat ducks will not lay, so they must not have more food at a time than they can eat greedily.

The usual way to hatch ducklings is under an ordinary hen. Ducks are poor sitters and mothers. The incubating period is twenty-eight days. When the young ducks are hatched give either chopped hard-boiled egg and bread crumbs, with a little fine sand added, or bread and milk and oatmeal. After the first ten days the diet can consist of meal, such as ground oats, barley-meal, maize-meal and middlings, mixed into a crumbly paste, with the addition of some animal food. The latter is necessary for rapid growth. Some grit must be added to the

Poultry Houses with Covered Runs.

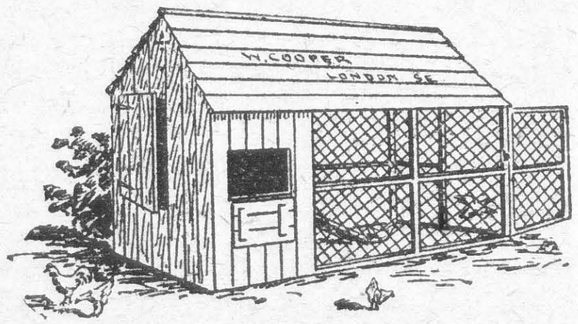


No. 111.

A strongly-built serviceable structure, constructed of good sound tongued and grooved matching, weather-board roof. The Run is covered at sides and front with galvanised wire-netting, the bottom part being boarded up, thus excluding draughts. Constructed in sections in readiness for erection. All outside woodwork painted with our Patent Rot-proof Composition. Carefully put on rail at our Works at the following respective prices :—

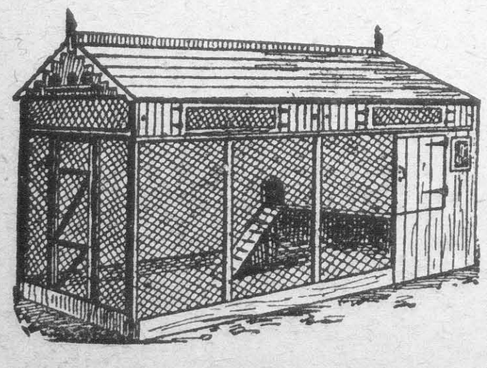
	Cash Price. £ s. d.
12ft. by 4ft. by 6ft. high	3 5 0
12ft. by 6ft. by 7ft. high	4 0 0

This is a compact House for a few birds ; thoroughly well made. It has a raised floor and ladder, a door at back, and hinged flap at side for collecting eggs; weather-boarded roof over House and Run, painted outside with our Patent Rot-proof Composition. Fitted complete with Nest-boxes and Perches. Carefully put on rail at our Works at the following prices :—



No. 112.

Length. ft.	Width. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.
7	3 0	4 0	2 10 0
9	3 6	4 6	3 0 0
12	4 0	5 0	3 10 0



No. 113.

Span-Roof Poultry House, Covered Run and Pigeon Loft.

Complete with nests, perches, and ladder; and has raised floor and a pigeon-loft at top, complete in sections.

Size over all.	Cash Price. £ s. d.
12ft. by 5ft., 7ft. high	5 0 0
14ft. by 6ft., 8ft. high	6 5 0

Painted with our Patent Rot-proof Composition.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

food, as ducklings do not thrive without it. The food should be given in troughs and not thrown on the ground. Our chicken troughs are eminently suited for ducklings, as they are readily cleaned. Water should be allowed the young ducks for drinking.

Cooked rice makes a good change now and then. Chopped green food—such as nettles and lettuce—is necessary if the ducklings are kept in a small space. They ought to be fit to kill, if fed in this way, when from nine to ten weeks old. They should not be kept longer or they will begin to cast their first feathers and lose flesh.

Of recent years some of the old breeds of duck have been improved in size and laying powers, and some useful new breeds have been created by clever crossing. The Aylesbury, one of the oldest breeds, continues to be held in great esteem. It is very large, it grows and matures rapidly, and the flesh is most delicate. Aylesbury ducks are good layers of large eggs. The eggs vary in colour from green to almost white. The pale, flesh-coloured beak of the Aylesbury becomes yellow with exposure to hot sun. This duck is not quite such a free layer as the Pekin, another white duck. The Pekin is more suitable to a small run than the Aylesbury. It is largely kept in America and is particularly hardy. On some of the duck farms in the United States Pekins have averaged over 140 eggs per duck.

The Rouen is a beautiful duck, in plumage the facsimile of the wild mallard. It is not as good a layer as either the Aylesbury or the Pekin, but it attains great size, drakes having scaled 14lb. A fine, large duck is the Cayuga—black in colour, an excellent layer of large green eggs, and of fine flavour for the table.

Where there is a free range the Indian Runner will be found a most prolific layer. It is a non-sitter, lays at about sixteen weeks old, is very hardy, and easily reared. It is small, so not advisable when only ducks for the table are desired. But for a quantity of good-sized eggs, and for a duck that will obtain almost all of its own food by foraging, the Indian Runner is unsurpassed.

A new breed of duck that is gaining many friends is the Campbell Khaki, a buff-coloured duck with bronze neck and tail. It was produced from a cross between the Rouen and the Indian Runner. The Khaki are said to be great layers and good table ducks.

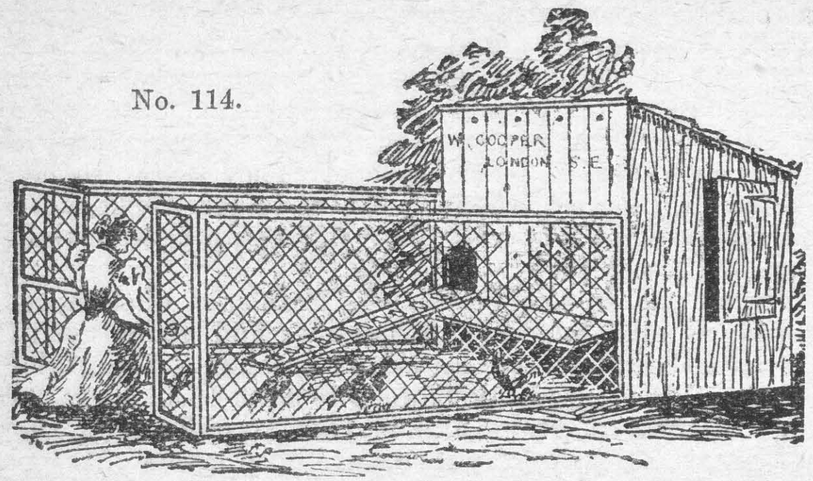
If a cross-bred duck is desired the amateur cannot do better than keep Aylesbury-Pekin, which has the good qualities of both its parents.

GEESE.

A great advantage in geese-breeding is that they can be reared cheaply and that goslings are very easy to bring up. If there

Portable Lean-to Poultry House and Run.

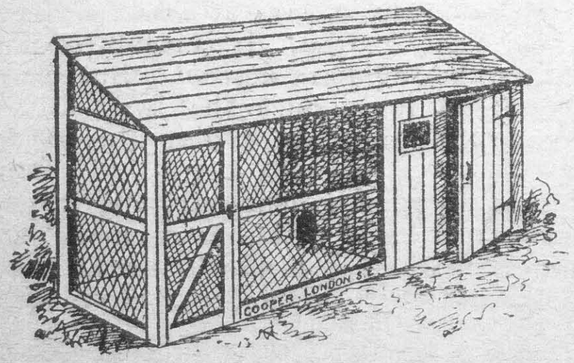
No. 114.



This House can be readily moved for change of ground. It is easily fixed, being made in sections. The floor is raised above the run, and the roof weather-boarded, rendering it rain-proof. It is fitted with nest-boxes, perches, sliding shutter, and door with lock and key. The wire-netted run is 4ft. high, and is made with door at the end. Painted outside with our Patent Rot-proof Composition. Carefully put on rail at our Works at the following prices :—

House.	Run.	Cash Price. £ s. d.
4ft. by 3ft.	4ft. long	2 2 0
5ft. by 4ft.	6ft. ,, ...	2 15 0
6ft. by 5ft.	7ft. ,, ...	3 10 0
8ft. by 7ft.	8ft. ,, ...	5 0 0

These Poultry Houses are portable and complete in themselves, requiring no wall to lean against.



No. 115.

Lean-to Fowl House with Covered Run.

Constructed of good sound timber; the roof of both House and Run is of tongued and grooved boards, covered with felt; complete with glazed window, nests, and perches. In sections in readiness for erection.

Length. ft.	Width. ft.	Height at Back. ft.	Height at Front. ft.	Cash Price. £ s. d.	Back extra. £ s. d.
8	4	6	4	2 10 0	0 5 0
10	5	7	5	3 10 0	0 7 6
12	5	7	5	4 0 0	0 7 6
12	6	8	5	5 0 0	0 10 0

Painted with our Patent Rot-proof Composition.

is an open common or piece of waste land, geese will obtain most of their own food. Unlike ducks and fowls, geese continue profitable for several years. A gander is at his best when five or six years old. Young geese, as a rule, do not lay before they are two years old. Three geese are enough to run with one gander.

Geese generally begin to lay in February if they are comfortably housed. Our house, No. 88, will be found a most convenient one for these birds. As the eggs are laid it is better to remove them and store them out of reach of frost. The gander and geese must have access to a pond or large tub of water, or the eggs will not prove fertile. Most geese are good sitters and mothers, but some pure Toulouse geese do not sit. A goose will cover from eleven to thirteen eggs. A large fowl, such as a Cochin, will hatch from four to six goose eggs. The period of incubation is from twenty-eight to thirty days. The eggs should be sprinkled every few days with water.

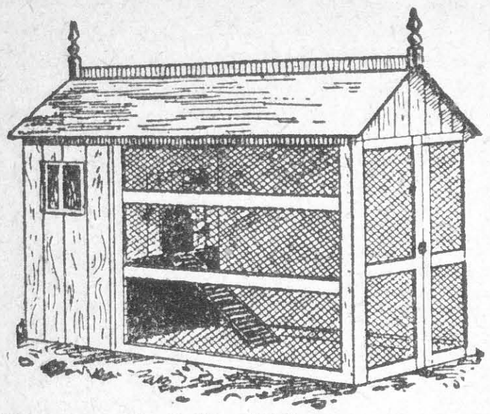
When the goslings are hatched out, the mother and her young must be moved to a coop, placed on dry, short turf. A good food for the young birds is chopped-up egg and bread crumbs, mixed with some minced young nettles or onion tops. After a few days of this, barley-meal is a good diet till they can eat grain. Hard food can form the staple diet at a month, and after six weeks no soft food is required. Plenty of fresh water must be given in a shallow dish for drinking. They should not be allowed to swim till most of the feathers have appeared.

The stock geese require very little food. A feed of oats of an evening is usually enough. To fatten young geese for the table they are shut up for a month and fed twice a day—in the morning on a soft food, made of a mixture of barley-meal and middlings; and in the evening on oats or wheat, after the grain has been soaked.

There are two breeds of goose only that are commonly kept in this country, the Toulouse and the Embden. The Toulouse is dark grey, passing into white at the underparts and tail coverts. It is very large and a poor mother, some geese being non-sitters. The Embden is a pure white goose with blue eyes, very hardy and quick maturing. A favourite goose, and the one generally seen, is a cross between these two breeds. The Chinese goose is kept now and then. It is a freer layer than the Embden or Toulouse, and is said to lay upwards of one hundred eggs in the year.

TURKEYS.

Turkey rearing, though it is carried on more than was the case some few years ago, is still considered by many people



No. 116.

Span-Roof House and Run for Pigeons or Poultry.

Constructed in sections to bolt or screw together. The roof is of feather-edge boards, and complete with door, window, ventilator, nests, and perches.

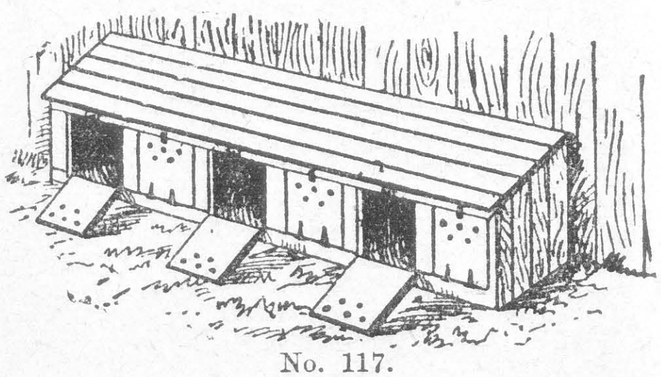
Painted with our Patent Rot-proof Composition.

Length. ft.	Width. ft.	Height at Ridge. ft. in.	Height at Eaves. ft. in.	Cash Price. £ s. d.
6	3	5 0	3 6	2 10 0
8	4	6 0	4 0	3 0 0
10	4	7 0	5 0	3 5 0
12	5	7 0	5 0	4 0 0
14	6	8 6	5 6	5 0 0

Ranges of Hatching Boxes.

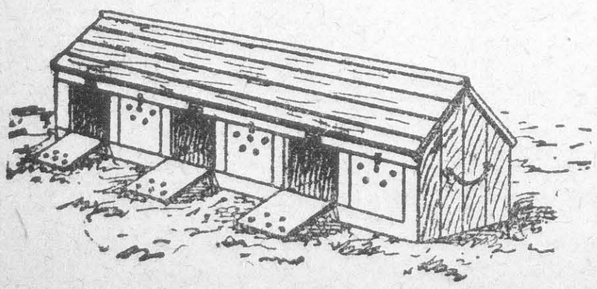
(Lean-to.)

The illustration shows a range of six Boxes; they are thoroughly well made of good, sound match-boarding, with weather-board roof, and are painted outside with our Rot-proof Composition.



No. 117.

Cash Price (for six Boxes) £1 1s.



No. 118.

(Span-Roof.)

Similar in construction to No. 117, but with partition through centre, forming six Boxes on each side.

Cash Price (for Twelve Boxes), £1 12s. 6d.

10, Leicester Road, Ashby-de-la-Zouch.

DEAR SIRS,—I have received Poultry House, and I am well satisfied with it.—Yours truly,

J. SHAW.

to be risky and unprofitable; but so much improvement has taken place since these birds have become better understood, that, provided there is a free range, turkeys pay extremely well. Care must be taken to avoid in-breeding by frequent change of blood. And the stock birds must not be allowed to get fat.

The turkeys to produce large offspring must be as large in frame as possible. Hens about 18lbs. in weight do well with a cock of about 30lbs. One mating is sufficient to fertilise all the eggs in one laying of the turkey-hen. But it is none the less better not to run the male with more than twelve hens. If the stock birds are given some warm, soft food, of ground oats and middlings in the morning and of some wheat or other grain at roosting time, the hens should begin to lay in February.

Turkeys are good sitters and mothers. The chicks break the shell from the twenty-sixth to the twenty-ninth day of incubation. They require food when twelve hours old. A most successful mode of feeding is to give milk curds and oatmeal at first every two hours. This is continued for about three days and then replaced with middlings, scalded and dried off with ground oats. Water and grit are supplied. At the expiration of three weeks the young birds need only be fed every three hours, and some chopped-up dandelions or minced onions added to the soft food. The little birds have every evening a feed of groats, or some dry chicken food.

Care must be taken to keep the young turkeys dry and out of the reach of rain until they are from eight to ten weeks old, when they "shoot the red." They can then have ordinary poultry food and are quite hardy. About six weeks before required for the table they should be put in a roomy shed with plenty of ventilation. The food used is ground oats and barley-meal mixed with milk, with a little melted fat added for the last ten days. This is given in the morning. Boiled rice and oatmeal are allowed at noon, and in the evening the morning meal is repeated, varied with boiled grain, such as wheat or barley. This feeding will carry them on until killing time. Clean drinking water and plenty of grit are necessary. The English breeds of turkey, the Norfolk and the Cambridge, have been much improved of recent years in size and hardiness by crossing with the American Bronze turkey.

ROT-PROOF COMPOSITION.

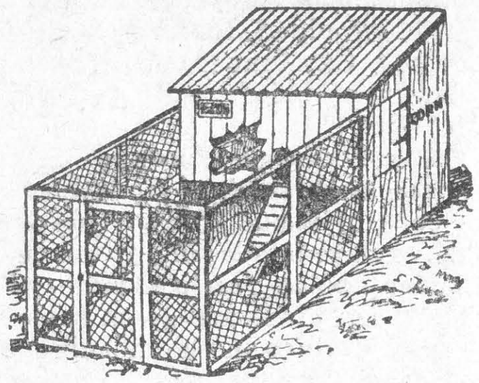
A good preservative for all Woodwork exposed to the weather, and suitable for Farm Buildings, Poultry Houses, Palings, Fences, or any description of outdoor Woodwork.

1 gal. 2s. 6d., 2 gals. 4s. 9d., 5 gals. 10s., 10 gals. 17s. 6d., 20 gals. 30s., 40 gals. 50s.

Put on rail at our Works. Cans and casks included (not returnable).

Lean-to Poultry House, with Corn-Room and Run.

No. 119.



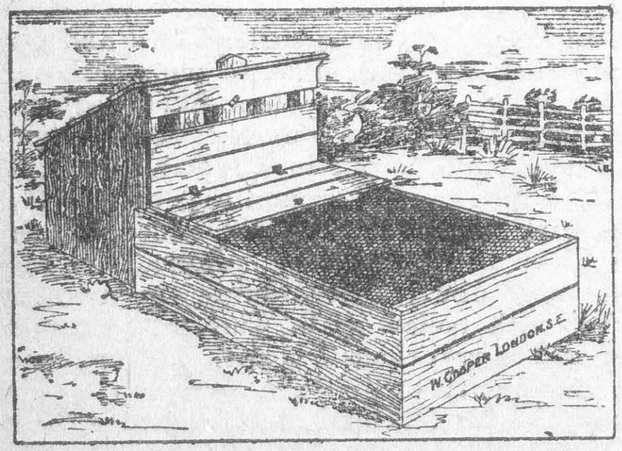
Substantially constructed; provided with raised floor, complete with nests, perches, ladder, and ventilator; 2ft. partitioned off to form corn-store, with door, lock, &c. The roof is of feather-edge boards, and the run is formed of wood framework covered with galvanised wire netting, with gate. In sections in readiness for erection.

Length. ft.	Back to Front. ft. in.	Height at Back. ft. in.	Height in Front. ft. in.	Length of Run. ft.	Cash Price. £ s. d.
6	3 6	5 6	4 6	6	3 15 0
9	5 0	7 0	6 0	8	4 10 0
12	5 6	8 0	7 0	12	6 0 0

Painted with our Patent Rot-proof Composition.

The Safety Chicken Coop.

We sell on an average 5,000 of these every season.



No. 120.

This is a strongly-made and serviceable Coop; the construction of same has been greatly improved this season; stronger and more convenient. We guarantee you cannot purchase a Coop equal to this at half as much again; boarded sides and weather-boarded roof. Fitted with a shutter that can be used either to shade from the sun or to shut off cold winds and beating rain. It also secures against the attacks of predatory vermin. Complete.

CASH PRICES.

Size 23in. wide, 21in. deep, 1ft. 10in. high at front, 1ft. high at back.
3s. 3d. each 36s. per doz., £13 5s. per 100.
3ft. Movable Wire Run, 2s. 3d. each extra, 24s. per doz.

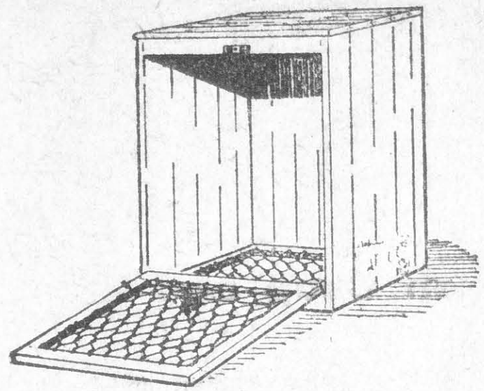
Outside painted with our Patent Rot-proof Composition.

"The Lodge," Rowde, Devizes.

Miss A. St. George has received the Poultry House safely, and is very pleased with it.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Hatching and Nest Box.



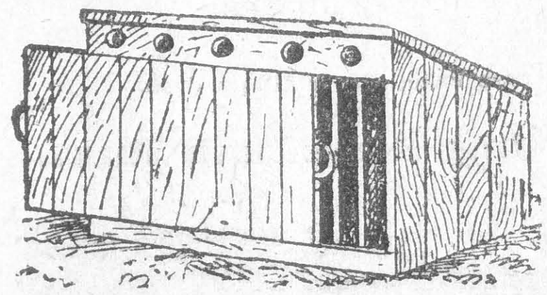
No. 121.

THOUSANDS SOLD EVERY SEASON.

This is an improved Sitting-box for Hens. The bottom, which is made of fine mesh galvanised netting, is hollowed so as to preserve the shape of the nest, and to keep the eggs from being kicked away from the hen. The bottom is also proof against rats. Thoroughly well made of seasoned matchboards. It is 15in. high, 16in. wide, 13in. deep.

Cash Prices, One-Nest Box, 2s. 3d.; 12, 25s.; 100, £9.

Outside painted with our Patent Rot-proof Composition.



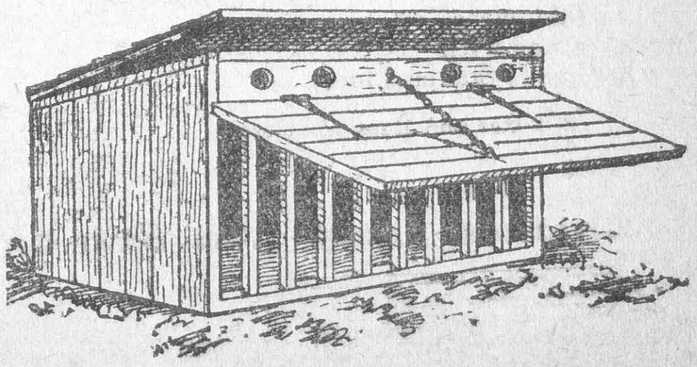
No. 122.

Chicken Coop with Sliding Shutter.

This Coop is constructed of good, sound, tongued and grooved matching, fitted with a sliding shutter, and the roof, which is hinged, of weather boards.

Cash Price (complete), 7s. 6d. each, or £3 15s. per dozen.

"Safety" Chicken Coop.



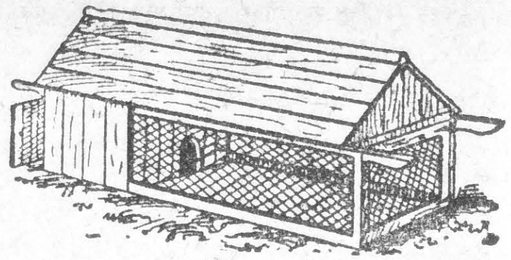
No. 123.

Sides and ends constructed of good tongued and grooved matching, and roof—which is hinged to lift up—of weather boards; the front shutter is also hinged and is fitted with a galvanised chain, thus allowing of shuttering the Coop to any degree as may be desired; painted outside with our Rot-proof Composition.

Cash Price ... ... 6s. each. 65s. per dozen.

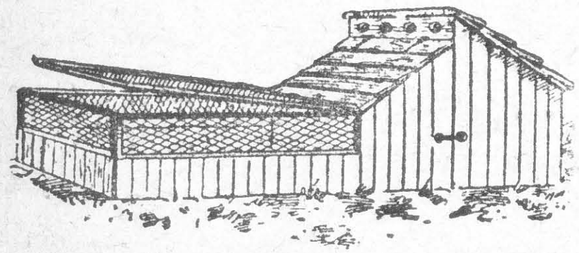
Span-Roof Poultry Coop with Covered Run.

Coop, 2ft. 6in. by 2ft. 6in., 2ft. high; Run, 4ft. long.
Cash Price, £1 5s., or 3 for £3 7s. 6d.



No. 124.

Pheasant or Chicken Coop and Run.



Constructed of tongued and grooved boards; roof of feather-edge. The coop and run are detachable, and the upper part of run is formed of galvanised wire netting.

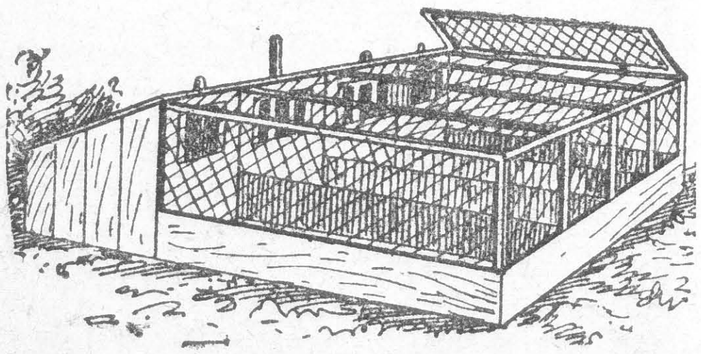
No. 125.

Size, 6ft. 6in. by 2ft. **Cash Price, £1; or £10 per dozen.**

Range of Hatching Boxes and Runs.

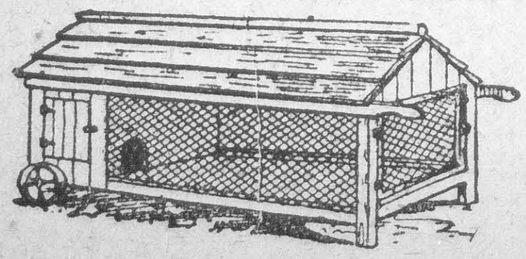
No. 126.

Constructed of good sound tongued and grooved matching, roof weather-boards; runs of wire netting, boarded at bottom, tops hinged to open; all outside woodwork painted with our Rot-proof Composition.



	Cash Price. £ s. d.
2 Boxes and Runs complete	0 17 6
4 " " "	1 5 0
6 " " "	1 15 0

Chicken Coop and Run on Wheels.



No. 127.

6ft. 6in. long by 2ft. 6in. wide.

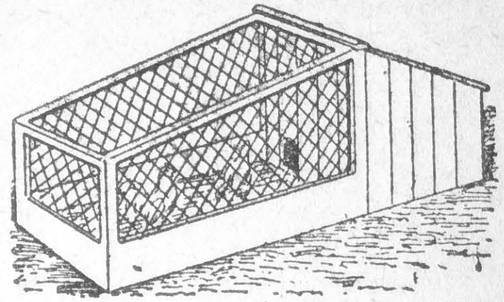
Cash Price, £1 15s.
3 for £5.

Bantam or Chicken House and Run.

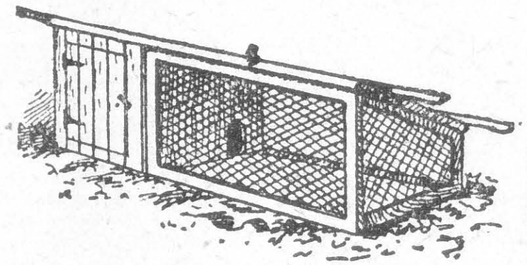
No. 128.

6ft. by 2ft. 6in., 2ft. 6in. high to ridge.

Cash Price (complete), £1 1s.
3 for £3.



Pent-Roof Poultry Coop with Covered Run



No. 129.

Coop, 2ft. 6in. high in front, 2ft. 6in. wide.

Run 4ft. long, 2ft. 6in. wide.

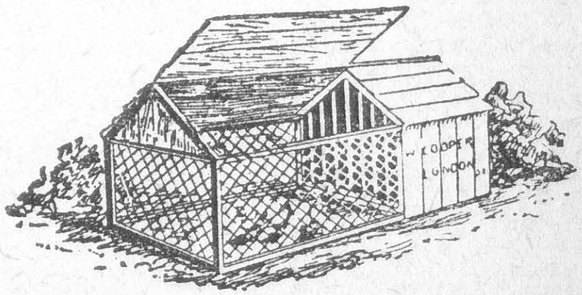
Cash Price, £1 1s. 3 for £3.

Improved New Coop and Run.

No. 130.

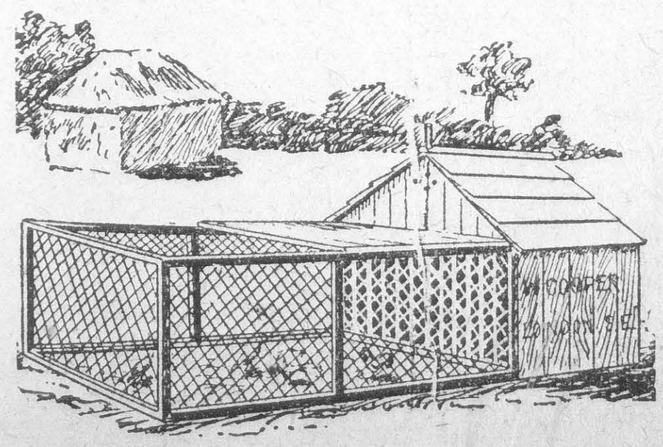
Length 6ft., width 2ft., height at eaves 1ft. 2in., and 2ft. at ridge.

Cash Price, £1 2s. 6d.
3 for £3 3s.



Coop and Run for Poultry or Game.

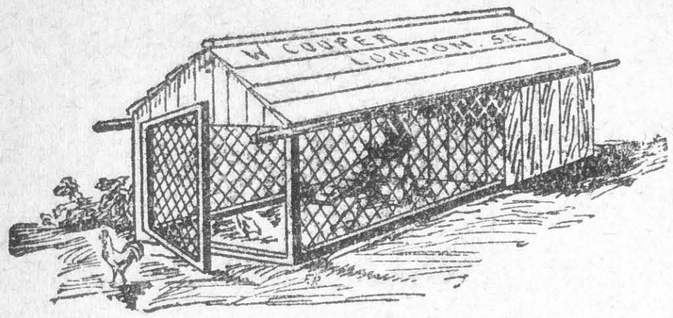
No. 131.



The Run may be detached at night, and the Coop closed up. The Coop is 1ft. 2in. high to eaves, 2ft. high at ridge, and 2ft. wide; together with run it is 7ft. long.

Cash Price, £1 5s.
3 for £3 7s. 6d.

New Span-Roof Poultry Coop and Run.



No. 132.

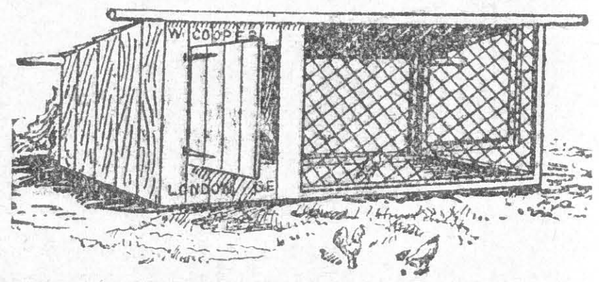
The Coop is 2ft. 6in. by 2ft. 6in., and the Run 4ft., measuring in all 6ft. 6in. long, with raised Floor.

Cash Price, £1 7s. 6d.
3 for £3 15s.

Lean-to Poultry Coop and Run.

No. 133.

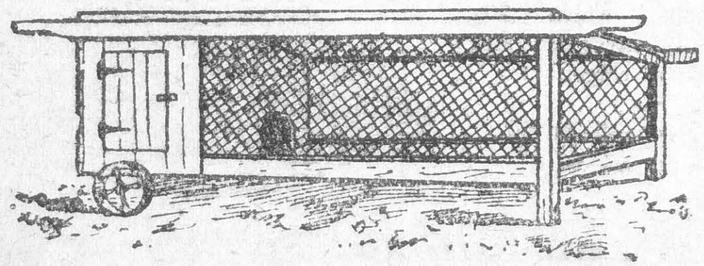
The Coop is 2ft. wide and 2ft. 6in. high in front; fitted with door and handles for moving; the Run 4ft. long and 3ft. wide, with galvanised wire netting in front and Wire Door at end.



Cash Price, £1 5s.; or 3 for £3 7s. 6d.

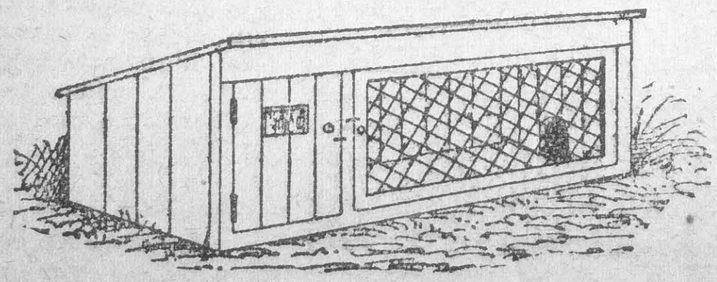
Chicken Coop and Run on Wheels.

No. 134.



6ft. 6in. long by 2ft. 6in. wide. Cash Price, £1 10s.; or 3 for £3 15s.

Improved Bantam or Chicken House and Run.



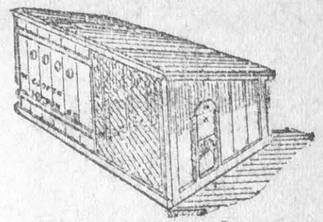
No. 135.

6ft. by 3ft.; 2ft. 8in. high in front.

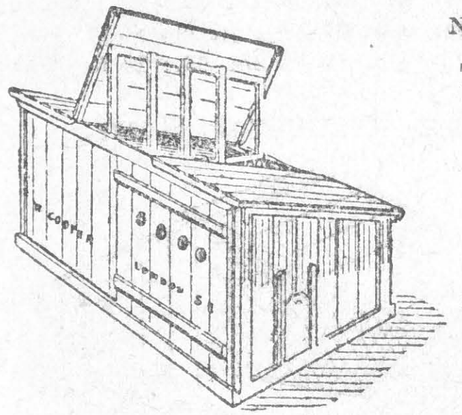
Cash Price, £1 5s.
3 for £3 7s. 6d.

The "Sussex" Hen Coop.

Our latest and Improved Hen Coop and Complete Coop Feeder or covered Run combined. The barred partition behind which the hen is confined is movable. The other part acts as a run for chicks.



No. 136. Sliding Shutter Open.



Sliding Shutter Closed.

The sliding shutter can be open whole or part according to the weather, so that chicks can be reared in this Coop at all times of the year. A small trapdoor is fitted at the end to enable the chicks to go in or out as required.

The most perfect Coop yet invented.

Size, 4ft. long, 2ft. wide.

Cash Price, 7s. 6d. each; 6 for 42s.; 12 for 80s.

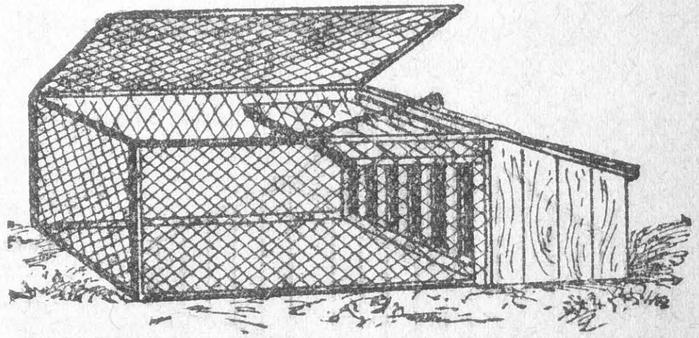
Improved Coop and Run.

No. 137.

Cat, Rat, and Sparrow Proof.

Coop, 2ft. square; Run, 3ft. long, 2ft. high.

Cash Price, 15s., or £8 per doz.



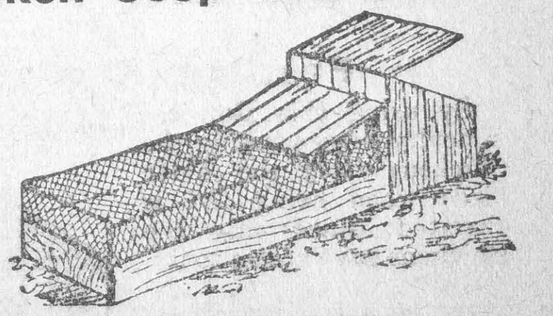
The Safety Chicken Coop and Run.

No. 138.

Coop, 2ft. by 2ft.

Run, 3ft. long by 1ft. high.

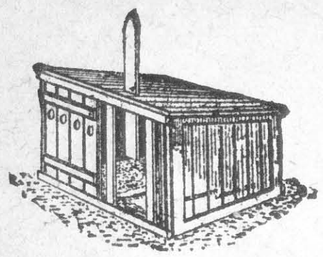
Cash Price, 16s.
£8 10s. per dozen.



Flora Street, Bowmore, Islay, N.B.

DEAR SIR,—I got Fowl House erected to-day, and my few birds are most comfortably housed. It suits my purposes well, and I am pleased and thankful that I was guided to order it. I think some others will give you an order.—Thanking you for your attention, I remain, yours sincerely,
ELIZABETH CURRIE.

The "Essex" Coop.



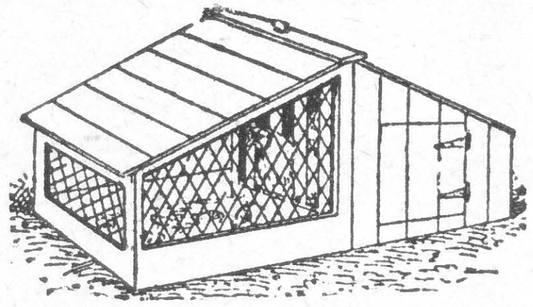
No. 139.

The half-boarded front gives a shelter for chicks in all sorts of weather, and the sliding front makes them as perfect and weatherproof as can be desired.

Size, 3ft. long, 2ft. wide, 1ft. 6in. high.
Cash Price, 5s. each; 6 for 27s. 6d.; 12 for 50s.

Chicken Coop with Covered Run.

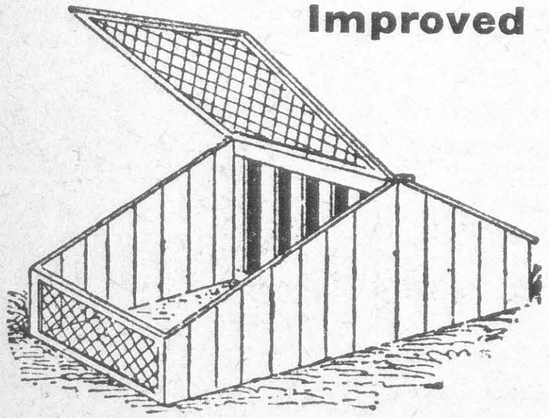
No. 140.



4ft. by 2ft., 3ft. high to ridge, 2ft. high to eaves.

Cash Price (complete), £1 1s.
£10 10s. per dozen.

Improved Coop and Run.



No. 141.

Cash Price, 10s. 6d.

£5 10s. per dozen.

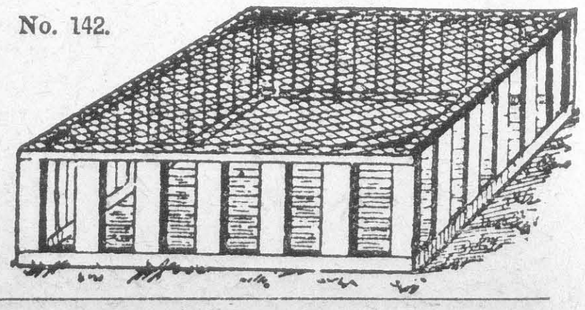
Feeding Run for Chickens.

By using this Run the difficulty of separating the Chickens from the older birds when being fed is obviated, since only the Chickens have access to it.

Size, 3ft. square, 15in. high.

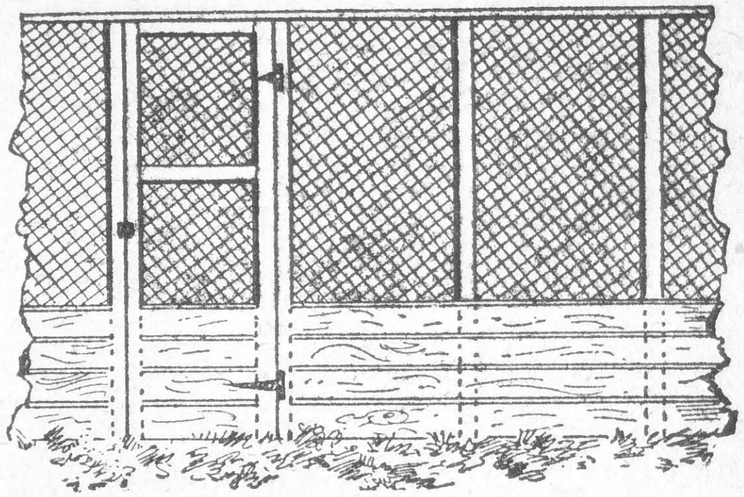
Cash Price, 5s.

No. 142.



Rettendon Place, Battles Bridge, Wickford, Essex.
Run safely received, and am well satisfied.
C. MEESON.

Portable Poultry and Game Fencing.



No. 143.

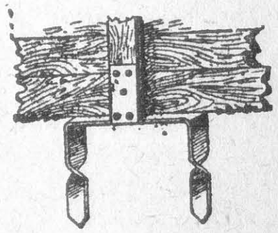
These Hurdles are constructed in 6 ft. lengths, and are 6ft. high, the bottom part being boarded up 2ft. and the remainder covered with 2in. mesh wire netting. They are much cheaper and stronger than iron hurdles, and the bottom part being boarded make them a protection from sharp winds.

Cash Price ... ... 6s. each.
Gates, 2ft. wide and hinges complete, 4s. each.
Iron feet 1s. each extra, see No. 144.

Iron Feet.

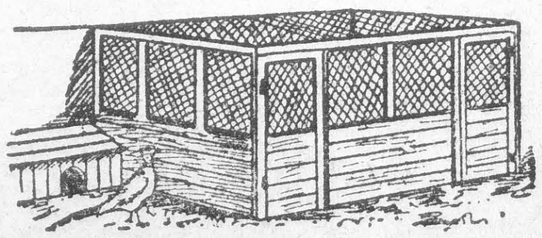
Suitable for Wooden Stakes.

These feet form a cheap and easy method of erecting above Poultry fencing, being provided with a socket into which the stake is easily fixed, the iron feet only going into the ground; the wood stakes are thus preserved from rotting. Cash price, 1s. each, 10s. per doz. Free on rail at our Works.



No. 144.

No. 145.



Pens Suitable for Pheasants.

The illustration shows two pens, size 12ft. long by 6ft. wide.

Cash Price, £2 5s. each, £2 each if two or more ordered.

Imperial Black Varnish.

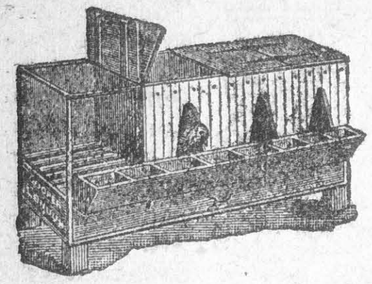
No. 146.

For Iron Fences, Wood Palings, Farm Buildings, Poultry Houses, &c. Put on rail at our Works.

1 gallon 2s., 5 gallons 7s., 18 gallons 20s., 40 gallons 35s.
Cans and casks included (not returnable).



Fattening Pen.



No. 147.

The illustration shows an underneath drawer, into which the droppings fall through the floor. The drawer can be taken out and cleaned as often as necessary and replaced. The birds are put in and taken out at the top, hinged flaps being provided for the covers. The Trough is of zinc for both food and water.

Cash Prices—For Four Fowls, £1 2s. 6d.; for Six Fowls, £1 10s.

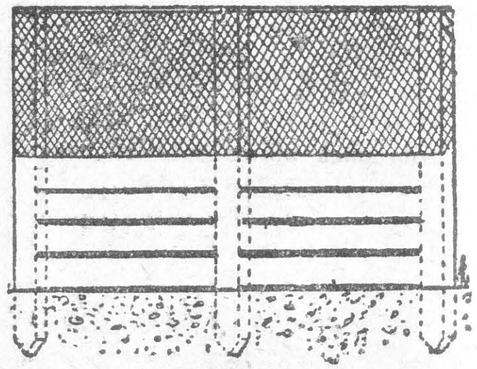
Poultry Hurdles.

No. 148.

Size, 6ft. long by 5ft. high; boarded 2ft. high; remainder 2in. mesh galvanised wire netting. These Hurdles are strongly made, and if painted occasionally will last for many years.

Cash Price, 3s. 6d. each; £1 17s. 6d. per dozen.

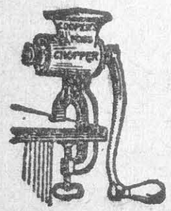
Gates, 2ft. wide, and hinges complete: Cash Price, 3s.



Cooper's Food Choppers.

(Tinned.)

Chops 3lb. of meat per minute.



No. 149.

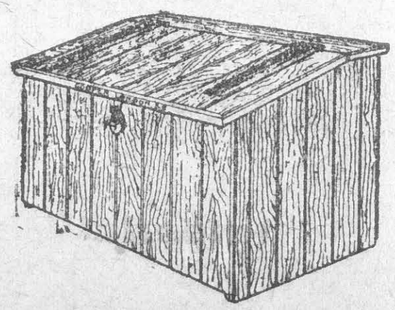
Chops raw or cooked meat, bread, roots, gristle, green stuff, &c., &c. It will pay for itself in two or three weeks. Get a few pounds of fresh butcher's offal, and chop some daily. Better than all the prepared meats on the market, and will produce more rich and full-flavoured eggs. Each chopper complete with a set of knives. Cash price, 4s. 3d.

Strong Wooden Corn Bin.

EIGHT BUSHELS.

Very substantially constructed, raised floor, partition in centre. Strong hinged lid. Complete, with lock and key.

Suitable for the stable, kennel, or poultry yard; also numerous other purposes.

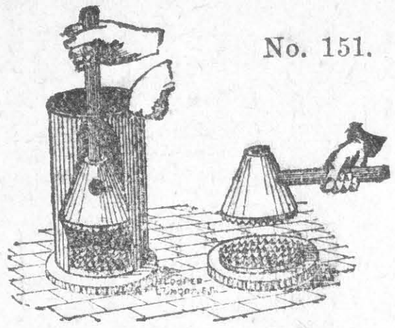


No. 150.

Size, 3ft. 2in. long, 2ft. wide, 2ft. 6in. high at back, 2ft. high at front. Cash Price, 17s. 6d.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Grit Crusher.



No. 151.

As used by Poultry Breeders for Crushing Shells, &c.

Cash Price, 2s. 3d.

Scraper.

Best Cast Steel, as illustration.



No. 153.

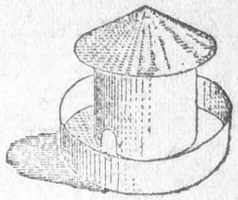
For Cleaning Floors, Perches, &c., of Poultry Houses. Fitted with Wood Handle.

Cash Price, 1s. 2d. post free.

Drinking Fountains.

FOR YOUNG CHICKS.

No. 152.

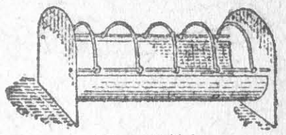


Well made of Galvanised Iron. Last a lifetime. Always maintain a fresh supply of clean water, and can be easily filled.

Cash Price, 1s. 2d. each, or 11s. per dozen.

Feeding Troughs.

FOR YOUNG CHICKS.

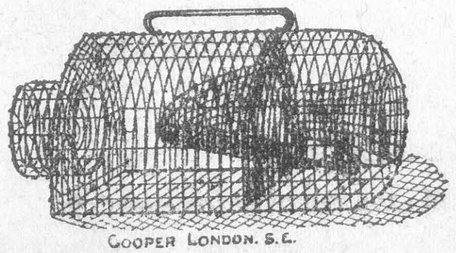


No. 154.

Well made of Galvanised Iron. Last a lifetime. With removable guard for cleansing.

Cash Price, 1s. 2d. each, or 11s. per dozen.

Rat and Mouse Traps.



No. 155.

The "Success" Rat and Mouse Trap. Extraordinary results.

For Rats—

Price, 1s. 10d. each.
Per dozen, £1 1s.

For Mice—

Price, 1s. each.
Per dozen, 11s.

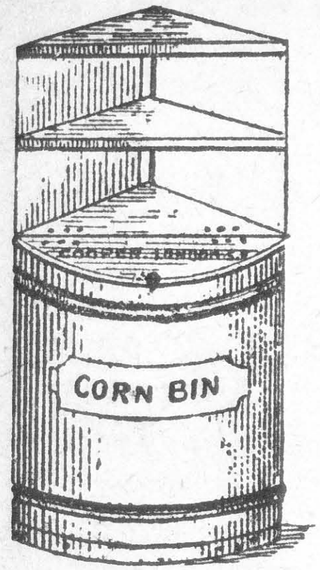
Galvanised Iron Corn Bin.



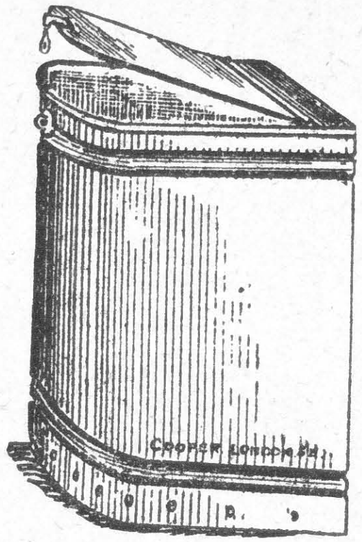
No. 156.

	Cash Price. £ s. d.
½ Bushel	0 7 0
1 „	0 9 0
2 Bushels	0 11 6
4 „	0 18 0
6 „	1 1 6
8 „	1 5 0

Galvanised Iron Corn Bins.



No. 157.



No. 158.

	Cash Price. £ s. d.		Cash Price. £ s. d.
4 Bushels	1 8 6	4 Bushels	0 19 6
6 ,, ...	1 13 6	6 ,, ...	1 3 0
8 ,, ...	1 19 0	8 ,, ...	1 8 6

Improved Double Trough.

Galvanised; with cover and movable bars each side, very economical in use.

	Cash Price. Each. s. d.
12in. long	3 9
18in. ,, ...	4 0
24in. ,, ...	4 6



No. 159.

Poultry Fountain.



No. 160.

Galvanised; top removes for cleaning.

	Cash Price. Each. s. d.
4 pints	1 9
6 ,, ...	2 0
8 ,, ...	2 6

Galvanised Fountains.



No. 161.

	Cash Price. Each. s. d.
4 pints ..	1 6
5 ,, ..	1 9
6 ,, ..	2 0

With flat back.



No. 162.

	Cash Price. Each. s. d.
4 pints ..	1 6
5 ,, ..	1 9
6 ,, ..	2 0

Galvanised Poultry Troughs.

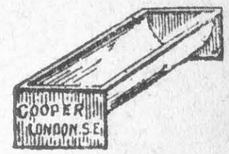
Very strong; will last a lifetime. Always of clean appearance.

For Poultry or Rabbits.

Galvanised.

4in. wide, 2½in. deep.

	Cash Price. s. d.		Cash Price. s. d.
6in. long	0 6 each	.. ..	6 for 2 9
9in. ,, ...	0 8 ,,	.. ..	6 ,, 3 6
12in. ,, ...	0 9 ,,	.. ..	6 ,, 4 6
18in. ,, ...	1 0 ,,	.. ..	6 ,, 5 3



No. 163.

Poultry Feeders.



No. 164.

Galvanised; one of the best patterns.

	Cash Price. Each. s. d.
12in. loug	1 3
18in. ,, ...	1 6
24in. ,, ...	2 0



No. 165.

Galvanised; same shape, but with movable bars.

	Cash Price. Each. s. d.
12in. long	2 0
18in. ,, ...	2 6
24in. ,, ...	3 0



No. 166.

Galvanised; for soft food or water. Easily cleaned.

	Cash Price. Each. s. d.
10in. diam.	1 6
12in. ,, ...	1 9
14in. ,, ...	2 0

Poultry or Rabbit Trough.

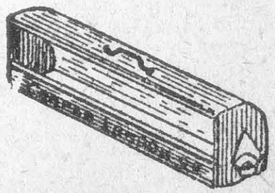


No. 167.

Galvanised. The division bars are hinged for cleaning out.

	Cash Price. Each. s. d.
12in. long	2 6
18in. ,, ...	2 9
24in. ,, ...	3 3

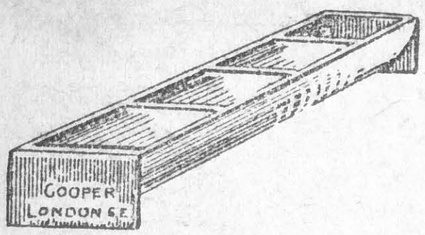
Poultry Feeding Trough and Drinking Fountain.



No. 168.

	Cash Price. Each. s. d.
12in. long, 9 pints	3 0
18in. ,, 13 ,, ...	3 6
24in. ,, 17 ,, ...	4 0

For Poultry, Dogs, Pigs, &c.



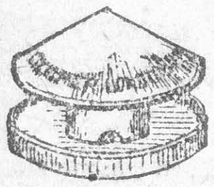
No. 169.

Galvanised.

6½in. wide, 3in. deep.

	Cash Price. Each. s. d.
12in. long	1 0
18in. ,, ...	1 3
24in. ,, ...	1 6
36in. ,, ...	2 0
48in. ,, ...	2 6

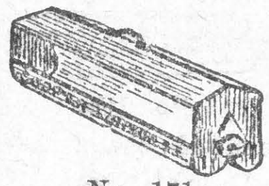
Seed Fountain with Conical Top.



No. 170. Galvanised.

	Cash Price. Each. s. d.
4 pints	2 3
6 ,, ...	2 6
8 ,, ...	3 0

Double Feeding Trough with Drinking Fountain.



No. 171.

Galvanised.

	Cash Price. Each. s. d.
12in. long, 7 pints	4 0
18in. ,, 10 ,, ...	4 9
24in. ,, 14 ,, ...	5 6

Patent Poultry Grit Crusher.

Cash Price, 7s. 6d.
(as illustrated).
Larger Size, 10s. 6d.



No. 172.

Do you wish to keep your Poultry in perfect health? Then use novelty of the age.

Saves time. Saves trouble. Saves annoyance. Saves expense.

Everlasting wear! Entire absence of danger to the eyes from flying chippings.

Crush your own grit from your old crockery, glass, shell, and other refuse.

Why buy grit when you can crush in a few minutes all that is required — thereby keeping your poultry in health and increasing your egg supply? Why throw away your breakage refuse when you can put it to good account—thereby saving labour in disposing of it?

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

SPECIAL REMEDIES FOR POULTRY.

Cooper's Egg Producer.

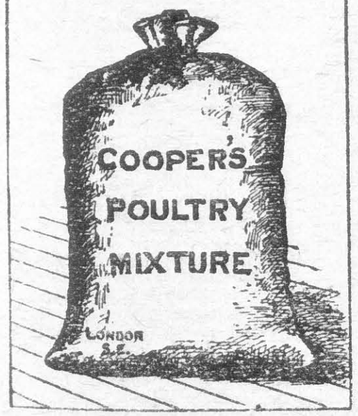
Keep your stock in perfect condition, and have abundance of eggs all the year round. Young Chicks thrive well on it, and become strong and good layers. Laying Hens—improves condition, increases number of eggs, and promotes fertility. A Wonderful Bone and Size Producer. Keeps the plumage bright; gives protection against climatic changes.

Cash Price, 1s. 6d. post free. Full directions with each tin.

Cooper's Roup and Condition Pills.

— UNEQUALLED. —

Cure for Roup, Rattling in the Throat, Coughing, Diarrhœa, &c. In boxes. Cash Price, 1s. 6d. post free. Full directions with each box.



Cooper's Cramp Cure.

For Young Chickens, Fowls, &c.
Sold in bottles, Cash Price, 1s. 6d. post free. Full directions with each bottle.

No. 173.

Poultry Mixture.

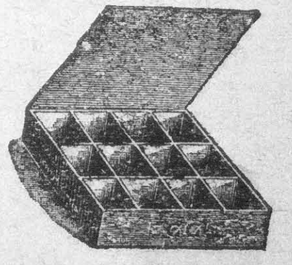
SPECIAL OFFER. GRAND FEED.

Cash price, 13s. per sack.
Containing about 130lb.

We guarantee this to be the best and cheapest feed you have ever bought.

Egg Boxes.

No. 174.

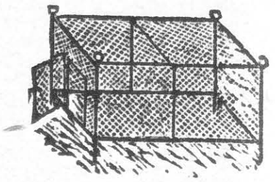


Partitions movable. Postal Boxes for Eggs, with separate compartment for each egg.

Boxes to hold any number of Eggs to order. Sample box to hold twelve eggs, post free 6 stamps. Boxes for Duck and Bantam Eggs made to order.

	Per doz. s. d.	Per gross. £ s. d.
To hold 12 eggs	2 0	0 16 0
,, 15 ,, ...	2 6	0 18 0
,, 18 ,, ...	3 0	1 2 0
,, 24 ,, ...	4 0	1 13 0
,, 26 ,, ...	4 6	1 16 0
,, 36 ,, ...	6 0	2 4 0
,, 48 ,, ...	7 0	2 14 0

Cooper's Famous Collapsible Improved Folding Wire Runs.



No. 175.

Known all over the world. These runs will last a lifetime. For Fanciers of Dogs, Turkeys, Geese, Ducks, Pheasants, Rabbits, Chickens, Pigeons, &c.

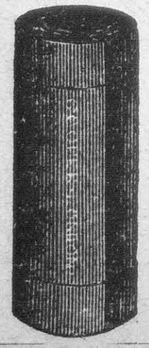
Used by all the leading Fanciers in England, Ireland, Scotland, and Wales, and exported by us to Australia, India, Toronto, America, Sweden, Switzerland, New Zealand, Africa, &c.

Used by all the leading Fanciers of the day at home and abroad, and thousands of bona-fide unsolicited testimonials received annually from delighted purchasers. These Runs are made of strong 1in. mesh Galvanised Wire Netting, and are thoroughly rat, cat, and sparrow proof. Each Run is fitted with strong stakes for fixing. Undoubtedly the most perfect and useful invention ever placed before the fancy public. The advantages of this Run above all others are as follow :—

1.—Can be fixed or packed away momentarily.
2.—Folds quite flat, therefore occupying a very small space when not in use.
3.—Can be moved to fresh grounds daily, if required.
4.—Will last a lifetime if used in an ordinary way.
5.—Is cheaper and stronger than any Runs yet placed upon the market.
6.—Can be fixed against dog kennels, fowl houses, pigeonries, aviaries, rabbit hutches, &c.

Enormous quantity of all sizes kept in stock ready for instant dispatch.

Cash Prices.	Each. £ s. d.	
3ft. long, 2ft. wide, 1ft. high	0 2 6	With door, 6d. extra.
4 ,, ,, 2 ,, ,, 1 ,, ,, ...	0 3 6	
6 ,, ,, 2 ,, ,, 1 ,, ,, ...	0 5 0	
3ft. long, 2ft. wide, 2ft. high	0 4 6	With door, 1s. extra.
4 ,, ,, 2 ,, ,, 2 ,, ,, ...	0 5 6	
6 ,, ,, 2 ,, ,, 2 ,, ,, ...	0 6 6	
12 ,, ,, 2 ,, ,, 2 ,, ,, ...	0 12 0	
3 ,, ,, 3 ,, ,, 2 ,, ,, ...	0 5 6	
4 ,, ,, 3 ,, ,, 2 ,, ,, ...	0 6 6	
6 ,, ,, 3 ,, ,, 2 ,, ,, ...	0 7 6	
12 ,, ,, 3 ,, ,, 2 ,, ,, ...	0 13 0	
6 ,, ,, 3 ,, ,, 3 ,, ,, ...	0 9 0	
12 ,, ,, 3 ,, ,, 3 ,, ,, ...	0 15 0	
18 ,, ,, 3 ,, ,, 3 ,, ,, ...	1 0 0	



Felt.

No. 176.

Patent Asphaltic Roofing Felt. Roll 25 yards long by 32 inches wide.

A—3s. 3d. per roll ; 6 for 19s. ; 12 for 37s. ; 50 for £7 10s.
B—4s. 6d. per roll ; 6 for 25s. ; 12 for 48s. ; 50 for £9 10s.
Nails for fixing Felt (in boxes), 250 6d., 500 1s.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Cooper's Disinfectas.

No. 177.

For Poultry Houses and Runs, Kennels, Rabbit Hutches, Stables, &c.

Clean, cheap, and healthy.
Sprinkle a little daily.
Per sack (2 bushels) 2s. 6d.
10 for 22s. 6d. Sacks included.





Rot-Proof Composition.

No. 178.

A good preservative for all woodwork exposed to the weather, and suitable for Farm Buildings, Poultry Houses, Palings, Fences, or any description of Outdoor Woodwork.

	Cash Price.				Cash Price.		
1 gal.	£0	2	6	10 gals.	£0	17	6
2 gals.	0	4	9	20 gals.	1	10	0
5 gals.	0	10	0	40 gals.	2	10	0

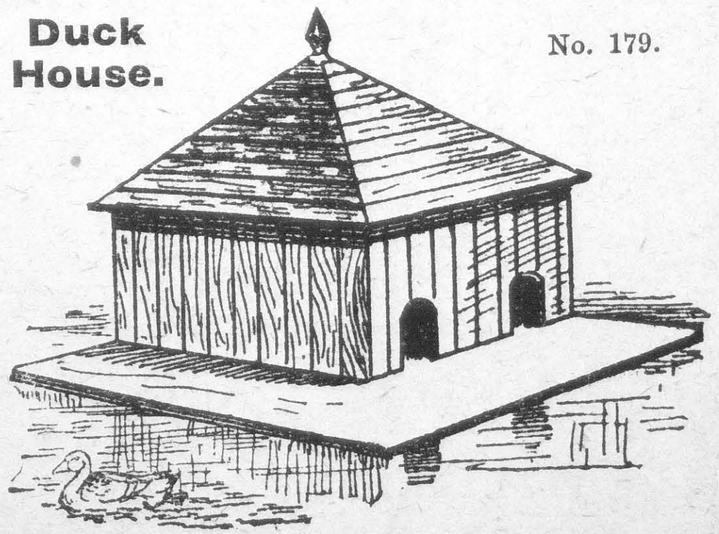
Put on rail at our Works, cans and casks included (not returnable).

Insect Powder for Poultry.

In Tins. Cash Price, 1s. 6d. post free.

Duck House.

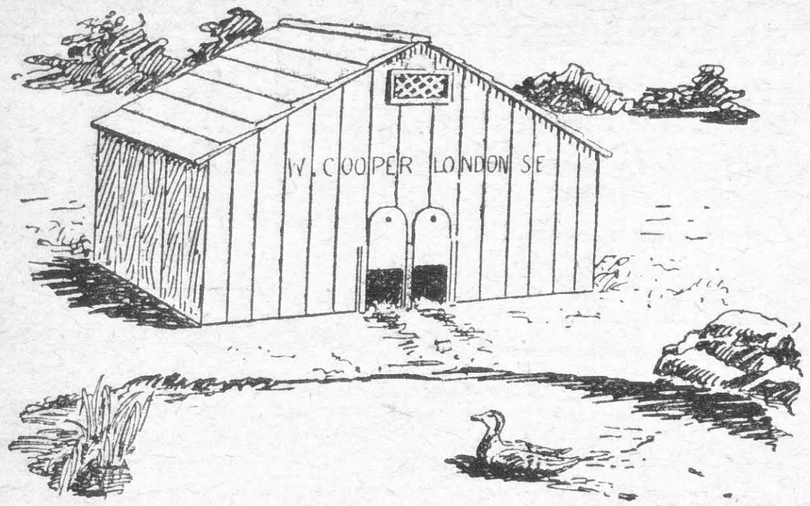
No. 179.



Substantially constructed of tongued and grooved matching ; roof weather-boarded, and has a ledge all round at base ; outside woodwork painted with our Rot-proof Composition. Size, 4ft. by 4ft. ; 4ft. high to top, 2ft. high to eaves.

Cash Price .. .. £2 5s.

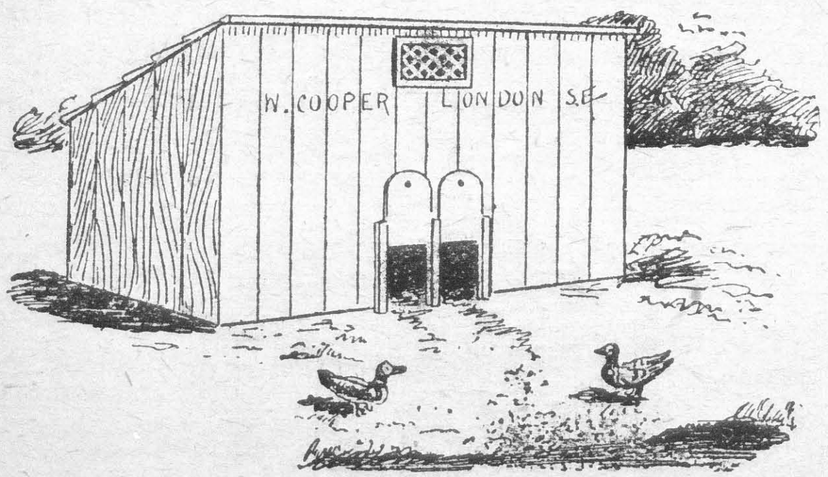
Portable Duck Houses.



No. 180.

These are Handy Duck Houses for placing near to water. A division board is placed inside, forming two compartments in each house, with a separate entrance door hinged at the bottom. A large door is made at the back, and fitted with lock. These houses

Lean-to.



No. 181.

are strongly made with well-seasoned wood, outside painted with our Rot-proof Composition. Dimensions: 5ft. long by 2ft. 6in. wide, 2ft. 6in. high.

Cash Price .. .. £1 5s.

Warning Camp, Arundel, Sussex.

DEAR SIR,—I received the Poultry House quite safe, and am very pleased with it.—Yours truly,

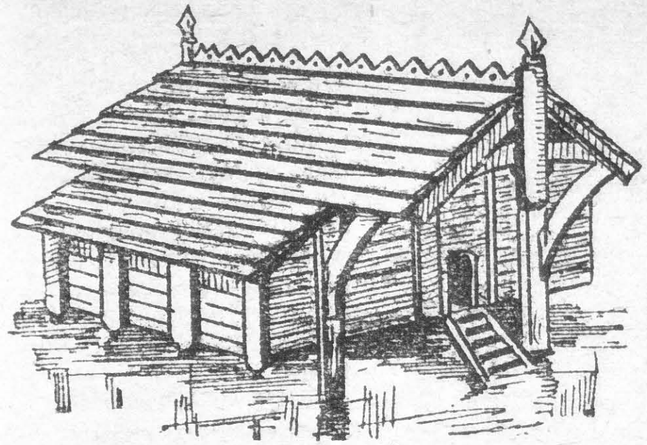
L. PENNICOTT.

Ballycaddane, Knocklong, R.S.O., Co. Limerick.

The Chicken House has arrived quite safely, and is exactly what I require.

RHODA FRANKS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.



No. 182.

Ornamental Duck House.

Constructed of weather boards throughout, ornamented with rustic wood additions; all outside woodwork painted with our Rot-proof Composition.

Size, 6ft. by 4ft.

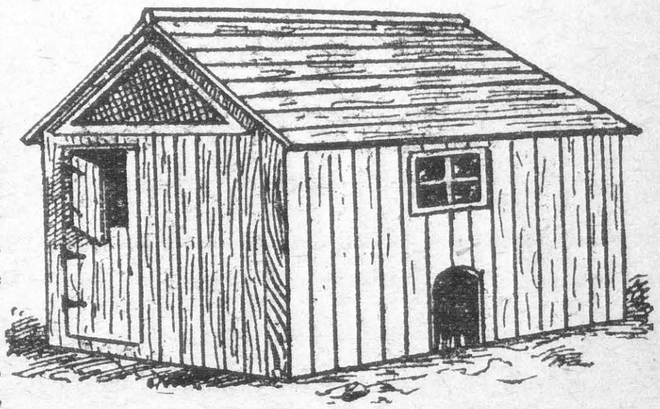
Cash Price, £4.

Span-Roof Duck House.

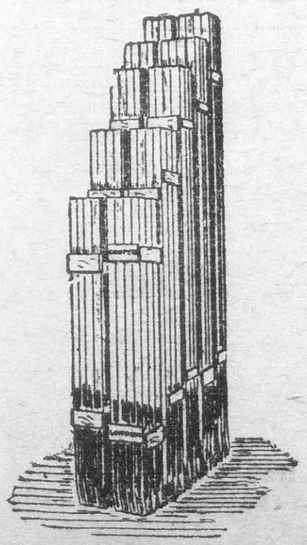
A neat design constructed of match-boards, roof of weather - boards; door in one end in two halves; window in one side; all woodwork painted outside with our Patent Rot-proof Composition.

Size, 8ft. by 6ft., 8ft. high to ridge, 6ft. high to eaves.

Cash Price, £3 10s.



No. 183.



Fencing Stakes.

No. 184.

For Poultry Fencing, &c. Size of timber 2 by 1½in. End pointed and Steam Tarred for driving into ground.

Fencing made with these Stakes and Wire Netting is strong, cheap, and of neat appearance and easy to erect.

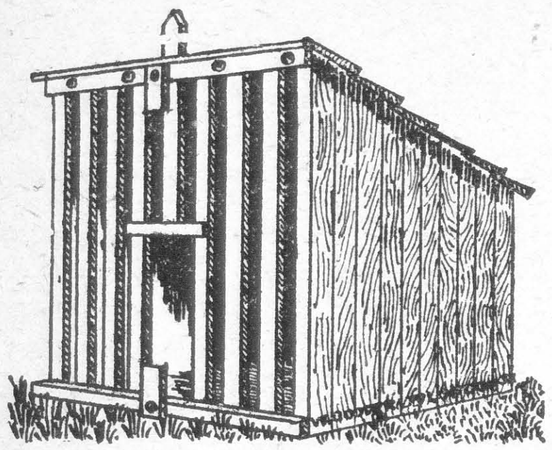
In bundles of twelve stakes:

	3ft.	3ft. 6in.	4ft.	4ft. 6in.	5ft.
	s. d.	s. d.	s. d.	s. d.	s. d.
Cash Price ..	1 3	1 6	1 9	2 0	2 3

	5ft. 6in.	6ft.	6ft. 6in.	7ft.
	s. d.	s. d.	s. d.	s. d.
Cash Price ..	2 6	2 9	3 0	3 3

For Wire Netting see Sundries Section.

Pheasant Coop.



No. 185.

We sell on an average 3,000 of these every Season.

This is a strongly made coop specially intended for Pheasants. Boarded sides, and Weather-boarded roof, wood bars in front, the centre one to move up and down. Painted with our Patent Rot-proof Composition.

A lift-off Wooden Shutter is provided in front for closing up the coop at night.

Size, 2ft. 4in. square, 2ft. high in front, 1ft. 3in. high at back.

Cash Price, 5s. each, £2 16s. per dozen, £21 per 100.

Egg Transit Boxes. No. 185A.

Very light, but strongly made and well finished.

		s.	d.				s.	d.	
To hold	6 doz.	6	0	each	To hold	18 doz.	10	0	each.
„	9 „	7	6	„	„	24 „	12	0	„
„	12 „	8	6	„					

With Brass Padlock, strong, two keys.

These Boxes are specially made for Railway Traffic and Wholesale Merchants for delivering eggs in vans, or otherwise. They will bear a great amount of rough usage, and they are so constructed that it is almost impossible to break the eggs.

3, Morrison Crescent, Swansea Road, Pontardulais.

DEAR SIRS,—I am very pleased with Incubator I had from you, as it gives good satisfaction, and has hatched every fertile egg.—Yours truly,

GWILYN REES.

Oakdene, William Street, Rainham, Kent.

DEAR SIR,—I am having splendid results from the Incubator I had from you. We had ninety out of ninety-five eggs.—Yours, &c.,

A. DEAN.

113, Well Lane, Tranmere, Birkenhead.

DEAR SIRS,—The Foster Mother arrived this morning, and I am extremely pleased with it.—With thanks, yours, &c.,

A. MACLEAN.

Perry Court, Faversham.

DEAR SIRS,—The Foster Mother arrived all right, and my people are very pleased with it.—Yours faithfully,

J. H. CURLING.

Wood Hall, Norton, Worcester.

To W. COOPER, LTD.—The Foster Mother arrived last evening, and is quite satisfactory.—Yours truly,

E. HOLLAND.

SECTION III.

.. THE ..

Pigeon-Fanciers', Rabbit, Guinea-Pig and Ferret-Keepers'

GUIDE AND Illustrated Catalogue

OF

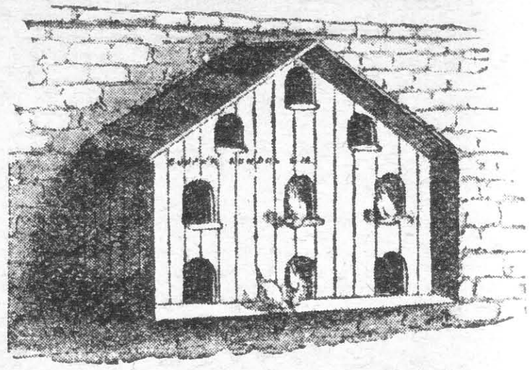
PIGEON COTES, HOUSES AND FLIGHTS,

&c., &c.

No. 186.

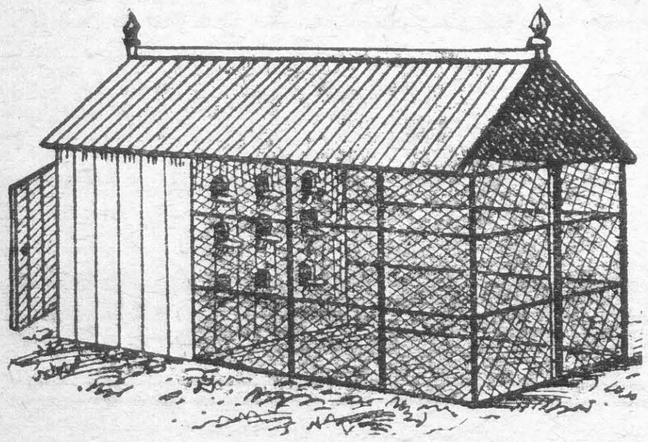
Dove or Pigeon Cote for Wall.

Well constructed of deal for fixing against a wall. Neat in appearance, painted. Ready fitted.



	Cash Price. £ s. d.
For 9 pairs Birds (see Illustration)	1 10 0
„ 7 „ „	1 7 6
„ 6 „ „	1 5 0
„ 5 „ „	1 2 6

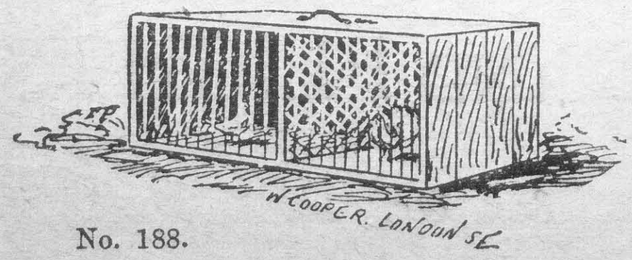
Span-Roof Pigeon House and Flight.



No. 187.

Ornamental design and substantially constructed of good, sound, tongued and grooved matching. The House is provided with separate compartments for each pair of birds, complete with nests; all doors fitted with locks. The flight is constructed of wood framing, covered with galvanised wire netting, and fitted complete with gate. The Roof of House and Flight is of strong Boards, covered with felt.

	Cash Price. £ s. d.
For 9 pairs of Birds: 2ft. long, 3ft. 6in. wide, 5ft. 6in. high; flight 6ft. long	3 15 0
For 12 pairs of Birds: 2ft. long, 3ft. 6in. wide, 6ft. 6in. high; flight 6ft. long	4 15 0



No. 188.

Mating Pen for Pigeons.

These Pens are useful for mating. Well made of wood and galvanised wire netting.

Cash Price, 7s. 6d. each.

PIGEONS.

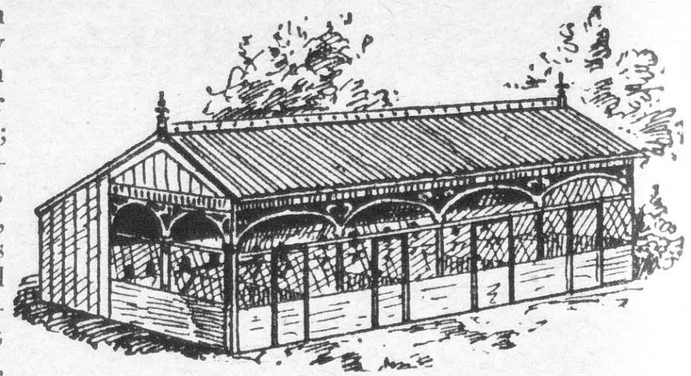
HOUSING.—It is not at all necessary that domestic pigeons—with the exception of Flying Homers and Flying Tumblers—should be allowed their full liberty. Very few fancy pigeons ever see the outside of an aviary or loft. We make a variety of cotes and aviaries suitable for all kinds of pigeons. There is the pigeon cote for fixing against a wall, No. 186, and that on the top of a pole, No. 192. Either of these is adapted to the breeding of common pigeons for the table, or as an abode for such birds as Fantails, which are highly ornamental when strutting about a lawn or stable yard. Our pigeon cote, No. 196, to accommodate six pairs of birds, is most compact and useful, especially to the beginner, who can place it near the house, and be able to see at a glance how his pigeons are going on.

For fancy pigeons, and where pigeon-breeding is conducted on regular principles, our houses, Nos. 187, 193, and 201, cannot be surpassed. No. 201 is stocked in three sizes, the largest 20ft. by 10ft., with a 12ft. run. Nest-pans are indispensable to the successful rearing of young pigeons. They can be obtained of glazed earthenware, ordinary red earthenware, or wood. Either of the former are preferable, as less likely to harbour vermin. The nest-pans obviate the risk of the eggs rolling out. Two nest-boxes must be allowed to each pair of birds. The hen lays again before the first pair of young ones can fly, and the second pair of eggs stand a better chance if laid in a nest into which the young birds cannot come.

Flying Homers and Flying Tumblers must have their house constructed so that there is an outlet for the pigeons into the open. This is through a cage, or trap, which is usually fixed outside on a small platform. This trap has a falling door which can be pulled up by a string, so as to shut in the birds and enable them to be caught when desired. In order that the pigeons can get in when the door is closed openings are left at the top of the trap, through which they can pass in from the outside, but up which they cannot fly to make their escape. Openings are also left at the side of the cage called "bolting wires."

APPLIANCES.—The appliances required are a pairing pen, bath, drinking-fountain, a scraper for cleaning, a small hand-broom, a shovel, and a fine sieve through which to pass the grain, to remove dust. Our pairing pen No. 188 is made for mating purposes, and is useful to accustom pigeons to confinement prior to a show. It can also be utilised to hold an occasional invalid. The bath is a most important appliance.

Range of Span-Roof Pigeon Cotes.

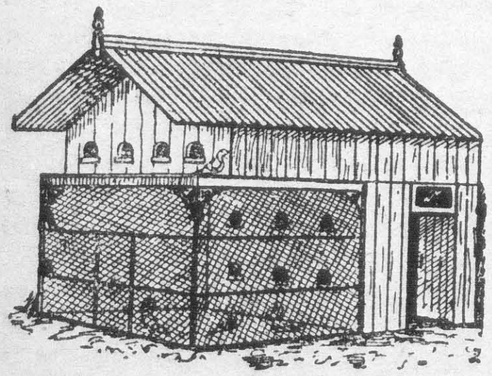


No. 189.

The illustration here shows a very ornamental design for a range of Four Cotes and Flights; the Cotes are constructed of good, sound matchboards, roofs of both Cotes and Flights boarded and felted, with ornamental cresting at ridge; the front, ends, and divisions to Flights are formed of strong wooden framework, the bottom part of same being boarded; each Flight is fitted complete with gate; all outside woodwork stained and varnished; in sections in readiness for erection.

Four Houses and Flights, size over all, 16ft. by 10ft.
Cash Price, £18 10s.

Span-Roof Pigeon House.



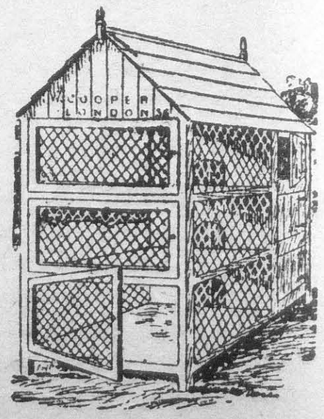
No. 190.

A well-made, neat design. Fitted with nests and perches; the Flight is formed of wood framing covered with galvanised wire-netting; complete in sections.

12ft. by 6ft.; 9ft. high to ridge; 6ft. high to eaves; suitable for Twelve Pairs of Birds,
Cash Price, £10.

New Three-Tier Pigeon or Dove Cote.

No. 191.



This Breeding Cote is in three tiers, each one being divided from the other throughout the Flight with separate doors back and front. Galvanised wire netting encloses each flight. 3ft. 6in. long, 1ft. 9in. wide, 5ft. 6in. high to ridge, and stands well from the ground. Painted or stained and varnished.

Cash Price ... ... £1 15s.

Pigeons are great bathers. The bath should be of galvanised iron, painted or enamelled. The size will depend on the number of birds. In any event it should not have a depth of more than three inches, two inches of water being enough. Young pigeons will often get into the bath when first out of the nest. If they are assaulted by an older bird when they are wet and bedraggled death by drowning is not unusual. The scraper for cleaning should be triangular in shape. The corners and sides of the nest boxes can then be kept clean, the accumulations in the nest being scraped into the shovel; the small hand-broom will help to keep the corners of the aviary free from loose feathers and dust. A sieve is valuable in ridding the grain of dust and dirt.

SELECTING THE STOCK.—The novice should make a start with one breed only, and that of the best pedigree obtainable. The birds should be obtained from a fancier who is known to have bred prize-winners. The catalogue of a show, such as the Crystal Palace, will give names and addresses. If it is intended to begin with two or three pairs they should all be obtained from the same person. There will then probably be the advantage of breeding from one particular strain.

An erroneous idea is that the breeding stock ought not to be related. Yet it is a fact well known to all clever breeders that, to obtain good results, inbreeding to some considerable extent is essential. Inbreeding consists in the mating together of birds that are related to one another, either closely or remotely. If the pigeons with which a beginning is made are healthy, and free from disease, inbreeding may be carried on closely for years, not only without detriment, but with advantage. The more perfect the birds are the better. Any faults should be corrected as far as possible in mating. For instance, if the cock bird has too much colour in the wrong place he should be paired with a hen that has too little. Or if shortness of beak is an important point, a thin-beaked bird should be paired with an extra thick-beaked one. At the end of each season, if the best youngsters are retained and the inferior ones weeded out, with judicious mating and perseverance the character of the stock will greatly improve.

BREEDING.—The mating of most breeds can take place about the middle of February. When a pair of pigeons have been mated for ten days or a fortnight, the first egg may be expected. They will have carried straw into the nest, and the cock will be seen to follow the hen about, and to peck continually at her. This is called "driving to nest." Pigeons lay two eggs, missing a day between laying the first and the second. Some hens begin to sit on the first egg directly it is laid. When this happens one young one will hatch before the other. To avoid

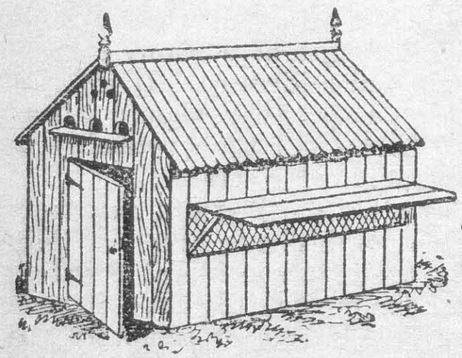
Dove or Pigeon Cote on Pole.

No. 192.

This picturesque Cote, with nesting accommodation for eight pairs of Birds, is strongly fixed upon a pole for sinking in the ground. Well made, and neat in appearance; stained and varnished or painted.

Cash Price ... ... £1 15s.





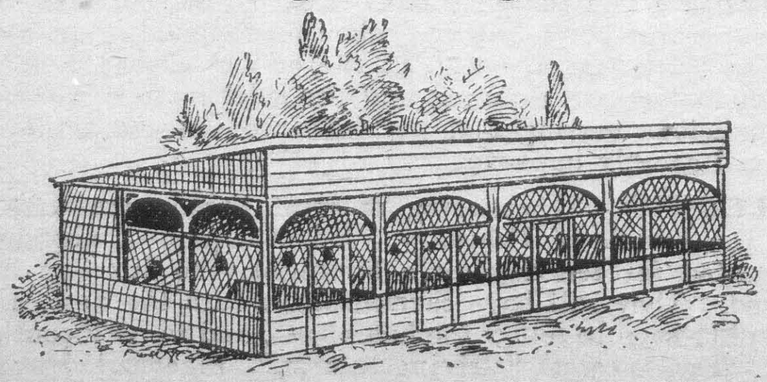
Pigeon House and Flight Combined.

No. 193.

Strongly made, complete with door and lock; nests, alighting boards, and side shutter covered underneath with galvanised wire netting along one side; in sections.

Length. ft.	Width. ft.	Height. ft.	Cash Price. £ s. d.	Floors and Joists extra. £ s. d.
8	5	7	3 0 0	0 10 0
10	6	8	4 5 0	0 15 0
12	6	8	5 10 0	1 0 0

Lean-to Range of Pigeon Cotes.



No. 194.

Similar in construction to No. 189. Four Houses and Flights, size over all 16ft. by 10ft. Cash Price ... ... £17 10s.

this artificial eggs made of china or bone are used. The first egg is removed and replaced by an artificial one, care being taken to return the real egg on the appearance of the second egg. The period of incubation is seventeen days from the laying of the second egg.

The young ones are usually cock and hen; occasionally two cocks, and less often two hens. Young pigeons grow at a great pace. At from eight to ten days old they will be covered with sprouting feathers. If they are of good strain it is advisable at this age to take the trouble to ring them with the rings that are issued yearly by the Pigeon Marking Conference. The original object of using these rings was to prevent old birds being exhibited in the classes reserved for young birds only. The rings bear the date of the year and a number. They show the age of a bird throughout its career—not only to the breeder, but to a purchaser—and also enable the bird to be known by the number on the ring, and an easy record to be kept, in the stud book, of its offspring. The operation of "ringing" is performed by holding the young pigeon with one hand, pointing all the toes in the same direction, and drawing them through the ring till the ring is on the leg. It does not matter on which leg the ring is placed. We supply these rings at 2s. 3d. per dozen, post free.

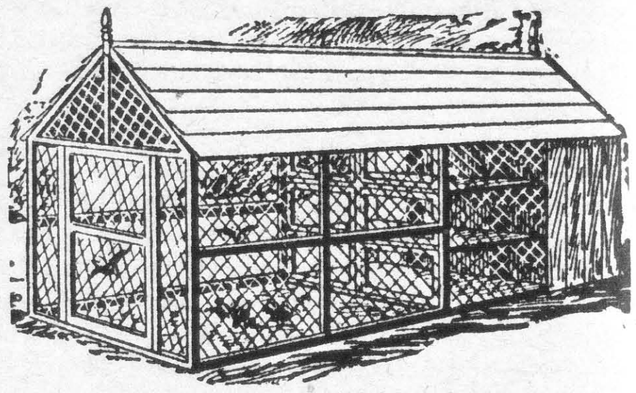
When the young birds are about ten days old their parents will begin to arrange for another nest. While doing this they may not attend to the squabs as much as they ought. This can be ascertained by looking at the squabs in the morning and evening. They should have been fed by ten o'clock in the morning, and before dusk. If on examination the crops of the youngsters are nearly empty some help in the form of hand-feeding is necessary. If the squabs are less than ten days old some bruised dari and wheat should be soaked for twelve hours in cold water, then warmed, and carefully placed, a very little at a time, in the mouth of the bird, over the tongue into the throat. With a little practice this will be found easy, and the youngsters will soon take to it greedily.

Occasionally the parent birds are unable to feed their young when first hatched. The little squabs can be saved by artificial feeding. If a plain biscuit is crushed and mixed with a little oatmeal, to which some warm milk is added, and poured into a small teaspoon, the beak of the small bird dipped in the fluid will generally induce it to suck it up; or a small glass syringe can be used, from which the mixture is dropped into the throat. When artificially feeding young pigeons, the crop should not be more than two-thirds filled. After a young pigeon is a fortnight old the feeding can be done with soaked tares and maple peas.

FEEDING.—During the breeding season the best general

Double Pigeon House.

No. 195.

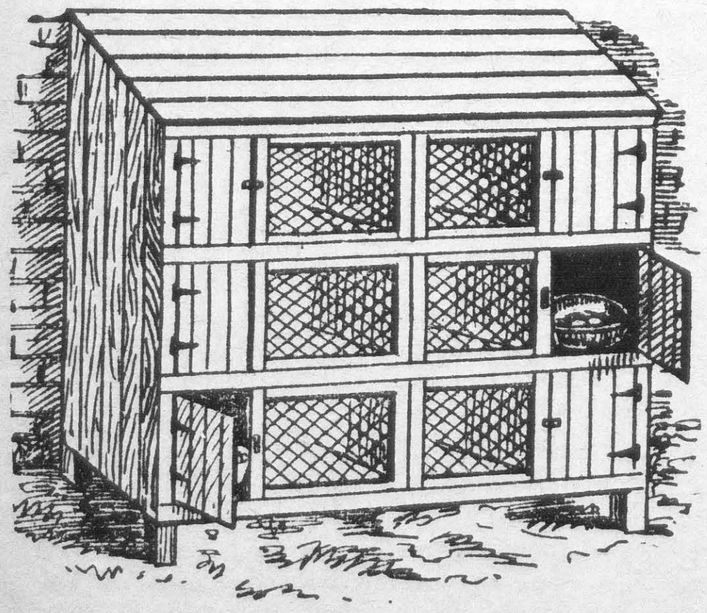


This is a Breeding House for six pairs of pigeons. Each nest-compartment has a door at the back, facilitating the inspection of the nest, and leading from the front of the nesting-chamber is a short Flight which opens into the large Flight, as will be seen by the illustration. The arrangement admits of the birds being parted when desired for pairing off, The entire House is 12ft. long by 4ft. wide, strongly made and roof weather-boarded, stained and varnished, which lends an effective appearance to the construction.

Cash Price ... ... £6.

Pigeon Cote.

No. 196.



The illustration shows a Cote to accommodate six pairs of birds. It is strongly constructed of good, sound match-boards; roof weather-boards. The Flights are covered in front with galvanised wire netting, complete with doors, as per illustration. All outside woodwork, with exception of roof, stained and varnished, roof painted. Complete with back.

5ft. by 2ft., 5ft. high at back, 4ft. high in front.

Cash Price ... ... £2 10s.

35, Ingham Road, West Hampstead, N.W.

DEAR SIR,—I received your new Span-roof Chicken House quite safe, and I must say I like it very much. I have had more eggs since the fowls have used it, so that I am more than satisfied with my bargain. You can use this as a testimonial if you wish.—I am, yours faithfully,

G. J. HEATH.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

food is a mixture of equal parts of maple peas, tares, dari, and wheat. When the birds are not rearing young maple peas and tares are sufficient. Tick beans are used by breeders of Homers, Carriers, and some other pigeons, and maize is given by some fanciers. A handful of canary seed now and then is eaten eagerly by pigeons, and is beneficial. There must always be a free supply of coarse gritty sand and plenty of fresh water, renewed at least once a day. Several prepared grits are sold. These are very useful. Some breeders always feed from hoppers; the pigeons can then help themselves at any time. During the long days the pigeons are up and feeding very early, and it is advantageous for them to have access to grain, and not to wait. Moreover, if the birds are fed only at stated times, there are hens, perhaps just hatching, which will not leave the nest, and would not get any food till the second meal in the evening. Both birds assist in incubating, the cock going on the nest in the morning, where he remains till three or four; the hen sitting the remainder of the time. And this practice must be taken into consideration in feeding the pigeons. After the birds have done breeding it is better to feed them twice a day—just enough at each meal for them to eat up with appetite.

In the breeding season it is a good plan to add a few crystals of permanganate of potash to the drinking water. This does not stain the pigeons, helps to prevent the food going sour in the crops of the birds that are feeding young, and obviates canker. A piece of rock salt is wholesome, and affords the pigeons endless pleasure and occupation. Salt-cat is a compound of which the pigeons are very fond, and which is always given by some fanciers. The following is a good recipe for salt-cat: One peck of loam, half a peck each of ground oyster-shell and ground bone-meal, and a quarter of a pound each of aniseed, coriander seed, caraway seed, and cumin seed. Mix well together, and to each half-gallon add a handful of salt and a pint of water. When the salt is dissolved, the liquid is poured over the ingredients, and the whole beaten into a stiff state, and then allowed to dry before using.

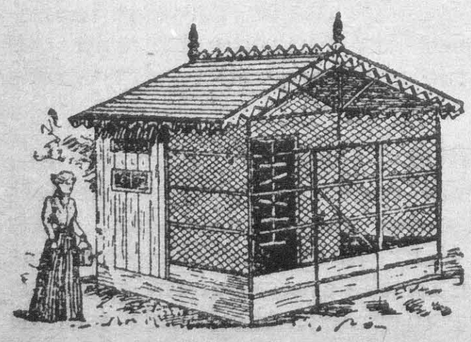
SEPARATING THE PAIRS.—Domestic pigeons are usually so well fed that they will continue to breed, if left to themselves, throughout the greater part of the year. This is neither good for them nor their progeny. The constant feeding of young is a great strain on the system of the parents. If they are allowed to continue to breed, the moult will be deferred and irregular. Late-hatched young ones are rarely of any value, even if they survive the winter. Fancy pigeons should be separated by the end of July. Any eggs

laid at that time should be destroyed. It is advisable, if possible, to have the cocks in one part of the aviary, divided away from the hens.

EXHIBITING.—There can be no doubt that the show pen is the objective point of the large majority of pigeon fanciers. The practical proof of the quality of the pigeons can best be shown by sending any that are considered promising to an exhibition. The beginner should attend the show at which his birds are entered, to compare his exhibits with the others. The pigeons must be in the best condition and feather or they will stand slight chance of winning. They must be made as tame as possible by being frequently placed singly in the mating pen, and touched and stroked with a small stick. Many untrained birds crouch in a corner on the approach of the judge and decline to show themselves. While in the pen a few grains of hempseed should be given. Pigeons are naturally so clean, and wash so often, that they rarely require more than their feet and legs, and perhaps the beaks, gone over with a damp sponge. Washing requires a good deal of practice. The experiment should first be tried on a bird that is not to be shown.

Pigeons must be exhibited in their "natural condition." Any operation that is not necessary to the birds' health and comfort constitutes trimming, or otherwise interfering with the natural appearance of the bird, and will, if discovered, cause the exhibit to be disqualified. But such little attentions as removing with scissors the small extra growth which often comes at the tip of the upper mandible of the beak are not objected to.

SOME DISEASES: CANKER is a very troublesome and fatal disease in lofts or aviaries that are overcrowded. It



Portable Outdoor Aviary.

No. 197.

Picturesque design for an outdoor Aviary, substantially constructed. The flight is constructed of fine mesh galvanised wire upon light wood framing. Constructed in sections in readiness for erection.

	Cash Price. £ s. d.
6ft. by 6ft., 5ft. high at eaves, 7ft. high to ridge	7 10 0
4ft. by 4ft., 4ft. 6in. high at eaves, 6ft. high at ridge	5 10 0

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

takes various forms. Usually it appears in the throat in the form of cheesy-looking lumps; sometimes in the head under one eye; and again at the beak. A treatment that will often cure is to obtain from a chemist a little creoline, put two or three drops in a teaspoonful of water, and apply to the throat and mouth twice a day with a soft camel's-hair brush. Creoline is also a preventive; a few drops in the drinking water of all the birds will keep them free if canker has attacked one that has been removed. Another mode of treating is to touch the sores in the throat with alum or nitrate of silver. The patient must be isolated, as the disease is contagious. Enough Chemical Food in the drinking water to colour it pinkish should be given.

COLD.—This can be known by a running at the eyes and nostrils, which sometimes turns to roup. If directly this is seen a camel's-hair brush is dipped in paraffin, and the throat mopped out with it twice a day, the trouble will usually cease.

DIARRHŒA can in simple cases be cured by feeding on raw rice, and giving rice water to drink. A drop of chlorodyne made into a pill with a little barley-meal, two or three times a day, is another remedy.

EYE INFLAMED, or one-eyed cold, is a troublesome complaint. One of a bird's eyes becomes swollen and closed, and exudes matter. To bathe with warm water and a little permanganate of potash morning and evening, and keep the bird out of draught, will generally effect a cure.

GOING LIGHT.—When suffering with this complaint the pigeon rapidly loses flesh and strength, accompanied by diarrhœa, the excrement being green. A usual treatment is to give the sufferer a dose of three or four drops of castor oil, and to feed on small grain, such as hempseed, rice, and canary seed. A course of Parrish's Food in the drinking water should be given.

ROUP is very much like canker in general character. It is usually classified as dry, wet, and diphtheritic roup. A cold is the usual forerunner. This must be treated as recommended under "Cold." If after three days there is no improvement, and the secretions thicken, then it is probably roup. The roupy matter must be removed with the end of a feather, and the throat and mouth washed with water and permanganate of potash. For medicine the following is very good: Sulphate of magnesia, 1½ drachms; sulphate of soda, 1½ drachms; common salt, 1 drachm; and water, 1 quart. This mixture should be given in place of the usual drinking water. When the bird begins to improve a tonic should be given, about a teaspoonful to half a pint of drinking water.

Chemical food must be given in china or earthenware, and not in metal.

WING DISEASE.—This is known by a bird flying in a one-sided manner, and, on examination, a swelling on the inside of the wing will be found. The most likely way to cure this is to strip the flight-feathers from the wing. By the time the feathers have grown again the swelling should have disappeared.

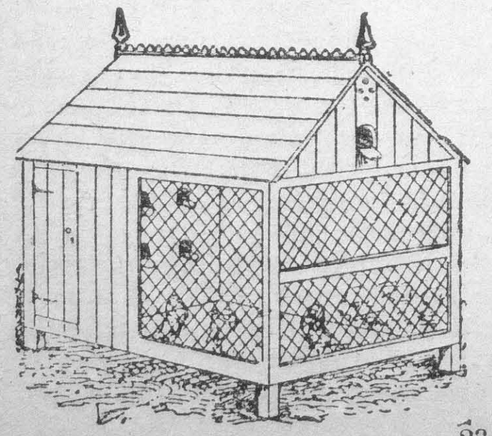
THE DIFFERENT BREEDS.

THE ANTWERP.—A large and hardy pigeon bred in three varieties: the Long-Faced, Medium-Faced, and Short-Faced. The head is large, high, and broad, the beak stout, both mandibles of the same thickness, the eye red, the eye cere dark and fine in texture. The colour is silver-dun, red-chequer, and blue and blue-chequer.

THE ARCHANGEL.—Brilliance of plumage is a characteristic feature of this pigeon. Head, neck, chest, and thighs are of a rich bronze; the shoulders, back, and tail a bronze black. The bronze is accompanied by a beautiful lustre. This is an excellent pigeon for the novice to commence with. It is very hardy, a free breeder, and a good feeder.

THE BARB.—The head of this pigeon is short and broad, the skull flat across, the beak short and stout, and the upper mandible curved. The wattle on the beak lies flatly, and round the eye is red in colour, circular in shape, and evenly developed. The eye is white or orange, the beak white. The neck is of medium thickness. Barbs are not very good parents, and the young should be reared under foster-parents, such as Magpies.

THE CARRIER.—This is the most difficult to breed in perfection of any pigeon. The number of points is almost



Pigeon or Dove Aviary.

No. 198.

Soundly made. The Flight is formed of wood framework covered with galvanised wire netting, fitted complete with doors.

4ft. long by 2ft. 6in. wide.
Cash Price, £2.

legion. The Carrier is a large bird—17in. from tip of beak to end of tail. The beak is straight and stout. The wattle on the beak is of the shape of a peg-top or walnut, thickest at the back. The eye wattle forms a complete circle round the eye, and is of even width throughout. The beak and eye wattles should not touch, although this is a common defect in old birds. The skull is flat, narrow, and of even width from back to front. The eye is bright red. Carriers are not good sitters, and feeders should be used for rearing the young. A Carrier is not at its best till three years old.

THE CUMULET is an old breed of pigeon, smart and racy-looking, and a high flyer. It is either white in colour, or marked with a fawny-red chuck somewhat half-moon shaped, or slightly ticked with the same colour on the neck hackle. The head is long, the beak 1½in. in length, and standing straight out from the head. The eye is white. The young birds are usually marked with red, which they lose in the moult.

THE DRAGOON is a very popular pigeon. The head is wedge-shaped, wider at the back than at the front of the skull, the beak straight and about 1½in. long, the wattle large at the back, tapering almost to a point in front; the eye wattle small and hard-looking, the eye cere fine in texture, and in white, red, and yellow dragoons of a white tint; in the other coloured birds of a deep damson. The plumage is close and hard. Dragoons are good nurses and free breeders.

THE FANTAIL.—This very attractive pigeon is fairly hardy, is usually very tame, and can rear its own young. The chief properties are shape, tail feather, carriage, and motion. The latter consists in a constant tremulous movement of the neck. As a rule Fantails with from thirty to thirty-four feathers in the tail have the most circular and best-fitting tails. The tail cannot be carried too erect or be too flat, round and close in its spreading. Very small hens are seldom good breeders.

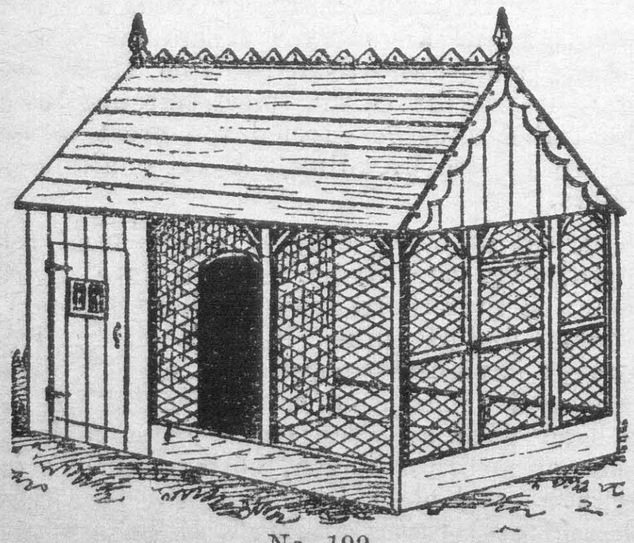
THE HOMER.—Instead of being only a pigeon used for racing and homing purposes, the Homer has of late years been bred for exhibition, so that there are now Show Homers, Exhibition Flying Homers, and Genuine Flying Homers. The Show Homer has become immensely popular. Several birds of this variety have changed hands at upwards of £100. It is of medium size, the head with an even curve from beak to back of skull, the beak of medium length, both mandibles of equal length and thickness, and black in colour, the face (the portion between beak and eye) broad and full, the eye white in colour, the cere fine and dark, and wattle small and heart-shaped. The Show Homer is of various colours. The black

and blue chequers, which are the greatest favourites, are evenly marked. The Exhibition Flying Homer is more prominent in head than the Genuine Flying Homer. Homers are very hardy, strong birds.

THE JACOBIN.—The principal points of this pigeon are the hood, mane, chain, rose, head, shape, carriage, and colour. The hood is formed by the feathers at the back of the skull and upper part of the neck growing forward and arching over the head, fitting closely and evenly. The chain is the continuation of the hood feathers as low down the shoulders as possible. Large birds with good chain and mane should be paired with small hens, narrow in girth, and good in hood.

THE MAGPIE is a very favourite pigeon. The head is long and narrow, the beak long and thin, of a delicate pink colour, and carried in a straight line with the eye. The eye is white, the eye cere and wattle fine and of the same tint as the beak. The flights and tail are long, also the legs, the whole bird small and slender, and tapering gracefully towards the tail. The coloured parts are the head, neck, and breast down to the breast-bone, the back, saddle, tail, and vent. The rest of the body is white. The colours are black, red, yellow, blue, silver, cream, and dun. Young Magpies should not be exposed to the direct rays of the sun or the beaks will become stained. The Magpie is a prolific breeder, rearing its young readily, and often being used as a feeder for other breeds.

Span-Roof Aviary for Outdoor Use.



No. 199.

This is a well-made artistic design. The House is lined inside with tongued and grooved match-boards; roof felted between weather-boards and matching; complete with door, and fitted inside with perches; floor all over base of House and Flight. The Flight also is fitted complete with a rustic perch and two troughs. All outside woodwork painted. In sections for erection, and securely put on rail at Works. Size, 11ft. by 6ft.; 8ft. 6in. high to ridge; 6ft. high to eaves. Cash Price, £9 10s.

THE NORWICH CROPPER.—An old fancy pigeon, formerly known as the Uplopper, this bird has recently found its way into prominence. In colour, markings, inflation of crop, and action the Norwich Cropper resembles the Pouter. It is smaller—not exceeding 15in. in length—and the legs are either clean or very slightly feathered. The tail in blacks and blues is coloured; in reds and yellows it is white. This bird is most tame, companionable, and lively, and, unlike the Pouter, an excellent parent and feeder.

THE NUN.—The body of this bird is white, with coloured head, throat, flight, and tail feathers. The throat marking is called the "bib," which comes as low down the throat as possible. An important point is the shell, or crest, an unbroken crest of white feathers, upright, and spreading from side to side at the back of the head. The eye is pearl white. The Nun is bred in black, red, and yellow, but the blacks are the commonest. This pigeon is hardy and a good breeder and feeder.

ORIENTAL FRILLS is the name given to a number of frilled pigeons that have been brought from the East. The Oriental Turbit has a round, broad skull, short, thick beak, a frill, no peak, clean legs, shoulders and tail coloured, the rest of the bird white. The Turbiteen is marked like the Oriental Turbit, with the addition of three patches of coloured feathers on the forehead and face. There is a peak, and the legs are closely feathered.

Blondinettes, Satinettes, Brunettes, Bluettes, Silverettes are peaked birds of the same character, with the plumage beautifully laced and spangled. None of the Oriental Frills should be mated before April.

THE OWL.—There are three varieties of the Owl, called the English, the African, and the Whiskered. The latter is seldom seen. The English Owl is bred in blue, silver, powdered blue, powdered silver, blue and silver chequer, black, dun, red, and yellow. The head of the Owl is large, massive, and broad, forming a regular arch. The eye is gravel-coloured, and is in the centre of the head, the beak short, thick, and fitting in with the angle of the skull, the wattle slight and smooth, the eye cere fine, the neck short, the chest prominent, gullet full, frill well developed, and flight and tail feathers short. English Owls mature slowly, not attaining their full thickness and size of skull for three or more years. They are hardy and good parents. The African Owl is one of the smallest and prettiest of all our pigeons. It should be a miniature edition of the English Owl, with the eye prominent. It is bred in white, black, black and white, blue, red, yellow, and dun. It is delicate, and should not be paired before the end of April.

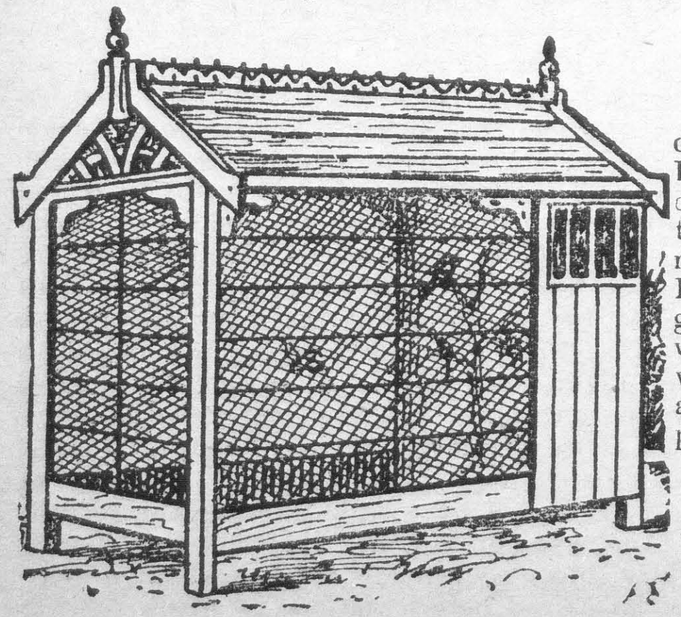
THE POUTER.—Unlike most other pigeons, head properties are not of special importance in the Pouter. The chief points are body structure, shape of the crop, colour, and markings. The Pouter is large, long, and slender, and of very upright carriage; the crop is large and globular, the girth, or waist, narrow, back long and straight, legs and thighs long and clothed with soft feathers. The length of a good specimen is about 20in., and the length of limb from 7in. to 7½in. Pouters are poor sitters and parents.

THE PIGMY POUTER is a lively and bright little pigeon, the original Pouter in miniature, with all the tameness and companionable disposition of the latter. It is a fairly good breeder and nurse.

THE RUNT.—The largest of all our domestic pigeons—not less than 20in. from tip of beak to end of tail, and measuring in girth at least 14in. The head is dove-shaped, the eye pearl, or red, the back broad and long, and the chest wide. Owing to their weight they are clumsy, and apt to break their eggs; so the eggs should be removed and entrusted to common pigeons.

THE SCANDAROON is an old breed of pigeons. It has a long curved beak and an arched and narrow head. The eye is large, encircled by bright red wattle, the wattle on the beak being about the size of that on the Dragoon. The beak is flesh-coloured, and there is a red tinge on the beak wattle and a redness along the line of the mouth.

Span-Roof Aviary.



No. 200.

This aviary is for outdoor use. The House is composed of good, sound, tongued and grooved matching. The Flight is formed of galvanised wire-work. All outside woodwork stained and varnished or painted.

6ft. by 2ft. 6in.; 5ft. high to eaves. Cash Price, £3 15s.

THE SWALLOW.—A conspicuous-looking pigeon. The upper part of the head is coloured—called the cap—the wings and the leg feathers are coloured, and the breast, neck, back, saddle, tail, and thighs are white. There is a crest—a cup-shaped ridge of feathers rising from the neck at the base of the skull. The foot feathering is heavy. The beak is thin and rather long and the eye black. Swallows are good breeders and parents.

THE TRUMPETER.—This is a very peculiar-looking pigeon. The chief points are the rose, the shell, and the foot feathering. The rose is a circle of feathers on the top of the head, radiating evenly, and covering the head, eyes, and greater part of the beak. The shell rises from the back of the head, standing upright, and stretching round below each eye. The legs are short and heavily feathered. The eye is pearl. When pairing Trumpeters the front part of the rose should be cut away and most of the foot feathers cut short, or many of the eggs will be unfertile.

TUMBLERS are a large group of pigeons comprising many varieties. They are separated into two divisions, the Short-faced and the Long-faced. The Short-faced Tumbler is very small, with high and round head, and thin, short, and straight beak. The eye is pearly white, the neck and back short, the flight and tail feathers rather long, and the legs short.

The Almond Tumbler is generally known as the Queen of Pigeons. The ground colour of the plumage is a rich almond. After the first moult black ticks are seen on the neck, breast, shoulders, and back. The bird is at its best when between two and three years old. It is then spangled well, the tail and flight feathers showing "breaks," and divisions of black and white on the ground colour. After the almond is three years old the markings begin to go off.

Among the most charming of the Short-faced Tumblers are the Mottles. These are rich in colour, with an evenly-marked rose of small white feathers on the shoulders and a V-shaped cluster of white feathers in the centre of the back. There are Short-faced Kites, Agates, Self, or Whole-coloured Tumblers, Baldheads, and Beards. Short-faced Tumblers are delicate. They should not be mated before April.

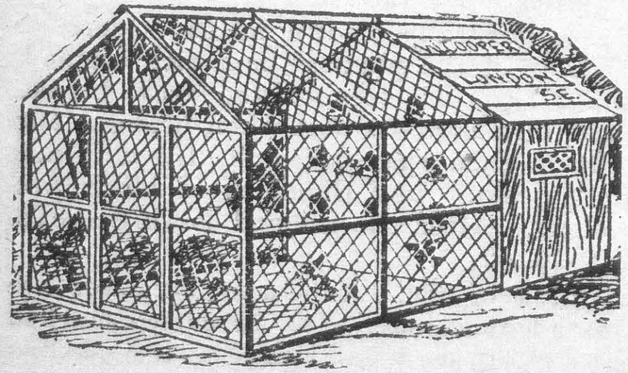
The Long-faced Tumblers are usually classified under two divisions, the Clean-legged and the Muffed-legged. The Clean-legged are subdivided into Self-colours, Mottles, Rosewings, Whitesides, Almonds, Baldheads, and Beards. The head of the Long-faced Tumbler is round, and the beak 1⅛in. from the tip to the centre of the eye. The eye is pearl. The Rosewings have white feathers on the shoulders like the Mottles, but no markings on the back. The Whitesides are coloured, with the exception of the sides of the wings, which are white.

PIGEONS—*continued.*

The Muffed-legged varieties are like the other Tumblers in markings, and are heavily feathered on the legs and feet. Tipplers are kept to a great extent in Leicester, Sheffield, and other parts of England. They are wonderful flyers, remaining on the wing for over twelve hours.

THE TURBIT.—With the exception of the shoulders the Turbit is completely white. The shoulders are either black, red, yellow, blue, silver, or dun, according to the variety. The head of the Turbit has been a good deal altered of recent years owing to a strong infusion of Antwerp. The beak is short and stout, the head with an even curve from beak to back of the skull. The eye is full, large, dark, and prominent, the mouth wide, the cheeks full, the gullet filling up the hollow of the throat, the frill long and compact, the mane at the back of the neck ending in a fine peak reaching slightly higher than the crown of the head. High sums are realised for really good specimens. Turbits will rear their own young, but it is advisable when first-class birds are breeding to use foster-parents.

Portable Span-Roof Pigeon House or Aviary.



No. 201.

This House is stocked in three sizes, but it can be made to any dimensions given. It is a useful and compact Aviary made of best material, painted one coat outside, fitted with nest-boxes, &c. It has two doors, one at the back of the House, the other at end of run, hinged and locked. A window is fixed in each side, protected by wire netting.

	Cash Price. £ s. d.
12ft. by 6ft. (including 7ft. run)	6 10 0
15ft. by 8ft. (including 9ft. run)	8 10 0
20ft. by 10ft. (including 12ft. run)	11 10 0

9, Sherwood Road, Addiscombe.

Poultry House arrived yesterday; quite satisfactory.

M. ELPICK.

14, George Street, Oban.

DEAR SIR,—Some two years ago I had a 60-egg Incubator from you, I must say I was highly pleased with it, my hatching percentage was very high—in fact, no machine, I do not care what it might cost, could have done better.—Yours, &c.,

DONALD M'D. SKINNER.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

BIRD-KEEPING IN AVIARIES.

There are so many advantages in keeping birds in aviaries instead of in cages that it is only natural that the former should gradually be becoming more general. A large number of foreign and many British birds will nest and rear their young in aviaries. Cages are, in some instances, too cramped for nesting operations, neither can the habits of the birds be readily studied under such conditions. From experience gained by the use of aviaries it has been ascertained that various foreign birds, formerly considered delicate and only able to live in heated rooms, can exist throughout the entire year if allowed the limited freedom of an aviary out of doors. Brilliantly-coloured parrots, as well as small birds, brought from all parts of the world, can be seen flying about in good health and condition when the temperature is below the freezing point.

The best aspect for an outdoor aviary is south or south-east. We make aviaries of various sizes and descriptions. No. 200 is 6ft. by 2ft. 6in., and 5ft. high to the eaves. There is a house and a flight, the roof of weather-boards is fitted with ornamental ridge, and all outside woodwork stained and varnished. No. 199 is 11ft. by 6ft., and 6ft. high to the eaves; the roof is felted between weather-boards and matching. A very picturesque and useful aviary is No. 197, made in sections in readiness for erection; and No. 201 is most compact, with two doors, one at the back of the house and the other at the end of the run, and a window in each side. This latter aviary is suitable not only for small birds, but also for doves, which are largely kept.

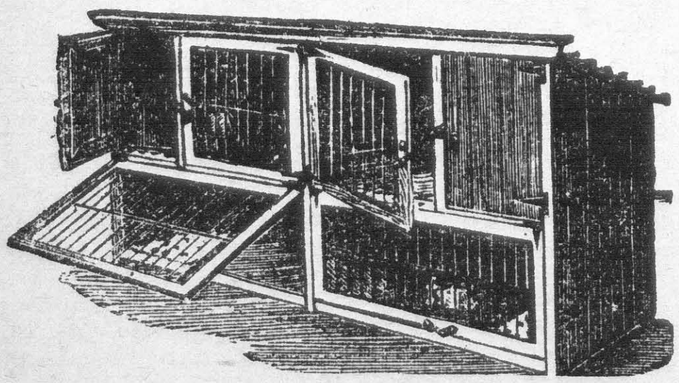
An aviary of British birds is very charming and interesting. Goldfinches, linnets, siskins, bullfinches, and greenfinches make a pleasing mixture, and a few canaries added help still more to brighten the gathering. These finches will thrive on canary seed, rapeseed, hempseed, linseed, and teazel. Always plenty of gritty sand must be provided, and clean fresh water daily for bathing in and drinking.

For beauty there are few birds to equal the Budgerigar or Australian Grass Parrakeet. In an aviary it will breed as freely as the canary, and being naturally gregarious, it does better when there are several pairs together. The male and female are alike in plumage, but they can be distinguished by the membrane surrounding the nostrils. This is blue in the males, light brown or cream colour in the females. They will nest in cocoanut husks or small hollow logs hung up. The hen lays from four to seven white eggs, on which she begins to sit directly the first egg is laid. The food for these birds is very

simple—canary seed and white millet, in separate vessels, with a few white oats in addition when there are young. The young ones will nest and lay when three months old. This should not be allowed, as the result from such a youthful alliance will be sickly, and will fledge badly. They should not be permitted to mate before they are at least six months old. Among the smaller foreign birds the Parson finch, the Ribbon finch, the Zebra finch, the Chestnut finch, the Cherry finch, the Java Sparrow, the Avadavat, the Waxbill, and the Black-headed and the Bronze Mannikin are all hardy, and do well in an aviary on canary seed and white millet.

An aviary of Foreign Doves is extremely attractive and pretty. Many of the Doves are among the most beautiful of birds. The one most frequently seen in this country is the Barbary or Collared Dove, pale fawn in colour, with a black line, in a half circle, at the back of the neck. It is perfectly hardy, and will breed during the greater part of the year. The Java Dove is a pure white bird, in size and shape much like the Barbary Dove. The Diamond Dove is lavender-coloured in head and breast, the back and wings purplish lilac, with a number of delicate white spots dotted over. Of the larger Doves, the Bronze-winged and the Cambayan Turtle Dove are hardy and desirable aviary birds. The food for the smaller Doves is canary and millet seed, with now and then some hempseed, and for the larger Doves dari, wheat, tares, and canary seed.

Improved Outdoor Rabbit Hutch.



No. 202.

This Hutch is constructed with the Breeding Chambers above, the Run underneath affording plenty of room for the young ones when weaned. It is well made, and fitted with the latest improvements. 4ft. high in front, 3ft. 6in. at back.

6ft. long by 2ft. wide. Cash Price, £2 15s.

Silcoates, Wakefield.

GENTLEMEN,—I bought one of your Rabbit Hutches a year ago, and have been more than delighted with same.

Have lost my catalogue of your goods, and wish to buy some fowl appliances, so will you please forward me another copy?—Yours, &c.,

R. K. SYKES.

RABBITS.

There are advantages in rabbit-keeping which cause these animals to take a prominent position in the rank of home pets. They are a source of great interest to the fancier owing to the skill required in breeding them to the requisite standard of points; they are held in esteem as an article of food; and many of the varieties are hardy enough to thrive out of doors in the smallest space.

HOUSING.—One or two breeds, such as the Lop, can only be bred successfully under cover. If one of these breeds is kept, some sort of house or shed is necessary. Special care must be taken to provide proper ventilation. The lower part of the house must have holes, or gratings, and there must be an outlet at the top for the foul air. A blind is necessary for the window when the sun is hot. The coats of some rabbits will turn a rusty brown, instead of black, if exposed to the direct rays of the sun.

We make hutches of various descriptions, suitable both for indoor and outdoor use. There is our cheap rabbit hutch for boys, No. 204; a very useful hutch, No. 203, made either single or double; and our improved outdoor rabbit hutch, No. 202, This hutch is constructed with the breeding chambers above, and run underneath for the young ones when weaned. It is 6ft. long by 2ft. wide, and is fitted with all the latest improvements. The floors of the hutches must be strewn to the depth of an inch with coarse pine sawdust. The sleeping apartment must contain some hay. It is necessary to use feeding troughs, and not to throw the food on the floor.

FEEDING.—Rabbits will eat almost anything in the way of grain, meal, or greenstuff. They benefit by frequent change of diet. If any food is left after a meal it should not be given to the rabbits again. They will seldom touch stale food. They will certainly not thrive on it. With most rabbit-breeders grain is the staple article of food. Of the various grains, oats are the best for all purposes. They can be used in several ways—whole oats, crushed oats (particularly useful for young rabbits which cannot manage whole grain), soaked oats, steeped in cold water for six hours and then drained off, and ground oats, which can be made up in many ways.

Barley is good as a change, but it must not be given daily, or it is liable to cause eruptions and coarseness. The heaviest and best grain should always be procured. It goes further, and is really cheaper. Meal is useful for getting a rabbit into condition or for fattening purposes. Oatmeal, barley-meal, pea-

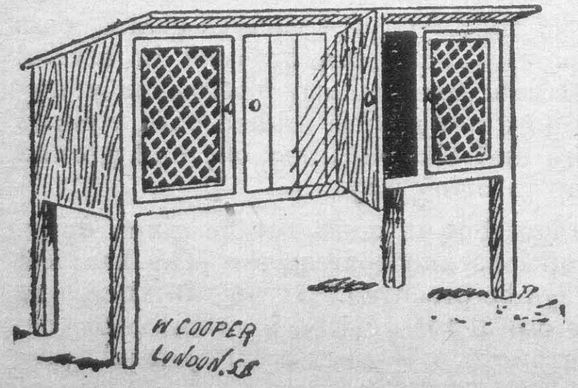
meal, maize-meal, and pollard can all be utilised. They are generally given mixed into a crumbly paste with water, though sometimes in a dry state.

Green food is essential. The following can be given:—Cabbage, lettuce, dandelion, hedge-parsley, sow-thistle, chicory, grass, clover, blackberry leaves, vine leaves, scarlet-runner leaves, nut leaves, mallow, wild tares, and young hawthorn shoots. Cabbage is almost always obtainable, and is useful when little other green food can be had. Lettuce is valuable for does with young. Being of a watery nature, it must not be given too freely. Dandelion is useful and milk-producing. If used in large quantities, or for a lengthy period, it has a powerful effect on the kidneys. Hedge-parsley is a first-rate food in the spring. Chicory is eaten freely by the rabbits, never giving them the scours.

How to give the green food is important. Some breeders give it freshly gathered. Others use it only when it has been cut for some hours and is partially dry. If given fresh, all superficial moisture must first be removed by drying with a cloth. Rabbits are undoubtedly fond of wet green food, and eat it greedily. But the effect is often disastrous. Roots, such as carrots, swedes, mangolds, and parsnips, are useful, especially when green food is not obtainable. Swedes and mangolds should be cut in pieces some hours before required for use.

Bread and milk is a good food, especially when the doe has young or in cases of sickness. Plenty of hay, too, is essential. Soaked peas, a handful of maize slightly bruised, potatoes boiled and mixed with pollard or oatmeal, tea leaves and bran—all of these make a satisfactory change. Clean cold water should be given at least three or four times a week in the summer, and once a week in the winter. It is beneficial to young and growing rabbits, and saves many lives in bad cases

Rabbit Hutch.



No. 203.

Strongly made, sound timber and workmanship, and fitted with divisions for breeding purposes.

SINGLE:
2ft. 6in. long, 4ft. high, 2ft. wide.
Cash Price .. 15s.

DOUBLE:
5ft. long, 4ft. high, 2ft. wide.
Cash Price .. £1 5s.

of diarrhœa. Three meals a day is a favourite method of feeding: soft food in the morning, greenstuff at noon, and oats or other grain and hay at night. This can be varied often.

BREEDING.—If permitted, rabbits will breed throughout the year. The young ones, however, seldom thrive in the winter. It is better not to allow breeding before the early spring. Both buck and doe must be in good health and condition, with glossy coats and clear, bright eyes, the buck at least a year and the doe not less than nine months old. When in a condition for breeding the doe will be restless, and will stamp her hind feet loudly on the floor. She should be placed in the hutch of the buck for not more than ten minutes, then returned gently to her own quarters. The doe goes with young about thirty days. Young does sometimes have their first litter in twenty-eight days.

A few days before the little ones are expected the doe will generally begin to bite up her bedding, carry it about in her mouth, and pile some of it in a corner. Her appetite will become larger, and her rations should be increased. Some mashes, made of meal, mixed with boiled linseed, will not be amiss at this time. Fresh cold water must not be forgotten. Nearly all does line their nests with fur from their breasts. A good supply of soft hay must be given in the sleeping compartment. With timid does it is as well to darken the hutch. Two days before the young are due the hutch should be cleaned out.

The nest should be examined about three days after the doe has littered. She should be offered some green food or other luxury to attract her attention while this is being done. Any very weakly or dead young can then be removed. Doe rabbits will occasionally destroy their offspring. One reason for this is the practice of handling the litter too soon. Sometimes a doe will desert her young on account of rats or mice. A strange dog or cat appearing near the hutch may cause a doe to rush to her young and trample them to death. Fresh green food must be supplied to the doe liberally when nursing, such as lettuce, sow-thistle, and dandelion. She should also have warm bread and milk, oats, sound sweet hay, and occasionally a mash made of oatmeal and milk, or barley-meal and middlings.

Lops and other rabbits that require to be large should remain with their mother for ten or twelve weeks. The young of other breeds can be taken from the doe at the end of six weeks. Our hutch, No. 202, is most convenient for this purpose. The compartment underneath should be made ready for the young ones by putting in it some fresh straw. They should not all be moved on the same day. The largest and strongest can go first.

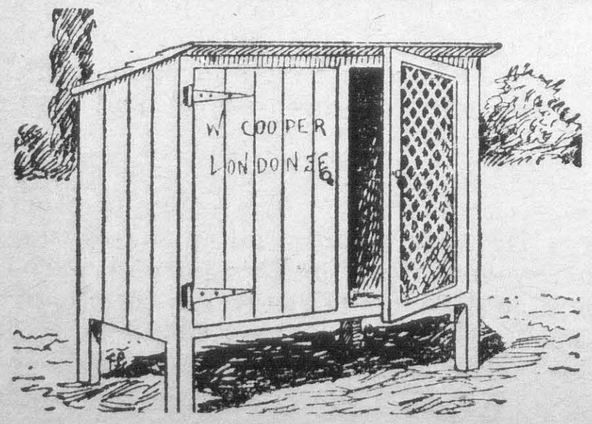
The youngsters should be fed three times a day. A good mode of feeding is to give crushed oats and a little lukewarm milk and water to drink in the morning; at noon some sweet hay and a cabbage leaf or two; and at dusk some middlings mixed with milk, or barley-meal scalded with water, then squeezed nearly dry and a little milk added. A good supply of bread and milk helps to bring them on quickly. The young rabbits may be kept together till they are thirteen or fourteen weeks old. After that time the bucks must be placed in separate hutches.

SOME DISEASES: DIARRHŒA OR SCOURS. — A common malady, caused often by stale or wet green food. Give dry food, such as crushed oats and bran, plenty of fresh water to drink, and about 5 grains of carbonate of bismuth daily, put over the tongue at the back.

EAR WAX.—Some rabbits have their ears now and then filled with sores and scabs, which cause discomfort and pain. When this is noticed the wax should be gently loosened and removed with a little piece of wood or with a quill. Then sprinkle into the ear some boracic powder daily three or four times. Or another treatment is to drop a little olive oil into the ear, and, when the scabs are softened, to carefully remove them with a soft rag or sponge.

EYES, INFLAMMATION OF.—When this occurs the eyes will run, and will be inflamed. They should be bathed with a lotion made of boracic acid one scruple, and water 6oz. Young rabbits are subject to ophthalmia. This causes the eye to look swollen and be sometimes closed, and there are red spots round the lids. The eyes should be bathed with a weak solution of alum and water. An hour after bathing apply a ten-grain solution of sulphate of zinc twice daily, dropped into the eye.

SCURF will arise from want of cleanliness, from insufficient



A Cheap Rabbit Hutch for Boys.

No. 204.

It has a Breeding Compartment, and is fitted with hinged wire door, &c.

2ft. 6in. long, 1ft. 10in. wide, 2ft. deep.

Cash Price, 7s. 6d.

green food, and from contagion. The symptoms are roughness of the skin, which peels off in small white flakes. The sufferer must be isolated, and the affected parts washed with warm water. Half an hour afterwards a solution of strong tobacco water should be applied—an ounce of common shag to half a pint of boiling water, used lukewarm. This must be continued every alternate day for a fortnight.

RED WATER is induced by damp, or by feeding too freely on cabbage or dandelion. The water appears as if tinged with blood. The bed must be dry and clean, no cabbage leaves allowed, but the feeding should be warm pollard mixed with boiled potatoes, hay, a few oats, tea leaves, chicory, and a little garden parsley, and a few drops of sweet spirits of nitre daily.

THE DIFFERENT BREEDS.

THE ANGORA.—One of the most uncommon looking of the numerous breeds, with wool as long as can be obtained, fine in texture, and of equal length all over the body. White Angoras are generally seen, but there are also blue, grey, and fawn specimens. The eye is of a pale ruby colour. The Angora is fairly hardy, and does not require artificial heat. To prevent the long coat becoming damaged the strictest cleanliness must be observed.

THE BELGIAN HARE.—This is a native of Belgium and the Northern parts of France, and derives the name of "hare" from its great resemblance to that animal. Length of limb and freedom from dewlap are important points. It is an excellent rabbit for the table, being of good flavour, and weighing from 7lb. to 10lb. In breeding Belgians dark bucks should be used, otherwise the young ones may be too light.

THE BLACK AND TAN.—A good specimen of this breed is very attractive. The dense black, the rich tan, the short, erect black ears margined with tan, the tan nostrils, and the bright colour on the chest, flanks, and feet all produce a most pleasing effect.

The Blue and Tan is a pretty sub-variety. The points are the same as in the Black and Tan, with the substitution of blue for black.

THE DUTCH is a popular and pretty variety. It is hardy and prolific, and, depending largely on markings, the inferior specimens can be distinguished at an early period. The points of the Dutch lie in the markings, colour, and shape. The ears are neat, erect, and coloured, the eyes matching, and

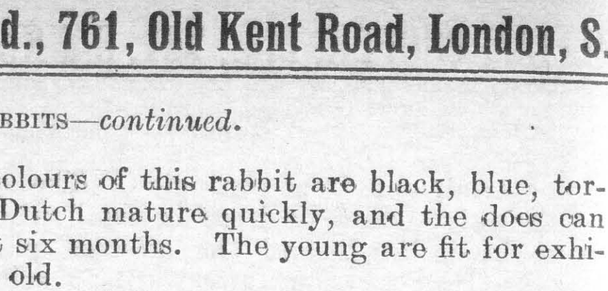
without specks. The colours of this rabbit are black, blue, tortoiseshell, and grey. Dutch mature quickly, and the does can be used for breeding at six months. The young are fit for exhibition when ten weeks old.

THE ENGLISH is bred in the usual rabbit colours. The ears are carried erect, and are coloured. The nose is marked like a butterfly with its wings extended, hence the name of Butterfly Smut sometimes given to this rabbit. There is a spot on each side of the face, clear of the eye circle. A line of colour extends along the spine, the colour being well broken up, continued by the "chains" on either side. The young ones show but little body colour till after the first moult.

THE FLEMISH GIANT.—A very large rabbit, good specimens weighing as much as 15lb. In colour it is grey, with a brown shade ticked with black, after the manner of the Belgian. The Flemish Giant is not so prolific as some other breeds. Size being so important a feature, the doe, though usually a good mother, should not be allowed to bring up more than two or three of the litter.

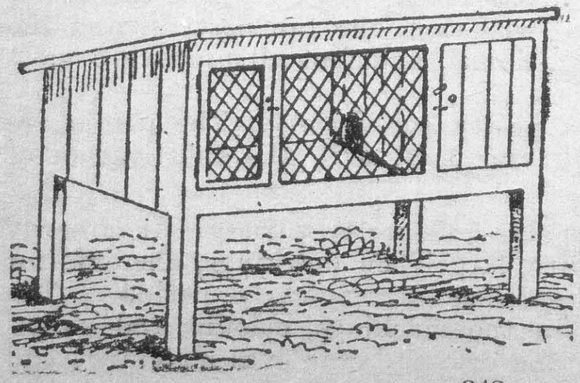
Portable Rabbit Hutch and Run.

No. 205.



Made for placing upon the ground, with all the latest improvements. It has a galvanised wire netting bottom, which admits the grass through, and in no way injures the comfort of the bottom. The roof is hinged in two parts: affording easy access in attending to the stock. 6ft. long by 3ft. wide. Cash Price, £1 10s. Any Size made to order.

Portable Rabbit or Ferret Hutch.



No. 206.

Soundly constructed of tongued and grooved matching, on raised legs, and fitted with loose floors for cleansing purposes; the front of the Run is covered with galvanised wire netting, and fitted with door.

4ft. by 2ft.; 3ft. 6in. high.

Cash Price, £1 7s. 6d.

THE HIMALAYAN is one of the prettiest of our domestic rabbits. It has a white body, with the ears, nose, feet, and tail black. The eyes are bright pink, the ears small and neat. As the dark markings are generally inclined to fade and grow lighter, various methods are adopted to prevent this. The Himalayan is a good breeder and fairly hardy. When the young are born they are all white. This continues for two or three weeks, after which the dark extremities will begin to show.

THE LOP-EARED is the oldest of our breeds of fancy rabbits. The most important feature of the Lop is the ear. Lops are reared with the greatest success in a house where the temperature is between 60deg. and 70deg. Not only should the ears be of great length, but they must be as wide as possible throughout the whole extent of the ear. For breeding the buck should have larger ears than the doe. A good Lop should weigh 10lb. or more.

THE PATAGONIAN is another of the large breeds of rabbit not often seen at the present day. It is not very prolific, the litters usually numbering from three to five.

THE POLISH is about the size of the Himalayan, neat and compact in shape. The coat is as fine as possible, short, smooth, and silky in texture. It is a free breeder.

THE SILVER TRIBES are general favourites. The Silver Grey is well known. The silvering and ticking are alike throughout the entire rabbit, the same shade prevailing all over the body and on the extremities, including the head and ears and legs. The Silver Fawn is of a rich fawn, silvered only sufficiently to be discerned. The Silver Brown is of a rich red fawn, finished off by silver tips, with some darker hairs intermingled. These rabbits are hardy, are prolific breeders, and are worthy a place in any rabbitry.

RABBITS FOR THE TABLE.—Rabbit breeding for table purposes only, without regard to fancy points, should, when properly managed, prove lucrative. There is very little outlay required, no special knowledge on the part of the rearer is necessary, and there is a ready sale for plump, well-grown, young rabbits. The system of rearing rabbits in portable hutches, which was originated by Major Morant, is well worth the consideration of anyone thinking of rabbit breeding for profit. Our portable hutch and run, No. 205, is constructed on the principles laid down by Major Morant, having a wire-netting bottom, enabling the rabbits to eat the grass that protudes.

Each doe has a hutch. It is advisable not to allow the does, as a rule, to have more than four litters in a year, and not to breed from them when they are changing their coats in September and October. By not attempting too many litters the

young ones can remain with their mother till they are six or eight weeks old. This hastens their growth. One hundred does and their young will thrive in a ten-acre field. One buck is required for every ten does. The first four weeks the young live entirely on their mother's milk. The last eight weeks—the young ones should be killed at twelve weeks—an average of 1½lb. each of grain and bran, in addition to grass and hay, is all that is necessary. It has been estimated that a full-grown rabbit does not require more than 2oz. of oats, and 2oz. of bran a day, in addition to the grass consumed. Half that quantity is sufficient in fine, dry, warm weather, when the grass or clover is good.

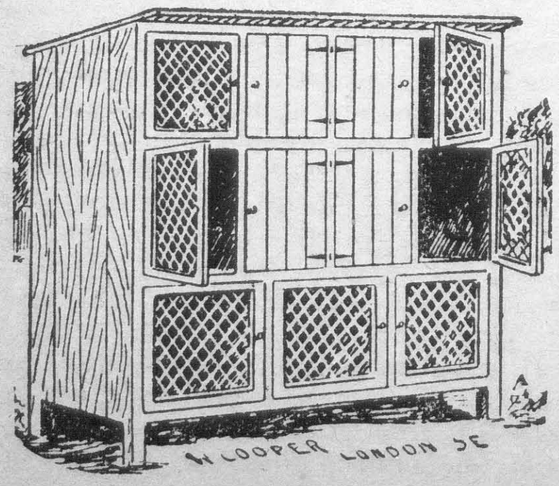
GUINEA PIGS.

The Guinea-pig, or cavy, is a very easily kept pet. Being small it will live comfortably in a space that would not suffice for a rabbit. It is very hardy, it is not expensive to buy, and will allow itself to be handled and carried about without attempting to use its teeth.

With the exception of the Peruvian variety, Guinea-pigs will thrive almost anywhere. We make a most useful house for Guinea-pigs, No. 207. Four sows' hutches comprise the top part, each with breeding chamber. The boars' hutches, three in number, are placed at the bottom. If desired these can be converted into one large hutch by removing the division boards.

There are three varieties of Guinea-pig kept in this country—the English, the Peruvian, and the Abyssinian. The chief

Guinea-Pig House.



No. 207.

This is a pattern supplied to many Breeders. The Boars' Hutches are placed at the bottom, each having a door. This floor can be converted into one large Hutch by removing the division boards. Four Sows' Hutches comprise the top part, each with Breeding Chamber and separate doors.

Size: 3ft. 6in. long, 3ft. high, 1ft. 8in. wide. As illustrated.

Cash Price, £2 10s.

points of the English, besides colour, are size, shape, shortness and silkiness of coat, large head, neck and shoulders broad and thick, and eyes large and prominent.

The Peruvian is judged chiefly for size, and for the length and quality of the fur. The coat is long, silky, soft, and straight, without the least curl or wave. It is parted down the centre of the back, and hangs on each side of the body, coming also well over the head. The undercoat is dense and long, not thin or open. Compared with the English cavy, the Peruvian is delicate. The coat is brought to perfection by warmth, such as that of a stable. To prevent the long coat becoming soiled the hutch must be cleaned out daily.

The Abyssinian has a harsh coat. This is wiry, rough, and well "rosetted" with circles of stiff, straight hairs radiating from the centre. The number of these rosettes varies in individual cavies. The Abyssinian should be large, with big head, broad shoulders, and large eyes.

Guinea-pigs are fed much as rabbits. They eat more than rabbits in proportion to their size. The food consists of good oats, sweet hay, an occasional mash made of barley-meal and pollard, mixed into a crumbly paste, bread and milk, any kind of green stuff in season, and roots, such as carrots, parsnips, and swedes. Many breeders give their cavies cold water to drink. Peruvians require a somewhat dry diet. They should not have cabbage, lettuce, or watery green stuff.

When breeding Guinea-pigs one boar can run with three or four sows. The sow goes with young about sixty-three days. The little ones are born with their eyes open and clothed with hair. In three days they are able to run about, and will begin to eat bread and milk and nibble the green food. They should be left with their mother till they are about a month old, then they should be removed, the boars being placed in one hutch and the sows in another. At first they should have plenty of bread and milk. After a little while they will be able to eat oats, and manage the same diet as the adults. Cavies will breed when only a few weeks old. This should be prevented. Size is important, so they should not be bred from until they are at least seven months old.

FERRETS.

Originally a native of Africa, the ferret was first introduced into Asia and Southern Europe. It has since been carried into all parts of the habitable globe where its services can be utilised. We make a capital hutch for ferrets, No. 208, divided into two compartments. The hutch must be placed where it is not exposed to wind or rain. A common practice is to stand

FERRETS—*continued.*

it in a dark corner, the idea being that the ferret cannot tolerate bright light; but the animal is healthier and more comfortable when allowed a good amount of light. The floor of the hutch must be covered with clean, coarse sawdust, while the bedding is of wheaten straw. This must often be changed, and the hutch cleaned out.

Two female ferrets can be kept together in the same hutch, but must be separated when young ones are expected. The period of gestation is six weeks. The average litter is from four to six. With regard to diet, bread and milk is largely used. In addition to this, three or four times a week, some flesh, such as a piece of rabbit, or fowl, or other bird. It is not advisable to give them birds or animals that have died of disease, or that are putrid or high. Neither should a quantity of food be given at a time, and allowed to remain until consumed.

If it is wished to bring young ferrets on quickly some beef tea or meat extract added to the food is an excellent thing. They should remain with their mother till they are nine or ten weeks old. This is a good age at which to purchase them. Ferrets must often be handled, so as to make them as tame as possible. If they are only handled when required for use they are liable to bite, and the bite is very severe.

If clean and dry and warm in their houses ferrets are healthy, and give no trouble. If neglected they are liable to many ailments, including foot-rot, mange, and distemper. Foot-rot commonly arises from dirty hutches, and particularly from being put away, after working rabbit and rat holes, while their feet are wet and muddy. The symptoms are great soreness of the feet and tails. These should be washed with warm water, and then anointed with spirits of tar and turpentine in equal parts. Mange can be known by a redness of the skin, especially under the shoulders, and by the animal frequently scratching itself. The simplest remedy is to wash with warm water in which is dissolved a few grains of permanganate of potash. Distemper is practically incurable. It is known by the swollen head and eyes, soreness of the mouth, and loss of appetite. A nutritious diet should be tried, but it is seldom of any use.

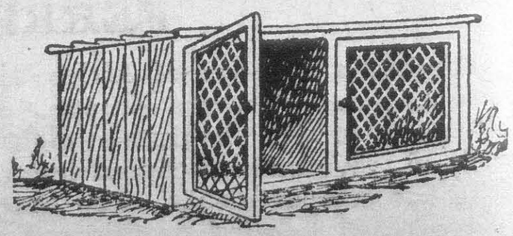
Ferret Hutch.

No. 208.

This is a capital Hutch for Ferrets or Guinea Pigs.

3ft. long, 1ft. 6in. wide, 2ft. high.

Cash Price, 15s.



SECTION IV.

THE DOG-KEEPERS' GUIDE

AND

Illustrated Catalogue

OF

DOG KENNELS,

KENNELS WITH RUNS,

PUPPY KENNELS,

PENT-ROOF KENNELS,

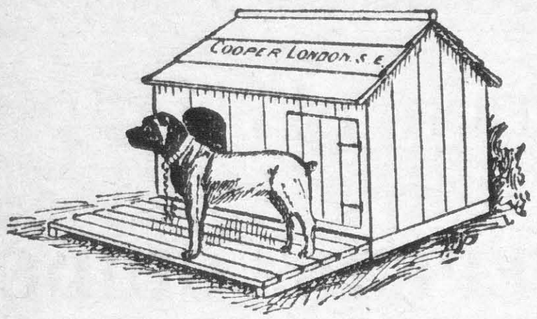
STAKES FOR DOG CHAINS,

RANGES OF KENNELS AND RUNS,

DOUBLE KENNELS,

Kennel Railing, &c., &c.

Portable Dog Kennel. With Platform.



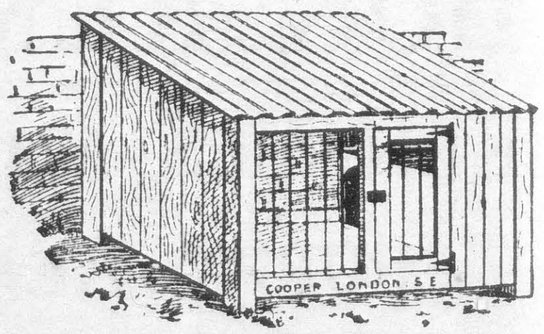
No. 209.

This Kennel is soundly made of thoroughly seasoned timber, with large door at the side to facilitate attention to sanitary operations, so essential to the well-being of dogs; an open platform is supplied, affording a stand for the dog outside the Kennel free from wet. Painted outside with our Patent Rot-proof Composition.

No.	Cash Price. £ s. d.
1.—Suitable for Terriers, 2ft. long, 1ft. 6in. wide, 2ft. high	0 10 6
2.—Suitable for Large Terriers, &c., 2ft. 3in. long, 2ft. wide, 2ft. 6in. high	0 12 6
3.—Suitable for Collies, Retrievers, and Spaniels, 3ft. 6in. long, 2ft. 3in. wide, 3ft. high	0 15 0
4.—Suitable for St. Bernards, Mastiffs, and Newfoundlands, 4ft. 6in. long, 2ft. 6in. wide, 4ft. high	1 5 0

Portable Lean-to Kennel and Run.

The accompanying illustration shows a Lean-to Kennel and Covered Run for fixing against a wall or fence, and is constructed in sections to be bolted together; strong framework, boarded with tongued and grooved boards, the end of run also being boarded, thus protecting the run and kennel from draughts; the sleeping compartment is made at one end, the top of which forms a day bench; the front is hung on hinges, by which means the inside can be thoroughly cleaned; the front of run is constructed of iron rods 2½in. apart, and complete with door; the roof is covered with feather-edge boards; outside woodwork painted with our Patent Rot-proof Composition. All in perfect readiness for erection, and securely put on rail at our Works, at the following respective prices:—



No. 210.

No.	Cash Price. £ s. d.
1.—Suitable for Terriers, &c., 6ft. 6in. long, 3ft. wide, 4ft. high at back	2 10 0
2.—Suitable for Collies, Retrievers, &c., 9ft. long, 3ft. 9in. wide, 5ft. high at back	3 10 0
3.—Suitable for St. Bernards, &c., 11ft. 6in. long, 4ft. 9in. wide, 5ft. 6in. high at back	4 10 0

If the back is boarded, making them independent of wall or fence, 10s., 12s., or 20s. extra. Wood batten floors for runs, 6s., 9s., and 12s. extra.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

DOGS.

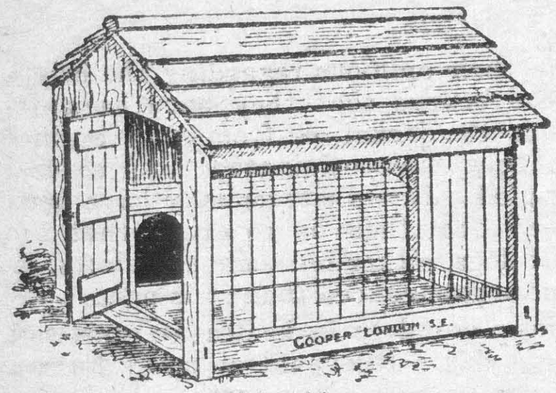
Naturalists are divided in their opinions regarding the origin of our domestic dogs. Some believe that they have been derived either from the wolf or the jackal, or from some extinct species; others opine that they have originated from several species more or less commingled. But whatever may have been the origin of our present-day dog, there is no doubt that the taste for keeping all kinds of dogs, either for their usefulness, or simply as pets, was never more pronounced than it is now.

FOOD.—If we wish to keep our dogs in health we must not feed them more than twice a day. It is said of many human beings that they dig their graves with their teeth. The same may truthfully be said of numberless house dogs. The greatest enemy to their health, and the cause of much disease and premature death, is over-eating. A dog that is allowed to be present at the family meals almost invariably receives numerous scraps in addition to his ordinary food. It is true that some self-denial is required when we see our pets sitting up on their hindquarters, and eloquently asking for a taste of what we are eating. But most certainly it is mistaken kindness to yield to doggie's appeal.

A valuable article of diet for all kinds of dogs is dog biscuit. For breakfast a biscuit—or a portion, according to the size of the dog—broken up, either dry or soaked. The next and principal meal should be given about five o'clock, or later if more convenient. This can be varied with advantage. Scraps from the table, bread or biscuit mixed with gravy or with the water in which fish has been boiled, or any of the advertised prepared foods for dogs. Two or three times a week some boiled green vegetables must be given, mixed with the other food—no more at a time than the dog will eat eagerly. As soon as he begins to stop feeding and to look about, any remaining must be taken away. A large bone now and then helps to keep the teeth clean, and gives a lot of employment. Fish, game, and fowl bones are bad. Small bones of that description are greedily eaten; but they often lead to perforation of the intestines.

Small toy dogs, such as Poms, do well on biscuit broken up and mixed with gravy, with, three or four times a week, a little minced underdone or raw, lean meat. Big dogs can eat all kinds of things. Paunches, houndmeal, oatmeal, and bullocks' heads can form items in the bill of fare. All dogs should have constant access to clean water for drinking. It is a common practice to put a piece of sulphur in the water provided for dogs. This is quite useless. A pebble might as well be used, as sulphur does not dissolve in water.

Three-Quarter Span-Roof Portable Kennel and Run.



No. 211.

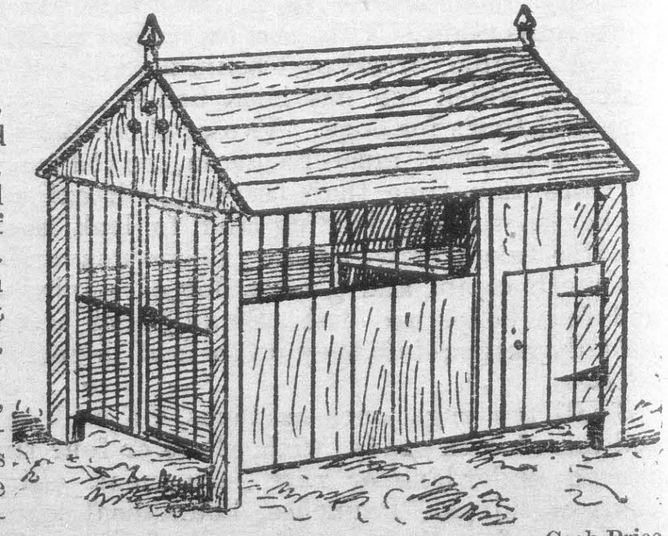
The above Kennel and Run is suitable for Collies, Retrievers, Terriers, and small dogs, and is well adapted for breeding purposes, and also for a Puppy House; the sleeping compartment is constructed at the back, the top of which forms a day bench; the front is made to lift up for cleaning purposes; both ends are constructed of iron rods 2½in. apart; roof of weather-boards, boarded back, thus doing away with the need for wall or fence. All woodwork painted with our Patent Rot-proof Composition outside and limewashed inside, and the whole in sections to bolt together, and securely put on rail at our Works at the following respective prices :—

No.	Cash Price. £ s. d.
1.—For Terriers, 3ft. wide, 5ft. deep, 4ft. 6in. high at ridge	2 0 0
2.—For Collies, Retrievers, &c., 3ft. 9in. wide, 6ft. 6in. deep, 5ft. 6in. high at ridge	2 15 0

Wood Batten Floor for Runs, 4s. and 5s. extra respectively.

Dog Kennel with Covered Run.

No. 212.



This is a neat design, constructed of good, sound, tongued and grooved matching; roof of weather-boards. The Run is of iron rods in upper part of sides and in end, fitted with gate; the whole complete, with floor, in sections in readiness for erection, at the following prices :—

No.	Cash Price. £ s. d.
1.—6ft. by 3ft. by 5ft. 6in., suitable for Terriers	3 0 0
2.—7ft. by 4ft. by 6ft., suitable for Collies, &c.	3 10 0
3.—10ft. by 5ft. by 7ft., suitable for Mastiffs, &c.	5 5 0

All outside woodwork painted Rot-proof Composition.

Dogs—*continued.*

HOUSING.—It is not good to coddle dogs, even small toy dogs, in their sleeping quarters. A small pet dog is frequently allowed to sleep on the bed of its owner. Under such conditions the little animal is more susceptible to cold, is more likely to be delicate, and the coat, if a large one, will not be glossy and healthy. We make a great variety of dog-kennels, suitable for all breeds. Our portable kennel, No. 209, is constructed in various sizes, for Terriers, for Collies or Retrievers, and for the largest dogs, such as St. Bernards and Newfoundlands. It has an entrance at the side, a door to enable easy cleaning, and a platform outside, affording a stand free from wet. We make lean-to kennels, with covered runs, of various descriptions, Nos. 210, 213, and 219; a three-quarter span-roof portable kennel and run, No. 211, for dogs of all sizes, and well adapted for breeding purposes, and also for a puppy house; other kennels of different shapes with covered runs, Nos. 217, 221, 223, and 226; and kennels with open runs, Nos. 225, 228, and 229; also different patterns of puppy kennels, notably Nos. 214, 215, 220, and 227.

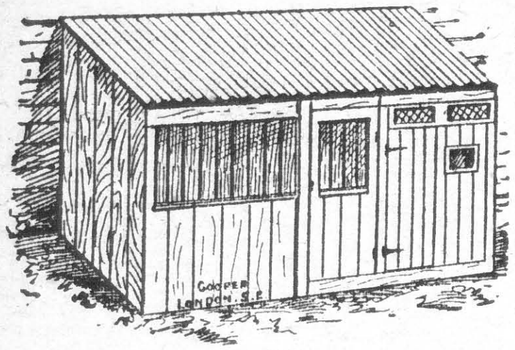
The kennel must be placed in a dry situation, where damp and wet will be absent. A south or south-east aspect is as good as any. Plenty of sunshine tends to health, provided the dog can obtain shade in hot weather. A good supply of bedding adds much to the comfort of a dog. There is nothing better than clean, well-broken straw often changed. A good supply of disinfectant is a necessity. For this purpose our Disinfectas should be sprinkled frequently in the kennels and runs.

GENERAL MANAGEMENT.—Regular exercise is most important for the health and comfort of the dog. Most dogs suffer from constipation and more serious troubles if they are not allowed at least one good run daily. House dogs should always be put out of doors for a few minutes before going to bed. Exercise should not be given immediately after a good meal. In very hot weather the outing ought to be taken either early in the morning or in the evening—not at the warmest time of day. Certain active breeds of dog require more exercise than heavier dogs, such as the Bulldog; and old dogs will not want as much as younger dogs.

Washing in moderation helps to keep a dog in health, and prevents unpleasant smell. Long-haired dogs must not be washed too often, or the coat will go wrong. The same may be said of wire-haired, hard-coated dogs, the coats of which will become soft with frequent washing. Once a fortnight is often enough to give a bath to most toy dogs, and once a month for dogs such as Fox-terriers, although the time of year must also be taken into consideration, as well as the age of the dog.

To keep a dog's coat in the best condition it is necessary to brush it often. This not only adds to his good looks, but helps

Lean-to Kennel with Covered Run.



No. 213.

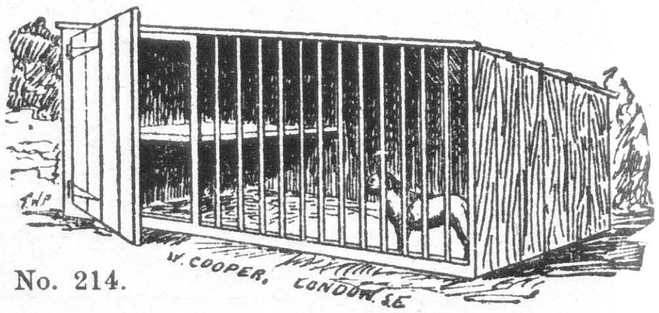
Constructed of good, sound, tongued and grooved matching, weatherboard roof; iron rods in front, as shown; all outside woodwork painted with our Patent Rot-proof Composition; all in sections in readiness for erection.

Size, 10ft. long, 4ft. 6in. wide, 7ft. high at back, 5ft. high to eaves.

Cash price ... ... £4 10s.

Wood Back, 20s. extra.

Puppy Kennel.



No. 214.

This portable Puppy Kennel will be found indispensable to Breeders. It can be moved as often as necessary to maintain cleanliness, and it provides accommodation in any case of emergency. It is strongly made and fitted, and all outside woodwork painted with our Patent Rot-proof Composition.

