

LION FOUNDRY CO., LTD.

LION
FOUNDRY
CO., LTD.



LION CASTINGS

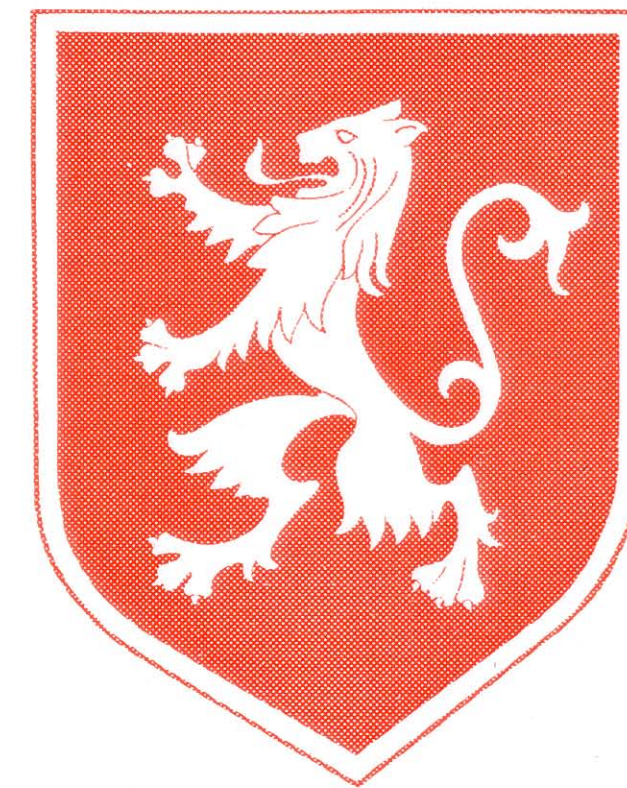
KIRKINTILLOCH
NEAR GLASGOW

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ILLUSTRATED CATALOGUE *of* CAST-IRON MANUFACTURES

VOLUME I
SEVENTH EDITION

LION



CASTINGS

LION FOUNDRY CO., LTD.

ARCHITECTURAL, STRUCTURAL AND ENGINEERING IRONFOUNDERS

KIRKINTILLOCH, Near GLASGOW

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CONWAY BRIDGE, NORTH WALES

Consulting Engineers

Messrs. C. W. Glover & Partners,
Francis House, Francis Street,
London, S.W.1.

Architects

Sir Percy Thomas, P.P.R.I.B.A., M.T.P.I.,
10 Cathedral Road,
Cardiff.

Main Contractors

Sir Wm. Arrol & Co. Ltd.,
85 Dunn Street,
Glasgow, S.E.

Cast Ironwork for the Parapet, Fluted Spandrels and Fascia, for this 310 ft. Span Bridge was supplied and erected by Lion Foundry Co. Ltd.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

PREFACE

It is with pleasure that we present this, the Seventh Edition of our Catalogue illustrating the extensive range of our Cast-Iron products.

In producing this volume, an attempt has been made to compile a standard work of reference for the use of our many friends in the Architectural profession and in the Building and Plumbing trades.

We trust this new edition will prove to be as reliable a source of information as previous issues have been.

We continue to produce castings of the highest quality, and it will be seen that we have added considerably to the scope of our manufactures and are now making a wide variety of specialised industrial castings as used in the many branches of the Engineering Industry.

Our technical and sales departments are always at your service, and we are at all times willing to supply Architects and Engineers with technical information.

May we express the hope that this catalogue will stimulate and enhance the confidence placed in us for so long by our many customers.

LION FOUNDRY COMPANY LIMITED

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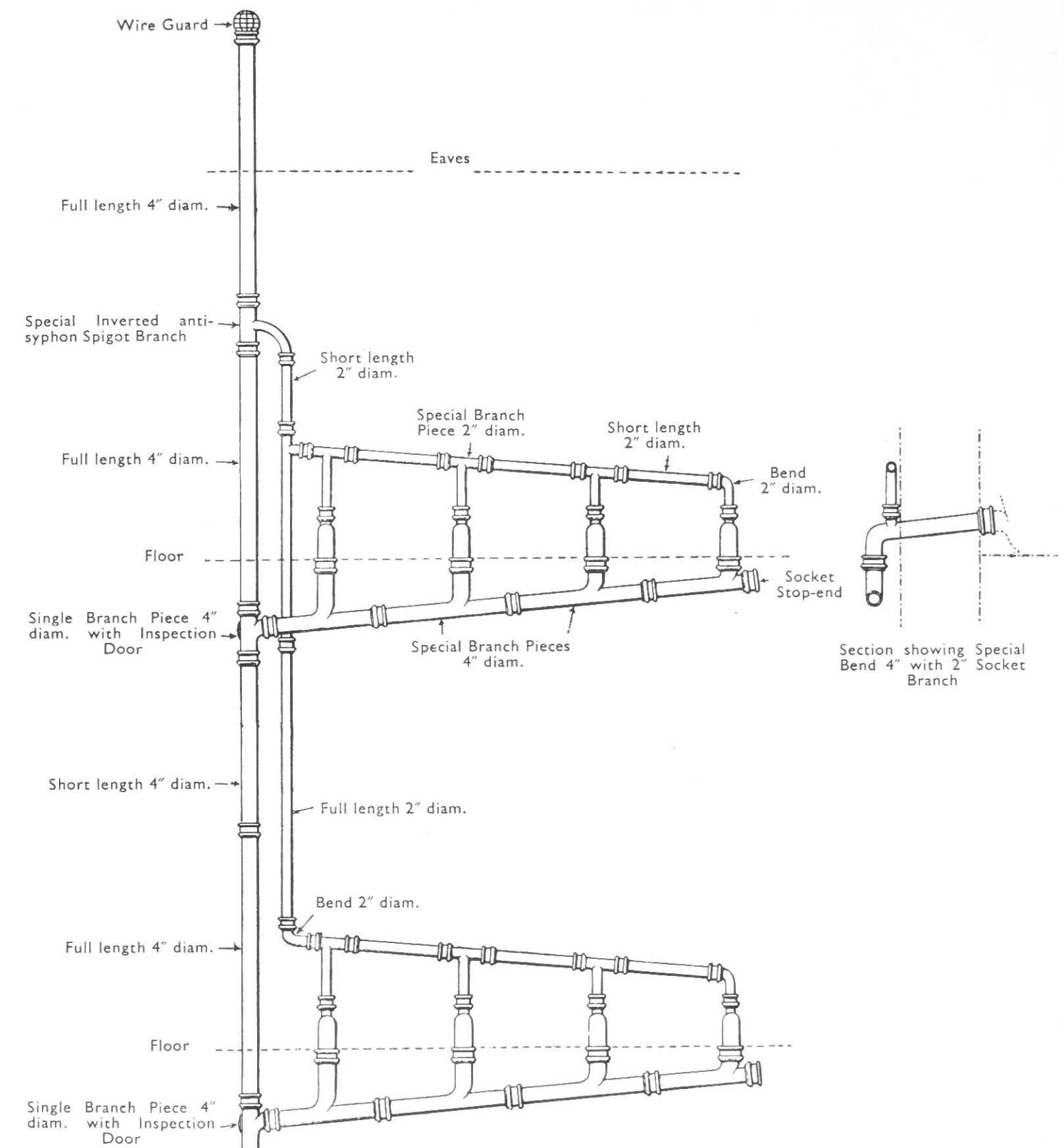
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TYPICAL ARRANGEMENT OF PIPE STACKS TO ASSIST WHEN ORDERING