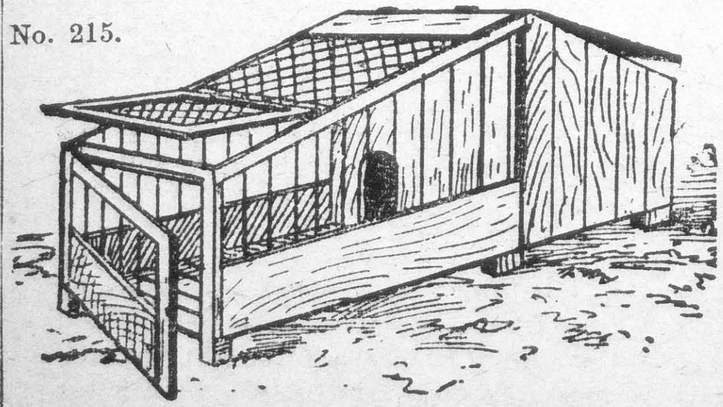
6ft. long, 2ft. 6in. wide, 2ft. 6in. high.

Cash price ... ... £1 7s. 6d.

Larger sizes made to order.

Puppy or Cat Kennel.

No. 215.



The above is a very neat design, and is suitable for indoor use, and is constructed of good, sound, tongued and grooved boards. The Kennel is fitted with zinc pan at bottom, and the top of both Kennel and Run is hinged to lift up; the Run is constructed of iron rods. The whole complete with floor; all outside woodwork painted with our Patent Rot-proof Composition.

Size, 5ft. by 2ft. by 2ft. 6in.

Cash Price ... ... **£2.**

to keep him free from insects, and to remove the old and loose hair. Long-haired toy dogs should be brushed and combed daily. Dogs that carry a short, shiny coat should often be rubbed down with a silk handkerchief to improve the gloss.

A puppy, when intended for the house, must be taught habits of cleanliness when quite young. He is sure to make mistakes occasionally in the house, but this should not entail severe chastisement. A couple of smacks with the hand and a scolding, repeated each time the offence is committed, will in most instances soon stop this, especially if the dog is immediately turned out of doors for a minute or two.

BREEDING.—It is advisable not to allow a bitch to be mated before she is a year old, not even quick maturing, small dogs. Many of the large breeds have not finished growing when eighteen months. These it will be better to keep unmated till two years old. A bitch usually comes in season at intervals of six months, but this cannot always be depended on. The approach of the period can be known by the parts swelling, followed by a discharge that lasts for nine or more days.

The period of gestation is sixty-three days. Before the puppies are expected, a dose of castor-oil is usually given. Small dogs can have some magnesia instead of the oil. The bitch will most likely be restless, and decline to eat for a few hours before the time. She must have water handy for drinking. After the puppies are born the mother should be offered some warm beef tea. The food must be light, and not heating, for the first week—porridge and milk, bread and milk, strong broth, and very little meat. More food will be required as the puppies grow. The supply of meat must be increased.

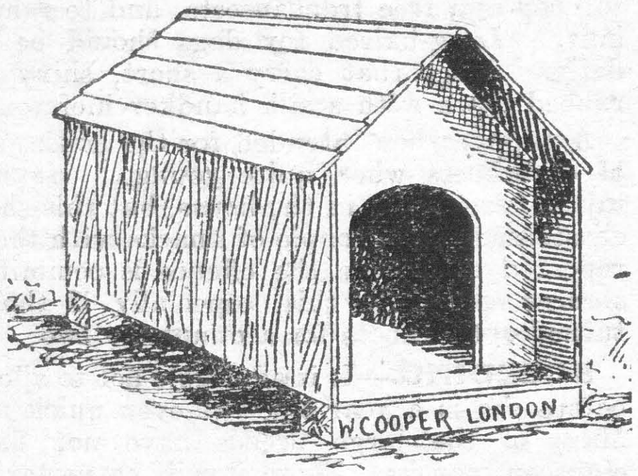
The different breeds vary considerably in the size of their litters. Fox-terriers, Pugs, and Scotch-terriers seldom have more than seven or eight puppies. The very large breeds have, some of them, from ten to fifteen at a litter. Unless the mother is very strong, it is as well not to allow her to attempt to rear all of a large litter. Small dogs generally find four or five puppies enough; larger breeds, eight or nine. The surplus pups can either be transferred to a foster-parent or drowned. If the latter, the weakest or most unshapely should be got rid of.

When five or six weeks old the puppies can be gradually weaned. They will be able to feed themselves, and can be fed from a plate on finely-broken puppy biscuits, with a little chopped-up underdone meat, or on bread broken up and mixed with gravy, or, for a change, with milk. They should have as much at each meal as they can eat. Four feeds a day for the first three months are not too many.

It is the practice to shorten the tails, or "dock," as it is

Improved Dog Kennel.

No. 216.



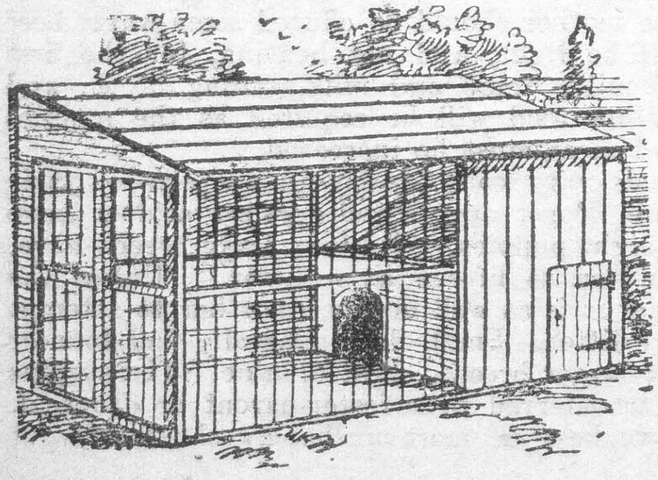
The superiority in manufacture of these Kennels has created a great demand for them. The best boards only, grooved and tongued, are employed in construction, and they are rendered thoroughly rain-proof. Outside painted with our Patent Rot-proof Composition.
Made in Three Sizes.

No.	Cash Price. £ s. d.
1.—Suitable for Terriers	0 10 6
2.—Suitable for Collies, Retrievers, and Spaniels	0 15 0
3.—Suitable for St. Bernards, Mastiffs, and Newfoundlands	1 5 0

These Kennels are comfortable, having the gables extended in the front.

Dog Kennel with Covered Run.

No. 217.



This is a well-built substantial Kennel and Run, the roof to both Kennel and Run being covered with weather-boarding. The Kennel is provided with day-bench over sleeping compartment. All outside woodwork painted with our Patent Rot-proof Composition. The Run is constructed of iron rods, and has gate at end. Constructed in sections, and carefully put on rail at our Works at the following respective prices :

Size 1. For Terriers £5

Kennel, 3ft. long, 3ft. 6in. wide, 4ft. high; Run, 5ft. long, 3ft. 6in. wide.

Size 2. For Retrievers and Spaniels ... £6 5s.

Kennel, 3ft. 6in. long, 4ft. wide, 5ft. high; Run, 6ft. long, 4ft. wide.
If wood spline floor for runs—Size 1, 15s. extra; Size 2, £1 extra.

called, of certain breeds. This should be done when the puppy is about three days old. There is an idea that the operation is performed by biting off the piece of the tail, but though this was occasionally done in the olden times, the disgusting practice is a thing of the past. Both docking and removing the dew claws are done with a pair of strong scissors. The puppies must be allowed plenty of exercise, and to run in the sunshine and air as much as possible. If it is desired to dispose of any of a litter of puppies, they look prettier when a few weeks old than during the "hobbledehoy" stage, and are more readily and more satisfactorily sold before they have attained three months.

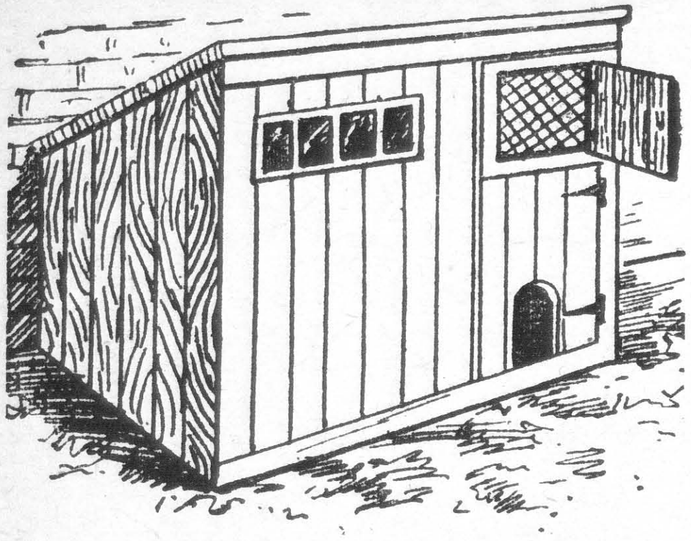
ADMINISTRATION OF MEDICINE.—In many instances medicine can be given in the food without the dog being aware of it. Pills can be inserted in a piece of meat, and powders can often be mixed with the dinner, or in some gravy. When it is necessary to compel the dog to take food as little force as possible must be used, or the animal may be injured. A large dog can best be treated if placed against a wall so that he cannot back. If the operator then stands across the animal, the dog's head can be held between his knees, and the mouth opened by inserting the second finger and thumb of the left hand. If liquids are given, the mouth of the dog can be kept closed, the head raised, the lower lip pulled out so that a funnel-shaped opening is made, and the fluid slowly poured in. A small dog can be held on an assistant's knee.

SOME MALADIES.—If a dog is really ill, it is better to call in skilled aid than to attempt amateur doctoring. A few of the ordinary ailments are here referred to, and some of the remedies given.

BRONCHITIS.—Dogs sometimes suffer from inflammation of the bronchial tubes, caused by exposure to cold and damp. The sufferer must be kept in a warm, moist atmosphere, and hot linseed poultices applied to the chest and sides. The following mixture can be given internally: Liquor morphia, 1 drachm; ipecacuanha wine, ½ drachm; paregoric, 2 drachms; Hoffmann's spirit, 1 drachm; water, 2oz. One teaspoonful to a 20lb. dog twice a day.

BURNS.—The best application to a burn or scald is carron oil, made by mixing equal parts of lime-water and linseed oil. The affected part must be covered with cotton-wool or wadding immediately after the oil is applied. If no oil is obtainable the wound should be freely dusted with flour.

CATARRH, OR COLD IN THE HEAD, sometimes is a prelude to distemper, but when this is the case there is always fever and prostration. A simple cold is denoted by a watery discharge from the nose and eyes, and now and then a cough.



Pent-Roof Kennel.

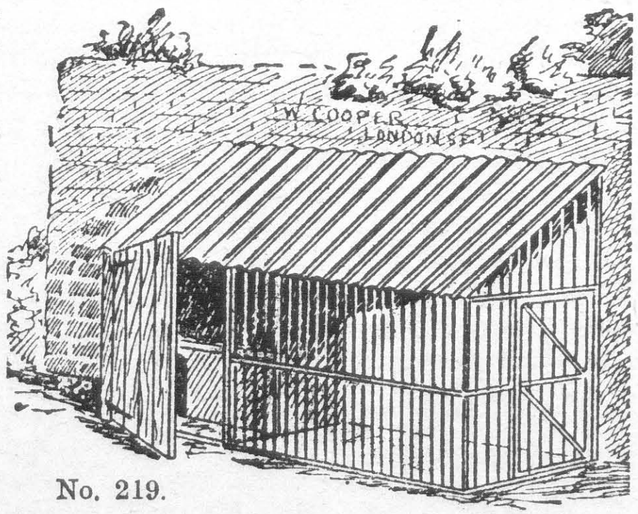
No. 218.

Constructed of good, sound, tongued, grooved, and beaded matching; weather-board roof; complete with floor, and fitted with bench; outside painted with our Patent Rot-proof Composition.

No.	Size.	Cash Price. £ s. d.
1.	3ft. by 2ft. 6in., suitable for Terriers	2 0 0
2.	4ft. by 3ft., suitable for Collies, &c.	2 10 0
3.	5ft. by 4ft., suitable for St. Bernards, &c.	3 5 0

Portable Lean-to Dog Kennel.

This Lean-to House and Kennel is made of the best materials, being strong, yet light in appearance. The Kennel, which is 2ft. 6in. high, is made with movable top, so that its height may easily be increased, if wanted, for a very large Dog. The house is 4ft. wide, and 3ft. 6in. back to front; the run is 6ft. long, 3ft. 6in. deep, and fitted with gate. It is roofed with corrugated galvanised iron, but open iron bars can be had if desired over Run.



No. 219.

Cash Price £5

Corrugated galvanised iron, 2ft. wide, round bottom of Run or Yard, 7s. 6d. extra.

The Crags, Holywood.

Received the Dog Kennel, with thanks. I am pleased with it, and will be very glad to show it to my friends.

J. DUGAN.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The treatment is to keep the dog in dry quarters, and give twice a day five drops of paregoric and five drops of eucalyptus oil, mixed with a little sugar.

COAT COMING OUT.—Many bitches shed their coats after whelping, and many breeds of dog, owing to improper feeding and other causes, are constantly losing their coats. The coat can be strengthened by freely applying cocoanut oil just warmed. A good stimulant for promoting the growth of hair is a lotion made of ½oz. of tincture of cantharides and 8oz. of water, gently rubbed on the hairless parts twice a day. See also under Eczema.

CONSTIPATION.—Some fluid magnesia—quantity according to the size of the dog—in milk every morning for a time will relieve. Give plenty of exercise, some green vegetables with the food, and let the diet be moist, and not dry.

COUGH.—A cough can in many instances be relieved by giving a dessertspoonful twice a day of the following mixture: Liquor morphia, 1½ drachms; paregoric and Hoffmann's spirit, 2 drachms each; ipecacuanha wine, 1 drachm; syrup of squills, 1oz.; and water to 3oz.

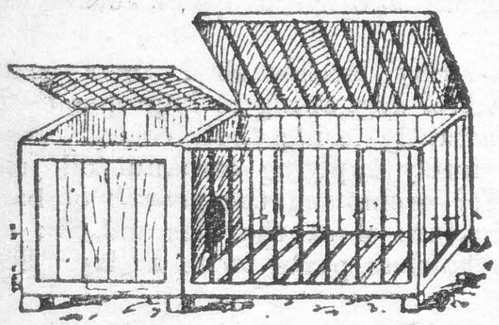
DIARRHŒA.—Ordinary cases can generally be stopped by using the following mixture: Rubini's essence of camphor and chlorodyne, five drops of the former and fifteen drops of the latter twice a day. In chronic diarrhœa, from five to ten grains of bismuth mixed with the food daily will often prove a cure.

DISTEMPER.—The first symptoms of this serious disease are loss of appetite, dulness, a husky cough, and rapid loss of flesh and strength. There is a discharge from the eyes and nose, and purging or vomiting. Distemper takes many forms. If the dog seems very ill skilled advice should be sought. The patient must promptly be put in a warm, dry place. Beef tea, bread and milk, and other light diet are necessary. If the dog is very weak he must be drenched with weak brandy and water or port wine. Puppies are more liable to distemper than older dogs, though the latter are attacked sometimes. It is not a matter of course that a puppy will have distemper. Many dogs are never afflicted with it.

EAR, CANKER OF.—When a dog is constantly holding its head on one side, shaking its ear violently and scratching it, it usually has canker. The ear should be syringed night and morning with a tablespoonful of methylated spirits added to half a tumbler of warm water, then dried with cotton-wool, and some boracic powder dusted into the ear. Or another mode of treatment is to pour in a few drops of the following lotion daily: Glycerine, 2oz.; laudanum, ½oz.; lead acetate, ½ drachm; water, 8oz. Warm before using the lotion.

Puppy Kennel and Run.

No. 220.

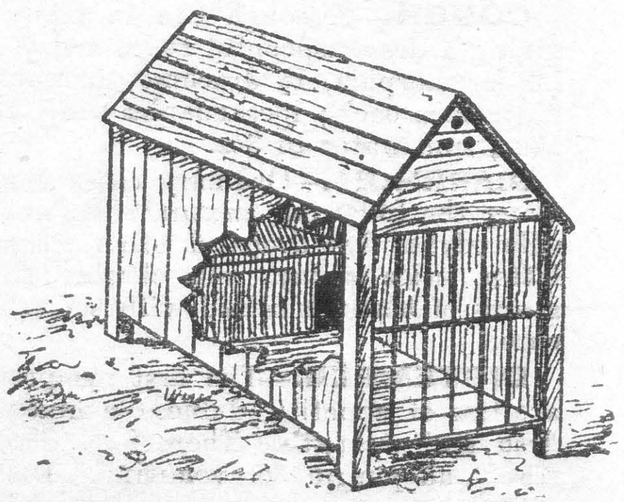


This kennel is constructed of good, sound, tongued and grooved matching, weather-boarded roof, which is hinged to lift up. The Run is formed of iron rods in sides and end; with gate in end, the top of Run being of wire netting and hinged to open, as shown. All outside woodwork painted with our Patent Rot-proof Composition, and inside Limewashed; the whole complete with floor.

Size, 6ft. by 2ft. 6in.

Cash Price ... ... £1 10s.

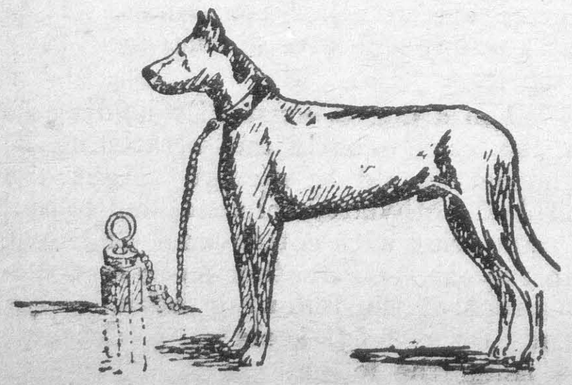
Dog Kennel and Run.



A good, strong Kennel and Run, constructed of good, sound, tongued and grooved matching, weather-board roof; front of Run formed of iron rods; the whole complete with floor, all outside woodwork painted with our Patent Rot-proof Composition, in sections in readiness for erection, at the following prices :—

No. 221.

No.	Cash Price. £ s. d.
1.—6ft. by 3ft., suitable for Terriers	2 10 0
2.—7ft. by 4ft., suitable for Collies, &c.	3 0 0
3.—10ft. by 5ft., suitable for Mastiffs, &c.	5 0 0



Stakes for Dog Chains.

No. 222.

For driving into the ground, fitted with iron ring to fasten chain to.

Price 2s. each.

Dogs—*continued.*

ECZEMA.—If the dog scratches himself violently, and the coat comes off in patches, and there are sore places. or spots or scales, he probably has some form of eczema. To the irritable places should be applied a lotion made of 1oz. of Wright's solution of coal tar and 8oz. of water, twice a day with a piece of rag; and after food twice a day give four drops of Fowler's solution of arsenic in a dessertspoonful of water. This dose is for a 20lb. dog. The patient should have a fair amount of raw meat.

EYES, WEAK.—Bathe the eyes two or three times daily with a lotion made of 1 grain chinosol and 3oz. water; or bathe with a lotion made of 1 scruple sulphate of zinc, 1 drachm laudanum, and 6oz. water.

FATNESS, EXCESSIVE.—This is common with many house dogs, arising from overfeeding and insufficient exercise. The amount of food should be reduced and the dog should have more exercise. A dose of iodide of potassium—2 grains in water twice daily after meals—will help to reduce the fat.

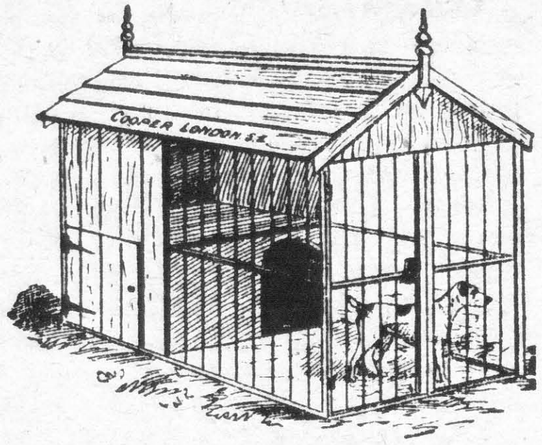
FITS.—These are of many kinds. The commonest are teething fits in puppies and epileptic fits. For the former it is usually sufficient to give some aperient medicine. For epileptic fits 5 grains of bromide of potassium three times a day is the usual treatment.

MANGE is of two kinds—sarcoptic and follicular. The latter is difficult to treat, and should be dealt with by a veterinary surgeon. In sarcoptic mange the skin becomes dry and rough, the hair comes off in patches, and there are pimples, followed by scabs. It is contagious to human beings, as well as to animals. The sufferer must be dressed all over with a mixture of olive oil 10 parts and sulphur 1 part. This must be well worked into the skin with the fingers, and repeated three times at intervals of four days; then it should be washed off.

PARASITES, EXTERNAL.—There are few dogs that are not troubled with parasites, especially fleas. These can be got rid of by using some of the advertised dog soaps when washing the dog, or by rubbing into the coat a preparation of 1 part paraffin and 2 parts olive oil two or three times at intervals of four days.

Lice can be killed by using a lime and sulphur lotion. This is made thus: Flowers of sulphur, 2lb.; unslaked lime, 1lb.; water, 2 gallons. Slake the lime in some of the water, stir in the sulphur, adding water gradually till it is creamy, then add the remainder of the two gallons, and boil down to one gallon. Let it stand till cold, pour off the clean liquid, and make the quantity to five quarts with cold water. Damp the dog all over with the lotion. Ticks can be destroyed with the above lotion.

Dog Kennel with Covered Run.

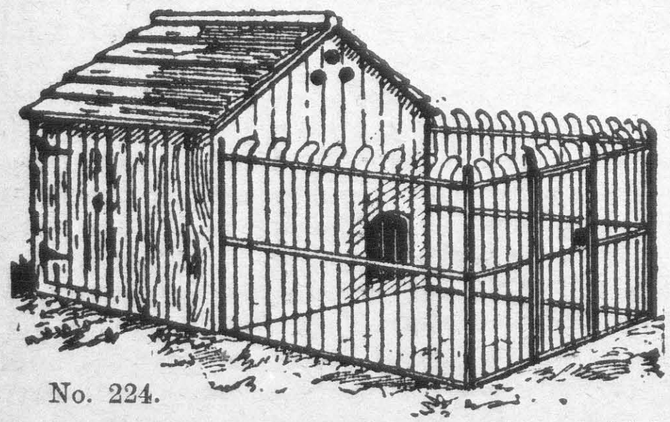


No. 223.

This is a strongly-built Kennel; sides and back are constructed of good, sound, tongued and grooved matching; roof of both Kennel and Run of weather-boarding. The Kennel is supplied with day-bench over sleeping compartment. All outside woodwork painted with our Patent Rot-Proof Composition. The Run is constructed of iron rods, and is complete with gate at end. The whole in sections in readiness for erection, and carefully put on rail at our Works at the following respective prices :—

Size. No.	Kennel. Width. ft. in.	Kennel. Length. ft. in.	Height. ft.	Run. Width. ft. in.	Run. Length. ft.	Cash Price. £ s. d.
1	2 6	2 6	3	2 6	4	3 15 0
2	3 0	3 0	4	3 0	5	4 10 0
3	4 0	3 0	5	4 0	6	5 5 0
4	5 0	3 0	5	5 0	6	6 10 0

Strong Dog Kennel and Run.



No. 224.

These Kennels are strongly constructed of good sound timbers; sides and ends of tongued and grooved matching; roof of weather-boards, and complete with wood floor; outside painted with our Patent Rot-Proof Composition.

The Run is constructed of iron bars, which are curved inwards at top, thus preventing the dog from jumping over, and is complete with a gate in the end.

CASH PRICES:

No. 1.—Suitable for Terriers, £5.

Kennel: 4ft. long, 4ft. wide, 4ft. height to eaves. Run. 4ft. long, 4ft. wide, 4ft. height to eaves.

No. 2.—Suitable for Retrievers and Collies, £6.

Kennel: 5ft. long, 5ft. wide, 5ft. height to eaves. Run: 5ft. long, 5ft. wide, 5ft. height to eaves.

DOGS—*continued.*

TUMOURS.—Bitches are sometimes troubled with small movable tumours near the teats. These should be rubbed with an ointment made of 1 drachm iodide of potash, 1 drachm mercuria lointment, and 1oz. belladonna ointment. Some old dogs have fatty tumours, smooth and slimy, and not tender when touched. They need not be interfered with unless they become troublesome, then a vet. must be called in to remove them by excision.

WORMS.—One of the most satisfactory remedies for worms is to give santonin in one to three grain doses, according to the size of the dog, after twelve hours' fasting, and one hour afterwards a dose of castor oil. This treatment must be repeated three or four times at weekly intervals.

THE VARIOUS BREEDS.

THE AIREDALE TERRIER, also known as the Waterside, is one of the largest of the terrier family. Some breeders are of opinion that this dog has a good deal of hound blood in its veins. The Airedale is not in the least quarrelsome, he is good-tempered, is an excellent dog for the home, good at killing vermin, and a first-rate water dog.

THE BEDLINGTON TERRIER.—One of the many dogs that have had their origin in the North of Great Britain. Being moderately long on the leg the Bedlington is faster than most terriers, and, having an excellent nose, and being very obedient, he is valuable to the sportsman. He is good-tempered, lively, and intelligent, and most plucky and resolute.

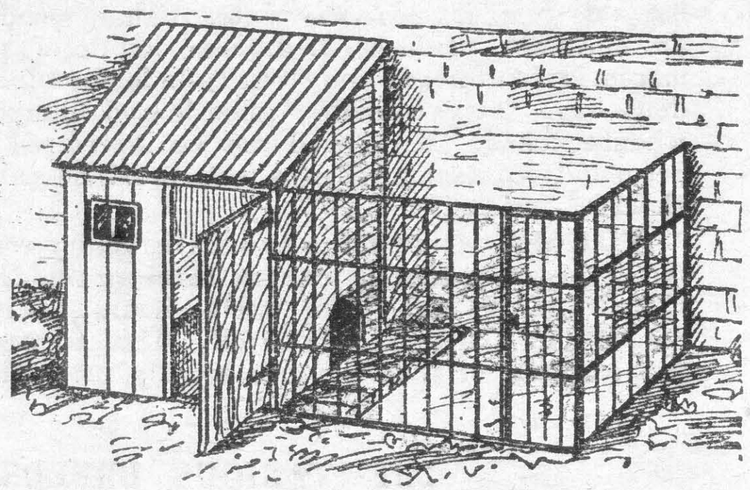
THE BLACK AND TAN TERRIER, called also the Manchester Terrier, is bred in two varieties, but only different in size. The weight of the larger dog is between 10lb. and 20lb. That of the smaller does not exceed 5lb. It is illegal to crop the ears as was formerly done, so the sharp appearance for which these dogs were celebrated has gone.

THE BLOODHOUND, formerly used for hunting and tracking fugitives, became almost extinct when its services were no longer required. But good classes for Bloodhounds appear at the leading dog shows, and attempts are now being made to utilise them for tracing criminals in this country. This splendid hound is most affectionate, rather shy, and very obedient.

THE BORZOI, or Russian Wolfhound, has become very popular in England of recent years. For elegance of conformation there is no member of the canine race to surpass this dog. In shape it is much like the Greyhound, the neck being slightly shorter. The Borzoi is gentle in disposition and reliable in temper, as well as affectionate and companionable.

Lean-to Kennel with Open Run.

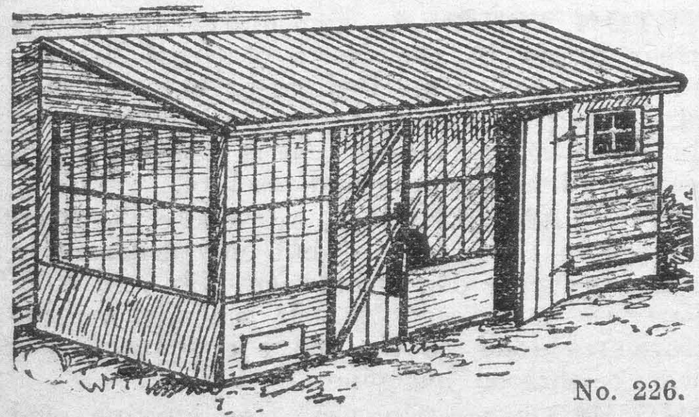
No. 225.



A well-built Kennel, constructed of good, sound, tongued and grooved matching, roof of weather-boards, doors in front; fitted inside with storage; the Run is formed of iron rods, and is fitted with gate; wooden platform outside dog's entrance to House, as shown. All outside woodwork painted with our Patent Rot-Proof Composition, and complete in sections in readiness for erection. Size of Kennel, 3ft. wide, 4ft. deep. Run, 5ft. wide, 4ft. deep.

CASH PRICE ... £4 15s. Prices for other sizes on application.

Lean-to Dog Kennel and Covered Run.



No. 226.

Constructed of good, sound, tongued and grooved 1in. matching, roof of both Kennel and Run of weather-boards; the Kennel is complete with bench; the Run is formed of iron rods, fitted with gate; all outside woodwork painted with our Patent Rot-Proof Composition; complete in sections in readiness for erection, securely put on rail at our Works. Size of Kennel and Run, 12ft. by 5ft., 6ft. 6in. high at back, 5ft. high in front.

CASH-PRICE ... ... £6 15s.

Sunny Bank, Northolme, Gainsborough.

DEAR SIR,—Received kennel this morning in perfect condition, with thanks.—Yours truly,

H. HAYES.

106, Dunlop Street, Glasgow.

The terrier kennel arrived on Saturday; it looks very well, and I hope to get it fixed up immediately. It is a bit larger and more roomy than those supplied by other makers.—Yours faithfully,

D. J. MACGLASHAN.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

THE BULLDOG.—After having been rarely seen for some years after bull-baiting was suppressed, the Bulldog has again come into prominence, and is now one of our most fashionable dogs. The courage of the Bulldog is proverbial; and as he is good-tempered, obedient, intelligent, and affectionate, and is formidable-looking, he is naturally in great request both as a pet and a guard. Good specimens realise high prices, so a good female of this breed may prove a satisfactory investment.

THE BULL TERRIER was formerly a coarse-looking dog of various colours. Now he has a long, wedge-shaped head, and the colour is white. He has great pluck, and will fight any dog or tackle any kind of vermin. He is not quarrelsome, and is an excellent companion.

THE CHOW CHOW is an interesting addition to any kennel, and to a man who has only one dog no more pleasant pal can be had. With patience he can be taught all sorts of tricks; he is a very good guard, and very hardy.

THE COLLIE.—It was claimed by the naturalist Buffon that the Collie is the originator of all our domestic dogs; but there is no evidence to bear out this assertion. The general appearance of the Collie is light and graceful, giving evidence of speed, activity, and endurance. The intelligence of the Collie is proverbial.

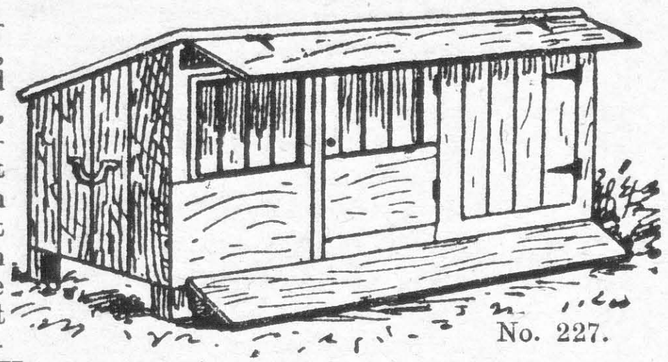
THE DACHSHUND.—This little dog is probably the most peculiar looking of all our domestic pets. The long, low body, the short legs, bent in at the knees and turned out at the elbows, the large fore feet turned outwards, and the very loose shoulders and long and narrow head make up a regular canine monstrosity. But it is a most affectionate and charming doggie, full of pluck, but rather wilful.

THE DANDIE DINMONT has been immortalised by Sir Walter Scott in his novel "Guy Mannering," though the great novelist did not invent this dog, as is popularly believed. It was one of the hardy terriers kept in North Britain. These terriers accompanied the hounds, and were used to go to earth after vermin. Amongst our many varieties of terrier the Dandie Dinmont continues in favouritism. He is a born sportsman, if in a town he will quickly find his way about, he will fight if called upon, and he will take a thrashing without uttering a sound.

THE DEERHOUND.—If size is no objection it is difficult to name any dog superior to the Deerhound. He is gentle in his manners, he follows well, he is majestic in appearance, and most tractable and faithful.

THE FOX-TERRIER.—The enormous classes of Fox-terriers at dog shows are a proof of their great popularity. They

Range of Three Puppy Kennels.

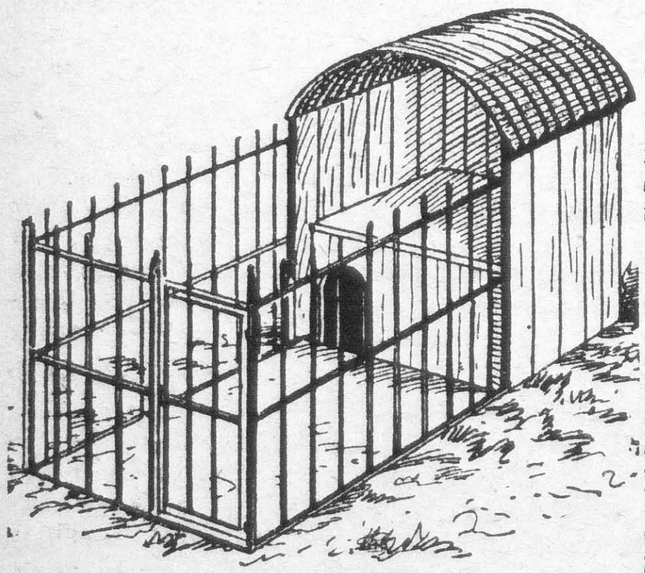


No. 227.

Substantially constructed of good, sound, tongued and grooved matching, roof of weather-boards; upper part of front fitted with hinged flap to let down, as shown, with iron bars behind, the entire length of front to open; raised platform in front of the Houses; complete with floor, All woodwork painted with our Patent Rot-Proof Composition.

Cash Prices: 6ft. by 2ft., £2 5s. 8ft. by 3ft., £3 5s.

Curved Roof Kennel with Open Run.



No. 228.

This Kennel is constructed of good, sound matchboards. The front of sleeping compartment is made to open for cleansing purposes; the top of this compartment forms day-bench; roof is covered with curved galvanised corrugated iron sheets; the Run is complete with gate; all outside woodwork painted with our Patent Rot-Proof Composition. Securely put on rail at our Works.

No.	Cash Price. £ s. d.
1.—For Terriers, Collies, and Retrievers, 10ft. by 4ft., 5ft. high to eaves	5 10 0
2.—For Mastiffs, St. Bernards, &c., 12ft. by 5ft., 6ft. high to eaves ..	7 10 0

2, Marsh Street, Aberavon, Port Talbot.

DEAR SIR,—Kennel and Arch to hand with thanks, and am extremely pleased with them; in fact, I am anticipating giving you another order for a fowl house, as I am so pleased with the Arch and Kennel.—Wishing your firm every success, yours truly, W. TUCKER (greengrocer).

92, Rochester Street, Chatham.

SIR,—Terrier Kennel came on Friday evening, and am very satisfied with it.—Yours faithfully, A. DENNE.

are just the right size, neither too large nor too small, and are clean, quick, active, and intelligent. The Fox-terrier of former times was a different looking animal to our present-day dog, which combines quality with strength, with plenty of galloping power, and is able, when required, to go to earth after a fox. There are two varieties of Fox-terrier, the smooth and the wire-hair. The coat of the former is hard, smooth, straight, and flat; that of the latter hard and wiry.

THE GREAT DANE.—A foreign dog that came to us from Germany, and a useful animal for those who like a very big dog. In no species is there a greater difference between a good and a bad specimen than in the Great Dane. A dog that comes up to the standard of the Great Dane Club is a grand beast. But one that has weak hindquarters, a hollow back, large ears, and a short neck—and there are a good many that answer this description—is a mongrel-looking brute.

THE GREYHOUND is not usually kept as a pet or companion. It is unequalled in speed by any other dog; it has been used for the chase for thousands of years, and is the most elegant member of the canine family.

THE GRIFFON BRUXELLOIS was introduced about twenty years ago from Brussels. A small dog, red in colour, with large dark eyes, black lips and moustache, and a rather human expression, it is a favourite with ladies.

THE IRISH TERRIER has many qualities to recommend him. He is possessed of plenty of character, is easily trained, full of sport and fun, always ready for a fight with another dog, but rarely snappy with human beings. He will usually take freely to the water, and is never happier than when rabbiting or ratting.

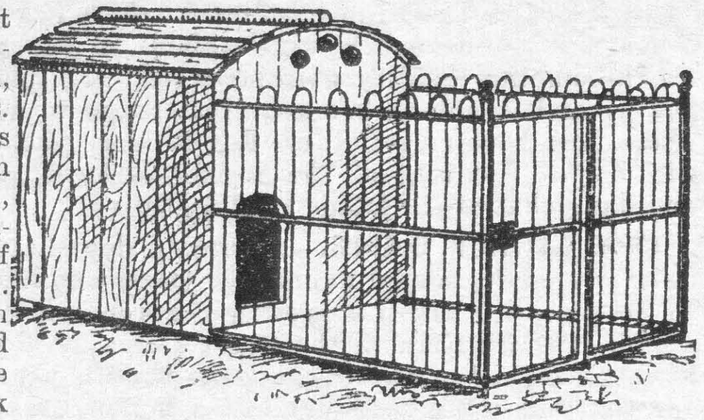
THE ITALIAN GREYHOUND.—This beautiful dog came from Italy originally, as the name implies. It is fragile in appearance and delicate in constitution.

THE JAPANESE SPANIEL.—A pretty little dog of black and white or red and white colour, that has become a favourite in this country during recent years. The head resembles that of the King Charles Spaniel, the nose is short, the eyes large, the back and legs short, and the coat long, straight, and silky. The Japanese is not robust.

THE MALTESE DOG.—A small white dog, the most ancient of all the lap dogs. It is most difficult to keep clean and in good condition, owing to the length of coat. It is not often seen.

THE MASTIFF shares with the Bulldog the reputation of having been the indigenous dog of Britain. It is a grand and magnificent animal, with massive head, square muzzle, deep

Dog Kennel and Run.

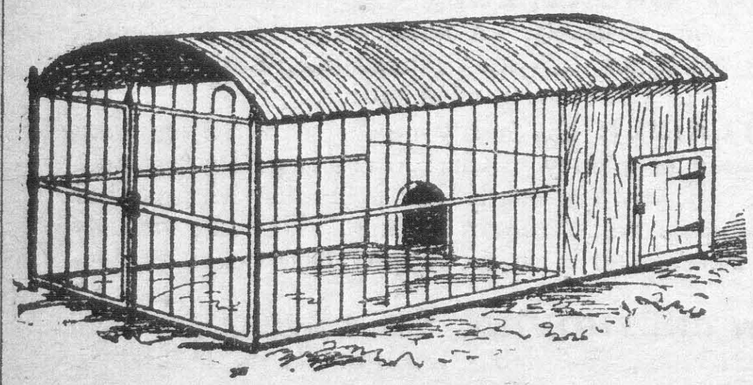


This neat design is constructed of good, sound timbers. Sides and ends are covered with tongued, grooved, and beaded match-boarding; roof of weather-boards. Complete with day-bench and floor. Outside woodwork painted with our Patent Rot-Proof Composition. Complete with Run as Illustration. Securely put on rail at our Works. Kennel, 5ft. long, 4ft. wide, 6ft. high. Run, 6ft. long, 4ft. wide.

No. 229.

CASH PRICE ... ... £6.

Kennel and Covered Run.



This Kennel is suitable for Mastiffs, St. Bernards, and other large dogs. Complete with day-bench over sleeping compartment and floor; all outside woodwork painted with our Patent Rot-Proof Composition.

No. 230.

The Run is constructed of iron rods, with gate in end. Securely put on rail at our Works.

Size of kennel, 4ft. long, 5ft. from back to front, 5ft. high to eaves; Run, 6ft. long and 5ft. wide.

CASH PRICE ... ... £7 10s.

Reversible Feeding Trough, 7s. 6d. extra. If with wood spline floor to Run, 25s. extra.

Rot-Proof Composition.

For Dog Kennels, Farm Buildings, Poultry Houses, Palings, Fences, or any description of Outdoor Woodwork.

1gal., 2s. 6d.; 2gal., 4s. 9d.; 5gal., 10s.; 10gal., 17s. 6d.; 20gal., 30s.; 40gal., 50s., put on rail at our Works. Cans and casks included (not returnable).

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

chest, muscular loins, and fawn or brindled coat. It is naturally of a quiet disposition.

THE NEWFOUNDLAND.—Much romance attaches to this dog owing to the high courage and fine swimming powers which enable him to face rough seas and rescue people from drowning. The Newfoundland is a large, heavy dog, weighing between 100lb. and 140lb. The usual colour is black, but there are white and black, bronze, and black and tan dogs. The Newfoundland is highly intelligent, an excellent companion, and as faithful as any dog in existence.

THE PEKINESE SPANIEL is another pretty foreign dog that has attracted much attention and realised large sums. It is fairly hardy, and a most affectionate little creature.

THE POINTER.—A very intelligent dog, though seldom kept as a companion or pet. It is not very sociable.

THE POMERANIAN.—One of the most fashionable of the pet dogs. There are usually many Poms. entered at the various shows, and the classes are surrounded by admirers. Poms. are bred in many shades of colour—black, white, blue, brown, chocolate, sable, red, fawn, and parti-coloured. Fifty pounds is no uncommon price to be given for a toy Pom. It is a bright, active dog, inclined to be noisy and bark a good deal.

THE POODLE.—One of the most intelligent and amusing of dogs; of ancient lineage, as shown by his figuring in paintings so far back as the fifteenth century. The Poodle is gifted with keen scent, will take readily to the water, has plenty of pluck, and will learn almost anything.

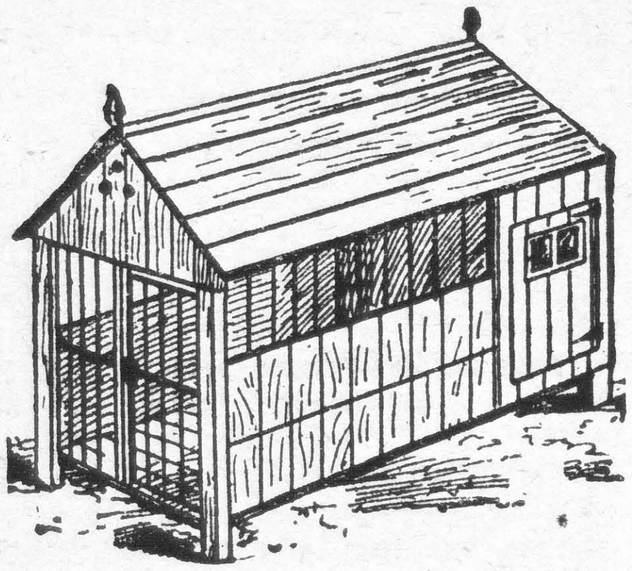
THE PUG.—Though of little use as a watch dog or to kill even a mouse, the Pug is such a clean, affectionate little animal that he makes a delightful pet. Few people who have once owned a Pug ever give up their regard for the breed. There are fawn and black Pugs, the latter the newer variety. Pugs, as they become old, are inclined to asthma; and some Pugs are troubled with occasional vomiting. This can usually be cured by sprinkling the principal meal daily for a fortnight or so with a little carbonate of bismuth.

THE RETRIEVER.—There are two varieties of this handsome and clever dog, the Flat-coated and the Curly-coated. And the Labrador, a dog that was formerly classed with the Newfoundlands, has of recent years been called a Retriever by the Kennel Club. The Retrievers are wonderful all-round sporting dogs. The colour is usually black, although liver-coloured Retrievers are to be seen.

THE ST. BERNARD.—Anyone who likes a large dog and has room to keep him cannot fail to admire the St. Bernard. He is naturally good-tempered and easily managed, forming

Dog Kennel with Covered Run.

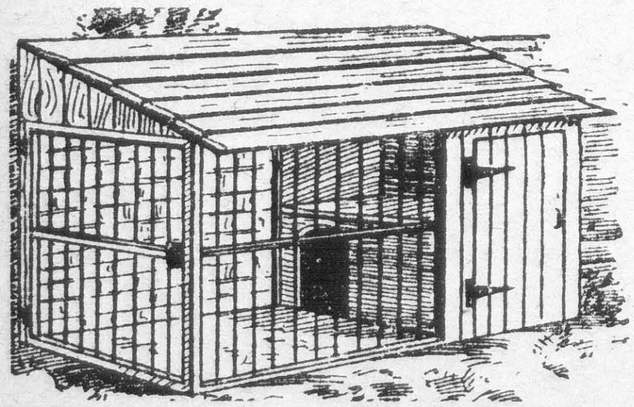
No. 231.



Constructed of good, sound, tongued and grooved matching; upper part of sides, and also end of Run, of iron rods; fitted with gate; the whole complete with floor. All outside woodwork painted with our Patent Rot-Proof Composition. Despatched in sections, in perfect readiness for erection, at the following sizes and prices:

No.	Cash Price. £ s. d.
1.—6ft. by 3ft. by 5ft. 6in., suitable for Terriers	3 0 0
2.—7ft. by 4ft. by 6ft., suitable for Collies, &c.	3 10 0
3.—10ft. by 5ft. by 7ft., suitable for Mastiffs, &c.	5 10 0

No. 232.



Lean-to Kennel with Covered Run.

This Kennel and Run is similar in construction to No. 217.

Size. No.	Kennel. Width. ft. in.	Kennel. Depth. ft. in.	Height to Eaves. ft. in.	Run. Long. ft.	Cash Price. £ s. d.
1	2 0	2 6	2 6	4	3 5 0
2	2 6	3 0	3 0	5	4 10 0
3	3 0	3 6	3 6	6	6 0 0

Nos. 1 and 2 are suitable for Terriers and small dogs, and No. 3 for Collies, Retrievers, &c.

Wood batten floor to Run extra, as follows: No. 1, 5s.; No. 2, 7s. 6d.; No. 3, 10s.

Be Sure and Sprinkle Cooper's Disinfectas in Kennels Daily.

the greatest attachment to his owner. There are two varieties of the St. Bernard, the Rough-coated and the Smooth-coated. The weight of a good specimen is from 170lb. to 210lb.

THE SCHIPPERKE is a quaint little black dog, brought from Belgium. The head is foxy, the ears erect and small, the back rounded off like that of a guinea-pig, and no tail. Some puppies are born tailless. The majority, however, are made so by being docked when a few days old. It is a bright, sharp little dog, and makes a pleasing and useful house dog.

THE SCOTTISH TERRIER is a general favourite. He is always good-tempered and reliable, never treacherous or uncertain; he is endowed with great pluck, yet is not quarrelsome, and he will live anywhere and thrive on anything.

THE SETTER.—There are three varieties of the Setter—the English, the Irish, and the Black and Tan, or Gordon, Setter. In conformation they are much alike, with long and narrow head, and skull slightly domed. The Irish is slightly higher on the leg than the English, and the colour is rich chestnut. The Black and Tan is rather heavier than the others.

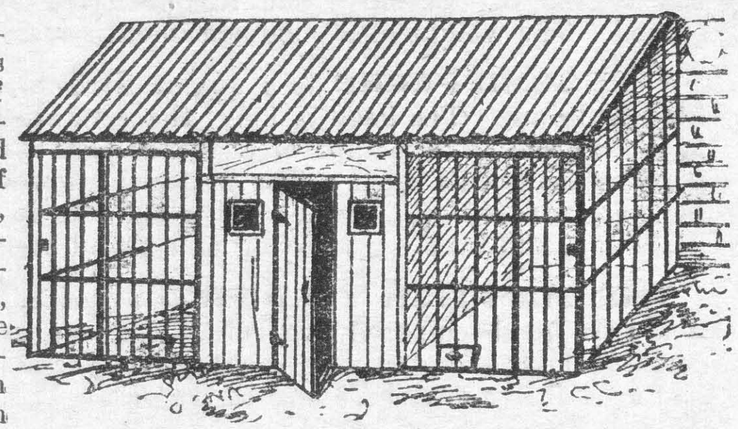
THE SHEEPDOG, after being used for years in assisting in driving and herding sheep and cattle, has been made a show dog. In 1888 the Old English Sheepdog Club was formed. The coat quickly mats if not brushed and groomed often. This dog must not be kept chained, and must have a good deal of exercise.

THE SKYE TERRIER.—Whether the present-day Skye Terrier is at all like the hard, vermin-hunting terrier of former times is very questionable. But, at any rate, he has plenty of pluck, and is a most interesting and companionable doggie. There are few dog-lovers who are not fond of the Skye, and who do not consider him one of the handsomest and most desirable of the many terriers.

THE SPORTING SPANIEL.—There are several varieties of this very ancient breed recognised by the Kennel Club, viz., the Clumber, Cocker, Field Spaniel, Irish Water Spaniel, Sussex, and the English and Welsh Springer. The Clumber is a large, heavy, handsome dog, white, with lemon markings. The Cocker is a much smaller dog, that derived its name from having been used largely in woodcock shooting. The Field Spaniel was formerly black only, but is now also bred in tricolour, red-roan, and blue-roan. The Irish Water Spaniel has a top-knot of curly hair, and is of a rich dark liver colour.

The Sussex is one of the oldest of the sporting Spaniels, rich golden liver in colour. This colour is a sign of good breeding.

Double Lean-to Kennel with Covered Runs.



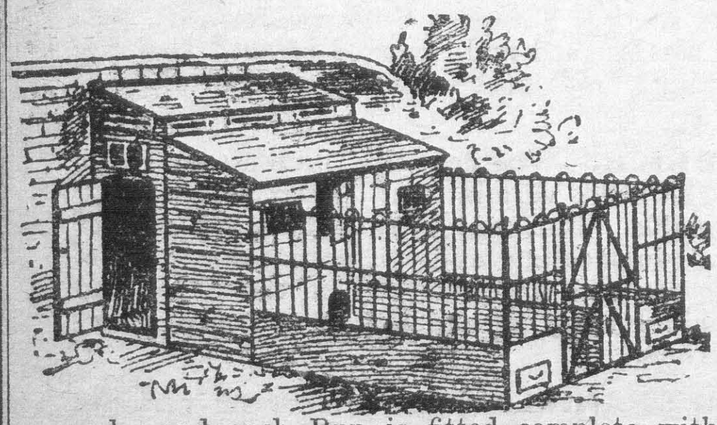
No. 233.

This useful design of Kennel is constructed of good, sound tongued and grooved matching; roof of weather - boards, and is fitted complete with storage, day-benches, and floor. The Runs are constructed of iron rods, with gate in each; all outside woodwork painted with our Patent Rot-Proof Composition. Constructed in sections in perfect readiness for erection.

CASH PRICE £12

Size of Kennels, each 3ft. wide, 5ft. deep, 7ft. high at back. Storage 2ft. 6in. wide, 5ft. deep, 5ft. 6in. high to eaves. Runs, each 4ft. wide and 5ft. deep.

Double Lean-to Kennel with Runs.



No. 234.

Well and substantially constructed of good, sound, tongued and grooved 1in. matchboards, with a passage at the back of Kennels; roof of weather - boards, with ventilators in same over passageway. The Runs are formed of iron rods, and each Run is fitted complete with gate and reversible trough; all outside woodwork painted with our Patent Rot-proof Composition. Complete in sections, in readiness for erection, and securely put on rail at our works.

Size of the two Kennels, 10ft. by 5ft.; each Run 6ft. long.

CASH PRICE ... ... £18.

Cooper's Disinfectas.

For Poultry Houses and Runs, Kennels, Rabbit Hutches, Stables, &c. Clean, cheap, and healthy.

Per Sack (2-bushel), 2s. 6d.; 10 for 22s. 6d. Sacks included.

DOGS—*continued.*

The English Springer was formerly called the Norfolk Spaniel. It is not very uniform in type. And the Welsh Springer is white, with red or orange markings.

THE TOY SPANIEL is bred in four varieties—the Blenheim, the King Charles, the Ruby, and the Tricolour, or Prince Charles. The difference is mainly that of colour. The Blenheim is of a white ground, with ruby red or chestnut markings. The King Charles is of a rich black, with tan spots over the eyes and on the cheeks and tan markings on the legs. The Ruby is a rich red, with black nose. The Tricolour has a white body, with black evenly distributed in patches; the ears are lined with tan, and there is tan over the eyes and on the cheeks.

THE WELSH TERRIER is much like a wire-hair Fox-terrier, except in colour, which is black and tan, or black, grizzle, and tan.

THE WEST HIGHLAND WHITE TERRIER.—A dog that has quite recently come to the front, and is making many friends. It strongly resembles the Scottish Terrier, but is white in colour. It is a plucky, hardy little dog, weighing from 14lb. to 18lb.

THE WHIPPET also called the Snap Dog, is like a Greyhound on a small scale. It is used largely for running races and for rabbit coursing.

THE YORKSHIRE TERRIER.—A little dog, under 5lb. in weight, said to have been originally produced from a cross between the Black and Tan and the Scottish Terrier. The coat is very long, straight, and silky, hanging evenly down each side. For its size it is a good watch dog in the house, and is bright, active, and courageous.

"Shelbourne," Highfield Road, Malvern.

The Dog House arrived to-day. I feel I must write and tell you how very satisfied I am with it, and to thank you for the way you have put yourselves out to comply with my wishes. It makes an ideal dog-house and run, and is such a good thing altogether. It was put together and ready for use in under an hour, and the whole thing is exactly what I wanted. I am immensely pleased with it, and, if you care to make use of this testimonial, I have no objection.—Faithfully yours,

W. E. HARRIS-BIGGE.

"Yeldham," Welcomes Road, Kenley.

DEAR SIRS,—The Puppy Run which you constructed for me arrived safely on Saturday, and I fixed it in the afternoon.

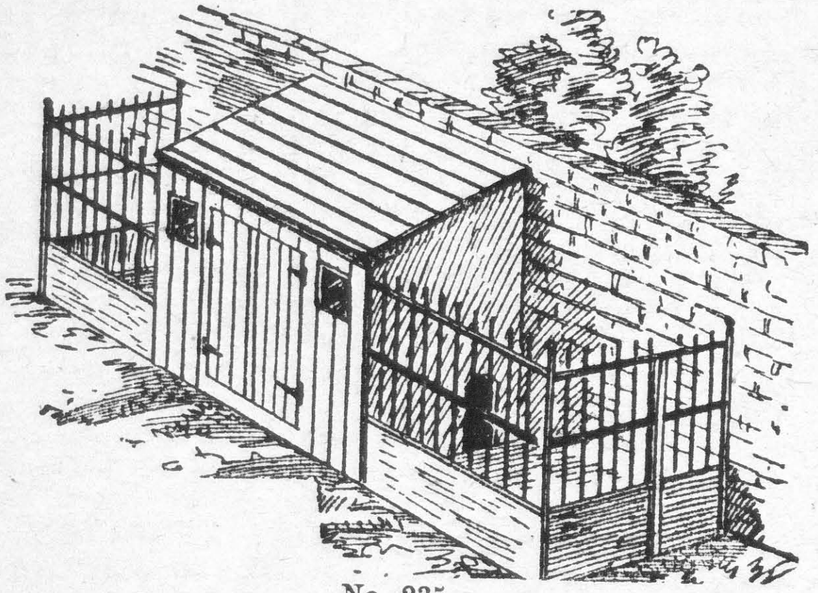
Allow me to thank you for your courteous and prompt attention in this matter, which, in view of the heavy rains and terrible weather we have been experiencing, has relieved me of great anxiety.—Believe me to be, dear Sirs, yours faithfully,

W. A. STEVENS.

Henley-in-Arden.

House has arrived safely. Many thanks for prompt despatch. I am very pleased with it.—Yours faithfully, G. A. WILLIS.

Lean-to Kennels with Runs.



No. 235.

The illustration shows a double House for placing against a wall, and will be found convenient and compact where more than one dog is kept.

The Kennels are constructed of good sound timbers, front and ends being covered with tongued and grooved match-boarding, roof of weather-boards. The Kennels are complete with door, day-bench, and floor; all woodwork painted with our Patent Rot-Proof Composition outside. The Runs are constructed of iron rods, with gate in ends, the lower part being covered with galvanised corrugated iron sheets, thus affording protection against draughts. The whole in sections in readiness for erection, and securely put on rail at our Works. Size of each Kennel is 3ft. long, 5ft. from back to front, 6ft. high to eaves; each Run is 6ft. long and 5ft. wide.

Cash price (complete) ... ... £10 10s.

Imperial Black Varnish.



For Iron Fences, Wood Palings, Farm Buildings, Poultry Houses, &c.

1 gal. 2s., 5 gals. 7s., 18 gals. 20s., 40 gals. 35s.

Put on rail at our Works.

Cans and Casks included (not returnable).

St. Andrew's, Chesterton Lane, Cambridge.

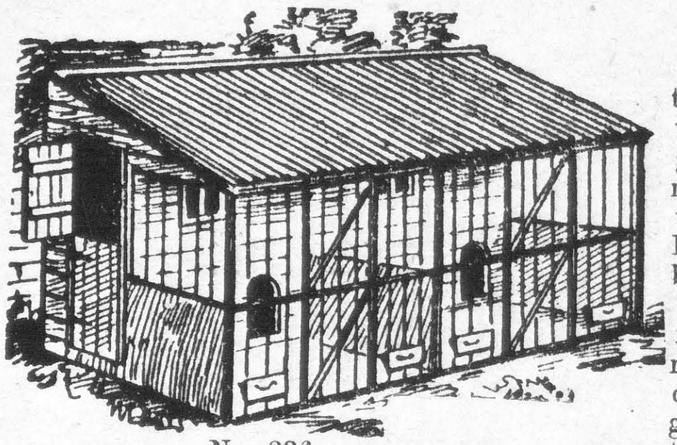
Mrs. Lower begs to inform Messrs. Cooper that the dog kennel has arrived in good condition, and gives satisfaction to her.

Beech Hurst, Stoke Green, Coventry.

Miss Onslow is exceedingly pleased with dog kennel, which she considers a marvel of cheapness.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Double Lean-to Kennel and Runs.



No. 236.

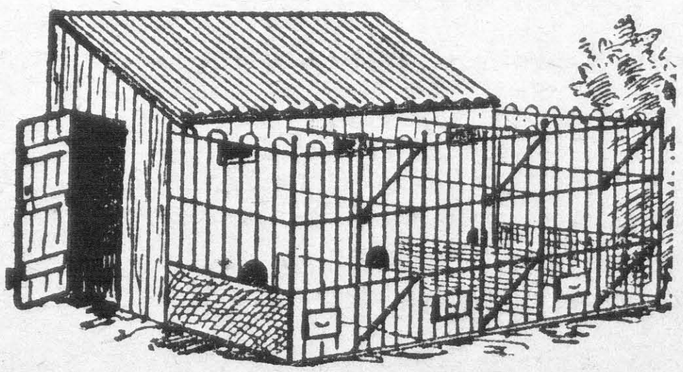
Well and substantially constructed of good, sound, tongued and grooved 1in. matchboards; roof to Kennels and Runs of weather-boards.

The Runs are formed of iron rods, and are each complete with gate; reversible trough to each Kennel and Run; all outside woodwork painted with our Patent Rot-proof Composition. In sections, in readiness for erection, and securely put on rail at our Works.

Each house, 5ft. by 4ft., 7ft. high at back, 5ft. high in front. Run, 5ft. by 5ft.

Cash Price ... ... £12 10s.

Lean-to Range of Three Kennels and Runs.



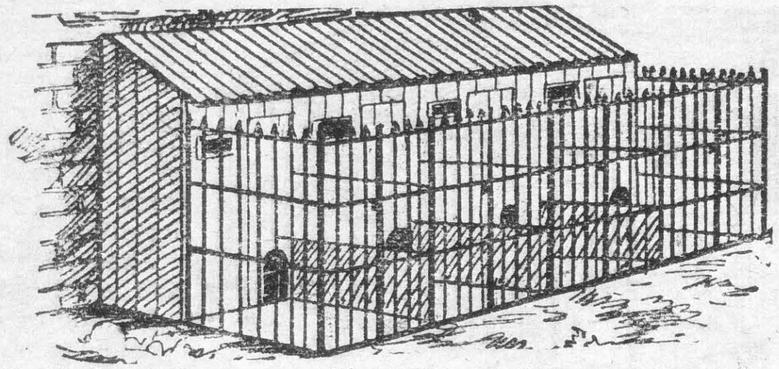
No. 237.

This illustration shows a Range of Three Kennels and Runs, with a passage at the back from which each Kennel is entered, and attention to sanitary requirements thereby facilitated. They are constructed of good, sound, tongued and grooved matchboards; roofs are formed of galvanised corrugated iron sheets. The Runs are constructed of iron rods, and are complete with gate ard reversible trough for each; all outside woodwork painted with our Patent Rot-proof Composition; in sections, in readiness for erection, and securely put on rail at our Works.

Size of the three Kennels, 12ft. by 6ft. 6in. (including the 2ft. 6in. passage-way), 7ft. 6in. high at back, and 6ft. in front; size of each Run, 6ft. long.

Cash Price £16

Lean-to Range of Dog Kennels and Runs.



No. 238.

Constructed similar to No 237, but less the passage-way at back of the Kennels.

Each Kennel, 4ft. by 4ft., 7ft. high at back, 6ft. in front.
Run, 6ft. by 4ft.
Cash Price—Four Kennels and Runs, £21.
Reversible Troughs, 7s. 6d. each extra.

Roofing Felt.

Patent Asphaltic Rolls, 25yds. long by 32in. wide, 3s. 3d. per Roll; better quality, 4s. 6d.
Nails for fixing Felt, in boxes of 250, 6d.; 500, 1s.

Insect Powder for Dogs.

In Tins. Price, 1s. 6d. each, post free.

48, Jesus Lane, Cambridge.

DEAR SIR,—Received dog kennel quite safely, and thoroughly satisfied.—Yours truly,
C. G. LLOYD.

9, Claremont Terrace, Exmouth.

Much pleased with kennel and platform, also steps; received safely this morning.—Yours truly,

7, Clapton Common.

DEAR SIRS,—I beg to acknowledge receipt of kennel, which has arrived safely and in good condition.—Thanking you for same, I am, yours faithfully,
R. KURTTZER.

2, Palmeria Gardens, Albert Road, Ilford.

Kennel received safely and in good condition. Thanks for promptitude.
H. L.

90, 92, and 94, Oxford Street, Manchester.

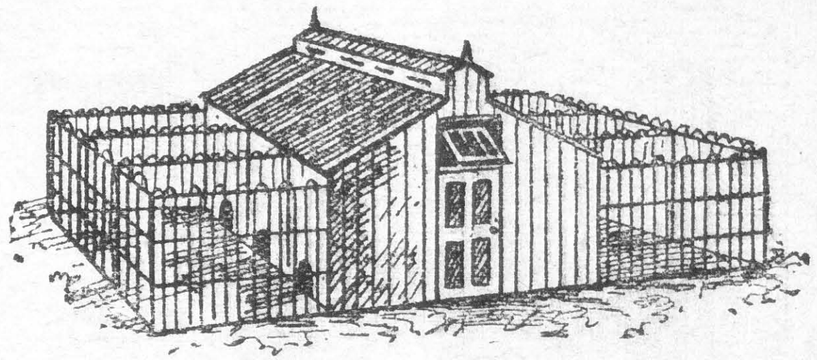
GENTLEMEN,—Please accept my best thanks for the splendid kennel you have sent me. I should have thought it cheap at twice the price. You may rest assured anything I require in the future I shall obtain from you.—Yours truly,
N. A. HUME.

South View, Westgate Road, Newcastle-on-Tyne.

GENTLEMEN,—I received the kennel all right a day or two ago, and am very much satisfied with it indeed.—Yours faithfully,
A. C. SANDERSON.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Span-Roof Range of Dog Kennels and Yards.



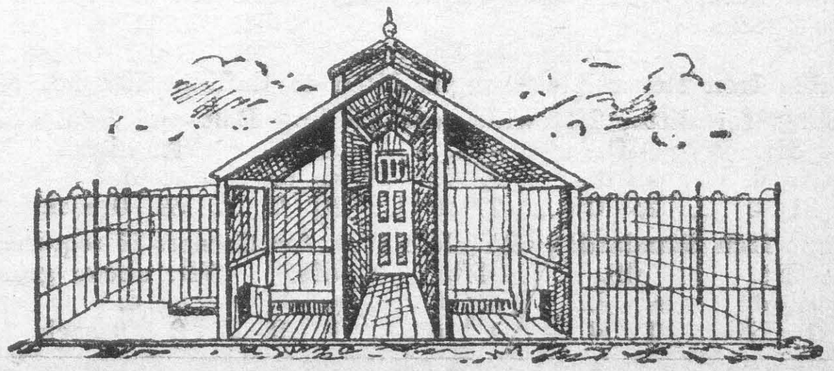
No. 239.

The illustration shows a range of six Kennels and Yards, three on either side, passage way in centre 3ft. wide, from which each Kennel is entered, and attention to sanitary requirements thereby facilitated. The Kennels are constructed of good, sound 1in. tongued and grooved matching, with ventilator in each gable, and are fitted complete with day benches. The Yards are formed of iron rods, and each fitted with gate and reversible trough complete; all outside woodwork painted with our Patent Rot-proof Composition; constructed in sections in perfect readiness for erection, and securely put on rail at our Works.

	Cash Price. £ s. d.
Range of Four Kennels and Yards	27 10 0
,, Six ,, ,, ...	36 0 0
,, Eight ,, ,, ...	45 0 0

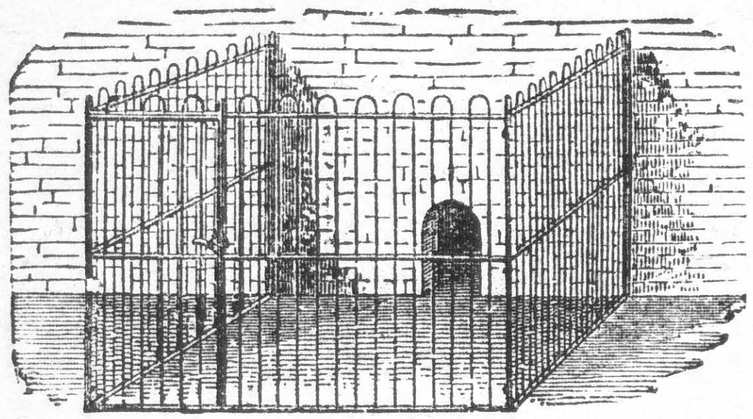
Size of each Kennel 5ft. by 4ft.; Yards, each 6ft. by 4ft.
Quotations for ranges of any number of Kennels and Yards on receipt of full particulars.

Interior View of Above.



Sprinkle Cooper's Disinfectas in Kennels and Runs Daily.

Wrought-iron Kennel Railing.



No. 240.

This Railing is specially suitable for a Kennel Run, which permits the dog having his liberty, the use of the chain being obviated. Made in hurdles, 5ft., 6ft., and 7ft. long, usually 6ft. high, but varying to suit the purpose required. Can be put together in a few minutes.

Length.	Width.	Height.	£ s. d.
5ft.	5ft.	5ft.	3 11 6
6ft.	6ft.	6ft.	4 12 0
7ft.	7ft.	6ft.	5 5 0

Including Gate.

Kennel Railing. (Design as above.)

In 6ft. lengths, Painted. Prices include Bolts and Nuts for fixing.

No. 241.

	Height.	s.	d.	
Five-sixteenths inch rods spaced 2in. apart	3ft. ...	6	9	per yard.
Five-sixteenths ,, ,, ,,	4ft. ...	8	0	,,
Three-eighths ,, spaced 2½in. apart	5ft. ...	10	0	,,
Three-eighths ,, ,, ,,	6ft. ...	11	6	,,
Half ,, spaced 3in. apart	7ft. ...	13	0	,,

Movable Iron Reversible Troughs fitted to Railing, 10s. 6d. each.

Gates for ditto, 2ft. wide, with sliding Bolt and Padlock.

3ft.	4ft.	5ft.	6ft.	7ft. high.
s. d.	s. d.	s. d.	s. d.	s. d.
21 0 ...	23 0 ...	27 6 ...	30 0 ...	36 0 each.

Angle Iron Standards, with plate feet, for Corners if required.

3ft.	4ft.	5ft.	6ft.	7ft. above ground.
s. d.	s. d.	s. d.	s. d.	s. d.
1 2 ...	1 4 ...	1 6 ...	1 9 ...	2 0 each.

54, Marlborough Road, Gillingham, Kent.

DEAR SIR,—Kennel to hand safely. I am greatly pleased with same, and think it a marvel of cheapness and quality. Everyone who has seen it says the same. I shall only be too pleased to place all future orders with you.—Yours faithfully,

W. J. LEWIS.

SECTION V.

Illustrated Catalogue

— OF —

PORTABLE WOODEN BUILDINGS.

Contractor's Offices.

Watchman's and Timekeeper's Boxes.

Photographic Studios & Dark Rooms.

CRICKET, FOOTBALL, TENNIS AND GOLF PAVILIONS.

Scoring Boxes. Huts.

STABLE AND COACH HOUSES.

Loose Boxes.

MOTOR CAR HOUSES and SHELTERS.

Cow Houses. Pigsties.

Grain Stores. Workshops. Cycle Houses.

Coal Sheds, &c., &c.

PORTABLE WOODEN BUILDINGS, STUDIOS, PAVILIONS, SCORING BOXES, HUTS and SHELTERS, STABLE and COACH HOUSES, and MOTOR CAR HOUSES illustrated in this section, are (unless stated otherwise) prepared to the following

SPECIFICATION:—Substantially constructed in sections, to bolt or screw together at the corners. The Framework is of 2in. by 2in., 2in. by 3in., and 2in. by 4in. (according to size) good well-seasoned timbers, covered with best ¾in. tongued and grooved matchboards. The Roof is also boarded and covered with Asphaltic Roofing Felt. Good Doors, complete with Lock and Key, in end or side. Glazed Windows in any position desired. Necessary Bolts and Screws, everything complete.

We also prepare Buildings to any special design or size, and submit Estimates Free upon receipt of particulars.

All prices quoted in this section are CARRIAGE FORWARD, but include putting the goods carefully on rail at our Works.

COOPER'S
PATENT ROT-PROOF COMPOSITION.
(WILCOO.)

This excellent preservative is now used very extensively at home and abroad on Wood Buildings, Poultry Houses, Palings, and every description of outdoor woodwork. Its penetrating power is marvellous. "Wilcoo" enters the knots, cracks, and crevices of wood, drives out all sap, and renders the timber absolutely rot-proof. It also prevents dry rot, fungus, and mildew, and is a perfect disinfectant. "Wilcoo" destroys lice, and directly applied kills or drives away all vermin.

For prices, see page 305.

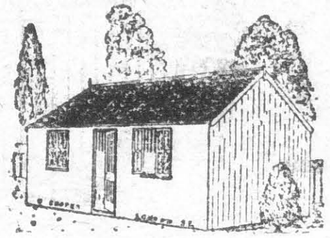
WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Portable Wood Buildings.

TENANTS' FIXTURES.

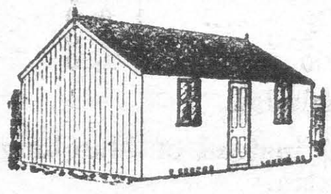
Suitable for WORKSHOPS, DWELLINGS, STORE ROOMS, OFFICES, STABLES, TOOL OR POTTING SHEDS, and numerous other purposes.

Erected by any handy man



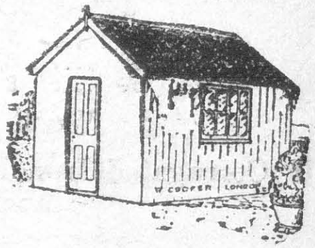
in a few hours.

No. 242.

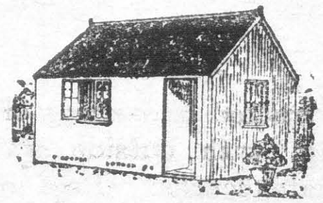


No. 243.

FOR SPECIFICATION, SEE PAGE 284.

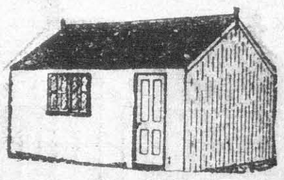


No. 244.



No. 245.

Doors and Windows in any position desired.



No. 246.

Length. ft.	Width. ft.	Height to Ridge. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.	If Floor and Joists required (bundled) Extra. £ s. d.
7	5	7 0	5 0	3 0 0	0 10 0
8	6	7 3	5 0	3 10 0	0 12 6
10	7	7 6	5 6	4 10 0	0 15 0
12	8	8 0	5 6	5 15 0	1 0 0
15	9	9 0	6 0	7 10 0	1 10 0
16	10	9 6	6 6	9 15 0	1 15 0
20	12	10 0	7 0	11 5 0	2 5 0
30	14	11 0	7 3	18 10 0	4 5 0
35	15	12 0	7 6	27 10 0	5 5 0
40	16	13 0	8 0	32 0 0	6 0 0

If Outside Woodwork painted with our Patent Rot-proof Composition, 10 per cent. extra.

Carpenters' Bench. No. 247.

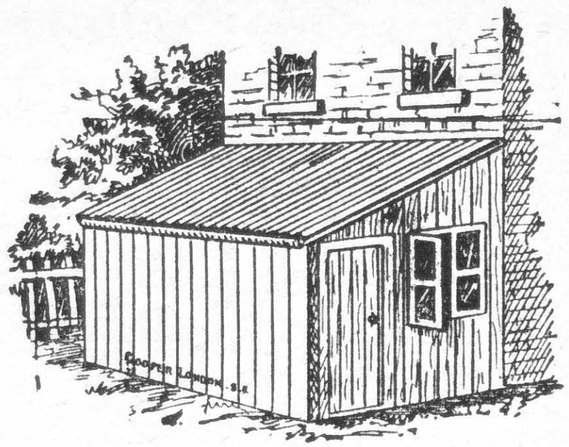
Length, 6ft.; width, 2ft. 2in.
Fitted with bench screw and back rack. Well finished.
Price 20s. Any other size made to order.

Lean-to Wooden Shed.

No. 248.

This structure will be found very useful as an addition to dwelling-house.

For Specification see page 284.

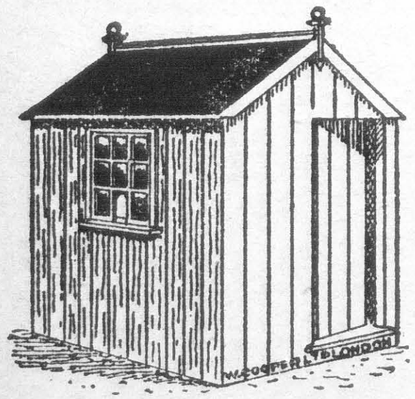


Length. ft.	Width. ft.	Height at Back. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.	If with Wood Back Extra. £ s. d.
10	8	7 6	5 0	5 10 0	1 0 0
10	10	8 0	5 6	6 5 0	1 5 0
12	10	8 6	6 0	7 0 0	1 10 0

Wood Floor and Joists included.

If Corrugated Iron Roof (as illustration) instead of Matching and Felt 7½ per cent. extra.

Span-Roof Contractor's Office.



No. 249.

Constructed in sections of stout framing, with outside walls of 1in. matchboards. Roof of 1in. tongued and grooved boards, covered with Mastic Felt; floor and joists; door with lock and key; window and pay trap; desk and drawer.

Length. ft.	Width. ft.	Height to Ridge. ft.	Height to Eaves. ft.	Cash Price. £ s. d.
8	6	8	6	7 0 0

If fitted with wheels and axles, 40s. extra.

If Outside Woodwork painted with our Patent Rot-proof Composition, 10 per cent. extra.

36, Westwell Road, Streatham Common, S.W.

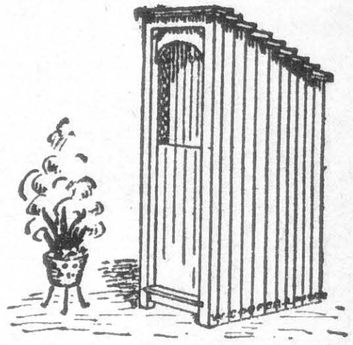
DEAR SIR,—I am very satisfied with the shed you have just supplied to me, and so are my friends who have seen it.—Yours faithfully,
E. R. KNIGHTS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Watchman's Box.

No. 250.

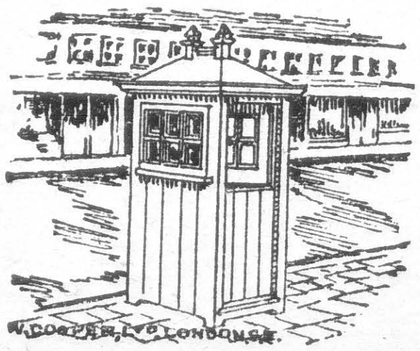
Constructed of good sound 1in. tongued and grooved matchboard walls, on strong frame, the roof of 1in. weather boards (or matchboards if preferred); floor and joists; seat and locker; door in two halves, with bolt, lock and key; unpainted. Size 2ft. 6in. by 3ft., 7ft. high in front, 5ft. 6in. high at back. Cash price £2 17s. 6d.; if less door, £2 7s. 6d.



If Outside Woodwork painted with our Patent Rot-Proof Composition, 10 per cent. extra.

Kiosk. (Time-keeper's Box.)

No. 251.



Constructed of good sound 1in. tongued and grooved matchboard and glass sides, on strong frame; roof boarded and covered with zinc; floor of 1in. tongued and grooved boards on strong joists; structure raised from ground on blocks at each corner; door in two halves, upper half glass, and fitted with bolt, lock and key. Made in sections ready to bolt together. Outside woodwork painted two coats. Desk with cupboard under same included. Zinc gutter, &c. Glass, plain 21oz. Size 4ft. 3in. by 3ft., by 8ft. high to ridge and 7ft. high to eaves.

Cash price £8.

25, Upper Park Road, Sittingbourne, Kent.

DEAR SIR,—I received the hut in perfect condition, and am very pleased with it. It will suit my purpose very much. Thanking you for prompt dispatch.—I remain, faithfully yours,
E. BENNETT.

2, Grosmont, Headingley, Leeds.

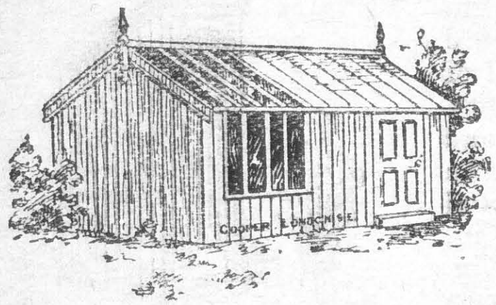
DEAR SIRS.—Thanks for prompt attention to order for hut, which was delivered safely this morning.—Yours truly,
H. S. DUNSFORD.

Fern Villa, Clayton-road, Freshwater, I.W.

SIRS,—I write to let you know I have received the hut quite safe, and am very satisfied with same; also I may say I have recommended a similar one to a friend.—I am, yours,
J. JACKMAN.

Photographic Studios.

No. 252.



These structures are fitted with ¾in. floorboards upon 3in. by 2in. or 4in. by 2in. joists, according to size. The roof is constructed partly of glass, on one side only, and the remainder boarded and covered with felt. One side of studio is part glass, as illustration. A sash to open can be had in roof or side, as desired, otherwise specification as stated on page 284.

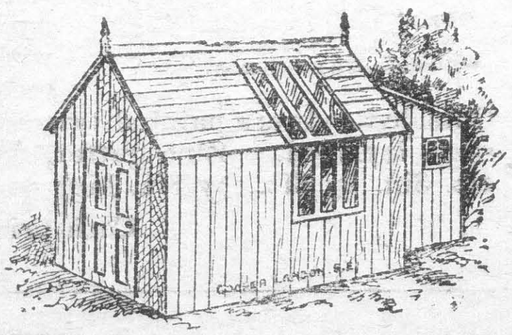
Length. ft. in.	Width. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.
12 0	8 0	7 6	7 15 0
14 0	10 0	7 6	9 10 0
16 0	10 0	8 0	11 5 0
20 0	12 0	8 0	14 0 0
24 0	12 0	8 0	15 10 0

If the above be fitted with projecting Dark Room with ruby window, size 6ft. by 3ft., £3; 6ft. by 4ft., £3 10s.

Span-Roof Photographic Studio with Dark Room.

No. 253.

This structure is substantially constructed of good sound tongued and grooved matchboards, roof of weatherboards, glass as shown; the dark room is fitted complete with slide, shelf, and ruby glass window; floor and joists all over base; complete in sections, in readiness for erection.



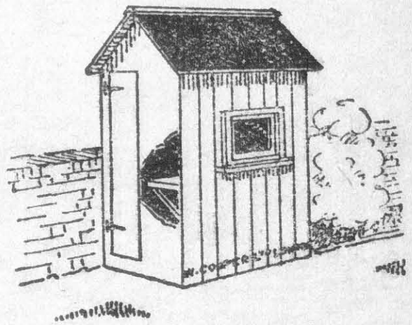
Size of Studio. Length. ft.	Width. ft.	Height at Ridge. ft. in.	Height at Eaves. ft.	Size of Dark Room. Length. ft.	Width. ft.	Cash Price. £ s. d.
12	8	9 0	7	4	4	10 0 0
16	9	9 0	7	5	4	12 10 0
20	10	9 6	7	6	4	15 0 0
24	12	10 0	7	6	4	18 0 0

The dark room can be placed in any position as desired.
If the whole of Outside Woodwork painted with our Patent Rot-proof Compositon, 10 per cent. extra.

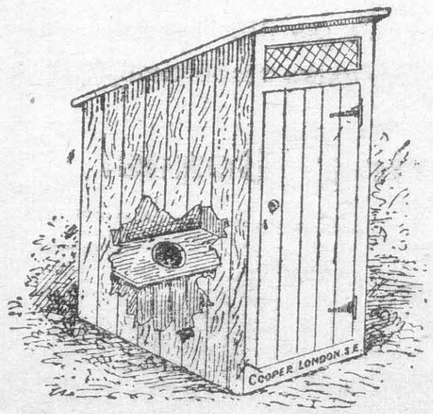
Span-Roof Photographic Dark Room.

No. 254.

Thoroughly well constructed of good sound ¾in. tongued and grooved matchboards; roof covered with felt; and fitted complete with floor, ruby glass window and slide; table under window; dark ventilator and door with lock; in sections, in readiness for erection.



No.	Length. ft.	Width. ft.	Height at Ridge. ft. in.	Height at Eaves. ft. in.	Cash Price. £ s. d.
1	.... 4	4	8 0	6 0	2 10 0
2	.... 5	4	8 0	6 0	2 17 6
3	.... 6	4	8 6	6 6	3 5 0
4	.... 6	6	8 6	6 6	4 5 0



No. 255.

Pent-Roof Portable W.C.

Constructed of good sound ¾in. tongued and grooved matchboards. Roof boarded and covered with felt; lattice-wood floor; fitted inside with hinged seat and front complete; door complete; in sections in readiness for erection. 3ft. 6in. by 4ft.; 6ft. high in front; 5ft. high at back.

Cash Price ..... £2 7s. 6d.

If Outside painted with our Patent Rot-proof Composition, 10 per cent. extra.

6, Denmark Terrace, South Ashford, Kent.

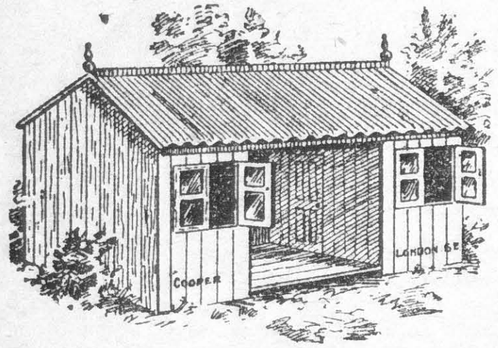
Dear Sir,—The building reached me safely on Thursday afternoon. I have erected same, and am perfectly satisfied. Thanking you for your prompt attention, I am, yours faithfully, T. Shilling.

Farnham Common, Slough, Bucks.

Dear Sir,—I received the wooden shed to-day, and am more than pleased with it.—Yours truly, A. Cox.

Cricket, Football, Tennis and Golf Pavilion.

No. 256.



These structures, very conveniently arranged, are fitted with two dressing rooms, and centre shelter with open front, two partitions, doors, and windows, and complete with floor and joists. The whole made in sections as far as possible. For specification see page 284.

Length. ft.	Width. ft.	Height to Ridge. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.
15	8	8 6	6 6	13 10 0
17	10	9 0	6 6	15 10 0
20	12	9 0	7 0	18 0 0
26	12	9 0	7 0	22 0 0
32	14	11 0	8 0	30 0 0

If Roof covered with Galvanised Corrugated Iron Sheets, underlined with ½in. matching and felt (as illustration),

27s. 6d., 35s., 50s., 60s., and 75s. extra respectively.

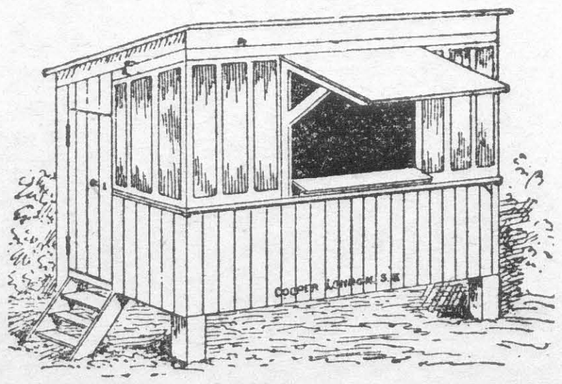
Pent-Roof Scoring Boxes.

As used at Cricket Matches, &c.

8ft. by 7ft.; 8ft. 6in. high in front; 6ft. 6in. high at back, including legs.

Cash Price... £5

If the whole of Outside Woodwork painted with our Patent Rot-proof Composition, 10 per cent. extra.



No. 257.

36, College Avenue, Gillingham, Kent.

GENTLEMEN,—Will you please note that the pent-roof building has been delivered safely, and everything is perfectly satisfactory. Please accept thanks for prompt delivery.—Yours faithfully, W. T. JOYCE.

Droxford Cricket Club.

DEAR SIR,—Wood building arrived safe; very satisfactory.—Yours truly, W. DURRANT, Hon. Sec.

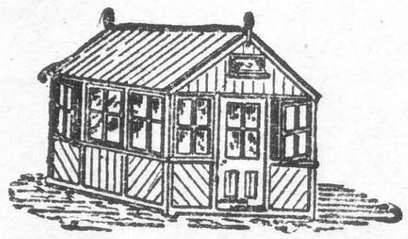
WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Huts and Shelters.

For Open-air Treatment of Consumption and various forms of Tuberculous Disease.

All substantially constructed in sections, and easily erected. Roof of Galvanised Corrugated Iron Sheets, underlined with Felt and Matchboarding. All Woodwork (outside and inside) painted with our Patent Brown Wood-Preserving Preparation.

No. 258.



Long. ft.	Wide. ft.	Height to Ridge. ft. in.	Height to Eaves. ft. in.	Cash Price. £ s. d.
8	7	8 9	6 0	7 10 0
9	8	9 0	6 0	9 10 0
10	8	9 0	6 3	10 5 0
12	10	9 6	6 6	13 0 0
13	10	10 0	6 6	14 0 0
14	10	10 0	7 0	14 15 0

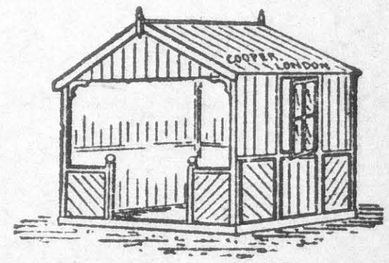
Sashes made to open according to size. Set Opes included.

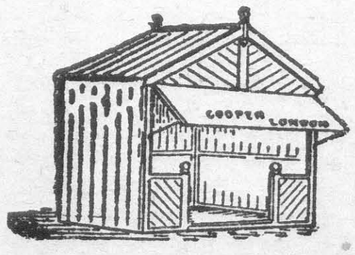
No. 259.

Size, 8ft. long by 6ft. wide by 9ft. to ridge, 6ft. 6in. to eaves.

Cash Price £5.

If fitted with Revolving Gear and Foundation Frame, so as to be easily revolved according to the wind, 45s. extra.





No. 260.

Size, 8ft. long by 6ft. wide by 9ft. to ridge, 6ft. 6in. to eaves.

Complete with Awning, as illustrated.

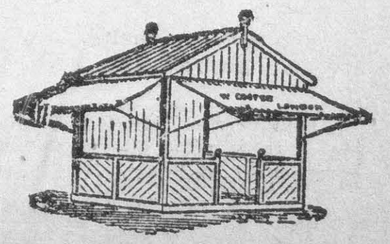
Cash Price, £5 17s. 6d.

If fitted with Revolving Gear and Foundation Frame, so as to be easily revolved according to the wind, 45s. extra.

Size, 8ft. long by 6ft. wide by 9ft. to ridge, 7ft. to eaves.

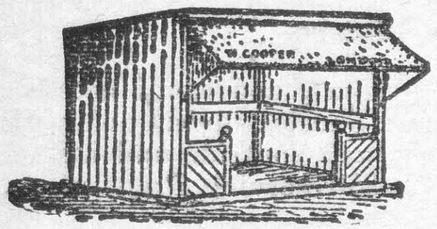
Cash Price, £7 10s.

With Awning, three sides, for closing up or to open according to the weather.



No. 261.

Special Cheap Shelter.



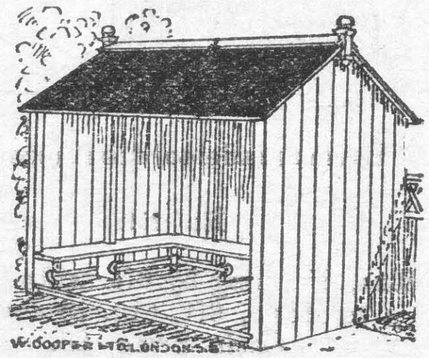
No. 262.

The walls are constructed of ¾in. matchboards on 2in. by 2in. frame; roof boarded and covered with felt; floor and joists. All woodwork (outside and inside) painted with our Patent Wood-Preserving Preparation.
Size, 8ft. by 6ft. wide by 7ft. high in front, by 6ft. at back.

Cash Price, £4 10s.

Span-Roof Garden Shelter.

No. 263.



This is a serviceable Shelter, fitted with seats as illustration. Specification as for No. 262, but unpainted. Complete in sections ready for erection.

Length. ft.	Width. ft.	Height at Ridge. ft. in.	Height at Eaves. ft. in.	Cash Price. £ s. d.
6	4	8 0	6 0	3 5 0
8	6	9 0	6 0	4 10 0
10	7	9 0	6 0	5 15 0
12	8	9 6	6 6	7 0 0

38, King Street, Maidenhead.

DEAR SIR,—I should have acknowledged receipt of shelter before. I am quite satisfied with it. I can usually manage to make a muddle of the simplest carpentry job, but the putting of this together was quite easy.—Yours faithfully, FRANK C. JONES.

3, Ash View, Newton, Wakefield.

GENTLEMEN,—I received the garden shelter yesterday. It suits my purpose admirably.—Yours faithfully, N. COLQUHOUN.

Collina, Bathwick Hill, Bath.

The garden shelter and swing arrived in safety the other day. We are very pleased with both. G. J. GREY.

Preston Grammar School, Brighton.

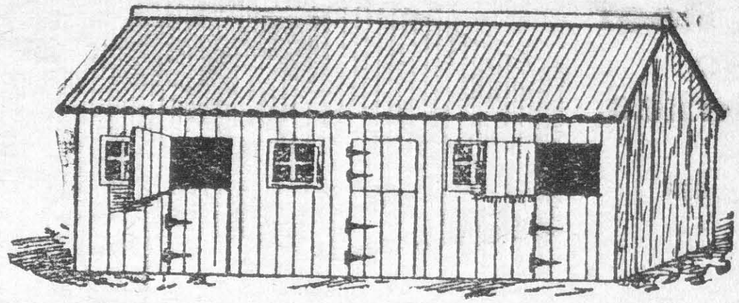
DEAR SIR,—The garden shelter arrived safely, is erected, and gives complete satisfaction. I consider it a marvel of cheapness, combined with good workmanship.—Yours truly, A. W. PARKIN.

The School Farm, Great Snoring, Fakenham, Norfolk.

Mrs. Tuck wishes to thank Messrs. Cooper for the garden shelter, which arrived safely. Mrs. Tuck is very pleased with it.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Span-Roof Loose Boxes.



No. 264.

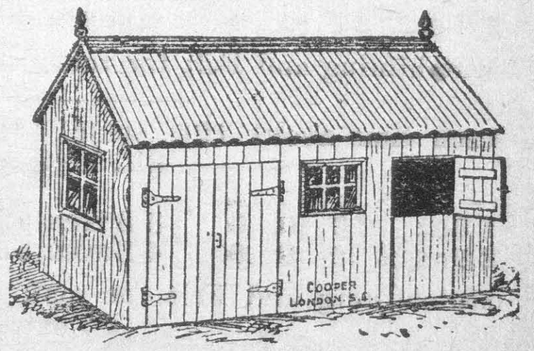
The illustration shows a range of three Boxes, constructed of good sound tongued and grooved 1in. matchboards, on 3in. by 2in. framing. The roof is formed of stout boards on strong timbers, and covered with felt; door and window to each box as shown; manger and hayrack to each. Constructed in sections in readiness for erection.

Size over all—	Cash Price. £ s. d.
21ft. by 9ft., 10ft. high to ridge, and 7ft. 6in. high to eaves	18 10 0
30ft. by 12ft., 11ft. high to ridge, and 8ft. high to eaves	29 10 0

Portable Stable, Coach and Harness House.

No. 265.

Constructed of good ¾in. matchboarding on 3in. by 2in. frame. The roof is covered with stout boards on strong principals and covered with felt, complete with partitions, doors, windows, all necessary ironmongery, and glass. All in sections in perfect readiness for erection.

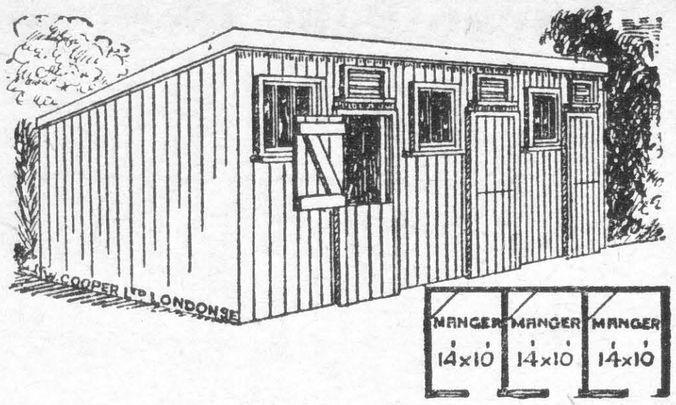


Suitable for	Length. ft.	Width. ft.	Height to Ridge. ft.	Height to Eaves. ft.	Cash Price. £ s. d.
1 pony and trap.....	14	10	10	7	9 10 0
1 horse and trap	15	12	11	8	12 0 0
2 horses and trap	20	12	11	8	15 0 0

Above prices do not include floor, which would be best of brick or concrete.

If the whole of Outside Woodwork painted with our Patent Rot-proof Composition, 10 per cent. extra.

Pent-Roof Loose Boxes.



No. 266.

These boxes are substantially constructed in sections to bolt together. Made of wrought timber framework 2in. by 3in. and 2in. by 4in., according to size. The outside walls are of 1in. tongued and grooved matchboards. Roof of Galvanised Corrugated Iron Sheets. Each Box fitted with a door made in two halves and hung on strong hinges. Locks, keys, and bolts included. A Louvre ventilator over door and a window at side, with plain 21oz. glass. Sufficient 1in. boards are supplied to line all walls inside, and both sides of Partition framing, Galvanised Mangers, and Hay Racks. The whole prepared ready for easy erection on site by purchaser. Woodwork unpainted.

Each Box about 10ft. wide, 14ft. deep, 11ft. high in front, 8ft. high at back.

	£	s.	d.		£	s.	d.		£	s.	d.
1 Box	**13**	**10**	**0**	**3 Boxes**	**35**	**0**	**0**	**5 Boxes**	**58**	**0**	**0**
				(as illustration.)							
2 Boxes	**24**	**10**	**0**	**4 Boxes**	**46**	**0**	**0**	**6 Boxes**	**70**	**0**	**0**

Matchlining and Felt for roof, under Iron, 15s. per box extra.

Each Box about 12ft. wide, 14ft. deep, 11ft. high in front, 8ft. high at back.

	£	s.	d.		£	s.	d.		£	s.	d.
1 Box	**16**	**0**	**0**	**3 Boxes**	**42**	**0**	**0**	**5 Boxes**	**69**	**10**	**0**
2 Boxes	**29**	**0**	**0**	**4 Boxes**	**55**	**0**	**0**	**6 Boxes**	**84**	**0**	**0**

Matchlining and Felt for roof, under Iron, 17s. 6d. per box extra.

Each Box about 14ft. square, 11ft. high in front, 8ft. high at back.

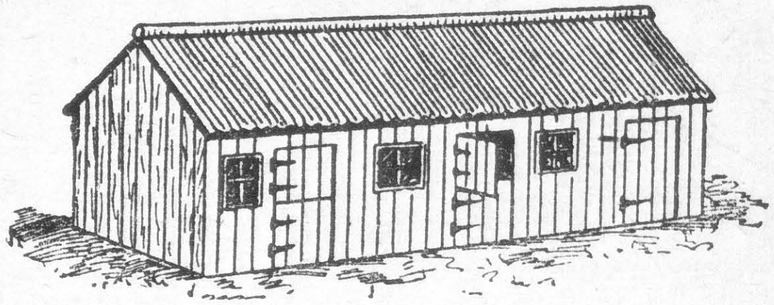
	£	s.	d.		£	s.	d.		£	s.	d.
1 Box	**18**	**10**	**0**	**3 Boxes**	**48**	**10**	**0**	**5 Boxes**	**80**	**0**	**0**
2 Boxes	**33**	**10**	**0**	**4 Boxes**	**63**	**10**	**0**	**6 Boxes**	**96**	**10**	**0**

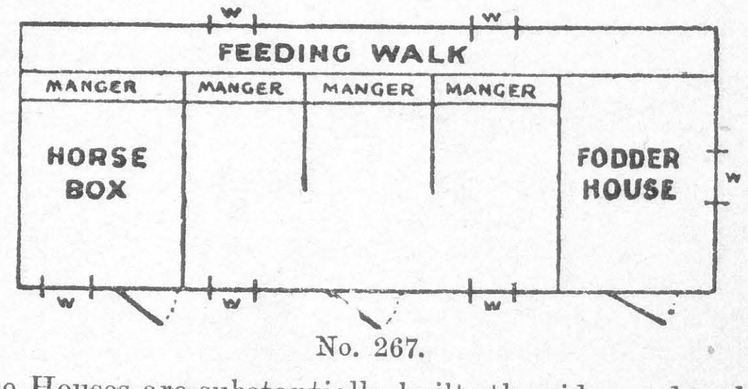
Matchlining and Felt for roof, under Iron, 20s. per box extra.

If Outside Woodwork painted with our Patent Rot-Proof Composition, 10 per cent. extra.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Span-Roof Cow Houses.





No. 267.

These Houses are substantially built, the sides and ends being covered with 1in. tongued and grooved matchboarding on strong 2in. by 3in. frame. The roof is formed of stout boards on strong principals, and covered with felt; the houses are complete with doors and windows, and also partitions as shown, dividing it into loose box, fodder house, set-in mangers, and feeder's walk. Constructed in sections in perfect readiness for erection, and securely put on rail at our Works.

Size, 28ft. by 12ft., 11ft. to ridge, and 7ft. to eaves.
Cash Price, £25.

Doors and Windows may be had in any position as required. If painted Outside with our Patent Rot-Proof Composition, 50s. extra.

Cooper's Disinfectas.

Clean, Cheap, and Healthy. A little sprinkled about a Stable gives a clean appearance and a pleasant smell. Try it.

Per Sack (2 Bushels) 2s. 6d. Sack included. 10 for 22s.

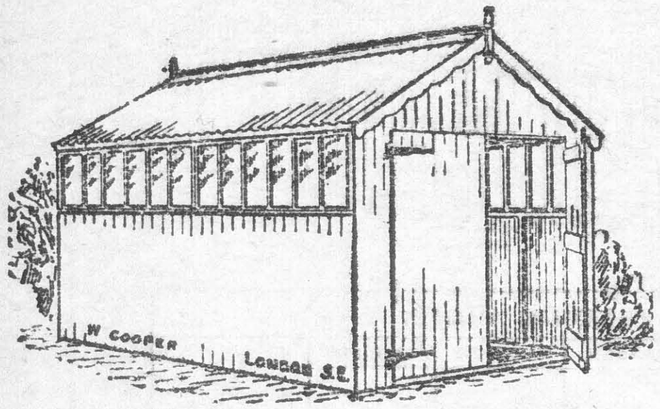
Send for Sample Sack.

Hawkesbury, Badminton.

DEAR SIRS,—It is only just to let you know I am exceedingly pleased with the stable received from your works last week.—Yours truly,

A. ROBINSON.

Portable Wood Motor-Car Houses.



No. 268.

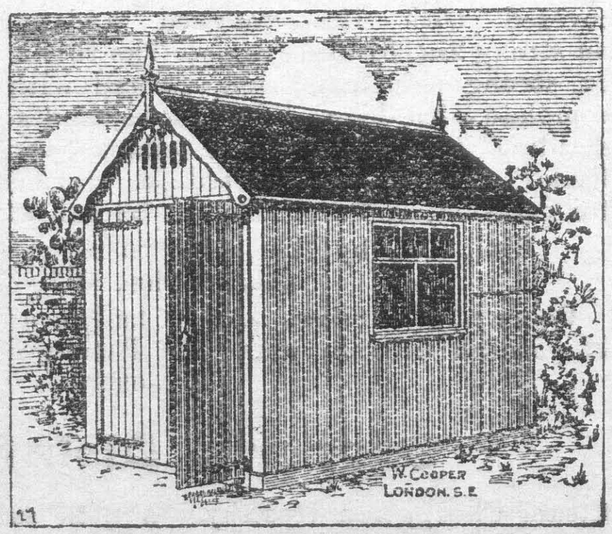
TENANT'S FIXTURE.

For specification see page 284.

The walls are not lined on the inside, and no Floor or Gutters are included.

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft. in.	Cash Price. £ s. d.
10	8	7	9 6	6 0 0
12	8	7	9 6	7 10 0
15	10	7	10 0	9 15 0
20	12	8	12 0	14 10 0
30	14	8	13 0	22 0 0
35	14	8	13 0	26 0 0

No. 269.



For specification see page 284.

The walls are not lined on the inside, and no Floor or Gutters are included.

Sizes and prices as for No. 268.

If roof covered with Galvanised Iron Corrugated Sheets, underlined with ½in. Matching and Felt instead of above—

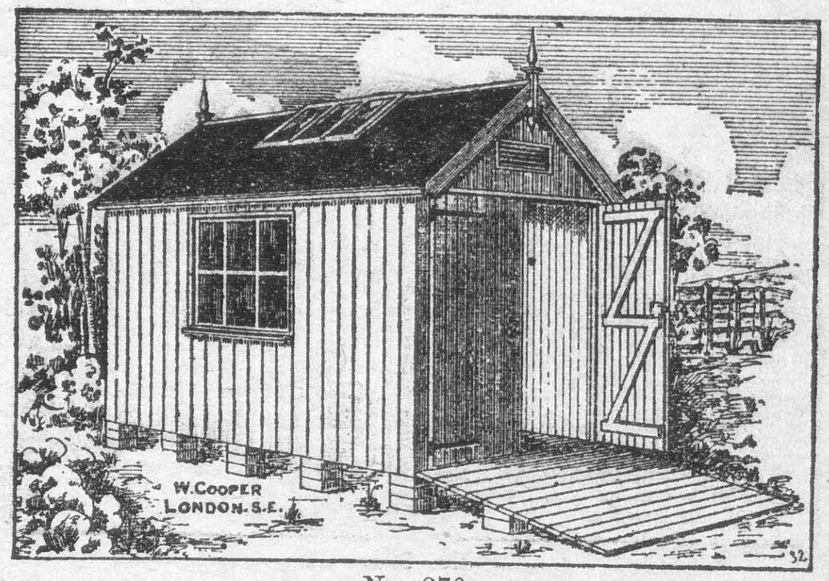
20s., 25s., 30s., 50s., 70s., 85s. extra, respectively.

In the four largest sizes doors can be placed in each end, if desired, without extra charge.

If Outside Woodwork painted with our Patent Rot-Proof Composition, 10 per cent. extra. Strongly recommended.

Portable Wood Motor-Car House.

TENANT'S FIXTURE.



No. 270.

For Specification see page 284.

The walls are not lined on the inside, and no Floor or Gutters are included.

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft. in.	Cash Price. £ s. d.
10	8	7	9 6	6 0 0
12	8	7	9 6	7 10 0
15	10	7	10 0	9 15 0
20	12	8	12 0	14 10 0
30	14	8	13 0	22 0 0
35	14	8	13 0	26 0 0

If roof covered with Galvanised Iron Corrugated Sheets, underlined with ½in. Matching and Felt instead of above—

20s., 25s., 30s., 50s., 70s., 85s. extra, respectively.

If structures fitted with Sloping Gangway, as illustration above, and 1in. Wood Floor all over base—

35s., 40s., 50s., 70s., 110s., 130s. extra, respectively.

In the four largest sizes doors can be placed in each end, if desired, without extra charge.

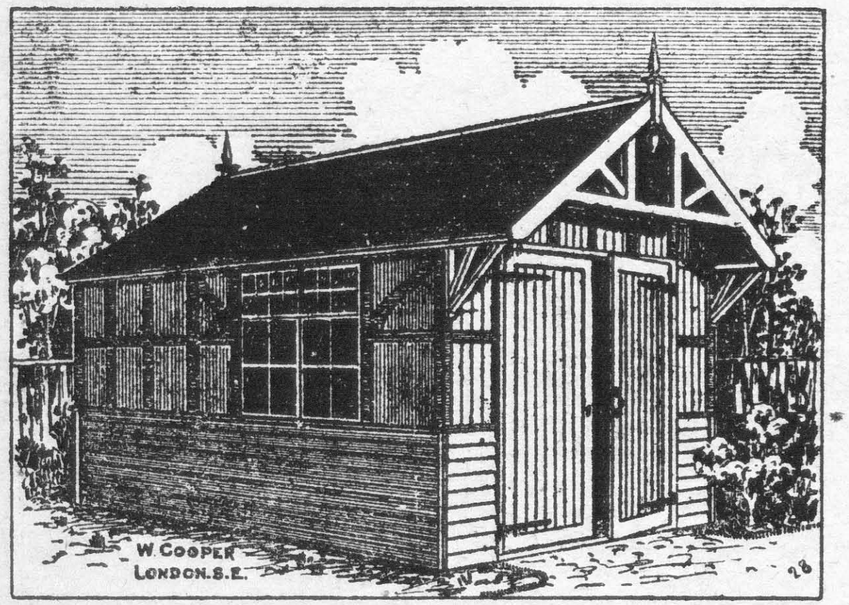
If Outside Woodwork painted with our Patent Rot-proof Composition, 10 per cent. extra.

7, Brynteg Place, Treharris, S. Wales.

DEAR SIR,—We received the building quite safe here to-day, and all was quite satisfactory.—Yours truly, B. W. MORGAN.

Portable Motor-Car House.

TENANT'S FIXTURE.



No. 271.

Substantially constructed. Framework is of 2in. by 3in. and 2in. by 4in. (according to size). The outside walls are 1in. Weather boards below windows, remainder of sides and ends 1in. tongued and grooved vertical Matchboard. Roof of 1in. tongued and grooved boards, covered with Felt.

The walls are not lined on the inside, and no Floor or Gutters are included. Outside Woodwork is painted one coat.

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Cash Price. £ s. d.
20	12	8	12	22 10 0
25	12	8	12	27 0 0
30	14	8	13	33 10 0
35	14	8	13	38 10 0

If Italian Iron Sheets to cover roof over Matching and Felt—
63s., 75s., 90s., 100s. extra, respectively.

Doors can be placed in each end, if desired, without extra charge.

Police Station, Nantyglo, Mon.

DEAR SIR,—I have received Building safe and sound, and am very well pleased with it.

Several people here have admired it. Anything that I can do to further your sales will be done with pleasure.—Yours faithfully,

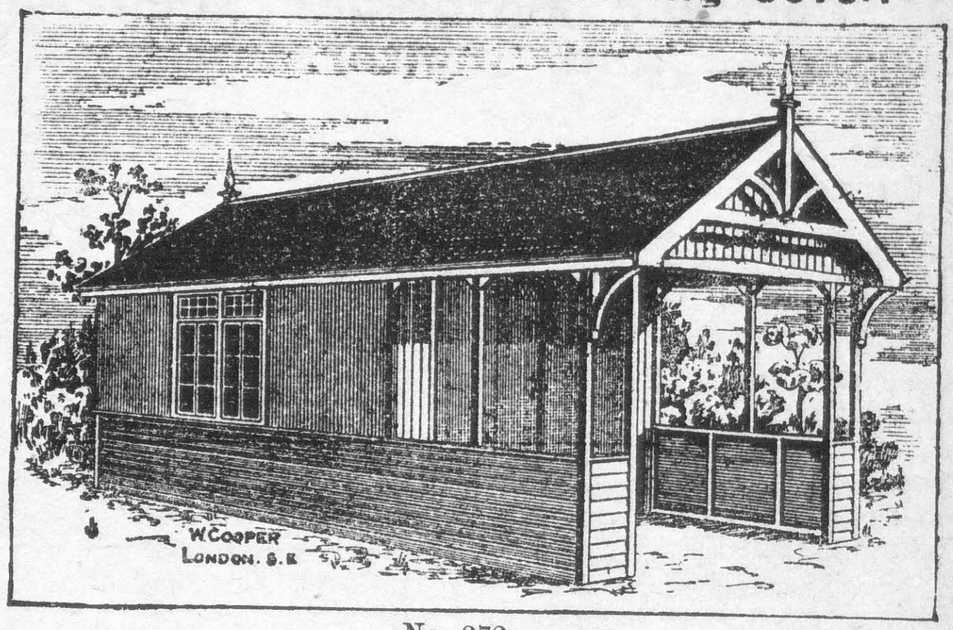
BERNARD WHITE.

Stanford-le-Hope.

I beg to acknowledge receipt of portable shed, which is satisfactory.—Yours truly,

H. H. SLOANE.

Motor House with Washing Cover.



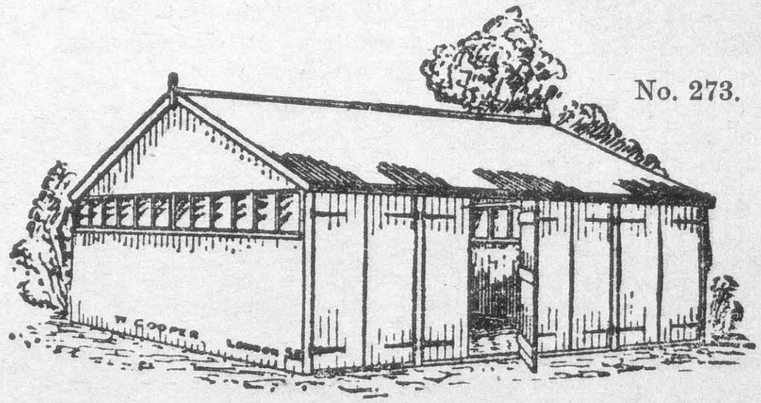
No. 272.

	Length.	Width.	Height to Eaves.	Height to Ridge.	Cash Price. £ s. d.
Size of House	15ft. ..	14ft. ..	8ft. ..	13ft. ..	30 0 0
Size of Cover	15ft. ..	14ft. ..	8ft. ..	13ft. ..	

Specification as for No. 271.

If Italian Iron Sheets to cover roof over Matching and Felt, £4 10s. extra.

Motor House suitable for Four Cars.



No. 273.

This building is substantially constructed of strong deal framing, in complete sections, the outside of which is covered with ¾in. and the inside ½in. tongued and grooved matchboards. Roof corrugated iron, with felt and matchboards for lining same, barge boards, cast-iron eaves gutters, and downpipes, glazed 21oz. glass. Outside woodwork painted one coat. No Floor included with this Building.

Size—32ft. long by 14ft. wide, by 8ft. to Eaves by 13ft. to Ridge.
Cash Price on rail at our Works, £42.

Portable Motor-Car Shed and Shelter.

TENANTS' FIXTURES.

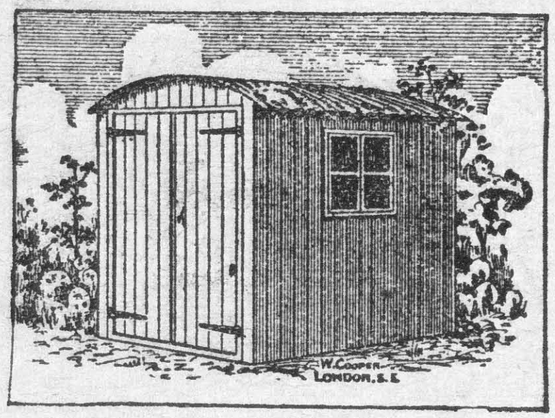
Circular Roof.

Constructed of 3in. by 2in. Wrought Timber Framework.

Outside walls ¾in. tongued and grooved Matchboards.

Roof Galvanised Corrugated Iron Sheets, underlined with ½in. Matching and Felt.

No Floor included.

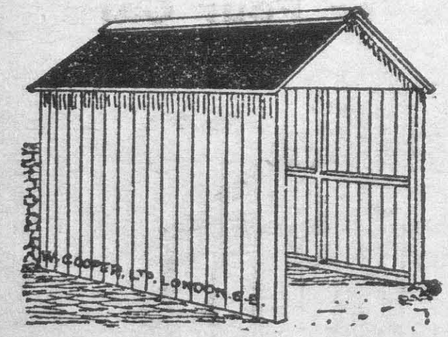


No. 274.

Length.	Width.	Height to Eaves.	Cash Price. £ s. d.
15ft.	10ft.	7ft.	11 10 0
20ft.	12ft.	8ft.	17 0 0

Motor-Car Shelter.

No. 275.



Constructed of ¾in. tongued and grooved matchboards. Roof tongued and grooved boards, covered with felt.

No Floor included.

Length.	Width.	Cash Price. £ s. d.
8ft. by	6ft.	3 10 0
10ft. ,,	7ft.	4 10 0
12ft. ,,	8ft.	5 12 6
15ft. ,,	9ft.	7 5 0
18ft. ,,	10ft.	9 0 0
20ft. ,,	12ft.	11 0 0
24ft. ,,	15ft.	14 10 0

Window can be fitted in side or end if required, without extra charge.

If Outside Woodwork painted with our Patent Rot-Proof Composition, 10 per cent. extra.

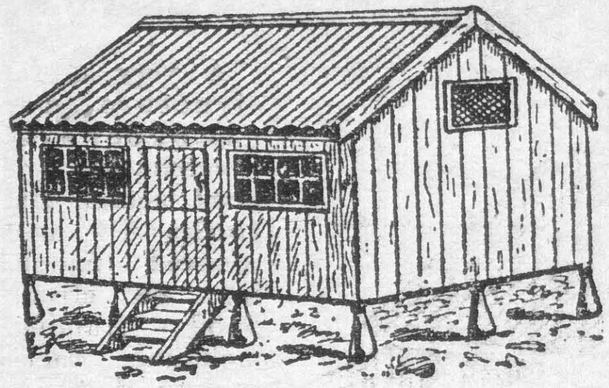
19, Bromham Road, Bedford.

DEAR SIRS,—I beg to enclose cheque for £15 in settlement of account, and am pleased to say the building, &c., gives every satisfaction.—Faithfully yours, E. COLBY SHARPIN.

5, Fern Villas, Feltham Road, Ashford, Middlesex.

DEAR SIR,—Have received wooden outhouse, and have erected same, and beg to say that I find it satisfactory.—Yours truly, S. WALLACE.

Grain Store.



No. 276.

A most useful building for farmers, perfectly rat and vermin proof, and, being constructed extra strong throughout, will be found to be well suited for the purpose it is intended for; the roof is of strong principals, boarded, and covered with felt, the sides of ¾in. matchboarding on strong framework; floor of 1in. tongued and grooved boards on strong joists; complete in sections as far as possible in readiness for erection on ground level or piers at the following prices:—

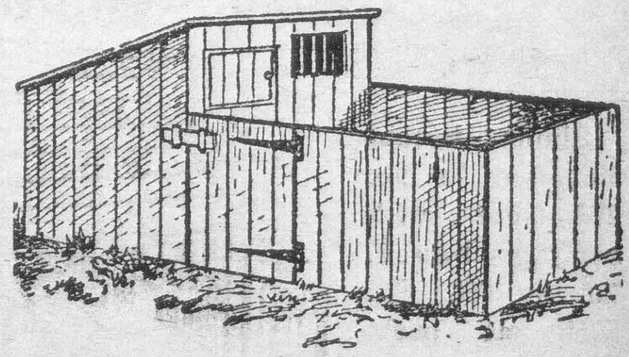
Length. ft.	Width. ft.	Height to Ridge. ft.	Height to Eaves. ft. in.	Cash Price. £ s. d.
20	10	11	8 0	17 10 0
30	12	12	8 6	24 0 0
40	14	13	9 0	35 0 0

Piers shown in illustration are not included.

If Roof of Galvanised Corrugated Iron Sheets instead of Matching and Felt, 7½ per cent. extra.

Pigsty and Open Yard.

Strongly-made and suitable for placing in the open field, &c. The framing is of 2in. by 2in. throughout, covered with strong tongued and grooved boarding. Wood roof covered with felt.



No. 277.

The Pigsty is complete with halved door and ventilator (as shown), and the Yard, with strong door, made in sections to screw together.

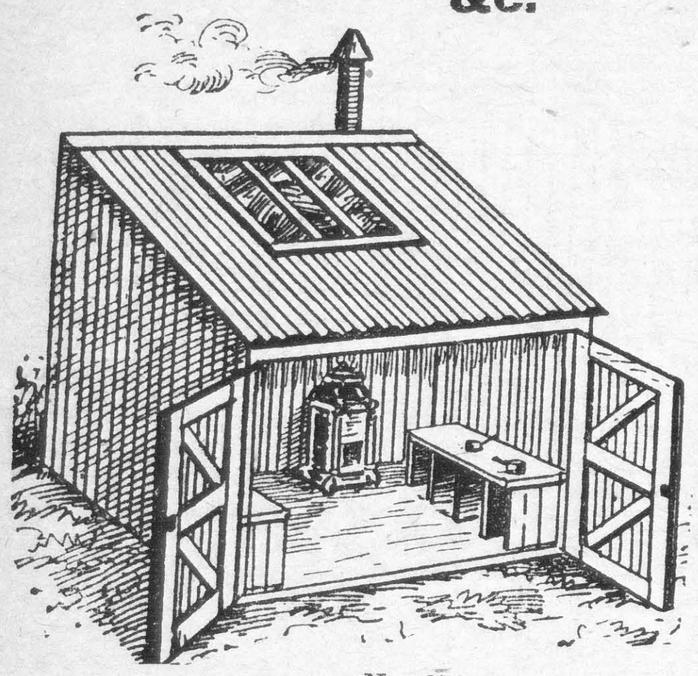
Size of Pigsty.—5ft. long by 5ft. wide by 4ft. 6in. in front by 3ft. 6in. at back.

Size of Yard.—6ft. long by 5ft. wide by 3ft. 6in. high.

Cash Price of Pigsty, £2 15s. Cash Price of Yard, £1 1s.

If Outside Woodwork painted with our Patent Rot-Proof Composition, 10 per cent. extra.

Lean-to Cooking Shed, Workshop, &c.



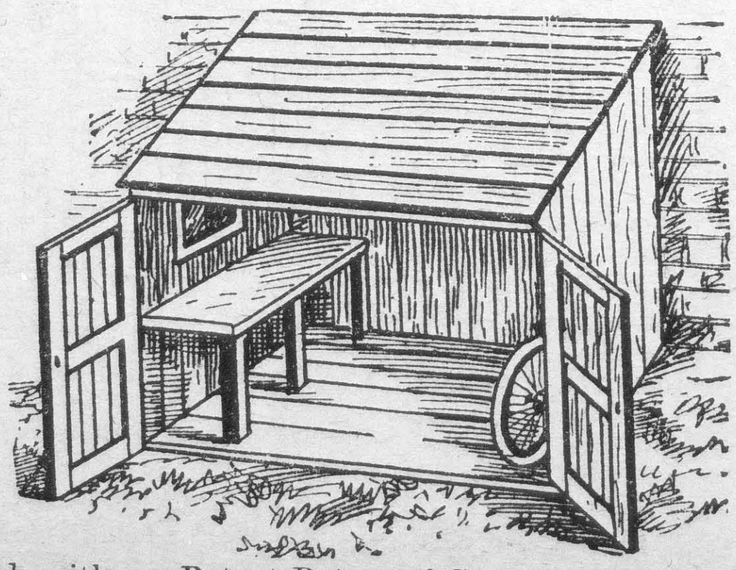
No. 278.

A very useful structure for gamekeepers; constructed of good, sound, ¾in. tongued and grooved matching, on strong wood framing, including back; folding doors in front, and glass ventilator in roof; complete with bench and floor; in sections in readiness for erection. Size, 8ft. by 5ft. 6in., 7ft. 6in. at back, 6ft. high to eaves.

Cash Price, £4 10s. Suitable stove for above, 30s. extra.

Lean-to Workshop and Cycle House combined.

No. 279.

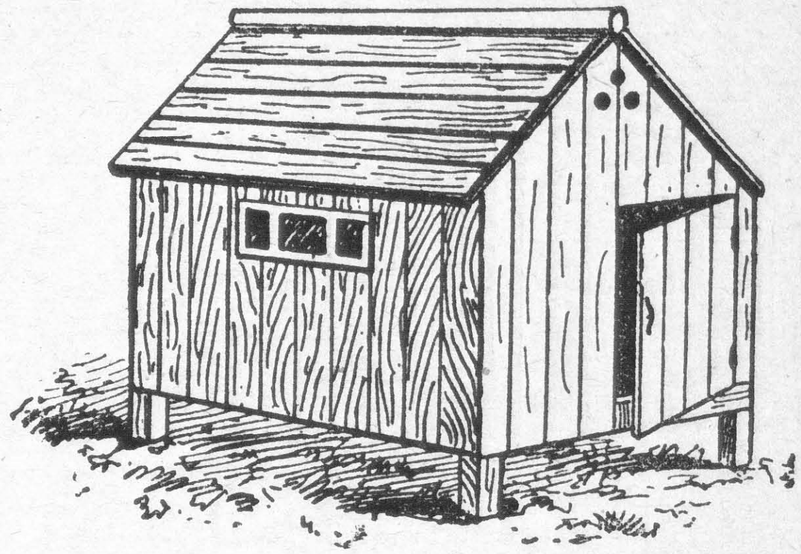


Similar in construction to No. 278, but with strong bench. 7ft. by 6ft., 8ft. high at back, 6ft. high to eaves. Complete, with back.

Cash Price, £4 10s.

If painted outside with our Patent Rot-proof Composition, 10 per cent. extra.

Span-Roof Keeper's Hut and Store.



No. 280.



Interior View of above.

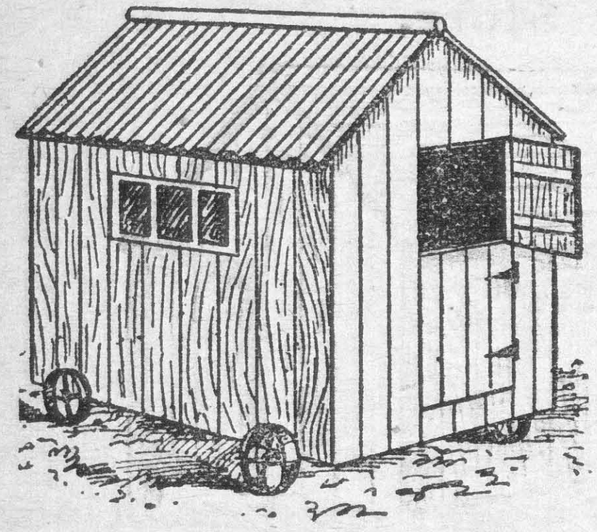
A strongly-made structure with raised floor; constructed of good, sound, well-seasoned ¾in. matching; roof of weather-boards; one window in each side, door in one end; complete with strong floor and bench; in sections in readiness for erection.

CASH PRICES.

8ft. by 6ft., 9ft. high to ridge	£4 10s. 0d.
10ft. by 7ft., 10ft. ,, ,, ...	£6 0s. 0d.

If painted outside with our Patent Rot-Proof Composition, 10 per cent. extra.

Keeper's Hut and Store.



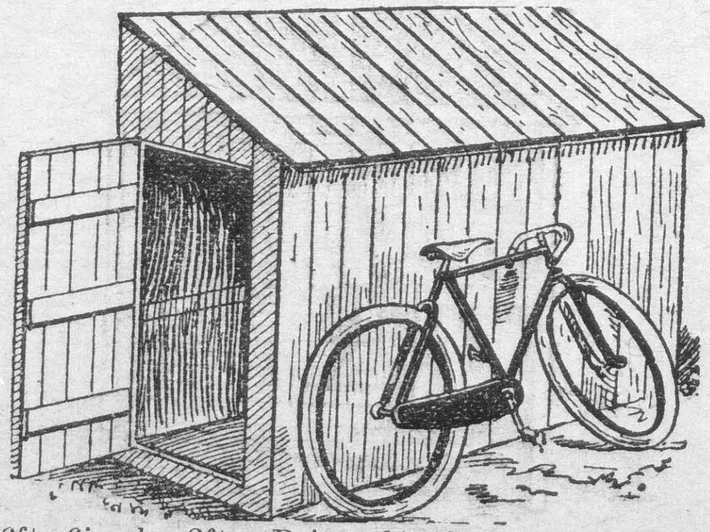
Substantially constructed of good, sound ¾in. tongued and grooved matching, on strong 2in. by 3in. frame; roof of stout boards, on strong principals and covered with felt; window in one side; door in two halves in one end. Complete with floor. Mounted on four strong wheels; the Hut is fitted with stove and chimney; in sections in readiness for erection.

No. 281.

8ft. by 6ft., 8ft. high to ridge, 6ft. high to eaves.
Cash Price, £7 5s.
Quotations for other sizes on application.

Lean-to Cycle Shed with Back.

No. 282.



A useful shed for one machine, constructed of ¾in. tongued and grooved matching. Roof boarded and felted; complete with floor and back, also cycle rest and tool box; no fixing required.

Size, 6ft. 6in. by 2ft. Price, £1 10s.
If Outside Woodwork painted with our Patent Rot-Proof Composition, 10 per cent. extra.

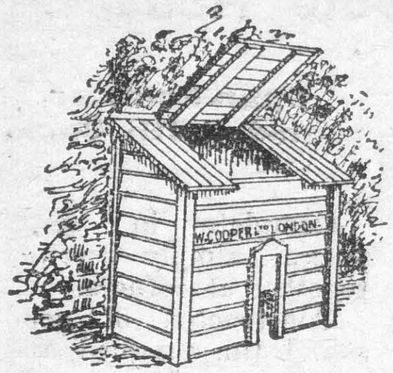
Rusholme, Homefield Road, Worthing.

DEAR SIRS,—The tricycle-shed has been received, and is quite satisfactory.—Yours truly,
H. J. KINNAIRD.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Wooden Coal Shed.

No. 283.



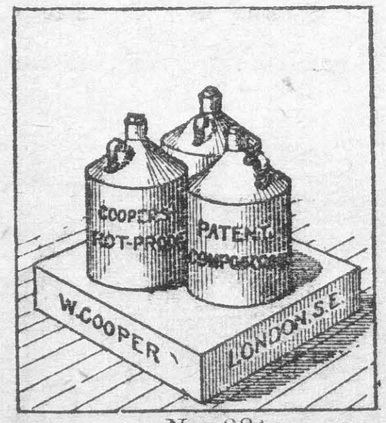
Strongly constructed of 1in. weather boarding on suitable frame, and complete with floor and wood back; hinged flap on roof and slide in front; the whole in sections, unpainted. Size, 6ft. long by 3ft. deep by 5ft. high at back by 4ft. high in front.

Cash Price, £2 5s.

If Outside Woodwork painted with our Patent Rot-Proof Composition, 10 per cent. extra.
Quotations for other sizes on application.

Cooper's Rot-Proof Composition.

(WILCOO.)



No. 284.

A good preservative for all woodwork exposed to the weather, and suitable for Farm Buildings, Poultry Houses, Palings, Fences, or any description of Outdoor Woodwork.

	Cash Price. £ s. d.		Cash Price. £ s. d.
1 gal.	0 2 6	10 gals.	0 17 6
2 gals.	0 4 9	20 gals.	1 10 0
5 gals.	0 10 0	40 gals.	2 10 0

Put on rail at our Works.

Cans and Casks included (not returnable).

"Mont Ceris," Grosvenor Avenue, Wallington.

DEAR SIRS,—I have received the Cycle House and Rabbit Hutch, and am very well pleased with the same.—Yours faithfully,
(Signed) W. NORRIS.

26, Highbury, West Jesmond, Newcastle-on-Tyne.

DEAR SIRS,—I am well satisfied with Tricycle House, which, since fixing, has stood severe weather satisfactorily.—Yours sincerely,
C. L. REID.

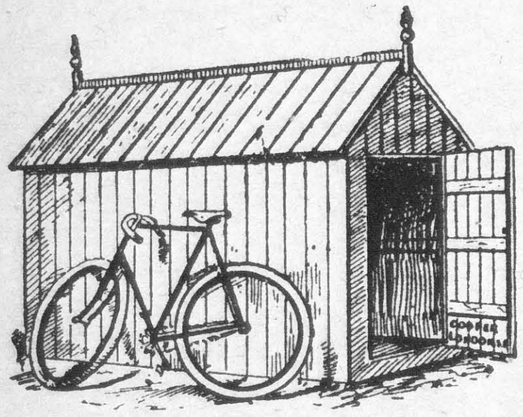
Springfield, Elmstead Road, Bexhill.

DEAR SIRS,—I have to thank you for the Swing and Bicycle House, which reached me on Saturday. I am very pleased with them.—Yours truly,
C. H. MURCER.

Fordham School House, Essex.

GENTLEMEN,—Stable and Coach House duly to hand. They are simply A1, and we are very pleased indeed with them. The materials used we find are of the best quality, and the workmanship everything that can be desired. We erected the whole in two hours. The building is absurdly cheap for what it is. You may make what use you like of this.—Yours, &c.,
E. J. C. PITT.

Bicycle and Tricycle Houses.



Span Roof, or Lean-to with Back.

Complete in seven pieces; simply screwed together at corners.

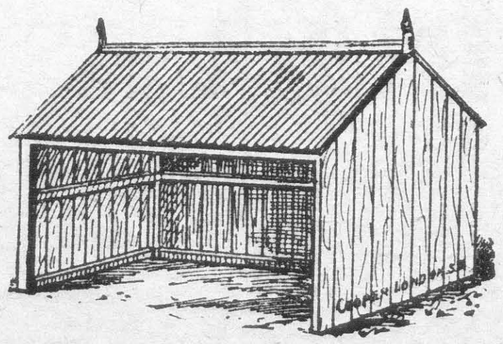
Constructed of good sound ½in. tongued and grooved boards; complete with floor, door, lock and key.

	No. 285. Span Roof. Cash Price. £ s. d.	No. 286. Lean-to. Cash Price. £ s. d.
Bicycle Houses, 6ft. 6in. by 3ft. 6in.	2 5 0	1 15 0
Tricycle Houses, 6ft. 6in. by 5ft.	2 15 0	2 10 0

When ordering state if Span-roof or Lean-to required; if the latter, end door also.

Span-Roof Open Shed.

No. 287.



Complete in sections to screw together. Constructed of good sound ½in. tongued and grooved matchboards; roof boarded and covered with felt. No floor included.

Length. ft.	Width. ft.	Height to Ridge. ft.	Height to Eaves. ft.	Cash Price. £ s. d.
6	4	7	5	1 10 0
7	5	8	6	2 0 0
10	8	9	6	4 0 0

If Outside Woodwork painted with our Patent Rot-Proof Composition, 10 per cent. extra.

St. Anvan's, Cosham.

DEAR SIR,—The Bicycle House arrived safely, and is very satisfactory—it was so easily put together. Also the Fowl House I had from you some time ago is as good as ever. When I moved from Portsmouth I took it apart and brought it with me, and the fowls are doing well in it.—Thanking you, yours truly,

A. H. MOYSEY.

SECTION VI.

Illustrated Catalogue

OF

LATEST DESIGNS

IN

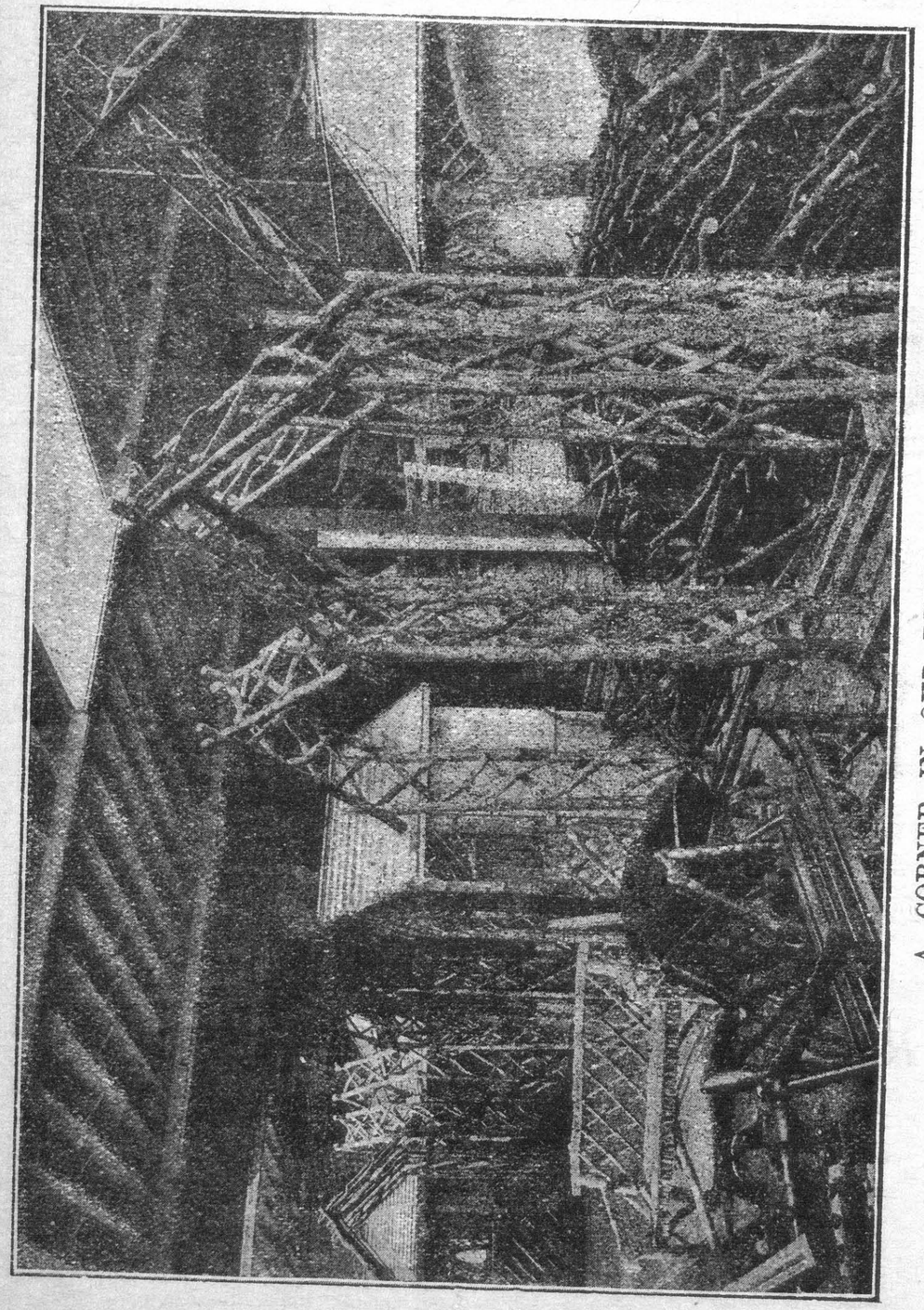
RUSTIC WORK.

REPAIRS OF ALL KINDS executed by thoroughly experienced workmen, who are sent to all parts of the country if required.

Rustic Bridges and other Rustic Work to order.

ALL RUSTIC WORK IS MANUFACTURED AT OUR WORKS, UNDER OUR OWN SUPERVISION.

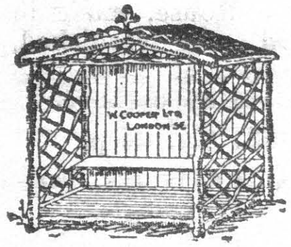
ESTIMATES FREE.



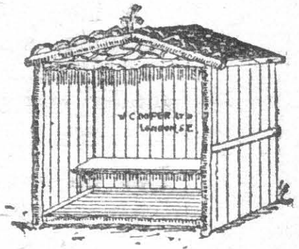
A CORNER IN OUR RUSTIC DEPARTMENT.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

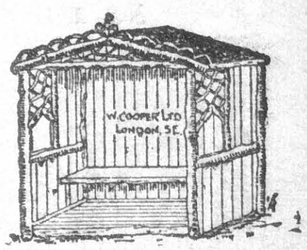
Special Cheap Rustic Houses.



No. 288.



No. 289.



No. 290.

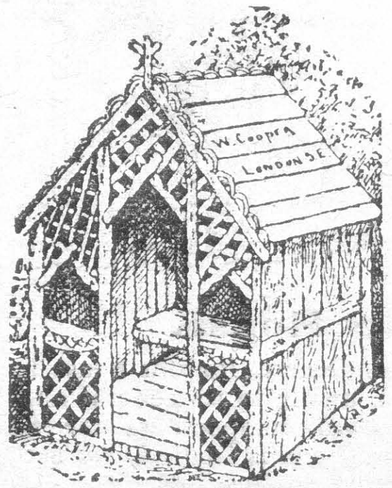
Very Convenient Garden Shelters, simply screwed together.
With Rustic Ornamentation, Boarded and Felted Roof, Wood Floor.
Carefully put on Rail at our Works.

Size, 5ft. by 3ft.
Cash Price, £1 12s. 6d.

Size, 5ft. by 3ft.
Cash Price, £1 10s. 0d.

Size, 5ft. by 3ft.
Cash Price, £1 15s. 0d.

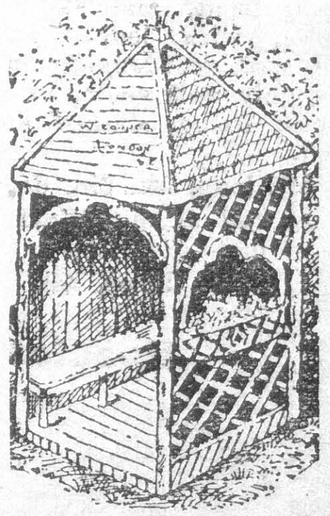
Rustic Summer Houses.



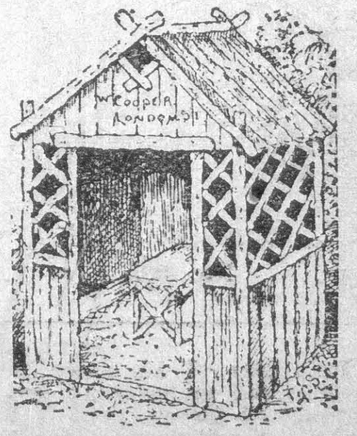
No. 291.
5ft. wide by 3ft. 6in. deep.
With Seat. Cash Price, £4.

Nothing lends a more picturesque appearance to a garden than a rustic-built Summer House, while its utility as a retreat in open air is a convenience at all times. Good sound timber only used, ornamented with hard rustic wood. Guaranteed watertight. Made in sections. Simply screwed together. Any handy man can erect any size or shape in 30 minutes. All Houses are carefully put on rail at our Works.

5ft. wide by 3ft. 6in. deep.
Cash Price, £4 15s., with Seat and Table.



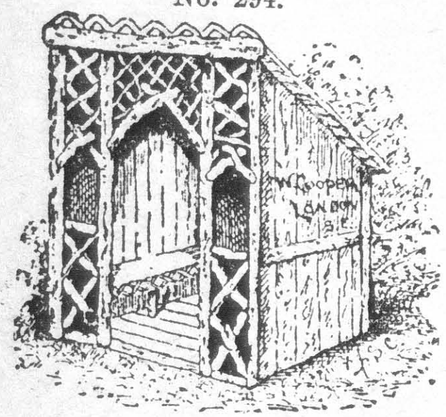
No. 292.
6ft. wide by 5ft. 6in. deep.
With Seat. Cash Price, £7.



No. 293.

Rustic Summer Houses.

No. 294.



A handy little House, made in sections, stained and varnished, and fitted with seat at back, well made, and neat in appearance.

5ft. long, 3ft. 6in. deep.

Put on rail at our Works, complete with seat,

Cash Price, £3 10s.

Open front, and side window opening, with ledge, handsome gable roof overhanging in front, thoroughly well made, in sections for easy fixing, stained and varnished.

6ft. long, 5ft. 6in. deep,

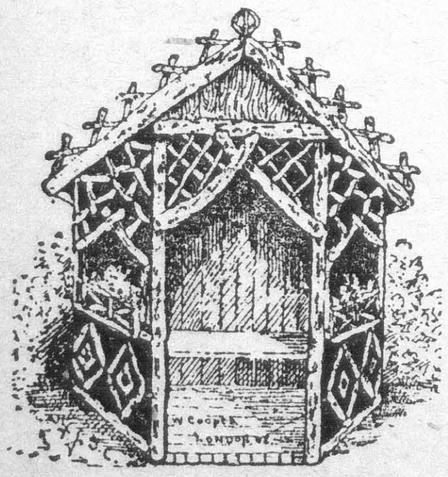
Put on rail at our Works, complete with seat,

Cash Price, £9.

No. 295.



Special Cheap House.



No. 296.

The demand for this house being great, owing to its general appearance and compactness for fixing where space is limited, we make a leading feature of it. It is thoroughly well constructed in sections, and can be removed as easily as it is put together. It is a useful and ornamental house wherever fixed. A climbing plant trained round and over the window-opening lends a charm to its appearance.

Cash Prices, put on rail at our Works, complete with seat :—

5ft. by 3ft. 6in., £5.
6ft. by 4ft., £6 15s.
7ft. by 5ft., £8 15s.

Alderman's House, Alderman's Walk, Bishopsgate.

DEAR SIRS,—I am much pleased with the rustic summer-house which you delivered on Saturday last, and also with the manner in which your men effected its erection. I have also to thank you for the promptness with which you executed my order.—Yours faithfully, E. W. ELLIOTT.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

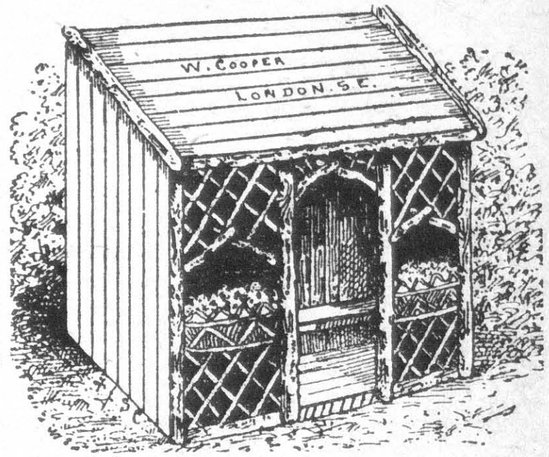
Special Portable Oblong Summer House.

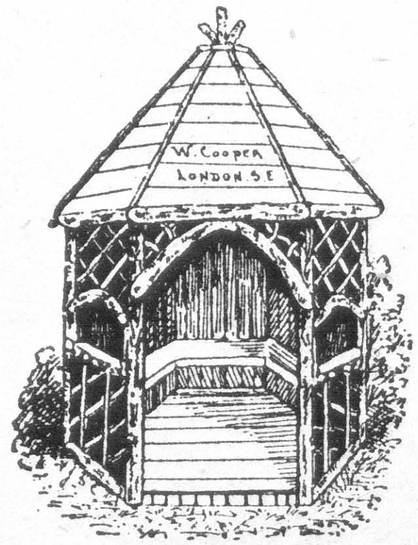
No. 297.

HUNDREDS OF THESE SOLD EVERY SEASON.

This is a squarely-built house, suitable for placing against a wall. It is convenient for a small garden, is thoroughly well made in sections, stained and varnished. Anyone can fix it. Size—5ft. long, 3ft. deep. Put on rail at our Works complete with seat.

Cash Price, £3 10s.





Portable Hexagon Summer House.

No. 298.

This is a roomy, six-sided house, and will be found convenient for placing in a shrubbery. It is 5ft. 6in. deep, and 6ft. from angle to angle. It is fitted with seats, and is stained and varnished. Being made in sections, with each part lettered, it is easily fixed by the purchaser. It is of a design that commands general admiration, and the price at which it is offered finds for it a ready sale.

Cash Price, £6 10s.

Carefully put on rail at our Works.

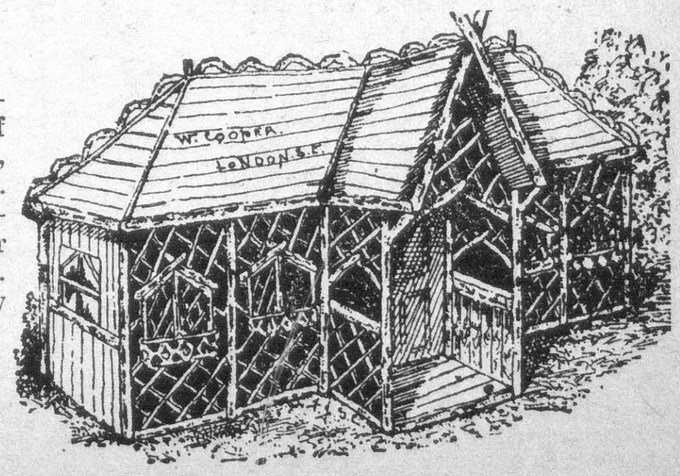
Portable Summer House.

No. 299.

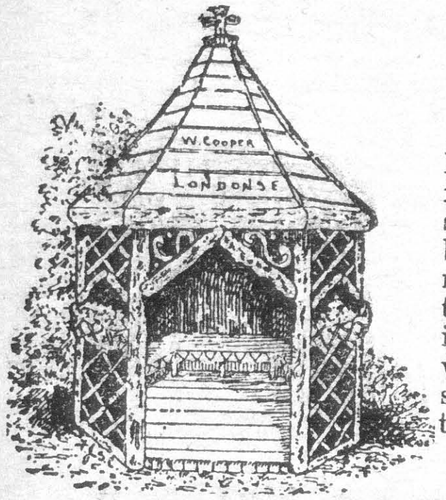
This is a commodious structure of handsome elevation, weather-boarded roof. A substantial erection, suitable for large parties. 12ft. long by 5ft. wide by 7ft.

Cash Price, £21.

Carefully put on rail at our Works.



Portable Hexagon-shape Summer House.



No. 300.

This is a very ornamental house. It is made in sections, and is easily fixed. It is fitted with seats, and strongly made throughout with the best materials, stained and varnished. It is a pretty rustic structure, and convenient for embellishing with drooping plants from the window boxes, and climbers up the sides; for the latter the clematis tribe give a charming effect.

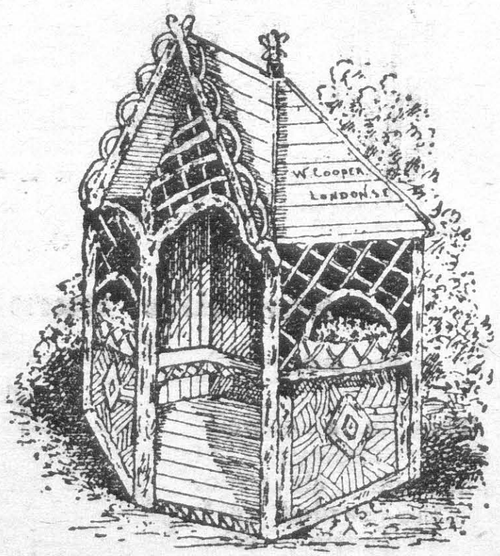
Put on rail at our Works.

Dimensions Outside. From Angle to Angle. ft. in.	From Back to Front. ft. in.	Height under Eaves. ft. in.	Cash Price. £ s. d.
6 0	5 6	6 0	7 0 0
6 6	6 0	6 0	9 0 0
7 0	6 6	6 6	10 0 0
7 6	7 0	6 6	11 10 0
8 0	7 6	6 6	14 0 0

Hexagon Rustic Summer House with Porch.

No. 301.

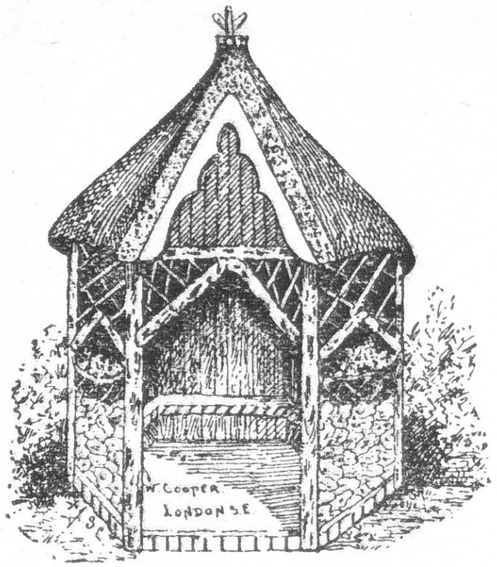
This hexagonal house is made of the best materials thoroughly seasoned. It is constructed with a handsome porch, and is of a very ornamental character. Made in sections, it is easily fixed and removed. It is fitted with seats stained and varnished. It is an effective and useful addition to any garden or grounds.



Put on rail at our Works.

Dimensions Outside. From Angle to Angle. ft. in.	From Back to Front. ft. in.	Height under Eaves. ft. in.	Cash Price. £ s. d.
6 0	5 6	6 0	9 0 0
6 6	6 0	6 0	11 0 0
7 0	6 6	6 6	12 0 0
7 6	7 0	6 6	13 10 0
8 0	7 6	6 6	15 15 0

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.



Portable Hexagon-shape Summer House.

No. 302.

This is a very pretty design, highly rustic in character and shape, and forms a charming place of retreat in the garden. The outside is thatched with heath and lined with straw inside; all woodwork thoroughly seasoned, stained, and varnished. Complete with seat.

Carefully put on rail at our Works.
Easily fixed in thirty minutes.

Dimensions Outside. From Angle to Angle. ft. in.	From Back to Front. ft. in.	Height under Eaves. ft. in.	Cash Price. £ s. d.
6 0	5 6	6 0	12 0 0
6 6	6 0	6 0	14 10 0
7 0	6 6	6 6	16 10 0
7 6	7 0	6 6	18 10 0
8 0	7 6	6 6	20 10 0

This Thatched House is strongly recommended, being thoroughly well made and guaranteed waterproof.
Can be had octagon shape if required at slightly increased cost; also fitted with windows and doors.

Pent Roof.

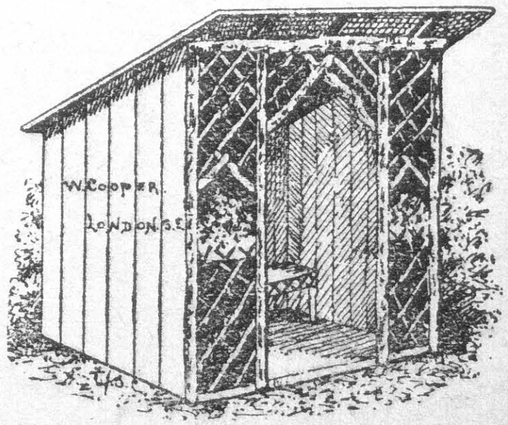
No. 303.

Size, 5ft. by 6ft. by 3ft. 6in., outside measure.

Cash Price, £4.

Carefully put on rail at our Works.

Well built in sections, easily put together; a useful house.

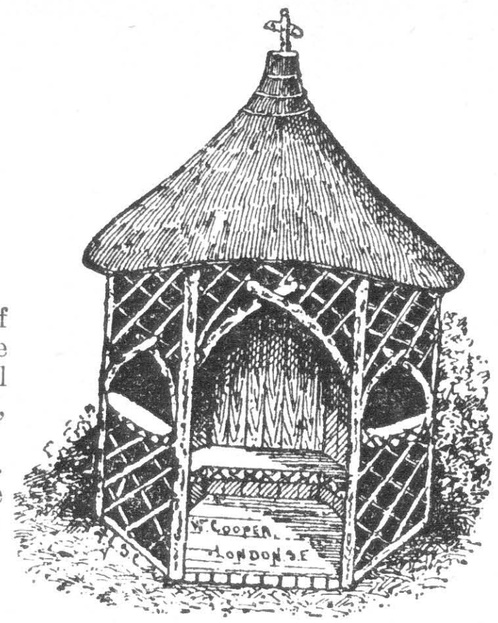


10A, Great Portland Street, London, W.

Gentlemen,—I am quite pleased with the five summer-houses, &c., you have supplied, and the smart and satisfactory manner in which your men fixed them, and shall recommend you to my friends.—Believe me, yours faithfully,
J. H. R. Bright.

Sexangular Thatched-Roof Summer House.

No. 304.



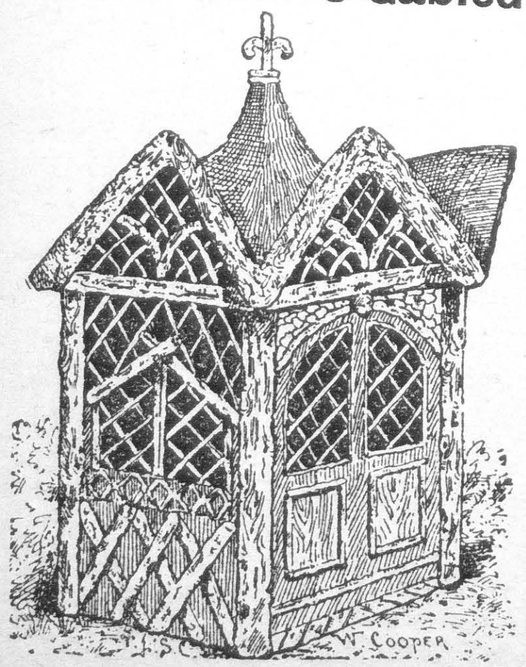
This is a cheaper kind of thatched house, strongly made and sound in every part; all boards tongued and grooved, stained and varnished.

This pattern has a large sale. For quality of workmanship the price is very low. It is unsurpassed by any in the trade.

Put on rail at our Works.

DIMENSIONS OUTSIDE. From Angle to Angle. ft. in.	From Back to Front. ft. in.	Height under Eaves. ft. in.	Cash Price. £ s. d.
6 0	5 6	6 0	10 10 0
6 6	6 0	6 0	13 10 0
7 0	6 6	6 6	15 10 0
7 6	7 0	6 6	17 10 0
8 0	7 6	6 6	19 10 0

Portable 3-Gabled Thatched-Roof Rustic Summer House.



No. 305.

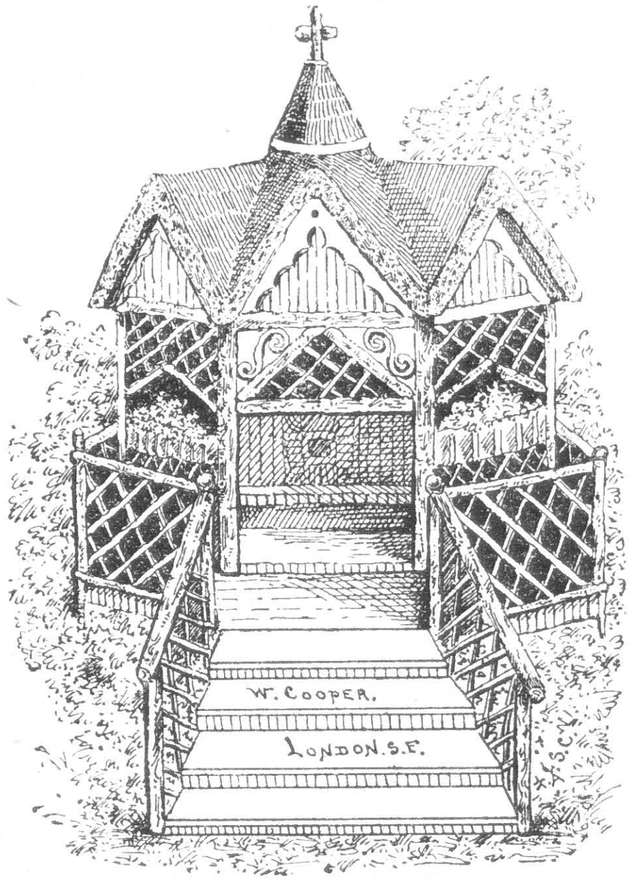
This is after the style of No. 306, without steps and balcony. It is enclosed with door and windows of cathedral glass, handsomely fitted throughout, and is of imposing elevation.

Made in any size to order, with or without windows and door. All work of the best character and finish. Size 8ft. by 8ft. Carefully put on rail at our Works.

Cash Price: Thatched Roof, £32; if Boarded Roof, £22.

Portable 3-Gabled Thatched-Roof Rustic Summer House.

No. 306.



This is one of the most effective designs ever produced for a Summer House. It is a charming adornment to a garden wherever erected.

A flight of steps in the centre leads to a balcony platform, which surrounds the house. It is artistically finished both inside and out.

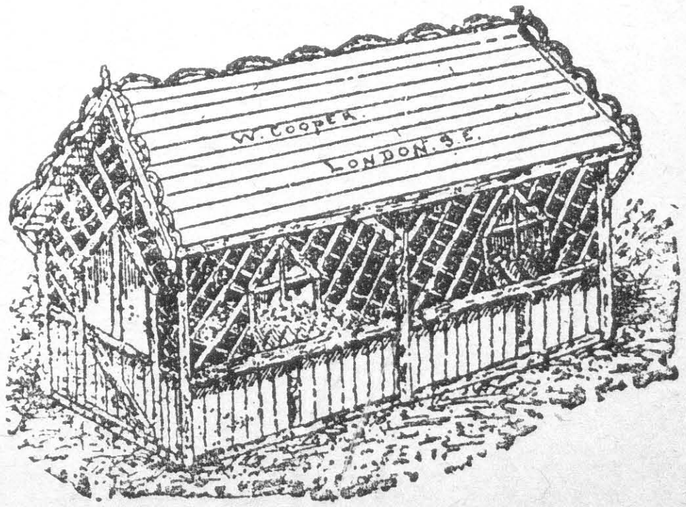
Size, 12ft. by 12ft. over all. House, 8ft. by 8ft., giving 2ft. Balcony all round. Raised 2ft. 6in. off the ground.

Price, complete on rail, at our Works, thatched, £42; if boarded roof, £32. This house can be made to any size required. Prices forwarded upon receipt of specification.

Portable Rustic Summer House.

No. 307.

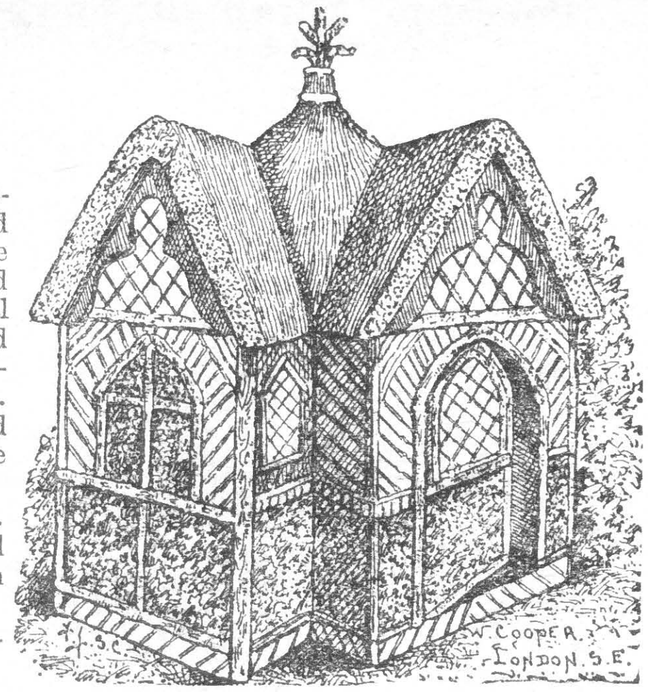
This is a roomy house, fitted with door, and windows each side. It makes a convenient Summer House in summer and a useful storeroom for a gardener in winter, at the same time a handsome ornament to any garden. Thoroughly well constructed, stained and varnished. 12ft. by 5ft.



Cash Price, £17 10s. Put on rail at our Works.

Rustic Summer House.

No. 308.



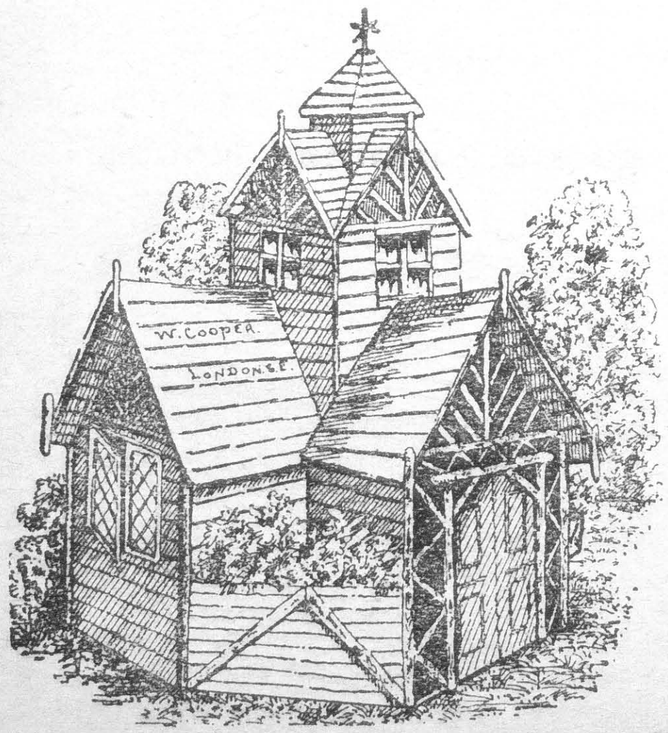
A handsome design, and finished throughout with care and skill, door and windows of cathedral glass, Swiss lined within and ornamented without. Soundly thatched, and put together in the very best manner.

Size 10ft. by 10ft. Carefully put on rail at our Works. Cash Price, £45.

Other sizes at proportionate prices.

Swiss Rustic House.

No. 309.



A beautiful structure of the most elegant design, Swiss in style, and replete with finish in every detail. Its lines afford scope of an exceptional character for the purpose of illumination at night, which, effectively carried out, displays it a gem of unequalled beauty.

Size 10ft. by 10ft., 12ft. by 12ft., 20ft. high.

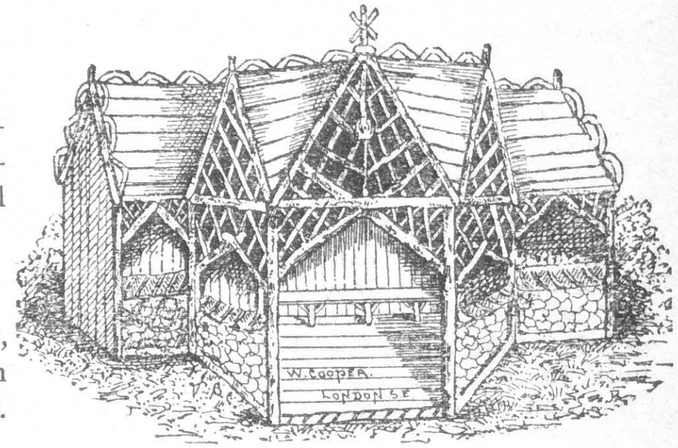
Carefully put on rail at our Works.

Cash Price, £55.

Other sizes at proportionate prices.

Portable Rustic Summer House.

No. 310.

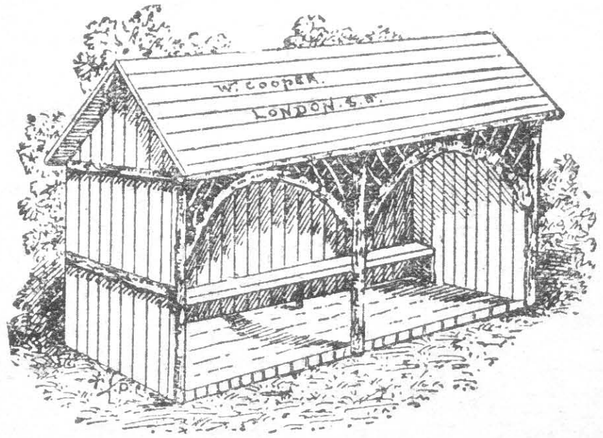


Roof weather-boarded. A handsome structure, well finished.

Size 12ft. by 10ft.

Cash Price, £22, complete. Put on rail at our Works.

Sports Rustic House.



No. 311.

Open front, span-roof house, suitable for grounds where amusements and sports are held. Soundly built of well-seasoned materials. Stained and varnished. Easily fixed and removed. Fitted with seat complete. 12ft. by 4ft.

Cash Price, £9. Carefully put on rail at our Works.

Rustic Lawn Tennis House.

No. 312.

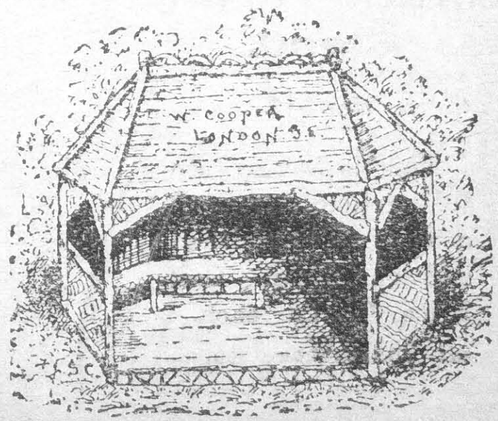
This House is made roomy and suitable for a large party. Being made in sections, it can be fixed and refixed at will, with very little trouble.

Strongly made, stained and varnished.

10ft. long,
5ft. deep.

Complete with Seat.

Cash Price, £10, put on rail at our Works.



Lawn Tennis House.

No. 313.

Can be put together easily by any handy man.

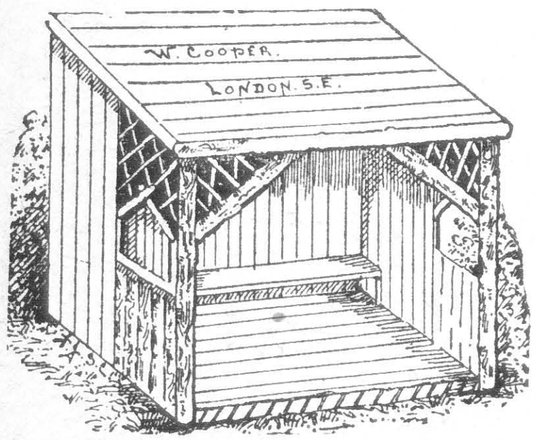
Special Lawn Tennis House, weather-boarded roof.

Size, 12ft. by 7ft.

For the cricket field or tennis ground this House will be found extremely useful; thoroughly well built in sections, easily fixed and removed when necessary. Complete with seat.



Cash Price, £17 10s. complete. Put on rail at our Works.



Garden Shelter.

No. 314.

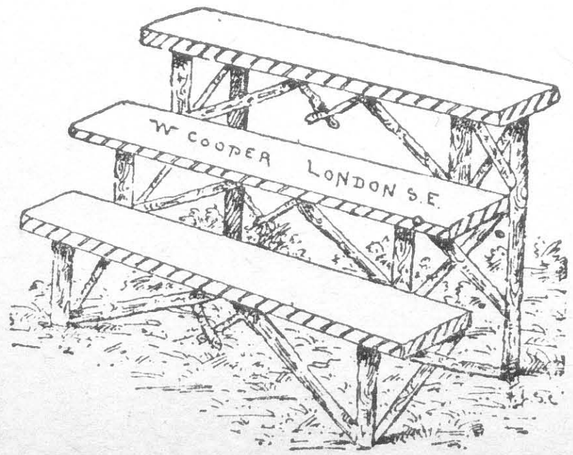
Size, 5ft. by 3ft. Portable and easily fixed. Stained and varnished. Complete with seat. Cash Price, £3.

Rustic Flower Stand.

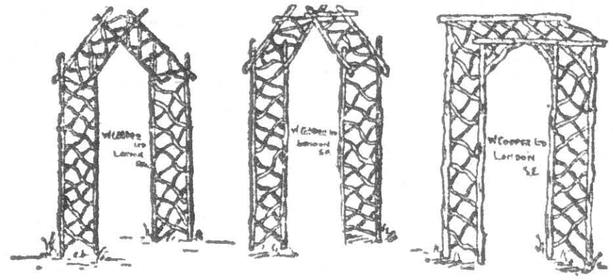
No. 315.

This is a very useful article, strongly made, well finished, and varnished. Cash Price, 7s. 6d. each.

3ft. long, three steps.



Special Cheap Rustic Arches.



No. 316. No. 317. No. 318.

Strongly made.

Carefully put on rail at our Works.

Size: 15in. deep, 8ft. high, 4ft. across path.

Cash Price, 4s. 9d. each.

Varnished, 2s. 3d. extra.

Rustic Arch with Ornamental Edges.

No. 319.

4ft. across path, 12in. deep, and 8ft. high.

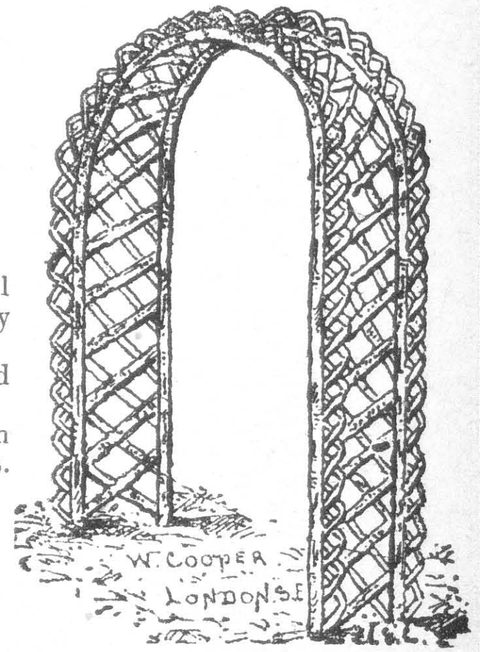
Cash Price, £1 1s. each.

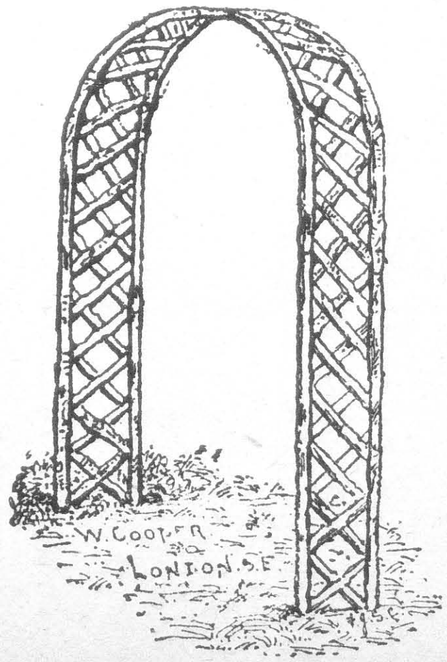
Larger Sizes: For every additional 3in. across path, 1s., and for every additional 3in. in depth, 3s. extra.

Stained with best oil stain, and varnished two coats.

Double Rustic Arch. Specification as above. 6ft. wide, 3ft. deep, 8ft. high.

Cash Price, £4 4s.





Rustic Arch with Plain Edges.

No. 320.

Cash Prices.

4ft. across path, 12in. deep, 8ft. high, 17s. 6d. each.

4ft., 18in deep, 22s. 6d.

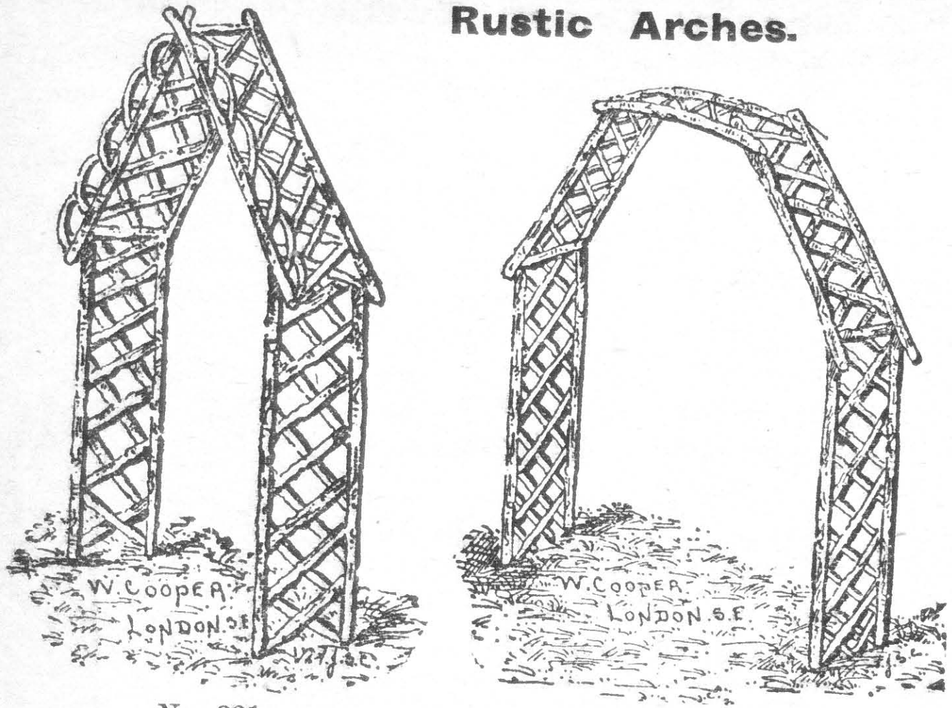
4ft. 6in., 18in. deep, 25s.

Ditto, 2ft. deep, 28s. 6d.

5ft., 2ft. 6in. deep, 37s. 6d.

Stained with best oil stain, and varnished two coats.

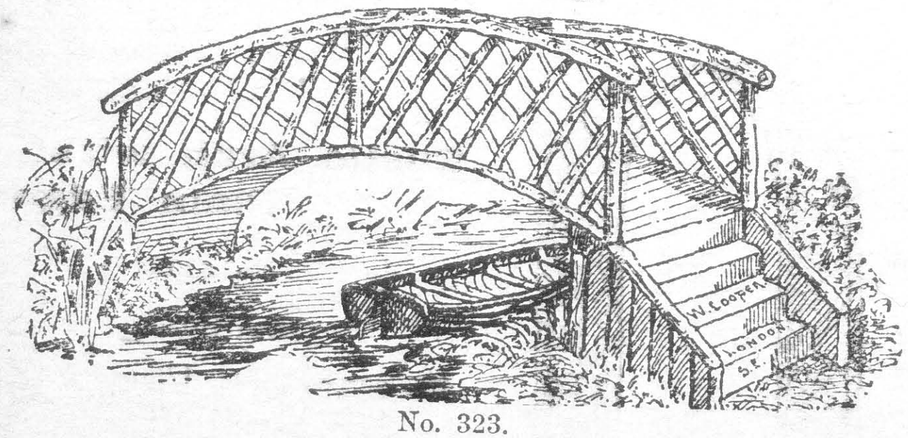
Rustic Arches.



No. 321. No. 322.

Either pattern, 4ft. across path, 12in. deep, 8ft. high.
Cash Price, 15s. each.

Rustic Bridge.



No. 323.

4ft. wide, 16ft. across. Complete with steps each side. Stained best oil stain, and varnished two coats. Carefully put on rail at our Works.

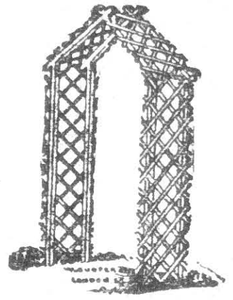
Cash Price, £15 15s. Any other sizes at proportionate prices.

Skene Bridge, Lake, Sandown.

SIRS,—Received Trellis safely, and am more than pleased with same. Thanking you for prompt delivery. I should like one of your large catalogues if you have one.—Yours faithfully,

C. PAYTON.

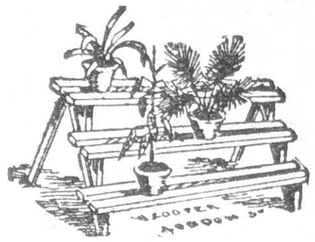
Trellis Garden Arches.



No. 324.

Strong, Portable.
Cash Price, 3s. each.

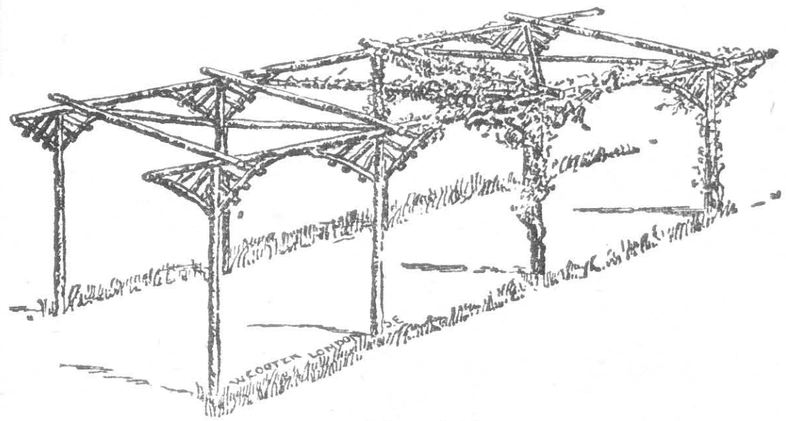
Portable Folding Flower Stands.



No. 325.

4ft. long, 2ft. 6in. high.
Cash Price, 2s. 9d. each.
Suitable for Greenhouse, Garden, Dwelling House, &c.

Rustic Pergola.

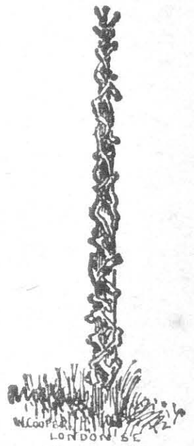


No., 326

For training roses, flowering creepers, etc., consists of strong main uprights and crossbars, with bark left on.

7ft. 6in. high, 5ft. span, posts 6ft. apart, 2s. per foot run.

Rustic Rose Pole.



No. 327.
10ft. long.
Stained and Varnished, 4s.

Rustic Porch for Doorway.

No. 328.

6ft. wide, 3ft. deep.

With window opening each side; ornamental boarded roof. Stained best oil stain, and varnished two coats.

Cash Price, £4 10s. Carefully put on rail at our Works.

High Buildings, Fernhurst, near Haslemere.

Mrs. Pearsall Smith is glad to say that the Garden Trellis has arrived, and is very satisfactory.

The Lodge, Pulsometer Works, Reading.

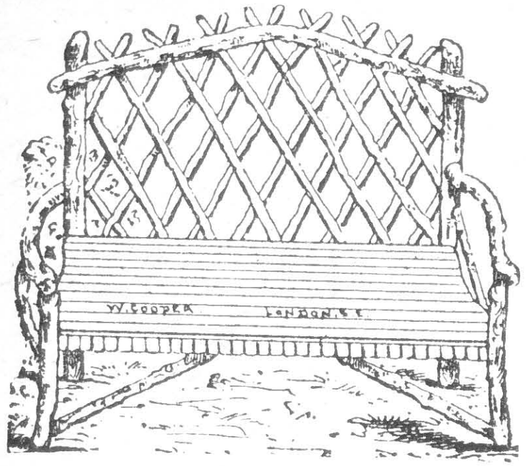
SIR,—The Trellis arrived yesterday, and is quite satisfactory.—Yours truly,

F. S. SMITH.

Norhamhurst, Saltburn.

DEAR SIRS,—Two Garden Arches arrived in good order to-day, and I am much obliged for your attention.

J. E. ORD.



Rustic Garden Seats.

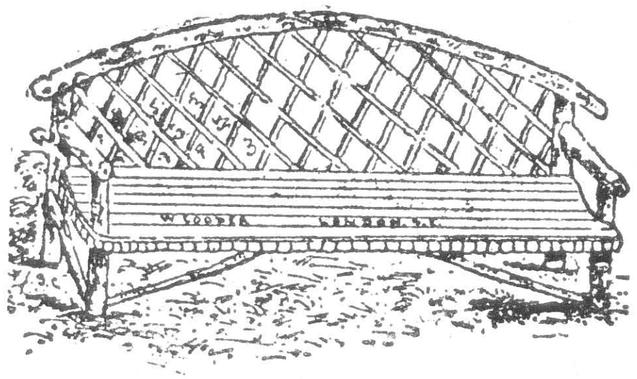
No. 329.

A good design, strongly made with comfortable hollowed seats.

Cash Prices: 4ft., 17s. 6d.; 5ft., £1 1s.; 6ft., £1 5s.

No. 330.

Very comfortable hollowed seats of yellow deal slats, oak rustic arms and back, strongly made. Stained and varnished. Cash Prices: 4ft., 17s. 6d.; 5ft., £1 1s.; 6ft., £1 5s.



Imperial Black Varnish.



No. 331.

For Iron Fences, Wood Palings, Farm Buildings, Poultry Houses, &c.

1 gal. 2s., 5 gals. 7s., 18 gals. 20s., 40 gals. 35s.
Put on rail at our Works. Cans and casks included (not returnable).

64, St. Helens Road, Westcliffe-on-Sea.

DEAR SIR,—The Rustic Arbour arrived quite safely, and we are delighted with it. Shall recommend you to our friends.—Yours truly,
B. WOODCUFF.

14, Bognor Road, Chichester.

DEAR SIRS,—I received the Arch quite safe, and am very pleased with it.
E. STAINSBY.

23, Old Hall Road, Sale, Cheshire.

DEAR SIRS,—The Rustic House arrived (in sections) on the Friday following your sending it off, and a neighbour and self put it up in about two hours on the Saturday afternoon. I am very much pleased with it, and it has been greatly admired by friends.—Yours truly,
J. HOPWOOD.

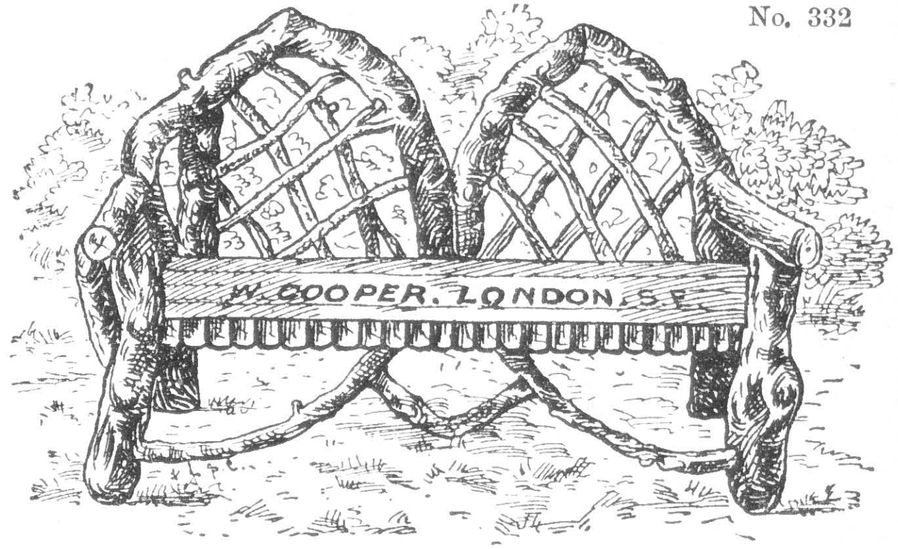
Bradley Villas, Gentland, near Halifax.

DEAR SIR,—I think I ought to say how pleased I am with the Summer House you sent me; the design and workmanship are entirely satisfactory. Could you give me an idea how much it would cost to fix doors to it to close it up in winter? They would need be light; it would not carry heavy ones. It would keep out the rough weather. Let me know at your convenience.—Yours truly,
W. SHACKERTON.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

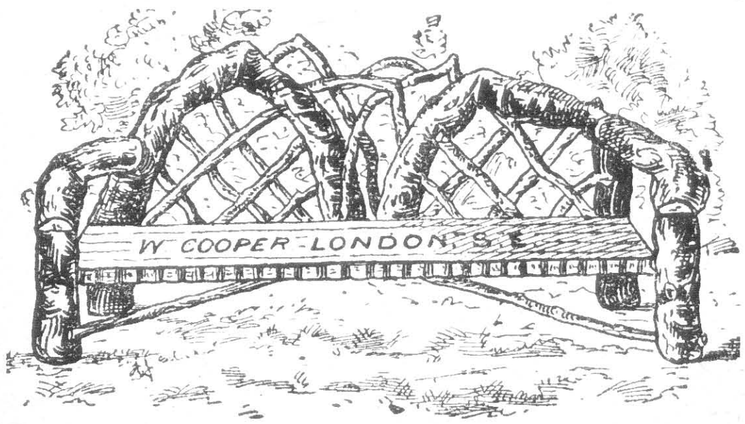
Rustic Garden Seats.

No. 332



A Gothic-backed seat, the rustic part substantially constructed of oak, the seat hollowed and made of best yellow deal slats. The whole stained and varnished.

Cash Prices: 4ft., 20s.; 5ft., £1 4s.; 6ft., £1 7s. 6d.



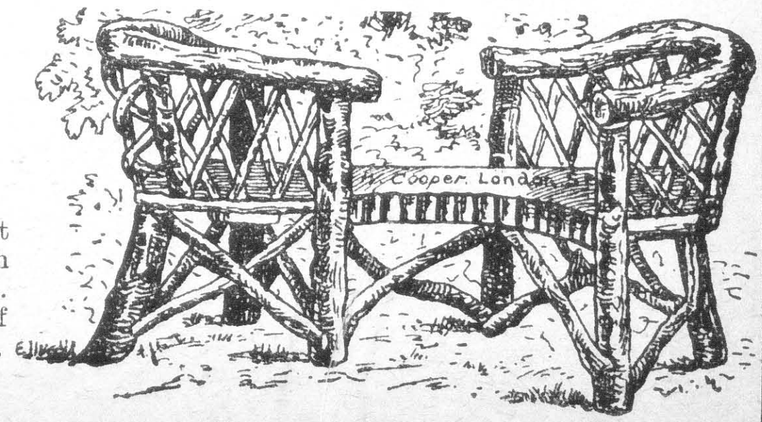
No. 333.

A slight variation in design of the preceding number. The quality of the material is the same. Cash Prices: 4ft., £1; 5ft., £1 4s.; 6ft., £1 7s. 6d.

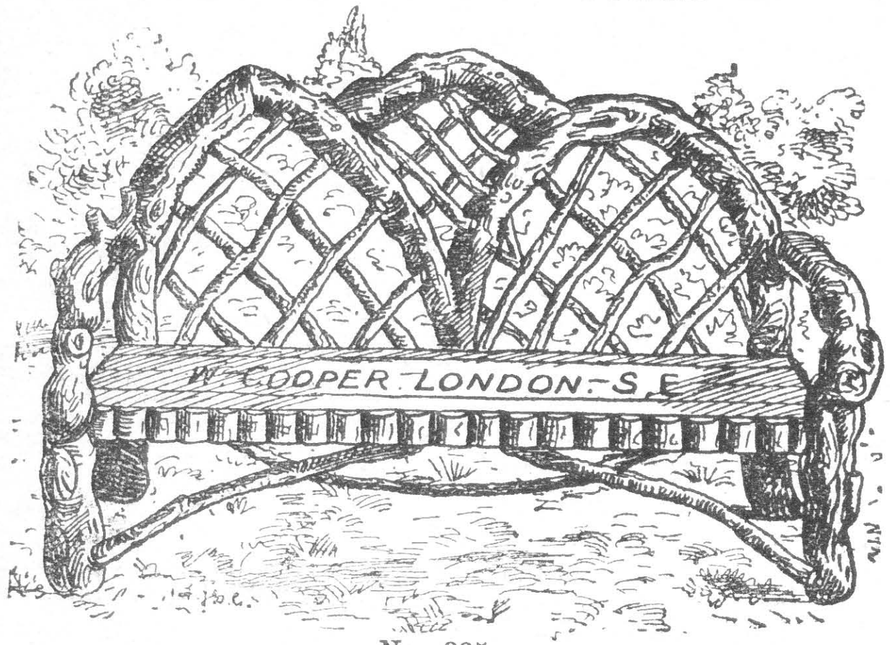
Elm Bottom Conversation Seat.

No. 334.

So constructed that persons face each other when seated. A delightful piece of Garden Furniture. Cash Price, 25s. each.

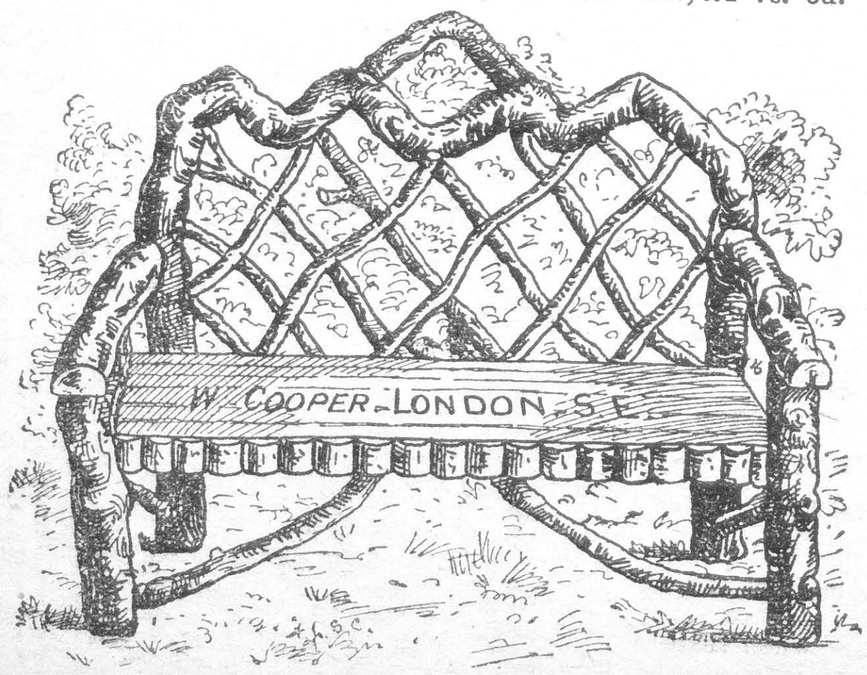


Rustic Garden Seats.



No. 335.

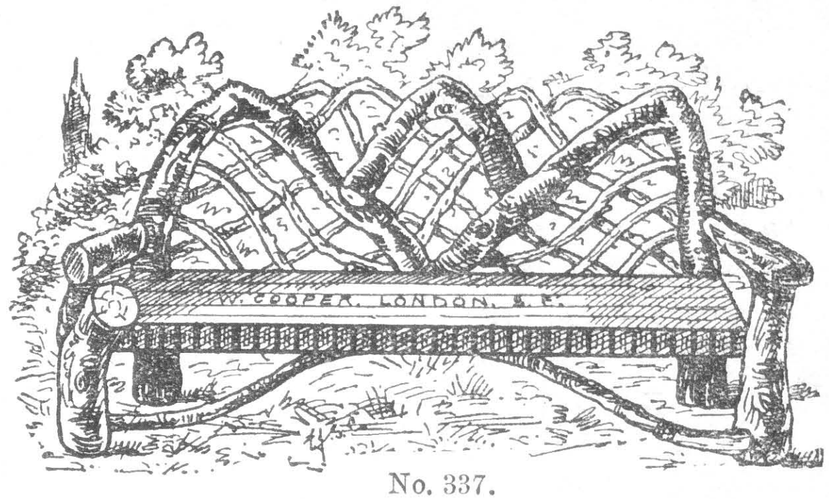
Triple Gothic pointed back seat, hollowed and made of best deal, soundly put together throughout. Stained and varnished.
Prices ... 4ft., £1 ... 5ft., £1 4s. ... 6ft., £1 7s. 6d.



No. 336.

This is a pretty design, same in quality as above, with deal laths.
Prices ... 4ft., £1 ... 5ft., £1 4s. ... 6ft., £1 7s. 6d

Rustic Garden Seat.

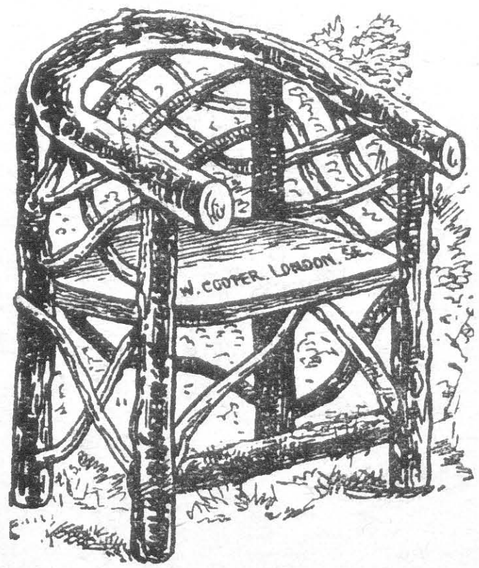


No. 337.

A good design, strongly made, and comfortable hollowed seat of yellow deal laths, stained and varnished.

Cash Prices : 4ft., £1; 5ft., £1 4s.; 6ft., £1 7s. 6d.

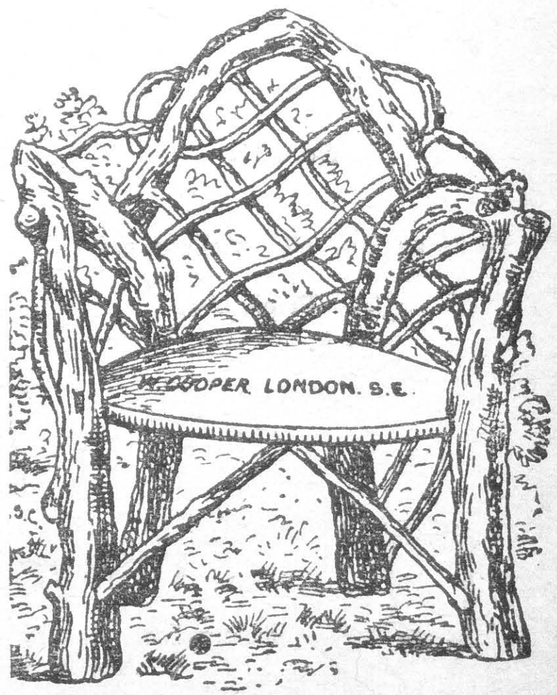
Rustic Arm Chairs.



No. 338.

A good Chair, strongly made, stained and varnished. Extra selected wood.

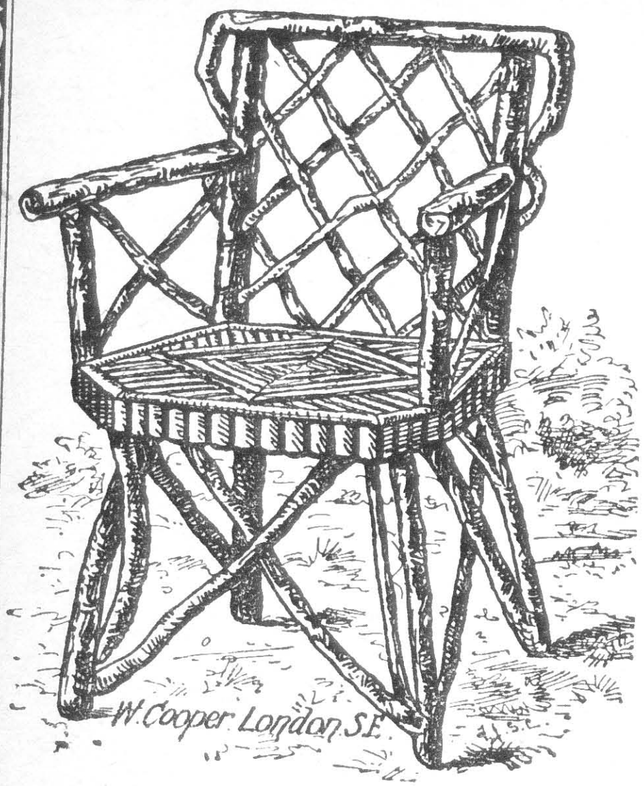
Cash Price, 10s.



No. 339.

Strongly made, roomy, and comfortable.

Cash Price, 12s. 6d.



Rustic Garden Chairs.

No. 340.

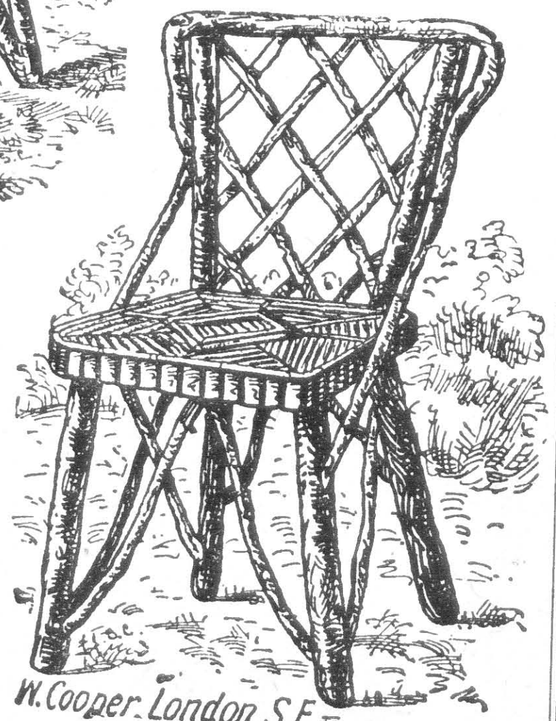
This Arm Chair is very strongly made and well finished.

Cash Price, 12s. 6d.

No. 341.

Same as No. 340, without arms.

Cash Price, 10s.





Open.

Folding Chairs.

Strong Iron Frame. Wooden Lath Seat. Nicely varnished.

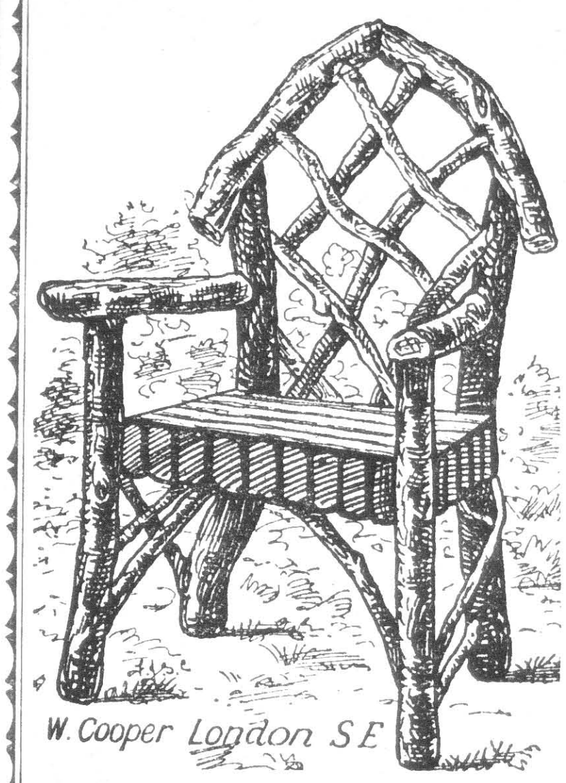
No. 342.

Cash Price, 2s. 9d. each; 30s. per dozen; £16 10s. per gross.



Folded.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

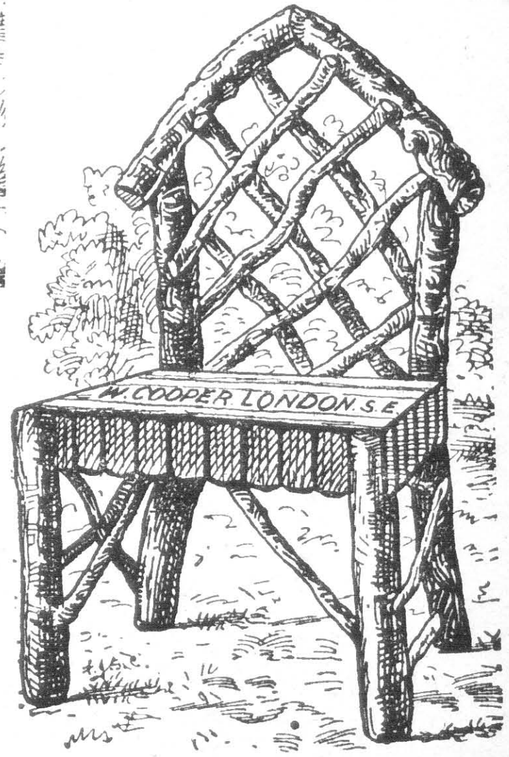


Rustic Garden Chairs.

No. 343.

Strongly made, stained, and varnished; a comfortable chair.

Cash Price, 10s.

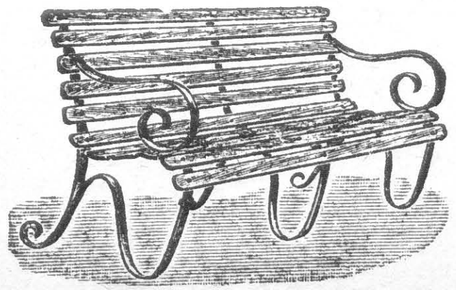


No. 344.

Same as No. 343, without arms.

Cash Price, 8s. 9d.

Strong Garden Seats.



No. 345.

Painted Ironwork and Varnished Legs. Wrought-iron Standards and Arm Rests.

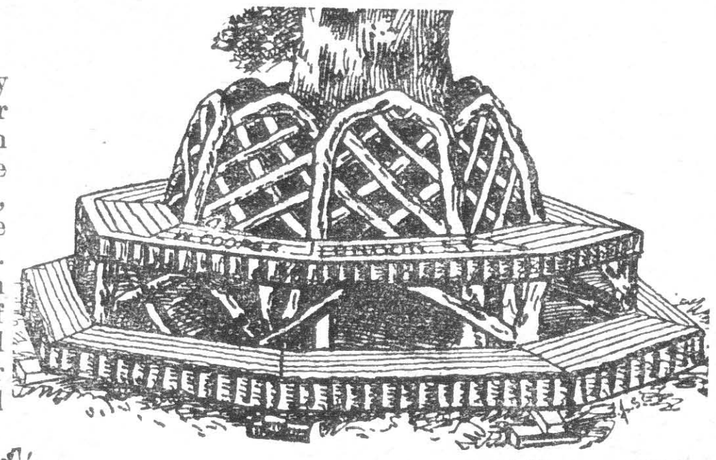
Cash Prices: 3ft., 10s. 6d.; 4ft., 14s.; 5ft. (3 standards), 17s. 6d.; 6ft., 21s.; 7ft. (3 standards), 24s. 6d.

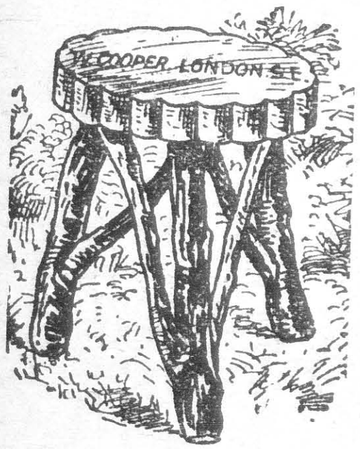
Special quotations for large quantities. Any design made to order.

Rustic Tree Seat.

No. 346.

These are very useful seats for parties, and can be built round the trunk of a tree, affording shade from the sun, 5s. per foot run, from front edge of seat; footboard to match, 1s. per foot. Stained and varnished.

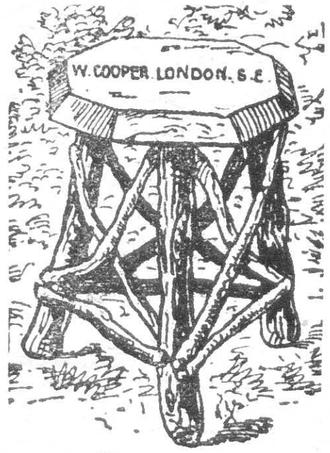




No. 347.

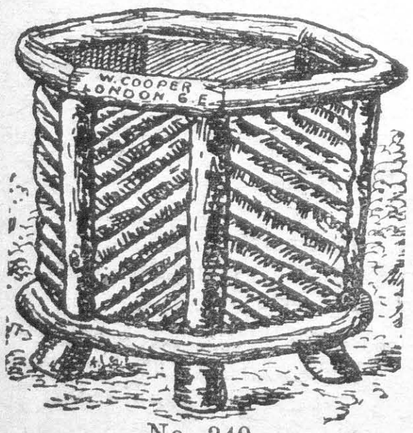
Rustic Stools.

Either Pattern,
Cash Price, 3s. 6d. each.
36s. per dozen.



No. 348.

Hexagon Rustic Tub.

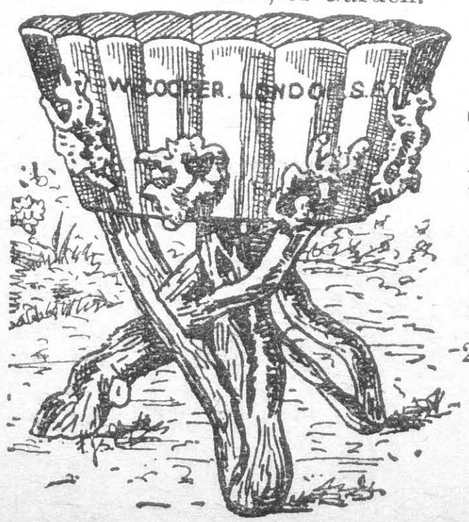


No. 349.

For large ferns or shrubs, 18in. in diameter. Cash Price, 12s. 6d. Other designs and sizes to order.

Rustic Vase.

Handsome Ornament to any Hall, Lawn, or Garden.



No. 350.

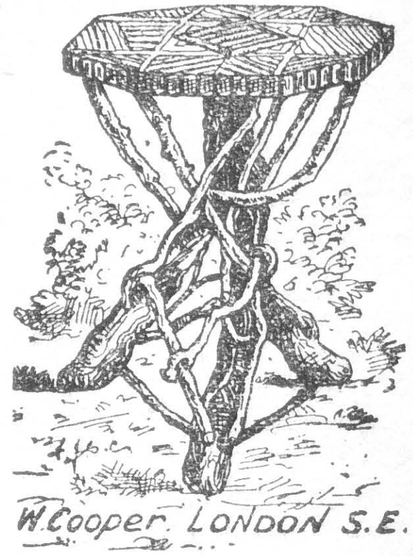
Cash Price,
15in. diam., 15s.;
20in., £1;
25in., £1 5s.

Rustic Table.



No. 351.

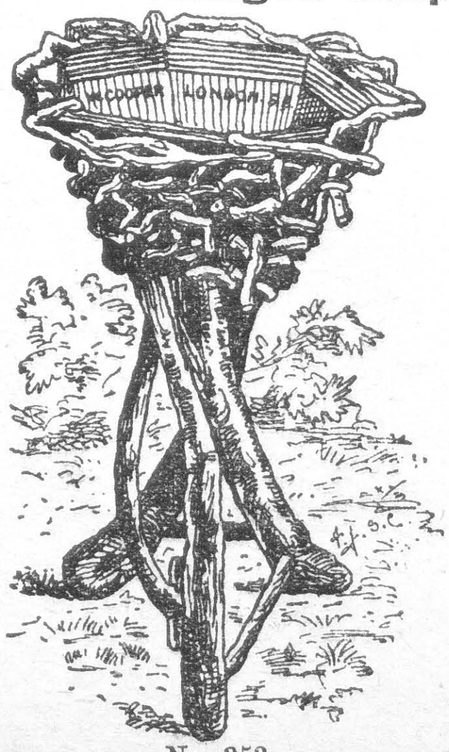
Swiss Top Rustic Table.



No. 352.

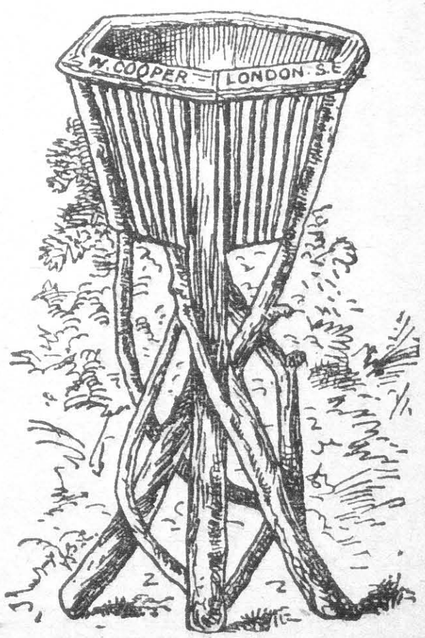
2ft. diameter. Cash Price, 12s. 6d. 2ft. diameter. Cash Price, 17s. 6d.

Hexagon-shape Rustic Vases.



No. 353.

Either pattern, stained and varnished.



No. 354.

Cash Prices.

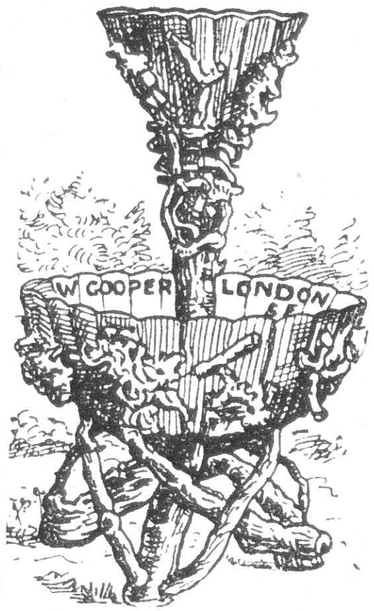
Dia.	s.	d.	Dia.	s.	d.
10in.	7	6	18in.	16	0
12in.	10	0	20in.	18	0
14in.	12	0	22in.	20	0
16in.	14	0	24in.	22	6

Double Rustic Vase.

Rustic Cork Vase.

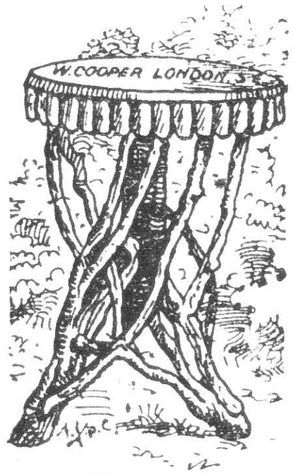


No. 355.
10in. diameter.
Cash Price, 6s.



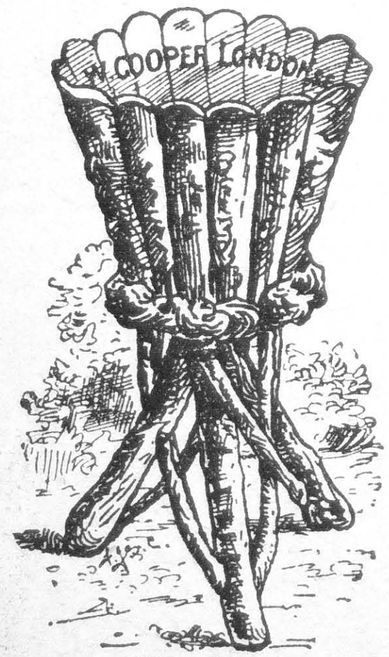
No. 356.
Lower vase, 30in. dia.; top ditto, 12in. Cash Price £2 5s.

Rustic Table.



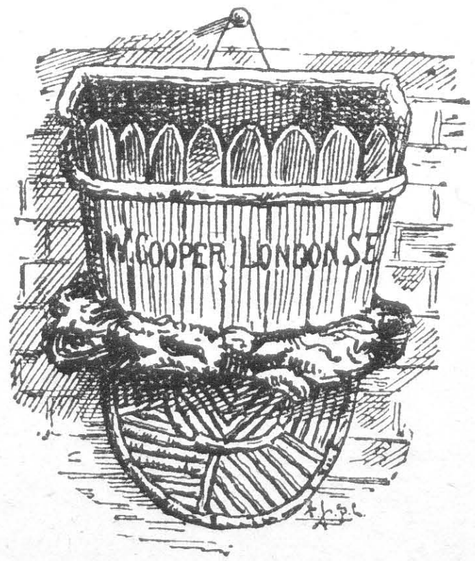
No. 357.
15in. diameter.
Cash Price, 7s. 6d.

Rustic Vase.



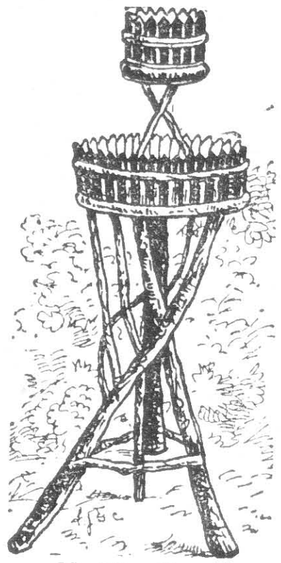
No. 358.
9in. in diameter.
Cash Price, 5s.

Rustic Pot Bracket.

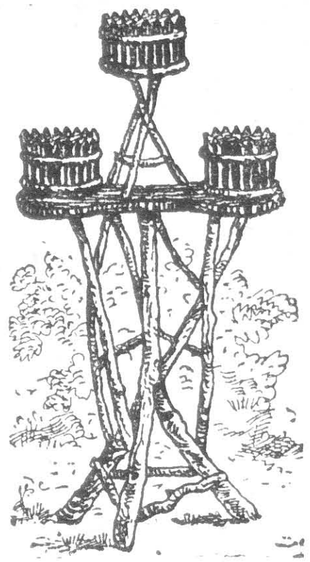


No. 359.
Cash Price, 2s. 9d.

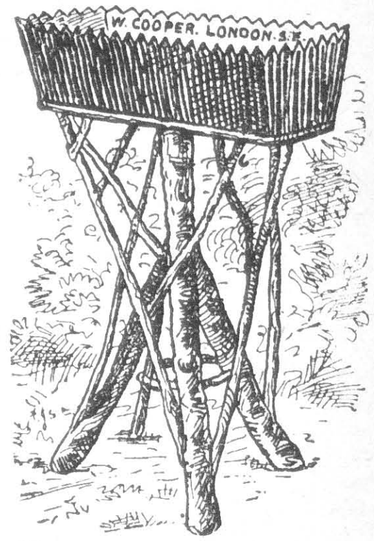
Rustic Garden Furniture.



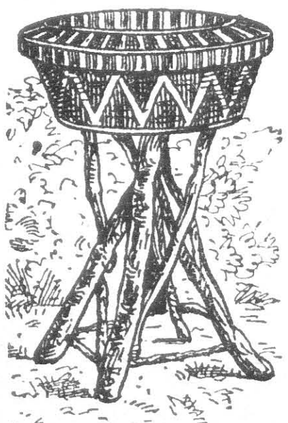
No. 360. Round. 11in. dia., 34in. high. Cash Price 6s. 6d. each.



No. 361. Cash Price 7s. each.



No. 362. 26in. long, 32in. high. Cash Price 6s. 6d. each.



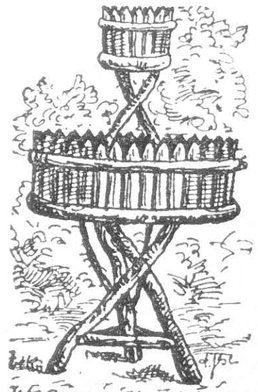
No. 364. 30in. high, 20in. dia. Cash Price 12s. each.



No. 363. Square, 4in. dia., 6in. high. Cash Price 15s. doz.



No. 365. Round, 4½in. dia., 6in. high. Cash Price 15s. doz.



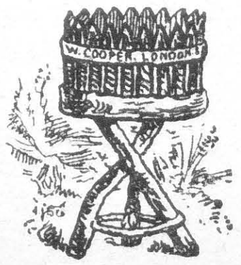
No. 366. Oval, 10in. long, 18in. high. Cash Price 5s. each.



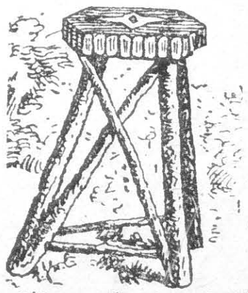
No. 367. 26in. high, 12in. dia. Cash Price 10s. each.



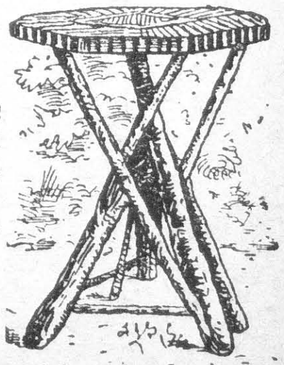
No. 368. Round, 5in. dia., 11in. high. Cash Price 15s. doz.



No. 369. Oval, 6½in. by 5in., 11in. high. Cash Price 2s. 6d. each.



No. 370. 9½in. high, 9in. dia. Cash Price 2s. each. 17in. high, 12in. dia. Cash Price 3s. each.



No. 371. 26in. high, 21in. dia. Cash Price 12s. each.



Rustic Window Box.

No. 372.

Made any length.

Price, 3s. 3d. per foot.

Rustic Window Box.

No. 373.

From 2s. 9d. per foot run.



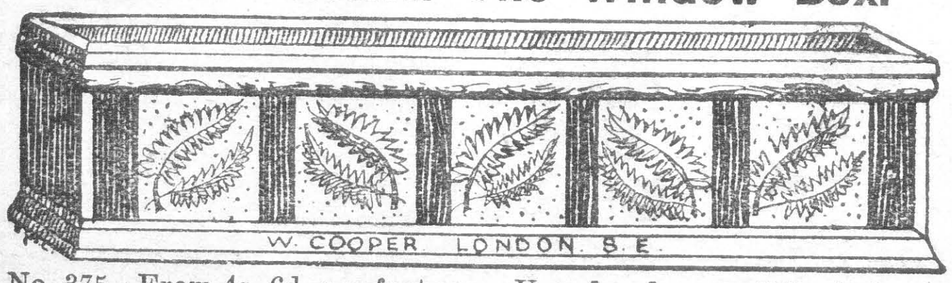


Rustic and Tiled Window Box.

No. 374.

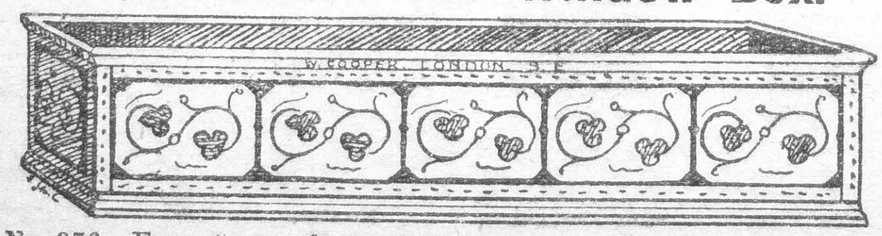
From 3s. 6d. per foot run.

Raised Pattern Tile Window Box.



No. 375. From 4s. 6d. per foot run. Very handsome. Tiles in front.

Flat Pattern Tile Window Box.

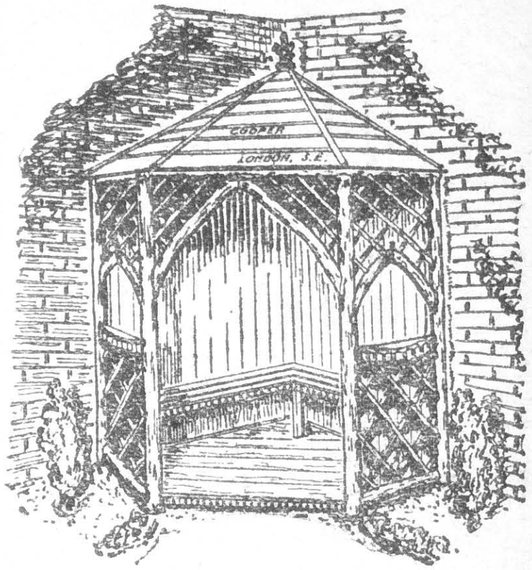


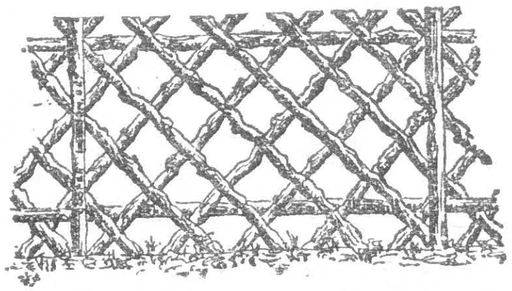
No. 376. From 5s. per foot run. Very neat. Tiles front and ends.
Both Rustic and Tile Window Boxes can be made in a variety of Patterns and Designs. Please state length over all when ordering.

Corner Summer House.

No. 377.

4ft. 6in. Angle to Angle.
Cash Price, £4 10s.





Rustic Fencing

No. 378.

Made ready for fixing.

Posts go into the ground about 1ft. 6in.

Heights....	3ft.	3½ft.	4ft.	4½ft.	5ft.
Cash Price.....	1s. 5d.	1s. 6d.	1s. 8d.	1s. 10d.	2s. per ft. run.
Stained and Varnished..	4d.	4½d.	5d.	5½d.	6d. ft. run extra.

Gate 2ft. 6in. wide to match. Hinges and Catch included.
4s. 6d. 5s. 5s. 6d. 6s. 6s. 6d. extra.

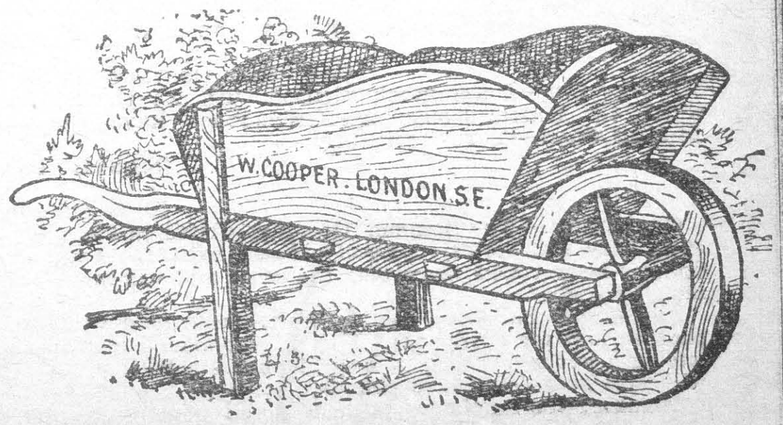
Stable and Garden Barrow.

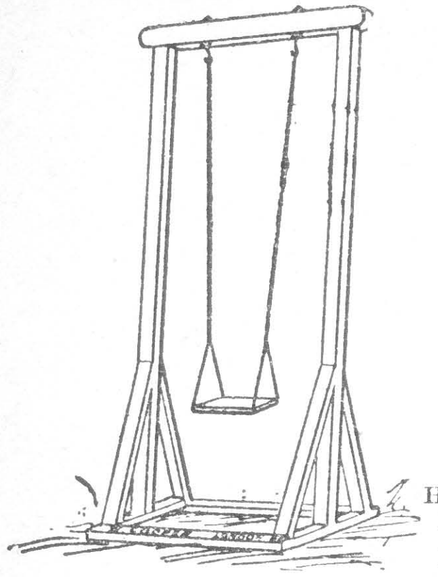
No. 379.

Made of well-seasoned Elm top and Ash handles. Including shifting handle boards. Cash Price, 21s.

Shifting top, 7s. 6d. extra.

If painted two coats, 4s. 6d. extra.





Garden Swing.

No. 380.

A capital Swing, rigidly built and bolted at top, so that it can be easily taken to pieces when necessary. Fitted with strong wrought-iron hooks securely held by nuts. Best hempen rope and solid seasoned wood seat. Oil-painted two coats. Put on rail at our Works at the following prices :—

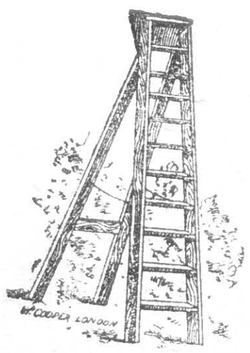
Height.		Width.		Cash Price.
10ft.	.....	4ft.	.....	£1 7 6
12ft.	.....	5ft.	.....	1 12 6

Shop Ladders and Steps.

Strongly made, for use in house, shop, office, garden, and greenhouse.

Steps.

No. 380A.



		each. s.	d.
4	tread	2	3
5	,, ...	2	6
6	,, ...	3	0
7	,, ...	4	0
8	,, ...	4	8
9	,, ...	5	6
10	,, ...	6	3
11	,, ...	7	0
12	,, ...	8	0

Shop Ladder.

No. 380B.



		each. s.	d.
4	tread	1	9
5	,, ...	2	2
6	,, ...	2	6
7	,, ...	2	9
8	,, ...	3	0
9	,, ...	3	5
10	,, ...	3	9
11	,, ...	4	2
12	,, ...	4	6

Eventide, The Warburns, Torquay.

Rustic work arrived safely, is put up, and Miss Boileau is much pleased with it.

Chaplain's Quarters, H.M. Prison, Maidstone.

DEAR SIR,—I am much pleased with all the articles, and the way in which the Rustic House and Greenhouse have been put up. Everyone admires them.—Yours faithfully,

(Signed) REV. EDWARD STEPHENS.

39, Douglas Road, Canonbury, N.

GENTLEMEN,—The Summer House you have just made and fixed for me is in every way satisfactory. I am pleased with the manner you carried out my special instructions respecting the seats and windows, which have proved great improvements.

As regards the price combined with the good workmanship far exceeds my expectations for cheapness. I shall recommend any of my friends thinking of buying a summer house to inspect your stock "as I did," for I feel sure they will thus be able to save pounds.

Thanking you for the promptness in delivering,—I remain, yours faithfully,

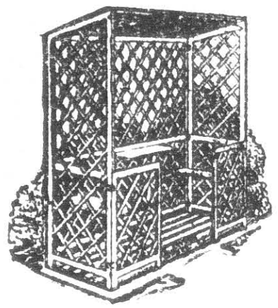
C. BARTER.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Folding Trellis Arbour.

Hundreds sold every season.

No. 381.



This neat and well-made Arbour is made to fold together so as to pack away in a small space when not in use. The sides, front, roof, &c., being hinged together, the whole may be taken down or erected in two minutes.

Complete with Seat each side, also Table.

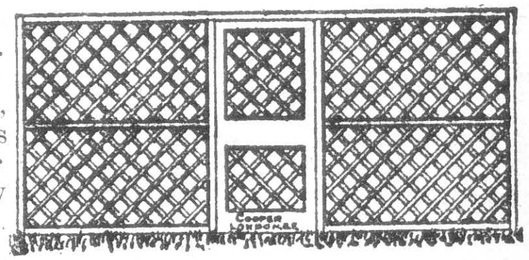
6ft. long, 2ft. wide, 6ft. high. Cash Price, £1 7s. 6d.

If a creeper is trained over Arbour it adds to the appearance.

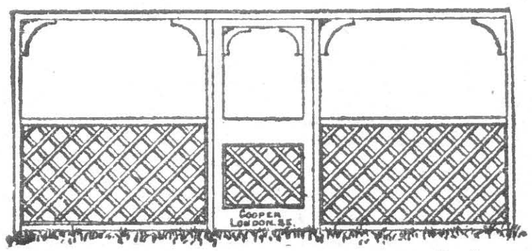
Trellis Screens.

USEFUL, ORNAMENTAL, CHEAP.

No. 382.



Sizes : 15ft. long, 6ft. high. Mortised, tenoned, and fitted in sections, ready for erection, £2 2s. 6d. per set. Materials only, not mortised, tenoned, or fitted in sections (door ready made), Cash price, £1 12s. 6d. per set.



No. 383.

For these Screens planed flat trellis is used; all the material is prepared ready for painting, and they are very substantial.

Sizes and Cash Prices as for No. 382.

12, Lebanon Gardens, Wandsworth, S.W.

DEAR SIRS,—The Trellis Garden Arch was safely delivered last evening, and I am not only pleased with the safe carriage, but with the arch itself. I, therefore, am looking forward to being able in the future to send you another order, which I feel will give equal satisfaction.—Yours truly,

W. COX.

Dotburn, Park Road, Stroud.

SIR,—The Garden Arches came to hand safely, and am much pleased with them.

E. R. EVANS.

Peterhead, N.B.

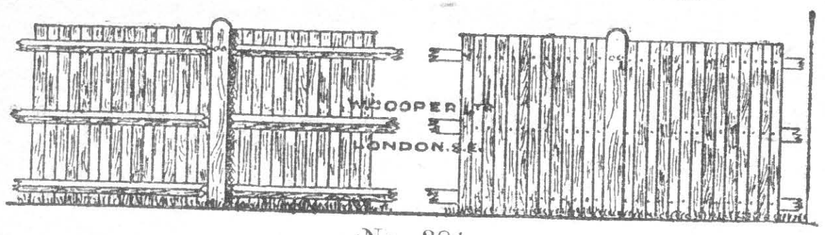
DEAR SIR,—I have to say that the Garden Arch has been delivered, and is to my entire satisfaction.

W. MATHIESON.

The Grange, Rudham, Great Yarmouth.

Mrs. Fitz-Hugh received the Rustic Fencing yesterday, and is very much pleased.

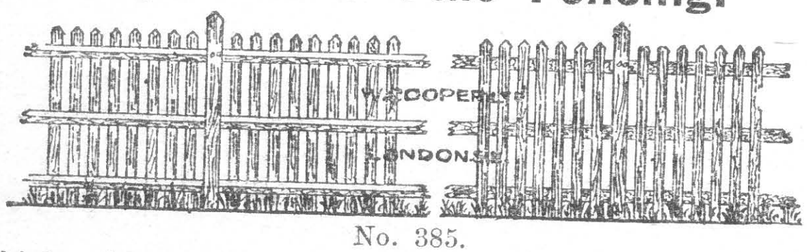
Oak Park Pale Fencing.



No. 384.

4ft. high, with 4 x 4 posts and 2 rails, at 5s. per yard.
5ft. high, with 5 x 4 posts and 3 rails, at 7s. per yard.
6ft. high, with 6 x 4 posts and 3 rails, at 8s. 8d. per yard.
If with 6in. Gravel Board, 5d. per yard extra.

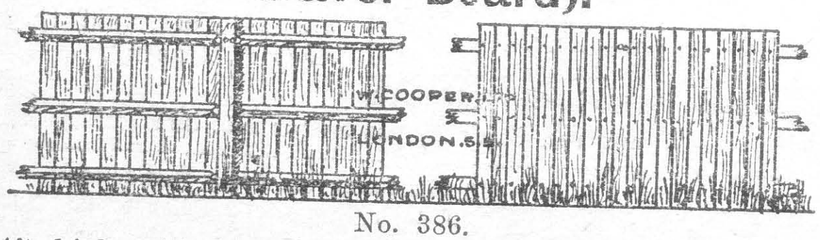
Space and Pale Fencing.



No. 385.

4ft. high, with 4 x 4 oak posts, 2 fir rails, $2\frac{1}{2}$ x $\frac{3}{4}$ deal pales, at 2s. 9d. per yard.
5ft. high, with 5 x 4 oak posts, 3 fir rails, $2\frac{1}{2}$ x $\frac{3}{4}$ deal pales, at 4s. per yard.
6ft. high, with 6 x 4 oak posts, 3 fir rails, $2\frac{1}{2}$ x $\frac{3}{4}$ deal pales, at 5s. 2d. per yard.

Weatherboard Fencing (without Gravel Board).



No. 386.

4ft. high, with 4 x 4 fir posts and 2 rails, at 2s. 10d. per yard.
5ft. high, with 5 x 4 fir posts and 3 rails, at 4s. per yard.
6ft. high, with 6 x 4 fir posts and 3 rails, at 5s. per yard.

These prices include delivery and fixing within about 15 miles for not less than 25 yards on fairly level ground and average digging. Quotations are for fixing in 9ft. lengths; extra end-posts are not included. Special quotations for large quantities, for Gates, and beyond above distance, free on application.

For erecting on rock, flint, chalk, or in roots of trees, extra must be charged.

Prices subject to alteration.

SECTION VII.

Illustrated Catalogue

OF

Heating Apparatus, Boilers, Pipes, Connections, Gas and Oil Heaters.

Public Buildings, Mansions, Greenhouses, &c., heated on the most approved Principles.

ESTIMATES ON APPLICATION.

Cooper's Improved Amateur Hygienic Heaters.

For Burning Paraffin Oil or Gas without Smoke or Smell.

These Stoves give off neither Smoke nor Smell, and will keep a Greenhouse from 15° to 40° above outside Temperature.

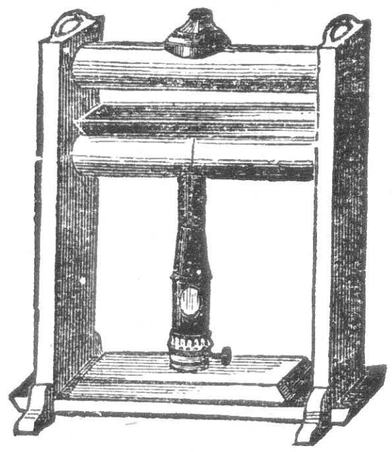
Portable and Complete. Nothing to Break.
Fitted with Iron Chimneys.

CAREFULLY PUT ON RAIL AT OUR WORKS AT THE FOLLOWING PRICES:

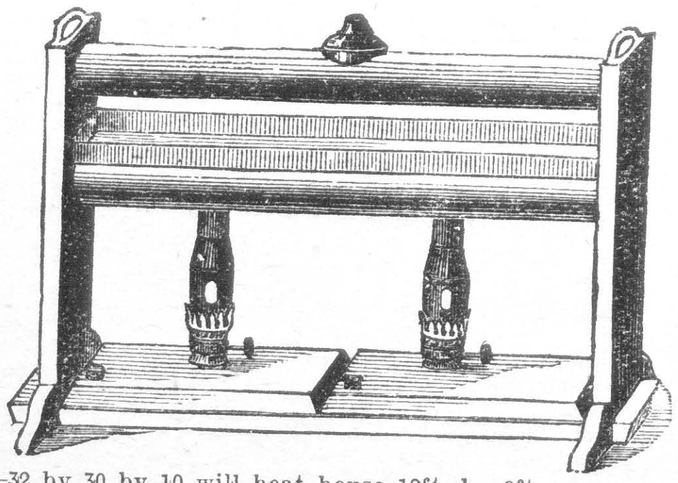


Fitted with Duplex Burner.

No. 387.—18 by 25 by 10, will heat house 7ft. by 5ft., consumes ¾ pint of oil in 10 hours, 15s.



No. 388.—27 by 30 by 10, will heat house 9ft. by 6ft., consumes 1 pint of oil in 10 hours, £1 2s. 6d.



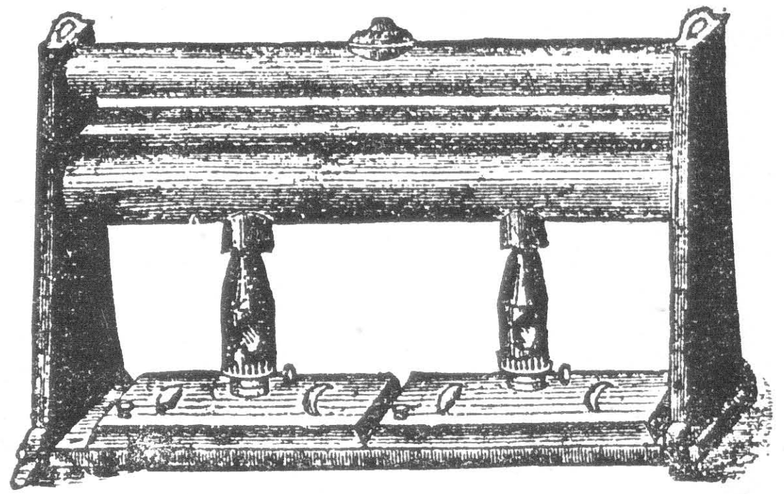
No. 389.—32 by 30 by 10 will heat house 12ft. by 8ft., consumes 1½ pints of oil in 10 hours, £1 15s.

Please state if required for Oil or Gas when ordering.

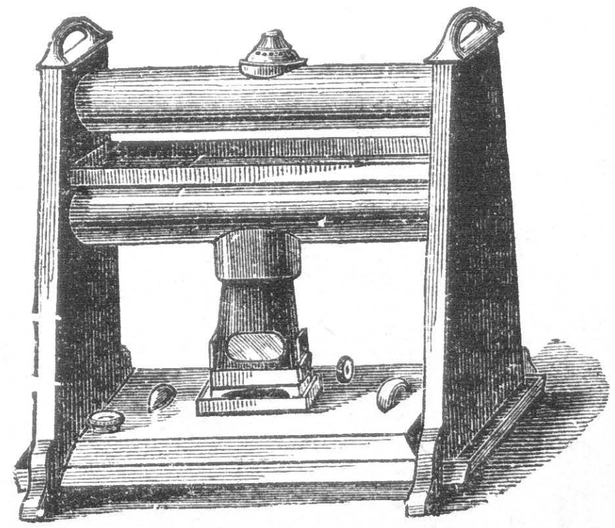
These Heaters have been specially arranged as the result of long experience in connection with Heating Arrangements (generally and especially). The Amateur Heater has obtained and maintained a good position among all classes of Gardeners.

Hygienic Heaters—*continued.*

The object of the present improved Stove is to give increased heat in the upper part, hitherto not obtained, at the same time giving better results in supplying the flame by an easier upward current—a difficulty long felt, but now completely removed.



No. 390.—34 by 30 by 10, will heat house 15ft. by 9ft., consumes 2 pints of oil in 10 hours, £2 10s.



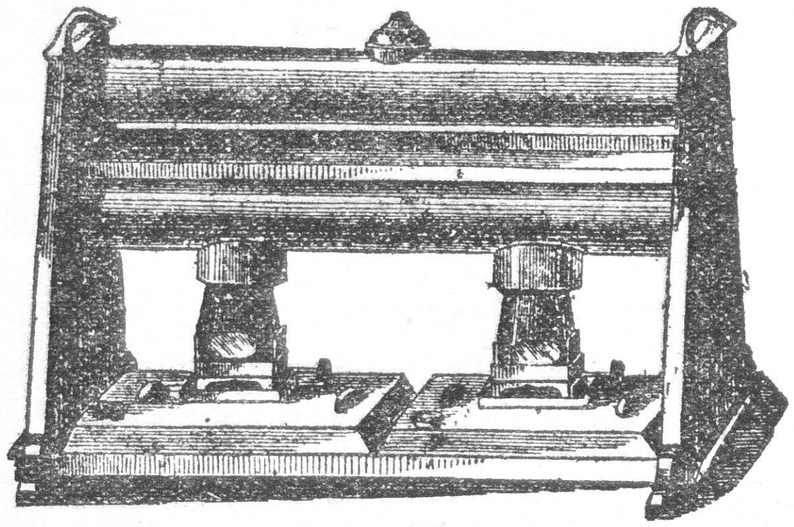
No. 391.—28 by 32 by 13 (with one 4in. flat-wick burner), will heat house 20ft. by 10ft., consumes 2 pints of oil in 10 hours, £2 15s.

Please state if required for Oil or Gas when ordering.

These Heaters are constructed as a means of heating by Hot Air without the use of Hot Water or Fires. Its peculiar construction economises the Heat generated, so that there is no waste of Heat or Fuel. There being perfect combustion in this Stove, and nothing whatever injurious to Plants, but actually everything conducive to their health, it should be observed that Plants may be had in full bloom throughout the severest Winter. This cannot be obtained in Stoves of other systems. The Temperature can be regulated to a nicety to suit all requirements, being raised 15deg. to 45deg. above that of the outside.

Hygienic Heaters—*continued.*

One of the many features worthy of special notice is the portability of the Stove when in action, there being nothing to shake about. It can be taken from room to room with perfect ease. To maintain the required moisture, a pan or cistern is placed on the upper part of the Stove for holding water.



No. 392—33 by 32 by 13 (with two 4in. flat-wick burners), will heat house 25ft. by 10ft., consumes 4 pints of oil in 10 hours, £3 5s.

Nos. 391 and 392 are special High Power Heaters, fitted with good, powerful Burners, No. 391 with one 4in. Flat-wick Burner, and No. 392 with two 4in. Flat-wick Burners.

Advantages of Cooper's Heaters.—(1) Great economy in first cost, its price being one-half that of other systems. (2) Large economy and perfect simplicity of maintenance. (3) No chimney or pipe required. (4) Its peculiar form gives the largest amount of heat-radiating surface. (5) All Double Heaters can be used with one Lamp when required, by stopping up one flue with the Cap supplied. (6) The night pressure of Gas is controlled by the new Patent Governor Burner, burning only 3ft. of Gas per hour.

Instructions.—Keep the air-holes of the Burner free from dirt. When new cotton is used it should be well dried and cut to the shape of the wick-tube (this can be done by removing the brass chimney-holder, wiping will only be necessary afterwards). Do not turn it too high at first, and regulate before leaving it. When the pan at bottom requires emptying, remove the lamp and tilt the Heater up, being careful not to empty the contents over the plants. A piece of indiarubber tube of the required length is all the addition wanted to the Gas Heaters, to connect to the nearest pipe or tap. Should the Heater at any time require cleaning out (through turning the wick too high), remove it from the Greenhouse, take away the lamps, &c., turn it upside down, and pour a quantity of water down the nozzle, then thoroughly shake about, so as to remove any soot that may have lodged in the barrels. After this replace the Heater on its feet, and allow the liquid to run out at the bottom. When thoroughly drained, re-trim and light the lamp, and place beneath as usual, putting the Heater in some place where it can remain until the vapour from the interior has gone off, when it will be found to act perfectly.

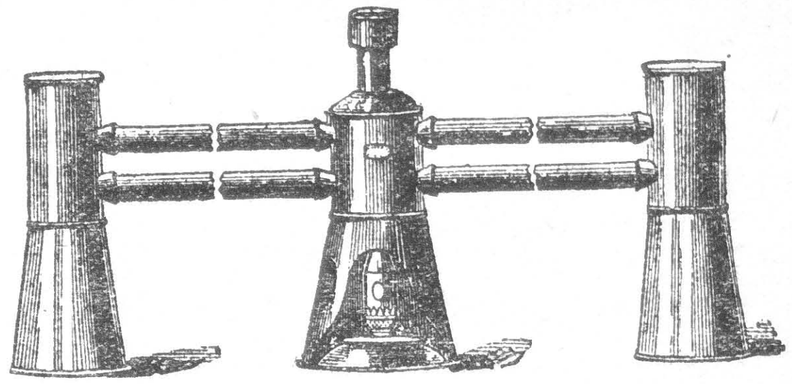
Culverlands, S. Merstham, Surrey.

GENTLEMEN,—I thank you for your catalogue, and am much pleased with your Hygienic Heater you supplied to my sister, Mrs. Lacey, of 109, Shooters Hill Road, Blackheath, last winter, and she has recommended me to get one from you.—Yours faithfully,

ISABEL CHERRY.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Cooper's "Reliable" Hot Water Boiler.



No. 393.

Requires no flue, and is easily moved from place to place. Made of best terne-coated iron sheets, which prevent rust. Should a moist atmosphere be required, remove either of the end caps. Always see that the tubes are full of water before lighting stove.

No. 1.—To heat House 7ft. by 5ft., two pipes and movable burner. CASH PRICE, £1 10s.

No. 2.—To heat House 9ft. by 6ft., three pipes and movable burner. CASH PRICE, £2 2s.

Length of stoves, 3ft. 9in.

No. 3.—To heat House 12ft. by 8ft., four pipes and movable burners. CASH PRICE, £2 14s.

No. 4.—To heat House 15ft. by 10ft., five pipes, and movable burners. CASH PRICE, £3 10s.

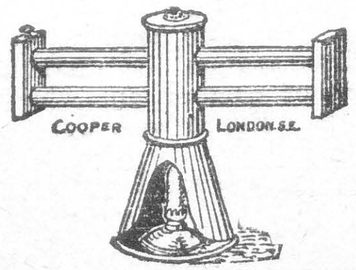
Length of stoves, 4ft. 4in.

Will burn 14 to 15 hours with one filling.

Above prices on rail at our Works.

The "Cooper" Circulating Hot Water Apparatus.

No. 394.



For Frames, small Greenhouses, Conservatories, Rooms, Offices, &c., &c. Will keep out the frost in the severest weather. Burns 15 hours without attention. Creates a gentle moist heat, very beneficial to Greenhouses, &c.

Heat Greenhouse 7ft. by 5ft.

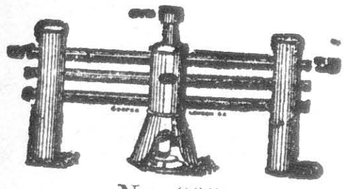
Cash Price, 10s. 6d.

Newtown Terrace, Hedon Road, Hull.

DEAR SIR,—Heater arrived safe on Saturday; was not damaged in the least; am well satisfied with it. I have got it fixed, and it gives all the heat I require. Shall be pleased to recommend your goods to anyone requiring them.—Yours truly,

J. BEELS.

The "Empress" Hot Water and Air Heating Apparatus.



No. 395.

For Oil or Gas.

Suitable for Greenhouses, Offices, Halls, Rooms, &c., &c.

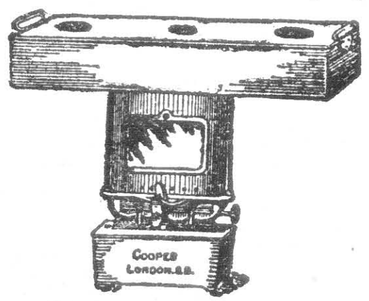
The Coil consists of double tubes, with water way between same.

The simplest, cheapest, and most effective apparatus made. Being substantially constructed of best Galvanised sheets, will last for years. A Radiator and Hot Water apparatus combined.

	Cash Price. £ s. d.
To Heat House 7ft. by 5ft., apparatus complete, with two pipes, length of apparatus 2ft. 6in.	1 10 0
To Heat House 9ft. by 6ft., apparatus complete, with three pipes, length of apparatus 2ft. 9in.	2 0 0
To Heat House 10ft. by 7ft., apparatus complete, with four pipes, length of apparatus 3ft.	2 10 0
To Heat House 12ft. by 8ft., apparatus complete, with four pipes, length of apparatus 3ft. 6in.	2 17 6
To Heat House 15ft. by 9ft., apparatus complete, with four pipes, length of apparatus 4ft.	4 0 0

"Devon" Greenhouse Stove.

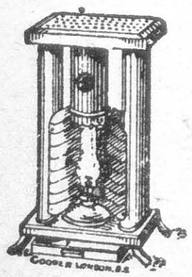
No. 396.



Suitable for Frames, small Greenhouses, Conservatories, Bedrooms, &c., &c.

Creates a gentle moist heat.
Cash Price, 3s. 3d.

The Hygienic "Cooperette."



No. 397.

For Oil or Gas.

For Heating Halls, Offices, Rooms, Workrooms, Shops, Greenhouses, and Buildings of every kind. No smoke or smell. No flue required.

These stoves are too well known to require any further description. Equal to any on the market. They condense the products of combustion, which are received in a movable tray. Fitted with Copper Reflector complete.

Please state if required for Oil or Gas when ordering.

	Cash Price. £ s. d.
Will Heat Greenhouse or Room up to 12ft. by 8ft. Size: Height, 36in.; width, 16in.; depth, 9in.	2 5 0
Will Heat Greenhouse or Room up to 15ft. by 9ft. Size: Height, 40in.; width, 18in.; depth, 10in.	3 5 0
Will Heat Greenhouse or Room up to 20ft. by 12ft. Size: Height, 42in.; width, 20in.; depth, 12in.	4 15 0

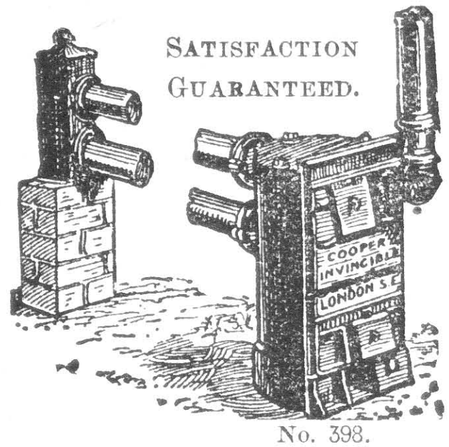
WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The "Invincible" Hot Water Apparatus.

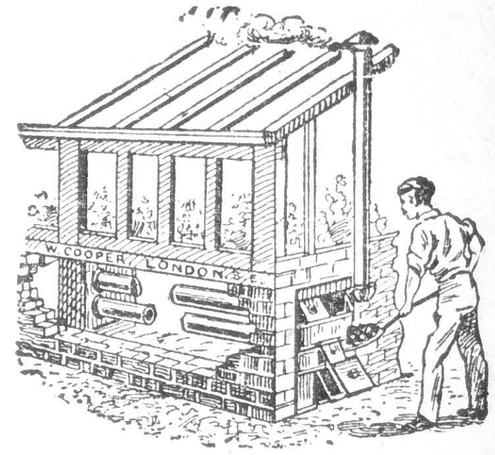
Guaranteed Equal to any on the Market, both for Working and Material.

TENANT'S FIXTURE.

SATISFACTION GUARANTEED.



No. 398.



No. 399.

THIS ILLUSTRATES THE WAY THE BOILER IS FIXED IN A GREENHOUSE.

We have sold on an average 1,500 of these Boilers every season for the last 24 years (*this speaks for itself*).

This is the simplest, cheapest, and most powerful Hot Water Apparatus made. The Boiler stands in the Greenhouse, the front only being outside and flush with the outer wall. It stands on the floor level, so that a sunk stoke-hole is not necessary. No brick setting is required—a hole is simply made in the brick or boarded front of the Greenhouse, and the boiler let in, thus forming a "Tenant's Fixture." The Boiler being in the house, the whole of the heat from same is utilised. This heat in a No. 1 size is about equal to that of 9ft. 4in. hot-water pipe. Being stoked from the outside no fumes can enter the house, and it is perfectly safe from risk of fire. The pipe terminates in an open-feed syphon, which takes the place of a supply cistern, and only requires filling about twice a week. The joints to the hot-water pipes are made with elastic rings, so that the whole of the apparatus can be fixed by any handy person, a hot-water fitter not being required. The Boiler is remarkably economical in fuel, and will burn more than 12 hours without attention, thus entirely dispensing with night stoking. The Boilers are made in six sizes; the dimensions, power, and prices are given below:—

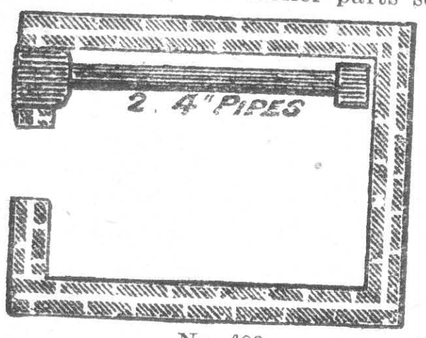
No.	Height. ft. in.	Breadth. ft. in.	Depth. ft. in.	Capable of Heating	Price of Boiler only.
1	1 10	1 2	1 0	75ft. of 4in. pipe	£2 2 0
2	2 0	1 5	1 2	100ft. ,,	3 10 0
3	2 0	1 6	1 6	200ft. ,,	4 15 0
4	2 7	1 4	1 4	275ft. ,,	7 2 6
5	2 8	1 6	1 6	375ft. ,,	9 0 0
6	2 8	1 8	1 8	500ft. ,,	10 0 0

These prices include two Sockets for pipes cast on Boiler flanges, Indiarubber Rings and Bolts for making Joints, Smoke Nozzle, Damper, Fire Bars, and Ashpit, and carefully put on rail at our Works.

Prices of Complete Apparatus with "Invincible" Boiler.

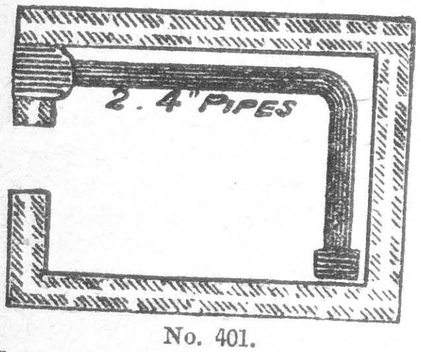
For Greenhouses of the following dimensions: with two rows of 4in. pipes, as shown in the accompanying illustrations, cut and fitted, so that if the internal measurement of the Greenhouse is given, the Apparatus will be sent completely ready for fixing—an advantage which will be appreciated by all.

For prices of "Invincible" Boiler parts see page 370.



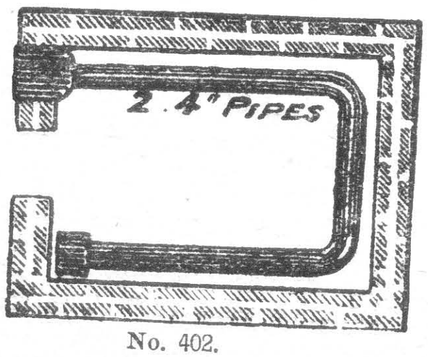
No. 400.

Two rows of 4in. pipes along one side of house.



No. 401.

Two rows of 4in. pipes along one side and end of house.



No. 402.

Two rows of 4in. pipes along two sides and one end of house.

Sizes of Greenhouses outside measure. Long.	Wide.	No. of Boiler.	Pipes as Illustration No. 400.	No. of Boiler.	Pipes as Illustration No. 401.	No. of Boiler.	Pipes as Illustration No. 402.
ft.	ft.		£ s. d.		£ s. d.		£ s. d.
7 by	5	1	2 12 6	1	3 12 0	1	4 10 0
9 ,,	6	1	2 17 6	1	3 14 0	1	4 14 0
10 ,,	7	1	3 0 0	1	3 15 0	1	4 15 0
12 ,,	8	1	3 2 6	1	4 5 0	1	5 10 0
15 ,,	9	1	3 17 6	1	5 10 0	1	7 0 0
20 ,,	10	1	4 17 6	1	6 10 0	2	9 10 0
25 ,,	10	1	5 12 6	1	7 10 0	2	11 5 0

Each Apparatus includes Boiler, as described on Page 343, 6ft. of Smoke Pipe, 4in. Pipes and Connections, Supply Cistern, with Cover, and all necessary Joints for fixing.

Estimates for Complete Apparatus for any sized house free on application. Securely and carefully put on rail at the above prices.

45, Loder Road, Preston, Brighton.

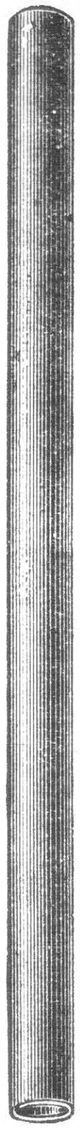
I have fitted up the "Invincible" Apparatus, and am pleased with the way it works; it is not a toy, but an arrangement that means business.—Yours respectfully,

J. WELLS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

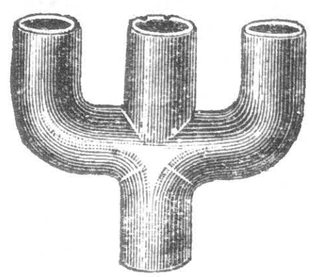
Hot Water Pipes and Connections.

With Improved Expansion Joints.



Hot Water Pipe, 9ft. Lengths
3ft. " "
6ft. " "
3in., 1/8 per yard
3in., 1/8 "
3in., 1/10 each.
2in., 1/2 per yard
2in., 1/4 each.
4in., 2/- per yard.
4in., 2/- "
4in., 2/- each.

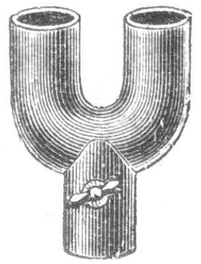
No. 403.



No. 404.

Three-Way Outlet Syphon.

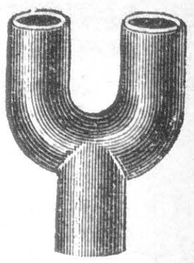
Size	3in.	4in.
Each	3/3	4/6



No. 405.

Two-Way Outlet Syphon, fitted with Valve.

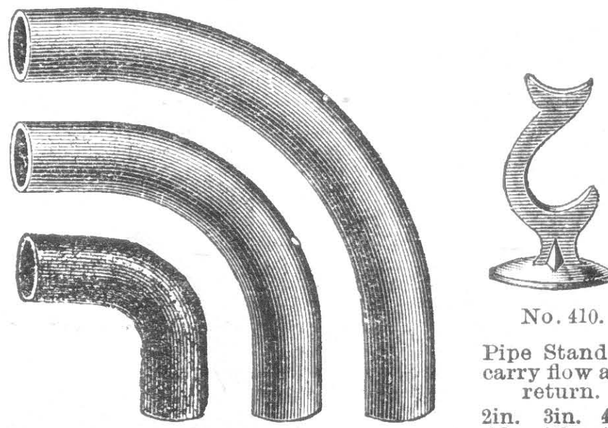
Size	2in.	3in.	4in.
Each	9/9	10/-	11/6



No. 406.

Two-Way Outlet Syphon.

Size	2in.	3in.	4in.
Each	1/10	2/3	3/-



Common Elbows.

	No. 407. Short.	No. 408. Medium.	No. 409. Long.
Size	2in.	3in.	4in.
Each	7d.	1/-	1/2
,,	1/2	1/11	2/6
,,		3/3	4/3

No. 410.

Pipe Stand to carry flow and return.

2in.	3in.	4in.
4d.	5d.	7d.

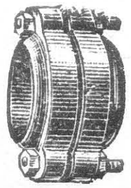
each.



No. 411.

Close Syphon.

Size	2in.	3in.	4in.
Each	1/-	1/8	2/-

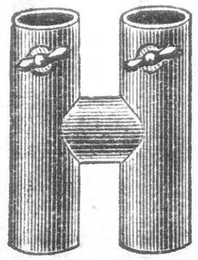


No. 412.

Complete Expansion Joints, including Rubber Rings.

2in.	3in.	4in.
1/1	1/4	1/8

each.

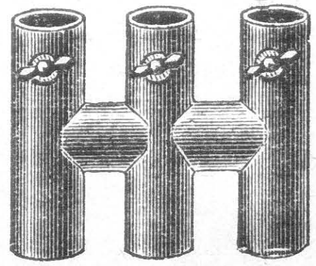


No. 413.

H Piece with Two Valves.

Size	2in.	3in.	4in.
	17/-	19/6	22/6

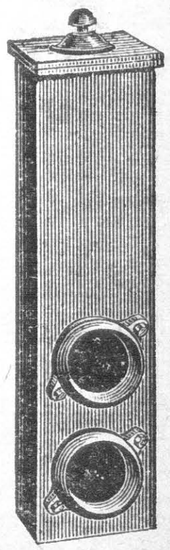
each.



No. 414.

H Piece fitted with Three Valves.

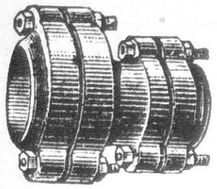
Size	2in.	3in.	4in.
Each	22/-	25/-	28/6



No. 415.

Expansion Box.

For	Each
Under 30ft. pipe	7/-
Over 30ft. ,,	8/6
,, 80ft. ,,	10/-
,, 100ft. ,,	15/-



No. 416.

Expansion Hot Water Connections.

Diminishing Joints Complete.

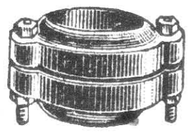
Including Rubbers and Bolts.

Size, 3in. to 2in.	4in. to 2in.	4in. to 3in
Each 1s. 10d.	2s. 3d.	2s. 8d.

Blank End Caps Complete.

Size, 2in.	3in.	4in.
Each 1s. 2d.	1s. 5d.	1s. 10d.

SPECIAL QUOTATIONS FOR QUANTITIES.



No. 417.



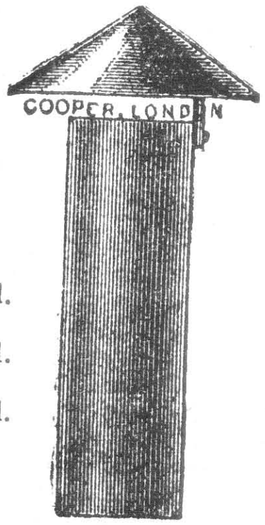
Smoke Pipe.

No. 418.

For No. 1 Boiler, 5s. 0d.

„ 2 „ 7s. 6d.

„ 3 „ 10s. 0d.

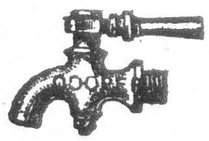


Cap for Smoke Pipe.

No. 419.

1s. 9d. each.

Draw-off Tap.



No. 420.

Brass Draw-off Tap for emptying apparatus, 2s. 6d. each.

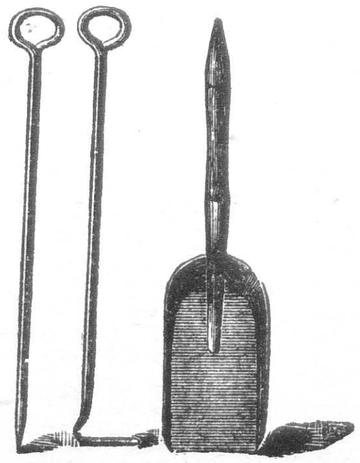
Spanner.



No. 421.

Spanner for screwing up joint pins, 6d. each.

Stoking Tools.

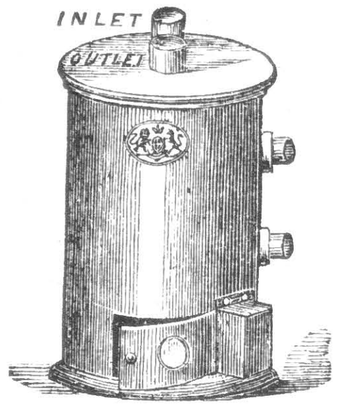


No. 422.

The complete set: Steel Shovel, Rake, and Teazer, 2s. 6d.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

New Patent "Cooper" Gas Boiler.



No. 423.

No. 0 will heat 20ft. of 2-in. pipe.
CASH PRICE, £2 5s.
No. 1 will heat 35ft. to 45ft. of 2-in. pipe.
CASH PRICE, £2 15s.
No. 2 will heat 70ft. to 80ft. of 2-in. pipe.
CASH PRICE, £4 10s.
No. 3 will heat 150ft. to 170ft. of 2-in. pipe.
CASH PRICE, £5 15s.

Nos. 1, 2, and 3, with extra powerful Burners, 7s. 6d. extra.

These boilers and stoves are made on an entirely new principle, and may be placed with perfect safety inside a conservatory, as from their construction there is an equal pressure of air on the inlet and outlet pipes, thus obviating the risk of a down draught, and at the same time effecting an enormous saving in cost of gas, as the heat from the boiler is retained in the house. The outer case of boiler is made air-tight, and all the air for the supply of burner is drawn from the outside down the inlet pipe to the bottom of case, while the pipe for the escape of hot air is taken from the top, thus keeping up a "syphonic" action when in use, and maintaining the air pure in conservatory.

The burners swing out so that a lady can manage them.

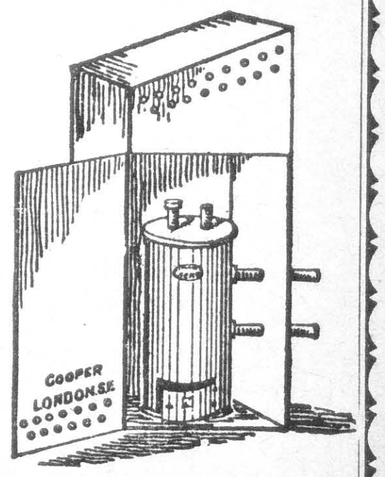
N.B.—All boilers are made right-handed, and can be supplied reverse hand to that shown if desired.

Galvanised Cases for "Cooper" and "Invincible" Boilers.

No. 424.

For fixing outside conservatory, showing boiler, as fixed inside case.

No. 1.	2.	3.
CASH PRICE, £1	£1 5s.	£1 10s. each.



80, Laws Terrace, Darlington.

DEAR SIR,—I have pleasure in stating the Heating Apparatus supplied by you has given every satisfaction. Hoping that I will be able to get you a few orders.

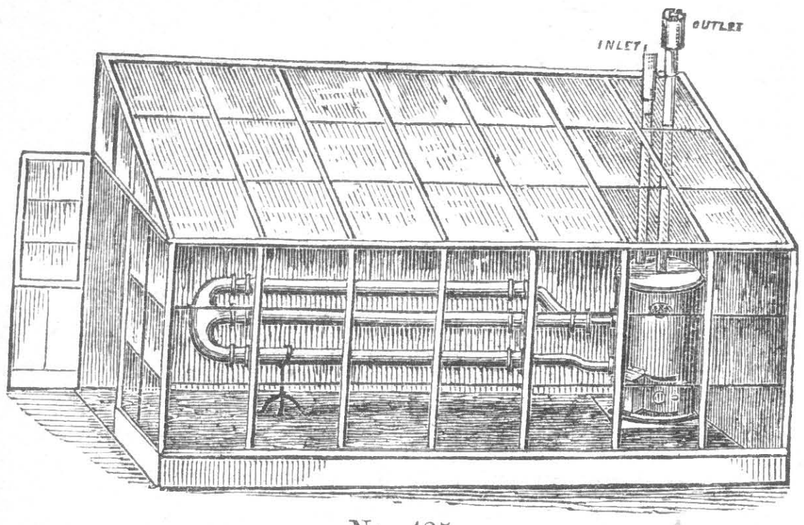
W. BEWICK.

76, Gladstone Street, Peterborough.

DEAR SIR,—I received the Heating Apparatus and Rings quite safe, and am well satisfied with it.

ISAAC MUNTON.

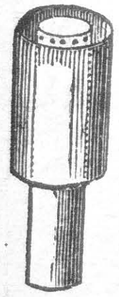
New Patent "Cooper" Gas Boiler.



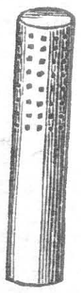
No. 425.

Sketch of conservatory fitted with New Patent "Cooper" Gas Boiler and Apparatus, showing position of outlet pipe for hot air, and inlet pipe for fresh air.

In fixing see that the top of inlet cap is 3in. below bottom of outlet cap.



No. 426. Outlet Cap.



No. 427. Inlet Cap.

Caps for Inlet and Outlet Pipes.

No.		1.		2.		3.
		s. d.		s. d.		s. d.
No. 426.	Outlet	2 9	...	3 6	...	4 3
No. 427.	Inlet	1 9	...	2 6	...	3 6

Stout Galvanised Iron Pipe.

For Outlet and Inlet. No 428.

For No.	1	2	3	Boiler.
Price	9d.	1s. 3d.	1s. 10d.	per ft.

When ordering boiler state amount of inlet and outlet pipe required, and add amount to cost of boiler, also if sockets are required left or right hand side of boiler when facing same.

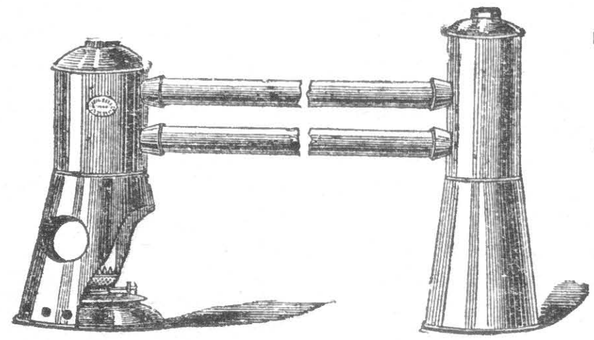
Ticehurst.

DEAR SIR,—The Stove has proved a perfect little success, and I am pleased with it.

C. COOK (Grocer).

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The Amateur's Assistant.



No. 429.

Considering the number of small Greenhouses that do not require much more than sufficient heat to keep out the frost, and the numerous applications constantly received from Amateurs for a cheap and strong stove applicable to the purpose, we are induced to place before the public an entirely original Hot Water Apparatus that will raise the temperature from 15deg. to 45deg. above that of the outside, requiring no attention, except to see that the oil vessel is kept supplied. No skilled labour is required for fixing, only to slip the rings over pipes, push into sockets, and fill up with either plaster of Paris, fire clay, or any cement. Securely put on rail at our Works, as follows :—

No. 1.—A Boiler made of strong Metal Plates, on our well-known patent principle, and fitted with a suitable lamp, to burn oil or gas; 8ft. 2in., Galvanised pipes (4ft. flow and 4ft. return); One Feeder Stand to receive the ends of the pipes, also for the purpose of filling; Four India-rubber Rings for joints to boiler and feeder. Price 18s. complete.

No. 2.—Larger Boiler, 12ft. 2in. Galvanised Pipes, Feeder, Rings, &c. Price £1 5s. complete.

No. 3.—Still larger Boiler, 16ft. 2in. Galvanised Pipes, Feeder, Rings, &c. Price £1 15s. complete.

No. 4.—Complete with 24ft. 3in. piping, £3. Will heat 60ft.

No. 5.—Complete with 30ft. 3in. piping, £5. Will heat 90ft.

ESTIMATES FOR LARGER SIZES FREE ON APPLICATION.

INSTRUCTIONS FOR FIXING THE AMATEUR'S ASSISTANT AND "RELIABLE" BOILER AND PIPES.

First, place the Boiler in the position it is intended to occupy; then connect the water-pipes to it by placing one of the indiarubber rings on the extreme end of each pipe, and forcing them into the sockets as far as they will go. The pipes are then to be connected to the elbows or feeder, as the case may be, in the same way, and the rings must be jammed or caulked in evenly all round the pipes. Then fill the apparatus with water through the **Feeder** at the end of the pipes, and when the water in the feeder is just above the level of the top pipe, light the lamp, keeping it **low at first** to allow the foul air and fumes to escape and create draught. Then you can turn the light up as high as may be required, **without smoking.** When the water in the pipes is hot enough, turn down the light, and by a little practice you will very soon know how to regulate the heat.

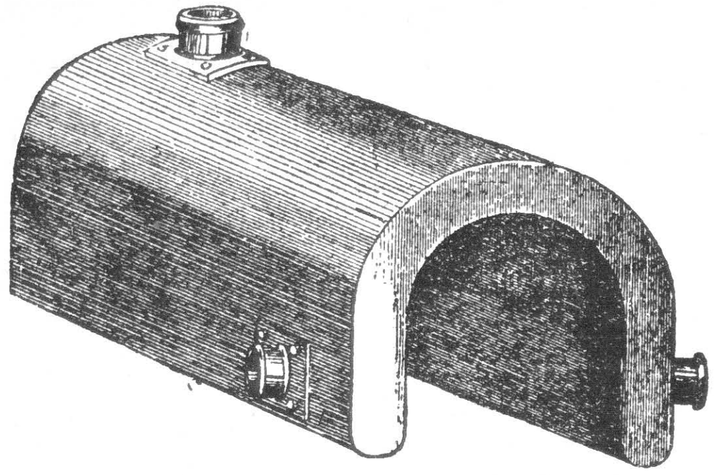
Do not under any circumstances allow the lamp to smoke, or you will fill the dome and conducting tubes full of soot, and the Boiler will not act. The lamp should be trimmed and refilled about once in ten or twenty hours, as the case may be, and about once in a season the Boiler should be cleaned out. The same remarks apply also to Boilers burning Gas. When the Gas Boiler is placed inside the Greenhouse, the joints of gas-pipes must be made tight, to prevent the smallest leakage. The feeder must in all cases be higher than the Boiler in the proportion of 1in. to every 6ft. of pipe, in length, or the water will not circulate properly. A mixture of red and white lead will stop any leak.

The pipes may be painted with lampblack and boiled linseed oil, to protect them from injury by damp.

Wrought Welded Saddle Boiler.

No. 430.

PRICES exclusive of Sockets.



No.	Size of Boiler. Long.	Inside Arch.	Outside Size.	Actual Heating Power. 4in. Pipe.	Price of Boiler.	Price of Furnace Fittings.
	L.	W.	H.	W.	H.	Feet.	£ s. d.	£ s. d.
1	18 by	10 by	11	14 by	13	150	1 13 6	2 2 6
2	18 ,,	12 ,,	12	16 ,,	14	180	2 0 6	2 5 0
3	21 ,,	10 ,,	11	14 ,,	13	180	1 18 6	2 7 6
4	21 ,,	12 ,,	12	16 ,,	14	210	2 4 0	2 7 6
5	24 ,,	10 ,,	11	14 ,,	13	210	2 0 6	2 10 0
6	24 ,,	12 ,,	12	16 ,,	14	240	2 7 6	2 12 6
7	24 ,,	14 ,,	14	18 ,,	16	280	2 14 6	2 15 0
8	27 ,,	12 ,,	12	17 ,,	14½	270	2 12 6	2 12 6
9	27 ,,	14 ,,	14	19 ,,	16½	315	2 19 6	2 17 6
10	30 ,,	12 ,,	12	17 ,,	14½	300	2 16 0	2 17 6
11	30 ,,	14 ,,	14	19 ,,	16½	350	3 8 6	3 0 0
12	33 ,,	14 ,,	14	19 ,,	16½	385	3 12 0	3 5 0
13	36 ,,	14 ,,	14	19 ,,	16½	420	3 15 6	3 7 6
14	36 ,,	16 ,,	16	22 ,,	19	480	4 9 6	3 7 6
15	42 ,,	16 ,,	16	22 ,,	19	560	5 12 0	3 10 0
16	42 ,,	18 ,,	18	24 ,,	21	630	6 6 0	3 15 0
17	48 ,,	15 ,,	16	22 ,,	19	640	6 6 0	3 15 0
18	48 ,,	18 ,,	18	24 ,,	21	720	7 3 6	4 0 0
19	48 ,,	21 ,,	18	27 ,,	21	760	7 10 6	4 10 0
20	48 ,,	21 ,,	21	27 ,,	24	840	7 19 3	4 10 0
21	48 ,,	24 ,,	18	30 ,,	21	820	8 8 0	5 0 0
22	48 ,,	24 ,,	21	30 ,,	24	880	9 2 0	5 0 0
23	54 ,,	21 ,,	18	27 ,,	21	850	8 8 0	5 0 0
24	54 ,,	21 ,,	21	27 ,,	24	950	9 2 0	5 0 0
25	54 ,,	24 ,,	18	30 ,,	21	910	8 15 0	5 5 0
26	54 ,,	24 ,,	21	30 ,,	24	1000	9 10 6	5 5 0
27	60 ,,	21 ,,	18	27 ,,	21	950	9 2 0	5 10 0
28	60 ,,	21 ,,	21	27 ,,	24	1060	9 19 6	5 10 0
29	60 ,,	24 ,,	18	30 ,,	21	1000	10 6 6	5 15 0
30	60 ,,	24 ,,	21	30 ,,	24	1120	11 2 0	5 15 0
31	66 ,,	24 ,,	21	30 ,,	24	1240	14 14 0	6 0 0
32	72 ,,	24 ,,	21	30 ,,	24	1360	16 16 0	6 7 6
33	78 ,,	24 ,,	21	30 ,,	24	1480	18 18 0	7 0 0
34	84 ,,	24 ,,	24	30 ,,	27	1600	22 8 0	7 10 0

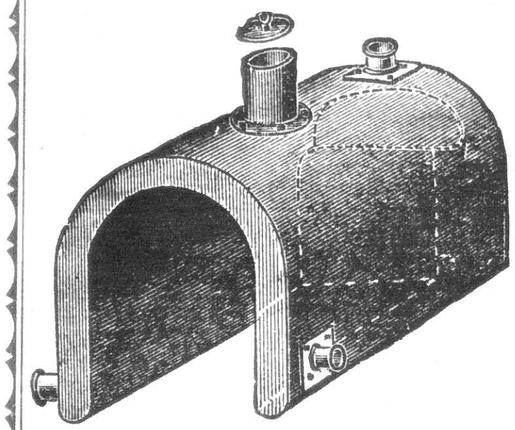
Plain Sockets, 2in. 5s. 6d., 3in. 7s., 4in. 8s. each.
Elbow Sockets, 2in. 7s. 6d., 3in. 9s., 4in. 10s. 6d. each.
Furnace fittings consist of one furnace front, fire bars, bearers, deadplate, damper, and 3 soot doors.

When ordering, state size of sockets and position in which they are to be fixed.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

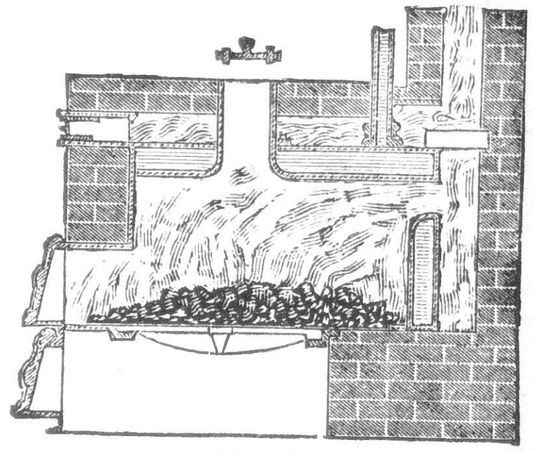
Improved Saddle Boiler.

With Waterway Bridge End and Top Feeder.



No. 431.

Elevation.



No. 432.

Longitudinal Section.

No.	Size of Boiler. Long.	Inside Arch.	Outside Arch.	Actual Heating Apparatus 4in. Pipe.	Price of Boiler.	Price of Furnace Fittings.
	L.	W.	H.	W.	H.	Feet.	£ s. d.	£ s. d.
1	18 by	12 by	16	16 by	18	275	5 16 0	2 10 0
2	24 ,,	14 ,,	18	18 ,,	20	415	7 0 0	2 15 0
3	30 ,,	14 ,,	18	18 ,,	20	490	8 8 0	3 0 0
4	36 ,,	16 ,,	20	21 ,,	22½	650	10 12 6	3 10 0
5	42 ,,	16 ,,	20	21 ,,	22½	730	13 0 0	3 15 0
6	48 ,,	18 ,,	22	24 ,,	25	915	15 10 0	4 5 0
7	54 ,,	18 ,,	22	24 ,,	25	1040	18 0 0	5 0 0
8	54 ,,	21 ,,	26	27 ,,	29	1225	20 0 0	5 5 0
9	60 ,,	21 ,,	26	27 ,,	29	1375	20 15 0	5 10 0
10	60 ,,	24 ,,	28	30 ,,	31	1525	22 15 0	5 15 0

Plain Sockets, 2in., 5s. 6d.; 3in., 7s.; 4in., 8s. each extra.

Elbow Sockets, 2in., 7s. 6d.; 3in., 9s.; 4in., 10s. 6d. each extra.

Furnace fittings consist of furnace front, fire bars, bearers, deadplate, damper, and three soot doors.

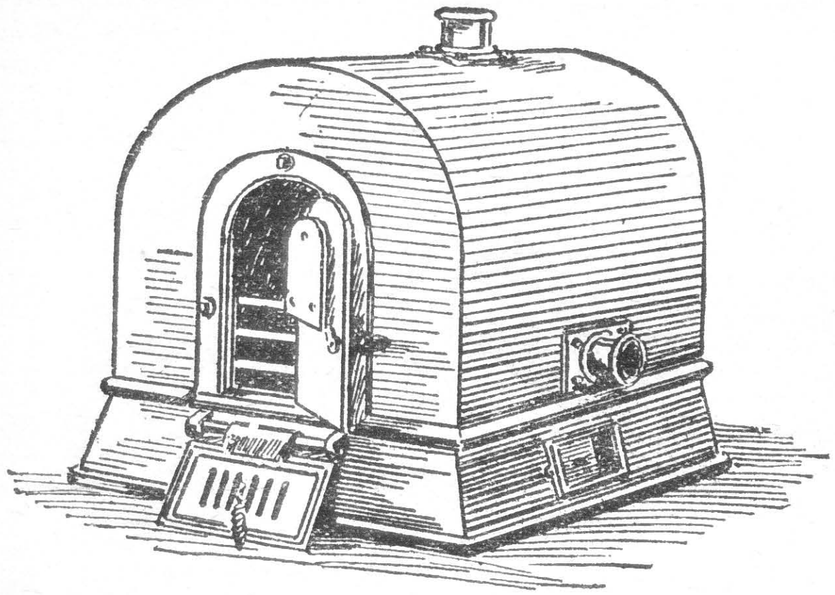
Cooper's Pipe Composition.

No. 433.

A coat of this Composition on Boilers and Pipes preserves, prevents rust, and gives neat appearance. Much better than paint. Cheap and lasting.

Price, 5s. per gallon (cans included).

Improved Independent Saddle Boiler.



No. 434.

With Waterway Front, cast-iron Front Bars and Door, Smoke Flue fitted with slide damper, cast-iron Stand fitted with door, front and side Ventilators.

Price includes one 2in. Flow and one 2in. Return Socket.

No.	Outside Size of Boiler, exclusive of Stand. Long.	Wide.	High.	Height, including Stand.	Actual Heating Power. 4in. Pipe.	Price of Boiler.
	in.	in.	in.	in.	ft.	£ s. d.
1	18 by	16 by	18	26	175	8 5 0
2	21 ,,	16 ,,	18	26	187	9 0 0
3	24 ,,	16 ,,	18	26	200	9 7 6
4	24 ,,	18 ,,	22	30	260	9 14 0
5	24 ,,	24 ,,	24	33	300	11 10 0
6	30 ,,	18 ,,	22	30	300	11 10 0
7	30 ,,	24 ,,	24	33	375	14 0 0
8	36 ,,	18 ,,	22	30	340	14 0 0
9	36 ,,	21 ,,	24	33	415	15 0 0
10	36 ,,	24 ,,	24	33	450	15 10 0
11	42 ,,	21 ,,	24	33	500	17 2 6
12	42 ,,	24 ,,	24	33	525	18 0 0
13	48 ,,	21 ,,	24	33	585	19 0 0
14	48 ,,	24 ,,	24	33	600	20 0 0

When ordering, please state Number and Size of Boiler.

Pleasant House, Nenthead, Cumberland.

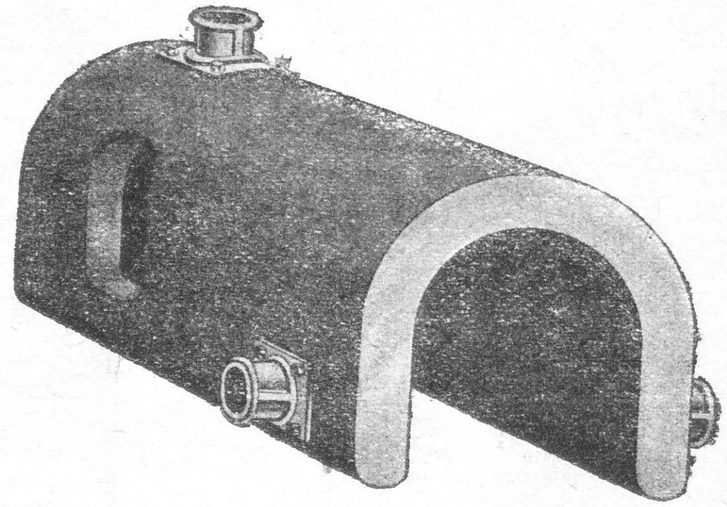
DEAR SIRS,—I have received Stove (Slow Combustion) all right, and am very pleased with it. I think it is splendid value for the money, and it gives entire satisfaction. Wishing you every success in the future—I remain, yours,

A. RUTHERFORD.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Improved Saddle Boiler

With Waterway Terminal End and Side Flues.



No. 435.

No.	Size of Boiler. Long.	Inside Arch. W.	Inside Arch. H.	Outside Size. W.	Outside Size. H.	Actual Heating Power. 4in. Pipe.	Price of Boiler.	Price for Furnace Fittings.
	L.	W.	H.	W.	H.	Feet.	£ s. d.	£ s. d.
1	24 by	14 by	14	20 by	17	320	6 0 0	2 15 0
2	30 ,,	14 ,,	14	20 ,,	17	390	6 10 0	3 0 0
3	30 ,,	16 ,,	16	22 ,,	19	450	7 7 6	3 5 0
4	33 ,,	14 ,,	14	20 ,,	17	425	7 5 0	3 5 0
5	33 ,,	16 ,,	16	22 ,,	19	490	8 2 6	3 7 6
6	36 ,,	14 ,,	14	20 ,,	17	460	8 0 0	3 7 6
7	36 ,,	16 ,,	16	22 ,,	19	530	8 12 6	3 7 6
8	42 ,,	14 ,,	14	20 ,,	17	530	8 17 6	3 7 6
9	42 ,,	16 ,,	16	22 ,,	19	610	10 10 0	3 10 0
10	42 ,,	18 ,,	18	24 ,,	21	700	11 2 6	3 15 0
11	48 ,,	16 ,,	16	22 ,,	19	690	11 2 6	3 15 0
12	48 ,,	18 ,,	18	24 ,,	21	790	12 5 0	4 0 0
13	48 ,,	21 ,,	21	27 ,,	24	940	14 0 0	4 10 0
14	48 ,,	24 ,,	21	30 ,,	24	990	14 10 0	5 0 0
15	54 ,,	21 ,,	18	27 ,,	21	930	13 15 0	5 0 0
16	54 ,,	21 ,,	21	27 ,,	24	1010	15 5 0	5 0 0
17	54 ,,	24 ,,	21	30 ,,	24	1110	17 0 0	5 5 0
18	60 ,,	21 ,,	18	27 ,,	21	1030	15 10 0	5 10 0
19	60 ,,	21 ,,	21	27 ,,	24	1160	17 0 0	5 10 0
20	60 ,,	24 ,,	21	30 ,,	24	1230	18 10 0	5 15 0

Plain Sockets, 2in., 5s. 6d.; 3in., 7s.; 4in., 8s. each extra.

Elbow Sockets, 2in., 7s. 6d.; 3in., 9s.; 4in., 10s. 6d. each extra.

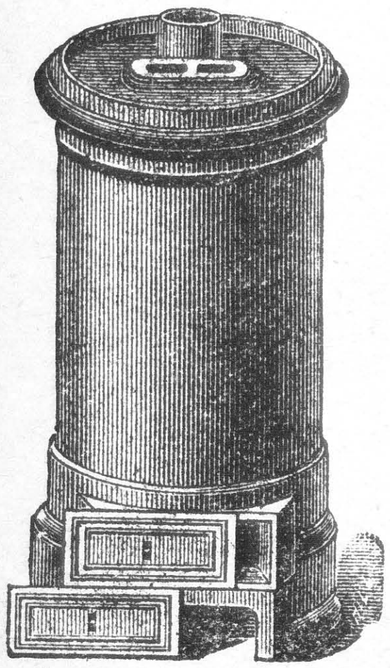
When ordering, please state Number and Size of Boiler.

The Gardens, Well Hall House, Eltham.

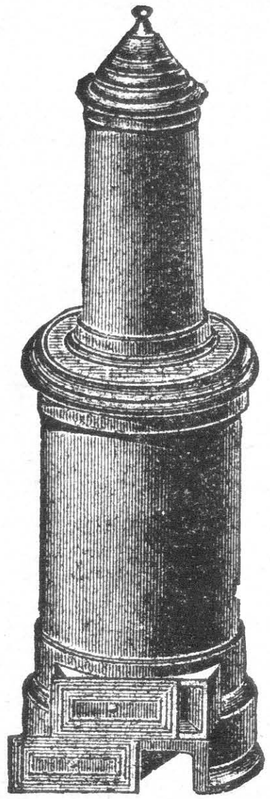
DEAR SIRS,—I beg to advise you the apparatus has arrived safely, and is fitted and working very satisfactorily.—Thanking you, yours &c.,

T. W. BALL.

Improved "Star" Independent Boiler.



No. 436.



No. 437

Price List includes one Flow and Return Socket
(AS PER DRAWINGS).

No. 436. Without Top Feeder.

Outside Dimensions. Height. Dia.	Size of Socket. In.	Actual Heating Power in 4in. Pipe. Ft.	Price. £ s. d.
26 by 12	1¼	80	2 12 6
34 ,, 14	1½	140	3 17 6
40 ,, 16	2	220	6 2 6

No. 437. With Extended Top Feeder.

46 by 12	1¼	80	3 10 0
58 ,, 14	1½	140	4 17 6
68 ,, 16	2	220	7 2 6

The sockets, unless specially ordered, are fitted at back.

Whytethorne, Cobham, Surrey.

DEAR SIR,—I received the air-pipes, &c., all right, and I have fixed them. I am astonished at the heat and the time it lasted. To be correct, I filled it about three-parts full of breeze and cinders from the house at seven o'clock in the evening, and there was a fair amount of fire at seven o'clock in the morning, and glass stood at 70deg.

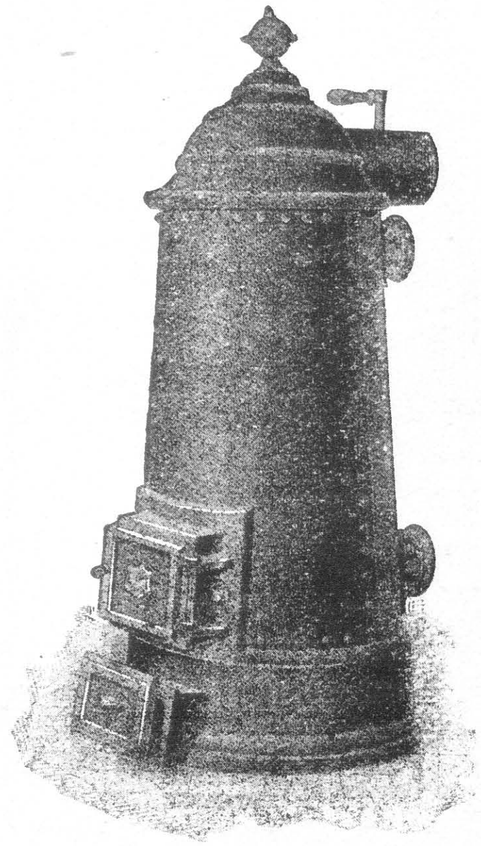
I am instructed by Mrs. Heilbut to tell you she is highly delighted with the House and the work that is put into it, and likewise the way it works.—I remain, yours, &c., J. H. SMITH (Gardener).

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Improved Independent Riveted Boiler.

(Parallel Sides.)

(SIMPLE. EFFICIENT. ECONOMICAL.)



No. 438.

Prices include one Flow and Return Socket (as per Drawing).

No.	Size of Boiler Exclusive of Castings. Height. Diam.	Size of Socket.	Actual Heating Power. 4in. Pipe.	Price, Complete.
	In. In.	In.	Ft.	£ s. d.
1	24 by 14	2	140	4 0 0
2	30 ,, 14	2	175	5 0 0
3	30 ,, 16	2	200	6 6 0
4	36 ,, 16	2	250	7 7 0
5	42 ,, 16	2	300	8 0 0
6	36 ,, 18	2	280	8 15 0
7	42 ,, 18	2	330	10 0 0
8	48 ,, 18	2	380	11 0 0
9	36 ,, 20	2	300	10 0 0
10	42 ,, 20	2	350	11 0 0
11	48 ,, 20	2	400	12 0 0

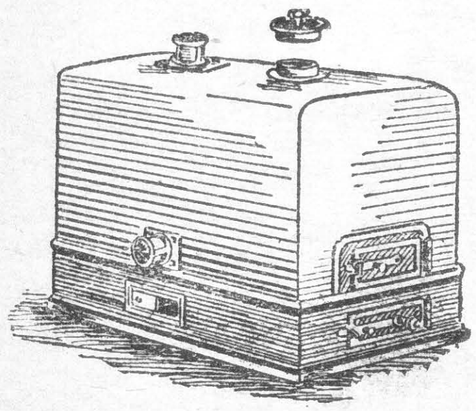
This Boiler can be made with conical sides (as illustration), 10 per cent. extra.

When ordering Boilers, please give Number and Page with sizes.

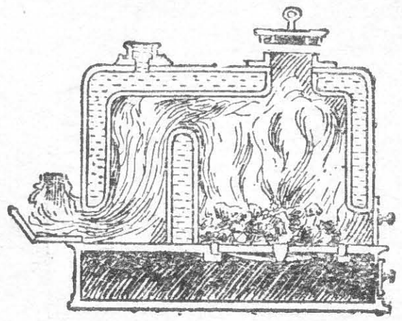
Sockets, unless specially ordered, are fitted at back of boiler.

Independent "Caxton" Boiler.

With descending Flue and Top Feeder, smoke flue fitted with Slide Damper. Cast-iron stand fitted with door. Front and side ventilators.



Elevation. No. 439.



Section. No. 440.

Price List includes one 2in. Flow and one 2in. Return Socket.

No.	Outside Measure of Boiler exclusive of Stand. Long. Wide. High.	Height including Stand.	Actual Heating Power, 4in. Pipe.	Price of Boiler.
	IN. IN. IN.	IN.	FT.	£ s. d.
1	24 by 24 by 34	43	575	17 0 0
2	30 „ 24 „ 34	43	685	20 5 0
3	36 „ 24 „ 34	43	800	23 15 0
4	42 „ 24 „ 34	43	910	26 15 0
5	48 „ 24 „ 34	43	1025	30 0 0
6	54 „ 24 „ 34	43	1150	33 5 0
7	60 „ 24 „ 34	43	1275	35 10 0
8	54 „ 27 „ 34	43	1250	35 10 0
9	60 „ 27 „ 34	43	1375	37 10 0

When ordering Boilers, please give Number and Page with sizes.

42, Jamesville, Cwmcarn, Newport, Mon.

DEAR SIR,—The Heating Apparatus I had from you in 1903 has given every satisfaction, and only cost me one shilling each winter for fuel.

H. RICHARDS.

Gleniffer, Spencer Avenue, Coventry.

GENTLEMEN,—Your Heating Apparatus supplied to me a few weeks past is giving every satisfaction. Kindly favour me with catalogue.—Yours, &c.,

JOHN L. RODGER.

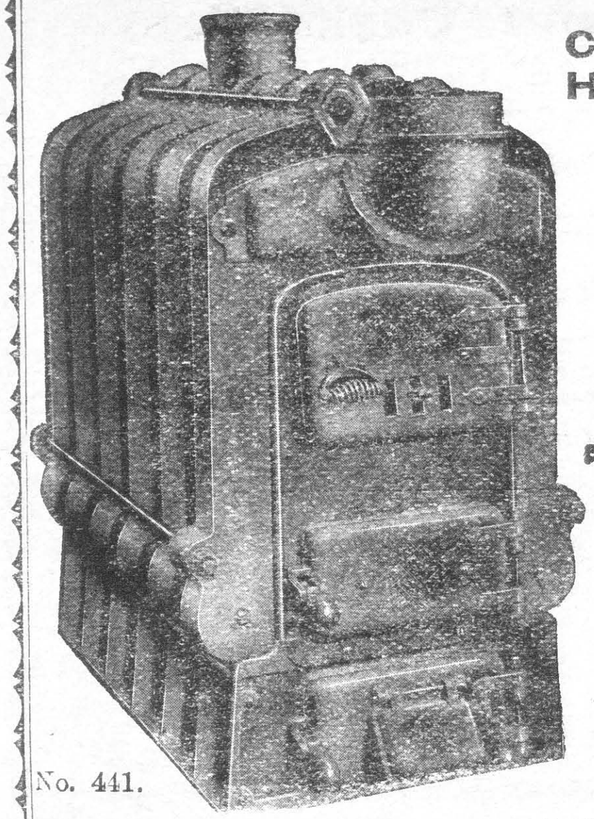
Southport Road, Lydgate.

MR. COOPER, DEAR SIR,—Received Heating Apparatus. Am pleased with same.—Yours truly,

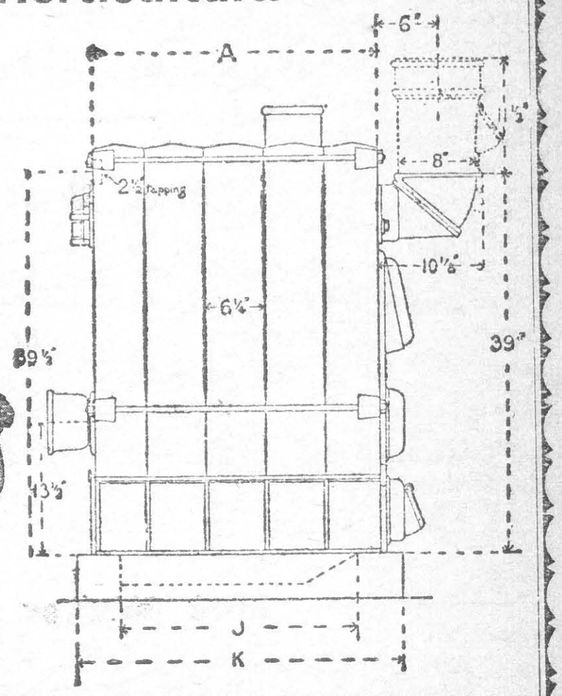
JOHN PYE.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

IMPROVED Cast-iron Sectional Horticultural Boiler.



No. 441.



No. of Sections.	Length of Boiler A	Length of Foundation. inches.		Capacity. Lineal Feet of 4in. Pipe.	Tappings.* Flow Outlets at Top.	Tappings.* Returns at Bottom either side.	Cash Price.
	in.	J	K		Diameter in in.	Diameter in in.	£ s. d.
4	23	13	27	570	1-3 or 2-2	1-3 or 2-2	13 0 0
5	29¼	24	33	710	1-3 „ 2-2	1-3 „ 2-2	16 0 0
6	35½	30	39	850	1-3 „ 2-2	1-3 „ 2-2	19 0 0
7	41¾	36	45	990	1-3 „ 2-2	1-3 „ 2-2	22 0 0
8	48	43	52	1130	2-3 „ 3-2	2-3 „ 3-2	25 0 0
9	54¼	50	59	1270	2-3 „ 3-2	2-3 „ 3-2	28 0 0
10	60½	56	65	1410	2-3 „ 3-2	2-3 „ 3-2	31 0 0

Smoke Hood Extension Piece, complete with check draught door, supplied only when specially ordered. State whether vertical or horizontal outlet required . . . . . Extra £0 10 0

Extra Middle Sections with necessary Nipples and Base Side Extension Pieces for increasing Boilers, each £3 6 0

FIRE TOOLS, EXTRA PER SET £0 13 9

Fire Tools are forwarded with Boiler unless otherwise ordered.

Grill pattern Bars are supplied with these Boilers.

In addition to tappings given, all Boilers are tapped 1in. on front section.

* When ordered with the Boiler, a Threaded Socket for Cast-iron Pipe will be supplied for all Tappings regularly provided with Boilers. All additional Fittings for Connections will be charged extra.

If desired, each Boiler can be provided with a flow socket on top of the third section from front, and return socket at back of back section, both for 4in. pipe, instead of the tappings shown above.

We strongly recommend the deepening of Ashpit by raising the base on one course of bricks as shown above.

Socket Pipes and Connections.

SPECIAL QUOTATIONS FOR QUANTITIES.

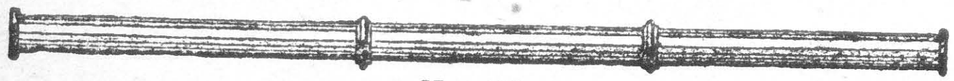
Hot Water Pipes.



No. 442.

	DIAMETER OF PIPE. 2in.	3in.	4in.	
	s. d.	s. d.	s. d.	
9ft. Lengths	—	1 8	2 1	per yd.
6ft. ,, ...	1 2	1 8	2 1	,,
3ft. ,, ...	1 4	1 10	2 4	,,

Hot Water Coil Pipes.



No. 443.

	DIAMETER OF PIPE. 2in.	3in.	4in.	
	s. d.	s. d.	s. d.	
9ft. Lengths	—	1 8	2 1	per yd.
6ft. ,, ...	1 2	1 8	2 1	,,
3ft. ,, ...	1 4	1 10	2 4	,,

Hot Water Trough Pipes.



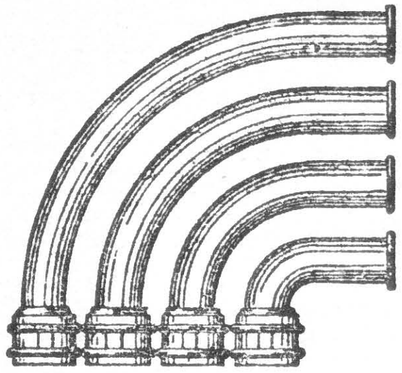
No. 444.

	DIAMETER OF PIPE. 2in.	3in.	4in.	
	s. d.	s. d.	s. d.	
9ft. Lengths	—	5 9	7 0	per yd.
6ft. ,, ...	3 8	5 10	7 0	,,

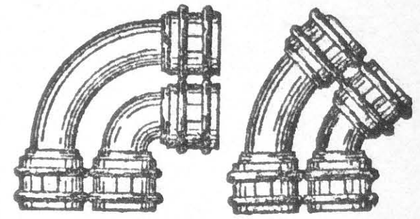
Maycroft, Barrow-on-Soar.

SIRS,—Will you kindly send me two extra Oil Reservoirs, complete with burners and chimneys, and two spare burners, for one of your Hygienic Heaters. I should like to state that I find these heaters quite satisfactory. Last winter I kept the frost out of my greenhouse quite easily, and you know what a severe winter it was.—Yours truly, GEO. BERTIE BIRD

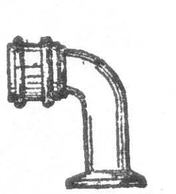
Hot Water Connections.



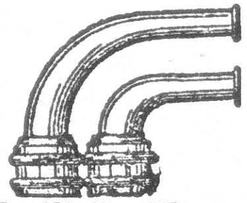
No. 445.
No. 446.
No. 447.
No. 443.



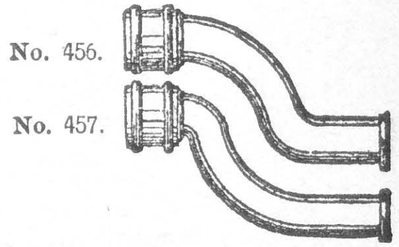
No. 449. No. 450. No. 451. No. 452.



No. 453.



No. 454. No. 455.



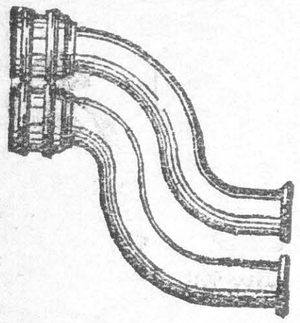
No. 456.
No. 457.

No.		DIAMETER OF PIPE. 2in.	3in.	4in.	
		s. d.	s. d.	s. d.	
445	Common Elbows	—	7 3	9 6	each.
446	,, ,, ...	—	5 8	7 3	,,
447	,, ,, ...	2 2	3 2	4 0	,,
448	,, ,, ...	1 2	2 1	2 6	,,
449	Double-Socket Elbows, long ...	2 4	3 2	4 3	,,
450	,, ,, short ...	1 5	2 3	3 0	,,
451	,, ,, ⅛-circle long ...	2 4	3 10	4 9	,,
452	,, ,, ,, short...	1 8	2 8	3 7	,,
453	Flange Elbow, ⅛-circle short ...	2 9	3 6	4 9	,,
		3in. to 2in.	4in. to 2in.	4in. to 3in.	
454	Long Diminishing Elbows ...	3 6	5 0	5 0	,,
455	Short Diminishing Elbows ...	2 6	3 6	3 6	,,
		2in.	3in.	4in.	
456	Swan Necks	2 9	4 2	5 6	,,
457	,, ,, ...	2 9	4 2	5 6	,,

13, Tower Street, London Fields, Hackney.

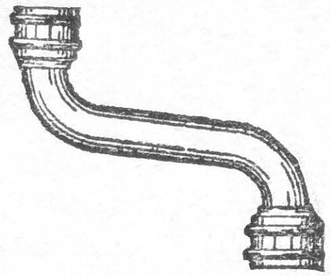
DEAR SIR,—I received the Stove quite safely, put it together in half an hour, gave it a good testing, and I found it all right. Am very pleased with it, and I will recommend it to all I know.—Yours, &c., S. BRIGDEN.

Hot Water Connections—*continued.*

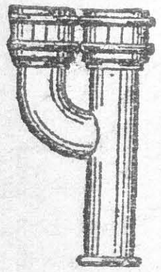


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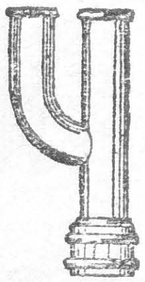
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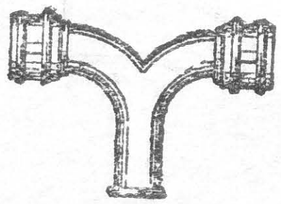
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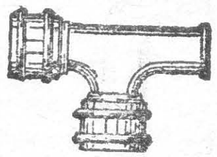
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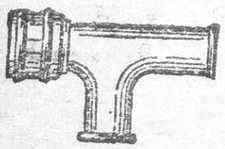
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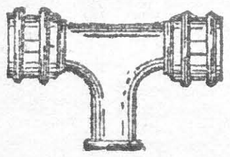
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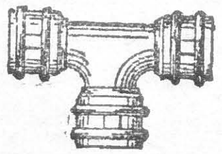
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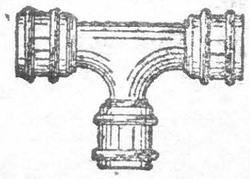
No. 465.



No. 466.



No. 467.



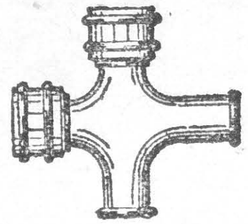
No. 468.

DIAMETER OF PIPE.

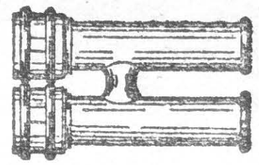
No.		2in. s. d.	3in. s. d.	4in. s. d.	
458	Swan Necks	3 6	5 6	6 9	each.
459	,, ,, ...	3 6	5 6	6 9	,,
460	**S** Pipe	3 9	5 0	7 6	,,
461	Branch Piece	3 6	5 3	7 0	,,
462	,, ,, ...	3 6	5 3	7 0	,,
463	**Y** Piece	2 0	3 0	4 0	,,
464	**T** Piece	2 0	3 0	4 0	,,
465	,, ,, ...	2 0	3 0	4 0	,,
466	,, ,, ...	2 0	3 0	4 0	,,
467	,, ,, ...	2 0	3 0	4 0	,,
468	Diminishing **T** Piece ...	2 0	3 0	4 0	,,

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

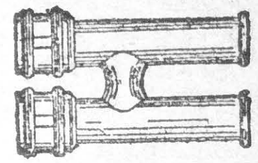
Hot Water Connections—*continued*



No. 469.



No. 470.



No. 471.



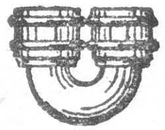
No. 472.



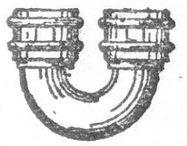
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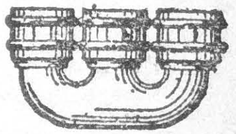
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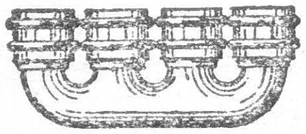
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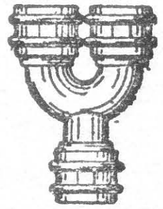
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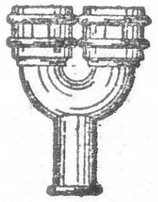
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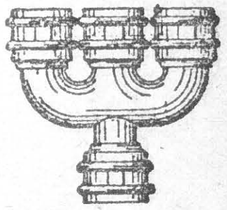
No. 478.



No. 479.



No. 480.

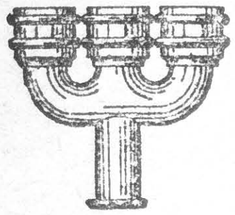


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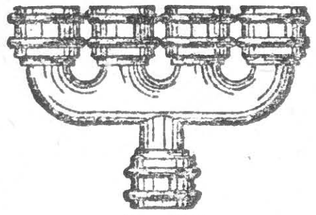
DIAMETER OF PIPE.

No.		2in. s. d.	3in. s. d.	4in. s. d.	
469	Cross Piece	3 6	5 6	7 6	each.
470	Close **H** Piece	4 0	7 0	9 0	,,
471	Open **H** Piece	4 0	7 0	9 0	,,
		3in. to 2in.	4in. to 2in.	4in. to 3in.	
472	Diminishing Pipe	2 4	2 10	3 0	,,
473	,, Nipple ...	1 4	1 10	2 0	,,
474	,, Socket ...	2 0	2 9	3 0	,,
		2in.	3in.	4in.	
475	Close Syphon	2 0	3 0	4 0	,,
476	Open ,, ...	2 0	3 3	4 0	,,
477	Three-way Syphon	4 0	6 9	8 6	,,
478	Four-way ,, ...	5 6	8 9	12 0	,,
479	Outlet ,, ...	3 4	5 6	7 6	,,
480	,, ,, ...	3 4	5 6	7 6	,,
481	Three-way Outlet Syphon...	5 6	8 0	11 0	,,

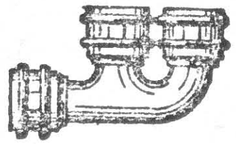
Hot Water Connections—*continued.*



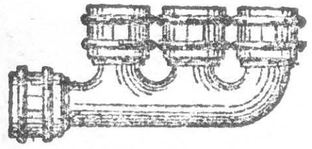
No. 482.



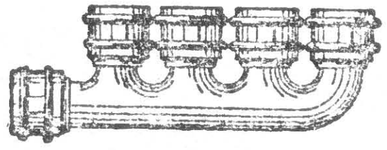
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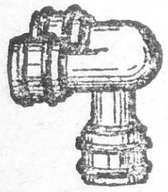
No. 484.



No. 485.



No. 486



No. 487.



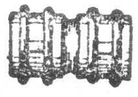
No. 488.



No. 489.



No. 490.



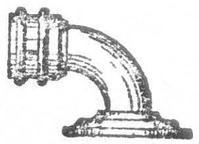
No. 491.



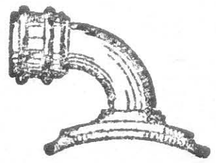
No. 492.



No. 493.



No. 494.



No. 495.

DIAMETER OF PIPE.

No.		2in. s.	d.	3in. s.	d.	4in. s.	d.	
482	Three-way Outlet Syphon	5	6	8	0	11	0	each.
483	Four-way ,, ,,	6	6	11	0	14	6	,,
484	Elbow Syphon	3	4	5	6	7	6	,,
485	Three-way Elbow Syphon	5	6	8	0	11	0	,,
486	Four-way ,, ,,	6	6	11	0	14	6	,,
487	Chair Syphon	3	9	6	0	7	6	,,
488	Single Collar	0	10	1	4	1	9	,,
489	Blank Socket	0	10	1	4	1	9	,,
490	Blank Spigot	0	5	0	9	1	2	,,
491	Double Collar	1	8	2	4	3	6	,,
492	Short Flange Socket ...	2	4	3	6	4	9	,,
493	Curved ,, ,, ...	2	4	3	6	4	9	,,
494	Flat Elbow Socket ...	3	0	4	0	5	3	,,
495	Curved ,, ,, ...	3	0	4	0	5	3	,,

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Hot Water Connections—*continued.*



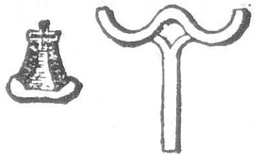
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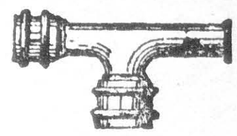
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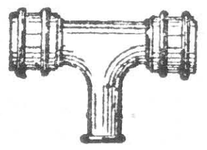
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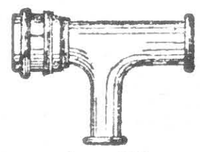
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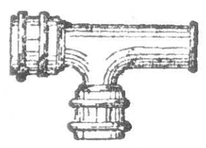
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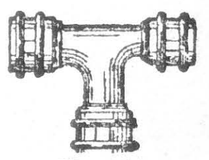
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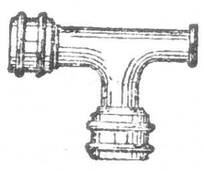
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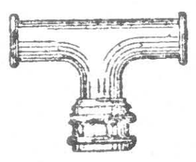
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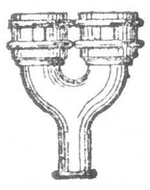
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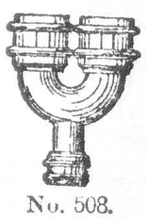
No. 505.



No. 506.



No. 507.



No. 508.

DIAMETER OF PIPE.

No.		2in. s.	d.	3in. s.	d.	4in. s.	d.	
496	Pipe Stand	—		0	7	0	9	each.
497	,, ,, ...	—		0	7	0	9	,,
498	Pipe Stand with loose Base	—		0	10	1	3	,,
499	,, ,, ,, ,, ,,	—		1	8	2	0	,,
500	Diminishing **T** Piece ...	2	0	3	3	4	0	,,
501	,, ,, ...	2	0	3	3	4	0	,,
502	,, ,, ...	2	0	3	3	4	0	,,
503	,, ,, ...	2	0	3	3	4	0	,,
504	,, ,, ...	2	0	3	3	4	0	,,
505	,, ,, ...	2	0	3	3	4	0	,,
506	**T** Piece	2	0	3	3	4	0	,,
507	Diminishing Outlet Syphon	3	4	5	6	7	6	,,
508	,, ,, ,, ...	3	4	5	6	7	6	,,

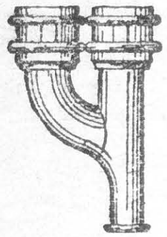
12, Park Place, Ealing, W.

SIR,—Please send me 5 Amateur Assistant Heating Apparatus. I had one last year, and it answered remarkably well. A. LOADER.

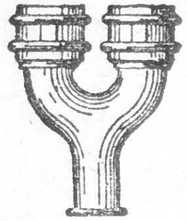
26, Whitepost Hill, Redhill.

DEAR SIR,—I have received Heating Apparatus safe and sound, and am very pleased with it, and thank you for prompt delivery of same.—Yours truly, T. A. HEATLEY.

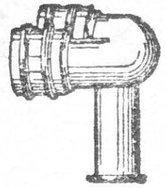
Hot Water Connections—*continued.*



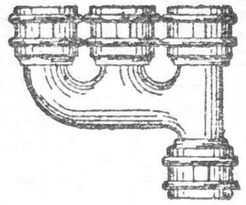
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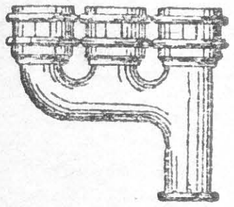
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No. 511

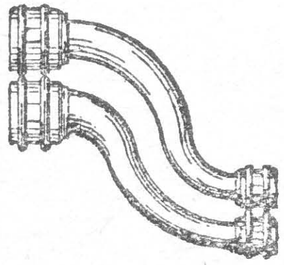


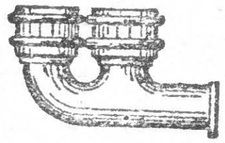
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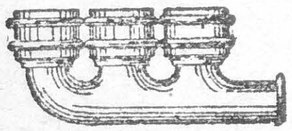
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No. 514.

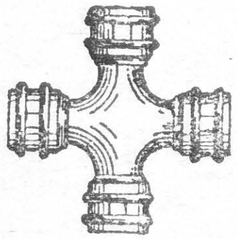




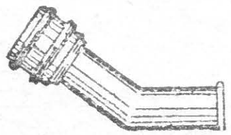
No. 51b.



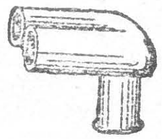
No. 516.



No. 517.



No. 518.

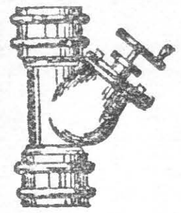


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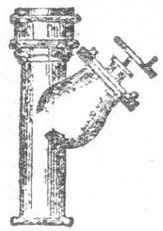
No.		Diameter of Pipe. 2in. s. d.	3in. s. d.	4in. s. d.	
509	Diminishing Branch Piece...	3 6	5 3	7 0	each.
510	Open Outlet Syphon ...	3 4	5 6	7 6	,,
511	Chair Syphon	3 9	6 0	7 6	,,
512	Three-way Branch Piece ...	6 0	8 3	11 0	,,
513	,, ,, ,, ...	6 0	8 3	11 0	,,
514	Diminishing Double Elbows	—	5 3	7 0	,,
515	Elbow Syphons	3 4	5 6	7 6	,,
516	Three-way Elbow Syphon...	5 6	8 0	11 0	,,
517	Cross Piece	3 6	5 6	7 6	,,
518	Octagonal Bend	2 0	3 0	4 0	,,
519	Coil Syphon	3 0	5 0	7 6	,,

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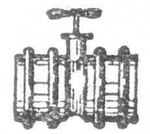
Hot Water Connections—*continued.*



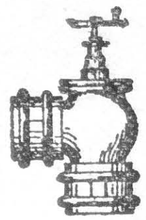
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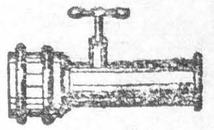
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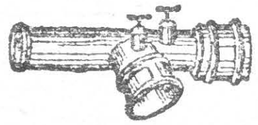
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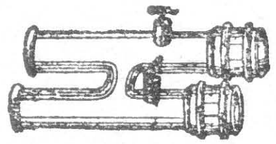
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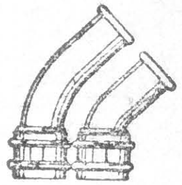
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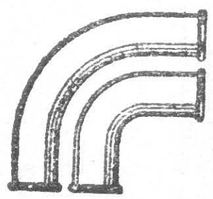
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No. 525.

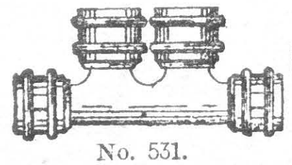


Nos. 527–528.

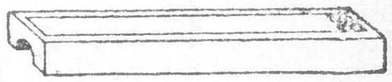


No. 529.

No. 530.



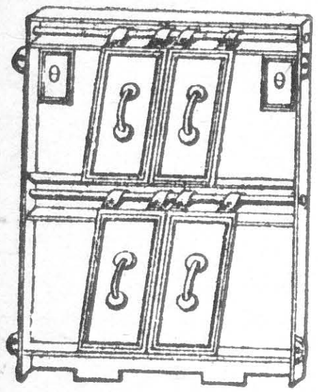
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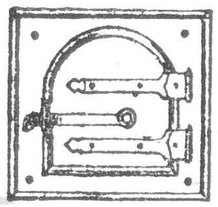
No. 532.

No.		Diameter of Pipe. 2in. s. d.	3in. s. d.	4in. s. d.	
520	Diaphragm Valve	13 3	16 6	20 0	each.
521	Diaphragm Valve Single Socket	13 3	16 6	20 0	,,
522	Throttle Valve Double Socket	9 0	11 0	12 6	,,
523	Improved Angle Valve ...	13 3	16 6	20 0	,,
524	Throttle Valve Spigot and Socket	9 0	11 0	12 6	,,
525	**T** Pipe with 2 Valves ...	25 0	32 0	37 6	,,
526	**H** Pipe, open or close, with 2 Valves	25 0	32 0	37 6	,,
527	Single Socket Elbow $\frac{1}{8}$-circle long	2 9	3 9	5 0	,,
528	Single Socket Elbow $\frac{1}{8}$-circle short	2 0	2 9	3 9	,,
529	Spigot Elbow long	2 3	3 0	4 3	,,
530	Spigot Elbow short... ...	1 4	2 4	2 9	,,
531	Double Branch Pipe ...	—	—	15 0	,,
532	Loose Trough	2 3	3 3	4 3	,,

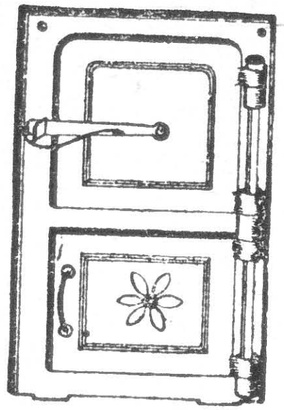
Furnace Doors and Frames.



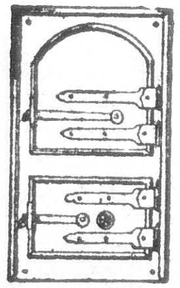
No. 533.



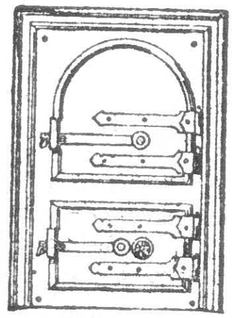
No. 534.



No. 535.



No. 536.

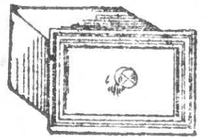


No. 537.

No.			£ s. d.	
533	Double Sliding Doors	18½in. by 14in.	0 12 0	each.
	With 1 each Furnace and Ashes Pit Door	20in. by 16in.	0 15 0	,,
	,, ,, ,,	21½in. by 18in.	1 0 0	,,
	With 2 each do. do	30in. by 26in.	1 10 0	,,
	Double Sliding Doors with 2 Soot Boxes	36in. by 32in.	2 10 0	,,
534	Single Flush Doors	15in. by 14½in.	0 9 0	,,
	,, ,, ,,	19in. by 18in.	0 12 6	,,
535	Extra Strong Flush Doors	30in. by 25in.	2 0 0	,,
	,, ,, ,,	34in. by 25in.	2 5 0	,,
	,, ,, ,,	38in. by 25in.	2 10 0	,,
536	Double Flush Doors	24in. by 15in.	0 15 0	,,
	,, ,, ,,	28in. by 19in.	1 0 0	,,
537	Double Recessed	29in. by 17in.	1 2 6	,,
	,, ,,	32in. by 20in.	1 10 0	,,

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Hot Water Appliances.



No. 538.



No. 539.



No. 540.



No. 541.

Soot Boxes and Plugs.

No. 538.

		s.	d.	
4in. by 4½in.	... ...	2	0	each.
6in. by 4½in.	... ...	2	3	,,
9in. by 4½in.	... ...	3	0	,,
9in. by 6in.	... ...	3	6	,,

Dead and Flue Plates.

No. 539.

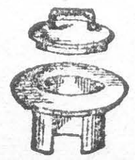
	s.	d.			s.	d.	
18in. by 6in. by ½in.	1	8	each.	48in. by 6in. by ½in.	4	3	each.
24in. by 6in. by ½in.	2	0	,,	18in. by 9in. by ½in.	2	6	,,
30in. by 6in. by ½in.	2	6	,,	24in. by 9in. by ½in.	3	0	,,
36in. by 6in. by ½in.	3	0	,,	30in. by 9in. by ⅝in.	4	0	,,
42in. by 6in. by ½in.	3	9	,,	36in. by 9in. by ⅝in.	6	0	,,

Furnace Bars in Sets of Twelve.

WITH TWO BEARERS.

Nos. 540, 541.

			£	s.	d.				£	s.	d.
12in.	...	Per Set	0	5	6	27in.	...	Per Set	1	0	0
14in.	...	,,	0	7	0	30in.	...	,,	1	2	6
16in.	...	,,	0	8	0	33in.	...	,,	1	7	6
18in.	...	,,	0	10	0	36in.	...	,,	1	10	0
21in.	...	,,	0	12	6	42in.	...	,,	2	0	0
24in.	...	,,	0	16	6	48in.	...	,,	2	15	0



Flue Tops and Lids.

No. 542.

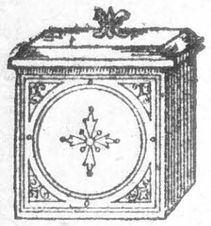
s.	d.		s.	d.		s.	d.		s.	d.	
6	0	...	8	0	...	10	0	...	12	6	each.

Priest Croft, Ifield, Crawley.

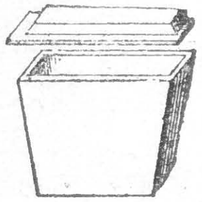
DEAR SIRS,—Very many thanks for the goods received in excellent condition, everything going together beautifully. The Stove casts a splendid heat all over building. We are very pleased with everything, and shall certainly recommend you to our friends.—Yours truly,

J. D. LILLICOTE.

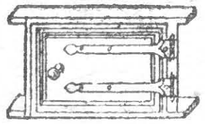
Hot Water Appliances—*continued.*



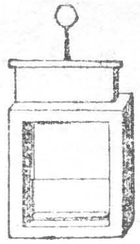
No. 543.



No. 544.



No. 545.



No. 546.

Ornamental Cisterns and Covers.

				£	s.	d.	
No. 543.—12in. long,	7in. wide,	12in. deep	... ...	0	6	6	each.
15in. ,,	8in. ,,	15in. ,,	... ...	0	10	6	,,
19in. ,,	10in. ,,	16in. ,,	... ...	0	15	0	,,
24in. ,,	10in. ,,	18in. ,,	... ...	1	0	0	,,
30in. ,,	15in. ,,	20in. ,,	... ...	1	15	0	,,
34in. ,,	15in. ,,	22in. ,,	... ...	2	0	0	,,

Plain Supply Cisterns and Covers.

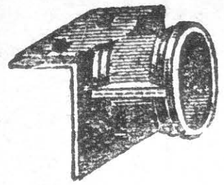
				s.	d.	
No. 544.—12in. long,	6in. wide,	9in. high	... ...	3	0	each.
12in. ,,	7in. ,,	12in. ,,	... ...	3	9	,,
15in. ,,	7in. ,,	12in. ,,	... ...	5	6	,,
18in. ,,	7in. ,,	14in. ,,	... ...	7	6	,,

Soot Doors and Frames.

		s.	d.	
No. 545.—5in. by 4in.	... ...	1	8	each.
6in. by 5in.	... ...	2	0	,,
7in. by 5½in	... ...	2	3	,,
8in. by 6in.	... ...	2	4	,,
10in. by 7in.	... ...	2	9	,,
12in. by 8½in.	... ...	4	0	,,

Dampers and Frames.

		s.	d.	
No. 546.—6¾in. long by 5¼in. wide	... ...	2	0	each.
8in. ,, 6in. ,,	... ...	2	3	,,
9in. ,, 7in. ,,	... ...	2	9	,,
10in. ,, 8in. ,,	... ...	3	6	,,
11in. ,, 9in. ,,	... ...	4	3	,,
12in. ,, 9in. ,,	... ...	5	0	,,
14½in. ,, 11½in. ,,	... ...	6	6	,,
18in. ,, 12in. ,, Improved with wide bearing	... ...	7	6	,,



Flow and Return Sockets

Fixed on Boilers.

This Socket is specially adapted for use in cases where Boiler has to be kept up through water rising in stoke-hole.

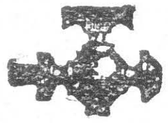
No. 547.	2in. s. d.	3in. s. d.	4in. s. d.	
Flat	5 0 ..	6 0 ..	7 0	per Socket.
Elbow	6 0 ..	7 0 ..	8 0	,,
Angle	6 0 ..	7 0 ..	8 0	,,

Drilling and tapping Boilers :—

½in. s. d.	¾in. s. d.	1in. s. d.	1¼in. s. d.	1½in. s. d.	2in. s. d.	
1 0 ..	1 2 ..	1 4 ..	1 8 ..	1 10 ..	2 0	per hole.

Drilling and tapping Connections for air pipes or cocks .. .. .. 5d. each.

	½in.	¾in.	1in.	
Drilling Cisterns	5d. ..	6d. ..	8d.	per hole

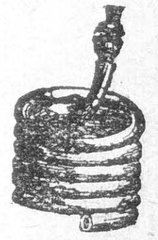


No. 548.

Air Cocks.

Brass.

½in. s. d.	¼in. s. d.	
1 0	1 2	



No. 549.

Open Air Pipes.

With Brass Union attached.

4 s. d.	6 s. d.	8 s. d.	10 s. d.	12 feet long. s. d.	
1 4 ..	1 9 ..	2 0 ..	2 3 ..	2 6	each.

Brass Air Pipe Unions to connect to compo pipe, 6d. each.

Indiarubber Ring Expander.

This Expander will be found of great assistance when fixing pipes with Indiarubber rings, and effects a considerable saving in labour.



No. 550.

2in. s. d.	3in. s. d.	4in. s. d.	
1 7 ..	1 6 ..	2 0	each.

The Indiarubber ring being rolled upon taper end of expander, the opposite end is inserted in spigot end of pipe or connection and the ring rolled back upon pipe. By this method the ring is gradually and equally expanded, and at once assumes its proper position upon pipe.

Indiarubber Rings (round and square) for Socket and Expansion Joints. Average number of Rings per lb.—8 4in., 12 3in., 16 2in.	4s. per lb.
Prepared Iron Cement, for Socket or Boiler Joints	8s. per cwt.
Iron Borings	6s. ,,
Red and White Lead (Mixed) for Socket Joints	4d. per lb.
Best White Caulking Yarn	4d. ,,

Parts of "Invincible" Boiler.

		Cash Price.
No. 1.	Front complete	16/-
No. 2.	„ „	18/6
No. 1.	Bottom Front with Doors and Protecting Plate	8/-
No. 1.	Top Front Door Nozzle Damper	9/-
No. 2.	Lower Front	8/6
No. 2.	Top „	11/-
No. 1.	Protecting Plate	3/6
No. 2.	„ „	4/6
No. 1.	Nozzle	5/-
No. 2.	„	6/6
No. 1.	Fire Bars	2/6
No. 2.	„ „	4/-
Doors for No. 1, per set	... ...	1/6
„ No. 2, „	... ...	2/6
Lower Front No. 3	... ...	11/6
Top „ No. 3	... ...	14/6
No. 3.	Front Complete	25/-
No. 1.	Soot Door and Postage	1/3

Old parts to be replaced should be returned to us with order, or, if not convenient to send same, a paper template will do.



No. 551.

Imperial Black Varnish.

For Iron Fences, Wood Palings, Farm Buildings, Poultry Houses, &c.

1 gal., 2s.; 5 gals., 7s.; 18 gals., 20s.; 40 gals., 35s. Put on rail at our Works. Cans and Casks included (not returnable).

Cooper's Pipe Composition.

No. 552.

A coat of this Composition on Boilers and Pipes preserves, prevents rust, and gives neat appearance. Much better than paint. Cheap and lasting.

Price, 5s. per gallon (cans included).

24, Victoria Street, Stone.

GENTLEMEN,—I beg to acknowledge receipt of Heater, and am well pleased and satisfied with it. It answers admirably, and I thank you very much. —Yours very truly, T. GOODALL.

54, Victoria Street, New Brimington, Chesterfield.

GENTLEMEN,—Please forward me your Catalogue. I may say I have had one of your Heating Apparatus working five years, and it is as good as when I bought it.—Yours truly, A. COPE.

SECTION VIII.

PRICE LIST

OF

Horticultural Timber,

WELL SEASONED

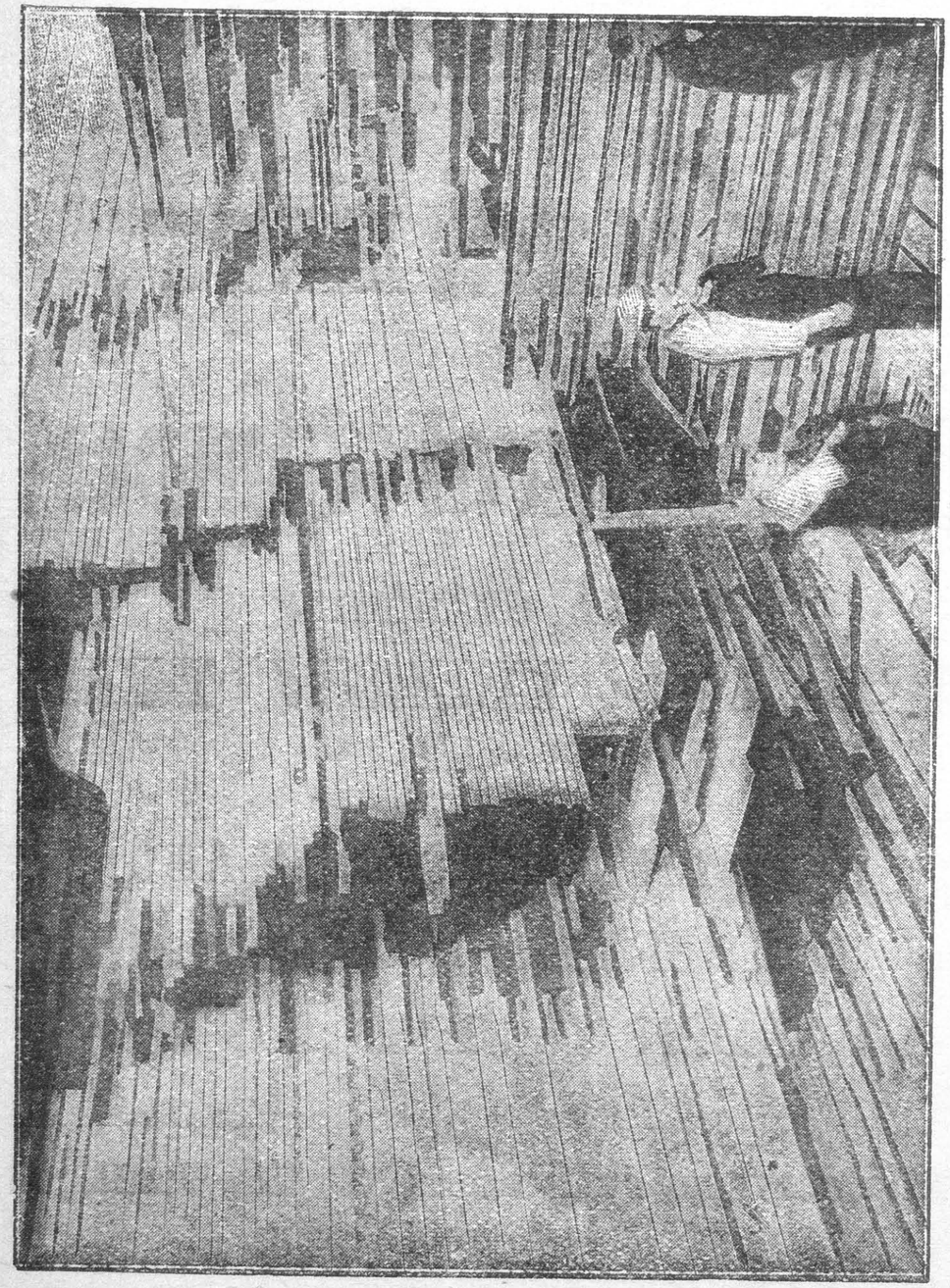
RED AND YELLOW DEAL.

ALSO

GARDEN TRELLIS, GLASS, GLAZIERS' DIAMONDS, GARDEN LIGHTS, &c., &c.

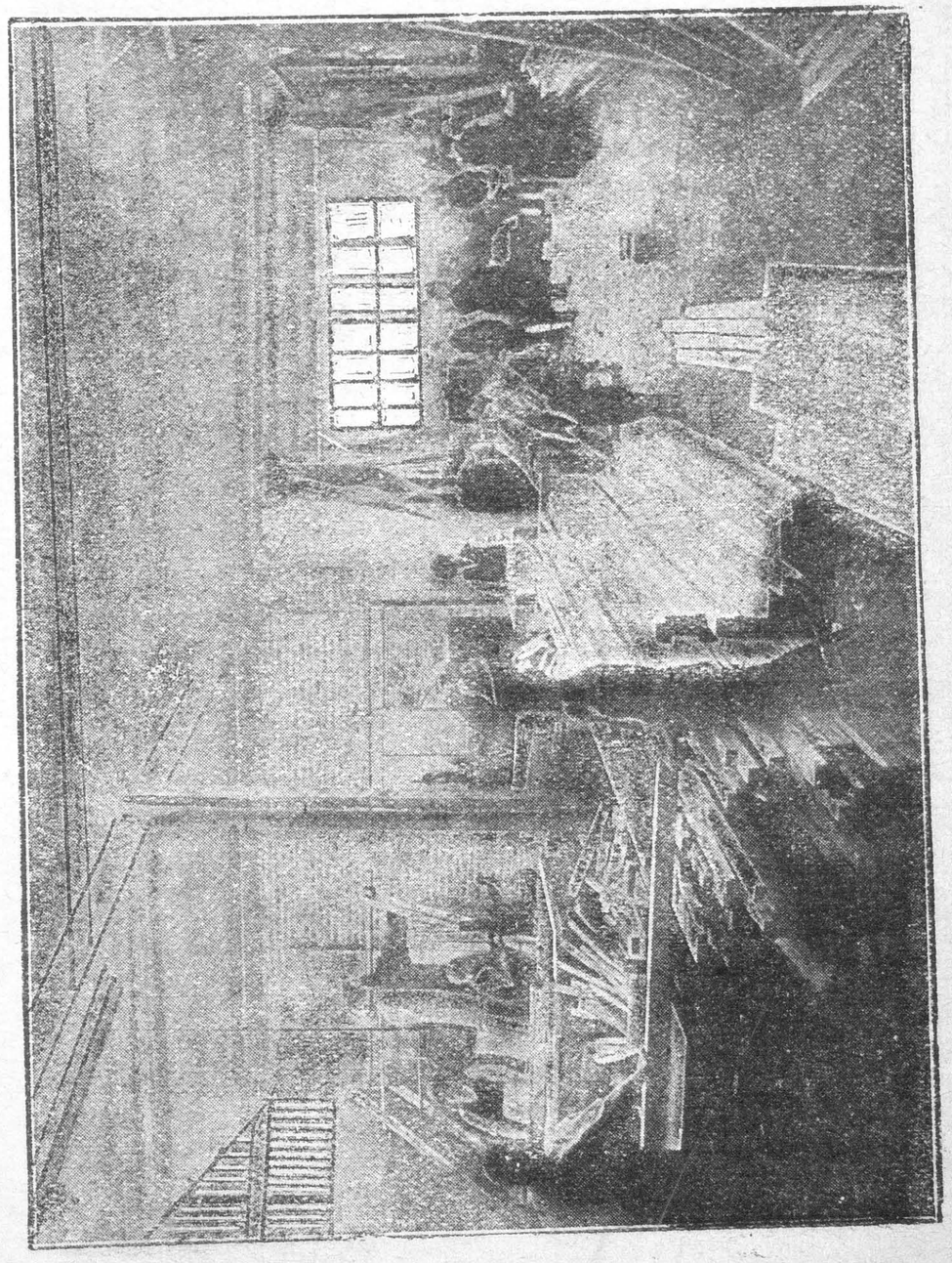
Estimates for all kinds of Horticultural Work on application.

All Timber consigned at the Cheap Timber Rate to all parts of the Country.

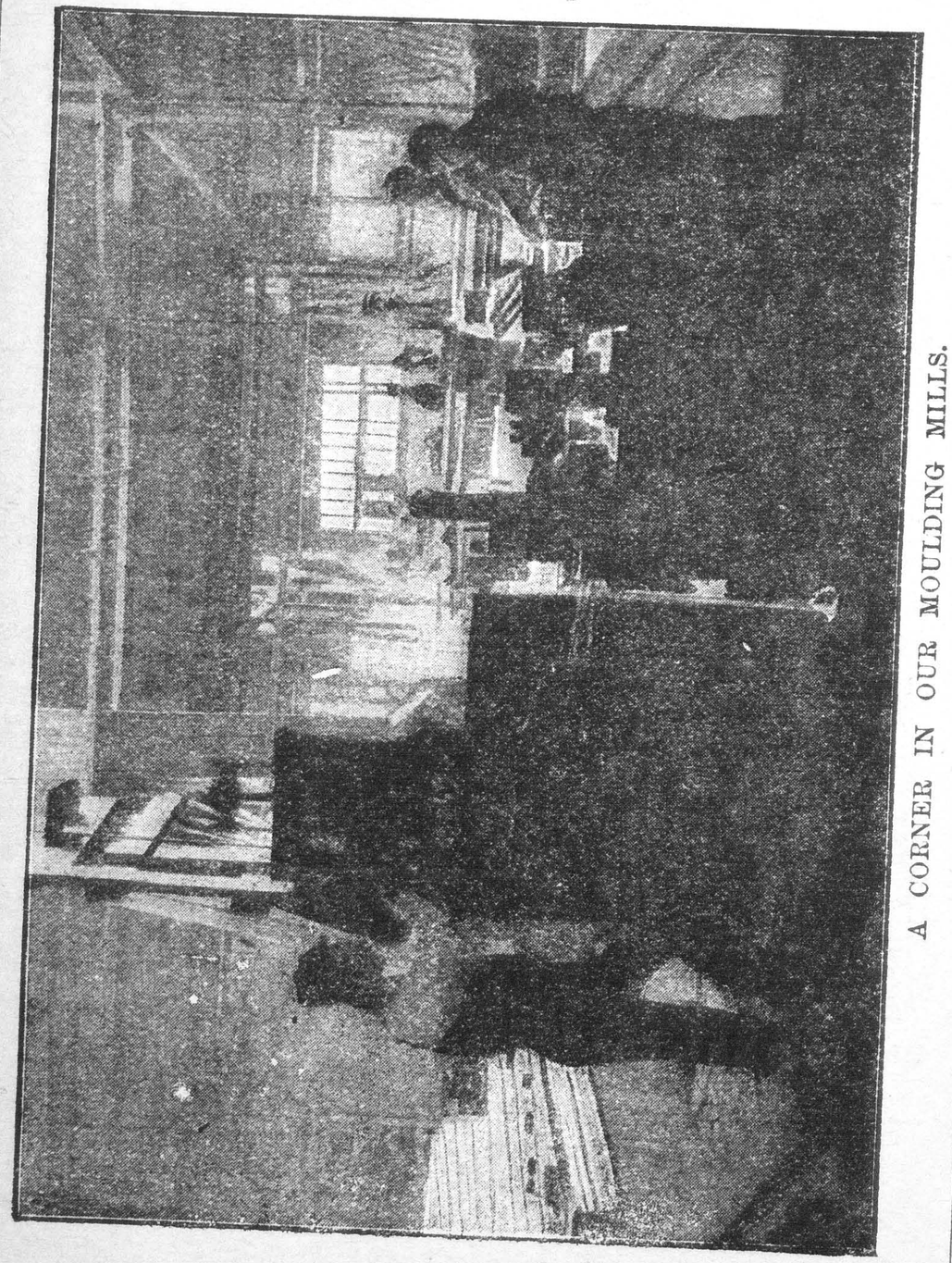


A CORNER IN OUR TIMBER YARD.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.



A CORNER IN OUR MOULDING MILLS.



A CORNER IN OUR MOULDING MILLS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Horticultural Timber.

Doors, Matching, Flooring, Planed and Unplaned Timber, &c.

Sashbars.

1½in., 3s. 6d. per 100ft. run; 3in. by 1in., 5s. 6d. per 100ft. run.
2in., 4s. 6d. ,, 3in. by 1¼in., 6s. 0d. ,,
2½in., 5s. 3d. ,, 3in. by 1½in., 6s. 9d. ,,

Half-Glass Greenhouse Doors.

	s.	d.	
Size 5ft. 6in. by 2ft. 6in.	6	0	each.
,, 6ft. by 2ft. 6in.	7	0	,,

Marginal Light Door.

,, 6ft. 6in. by 2ft. 6in. ... ... 10 0 ,,

Ventilators.

Top or Side, 2ft. 6in. by 2ft. ... ... 1 6 ,,

Matchboards.

	s.	d.	
½in., Tongued and Grooved	7	0	per 100 sq. ft.
¾in., ,, ,, ...	9	6	,,
1in., ,, ,, ...	13	0	,,
1¼in., ,, ,, ...	16	0	,,

Floorboards.

¾in.	9	0 ,,
1in.	12	6 ,,

Boards (Unplaned).

	Per foot run.		Per 100 foot run.
1½ by 11	2¾d.		
1½ by 9	2¼d.	1 by 6	8/-
1½ by 7	1¾d.	1 by 5	6/-
1½ by 6	1½d.	1 by 4½	5/-
1½ by 5	1¼d.	1 by 4	4/6
1½ by 4½	1⅛d.	¾ by 11	12/-
1½ by 4	1d.	¾ by 9	10/-
1¼ by 11	2½d.	¾ by 7	8/-
1¼ by 9	2d.	¾ by 6	6/6
1¼ by 8	1¾d.	¾ by 5	5/6
1¼ by 7	1¼d.	¾ by 4½	4/6
1¼ by 6	1⅛d.	¾ by 4	3/9
1¼ by 5	1d.	½ by 11	10/-
1¼ by 4½	1d.	½ by 9	9/-
1¼ by 4	¾d.	½ by 7	6/-
1 by 11	2d.	½ by 6	5/-
1 by 9	1½d.	½ by 5	4/-
1 by 8	1¼d.	½ by 4	3/-
1 by 7	1⅛d.		

Horticultural Timber—*continued.*

Deals and Battens (Unplaned).

	Per foot run.			Per 100 foot run.
4 by 11	1s.	2 by 4		10/6
4 by 9	8d.	2 by 3		8/-
4 by 8	6d.	2 by 2½		6/6
4 by 7	4¾d.	2 by 2		5/6
4 by 6	4d.	1½ by 3		7/-
4 by 5	3½d.	1½ by 2		5/-
4 by 4	3d.	1½ by 1½		4/6
3 by 11	5½d. 6½d. 7d.			
3 by 9	4d. 5d. 6d.			
3 by 8	3½d.			
3 by 7	3¼d.			
3 by 6	2¾d.			
3 by 5	2¼d.			
3 by 4½	2d.			
3 by 4	1¾d.			
3 by 3½	1½d.			
3 by 3	1½d.			
2½ by 7	2⅝d.			
2½ by 6	2¼d.			
2¼ by 4	1½d.			
2½ by 3	1¼d.			
2 by 9	3d.			
2 by 8	2½d.			
2 by 7	2⅛d.			
2 by 6	1¾d.			
2 by 5	1½d.			

Greenhouse Ridge Boards

(planed and grooved both sides).

1¼in. by 6in., at 11/-
1¼in. by 7in., at 12/-
1½in. by 6in., at 13/6
1½in. by 7in., at 14/6
per 100ft. run.

Planed Battens, &c.

These goods are planed all over. (The sizes specified are before preparation.)

4 by 4 ... 3½d.	per foot run.	2 by 3 ... 9/-	per 100ft. run.
3 by 9 ... 4¾d., 5⅜d., 6¾d.		2 by 2½ ... 8/-	,,
3 by 8 ... 4d.	per foot run.	2 by 2 ... 7/-	,,
3 by 7 ... 3¾d.	,,	1½ by 3 ... 7/6	,,
3 by 6 ... 3¼d.	,,	1½ by 2½ ... 6/6	,,
3 by 5 ... 20/-	per 100ft. run.	1½ by 2 ... 5/6	,,
3 by 4½ ... 18/-	,,	1½ by 1½ ... 5/-	,,
3 by 4 ... 16/-	,,	1 by 4 ... 6/3	,,
3 by 3 ... 12/6	,,	1 by 3 ... 5/-	,,
2½ by 7 ... 3¼d.	per foot run.	1 by 2 ... 4/-	,,
2½ by 6 ... 2¾d.	,,	1 by 1 ... 3/-	,,
2½ by 5 ... 2¼d.	,,	¾ by 4 ... 4/6	,,
2½ by 4 ... 14/-	per 100ft. run.	¾ by 3 ... 3/6	,,
2½ by 3½ ... 12/6	,,	¾ by 2 ... 3/-	,,
2½ by 3 ... 11/-	,,	¾ by 1 ... 2/9	,,
2½ by 2½ ... 10/-	,,	½ by 4 ... 4/3	,,
2 by 9 ... 3¾d.	per foot run.	½ by 3 ... 3/3	,,
2 by 8 ... 3d.	,,	½ by 2 ... 3/-	,,
2 by 7 ... 2½d.	,,	½ by 1½ ... 2/9	,,
2 by 6 ... 2⅛d.	,,	½ by 1 ... 2/6	,,
2 by 5 ... 1⅞d.	,,	¼ by 1 ... 1/6	,,
2 by 4 ... 1½d.	,,		

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Horticultural Timber—*continued.*

Slating Battens, &c.

1 by 3 ... 3/6	per 100ft. run.	¾ by 3 ... 2/6	per 100ft. run.
1 by 2½ ... 3/-	,,	¾ by 2½ ... 2/-	,,
1 by 2 ... 2/6	,,	¾ by 2 ... 1/9	,,
1 by 1½ ... 2/-	,,	¾ by 1½ ... 1/6	,,
1 by 1 ... 1/9	,,	¾ by 1 ... 1/3	,,

Various.

	s.	d.	
Feather-Edge Boards	7	6	per square.
Finials, Machine Turned ...12in. high, 6d. each	4	6	per doz.
Quadrants, with Pulleys for Opening Top Ventilators	10	0	,,

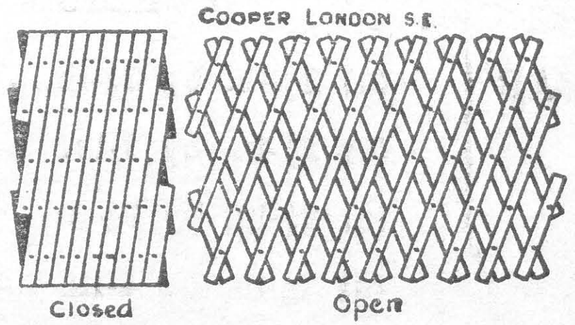
Casement Stays, Japanned, Malleable, for Opening Ventilators—

12in.	15in.	18in.	21in.	24in.	27in.	30in. long.
9/3	10/9	12/3	13/9	16/-	18/6	20/- per doz.

Rim Locks, with Brass Fittings, Complete ... 1/6 and 2/6 each.
Nails, Best English Cut, any size ... ... 2d. per lb.

Special Quotations for Large Quantities.

Wood Garden Trellis.



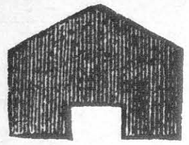
No. 553.

Size of Laths, ¼in. by 1in.

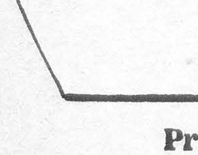
Size when open. Long. ft.	High. ft.	Cash Price. Unplaned. s.	d.	Cash Price. Planed. s.	d.
12 by 1		0	6	1	6
12 by 1½		0	9	1	9
12 by 2		0	11	2	8
12 by 2½		1	2	3	0
12 by 3		1	4	3	6
12 by 3½		1	9	4	0
12 by 4		2	0	5	0
12 by 5		2	9	6	0
12 by 6		4	3	7	0

This Trellis is folding and admirably adapted for Ornamental Horticultural and other purposes, will last for years, and when not in use can be closed and packed away in a very small space.

Horticultural Timber—*continued.*



Top Rail



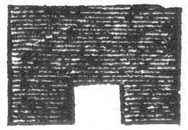
Bottom Rail

Trellis Rails.

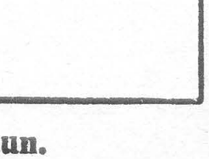
No. 554.

Cash Price.

Top Rail at 8s. per 100ft. run.
Bottom Rail at 8s. per 100ft. run.
Outside Posts at 8s. per 100ft. run.
Inside Posts at 8s. per 100ft. run.



Outside Post



Inside Post

Sashbars, Purlins, Plate, Ridge, Rafters, Capping, Drip, etc., etc.

No. 20

PURLINS

(a) 2½-in. by 2½-in. ... 10/-
(b) 2½-in. by 3-in. ... 11/-
(c) 2½-in. by 3½-in. ... 12/6
(d) 2½-in. by 4-in. ... 14/-

Prices are calculated at per 100ft. run.

Priest Croft, Ifield, Crawley, Sussex.

DEAR SIRS,—Sorry to have neglected writing before, but have been very busy. I thank you for the wood received from you, which is just what I want. I am more than pleased with it, and shall recommend any of my friends in like need to send to you.—Yours truly,
W. BAYFORD.

29, Rhos Street, Ruthin, Denbighshire.

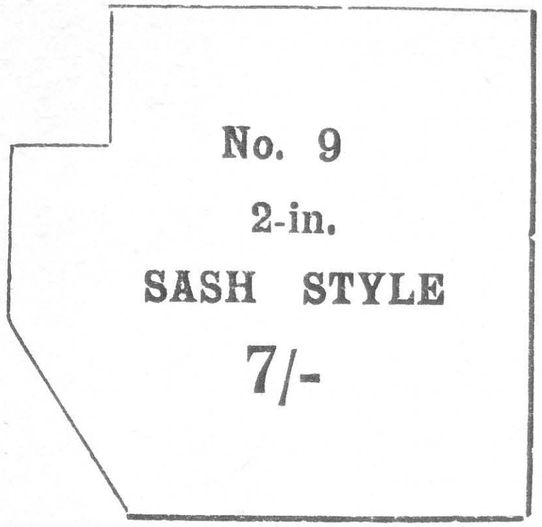
DEAR SIR,—I am quite pleased with your goods (timber and glass) supplied. —Yours truly,
JAMES CURTIS.

11, Pyecroft Street, Chester.

DEAR SIR,—The timber and glass arrived on Friday, am pleased with your quality. Please send catalogue.
JOSEPH THOMAS

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Horticultural Timber—*continued.*



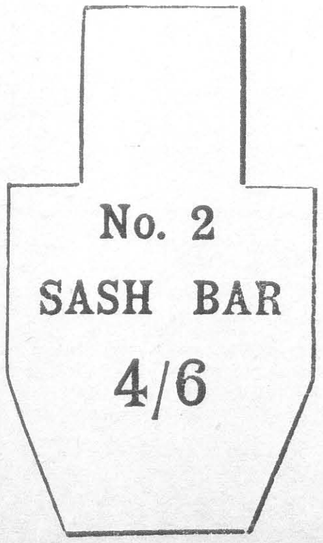
No. 22
PURLINS

(a) 1½-in. by 1½-in. 5/-
(b) 1½-in. by 2-in. 5/6
(c) 1½-in. by 2½-in. 6/6
(d) 1½-in. by 3-in. 7/6

No. 11
VENTILATOR STYLE

(a) 1½-in. by 2-in. ... 6/-
(b) 1½-in. by 2½-in. ... 7/-
(c) 1½-in. by 3-in. ... 8/-





No. 21
PURLINS

(a) 2-in. by 2-in. 7/-
(b) 2-in. by 2½-in. 8/-
(c) 2-in. by 3-in. 9/-
(d) 2-in. by 3½-in. 10/6

Prices are calculated at per 100ft. run.

Horticultural Timber—*continued.*

No. 17

SIDE PLATE

(a) 3-in. by 3-in. 12/6
(b) 3-in. by 3½-in. 14/-
(c) 3-in. by 4-in. 16/-
(d) 3-in. by 4½-in. 18/-
(e) 3-in. by 5-in. 20/-

No. 14

CAP

IN.	IN.		IN.	IN.	
(a) 1¼	by 3½	—7/-	(d) 1½	by 3½	—8/6
(b) 1¼	by 4	—8/-	(e) 1½	by 4	—9/6
(c) 1¼	by 4½	—9/-	(f) 1½	by 4½	—10/6

Prices are calculated at per 100ft. run.

Horticultural Timber—*continued.*

No. 4

3-in. SASH BAR

(a) 1-in. thick 5/6
(b) 1¼-in. „ 6/-
(c) 1½-in. „ 6/9

No. 5

STRENGTHENING or DIVISION RAFTER

8/6

No. 10

VENTILATOR TOP RAIL

(a) 1½-in. by 2-in. ... 6/-
(b) 1½-in. by 2½-in. ... 7/-
(c) 1½-in. by 3-in. ... 8/-

No. 12

PIT LIGHT STYLE

9/-

Prices are calculated at per 100ft. run.

Horticultural Timber—*continued.*

No. 16
VENTILATOR BOTTOM RAIL or DRIP
(a) 3-in. 3/6 (c) 4-in. 4/6
(b) 3½-in. 4/- (d) 4½-in. 5/-

No. 15
PIT LIGHT BOTTOM RAIL
8/6

SPECIAL QUOTATIONS FOR LARGE QUANTITIES.

No. 7
END RAFTER
8/6

No. 8
1½-in.
SASH STYLE
5/6

Prices are calculated at per 100ft. run.

Horticultural Timber
—continued.

SPECIAL QUOTATIONS FOR LARGE QUANTITIES.

No. 14
END RAFTER
12/-

No. 6
STRENGTHENING
or
DIVISION RAFTER
12/-

Prices are calculated at per 100ft. run.

No. 18
END PLATE

(a) 3-in. by 3-in.	...	...	12/6
(b) 3-in. by 3½-in.	...	...	14/-
(c) 3-in. by 4-in.	...	...	16/-
(d) 3-in. by 4½-in.	...	...	18/-
(e) 3-in. by 5-in.	...	...	20/-

No. 19
PURLINS

(a) 3-in. by 3-in.	...	12/6
(b) 3-in. by 3½-in.	...	14/-
(c) 3-in. by 4-in.	...	16/-
(d) 3-in. by 4½-in.	...	18/-

Special Quotations for Large Quantities.

Prices are calculated per 100ft. run.

No. 23 RIDGE

(b) 1½-in. by 6-in. 13/6
(d) 1½-in. by 7-in. 14/6

(a) 1¼-in. by 6in.....11/-
(c) 1¼-in. by 7in.....12/-

No. 13
PIT LIGHT TOP RAIL
10/-

Prices are calculated at per 100ft. run.

The foregoing Prices are for good, sound, well-seasoned Yellow Deal.

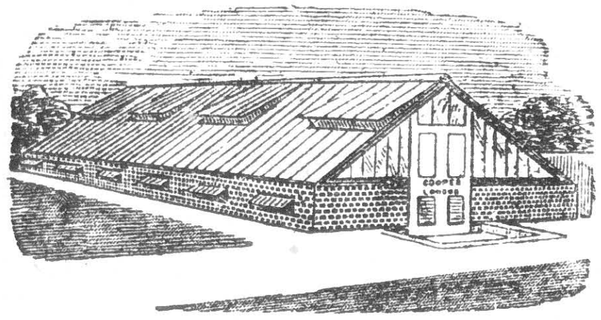
ESTIMATES FOR ALL KINDS OF HORTICULTURAL WORK ON APPLICATION, FREE OF COST.

Quotations for any size will be forwarded on application.

For large quantities Special Prices will be quoted.

All Timber consigned at the Cheap Timber Rate to all parts of the country.

Materials required for Building Span Roof Cucumber House, 100ft. by 12ft., as illustration.



No. 555.

SPECIFICATION.

Good, sound, well-seasoned timbers, all planed, rabbeted, &c., ready for use. Ends, Door, and Ventilators made. Any handy man can erect.

Any alteration can be made to suit any size house at a corresponding alteration in price.

1 pair Ends (made), as illustration,
105ft. 1¼in. by 6in. Ridge,
105ft. 1in. by 4in. Capping,
230ft. 3in. by 3½in. Plate,
210 ¾in. by 3in. Drip,
120—8ft. 1¼in. by 3in. Bars,
15 Ventilators, about 4ft. by 2ft.,
15 ditto Seats, about 60ft.,
1 Door, 6ft. by 2ft. 6in.

CAREFULLY PUT ON RAIL AT OUR WORKS FOR THE SUM OF £10.

When two or more Houses are required for building in one block Centre Gutters will be supplied at same price. Special quotation for Glass, Paint, and Heating Apparatus; also for erecting in any part free on application.



Cooper's Ready-mixed Paint.

No. 556.

The Most Reliable, Quick-drying, Ready-mixed Paint in the Trade.
Will stand any weather.
Made in all Colours. Tins Free.
Carriage Forward.
7lbs. 2s., 14lbs. 3s. 9d., 28lbs. 7s., 56lbs. 13s. 6d., 112lbs. 25s.
Packing, if desired, 3d. per 7lb. extra.
Try a Sample Tin. State colour required when ordering.
Prices quoted are subject to market fluctuations.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Horticultural Glass.

4th 21 oz. 200 ft. Boxes.

Owing to Market Fluctuations special low current prices will be quoted upon application or see our Advertisements.

We hold a very large stock here, including all the undermentioned sizes.

8 by 6	14 by 9	13 by 11	18 by 12	16 by 14	18 by 16
9 by 7	15 by 9	14 by 11	20 by 12	18 by 14	20 by 16
10 by 8	11 by 10	12 by 12	22 by 12	20 by 14	24 by 16
12 by 8	12 by 10	13 by 12	24 by 12	22 by 14	20 by 18
11 by 9	13 by 10	14 by 12	17 by 13	24 by 14	22 by 18
12 by 9	14 by 10	16 by 12	20 by 13	20 by 15	24 by 18
13 by 9	12 by 11				

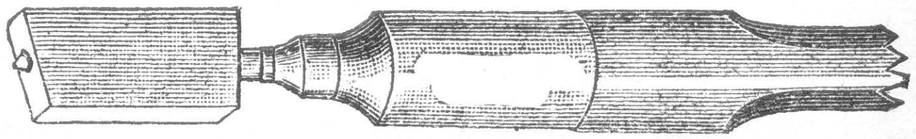
Glass cut to any size required.
Large size for cutting up, 15oz., in 300ft. cases; 21oz., in 200ft. cases. All Glass is cut and packed in own warehouse.
Quality of glass and careful packing guaranteed.

Special Quotations given for Large Quantities. Have Cash Estimate from us before ordering elsewhere.

Putty, prepared especially for Greenhouse work, 28lb. 2/6, 56lb. 4/9, 8/6 per cwt.

Glaziers' Diamonds.

No. 557.



Every Diamond sold by us we guarantee finest quality, *and made by us.* Buy of the Manufacturers.
New Sheet Diamond, perfect, Cash Price, 7/6, 10/6, 15/-
We also have a Special Line for Gardeners and Amateurs who require them only for occasional use at 5s. each.

American Glass-cutter.

No. 558.

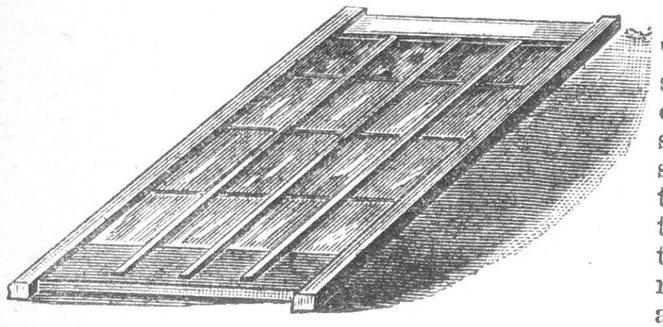
With Rosewood Handle.
Cash Price, 9d. each, post free.

3, Temple Place, Altofts, Normanton, Yorks.

DEAR SIR,—I have received the Frames and Glass safely, and am highly satisfied with them.—Yours truly,

A. MALPASS

Garden Lights.



No. 559.

These Lights are substantially constructed of good, sound, well-seasoned deal. The stiles, which are 2in. thick, being well mortised and pinned to tenoned rails, properly rabbeted for the glass, and fitted with 2in. sash bars. The Glazed Lights are painted one coat, and the glass in same nailed and bedded in superior oil putty.

Put on rail at our Works at the following cash priees.

	UNGLAZED LIGHTS.			LIGHTS GLAZED WITH 21oz.		
	Each.	Per doz.	Per 100.	Each.	Per doz.	Per 100.
	s. d.	s. d.	£ s. d.	s. d.	£ s. d.	£ s. d.
6ft. by 4ft.	3 0	32 6	12 15 0	9 0	5 0 0	37 10 0
5ft. by 3ft. 6in.	2 9	29 0	11 0 0	7 6	4 5 0	32 0 0
4ft. by 3ft.	2 6	27 0	10 5 0	6 0	3 7 6	25 15 0
3ft. by 2ft.	1 8	18 0	6 17 6	4 0	2 5 0	17 0 0

Unglazed Lights with sufficient 21oz. glass to glaze same.	ft.	ft.	in.	Each. s. d.	Per doz. £ s. d.	Per 100. £ s. d.
	6	by 4	0	7 0	.... 3 15 0	.... 28 10 0
	5	by 3	6	5 9	.... 3 3 0	.... 24 0 0
	4	by 3	0	4 6	.... 2 10 0	.... 19 0 0
	3	by 2	0	2 9	.... 1 10 0	.... 11 10 0

Iron Strengthening Bar, 1s. extra.

Prices given by return of post for all kinds of Sashes and Doors, glazed and painted.

Special strong Market Gardeners' Light for rough use, 3in. by 2in. stiles, with iron bar, 6ft. by 4ft., 4s. 9d. each, 54s. per dozen, unglazed.

Special Quotations for large quantities.

Marlborough.

SIRS,—Lights received quite safe. I am very pleased with them.—Yours truly,

A. HUMPHRIES.

9, Capel Road, Faversham.

SIR,—The Lights arrived safely and am perfectly satisfied with them.—Yours truly,

C. COSBURN.

Fillongley Hall Gardens, Coventry.

DEAR SIRS,—Goods as per order received safely. The Lights appear sound and strong.—Yours sincerely,

W. BOTT.

21, Elm Terrace, Eltham.

SIR,—Received Garden Lights to-day and they are very satisfactory.—Yours truly,

W. WELLS.

5, Leazes Terrace, Bishop's Auckland.

DEAR SIR,—The Lights to hand in good condition, for which I am obliged.

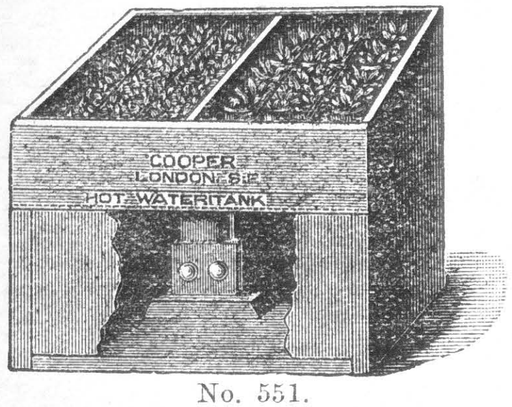
A. THOMPSON.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.



A CORNER IN OUR GLASS DEPARTMENT.

The "Rapid" Propagator.



No. 551.

The only perfect Propagator for Raising Plants from Seeds, Slips, or Cuttings.

This Propagator is the best and cheapest now before the public, and will be found especially serviceable to amateurs and gardeners who require to strike cuttings and raise seeds in a short space of time.

One of these Propagators will raise large quantities of plants in the spring, thus, to a great extent, dispensing with the necessity of striking cuttings in the autumn, it being well known that many cuttings fall victims to the frost and damp atmosphere so prevalent in this country. This method of propagating saves the trouble and annoyance resulting from the loss of so many plants in the winter time, and also makes it unnecessary to occupy so much space in storing a large quantity of autumn cuttings.

The Propagators are composed of an outside casing with hinged glazed sash on top. The bed or bottom is formed of a tank, in which a constant circulation of hot water is kept up by the heater (see illustration), the pots being plunged in a bed of cocoa-nut fibre refuse, which should be kept moist. It is heated by oil, one pint of which will last 30 hours. Put on rail at our Works complete at the following respective prices :—

		£	s.	d.
Lean-to shape	1ft. 8in. by 1ft. 6in.	1	1	0
,, ,,	2ft. 1in. by 1ft. 10in.	1	10	0
,, ,,	4ft. by 2ft.	2	10	0
Span-roof shape	4ft. by 4ft.	4	10	0

Estimates for larger sizes free on application.

Wood Propagating Trays.

For sowing seeds, sticking cuttings, &c., in bundles, ready for nailing together.

Length. in.	Depth. in.	Width. in.	Cash Price. Per 100. s.	d.
12	9	2	8	0
15	10	2½	10	0
18	12	3	15	0

Outside measure. Other sizes to order.

50, Mill Lane, Fazeley, nr. Tamworth.

DEAR SIR,—Received Trellis safe and am very pleased with it, and shall always remember you when I require anything else.—Yours truly,

WALTER LAKIN.

SECTION IX.

PRICE LIST

— OF —

Horticultural Manures,

Fertilizers, Insecticides, Worm Destroyers, Weed Destroyers, Sunshades, Flower Sticks, Peats, Wood Labels, &c., &c.

We have great pleasure in submitting to you our

REVISED LIST

of

Horticultural Manures, Sundries, &c.

Lowest possible prices are quoted. We have taken great pains in blending the various Manures to ensure success, and they are now commanding a very great sale all over the Kingdom.

The system we have adopted enables our Manures to come within the reach of all classes, well knowing how essential it is to have a good Fertilizer for the production of strong, healthy plants and good bloom, and if our instructions are strictly adhered to they cannot fail to give satisfaction.

Prices in this section are Carriage Paid *only* where stated.

Dr A. B. GRIFFITHS, F.R.S.E., F.C.S.,
Analytical Chemist and Assayer;
Consulting Chemist to National
Amateur Gardeners' Association;
Lecturer on Chemistry, Botany, etc.

12, KNOWLE ROAD,
BRIXTON, LONDON.

I hereby certify that I have made a careful examination of the horticultural Manures supplied by Mr. William Cooper. They are undoubtedly first-class plant-foods for vegetables, flowers, and fruit-trees.

A. B. Griffiths, Ph.D., F.R.S.E., F.C.S.,
Author of "A Treatise on Manures", "The Diseases of Crops", "Manures and their Uses," etc.

WILLIAM COOPER'S
Special Lawn Fertilizer.

We have made the study of Lawn Fertilizers a speciality, and compound different receipts according as the Fertilizer is to be used, for Winter, Spring, or Summer application. These Fertilizers produce a dark green velvety surface. Nothing improves the general appearance of a garden like a nice lawn. The analysis contains 3½ per cent. Ammonia, and 30 per cent. Phosphates, in different degrees of solubility.

Cash price 14lb. 4s., 28lb. 6s. 9d., 56lb. 11s. 6d., 1cwt. 20s., carriage paid nearest station England and Wales.

Directions for Use.—These Lawn Fertilizers should be applied at the rate of 4ozs. to the square yard, having previously mixed the quantity of Fertilizer to be applied with dry loam, to facilitate even distribution. A second dressing at an interval of a few weeks may be applied with advantage.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

WILLIAM COOPER'S
Special Lawn Sand.

For eliminating moss and daisies our "Lawn Sand" will be found most effective. It should be applied in dry weather, at the rate of 2 to 4 oz. per square yard. The grass may be temporarily browned, but it will soon recover after rain. If no rain falls after three or four days, the grass should be watered.

The application of Lawn Sand may be repeated at intervals of a few weeks during the season.

This Lawn Sand contains, in addition to other ingredients, 12 per cent. of Ammonia. It is, therefore, a powerful Fertilizer, and must be used with care. Even distribution is necessary, and can best be obtained by mixing with dry earth before application.

Cash price 14lb. 6s., 28lb. 10s. 3d., 56lb. 15s. 6d., 1 cwt. 23s. 6d., carriage paid nearest station England and Wales.

WILLIAM COOPER'S
"Excelsior" Fertilizer.

This Fertilizer is a superb Horticultural Manure, highly concentrated and practically free from smell.

It is compounded of the best and purest materials, and contains valuable ingredients not usually found in artificial fertilizers.

Each element of its composition has been carefully experimented with for years, and its precise independent value determined.

"Excelsior" Fertilizer is sold only on a guaranteed analysis.

Guaranteed Analysis:

Nitrogen, in the form of ready-formed Ammonia and Organic Nitrogen...	6 per cent.
Equal to Ammonia	7 „
Total Phosphates	24 „
Soluble Phosphates	7 „
Pure Potash...	3½ „
Equal to Sulphate of Potash	6 „

Cash prices in bags: 7lb. 3s. 6d., 14lb. 6s., 28lb. 10s. 3d., 56lb. 16s., 1cwt. 27s., carriage paid nearest station England and Wales.

Directions for Use.—For Vines, 1cwt. to 4 tons of soil for new border, or ¼lb. per square yard after thinning. For Tomatoes, 4ozs. per square yard mixed with good loam. For Flowers and Pot Plants, ½lb. per bushel of soil, or a teaspoonful to a 6-in. pot. For top-dressing, 2 to 3ozs. per square yard.

WILLIAM COOPER'S

General Garden Fertilizer.

This Fertilizer will be found particularly suitable for Market-gardeners' general use. It is a carefully compounded article, the Nitrogen appearing in the form of both ready-formed Ammonia and Organic Nitrogen.

The following high Analysis is guaranteed:

Nitrogen	2 per cent.
Ammonia	2 ,,
Phosphates	24 ,,
Soluble Phosphates	14 ,,
Pure Potash	3 ,,
Sulphate of Potash	6 ,,

Cash price 1cwt. 13s. 6d., 5cwt. 60s., 10cwt. 113s., 1 ton 213s., carriage paid nearest station England and Wales.

Directions for Use.—Apply at the rate of 8 or 10cwts. per acre, or, for small gardens, at the rate of 4 to 5lbs. per square rod or perch.

WILLIAM COOPER'S

Special Rose Fertilizer.

Made from a special highly-recommended recipe. It differs from other Fertilizers, in containing a very high percentage of Potash.

Analysis:

Ammonia	5 per cent.
Phosphates	9 ,,
Sulphate of Potash	26 ,,

Cash price 14lb. 5s. 6d., 28lb. 8s. 9d., 56lb. 13s. 6d., 1cwt. 22s. 6d. carriage paid nearest station England and Wales.

Directions for Use.—Apply at the rate of ¼lb. to the square yard, wherever the roots extend. Water gently after application.

WILLIAM COOPER'S

Chrysanthemum Fertilizer.

For Potting Purposes. Guaranteed Analysis:

Nitrogen	4 per cent.
Equal to Ammonia	5 ,,
Total Phosphates	15 ,,
Sulphate of Potash	3 ,,

Cash price 14lb. 4s., 28lb. 6s. 9d., 56lb. 11s. 6d., 1cwt. 20s., carriage paid nearest station England and Wales.

Directions for Use.—In making up a compost for potting use ½lb. to every bushel of soil. The compost should consist of leaf mould, well-rotted dung, and a small quantity of sand.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

WILLIAM COOPER'S SPECIAL SOLUBLE.

Chrysanthemum Fertilizer.

For Watering and Top Dressing. Guaranteed Analysis:

Nitrogen	8½ per cent.
Equal to Ammonia	10 ,,
Soluble Phosphates	10 ,,
Sulphate of Potash	2 ,,

Cash price 7lb. 4s., 14lb. 6s., 28lb. 10s. 3d., 56lb. 16s., 1cwt. 27s., carriage paid nearest station England and Wales.

Directions for Use.—*For Watering.*—Dissolve ½oz. in 1gal. of water, and use two or three times a week, taking care not to allow the solution to wet the foliage. Any residue may be used as a top dressing.

For Top Dressing.—Use about a teaspoonful for an 8-in. pot, having previously mixed it with two or three times the quantity of soil.

This excellent Chrysanthemum Fertilizer will be found to produce a splendid effect. It has been prepared only after a considerable amount of experiment as to the needs of this particular plant. In addition to the guaranteed items it contains other forms of plant food for promoting depth of colour and large size of blooms.

WILLIAM COOPER'S

Special Vine Fertilizer.

The composition of this Fertilizer has been arranged so as to feed the plant with a form of food immediately available, and, in addition, with a reserve supply which only gradually comes into operation during the later periods of growth.

It is, therefore, both stimulating and sustaining, imparting to exhausted Vines a new lease of life.

It is a useful Fertilizer for fruit trees.

Guaranteed Analysis:

Nitrogen	4½ per cent.
Equal to Ammonia	6 ,,
Total Phosphates	24 ,,
Soluble Phosphates	14 ,,
Pure Potash	2½ ,,
Equal to Sulphate of Potash ...	6 ,,

Cash price 14lb. 5s. 6d., 28lb. 8s. 9d., 56lb. 13s. 9d., 1cwt. 22s., carriage paid nearest station England and Wales.

Directions for Use.—In making up a new Vine border, add 1cwt. of the Fertilizer to every 4 tons of soil, with the addition of one or two sprinklings of about ¼lb. per superficial yard after thinning. If the border is already made up, apply ½lb. per superficial yard forked into the soil, with subsequent top dressings of about ¼lb. per superficial yard after thinning, and ¼lb. just before colouring.

WILLIAM COOPER'S

Special Tomato and Cucumber Fertilizer.

This special preparation supplies a food readily assimilable by Tomatoes and Cucumbers, for which it has been specially designed, after a careful consideration of the requirements of these vegetables.

Guaranteed Analysis:

Nitrogen	3¼ per cent.
Equal to Ammonia	4 ,,
Total Phosphates	12 ,,
Soluble Phosphates	8 ,,
Pure Potash	5 ,,
Equal to Sulphate of Potash ...	9¼ ,,

Cash price 14lb. 4s., 28lb. 6s. 9d., 56lb. 11s. 6d., 1cwt. 20s., carriage paid nearest station England and Wales.

Directions for Use.—This Fertilizer may be applied in a liquid form two or three times a week, using a solution of ½ to ¾oz. per gallon of water, or it may be applied as a top dressing, and afterwards watered in, employing for this purpose a mixture of equal parts of soil and manure at the rate of 1lb. per square yard. Two dressings may be given during the growing and fruiting seasons. Bedding and potting soil should have this Fertilizer mixed with it in the proportion of 4lbs. to one barrowful of soil.

WILLIAM COOPER'S

Special Potato Fertilizer.

The use of artificial Fertilizers for the Potato Crop is extremely necessary, and is invariably attended with good results, provided the Fertilizer used is thoroughly adapted to the needs of the plant. Our Special Potato Fertilizer is a well-balanced food, specially designed for market-gardeners' use. With this Fertilizer a healthy crop of tubers should be assured.

Guaranteed Analysis:

Ammonia	4 per cent.
Phosphates	18 ,,
Sulphate of Potash	8 ,,

Cash price 14lb. 3s. 6d., 28lb. 6s., 56lb. 10s. 3d., 1cwt. 17s., carriage paid nearest station England and Wales.

Directions for Use.—Apply at the rate of 4 to 5lbs. per square rod or perch.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

CASH PRICES, CARRIAGE PAID

(nearest station England and Wales),

OF

Garden Fertilizers, Chemicals and Sundries.

DESCRIPTION OF FERTILIZERS.	ANALYSIS.	7lbs	14lbs	28lbs	56lbs	1 cwt
BONES.						
Pure Bone Meal (English Bones)	4½% Ammonia, 45% Phosphates	2/-	2/9	4/-	6/9	12/-
Quarter-inch and Half-inch Bones	4½% Ammonia, 45% Phosphates	2/-	2/9	4/-	6/9	12/-
Pure Dissolved Bones	3% Ammonia, 32% Phosphates	2/-	2/9	4/-	7/6	13/6
Steam Bone Flour	1¼% Ammonia, 55% Phosphates	2/-	2/9	4/-	7/6	13/6
Dissolved Bone Compound..	2% Ammonia, 30% Phosphates	2/-	2/9	4/-	6/9	11/6
POTASH SALTS.						
Kainit, specially ground ready for use	11½% Pure Potash	2/-	2/9	3/6	5/-	8/-
Sulphate of Potash	48% Pure Potash	2/9	4/-	7/6	13/-	24/-
Muriate of Potash	48% Pure Potash	2/9	4/-	6/9	12/-	23/-
Nitrate of Potash	13% Ammonia, 30% Pure Potash	3/9	6/-	11/-	20/-	39/-
NITROGENOUS FERTILIZERS.						
Sulphate of Ammonia	24% Ammonia	2/9	4/-	6/9	13/-	23/6
Nitrate of Soda	18% Ammonia	2/9	3/9	6/6	11/9	21/6
Dried Blood	16% Ammonia	2/9	4/-	6/9	12/-	23/6
Rape Meal (protects Crops against wireworms)	5½% Ammonia	2/6	3/6	4/9	8/-	13/6
PHOSPHATIC FERTILIZERS.						
Superphosphate of Lime, No.1	26% Soluble Phosphates	2/-	2/9	3/6	5/-	8/-
,, ,, No.2	30% Soluble Phosphates	2/6	3/3	3/9	5/6	8/9
,, ,, No.3 extra strength	36% Soluble Phosphates	2/9	3/6	4/-	6/-	9/3
Basic Slag, best quality ..	42% Phosphates, 80% Soluble in a 2% Citric Acid Solution, 85% Fineness	2/-	2/9	3/6	4/9	7/6
MISCELLANEOUS.						
Phosphate of Potash	65% Phosphates, 15% Pure Potash	4/-	6/9	12/-	23/-	44/-
Sulphate of Magnesia	Best Qualities, Commercial	2/9	3/9	6/3	11/6	20/-
Sulphate of Iron		2/6	3/3	4/-	6/-	10/3
Sulphate of Lime		2/-	2/9	3/6	5/-	7/6
Sulphate of Soda		2/9	3/9	6/3	11/6	21/6

SPECIAL QUOTATIONS FOR LARGER LOTS—on Rail at Works, or Carriage paid—will be quoted on receipt of particulars.

SUNDRIES,

Calcined Oyster Shell for Potting Purposes	7/6 per Cwt.
Wood Charcoal for Vine and Potting Purposes ..	4 Bushels, 10/3.
Best Clean Broad Salt	5/3 per Cwt.

CASH PRICES, CARRIAGE PAID

(nearest station England and Wales),

OF

Garden Fertilizers, Chemicals and Sundries

(*continued*).

COMPOUND FERTILIZERS.

DESCRIPTION.	Per cent. of Ammonia.	Per cent. of Phosphates	Per cent. of Sulphate of Potash.	14lbs	28lbs	56lbs	1 cwt
HORTICULTURAL.							
"EXCELSIOR" Fertilizer (for all Crops)	7	24	6	6/-	10/3	16/-	27/-
Patent Silicate—a Speciality	2	6	—	3/6	6/-	10/3	17/-
Soluble Chrysanthemum Fertilizer	10	10	2	6/-	10/3	16/-	27/-
Chrysanthemum Fertilizer for potting purposes	5	15	3	4/-	6/9	11/6	20/-
Special Vine Fertilizer	6	24	6	5/6	8/9	13/9	22/-
Special Tomato and Cucumber Fertilizer	4	12	9¼	4/-	6/9	11/6	20/-
Special Lawn Fertilizer	3½	30	—	4/-	6/9	11/6	20/-
Lawn Sand (for eliminating Daisies, &c.)	12	—	—	6/-	10/3	15/6	23/6
Special Rose Fertilizer (Tonk's Receipt)	5	9	26	5/6	8/9	13/6	22/6
Special Potato Fertilizer	4	18	8	3/6	6/-	10/3	17/-
General Garden Fertilizer	2	24	6	3/6	5/6	8/-	13/6
Full directions for use given in previous pages of this List.							
GUANOS.							
PURE PERUVIAN GUANO	6	32	4	4/9	8/-	13/6	23/6
Fish Guano, very high analysis	10	17	—	4/9	8/-	13/6	23/6

NOTE.—When Half-Ton lots and upwards are required of Agricultural Fertilizers and Sundries, we can frequently save Customers carriage by forwarding such Fertilizers as Basic Slag from the nearest centre of Manufacture, and imported goods, Nitrate of Soda, Kainit, &c., from the nearest port of discharge.

POULTRY REQUISITES.

	28lbs.	56lbs.	1 cwt.	2 cwts.	5 cwts.
Best Sharp Flint Grit	2/6	4/-	6/-	11/-	21/-
Best Granulated Cockle Shell	2/9	4/6	6/9	12/-	27/-
Best Calcined Oyster Shell	3/3	4/9	7/6	13/6	30/-
Best Poultry Bone Meal (Pure Marrow)	5/-	8/9	16/-	31/6	73/6
Best Granulated Moss Litter Dust	3/4 per Bag (about 2½ Bushs.), 12/3 1½ cwts. (about 15 Bushs.), 12/- per Bale (about 2 cwts.), 14/- if in Canvas.				

CARRIAGE PAID, SACKS FREE.

SPECIAL QUOTATIONS FOR LARGER LOTS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

William Cooper's Insecticide

Is the Most Effective, the Safest, and the Cheapest Insect Destroyer.

One gallon of this Insecticide will make 200 gallons of efficient wash.

DIRECTIONS FOR USE.

Always shake the bottle before pouring out any of the contents. Use soft water only to dilute the Insecticide.

Strength of Solution.—For very tender succulent plants, ½ fluid ounce of Insecticide in 1 gallon water, or 1 teaspoonful in 2 pints. For less tender plants, ¾ ounce to 1 gallon, or 1 teaspoonful to 1½ pints. For more hardy plants, 1 ounce to 1 gallon, or 1 teaspoonful to 1 pint. When the latter strength is exceeded, it is well to proceed with caution, although many plants will be uninjured by a solution of 4 ounces to the gallon, a much weaker solution is fatal to most insect pests. In the case of scale and mealy-bug, however, the solution should be made rather stronger—1½ to 2 ounces to the gallon, or more if the plant will bear it; and water at a temperature of about 80 deg. Fahr. should be used. Tender plants should always be well syringed with clean water about fifteen minutes after this solution has been applied.

When the Insecticide is to be applied by syringing, it will be found an advantage to dissolve some soft soap in the water before adding the Insecticide. This will make it wet the leaves and insects more thoroughly.

		Cash Prices. £ s. d.	
½ gallon can	.....	0 3 0	
1 ,, ,,	.....	0 5 0	
5 ,, ,,	.....	0 4 9	per gallon
10 ,, ,,	.....	0 4 6	,, ,,
20 ,, cask	.....	0 4 3	,, ,,
40 ,, ,,	.....	0 4 0	,, ,,

Special Price for large quantities. Cans and Casks Free.

Cooper's Insecticide is death to Green Fly, Mealy Bug, American Blight, Thrip, Red Spider, and other Greenhouse Pests.

The Gardener's Friend for syringing, sponging, or dipping. Highly recommended for Vines, Fruit Trees, and all other plants.

WILLIAM COOPER'S

Mealy Bug Destroyer.

For the special eradication of this most troublesome of Stove-house Plant Pests. It is easily applied, either with a small brush or vaporiser; is instant destruction to both insect or ova, and does not stain or injure the foliage.

Cash prices, in Cans, 2s. 9d. and 5s.; ½ gallon, 16s.; 1 gallon, 30s.

William Cooper's Nicocide Wash.

For Syringing, Spraying, or Dipping.
Nothing to equal it on the market. The best Insecticide yet manufactured. Clean, Sure, Certain. Death to all insect life on plant or fruit trees; one dressing sufficient.
Cash prices, quart, 2s. 6d.; ½ gallon, 4s.; gallon, 7s. 6d.; 5 gallons, £1 15s. Cans included.
Directions for use—1oz. to 1 gallon of water.

Tanned Garden Netting.

For protecting Fruit Trees, Flower Beds, &c., &c.

Yards	50 x 1	50 x 2	100 x 2	50 x 3	50 x 4	25 x 8
Cash Prices	2s.	3s. 9d.	7s. 6d.	5s. 9d.	7s. 6d.	7s. 6d.

Fumicide—William Cooper's Vaporizing Compound.

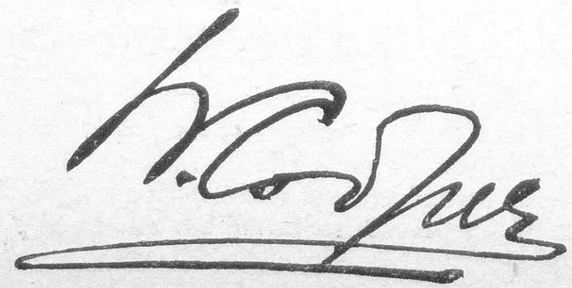
For killing all kinds of Insects on plants in frames and greenhouses. The most effective method of fumigating ever manufactured. Easy to use. Perfectly safe. Success guaranteed. Will destroy Green and Black Fly, Thrip, Mealy Bug, Red Spider, &c., and is absolutely certain death to all Insect Pests. It will not damage the most tender plants. Cooper's Fumicide is sold in bottles.

				Cash Prices.
No. 1	Size, 1oz.	containing sufficient for	2,000 cubic feet	9d. post free.
,, 2	,, 4oz.	,, ,,	8,000 ,,	2s. 6d. ,,
,, 3	,, 6oz.	,, ,,	12,000 ,,	3s. 6d. ,,
,, 4	,, ½ pint	,, ,,	20,000 ,,	6s. 0d. ,,
,, 5	,, 1 pint	,, ,,	40,000 ,,	11s. 0d. ,,
,, 6	,, 1 quart	,, ,,	80,000 ,,	21s. 0d. ,,

Fumigators suitable for using above, large enough for 5,000 cubic feet, 1s. 6d. each, post free.

Directions for use.—Close all doors, ventilators, &c., light the lamp, and place the cup containing the compound over it; then leave the house. The lamp will go out shortly after the compound has evaporated. For large houses use one Fumigator for every 5,000 cubic feet.

N.B.—Beware of Imitations. See that all LABELS *on Cans, Tins, and Bottles bear this Signature, without which none are genuine.*



William Cooper's Unrivalled Weed Destroyer.

The Best and Cheapest Weed Killer in Existence.

Maintains its superiority over all rivals for permanently destroying vegetation on Walks, Carriage Drives, Railway Stations, Ash Tennis Courts, Stonework grown green, &c., &c.

USED AT KEW GARDENS, ROYAL HORTICULTURAL GARDENS, &c., &c.

COMPLETE SATISFACTION GUARANTEED to all using WEED KILLER bearing our TRADE MARK, without which none is genuine. REFUSE IMITATIONS. It will keep the weeds away for the whole season. May be applied with an ordinary watering can.

One Gallon as sold makes 10 Gallons for use, and is sufficient to treat 40 to 50 square yards.

Saves many times its cost in labour, and eradicates the weeds far more thoroughly than any hand-weeding.

Cash prices, 1gal., 1s. 6d.; 5gals., 6s. 9d.; 10gals., 12s.; 20gals., 20s.; 40gals., 32s. 6d. Cans and Casks included (not returnable).

DIRECTIONS FOR USE.

The Weed Killer should be used in the evening or early morning, when the weather is fine and settled. Each gallon should be well mixed with 10 gallons of water and applied with an ordinary watering can, sufficient being sprinkled to reach the roots of the weeds. To eradicate Dandelions, Plaintain, and lawn Weeds, apply a few drops of the mixture upon the centre of each plant.

Special Caution.—The Weed Killer is a poison and watering cans must be well rinsed after use.

This very successful Weed Killer proved to be most reliable (20 per cent. saved in labour). It is highly concentrated and lasting in its effect, is now largely used in the Royal Parks, Gardens, and Estates in the United Kingdom.

"IT BRIGHTENS THE GRAVEL WALKS."

Cooper's Disinfectas.

Cheap, Clean, and Healthy. The best Disinfectant for Stables, Poultry Houses, &c. Try it. Cash prices, per sack (2-bushel), 2s. 6d., sack included; 10 for 22s. 6d.

William Cooper's Soap for Plants.

JUST THE THING THAT HAS BEEN WANTED.

By simply using the Soap with water and sponging the foliage, it destroys all insects, parasites, and fungus which infest plants, and gives the foliage a healthy and glossy appearance.

For room plants, such as Palms, Aspidistras, Grevilleas, &c., &c., by washing them occasionally with this Soap, it will preserve and keep them in a healthy condition for a remarkably long time.

This is a Cheap and Reliable Insecticide.

Made in ½lb. Tablets.
Cash prices, 1lb., 1s. 3lb., 2s. 6d. 7lb., 5s., post free.
28lb., 14s. 56lb., £1 7s. 6d. Cwt., £2 10s.

Used by most of the Leading Nurserymen throughout the Kingdom.

William Cooper's Sunshade

Supersedes all other preparations of the kind.

The cheapest, most efficient, and convenient preparation for Shading Greenhouses, Conservatories, Glass Roofs, and Windows of all descriptions. It is applied cold—an enormous advantage over preparations requiring to be used whilst hot. May be used either inside or outside, and produces a pleasing effect. Is not washed off by rain, but can be instantly removed when desired by rubbing over with a brush whilst it is wet. Made in various colours—White, Pale Blue, and Pale Green.

DIRECTIONS FOR USE.

Mix the powder thoroughly with a little *cold* water till it is about the consistency of cream, then for each 1lb. of Powder used add 3 pints *boiling water* **(it must be quite boiling or the mixture will be useless),** stirring the mixture whilst you pour it in. *Allow the mixture to cool.* Again thoroughly stir, and apply with a suitable soft brush. It may either be spread smoothly and evenly over the glass, or "stippled," as it is called, by going over the freshly-painted surface with a flat brush, dabbing it carefully and evenly with the points of the bristles, so as to produce a frosted appearance. The effects of the work can be best seen from the inside of the house. If any part of it is unsatisfactory, wash it off, and go over it again when the glass is dry. The Shading should be applied in fine weather, and the glass should be clean and dry when it is put on.

Cash Prices, in Tins.

2lb., 1s., post free 1s. 5d.; 7lb., 3s. 6d.; 14lb., 6s. 6d.; 28lb., 12s. 6d.; 56lb., 24s.; 112lb., 45s., on Rail.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Certain Death to Insect Pests.

WILLIAM COOPER'S

Fumigating Insecticide.

Destroys all insects infesting plants without injury to the Foliage, Fruit, or Flowers. Will be found to be the best and cheapest article yet introduced.

Two or three of these suspended by a wire under a greenhouse stage and lighted at each end will quickly settle the accounts of the green fly and thrips, and that with comparatively little trouble; indeed, if a quantity of these are kept in readiness, a few plants may be put into a pit or small room and be cleaned; at least, have their insect pests destroyed in a very short time. When once lighted will burn till finished without further attention.

SUCCESS GUARANTEED.

Cash prices, 3d. each; 6 for 1s. 6d.; 2s. 9d. per doz.; 6 doz., 15s.; 28s. per gross. Postage extra.

William Cooper's Worm Destroyer.

INVALUABLE for destroying Worms on TENNIS COURTS, CRICKET GROUNDS, BOWLING GREENS, and LAWNS, or removing them from the roots of Plants in Pots. The most certain, swift, economical, and safe remedy yet introduced. Will not injure the grass or the most delicate plant.

DIRECTIONS FOR USE.

Mix 2oz. of the Solution with 1 gallon of water, or in larger quantities, 1 pint with 10 gallons (=1 in 80), and apply to the Lawn with an ordinary watering can in sufficient quantities to fairly saturate the ground. The worms will immediately come to the surface, and may be gathered into pails, or left to die and swept up with a broom. It is best applied in the evening when the ground is moist and the worms are near the surface.

NOTICE.—This preparation is a POISON, and Poultry should not be allowed to eat the worms destroyed by it. The vessels in which it has been should be thoroughly washed after use.

Cash prices: 1 quart, 1s. 6d.; ½ gallon, 2s. 9d.; 1 gallon, 4s. 8d.; 5 gallons, 17s. Cans included (not returnable).

Silver Sand.

	Small quantities on rail, at pit, Bedfordshire. Bags included. Cash Price.	Single tons on rail, at pit, Bedfordshire. Bags included. Cash Price.
Coarse Bedfordshire	.. 1s. 9d. per 2cwt. sack	..... 15s. 6d.
Fine ,,	.. 2s. 0d. ,,	..... 17s. 6d.

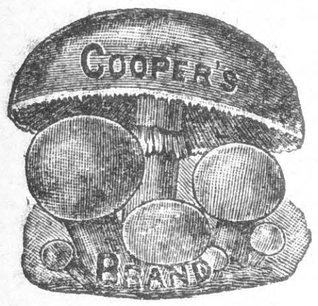
Special offer. 2 trucks on rail at pit, each containing 4 tons Loose Sand, one Fine and one Coarse, £2 10s. the lot; 1 truck, £1 7s. 6d.

Cooper's Wonderful New Mushroom Spawn.

Complete satisfaction guaranteed to all using this brand of Spawn. The finest and most excellent quality procurable. Fresh and productive of abundant crops of Superior and Fleshy Mushrooms.

1 Bushel—16 Bricks ... ... Cash price, 4s.
8 Bushels and upwards at 3s. per Bushel.

INSTRUCTIONS.



Mushrooms may be grown in a warm cellar or shed in winter, or in the open air in summer. Take partially dry, fresh horse manure and lay it in a heap to ferment, turn and mix it well every few days, and when well and equally fermented, which will be in from ten to fifteen days, it may be made into a bed four feet wide and about two feet deep, mixing it well together and beating or treading it firmly. As soon as the temperature of the bed falls from 75deg. to 50deg. the spawn may be inserted in pieces about the size of a walnut, about 2in. deep, and 6in. apart. Cover with loamy soil about 2in. deep, and beat it down evenly and firmly, placing a Garden Mat over the bed. Water when necessary with lukewarm water, and expect Mushrooms in from four to six weeks.

Insecticides, Various.

	Cash Prices. 14lb.		28lb.		56lb.	
	s.	d.	s.	d.	s.	d.
Tobacco Powder (for killing Aphides) ...	7	6	13	0	24	0
Hellebore Powder (for destroying Caterpillars)	10	0	19	0	35	6
Bordeaux Mixture	7	6	14	3	27	6
Sulphur (selected flowers)	3	0	5	3	9	9
Quassia Chips (kiln dried)	4	6	8	3	13	6

Quassia Extract, Concentrated (exterminates Aphis), ½ gallon, 2s. 9d.; 1 gallon, 4s. 3d.
Soft Soap, per firkin ... ... 16s. 6d.
Paris Green, the trade remedy for Blight, £8 5s. cwt.; 1lb. packets, 2s. each.

William Cooper's Zinc Label Ink.

For writing an indelible black on Zinc Labels, warranted to withstand the action of all weathers. In Bottles, cash price, 1s., post free.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

William Cooper's Flower Cement.

The best of its kind for fixing the Petals of Flowers; for Bouquets, Headdresses, Vases, Church, Table, or Ball Decorations. It drys quickly, and preserves the Flowers without staining or injuring them.

Cash Prices.
In Bottles, 1s. each (Postage 3d. extra).
Quart Tins, 4s. 6d. each.

Cash Prices.
Half Gallon Tins, 8s. each.
One Gallon Tins, 15s. each.

William Cooper's Beetle Powder.

For destroying Beetles, Cockroaches, Crickets, &c.
Cash prices, Tins, 1s., 2s. 6d., and 5s. each.

William Cooper's Nicotine Soap.

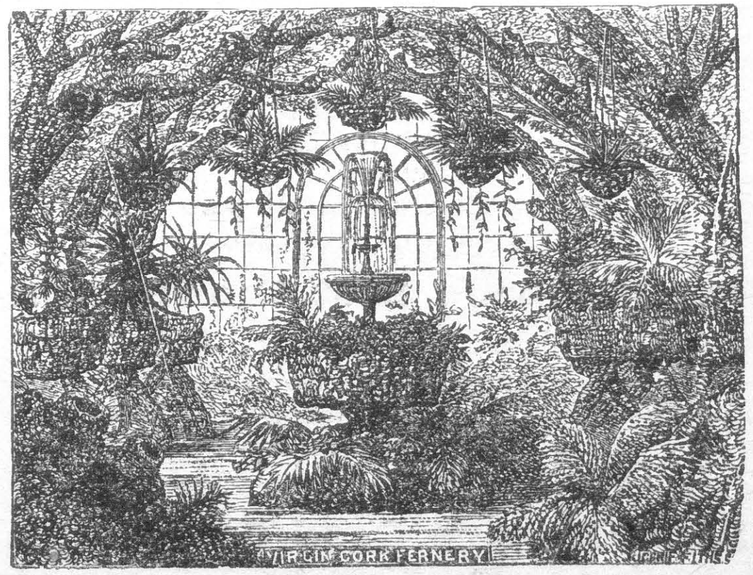
Effectually eradicates all Insect Pests without injury to foliage.
Cash prices: Per lb., 1s. 3d.; 7lb. 7s.; 14lb. 12s. 6d.; 28lb. 23s.

William Cooper's Mildew Composition.

The Original, Certain, and Safe Remedy.
Cash prices, in Bottles, 1s. 3d. and 2s. 6d.; per Gallon, 10s.

Virgin Cork.

For Ferneries, Window Boxes, &c., &c.



No. 561.

Best Quality only. Cash prices, 112lb. 15s.; 56lb. 8s.; 28lb. 4s. 6d.; 14lb. 2s. 3d.

William Cooper's Wasp Destroyer.

Has stood many years' test as the only effectual protection for Fruit Trees, &c., from Wasps and Flies.
Cash prices: 1s. 3d. and 2s. 3d. per Bottle, post free.

Tobacco Paper.

This Paper is specially prepared by us of the Best Tobacco Juice, and does not require a Fumigator. By merely making a roll and suspending in house or frame, and then igniting both ends, it will cause a great smoke, and destroy all insects.
Cash prices: 1lb., 6d., post free 9d.; 2lb. 1s., post free 1s. 5d. 7lb., 3s. 6d.; 14lb., 6s. 6d.; 28lb., 12s. 6d.; 56lb., 24s.; 112lb., 45s., on Rail.

William Cooper's Prepared Compost for Potting Bulbs.

SPECIALLY PREPARED.
Cash prices: 3s. per Sack; 6 for 17s.; 10 for 27s.
On Rail at Nursery, Surrey.

William Cooper's Leaf Soil, Beech and Oak, Well Decayed.

Cash prices: 3s. per Sack; 6 for 17s.; 10 for £1 7s. 6d.
On Rail at Nursery, Surrey.

William Cooper's Original Celebrated Orchid Peat.

All Rich Brown Pure Bracken Fibre.
SELECTED IN TURVES, with Dust and Roots taken out.
Cash prices: 7s. per Sack; 5 for 33s. On Rail at Nursery, Surrey.
Especially prepared ready for use, all pure Fibre, no waste whatever. 10s. per Sack; 5 for 45s. On Rail at Nursery, Surrey.

William Cooper's Best Brown Fibrous Peat.

For Hardwood and Stove Plants.
Cash prices: 4s. 6d. per Sack; 6 for 25s.; 10 for 40s. 6d.
On Rail at Nursery, Surrey.
Special quotations for Truck Loads, F.O.R.

William Cooper's Good General Peat,

For Ferns, &c.
Cash price: 3s. per Sack; 6 for 17s.; 10 for 27s. On Rail at Nursery, Surrey.
Special quotations for Truck Loads, F.O.R.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

William Cooper's Rhododendron Peat-Mould.

Cash prices: 3s. per Sack; 6 for 17s.; 10 for 27s. On Rail at Nursery, Surrey.
Special quotations for Truck Loads, F.O.R.

William Cooper's Rich Brown Peat.

Of the very best quality. All waste extracted. Ready for use.
Cash prices: 4s. 6d. per Sack; 6 for 25s. On Rail at Nursery, Surrey.
Special quotations for Truck Loads, F.O.R.

William Cooper's Loam—Surrey.

Splendid Quality, full of Yellow Fibre.
Cash prices: 2s. 6d. per Sack; 6 for 13s.; 10 for 21s.
On Rail at Nursery, Surrey.
Special quotations for Truck Loads, F.O.R.

William Cooper's General Potting Compost.

SPECIALLY PREPARED.
Cash prices: 3s. per Sack; 6 for 17s.; 10 for 27s.

William Cooper's Chrysanthemum Compost.

SPECIALLY PREPARED.
Cash prices: 3s. per Sack; 6 for 17s.; 10 for £1 7s. 6d.

William Cooper's Prepared Compost for Potting Ferns.

SPECIALLY PREPARED.
Cash prices: 3s. per Sack; 6 for 17s.; 10 for £1 7s. 6d.

Flower Pots.

Cash Prices:
2in., 3s.; 2½in., 3s. 3d.; 3¼in., 3s. 6d.; 3¾in., 3s. 9d.; 4¾in., 4s.; 5in., 4s. 3d.; 5½in., 6s. 3d.; 6¼in., 8s.; 7in., 14s. 6d.; 7½in., 15s. 9d.; 8½in., 28s. 6d. per 100.
Twenty per cent. must be added to cover cost of Crate.

Saucers and Round Fern Pans same prices and sizes as Pots.
Orchid Pans and Pots same sizes and double prices as Pots.

Special quotations for large quantities.

Special Lots for Amateurs.
12—8in., 20—6in., 50—5in., 50—4in., 50—3in., cash price, 9s.
Packing in crate (not returnable), 2s. extra.
Nurserymen and the Trade Supplied.

The Vast Superiority of the Original

Horticultural Anthracite

over every other description of Coal or Coke for Horticultural purposes is now being rapidly recognised. Entirely without Smoke. Delivered by rail to all parts with despatch DIRECT FROM COLLIERY. Used by all the leading Nurserymen in Great Britain.

Quotations Carriage Paid to any Station by return post.

Peat Moss Litter.

Direct as imported, Best Quality. The Best and Cheapest Bedding for Horses, Cattle, and Poultry; cash price, £2 per ton, subject to market fluctuation. Free on Rail in London.

Special Quotations given. Delivered Carriage Free in 2 and 4 ton lots to any Station. Sample Bales, cash price, 6s. each; per Sack, 2s.

Best Cocoa-nut Fibre Refuse.

(Fresh and Clean.)

Cash Price: 3s. 6d. per Sack. Sacks included. Special quotation for truck load, loose, free on Rail at Works.

MOISTENS IN HEAT. HOLDS HEAT IN WINTER. Invaluable for POTTING, PLANTING, FORCING, DECORATING; and used on STRAWBERRY BEDS is preferable to straw, keeping the Fruit clear from grit, and at the same time nourishing the Plants. For lightening heavy soils it is particularly useful, and when the soil is light and dry it is of great advantage as a mulch. All slugs and insects are destroyed by its use.

Russia Mats.

	Cash Price.	Cash Price.
Archangel Mats	1s. 6d. each	16s. 6d. per doz.
Heavy Petersburg Mats ...	1s. 1d. ,,	11s. 6d. ,,
Siberian	1s. 0d. ,,	11s. 0d. ,,

Special quotations for large quantities.

Tobacco Juice.

Duty free. Especially produced from strong American Leaf Tobacco. One gallon contains the strength of 40oz. of tobacco, and will bear diluting with from four to eight parts of water.

Cash price: In Bottles, 1s. and 2s. 6d. each; or in Casks of 10 gallons and upwards, at 2s. 3d. per gallon.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Bamboo Garden Canes.

CASH PRICES:

Very durable for staking plants, 4ft. long, 1s. 9d. per 100, 15s. 6d. per 1000. 5ft., 4s. per 100; 6ft., 5s. per 100; 7ft., 7s. per 100.

SPECIAL OFFER.—Our Popular 5s. bundle 150 bamboos. Assorted sizes from 2ft. to 7ft.

Raffia.

For Garden Tying. Best quality.

CASH PRICES:

1lb. 1s.; 2lb. 1s. 7d.; 7lb. 4s. 9d., post free.
14lb. 7s. 6d.; 28lb. 12s. 6d.; 56lb. 23s. 6d. On Rail at Works.

William Cooper's Dubbin.

Keeps Boots dry and soft on wet ground.

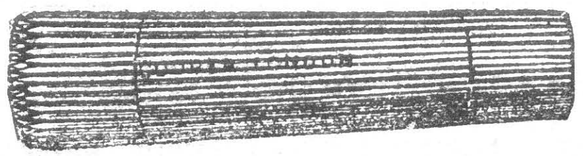
Cash Price:
Boxes, 6d. & 1s.

N.B.—Beware of Imitations. See that all LABELS *on Cans, Tins, and Bottles bear the Signature,*



Without which none are genuine.

Flower Sticks.



No. 562.

Cash Prices per 1,000.

1 ft., 3s. 0d.	3 ft., 14s. 0d.
1½ft., 4s. 9d.	3½ft., 19s. 3d.
2 ft., 8s. 0d.	4 ft., 23s 9d.
2½ft., 11s. 3d.	4½ft., 32s. 0d.

5ft., 40s. 6d.

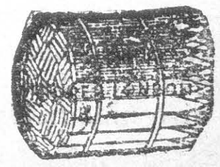
Dahlia or Rose Stakes, Square, Painted Green, and Tarred Ends.

No. 563.

Cash Prices per gross: 4ft., 22s.: 5ft., 26s.; 6ft., 32s.

Wood Labels (Plain).

No. 564.



Cash Prices per 1,000:
4in., 2s. 3d.; 5in., 2s. 9d.; 6in., 3s. 6d.; 7in., 5s.; 8in., 6s. 9d.; 9in., 7s. 9d.; 10in., 8s. 9d.

Garden Pencils.

Indelible for marking Wood Labels. 3s. 6d. per doz.

Cooper's Fluid Salts.

A highly concentrated form of an Effective, Simple, Safe, and Cheap Disinfectant. Non-poisonous. They are powerfully astringent, being rich in oxygen, which is the secret of their antiseptic value.

Before use it must be diluted with water in proportions as given below:—

For general use as a purifier for sick rooms, workshops, school-rooms, stable-yards, &c.—One tablespoonful to one gallon of water; to stand in open vessel or sprinkle about.

For water-closets, urinals, drains, sinks, sewers, cesspools, &c. —Two tablespoonfuls to one gallon of water. Either flush, pour over the surface of the soil and path, or use through a rose-spouted can or garden syringe; any offensive smell will be at once removed.

For the bath.—One tablespoonful to three gallons of water will remove all impurities, invigorate the nerves, and afford a bracing effect to the system. Tender feet should be treated with a larger quantity.

For gargle and mouth-wash.—A few drops in a half-tumbler of water; it sweetens the mouth and breath, and cleanses the palate; purifies, and prevents tartar.

Mix a few drops with all water used for scrubbing floors, washing plates and dishes, saucepans, paintwork, &c.

CASH PRICES:

1gal. 7s. 6d.; 2gals. 14s.; 3gals. 20s.; 5gals. 30s. Cans free.

Veterinary Uses of Cooper's Fluid Salts.

Glanders.—Two tablespoonfuls to a pint of warm water; syringe the nostrils; repeat at intervals of two hours.

Cow Pox.—One tablespoonful to a pint of water may be given internally; when eruption of the udder sets in, bathe or syringe the udder with the Salt, two tablespoonfuls to a quart of warm water.

Foot and Mouth Disease.—Use the Salts freely in this disease; wash the animal's mouth out frequently with two tablespoonfuls to a pint of cold water; syringe or bathe the eruption with nine parts of fluid Salt to one of warm water.

Sores of all kinds, abscess, canker, thrush, ulceration, broken knees, galled backs, chafed shoulders, mange in dogs and cats, &c., should be treated with the Salts; bathe or spray, three tablespoonfuls of fluid to a pint of warm water.

SECTION X.

Illustrated Catalogue

— OF —

IRON BUILDINGS

(for Home and Export):

Churches, Chapels, Mission Rooms, Hospitals, Club Houses, Residences, Dwelling-Houses, Cottages, Bungalows,

Offices, Stables, Coach-houses, Workshops, Boat and Motor-car Houses, Schools, Billiard Rooms, Concert and Drill Halls, Ball Rooms, Loose Boxes, Roofing, &c., &c.

The following Illustrations show Elevations of a general character, but any deviations from the designs can easily be made as desired, and special Drawings will be forwarded, together with Prices, upon receipt of Specification.

All Buildings contracted for are promptly fixed in a given time.

Description of Materials used

— IN THE —

Construction of Iron Buildings.

Brickwork.

Where a building is required to stand permanently a four-course brick foundation is advisable. A special quotation for all brickwork is given after a survey of the site, which is necessary, owing to the variation of soils and levels. It will, however, be found more expedient where brick foundation is wanted to entrust this to a local man, we, upon receipt of order for the structure, supplying a plan (free of charge) for his guidance.

Cheaper Foundation.

Where brickwork is not necessary, or a cheaper foundation is desired, we recommend Stone Templates placed under the weight-carrying supports of the building, or 6in. by 4in. or 5in. Tarred Sleeper Plates laid on the ground, after levelling the site, or blocked up with bricks to required level.

Foundations are not included in our estimates.

Frame-work

is of the following substances: Sleepers, 3in. by 2in. and 4in. by 2in.; joists 3in. by 2in., 4in. by 2in., and 5in. by 2in.; principal rafters, 4in. by 2in., 5in. by 2in., 6in. by 2in., 7in. by 2in., 3in. by 6in., 2½in. by 7in., 3in. by 8in., and 3in. by 9in., according to width of building; framework, 3in. by 2in., 4in. by 2in., and 4in. by 3in.; purlins, 3in. by 2in., 4in. by 2in., and 4in. by 3in. It is made in sections to facilitate both fixing and removal, which can be easily accomplished at any time at a minimum cost for labour.

Floor Boards

are supplied of thoroughly seasoned deal of ¾in. and 1in. thicknesses.

Lining

is of thoroughly seasoned and selected matchboards of ½in. and ⅝in., tongued and grooved.

Exclusion of Draughts

is effected by a liberal use of felt in the walls and gables. We employ it in all buildings we erect. It has also the advantage of preserving an equable temperature.

Ventilation

is studied in every building, our principle being to thoroughly effect it without causing draught.

Galvanised Corrugated Iron

sheets of standard Birmingham gauge only are used, truly and evenly corrugated, thickly coated with pure Silesian spelter, true and even in temper, and free from flaws and cracks. They are fixed on a principle that admits of their being easily released without damage to the structure. At the apex of roof plain galvanised iron capping is provided.

Ornamental Finish

to gables and pinnacles is studied from the most approved Gothic designs.

Fittings and Glazings,

Locks, Bolts, Bars, Ventilating Gear, Gutters and Downpipes, and all Sundries are of the best make, and are carefully fixed. The Glass used in buildings quoted in this list is heavy 21oz. or ⅛in. Rolled Plate, but Cathedral or other qualities may be had at prices accordingly.

Erection Prices

include Delivery Carriage Paid to any Railway Goods Station within 100 miles of London, and Erection complete upon purchaser's foundations, Painting Outside Woodwork two coats best Oil Colour, and Staining and Varnishing Inside, Glazing Windows, &c., by our own men, Men's Fares, Lodgings, &c. Beyond this distance extra cost of Carriage, &c., will be charged.

Cartage from station to site to be done by purchaser.

On-Rail or Wharf Prices

include the building complete as above, ready for erection, carefully marked and put on Rail at our Works or delivered to London Wharf, and a drawing to facilitate erection supplied with each Building.

Deviations from the Designs.

The following Illustrations show Elevations of a general character, but any deviation from the Designs can easily be made as desired, and special drawings will be forwarded, together with Prices, upon receipt of Specification.

The London County Council and other Authorities.

Our Buildings can, where required, be lined with Fire-resisting material at extra cost.

Purchaser (if necessary) to deposit plans with local authority, obtain their sanction for the erection of structure, pay all fees, &c.

Increasing Demand.

Owing to the increasing demand for our Iron Buildings and Cottages (wood framed), and to the large number of inquiries received for Corrugated Iron structures, we have decided, now that we are publishing a new Illustrated Catalogue, to include in this section many new designs which will be found suitable for various purposes—small holdings, &c.

Neat in Appearance.

The advantages they possess are at once so apparent it hardly becomes necessary to point them out. On the ground of CLEANLINESS they have no equal. They are NEAT in appearance. The risk from FIRE is minimised, and from an ECONOMICAL POINT OF VIEW they are cheaper, commensurately, than any other form of temporary structure. With ordinary attention to the exterior, they will last a lifetime. All that is necessary for their preservation is to see they are painted, say, every three or four years. Used as a Dwelling-house, there is no necessity for waiting until the walls are dry before entering, inasmuch as no material used in the construction of the Buildings is even damp, hence the readiness with which medical authorities resort to them for hospitals in cases of emergency. For those who take their pleasures up-river year by year, a portable building affords a means of enjoyment and change upon a scale of economy not found in any other system. We are also making and erecting Bungalows, Dwelling-houses, and other Buildings constructed of timber framework, tile roof, and cement plaster sides, finished with Rough Cast (see page 481). Should intending purchasers not see in our Catalogue the exact design and size structure needed, if they will send us full particulars and a sketch, we shall always be ready to submit our lowest estimate for the work.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

We contract for every interior requisite, heating, lighting, cooking apparatus, furniture, &c., &c., whether required for the Church or the Gamekeeper's Cot. (See Section XI.)

EXPORT TRADE.—Buildings suitable for all Climates.

The Colonies, South Africa, and India.

Great care is necessary, not only in the construction, but in the selection of materials for all Buildings required for use in foreign countries. The experience we have had in this department, combined with assistance rendered to us by old residents abroad, has enabled us to turn out work which has met the full appreciation of those for whom we have contracted.

For Tropical Climes

our Buildings are constructed with a double roof, each end being covered with perforated zinc in order to admit a through current of air. This not only assists to cool the interior, but may be made to act as a through ventilator.

Our Buildings are all made in Sections,

and tested as a whole, before leaving our Works. Each part is numbered and lettered to correspond with a diagram which accompanies the Buildings, so that reference is made easy, and the putting together of the sections is a matter of common intelligence, no technical skill being required.

Packing for Shipment

has the greatest attention, so that the parts may be protected from rough usage, consequent upon a long voyage and transhipments and carriage overland.

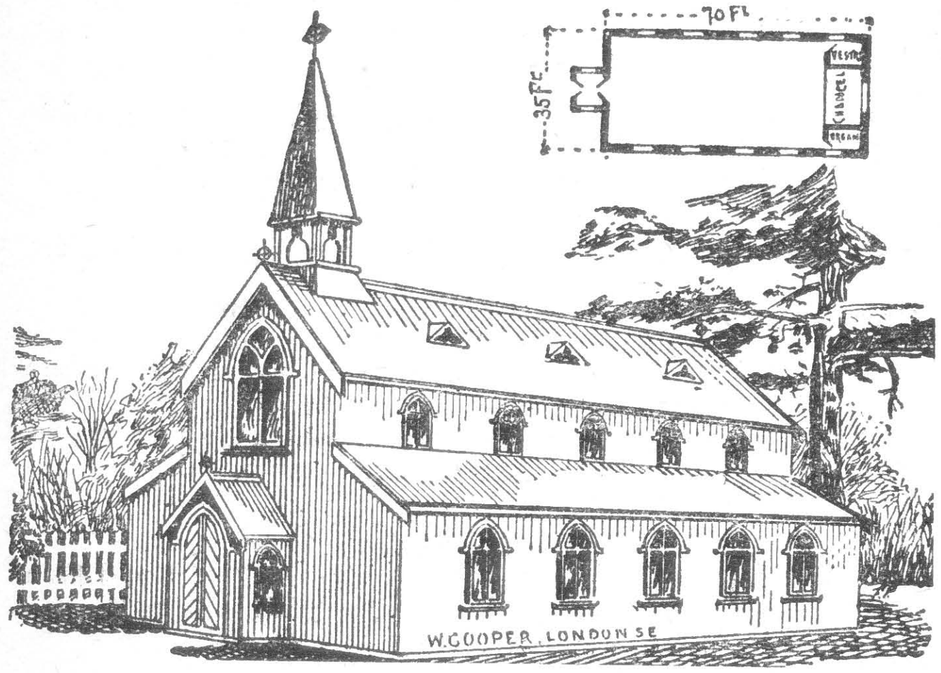
Portable and Tenants' Fixtures.

Being portable and tenants' fixtures, these Buildings commend themselves for service in all parts of the world. They can be enlarged or made small with comparative ease in any case of emergency.

If designs in this list do not meet with purchasers' requirements, Special Designs and Estimates will be promptly despatched on receipt of Rough Sketch and Particulars.

SPECIAL DESIGNS FREE.

Church.



No. 565.

This Church is handsomely designed, and can be constructed to suit any number of people. Lowest cash estimates given for other sizes on receipt of particulars. Furniture, Lighting, and Heating Apparatus separately estimated for. For Specification, see pages 412 and 413.

Delivered nearest Goods Station, and erected complete on purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf.

PRICES:

70ft. long by 40ft. wide, 9ft. to eaves, 30ft. to ridge.

Erected complete, £435.

On Rail or Wharf, £305.

For suitable Heating, Furniture, &c., see Section XI.

The Crown Hotel, East Grinstead.

SIRS,—The men have worked well, and completed the Corrugated Iron Studio to my satisfaction.—Yours faithfully, G. UNDERWOOD.

Duffryn Ffrwd, Mountain Ash.

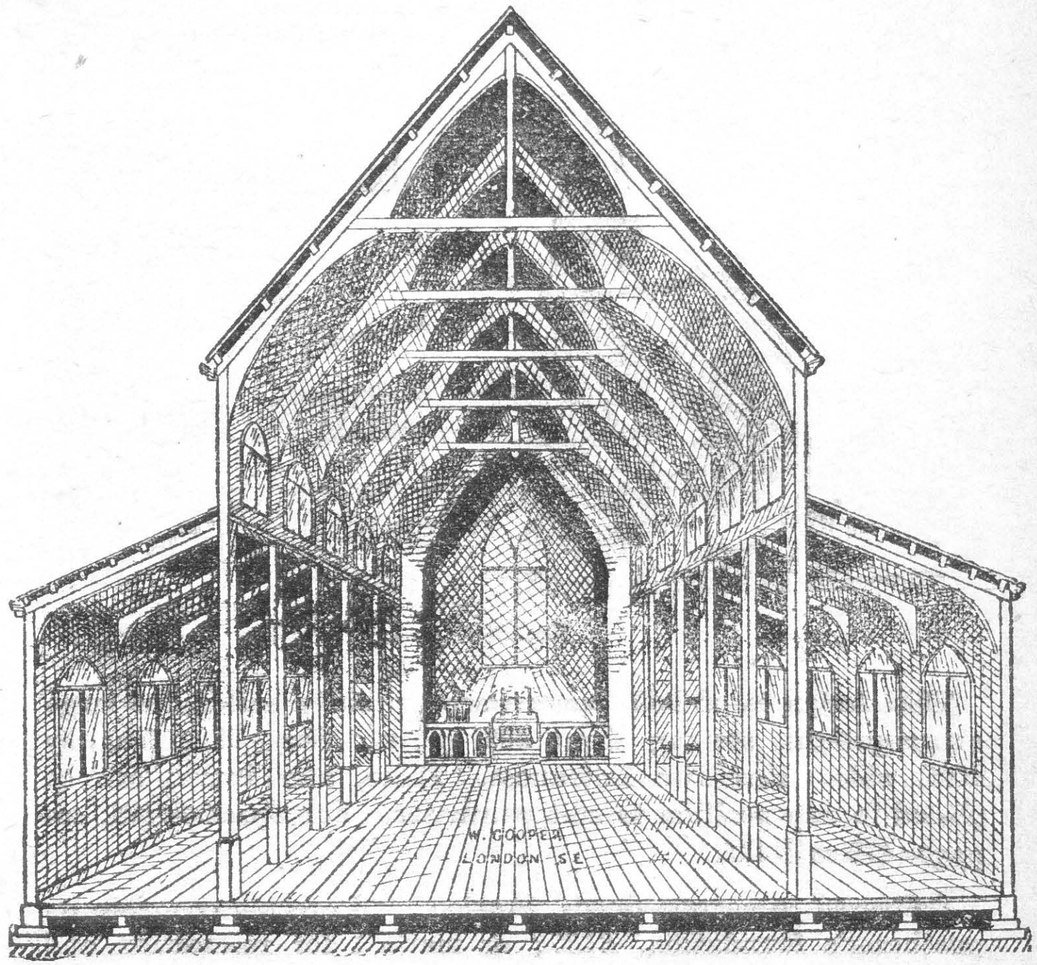
DEAR SIRS,—The Loose Boxes have been completed to my satisfaction. I think your men understand their work thoroughly.—Yours, &c., E. T. EVANS.

Chapel Road, Ropley.

DEAR SIR,—I beg to say that your man has been down and has made a splendid job of the Bungalow.—Yours truly, T. WILKINS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Sectional Interior View of No. 565.



Showing construction. This is a much admired and approved design, being in strict accordance with the rules of modern architecture.

Any Building not in stock, or special sizes, can be placed on rail within a few days from receipt of order.

Packing for shipment has the greatest attention, so that the parts may be protected from rough usage consequent upon a long voyage and transhipments and carriage overland.

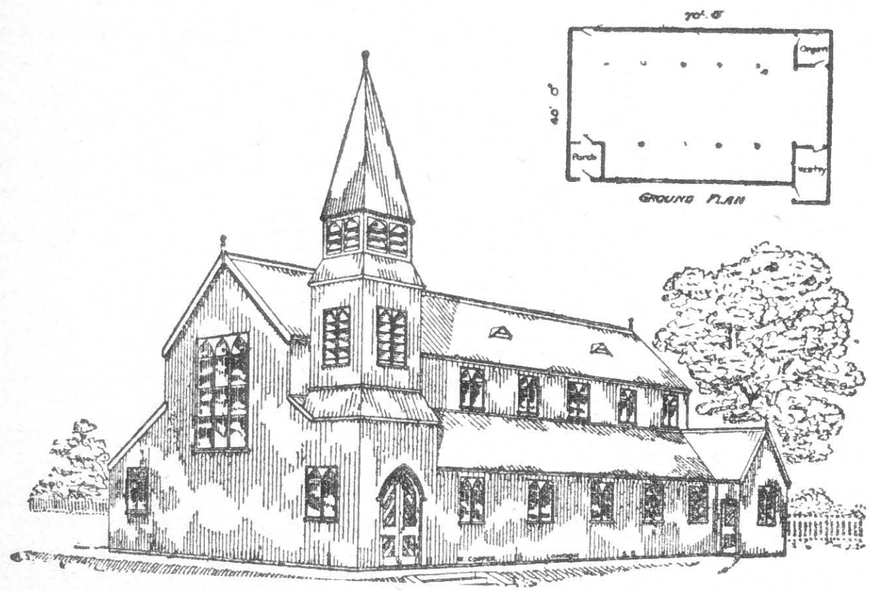
Didcot.

GENTLEMEN,—We hereby certify that we are highly pleased with the Iron Room your men have erected for us. It is in every way satisfactory, and the job has been carried through without a hitch, and in a most businesslike manner.—Yours truly, R. EDWARDS AND SONS.

Harlington, Hounslow.

DEAR SIRS,—Mr. Surgery wishes me to say that he is very well pleased with the Iron Building erected by you.—Yours truly, H. C. BELCH, JUN., Clerk to the Parish Council.

Church.



No. 566.

This design is of bold appearance, specially suited for large congregations, seating about 500 adults. Size, 70ft. long by 40ft. wide. Has Two Entrances. These, also Tower, can be placed in any position to suit purchaser. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station, and erected complete on purchaser's foundation, £455; or marked for re-erection and bundled and put on Rail or Wharf, £325.

For suitable Heating, Furniture, &c., see Section XI.

Vine Cottage, Goudhurst, Kent.

This is to certify that the Parish Room supplied by Messrs. W. Cooper, Ltd., has been erected to my satisfaction. A. J. MACLEAN.

The Vicarage, Wiveliscombe, Somerset.

I have great pleasure in bearing witness to the excellent manner in which your men have worked on the Mission Room erected here. I should imagine they are valuable men for any firm to possess.
HOWARD MCCRINCK, Vicar of Wiveliscombe, Somerset.

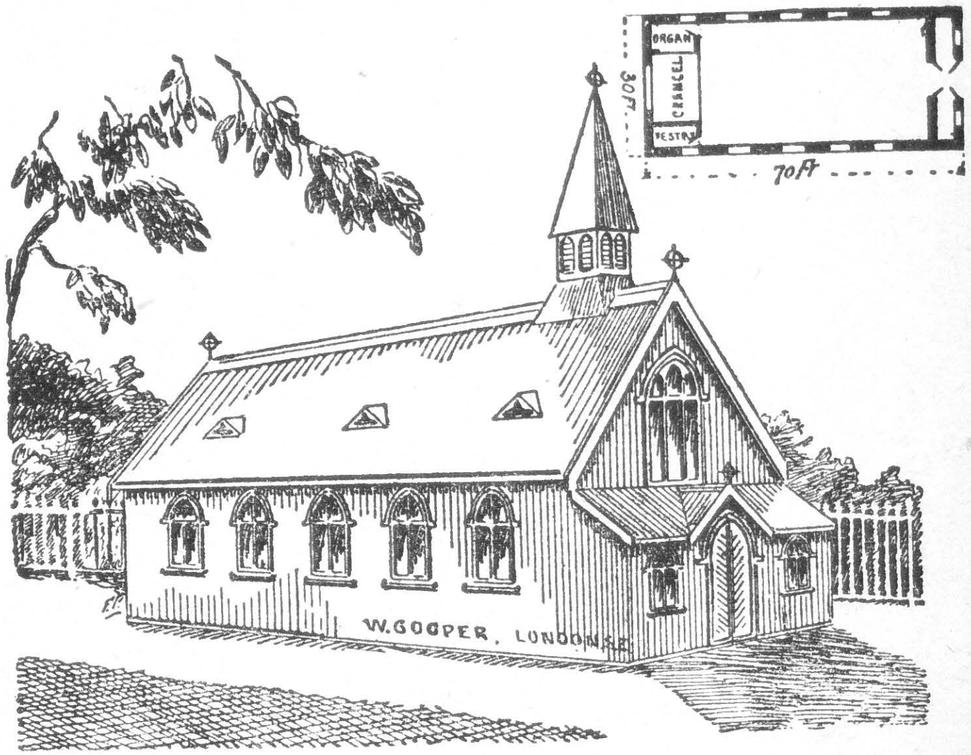
Lidget Cott, Barstable Estate, Laindon.

GENTLEMEN,—The Iron Bungalow supplied by you and erected by your men, whom I consider very capable, gives me great satisfaction.—Yours truly,
R. VARLEY.

The Homestead, Althorne, Essex.

GENTLEMEN,—I enclose balance of account, and am very pleased and satisfied with Cottage you have supplied and erected. The workmanship is very good.—Yours respectfully, GEORGE SOANES.

Church or Chapel.



No. 567.

This is a very neat design. Substantially constructed, very neat appearance, and well ventilated. Size, 70ft. long by 30ft. wide, 9ft. to eaves, 20ft. to ridge. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station, and erected complete on purchaser's foundation, £285, or marked for re-erection and bundled and put on Rail or Wharf, £195.

For suitable Heating, Furniture, &c., see Section XI.

Any size made at proportionate prices.

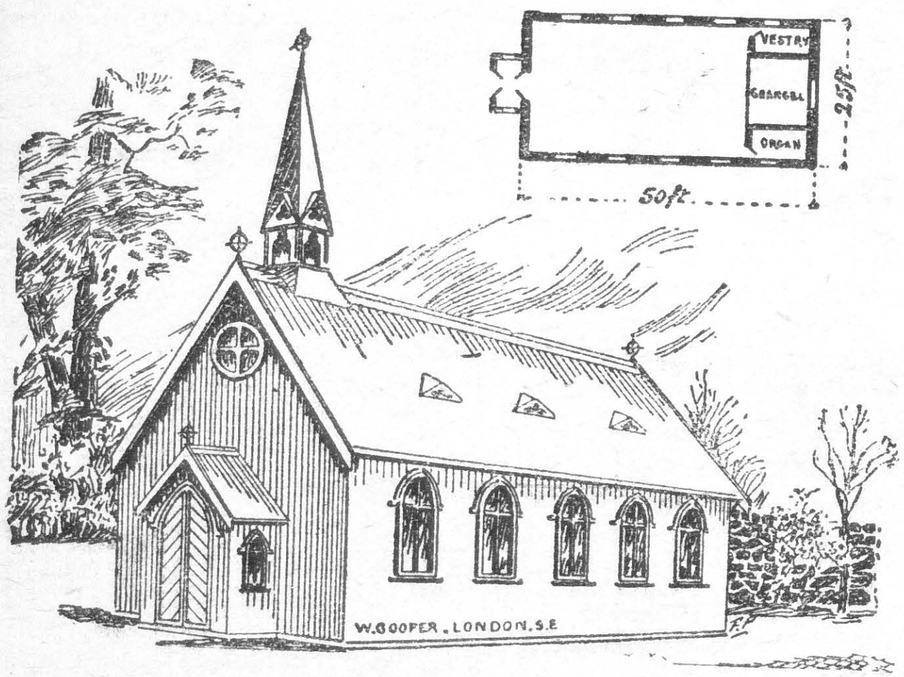
The Limes, Abertillery.

DEAR SIR,—My committee desire me to express to you their appreciation for the able manner in which you have carried out your work in connection with the erection of Billiard Room, and for the courteous manner in which you dealt with the officers of the institute whenever they found it necessary to consult you about anything connected with the structure.—On behalf of the Committee, I remain, yours faithfully,
GEO. TURNER, Secretary.

Dan-y-Craig, Crosmont, Hereford.

DEAR SIR,—I am very pleased with the Church you have supplied and erected for me, and I shall advise others to come to you if they are in need of a similar building.—Yours truly, G. RADCLIFFE.

Church or Chapel.



No. 568.

Another neat design, which is much patronised, well built, and well ventilated. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection and bundled and put on Rail or Wharf at the following prices :—

Length. ft.	Width. ft.	Height to Eaves. ft.	Ridge. ft.	Erected Complete. £ s. d.	Cash Price on Rail or Wharf. £ s. d.
30 ..	20 ..	8 ..	16 ..	110 0 0 ..	80 0 0
40 ..	20 ..	8 ..	16 ..	137 10 0 ..	100 0 0
50 ..	25 ..	9 ..	18 ..	192 0 0 ..	135 0 0
60 ..	25 ..	9 ..	18 ..	225 0 0 ..	158 0 0

For suitable Heating, Furniture, &c., see Section XI.

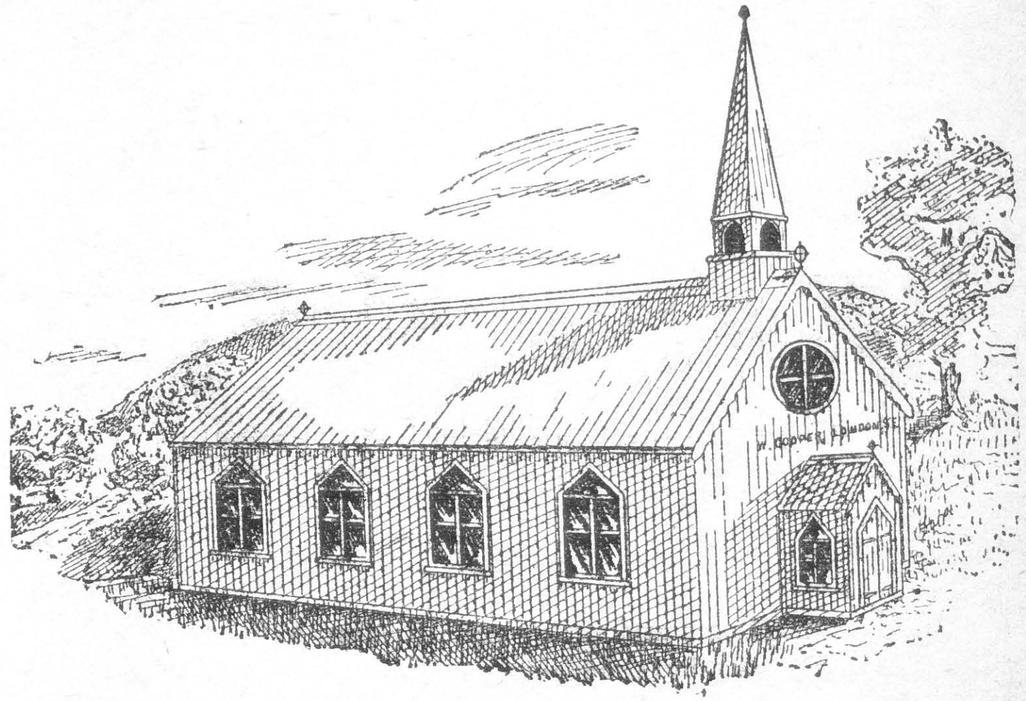
Any size made at proportionate prices.

42, Rockingham Terrace, Briton Ferry.

GENTLEMEN,—The Chapel which you have built gives us every satisfaction, and we are highly pleased with it. We are also pleased with the excellent manner in which the work has been carried out.—Yours respectfully,

M. WILLIAMS.

Church or Chapel.



No. 569.

This style of Church is suitable either for temporary use or a permanency. Is of economical design, and can be made to any size. For Specifications, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf at the following prices :—

Length.	Width.	Height to Eaves.	Ridge.	Erected Complete. £ s. d.	Cash Price. On Rail or Wharf. £ s. d.
30ft.	by 20ft.	by 8ft.	by 16ft.	100 0 0	70 0 0
40ft.	by 20ft.	by 8ft.	by 16ft.	122 0 0	85 0 0
50ft.	by 25ft.	by 9ft.	by 18ft.	166 0 0	112 0 0
60ft.	by 25ft.	by 9ft.	by 18ft.	188 0 0	126 0 0

For suitable Heating, Furniture, &c., see Section XI.

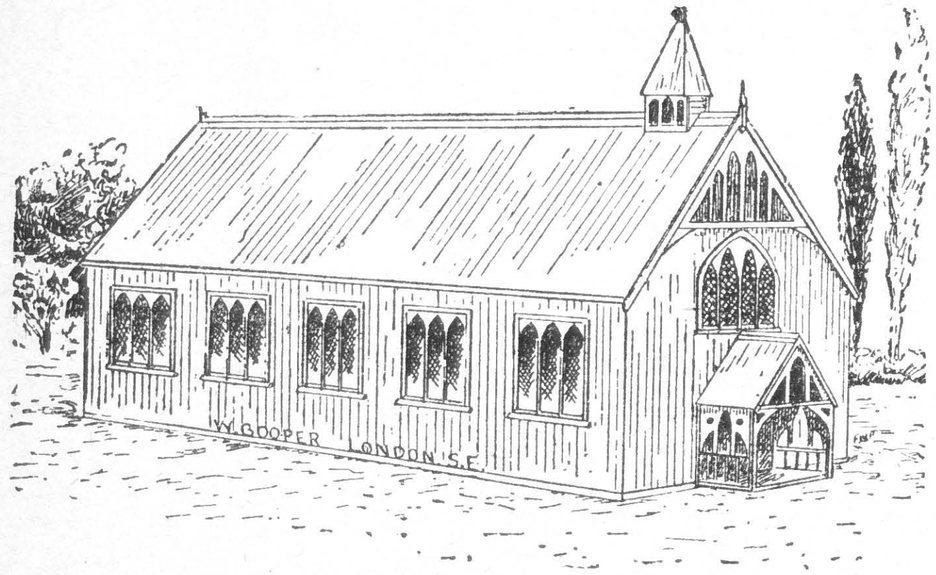
Any size made at proportionate prices.

Leckhamstead Rectory, Buckingham.

SIRS,—I have much pleasure in saying that the Iron Room is now completed, and that your men seem to have done their work very well and have made it all look very nice. The Greenhouse has arrived also, and will soon be completed.—Yours faithfully,

R. M. GORE-BROWNE.

Church or Chapel.



No. 570.

This is a handsome and picturesque Design, and is very much in vogue. Can be built to accommodate any number of worshippers up to 1,000. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf at the following prices:—

50ft. by 25ft., erected complete, £175; on Rail or Wharf, cash price, £115.

60ft. by 30ft., erected complete, £225; on Rail or Wharf, cash price, £145.

For suitable Heating, Furniture, &c., see Section XI.

Any size made at proportionate prices.

If designs in this List do not meet with purchasers' requirements, special designs and estimates will be promptly despatched on receipt of rough sketch and particulars.

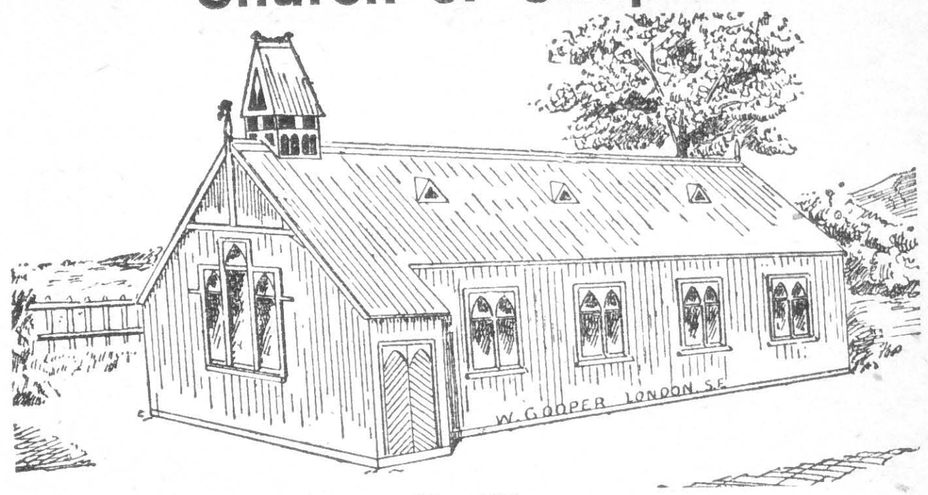
Horsey Vicarage, Great Yarmouth.

DEAR SIRS,—I have pleasure in expressing my satisfaction with the Church Room which your men have just erected for me. It is exactly what we want, and will, I hope, be found of much value in the parish. I should also like to testify to the good conduct and work of the men employed in the erection. They have given entire satisfaction in every way.—Yours faithfully,

S. MEREDITH BROWN.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Church or Chapel.



No. 571.

This is a very pretty Design, and has met with approval wherever erected. Is made to seat from 200 people. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf at the following prices:—

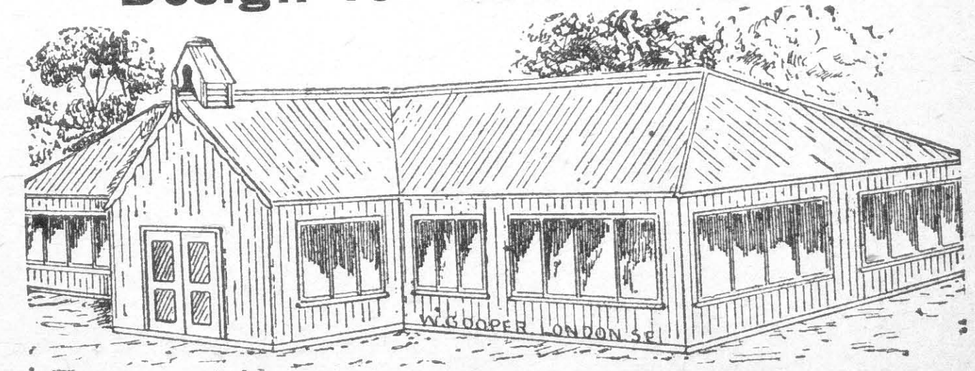
40ft. by 20ft., erected complete, £124; on Rail or Wharf, cash price, £88.

50ft. by 25ft., erected complete, £174; on Rail or Wharf, cash price, £118.

For suitable Heating, Furniture, &c., see Section XI.

Any size made at proportionate prices.

Design for School Rooms.

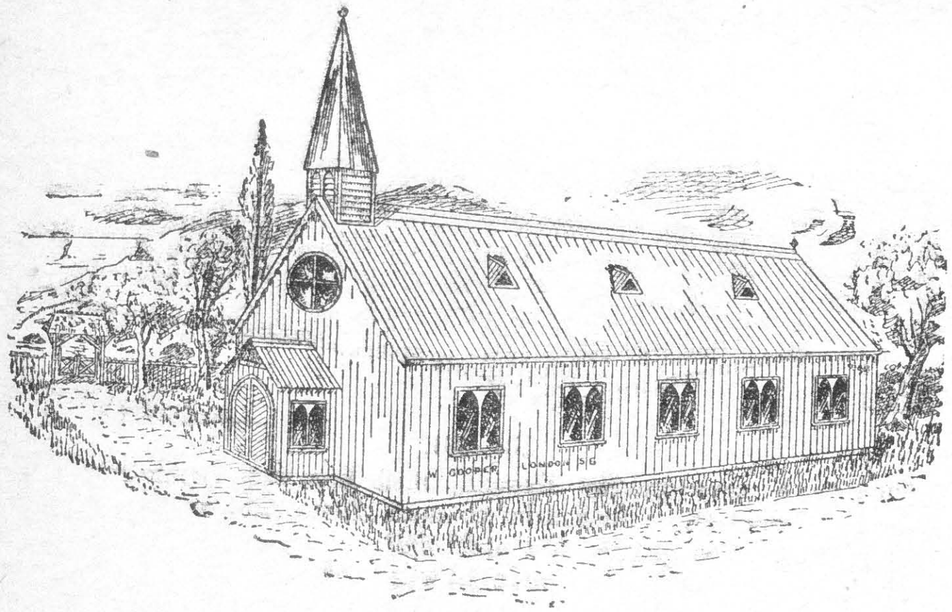


No. 572.

Main Building 60ft. by 30ft., with 12ft. by 12ft. projection. Erected Complete, £230. On Rail or Wharf, cash price, £150.

Estimates for other sizes, also for Partitions to form separate rooms, Heating Apparatus, Seats and Desks, &c., free on application.

Church or Chapel.



No. 573.

A very neat, soundly-constructed, and well-ventilated Church. Economical in design, and has given universal satisfaction. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf at the following prices:—

Length.	Width.	Eaves.	Ridge.		Erected Complete. £ s. d.		On Rail or Wharf. Cash Price. £ s. d.
30ft.	by 20ft.	by 8ft.	by 16ft.	....	105 0 0	....	75 0 0
40ft.	by 20ft.	by 8ft.	by 16ft.	....	126 0 0	....	92 0 0
50ft.	by 25ft.	by 9ft.	by 18ft.	....	176 0 0	....	122 0 0
60ft.	by 25ft.	by 9ft.	by 18ft.	....	205 0 0	....	142 0 0

For suitable Heating, Furniture, &c., see Section XI.

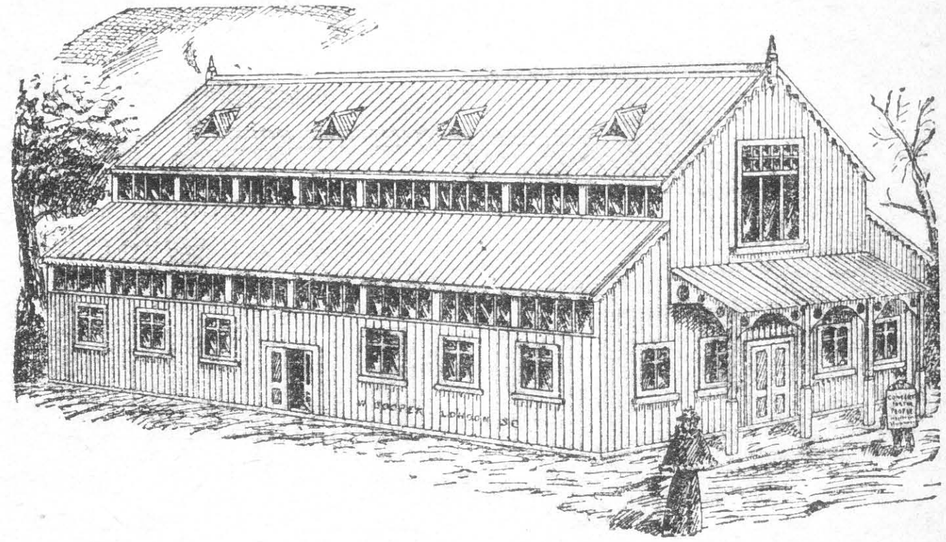
These Buildings, being portable and tenants' fixtures, commend themselves for service in all parts of the world.

Church Mission, Ynysddu, Mon.

DEAR SIRS,—On behalf of the above Building Committee, I am asked to notify you of their perfect satisfaction both in material and workmanship of the Building completed this day.—I am, yours faithfully,

IRVING WATSON, in charge. Signed, R. J. ROBERTS.

Concert, Drill Hall, Ball Room, or Entertainment Hall.



No. 574.

Handsome Design, light and well ventilated. Upper portion of windows made to open, and every part substantially constructed from good sound materials only. For full Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation. 100ft. long by 60ft. wide, £635; or marked for re-erection, and bundled and put on Rail or Wharf, £395.

For suitable Heating and Fittings, see Section XI. Or will quote specially for these upon receipt of particulars.

Plans free. Any size made at proportionate prices.

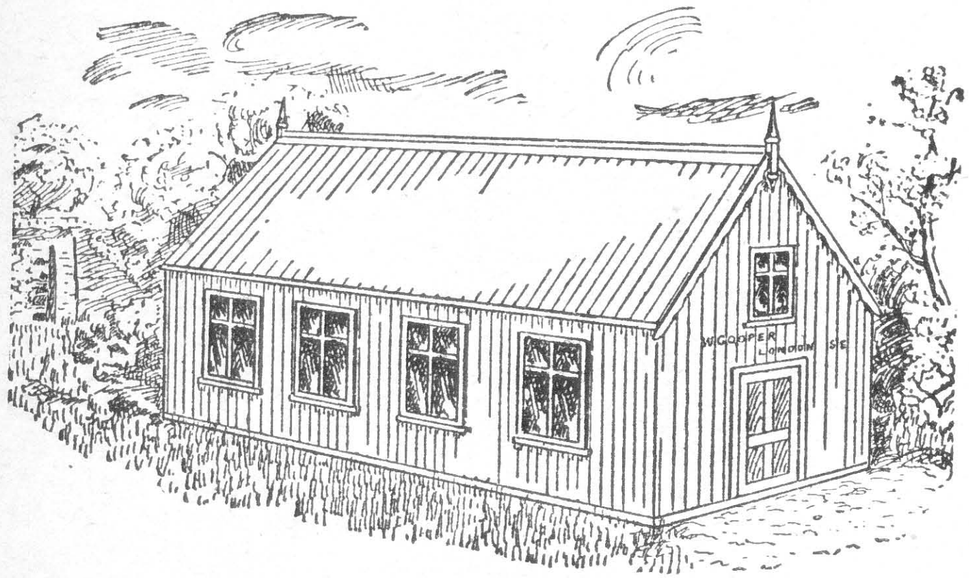
Exclusion of Draughts

is effected by a liberal use of Felt in the walls and gables. We employ it in all buildings we erect. It has also the advantage of preserving an equable temperature.

Ventilation

is studied in every building, our principle being to thoroughly effect it without causing draught.

Mission, School, Billiard, or Entertainment Room.



No. 575.

A cheap, well-made structure. Can be partitioned off into two or more rooms. Floored and match-lined. For Specification, see pages 412 and 413.

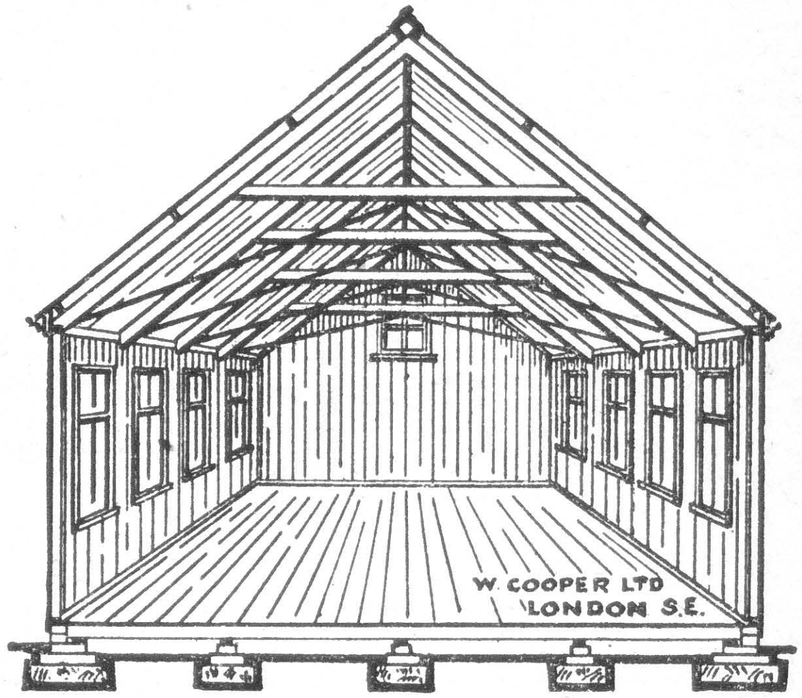
Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf, with or without lining, &c., at the following respective prices:—

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail or Wharf. Cash Price. £ s. d.	Building only on Rail. No Flooring Matching, Gutters, or Felt. Otherwise Complete as Specification. Cash Price. £ s. d.
8	6	5	7	10 0 0	8 0 0	5 0 0
10	8	6	8	12 15 0	9 15 0	6 10 0
14	10	6	9	18 10 0	13 0 0	8 10 0
18	12	7	10	31 10 0	22 0 0	15 10 0
22	14	7	11	43 0 0	29 0 0	19 15 0
26	16	8	13	55 10 0	39 0 0	25 10 0
30	18	8	14	74 0 0	50 0 0	31 0 0
40	20	9	16	100 0 0	67 0 0	44 0 0
50	24	9	17	132 0 0	87 0 0	55 0 0
60	30	9	19	190 0 0	128 0 0	75 0 0

Doors and Windows can be placed in any position to suit purchaser.

For suitable Heating and Fittings, see Section XI.

Mission Room.



Interior View of No. 575.

Delivered and erected upon purchaser's foundation. For Specification, see pages 412 and 413.

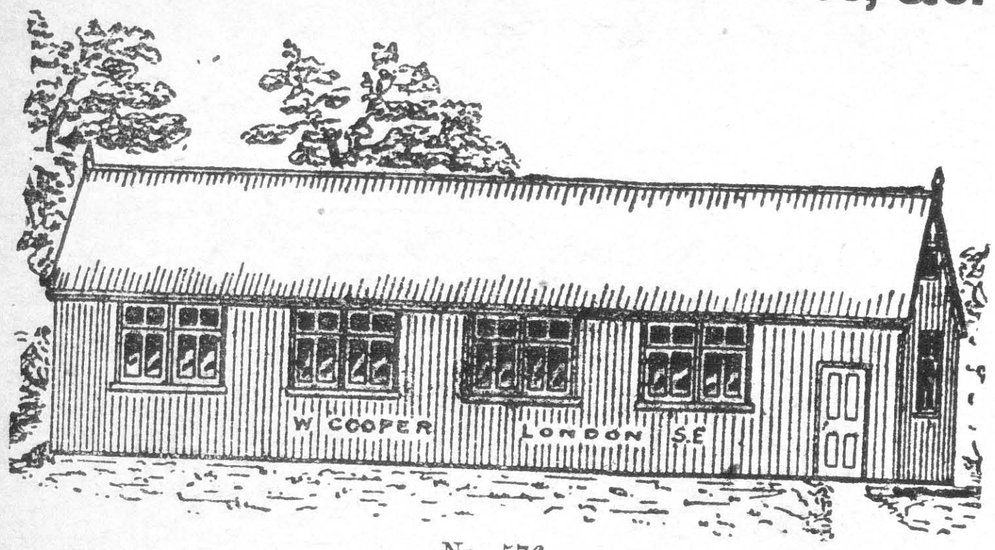
Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf at the following prices:—

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	Building only on Rail. No Flooring, Matching, Gutters, or Felt. Otherwise complete as Specification. Cash Price. £ s. d.
8	6	5	7	10 0 0	8 0 0
10	8	6	8	12 15 0	9 15 0
14	10	6	9	18 10 0	13 0 0
18	12	7	10	31 10 0	22 0 0
22	14	7	11	43 0 0	29 0 0
26	16	8	13	55 10 0	39 0 0
30	18	8	14	74 0 0	50 0 0
40	20	9	16	100 0 0	67 0 0
50	24	9	17	132 0 0	87 0 0
60	30	9	19	190 0 0	128 0 0

For suitable Heating and Fittings, see Section XI.

This Building has plain front, with door in centre. Porch can be added at a small extra charge on above prices. Any size made at proportionate prices.

School, Mission Room, Offices, &c.



No. 576.

A very convenient well-lighted structure, having windows in each side, and a window in each gable, side windows to open inwards at top for ventilation, gable windows hung on pivots. Glass plain 21oz. or $\frac{1}{8}$in. Rolled Plate. Constructed as specification, pages 412 and 413.

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail. or Wharf. Cash Price. £ s. d.	Building only on Rail. No flooring, Matching, Gutters, or Felt. Otherwise Complete as Specification. Cash Price. £ s. d.
40	20	9	16	100 0 0	67 0 0	44 0 0
50	24	9	17	132 0 0	87 0 0	55 0 0
60	30	9	19	190 0 0	123 0 0	75 0 0

Other sizes at proportionate prices upon application.

Extra doors can be added without charge.

Position of doors and windows can be arranged to suit purchaser.

For suitable Heating, &c., see Section XI.

Pogham, by Bognor.

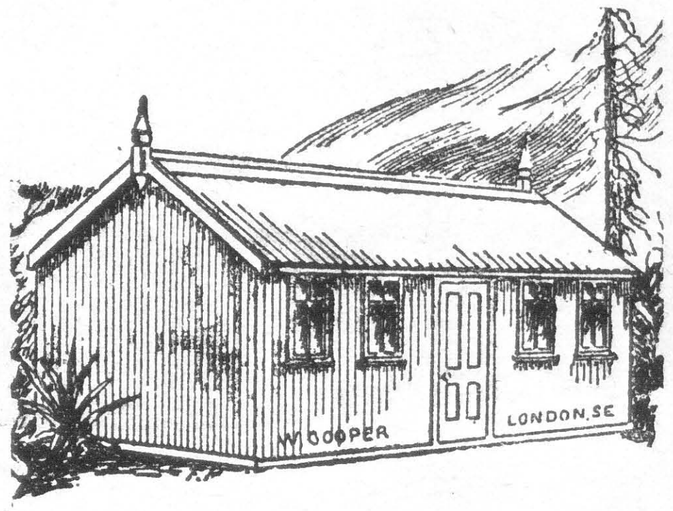
Mrs. Davis writes to say the men who have built up Gardener's Cottage here have done very well indeed, and completed the whole thing in eight days by working late and commencing early. The structure is put up well, nicely finished, and makes a comfortable dwelling for a couple.

The Central Stores, Highley, near Bridgnorth.

GENTLEMEN,—Enclosed please find cheque in settlement of account for Iron Building erected. I am quite satisfied with same, also the neat way you have completed the erection. You may use this as a testimonial if you wish.—Yours respectfully,

S. A. BACHE.

School, Mission, Living Rooms, Offices, Workshops, &c., &c.



No. 577.

Windows in back are also included.

Can be divided to make separate rooms, &c., at small extra charge. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf, with or without lining, &c., at the following respective prices:—

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail or Wharf. Cash Price. £ s. d.	Building only on Rail. No Flooring, Matching, Gutters, or Felt. Otherwise Complete as Specification. Cash Price. £ s. d.
30	18	8	14	74 0 0	50 0 0	31 0 0
40	20	9	16	100 0 0	67 0 0	44 0 0
50	24	9	17	132 0 0	87 0 0	55 0 0
60	30	9	19	190 0 0	128 0 0	75 0 0

Other sizes at proportionate prices.

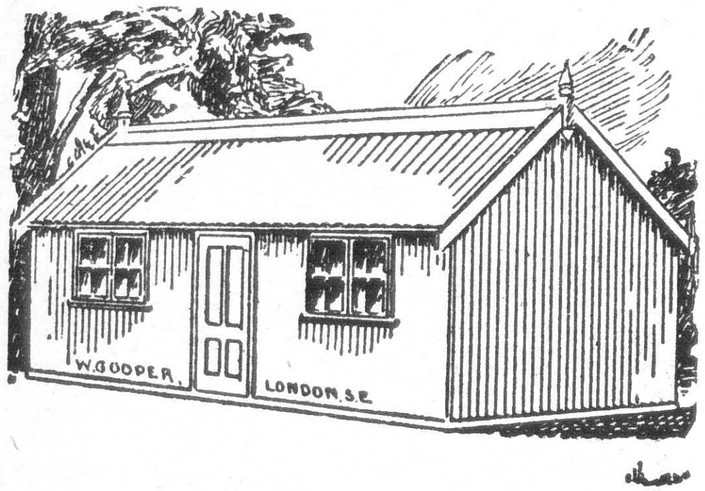
For suitable Heating, &c., see Section XI.

122, Kingston Road, Merton, Surrey.

DEAR SIRS,—New Wash-house, The Lawn, Merton Park:—I have inspected your work at the above, and found everything satisfactory. I am very pleased with the way you have carried out the work.—Yours faithfully,

J. SYDNEY BROCKLESBY, Architect.

School, Mission, Living Rooms, Offices, Workshops, &c., &c.



No. 578.

Windows in back are also included in the three largest sizes.

Can be divided to make separate rooms, &c., at small extra charge. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf, with or without lining, &c., at the following respective prices:—

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail or Wharf. Cash Price. £ s. d.	Building only on Rail. No Flooring, Matching, Gutters, or Felt. Otherwise Complete as Specification. Cash Price. £ s. d.
10	8	6	8	12 15 0	9 15 0	6 10 0
14	10	6	9	18 10 0	13 0 0	8 10 0
18	12	7	10	31 10 0	22 0 0	15 10 0
22	14	7	11	43 0 0	29 0 0	19 15 0
26	16	8	13	55 10 0	39 0 0	25 10 0
30	18	8	14	74 0 0	50 0 0	31 0 0

Other sizes at proportionate prices.

For suitable Heating, &c., see Section XI.

11, Salcombe Gardens, North Side, Clapham Common.

DEAR SIRS,—I am very pleased with the Bassinette House, which arrived safely on Saturday. It is and looks better than I anticipated.—Yours faithfully,

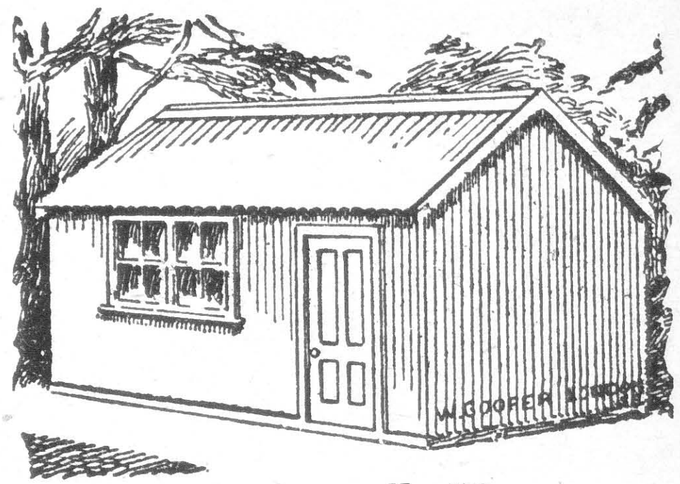
E. MYNOTT.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

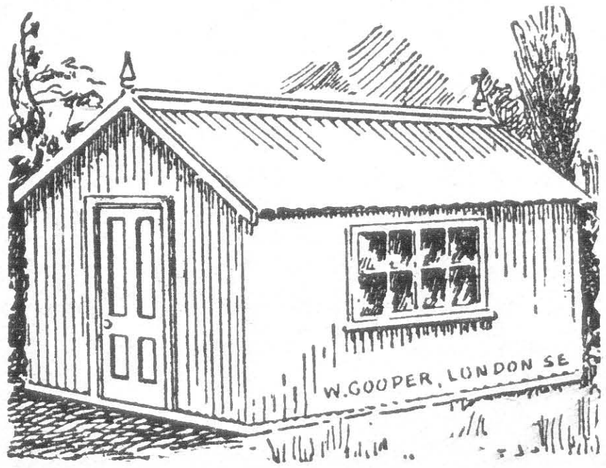
School, Mission, Living Rooms, Offices, Workshops, &c., &c.

Window in each side included in the two largest sizes.

Can be divided to make separate rooms, &c., at small extra charge. For Specification, see pages 412 and 413.



No. 579.



No. 580.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf, with or without lining, etc., at the following respective prices:—

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail or Wharf Cash Price. £ s. d.	Building only on Rail. No Flooring, Matching, Gutters, or Felt. Otherwise Complete as Specification. Cash Price. £ s. d.
8	6	5	7	10 0 0	8 0 0	5 0 0
10	8	6	8	12 15 0	9 15 0	6 10 0
14	10	6	9	18 10 0	13 0 0	8 10 0
18	12	7	10	31 10 0	22 0 0	15 10 0

Door and Windows can be placed in any position to suit purchaser.

Other sizes at proportionate prices.

For suitable Heating, &c., see Section XI.

School, Mission, Living Rooms, Offices, Workshops, &c., &c.



No. 581.

Can be divided to make separate rooms, &c., at small extra charge. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf, with or without lining, &c., at the following respective prices:—

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail or Wharf. Cash Price. £ s. d.	Building only on Rail. No Flooring, Matching, Gutters, or Felt. Otherwise Complete as Specification. Cash Price. £ s. d.
8	6	5	7	10 0 0	8 0 0	5 0 0
10	8	6	8	12 15 0	9 15 0	6 10 0
14	10	6	9	18 10 0	13 0 0	8 10 0
18	12	7	10	31 10 0	22 0 0	15 10 0
22	14	7	11	43 0 0	29 0 0	19 15 0

Door and windows can be placed in any position to suit purchaser.

Other sizes at proportionate prices.

For suitable Heating, &c., see Section XI.

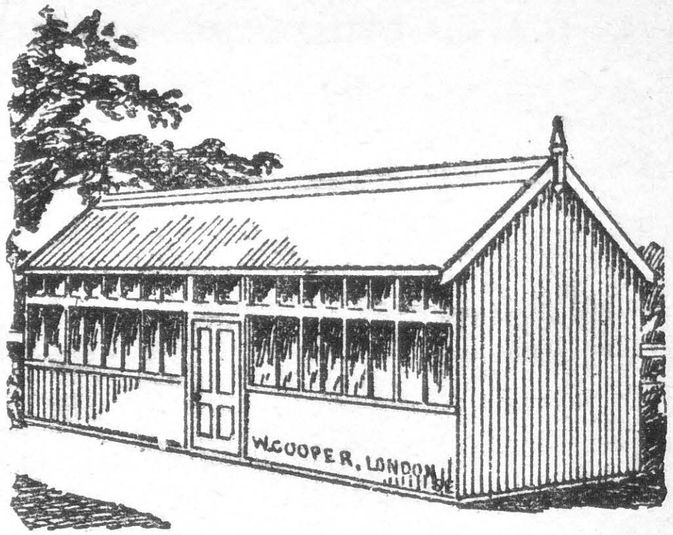
On-Rail or Wharf Prices

include the Building Complete as above, ready for erection, carefully marked and put on Rail at our Works, or delivered to London Wharf.

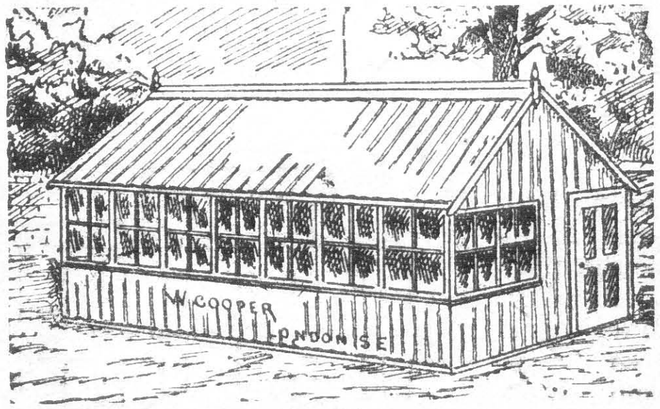
Offices, Workshops, &c., &c.

Can be divided to make separate rooms, &c., at small extra charge.

For Specification, see pages 412 and 413.



No. 582.



No. 583.

Delivered to nearest Goods Station within 100 miles and erected complete on purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf, with or without lining, &c., at the following respective prices:—

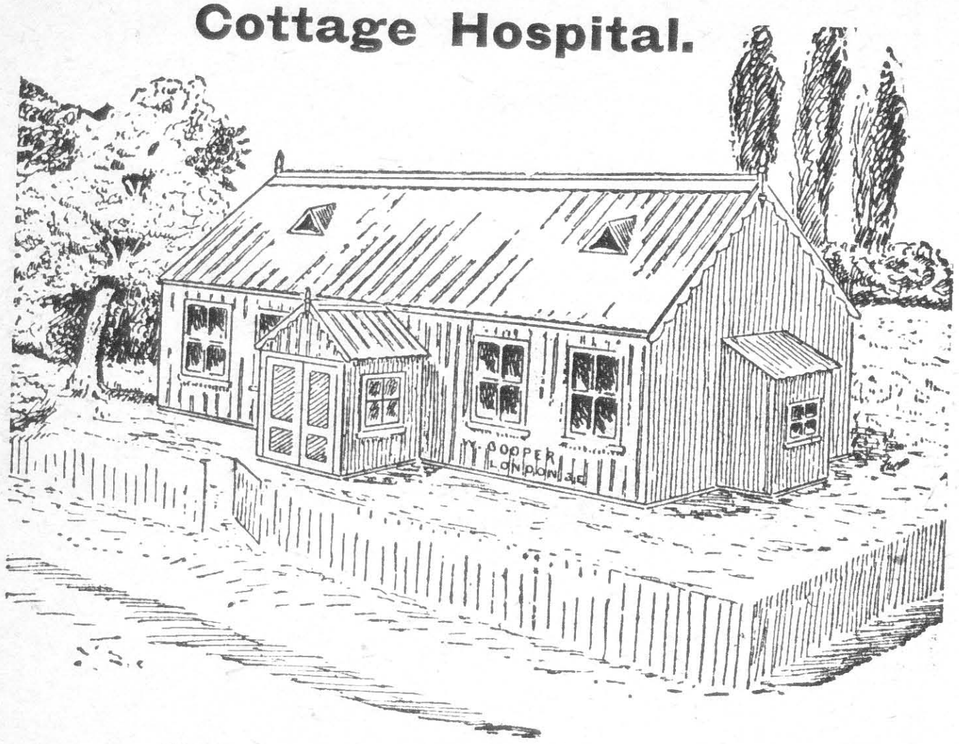
Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail or Wharf. Cash Price. £ s. d.	Building only on Rail. No Flooring, Matching, Gutters, or Felt. Otherwise Complete as Specification. Cash Price. £ s. d.
8	6	5	7	10 0 0	8 0 0	6 0 0
10	8	6	8	12 15 0	9 15 0	6 10 0
14	10	6	9	18 10 0	13 0 0	8 10 0
18	12	7	10	31 10 0	22 0 0	15 10 0
22	14	7	11	43 0 0	29 0 0	19 15 0
26	16	8	13	55 10 0	39 0 0	25 10 0
30	18	8	14	74 0 0	50 0 0	31 0 0
40	20	9	16	100 0 0	67 0 0	44 0 0
50	24	9	17	132 0 0	87 0 0	55 0 0
60	30	9	19	190 0 0	128 0 0	75 0 0

Door and Windows can be placed in any position to suit purchaser.

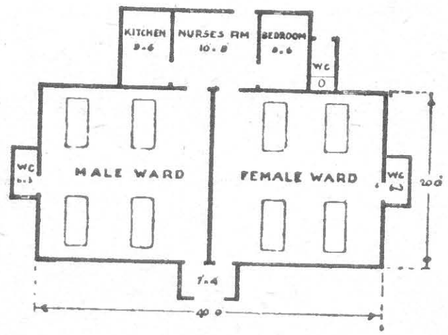
Prices for these Buildings, unlined, but with Wood Floor and Joists upon application.

For suitable Heating, etc., see Section XI.

Cottage Hospital.



No. 584.



This Design has been thoroughly considered, and is especially adapted for the purpose for which it is intended. Contains both Male and Female Wards, three Lavatories, Nurses' Room, Bedroom, and Kitchen.

Delivered to nearest Goods Station within 100 miles, and erected complete upon purchaser's foundation

Exclusive of Fittings.

For 8 Beds, erected Complete £160

Quotations for other sizes upon application.

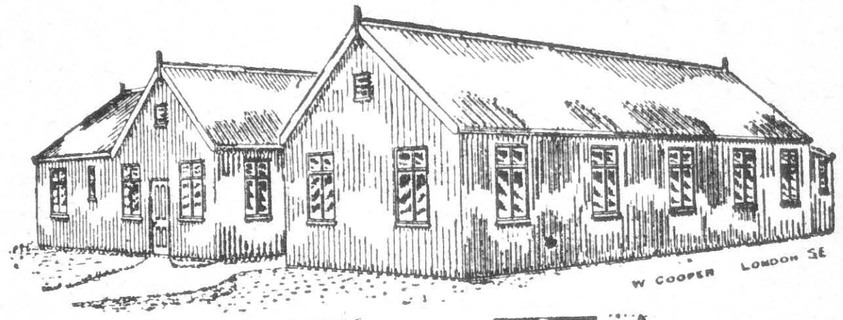
Specification for this structure includes 24 gauge Galvanised Corrugated Iron Sheets, ¾in. Matching, 1in. tongued and grooved Floorboards, otherwise as stated on pages 412 and 413.

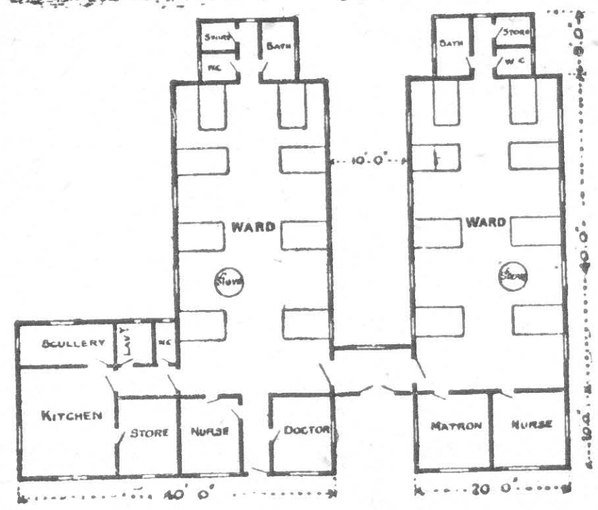
Exclusion of Draughts

is effected by a liberal use of Felt in the walls and gables. We employ it in all buildings we erect. It has also the advantage of preserving an equable temperature.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Isolation Hospital.





No. 585.

Plan and Elevation of Complete Isolation Hospital.

For Specification, see pages 412 and 413.

Delivered to nearest Goods Station, and erected complete upon purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf.

Estimates given free on application.

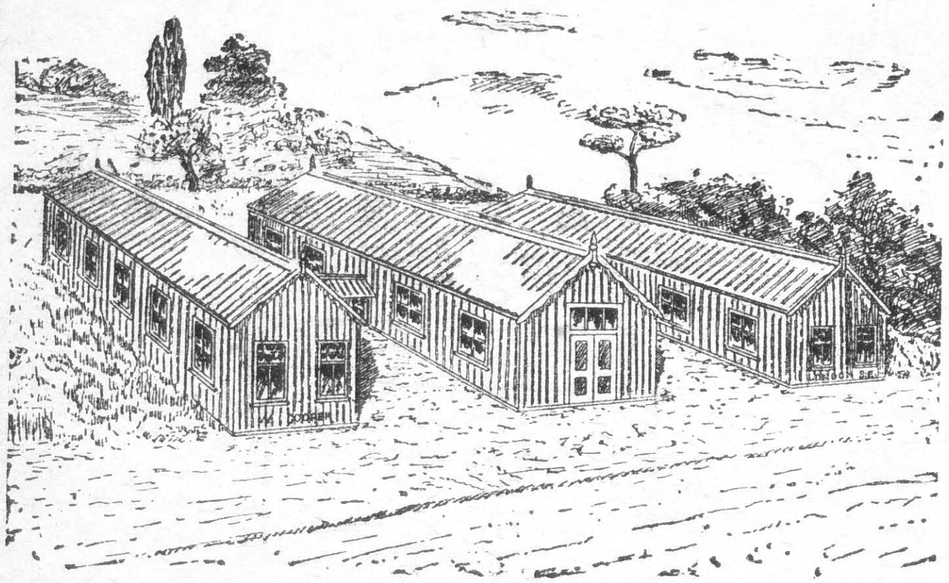
Hospitals can be despatched within 24 hours after receipt of order, and erected complete, ready for occupation, within 14 days.

One of our Surveyors waits on intending purchasers to take particulars, give advice, &c., free of charge.

Ventilation

is studied in every building, our principle being to thoroughly effect it without causing draught.

Hospital (Isolated Wards).



No. 586.

This Design has been thoroughly well considered and planned. It can be built to accommodate from Sixteen to Thirty-two Beds. Contains Doctor's Residence, Nurses' Rooms, Disinfecting Rooms, Bath Rooms, Closets, Kitchen, Scullery, Larder, Pantry, &c., &c., or can be fitted or divided to purchaser's own requirements. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station, and erected complete upon purchaser's foundation, or marked for re-erection and bundled and put on Rail or Wharf.

For 16, 24, 32, or more Beds.

Estimates given free on application.

Hospitals can be despatched within twenty-four hours after receipt of order, and erected complete ready for occupation within 14 days.

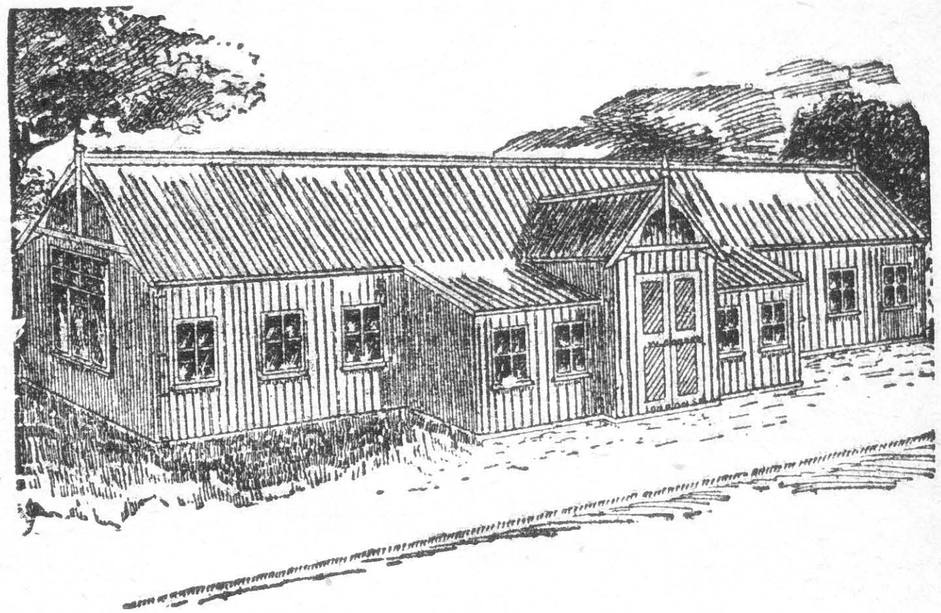
One of our Surveyors waits on intending purchasers to take particulars, give advice, &c., free of charge.

Roofing Felt.

Specially made for Iron Buildings. Patent Asphaltic Rolls, 25yd. long by 32in .wide, 4s. 6d. per roll.

Nails for fixing, per box containing 100, 6d.; 250, 1s.

Iron Portable Hospital.



No. 587.

Constructed for the isolation of infectious diseases on the most approved sanitary principles. Well ventilated, both by windows, which are made to open, and through the roof. Contains Male and Female Wards, Doctor's and Nurses' Rooms, Kitchen, Scullery, Bath Room, and Lavatories. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station, erected complete upon purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf.

For 8, 12, 16, or more Beds.

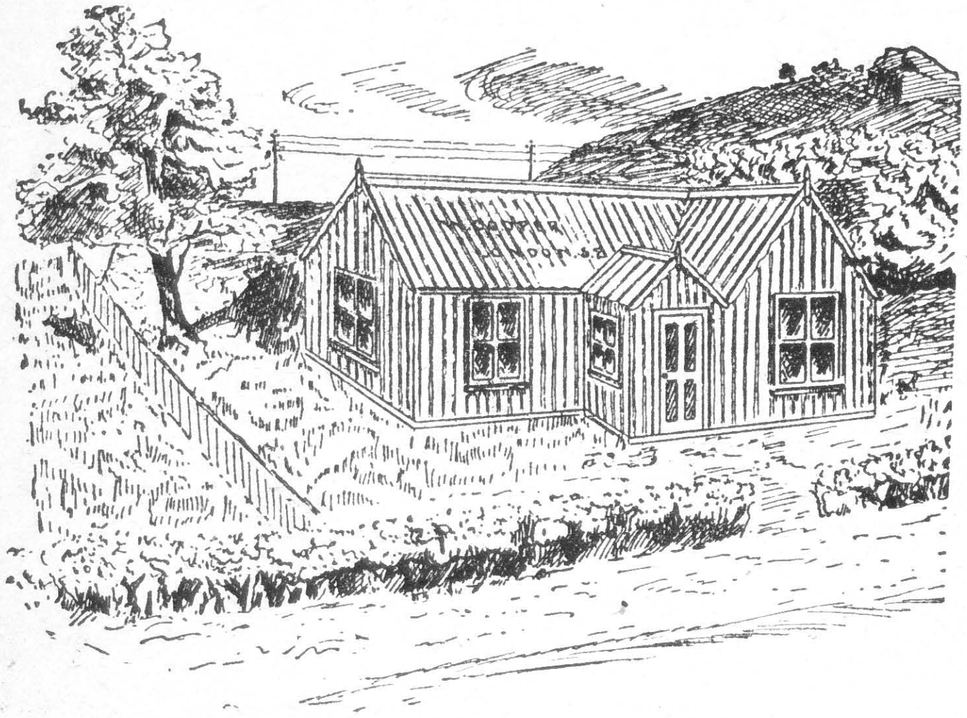
Estimates given free on application.

Can be despatched at 24 hours' notice, and erected complete ready for occupation within 14 days.

Erection Prices

include Delivery and Erection complete, Painting Outside Woodwork two coats best oil colour, and Staining and Varnishing Inside, Glazing Windows, &c., by our own men, all Railway Charges, Carriage, Men's Fares, Lodgings, &c.

Village School.



No. 588.

This is a very Convenient Building for a Mixed School, which has had careful consideration. Is divided into two Rooms, one 20ft. by 20ft., the other 20ft. by 30ft., with Entrance Hall 10ft. by 8ft. Delivered to nearest Goods Station, and erected complete upon purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf.

Size, 40ft. by 30ft.

Erected Complete, £155; on Rail or Wharf, £110.

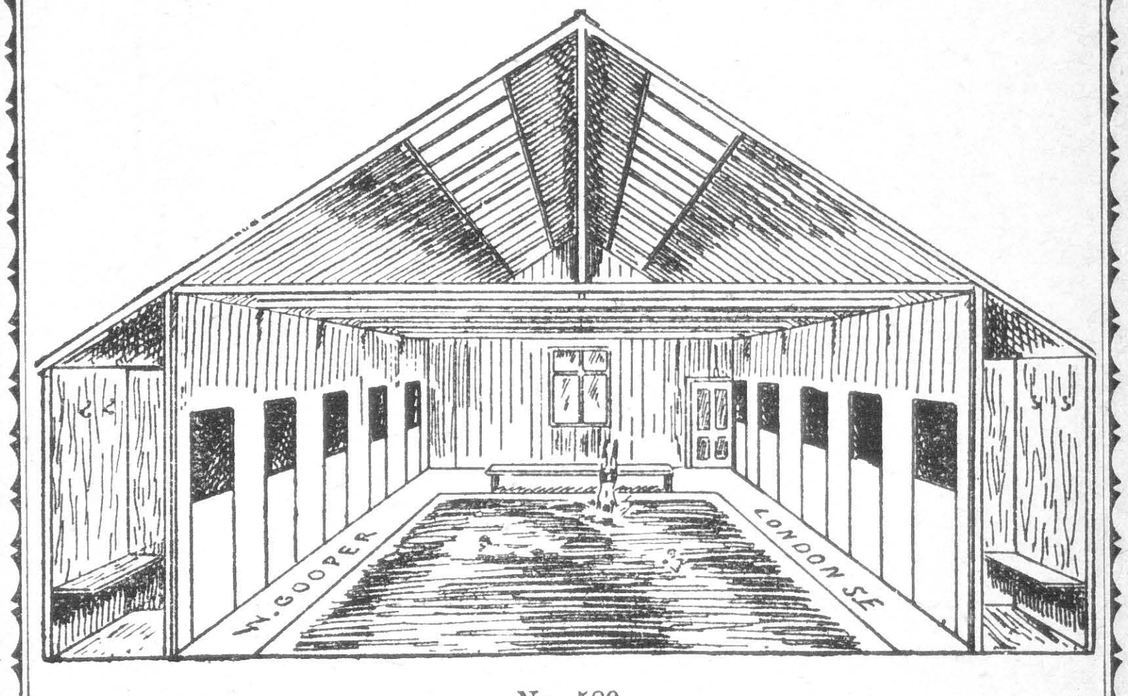
For suitable Heating and Fittings, see Section XI.

Ground Plan Free on Application.

Erection Prices

include Delivery and Erection complete, Painting Outside Woodwork two coats best oil colour, and Staining and Varnishing Inside, Glazing Windows, &c., by our own men, all Railway Charges, Carriage, Men's Fares, Lodgings, &c., within 100 miles. Beyond this distance extra cost of Carriage, &c., will be charged.

Swimming Baths.



No. 589.

This Design has been well considered, and can be made to accommodate any number. Delivered and erected upon purchaser's foundation and bath. Size of Building, 65ft. by 30ft. With 24 Compartments, Hall, Office, and Caretaker's Room. For full Specification, see pages 412 and 413.

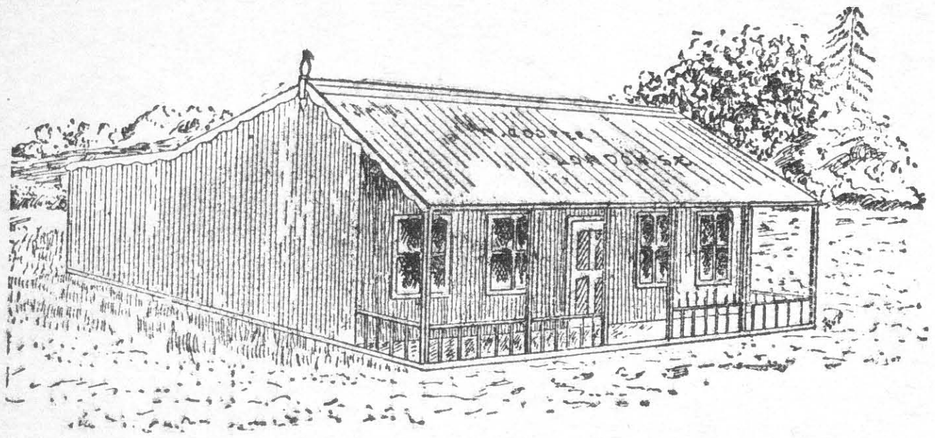
Delivered to nearest Goods Station within 100 miles, and erected complete, on purchaser's foundation, £300; or marked for re-erection, and bundled and put on Rail or Wharf, cash price, £205.

Any size made at proportionate prices. Plans Free.

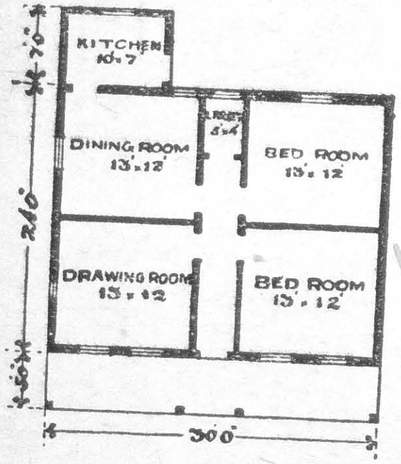
Newport Road, Bedwas, Cardiff.

GENTLEMEN,—I hereby certify that you have (in ten days), in defiance of wind and rain, completed our mission hall according to specification, and I must say its neatness, both inside and out, has met with the admiration of everyone; also its durability. It therefore gives me the greatest pleasure to state that the men sent by you to erect the building are indeed a credit, not only to you as a firm, but to all British mechanics. For system, zeal, &c., and for their ambition to please both master and purchaser they are unequalled.—I am, gentlemen, on behalf of the committee, D. WATTS.

Shooting Box.



No. 590.



This handsome design contains five rooms, consisting of two Bedrooms, 13ft. by 12ft., Dining Room, 13ft. by 12ft., Drawing Room, 13ft. by 12ft., Kitchen, 10ft. by 7ft., and Larder, 5ft. by 4ft.; or Saloon, Refreshment Room, two Dressing Rooms, and Lavatory. Main Building, 30ft. by 24ft., with 5ft. Verandah and 7ft. Back addition. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, £130; or marked for re-erection, and bundled and put on Rail or Wharf, Cash Price, £95.

Estimates for larger sizes upon receipt of particulars.

Frame-work

is of the following substances:—Sleepers and joists, 4in. by 2in.; principal rafters, 5in. by 2in., 6in. by 2in., 7in. by 2in., 3in. by 6in., 2½in. by 6in., 3in. by 8in., and 3in. by 9in., according to width of house; framework, 3in. by 2in., 4in. by 2in., and 3in. by 4in.; purlins, 4in. by 2in. It is made in sections to facilitate both fixing and removal, which can be easily accomplished at any time at a minimum cost of labour.

Floor Boards

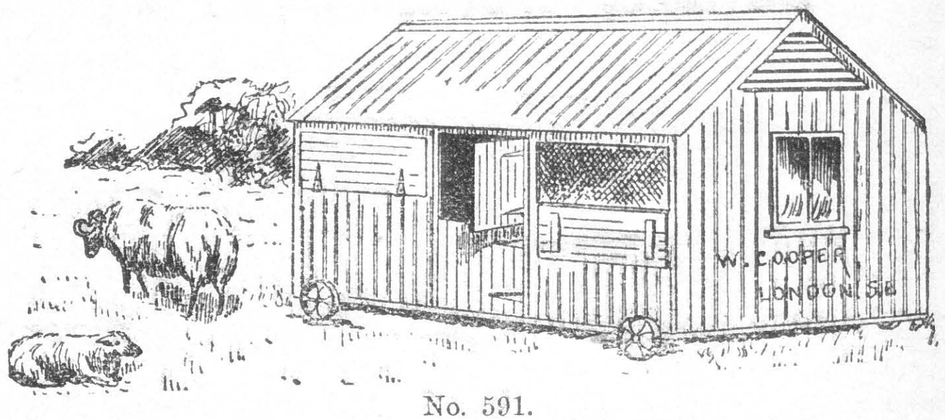
are supplied of thoroughly seasoned deal of ¾in. and 1in. thicknesses

Lining

is of thoroughly seasoned and selected matchboards of ½in. and ⅝in., tongued and grooved.

For suitable Heating, &c., see Section XI.

Portable Game Larder.

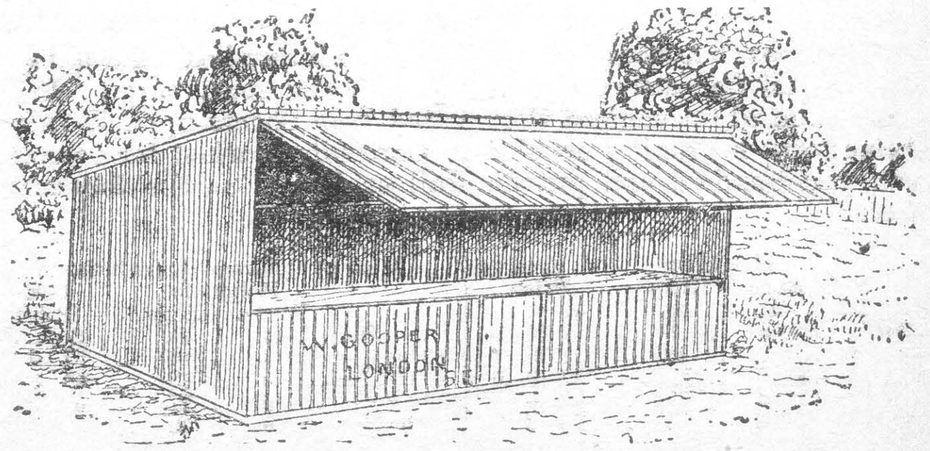


No. 591.

These Larders are invaluable to Sportsmen for storing game after killed; perfectly ventilated, and are necessary acquisitions for keeping game fresh. Complete with Floor and Wheels. No Lining.

12ft. by 8ft., £14. Marked for re-erection, bundled, and put on Rail or Wharf.

Refreshment Bar.



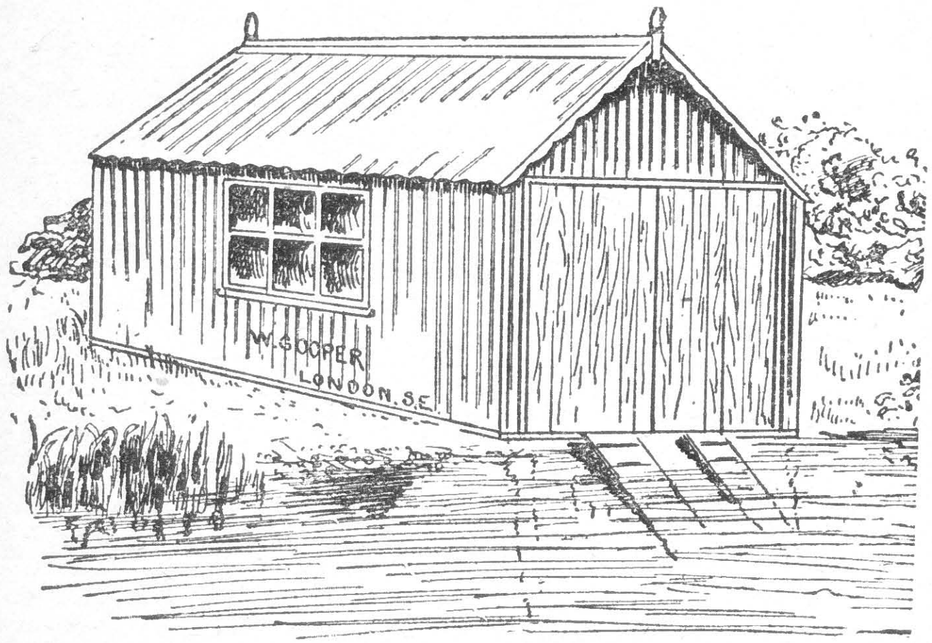
No. 592.

This is a very neat and useful design, being constructed of Galvanised Corrugated Iron on strong Wooden Framework. The roof of the verandah is made to let down, and can be bolted inside, thus making it perfectly secure when left. No Floor or Lining included.

Made in Sections, marked for re-erection, and bundled and put on Rail or Wharf.

10ft. by 8ft., £8; 14ft. by 10ft., £11; 18ft. by 12ft., £18; 22ft. by 14ft., £22.

Boathouse, Motor-car Shed, Garage, Workshop, &c.



No. 593.

This design has been supplied by us to many boat and garage owners, and has answered their purpose in every way. It is constructed of Galvanised Corrugated Iron Sheets upon Wooden Framework, no Lining or Floor. Carefully marked for re-erection, and bundled and put on Rail or Wharf at the following prices:—

ft.	ft.	Height to Eaves. ft.	Height to Ridge. ft.	Cash Price. £ s. d.
10 by	8	6	8	7 10 0
14 by	10	7	10	9 15 0
18 by	12	8	11	17 10 0
22 by	14	8	11	22 0 0
26 by	16	8	13	28 0 0

With two pairs of doors in front.

ft.	ft.	Height to Eaves. ft.	Height to Ridge. ft.	Cash Price. £ s. d.
30 by	18	8	14	34 0 0
40 by	20	9	16	49 0 0
50 by	24	9	17	63 0 0
60 by	30	9	19	85 0 0

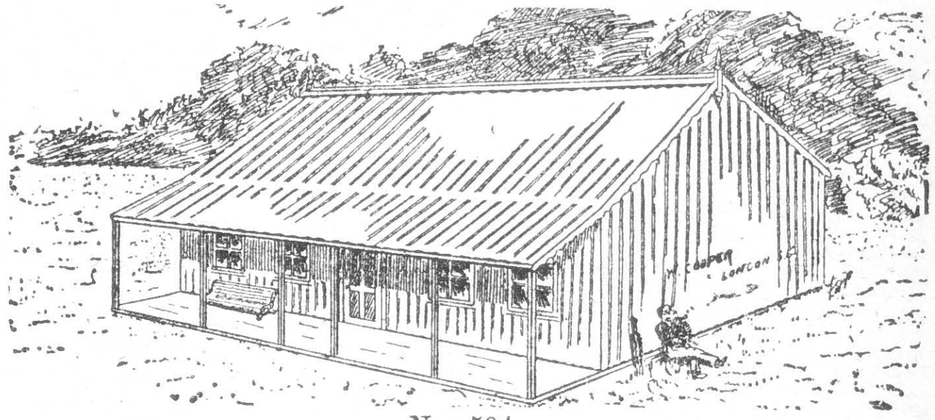
Doors and windows can be placed in any position.

Estimates for erecting on purchaser's foundation and for other sizes on application.

On-Rail or Wharf Prices

include the Building Complete as above, ready for erection, carefully marked and put on Rail at our Works, or delivered to London Wharf.

Cricket, Lawn Tennis, or Golf Pavilion, with Verandah.



No. 594.

This is a very neat and useful design. Can be divided to make Dressing Rooms, Refreshment Bar, Saloon, Lavatory, &c., to purchaser's requirements. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf at the following prices:—

Main Building. Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	Complete on Rail or Wharf. Cash Price. £ s. d.
10	8	6	8	14 0 0	10 10 0
14	10	6	9	21 0 0	15 10 0
18	12	7	10	34 0 0	24 0 0
22	14	7	11	47 0 0	32 0 0
26	16	8	13	62 0 0	44 0 0
30	18	8	14	72 0 0	56 0 0
40	20	9	16	107 0 0	72 0 0
50	24	9	17	140 0 0	94 0 0
60	30	9	19	200 0 0	135 0 0

Sizes 10ft. by 8ft. to 26ft. by 16ft. have one window only, either side of door, remainder as illustration.

Above sizes are without Verandah.

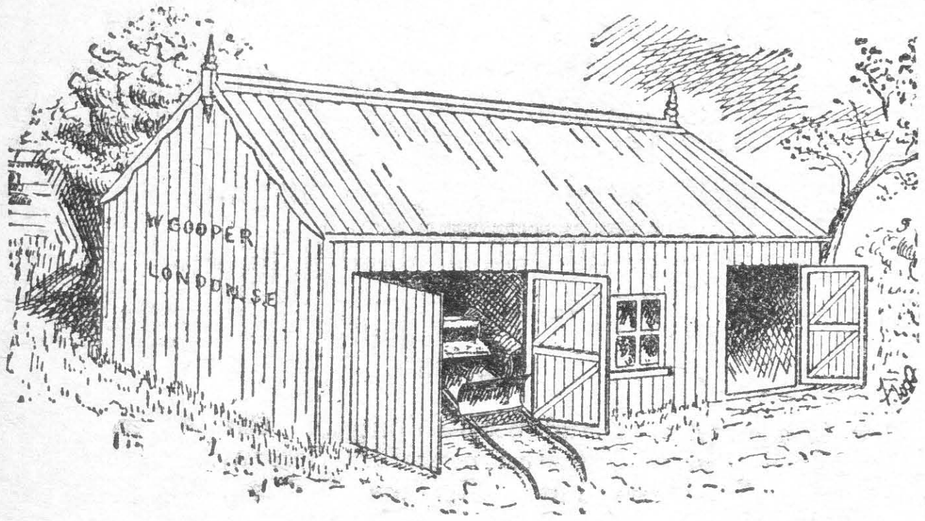
Extra windows can be added if desired.

For suitable Heating, &c., see Section XI.

Exclusion of Draughts

is effected by a liberal use of Felt in the walls and gables. We employ it in all buildings we erect. It has also the advantage of preserving an equable temperature.

Portable Iron Stable, Coach-House, and Harness Room Combined.



No. 595.

Stable match-boarded, Harness-room floored and matchlined. Very substantially constructed. Neat design. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected on purchaser's foundation, or marked for re-erection, bundled, and put on Rail or Wharf at the following prices:—

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail or Wharf. Cash Price. £ s. d.
14	10	7	10	19 0 0	13 10 0
18	12	7	10	30 10 0	21 10 0
22	14	8	12	42 0 0	29 10 0
34	14	8	12	62 0 0	45 0 0

Other sizes and prices on application.

Ground Plans for foundations free.

For suitable Fittings, see Section XI.

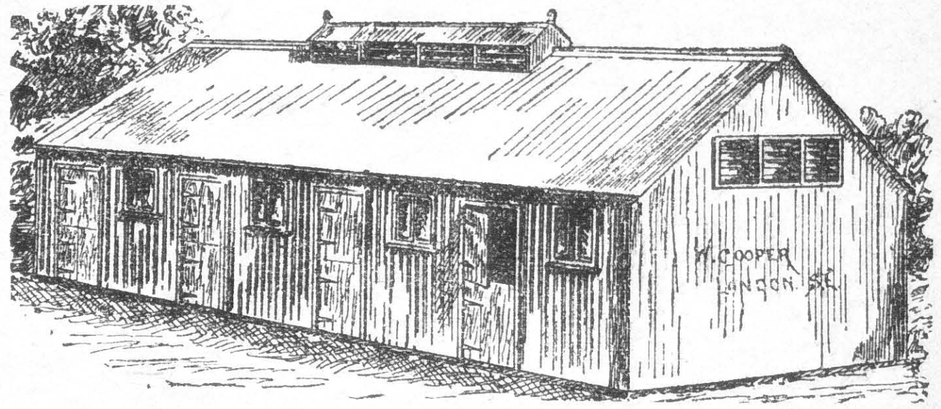
Royal Needles Hotel, Alum Bay, Isle of Wight.

GENTLEMEN,—I am sorry my time was so limited in London last week so as to be unable to call upon you to express my satisfaction at the way you erected the Refreshment Building here. I am very pleased with it, and several of my friends here say that when they want a structure put up Cooper's are the people to go to. I might add that the men you sent down to put up the structure were most civil and did their work wonderfully well.—Yours truly,

W. R. BERKELEY, Proprietor.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Portable Loose Boxes.



No. 596.

These Boxes are a useful acquisition for stabling Hunters, &c. They are substantially constructed of 2in. by 3in. and 2in. by 4in. timber framework, according to size. The outside walls and roof are of Galvanised Corrugated Iron Sheets. Sufficient 1in. boards are supplied to line all walls inside 5ft. high, and ½in. boards for remaining height to eaves. Felt to interline.

Partitions are to eaves height only. Roof is unlined. A Lantern Louvre ventilator, as illustration, is supplied for four boxes or more; the smaller sizes have Louvre ventilator in each gable end only.

Height of each box to eaves, 8ft. Mangers and Hay Racks, also door and window fasteners, are included.

Made in Sections as far as possible, marked for re-erection, and bundled and put on Rail or Wharf at the following cash prices:—

	£ s. d.		£ s. d.
1 Box, 10ft. by 10ft.	11 5 0	1 Box, 10ft. by 12ft.	14 10 0
2 ,, 20ft. by 10ft.	20 5 0	2 ,, 20ft. by 12ft.	27 10 0
3 ,, 30ft. by 10ft.	28 10 0	3 ,, 30ft. by 12ft.	38 0 0
4 ,, 40ft. by 10ft.	40 10 0	4 ,, 40ft. by 12ft.	49 0 0

	£ s. d.
1 Box, 12ft. by 12ft.	15 10 0
2 ,, 24ft. by 12ft.	28 10 0
3 ,, 36ft. by 12ft.	40 10 0
4 ,, 48ft. by 12ft.	53 10 0

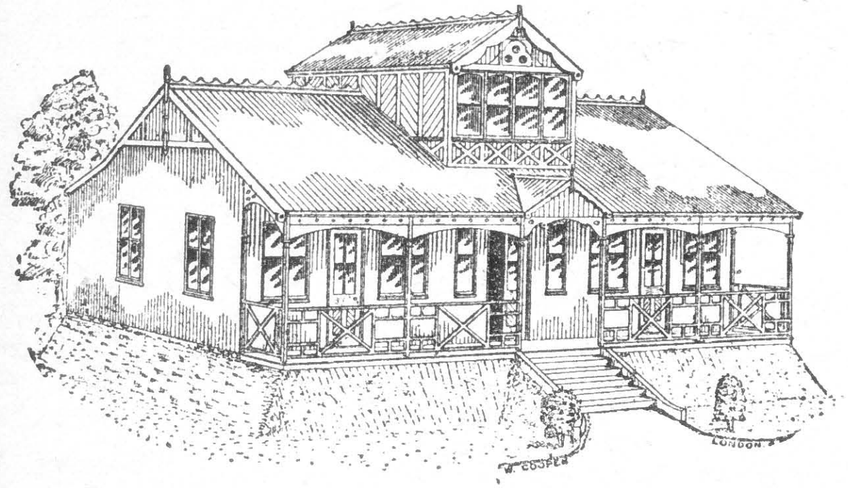
Ground Plans and Estimates for Erecting Free.

For suitable Fittings, see Section XI.

Superior to any Class of Structure.

Iron Buildings have been in use sufficiently long to put them to the test in every possible way, and from the continually increasing demand for them it may fairly be said that they justify a claim superior to any class of structure, for similar use, that existed prior to their introduction.

Club House or Bungalow.

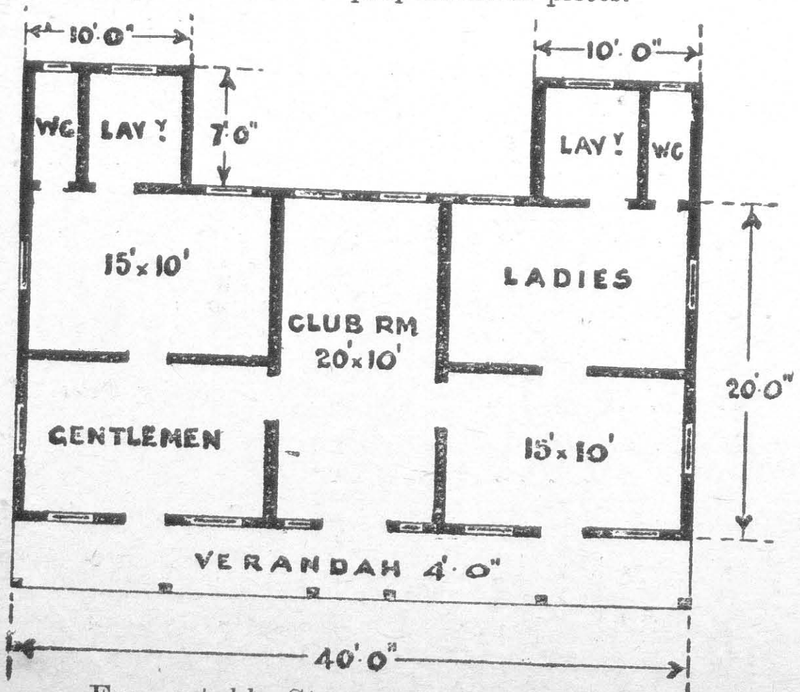


No. 597.

This artistic building is suitable for either bungalow or club house, and if raised as shown in illustration gives a particularly striking effect. The main building is 40ft. long by 20ft. wide, and a verandah 4ft. wide runs the entire length of front. There are five rooms on ground floor with usual offices, and one large room over, 20ft. by 10ft.

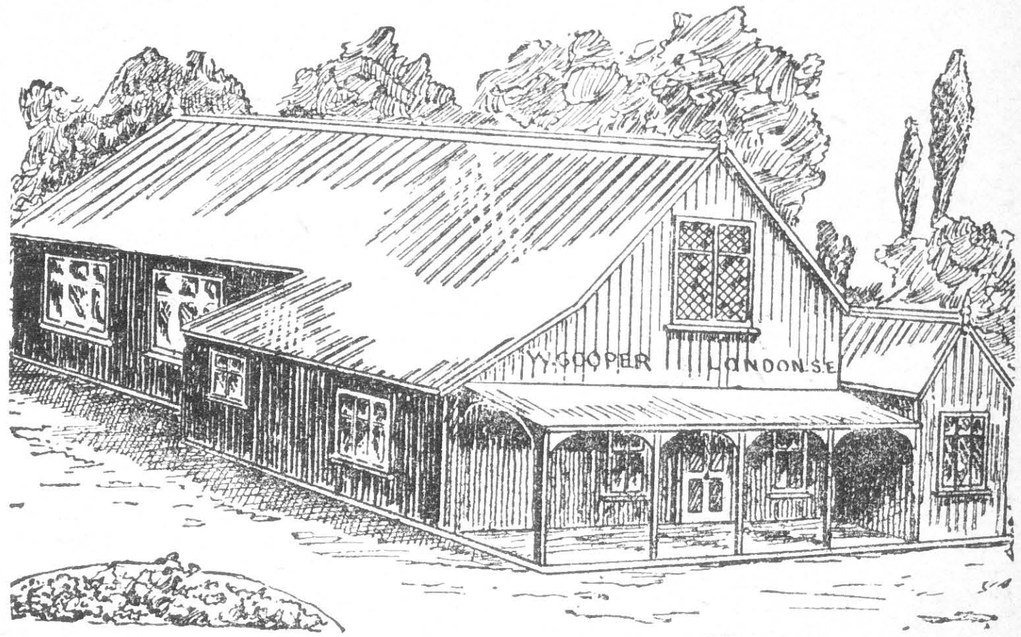
Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, £300; or marked for re-erection and bundled and put on Rail or Wharf, Cash Price £225.

The inside can be divided to form larger or smaller rooms as required. Any size made at proportionate prices.

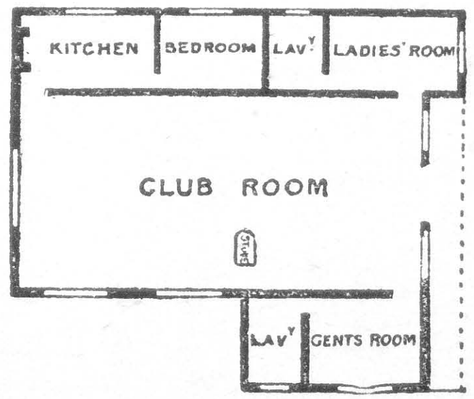


For suitable Stoves, &c., see Section XI.

Club House.



No. 598.



GROUND PLAN.

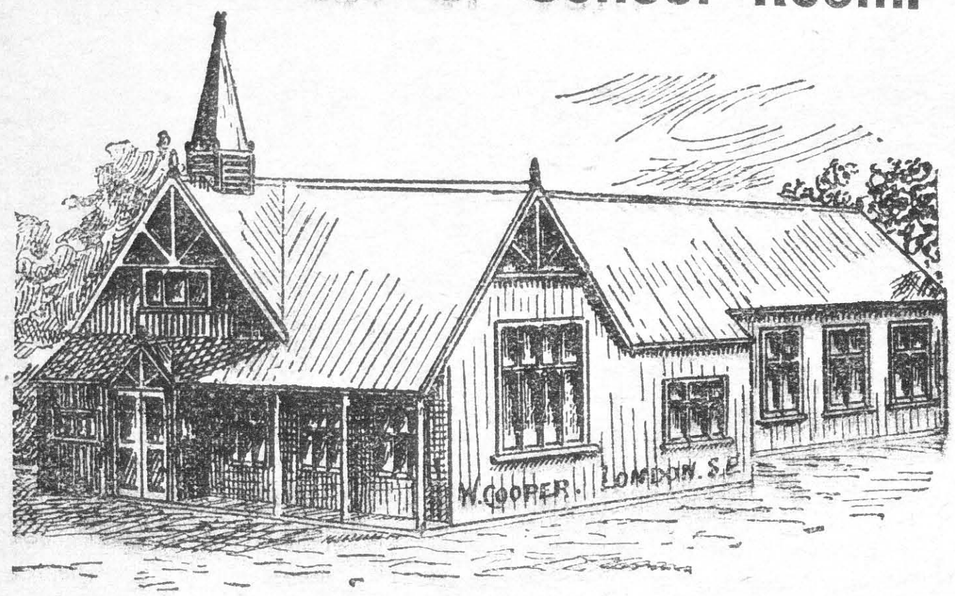
This neat design contains two Lavatories, Gentlemen's Room, Ladies' Room, Bedroom, Kitchen, and Club Room. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection and bundled and put on Rail or Wharf.

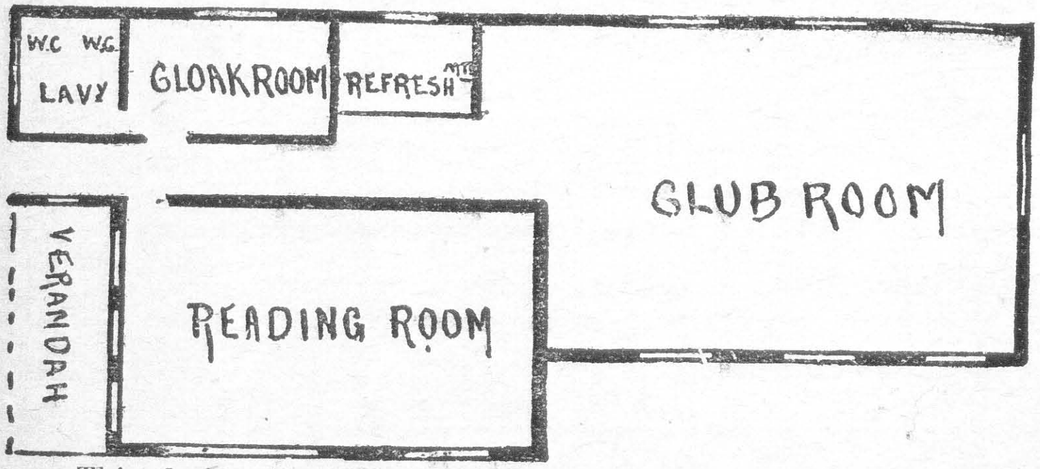
40ft. by 36ft. Erected complete, £225; on Rail, cash price, £160.

For suitable Stoves, Lighting, &c., see Section XI.

Club House or School Room.



No. 599.



This design is very neat in appearance, and contains Club Room, Reading Room, Refreshment Room, Cloak Room, and Lavatory. For Specification, see pages 412 and 413.

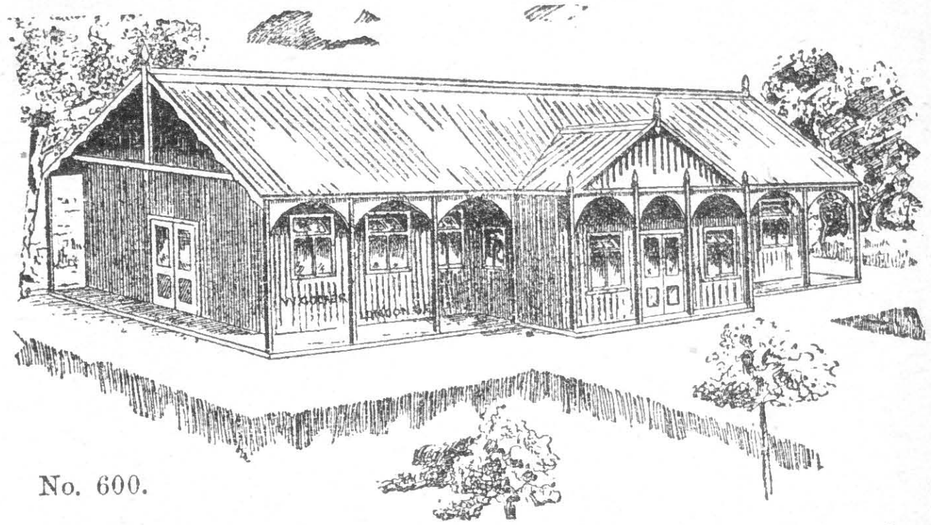
Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf. 48ft. by 21ft. Erected complete, £200; on Rail or Wharf, cash price, £140. Position or number of rooms may be altered to suit purchaser's requirements.

For suitable Stoves, Lighting, &c., see Section XI.

Ornamental Finish

to gables and pinnacles is studied from the most approved Gothic designs.

Ball Room, Drill, or Lecture Hall.

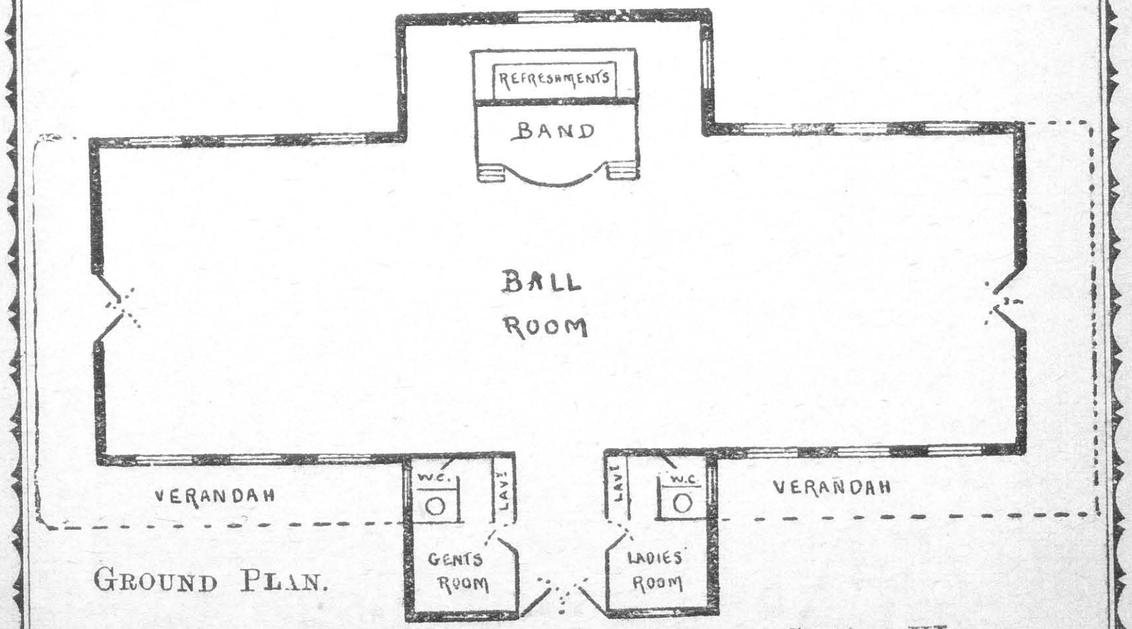


No. 600.

This is a very handsome design, and is suitable for a variety of purposes. For Specification, see pages 412 and 413. Main Building 60ft. by 35ft., with 5ft. Verandah Front and Sides.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, £290; or marked for re-erection, and bundled or put on Rail or Wharf, cash price, £205. These prices do not include any Band Stand, Counter, or Lavatory Fittings. Any size made at proportionate prices.

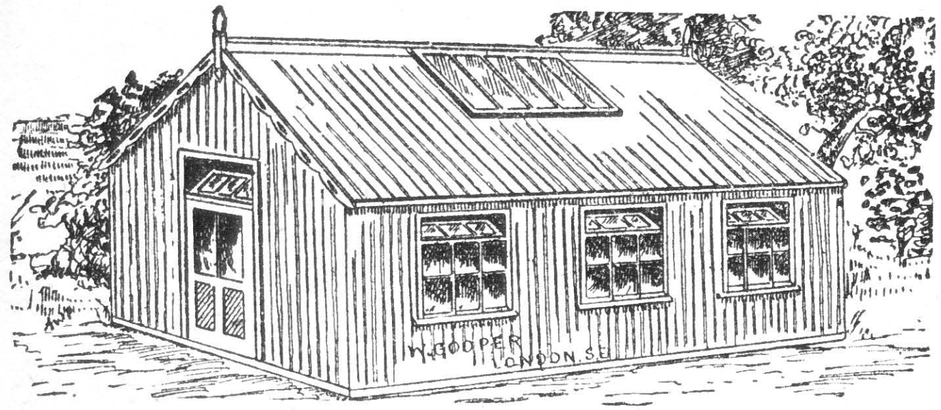
This building can be divided to suit customer's requirements, making a handsome dwelling.



GROUND PLAN.

For suitable Stoves, Lighting, &c., see Section XI.

Billiard Room.



No. 601.

A very neat design, well ventilated, and adapted for a variety of purposes. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, or marked for re-erection, and bundled and put on Rail or Wharf at the following prices:—

Length. ft.	Width. ft.	Erected Complete. £ s. d.	On Rail. Cash Price. £ s. d.
22	14	46 10 0	..... 33 0 0
26	16	60 0 0	.. .... 44 0 0
30	18	79 0 0	..... 55 0 0
40	20	107 0 0	..... 75 0 0

Any size made at proportionate prices.

Windows and doors can be placed in any position, also can be divided to suit purchaser's wishes.

For suitable Stoves, Lighting, &c., see Section XI.

Ornamental Finish

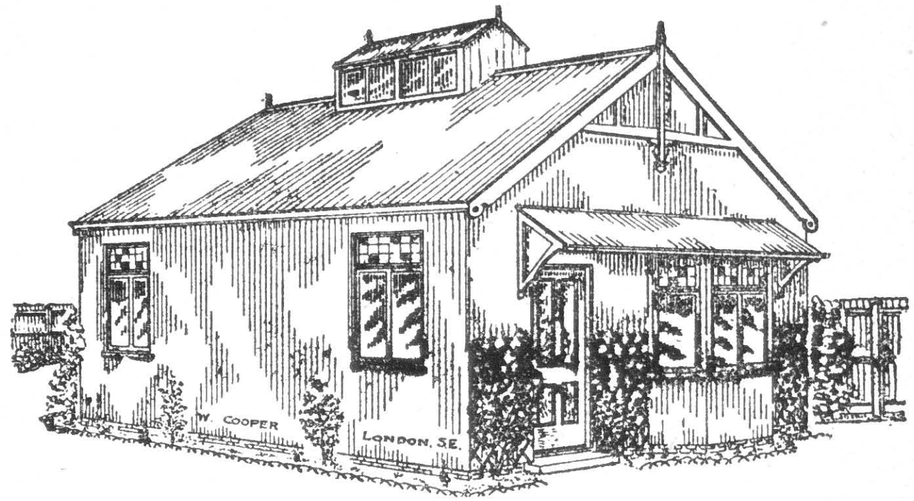
to gables and pinnacles is studied from the most approved Gothic designs.

Fittings and Glazings,

Locks, Bolts, Bars, Ventilating Gear, Gutters and Down-pipes, and all Sundries are of the best make, and are carefully fixed. The Glass used in buildings quoted in this list is heavy 21oz., or $\frac{1}{8}$in. rolled Plate, but Cathedral or other qualities may be had at prices accordingly.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Billiard Room, Club House, or Studio.



No. 602.

This is a very pretty design; having a bay window gives it a handsome appearance. Size of building, 25ft. long, 19ft. wide. For full Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, £87 10s.; or marked for re-erection, and bundled and put on Rail or Wharf, cash price, £62 10s.

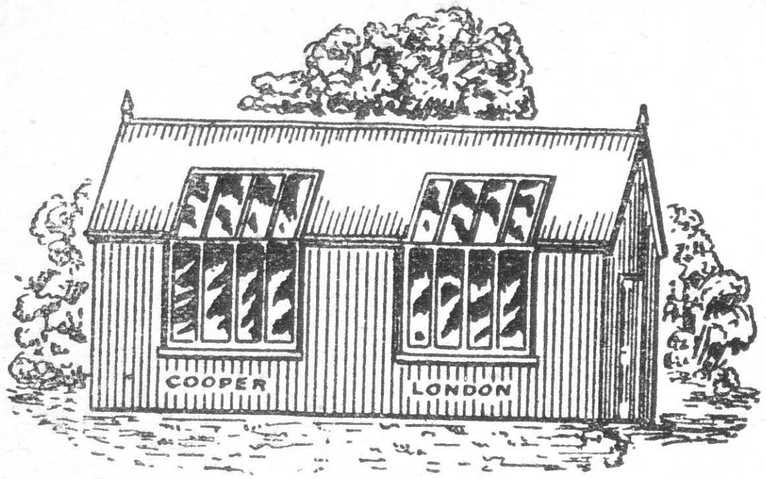
For suitable Stoves and Lighting, see Section XI.

Buildings Suitable for all Climates.

Great care is necessary, not only in the construction, but in the selection of materials for all Buildings required for use in foreign countries. The experience we have had in this department, combined with assistance rendered to us by old residents abroad, has enabled us to turn out work which has met the full appreciation of those for whom we have contracted.

For tropical climes our buildings are constructed with a double roof, each end being covered with perforated zinc in order to admit a through current of air. This not only assists to cool the interior, but may be made to act as a thorough ventilator.

Studio (Span Roof).



No. 603.

Size, 30ft. long by 18ft. wide, 15ft. high to ridge, 9ft. high to eaves, with glass as illustration each side of structure.

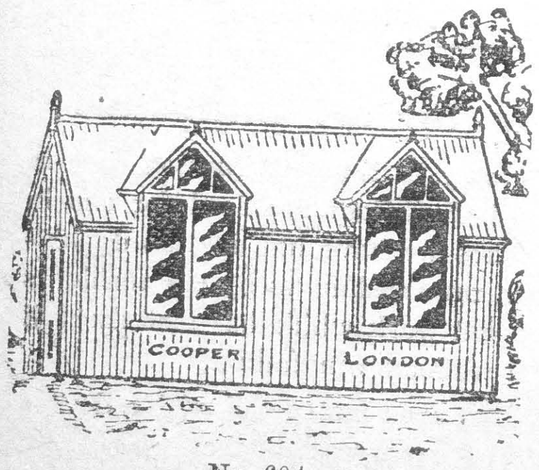
Substantially constructed of Wrought Timber Framework. Galvanised Corrugated Iron Sheets for walls and roof outside. Matchlined inside, and Felt interlined. Gutter, &c. Wood Floor.

Delivered to nearest Railway Goods Station within 100 miles, and erected complete on purchaser's foundation, £75; or marked for re-erection, bundled and put on Rail or Wharf, cash price, £52.

Other sizes at proportionate prices

For full Specification, see pages 412 and 413.

Reading Room, &c.



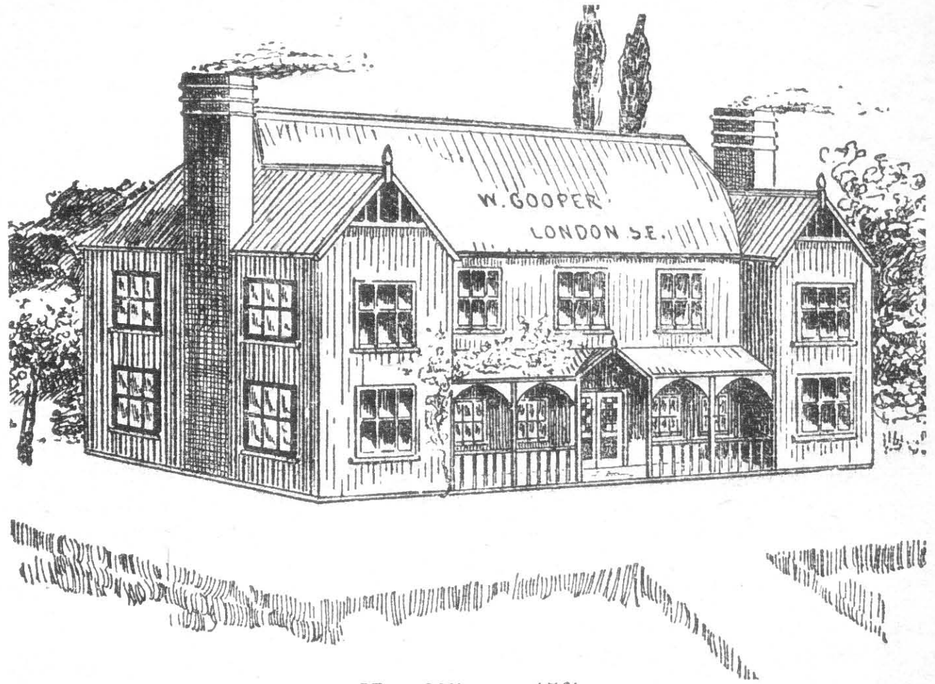
No. 604.

Size, 25ft. long by 16ft. wide by 13ft. high to ridge, and 8ft. to eaves, with windows as illustration. Specification as for No. 603, otherwise as on pages 412 and 413.

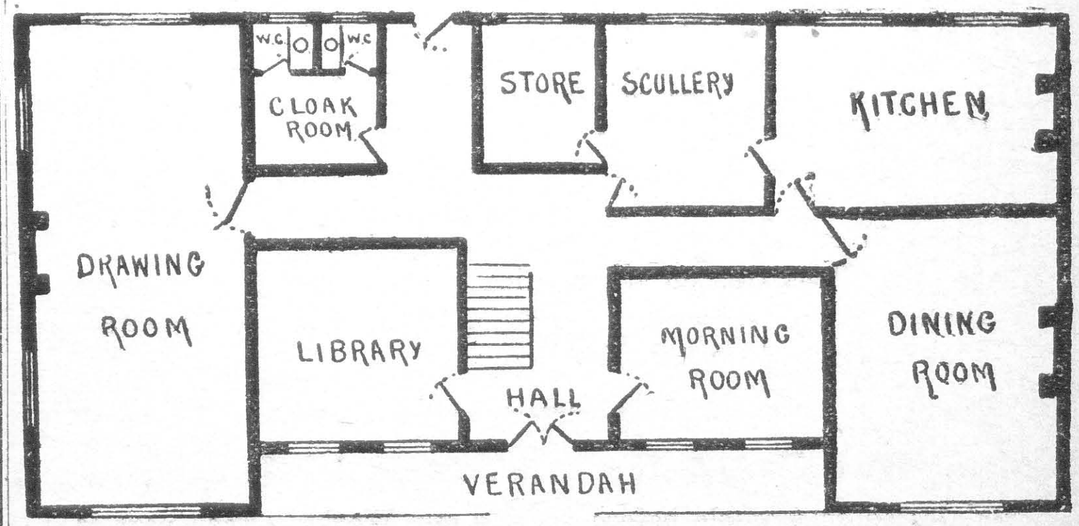
Delivered to nearest Railway Goods Station within 100 miles, and erected complete on purchaser's foundation, £58; or marked for re-erection, bundled, and put on Rail or Wharf, Cash Price, £42.

For suitable Stoves, &c., see Section XI.

Residence.



No. 605. 45ft.



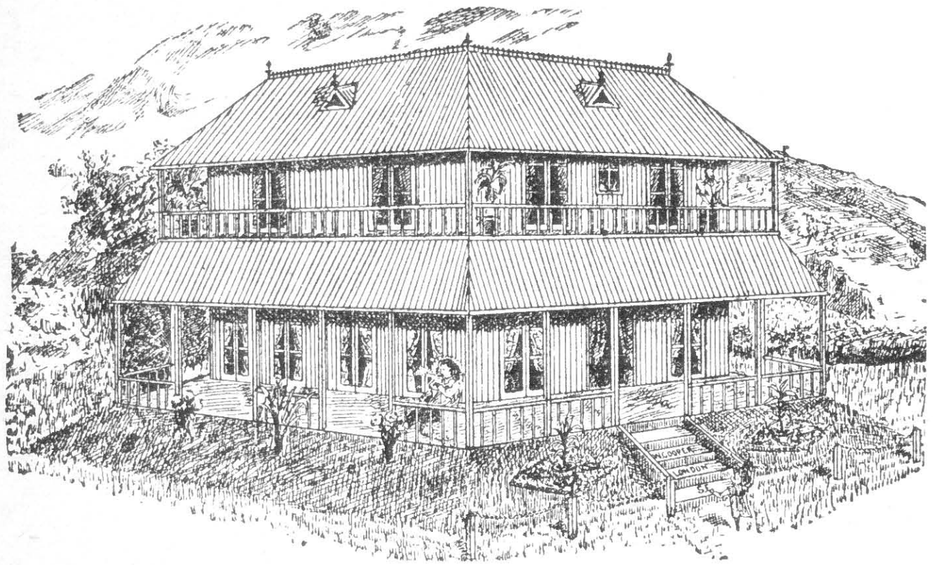
GROUND PLAN. Handsomely designed Residence. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles and erected complete on purchaser's foundation, £425; or marked for re-erection and bundled and put on Rail or Wharf, Cash Price, £300.

Could be altered to suit purchaser's requirements.

Brick Chimneys, w.c. Fittings, and Stoves not included. Complete Estimate on application.

Bungalow.



No. 606.

Picturesque erection, with Verandah, for the Country or Seaside, 24ft. by 24ft. Built on a raised terrace it is particularly striking. Two Storied, with double Verandah, constructed with eight or more rooms, as desired.

Delivered to nearest Goods Station within 100 miles and erected complete on purchaser's foundation, as per Specification, pages 412 and 413, £350; or marked for re-erection and bundled and put on Rail or Wharf, Cash Price, £250.

Other Sizes at Proportionate Prices.

Ground Plans free on Application.

Brick Chimneys, w.c. Fittings, and Stoves not included. Complete Estimate on application.

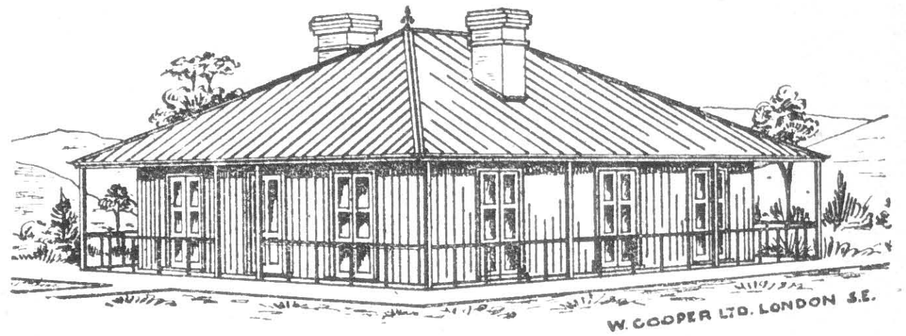
Our Buildings are all made in Sections,

and tested as a whole before leaving our Works. Each part is numbered and lettered to correspond with a diagram which accompanies the Building, so that reference is made easy, and the putting together of the sections a matter of common intelligence, no technical skill being required.

Packing for shipment has the greatest attention, so that the parts may be protected from rough usage, consequent upon a long voyage, transhipments, and carriage overland.

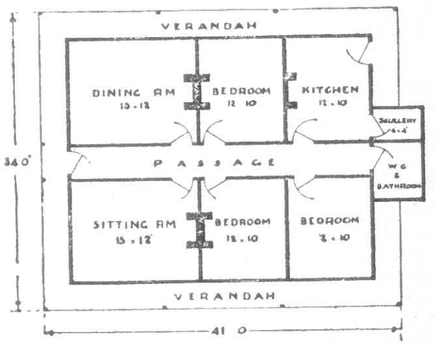
WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Bungalow Style of Residence.



No. 607.

This is an exceedingly neat and pretty design, with 3ft. Verandah all round, and is greatly in demand. It comprises Six Rooms and usual Domestic Offices; Three Bedrooms, 12ft. by 10ft.; Dining Room, 15ft. by 12ft.; Sitting Room, 15ft. by 12ft.; Kitchen, 10ft. by 12ft.; Scullery, Bath Room, and w.c.



For Specification, see pages 412 and 413.

Main Building, 35ft. by 28ft.

Delivered to nearest Goods Station within 100 miles and erected complete on purchaser's foundation, £175; or marked for re-erection and bundled and put on Rail or Wharf, Cash Price, £120.

For suitable Lighting, &c., see Section XI.

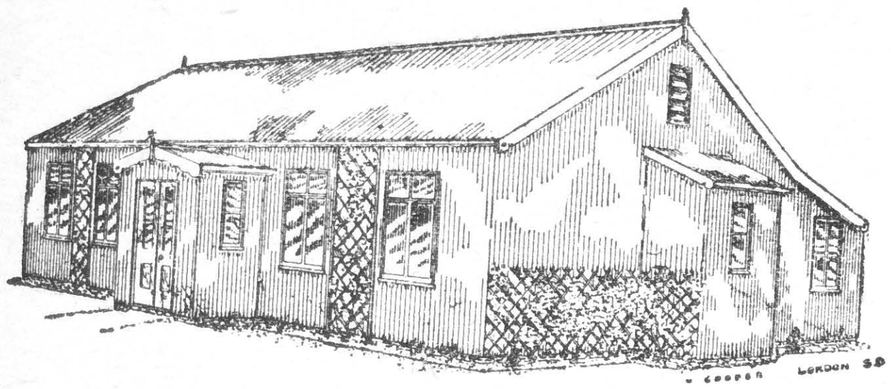
Buildings for Foreign Countries.

Great care is necessary, not only in the construction, but in the selection of materials for all buildings required for use in foreign countries. The experience we have had in this department, combined with assistance rendered to us by old residents abroad, has enabled us to turn out work which has met the full appreciation of those for whom we have contracted.

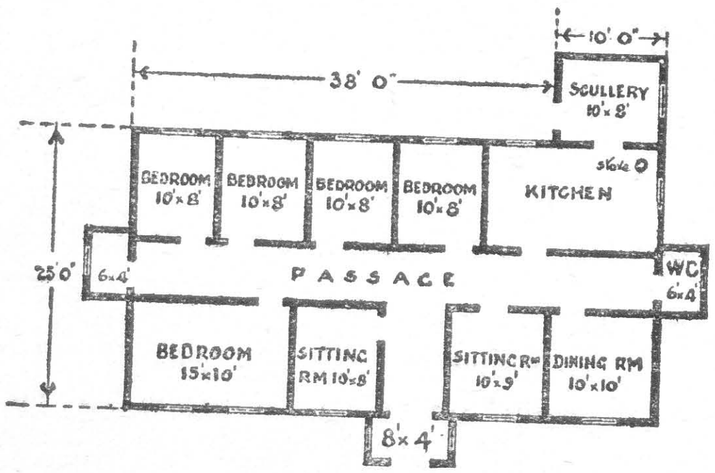
Chalk House, Green Farm, Rimmer Green, Caversham.

GENTLEMEN,—Your men have to-day finished Bungalow, and everything is perfectly satisfactory, and your men have given every satisfaction. Should you care to refer anyone to me in the future as regards such a place they may be wanting, I shall be glad to give Cooper, Ltd., a good testimonial.—
I remain, yours truly,
H. W. BAKER.

Bungalow.



No. 608.



Design for Ten-Roomed Bungalow, comprising Dining Room, Sitting Rooms, Five Bedrooms, Kitchen, Scullery, Bath Room, and w.c. The Main Building measures 48ft. by 25ft., with small additions at back ends and front, as shown on ground plan. The position and sizes of rooms may be altered to suit purchaser's requirements. For full Specification, see pages 412 and 413.

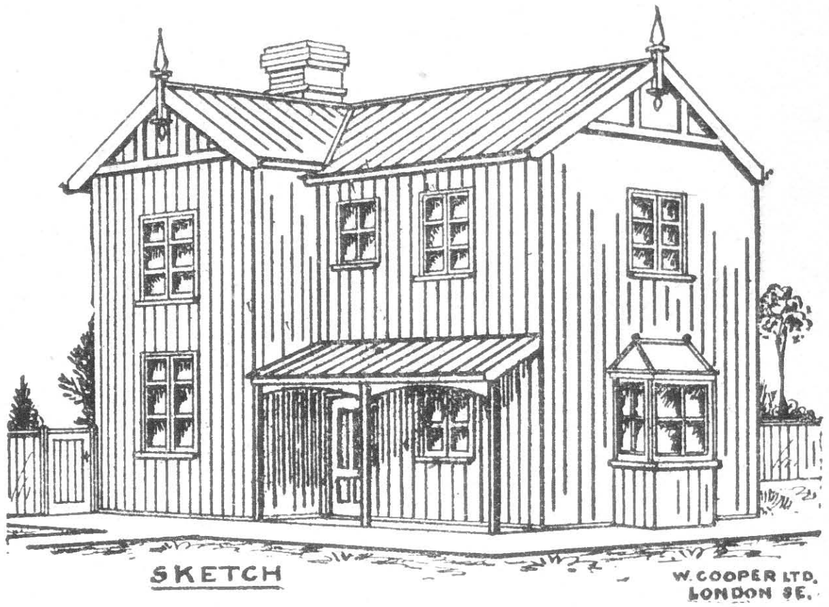
Delivered to nearest Goods Station, and erected complete on purchaser's foundation, £230; or marked for re-erection and bundled and put on Rail or Wharf, Cash Price, £178.

For suitable Stoves, Lighting, &c., see Section XI.

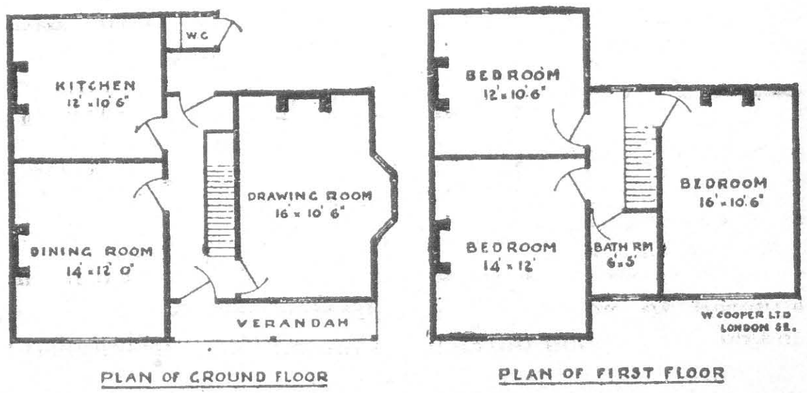
Erection Price

includes delivery and erection complete, painting outside woodwork two coats best oil colour, and staining and varnishing inside, glazing windows, &c., by our own men, all railway charges, carriage, men's fares, lodgings, &c., within 100 miles. Beyond this distance extra cost of carriage, &c., will be charged.

Dwelling-House.



No. 609.

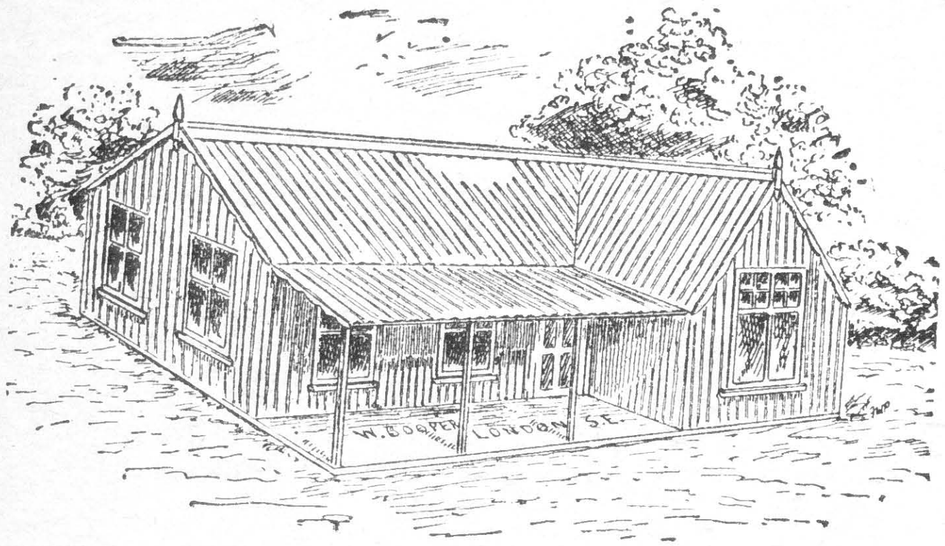


This is a Residence of a well-planned Design. It contains Drawing Room, Dining Room, Kitchen, Three Bedrooms, Bath Room, and w.c. Having a Verandah gives it a handsome appearance. For Specification, see pages 412 and 413.

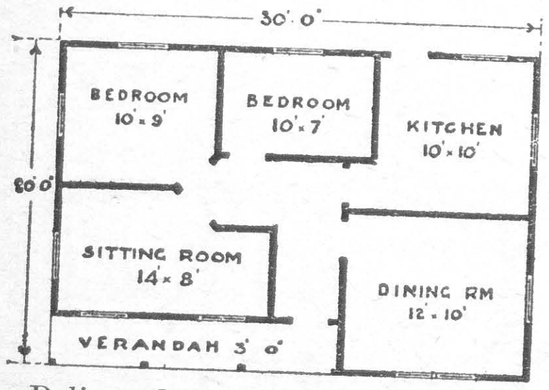
Delivered to nearest Goods Station with 100 miles and erected complete on purchaser's foundation, £235; or marked for re-erection and bundled and put on Rail or Wharf, Cash Price, £160.

Brick Chimneys, w.c. Fittings, and Stoves not included. Complete Estimate on application.

Dwelling-House.



No. 610.



A well-planned design, constructed upon the most approved principles, containing Two Bedrooms, Drawing Room, Dining Room, and Kitchen. It has a Verandah in front.

For Specification see pages 412 and 413.

Inside arrangement can be altered to suit purchaser's requirements.

Delivered to nearest Goods Station within 100 miles and erected complete upon purchaser's foundation; or marked for re-erection and bundled and put on Rail or Wharf.

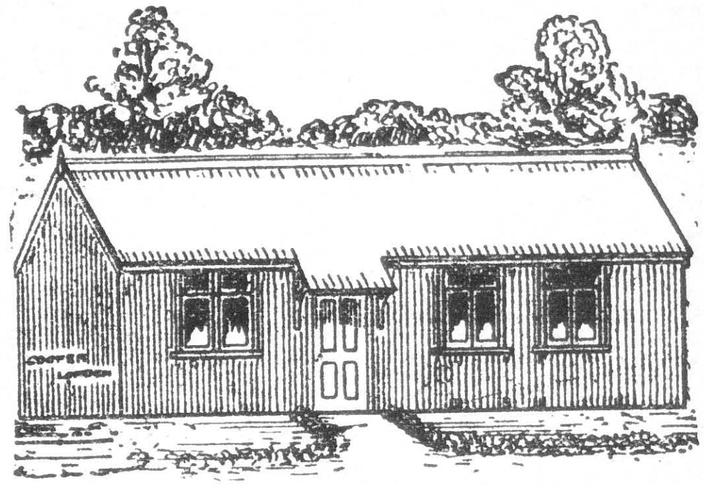
30ft. by 20ft. Erected complete, £120; on Rail, Cash Price, £80.

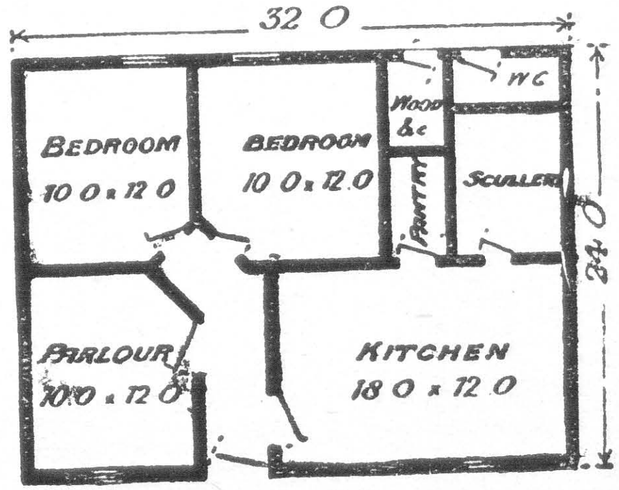
Frame Work

is of the following substances: Sleepers and joists, 4in. by 2in.; principal rafters, 5in. by 2in., 6in. by 2in., 7in. by 2in., 3in. by 6in., 2½in. by 7in., 3in. by 8in., and 3in. by 9in., according to width of house; framework, 3in. by 2in., 4in. by 2in., and 3in. by 4in.; purlins, 4in. by 2in. It is made in sections to facilitate both fixing and removal, which can be easily accomplished at any time at a minimum cost of labour.

For suitable Stoves, Lighting, &c., see Section XI.

Dwelling-House.





No. 611.

For Specification, see pages 412 and 413.

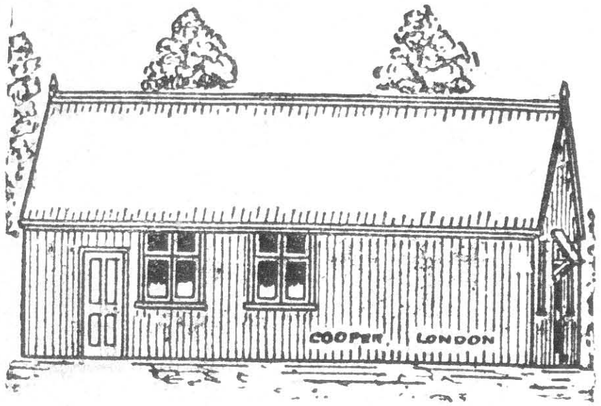
Delivered to nearest Goods Station within 100 miles, and erected on purchaser's foundation, £128; or marked for re-erection, bundled and put on Rail or Wharf, Cash Price, £90.

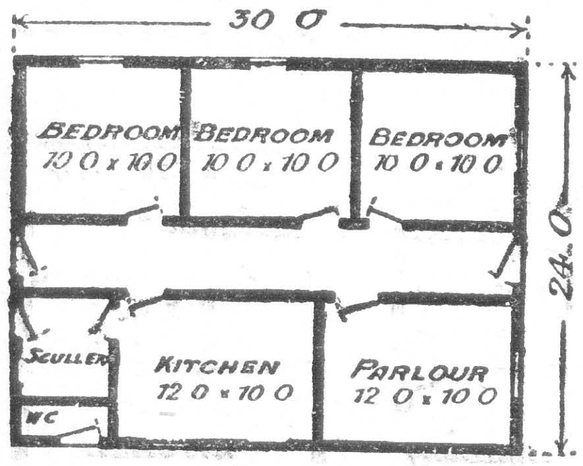
For suitable Stoves, Lighting, &c., see Section XI.

On-Rail or Wharf Prices

include the Building Complete as above, ready for erection, carefully marked and put on Rail at our Works, or delivered to London Wharf.

Dwelling-House.





No. 612.

This is a neat design, roomy and well ventilated. Double Casement Windows. Passage the entire length of structure.

For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected on purchaser's foundation, £124; or marked for re-erection, bundled and put on Rail or Wharf.

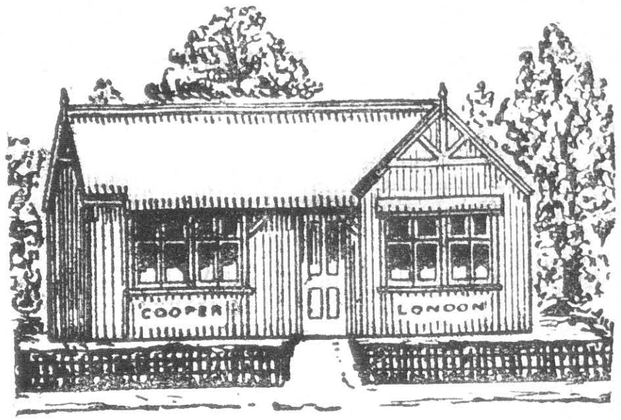
Cash Price, £88.

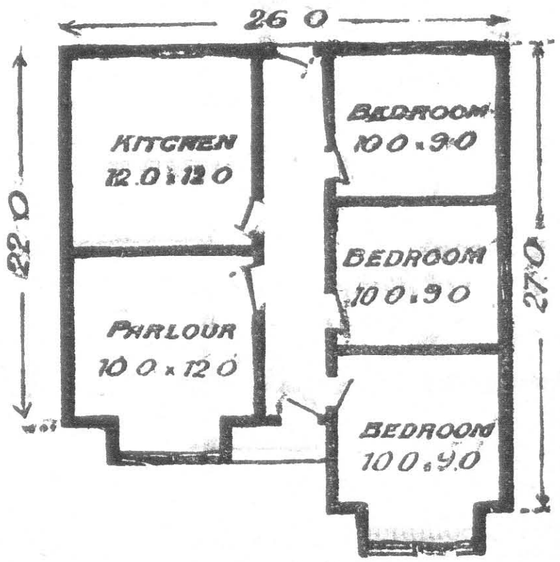
For suitable Stoves, Lighting, &c., see Section XI.

Erection Prices

include Delivery and Erection complete, Painting Outside Woodwork two coats best oil colour, and Staining and Varnishing Inside, Glazing Windows, &c., by our own men, all Railway Charges, Carriage, Men's Fares, Lodgings, &c., within 100 miles. Beyond this distance extra cost of Carriage, &c., will be charged.

Dwelling-House.





No. 613.

This is a very imposing structure, containing Parlour, Three Bedrooms and Kitchen; two square Bay Windows in front, and roof extended over entrance door.

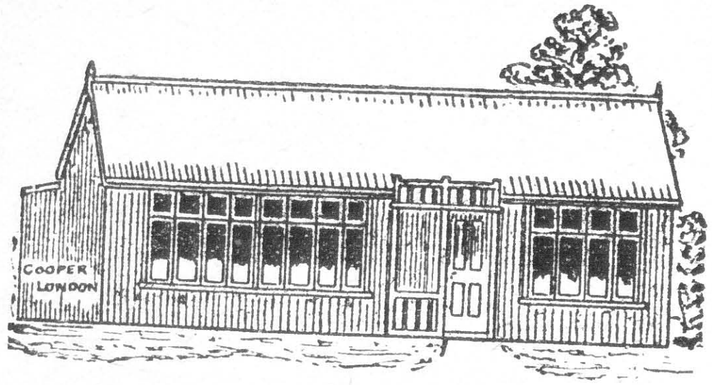
For Specification, see pages 412 and 413.

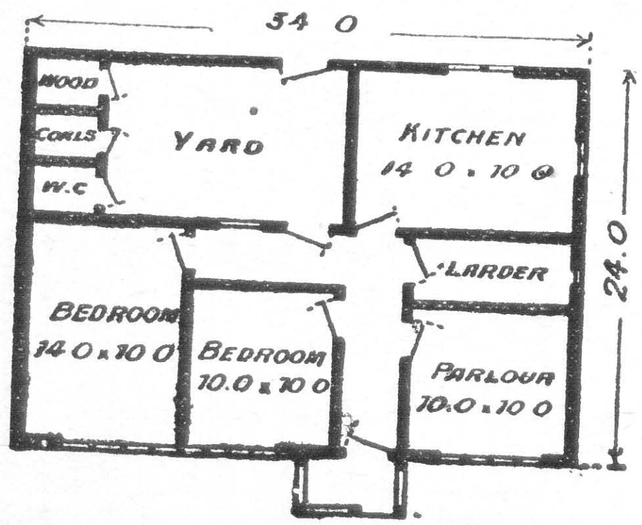
Delivered to nearest Goods Station within 100 miles and erected on purchaser's foundation, £114; or marked for re-erection, bundled, and put on rail or wharf,

Cash price, £78.

For suitable Stoves, Lighting, &c., see Section XI.

Dwelling-House and Yard.





No. 614.

This is a very uncommon design, extremely well lighted and ventilated. With walls round Yard, and fitted with Wood and Coal Sheds, also w.c.

For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles and erected on purchaser's foundation, £118; or marked for re-erection, bundled and put on rail or wharf,

Cash price, £83.

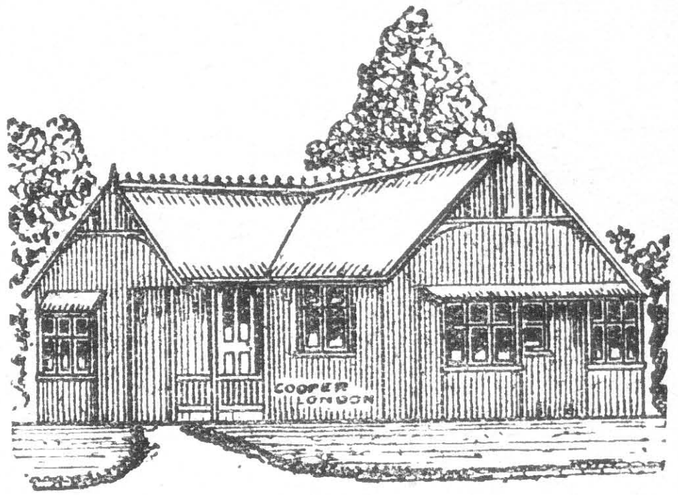
For suitable Stoves, Lighting, &c., see Section XI.

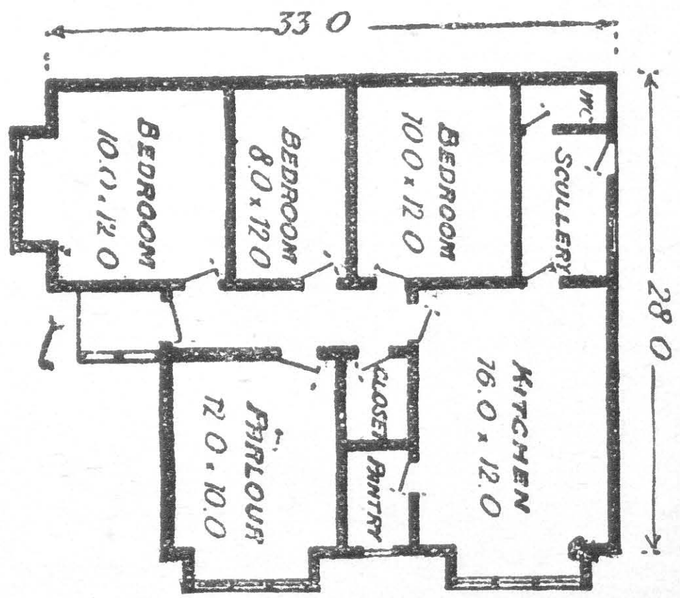
DEAR SIRS,—I am well satisfied with the Corrugated Iron Room, and thank you for turning out such an article for me.—Yours faithfully,

Bradford.

J. WOOD.

Dwelling-House.





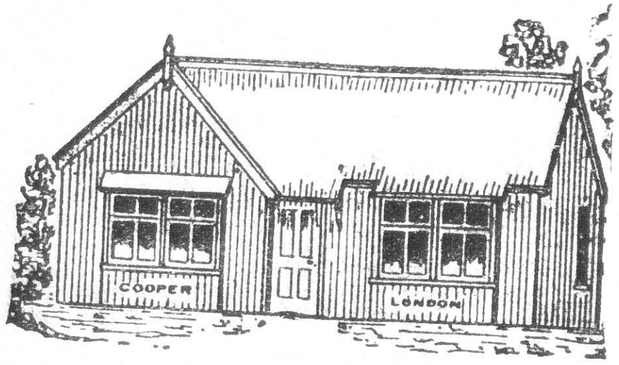
No. 615.

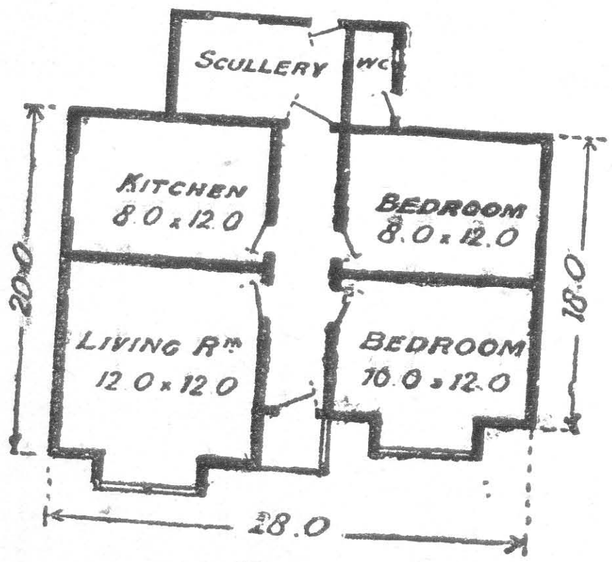
For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, £160.

For suitable Stoves, Lighting, &c., see Section XI.

Dwelling-House.





No. 616.

This desirable and well finished House, fitted with two square Bay Windows in front, porch, &c., has been designed to meet the requirements of a gardener or estate carpenter and others with a small family.

For Specification, see pages 412 and 413.

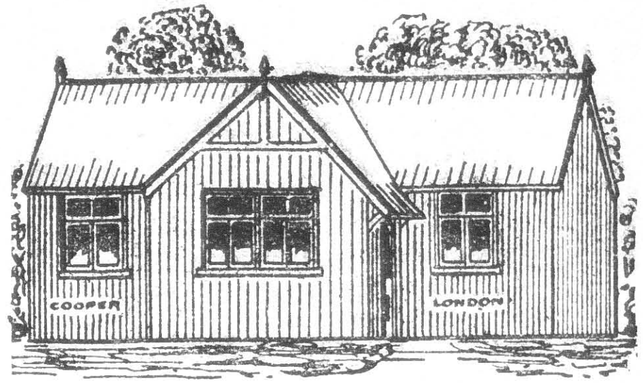
Delivered to nearest Goods Station within 100 miles, and erected on purchaser's foundation, £106; or marked for re-erection, bundled and put on rail or wharf,

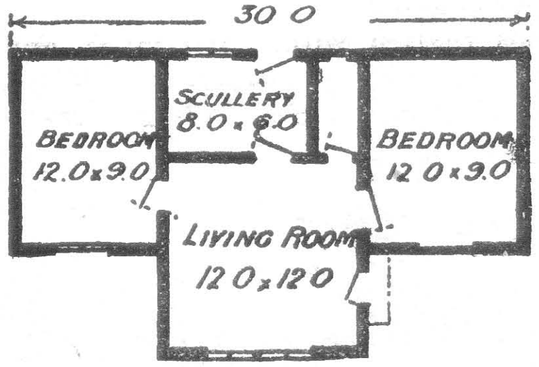
Cash price, £72.

For suitable Stoves, Lighting, &c., see Section XI.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Portable Cottages.





No. 617.

A very convenient structure, consisting of Two Bedrooms, large Living Room, Scullery and W.C.

For Specification, see pages 412 and 413.

Erected Complete, £80. On Rail or Wharf,
Cash Price, £56.

This Cottage has a frontage of 22ft., and a depth of 20ft., and is divided into Three Bedrooms, 9ft. by 10ft., and Kitchen, 13ft. by 10ft.

Erected Complete, £77. On Rail or Wharf,
Cash Price, £52.

Ground Plan upon application. For suitable Stoves, &c., see Section XI.

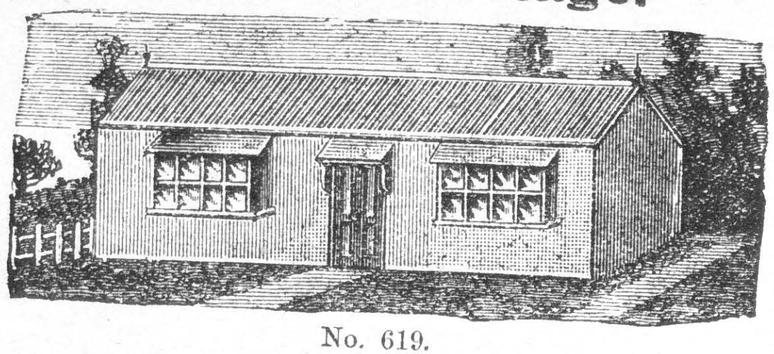


No. 618.

Erection Prices

include Delivery and Erection complete, Painting Outside Woodwork two coats best oil colour, and Staining and Varnishing Inside, Glazing Windows, &c., by our own men, all Railway Charges, Carriage, Men's Fares, Lodgings, &c., within 100 miles. Beyond this distance extra cost of Carriage, &c., will be charged.

Portable Cottage.



No. 619.

An attractive design, with square Bay Windows, and Porch over door. Measurements and plan of rooms as for No. 622.

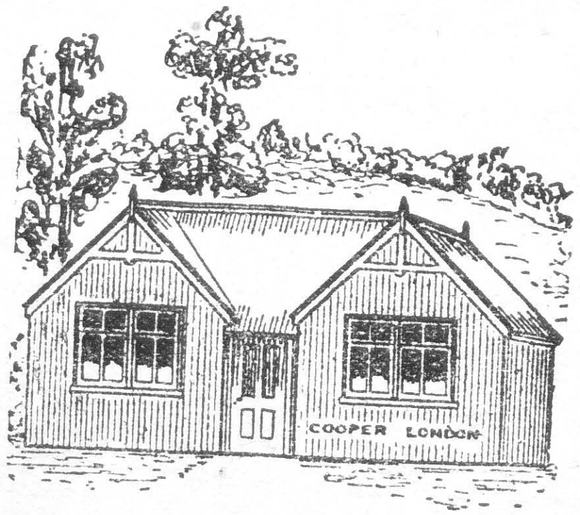
For Specification, see pages 412 and 413.

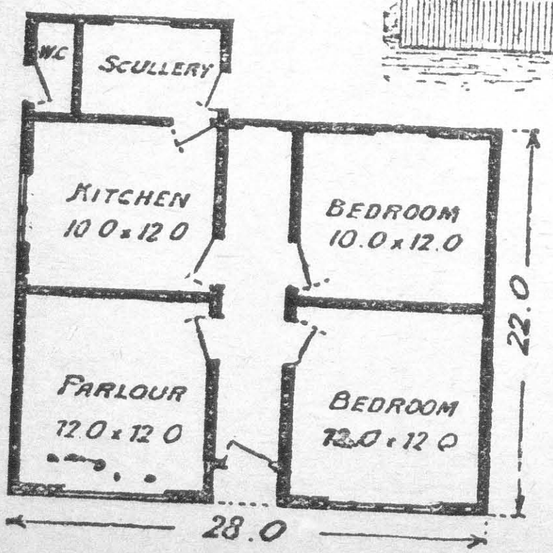
Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, £62; or marked for re-erection, bundled and put on Rail or Wharf, Cash price, £44.

Portable Cottage.

No. 620.

Main structure, 28ft. by 22ft.





Erected Complete, £110.
On Rail or Wharf,
Cash Price, £75.

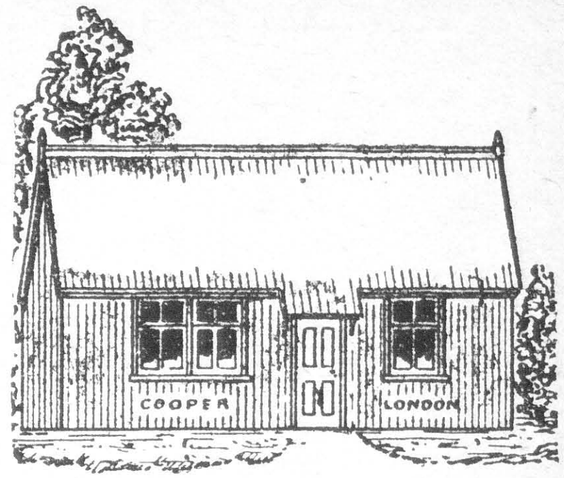
For suitable Stoves, &c., see Section XI.

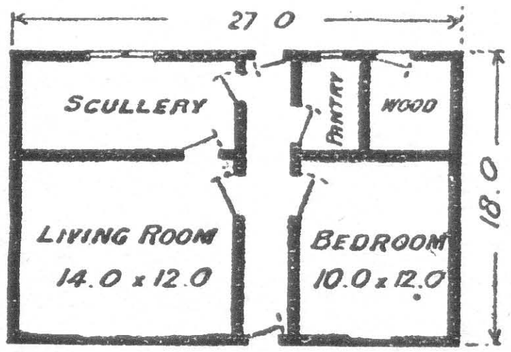
WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Portable Cottage.

No. 621.

For Specification, see pages 412 and 413.



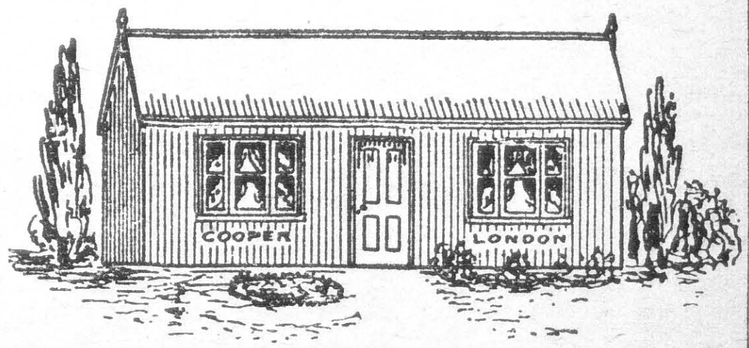


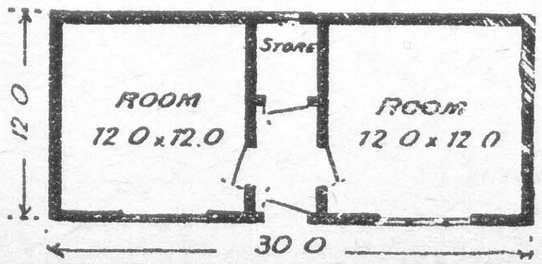
Delivered to nearest Goods Station within 100 miles, and erected on purchaser's foundation, £80; or marked for re-erection, bundled, and put on Rail or Wharf,
Cash Price, £56.

Portable Cottage.

No. 622.

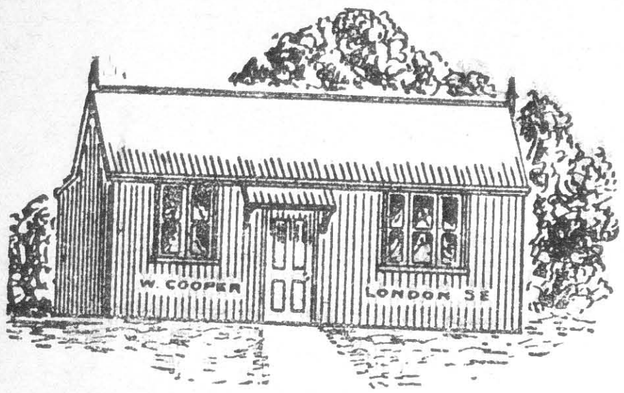
This design has Casement Windows, the centre section of each opening outwards.





Erected Complete, £58.
On Rail or Wharf,
Cash Price, £42.

For suitable Stoves, &c., see Section XI.



Portable Cottage.

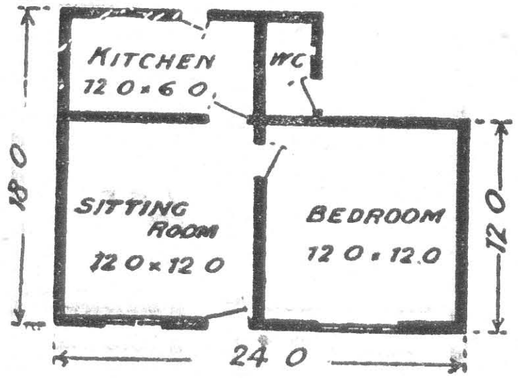
No. 623.

Containing three rooms and W.C. Bedroom, 12ft. by 12ft.; Sitting-room, 12ft. by 12ft.; Kitchen, 12ft. by 6ft.

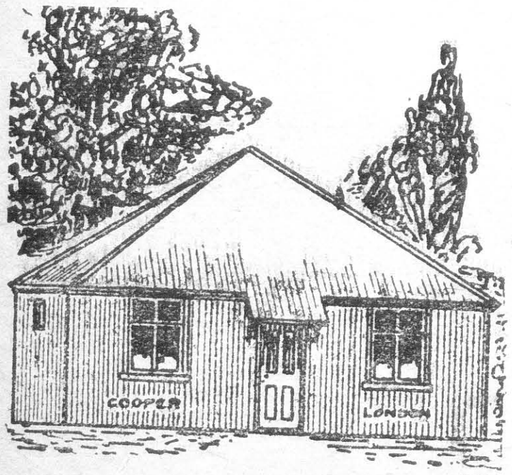
Delivered to nearest Goods Station within 100 miles, and erected complete upon purchaser's foundation, £60; or marked for re-erection, and bundled and put on rail or wharf,

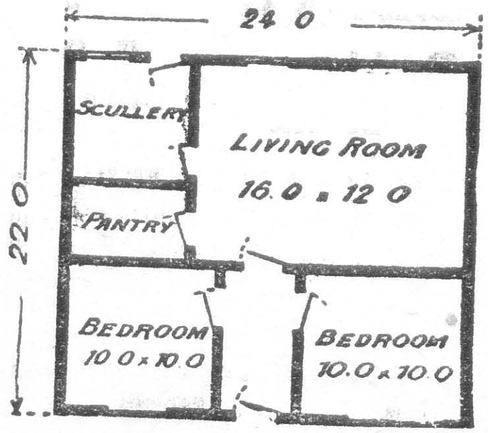
Cash Price, £42.

For Specification, see pages 412 and 413.



Portable Cottage.





No. 624.

Erected complete, £92; on Rail or Wharf, cash price, £62.

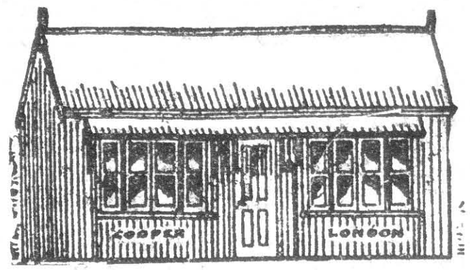
For suitable Stoves, &c., see Section XI.

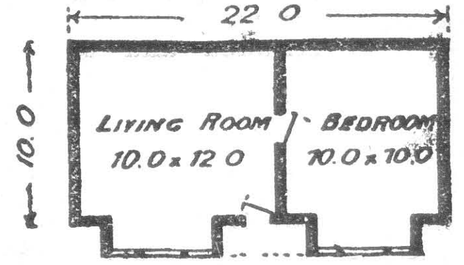
DEAR SIR,—The structure you supplied to my brother in India is very satisfactory. I am instructed to thank you for careful attention to order.—Yours faithfully,

Blackpool.
E. TURNER.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Portable Cottages.

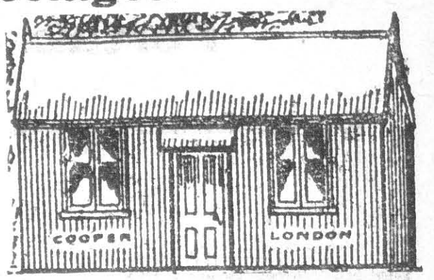


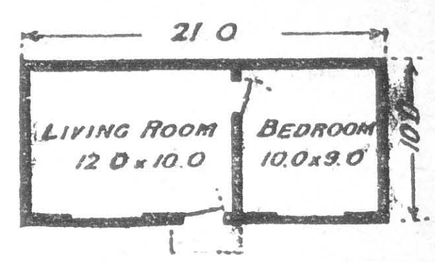


No. 625.

A two-roomed structure with square Bay Windows and Porch.

Erected Complete, £46. On Rail or Wharf, Cash Price, £32.

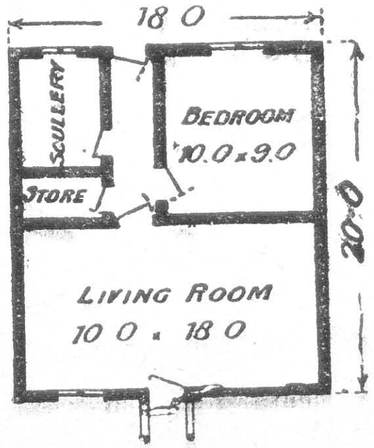


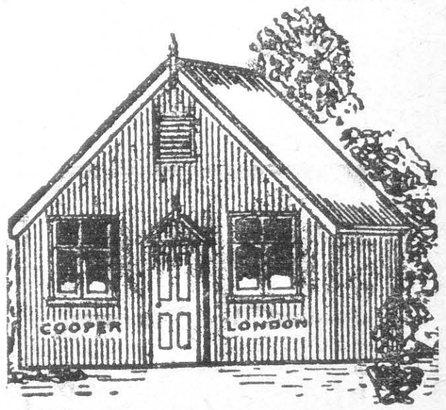


No. 626.

Another two-roomed structure with double Casement Windows and Porch.

Erected Complete, £38 10s. On Rail or Wharf, Cash Price, £27.





No. 627.

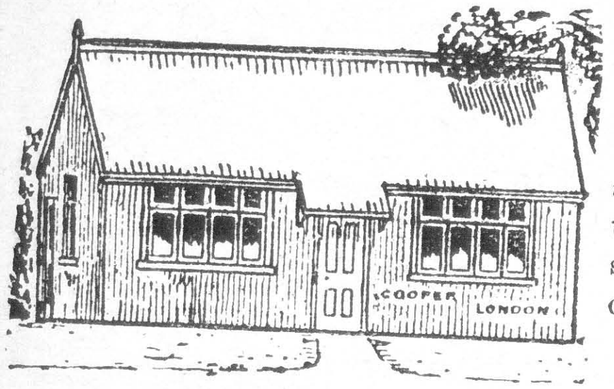
Erected Complete, £68. On Rail or Wharf, Cash Price, £48.

For Specification, see pages 412 and 413, and for suitable Stoves, &c., see Section XI.

Erection Prices

include Delivery and Erection complete, Painting Outside Woodwork two coats best oil colour, and Staining and Varnishing Inside, Glazing Windows, &c., by our own men, all Railway Charges, Carriage, Men's Fares, Lodgings, &c., within 100 miles. Beyond this distance extra cost of Carriage, &c., will be charged.

Portable Cottages.

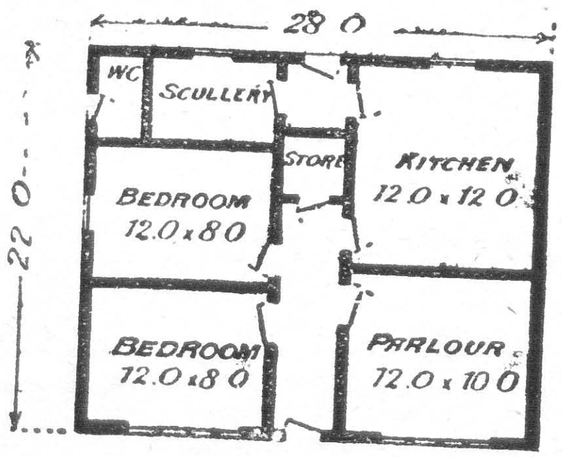


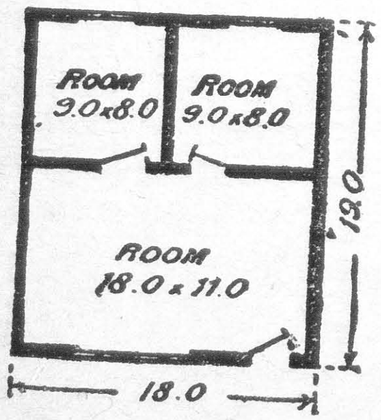
No. 628.

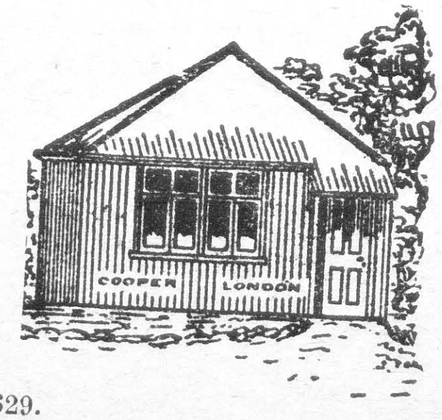
This is a very popular and convenient structure, substantially constructed and of neat design.

Delivered to nearest Goods Station within 100 miles, and erected on purchaser's foundation, £110; or marked for re-erection, bundled and put on rail or wharf.

Cash price, £78.







No. 629.

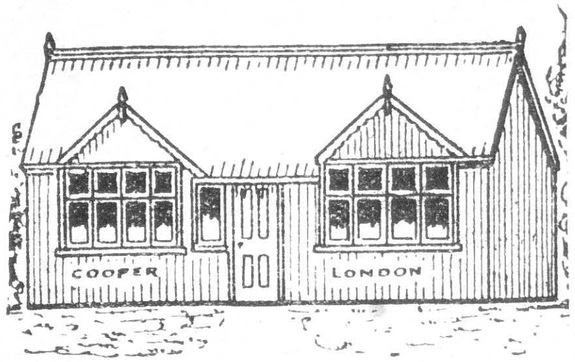
For Specification, see pages 412 and 413.

Erected Complete, £62. On Rail or Wharf, Cash Price, £41

For suitable Stoves, &c., see Section XI.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Portable Cottages.

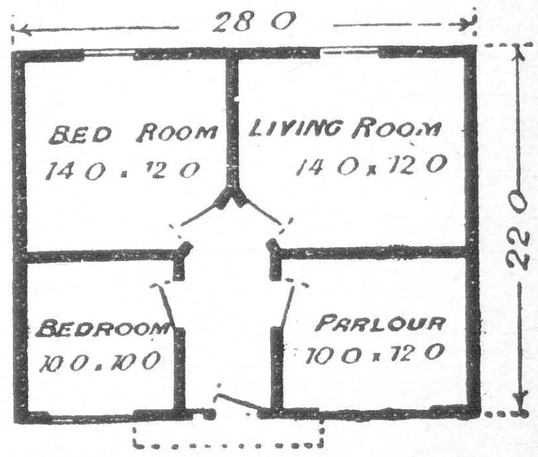


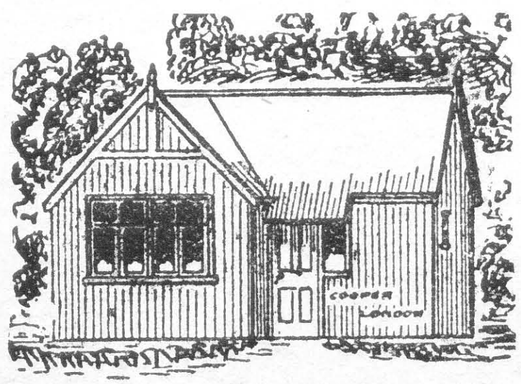
No. 630.

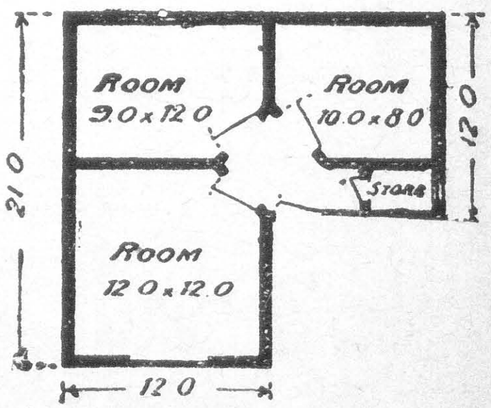
Handsome design, with Gable over each Front Window and roof extended over entrance door.

Delivered to nearest Goods Station within 100 miles, and erected on purchaser's foundation, £108; or marked for re-erection, bundled and put on rail or wharf,

Cash Price, £75.







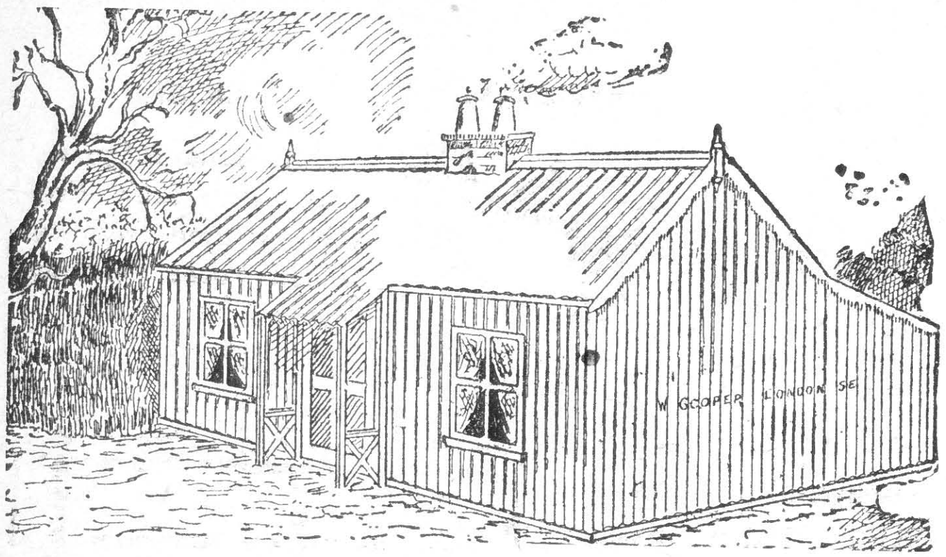
No. 631.

For Specification, see pages 412 and 413.

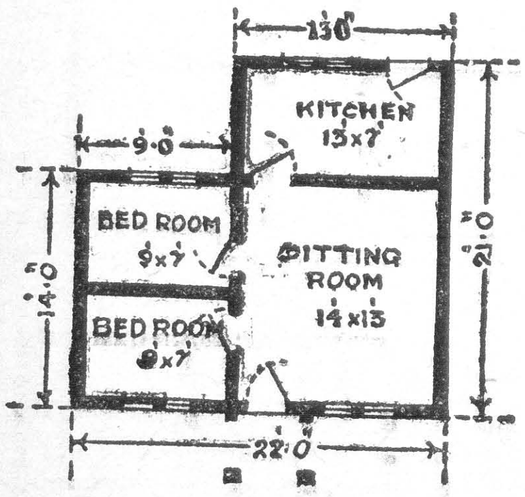
Erected Complete, £65. On Rail or Wharf, Cash Price, £44.

For suitable Stoves, &c., see Section XI.

Portable Cottage.



No. 632.



Containing Two Bedrooms, 9ft. by 7ft.; Sitting Room, 13ft. by 14ft.; and Kitchen, 13ft. by 7ft.

This is a cheap and serviceable structure suitable for a Gardener, Groom, Gamekeeper, and others. For Specification, see pages 412 and 413.

Delivered to nearest Goods Station within 100 miles, and erected upon purchaser's foundation, £65; or marked for re-erection, bundled and put on Rail or Wharf, cash price, £45.

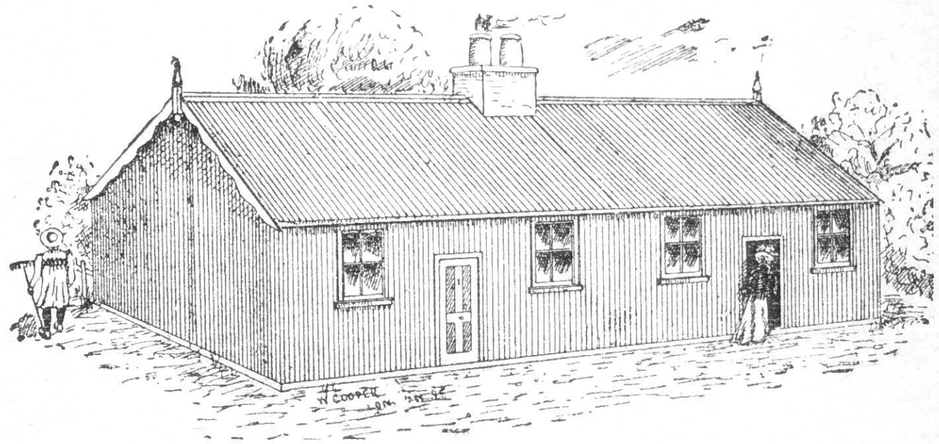
If three or more are ordered at one time, £60 each, erected, or £42 10s. each on Rail.

The two Bedrooms can be enlarged to 9ft. by 10ft. 6in. each at £8 10s. extra fixed, or £6 extra on Rail or Wharf. Brickwork not included.

For suitable Stoves, &c., see Section XI.

Our Buildings are all made in sections. Each part is numbered and lettered, so that the putting together of the sections requires no technical skill.

Workmen's or Gardeners' Cottages.

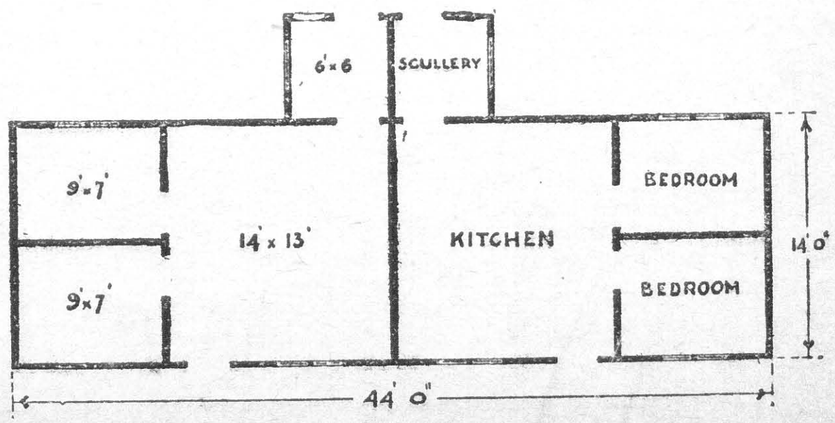


No. 633.

Three-room Cottages, containing Two Bedrooms, each 9ft. by 7ft.; Kitchen, 14ft. by 13ft.; and Scullery, 6ft. by 6ft.; specially suitable for estates, large works, &c. For Specification, see pages 412 and 413.

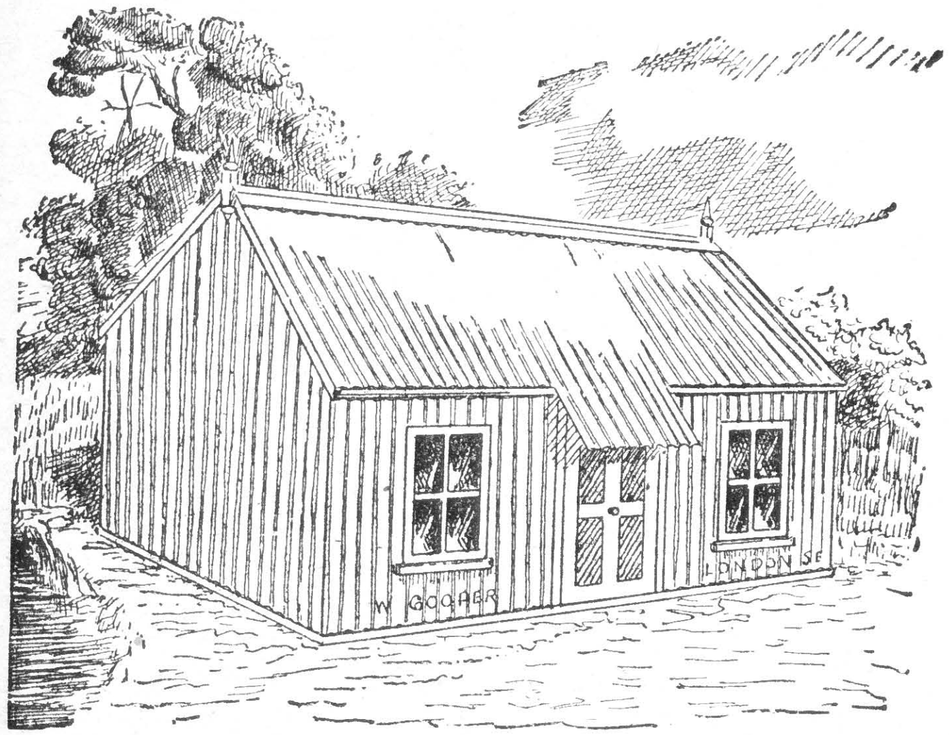
Cash Prices.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, in Blocks of two, as illustration, £60 each, or £116 per Block; six blocks, £110 each; twelve Blocks, £104 each; or marked for re-erection, bundled and put on Rail or Wharf, one Block, £84; six Blocks, £80 each; twelve Blocks, £75 each, if ordered at one time. Brick chimneys not included.



For suitable Stoves, &c., see Section XI.

Cottage, School, Storeroom, or Workshop.



No. 634.

A Serviceable and Inexpensive Structure.

This building is suitable for a number of purposes. The door and windows can be placed in any position, also partitions may be added, forming separate rooms, to suit purchaser's requirements, at a small extra cost.

Delivered to nearest Goods Station within 100 miles, and erected complete on purchaser's foundation, as per Specification, pages 412 and 413, or marked for re-erection, bundled, and put on Rail or Wharf at the following prices:—

Length. ft.	Width. ft.	Height to Eaves. ft.	Height to Ridge. ft.	Erected Complete. £ s. d.	On Rail or Wharf. Cash Prices. £ s. d.	Building only on Rail. No Flooring, Matching, Gutters, or Felt. Otherwise Complete as Specification. Cash Prices. £ s. d.
10	8	6	8	12 15 0	9 15 0	6 10 0
14	10	6	9	18 10 0	13 0 0	8 10 0
18	12	7	10	31 10 0	22 0 0	15 10 0
22	14	7	11	43 0 0	29 0 0	19 15 0
26	16	8	13	55 10 0	39 0 0	25 10 0

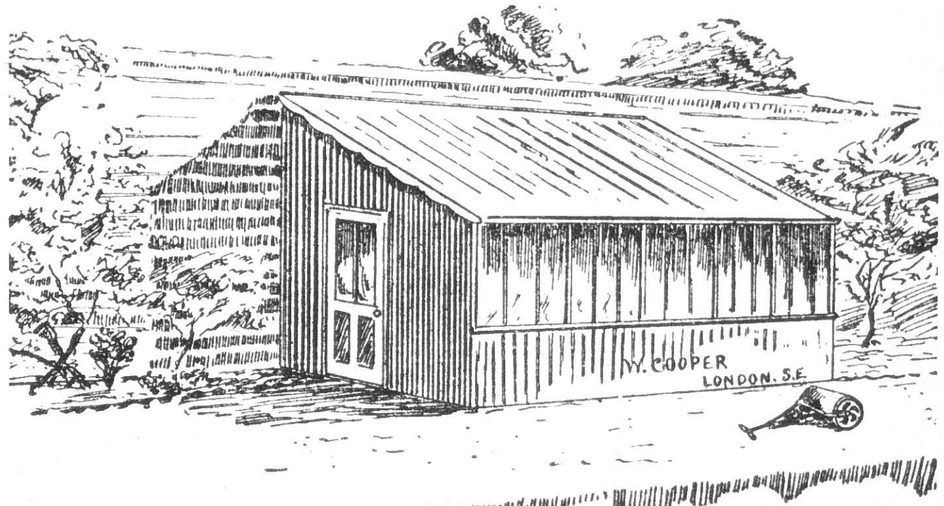
Other sizes at proportionate prices.

For suitable Heating, &c., see Section XI.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Workshop.

Lean-to



No. 635.

Constructed of Strong Wooden Framework, and covered with Galvanised Corrugated Iron Sheets. Not lined, no floor or back. Made in sections, and fitted ready for erection. Glass cut to sizes. Carefully put on Rail or Wharf at the following cash prices:—

10ft. by 8ft., £6 10s.; 20ft. by 10ft., £12 10s.; 30ft. by 12ft., £18 10s.

$\frac{3}{4}$in. and 1in. wood floor on 3in. by 2in. and 4in. by 2in. joists, according to size of workshop, 20s., 45s., and 80s. extra respectively.

The position of Door and Windows can be altered to suit purchaser's requirements.

Other sizes at proportionate prices.

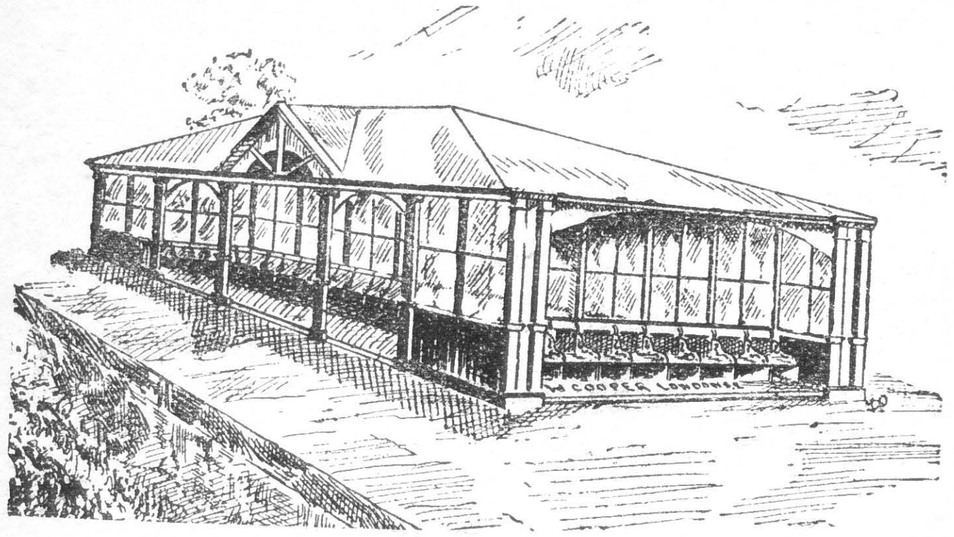
Galvanised Corrugated Iron

sheets of standard Birmingham gauge only are used. They are fixed on a principle that admits of their being easily released without damage to the structure.

Iron Buildings

have been in use sufficiently long to put them to the test in every possible way, and from the continually increasing demand for them it may fairly be said that they justify a claim superior to any class of structure, for similar use, that existed prior to their introduction.

Promenade Shelter.



No. 636.

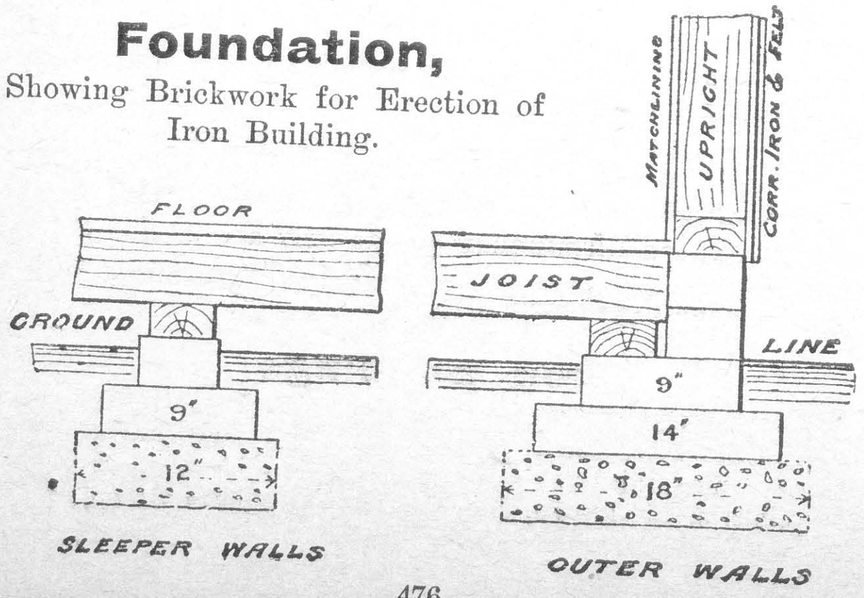
This new and handsome design meets with great favour, many having been erected. It is constructed with Galvanised Corrugated Iron Roof upon Wooden Frame-work, the inside being Match-lined, Stained, and Varnished, and very strongly floored.

Delivered to nearest Goods Station, and erected complete upon purchaser's foundation, or marked and bundled ready for re-erection and put on Rail or Wharf.

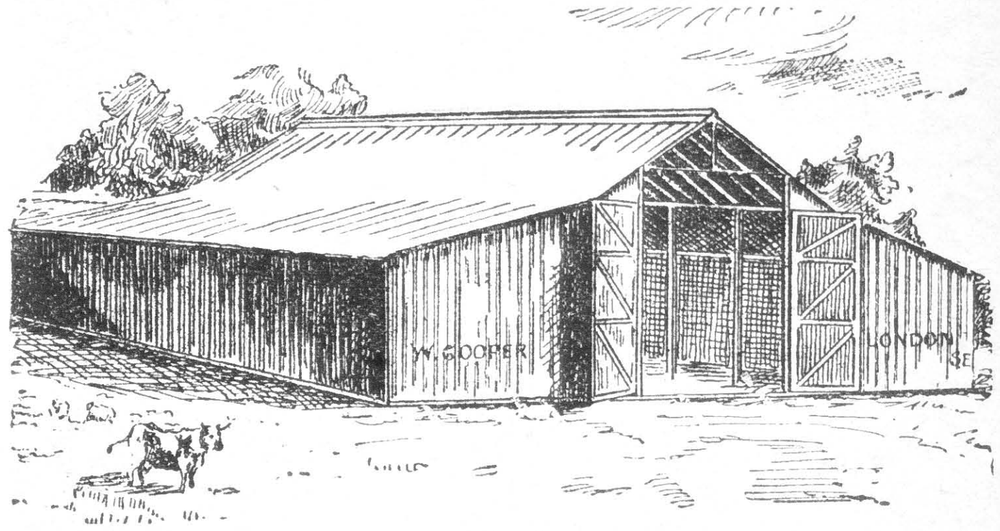
Estimates free upon receipt of particulars of requirements.

Foundation,

Showing Brickwork for Erection of Iron Building.



Cattle Shed, Store, or Barn.



No. 637.

This design is made to suit the requirements of Farmers, Agriculturists, &c. Also makes an ideal place for storing and warehousing goods. Constructed of Galvanised Corrugated Iron Sheets, upon very strongly made Wooden Framework.

Delivered to nearest Goods Station, and erected complete upon purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf.

Estimates free upon receipt of measurements and full particulars of requirements.

Our Buildings are all made in sections,

and tested as a whole, before leaving our Works. Each part is numbered and lettered to correspond with a diagram which accompanies the Building, so that reference is made easy, and the putting together of the sections is a matter of common intelligence, no technical skill being required.

40, Gondar Gardens, West Hampstead.

The Shed came yesterday. It is very nicely made, and will be very useful.

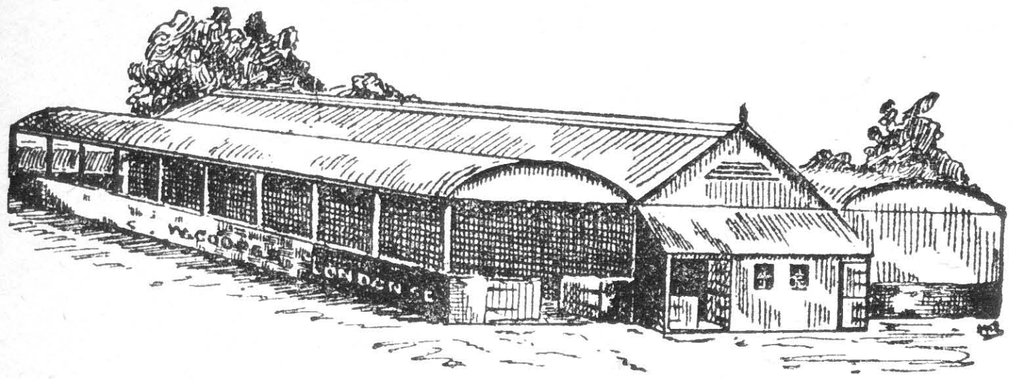
C. T. LUCAS.

11, Trowlock Island, Hampton Wick.

DEAR SIR,—I beg to inform you that the Shed has duly arrived, and is quite satisfactory.—Yours truly,

J. S. OMOND.

Range of Sheds.



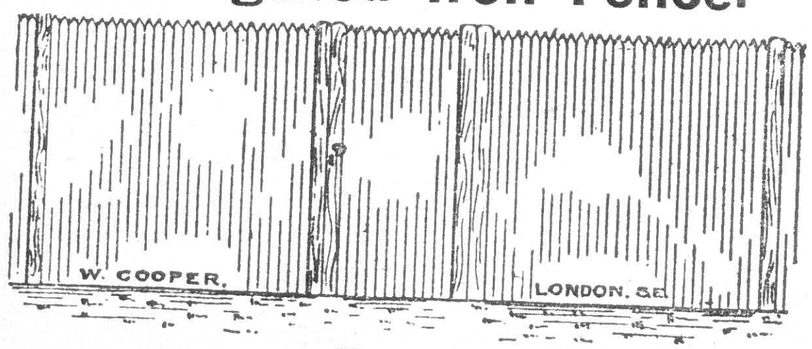
No. 638.

Specially adapted for Agriculturists, &c. Is very useful for stacking straw, grain, or hay. Centre house can be used as a Cattle Shed. Is constructed of Galvanised Corrugated Iron, upon very strongly made Wooden Framework.

Delivered to nearest Goods Station, and erected complete upon purchaser's foundation, or marked for re-erection, bundled and put on Rail or Wharf.

Estimates free upon receipt of measurements and full particulars of requirements.

Corrugated Iron Fence.



No. 639.

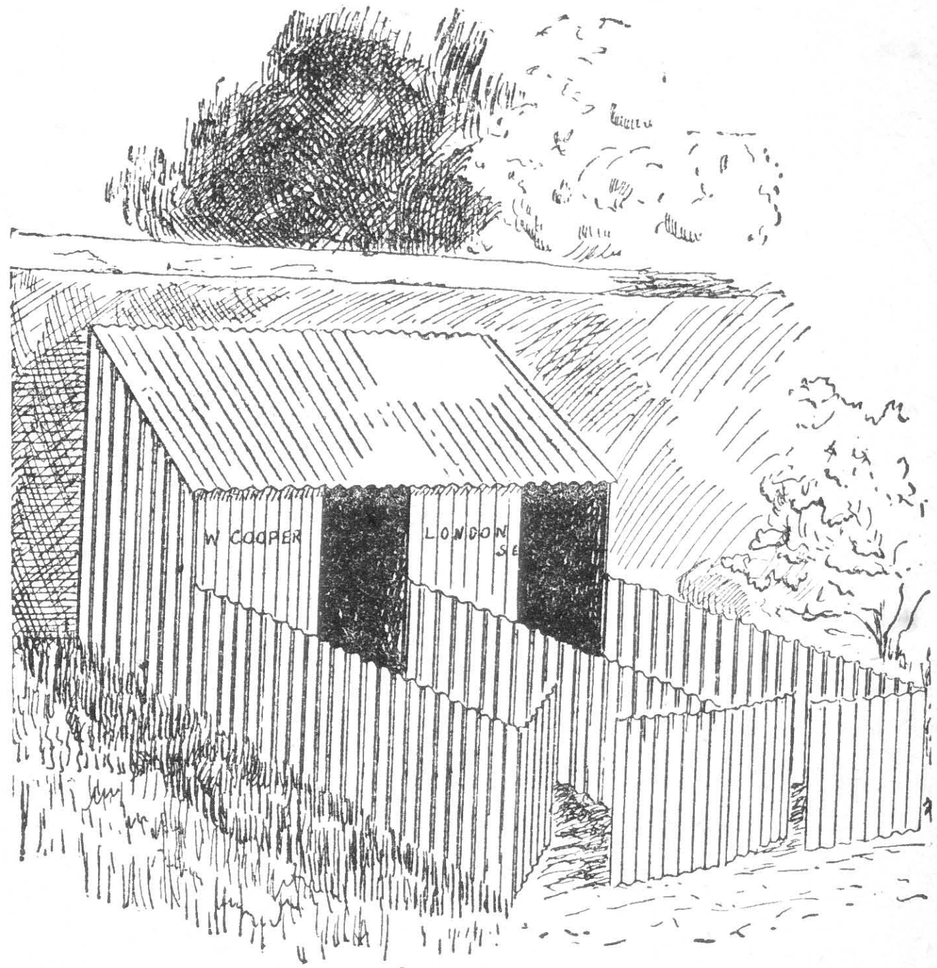
Made in 6ft. lengths ready for fixing. Posts 6ft. apart, 4 by 3, cut at end and tarred for fixing, 1ft. 6in. in ground. Aris Rails, 3in. Complete with Bolts to bolt together.

3ft.	high above ground,	9s.;	gates and fittings,	3ft.	wide,	6s.
4ft.	,, ,,	12s.;	,, ,,	,,		8s.
5ft.	,, ,,	15s.;	,, ,,	,,		10s.
6ft.	,, ,,	18s.;	,, ,,	,,		12s.

All Woodwork painted with our Patent Rot-Proof Composition.

N.B.—This Fence is unclimbable, durable, and is very largely used in all parts of the Kingdom.

Galvanised Corrugated Iron Piggery.



No. 640

With Timber Uprights. Cheap, Durable, and Portable.

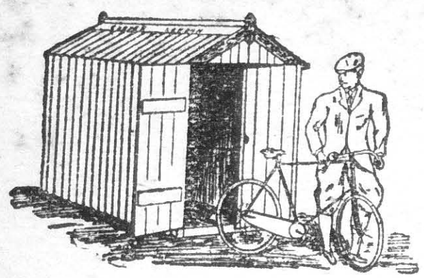
5ft. wide, 10ft. long, including 6ft. Run each, £5 10s. the two, as illustrated, put on Rail or Wharf.

Other sizes at proportionate prices.

On-Rail or Wharf Price

includes the structure complete as above, ready for erection, carefully marked, and put on Rail at our Works, or delivered to London Wharf.

Bicycle or Tricycle House.



Span-Roof.

Wooden Framework, covered with galvanised corrugated iron, 7ft. long, 4ft. wide, 5ft. high in centre. Fitted with wood floor and double doors in front, with good lock.

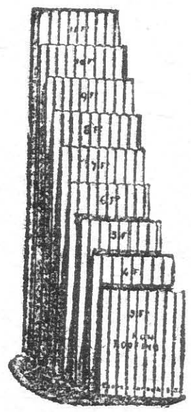
No. 641. Cash Price, £3 10s.

Lean-to House.

7ft. long, 4ft. wide, 5ft. high at back, 4ft. in front. Complete with floor. Cash Price, £2 15s.; if with wood back, 10s. extra. Corrugated Iron Back, 15s. extra.

Corrugated Galvanised Iron Sheets.

Large Quantities of every Size kept in Stock, from 3ft. to 10ft. long, by 2ft. 3in. wide.
Curved Sheets to order.



No. 642.

	Cash Prices. 26 Gauge.	24 Gauge.
	s. d.	s. d.
3ft. long	0 11 ..	1 2
4ft. „	1 3 ..	1 7
5ft. „	1 7 ..	1 11
6ft. „	1 10 ..	2 3
7ft. „	2 2 ..	2 7
8ft. „	2 5 ..	3 0
9ft. „	2 10 ..	3 7
10ft. „	3 4 ..	4 1

All prime Sheets not wasters.

Galvanised Ridging.

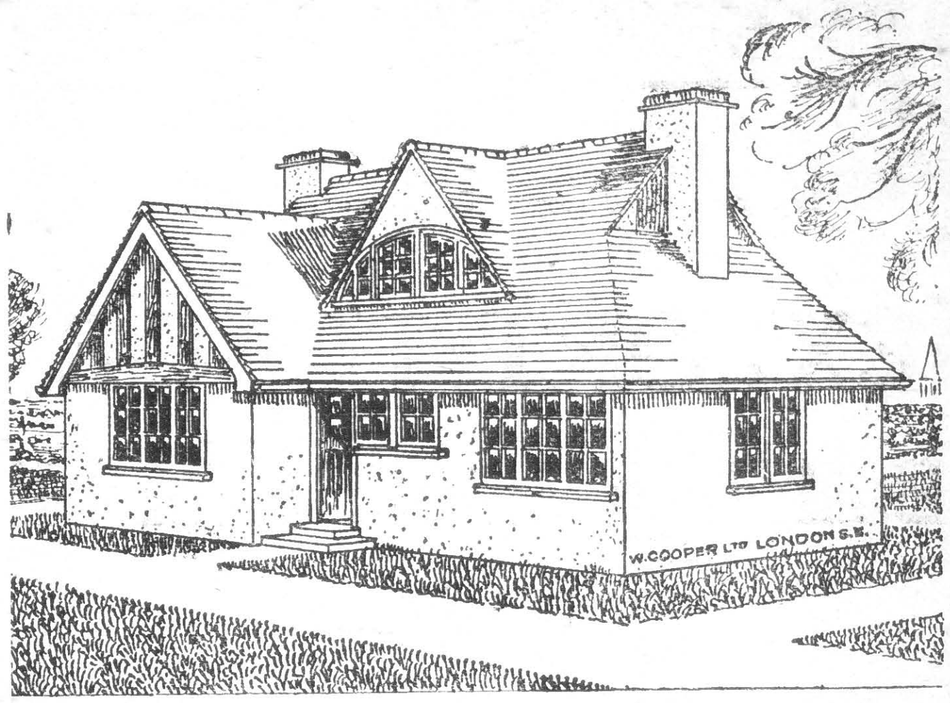
In 6ft. Lengths. Cash Prices:
26 Gauge at 1s. 6d. each. 24 Guage at 1s. 11d. each.

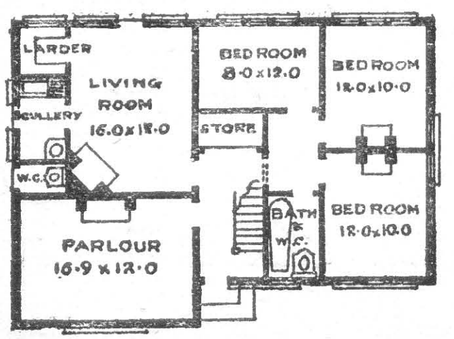
Galvanised Cone Head Nails and Washers.

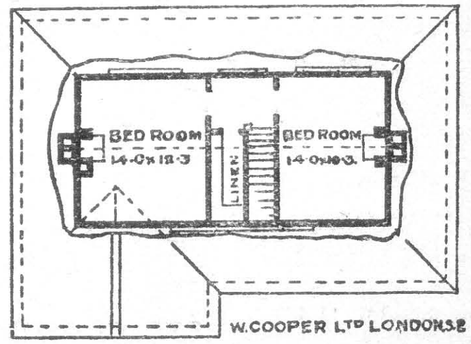
	Cash Prices. s. d.	
Nails	2 3	per gross.
Nails	0 3	per dozen.
Washers	1 3	per gross.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Bungalow.







No. 643.

This very handsome and convenient Bungalow is constructed of timber framework, the outside walls are rough cast, with Tile Roof, and the walls internally can be lined with Fire Resisting Material or Matchboarding.

Made to any size. Prices upon application.

Outside walls and roof can be of Corrugated Iron if preferred.

Manufacturers and Exporters of Wood and Iron Buildings of every description.

Telegraphic Address: "Conservatories," London.

EXPORT TRADE.

Buildings suitable for all climates,

The Colonies, South Africa, and India.

FOR TROPICAL CLIMES

our Buildings are constructed with a double roof, each end being covered with perforated zinc in order to admit a through current of air. This not only assists to cool the interior, but may be made to act as a thorough ventilator.

All prices on pages 483 to 492 include special export packing, and delivery F.O.B. London.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

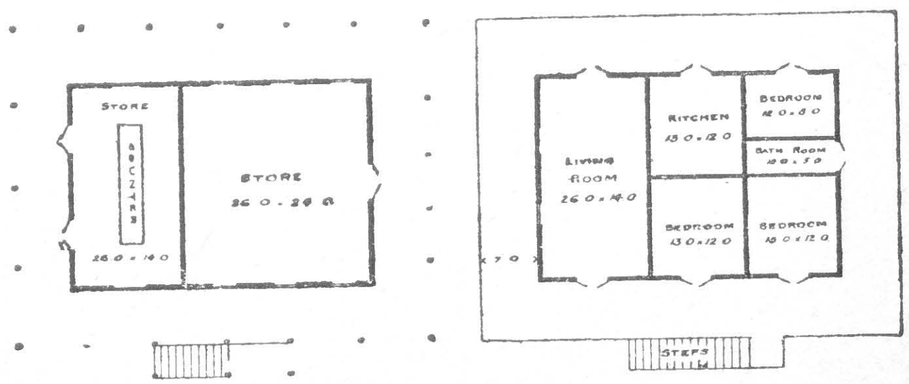
Merchant's Store and Residence.



No. 644.

Code Word, "Easy."

For full Specification, see pages 412 and 413.



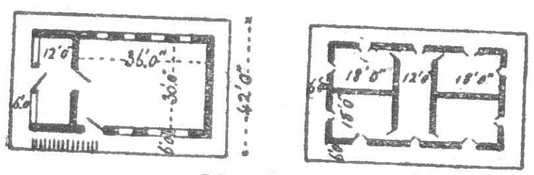
Cash Price F.O.B. London, £360.

Extra for Cast Iron Foundations, **£30.**

Please use A B C Code when cabling.

African Merchant's Station.





No. 645.

Code Word, "Station."

Specially Constructed for Tropical Countries.

Warehouse, Shop, and Residence combined. Everything complete, packed, marked, and bundled ready for re-erection. Cash price, F.o.b., London, £420. Every attention is given to suit the climate and special requirements of purchasers. For full Specification, see pages 412 and 413.

Full working Drawings, Plans, &c., sent with every Building.

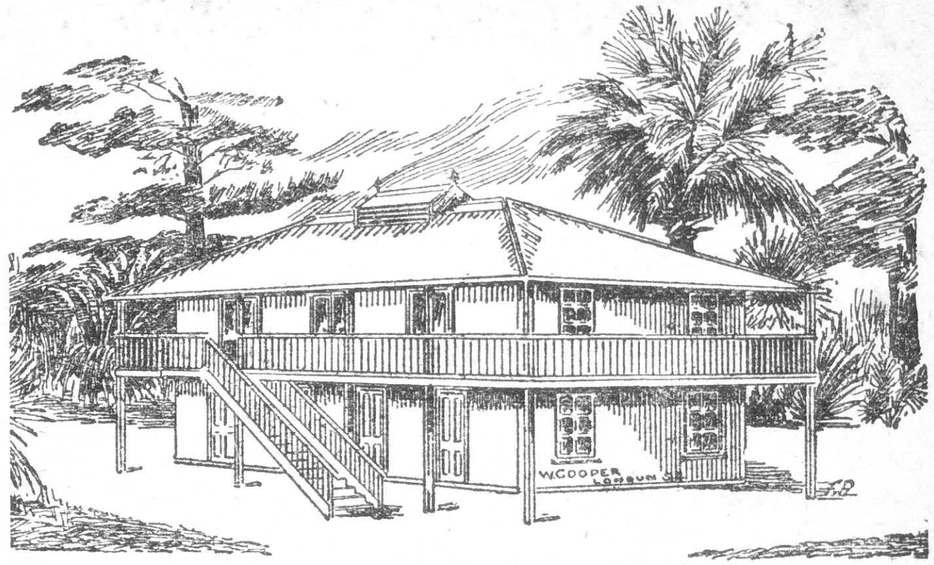
Extra for Cast-iron Pile Foundations, £32.

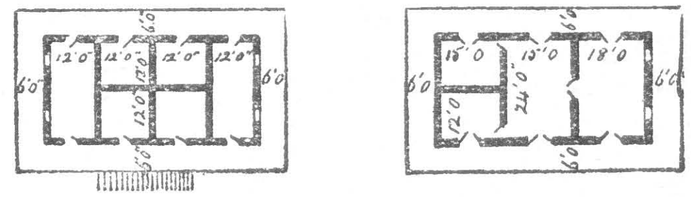
For Tropical Climate.

For tropical climes our Buildings are constructed with a double roof, each end being covered with perforated zinc in order to admit a through current of air. This not only assists to cool the interior, but may be made to act as a thorough ventilator.

Please use A B C Code when cabling.

Residence for Hot Climate.





No. 646.

Code Word, "Comfort."

Specially Designed for Tropical Countries.

Every attention is given to suit the climate and special requirements of purchasers. For full Specification, see pages 412 and 413.

Everything complete, packed, marked, and bundled ready for re-erection. Cash price, f.o.b., London, £375.

Full working Drawings, Plans, &c., sent with every Building.

Extra for Cast-iron Pile Foundation, £30.

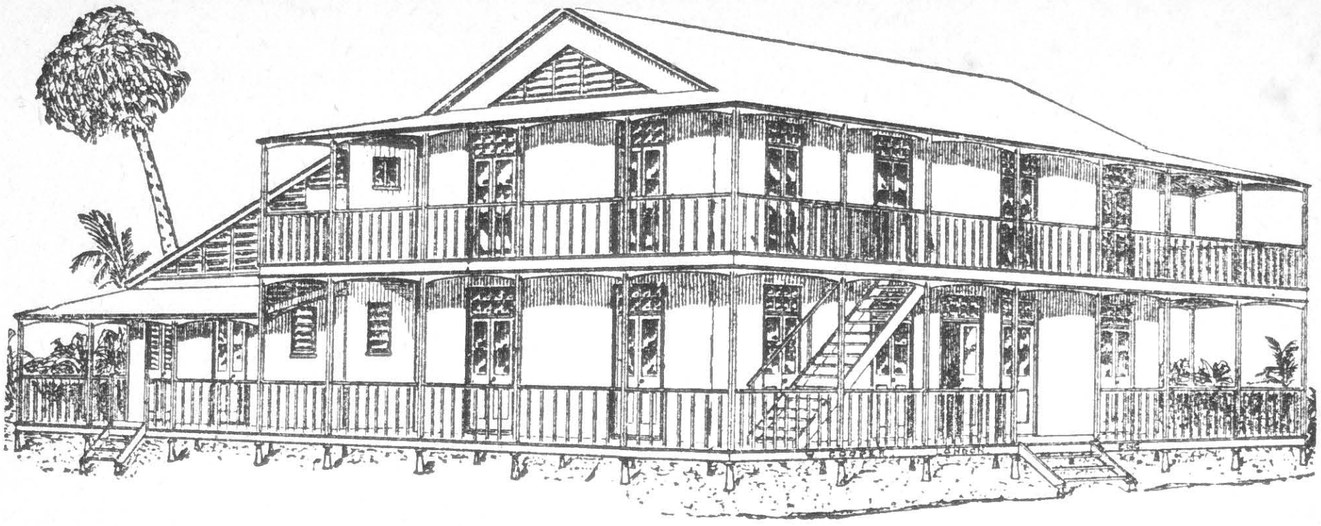
Being Portable and Tenant's Fixtures,

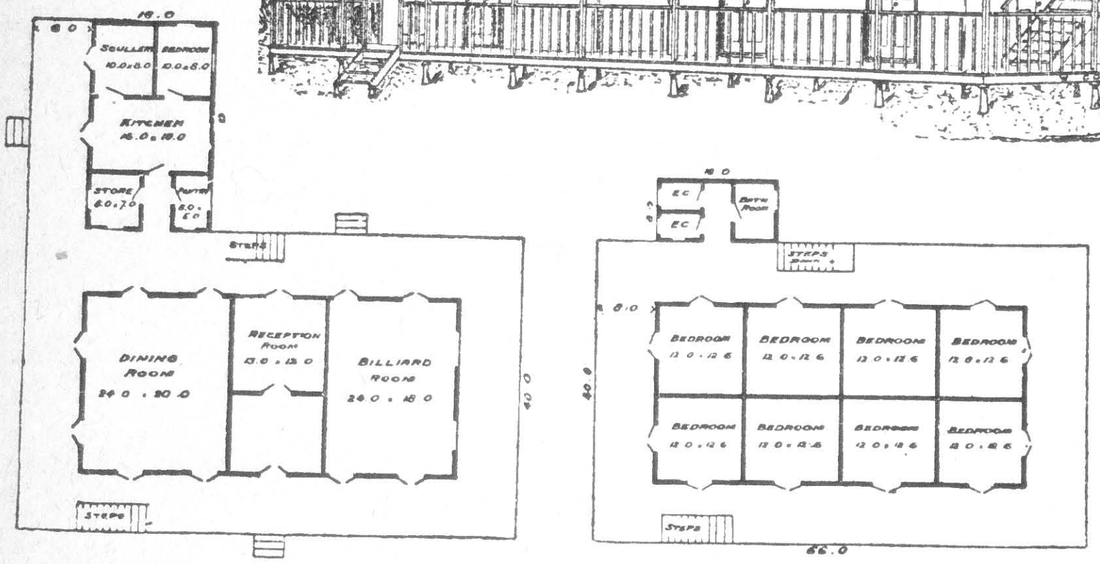
these Buildings commend themselves for service in all parts of the world. They can be enlarged or made small with comparative ease in any case of emergency.

Ventilation

is studied in every building, our principle being to thoroughly effect it without causing draught.

Please use A B C Code when cabling.





No. 647.

Code Word, "Compact."

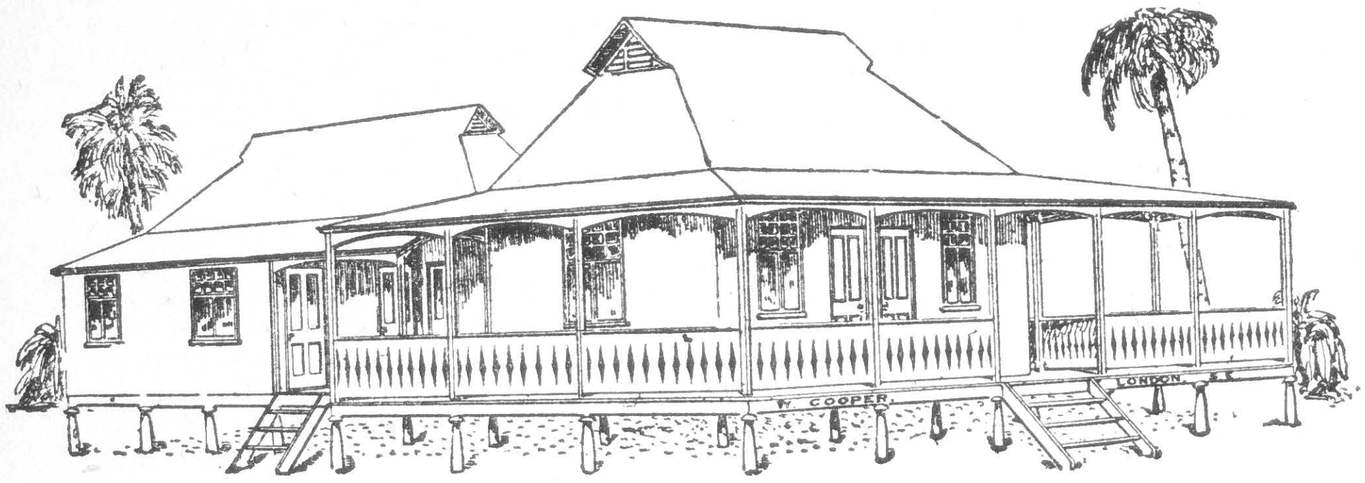
This roomy structure with Verandahs.

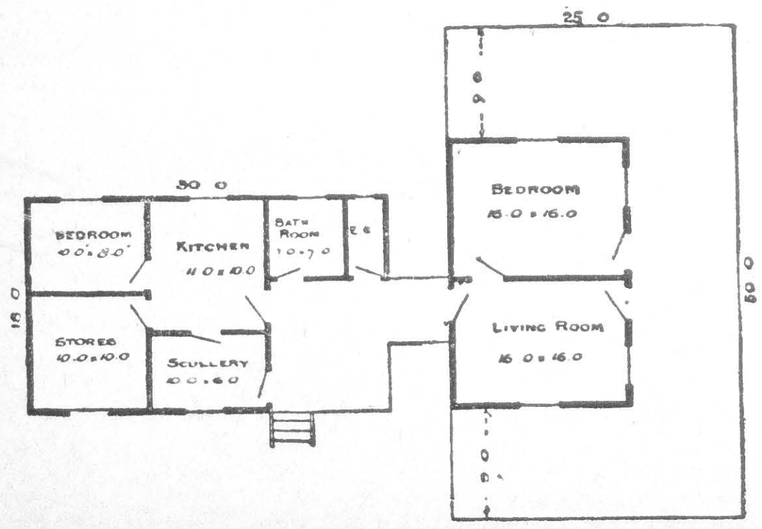
Cash Price F.O.B. London, £650.

Extra for Cast-iron Foundations, **£65.**

For full Specification, see pages 412 and 413.

Please use A B C Code when cabling.





No. 648.

Code Word, "Hardy."

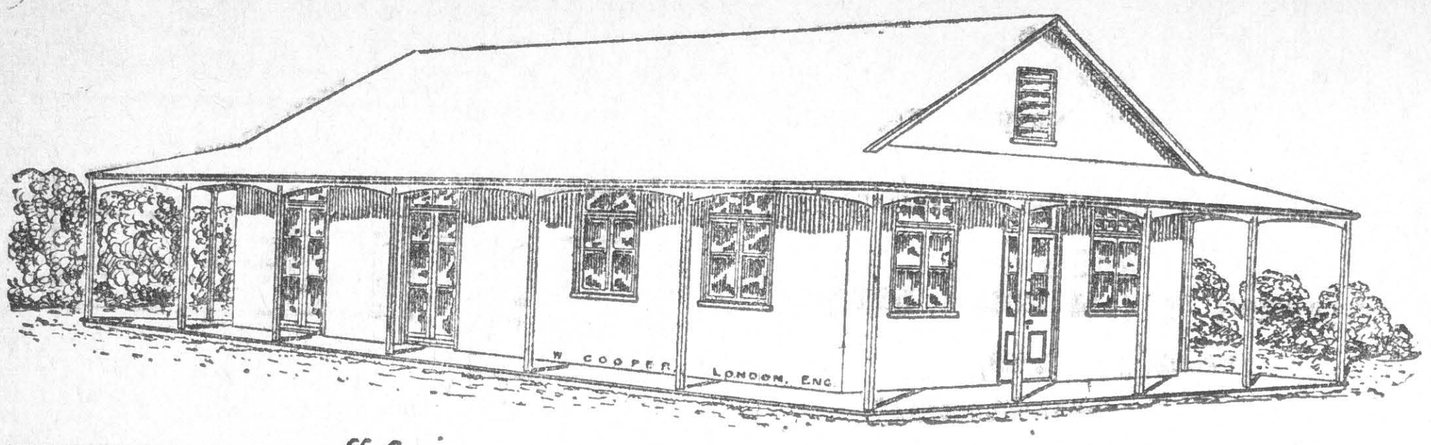
Residence, with Verandah.

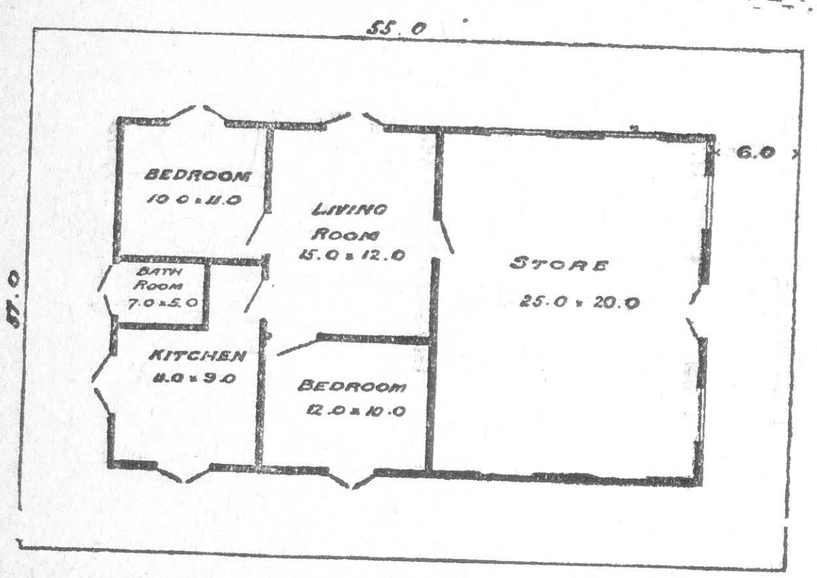
Cash Price F.O.B. London, £248.

Extra for Cast-iron Foundations, **£20.**

For full Specification, see pages 412 and 413.

Please use A B C Code when cabling.





No. 649.

Code Word, "Storage."

Merchant's House and Store.

Cash Price £180, F.O.B. London.

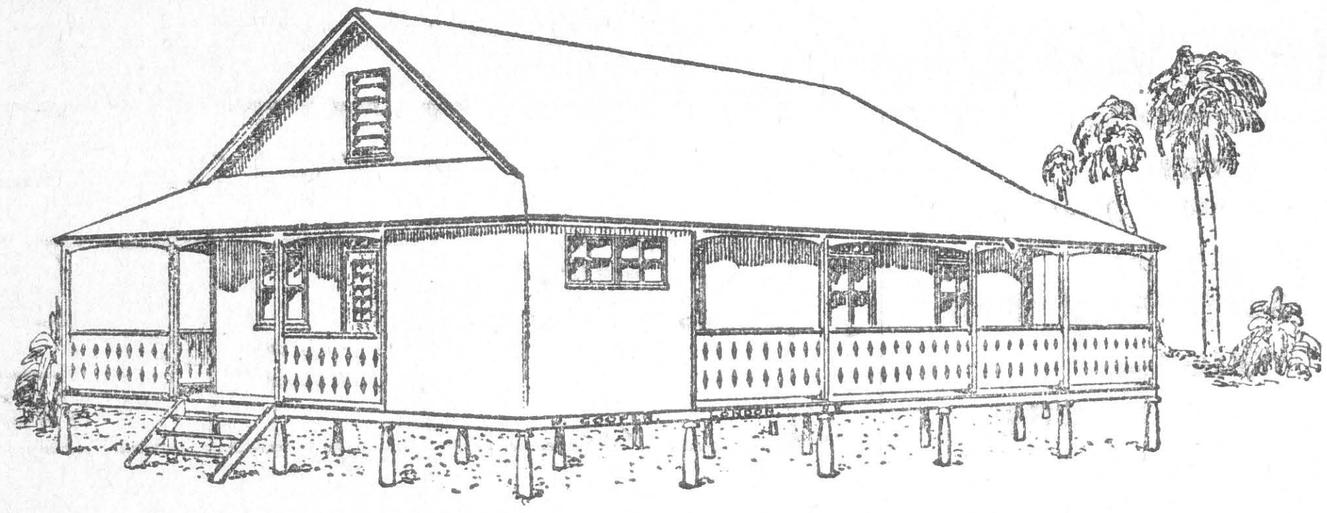
Extra for Cast-iron Pile Foundations,

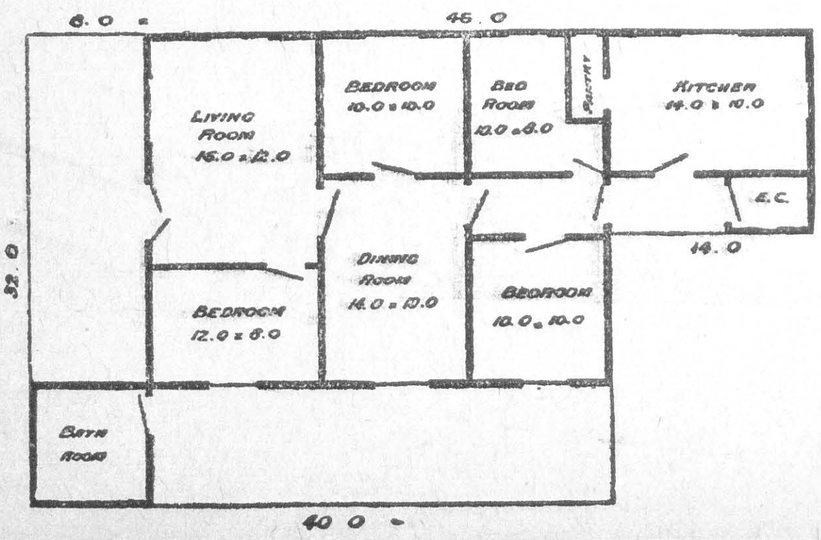
£22.

For full Specification, see pages 412 and 413.

Please use ABC Code when cabling.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.





No. 650.

Code Word, "Tree."

Residence.

This convenient structure is largely used in hot climates.

Thoroughly well ventilated and has a Verandah 8ft. wide along two sides.

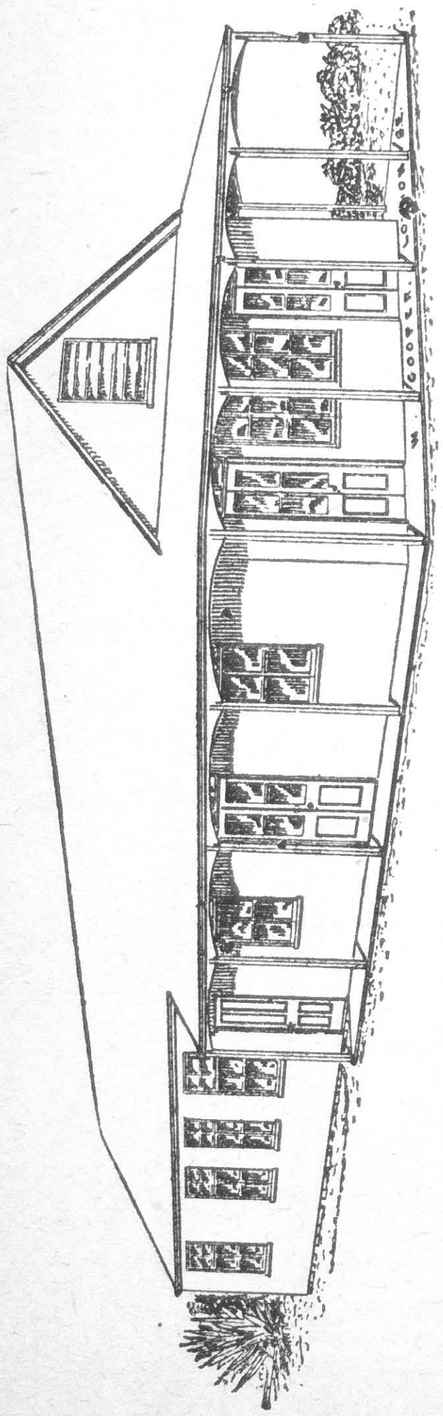
Cash Price F.O.B. London, £198.

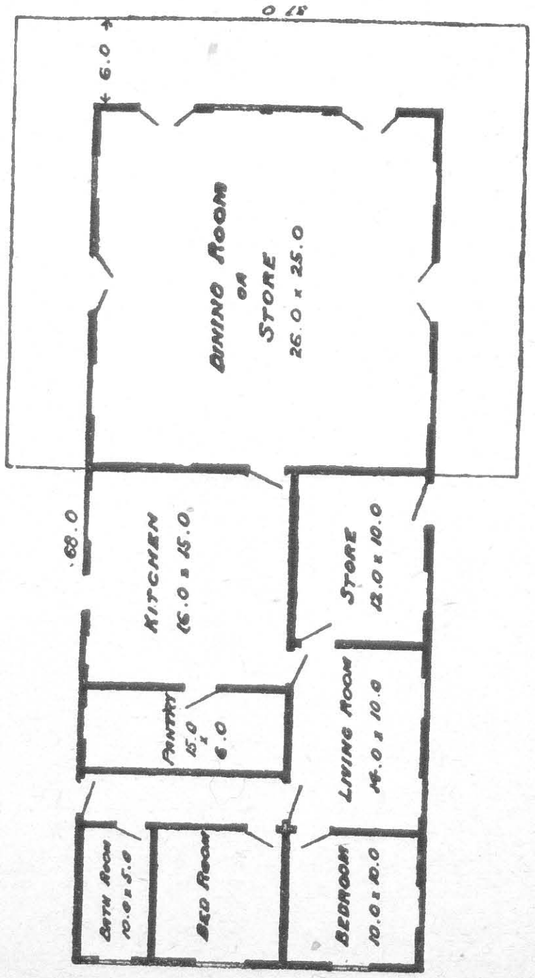
Extra for Cast-iron Foundations,
£17.

For full Specification, see pages 412 and 413.

Please use ABC Code when cabling.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.





No. 651.

Code Word "Complete."

Residence and Store.

Cash Price £305, F.O.B. London.

Extra for Cast-iron Foundations,

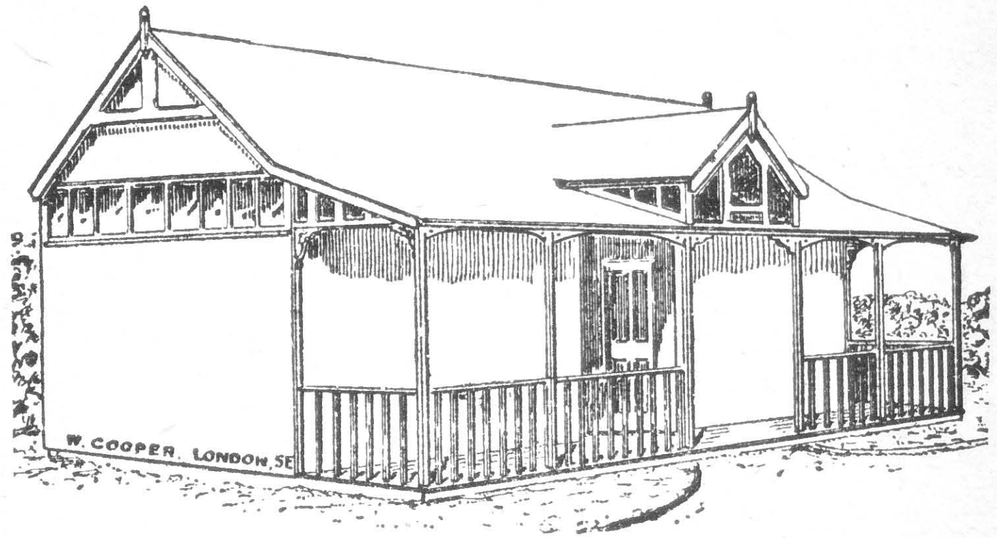
£30.

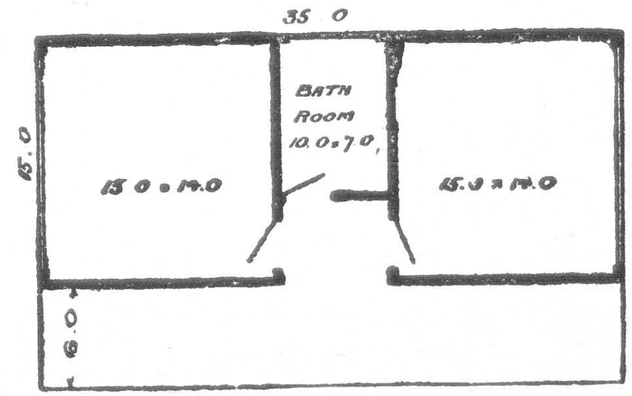
For full Specification, see pages 412 and 413.

Please use A B C Code when cabling.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Span-Roof Structure with Gable and Verandah.





No. 652.

Code Word, "Van."

Cash Price F.O.B. London, £90.

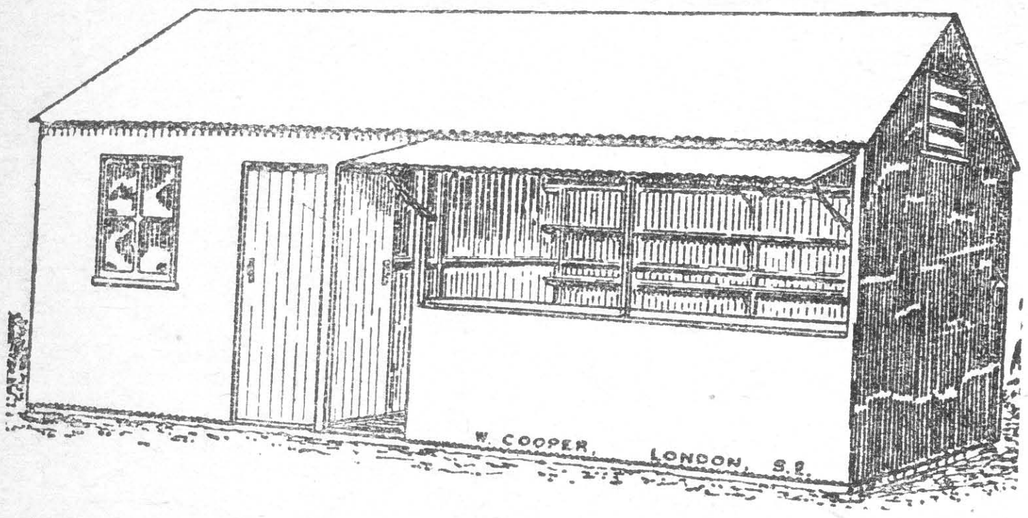
Extra for Cast-iron Foundations,

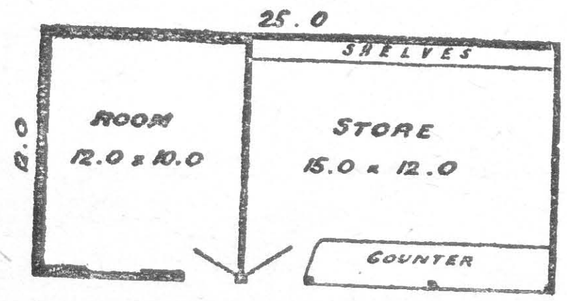
£11.

For full Specification, see pages 412 and 413.

Please use A B C Code when cabling.

A Country Store.





No. 653.

Code Word, "Country."

This convenient Store, unlined, but with Wood Floor and fitted with Flap, Shelves, and Counter as illustration and plan.

For full Specification, see pages 412 and 413.

Cash Price F.O.B. London, £48.

Please use A B C Code when cabling.

For all buildings in this Export part of Section X.

Galvanised Corrugated Iron Sheets

of No. 24 standard Birmingham gauge only are used. They are fixed on a principle that admits of their being easily released without damage to the structure.

SECTION XI.

Illustrated Catalogue

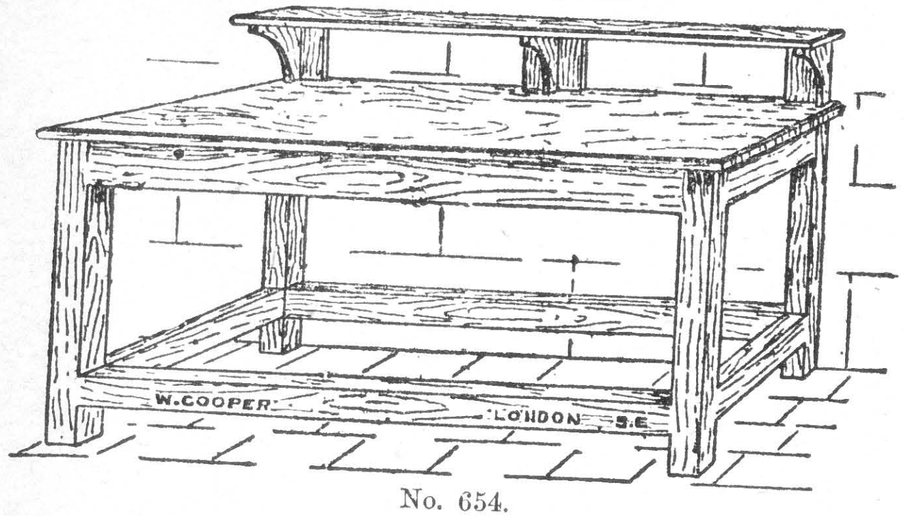
OF

Church, Mission Hall, &c., Furniture.

ALSO

Seats, Chairs, Cupboards, Dressers, Heating, Lighting, Cooking Stoves, Stable Fittings, &c., &c.

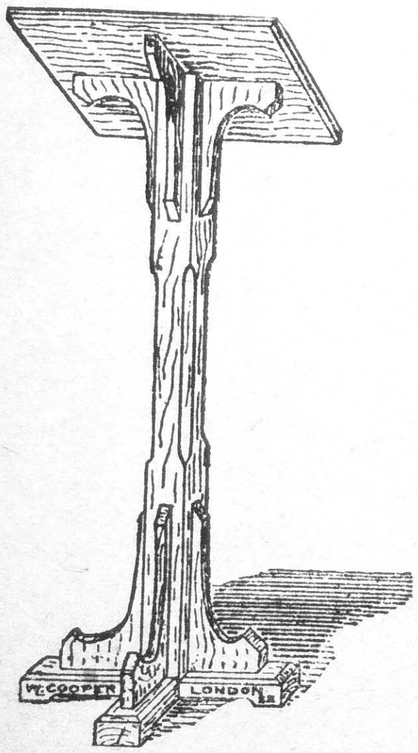
Altar Table.



No. 654.

	Cash Price.
Deal, Stained and Varnished, 6ft. by 2ft. 6in. by 3ft.,	£3.
Pitch Pine	£4.

Lecterns.



No. 655.

4ft. high.	Cash Price. £ s. d.
Deal, Stained and Varnished	1 12 6
Pitch Pine	1 16 0

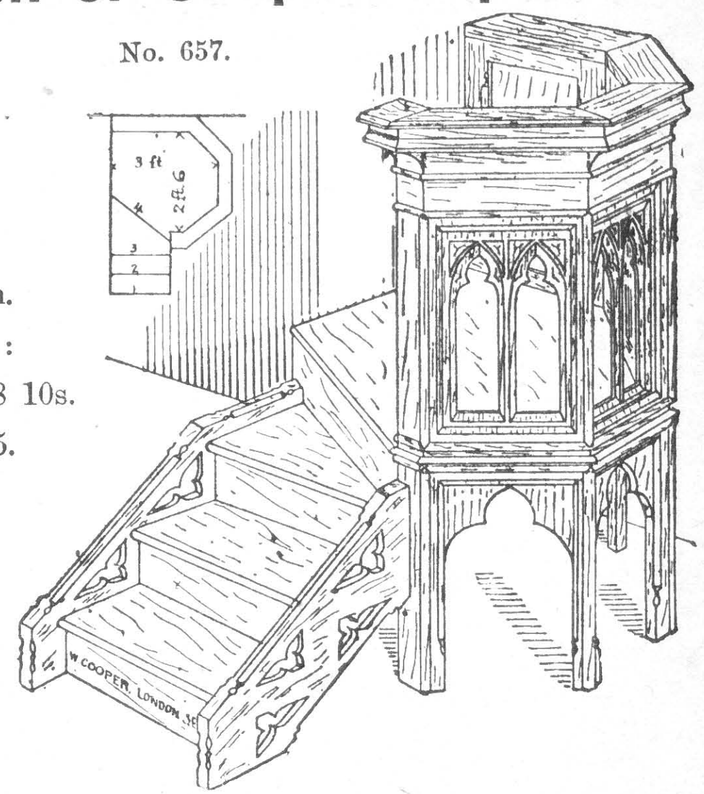


No. 656.

4ft. 8in. high.	Cash Price. £ s. d.
Deal	7 5 0
Pitch Pine	8 10 0
Oak	11 0 0

Church or Chapel Pulpits.

No. 657.



5ft. 8in. high.

Cash Prices:

Pitch Pine	£18 10s.
Oak	£25.

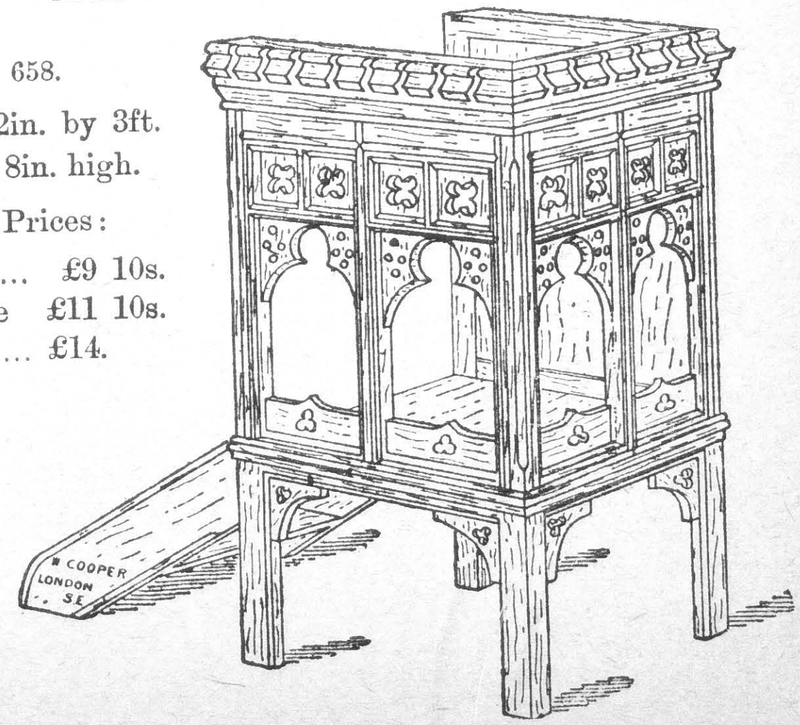
Estimates for other Designs Free.

No. 658.

Size, 3ft. 2in. by 3ft. 2in., 5ft. 8in. high.

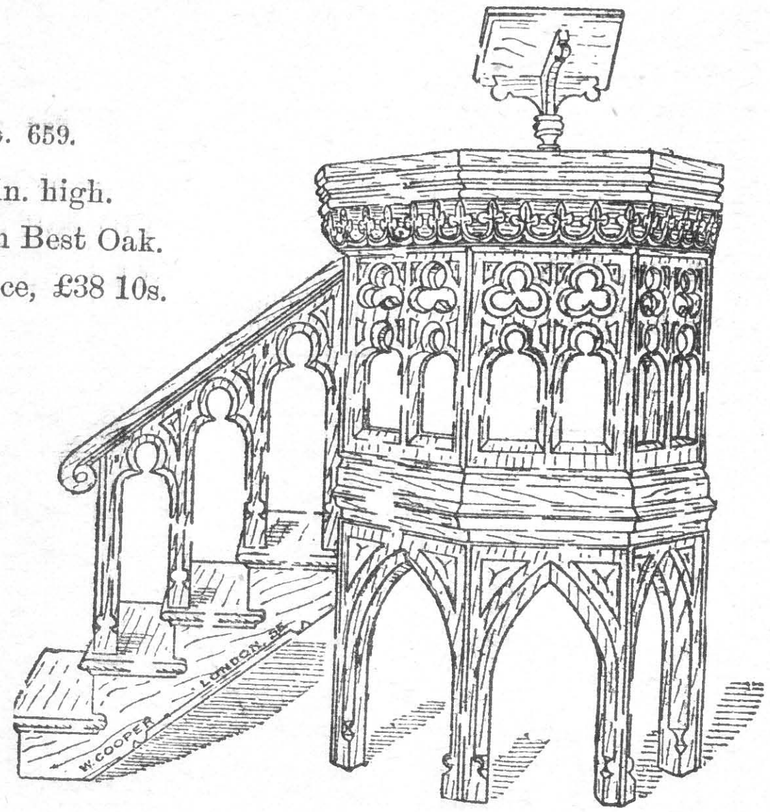
Cash Prices:

Deal	£9 10s.
Pitch Pine	£11 10s.
Oak	£14.

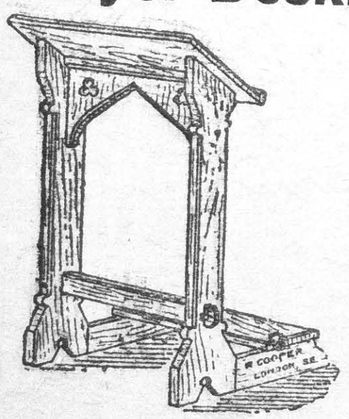


Church or Chapel Pulpit.

No. 659.
5ft. 8in. high.
Carved in Best Oak.
Cash Price, £38 10s.



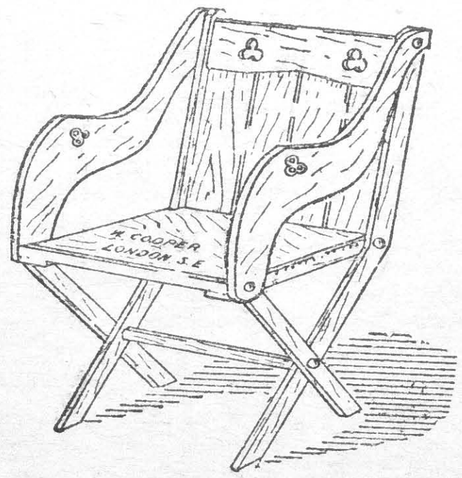
Prayer Desk.



No. 660.
30in. high.
Size of top, 20in. by 11in.

	Cash Price. £	s.	d.
Deal, Stained and Varnished	1	4	0
Pitch Pine	1	7	6
Oak	1	14	6

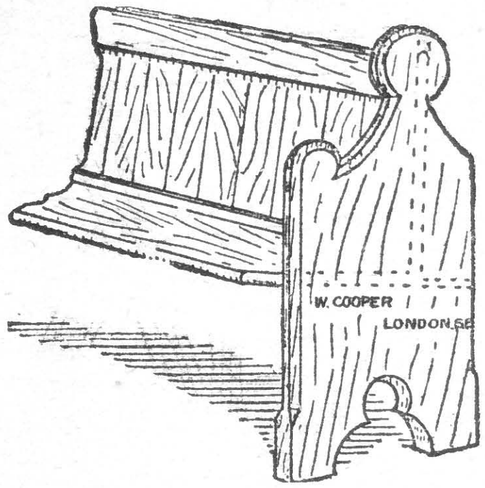
Glastonbury Chair.



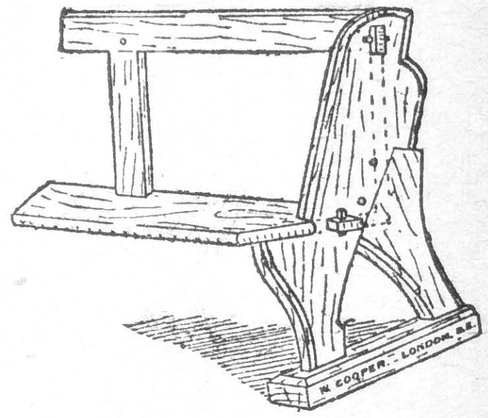
No. 661.
Stained and Varnished.

	Cash Price. £	s.	d.
Deal	0	19	0
Pitch Pine	1	4	0

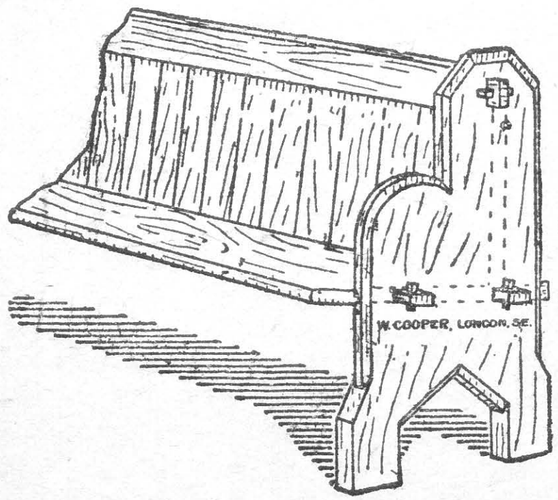
Nave Seats.



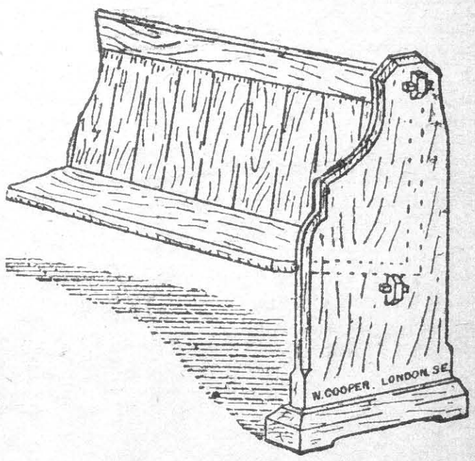
No. 662.
7ft. 6in. long.
To seat 5 persons. Pitch Pine.
Cash Price, £1 17s. 6d.
Stained and Varnished.



No. 663.
7ft. 6in. long.
To seat 5 persons. Pitch Pine.
Cash Price, £1 7s. 6d.
Stained and Varnished.



No. 664.
7ft. 6in. long.
To seat 5 persons. Pitch Pine.
Cash Price, £1 17s. 6d.
Stained and Varnished.

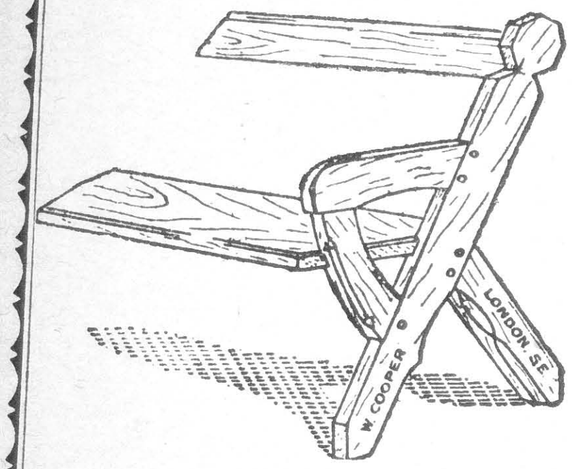


No. 665.
7ft. 6in. long.
To seat 5 persons. Pitch Pine.
Cash Price, £1 17s. 6d.
Stained and Varnished.

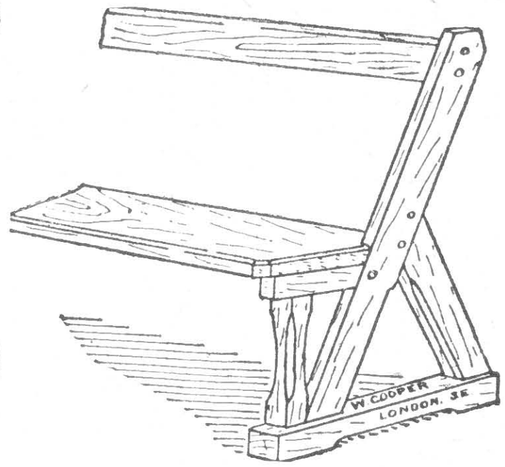
Book Rests can be fixed to either of above at 3s. per Seat extra.

Estimates free for other sizes.

Mission Seats.

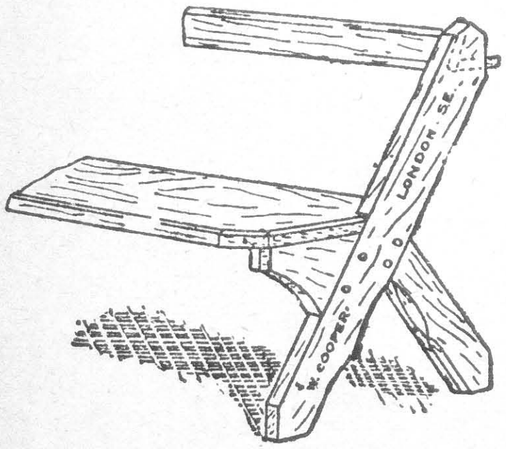


No. 666.
Cash Price:
7ft. 6in. long ... ... 24s.
Seat five persons.

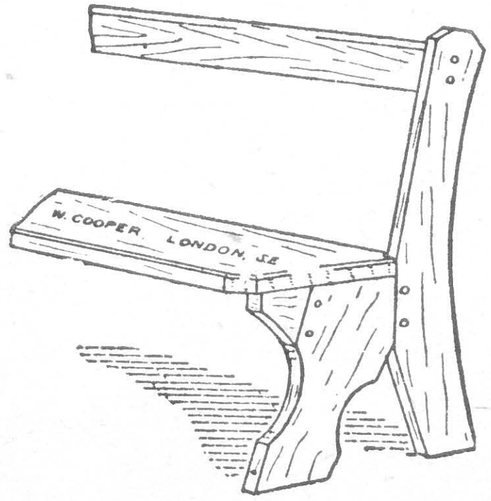


No. 667.
Cash Price:
7ft. 6in. long ... ... 21s.
Seat five persons.

Pitch Pine, Stained and Varnished.



No. 668.
Cash Price:
7ft. 6in. long ... ... 17s. 6d.
Seat five persons.

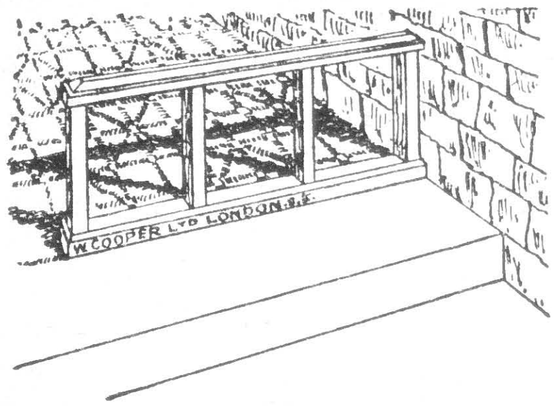


No. 669.
Cash Price:
7ft. 6in. long ... ... 17s. 6d.
Seat five persons.

Pitch Pine, Stained and Varnished.

Book Rests can be fixed to either of above at 2s. 6d. per Seat extra.

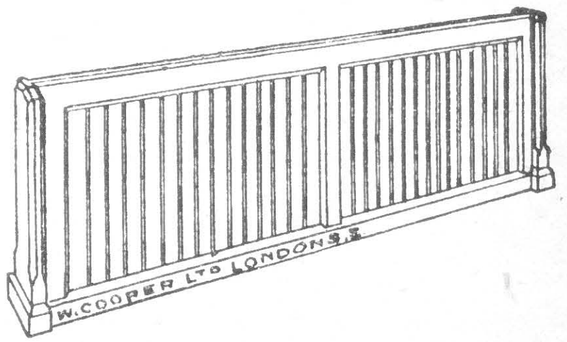
Altar Rails.



No. 670.
2ft. high.
Cash Prices, per foot run for 5ft. lengths:
Deal ... ... 5s. 6d.
Pitch Pine ... 7s. 6d.
Oak ... ... 9s. 6d.

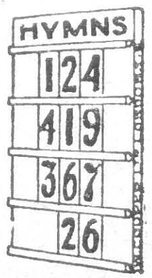
Book Front.

No. 671.
Cash Prices, per foot run, for 9ft. lengths.
Deal ... ... 6s. 0d.
Pitch Pine ... 7s. 6d.



Hymn Boards.

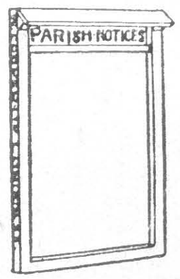
Plain Designs.



No. 672.
Size, 22in. by 11in.
Cash Prices:
4 rows. In Deal ... 4s. 6d.
" In Pitch Pine, 6s. 0d.

Notice Boards.

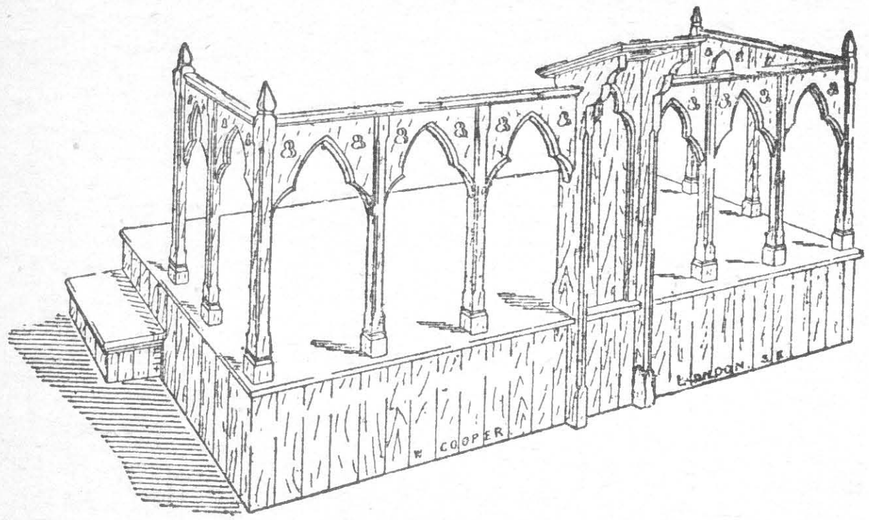
Plain Designs.



No. 673.
Size, 24in. by 13in.
Cash Prices:
Deal ... ... 14s. 0d.
Pitch Pine ... ... 16s. 6d.

Special designs quoted for upon receipt of particulars.

Rostrums, Platforms, &c.



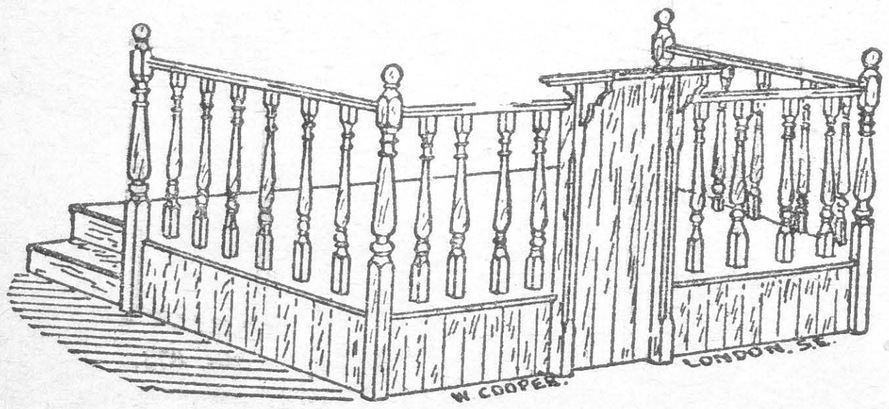
No. 674.

Size 8ft. long by 5ft. wide, raised 1ft. 3in. off the floor, with Steps up both sides and Book Board in centre, with Rail round.

Cash Prices:

Deal, Stained and Varnished ... ... £7 10s.
Pitch Pine ... ... £9 10s.

Any Size made at Proportionate Prices.



No. 675.

Size 8ft. long by 5ft. wide, raised 1ft. 3in. off the floor, with Steps up and Book Board, with Rail round. Cash Prices:

Deal, Stained and Varnished ... ... £5 10s.
Pitch Pine ... ... £7 5s.

Any Size made at Proportionate Prices.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Alms Box.



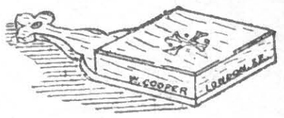
No. 676.

10in. high, 7in. wide, 7in. deep.

Cash Price:

Pitch Pine ... ... 8s. 6d.

Collecting Box.



No. 677.

Stained and Varnished.

Cash Price:

Pitch Pine ... ... 6s. 0d.

Designs for Chapel and Mission Hall Chairs.



No. 678.

Rush Bottom.

Cash Price, 28s. per doz.



No. 679.

Perforated Wood Bottom.

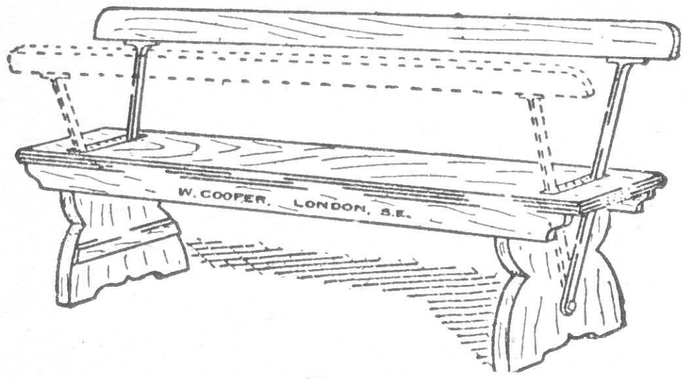
Cash Price, 21s. per doz.

£8 10s. per 100.

If Varnished 3d. per chair extra.
If fitted with Hat Rail, 4d. per chair extra.
If fitted with Book Box, 4d. per chair extra.

We can also supply a Good Chair with Solid Seat, Varnished 28s. per doz.

Reversible Seat,
On Wood Legs.



No. 680.

		Cash Prices.
Deal, Varnished, for 7ft. 6in. length	...	1s. 8d. per foot run.
Pitch Pine " "	...	2s. 1d. "

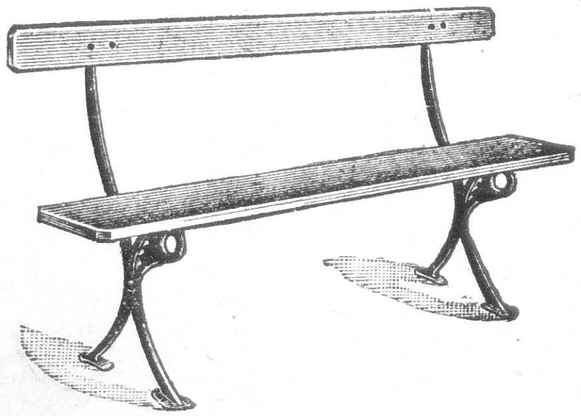
With Hat Shelf under, 4d. per foot extra.
Made to any length.

Fixed-back Seat.

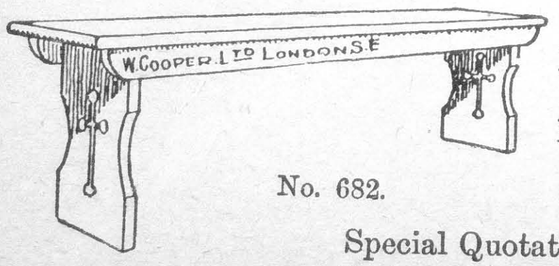
No. 681.

Seat complete,
Ironwork Blacked,
Pitch Pine Varnished,
5ft. and upwards.

Cash Price,
2s. per foot.
9in. Seat.



Stools.

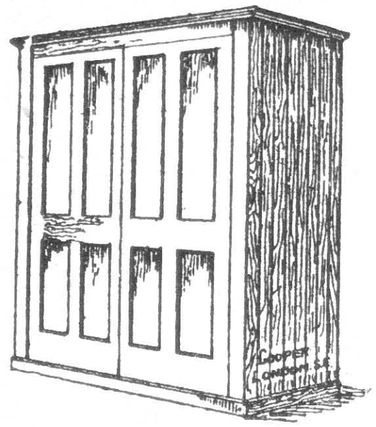


No. 682.

Cash Prices:
Deal, 6ft. long, 11in. wide, 8s. 9d. each.*
Pitch Pine, 6ft. long, 11in. wide, 11s. 6d. each.*
* For not less than 6.

Special Quotations for Quantities.

Wardrobe or Linen Cupboards.



No. 683.

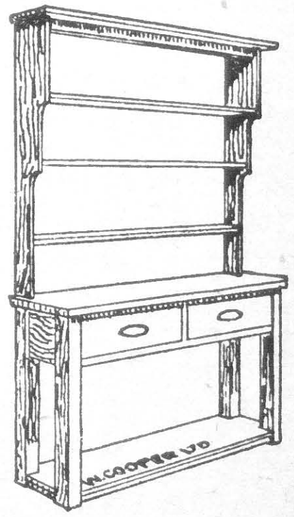
Strongly made. Compact, convenient, cheap. Useful in any house.
Size: 7ft. high, 3ft. wide, 1ft. 6in. deep.
Cash Price, £2 12s. 6d. each (not painted).
Fitted with one door, one shelf, hanging rail and lock complete.

Size: 6ft. 10in. high, 4ft. 8in. wide, 1ft. 6in. deep.
Fitted with pair of doors, one shelf, hanging rail, fastenings, and lock complete.

Cash Price, £3 7s. 6d. each (not painted).
Any other sizes quoted for on application.

Kitchen Dresser with Open Pot Board.

No. 684.



Substantially made, in the following sizes:—

Height.	Width.	Depth.	Cash Prices. £ s. d.
7ft. 6in.	4ft. 6in.	17in.	1 7 6
7ft. 6in.	5ft.	17in.	1 12 6
7ft. 6in.	5ft. 6in.	17in.	1 17 6

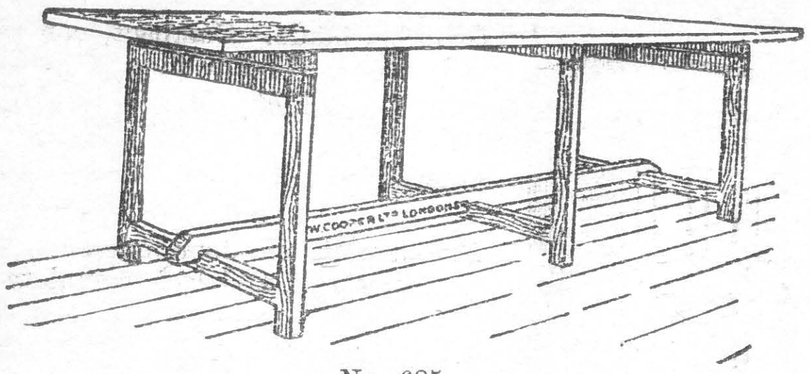
If fitted with doors instead of Open Pot Board, 12s. 6d., 15s. and 17s. 6d. extra respectively.

Any size quoted for upon receipt of particulars.

Upper Norwood.

DEAR SIRS,—I think you should know I am delighted with the Kitchen Dresser received.—Yours truly,
J. BEALE.

Table, with Hinged Trestles.



No. 685.

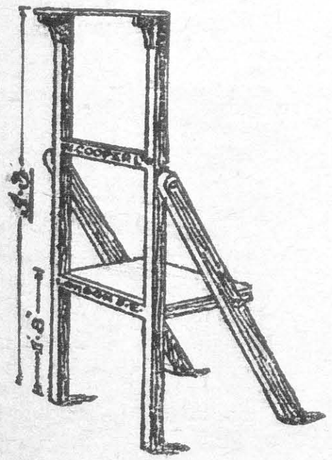
Strongly made. When not in use the trestles or legs fold under the top. In use the trestles are firmly held in position by a stretcher let into the bottom rails, as illustration.

Size 10ft. long, 2ft. 9in. wide, 2ft. 6in. high.

Cash Price, 22s. each; £11 10s. per dozen.

Any size made to order. Special quotation for large quantities.

Speaker's Platform
(PORTABLE).



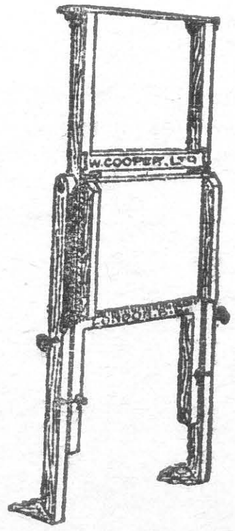
Open.

No. 686.

Strongly Made.

Hinged to Fold Up.

Largely Used for Outdoor Meetings.



Closed.

Size 5ft. 3in. high over all, 3ft. 7in. high above platform, 2ft. wide. Unpainted.

Cash Price, 17s. 6d. each; £9 10s. per dozen.

Stained and Varnished 2s. each, extra.

Any size made to order. Special quotation for large quantities.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Heating Stoves.

Suitable for Churches, Concert and Mission Halls, Bungalows, Workshops, &c.

THE "EQUATOR" STOVE.

Brick Lined.

Open Fire.



These Stoves are designed specially for use in Churches, Halls, Offices, Schoolrooms or any large apartment where a great heating power that requires little attention is essential.

Extreme Measurements: 44½in. high, 25¼in. wide, 20½in. deep.

NOTE. When with Fender, add 7½in. to depth.

Heating Capacity— Close Fire, 40,000 cubic ft.; Open Fire, 20,000 cubic ft.

CASH PRICES.

Close Fire. No. 687.	s.	d.	
Plain Blacked	63	0	each
With Fire Doors, Top Panel and Ornamental Knob on Top, Electro Bronzed ..	10	6	extra
With Tiles in front instead of centre Panel	2	6	,,

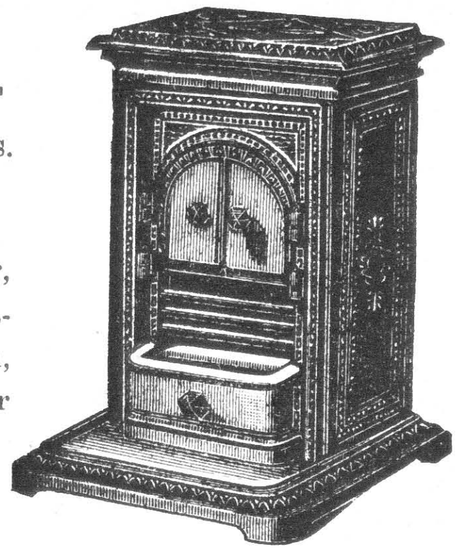
Open Fire. No. 688. As Illustration.	s.	d.	
Plain Blacked	66	0	each
With the two Panels of front and Ornamental Knob on Top, Electro Bronzed	10	6	extra
With Tile instead of Top Panel in front	2	6	,,

If with Plain Fender, 3s. less. If without Fender, 5s. 6d. less.

"Coronation" Stove.

FOR WOOD OR IRON BUILDINGS.

No. 689.



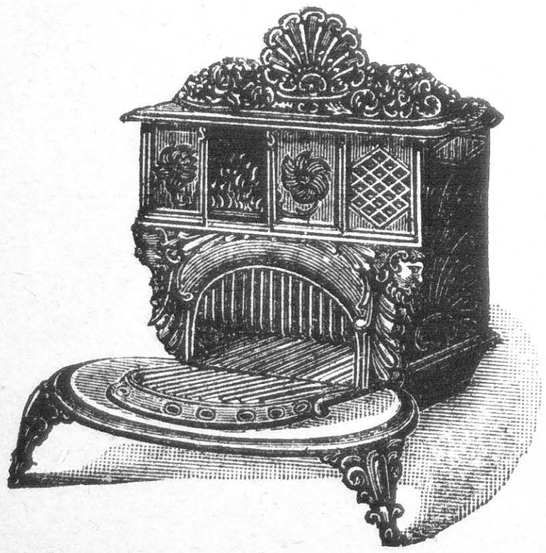
Fitted with fire-brick lining, polished mountings, bright ornamental top, draw-out ashes pan, and cast tray. Nozzle at top or back.

No.	Size of Body.	Size of Tray.	Size of Nozzle.	Cash Prices. £ s. d.
1	25 by 13½ by 10½	20 by 18	5	1 10 0
2	30 ,, 17 ,, 12	25 ,, 21	6	2 0 0
3	35 ,, 20 ,, 12	25 ,, 25	6	3 9 0

"The King" Stove.

FOR WOOD OR IRON BUILDINGS.

No. 690.



With open fire, suitable for office or bedroom. This stove is made with flat top, with two loose round lids for boiling, and ornamental top cover.

No.	Sizes.	Cash Prices.
5	15 by 16½in. high,	12s. 0d. ea.
6	19¼ ,, 23⅝in. ,,	14s. 6d. ,,
7	22½ ,, 25½in. ,,	18s. 6d. ,,

With Rings at side for ship's use, 1s. 6d. each extra.

Feet drilled for screwing to deck, 9d. each extra.

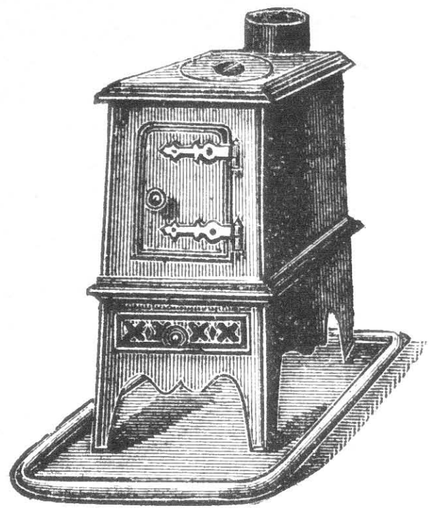
3, Corbetta Villas, St. Ives, Hunts.

SIR,—Received goods quite safe and well satisfied.—Yours truly,

W. SIBBS.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Dumpy Stove.



No. 691.

For Office, Workshop, Store, &c.

Very strong and serviceable.

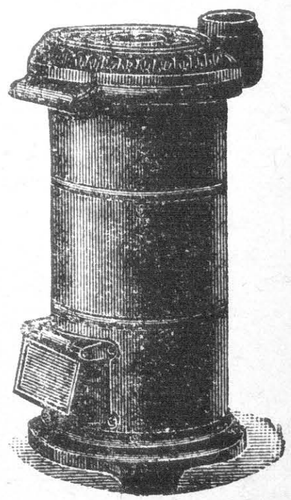
Made in parts, and fastened together with four bolts, allowing for expansion. Fitted with cast pan and ash drawer. Smoke nozzle either back or top.

No.	Size.	Nozzle to suit Pipe.	Approx. Weight.	Cash Prices.
1	8½ by 8½ by 17 in. high	3 in.	37½lbs.	8/- each
2	9½ ,, 9½ ,, 20 ,,	3½in.	46¾lbs.	10/- ,,
3	10½ ,, 10½ ,, 23 ,,	3½in.	61¾lbs.	14/- ,,
4	11½ ,, 11½ ,, 25 ,,	4 in.	74 lbs.	17/- ,,
5	12½ ,, 12½ ,, 27 ,,	4 in.	91 lbs.	20/6 ,,

Nos. 3, 4 & 5 can be supplied with Bricks, 2/6 each extra

Slow Combustion Stove.

No. 692.



With strong wrought-iron body, firebrick lining and bottom, and cast mounts.

Nozzle back or top.

Suitable for Offices, Dwellings, Churches, Chapels, &c.

No.	Size. dia.	high.	Calculated Heating Power.	Nozzle to suit pipe.	Cash Prices.	Ash-pans. each. extra
1	9in. by	22 in.	2,500 cub. ft.	3½in.	12/6	1/6
2	10in. ,,	25½in.	7,500 ,,	3½in.	14/6	2/-
3	12in. ,,	29 in.	11,500 ,,	4 in.	21/-	2/6
4	14in. ,,	31 in.	16,000 ,,	4½in.	34/-	3/-
5	16in. ,,	33½in.	26,000 ,,	4½in.	38/-	4/-

Pleasant House, Nenthead.

DEAR SIRS,—I have received Slow Combustion Stove all right, and am very pleased with it. I think it is splendid value for the money; it is a splendid heater, and gives entire satisfaction. Wishing you every success in the future.—I remain, yours faithfully, A. RUTHERFORD.

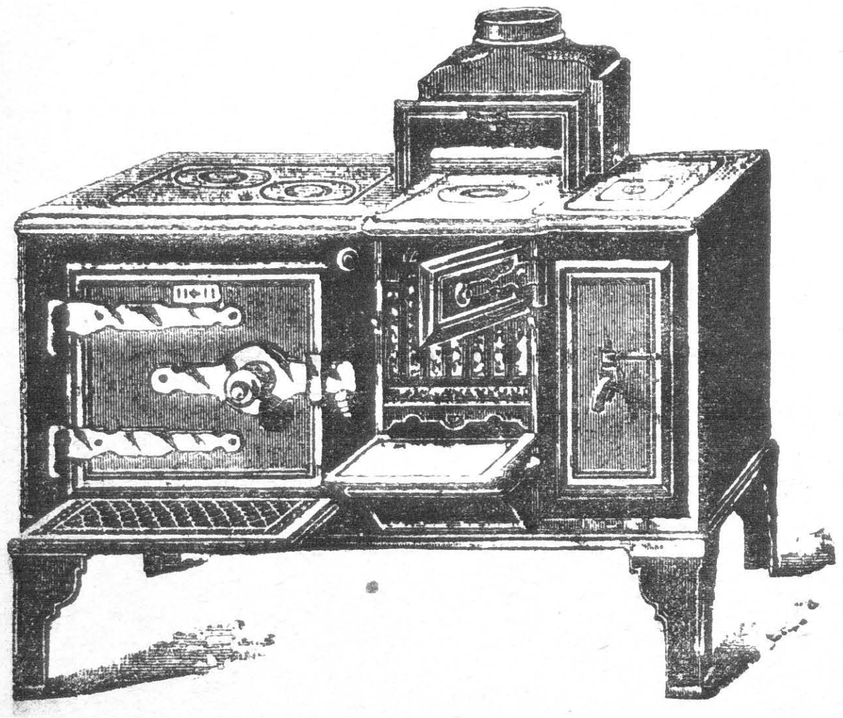
The World-famed "Cooper" Range.

The "New Portable" Range.

Suitable for Wood or Iron Buildings.

This range is fitted with large Oven, well-ventilated, bright Latch and Bands, Open and Close Fire, Fall Bar, Ash Pan, Rake, and Lifter complete.

Will Boil, Bake, Roast, or Stew. No Brick Setting required.



No. 693.

CASH PRICES:

Sizes	21	24	26	28	30	32	34	36	39	42in.
Oven and Sham (no Boiler)	37/6	42/6	45/-	50/-	52/6	54/-	56/-	57/6	67/6	72/6 each
Oven and Cast Boiler,				57/6	60/-	62/6	67/6	70/-	80/-	85/- ,,

Smoke Pipe, 9d. per foot extra.

Orders for above Stoves over 40/- carriage paid any station England, Wales, and Scotland.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Anthracite Stove.

For Anthracite, Gas, Coke, or other Smokeless Fuel.

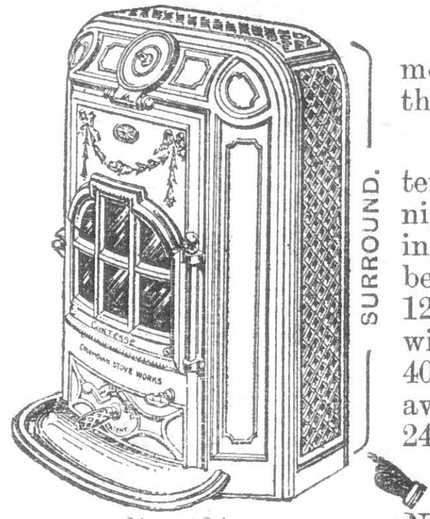
The Fittings of Hopper Door, Fire Door, and Ashpan are Nickel-plated. A Key for the Door, a Coal Filler, and a Fire-bar Lever are included.

Will keep alight all night.

Will never go out if re-filled every 12 to 24 hours.

No smoke, smell, or dust.

Cleaner than Oil Stoves; healthier and cheaper than Gas or Electric Radiators.



No. 694.

As cheerful and more economical than open grates.

To maintain a temperature of 55° night and day during the winter in a bedroom 15ft. by 12ft. by 9ft. high with anthracite at 40s. per ton, will average 1¾d. per 24 hours.

Without Surround Nos. 1, 2, and 3.

With Surround Nos. 1s, 2s, and 3s.

Design shows Stove with Surround.

No.	Average Heating Capacity.	Width over all.	*Depth over Movable Tray.	Height over all.	Height to top of Flue Collar.	Black-lead.	Black Vitreous Enamel.	Majolica Enamel in Various Colours.
						£ s. d.	£ s. d.	£ s. d.
1	1500 C.F.	17½ins.	14 ins.	26 ins.	15 ins.	3 5 0	4 5 0	4 12 6
1s	1500 ,,	17¼ ,,	15¼ ,,	26 ,,	15 ,,	3 13 0	4 15 6	5 6 6
2	2000 ,,	20 ,,	14 ,,	27 ,,	16½ ,,	3 12 6	4 12 6	5 0 0
2s	2000 ,,	20 ,,	15¼ ,,	27 ,,	16½ ,,	4 1 6	5 4 0	5 15 0
3	3500 ,,	23 ,,	14¾ ,,	29¼ ,,	17¾ ,,	4 5 0	5 5 0	5 12 6
3s	3500 ,,	23 ,,	15¾ ,,	29¼ ,,	17¾ ,,	4 14 0	5 16 6	6 7 6

*NOTE.—Where space is limited Tray in front can be removed, thus reducing depth required by 4½in. for Nos. 1 and 2; and by 5⅝in. for No. 3.

Larger Stoves supplied for Churches, Chapels, Mission Halls, etc. Prices and designs upon receipt of particulars.

Special quotations on application for Anthracite Stoves fitted with High-Pressure Boiler for heating Hot-Water Pipes, Radiators, etc.



Gas Heating Stove.

No. 695.

Fitted with Copper Reflector, Internal Hot-Air Tubes, Luminous White-Flame Burners, specially designed for use where no Flue is available. Best Stove Enamel Finish.

Height, 14in., width 15in., Cash Price, 16s. each.

Gas Heating Stoves. Complete with Fuel.



No. 696.

Height Width
14in. by 12½in.
Cash Price, 12/- each.

Height Width
16in. by 14½in.
Cash Price, 15/6 each.

Nickel-plated Trivet,
1/6 each extra.

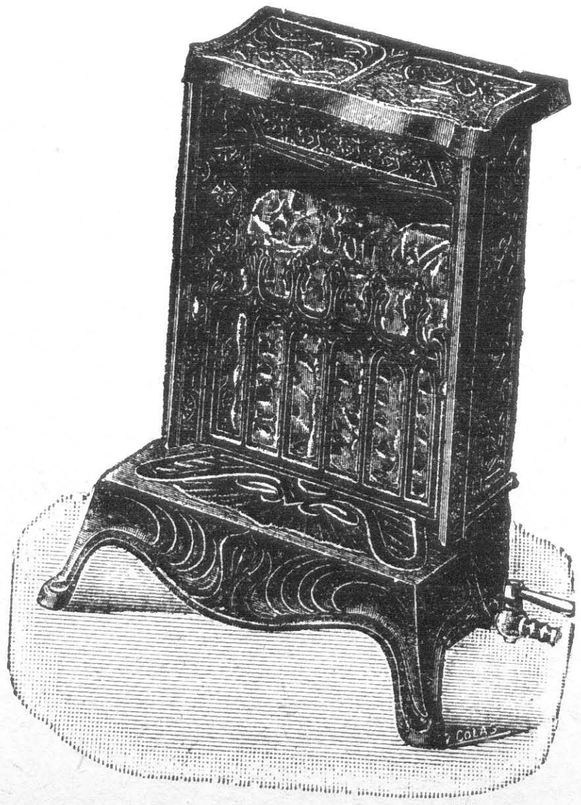
No. 697.

Fine Casting of Artistic Design. Black Finish.

Height Width
15in. by 13in.
Cash Price, 15/- each.

Finished in Brown or Art Green, or Blue Ceramic Enamel.

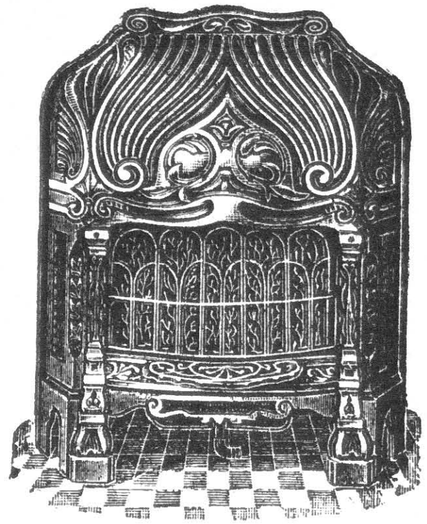
15in. by 13in.
Cash Price, 22/- each.



Other Designs supplied when required, on receipt of full particulars.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Gas Heating Stove.



New Patent Gill Fire and Stove.

No. 698.

Suitable for Billiard Rooms, Mission Rooms, Class Rooms, Reception Rooms, Bedrooms, etc.

These are the most powerful Gas Fires ever made.

Made in four sizes, suitable for rooms up to 30ft. square.

Fitted with Patent Iron Spray Fire, Removable Front, etc.

No.	For Rooms not exceeding	Sizes. Wide.	Deep.	High.	Height to top of Flue.	Width of Fire Opening.	Cash Prices. Art Black.	Majolica Enamel.
	sq. ft.	in.	in.	in.	in.	in.	£ s. d.	£ s. d.
1	14	19¾	7¾	24¾	19	10	2 0 0	2 17 6
2	21	20¼	8	30½	21¾	10	2 0 0	3 0 0
3	25	22	8	30½	22	13	2 10 0	3 12 6
4	30	26½	8	32	22	16	3 0 0	4 4 0

Finished only in the above as no other finish will stand the heat.

Gas Heating Stove.

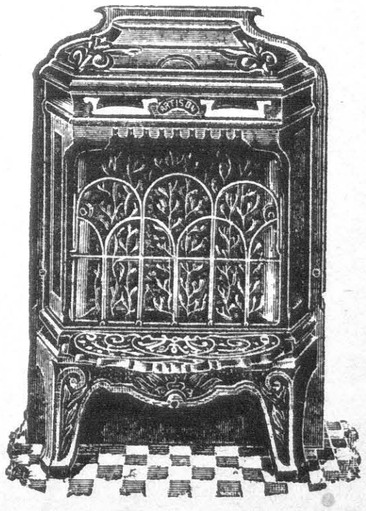
No. 699.

For rooms not exceeding 14ft. square.

Sizes:
14¾in. wide, 22in. high, 5¼in. back to front.
Height to top of flue, 20½in.
Fire Opening, 10in. wide.

Cash Prices:

	£ s. d.
Stove Enamel, with Patent Ball or Incandescent Iron Fire	1 1 0
Majolica Enamel	1 10 0
Nickel-plated Trivet Shelf, 2/- extra.	



Stoves on this Page only Carriage Paid to Railway Stations in England or Wales for orders of £2 and upwards.

Heating by Radiators.

The Heating of Dwelling-houses, Schools, Churches, Chapels, and Public Buildings being now universally carried out by means of Radiators, the following remarks will be found useful in estimating.

In calculating the Heating Power required, it is necessary to take into consideration the number and sizes of Windows and Doors, and allowance for their loose construction; also the amount of wall area in contact with the outer air.

It is preferable to allow a larger radiating surface at a lower temperature than a smaller surface at a higher temperature, and to avoid discomfort this should be carefully considered.

A Valve to every Radiator enables the heat to be controlled to a nicety.

One square foot of surface in Radiators heats approximately:—

Factories, Workshops, and Warehouses ...	175	cubic ft.
Public Buildings, Churches, and Chapels ...	150	,,
Tradesmen's Shops	120	,,
Schoolrooms and Entrance Halls	80	,,
Offices	65	,,
Dwelling-rooms	from 50 to 65	,,

We shall be pleased to quote for suitable Radiators on receipt of Plans and sizes of Rooms. Plans should show position of Windows and Doors.

If Radiators are required for Steam, this must be particularly mentioned when ordering.

Cooper's Pipe Composition.

A coat of this Composition on Boilers and Pipes preserves, prevents rust, and gives neat appearance. Much better than paint. Cheap and lasting.

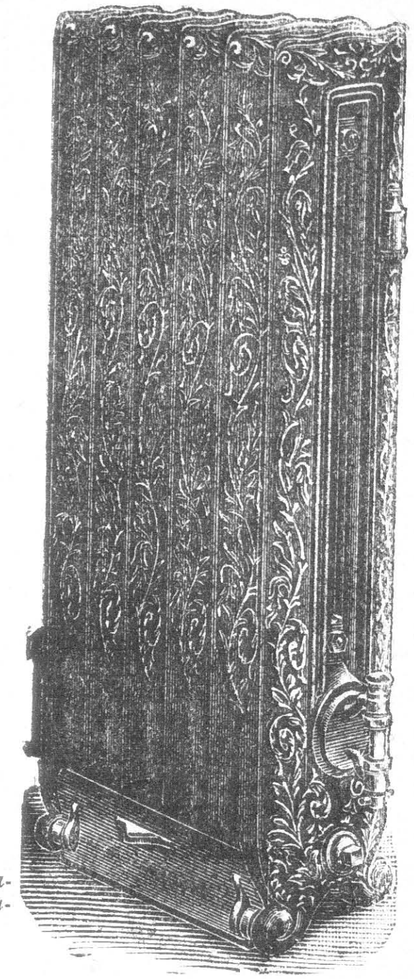
Price, 5s. per gallon (cans included).

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Gas Steam Radiator.

No. 700.

HEATED BY STEAM.



Automatic Gas Regulator and Burner Regulator.

GAS FOR FUEL.

The Gas Steam Radiator is constructed on the most scientific principles by which the products of the Gas are consumed and no Flue is required.
No offensive smell is given off so long as there is enough water to show in the gauge glass.
All valves are automatic, and when once set need no further attention.
Expense of fixing is very low, and in cases of urgency the Radiator can be connected by a rubber tube to the nearest gas jet.
Height, 36ins. Width over all, 8ins.

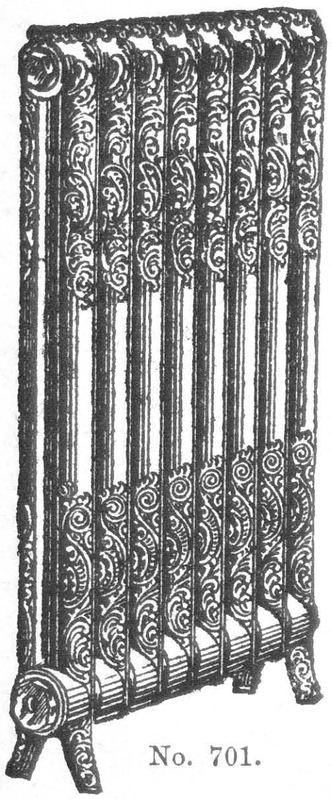
PRICES. Got up in GOLD complete ready for fixing.

No. of Sections.	Heating Surface. Square Feet.	Length over all.	Will Heat Cubic Feet.	Cash Prices. £ s. d.	Consumption of Gas per Hour.
3	12	11½in.	1,200	2 17 6	6 cubic feet
4	16	14 in.	1,600	3 7 6	8 ,,
5	20	16½in.	2,000	3 18 6	10 ,,
6	24	19 in.	2,400	4 10 0	12 ,,
7	28	21½in.	2,800	5 0 0	14 ,,
8	32	24 in.	3,200	5 10 0	16 ,,
10	40	29 in.	4,000	6 10 0	20 ,,
12	48	34 in.	4,800	7 12 6	24 ,,

NOTE.—The consumption of Gas is taken at a pressure of 20 tenths.

Ornamental Single Column Radiator.

For Water or Steam.



No. 701.

1½ inch top and 2 inch bottom right and left-hand threaded nipple connections.

The Top Tappings of these Radiators are plugged, and the Bottom Tappings bushed as under unless otherwise specified.

Direct Radiation.	Hot. Water.	One Pipe Steam.	Two Pipe Steam.	Open Return. 2 Pipe Steam
0 to 28 sq. ft.	¾ in.	1 in.	¾ × ½ in.	⅜ × ½ in.
29 to 60 ,,	1 ,,	1¼ ,,	1 × ½ ,,	½ × ½ ,,
61 to 100 ,,	1¼ ,,	1½ ,,	1¼ × ¾ ,,	¾ × ½ ,,
Over 100 ,,	1½ ,,	2 ,,	1½ × 1 ,,	1 × ¾ ,,

Number of Sections.	Length in Inches. *	38 Inches High. 3 Sq. Feet per Section.		32 Inches High. 2½ Sq. Feet per Section.		26 Inches High, 2 Sq. Feet per Section.		23 Inches High. 1⅔ Sq. Feet per Section.	
		Heating Surface.	Cash Price.	Heating Surface.	Cash Price.	Heating Surface.	Cash Price.	Heating Surface.	Cash Price.
		Sq. Feet.	£ s. d.	Sq. Feet.	£ s. d.	Sq. Feet.	£ s. d.	Sq. Feet.	£ s. d.
4	12	12	0 15 0	10	0 14 2	8	0 12 8	6⅔	0 12 9
5	15	15	0 18 9	12½	0 17 9	10	0 15 10	8⅓	0 16 0
6	18	18	1 2 6	15	1 1 3	12	0 19 0	10	0 19 2
7	21	21	1 6 3	17½	1 4 10	14	1 2 2	11⅔	1 2 4
8	24	24	1 10 0	20	1 8 4	16	1 5 4	13⅓	1 5 7
9	27	27	1 13 9	22½	1 11 11	18	1 8 6	15	1 8 9
10	30	30	1 17 6	25	1 15 5	20	1 11 8	16⅔	1 11 11
11	33	33	2 1 3	27½	1 19 0	22	1 14 10	18⅓	1 15 2
12	36	36	2 5 0	30	2 2 6	24	1 18 0	20	1 18 4
13	39	39	2 8 9	32½	2 6 1	26	2 1 2	21⅔	2 1 7
14	42	42	2 12 6	35	2 9 7	28	2 4 4	23⅓	2 4 9
15	45	45	2 16 3	37½	2 13 2	30	2 7 6	25	2 7 11

* In estimating length of Radiator, allow half an inch at each end for bushing.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The "Cooper"
Blue Flame Oil Heater.

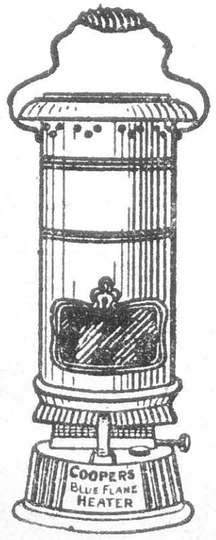
Registered and Provisionally Patented.

Economy in Oil. Great Heat. Flame does not Draw Up. Portable.

The Heater is unique in its conception, and provides an entirely satisfactory heater, which will be appreciated and used where oil stoves have hitherto been considered unsuited.

The patented blue flame burner is the final word in atmospheric oil burners—the flame being for the greater part of its area positively blue, producing a powerful heat. After first lighting the flame is constant, and does not "draw up" whilst the small oil consumption recommends it as the most economical besides hygienic form of heater yet produced.

The tank is of cast iron, finished in aluminium; it therefore will not leak or "sweat," is untarnishable, unbreakable, and provides a firm, heavy base, precluding the possibility of overturning.



The radiator is of fine rolled steel, finished with a bright handle; the cover, being flat, can be used for boiling purposes.

For all household purposes, Shop or Office use, it is invaluable; can be carried anywhere, and is unbreakable.

Tank holds two pints. Will burn 13 to 14 hours at one filling. Nearly three square feet of radiating surface. Heats a room 10ft. by 10ft.

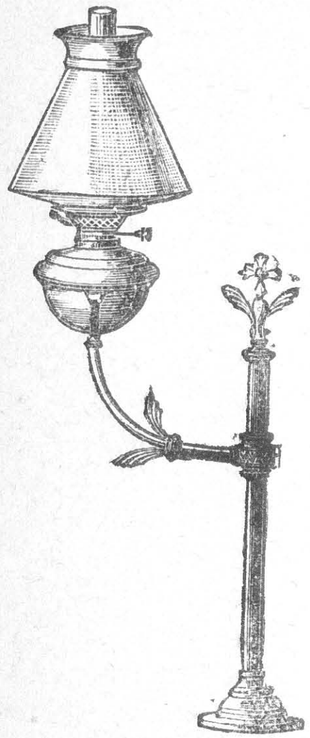
No. 702.
Radiator Complete,
Cash Price, 8s. 6d. each.
Crate for packing, 6d. each extra.

Preston Park.

DEAR SIRS,—Heater duly received and very satisfactory.—Yours faithfully,
C. WEBB.

CHURCH AND SCHOOL FITTINGS.

Pulpit Lights.



Height 22in.

POLISHED BRASS.

With sliding arm, and cut crystal fount.

No. 703.

With good quality Duplex Burner.

Cash Price, 42s. each.

No. 703A.

With 50-candle power "Central Draught" Lamp.

Cash Price, 47s. each.

Priced with opal and flint Paris shade.

Height 22in.

WROUGHT IRON.

With sliding arm.

No. 704.

With 50-candle power copper "Central Draught" Lamp.

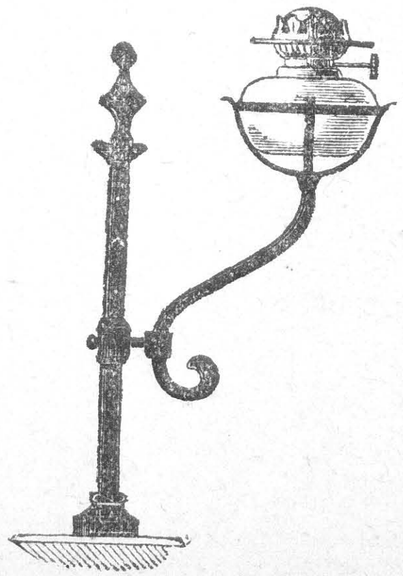
Cash Price, 30s. each.

No. 704A.

With good quality Duplex Burner and copper fount.

Cash Price, 24s. 6d. each.

Globe Extra.



Other designs supplied upon application, stating requirements.



Church Standard and Pulpit Lights.

Height 26in.

POLISHED BRASS STANDARD.

No. 705.

Cut Crystal fount, stamped basket, and good quality Duplex Burner.

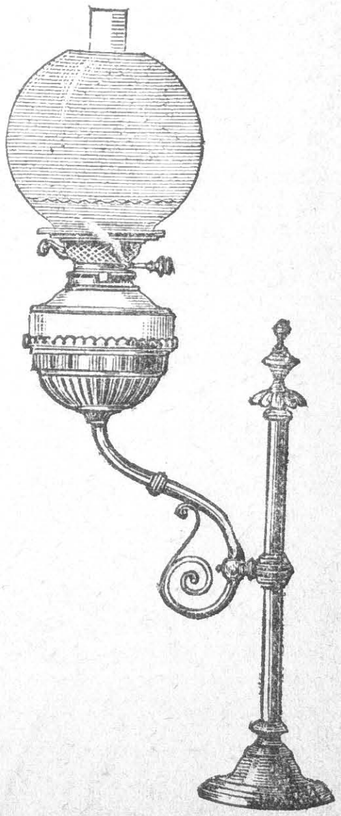
Cash Price, 22s. 6d. each.

No. 705A.

With 50-candle power "Central Draught" Lamp.

Cash Price, 27s. each.

Priced with best Opal globe.



Height from base to globe gallery 22in.

POLISHED BRASS.

With sliding arm, and cut crystal fount.

No. 706.

With good quality Duplex Burner,
Cash Price, 36s. each.

No. 706A.

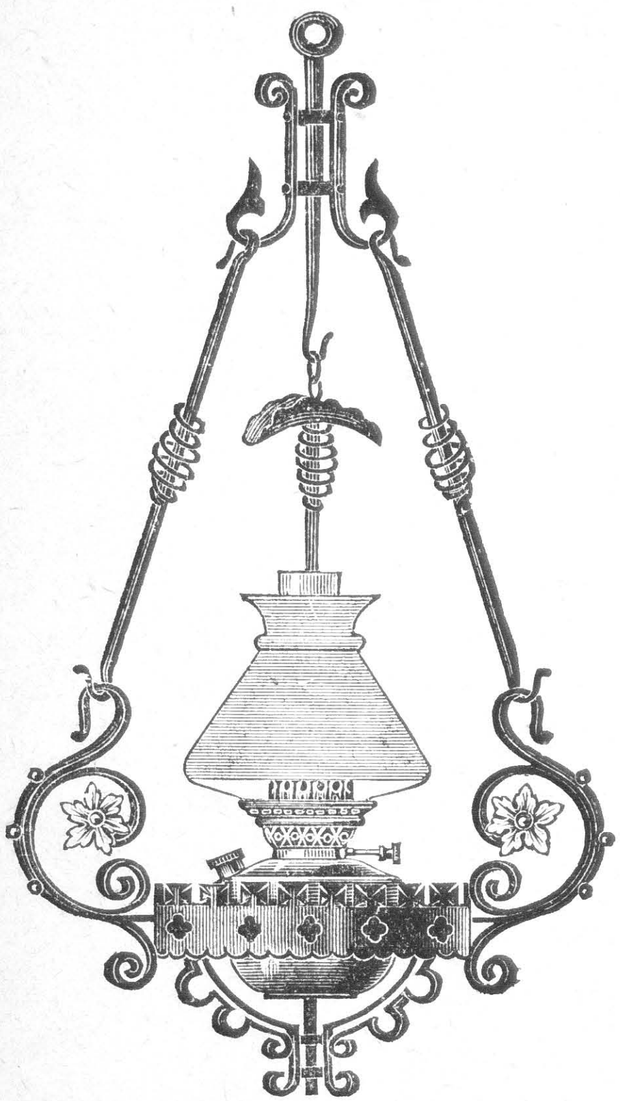
With 50-candle power "Central Draught" Lamp,

Cash Price, 40s. each.

Priced with Opal globe.

Other designs supplied upon application stating requirements.

ART METAL CHURCH FITTINGS.



No. 707.

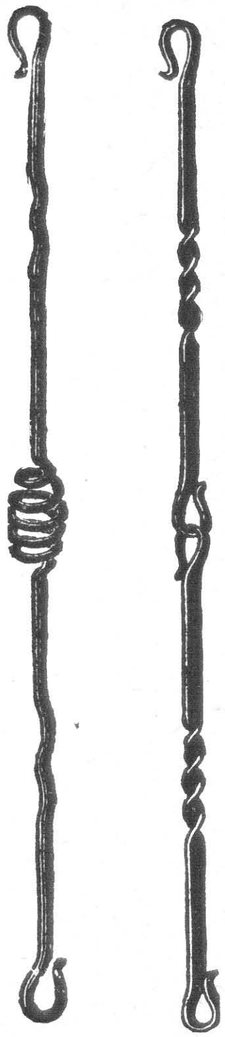
Wrought Iron with good Duplex Burner, and opal and flint Paris shade.

Cash Price, 60s. each.

No. 707A.

Ditto, with 50-candle power "Central Draught" Lamp.

Cash Price, 65s. each.



Wrought Iron Link for Suspending or Lengthening Tripods.

No. 708.

1 Link 24in. long, Cash Price, 1s. 6d. each.

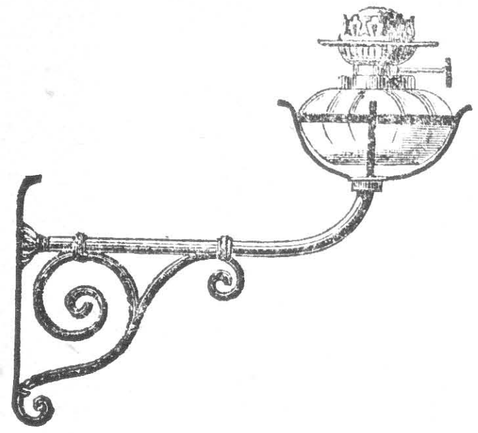
No. 708A.

2 Links, each 12in. Cash Price, 1s. 9d. each.

Other designs supplied upon application stating requirements.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Art Metal Fittings.



No. 709.

Wrought Iron, with 50-candle power copper "Central Draught" Lamp.

Cash Price, 22s. 6d. each.

No. 709A.

Ditto, with good quality Duplex Burner.

Cash Price, 16s 6d. each.

No. 710.

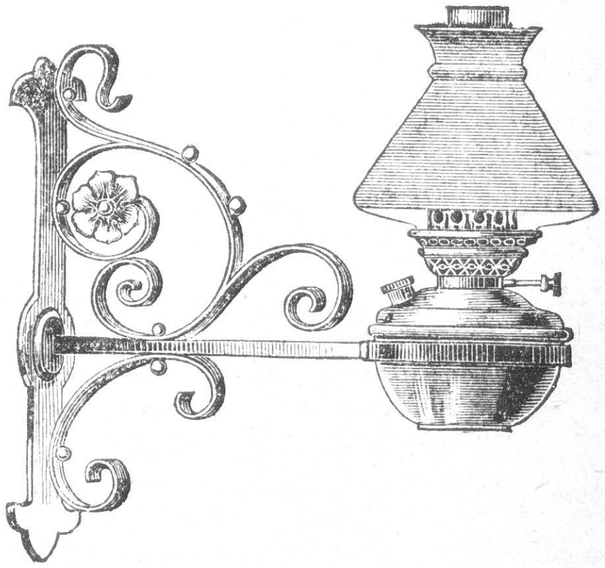
Wrought Iron, with Good Quality Duplex Burner, and opal and flint Paris shade.

Cash Price, 33s. each.

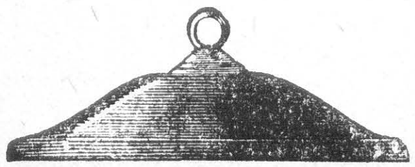
No. 710A.

Ditto, with 50-candle power "Central Draught" Lamp.

Cash Price, 39s. each.



Smoke Bells.



No. 711.

Unbreakable Enamelled Steel with Brass Mount.

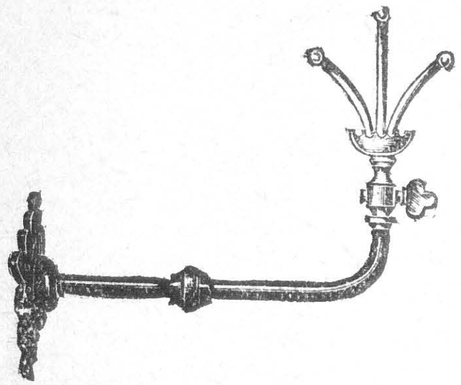
Cash Prices:

6	8	9	10	12	14	16	18in.
4/9	6/-	6/6	7/-	10/6	15/6	27/-	35/- per dozen.

Smaller quantities can be supplied. Prices on application.

Church, School, &c., Fittings.

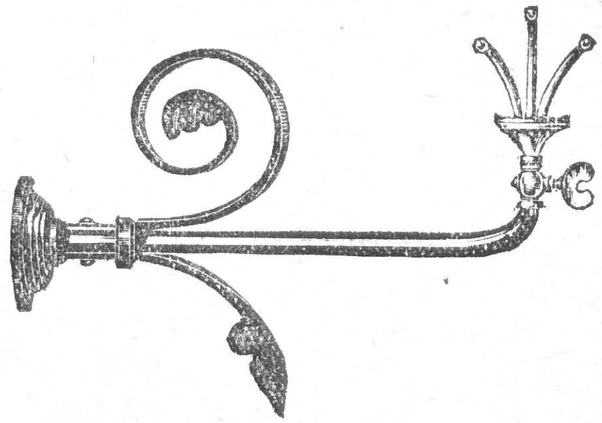
For Upright Burners.



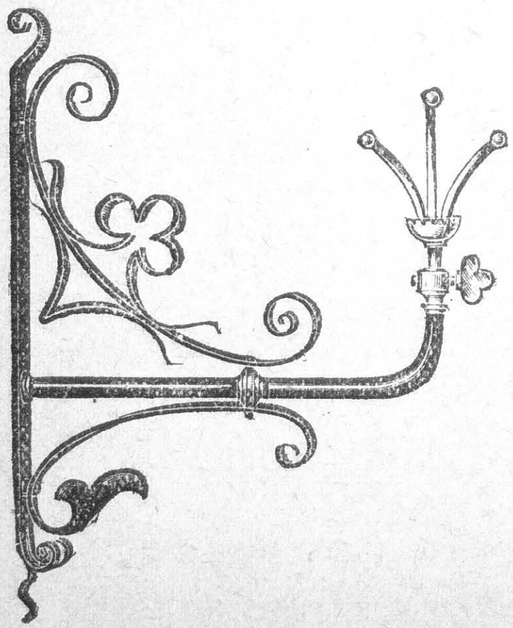
No. 712.
Iron, with Brass Mounts, ½in. by 10½in.
Cash Price, 4s. 6d. each.

No. 712A.
Iron, with Brass Mounts, ⅝in by 12in.
Cash Price, 6s. 6d. each.

No. 712B.
⅝in. by 12in. Brass Tube with Iron Plate and Nurl.
Cash Price, 10s. 6d. each.



No. 713.
Iron, with Brass Mounts, ⅝ by 15½in.
Cash Price, 9s. 6d. each.



No. 714.
Iron, with Brass Mounts, ½ by 12in.
Cash Price, 12s. each.

No. 714A.
Iron, with Brass Mounts, ⅝ by 15in.
Cash Price, 17s. each.

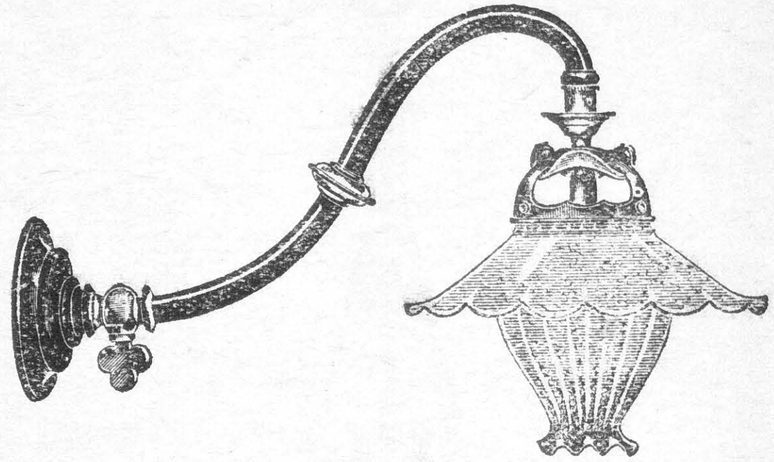
No. 714B.
Iron, with Brass Mounts, ⅝ Brass Tube by 15in.
Cash Price, 21s. each.

No. 714C.
All Brass, ⅝ by 15in.
Cash Price, 35s. each.

Other designs supplied upon application stating requirements.

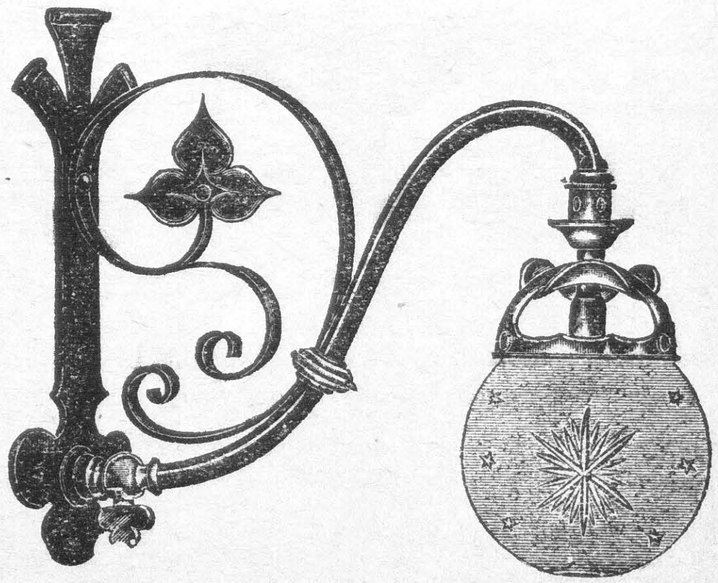
Church, School, &c., Fittings.

For Inverted Burners.



½ by 13in. Back, 4in.

		Cash Prices.
No. 715.	Wrought Iron, with Brass Mounts ...	6s. each.
No. 715A.	Ditto, all Polished Brass, ½in. tube ...	9s. „



½ by 12½in. Back, 14 by 3½in.

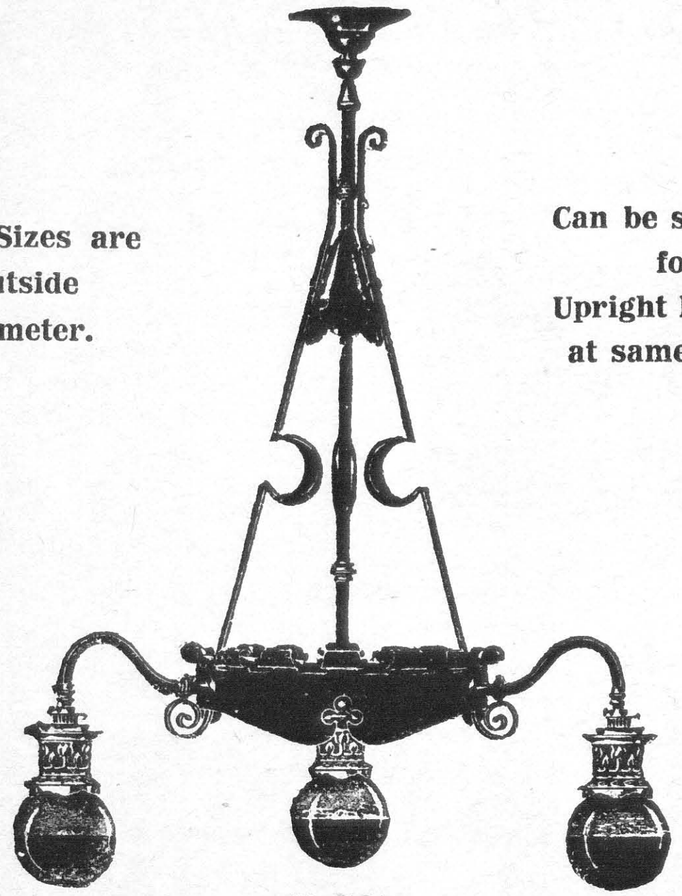
		Cash Prices.
No. 716.	Wrought Iron, with Brass Mounts ...	13s. 6d. each.
No. 716A.	Ditto, all Polished Brass, ½in. tube ...	18s. „

Priced without Burners and Globes.

Other designs supplied upon application, stating requirements.

Church Corona.

Tube Sizes are Outside Diameter.



No. 717.

Can be supplied for Upright Burners at same price.

Iron, with Brass Mounts, $\frac{3}{4}$ by $\frac{5}{8}$in.; Corona, 18in. diameter; Spread, 36in.; Length, 6ft.

Cash Prices	3	4	5	6 Light.
	54/-	66/-	75/-	85/- each.

Priced without Burners or Globes.

Other designs supplied upon application stating requirements.

High Street, Bedford.

DEAR SIR,—The Fittings you have supplied I am well satisfied with. Hope to send you another order shortly.

J. LOVELL.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

PATENT

Atmospheric Burner Cooking Stoves.

Intense Heat. 40 per cent. saved in Oil Consumption. Perfect Combustion. Renewable Tops.



No. 718.

These Cookers are fitted with patent atmospheric (blue flame) burners which give a pure and intense heat and have the following advantages over the ordinary stove with luminous (white flame) burners.

Flame effectively controlled and cannot rise or smoke after first lighting and regulating.

Saves 40 per cent. in oil.

Oven temperature can be raised 100 degrees above similar stove with luminous burners.

Free from complications and as easy to handle as any ordinary stove.

Fitted with Patent Removable Tops, which when worn can be replaced at small cost, thereby doubling life of the stove.

DESCRIPTION.

Drop Door, with Sliding Tanks and Oil-Level Indicator. Shelf, Meat Tray and Grid, Half-gallon Kettle, Saucepan, Steamer, and Frypan.

SIZE 1 { Outside Measurements... W 17$\frac{1}{4}$ by D 11$\frac{3}{4}$ by H 15$\frac{1}{2}$in.
Cooking Space of Oven „ 11$\frac{1}{4}$ „ 11$\frac{1}{4}$ „ 8 „

Cash Price, with Two 4$\frac{1}{2}$in. Burners, £1 19s. 6d.

Will cook for 6 to 8 persons.

SIZE 2 { Outside Measurements... W 18 by D 11$\frac{3}{4}$ by H 16$\frac{1}{2}$in.
Cooking Space of Oven „ 12$\frac{1}{2}$ „ 11 „ 9 „

Cash Price, with Two 4$\frac{1}{2}$in. Burners, £2 5s. 6d.

Will cook for 7 to 9 persons.

SIZE 3 { Outside Measurements... W 20$\frac{1}{4}$ by D 12$\frac{1}{2}$ by H 17$\frac{1}{4}$in.
Cooking Space of Oven „ 13$\frac{3}{4}$ „ 12 „ 9$\frac{1}{4}$ „

Cash Price, with Two 6in. Burners, £2 12s. 6d.

Will cook for 8 to 10 persons.

SIZE 4 { Outside Measurements... W 20$\frac{1}{4}$ by D 12$\frac{1}{2}$ by H 19$\frac{1}{4}$in.
Cooking Space of Oven „ 13$\frac{3}{4}$ „ 12 „ 11$\frac{1}{4}$ „

Cash Price, with Two 6in. Burners, £2 16s.

Will cook for 10 to 12 persons.

Cooking Stove.



No. 719.

Will do all the cooking necessary for a small household.

Oven cooking space, 9 by 7 by 8½ins., two 4in. Burners, Cash Price, 21s.

Oven cooking space, 9½ by 11½ by 8in., two 4½in. Burners, Cash Price, 28s.

Oven cooking space, 12½ by 9½ by 11½ins., two 6in. Burners, Cash Price, 38s. 6d.

Prices of Stoves include Saucepan, Steamer, Frypan, Kettle, Meat Tray and Grid.

Cooking Stove.

Made of Strong Sheet Steel. Best Workmanship and Finish.

No. 720.

Outside Measurements,

W		D		H
15	by	10	by	15½ins.

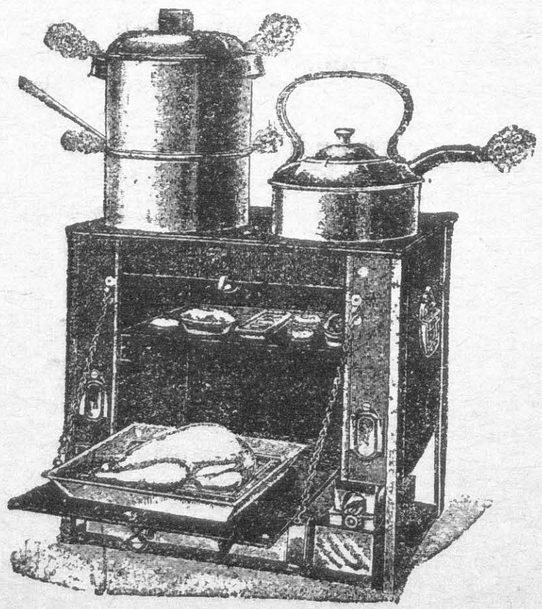
Cooking space of Oven

W		D		H
10	by	9½	by	8ins.

DESCRIPTION.

Drop Door, Sliding Tanks, with Patent Oil-level Indicators, two 4½in. Movable Burners, Shelf, Meat Tray and Grid, Half-gallon Kettle, Saucepan, Steamer and Frypan complete.

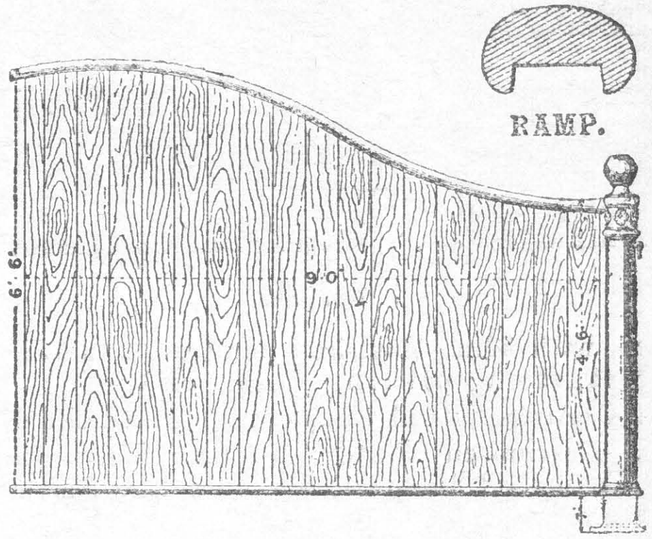
Cash Price, 27s. 6d.



Larger Stoves to cook for 8 to 12 persons, quoted for on application stating requirements.

Stable and Loose Box Fittings.

STALL RAMPS.



No. 721.

Stall Ramp Division, consisting of Cast-iron Ramp, 9ft. 6in. long over all, 5in. Cast-iron Post with Iron Ring, and Cast-iron Sill with Movable Piece.

	For 1½in. Wood. Cash Prices. £ s. d.	For 1¾in. Wood. Cash Prices. £ s. d.	For 2in. Wood. Cash Prices. £ s. d.
Ramp	0 11 6	0 12 9	0 13 3
Post	1 3 0	1 3 0	1 3 0
Sill	0 8 0	0 8 6	0 9 3
Fitting Complete ...	0 4 9	0 4 9	0 4 9
Complete Set	£2 7 3	£2 9 0	£2 10 3

EXTRAS.—Brass Ring to Post, 5s. 6d.; Painting One Coat, 10%.

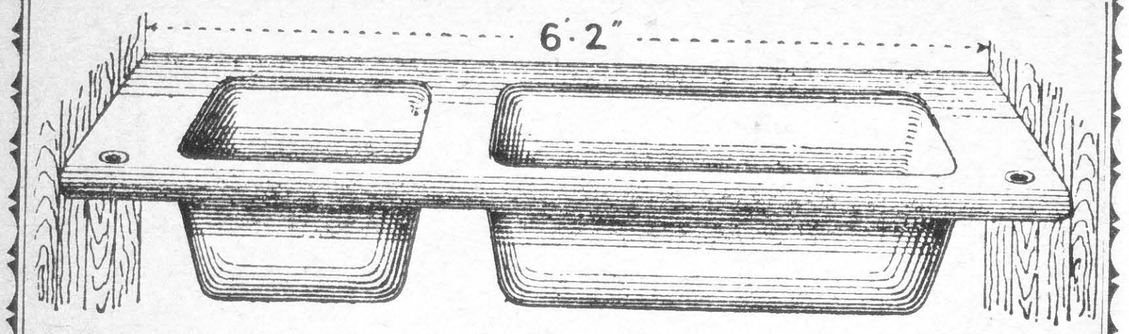
Wrought timber for filling	1½in.	1¾in.	2in.
Per division, unpainted... ...	21/-	25/-	28/6.

Rot-Proof Composition

For Dog Kennels, Farm Buildings, Poultry Houses, Palings, Fences, or any description of Outdoor Woodwork.

1gal., 2s. 6d.; 2gal., 4s. 9d.; 5gal., 10s.; 10gal., 17s. 6d.; 20gal., 30s.; 40gal., 50s., put on rail at our Works. Cans and casks included (not returnable).

Stall Sets.



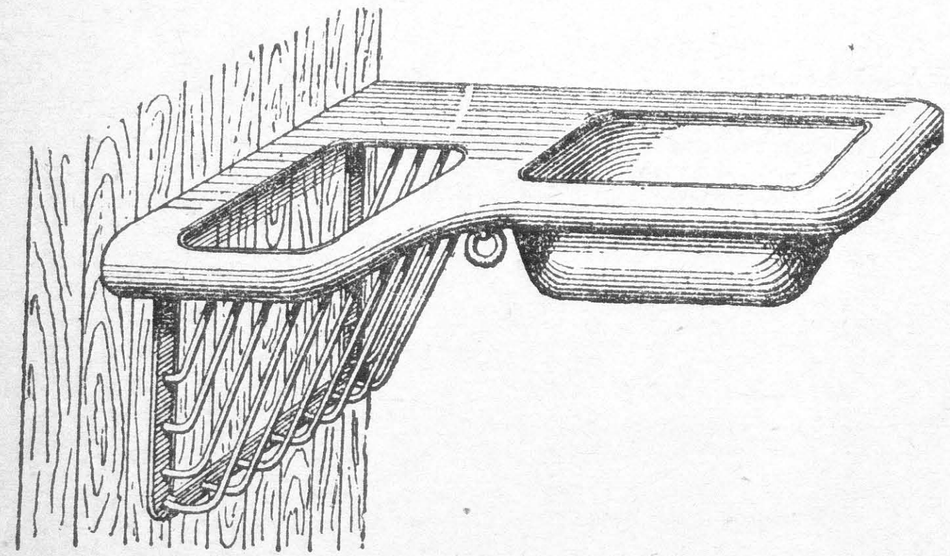
No. 722.

Stall Set, with 30in. Cast-iron Manger, and 18in. Pot, Bold Barrel Front, strong pattern. Cash Price:—

Plain Castings, fitted complete... ...each £2 8 3

EXTRAS.—Galvanised Plate, 12s. 9d.; Galvanised Mangers, 12s. 3d.; Enamelled Mangers, 32s. 6d.; End Fastenings, plain, 3s. 9d.; Galvanised, 5s. 9d.

Loose Box Sets.



No. 723.

Loose Box Set, 2ft. 4in. by 3ft. 6in., with Wrought-iron Hay Rack and 20½in. Cast-iron Manger, Right or Left Hand Rack, Small Lip Front.

Cash Price.

Plain Castings, fitted complete ... ...each £1 17 3

EXTRAS.—Galvanised Plate, 6s. 9d.; Galvanised Manger, 5s. 6d.; Galvanised Rack, 3s. 3d.; Enamelled Manger, 16s. 3d.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Hay Racks.

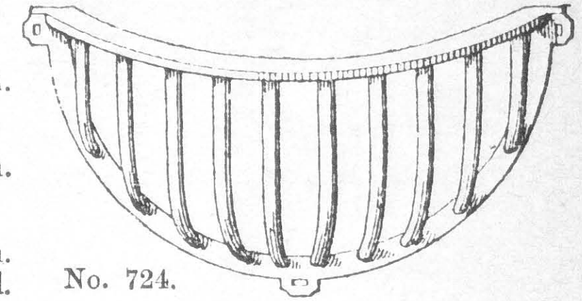
Straight Pattern.

No. 1. Cast, Plain.
Cash Prices:
30in. 33in. 36in.
5/6 6/9 9/- each.

No. 2. Cast, Galvanised.
30in. 33in. 36in.
9/6 11/- 14/- each.

No. 3. Wrought, Plain.
30in. 33in. 36in.
7/3 8/3 8/3 each.

No. 4. Wrought, Galvanised.
30in. 33in. 36in.
10/9 12/- 12/- each.



No. 724.

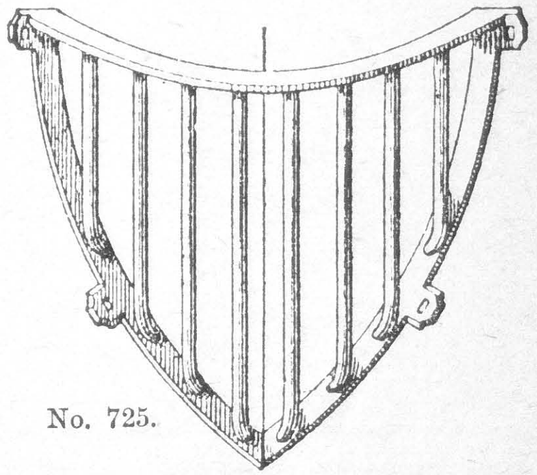
Corner Pattern.

No. 1. Cast, Plain.
Cash Prices:
30in. 33in. 36in.
5/9 6/9 9/- each.

No. 2. Cast, Galvanised.
30in. 33in. 36in.
9/6 11/- 14/- each.

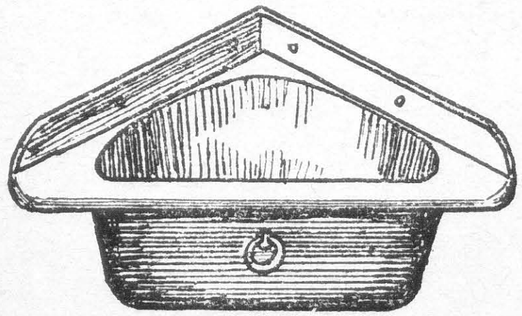
No. 3. Wrought, Plain.
30in. 33in. 36in.
7/3 8/3 8/3 each.

No. 4. Wrought, Galvanised.
30in. 33in. 36in.
10/9 12/- 12/- each.



No. 725.

Cast-iron Mangers.



No. 726.

Cash Prices, each:

Sizes Across.

No. 1. Plain.

30	33	36	42	48ins.
8/-	9/3	9/9	12/6	22/-

No. 2. Galvanised.

30	33	36	42	48ins.
13/9	16/-	17/-	21/6	34/6

No. 3. Enamelled.

30	33	35	42	48ins.
26/-	28/-	29/9	34/6	49/-

Cash Prices, each:

No. 1. Plain.

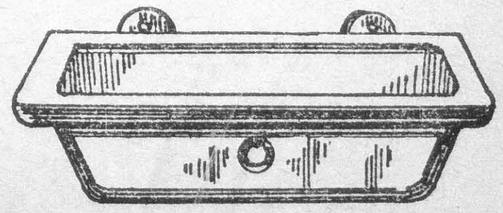
30	33	36	42	48ins.
9/-	9/6	10/3	14/-	15/9

No. 2. Galvanised.

30	33	36	42	48ins.
15/9	16/9	18/3	24/3	28/-

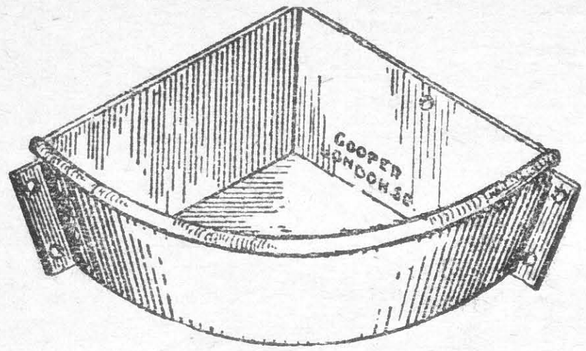
No. 3. Enamelled.

30	33	36	42	48ins.
28/-	30/6	32/3	42/-	46/-



No. 727.

Galvanised Sheet-iron Corner Manger,

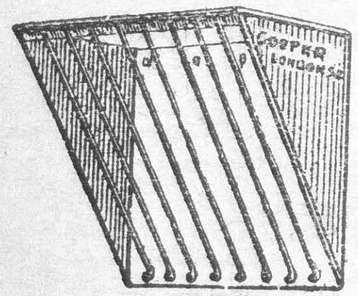


No. 728.

24in. long on straight sides, 10in. deep, Cash Price, 7s.
Extra Strong and Deep:—
24in. long on straight sides, 14in. deep, Cash Price, 11s. 6d.
27in. long on straight sides, 16in. deep, Cash Price, 13s. 9d.

Galvanised Sheet-iron Hay Rack.

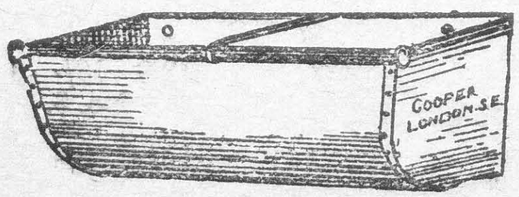
No. 729.



This Rack, having a back, is self-contained, and can be fixed to any rail, hurdle, or temporary stable. Equally good for permanent rack.

	Cash Prices. s.	d.
24in.	8	9
30in.	9	9
36in.	11	0

Galvanised Sheet-iron Portable or Fixed Manger.



No. 730.

	Cash Prices. s.	d.
24in. long, 13in. wide, 10in. deep	5	9
30in. long, 13in. wide, 10in. deep	7	0
36in. long, 13in. wide, 10in. deep	8	0
48in. long, 13in. wide, 10in. deep	9	3

Larger and Stronger for Cart Horses' Use.

SECTION XII.

Illustrated Catalogue

OF

HORTICULTURAL SUNDRIES

AND

Garden Requisites,

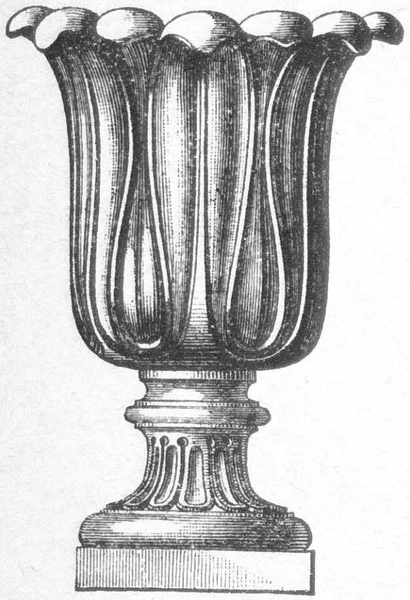
INCLUDING

Garden Vases, Wire Work, Rollers, Lawn Mowers, Garden Tools, Garden Hose and Fittings, Syringes, Garden Engines, Pumps, Tents, Garden Seats and Chairs, Field Gates, Barrows, Tubs, Bins, Cisterns, Bird Cages, Coppers, Chaff Cutters, Bone Mills, Rain Water Goods, Oils, &c., &c.

Imperishable Terra-cotta Garden Vases.

Buff Colour. Packing charged; Small Vases 2s., large 3s. each, and allowed on return, carriage paid.

Enriched Vase.



No. 731.
25in. high, 18in. wide.
Cash Price, 18s.

Flute and Rosette Vase.



No. 732.
20in. high, 16in. wide.
Cash Price, 14s. 6d.

Enriched Vase.



No. 733.
17½in. high, 18in. wide.
Cash Price, 21s.

Draped Bowl.

No. 734.



13in. high, 16in. wide.
Cash Price, 13s. 6d.

Pedestals for any of above quoted on application.

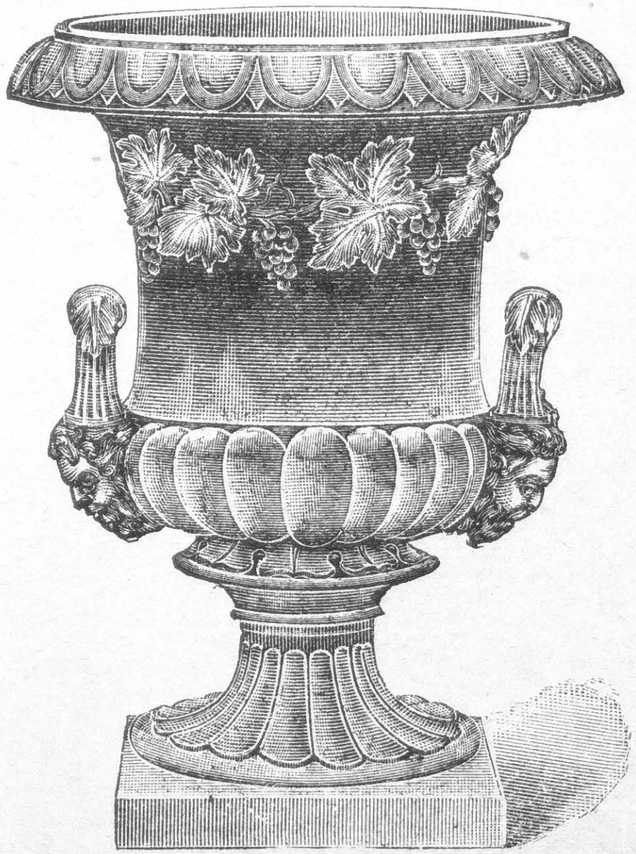
Tazzæ.

No. 735.



10in. high, 17in. wide ... Cash Price, 11s. 6d.
14in. „ 22in. „ .. „ „ 17s. 6d.

Vine Wreath Grecian Vase.

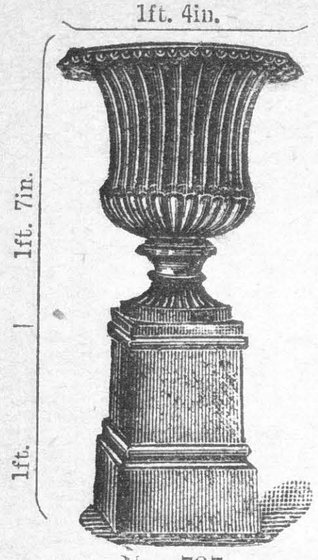


No. 736.

			As Illustration.	Without Vine Wreath.
23in. high,	18 in. wide	.... Cash Prices	30s. 0d.	25s. 0d.
27in. „	20½in. „	.... „	37s. 6d.	32s. 0d.
30in. „	23 in. „	.... „	52s. 0d.	45s. 0d.

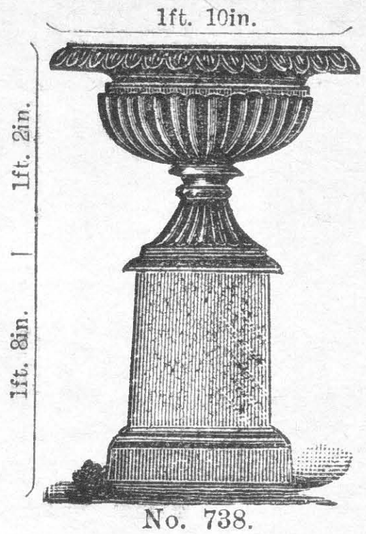
Pedestals for either of above quoted on application.

Cast-iron Garden Vases.



No. 737.

Cash Prices:
Vase, 18s.; Pedestal, 7s.



No. 738.

Cash Prices:
Vase, 22s.; Pedestal, 14s.

Other Designs, Sizes, and Prices on application.

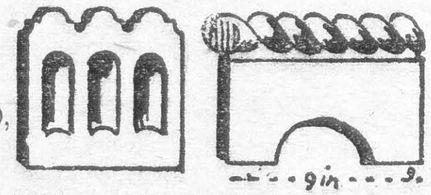
Orders for above Vases over 40s. Carriage Paid any Station England, Wales, and Scotland.

Garden Border Edging.

No. 739.

7in. Dark Blue.

Cash Price per 100, 8s. 3d.



No. 740.

Brown Glazed, or Unglazed Dark Blue.

Cash Price per 100, 15s.

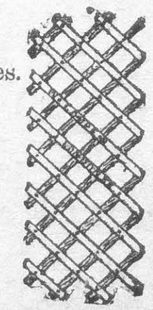
Special quotations for large quantities.

Garden Trellis.

For lawn tennis and croquet lawns, training creeping plants, fruit trees, shrubs, &c. 12ft. long when open.

Size of Laths, ¼in. by 1in.

Size when open. Long.	High.	Cash Prices. Unplaned.	Cash Prices. Planed.
ft.	ft.	s. d.	s. d.
12 by	1	0 6	1 6
12 by	1½	0 9	1 9
12 by	2	0 11	2 8
12 by	2½	1 2	3 0
12 by	3	1 4	3 6
12 by	3½	1 9	4 0
12 by	4	2 0	5 0
12 by	5	2 9	6 0
12 by	6	4 3	7 0

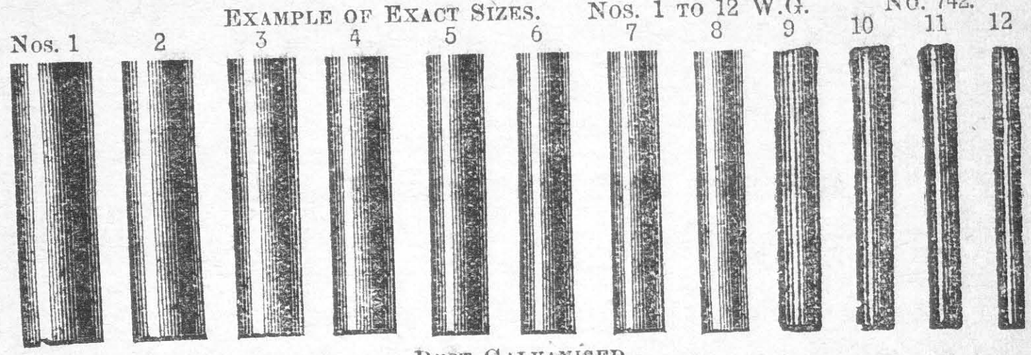


No. 741.

This Trellis is folding and admirably adapted for Ornamental Horticultural and other purposes, will last for years, and when not in use can be closed and packed away in a very small space.

Wire for all Purposes.

Best Quality only. Greatly Reduced Prices.



Best Galvanised.

	No. 0 to 8	9	10	11	12	13	14	15	16	17	18	W.G.
Containing abt. per cwt., No.	8, 566	700	882	1077	1333	1723	2240	2800	3500	4600	6000	yds.
Price per bundle of 56lbs.	8/6	8/9	9/0	9/3	9/6	9/9	10/3	10/9	11/6	13/0	14/0	
Price per bundle of 7lbs.	1/4	1/5	1/6	1/6	1/7	1/7	1/8	1/9	1/10	2/1	2/1	

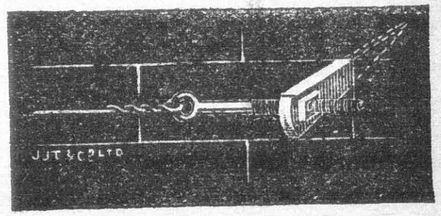
Galvanised Fittings for Wiring Walls, etc.

Straining Bolts and Nuts.

(As illustrated.) No. 743.

Cash Prices:

3	4	5	6 inches long.
9d.	11d.	1s. 1d.	1s. 3d. per dozen.



Galvanised Holdfasts for ditto.

No. 744.

4in. long, 1s. 6d. 5in. long, 2s. per dozen.

Galvanised Driving Eyes.



No. 745.

Cash Prices:

	2	2½	3	4 in. long.
No. 745.	2d.	2½d.	3d.	5d. per doz.
No. 746.	3d.	3½d.	4d.	5½d. ,,



No. 746.

Galvanised Holdfasts.



No. 747.



No. 748.



No. 749.

		3	4	5	6 inches long.
No. 747.	Cash Prices	9d.	10d.	1s. 0d.	1s. 2d. per dozen.
No. 748.	,,	1s. 3d.	1s. 6d.	1s. 9d.	— ,,
No. 749.	,,	—	1s. 9d.	2s. 0d.	— ,,

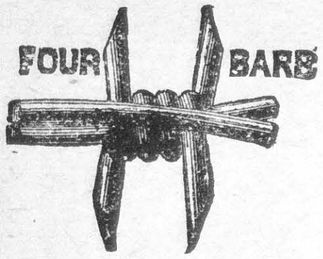
Nos. 745 Eyes, 748 749 and 744 Holdfasts are made of Malleable Iron and very strong.
No. 748 .. Holdfasts are only made 3, 4 and 5 inches long.
Nos. 749 and 744 ,, ,, ,, 4 and 5 inches long.

Galvanised Screw Eyes.



No. 750.

	3	4	6	8	10	12	15 inches long.
Cash Prices	4d.	5d.	6d.	9d.	1s. 0d.	1s. 3d.	1s. 9d. per dozen.



Galvanised Barbed Wire.

No. 751. Best Quality.

2 and 4 point. Ordinary and Thick Set.

Cash Prices:
7lb. reels, 2/- ; 14lb. reels, 3/3 per reel.
¼cwt. reels, per cwt. 20/-. ½cwt. reels, per cwt. 18/9.
4-point ordinary, about 560 yds. to the cwt.
Thick set, in ½cwt. coils, about 448 yds. to the cwt.

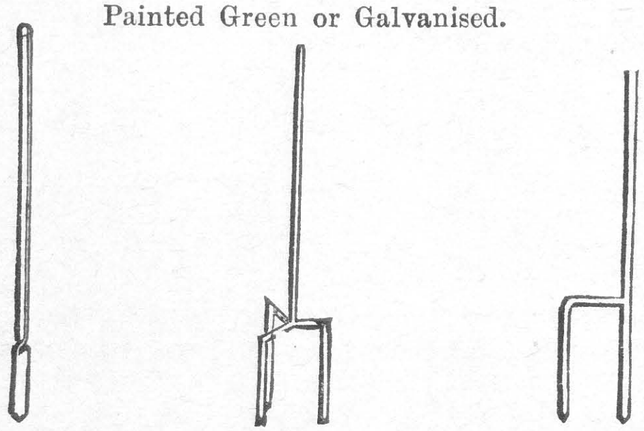
Galvanised Netting Staples.

No. 752.

			½ × 16		⅝ × 16		¾ × 15		1in. × 14 W.G.	
28lb. lots	..	Cash Prices	22/6	..	21/9	..	21/0	..	20/3	per cwt.
14lb. lots	..	,,	24/0	..	24/6	..	22/6	..	21/9	,,
7lb. lots	..	,,	25/6	..	24/9	..	24/0	..	24/6	,,

Wrought-iron Rose and Netting Stakes.

Painted Green or Galvanised.



For Dahlias and Rose Trees.
No. 753. 1 Prong. No. 754. 3 Prong.

For Wire Netting.
No. 755. 2 Prong.

CASH PRICES. PER DOZEN.

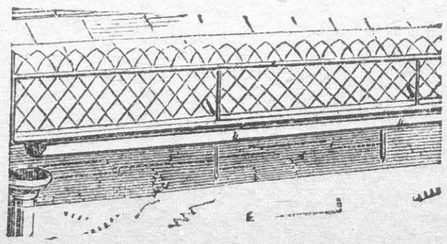
	ft. 1½	ft. 2	ft. 2½	ft. 3	ft. 3½	ft. 4	ft. 5	ft. 6
1 Prong, Painted Green ..	2/9	3/0	3/6	4/3	5/0	6/3	8/6	11/6
,, Galvanised	3/3	3/6	4/6	5/6	6/6	8/6	11/9	16/9
2 Prong, Varnished Black ..	4/3	4/6	5/0	6/0	7/6	8/6	10/9	15/6
,, Galvanised	4/9	5/3	6/3	7/9	10/0	11/6	14/3	22/6
3 Prong, Painted Green ..	—	—	—	10/0	12/0	14/0	16/6	20/0
,, Galvanised	—	—	—	15/0	18/0	21/0	25/0	30/0

Strong Wire Snow Guards.

Galvanised after made.
Made on Rod Iron Frames, and covered with Wire Lattice, 1½in. mesh, diamond pattern, with Gothic top. To prevent the Snow falling from the Roof on to a Conservatory. Made any length up to 12ft.

Stock Lengths, 6ft. and 9ft.

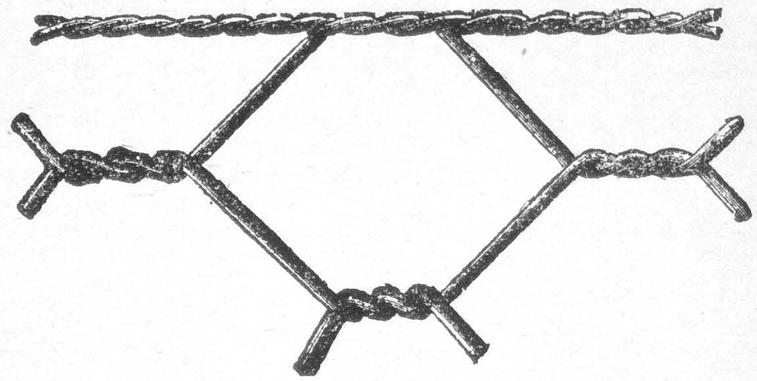
	Cash Prices — 6in.	9in.	12in. high.
Light	6d.	7½d.	9d. per ft. run
Strong	7½d.	9d.	10½d. ,,
Extra Strong	9d.	10½d.	1/0 ,,



No. 756.

GALVANISED IRON SUPPORTS, 3ft. apart, included.

Best Quality Galvanised Wire Netting.



No. 757.

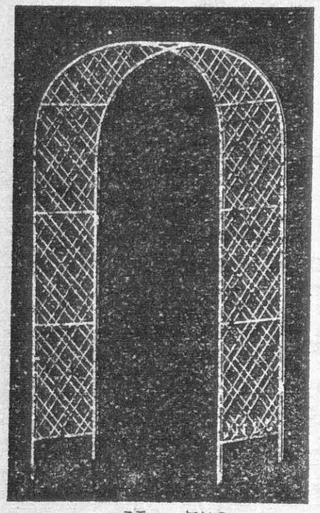
Cash Prices, at per 50 yard roll.

Mesh.	Gauge.	1ft. wide.	1½ft. wide.	2ft. wide.	2½ft. wide.	3ft. wide.	3½ft. wide.	4ft. wide.	5ft. wide.	6ft. wide.
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
½in.	22	9 3	13 4	17 5	21 3	25 5	29 10	34 0	42 6	51 0
¾in.	20	5 11	8 5	10 10	13 2	15 5	17 11	20 6	25 8	30 9
	19	7 7	10 11	13 9	16 11	19 8	23 0	26 3	32 11	39 5
	18	10 4	14 10	18 10	22 11	26 11	31 4	35 10	44 8	53 10
1in.	20	4 10	6 9	8 8	10 6	12 4	14 5	16 4	20 5	24 7
	19	5 8	8 2	10 3	12 7	14 8	17 2	19 8	24 7	29 6
	18	6 11	9 11	12 6	15 4	17 11	20 11	24 0	29 11	35 10
	17	9 3	13 3	15 9	20 6	24 1	28 0	32 1	40 0	—
1½in.	19	3 7	5 3	6 7	7 11	9 2	10 8	12 2	15 3	18 3
	18	4 7	6 7	8 3	10 0	11 7	13 5	15 5	19 3	23 2
	17	5 11	8 5	10 9	13 0	15 1	17 6	20 1	25 1	30 1
	16	7 6	10 10	13 9	16 7	19 2	22 5	25 8	32 0	38 5
2in.	19	2 10	4 1	5 1	6 2	7 0	8 2	9 5	11 9	14 1
	18	3 7	5 1	6 7	7 10	9 0	10 5	12 0	14 11	17 11
	17	4 7	6 8	8 5	10 0	11 7	13 5	15 5	19 2	23 0
	16	6 1	8 8	11 1	13 3	15 0	17 6	20 0	25 1	30 1
	15	7 7	10 10	13 10	16 7	18 10	22 0	25 3	31 6	37 10
3in.	19	2 2	3 3	4 1	4 10	5 6	6 6	7 4	9 3	11 1
	18	2 7	3 9	4 8	5 9	6 6	7 7	8 8	10 10	13 0
	17	3 4	4 10	6 2	7 5	8 5	9 10	11 2	14 1	16 11
	16	4 2	6 1	7 9	9 3	10 6	12 4	14 1	17 7	21 2
	15	—	7 2	9 2	10 11	12 6	14 7	16 8	20 10	25 0
	14	—	8 9	11 1	13 4	15 3	17 9	20 3	25 3	30 4
4in.	17	2 7	3 9	4 8	5 9	6 6	7 7	8 8	10 10	13 0
	16	3 2	4 5	5 8	6 8	7 9	9 0	10 3	13 2	15 5
	15	—	5 10	7 5	8 10	10 0	11 11	13 5	16 9	20 3
	14	—	6 11	8 9	10 6	12 1	14 1	16 1	20 0	24 0

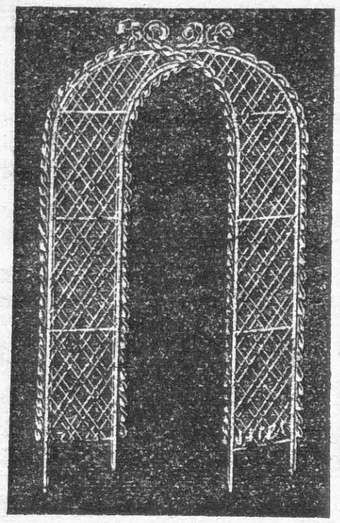
Carriage paid on £4 lots and up to any Station in England and Wales, including Channel Islands, Isle of Wight, Isle of Man, Dublin, Belfast, and Londonderry.

Special Quotations for Quantities.

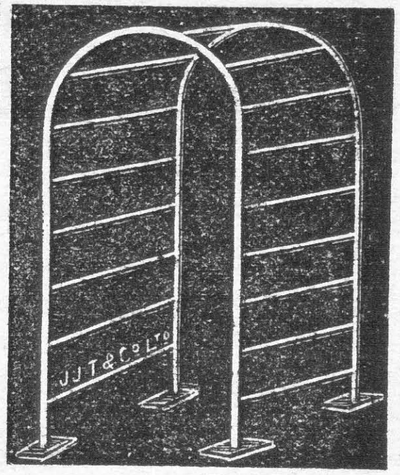
Special Cheap Lines in Garden Archways.



No. 758.



No. 759.



No. 760.

7ft. 6in. high, 4ft. 6in. span, 3ft. wide.

	s.	d.
Green	11	6
Galvanised	16	6

The best for rose growing. Extra Strong; entirely of Wrought Iron. Made with flat iron frame and is well adapted for a continuous run or covered way. Simply Bolts together.

Light Useful Archways.
Diamond Pattern, Galvanised.

ft.	in.		ft.	in.		ft.	in.		No. 758. s.	d.		No. 759. s.	d.
7	0	by	4	0	by	1	0	..	3	4	..	4	10
7	0	,,	4	0	,,	1	6	..	5	9	..	7	2

Diamond Pattern, Stronger Make.

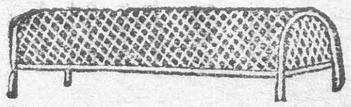
7	0	by	4	0	by	1	0	..	4	6	..	6	0
7	0	,,	4	0	,,	1	6	..	6	0	..	7	6

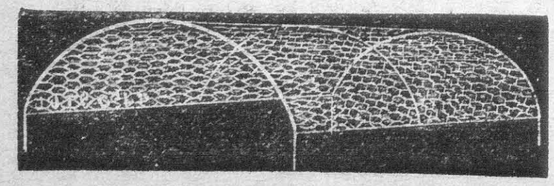
Pea and Seed Guards.

For protecting seed and young plants from Birds, &c.

No. 761.

2 End Pieces with each dozen.
3ft. long 2s. 3d. per dozen. 25s. per gross.
Extra End Pieces 6d. per dozen.





No. 762.

Per Dozen.

Long. ft.	in.		Wide. ft.	in.		High. in.	Cash Prices. ¾in. Mesh. £	s.	d.	1in. Mesh. £	s.	d.
1	6	by	1	6	by	6	0	5	0	0	4	6
2	0	,,	1	6	,,	6	0	6	9	0	6	0
3	0	,,	2	0	,,	6	0	8	9	0	8	0
6	0	,,	1	6	,,	9	1	0	9	0	18	9
6	0	,,	2	0	,,	9	1	3	9	1	1	9

Pieces for stopping the Ends, 2s. 3d. the first two sizes, and 3s. 6d. remainder per dozen.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

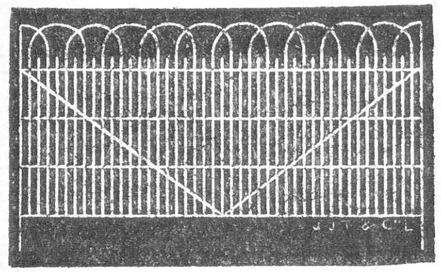
Portable Galvanised Wire Fencing.

Cheap, Strong and Durable.

Specially adapted for separating Gardens, for fixing on top of Garden Walls, Training Fruit Trees, enclosing Runs for Poultry, and many other purposes.

Garden Fence.

No. 763. 1½in. Mesh.

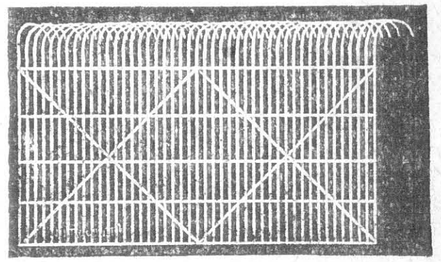


Cash Prices per Length

Out of Ground. ft.	in.	2 s.	d.	3 s.	d.	4 s.	d.	6ft. s.	d.	
1	6 high	1	2	1	5	1	9	2	2	each
2	0 ,,	1	6	1	9	2	0	2	6	,,
2	6 ,,	1	11	2	2	2	5	3	1	,,
3	0 ,,	2	4	2	7	2	11	3	9	,,

Cat Fence (unclimbable).

No. 764. 1½in. Mesh.



In 6ft lengths. Cash Price Each.

2ft	2ft. 6in.	3ft. high.
3s. 6d.	4s. 3d.	5s. 3d. each

1 doz. panels and upwards.

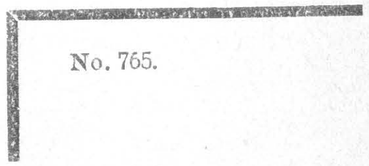
40s. 6d.	49s. 6d.	58s. 6d. per doz.

Most useful for keeping Cats out of Gardens.

Galvanised Iron Standards.

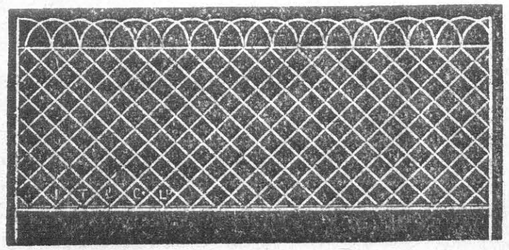
To drive into the face of the wall for fixing Cat Fence.

3ft.	3ft. 6in.	4ft. full length.
7s. 6d.	9s. 0d.	10s. 6d. per doz.



No. 765.

No. 766. 2in. Mesh.

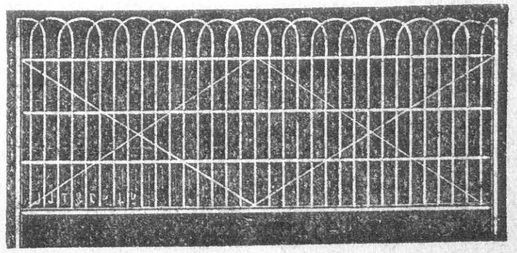


Useful and Ornamental Wire Fencing.

Cash Prices:

Above ground.	ft.	in.	ft.	in.	ft.	in.	
	2	0	2	6	3	0	
	s.	d.	s.	d.	s.	d.	
3ft. lengths	1	10½	2	3	2	7½	each.
6ft. ,,	2	9	3	6	4	3	,,

No. 767. 2in. Mesh.



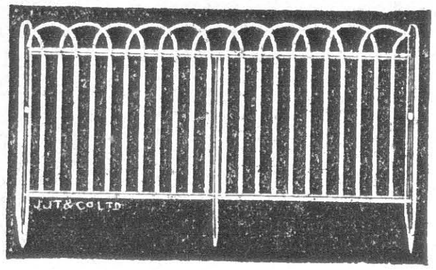
Extra Strong Wire Fencing and very durable.

Cash Prices:

Above ground.	ft.	in.	ft.	in.	ft.	in.	
	1	0	1	6	2	0	
	s.	d.	s.	d.	s.	d.	
3ft. lengths	1	9	2	3	2	9	each.
6ft. ,,	3	0	4	0	5	0	,,

Strong Dwarf Hurdle Fencing.

The End Standards of each Hurdle are of Flat Iron, made to fit and bolt together.



Suitable for Parks, Garden Walks, Flower Beds, Enclosing Graves, &c.; can be easily bent to any shape required.

No. 768.

For Graves. 12 inches high. Usually made as follows:

2 lengths each 6ft. 6in.
2 ,, ,, 2ft. 0in.

Cash Price, complete per set.

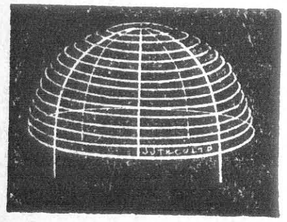
Painted, 13s. 6d. Galvanised, 16s. 6d.

For Gardens. In 6ft. lengths.

Cash Price each length.

Inches high	12	15	18	24
	s. d.	s. d.	s. d.	s. d.
Painted	3 6	4 0	4 6	6 0
Galvanised	4 6	5 6	6 6	8 0

Including Bolts and Nuts for fixing.



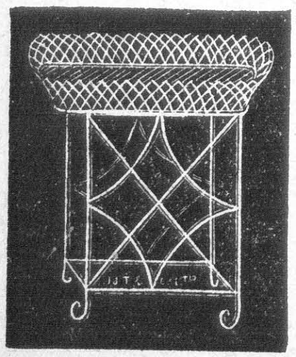
Glass Shade Protectors.

No. 769.

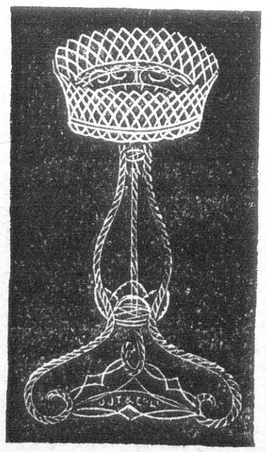
Cash Prices:

12in. .. 14in. .. 16in. .. 18in.
1/9 .. 2/- .. 2/3 .. 2/6 each.

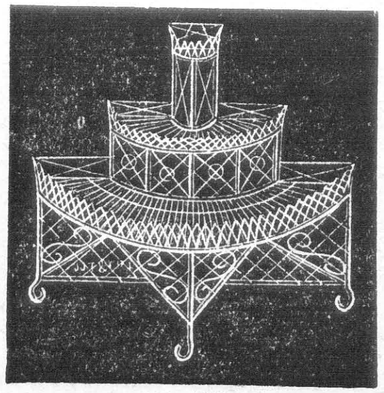
Flower Stands, Painted.



No. 770.
Cash Prices:
2ft. 6in. 3ft. 3ft. 6in.
5/9 6/6 7/6
A Lighter Make, Galvanised only.
4/9 5/6 6/6

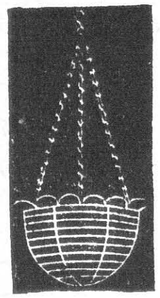


No. 771.
Ornamental Stand.
Made of Twisted Iron and Wire.
Cash Prices:
14in. 18in. 24in.
7/- 9/- 12/-

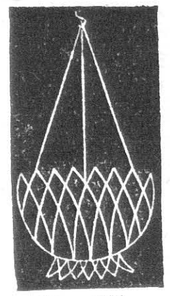


No. 772.
Semi-Circle.
Very Useful Pattern (3-Stage).
Cash Prices:
3ft. 3ft. 6in. 4ft.
11/6 13/6 15/- each.

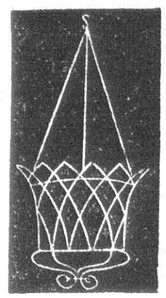
Suspending Flower Baskets, Galvanised.



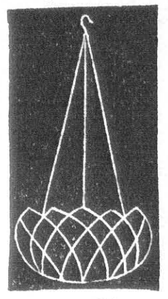
No. 773.
8 10 12in.
9d. 11d. 1/1



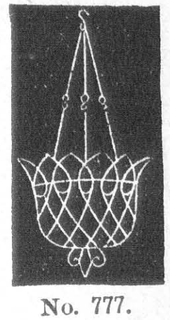
No. 774.
8 10 12in.
1/- 1/6 2/-



No. 775.
Cash Prices:
8 10in.
6d. 11d.



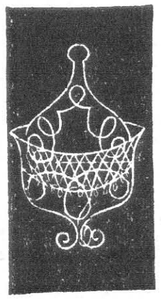
No. 776.
8 10in.
4½d. 9½d.



No. 777.
10 12in.
1/2 1/6 each.

Wire Brackets,

To hang against a Wall.



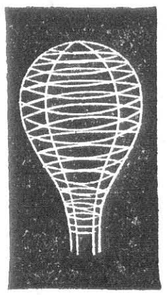
No. 778.
8 10 12in.
1/- 1/3 1/6



No. 779.
8 10 12in.
1/3 1/6 2/-

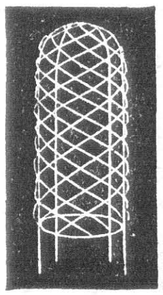
Balloon Trainer.

Made in Halves.



No. 780.
Cash Prices:
18 21 24in.
2/8 3/2 3/9

Useful Pea Trainer.



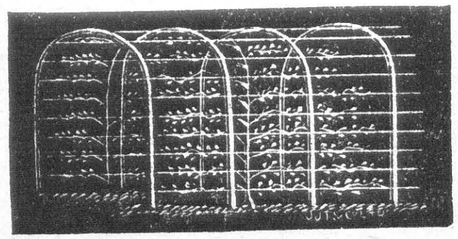
No. 781.
24 27 30in.
3/3 3/6 4/3

Umbrella Trainer.



No. 782.
36 42 48in. high.
5/- 5/6 6/6 each.

Wrought-iron Continuous Archway for Espalier Training.

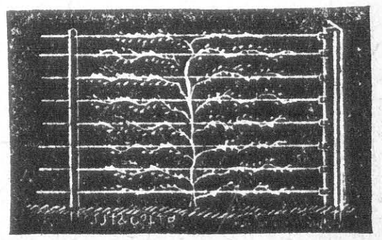


No. 783.

CASH PRICES PER YARD RUN.

Height. ft. in.	Span. ft. in.	Green.	Galvd.
7 0	4 0	10/6	15/6
7 6	4 6	11/6	16/6
8 0	5 0	12/6	19/6

Espalier Fencing for Training Fruit Trees.



No. 784. **T** Iron Terminal Posts. Two required for each length.

CASH PRICES.

	Varnished Black.	Galvanised.
4ft. high	.... 9/9	15/9 each.
5ft. high	.... 11/3	18/0 each.

No. 785. **Intermediate Standards.**

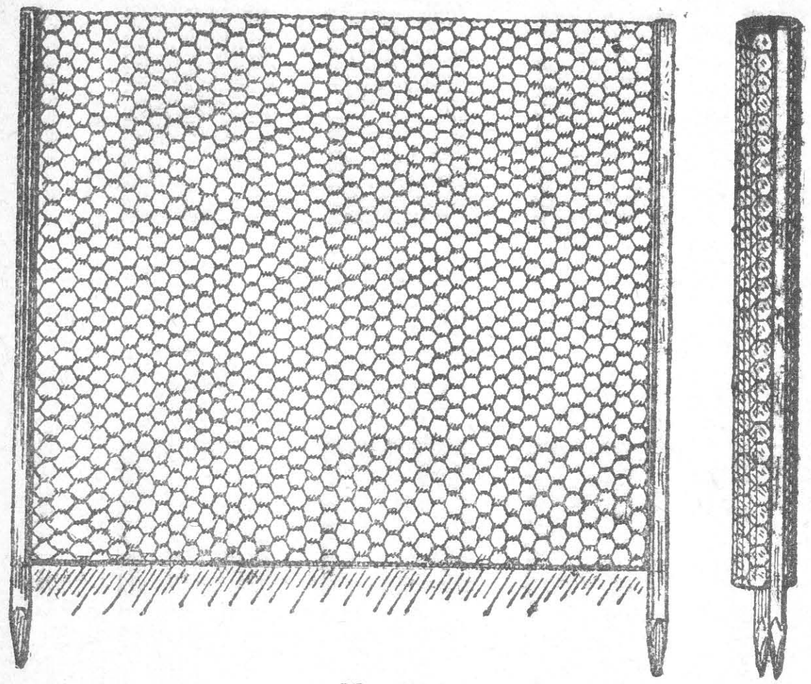
With Anchor Feet, generally placed 10ft. apart.

4ft. high	.... 1/3	2/0 each.
5ft. high	.... 1/6	2/6 each.

For Wire for above, see page 533.

A New Cheap Pea Trainer.

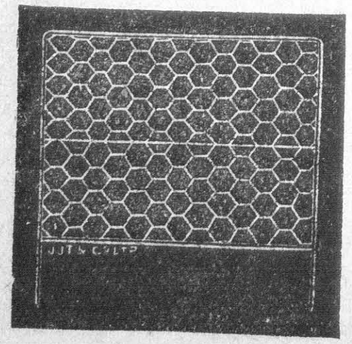
A Marvel of Price and Utility! Reg. No., 536,246.



No. 786.

This new, cheap Pea Trainer is made of 4in. mesh Galvanised Wire Netting attached to strong wood stakes, which are painted green, with tarred ends. The advantages are that, being quite portable, they can be placed anywhere at will, and when done with they are simply rolled up (as shown in illustration) and stored away for use in following season. Made in one length only, 6ft., and 4ft. and 5ft. high out of ground. The cheapest Pea Trainer ever offered.

Cash Prices—4ft. high by 6ft. wide, 18s. per doz.; 5ft. high by 6ft. wide, 22s. 6d. per doz.



Pea Trainers.

In Hurdles 4ft. long.

No. 787.

Cash Prices:

3ft.	..	4ft.	..	5ft. high.
1/3	..	2/-	..	3/- each.

Black Frames. Covered with Galvanised Wire Netting.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Galvanised Trellises.

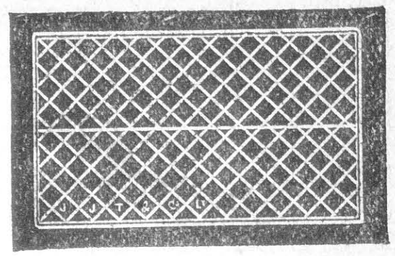
In panels 6ft. long.

No. 788.

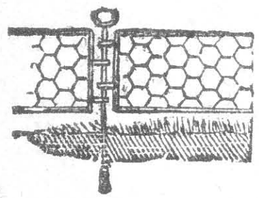
Cash Prices:

3ft.	..	4ft.	..	5ft.
2/3	..	3/-	..	3/9 each.

Special sizes and strengths quoted for on application.



Cheap and Useful Garden Borderings, Galvanised.



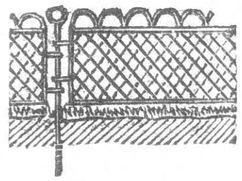
No. 789.

Made of Wire Netting.

The Netting is cut into 3ft. lengths, with eyelet pieces at each end for the spike to go through.

Cash Prices:

6in.	9in.	12in. high.
3/6	4/6	5/6



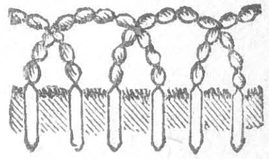
No. 790.

Made of Hard Wire.

In 3ft. lengths.

Cash Prices:

6	9	12	15in. high.
7/6	9/6	11/6	14/-



No. 791.

Border Arches.

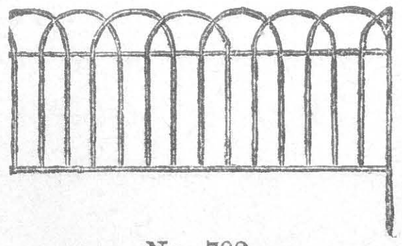
Made of Spiral Iron.

Very Ornamental.

Cash Prices:

9	12	15in.
2/- ..	2/6 ..	3/-

Per dozen lengths, including Spikes for fixing. Per dozen Arches.



No. 792.

Made of Hard Wire.

A Strong Border.

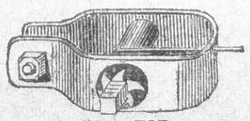
12 inches high.

Cash Prices:

3ft.	..	4ft. 6in.	..	6ft. long.
9/6	..	13/6	..	18/6.

Per dozen Lengths.

Galvanised Raidisseur Wire Strainers.



No. 793.

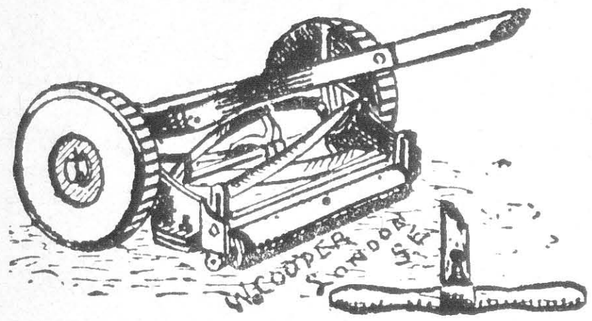
One required for each line of Wire.

For Straining	15-14	13	12-11	10	9-8 Gauge Wire.
Cash Prices	3/-	4/-	6/-	8/-	16/- per doz.

Keys for ditto, 6d. each.

The "Cooper" Lawn Mower,

AND THE WORLD'S BEST.



No. 794.

The Lightest Running Mower in the World.

For General Efficiency it cannot be surpassed.

Excels for Fine Quality of Material and Finish, Simple Adjustments, no Clogging with Grass, Smooth Cutting.

The Mower that Cuts. Some Mowers Cut Profits, this one Cuts Grass.

IT CUTS Long or Short, Thin or Thick, Wet or Dry, Weak or Strong, Any Kind, Every Kind, All Kinds of **GRASS.**

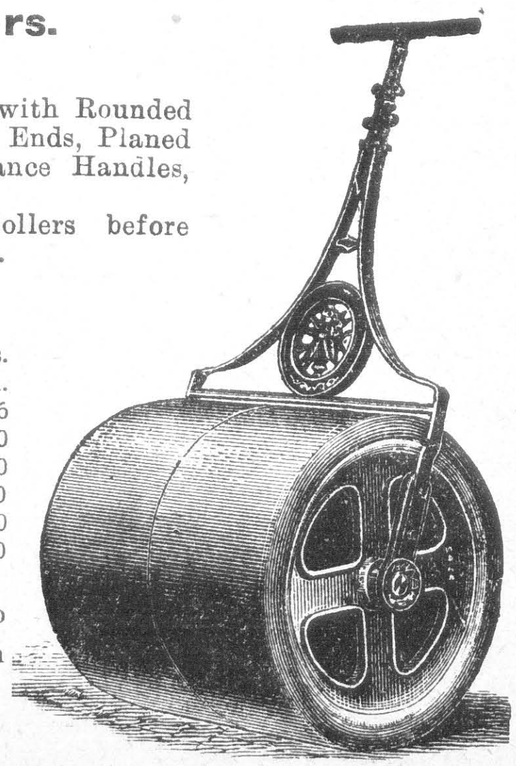
Sizes	8in.	10in.	12in.	14in.	16in.
Cash Prices	10s. 6d.	12s. 6d.	13s. 0d.	14s. 0d.	15s. 6d.
Grass Boxes	3s. 0d.	3s. 6d.	3s. 9d.	4s. 3d.	4s. 9d.

Garden Rollers.

No. 795.

Best Quality. New Design, with Rounded Edges, Double Cylinder, Solid Ends, Planed Centre Joints, Steel Axles, Balance Handles, and Painted in Good Colours.

Compare weight of our Rollers before ordering elsewhere.



Sizes.	Approximate Weight. Cwt.	qrs.	lb.	Cash Prices. £	s.	d.
14 by 14	1	3	6	1	6	6
16 ,, 16	2	1	0	1	10	0
18 ,, 18	2	3	9	1	15	0
20 ,, 20	3	1	8	2	2	0
22 ,, 22	4	0	21	2	5	0
24 ,, 24	4	2	16	3	3	0

Rollers only delivered Free to any Railway Goods Station in England or Wales.

Hope Cottage, North Hayling, Hants.

DEAR SIR,—I beg to acknowledge the receipt of Lawn Mower. It is a well finished article and dirt cheap. Marvellous value.—I am, yours sincerely,

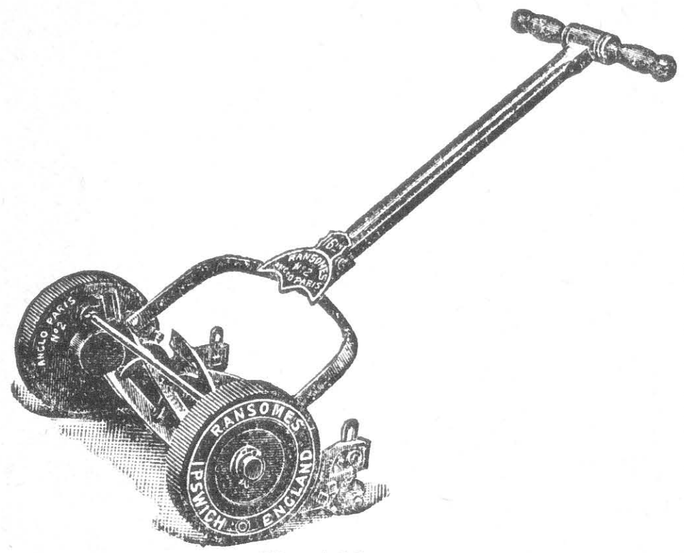
JAMES KELLY.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Ransomes' Mowers.

"Anglo-Paris" Mowers.

The "Anglo-Paris" Mowers are recommended as the very best Light Machines made. They have large driving wheels and pinions, large cutting cylinders, renewable brass bearings, and the Single-screw Adjustment. The 10in. Machines and upwards are fitted with six knives.



No. 796.

Front delivery Grass Boxes, extra as below.

	Cash Prices. £	s.	d.
6 in. ..	1	3	6
8 in. ..	1	7	9
10 in. ..	1	12	0
12 in. ..	1	18	3
14 in. ..	2	4	9
16 in. ..	2	11	0
18 in. ..	2	19	6
20 in. ..	3	8	0

Carriage Paid to all the principal Stations in the United Kingdom. Grass Boxes, 6 to 10in., 4s. 3d.; 12 to 16in., 6s.; 18 & 20in., 6s. 9d. each.

These machines can be fitted with a long handle for cutting banks and slopes, in addition to the ordinary handle, at an extra charge of 5s.

"Lion" Lawn Mowers.

The "Lion" Lawn Mowers are of the same general design as the "Anglo-Paris," but are lighter and cheaper. They have five knives, and the bottom blade is adjusted to the cutting barrel instead of having the Single-screw Adjustment. They are really well-made and useful machines.

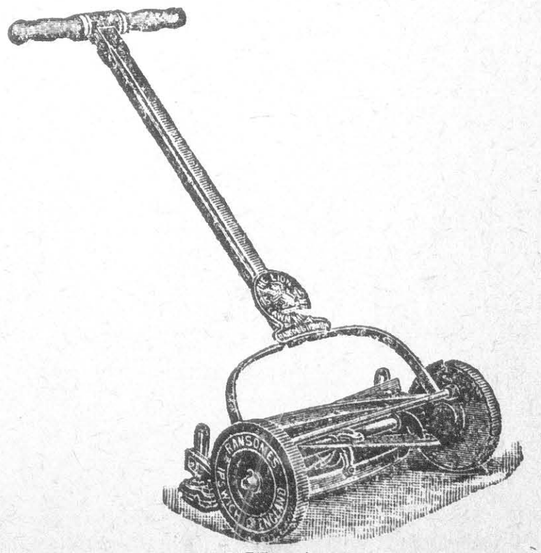
Front delivery Grass Boxes, extra as below.

	Cash Prices. £	s.	d.
9 in.	1	0	6
11 in.	1	2	0
13 in.	1	4	0
15 in.	1	5	6

Carriage Paid to all the principal Stations in the United Kingdom.

Grass Boxes, 9in., 3s. 6d.; 11in., 4s.; 13 in., 4s. 3d.; 15 in., 4s. 9d. each.

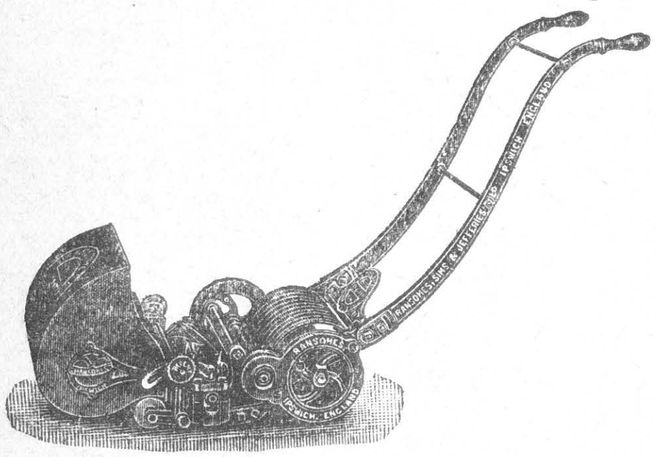
These Machines can be fitted with a long handle for cutting Banks and Slopes, in addition to the ordinary handle, at an extra charge of 5s.



No. 797.

"Patent Gear and Chain Automatons."

The "Patent Gear Automatons" are the best Roller Machines made. They are driven by wheel gearing, as shown above, and all the parts are as accurately fitted as those of a steam-engine. They are capable of dealing with all kinds of grass, and leave a fine and even surface on the lawn. They possess special advantages—the subjects of several patents. The handles can be raised or lowered if required, to suit the user of the Machine. Drawing rope and handle fitted to all Machines from 14in. upwards.



No. 798.

	Cash Prices. £ s. d.
8 in. ..	2 6 9
10 in. ..	3 6 0
12 in. ..	4 3 0
14 in. ..	5 2 0
16 in. ..	5 19 0
18 in. ..	6 18 0
20 in. ..	7 6 6
22 in. ..	7 17 3
24 in. ..	8 5 9

Carriage Paid to all the principal Stations in the United Kingdom.

Grass Boxes included.

Whippletree for Pony or Donkey, 10s.

This Automaton can be fitted with a chain drive instead of gear at same prices. They are somewhat easier running and practically noiseless, but for cutting long grass the gear machine is preferable.

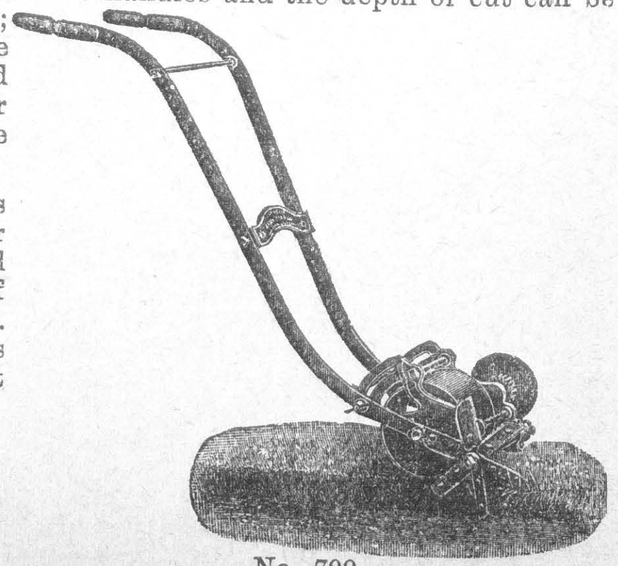
Edge Trimmer.

This Edge Trimmer will cut the grass on the edges perfectly, as fast as a man can walk. The cutters are of the best steel, renewable, and large enough to cut the deepest edges, and by a new arrangement the height of the handles and the depth of cut can be regulated at pleasure; the cutters can by the same means be raised clear of the ground for moving the machine across a lawn.

It is recommended as the best Edge Trimmer ever made. Will be found an immense saver of labour in a large garden. With it the grass edges can always be kept neat at small expense.

Carriage Paid to all the principal Stations in the United Kingdom.

Cash Price .. £1 16s.

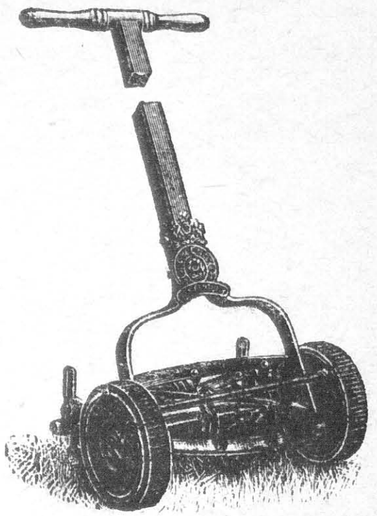


No. 799.

Green's Patent "New Century" Lawn Mower.

Light Draught.

No. 800.



Fitted with five cutters. Well adapted for mowing small lawns, tennis courts, slopes, and banks. For a cheap light machine, we have every confidence in recommending it. The height of the handle of this mower can be regulated by releasing the screws on bottom of wood handle; when adjusted tighten up screws.

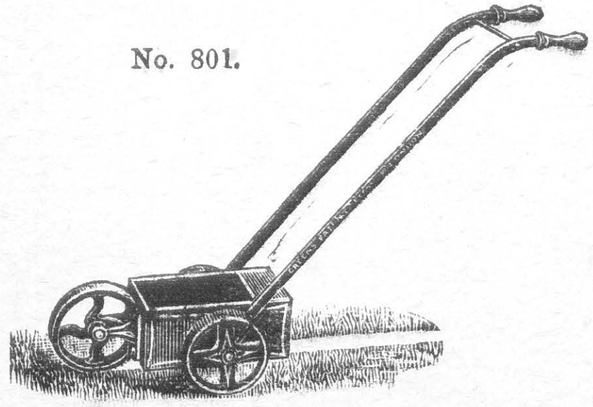
These Mowers are fitted with adjustable bearings and have Grass Box in front.

Sizes:	9in.	11in.	13in.	15in.
Cash Prices	20/6	22/-	24/-	25/6
Grass Box and Delivery Plate, extra ...	3/6	4/-	4/3	4/9

When ordering please state if Grass Box is required.
If supplied with Long Handle for cutting banks, &c., in addition to ordinary Handle, 5/- extra.
No charge for packing. Carriage paid to all the principal Railway Stations in the United Kingdom.

Patent Tennis Court Marker.

No. 801.



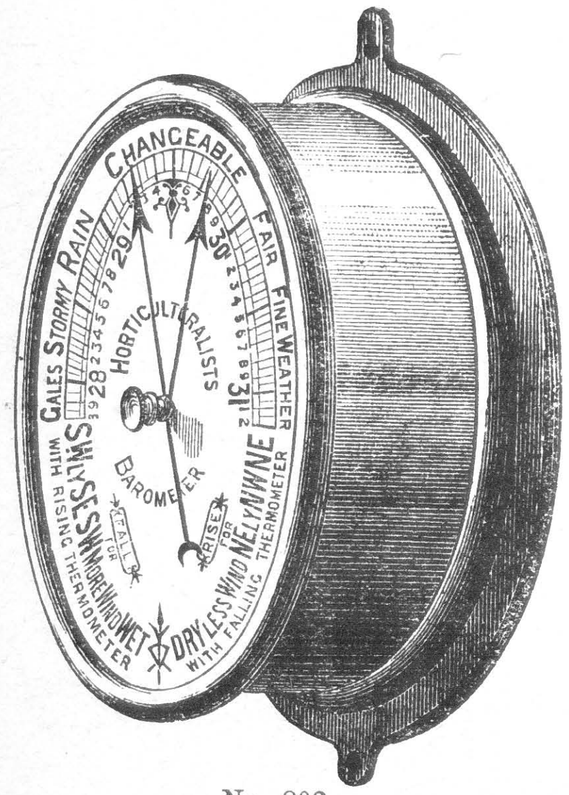
Simple in design and construction, and easy in manner of working. The trough is so constructed that the periphery of the front or marking wheel, which is turned true on the edges and face, and works in indiarubber fittings, enters it, and in its revolving motion gathers up the liquid and conveys it to the ground direct for marking purposes. When the machine is at rest the trough remains slightly tilted, so that the liquid flows to the back part, and being easily mixed is thus ready for future use.

Cash Prices:	s.	d.
No. 1.—Holds 1 gallon marking composition (width of marking wheel 1⅜in.)	16	0
No. 2.— ,, 1½ gallons ,, ,, ,, ,, ,,	19	0
Special Large Size.—Holds 4 gallons marking composition (width of marking wheel, 1½in.)	47	6

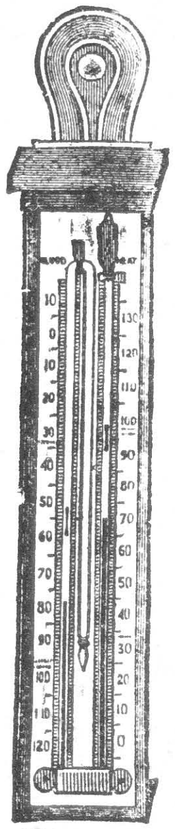
Small bag of Marking Composition, 9d.

Carriage Paid to all the principal Railway Stations in the United Kingdom.

Horticulturists' Barometers and Thermometers.

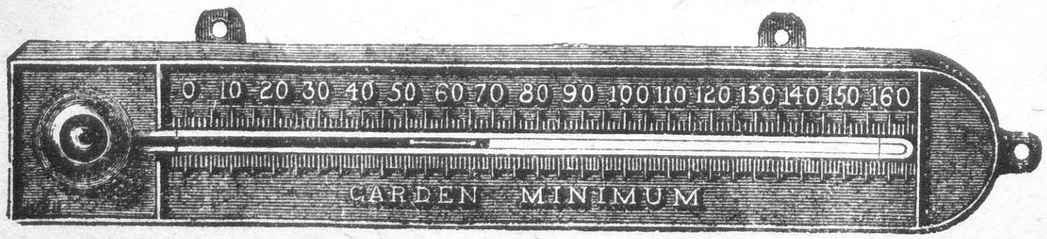


No. 802.
Stout Metal Case, Porcelain Dial.
Packed in Box, Cash Price, 15s. 6d. each.



No. 803.
Registers Maximum and Minimum Temperatures. Enamelled Tube on Boxwood, with Grooved Magnet.
Cash Prices: 8in., 4s. 6d.; 10in., 6s. each, post paid.

Minimum Thermometer.



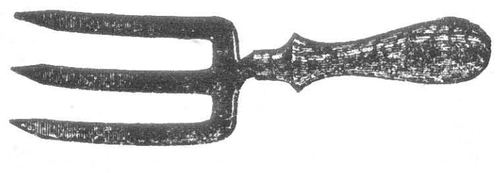
No. 804.
Scaled 0 to 130deg. 10in. Cast Metal. Cash Price, 3s. each, post paid.

Ladies' Sets of Garden Tools.

Solid Steel Garden Tools.



No. 805.
Polished Handles, Brt. and Red Blades.
Spade, 4in. by 6in.; Fork, 2⅝in. by 5¼in.; Rake, 6 teeth; Hoe, 3¾in. wide. Cash Price, 4s. 9d. per set.
Extra special set, including Weed Fork and Trowel, 8s. 6d. per set.

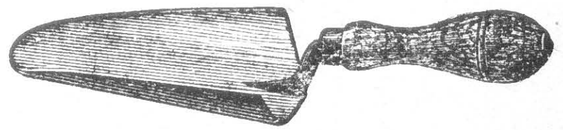


Flat 3-prong Steel Garden Forks.

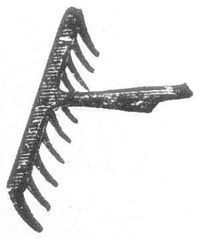
No. 806.
6d. each. 5s. 6d. doz.
Extra Strong, 8d. each.

Wrought Steel Garden Trowels.

5d. each. 4s. 6d. doz.
With long handle, 8d. each, 7s. 6d. doz.



No. 807.

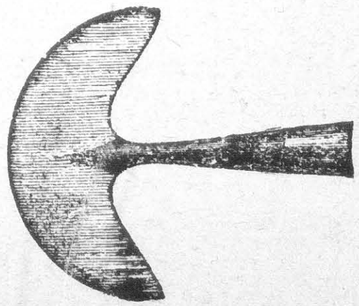


Solid End Garden Rakes.

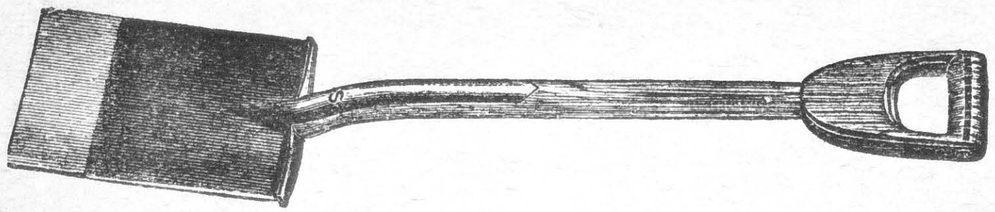
No. 808.
With 4ft. 6in. Ash Handle.
Cash Price, 10 teeth, 1s. 1d. each.

Cast Steel Grass-Plot Knives.

No. 809.
With 36in. handles. Patent hollow-back blades. 9in. blade, Cash Price, 2s. 9d.



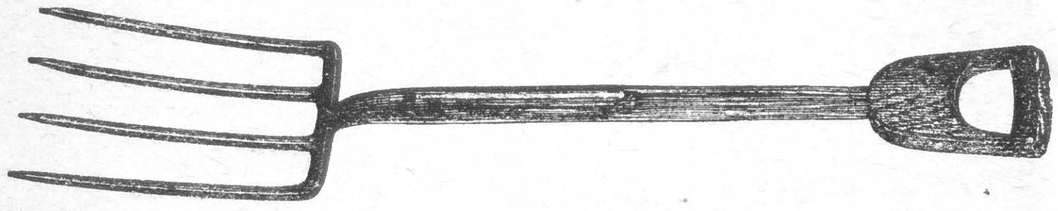
Solid Steel Spade Strapped and Treaded.



No. 810.

28in., D handles. 7 by 11½in., Cash Price, 3s. 6d.

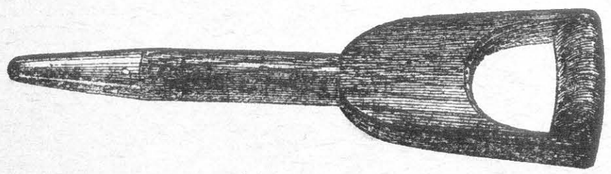
Best Solid Steel Digging Forks.



No. 811.

4 prongs with riveted D handles. 7½ by 12½in.
Cash Price, 2s. 9d.

Iron Shod Dibblers.



No. 812.

Cash Price, 1s. 3d. each.

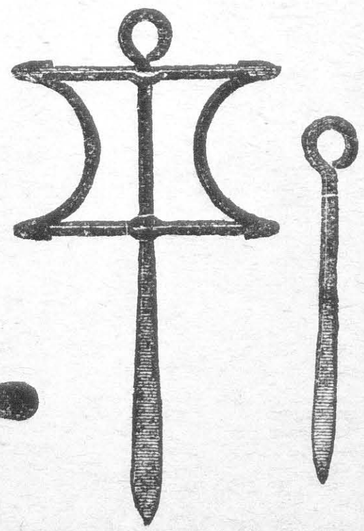
Daisy Grubber.



No. 813.

Polished Handles. Malleable Heads.
10in. handles .. Cash Price, 1s. 0d. each.

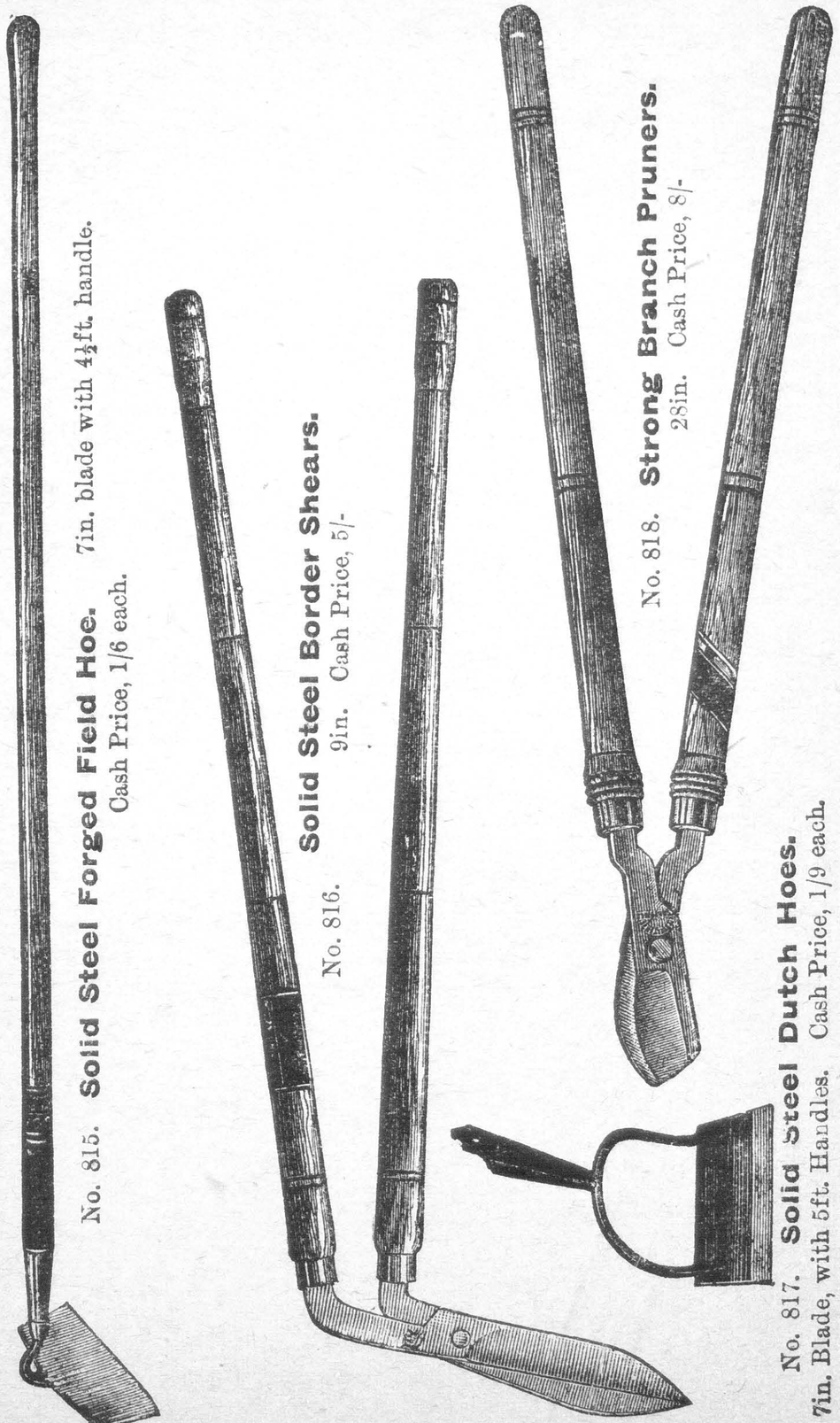
Black Japanned Garden Reel.



No. 814.

Cash Prices: 7in., 1/7;
30-yard lines, 8d.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.



No. 815. **Solid Steel Forged Field Hoe.** 7in. blade with 4½ft. handle.
Cash Price, 1/6 each.

No. 816. **Solid Steel Border Shears.**
9in. Cash Price, 5/-

No. 817. **Solid Steel Dutch Hoes.**
7in. Blade, with 5ft. Handles. Cash Price, 1/9 each.

No. 818. **Strong Branch Pruners.**
28in. Cash Price, 8/-

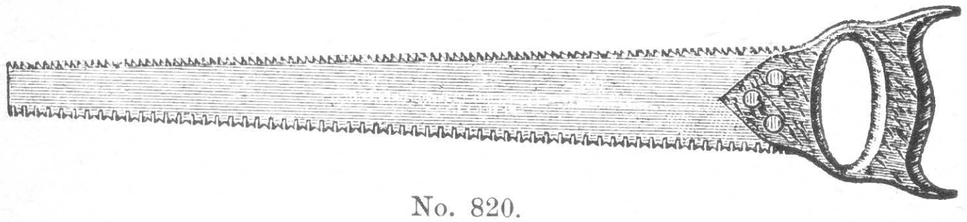


No. 819.

Scraper.

Best Cast Steel, as illustration.
For Cleaning Floors, Perches, &c., of Poultry Houses. Fitted with Wood Handle.
Cash Price, 1s. each.

Pruning Saw.



No. 820.
20in. Best Cast Steel. Cash Price, 2s. 9d. each.

Pruning Knives.

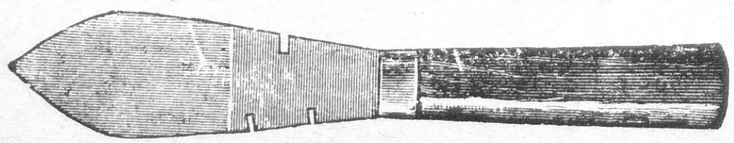
No. 821.
Superior Make and Finish. Cash Price, 2s. 6d. each.

Budding Knives.



No. 822.
Ivory, 3½in. Cash Price, 2s. 3d. each.

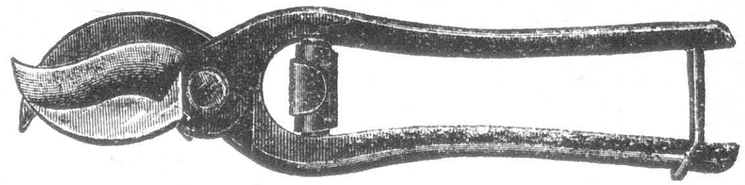
Notched Putty Knives.



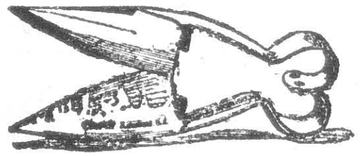
No. 823.
Best quality. Cash Price, 9d. each.
Glaziers' Hacking Knives. Cash Price, 1s. each.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Secateurs.



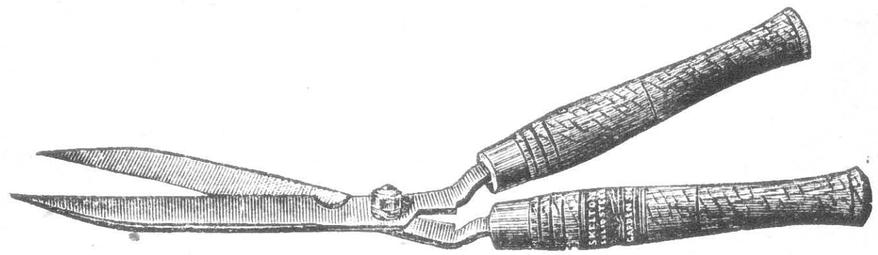
No. 824.
7in. Cash Price, 2s. each.



Single Bow Grass Shears.

No. 825.
Good Quality. Cash Price, 1s. 6d. each.

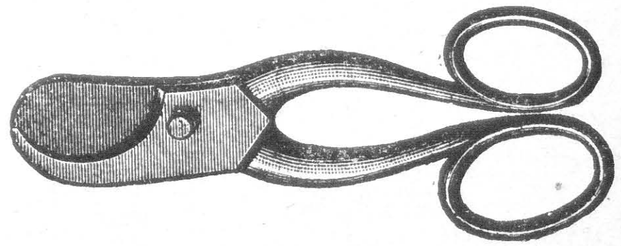
Solid Steel Garden Shears.

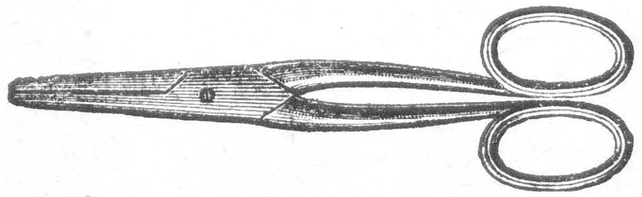


No. 826.
9in. With Pruning Notch. Cash Price, 3s. 6d.

Best Cast Steel Pruning Scissors.

No. 827.
Cash Price, 2s. 6d.



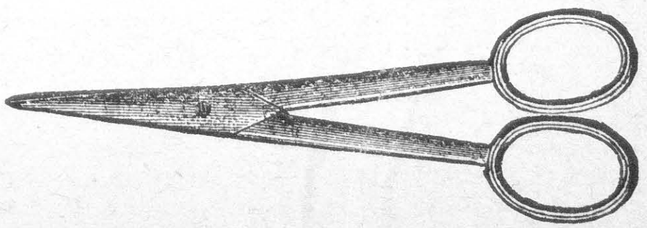


Best Cast Steel Flower Gatherers.

No. 828.
Cash Price, 3s.

Best Cast Steel Vine Dressing Scissors.

No. 829.
Cash Price, 2s. 6d.





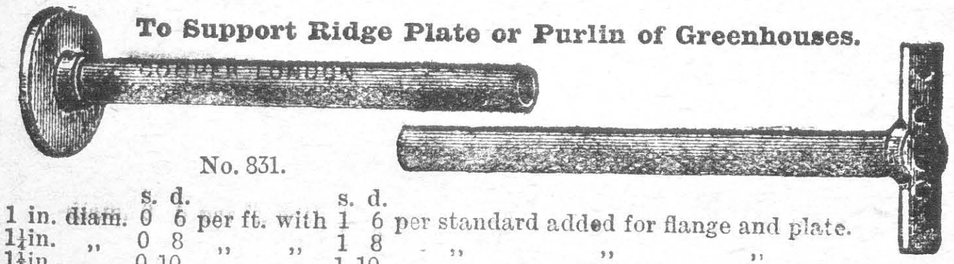
Ornamental Cast-iron Shelf Bracket.

No. 830.

Sizes. in.	in.	Cash Prices. s.	d.	
4 by	6	3	0	per doz.
5 by	7	4	0	,,
6 by	8	4	3	,,
7 by	9	6	0	,,
8 by	9	6	6	,,
8 by	10	7	0	,,
9 by	10	7	6	,,
10 by	12	9	6	,,
12 by	14	11	6	,,
14 by	16	14	6	,,

Wrought-iron Tube Standards.

To Support Ridge Plate or Purlin of Greenhouses.

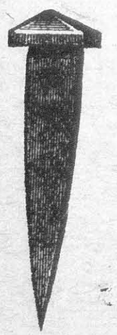


No. 831.

	s.	d.		s.	d.	
1 in. diam.	0	6	per ft. with	1	6	per standard added for flange and plate.
1¼ in. ,,	0	8	,, ,,	1	8	,, ,, ,,
1½ in. ,,	0	10	,, ,,	1	10	,, ,, ,,
2 in. ,,	1	4	,, ,,	2	2	,, ,, ,,

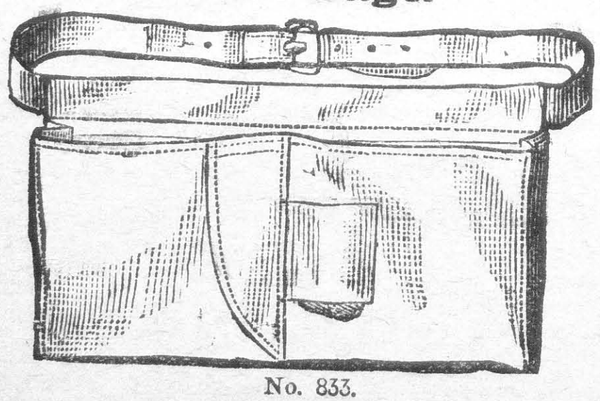
Manufactured in strong wrought Tubing with wrought Flange at bottom to go into concrete or ground, and iron Plate to screw on to wood at top.

Wall Nails.



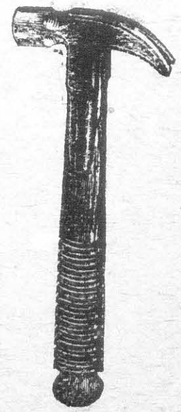
No. 832.
1in., 1¼in., 1½in.
Cash Price,
16s. 6d. cwt.

Nail Bags.



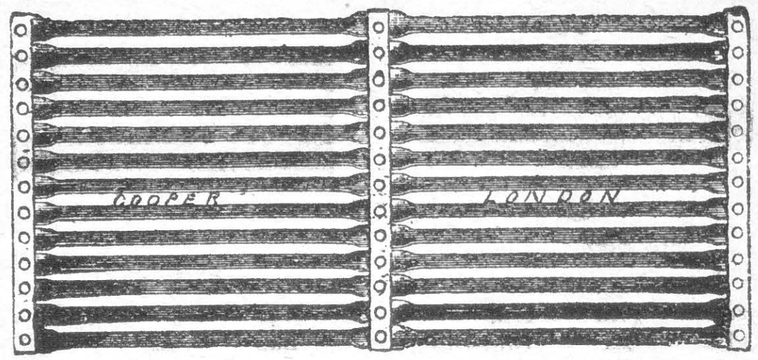
No. 833.
Cash Price, 5s. 0d. each.

Garden Hammer.



No. 834.
Cash Prices:
No. 1, 1s. 6d.
No. 2, 2s. 0d.
No. 3, 2s. 3d.

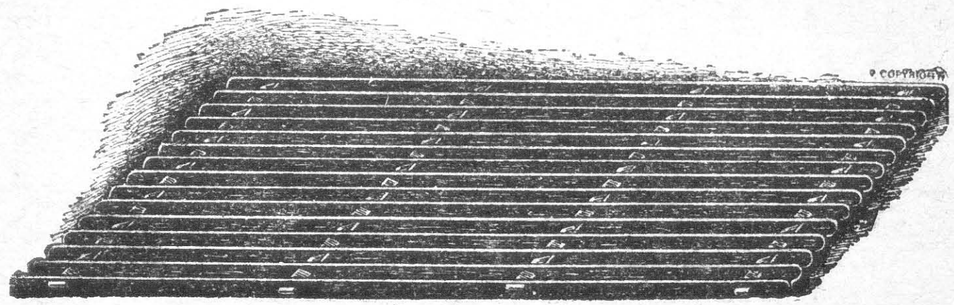
Galvanised Iron Scraper Mats.



No. 835.

Elastic and firm. The angle iron frame renders this pattern very rigid and strong.

	15 × 12	24 × 13	30 × 13	36 × 18 inches.
Cash Prices ..	3/-	4/-	5/-	6/6



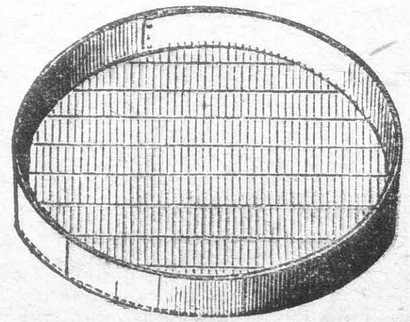
No. 836.

Strongly made with flat iron bars. Everlasting wear. Nothing to equal its value.

	20 × 12	24 × 12	28 × 14	30 × 16	33 × 16	36 × 18 in.
Cash Prices ..	1/11	2/3	3/-	4/-	4/4	5/3 each.

Gravel Sieves.

Extra strong iron wire, straight pattern. Oak rims.

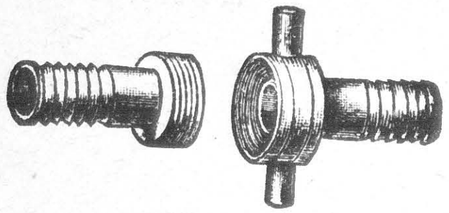


No. 837.

	¾in.	⅝in.	½in.	7/16in.	⅜in.	5/16in.	¼in.
20in. diam., Cash Prices ..	2/6	2/6	2/6	2/7	2/7	2/8	2/9
22in. diam., Cash Prices ..	2/10	2/10	2/10	2/11	2/11	3/-	3/1

Hose Unions.

Heavy Cast. Wiring-on principle.



No. 838.

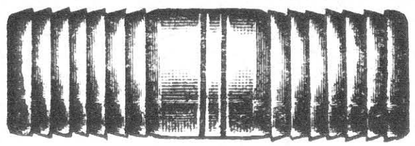
Cash Prices :

½in.	⅝in.	¾in.	1in.
8d.	11d.	1/1	1/6 each.

Post paid 2d. extra.

Tube Hose Unions.

Heavy Gauge Brass.

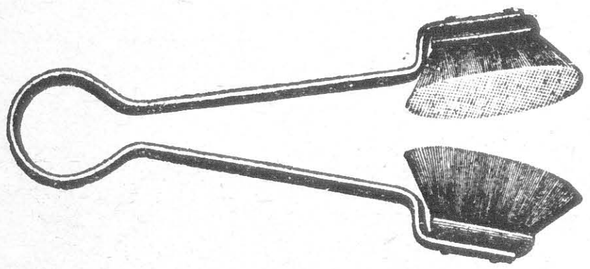


No. 839.

Cash Prices :

½in.	⅝in.	¾in.
2d.	3d.	3½d. each.

Post paid 1d. extra.



Aphis Brush.

No. 840.

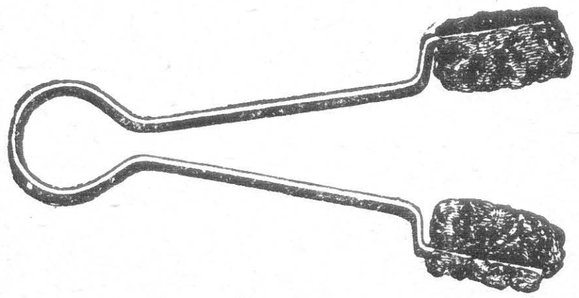
All Bristle.

Cash Price,

Post paid 1s. 6d.

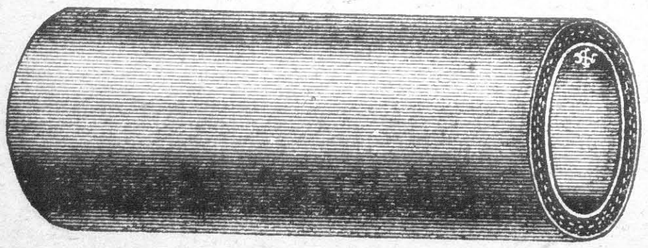
Patent Leaf Sponger.

The only effective means of sponging leaves without tearing them. Cleans both sides at once. Fine soft sponges. Brass Spring, Lacquered. Cash Price, 1s. 3d. post paid.



No. 841.

Special Garden Hose.



No. 842.

In 60ft. lengths complete with self-fitting Tap Union and Branch Pipe with Rose and Jet.

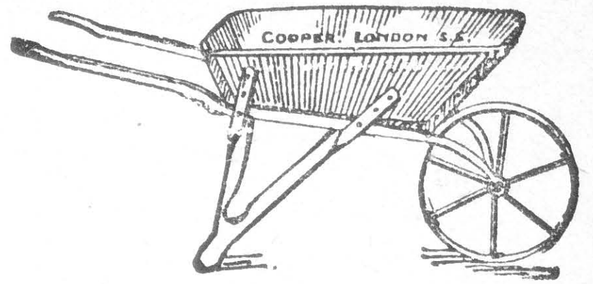
		Internal Diameter. ½in.	⅝in.	¾in.
Plain—Strong	Cash Prices	15/-	18/6	22/6
„ Extra Strong	„	18/-	22/-	25/6
Wire Armoured—Extra Strong	„	25/-	31/6	36/6

Subject to rubber market fluctuations.

Garden Wheelbarrow.

No. 843.

Strong and well made. Painted Frame and Galvanised Steel Body. Round Corners.



Size :	22 by 19	23 by 20	26 by 22	27 by 23	30 by 26	32 by 28.
Cash Prices :	9/6	12/6	16/3	19/6	23/-	25/6.

Hose Reels.

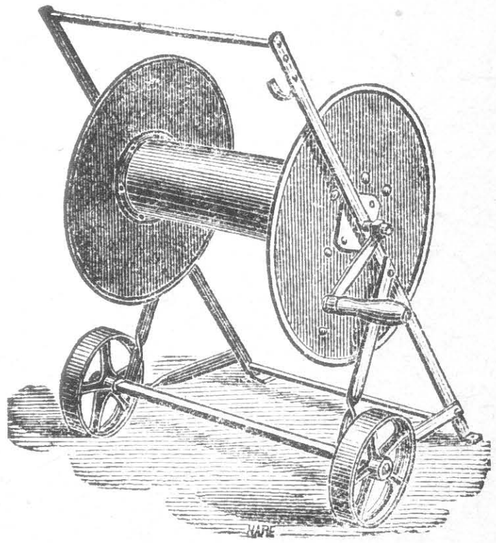
No. 844.

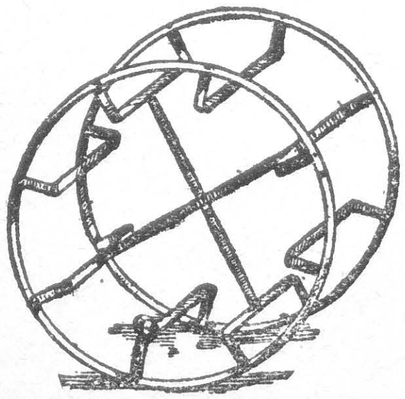
Iron Frame.

Painted Reels.

No.	Cash Prices. s.	d.
1—To carry 120ft. ½ Hose	6	3
2—To carry 120ft. ⅝ Hose	7	6
3—To carry about 180ft. ¾ Hose	9	0

Larger Sizes can be had if required.





Improved Steel Hose Reels.

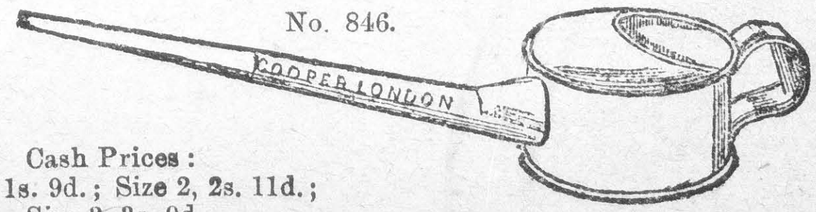
No. 845.

Strong, Light, Portable, and Cheap. No kinking or contraction and takes up very little room.

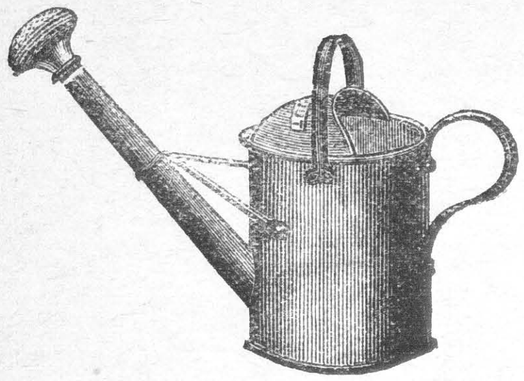
	No.	1	2	3	4	5	
To carry, of ½in. Hose		60	120	180	270	600	feet.
„ „ ⅝in. „		—	60	150	240	420	„
„ „ ¾in. „		—	60	120	220	360	„
„ „ 1in. „		—	—	60	100	240	„
Cash Prices.—Painted		3/9	4/6	6/-	7/6	15/9	ea.
Galvanised		4/3	5/3	7/3	9/9	18/9	„

Strawberry Watering Can.

No. 846.



Cash Prices :
Size 1, 1s. 9d.; Size 2, 2s. 11d.;
Size 3, 3s. 9d.



Water Cans.

For Outdoor and Nursery Use.

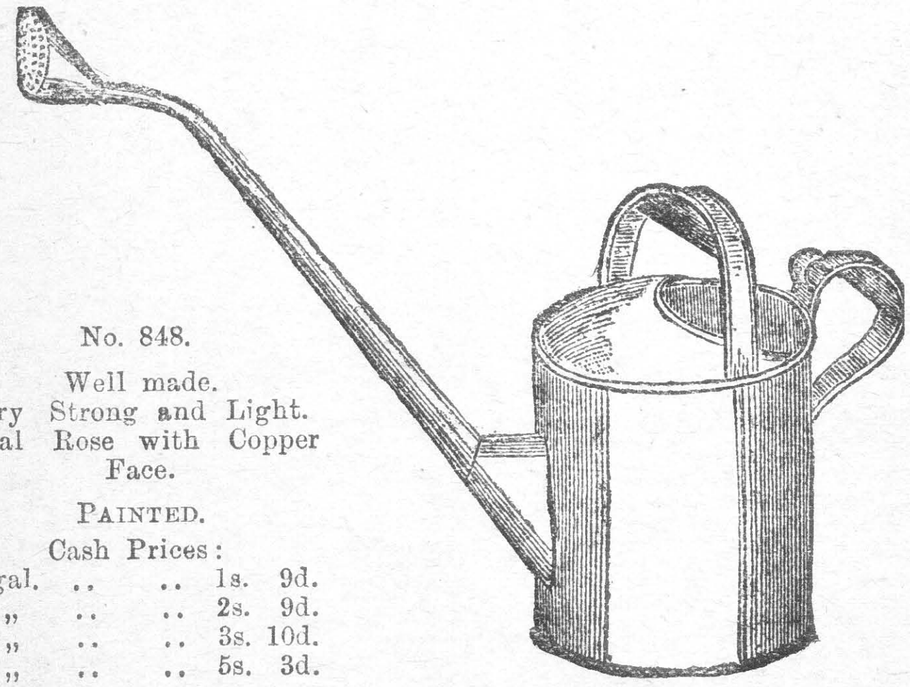
Galvanised.

No. 847.

Very Strong, Screw Top Roses, Copper Faced.

Cash Prices:

1gal.	1½gals.	2gals.	2½gals.	3gals.
2/6	2/8	2/10	3/5	3/9 ea.



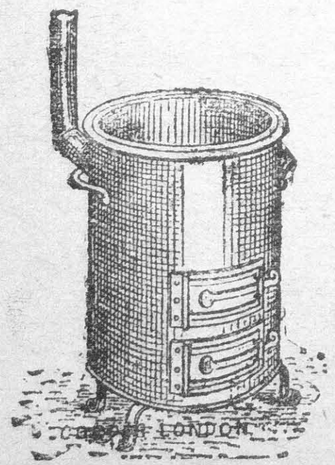
No. 848.

Well made.
Very Strong and Light.
Oval Rose with Copper Face.

PAINTED.

Cash Prices:

½gal.	..	..	1s. 9d.
1 „	..	..	2s. 9d.
2 „	..	..	3s. 10d.
2½ „	..	..	5s. 3d.



Portable Coppers.

With Elbow and 2ft. of Smoke Pipe.

No. 849.

Strong and well made, with galvanised cast pan. Self-setting; can be placed anywhere.

Burn Wood, Coal, Coke, or other Fuel.

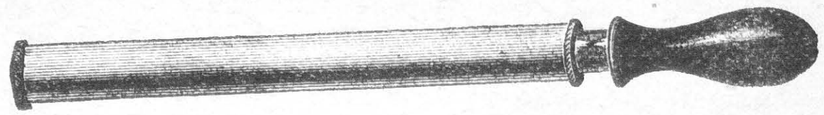
Cash Prices:

6gals., 17s. 6d.; 8gals. 21s.,; 10gals., 23s. 6d.; 12gals., 27s.; 16gals., 30s.; 25gals., 49s.

Brass Draw-off Cocks, 7s. 6d. extra.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Strong Knockabout Syringe. Rose only.



No. 850.

Machine Made, Red Handle.
16in. by 1¼in., 2s. 4d. each. 18in. by 1½in., 2s. 9d. each.
Postage and Packing 4d. extra.

Garden Syringe. Rose and Jet.

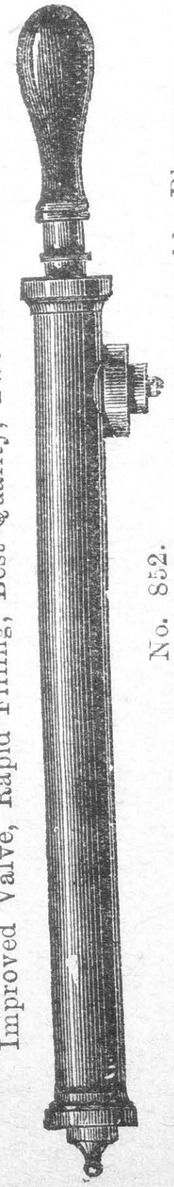


No. 851.

Fitted with Serviceable Plungers.
With one Rose and Jet: 18in. by 1½in., 3s.; 20in. by 1¾in., 8s. 6d. each.
With two Roses and Jet: 18in. by 1½in., 6s. 6d.; 20in. by 1¾in., 11s. 6d. each.
Postage and Packing 6d. extra.

Garden Syringe.

Improved Valve, Rapid Filling, Best Quality, Two Roses and Jet.

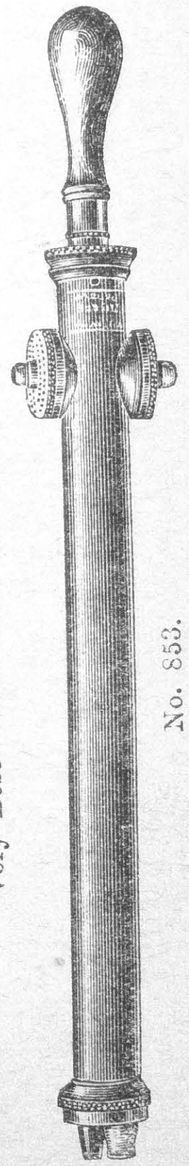


No. 852.

Highly Polished and Lacquered, Black Handles, Adjustable Plunger.
Very strong and substantial.
18in. by 1½in., 11s. 6d.; 20in. by 1¾in., 15s. Postage and Packing, 6d. extra.

Heavy Garden Syringe.

Very Best Make. Ball Valve, Rapid Filling.



No. 853.

Highly Polished, Rosewood Handles, Plain Fittings.
18in. by 1½in., 10s. 6d.; 20in. by 1¾in., 13s. each. Postage and Packing, 6d. extra.

Flower Syringe. Rose only.

Fine Spray.

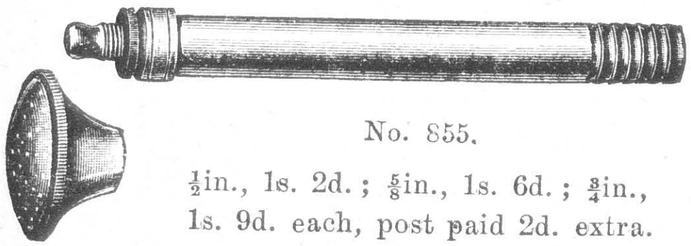


No. 854.

6in. by ½in., 11d.; 8in. by ⅝in., 1s. 2d.; 10in. by ¾in., 1s. 5d.; 12in. by 1in., 1s. 9d. each. Postage and Packing 3d. extra.

Branch Pipe. Rose and Jet.

Highly Polished and Lacquered.

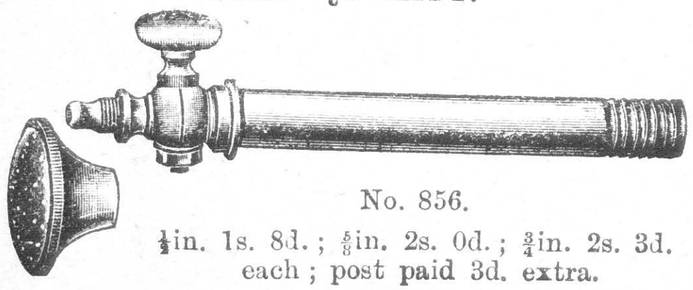


No. 855.

½in., 1s. 2d.; ⅝in., 1s. 6d.; ¾in., 1s. 9d. each, post paid 2d. extra.

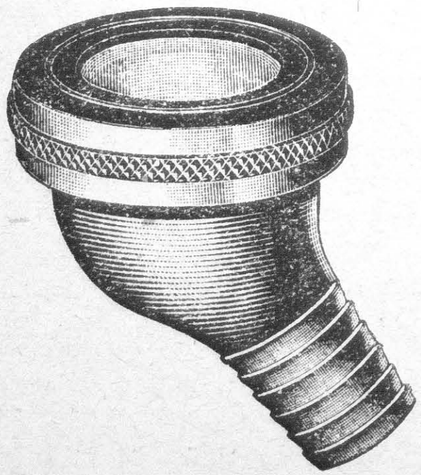
Branch Pipe. Stop Tap. Rose and Jet.

BEST QUALITY.



No. 856.

½in. 1s. 8d.; ⅝in. 2s. 0d.; ¾in. 2s. 3d. each; post paid 3d. extra.



Heavy Tap Unions.

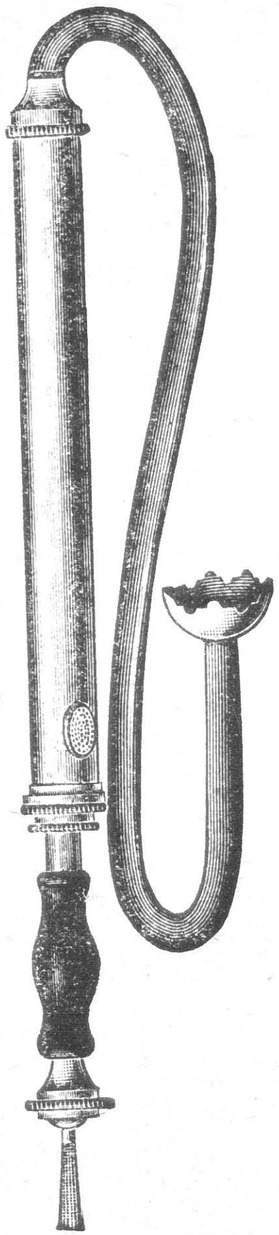
No. 857.

Well Made. Good Rubbers.

½in. .. ⅝in. .. ¾in.
9d. .. 1/- .. 1/2 each.

Post paid 2d. extra.

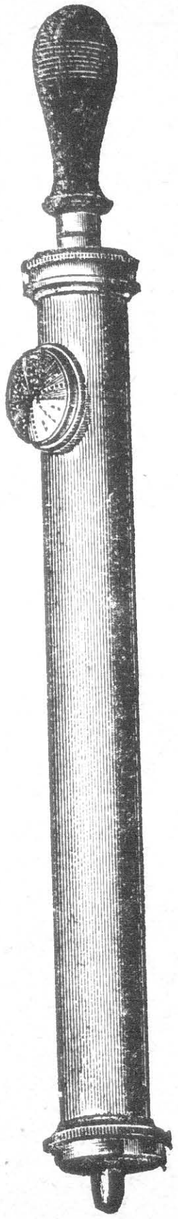
Hydroject.



No. 858.

Simple and Effective Garden Syringe. Highly Polished and Lacquered. 16in. by 1¼in., 10s. 6d. each; post paid 9d. extra.

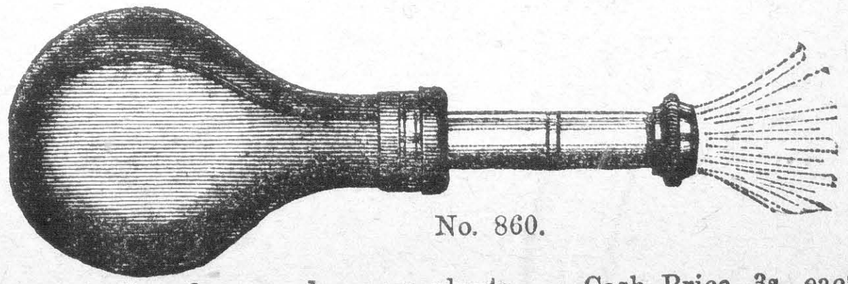
Strong Window Washing Syringe.



No. 859.

Best Finish. Polished and Lacquered.
18in. by 1¾in., 6s. each; 24in. by 1¾in., 6s. 6d. each.
Ditto, with Quick-filling Ball Valve, 2s. each extra; post paid 6d. extra.

Powder Distributors.

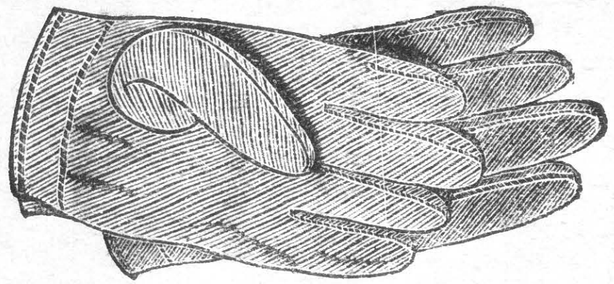


No. 860.

For spreading fine powder over plants. Cash Price, 3s. each.

Gardening Gloves.

Strong and well made.



No. 861.

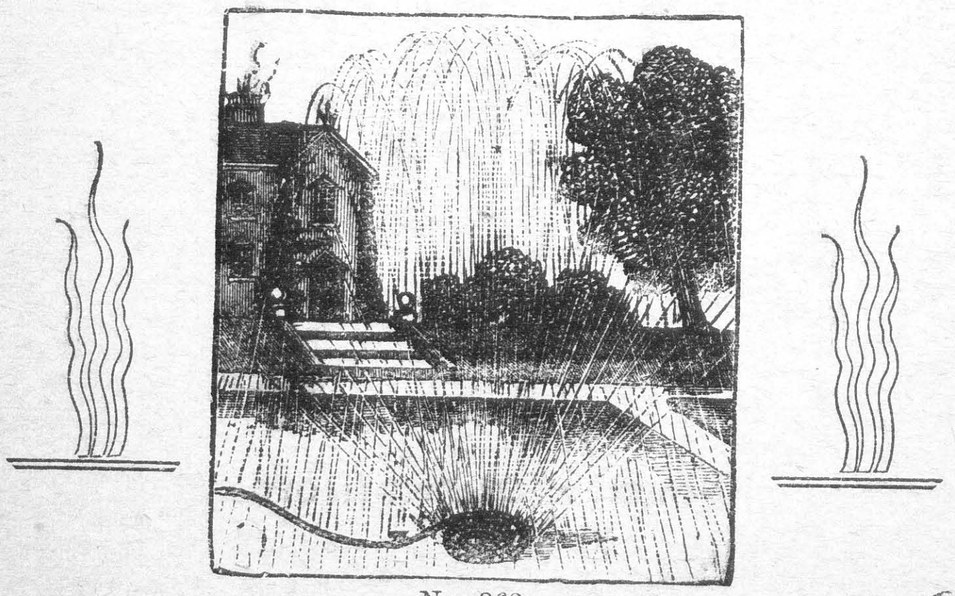
Ladies', 8d. pair; 7s. doz. pairs. | Gent's, 10d. pair; 8s. doz. pairs.

With Gauntlet.

Ladies', 10d. pair; 8s. 6d. doz. pairs | Gent's, 1/- pair; 10s. 6d. doz. pairs.

Serpentine Garden Fountain.

New! Effectual! Unbreakable!



No. 862.

Placed on the Lawn, will throw the water 20ft. to 40ft., according to power. Can be fixed to any ordinary hose. Used as a rose has all the effect of rain. Price 3s.; post free 3d. extra.

Buy one and astonish your friends.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The "Kew" Garden Engine.



IMPROVED PATTERN.

Is about Half the Price and Half the Weight of any other Pattern yet made, and is especially easy to use.

No. 863.

When being wheeled, the weight of the water is balanced above the wheels and no weight is borne by the arms. When at rest it is inclined at the angle most comfortable for working, which renders the action of pumping easy and direct. The outlet is arranged so that a full load of water may be carried without any splashing over. It can be filled with equal facility by a garden hose, or by means of a bucket, or can be run under a pump.

The Tank is made of stout galvanised steel. It is fitted with an outlet below, so that the water can be discharged if the engine is required for the purpose of a WATER BARROW.

The Pump is of strong brass, double-acting, forcing a continuous stream. It will throw a stream of water thirty feet or more, according to the power employed. It is fitted with fine and coarse roses and jet, polished black handle, and 30in. best delivery hose, ½in. by 2 ply.

The Frame is very substantial, being 1¼in. by ¼in. wrought-iron throughout, and will stand any amount of hard usage. The wheels are 2¼in. broad upon the face to prevent them cutting up gravel walks.

The extreme width of the frame is 19in., so that it can be wheeled with ease along the narrowest greenhouse pathway. The engine is fitted with polished rosewood handles, and is enamelled green and black, the whole having a very elegant appearance. Enamelled red tank can be supplied when the engine is required for a corridor fire engine. It is most useful for this purpose, and it is the only portable fire engine that can be wheeled at a run.

Design Registered No. 205,140.

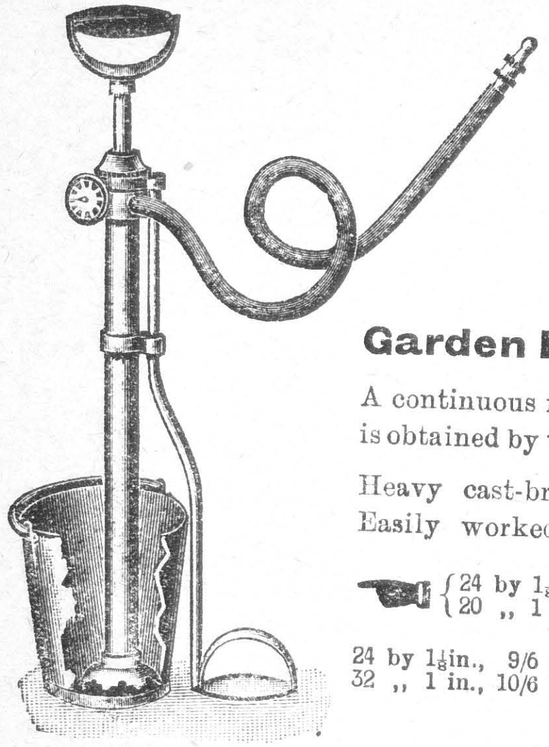
CASH PRICES:

Galvanised Iron Tank (painted), 12 gallons, £3 17s. 6d.;
16 gallons, £4 1s.

York Road, Brighton.

GENTLEMEN,—Please accept my thanks for Garden Hose received, and which I consider capital value.—Yours truly,

J. BAT.



No. 864.

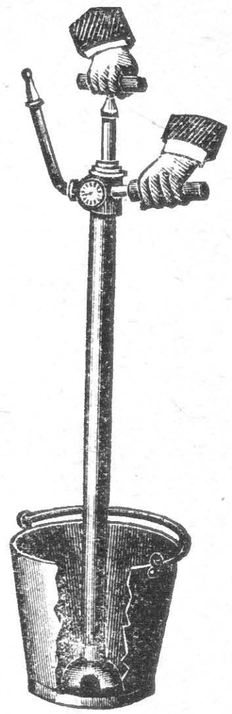
Garden Engines

A continuous flow of water is obtained by these Pumps.

Heavy cast-brass fittings. Easily worked. Reliable.

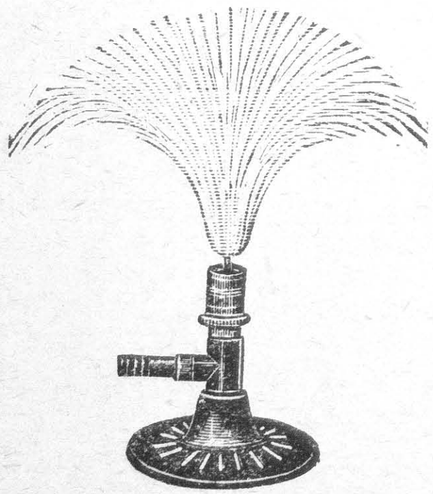
24 by 1⅛in., 12/6 each.
20 ,, 1 in., 11/6 ,,

24 by 1⅛in., 9/6 each.
32 ,, 1 in., 10/6 ,,



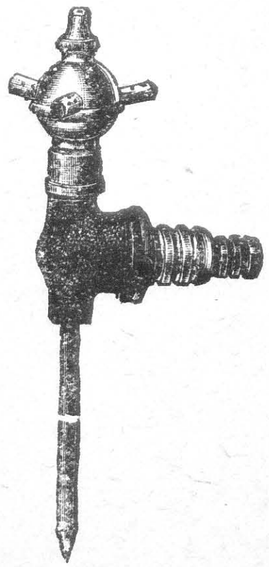
No. 865.

Lawn Sprinklers.



No. 866.

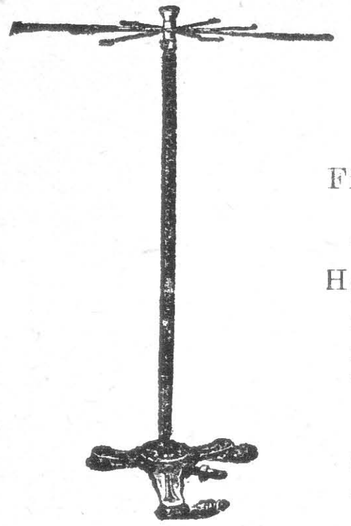
Simple Construction.
Best Make.
Cash Prices:
¼in. Hose, 3/-; ⅝in. 4/-; ¾in. 4/9 each.



No. 867.

Small and compact. Specially suitable for small lawns, flower beds, &c. Spike 16in. long, Brass Head, Tapered Connection to unscrew. Cash Price, 2s. 3d. each.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.



Lawn Sprinklers.

No. 868.

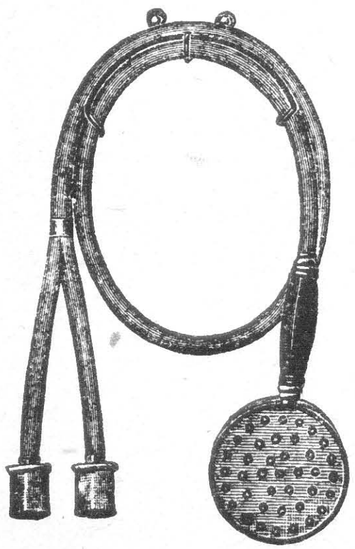
Fitted with eight arms which revolve rapidly and throw an ornamental spray over an area of sixteen feet diameter.

Head and Arms Polished and Nickel-plated; heavy Cast-iron Stand, painted Black and Red; Solid Brass Detachable Union for India Rubber Hose. Height, 3ft. 6in.

CASH PRICES:

8 Arms	...	...	...	17/6 each.
4 ,,	...	...	...	16/6 ,,

Patent "Vigorator" Bath Shower.



No. 869.

A great Sanitary Improvement in the way of Bathing, and a luxurious addition to the Bathroom. Can be attached in an instant, and is so arranged that the water can be used at any temperature. The pipes being flexible, any part of the body can be showered, avoiding the head if necessary.

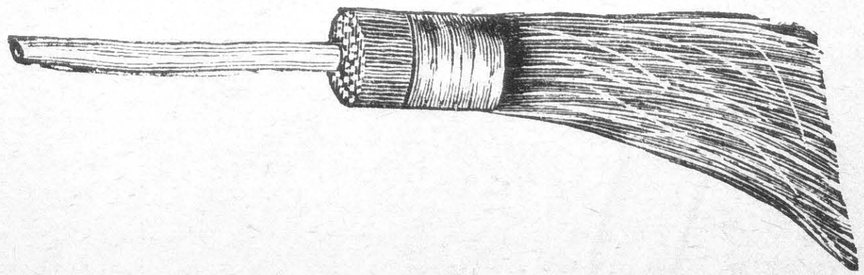
Fitted with Patent Rubber Unions as shown, which will suit oval or round taps.

For either ½, ⅝, ¾, or 1in. tap.

Cash Price, 10/6 each.

If with single Tube for Cold Water Shower only, 8/6 each.

Birch Brooms.



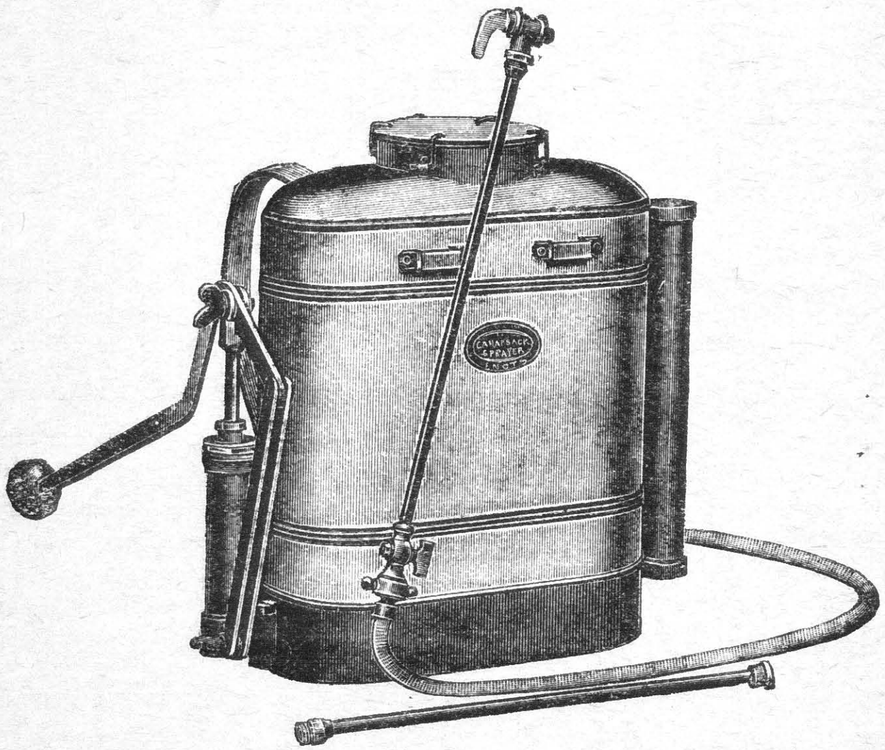
No. 870.

Cash Price, 7d. each, 6/- doz. In bundles of 2 doz., each, 5/6 doz.

"Enots" Canapsack Sprayer.

The first of its kind, and still THE BEST.

This is a powerful and effective Portable Sprayer. It is easy to work, and comfortable to carry. All the working parts are outside the tank, and so are accessible.



No. 871.

The Tank is of stout copper—capacity, 3 gallons.

The Pump Lever is reversible: it may be worked either right or left hand.

The Delivery Hose is of special quality, 4ft. supplied. Fitted with brass lance, 33in. (in two parts).

The Jet (Powell's Patent) is the best all-round spray jet; it sprays at any angle, and covers a large area. It is cleared of obstruction by merely turning the plug round, and the grit is flushed out at the back.

IMPORTANT FEATURES.

There are two simplified Ball-Valves only, which are handy for inspection.

The Air Chamber is large, and maintains a continuous and uniform spray.

The Lid is comparatively watertight—liquid will not splash on to the back of the operator.

The Inlet is large, and is fitted with a suitable gauze strainer.

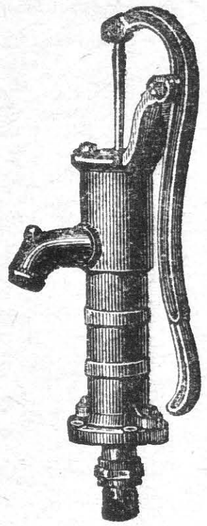
There is nothing about the machine to give trouble.

Cash Price, 45/- each.

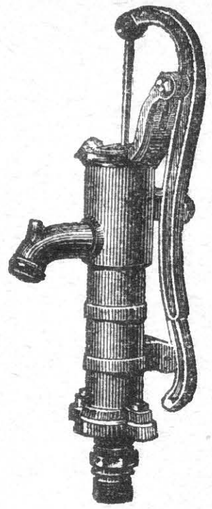
Awarded Silver Medal at both Wisbech and Middlesex demonstrations.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

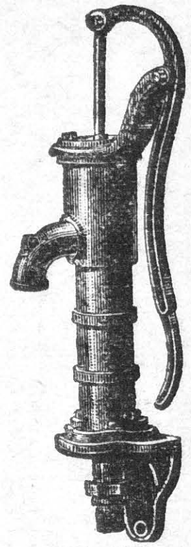
Colonial Suction Pumps.



No. 872.
With Bolt-Fastened Flanged Base.



No. 873.
With Lugs or Brackets for fixing to wall or plank.



No. 874.
With Bracketed Base.

These Pumps have revolving fulcrum top, which allows the handle to be used in any position desired. The barrels are truly bored, and the pumps fitted in the best possible manner. The tail-pieces are fitted with cast-iron coupling nut screwed for iron tube. If with brass tail for lead pipe, Nos. 0, 1, 2, 3, 9d. extra; remainder 1s. 6d. extra.

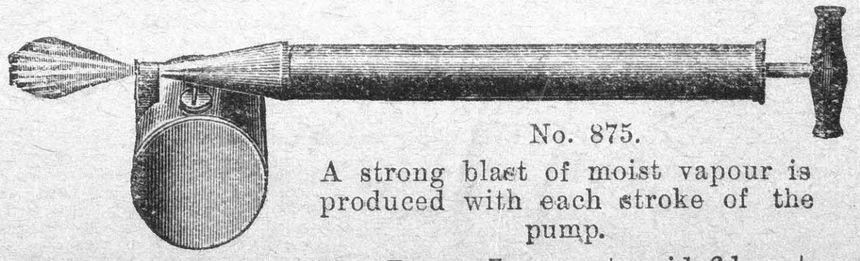
These pumps are Anti-freezing. By raising the handle to its full length the valve is tilted and the barrel emptied of water.

Either of above patterns.

No.	Diameter Barrel.	Diameter Suction Pipe.	Capacity per hour. Gallons.	Lift.	Cash Prices. Iron. £ s. d.	Cash Prices. Iron, Brass Lined. £ s. d.
0	2 in.	1 in.	100	25ft.	0 8 3	0 13 2
1	2¼in.	1 in.	155	25ft.	0 9 6	0 14 4
2	2½in.	1¼in.	190	25ft.	0 10 9	0 15 8
3	2¾in.	1¼in.	230	25ft.	0 12 0	0 17 4
4	3 in.	1½in.	275	25ft.	0 13 2	0 19 3
5	3¼in.	1½in.	375	25ft.	0 15 8	1 3 0
6	3½in.	1½in.	435	25ft.	0 19 0	1 9 0
8	4 in.	2 in.	570	25ft.	1 6 6	1 14 3

Vaporiser.

The most Economical Distributor of Disinfectants and Insecticides.

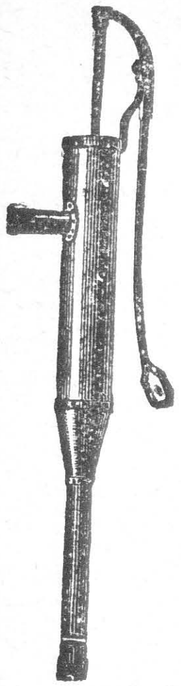


No. 875.

A strong blast of moist vapour is produced with each stroke of the pump.

Enamelled Tin, 4s. 6d.; Brass, 7s.; post paid 6d. extra.

Galvanised Sheet Steel Barge and Contractors' Pump.



No. 876.

No. 876.

The well-known Portable Galvanised Sheet Steel Pump, 7ft. 6in. under spout, for barges and contractors' use.

No. 877.

Is a Galvanised Sheet Steel Sliding Suction Pipe, 8ft. long. Can be used with this Pump.

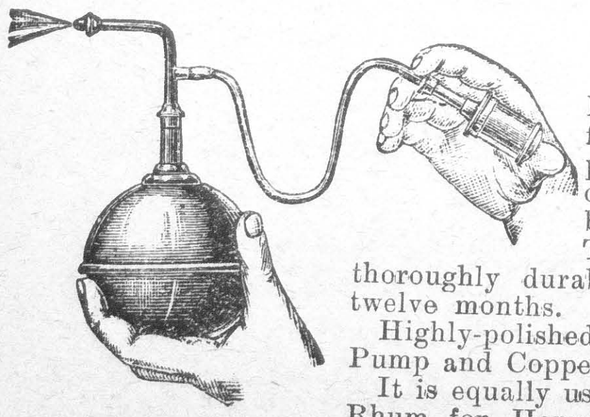


No. 877.

	Diameter of Bore of Working Barrel ..	Ins.	3	4	5	6
	Diameter of Bore of Suction Pipe	Ins.	1½	2	2½	3
	Approximate Capacity per hour	Galls.	410	730	1140	1650
No. 876.	Standard Pattern	Cash Prices	44/-	47/-	51/-	59/-
	Galvanised Suction Pipe for above, per foot extra	,,	1/11	2/2	2/5	2/8
No. 877.	Sheet Steel Sliding Suction	,,	13/9	14/9	16/6	18/6

Pneumatic Spray Diffuser,

For Use with Insecticides, &c.



No. 878.

SPECIAL FEATURES.—Produces a beautifully fine spray; no corrosion possible; no rubber ball or valves to perish; no blowing with the mouth. The whole article is thoroughly durable, and warranted for twelve months.

Highly-polished Brass Jet and Air Pump and Copper Bottle, post free 6s.

It is equally useful for distributing Bay Rhum for Home and Hairdressers' use, and also for Spraying Disinfectants and Deodorisers in sick rooms and hospitals.

Double Acting Semi-Rotary Pumps.

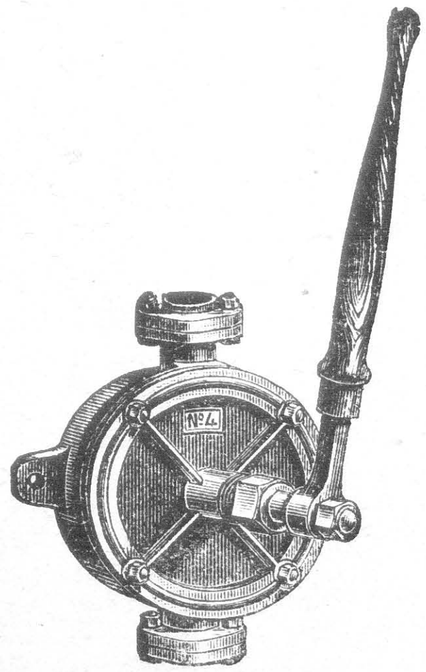
We can confidently recommend these pumps as being superior to any pump of the same type now in the market. They are produced by special machinery which has been laid down for the purpose, and great care and attention are bestowed upon their manufacture.

All pumps are tested and proved to be perfect as regards vacuum and against pressure before leaving the Works.

No. 879.—Semi-Rotary Pump, with cast-iron body, cover and connections, and brass wing, valves, seatings, and spindle bearings. The spindle is of steel, squared where handle is fixed on, allowing of its being secured in any position desired.

No. 879B.—Semi-Rotary Pump, with the whole of the pump and working parts in brass. The spindle is steel and as stated above. The handle may be fixed in any position desired.

These Semi-Rotary Pump bodies are bored and faced, and the valves and working parts machined by special tools. The cover makes a joint with the moving parts in a special manner, and ensures the satisfactory working of the pump.



No. 879.

NOTES.—Where a pump is only in occasional use for water, an All-Brass Pump is recommended.

The pumps are suitable for a vertical suction of 25ft. and a vertical delivery of 100ft.

Where there is a greater suction than 4ft. a foot valve and strainer should be used.

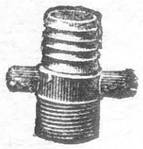
A foot valve and strainer is suitable for absolutely clear water, but for water containing grit a foot valve and sand strainer is recommended.

Unless the suction pipe is fitted with a foot valve we cannot be responsible for the satisfactory working of the pump.

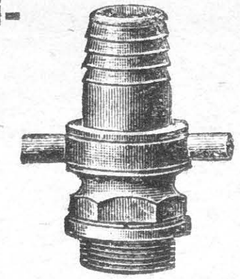
In frosty weather the frost plug should be removed, and the pump emptied of water by a few strokes of the handle.

Number of Pump	0	1	2	3	4	5	6	7	8
Diameter of Bore of Suction and Delivery Pipes .. Ins.	⅛	¾	1	1¼	1¼	1½	1½	2	2
Water capacity per hour Galls.	240	420	450	570	870	960	1320	1560	2310
Approximate weight. No. 879 Lbs.	12	15	18	24	31	39	48	67	72
Approximate weight. No. 879B Lbs.	10	12	16	22	27	35	43	61	65
	CASH PRICES.								
No. 879. Iron Pump, Brass Valves and Seatings ..	15/-	16/6	20/-	24/-	30/-	33/-	40/-	48/-	58/-
No. 879B. All Brass Pump, Valves and Seatings ..	20/6	23/-	30/-	41/-	50/-	61/-	70/-	83/-	114/-

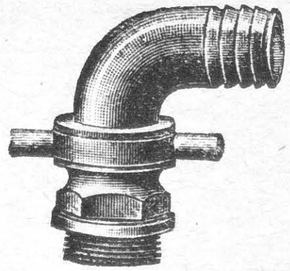
Fittings for Semi-Rotary Pumps No. 879.



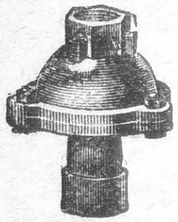
No. 1.



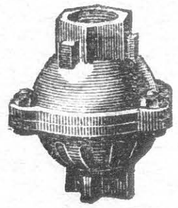
No. 2.



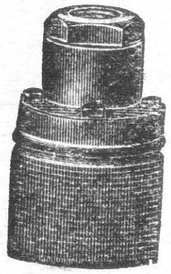
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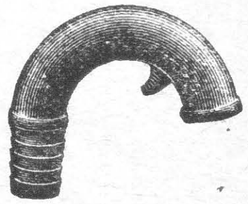
No. 4.



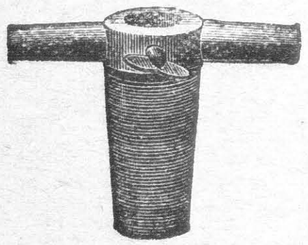
No. 5.



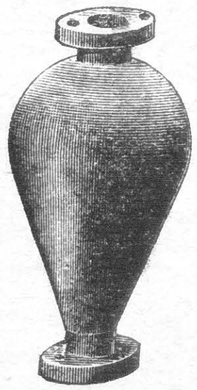
No. 6.



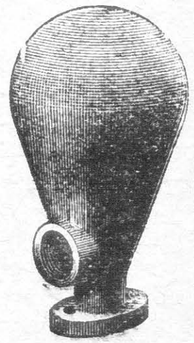
No. 7.



No. 8.



No. 9.



No. 10.

CASH PRICES.

No.	Size of Pipe Suitable for—	Inches. ½	¾	1	1¼	1½	2
1	Brass Iron to Hose Connecter	1/6	1/6	1/10	2/3	2/8	3/5
2	Brass Iron to Hose Union	1/6	2/3	3/-	3/9	5/3	8/9
3	Brass Iron to Hose Bent Union	1/10	2/8	3/9	4/6	6/-	9/9
4	Cast-iron Holding-up Valve screwed for Iron	3/3	3/3	3/3	3/9	4/9	6/-
5	Cast-iron Foot Valve and Strainer Screwed for Iron	2/9	3/-	3/-	3/6	4/2	5/4
6	Cast-iron Foot Valve and Sand Strainer Screwed for Iron	4/6	4/10	6/5	7/2	9/-	11/8
7	Cast-iron Hooked Spout for Hose	9d.	10d.	1/-	1/2	1/6	—
8	Cast-iron Taper Piece for fixing Suction Pipe in Barrel	3/9	3/9	4/2	4/2	4/6	—
9	Cast-iron Air Vessel with Dip Pipe ..	4/6	5/3	5/3	7/3	9/9	—
10	Cast-iron Air Vessel with screwed Outlet at Side	4/6	5/3	5/3	7/3	9/9	—
	Iron Tubing in 2ft. to 12ft. Lengths, screwed each end, and complete with one screwed Joint to each piece .. .. .. per ft.	3d.	3½d.	5d.	6½d.	8½d.	1/-
	Bends .. .. each	7d.	8d.	10d.	1/2	1/6	2/6

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Contractors' Diaphragm Pumps.

These pumps are most suitable for contractors and general service for raising large quantities of water from depths not exceeding 25ft. In the Diaphragm Pump a rubber diaphragm takes the place of the bucket or plunger in an ordinary pump which enables it to easily deal with water containing foreign matter such as sand, grit, small stones, chips, &c., and it is also a most suitable pump for dealing with sewage matter and liquid manure. There is very little friction in a Diaphragm Pump as compared with an ordinary Plunger Pump, so that a man is able to lift greater quantities of water with the Diaphragm Pump than with the ordinary pattern.

The diaphragm is of best quality rubber. The valves are of metal rubber faced, and are readily accessible.

No. 880.

It will be seen from the engraving that this pump is designed so that the relative positions of the lever, spout, and suction inlet can be varied to suit customer's requirements, but unless specified to the contrary the pump is always supplied as shown in engraving.

The Bottom Inlet Pump is usually screwed female for iron pipe, and is intended to be placed in a permanent position for pumping bilge out of a ship or fixed over a dumb well. It can, however, be fitted with connections for hose at the extras given.

The Side Inlet Pump is the one usually used by contractors, and is intended to be mounted upon a baulk of timber and moved from place to place as required. The suction inlet is screwed male as shown. Hose unions, &c., may be supplied at the extras given in list.

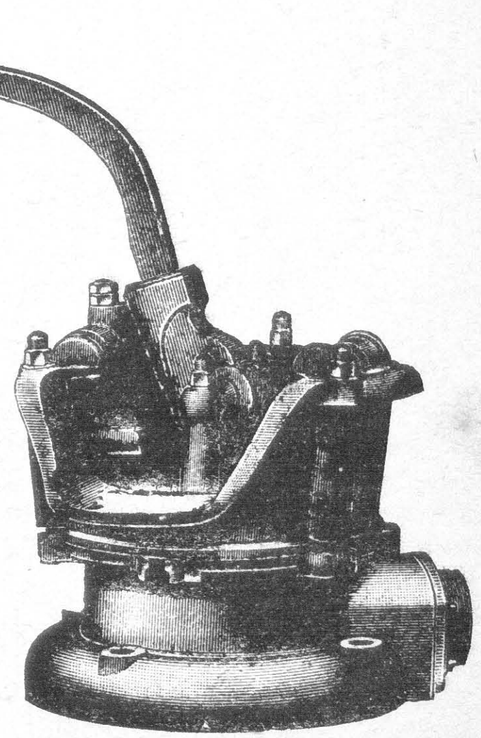


Illustration shows Side Inlet Pump.

	No. 2	No. 3	No. 4
Size of Pump			
Bore of Suction Pipe	2½ ins.	3 ins.	4 ins.
Nominal capacity in gallons per hour	1800	4000	6000
	CASH PRICES.		
	£ s. d.	£ s. d.	£ s. d.
Bottom Inlet Pump	4 11 0	5 4 0	9 10 0
Side Inlet Pump	5 12 0	6 4 0	12 0 0
FITTINGS AND ACCESSORIES FOR DIAPHRAGM PUMPS.			
Brass Half-hose Union for Side Inlet Pump	0 12 0	0 16 0	1 5 0
Brass Iron-to-hose Union for Bottom Inlet Pump ..	1 4 0	1 10 0	2 10 0
Cast-iron Foot Valve and Strainer, with connection Ribbed for Hose Pipe	0 15 0	1 0 0	1 12 0
Cast-iron Foot Valve and Strainer screwed for Iron Tube	0 10 0	0 13 0	1 2 0
Special 4-ply Vulcanised Rubber and Canvas Suction Hose, wired inside .. .. .. per ft.	0 3 9	0 4 7	0 6 5
Special Wrought-iron Clips for securing hose to unions .. .. per union	0 4 0	0 6 0	0 7 0
Spare Diaphragms .. .. each	0 15 0	0 18 0	1 2 0

Price for Diaphragm Lift and Force Pumps on application.

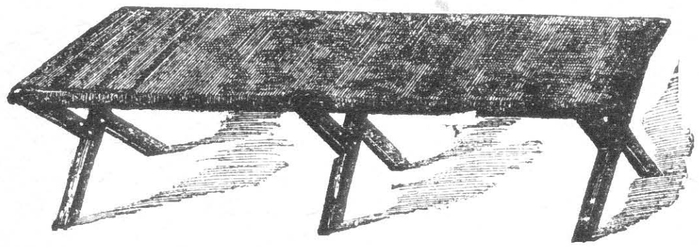


Folding Iron Tables,
suitable for Garden or Café.

No. 881.

Strong Wrought-iron Framework, Strong Top, 22in. diameter. Cash Prices: 4/9 each; 52/- per doz.

Military Folding Bed.



No. 882.

Size Open. 6ft. 2in. long, 2ft. 3in. wide, 1ft. 3in. high.

Specially selected Birchwood Frame, fitted with strong steel fittings, covered with best quality brown canvas with slips for pillow. Easy to open and fold, and combines a maximum of strength with minimum of weight. Cash Price, 12/6.

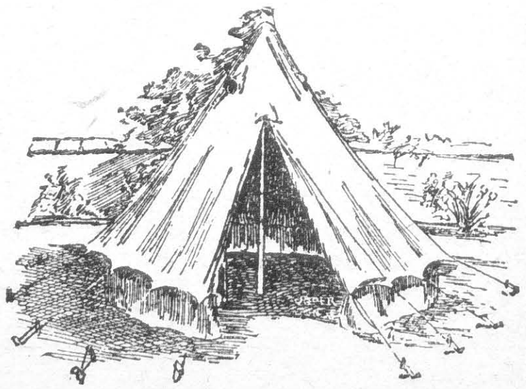
Army Bell Tents.

Waterproof canvas, with pole, pegs, wallet, and lines, in bag complete, ready for use.

40ft. in circumference, 10ft. in height. Cost the Government £5 each.

These tents are almost in as good condition as when originally supplied under contract to H.M. Government, and are really extraordinary value, whether for garden use or other purposes.

Ten persons can dine comfortably in one of these tents.



No. 883.

Cash Price 40/- each, complete; subject to being in stock on receipt of order.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

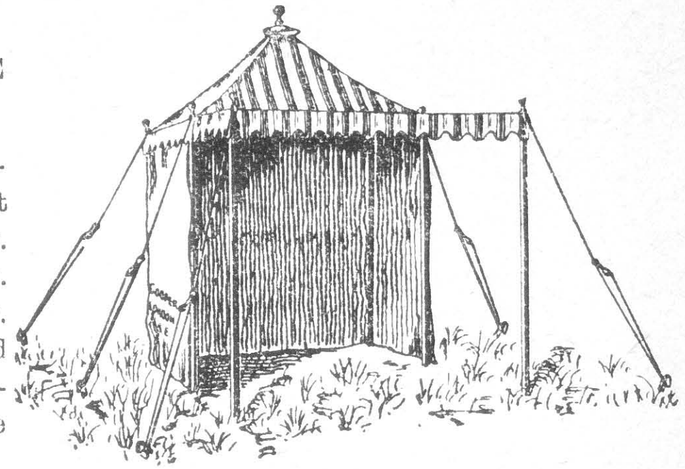
Garden Tents.

No. 884.

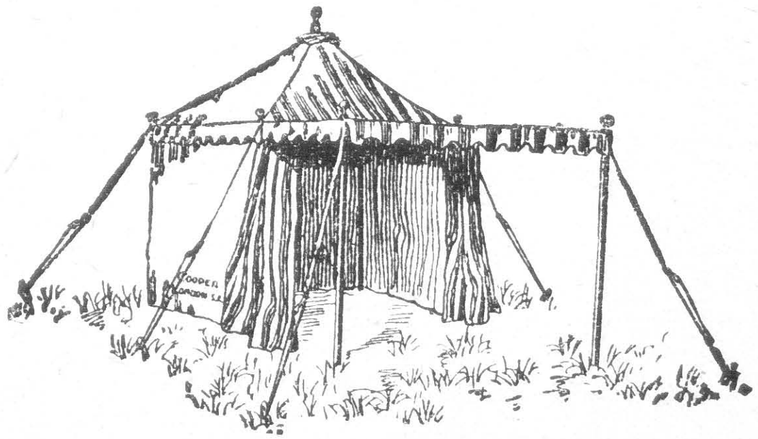
NO CENTRE POLE

Wonderful Value.

This is an illustration of our cheapest Striped Cloth Tent. Size 12ft. by 6ft. including Awning, scalloped edges, and fitted with ventilator. A tent that we can recommend.



	Cash Prices. £ s. d.
Plain Cloth, extra strong, scalloped edges, framework deal ..	1 17 6
Striped Cloth (as illustration), framework polished deal ..	2 5 0
Best Striped Cloth, superior quality, scalloped edges, framework deal	2 12 6



No. 885.

NO CENTRE POLE.

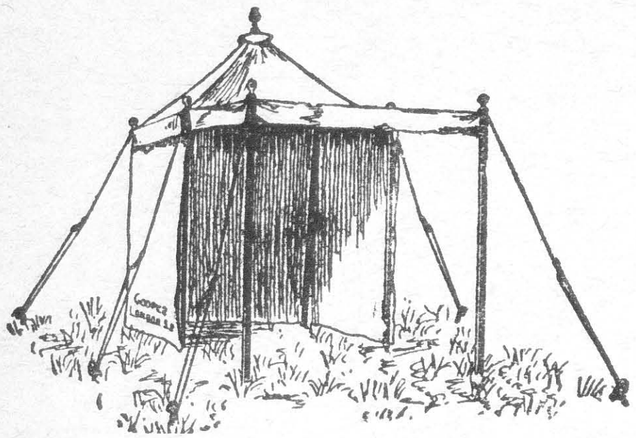
Our very best Garden Tent—a marvel at the price. Size 14ft. by 8ft., including Awning. Framework of deal, very strong, fitted with special ventilation.

	Cash Prices. £ s. d.
Plain Cloth, extra strong, scalloped edges	2 10 0
Striped Cloth, extra strong, scalloped edges	3 0 0
Best Striped Cloth, extra strong, scalloped edges, with Curtains to close	3 12 6

Curtains only supplied with best quality Tent. If desired for cheaper Tents, 10s. 6d. extra.

For Garden Parties, Tennis and Afternoon Tea, this Tent is pronounced by all—Excellent.

Garden Tents.



No. 886.

NO CENTRE POLE

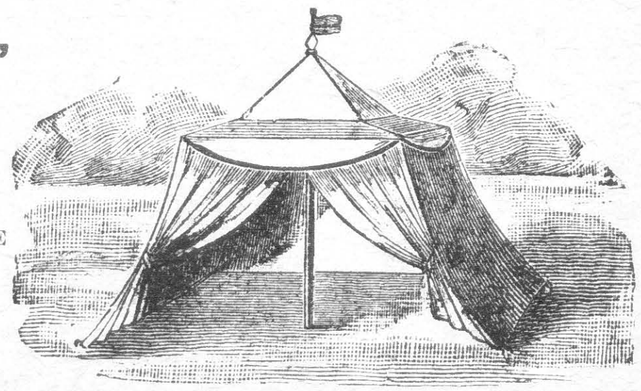
The Cheapest Tent.

Very strong and well made.

Framework of deal, size 12ft. by 6ft., including Awning, fitted with ventilator, white cloth, as illustration.

Cash Prices, £1 15s. Striped Cloth, £2 5s. Rot-Proof Green, £3 10s.

The "Million" Tent.

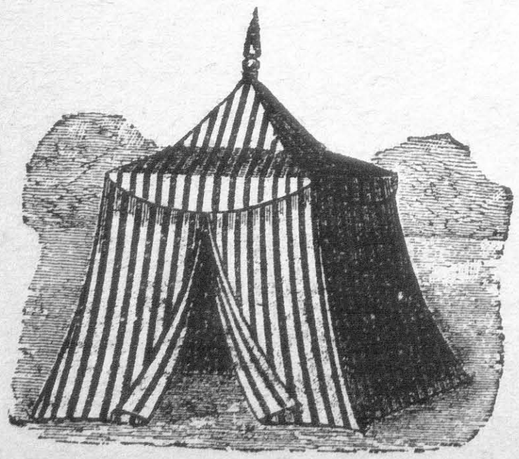


No. 887.

EXTRA STRONG CANE STRETCHERS.

6ft. square at Base.

	Cash Prices. £ s. d.
Plain Cloth (no front curtain)	1 1 0
Plain Cloth, with Front as Illustration	1 10 6
Striped ditto ditto	2 1 6



The "Surprise."

No. 888.

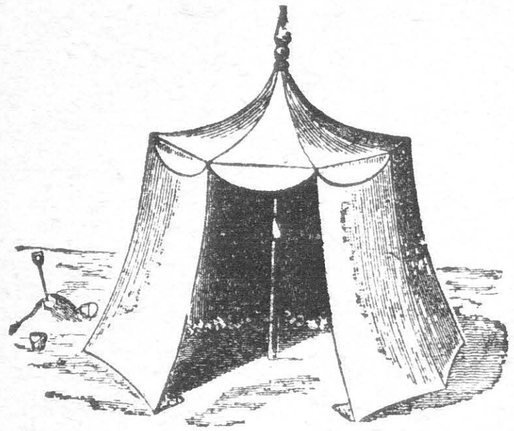
8ft. square at base. Strong Polished Wood Frame.

With Centre Pole.

	Cash Prices. Roof lined Green.
Plain Cloth	42/- 53/-
Striped Cloth ..	60/- 67/-
Rot-proof (Green)	70/- 77/-

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The "Seaside" Bathing Tent.

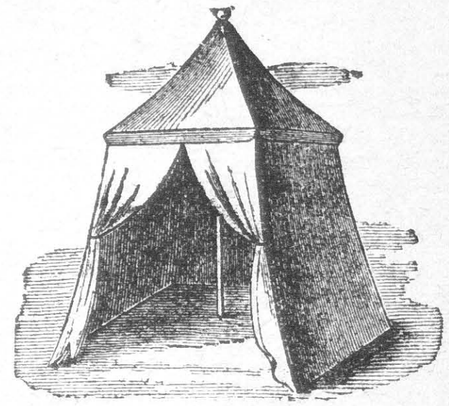


No. 889.

6ft. across at Base, with door and flaps for sand or shingle.

	Cash Prices. Roof lined Green.
Plain Cloth	25/- 34/-
Striped Cloth	38/6 45/-
RotProof Cloth, Green	50/- 56/-

"La Petite."

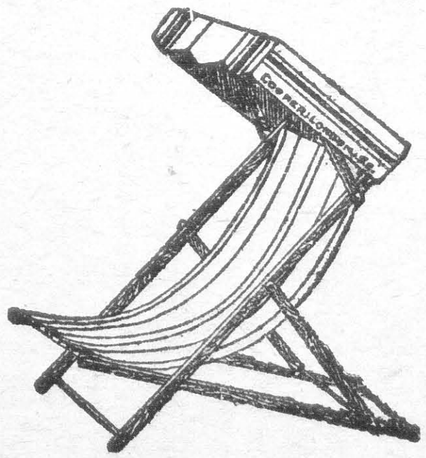


No. 890.

Jointed Pole, complete with pegs 5ft. across at base.

	Cash Prices. Roof lined Green.
Plain Cloth	21/- 24/-
Striped Cloth	26/- 29/-

Folding Hammock Chair with Canopy.

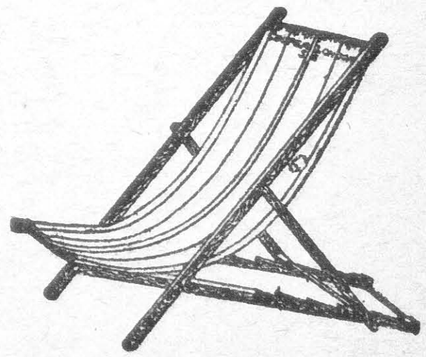


No. 891.

Birch Frame with Canvas Seat.

Cash Price, 5s. 9d.

Folding Hammock Chair.



No. 892.

Special Value. Wood Frame. Strong Canvas.

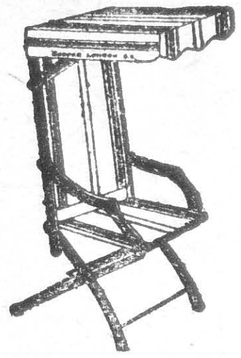
Cash Price, 1s. 11d. each; 22s. per doz.

43, Compton Road, Preston Park, Brighton.

DEAR SIR,—Chairs and Hand Lights to hand this morning, and I am very pleased with them. It will give me pleasure to recommend you to my friends.—Yours truly,

J. BROWN.

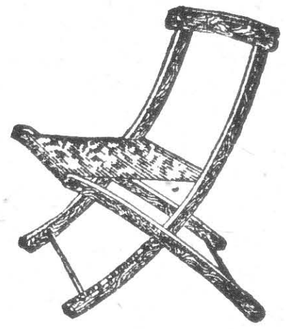
Folding Chairs.



No. 893.

Birch Frame, Back and Seat of Best Canvas, with Canopy.

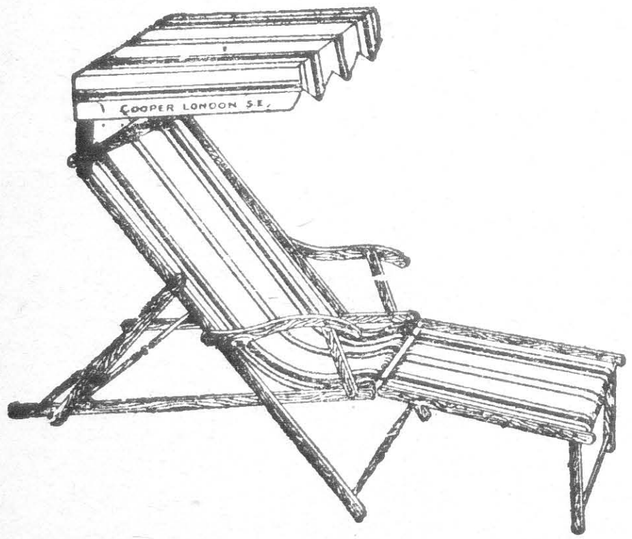
Cash Price, 6s. 9d.



No. 894.

Birch Carpet Seat, Full Size.

Cash Price, 1s. 9d.



No. 895.

Birch Frame, with Canvas Seat, complete with Arms, Foot Rest and Canopy.

Cash Price, 8s. 6d.

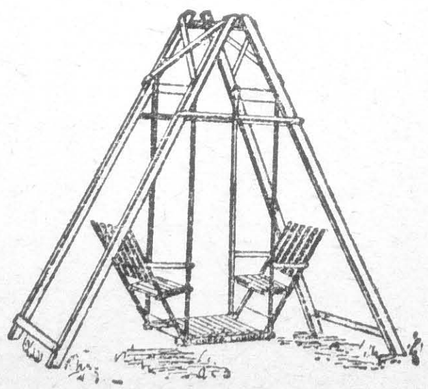
Folding Lawn Swing.

No. 896.

Handsome and Effective.
Nicely Painted and Varnished.
Suitable for Children.
Amusement for Young and Old.
Easiest Operated Swing on the Market.
Light and Strong.

8ft. 6in. High. 4ft. Wide.
10ft. Spread. Seat 18in. Wide.

Cash Price, £2.



Garden Seat.

No. 897.

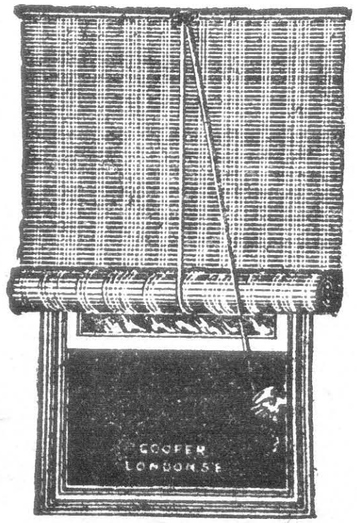
Length, 3ft. 2in., Depth of Seat 1ft. 6in.

Birch Frame, Canvas Seat and Back, with Canopy Complete.

Cash Price, 16s. 6d.



Split Bamboo Sun Blinds.



No. 898.

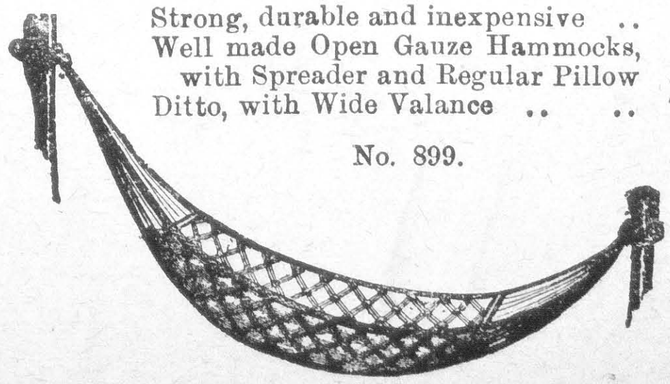
Fitted with Cords and Pulleys.
The Cheapest, Simplest, and Best.
Will last for years.

Width. ft.	Depth. ft.	Cash Prices, each. Dark Green. s. d.	Natural Colour. s. d.
3	8	3 0	2 6
3½	8	3 6	3 0
4	8	4 0	3 6
6	8	6 0	5 6
8	8	7 6	7 0
10	8	11 0	10 0

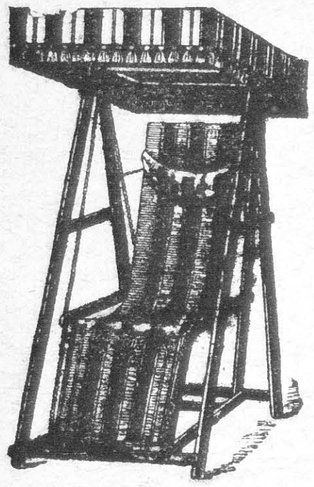
Oriental Hammocks.

	Cash Prices.
Strong, durable and inexpensive ..	2s. 6d. each
Well made Open Gauze Hammocks, with Spreader and Regular Pillow	5s. 0d. „
Ditto, with Wide Valance	7s. 6d. „

No. 899.



Swing Garden Chair.



No. 900.

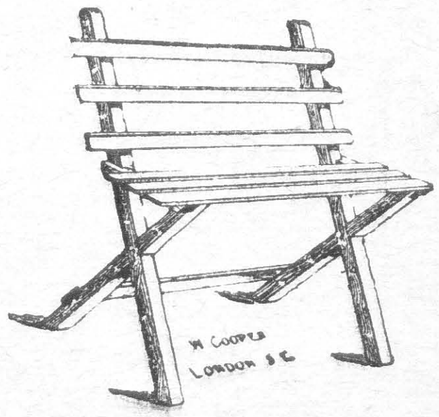
This chair is made of the best materials throughout, with Tinned Weldless Chains and Fittings. The balance is perfect, and the chair readily adjusts itself to the position of the body. Folds flat without detaching any part.

Height of Stand, 6ft. Width, 3ft. 3in.
Length of Chair when extended, 5ft. 9in.

	Cash Price.
Polish Birch, Best Striped Canvas, complete with Canopy	25s.
Ditto, Green Willesden Rot-proof Canvas	31s.

Very Strong Comfortable Seats.

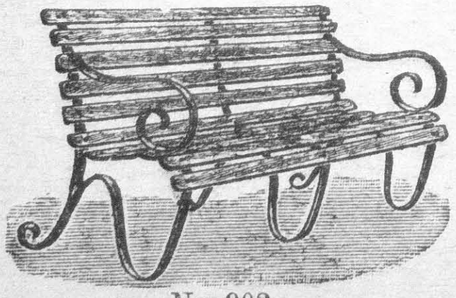
No. 901.



Made of good, sound well-seasoned timbers. Framework 2in. by 1½in.; lags 2in. by 1in., all nicely planed and properly fitted together—halved in, not simply spiked.

	Width. ft. in.	Cash Prices. £ s. d.	Per doz. £ s. d.
For one person	2 0	0 3 6	1 17 6
„ two „	3 0	0 4 6	2 8 0
„ three „	4 6	0 5 6	3 0 0

Strong Garden Seats.



No. 902.

Painted ironwork and varnished lags, wrought-iron standards and arm rests.

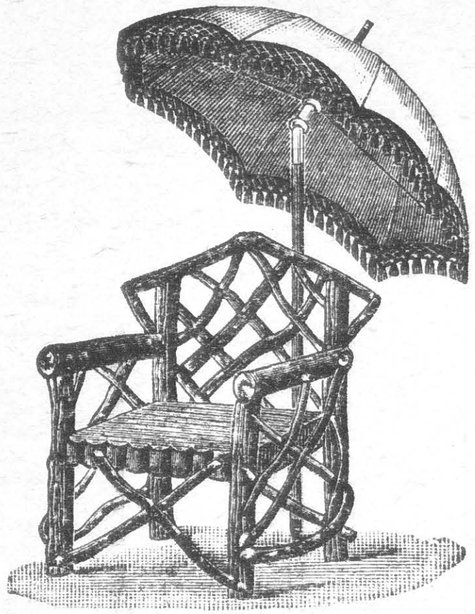
Cash Prices:

3ft.....10s. 6d.
4ft.....14s.
5ft.....17s. 6d.
6ft.....21s.
7ft.....24s. 6d

The 5ft., 6ft. and 7ft. sizes have three Standards.

Special quotations for large quantities. Any design made to order.

Garden Umbrellas.

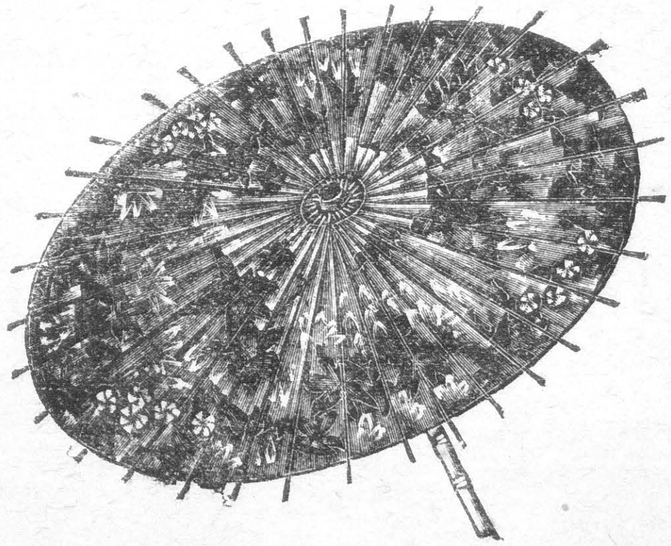


No. 903.

Umbrella only, 4ft. over top, fitted with fan turn-over joint as illustrated.

	Cash Prices. each.
White Cloth without fringe	8/7
Drab outside, Green inside „ ..	9/5
Striped Sateen „ ..	9/8
Turkey Red „ ..	11/-
White Cloth, trimmed fancy fringe, as illustrated	11/-
Drab outside, Green inside „ ..	12/-
Striped Sateen „ ..	12/2
Turkey Red „ ..	13/6

Japanese Tent Umbrellas.



No. 904.

Lined and decorated inside and out. Double papers. Extra Poles. Bright coloured decorations.

Cash Prices.	6	7	8	9	10	12 ft. diameter.
	3/6	4/9	6/9	9/6	12/-	17/- each.

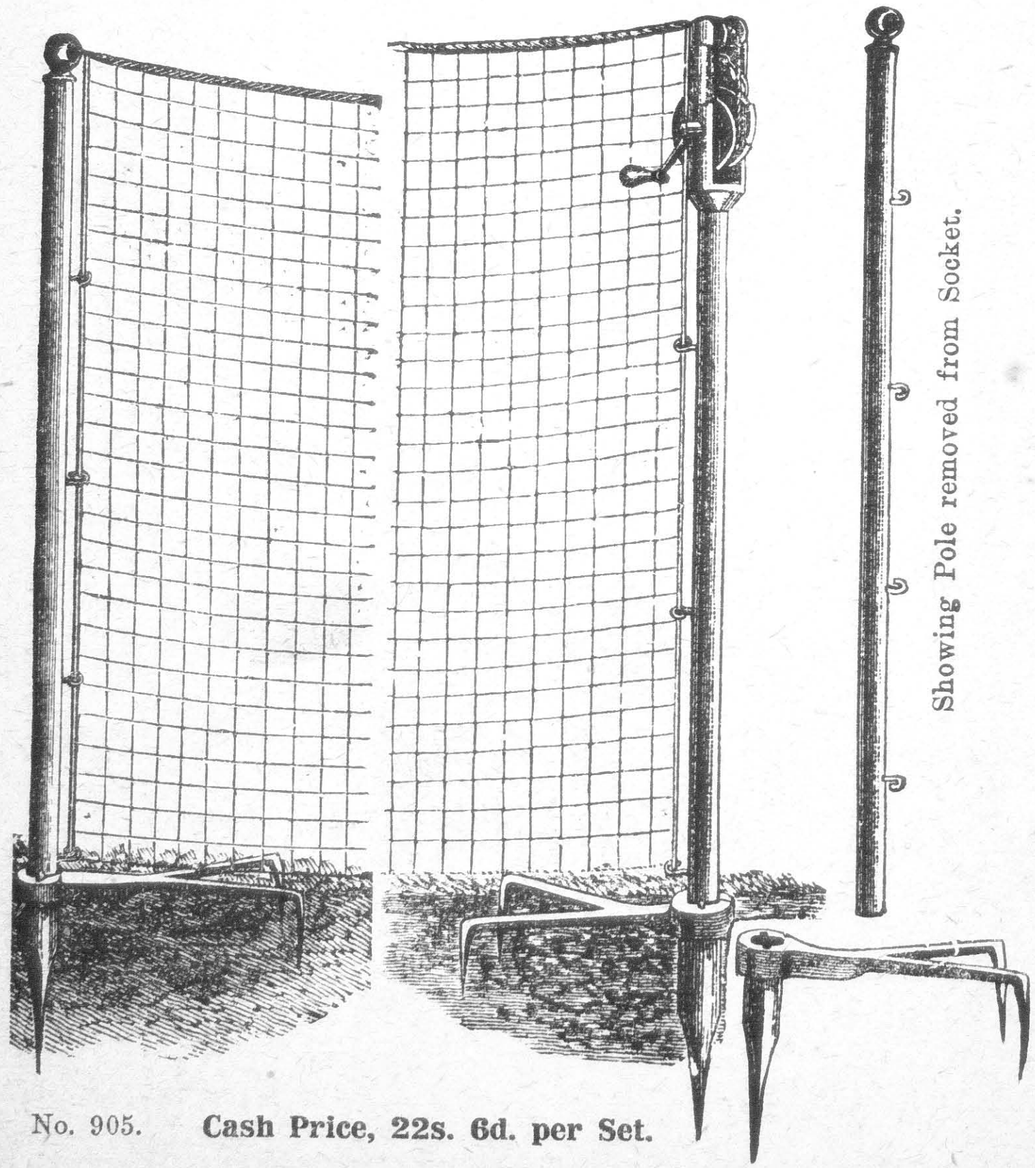
Sandhurst, Berks.

SIR,—Lawn Mower arrived safe. Works splendidly.—Yours respectfully,
W. MENZIES.

T

Lawn Tennis Poles.

Require no guy ropes; made of iron, not affected by the weather, are easily erected, will keep the net at exact regulation height. The stretching of the net is accomplished by a simple but effective windlass with cranked handle, can be easily used by a lady or child. The sockets have claw stays which take the place of guy ropes, and give a firm grip of the earth, and there is no possibility of the poles inclining towards each other when the net is firmly stretched, and being fixed below the surface no impediment is placed in the way of using a lawn mower, and players cannot trip over them. The poles being independent of the sockets can be removed for storage or mowing, leaving the sockets in the lawn unobservable. A cord is sent with poles to keep the net at regulation height in the centre, and is so arranged at top that the cord of net when struck with the ball cannot jump out.

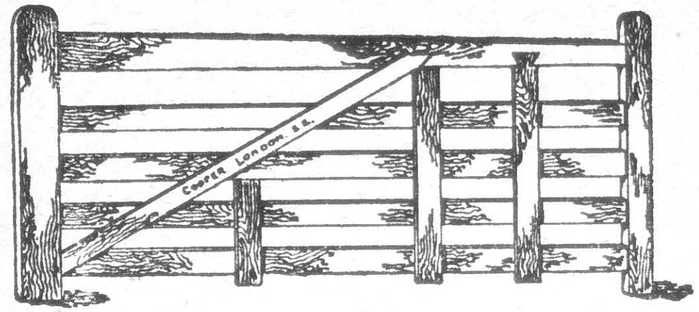


Showing Pole removed from Socket.

No. 905. **Cash Price, 22s. 6d. per Set.**

No. 906.	36ft.	TENNIS NETS	5/-,	7/6,	10/-,	12/6,	15/-,	—	Cash Prices.
	42ft.	Do.	6/6,	8/6,	10/6,	12/6,	15/-,	18/-	

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.



No. 907.

Field Gate.

Made of good seasoned Deal.

Very strong; well made.

Size 10ft. by 4ft. Cash Price, 8s. 6d. each.

If painted with Rot-proof Composition, 1s. 3d. per Gate extra.

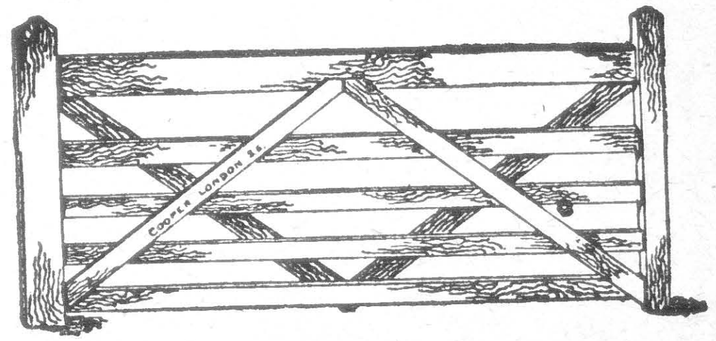
If planed for painting, 11s. each. 10ft. by 4ft. 4in., 6d. each extra.

Field Gate.

Extra braced; very strong.

Made of good seasoned Deal.

Size, 10ft. by 4ft. Cash Price, 9s. 6d. each.

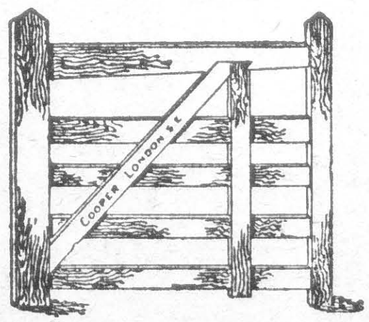


No. 908.

If painted with Rot-proof Composition, 1s. 3d. per Gate extra.

If planed for painting, Cash Price 12s. each.

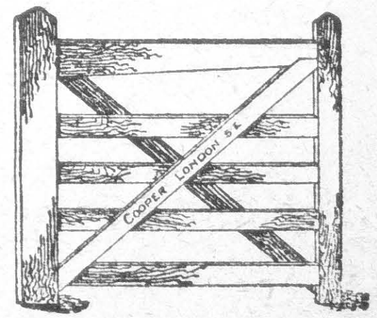
10ft. by 4ft. 4in., 10s. each. If planed for painting, 12s. 6d. each.



No. 909.

Cash Price, 7s. 6d. each.

Hunting Gates.



No. 910.

Cash Price, 8s. each.

Size, 5ft. long by 4ft. high.

Either of above Planed for Painting.

Cash Price, 9s. 6d. each.

If painted with Rot-proof Composition, 1s. 3d. per Gate extra.

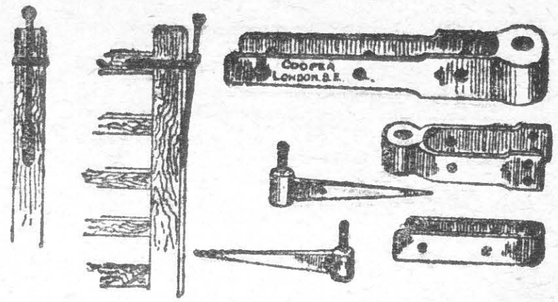
Gate Irons.

Top band 2ft. long, to be fastened with Three Bolts, Head Iron, Bottom Band, and Two Hooks.

Cash Price, 5s. 6d. per Set.

Gate Springs and Catch Complete.

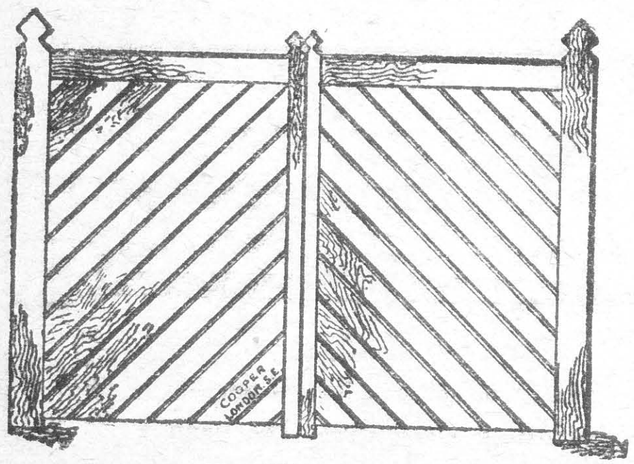
Cash Price, 3s. 6d. per Set extra.



No. 911.

Bolts and Brads for fixing, 9d. per set extra.

Gates hung with these Irons will last many years.



No. 912.

Yard Gates.

To fill a space 10ft. by 6ft.

Cash Price, 60s. pair.

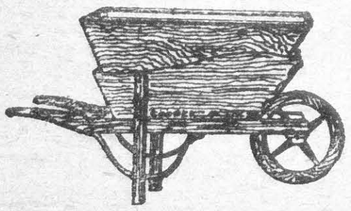
Prepared for painting.

The strongest and most useful Gates made.

3in. by 3in. heads.
3in. by 4½in. hanging styles.
3in. by 3in. top rail.
2in. by 4½in. middle and bottom rails.

Cladded with 1in. by 7in. prepared matchboards.

Made to any size, 1s. per square foot.



Stable Barrows.

No. 913.

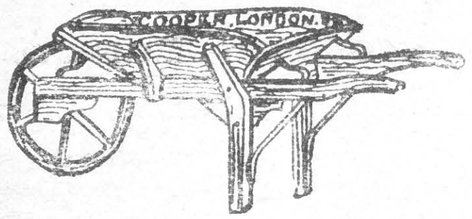
Strongly made of Ash and Elm, well ironed up.

Length of side. ft. in.	Length of top. ft. in.	Depth of top at wheel end. ft. in.	Width of top at wheel end. ft. in.	Cash Prices. £ s. d.
4 8	3 0	1 2	2 2	1 7 6
4 10	3 4	1 4	2 4	1 12 6
5 0	3 8	1 6	2 6	2 0 0

If fitted with Handle Board, 2s. extra. Painting 3 coats, plain colour, 5s. extra.
Shifting Top as illustration, 7s. 6d. extra.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Navvy Barrows.



No. 914.

Made of Ash and Elm, strong iron wheel.

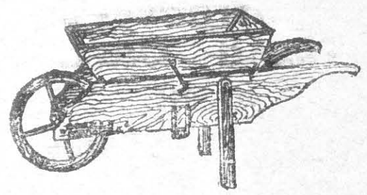
	Cash Prices. £ s. d.
A—Strong	0 10 6
BXX—Strong	0 12 6
CXX—Strong, 6 Stays ..	0 14 6

Garden Barrows.

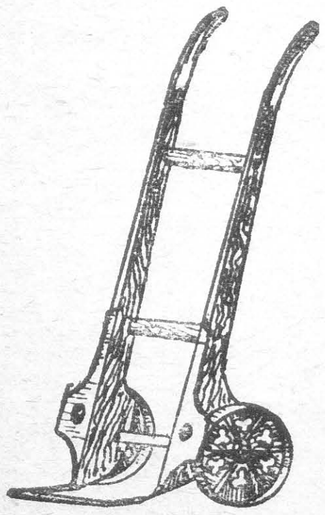
Box Garden Barrows without Movable Top. Strongly made.

No. 915.

	Cash Prices. £ s. d.
9in. side	0 17 6
10in. side	0 19 6
11in. side	1 0 6
12in. side	1 2 0
13in. side	1 3 0



Extras: Shifting Top, 7s. 6d.; Painting three coats of plain colour, 4s. 6d. each.



Sack Trucks or Parcel Barrows.

No. 916.

On Two Low Wheels.

	Cash Prices. £ s. d.
No. 1 Size	0 13 0
No. 2 ,, ...	0 16 0
No. 3 ,, ...	1 4 0
No. 4 ,, ...	1 8 0
Large, for Railway use	1 13 0
Heavy ditto	1 18 0

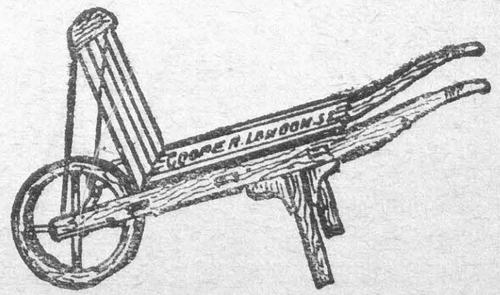
Rubber Tyred Wheels extra, in proportion to size.

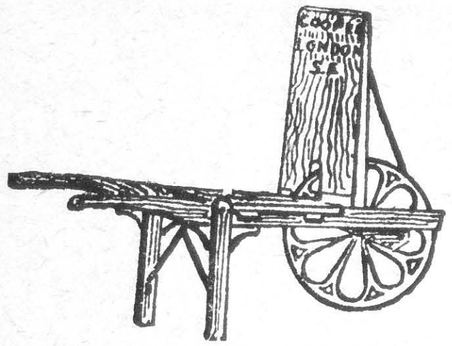
Laundry or Luggage Barrow.

No. 917.

Cash Price, 27s. 6d. each.

If painted three coats, 3s. 6d. extra.





Crowding Barrow.

No. 918.

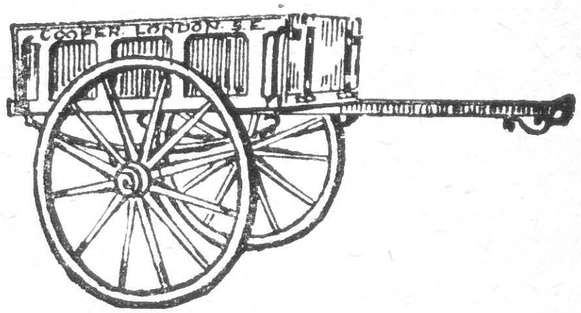
Cash Price .. £1 4s.

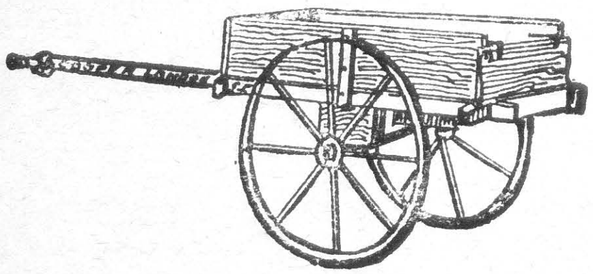
Contractor's Hand Cart.

No. 919.

Painted. With Wooden Wheels.

Cash Price .. £8.





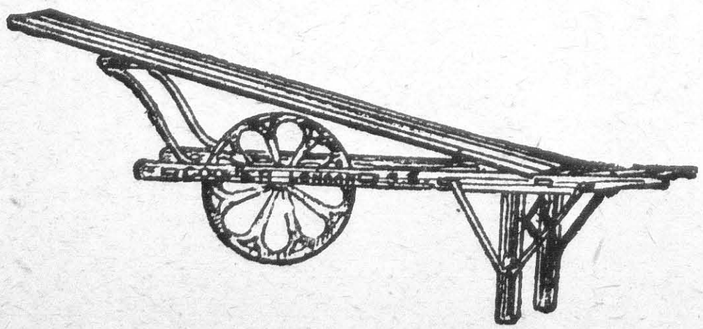
Contractor's Hand Cart.

No. 920.

With Iron Wheels.

Cash Price .. £6 10s.

Off-Bearing Barrow.



No. 921.

Cash Price .. .. £1 4s. 6d.

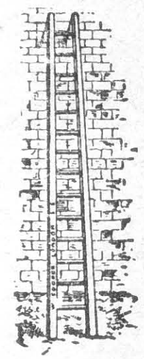
Builders' and Painters' Ladders.

Best selected Fir Sides (with Oak Rounds).

			Cash Prices. s.	d.
30	Rounds and under	per round	0	6
31	,, up to 45	,,	0	7
46	,, ,, 55	,,	0	8
56	,, ,, 60	,,	0	8½
61	,, ,, 65	,,	0	9
66	,, ,, 70	,,	0	10
71	,, ,, 75	,,	0	11
76	,, ,, 80	,,	1	1
81	,, ,, 85	,,	1	4
86	,, ,, 90	,,	1	7
91	,, ,, 96	,,	2	0
96	,, ,, 100	,,	2	5

Iron Bolts to Ladders, 6d. each Bolt. Painting, 3 Coats of Plain Colour, 1½d. per Round.

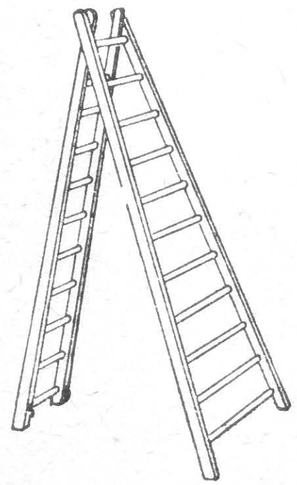
Fruit Gathering Ladders, spread out wide at bottom, 1d. per Round extra.



No. 922.

Combination Ladders and Steps.

No. 923.



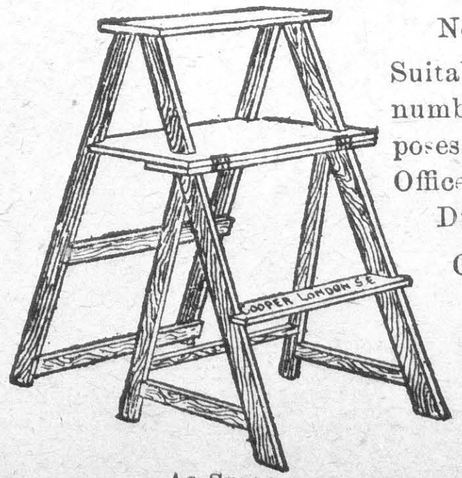
Steps. ft.	in.		Ladders. ft.	in.		Cash Prices. £	s.	d.
5	0	.....	8	6	.....	0	11	0
6	0	.....	10	6	.....	0	13	6
7	0	.....	12	0	.....	0	16	6
8	0	.....	14	0	.....	1	0	0
9	9	.....	17	0	.....	1	5	0
10	6	.....	19	0	.....	1	8	0
12	0	.....	22	0	.....	1	13	0

Hardwood Rounds, 10 per cent. extra.

Painting or Staining one-fifth extra.

Wide Flat Treads for Thin Shoes increases the cost one-twentieth.

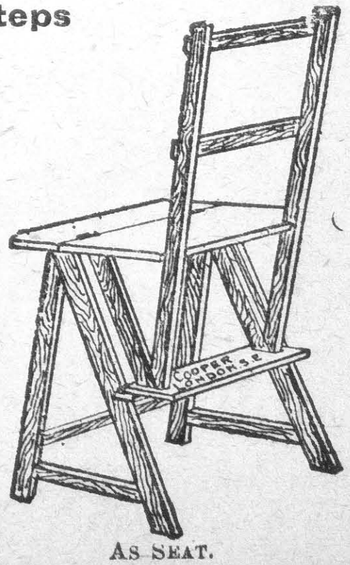
Shop Assistants' Seat and Steps Combined.



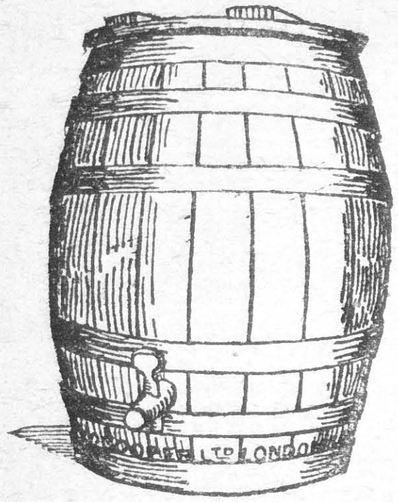
No. 924.

Suitable for a number of purposes either in Office, Shop, or Dwelling.

Cash Price, 3s.



As Steps. As Seat.



Rainwater Butts.

No. 925.

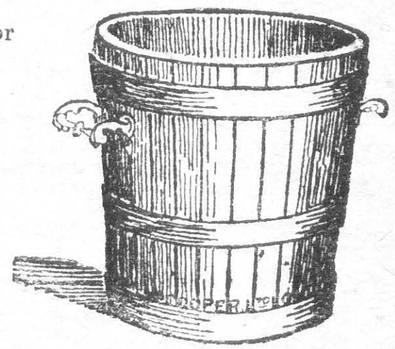
Height. in.	Diam. in.	Capacity. galls.	Cash Prices. Painted Green or Slate Colour. s. d.
34	21	40	9 6
38	24	60	16 0
42	29	100	22 0

These Butts are incinerated inside.
Cover and Taps supplied.

Oak Plant Tubs.

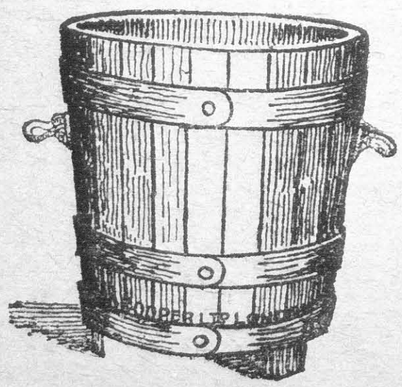
These Tubs are fitted with wrought iron handles or drop handles as desired, excepting the 10in., 11in., 12in., and 13in., but same can be fitted at an extra cost of 4d. per pair. Drainage holes bored.

Length. in.	Diam. in.	Cash Prices. Plain. s. d.	Cash Prices. Painted Green or Varnished or Stained and Varnished. s. d.
10	10	2 6	2 8
11	11	3 0	3 6
12	12	3 10	4 6
13	13	4 8	5 2
14	14	5 8	6 4
15	15	6 0	6 8
16	16	7 2	8 0
17	17	7 6	8 4
18	18	8 6	9 4
19	19	9 8	10 8
20	20	10 4	11 4
21	21	12 0	13 0
14	20	8 0	9 4



No. 926.

With Extended Staves, which form Feet.



No. 927.

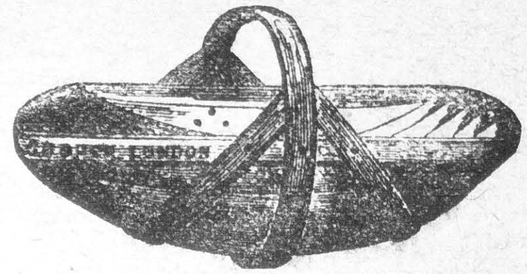
Length. in.	Diam. in.	Cash Prices. Plain. s. d.	Cash Prices. Painted Green or Varnished or Stained and Varnished. s. d.
10	10	2 8	3 6
12	12	3 6	4 6
14	14	5 0	6 0
16	16	7 0	8 6
18	18	9 0	11 0
20	20	11 9	13 0
22	22	13 0	15 0

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

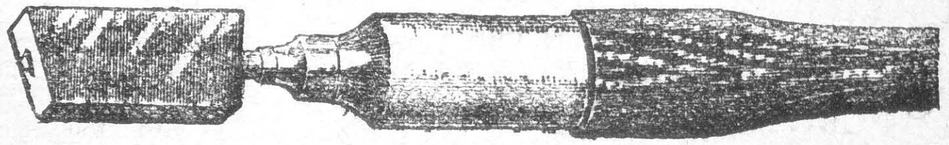
Trug or Garden Baskets.

No. 928.

in.	in.	Cash Prices. s. d.
7½ by	5	0 6 each.
11½ by	6	0 8 ,,
14 by	7½	0 9 ,,
16 by	8½	0 11 ,,
19 by	9½	1 1 ,,
21 by	10½	1 3 ,,
23 by	12	1 6 ,,
26 by	14	1 9 ,,



Glaziers' Diamonds.



No. 929.

Every Diamond sold by us we guarantee perfect and of the finest quality, and made by us. Buy of the Manufacturers.

Cash Prices .... 7/6 10/6 15/- and 21/- each, post free.

We also have a special line for Gardeners and Amateurs, who require them only for occasional use, at 5s. each.

American Glass Cutter.



No. 930.

Polished rosewood handle .. .. Cash Price, 9d. each, post free.

Tanned Garden Netting.

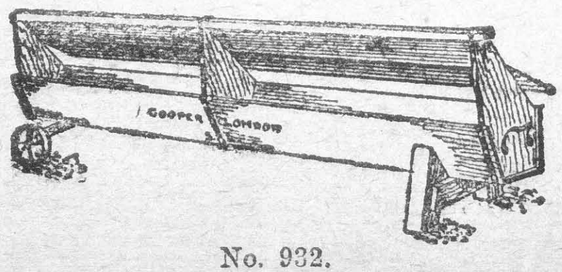
No. 931.

Very largely used all over the kingdom for protecting wall fruit trees, strawberries, espaliers, &c., from birds, and for surrounding tennis lawns it will be found most useful. Thoroughly selected A1 quality and well tanned.

Yards:	50 × 1	50 × 2	100 × 2	50 × 3	50 × 4	25 × 8
Cash Prices:	2/-	3/9	7/6	5/9	7/6	7/6

Covered Sheep Trough.

10ft.

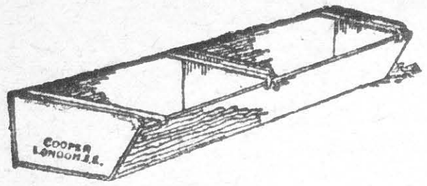


No. 932.

On strong cast wheels, wrought-iron axle, lid to open at back.
Well hooped.

	Cash Prices. s. d.
8in. sides ..	.. 14 6 each.
9in. sides ..	.. 15 6 ,,

If painted Rot-proof Composition, 1s. each extra.

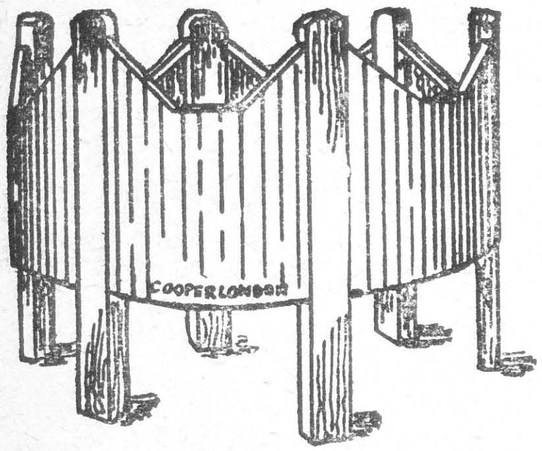


Swing Cattle Bin.

No. 933.

1in. by 11in. back, 1½in. by 18in. bottoms, 1½in. by 11in. front, 22in. across top.
Cash Price, 1s. 9d. per foot.

If painted Rot-proof Composition, **2d.** per foot **extra.**

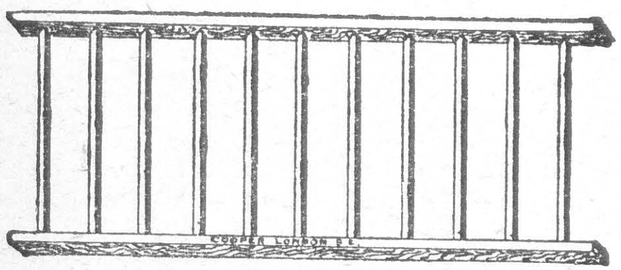


Circular Bins.

No. 934.

Cash Price, £1 12s. 6d. each; £18 per dozen.

If painted with Rot-proof Composition, 2s. each extra.



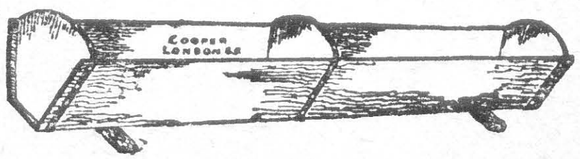
Stable Hay Racks.

No. 935.

Made any length.
Cash Price, 1s. per foot.
If painted with Rot-proof Composition, 2d. per foot extra.

Sheep Troughs.

10ft., well hooped and feet bolted on.

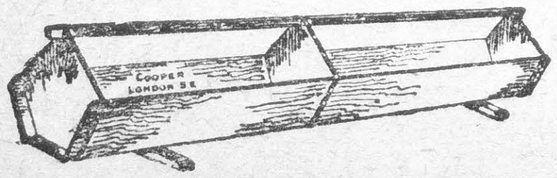


No. 936.

	Cash Price. Each. £ s. d.	Per doz. £ s. d.
7in. deep	0 6 0	3 6 0
8in. deep	0 6 6	3 12 0
9in. deep	0 7 6	4 4 0

If painted Rot-proof Composition, 6d. each extra; 5s. per dozen.

Sheep Troughs.



No. 937.

10ft. Rail. Well hooped and feet bolted on.

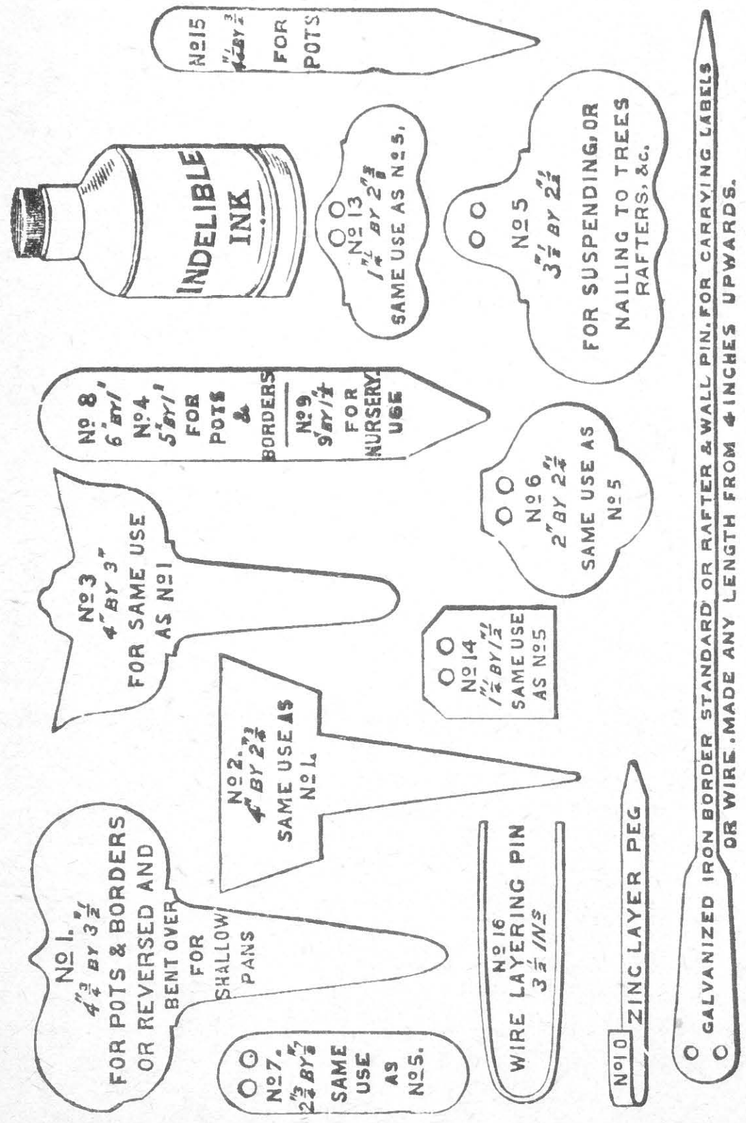
	Cash Prices. Each. £ s. d.	Per Doz. £ s. d.
8in. sides	0 7 3	4 0 0
9in. sides	0 8 0	4 10 0

If painted Rot-proof Composition, 6d. each extra; 5s. per dozen.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Zinc Labels, &c.

The Labels are made from specially selected Zinc, and when written on with our Indelible Ink form a permanent record, and are practically indestructible.



Labels.

Pattern No.	Cash Prices. s. d.	
1	4 0	per 100
2	2 6	,,
3	3 0	,,
4	2 6	,,
5	3 0	,,
6	1 9	,,

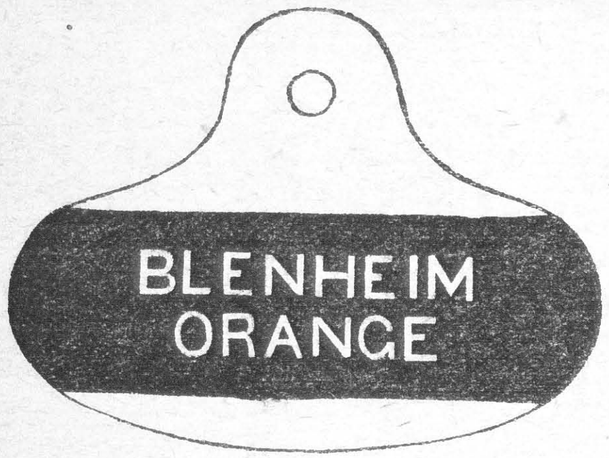
Pattern No.	Cash Prices. s. d.	
7	1 6	per 100
8	4 6	,,
9	8 0	,,
13	1 9	,,
14	1 3	,,
15	1 9	,,

No. 938. Cash Prices:

No. 21 as No. 7, 4in. by 1¼in., 3s. 6d.
Flat Zinc Layer Pegs (No. 10).—1s. 0d. per Box of 100, post free.
Wire Verbena Pins (No 16).—1s. 0d. per Box of 1 gross, post free.
Galvanised Iron Supports.—9in., 2s. 9d. per doz.; 18in., 3s. 6d. per doz.; 24in., 4s. 6d. per doz.
Indelible Ink.—6d. and 1s. 0d. per bottle.

Fruit and Rose Tree "Acme" Labels.

Made on Hard Rolled Zinc. Raised Letters on Black Ground. No Writing Required.



No. 939.

Made on Hard Rolled Zinc.

Cash Price,

1s. 9d. per doz., or 18s. per gross.

Only the names of Fruit Trees in the Lists of the principal English growers supplied in this shape.

Cast Labels for Roses.

No. 940.

Made in Commercially Pure Zinc, on Double Stem 14in. long.

Recommended for Bush Roses.

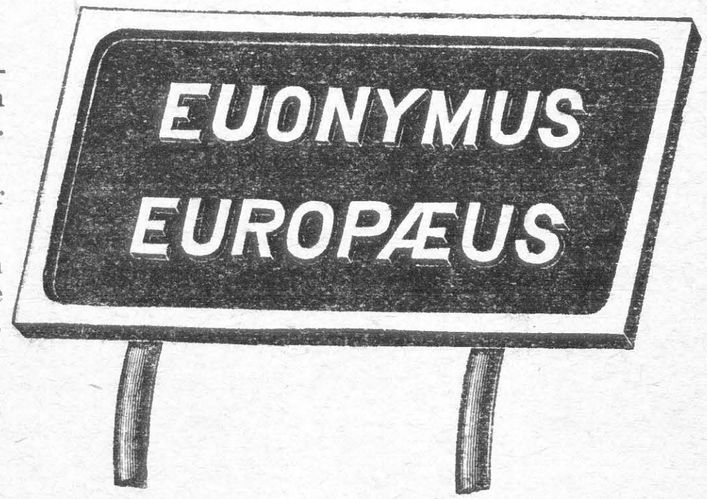
Any name, Foreign or English, can be made to this pattern.

Cash Price,

3s. per dozen.

If for Hanging,

2s. 6d. per dozen.



Labels for Roses.



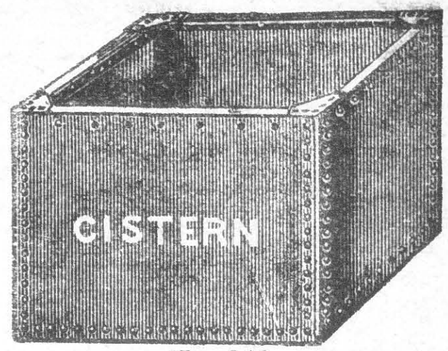
No. 941.

The shapes, Nos. 940 and 941, are made for the names of Roses in the Lists of the principal English growers only.

Cash Prices, 1s. 3d. per doz., or 12s. per gross.
Aluminium Tying Wire, 1s. per roll of 40ft.
Lead Tying Wire, 1s. per lb.

Galvanised Iron and Steel Closely Riveted Cisterns.

ANY SIZE OR SHAPE



MADE TO - ORDER. -

No. 942.

CASH PRICES.

Galls.	Outside Measurements			Gauge 20	Gauge 18	Gauge 16	Gauge 14
	Length.	Width.	Depth.				
About	Ft. In.	Ft. In.	Ft. In.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
20	2 0	1 4	1 3	0 12 6	0 13 6	0 14 3	0 17 3
20	2 0	1 8	1 0				
25	2 0	1 5	1 5	0 13 3	0 14 3	0 15 6	0 19 6
25	2 0	1 8	1 3				
30	2 0	1 6	1 7	0 14 3	0 15 6	0 17 9	1 2 3
30	2 0	2 0	1 3				
40	2 3	1 8	1 8	0 15 9	0 17 3	0 19 6	1 6 0
40	2 0	2 0	1 7				
50	2 5	1 10	1 10	0 18 0	1 0 3	1 3 0	1 8 6
50	2 7	2 0	1 7				
60	2 6	1 11	2 0	1 0 3	1 2 0	1 4 9	1 10 9
60	3 0	2 0	1 8				
70	2 8	2 2	2 0	1 2 0	1 4 6	1 6 3	1 17 6
70	2 3	2 3	2 3				
80	3 0	2 2	2 0	1 3 9	1 6 0	1 9 3	2 0 0
80	3 6	3 0	1 3				
90	3 0	2 3	2 2	1 5 6	1 9 0	1 11 6	2 2 0
90	2 8	2 6	2 4				
100	3 2	2 3	2 3	1 5 0	1 10 0	1 13 0	2 3 0
100	4 0	3 0	1 4				

Thoroughly Tested before leaving Works. Special Sizes to order in a few days. Galvanised after manufacture.

6, Pemplar Terrace, Posthill, Stoke-on-Trent.

DEAR SIR,—Goods arrived safe to hand on Monday. Very highly pleased.—Yours. EDW. BICKERTON.

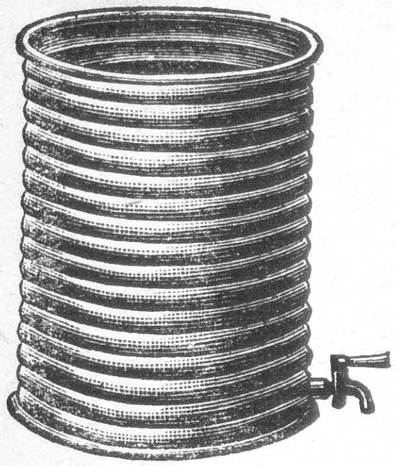
Rayleigh Road, Basingstoke.

DEAR SIR,—Goods as per order arrived safely to-day, for which I thank you. Same gives entire satisfaction.—Yours truly, A. TUCKER.

The Manse, Cudworth.

DEAR SIR,—The order has just been delivered. Am very pleased.—Yours truly, E. F. ATHERTON.

Galvanised Corrugated Steel Cisterns.



No. 943.

Cheapest and Best for Collecting Rain Water.

Gall.	High in.	Dia. in.	Cash Price. £ s. d.	Covers. £ s. d.
40	28	23	0 13 6	0 4 0
50	30	25	0 15 0	0 4 6
65	32	27	0 16 6	0 5 6
80	34	29	0 18 0	0 6 0
100	38	31	1 1 6	0 6 0
130	42	33	1 9 0	0 7 0
150	46	35	1 12 0	0 7 6
175	46	37	1 18 0	0 9 0
200	48	39	2 2 0	0 10 0
230	50	41	2 6 0	0 11 0
260	50	43	2 13 0	0 12 0
300	52	45	3 0 0	0 13 0
365	56	47	3 12 0	0 15 0
400	58	49	4 0 0	0 17 0
500	72	49	4 15 0	0 17 0
600	81	51	5 17 6	0 19 6
700	87	54	6 15 0	1 2 0
800	87	57	7 10 0	1 4 0
900	87	60	8 5 0	1 8 0
1000	98	60	9 0 0	1 8 0

Brass Taps can be fitted at—½in., 3/6; ¾in., 5/-; 1in., 7/6 each.

Round Sanitary Dust Bins.

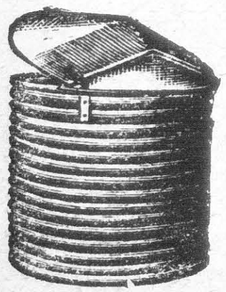
No. 944.

Strong, galvanised, made for wear.

		16 by 20	17 by 22	18 by 24
Cash Prices	Medium	6s. 6d.	7s. 0d.	7s. 6d.
	Best	9s. 0d.	9s. 6d.	10s. 0d.



Improved Field or Outdoor Corn Bin.



No. 945.

Cash Prices	5	10	16	20	32	40	50 bushel
	20/-	28/-	35/-	47/6	63/-	80/-	105/- each

2½in. Galvanised Padlocks, 1/- each extra.

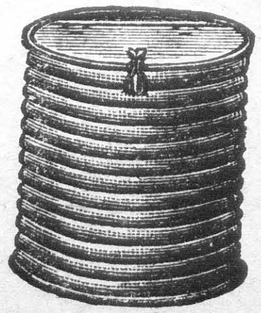
Invaluable for keeping Corn, Meal, Cake, Chaff, etc., dry and locked up in the fields and at any distance from home.

Round Corrugated Corn Bin.

No. 946.

Light and strong. These are the cheapest Bins made. Cash Prices:

4 bushel	.. ..	16/6	8 bushel	.. ..	23/-
6 bushel	.. ..	19/-	10 bushel	.. ..	28/-
			12 bushel	..	36/-



WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

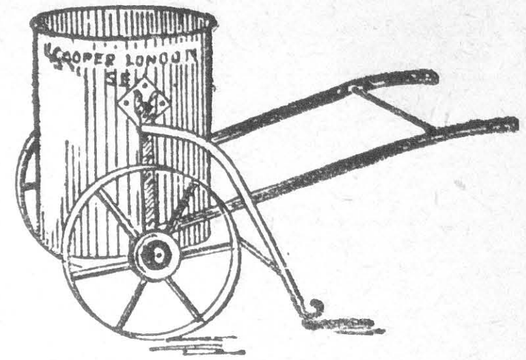
Water Barrow.

No. 947.

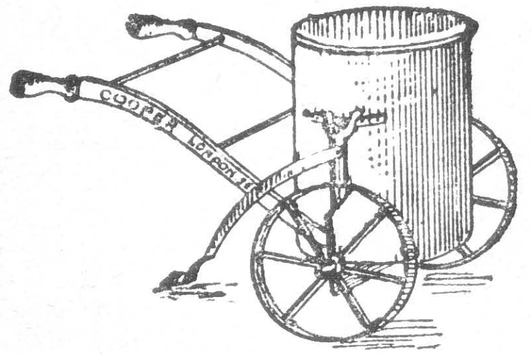
With Oval Galvanised Steel Tub. Painted Frame.

Cash Prices:

Galls.	£	s.	d.
12	1	2	0
20	1	8	6
30	1	14	0
40	2	0	6



Extra Strong Water Barrow.



No. 948.

With Oval Galvanised Steel Tub. Painted Frame. Extra Strong Wrought-iron Wheels.

Cash Prices:

Galls.	£	s.	d.
20	1	12	6
30	1	18	6
40	2	5	0
50	2	12	6
60	3	3	0

Galvanised Cisterns only for above (strong and well made).

Gallons:	12	..	20	..	30	..	40	..	50	..	60
Cash Prices:	11/3	..	15/-	..	18/9	..	24/-	..	31/6	..	37/6

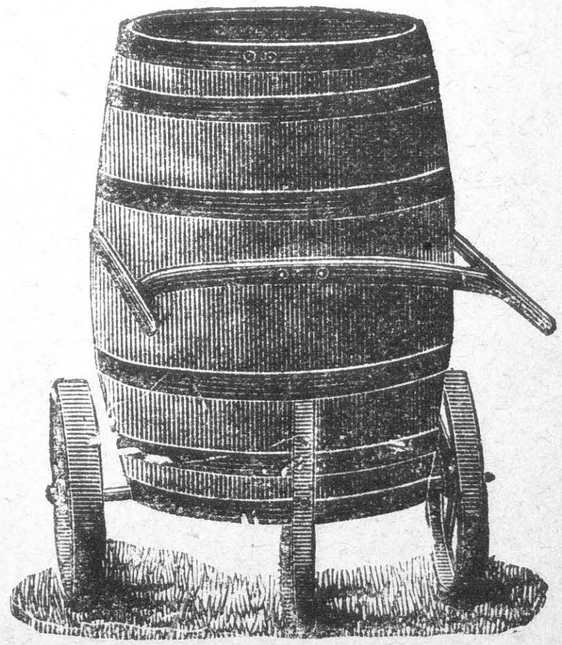
Wood Water Barrows.

No. 949.

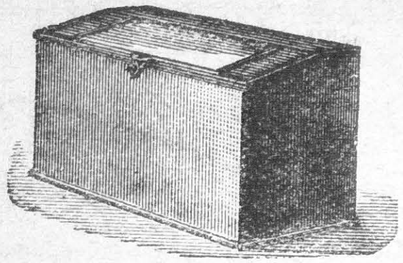
With Strong Iron Wheels, Axle and Handles, also improved Inside Rim to prevent splashing.

40 Gallons.

Cash Price, 30s.



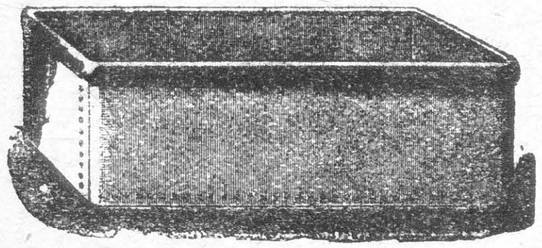
Rectangular Corn Bins.



No. 950.

	Cash Prices. £ s. d.	Partitions extra. s. d.
4 bushel	0 18 0	2 9
6 ,, ...	1 1 0	3 3
8 ,, ...	1 7 6	4 0
10 ,, ...	1 15 9	5 0
12 ,, ...	2 2 0	5 6
16 ,, ...	2 15 9	7 0
20 ,, ...	3 10 0	8 6
25 ,, ...	4 2 6	10 0

Strong Plate Galvanised Cattle and Horse Troughs.



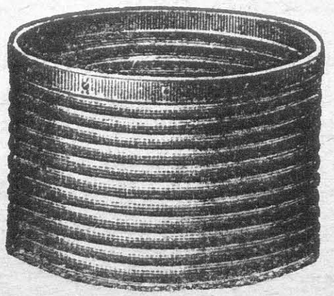
No. 951.

18in. wide, 13in. deep.		18in. wide, 16in. deep.		24in. wide, 24in. deep.	
Cash Prices:	£ s. d.	Cash Prices:	£ s. d.	Cash Prices:	£ s. d.
3 foot	1 3 6	4 foot	1 12 0	4 foot	2 9 0
4 ,, ...	1 10 0	5 ,, ...	1 18 0	5 ,, ...	2 18 6
5 ,, ...	1 12 6	6 ,, ...	2 4 0	6 ,, ...	3 7 6
6 ,, ...	1 18 0	7 ,, ...	2 10 0	7 ,, ...	3 14 0
7 ,, ...	2 2 6	8 ,, ...	2 16 0	8 ,, ...	4 3 0
8 ,, ...	2 8 0	9 ,, ...	3 2 0	9 ,, ...	4 15 0
9 ,, ...	2 13 6	10 ,, ...	3 10 0	10 ,, ...	5 4 0
Extra for Service Box fitted at one end, 8/-		Extra for Service Box fitted at one end, 9/-		Extra for Service Box fitted at one end, 12/-	

Galvanised Corrugated Steel Cattle and Horse Trough.

Strong Safety Edge Band round top. Galvanised after made. The best Cattle or Horse Trough in use. Its shape makes it very portable. Of great strength and durability; not easily damaged. Useful in field, barton or stable yard.

Galls.	Dia. in.	Deep. in.	Cash Prices. £ s. d.
60	33 by	20	1 0 0
70	35 by	20	1 4 0
90	38 by	22	1 8 0
110	41 by	22	1 12 0
130	44 by	24	1 16 0
150	47 by	24	2 0 0
200	53 by	26	2 10 0
250	56 by	28	3 0 0
300	60 by	30	3 15 0
350	62 by	32	4 10 0
400	65 by	32	5 10 0

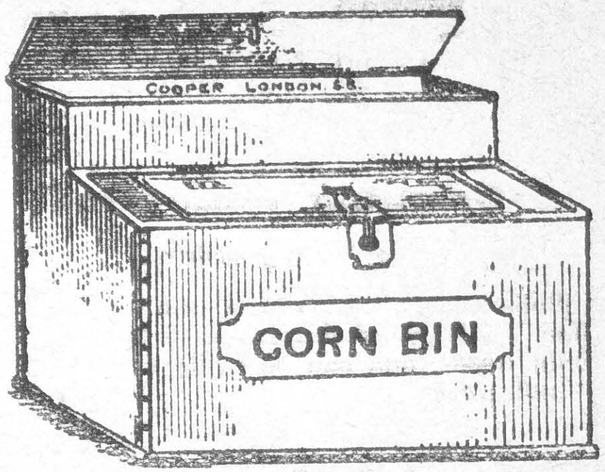


No. 952.

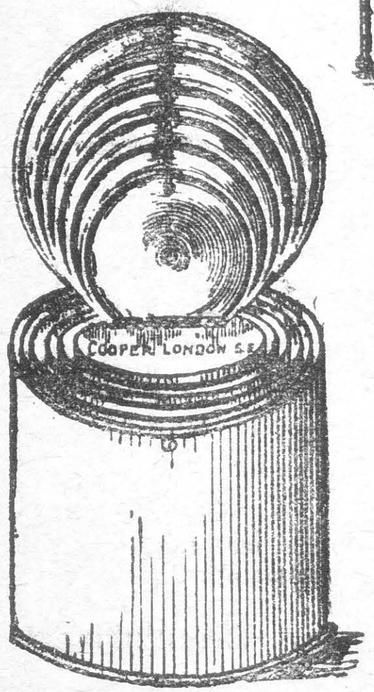
Galvanised Iron Corn Bins.

	Cash Prices. £ s. d.
6 Bushels ..	1 14 6
8 ,, ..	2 1 6
12 ,, ..	2 8 0
16 ,, ..	3 4 0
20 ,, ..	4 2 0
30 ,, ..	6 0 0
40 ,, ..	7 17 6

Extra for Partitions—
4 to 12 Bushels 3s. each.
16 to 40 Bushels 4s. each.



No. 953.

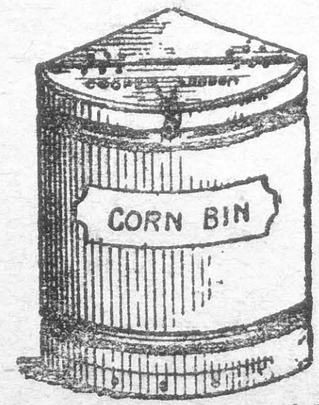


Round Galvanised Corn Bins.

No. 954.

The whole cover opens. Seven Bins nest one inside the other. They are strong, useful Bins, made of Galvanised Sheet Iron:

Bushels.	Diam. High.	Cash Prices. £ s. d.
2 ..	16 in. by 22in. ..	0 13 6
3 ..	18½in. by 24in. ..	0 16 6
4 ..	21 in. by 26in. ..	0 19 0
6 ..	23½in. by 30in. ..	1 3 0
8 ..	26 in. by 34in. ..	1 7 0
10 ..	28½in. by 36in. ..	1 11 0
12 ..	31 in. by 38in. ..	1 16 6



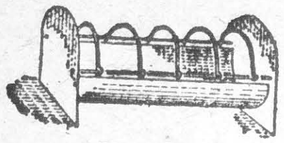
No. 955.

	Cash Prices. £ s. d.
4 Bushels	0 19 6
6 ,, ...	1 3 0
8 ,, ...	1 7 6



No. 956.

	Cash Prices. £ s. d.
4 Bushels	0 19 6
6 ,, ...	1 3 0
8 ,, ...	1 7 6



No. 957.

Feeding Troughs

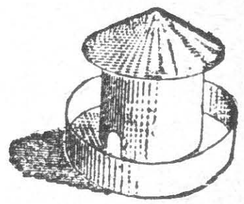
For Young Chicks.

Well made of galvanised iron. Last a lifetime. With removable guard for cleansing. Cash price, 1s. 2d. each, or 11s. per doz.

Drinking Fountains

For Young Chicks.

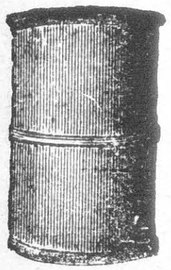
Well made of galvanised iron. Last a lifetime. Always maintain a fresh supply of clean water, and can be easily filled.
Cash price, 1s. 2d. each, or 11s. per doz.



No. 958.

Galvanised Oil and Petroleum Cisterns.

Sunk Head and Screw Plug.



No. 959.

Galls.		Dia. in.		High. in.		Cash Prices. £ s. d.
10	.....	14	by	22	.....	0 11 0
15	.....	16	by	23	.....	0 14 0
20	.....	16	by	29	.....	0 16 6
25	.....	18	by	29	.....	0 18 0
30	.....	20	by	29	.....	0 19 6
40	.....	22	by	29	.....	1 1 0
50	.....	22	by	37	.....	1 2 0
60	.....	24	by	37	.....	1 7 0
70	.....	24	by	47	.....	1 13 0
80	.....	24	by	50	.....	1 17 0
100	.....	24	by	62	.....	2 0 0

Including ½-in. Brass Taps, with Key.
If with loose covers same price.

Cooper's Dustbin and Sifter Combined.

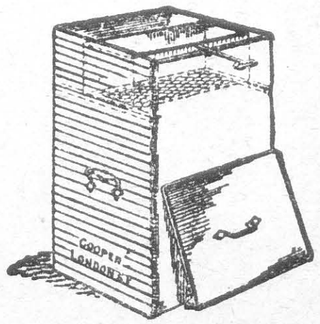
No. 960.

Compact. Weather-proof. Simple. Clean. Takes up very little room. Anyone can use it. Nothing to fix. Always ready for use.

Simply put the ashes in the Sifter, close the lid, and give a few backward and forward movements; let stand for a few seconds for dust to settle, then remove cinders.

Will pay for itself in a few weeks. No home complete without one.

Manufactured of stout galvanised iron, in three sizes.



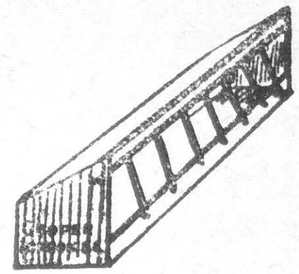
24in. high by 14in. by 14in.; suitable for Flats and Small Houses.
Cash Price, 10s. 6d. each; 3 for £1 10s.
30in. high by 16in. by 16in.; suitable for Medium-size Houses.
Cash Price, 14s. each; 3 for £2.
36in. high by 18in. by 18in.; suitable for Large Houses, &c.
Cash Price, £1 1s. each; 3 for £2 17s. 6d.

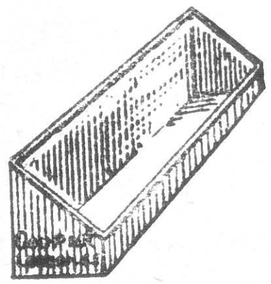
Galvanised Chicken and Pigeon Troughs.

No. 961.

With Swing Bars.

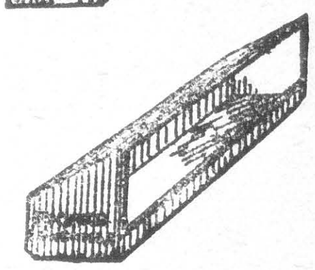
	Cash Prices. Each. s. d.
12in. long	2 0
18in. ,, ...	2 3
24in. ,, ...	2 6





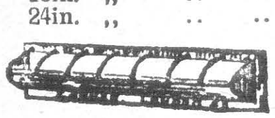
No. 962.

	Cash Prices. Each. s. d.
12in. long	1 3
18in. ,, ...	1 6
24in. ,, ...	1 9



No. 963.

	Cash Prices. Each. s. d.
12in. long	1 3
18in. ,, ...	1 6
24in. ,, ...	1 9



No. 954.

For fixing inside or front of Poultry House. Can be filled from outside. Galvanised.

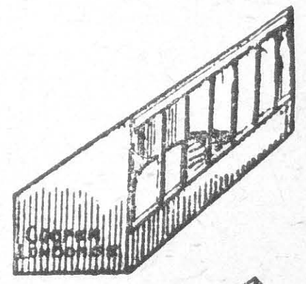
Cash Prices:
18in. long .. each, 3s. 24in. long. .. each, 3s. 6d

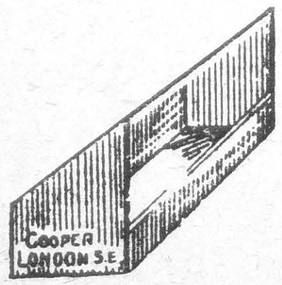
Poultry Feeders.

With Swing Bars. Galvanised.

No. 965.

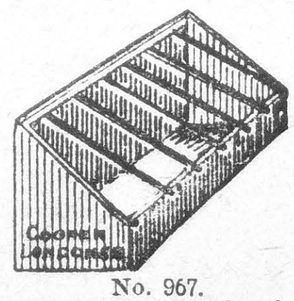
	Cash Prices. Each. s. d.
12in. long	2 3
18in. ,, ...	2 6
24in. ,, ...	2 9





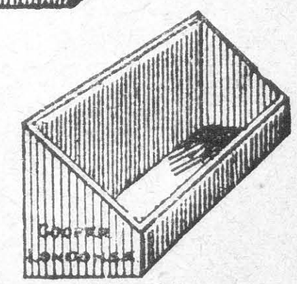
No. 966.
Galvanised.
Cash Prices, each.

	s. d.
12in. long ..	1 6
18in. ,, ..	1 9
24in. ,, ..	2 0



No. 967.
With Swing Bars. Galvanised.
Cash Prices, each.

	s. d.
12in. long ..	2 3
18in. ,, ..	2 6
24in. ,, ..	2 9

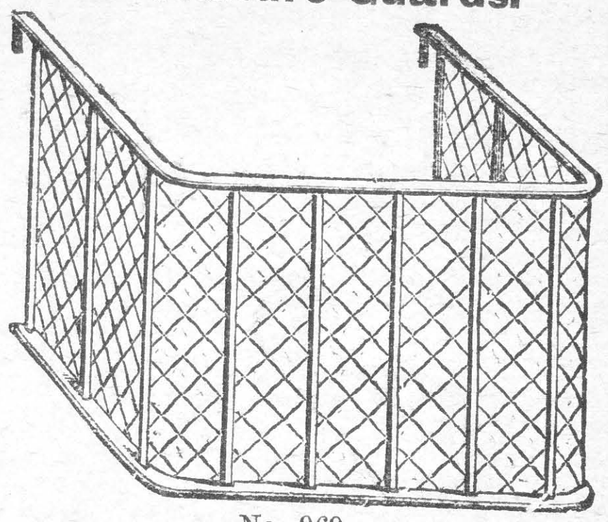


No. 968.
Galvanised.
Cash Prices, each.

	s. d.
12in. long ..	1 6
18in. ,, ..	1 9
24in. ,, ..	2 0

Galvanised Wire Manure Guards.

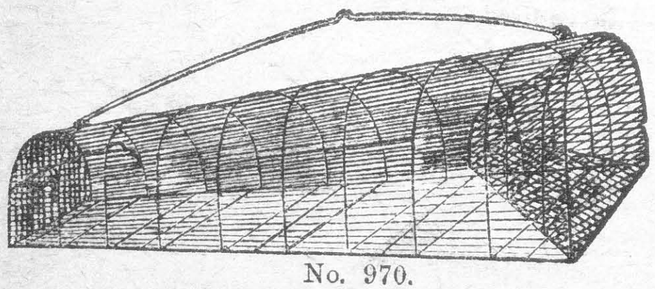
Fulfilling the requirements of L.C.C. Bye-Laws, and a necessity in every well-kept Stable. Made of strong Wrought Iron Frames, with Half-round Top Rails, strong flat bottom Rails, strong round upright Bars, and covered with stout diamond pattern 1½in. Mesh Lattice.



No. 969.

Wide. ft.	in.		High. ft.	in.		Projection. ft.	in.		Cash Prices. £	s.	d.	
4	0	.....	2	9	.....	2	3	.....	1	8	9	
4	0	.....	3	0	.....	2	6	.....	1	12	6	
4	3	.....	3	3	.....	3	0	.....	1	18	6	
5	0	.....	3	9	.....	3	6	.....	2	13	0	
6	0	.....	4	0	.....	3	0	.....	3	0	0	

Skirting band if required extra;
9in. high, 9d.; 12in. high, 1s. per lineal foot.
If with Handle each end for lifting, 3s. per Guard extra.
Other sizes can be made at proportionate prices. Quotation given on receipt of measurements.



No. 970.

Improved Galvanised Wire Eel Traps.

Strong, Well Made, and Effective.

Single Entrance for Streams, &c.

					Strong. £	s.	d.		Extra Strong. £	s.	d.	
30in. long	..	13in. wide	..	10in. high	0	11	6	..	0	13	6	each.
36in. ,,	..	14in. ,,	..	11in. ,,	0	13	6	..	0	15	0	,,

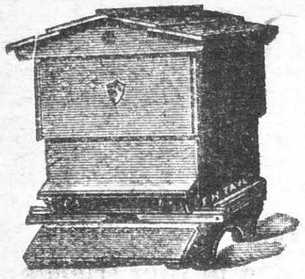
With Entrance both ends for Still Waters, Canals, &c.

Cash Prices.

					Strong. £	s.	d.		Extra Strong. £	s.	d.	
36in. long	..	14in. wide	..	11in. high	0	13	6	..	0	16	6	each.
36in. ,,	..	20in. ,,	..	12in. ,,	0	18	0	..	1	2	6	,,
48in. ,,	..	20in. ,,	..	12in. ,,	1	4	0	..	1	10	0	,,
36in. ,,	..	24in. ,,	..	13in. ,,	1	4	0	..	1	10	0	,,

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The "Sussex" Bee Hive.



No. 971.

Hive with 10 Frames, Dummy Rack of Sections, Telescope 9in. Lift, Roof, Detachable Porch, and Floor Board, 14s. Frames Full Sheets and Wired, Sections Full Sheets, 19s. 6d.

Without Rack of Sections, 11s. 6d.

Prices of Hives include delivery to customers nearest Goods Station in England, Scotland and Ireland.

"Peripage" Incubator Fittings.

Incubator Regulator Sets.

Comprising Hinged Arm with Weight, Damper, Needle Rod and Tube Capsule Stirrup. Cash Price, 6s. 3d. Post Free.

Brass Ventilator Bushings, 7d. dozen
Brass Fluted Drawer Pulls, 6d. each } Post Free.

Chimneyless Lamp Burners.

Screw Collar, Moveable Cones.

To take ⅜ inch wick .. 1s. 3d. each
,, ⅝ ,, ,, .. 1s. 6d. ,,
,, 1 ,, ,, .. 2s. 3d. ,,
} Post Free.

Thermometers.

Guaranteed accurate, scaled on tube. Red arrow mark at 104°
Cash Price, 2s. 6d. each, Post Free.

Tanks for "Peripage" Incubator.

Well made of strong, hard bright copper, large Flues and fitted with Brass Tube for Regulator Rod, filling Tube and Cap.

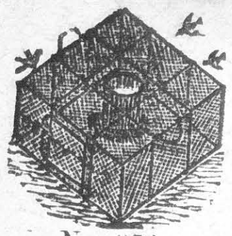
Cash Prices;

On rail at our Works. { No. 1 size .. .. 10s.
" 2 " .. .. 14s. 6d.
" 3 " .. .. 21s.

	No. 1.	No. 2.	No. 3.
Lamps for above	3s.,	3s. 9d.,	6s.
Hoods for Lamps,	3s.,	3s. 6d.,	4s.
Moisture Trays,	2s.,	2s. 6d.,	3s. 9d.

Thermostatic Capsules, 2s. 6d. each. Post Free.

Cooper's "Surrey" Sparrow Trap.



No. 972.

It is a marvel. Thousands ready for immediate dispatch.

Worth their weight in gold to Farmers, Fruit Growers, Gardeners, Poultry Fanciers, &c. Best and cheapest Trap ever invented. Always set and always ready.

Cash Price, 4s. 6d. each.

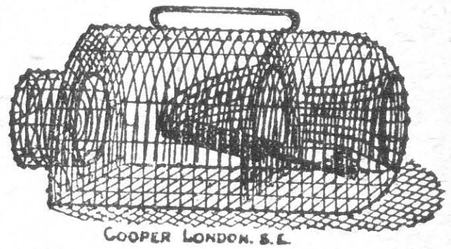
SPECIAL OFFER.—Six Traps sent Carriage Paid for 27s.

Money willingly returned if they fail to satisfy. After obtaining one you are bound to recommend to your friends.

DIRECTIONS FOR BAITING.—Simply sprinkle corn, crushed oats, bread, &c., at bottom of Trap, but be careful not to let any remain inside ring at bottom.

Rat and Mouse Traps.

No. 973.



The "Success" Rat and Mouse Trap. Extraordinary results.

For Rats—Cash Price 1s. 10d. each.
Per doz., £1 1s.

For Mice—Cash Price, 1s. each.
Per doz., 11s.



No. 974.

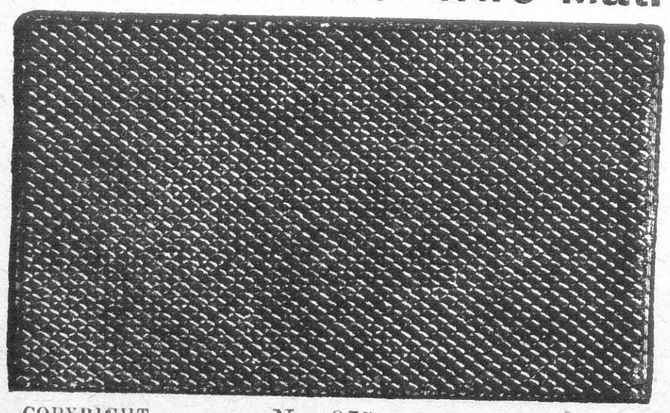
Garden Grates and Frames.

CASH PRICES:

4in. by 4in.	6in. by 6in.	8in. by 8in.
7d.	1/0	1/9

10in. by 10in.	12in. by 12in.
3/3	5/-

Galvanised Steel Wire Mat.



COPYRIGHT.

No. 975.

Will wipe away mud, snow, dust, and all dirt; everything falling through the mat. Cleans muddy boots. Is soft to the tread. Made of the hardest unrustable wire.

Cash Prices ..	20 × 12	24 × 14	28 × 16	30 × 18	33 × 18	36 × 21 in.
	1/1	1/6	1/9	2/-	2/3	2/8 each.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Best Quality Brass Wire Bird Cages.

Warranted to keep clean and free from verdigris for a very long period. Perfectly made. Entirely new. Novel and cheap designs. Fitted with Glass Seed Protectors where shown. Feeding Boxes, Glasses, Perches, Swings, Drawers where shown, &c., complete.

The Sizes given are for the Body of the Cages.



No. 976.

All brass Cages, strong and well made.

Cash Prices:

10in. by 7in.,	11in. by 8in.,
5/- each.	5/9 each.

With scalloped glass seed protectors.

Cash Prices:

10in. by 7in.	11in. by 8in.
6/- each.	7/3 each.

With ruby glass seed protectors.

Cash Prices:

10in. by 7in.	11in. by 8in.
7/- each.	8/- each.



No. 977.

All brass top, elegantly japanned bottom and drawer, scalloped glass seed protectors, &c.

Cash Prices:

11in. by 8in.	12in. by 9in.
8/6 each.	10/- each.

Engraved ruby glass at 1/- each extra.



No. 978.

All brass top, plain polished brass bottom, engraved ruby glass seed protectors.

Cash Price:

11in. by 8in. .. 12/6 each.



No. 979.

All brass top, beautifully enamelled bottom, deep figured glass seed plates.

Cash Prices:

11in. by 8in.	..	8/– each.
12in. by 9in.	..	9/6 ,,

Tinned Wire Bird Cages.

Bottoms richly Japanned and decorated, and fitted with Seed Drawers. Highest possible finish, with all fittings complete.



No. 980.

A very handsome cage, well finished bright tinned wire bodies, brass bell tops, japanned bottoms richly decorated by hand, with seed drawers, &c.

Sizes.		Cash Prices.
11½ by 8½in.	..	7/3 each.
12 by 9½in.	..	8/9 „



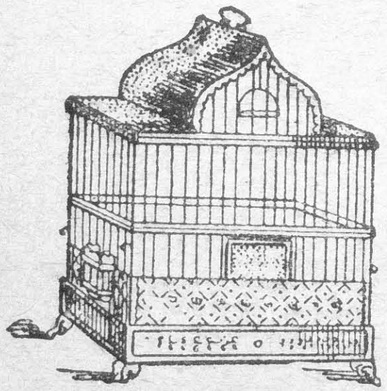
No. 981.

Well finished bright tinned wire bodies, brass bell tops, japanned bottoms, richly hand decorated, with seed drawer.

Sizes.		Cash Prices.
10½ by 7½in.	..	4/9 each.
11½ by 8½in.	..	5/6 „
12½ by 9½in.	..	6/6 „

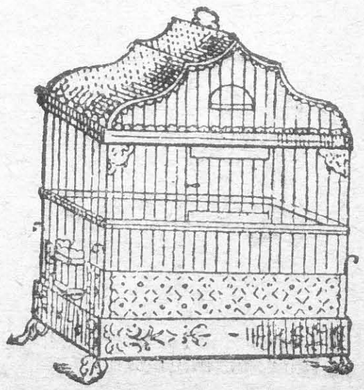
Metal Japanned Bird Cages.

Good serviceable cheap Cages. Fitted with outside opal feeding cups. All fitted complete.



No. 982.

11 by 8in., Cash Price, 4/- each.



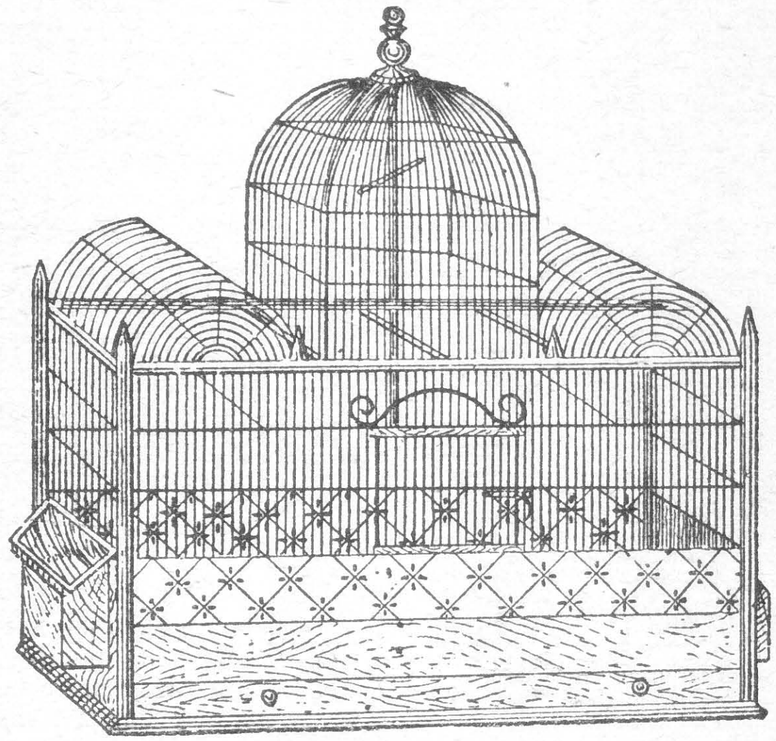
No. 983.

12 by 9in., Cash Price, 5/3 each.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Indoor Aviary.

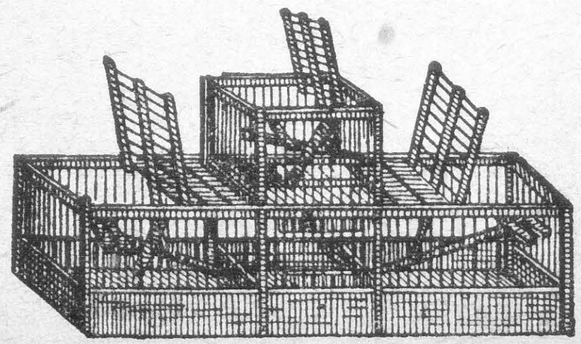
Best Quality.



No. 984.

Made of mahogany, French polished, and tinned wire, with two loose divisions to divide cage into three. Glass plates fitted round sides, feeding box, &c., complete.

Length ft. in.		Height ft. in.		Width ft. in.		Cash Prices each. £ s. d.
2 4	.....	1 0	.....	2 5	.....	1 10 0
2 8	.....	1 2	.....	2 10	.....	2 0 6
3 0	.....	1 4	.....	3 2	.....	2 11 0
3 6	.....	1 6	.....	3 6	.....	3 5 0
4 0	.....	1 8	.....	4 0	.....	4 1 0



Trap Cage.

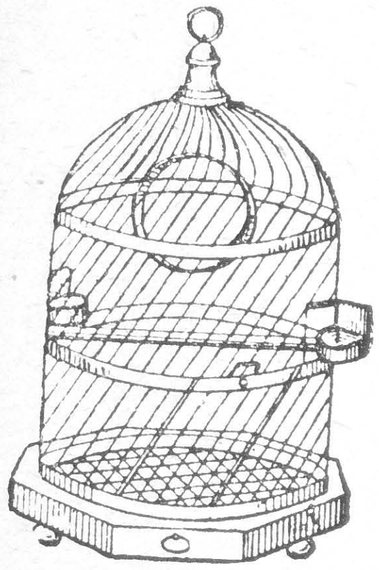
No. 985.

Painted Green. Double and two single combined. Price 3s. each.

Improved Parrot Cages.

With Feeding Pans passing into the Cage from the outside.

All well made. Best quality.



No. 986.

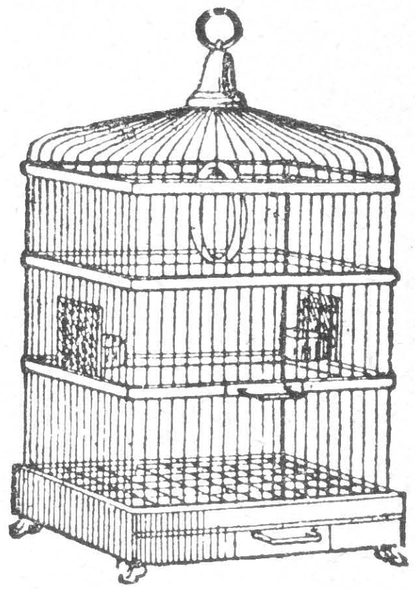
With loose grating and sliding tray for cleaning. Tinned wire, brass top and ring, strong quality, bright tin bottoms.

Cash Prices :

14 15 16 17 18 20 in. diam.
7/6 8/- 8/6 10/6 13/6 20/6 each.

Zinc base ditto, if required, at 1/6 to 2/9 extra per cage.

If with loose bottoms, to nest for export, 1/- each extra.



No. 987.

Made of stout bright tin and tinned wire, loose grating extra strong, and tray for cleaning. Brass top and ring, feeding pans lined porcelain, will be found much more durable and roomy than the round ones.

Cash Prices :

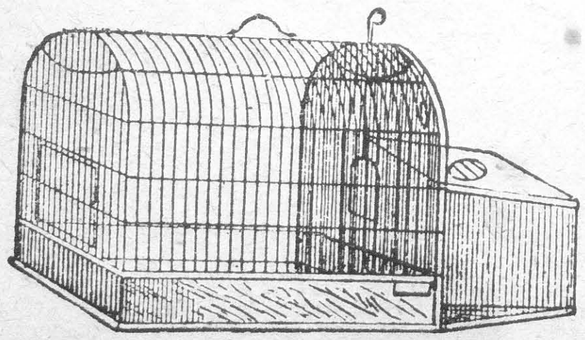
14 15 16 17 18 20 in. square.
13/- 15/- 16/- 18/- 20/6 31/6 each.

Common quality, same as above, but lighter make.

14in. sq., 8/- ; 16in. sq., 12/- ;
18in. sq., 16/- each.

Can be had with enamelled base at small extra charge.

If with loose bottoms, to nest for export, 1/- each extra.



Squirrel Cage

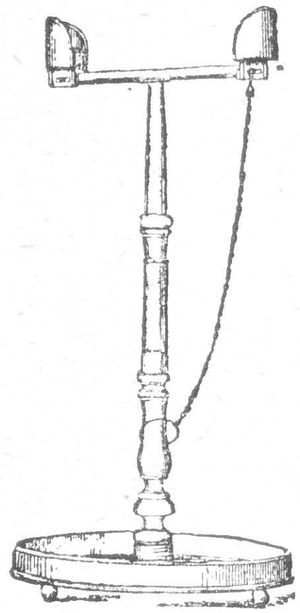
No. 988.

Waggon Top, Stained.
Tinned Wire.

Cash Prices :

20in. 6/6 ; 22in. 7/6 ;
24in. 9/- each.

Round Mahogany Parrot Stand.



No. 989.

Zinc lined, polished mahogany pole, lignum vitæ perch, with cups and chains complete.

Cash Prices :

21in. diameter 18/6
26in. „ 23/6

Blackbird or Thrush Cage.

Round, Wicker.



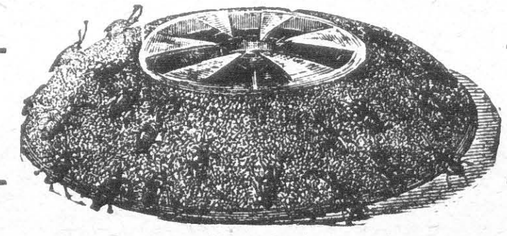
No. 990.

Cash Prices :

10in. at bottom .... 3s. 3d. each.
11in. „ .... 4s. 0d. „
12in. „ .... 6s. 4d. „

The Hedgehog Beetle Trap.

Superior to All Others.



PATENT NO. 12973/99.

No. 991.

Beetles cannot escape, not being able to move backwards they fall n in turning round.

DIRECTIONS.—Sprinkle bottom of trap with sugar or cheese ; bait top centre with stale beer, cheese or stout. Remove top and destroy beetles with boiling water. Keep trap dry.

Cash Prices, 9d. and 1s. each.

Cast-iron Portable Boilers or Coppers.



No. 992.

IMPERIAL GALLONS	Cash Prices. 6	8
With Plain Boiler	29/6	33/-
,, Galvanised or Barffed Boiler ..	33/3	37/9
,, Copper Boiler (tinned inside) ..	78/6	87/9
EXTRA TO ABOVE—		
Mounted on Wheels	13/-	13/-
Galvanised Steamer and Cover ..	21/9	21/9
Galvanised Cover only	5/9	5/9

IMPERIAL GALLONS	Cash Prices. 10	12
With Plain Boiler	38/3	41/6
,, Galvanised or Barffed Boiler ..	44/3	49/-
,, Copper Boiler (tinned inside) ..	96/9	109/-
EXTRA TO ABOVE—		
Mounted on Wheels	13/-	13/-
Galvanised Steamer and Cover ..	31/-	31/-
Galvanised Cover only	6/3	6/3

IMPERIAL GALLONS	15	20	22	25	Cash Prices. 30	40
With Plain Boiler	45/-	50/3	52/-	57/-	62/6	67/6
,, Galvanised or Barffed Boiler ..	54/3	62/6	65/6	72/9	78/6	87/9
,, Copper Boiler (tinned inside) ..	130/-	145/6	154/6	162/-	177/9	193/-
EXTRA TO ABOVE—						
Mounted on Wheels	13/-	13/-	13/-	13/-	13/-	13/-
Galvanised Steamer and Cover ..	36/6	36/6	40/-	40/-	43/6	43/6
Galvanised Cover only	8/-	8/-	9/3	9/3	11/6	11/6

BRASS DRAW-OFF COCK, $\frac{5}{8}$in. for sizes 6 to 12 gallons, 9/3; $\frac{3}{4}$in. for 15 to 25 gallons, 10/6; and 1in. for 30 gallons and upwards, 17/3 extra.

Boilers can be fitted with other sizes of cocks, but those priced are kept in stock, and can be supplied without delay.

The frames of all boilers with draw-off cocks are fitted with cleaning doors without extra charge.

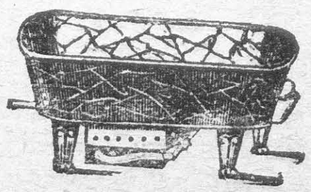
WHEN REQUIRED FOR USE WITH GAS the frames of these boilers can be specially adapted, and the fire chambers fitted with a powerful Bunsen burner, at an extra cost, including the burner, of 20/- for the 6 to 15 gallon sizes, and 22/6 for the 20 to 40 gallon sizes, inclusive.

Prices for Cast-iron Smoke Pipe for these Boilers upon application.

Gas Bath with Towel Warmer.

Suitable for Bungalows, Iron Cottages, &c.

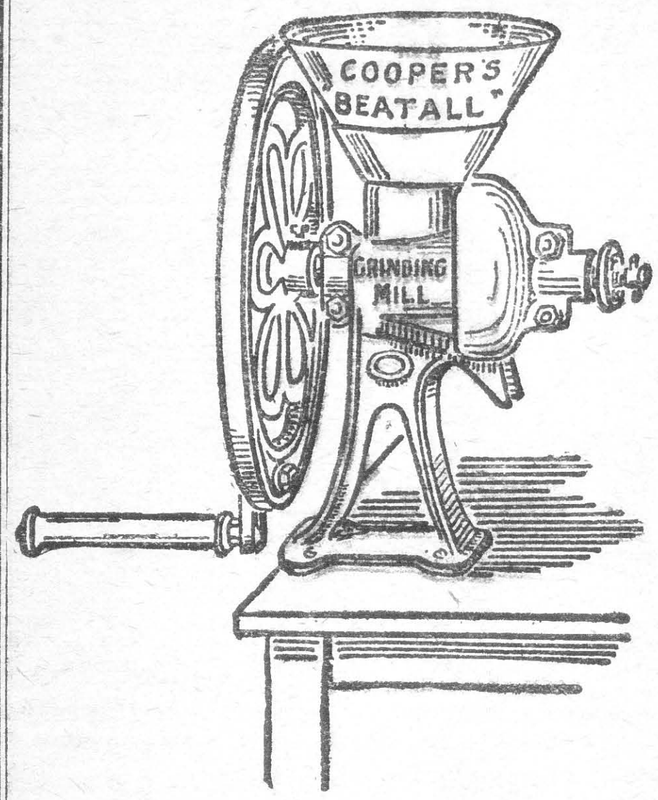
Strong well-made Equal End Bath, made right or left hand, but always sent left hand, as illustrated, unless ordered other wise. Fitted with Waste Plug and Union, Swing-out Atmospheric Burner, Japanned Oak and White.



No. 993.

5ft. Bath, Cash Price, £5 10s. 5ft. 6in. Bath, £6 5s.
With Copper Bottom, 16s. extra.

Cooper's Grinding and Kibbling Mills for Dry Chick Feeding.



No. 994.

Fitted with Patent Flexible Grinding Plates, which, being self-adjusting in all directions, run perfectly true one with the other, thus ensuring a good even sample of grinding.

Prepare your own food at first cost.

Examine seed before grinding; don't pay for damaged seeds, dust, &c.

These Mills are suitable for the Colonies, also for Farms, Stables, Domestic Purposes, Grocers, Chemists, or Poultry Feeders. They are capable of grinding to meal or kibbling all kinds of Grain, Coffee, Drugs, Charcoal, Cocoa, Broken Oyster Shells, Dog Biscuits, Oilcake, &c.

TABLE SHOWING QUANTITIES WHICH CAN BE KIBBLED OR GROUND PER HOUR.

	KIBBLED Per Hour. lbs.	GROUND Per Hour. lbs.		KIBBLED Per Hour. lbs.	GROUND Per Hour. lbs.
Wheat	40	15	Rice	40	15
Maize	60	15	Coffee	—	35
Beans	60	18	Oil Cake	35	18
Peas	65	10	Oyster Shells, &c.	30	14
Rye	—	15	Barley	34	14
Malt	40	18			

Cash Price, 25s., including extra large Hopper.

If mounted on Cast-iron Table with Steel Legs, 15s. extra.

Equal to any on the Market. Everlasting Wear. Will pay for itself in one month.

These Mills are a boon to all Poultry Keepers, who, to obtain superior birds, should not be without one.

King's Langley.

DEAR SIR,—Received the Food Chopper quite safe, and am very pleased with it.

MRS. MORTON.

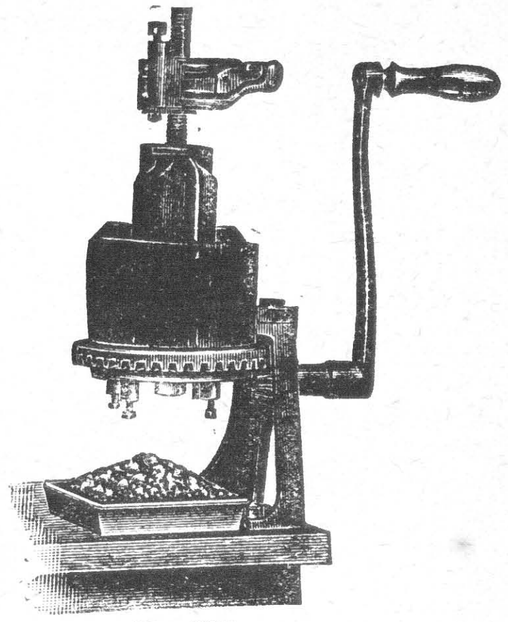
Bryngwyn House, Glanamman.

DEAR SIR,—Received Food Chopper safely. Am surprised at the value, and shall recommend you to all my friends.

D. LLEWELYN.

Cooper's Improved Green Bone and Vegetable Cutter.

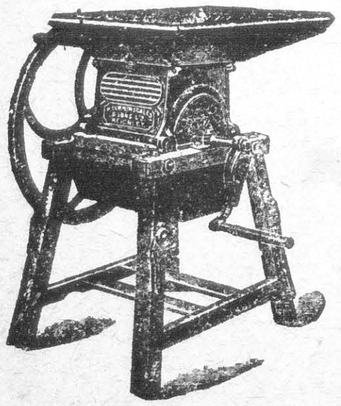
A bone cutter saves food, provides grit, supplies lime for the egg shells; furnishes nitrogen or albumen for the white of the eggs, gives a deeper colour to the yolks, makes the work of the hen easier, prevents decreases by supplying complete foods; causes rapid growth of chicks and gives vigour and stamina all round. Cheaper than grain feeding and induces hens to lay. Every machine warranted to cut dry or green bones, with meat and gristle attached, without clogging or choking.



No. 995.

Size No. 1. Weight 37lb. Capacity about 12lb. to 16lb. per hour. Cash Price, 24s.
Size No. 2. Weight 59lb. Fitted fly-wheel. Capacity 15lb. to 20lb. per hour. Cash Price, 30s.
Size No. 3. Weight 84lb. Fitted with fly-wheel and on tripod stand. Capacity 15lb. to 20lb. per hour. Cash Price, 36s.

Turnip Cutter.



No. 996.

This machine finds great favour amongst farmers and landed proprietors.

The "Single-action" Machine is for cutting turnips, &c., into pieces like fingers, suitable for both calves and sheep. It has 30 knives.

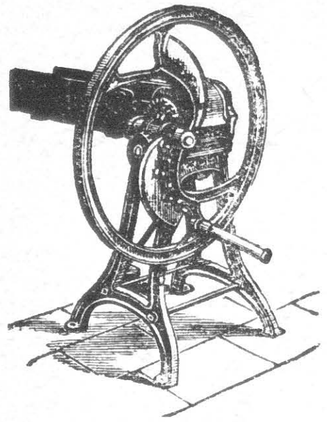
The "Double-action" will cut the turnips into "fingers" by turning the handle one way, but by reversing the motion it cuts them into slices.

	Cash Prices.
Single-action	£4 2 6
Double-action	4 12 6

Complete with Fly-wheel on one side and Swape on the other. If fitted with a Loose Box to catch the pieces, 5s. extra.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Chaff Cutter.



No. 997.

With fixed mouth-piece, 7¾in. by 2⅝in., and tooth rollers. Weight about 1cwt. 3qrs.

	Cash Prices.
Fly-wheel 29in. dia., cuts one length	£2 0 0
Fly-wheel 29in. dia., cuts two lengths	2 2 0

With Fly-wheel 34in. dia., 3s. 6d. extra.
,, ,, 40in. ,, 7s. 6d. ,,
If fitted with treadle, 8s. extra.

Root Pulper.

No. 998.

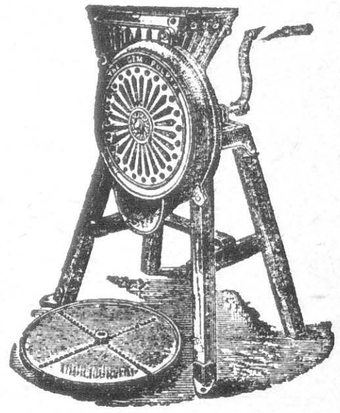
A Strong Useful Machine.

Disc, 20in. diameter.

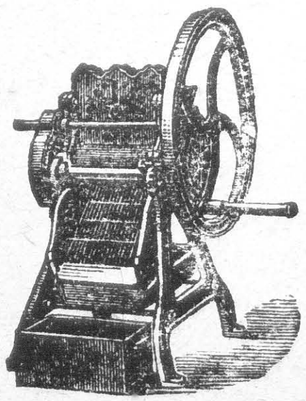
Cash Price £2 7 0

This machine can be supplied as Slicer only at same price.

Finger Plates for Slicer, 8s. 6d. extra.



Oil Cake Mill.

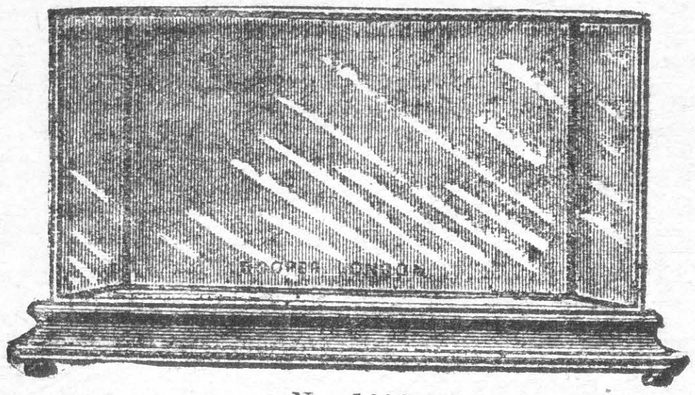


No. 999.

Fitted on strong iron frames with eccentrics to regulate the distance of the rollers, so that seven sizes of cake, suitable for cattle, sheep, or calves, can be crushed in one Machine by moving a small handle. Complete with a screen and receiving box. Can be worked from either side. A boy can work it.

	Cash Prices.
No. 0.—12in. Hopper (without guard)	£2 7 6
,, 1.—12in. Hopper (with guard)	2 11 6
,, 2.—14in. ,, ,,	2 15 6
,, 3.—16in. ,, ,,	3 3 0

Fern Case.



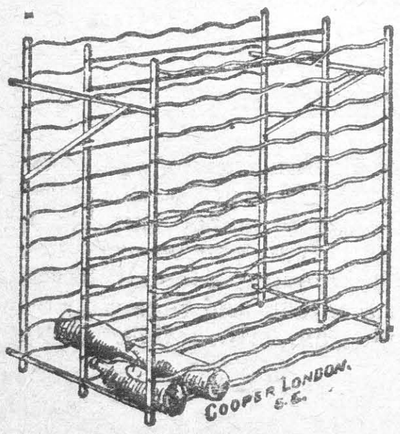
No. 1000.

Length. in.	Width. in.	Cash Price, each. £ s. d.	Length. in.	Width. in.	Cash Price, each. £ s. d.
16	10	1 1 0	24	14	1 13 0
18	11	1 2 6	26	15	1 16 0
20	12	1 6 6	28	16	1 19 0
22	13	1 10 0	30	17	2 0 0

These Fern Cases are strongly and neatly made, glazed with good clear glass. Any Size or Shape made to order. Packing Cases, up to 22in. long, 2s.; up to 30in. long, 3s. extra (not returnable).

Bottle Racks.

Made to pack flat for transport. **Single, to Fasten to a Wall.**



No. 1001.

To hold	Width ft. in.	Height ft. in.	Depth ft. in.	Cash Prices.
6 doz.	2 0	4 0	1 0	9s. 0d.
9 doz.	2 6	4 6	1 0	11s. 6d.
12 doz.	3 9	4 0	1 0	17s. 6d.

Larger sizes made to order, to fit recesses, at 2s. per dozen bottles.

Double, to Stand by Itself or to Fasten to a Wall.

To hold	Width ft. in.	Height ft. in.	Depth ft. in.	Cash Prices.
6 doz.	2 0	2 0	1 7	8s. 6d.
12 doz.	2 0	4 0	1 7	15s. 6d.

Larger sizes made to order, at 1s. 9d. per doz. bottles.

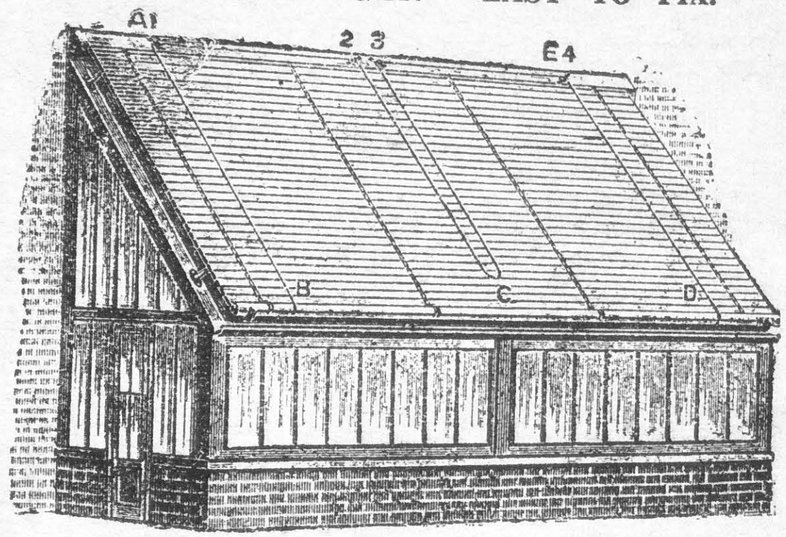
Walderton, Emsworth.

DEAR SIR,—Many thanks for goods received safely and perfect. My tenant is delighted with same.

C. MILLS.

Lath Roller Greenhouse Blinds.

STRONG AND LIGHT. EASY TO FIX.



No. 1002.

They are very durable, flexible, and easily rolled up. Can be taken off and put on without difficulty, or left on during winter months as a protection against frost. The spaces between the laths admit the requisite amount of light, are a protection against hailstorms, and are not blown about by the wind. The sun's rays are diffused, and pass in broken succession over the plants in a way most beneficial to them.

CASH PRICES:

Best planed laths, painted two coats, and varnished, per foot super .. .. 7d.
Best unplaned laths, not painted .. .. 5½d.

The above prices include the necessary lath roller, cord hooks, cleats, and pulleys.

These blinds are supplied up to 16ft. long; beyond this length it is advisable to have two. But special Prices will be quoted for any length. Part of one foot in the length charged as one foot.

All painted blinds supplied green unless otherwise ordered.

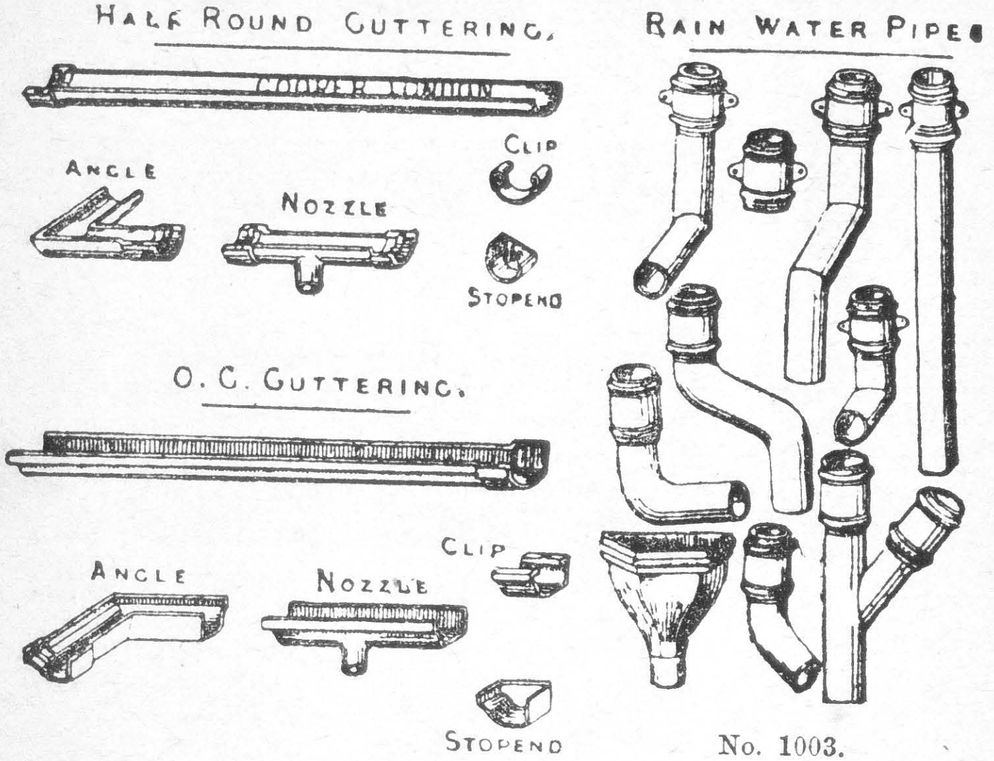
Directions for Fixing and Arranging Pulleys and Cords.

Fasten the cord to ridge of house at Point A, take it beneath the blind and roller to Point B, up through pulleys Nos. 1 and 2, and down to Point C, within hand-reach, then up through pulleys Nos. 3 and 4, over the Blind to Point D, under roller and up to Point E, where it is again fastened.

In ordering, send Lath length required from end to end, and drop length from ridge to eave-plate, or if required, blinds can be fixed under ventilators so as not to interfere with the opening or shutting of same.

The above prices do not include fixing.

Rain-Water Goods.



No. 1003.

Special Quotations for Large Quantities.

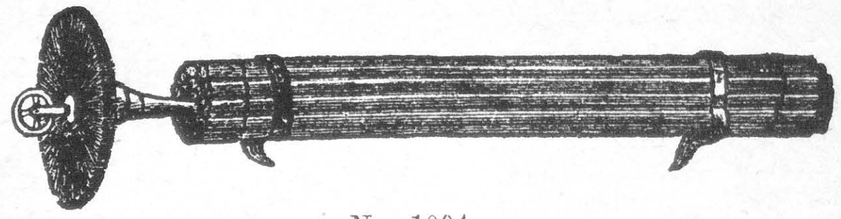
	2in.	2½in.	3in.	3½in.	4in.	4½in.	5in.	6in.	
	CASH PRICES.								
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	
Half Round Gutters, 6ft. Lengths	—	—	—	0 7	0 7	0 9	0 10	1 0	per yd.
Angles and Nozzles	—	—	—	0 7	0 8	0 10	0 11	1 5	each.
Stop Ends	—	—	—	0 3	0 3	0 4	0 5	0 6	,,
Loose Clips	—	—	—	0 4½	0 5½	0 6½	0 7	0 7½	,,
O.G. Gutters, 6ft. lengths	—	—	—	0 8	0 9	0 10	1 1	1 3	per yd.
Angles and Nozzles	—	—	—	0 8	0 9	0 10	1 0	1 2	each.
Stop Ends	—	—	—	0 3	0 3	0 4	0 5	0 6	,,
Loose Clips	—	—	—	0 5	0 5	0 6	0 6	0 7	,,
Pipes, 6ft. lengths	0 9	0 11	1 0	1 2	1 4	1 9	2 3	2 11	per yd.
Heads, flat or angle	1 0	1 4	1 9	2 3	2 8	3 9	4 9	5 11	each.
Shoes	0 9	0 10	1 0	1 4	1 6	2 2	2 8	3 9	,,
Boots	1 0	1 2	1 6	1 9	2 2	—	—	—	,,
Plinth Bends	1 0	1 4	1 7	2 0	2 7	—	—	—	,,
Elbows	0 10	1 0	1 3	1 6	1 10	—	—	—	,,
Branch Pipes	1 3	1 6	2 0	2 4	2 10	—	—	—	,,
Union Sockets	0 6	0 7	0 9	0 11	1 1	—	—	—	,,
Swan Necks, 3in. projection	1 0	1 1	1 4	1 8	2 0	—	—	—	,,
,, 4½in. & 6in. ,,	1 2	1 4	1 6	1 10	2 4	—	—	—	,,
,, 9in. ,,	1 6	1 8	2 0	2 6	3 0	—	—	—	,,
,, 12in. ,,	1 10	2 1	2 5	3 0	3 6	—	—	—	,,
,, 15in. ,,	2 3	2 6	2 10	3 6	4 3	—	—	—	,,
,, 18in. ,,	2 6	2 10	3 4	4 0	4 9	—	—	—	,,

Short lengths of Gutter, 3in. to 4in., 1d. per yard extra; 4½in. to 6in., 2d. per yard extra. Piping, 2in. to 4in., 2d. per yard extra; 4½in. to 6in., 3d. per yard extra.
Gutter Bolts and Nuts, 3s. per gross, 5d. per doz.
Pipe Nails, 6s. per gross, 8d. per doz.
All above Prices subject to market fluctuations.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Our Special "Household" Chimney and Drain Machine.

FOR PRIVATE HOUSES.



No. 1004.

With best Malacca canes, in 3ft. lengths, double worm screw, clearing wheel, 4in. indiarubber plunger, drop scraper, chimney sweep's brush, and pair of straps. Specially designed for country mansions, hotels, farms, and private houses. The chimney can be swept, or a choked drain cleared, by any man employed about the place.

Cash Prices, complete as shown:

30ft.	40ft.	50ft.	60ft.	70ft.	80ft.	90ft.	100ft.
22/6	25/9	30/-	35/3	39/9	46/6	51/9	56/3

Best Stout Red Malacca Cane Rods, Fitted with Best Brass Screws.

Cash Prices: 2ft. Rod, 1/6; 2ft. 6in. Rod, 1/11; 3ft. Rod, 2/6; 3ft. 6in. Rod, 2/9; 4ft. Rod, 3/1; 4ft. 6in. Rod, 3/5; 5ft. Rod, 3/9 each.

Drain-Cleansing Apparatus.

CASH PRICES:

No. 1—Double Worm Screw 2/6	No. 6—Whalebone Drain Brushes, 4 and 5in. 5/0, 6in. 5/9, 7in. 6/6, 8in. 7/3, 9in. 8/-
No. 2—Brass Clearing Wheel 2/-	No. 7—Jointed Scraper 3/6
No. 3—India Rubber Forcers, 4in. 2/6, 5in. 3/-, 6in. 3/6	No. 8—Plain Scraper 2/-
No. 4—Universal Clearing Wheel .. 3/6	No. 9—Spring Hook 4/-
No. 5—Archimedean Screw 2/-	

No. 10—Solid Gun Metal Roller 3/-

Heavy, Stout, Strong Rods, made specially for Sanitary Authorities and Local Boards of Health, fitted with Best Brass Screws, lengths 5ft. to 6ft., £3 5s. per 100ft. Run; 200ft. Run, £6.

Sweeps' Bass Heads, with Screw to fit on Rods, 10in. 2s. 3d., 12in. 2s. 6d., 14in. 2s. 11d., 16in. 3s. 3d., 18in. 3s. 9d. each.

Sweeps' Bass Brushes, with Patent Cup and Cap, Wheel and Leathers, as shown on the machine.

10in. 4s. 6d., 12in. 4s. 9d., 14in. 5s. 3d., 16in. 5s. 6d., 18in. 6s. each.

Chimney-sweeps' Best Hand Brushes, 3s. 3d.; with Screws to fit Rods, 6d. extra.

Turk's Head, Bristle or Bass, 6in. 5s., 8in. 6s. 6d., 10in. 7s. 6d. each.

Sweeps' Soot Cloths, 6ft. by 5½ft., 5s.

Soot Shovel, 1s. 3d.

The Celebrated "Grand Rapids" Carpet Sweeper,

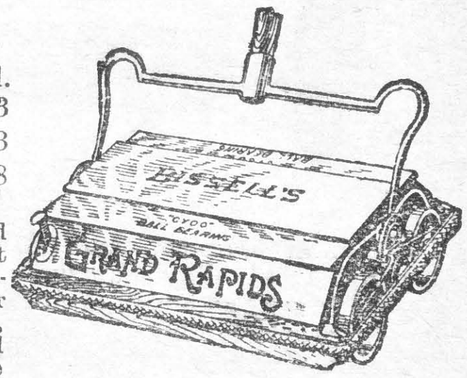
Cyco-Bearings, japanned finish.

Bissell's Grand Rapids.

Cash Prices:

	s.	d.
Grand Rapids	13	3
„ with Ball Bearings	14	3
„ Nickel-plated ..	16	8

The Grand Rapids is the oldest and most popular of all sweepers sold in Great Britain. Since 1885 its sale has undoubtedly been larger than that of all other carpet sweepers put together. It has, however, been continuously improved, and is to-day a Cyco-Bearing machine of the highest power and quality.



No. 1005.

Clothes Posts and Sockets.



No. 1006.

9ft. high, Complete with Socket. Cash Price, 2s. 3d. each.



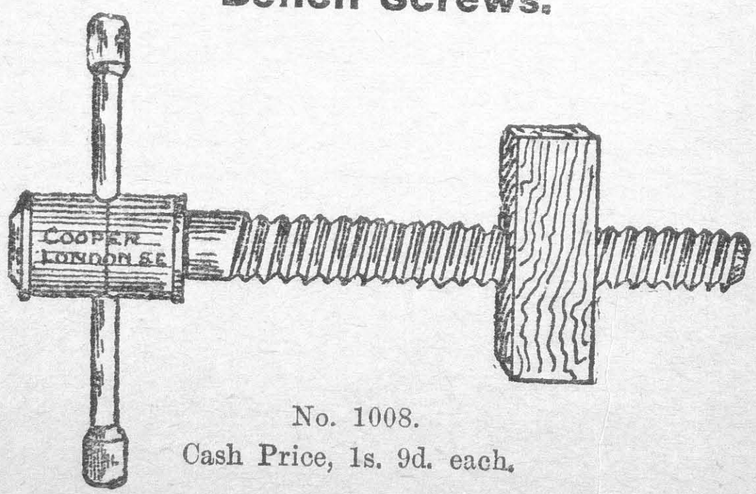
Housemaid's Boxes,



No. 1007.

Cash Prices, 14in. 2s. 6d., 16in. 3s.

Bench Screws.



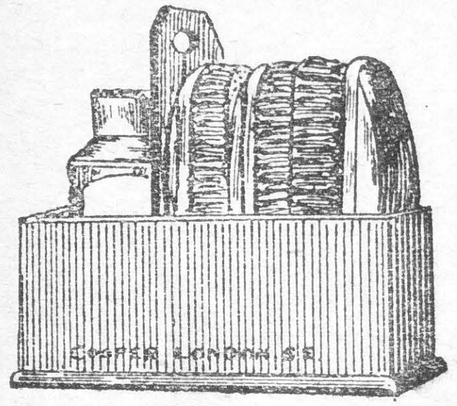
No. 1008.

Cash Price, 1s. 9d. each.

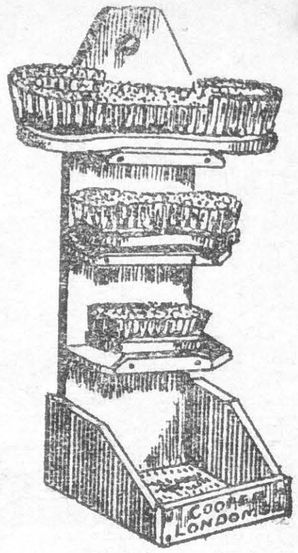
WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Shoe Brush Boxes.

Varnished Deal.
(Brushes not included.)



No. 1009.
Cash Price, 10d. each.



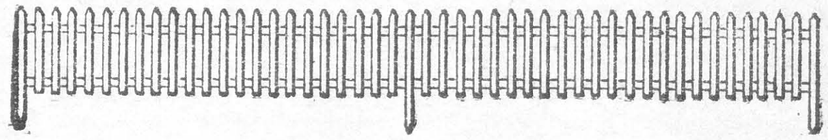
No. 1010.

Sink Tidies.

Complete with three Shelves. 14in. high. Cash Price, 8d. each.

(Brushes not included.)

Strong Wood Garden Border.

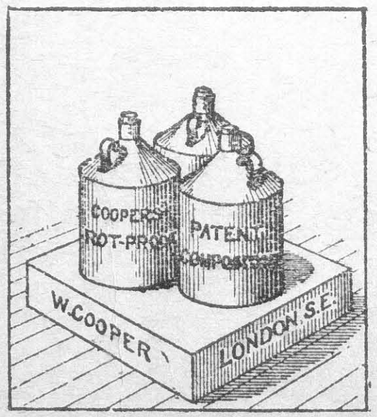


No. 1011.

Ornamental, and gives an artistic finish to Lawn, Flower Beds or Garden Walk. Strongly made of good sound materials. Will last for years.

Length. ft. in.			Height. ft. in.			Cash Prices. s. d.	
12 0	....	....	0 9	....	....	1 0	each.
12 0	....	....	1 0	....	....	1 3	„
12 0	....	....	1 3	....	....	1 6	„
12 0	....	....	1 6	....	....	1 9	„
12 0	....	....	2 0	....	....	2 9	„

Cooper's Rot-Proof Composition. (WILCOO.)



No. 1012.

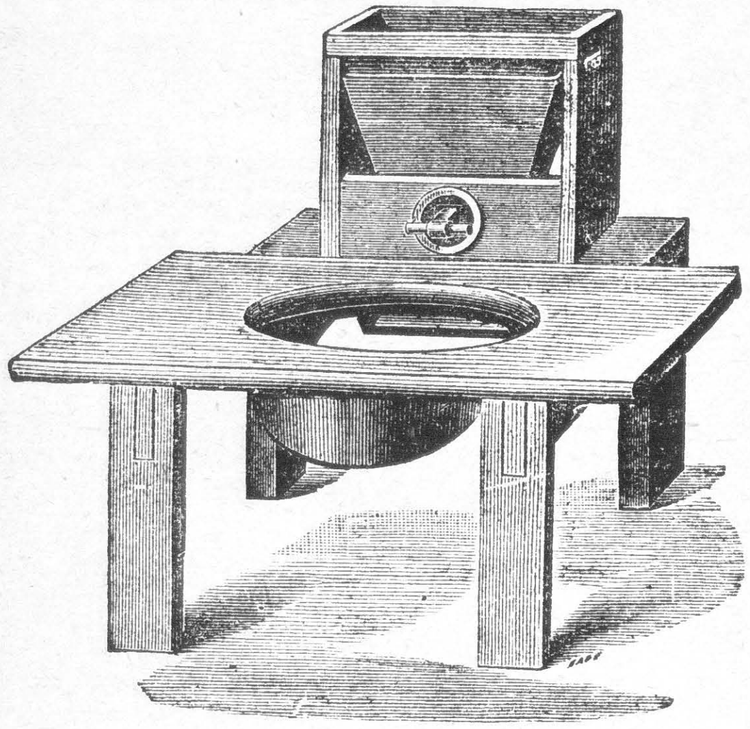
A good preservative for all woodwork exposed to the weather, and suitable for Farm Buildings, Poultry Houses, Palings, Fences, or any description of Outdoor Woodwork.

	Cash Price. £ s. d.		Cash Price. £ s. d.
1 gal.	0 2 6	10 gals.	0 17 6
2 gals.	0 4 9	20 gals.	1 10 0
5 gals.	0 10 0	40 gals.	2 10 0

Put on rail at our Works.

Cans and Casks included (not returnable).

Earth Closets.



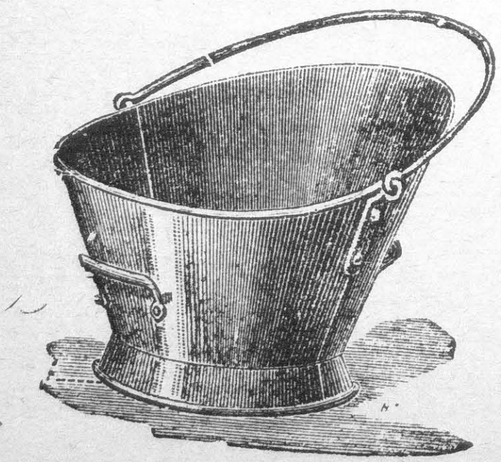
No. 1013.

This Apparatus is sent out on bearers, with seat fixed, ready for encasing. The seat is 3ft. long, but can be cut to any other length. Total depth, back to front, 2ft. 3½in.

Cash Price, £1 14s. 6d.

If with Pull-up Lever fitted in Seat, £1 19s; or can be supplied without bearers if required.

Earth supply should be of a loamy nature if possible.



No. 1014.

Galvanised Earth Closet Pails.

Egg Shape.

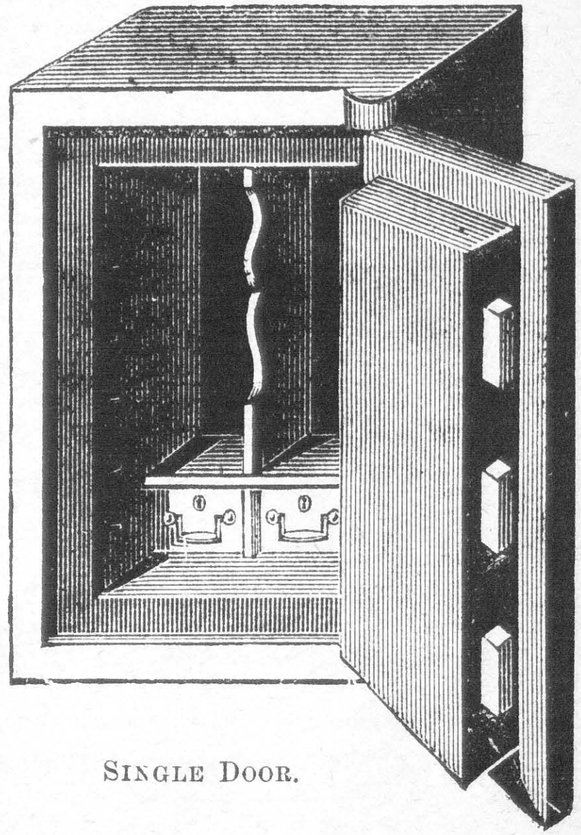
Cash Price, 4s. 6d.

Wrought-iron Fire and Burglar Proof Safes.

No. 1015.

These Safes are made from 13 gauge body plates and ⅜in. boiler plate doors, fitted with 2, 3, and 4 bolts in front, and same dogs in back, according to sizes. Fire resisting walls are 3in. to 3½in., making them perfectly fire and thief resisting, and fitted with a good 6 lever powder proof unpickable lock, making them a good and reliable Safe for the million.

Inches.				Cash Prices. £ s. d.
20	14	14	1 Drawer	3 5 0
22	16	16		3 12 0
24	18	18		3 18 0
26	19	19	2 Drawers	4 4 0
28	20	20		4 10 0
30	22	22		5 2 0
32	24	24		5 14 0
34	26	24	2 Drawers, 2 Shelves, or 2 Partitions	6 0 0
36	26	26		7 15 0
40	28	25		8 5 0
44	30	28		9 5 0
48	30	28		10 10 0



SINGLE DOOR.

Carriage paid to any Goods Station within 150 miles of our Staffordshire Works.



No. 1016.

Cooper's Ready Mixed Paint.

The Most Reliable Quick-drying, Ready-mixed Paint in the Trade.

Will stand any weather.

Made in All Colours. Tins Free.

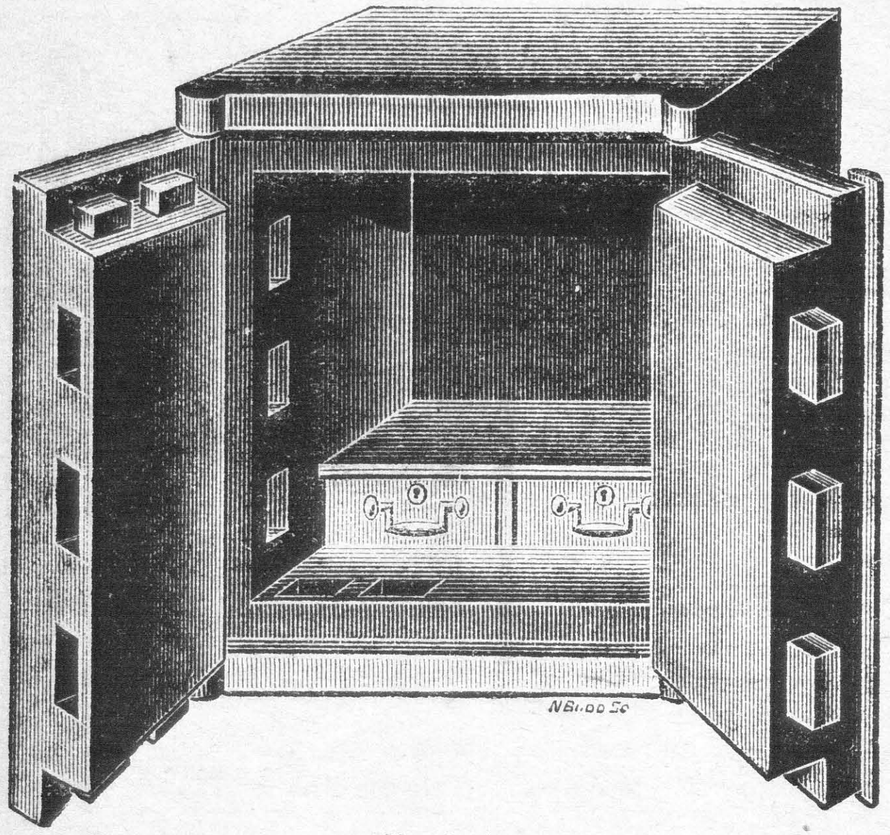
Carriage Forward.

Cash Prices—7lb., 2s.; 14lb., 3s. 9d.; 28lb., 7s.; 56lb., 13s. 6d.; 112lb., 25s.

Packing, if desired, 3d. per 7lb. extra.

Try a Sample Tin. State colour required when ordering.

Wrought-iron Fire and Burglar Proof Safes.



No. 1017.

DOUBLE DOOR SAFE.

Inches.				Cash Prices. £ s. d.
24	24	18	2 Drawers..	5 14 0
26	26	19		6 6 0
28	28	20		7 10 0
30	30	22	2 Drawers, 2 Shelves, or 2 Partitions	7 16 0
32	32	24		8 8 0
34	34	24		9 0 0
36	36	26		10 10 0
40	40	26		12 0 0

Carriage Paid to any Goods Station within 150 miles of our Staffordshire Works.

Sash Tools. No. 1018.

Best Quality. English Make.

Cash Prices:

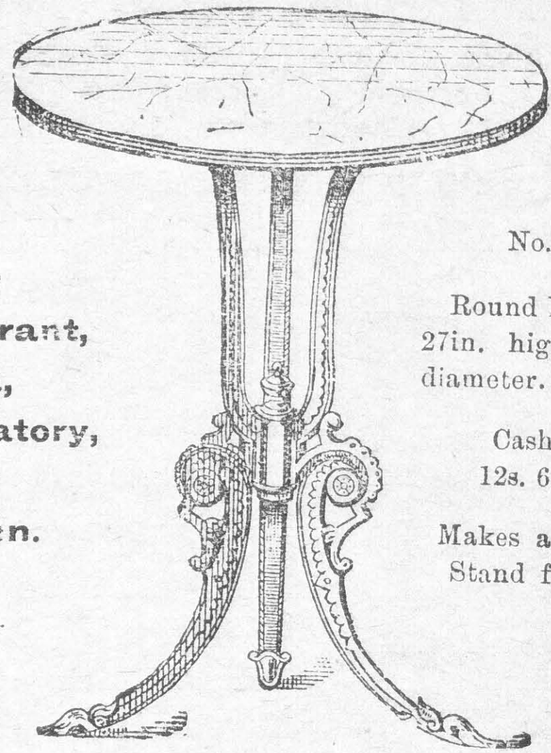
No.	2	3	4	5	6	7	8	
	3s. 3d.	3s. 9d.	4s. 6d.	6s.	8s. 3d.	10s. 3d.	12s. 6d.	per doz.
	4d.	4½d.	5d.	7d.	9d.	1s.	1s. 2d.	each.

Best quality 6/0 paint brushes, suitable for large surfaces, 4s. 6d. each.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Marble Top Solid Iron Frame Refreshment Tables.

For Restaurant, Tea, Conservatory, or Garden.

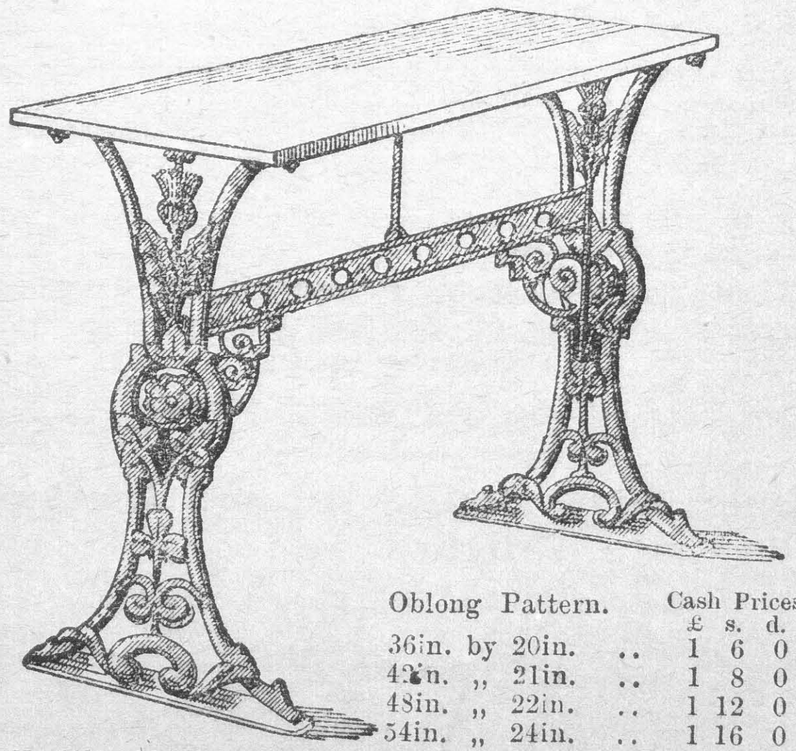


No. 1019.

Round Marble Top. 27in. high by 19in. diameter.

Cash Price, 12s. 6d. each.

Makes a handsome Stand for Plants.



Oblong Pattern.	Cash Prices. £ s. d.
36in. by 20in. ..	1 6 0
42in. „ 21in. ..	1 8 0
48in. „ 22in. ..	1 12 0
54in. „ 24in. ..	1 16 0

No. 1020. Makes a handsome Stand for plants in hall or room.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Cooper's High-Grade Lubricating Oils.

No. 1021.

For Railway, Steamship, Colliery, Tramway, and Omnibus Companies, Ironfounders, Engineers, Manufacturers, &c.

Our Oils are Highly Recommended as being Economical and thoroughly Effective Lubricants.

Grades.	Brand.		Machinery adapted for.	Drum Lent. Per Gallon (12 Gallons).	Cask Free. Per Gallon (Per Cask, 40 Gallons).
				s. d.	s. d.
1	W.C.	Lubricating Oil ..	Light	1 6	1 0
2	W.C.L.	„ „ ..	Medium	1 9	1 3
3	W.X.C.	„ „ ..	Heavy	2 0	1 6
4	C.L.C.	Cylinder Oil	—	2 0	1 6
5	L.C.W.	Black Cylinder Oil ..	—	1 9	1 3
6	C.W.L.	Engine Oil	—	1 9	1 3

Less quantities than 12 gallons are supplied, but 3d. per gallon extra must be added. Casks free. Kegs and drums lent and charged, but allowed for if returned in good condition carriage paid.

The above prices are based on market rates, and being cut fine are subject to fluctuations.

Our Oils are most highly appreciated, and the greatly increased demand is the best attestation to their superior quality.

Special quotations for large quantities.

Copper Wire, Bound Ground Distemper Brushes. No. 1022.

Secured with Improved Copper Shoulders.
Best Quality. English Make.

Cash Prices:

12	11	10	9	8oz.
110s.	103s.	93s.	84s.	74s. per doz.
9s. 6d.	9s.	8s.	7s. 3d.	6s. 3d. each.

WILLIAM COOPER, Limited,
761, Old Kent Road, LONDON, S.E.

SECTION XIII.

Illustrated Catalogue

— OF —

BILLIARD AND BAGATELLE TABLES and ACCESSORIES.

Made from the Best and Well-Seasoned Materials. ∴ Satisfaction Guaranteed.

REPAIRS of every description receive most careful attention.

Estimates Given for all classes of Work.

WE would respectfully draw your attention to the specification of each Table. A careful comparison of our prices and specifications with those of other makers will convince you that we are the cheapest on the market.

We are manufacturers. Our extensive and up-to-date plant enables us to offer better value for less money than any other house in the trade. Every detail is carefully studied to ensure satisfaction.

So confident are we of the merits of our Tables, that we will willingly send one on approval.

All Billiard Tables manufactured by us are fitted with our low and fast up-to-date cushions.

Tables specially built for India and other Tropical Climates.

Prices quoted in this List are the Lowest possible Net Figures for Cash.

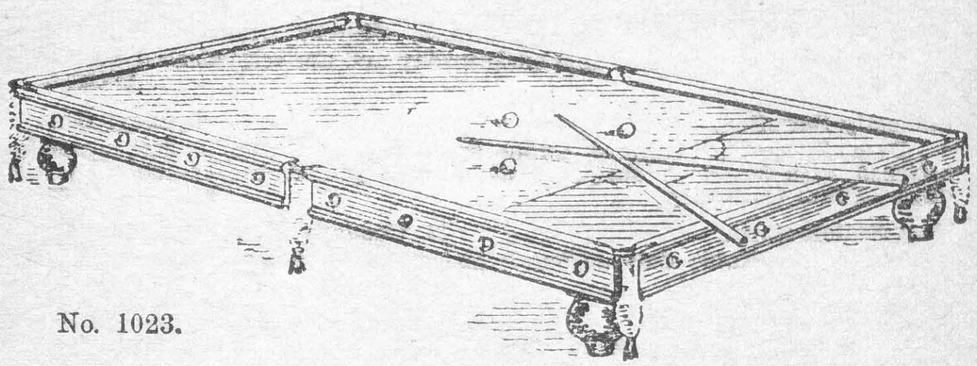
All Tables are delivered free to any Railway Station in the United Kingdom.

Packing Cases are lent free, but must be returned, Carriage Paid and in good condition, within 7 days, or will be charged.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Portable Billiard Tables.

A Billiard Table that can be placed on any Dining Table, at Trade Prices for Cash, carriage paid, at our risk.



No. 1023.

PORTABLE TABLE.

SPECIFICATION OF TABLE AND ACCESSORIES.

The bed is of thick slate, thoroughly seasoned, and with perfectly flat ground surface, covered with superfine West of England cloth. Mounted on stout mahogany, solid oak, or handsomely figured pitch-pine frame, fixed with adjustable screw feet, by the aid of which a perfect level can always be obtained. The cushions are mounted with the best frost-proof rubber, new low pattern. Six screw top brass pocket plates with strong white cord nets, well leathered. French polished and finished in a first-class manner.

The accessories supplied include two-slide marking board, polished to match table, two ash cues, spirit level, chalks, tips, wafers, good rest, rules of the game, and three large ivory or crystalate balls.

PRICES OF PORTABLE BILLIARD TABLES.
On Adjustable Screw Feet.

			Three Ivory or Crystalate Balls.	Nett Price for Cash with order. £	s.	d.
No. 1.	3ft. 10in.	by 2ft. 1in.	1¼in.	2	15	0
,, 2.	4ft. 4in.	by 2ft. 4in.	1¼in.	3	2	6
,, 3.	4ft. 10in.	by 2ft. 7in.	1⅜in.	3	10	0
,, 4.	5ft. 4in.	by 2ft. 10in.	1⅝in.	4	2	6
,, 5.	6ft. 4in.	by 3ft. 4in.	1¾in.	4	17	6
,, 6.	7ft. 4in.	by 3ft. 10in.	1⅞in.	6	15	0
,, 7.	8ft. 4in.	by 4ft. 4in.	2in.	9	15	0
,, 8.	9ft. 4in.	by 4ft. 11in.	2in.	13	0	0
,, 9.	10ft. 4in.	by 5ft. 4in.	2 1/16in.	15	15	0

Eythorpe, Aylesbury.

DEAR SIRS,—I beg to advise you of the safe arrival of the Billiard Table, and in good condition.—Yours truly, E. GIBBS.

UNSOLICITED TESTIMONIALS.

Very Satisfactory. 27, Windsor Terrace, South Shields.
DEAR SIRS,—Billiard Table is now to hand, and is very satisfactory.—Yours faithfully, ALF. MAYS.

Very Pleased. Wyndhurst, Milward Crescent, Hastings.
GENTLEMEN,—I received Table on Saturday and am very pleased with it.—Yours truly, O'CAVIE.

Perfectly Satisfied. Lydney, Glos.
DEAR SIRS,—The Billiard Table arrived to-day, and I am perfectly satisfied with same. A cheque shall be sent you in the course of a few days.—Yours faithfully, EDGAR JARRETT.

Very Satisfactory. 13, Goddard Hall Road, Sheffield.
DEAR SIRS,—Table duly to hand, and same is very satisfactory.—Yours truly, ALF. A. DYSON.

Table Works Admirably. 128, Beeches Road, West Bromwich.
DEAR SIRS,—Billiard Table arrived quite safely. I am very pleased indeed with it.—Yours, JNO. WEBSTER.

Every Satisfaction. Conway Villa, Gedling.
GENTLEMEN,—Billiard Table received on Friday in good condition, and has given every satisfaction.—Yours truly, F. BAILEY.

Arrived Safe. Dungannon.
SIR,—The Table Top has arrived in safety.—Yours, J. O'NEILL.

Given Every Satisfaction. 9, Aigburth Road, Grassendale, near Liverpool.
DEAR SIRS,—Billiard Table reached here safely, and has given every satisfaction.—Yours, &c., T. BELL.

Gives Satisfaction. 44, Portland Crescent, Leeds.
GENTS,—I am glad to say the Table gives satisfaction.—Yours truly, J. BENN.

Like it Very Much. Masham Vicarage, R.S.O., Yorkshire.
DEAR SIR,—The Billiard Table arrived in good order, and we like it very much.—Yours truly, H. HEDLEY.

Arrived Good Condition. Yews River, Dover.
DEAR SIR,—The Billiard Table has arrived in good condition.—Yours truly, CHARLES MITCHELL.

I'm Well Pleased. The Avalon Boot Works, Littlewood Street, Rothwell, Kettering.
GENTS,—The Billiard Table arrived quite safe, and I am well pleased with it.—Yours, L. Y.

Very Pleased. Furleigh, The Avenue, Southampton.
GENTLEMEN,—Billiard Board duly received, and am very pleased with it.—Yours faithfully, F. A. DUNSFORD.

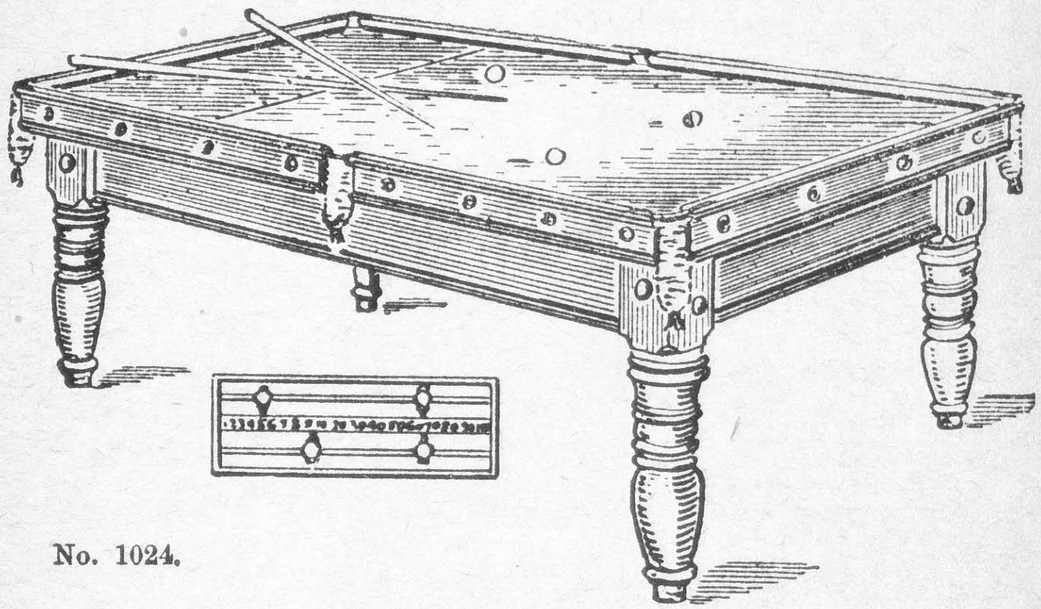
Quite Pleased. Dene Park, Tonbridge.
Mr. Peek writes to say he received the Table quite safe, and is quite pleased with it.—Yours truly, W. PEEK.

Well Satisfied. 319, Granville Road, Park, Sheffield.
Portable Billiard Table arrived safely. Am very well satisfied with it.—Yours truly, J. T. FRITH.

Quite Satisfied. Oakfield Cottage, Elmswood Road, Aigburth.
SIR,—The Table arrived this evening. I have tried it, and am quite satisfied with the way it plays.—Yours truly, JNO. MOORE.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Billiard Table
Complete with Stand.



No. 1024.

SPECIFICATION OF TABLE AND ACCESSORIES.

The bed is of thick slate, thoroughly seasoned, and with perfectly flat ground surface, covered with superfine West of England cloth. Mounted on stout mahogany, oak, or handsomely-figured pitch-pine frames. The cushions are mounted with the best frost-proof rubber, new low pattern. Six screw top brass pocket plates with strong white cord nets, well leathered. French polished and finished in a first-class manner. The stand is made of good sound timbers to bolt together at corners, with handsome turned pine legs polished to match table.

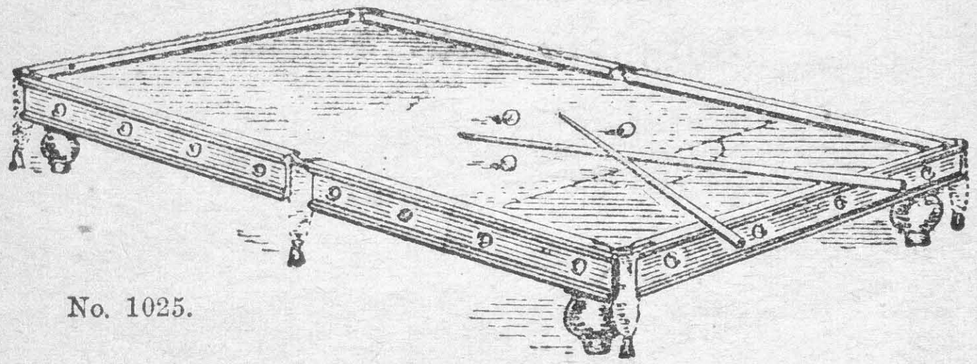
The accessories supplied include a two-slide marking board, handsomely polished to match table, ash cues, spirit level, chalks, tips, wafers, good rest, rules of the game, and three large ivory or crystalate balls.

SIZES AND PRICES.

			Three Ivory or Crystalate Balls.	Nett Price for Cash with Order. £ s. d.
No. 3.	4ft. 10in.	by 2ft. 7in.	1⅜in.	5 2 6
,, 4.	5ft. 4in.	by 2ft. 10in.	1⅝in.	6 0 0
,, 5.	6ft. 4in.	by 3ft. 4in.	1¾in.	7 5 0
,, 6.	7ft. 4in.	by 3ft. 10in.	1⅞in.	9 10 0
,, 7.	8ft. 4in.	by 4ft. 4in.	2in.	13 0 0
*,, 8.	9ft. 4in.	by 4ft. 11in.	2in.	17 0 0
*,, 9.	10ft. 4in.	by 5ft. 4in.	2 1/16in.	20 0 0

* With Six Legs.

Superior Portable Tables.



No. 1025.

PORTABLE TABLE.

Easily Adjusted by Screw Feet. Perfect Level can always be obtained.

NOT A TOY. ACCURATE GAME CAN BE PLAYED.

SPECIFICATION.

The bed is of superior, well-seasoned thick slate, hand-planed and rubbed surface equal to any first-class table. Will stand the test of level in any position. The corners for pockets are cut out of the slate. Covered with superfine West of England cloth, baulked and spotted. Cushions are of solid mahogany or oak, fitted with best frost-proof rubber, new low pattern. Balls easily playable when under cushion. Six screw brass pocket plates, strong cord nets, well leathered. The whole finished in a superior manner.

The accessories supplied include two-slide marking board, surmounted with ornamental pediment polished to match table, two butted cues, spirit level, chalks, tips, wafers, good rest, rules of the game, and three large ivory or crystalate balls.

SIZES AND PRICES.

		Three Ivory or Crystalate Balls.	Nett Price for Cash with Order. £ s. d.
No. 1.	5ft. 4in. by 2ft. 10in.	1⅞in.	5 10 0
,, 2.	6ft. 4in. by 3ft. 4in.	2in.	6 17 6
,, 3.	7ft. 4in. by 3ft. 10in.	2in.	9 0 0
,, 4.	8ft. 4in. by 4ft. 4in.	2in.	11 10 0
,, 5.	9ft. 4in. by 4ft. 11in.	2 1/16in. (match size).....	15 0 0
,, 6.	10ft. 4in. by 5ft. 4in.	2 1/16in. (match size).....	18 0 0

Great Northern Hotel, Haxey Station, Via Doncaster.

DEAR SIR,—I am duly in receipt of Billiard Table, in good order, with which I am thoroughly satisfied.—I remain, yours, &c., ALF. WRIGHT.

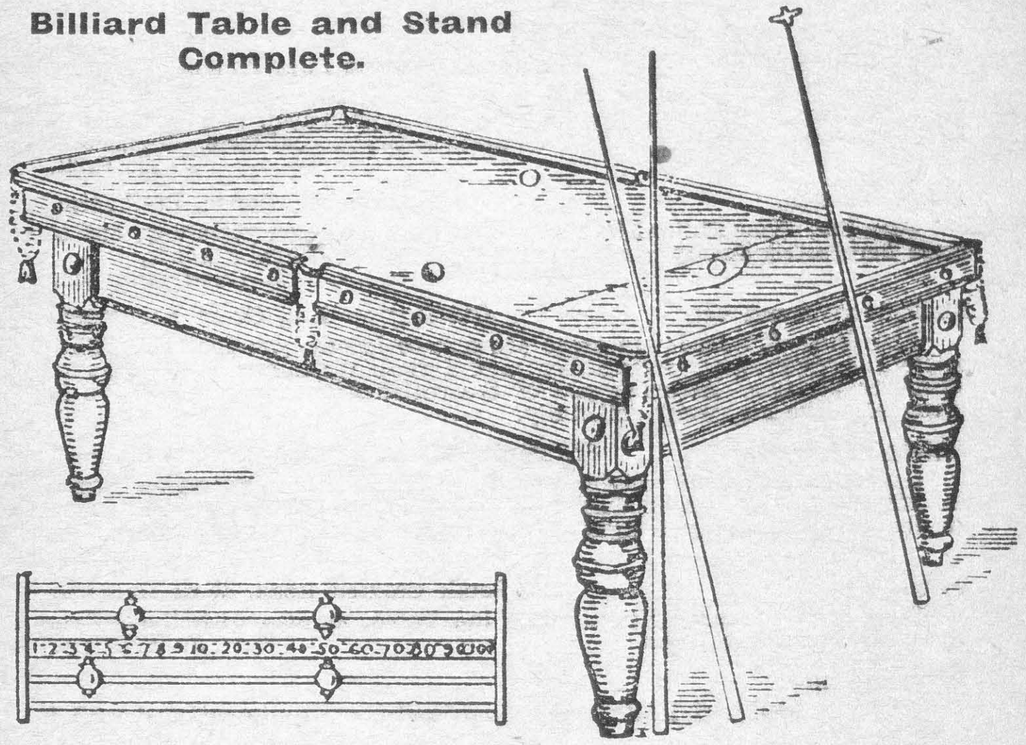
Waters Green Tavern, Macclesfield.

DEAR SIR,—I received the Billiard Table all right and am highly delighted with it, so is everybody who sees it. Thanking you very much.—I remain, yours truly, A. MIDGLEY.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The Superior Billiard Tables.

Billiard Table and Stand Complete.



No. 1026.

SPECIFICATION.

Carriage Paid at our risk.

The bed is of superior, well-seasoned, thick slate, hand-planed and rubbed surface, equal to any first-class table. Will stand the test of level in any position. The corners for pockets are cut out of the slate. Covered with superfine West of England cloth, baulked and spotted. Cushions are of solid mahogany or oak, fitted with best frost-proof rubber, new low pattern. Balls easily playable when under cushion. Six screw brass pocket plates, strong cord nets, well leathered. On stand with four stout mahogany, oak, or other hardwood turned legs. Mahogany or oak-faced sides. Handsomely polished, and finished off in a thorough workmanlike manner.

The accessories supplied include a two-slide marking board, handsomely polished to match table, surmounted with ornamental pediment, ash cues, spirit level, chalks, tips, wafers, good rest, rules of the game, and three large ivory or crystalate balls.

PRICES OF SUPERIOR BILLIARD TABLES.

		Three Ivory or Crystalate Balls.	Nett Price for Cash with Order. £ s. d.
No. 1.	5ft. 4in. by 2ft. 10in.	1⅞in.	7 15 0
,, 2.	6ft. 4in. by 3ft. 4in.	2in.	9 15 0
,, 3.	7ft. 4in. by 3ft. 10in.	2in.	12 10 0
,, 4.	8ft. 4in. by 4ft. 4in.	2in.	15 10 0
*,, 5.	9ft. 4in. by 4ft. 11in.	2 1/16in.	20 0 0
*,, 6.	10ft. 4in. by 5ft. 4in.	2 1/16in.	24 0 0

* With six stout legs.

UNSOLICITED TESTIMONIALS.

Best on the Market. Merok, Waddon Park Avenue, Croydon.

DEAR SIR,—I am pleased to inform you that the Billiard Table reached me safely, and I consider it an exceptionally good one, and certainly the best of its kind on the market at the price at the present time.—Yours truly
W. H. FINN.

Much Admired. Gartincaber, Doune, Perthshire.

DEAR SIR,—The Billiard Table reached Doune Station yesterday, and has come here safely to-day, and is much admired.—Faithfully yours,
J. BURN MURDOCH.

Shall Recommend You. Old Harrow Inn, Great Longstone.

DEAR SIR,—It affords me great pleasure to inform you that the Billiard Table has given every satisfaction, and I shall recommend you to anyone whenever possible. Assuring you of the satisfaction which the Table has given,—Believe me, yours faithfully, THOS. PARSONS.

Highly Delighted. St. Paul's Working Men's Club, Brentford.

GENTLEMEN,—I beg to advise you the Billiard Table and all accessories, including cues, have been duly received in sound and good condition, our members being highly delighted with the Table.—Faithfully yours,
W. ATKINS.

Very Pleased. 95, South Croxted Road, West Dulwich.

DEAR SIR,—Am very pleased with the Table, as also with the delivery of same.—Faithfully yours, J. W. PLATT.

Quite Satisfied.

DEAR SIR,—Billiard Table has arrived, and I am quite satisfied with it. —Yours truly, C. HENWOOD.

Table Works Admirably. 128, Beeches Road, West Bromwich.

GENTLEMEN,—Kindly send Catalogue. Billiard Table I had last year works admirably.—Yours, J. J. WEBSTER.

Quite Satisfied. 44, Poplar Road, Oxton, Birkenhead.

DEAR SIR,—Portable Billiard Table just arrived, quite sound. Am quite satisfied with it.—Yours, &c., J. MCMICHALL.

It is a Bargain.
Normanhurst, Laburnam Grove, North End, Portsmouth.

DEAR SIR,—I have much pleasure in stating that the combined Billiard and Dining Table has arrived safely. I look on it as a bargain at the price for cash. The arrangement for converting the table from billiard to dining, or *vice-versâ*, is very simple, it being possible for a child of ten to convert it from one to the other. Altogether, I think it is a grand article.—Yours faithfully, ———, Lieut., R.N.

Quite Satisfied. Yew Tree Hotel, Walkeen, near Stevenage, Berks.

DEAR SIR,—Received the Billiard Table, and we are quite satisfied with it.—Yours faithfully, J. PEMBER.

Very Pleased. The Royal Oak Hotel, Bickley.

DEAR SIR,—I have received Billiard Table quite safe, and very pleased with same; every satisfaction.—Faithfully yours, CHAS. GODDARD.

Arrived Safely. Ingatesby, Silverdale Road, Eastbourne.

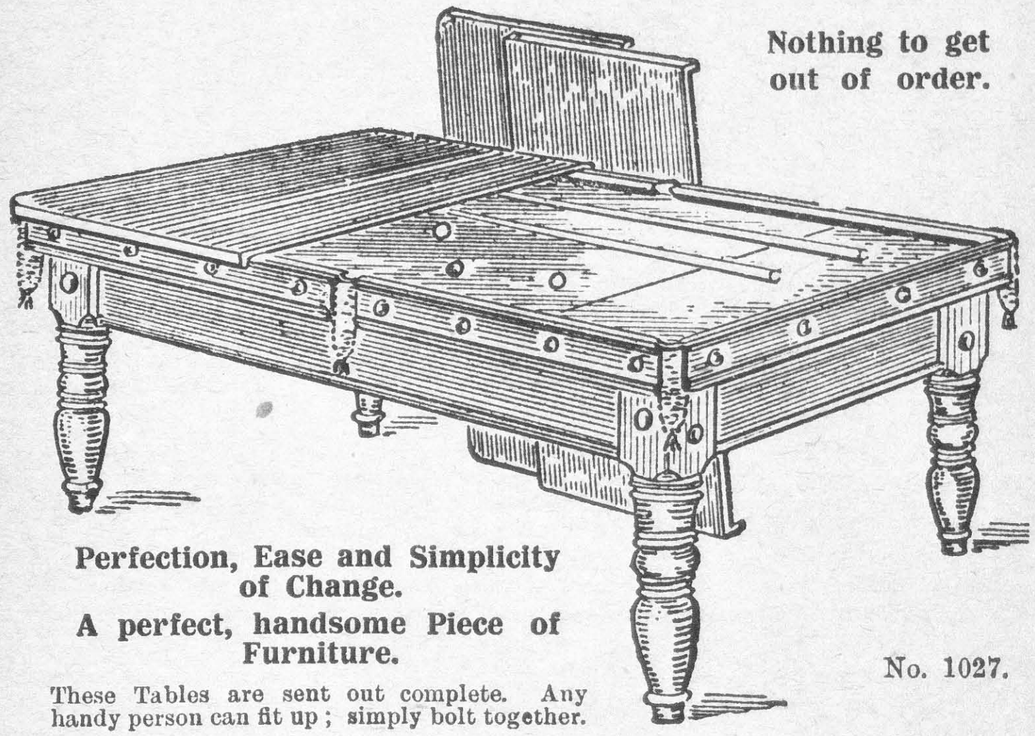
DEAR SIRS,—The Billiard Table arrived safely, and has given satisfaction.—Yours truly, R. I. W. MARSLAND.

Gives Every Satisfaction. Whitchurch, Salop.

DEAR SIR,—The Table is duly to hand, and fully comes up to my expectation; it gives every satisfaction, and is wonderfully cheap.—Yours faithfully, R. W. BOWMAN.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Billiard and Dining Table Combined.



Nothing to get out of order.

Perfection, Ease and Simplicity of Change.

A perfect, handsome Piece of Furniture.

No. 1027.

These Tables are sent out complete. Any handy person can fit up; simply bolt together.

SPECIFICATION OF TABLE AND ACCESSORIES.

Thick, thoroughly seasoned slate bed, with dead level ground surface, covered with superior West of England cloth, fixed to handsome stout polished faced oak or mahogany frame, mounted on four or six stout turned legs (according to size). A loose dining table top, which entirely covers up billiard table, is supplied. Solid mahogany or oak, low billiard cushions, fitted with best frost-proof rubber. The pockets have brass plates, well leathered, with strong white cord nets. The whole well finished, and all woodwork handsomely polished in a superior manner.

The accessories supplied include a handsome polished two-slide marking board, to match table, surmounted with ornamental pediment, three ash cues, spirit level, chalks, tips, wafers, good rest, rules of the game, and three large size ivory or crystalate balls.

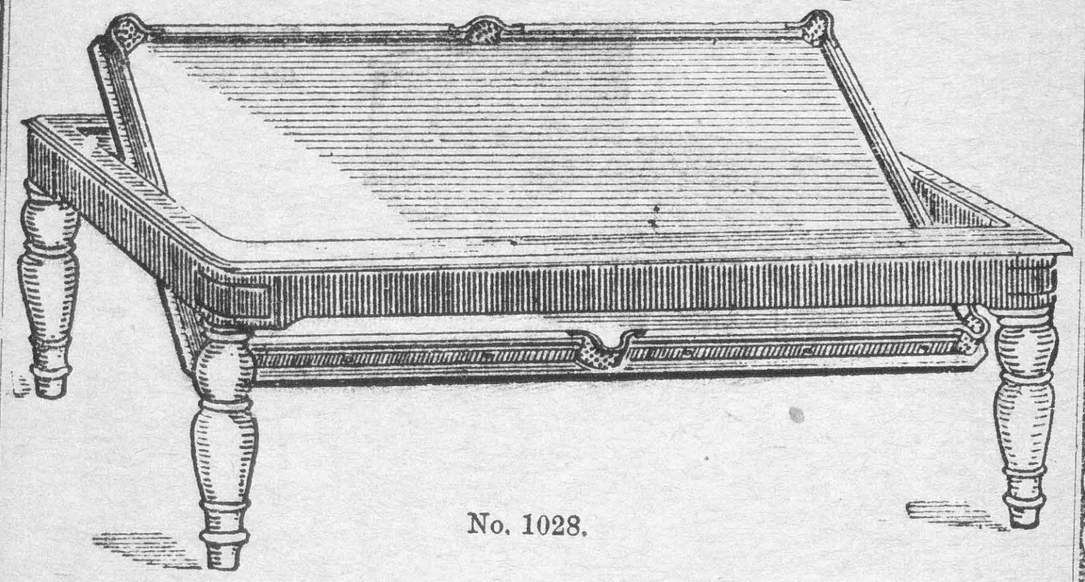
SIZES AND PRICES.

		Nett Price for Cash with Order. £ s. d.
No. 1.	Billiard Table, 5ft. 4in. by 2ft. 10in.	
,,	Dining Table, 5ft. 8in. by 3ft. 2in.	9 10 0
No. 2.	Billiard Table, 6ft. 4in. by 3ft. 4in.	
,,	Dining Table, 6ft. 8in. by 3ft. 8in.	10 10 0
No. 3.	Billiard Table, 7ft. 4in. by 3ft. 10in.	
,,	Dining Table, 7ft. 8in. by 4ft. 2in.	12 10 0
No. 4.	Billiard Table, 8ft. 4in. by 4ft. 4in.	
,,	Dining Table, 8ft. 8in. by 4ft. 8in.	17 10 0
No. 5.	Billiard Table, 9ft. 4in. by 4ft. 11in.	
,,	Dining Table, 9ft. 8in. by 5ft. 3in.	22 10 0

Carriage Paid to any Railway Station in the United Kingdom.

PACKING CASES LENT FREE OF CHARGE.

The "Empire" Billiard and Dining Table.



No. 1028.

A Handsome and Substantial Piece of Furniture.
No complicated Machinery to get out of order.

It will be seen at a glance the Simplicity and Superiority of this Table over all others.

It can be changed from Billiard Table to Dining Table, or vice versa, in a few seconds without removing top. This is an advantage over all other Tables.

SPECIFICATION.

The "Empire" Billiard and Dining Table is made expressly for use where a room cannot be spared for a billiard table. Equal in construction to full-size table, with best seasoned stout slate bed, mahogany, pitch pine, or oak cushions, fitted with frost-proof rubber. Covered with superior West of England cloth. The stand is made of good sound timbers with four stout hardwood turned legs, polished to match table.

The accessories supplied include a two-slide marking board, surmounted with ornamental pediment polished to match table, three ash cues, spirit level, chalks, tips, wafers, good rest, rules of the game, and three large ivory or crystalate balls.

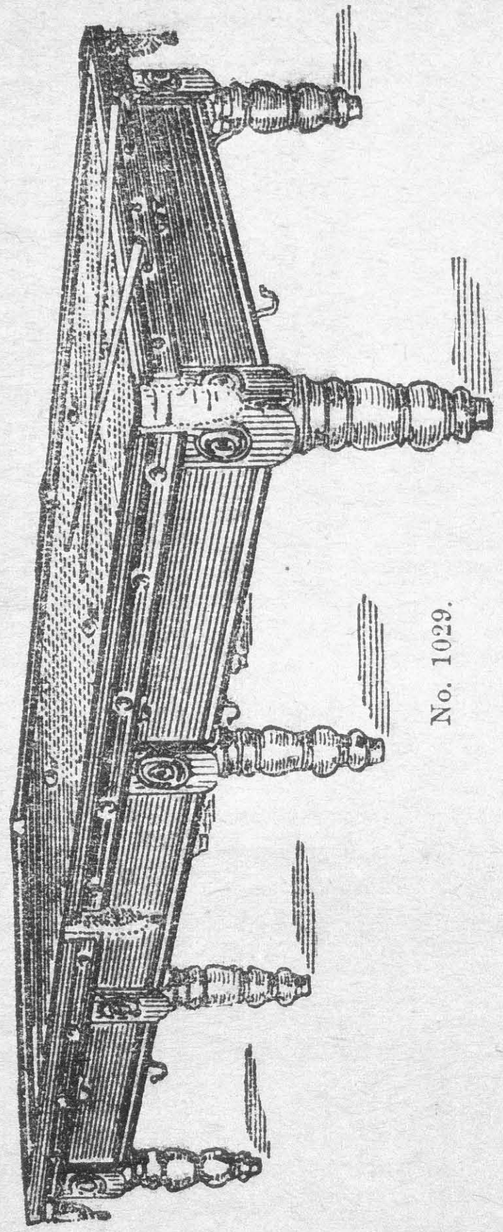
SIZES AND PRICES.

Mahogany, Pitch Pine, or Oak.	Nett Price for Cash with Order. £ s. d.
Dining Table, 7ft. by 4ft. } Billiard Table, 6ft. 4in. by 3ft. 4in. }	14 0 0
Dining Table, 8ft. by 4ft. 6in. } Billiard Table, 7ft. 4in. by 3ft. 10in. }	18 0 0
Dining Table, 9ft. by 5ft. } Billiard Table, 8ft. 4in. by 4ft. 4in. }	24 0 0

Packing Lent Free. Carriage Paid.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

The Club Table. (FULL SIZE.)



No. 1029.

Mahogany or oak table, on 6in. selected and warranted turned birch legs, 11in. by 1½in. figured veneered sides, 1in. slate bed bolted and dowelled, guaranteed dead level, covered superior billiard cloth, six solid mahogany or oak cushions mounted best frost-proof rubber, brass pocket plates, white cord nets.

The accessories supplied include six cues, cue rack, long cue and rest, short rest, marking board, six chalk cups, brush, iron, cover, framed rules, chalks, tips, wafers, and match size set of ivory or crystalate balls.

Net Cash Price ... ... £50.

SPECIFICATION.

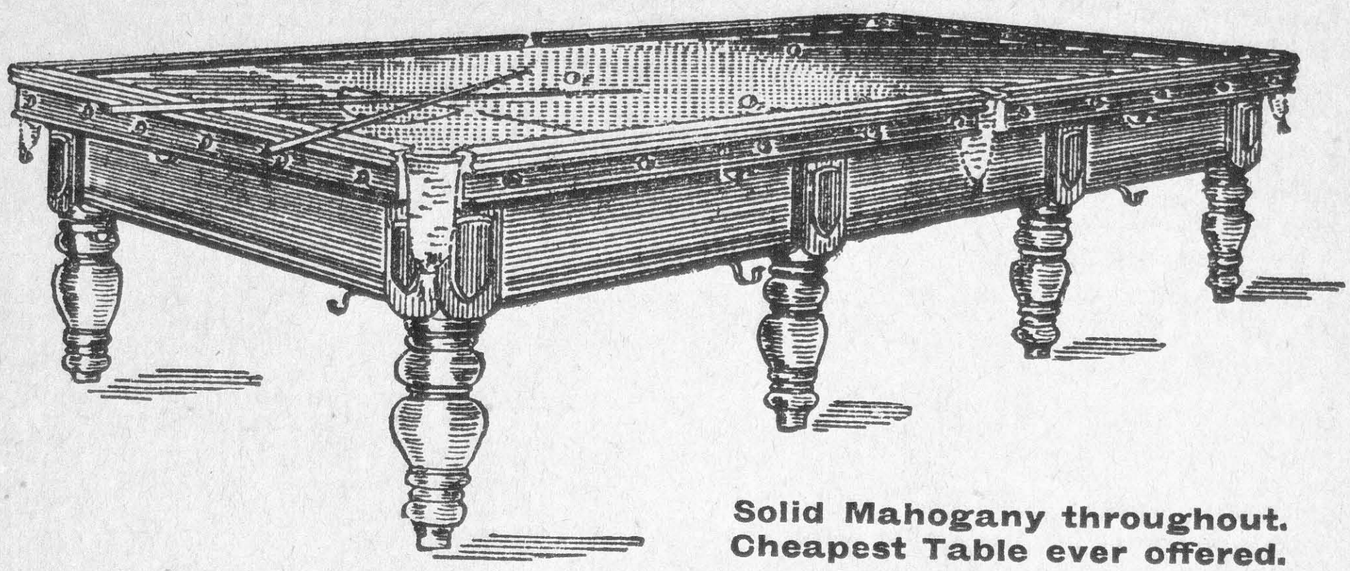
Undersized Tables.

Specification as above.

	Nett Price for Cash with Order. £ s. d.
11ft. by 5ft. 7½in. on six legs	28 0 0
10ft. by 5ft. 1½in. on six legs	24 10 0
9ft. by 4ft. 7½in. on six legs	21 0 0
9ft. by 4ft. 7½in. on four legs	20 0 0
8ft. by 4ft. 1½in. on four legs	16 10 0
7ft. by 3ft. 7 in. on four legs	14 0 0

Approximate Framing according to size.
Long Cue and Rest is not required with smaller sizes.

The Challenge Table. (FULL SIZE.)



Solid Mahogany throughout.
Cheapest Table ever offered.

No. 1030. **SPECIFICATION OF TABLE AND ACCESSORIES.**

The bed is of seasoned 1¾in. Welsh slate surface covered with superior billiard cloth. Solid mahogany cushions, mounted best frost-proof rubber. Half-inch mahogany sliding fringe rail. Panels to knees. Carved brackets. Invisible pocket plates. Strong corded nets. Mounted on solid mahogany 9in. turned legs. The whole finished off in a superior manner.

The accessories supplied include 12 handsome butted cues, 12-spring cue rack, 2 rests, brass heads, 2 long cues, mahogany marking board, brush, iron, cover, framed rules, chalks, tips, wafers, 6 brass chalk cups, and match size set of ivory or crystalate balls.

Nett Cash Price, 60 Guineas. **Solid Oak or Walnut throughout, 65 Guineas.**

These Tables are sent out complete. Any handy man can fit up. Simply bolt together.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

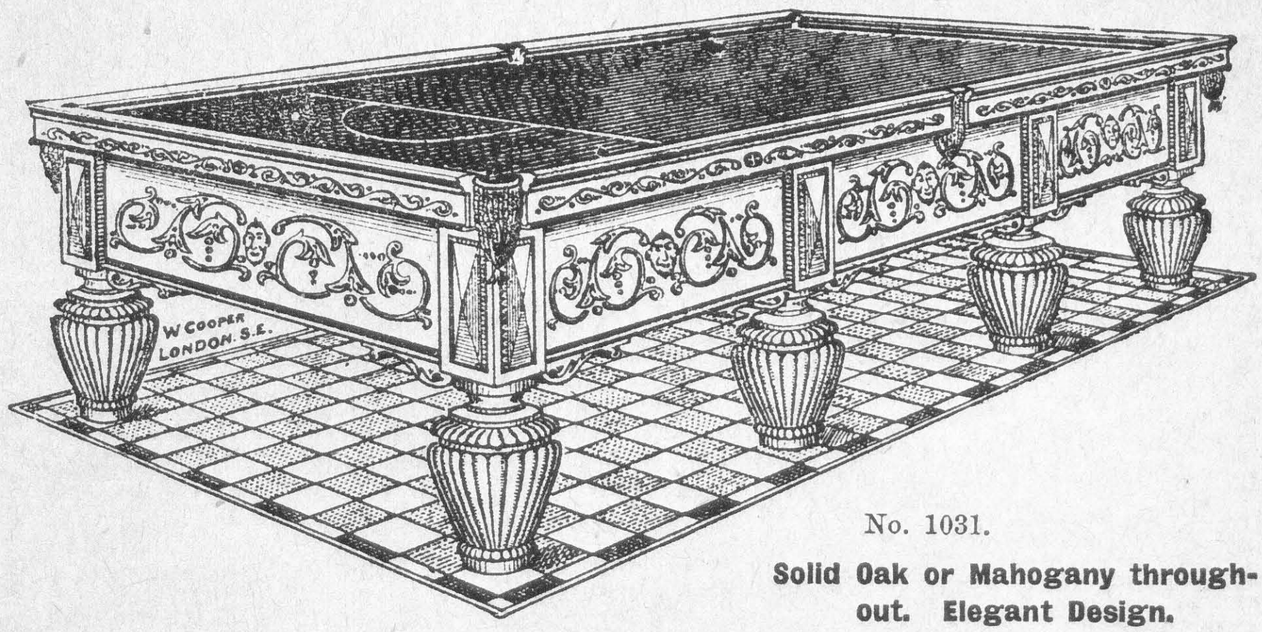
UNSOLICITED TESTIMONIALS.

Quite Satisfactory.
32, Russell Square, Brighton.
GENTS,—The Billiard Table arrived safely and is quite satisfactory.—
Yours truly,
H. W. MOORE.

Many Thanks.
Eastbourne Villa, Beaconsfield.
DEAR SIR,—Billiard Table received to-day, many thanks.—Yours truly,
W. F. BAGLEY.

630

The Champion Table.



No. 1031.

Solid Oak or Mahogany throughout. Elegant Design.

SPECIFICATION.

Handsome carved billiard table, elaborate design. Solid oak or mahogany throughout, on eight massive carved legs. Double bolted with framework brackets and panels, all carved to match. Specially selected, thick Welsh slate bed, best quality West of England cloth. Fitted with our latest up-to-date low fast frost-proof rubber cushions. Invisible pocket plates with strong cord nets. Also fitted with new sliding panels to cushions, giving a splendid finish to table, including the following accessories :—

Twelve butted cues, handsome figured oak or mahogany spring cue rack with brass clips, figured oak or mahogany marking board, long and short butts, long and short rests, iron, brush, linen cover, framed rules, rest hooks, brass chalk cups, one set match-size ivory or crystalate balls.

Nett Cash Price ... £125, Carriage Paid.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

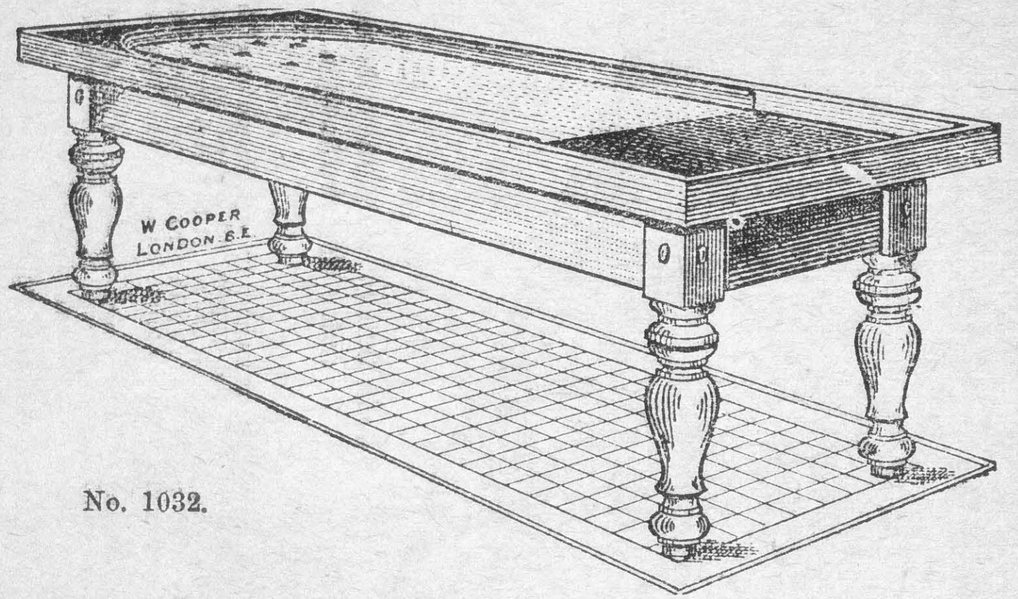
UNSOLICITED TESTIMONIALS.

Gives Satisfaction.
Woodville, Burton-on-Trent.
GENTLEMEN,—The Billiard Table has arrived and gives satisfaction.—
Yours faithfully,
P. H. MELLOR.

Every Satisfaction.
75, Caerleon Road, Newport, Mon.
DEAR SIRS,—Billiard Table has arrived and gives me every satisfaction.—
Yours faithfully,
C. H. LINTON.

631

Cannon or Bagatelle Table.



No. 1032.

SPECIFICATION OF TABLE AND ACCESSORIES.

Bed of thick specially selected slate, well seasoned, planed and rubbed. The cushions mahogany, oak, or handsomely figured pitch-pine fitted with best frost-proof rubber. Good quality billiard cloth, with or without cups. Stand is made of good stout timbers on four turned pitch-pine legs to bolt together at corners, handsomely French polished to match top.

Accessories include 9 crystalate balls, 2 cues, marking board, level, chalks, tips, wafers.

SIZES.	Carriage Paid.	Net Prices for Cash with Order. £ s. d.
8ft. by 2ft. 6in., $1\frac{3}{4}$in. balls	.....	10 0 0
8ft. by 2ft. 9in., $1\frac{3}{4}$in. ,,	.....	10 10 0
9ft. by 3ft. 0in., $1\frac{3}{4}$in., ,,	.....	11 10 0
9ft. by 3ft. 3in., $1\frac{7}{8}$in. ,,	.....	12 10 0
10ft. by 3ft. 3in., $1\frac{7}{8}$in. ,,	.....	13 10 0
10ft. by 3ft. 6in., $1\frac{7}{8}$in. ,,	.....	15 0 0
11ft. by 3ft. 9in., 2 in. ,,	.....	17 10 0
12ft. by 4ft. 0in., 2 in. ,,	(6 legs)	21 10 0

If for cannon game, the price will be as above with three larger balls. If table with two side pockets 10/6 extra.

UNSOLICITED TESTIMONIALS.

Arrived Quite Safely. 54, Kenilworth Avenue, Wimbledon.

DEAR SIR,—I am very pleased with the Billiard Table received this evening. It arrived quite safely.—Yours faithfully, G. ALLEN.

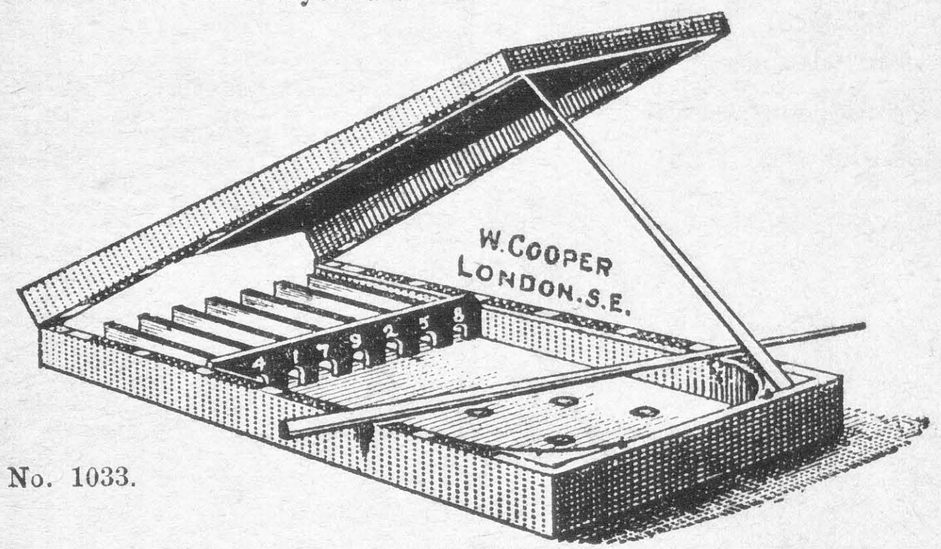
Very Pleased. 56, Park Road, Dunkenfield, Cheshire.

DEAR SIR,—Billiard Table to hand safe and sound, and I am very well pleased with it.—Yours respectfully, J. W. JACKSON.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Folding Bagatelle Boards.

Complete with cue, mace, bridge, pegs, chalks, tips, and wafers.
With a set of nine crystalate balls.



No. 1033.

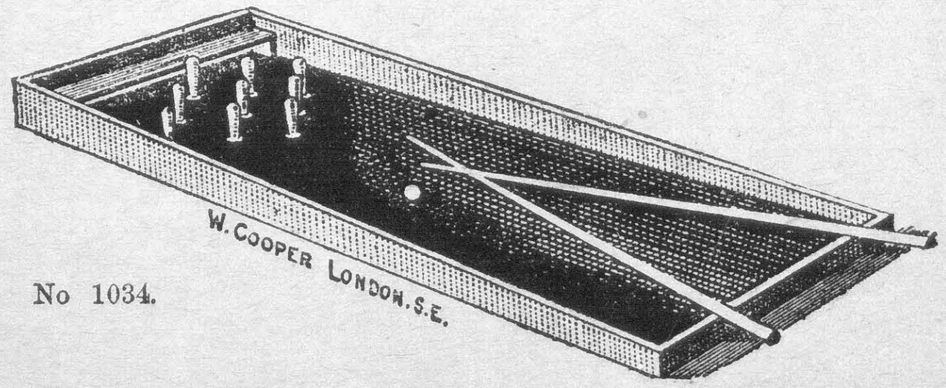
SPECIFICATION.

The bed is covered with a good quality cloth. Woodwork handsomely polished mahogany.

SIZES.			Net Prices for Cash with Order. £ s. d.
No. 1.	6ft. by 18in., $1\frac{1}{8}$	balls	2 10 0
,, 2.	7ft. by 21in., $1\frac{1}{4}$	,, ...	3 5 0
,, 3.	8ft. by 24in., $1\frac{3}{8}$	,, ...	4 0 0
,, 4.	9ft. by 27in., $1\frac{1}{2}$	,, ...	5 10 0
,, 5.	10ft. by 30in., $1\frac{5}{8}$	,, ...	7 10 0

Carriage Paid.

Skittle Boards.



No 1034.

SPECIFICATION.

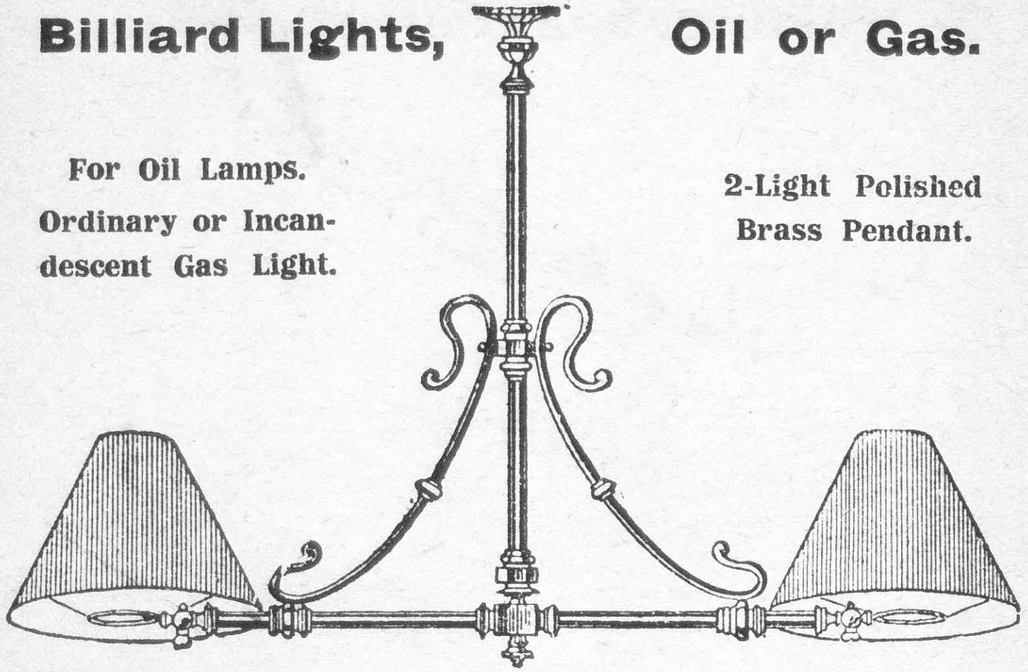
The above made in polished mahogany frame. Size 7ft. 6in. by 2ft. 9in. Covered with American leather, complete with nine large boxwood skittles. Boxwood ball and two heavy cues.

Net Cash Price ... £2 15s., Carriage Paid.

Billiard Lights, Oil or Gas.

For Oil Lamps.
Ordinary or Incandescent Gas Light.

2-Light Polished Brass Pendant.



1 in. by ⅞-in. by ½-in. Stays.

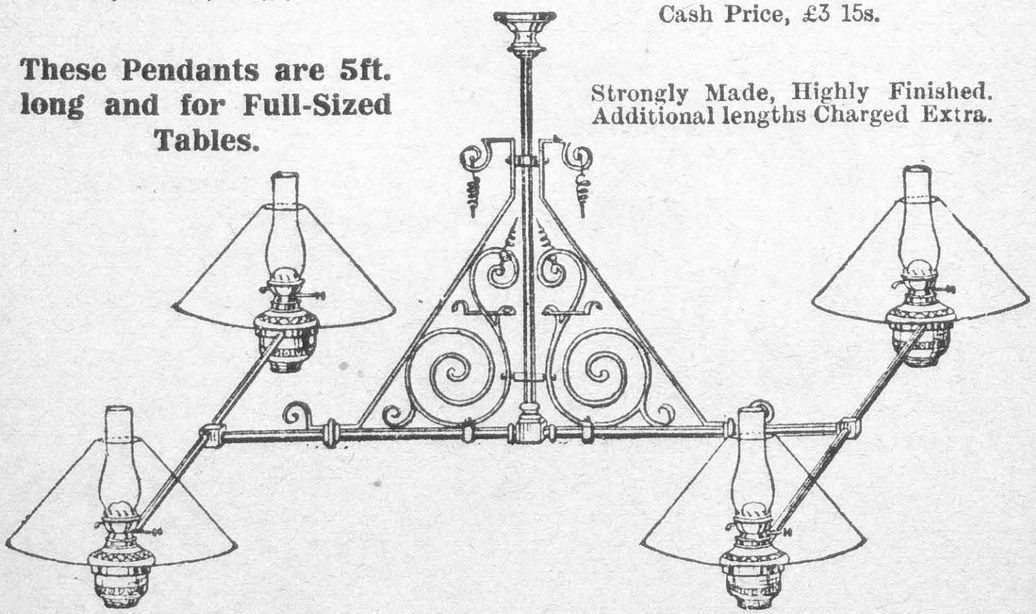
Size—6ft. long, 4ft. 6in. spread, for Small Tables.

FOR GAS. No. 1035.
Cash Price, £2 15s.
Frames, Shades, Rings, Etc., Extra.

FOR OIL. No. 1036.
Complete with Cut Crystal Containers, Duplex Burners.
Cash Price, £3 15s.

These Pendants are 5ft. long and for Full-Sized Tables.

Strongly Made, Highly Finished.
Additional lengths Charged Extra.



FOR GAS. No. 1037.
With 1-Light Burners, Shades, and Frames Complete.
Cash Prices:
Wrought Iron. Dead Black.
4-Light, £6. 6-Light, £7 5s.
Polished Brass.
4-Light, £12 10s. 6-Light, £14.

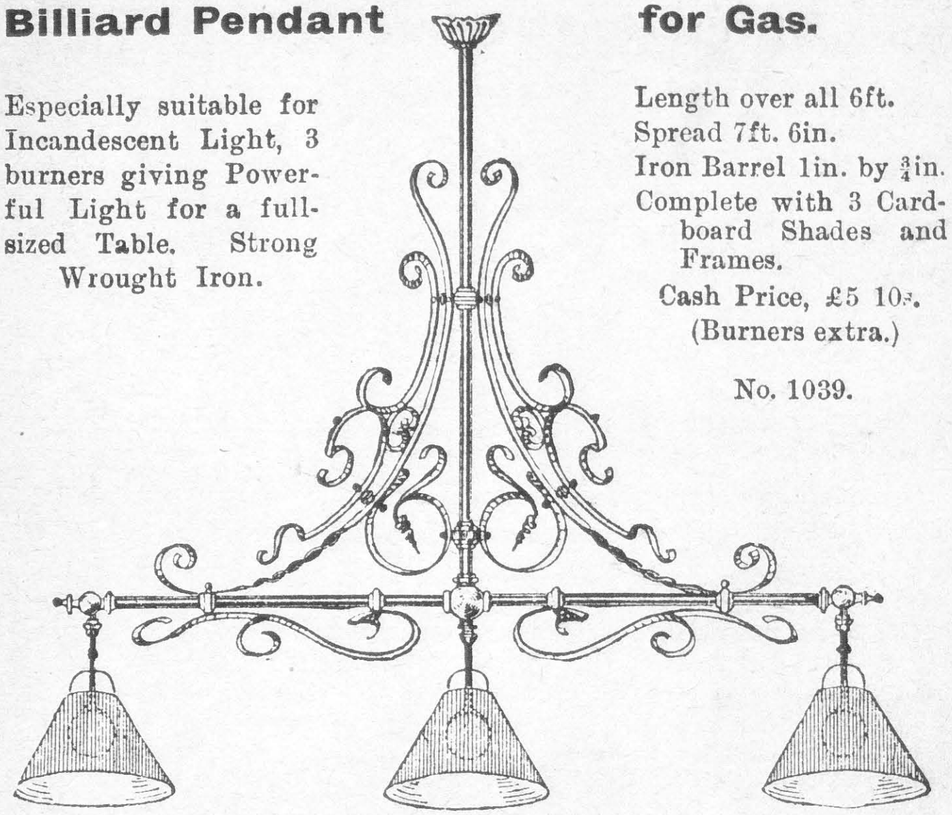
FOR OIL. No. 1038.
With 50 C.P. Lamps, Shades and Frames Complete.
Cash Prices:
Wrought Iron. Dead Black.
4-Light, £6 10s. 6-Light, £8 10s.
Polished Brass.
4-Light, £13 10s. 6-Light, £16.

Billiard Pendant for Gas.

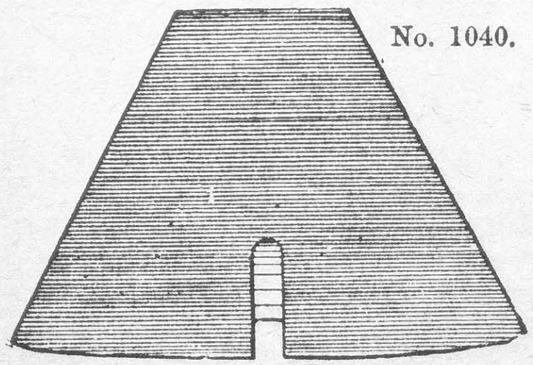
Especially suitable for Incandescent Light, 3 burners giving Powerful Light for a full-sized Table. Strong Wrought Iron.

Length over all 6ft.
Spread 7ft. 6in.
Iron Barrel 1in. by ¾in.
Complete with 3 Cardboard Shades and Frames.
Cash Price, £5 10s.
(Burners extra.)

No. 1039.



Billiard Fittings for Gas or Oil Lights.



No. 1040.

Shades.

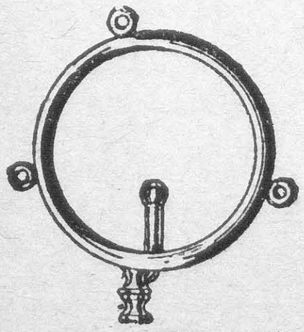
Full Size, Stout Material, Well Finished.
Cash Prices, 1/-, 1/6, and 2/- each.

Wire Frames for Above.

Full Size, 1/6, 2/- and 2/6.

Duplex Billiard Oil Lamp.

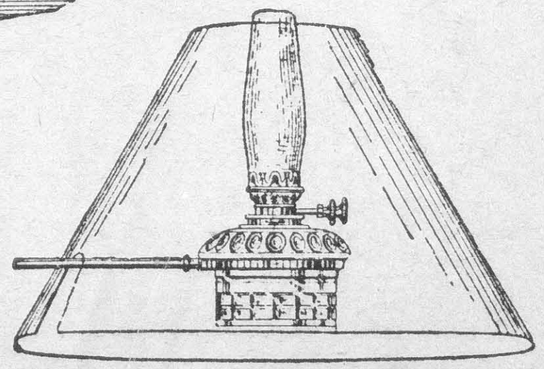
Including 20in. Green Cardboard Shade. Frame 5in. ring. Crystal Cut Fount and Superior Duplex Burner. Cash Price, 10/6 each.



Polished Brass Rings.

For 1 or 3 Burners.
Cash Prices 2/- each or £1 3s. 6d. per doz.

No. 1041.



No. 1042.

Billiard Accessories.



PLAIN ASH OR MAPLE CUES. No. 1043.

Length.	Cash Price.	Length.	Cash Price.	Length.	Cash Price.
2ft. 6in. ..	8d.	3ft. 6in. ..	9d.	4ft. 6in. ..	1/-
3ft.	8d.	4ft.	9d.	4ft. 10in. ..	1/-

Mace or Ladies' Cues same price.

SPECIAL HAND MADE, ANY WEIGHT.

4ft., Cash Price, 2/3. 4ft. 10in., Cash Price, 2/6.



BUTTED CUES. No. 1044.

Ebony and Walnut	Cash Prices, 3/6, 4/5, 5/6
Ebony and Maple	,, 6/6 and 8/6
Patent Cork Butted Cues	,, 10/6 each

SMALL FANCY BUTTED CUES.

Cash Prices. No. 1045.

3ft. 6in. .. 2/11 | 4ft. .. 3/6 | 4ft. 6in. .. 4/6



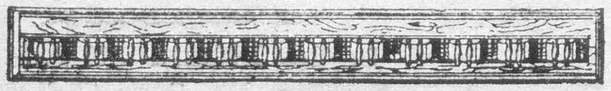
CUE CASES. No. 1046.

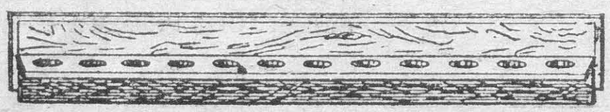
Best Black Japanned Cases, Ordinary Quality.
Cash Price, 2/- each.

Carriage 6d. extra on all Cues, Cases, Rests, &c., under 20/-

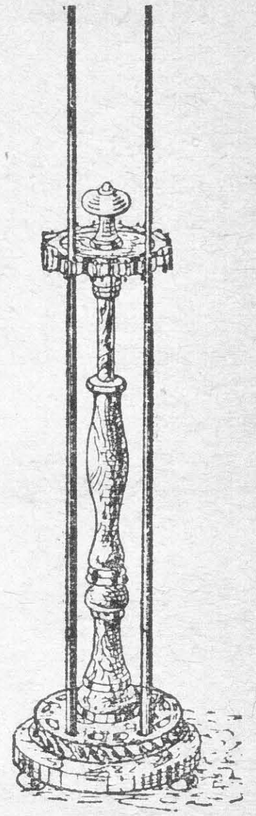
WALL CUE RACK.

Polished Mahogany, Oak, or Pitch Pine, with Brass Cue Springs.





No. 1047. To Hold 6 9 12 18 24 Cues.
Cash Prices 6/- 8/- 10/9 16/- 20/-



No. 1048.

CUE STAND.

In Oak, Mahogany, or Pitch Pine.
Handsomely Polished.
Weighted Base.
Fitted with Roller Clips.

REVOLVING.

	Cash Prices £ s. d.
For 9 Cues ..	1 15 0
For 12 Cues ..	2 0 0
For 18 Cues ..	2 7 6
For 24 Cues ..	2 17 6

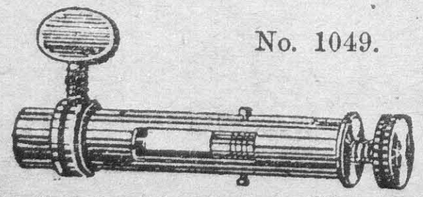
NON-REVOLVING.

For 9 Cues ..	1 7 6
For 12 Cues ..	1 12 6
For 18 Cues ..	1 17 6
For 24 Cues ..	2 2 6

Carriage Paid.

Brass Cue Tip Fasteners.

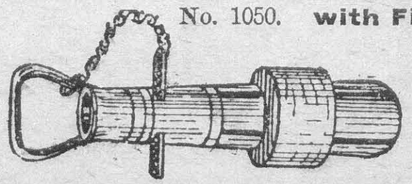
No. 1049.



Cash Price, 1/9. Postage, 2d. extra.

Boxwood Cue Tip Fastener

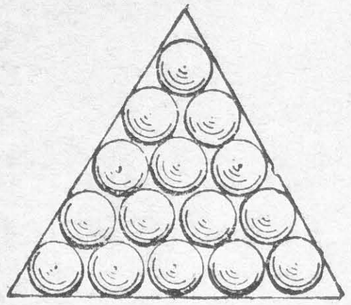
No. 1050. **with File.**



Cash Price, 1/11. Postage, 2d. extra.

WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Billiard Balls.



IVORY. No. 1051.

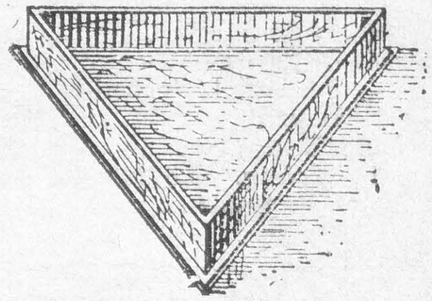
Cash Prices.

2 1/16in. ..	6/-, 7/6, and 10/6 per Ball.
2in.	4/6 and 6/- ,,
1 7/8in.	3/6 and 4/6 ,,
1 3/4in.	3/- and 4/- ,,

CRYSTALATE. No. 1052.

2 1/16in.	7/6 per Ball.
2in.	5/10 ,,
1 7/8in.	4/8 ,,
1 3/4in.	3/6 ,,

Pyramid Triangles.



No. 1053.

Cash Price, 3/- each. Sliding Tray, 3/- extra.
In Polished Mahogany, Oak, or Pitch Pine.
Postage, 4d. extra.

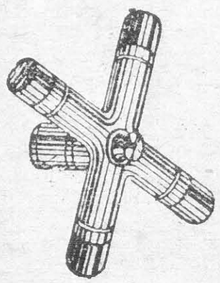
Spirit Levels.

No. 1054.

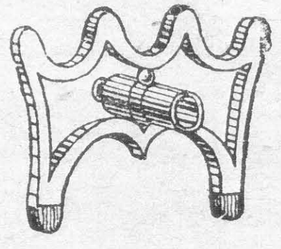
Spirit Levels	Cash Prices, each	8½d.
Ditto	Superior Finish 6in. Flat ,,	1/4½
Ditto	Best Quality 8in. ,,	2/-

Postage, 3d.

Brass Rests.



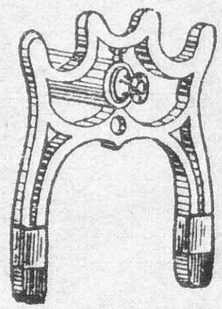
ROUND. No. 1055.
Cash Prices, each, 1/- and 1/9. Postage, 3d.
Polished Wood Handle, 1/- extra.
Carriage Extra.



BUTT. No. 1056.
Cash Prices, each, 2/3
Postage, 3d.
Polished Wood Butt Handle, 3/3 each.
Carriage Extra.



FLAT. No. 1057.
Cash Prices, each, 3/-
Postage, 3d.
Polished Wood Handle, 1/- extra.
Carriage Extra.



SPIDER. No. 1058
Cash Prices, each, 2/3
Postage, 3d.
Polished Wood Handle, 1/- extra.
Carriage Extra.

Marking Boards.

In Polished Mahogany, Oak, or Pitch Pine.

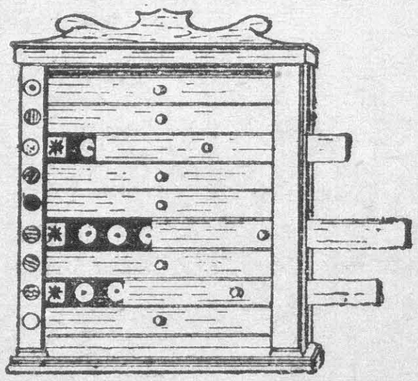


No. 1059.

Gold Figures. Boxwood Pointers.

24in. by 7in.	Cash Prices, each 6/-
28in. by 7in.	,, ,, 7/6
28in. by 12in.	,, ,, 10/6

Ornamental Pediment, 1/6, 2/-, 2/6 extra.
Carriage, 9d. extra.



POOL MARKER. No. 1060.

For 6 Players ..	Cash Prices 12/6
For 9 Players ..	,, 22/6
For 12 Players ..	,, 27/6

Carriage Extra.

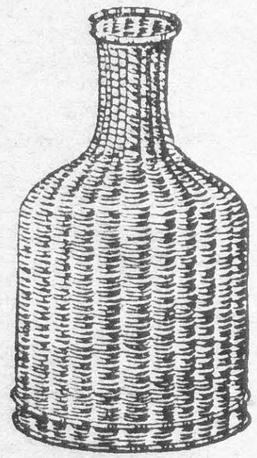
WILLIAM COOPER, Ltd., 761, Old Kent Road, London, S.E.

Billiard Sundries.

	Cash Prices.
Billiard or Bagatelle Cloth	from 6/- per yard
Rules of Billiards	6d. each
,, ,, Pool and Pyramids	6d. ,,
,, ,, Bagatelle	3d. ,,
Cue Tips, box of 50	7½d. per box
Cue Tip Wafers. No glue or cement required	4d. ,, ,,
Billiard Silk Spots	4½d. ,, ,,
Covers, Plain	6ft., 6/6; 7ft., 8/6; full size, 12/6
Chalk, White	1½d. per doz., 1/3 per gross
Waterproof Covers	from 27/6

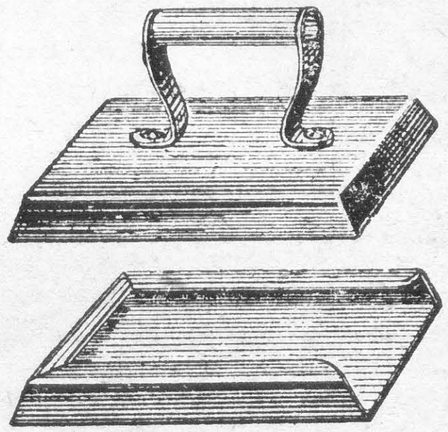
The above prices do not include postage, which must be added when remitting.

Pool Baskets.



No. 1061. Cash Prices, 3/- and 3/9 each. Postage, 3d. extra.

Billiard Table Irons with Shoes. No. 1062.

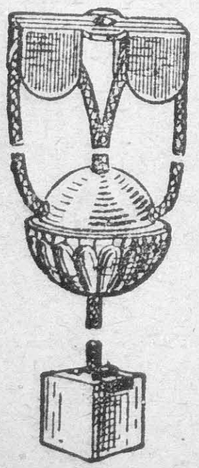


Cash Price, with Shoe complete, 7/6.

Special Size for Miniature Tables, Cash Price, 3/6.

Carriage extra.

Chalk Suspenders.



No. 1063.

Easily attached to Ceiling.

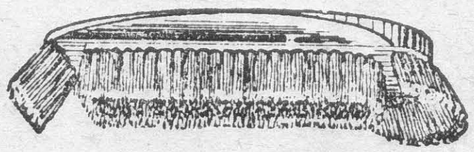
Complete with Cords and Fittings, Cash Price, 1/6.

Polished Brass, Cash Price, 3/9.

Chalks for same, Cash Prices, White, 4d. per doz. Blue, 7½d. per doz.

Postage, 3d. extra.

Billiard Table Brushes.



No. 1064.

Best make.

Cash Prices, 1/9, 2/6, 3/6 and 6/- each.

Postage, 3d. extra.

SAVOY TURKISH BATHS.

BEST IN THE WORLD.

ALL NIGHT BATHS—NEVER CLOSED.

GENTLEMEN ONLY.

91 & 92, Jermyn Street, Piccadilly, S.W.

Seven Hot Rooms. Russian Bath, 35ft. long. Throughout the day, 3/-; throughout the night, with bed, 5/-. Telephone: No. 9552 Gerrard.

GENTLEMEN ONLY.

Open daily 8 a.m. to 10 p.m., Sundays 1 p.m. Up to 6 p.m., **2/6**; after 6 p.m., **1/6.**

Savoy Mansions, Savoy Street, Strand, W.C.

Telephone: No. 5797 Gerrard.

9, Caledonian Road, King's Cross, N.

Telephone: No. 616 North.

102 & 104, Newington Causeway, Elephant and Castle, S.E.

LADIES AND GENTLEMEN.

Open daily 8 a.m. to 10 p.m., Sundays 1 p.m. Up to 6 p.m., **2/6**; after 6 p.m., **1/6.**

459 & 461, Brixton Road, S.W.

Telephone: No. 1581 Brixton.

24, Railway Approach, London Bridge.

Telephone: No. 3353 Hop.

11a, Kentish Town Road, N.W.

(Close to Hampstead Tube, Camden Town Station.)

LADIES ONLY.

12, York Street, Jermyn Street, Piccadilly, S.W.

Open daily 9 a.m. to 10 p.m., Sundays 8 p.m. Up to 6 p.m., **3/-**; after 6 p.m., **2/-.**

Telephone: No. 9552 Gerrard.

Denman Street, London Bridge, S.E.

Open daily 9 a.m. to 10 p.m., Sundays 1 p.m. Up to 6 p.m., **2/6**; after 6 p.m., **1/6.**

Telephone: No. 3353 Hop.

All above prices are for Turkish, Russian or Combined Bath, including Shampoo.

Manicure, Chiropody, Complexion and Hair Treatment a Speciality.

All kinds of Baths may be had at these Establishments.

		Book of 10 Tickets.
Electric Light Bath	3/6	30/-
Electric Water Bath	3/6	30/-
Electric Light Bath, followed by Electric Water	7/-	60/-
Vichy Douche Bath	3/6	30/-
Droitwich, Savoy Salts, Pine or Bran Bath	2/6	21/-
Massage, Electric or Hand	3/6	30/-
Hot Water Baths	1/-	7/6
Alcohol, Oil, Chilli Paste or Embrocation Rubbing	1/6	12/6

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