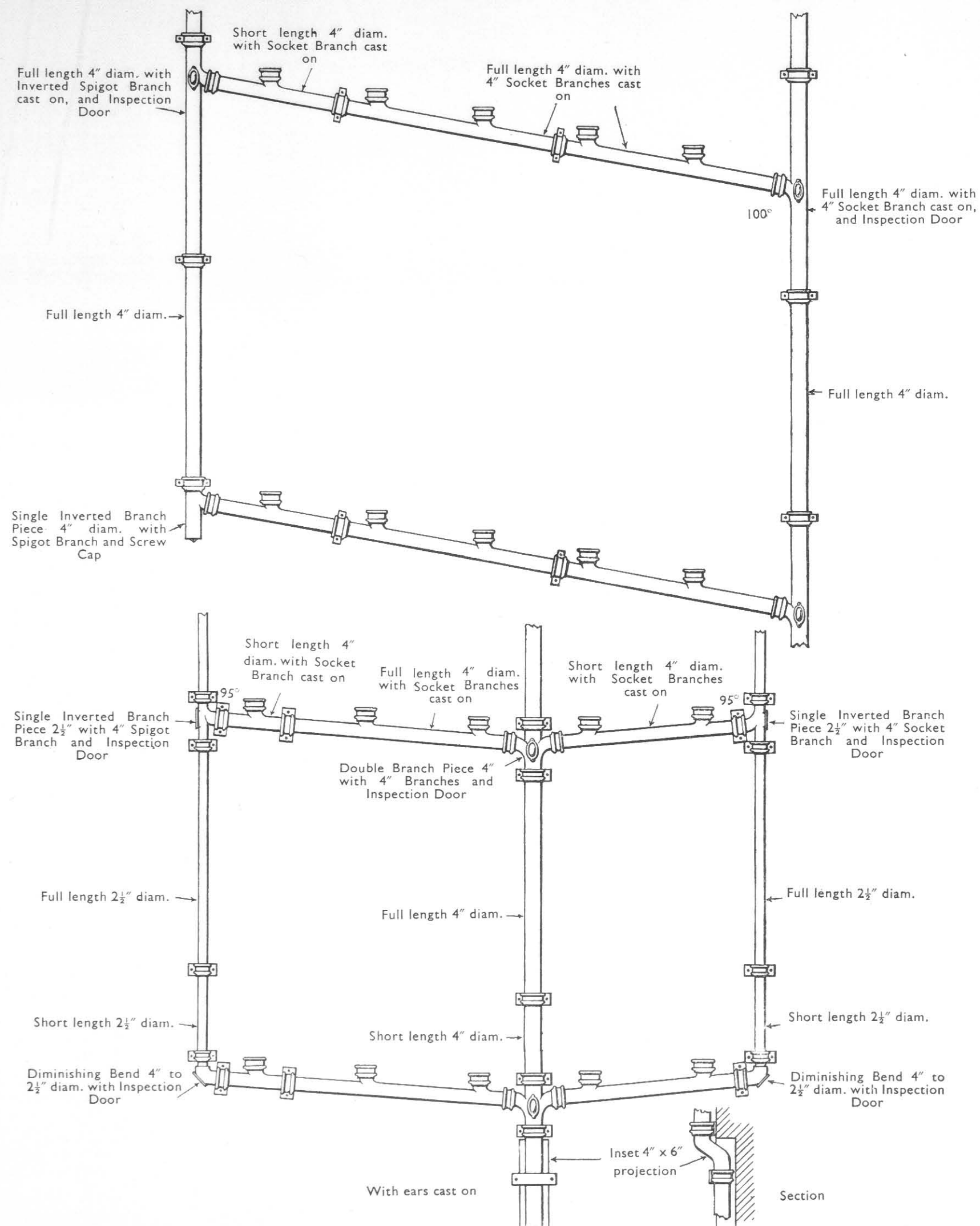
B.S.S.

Soil and Ventilating Pipes



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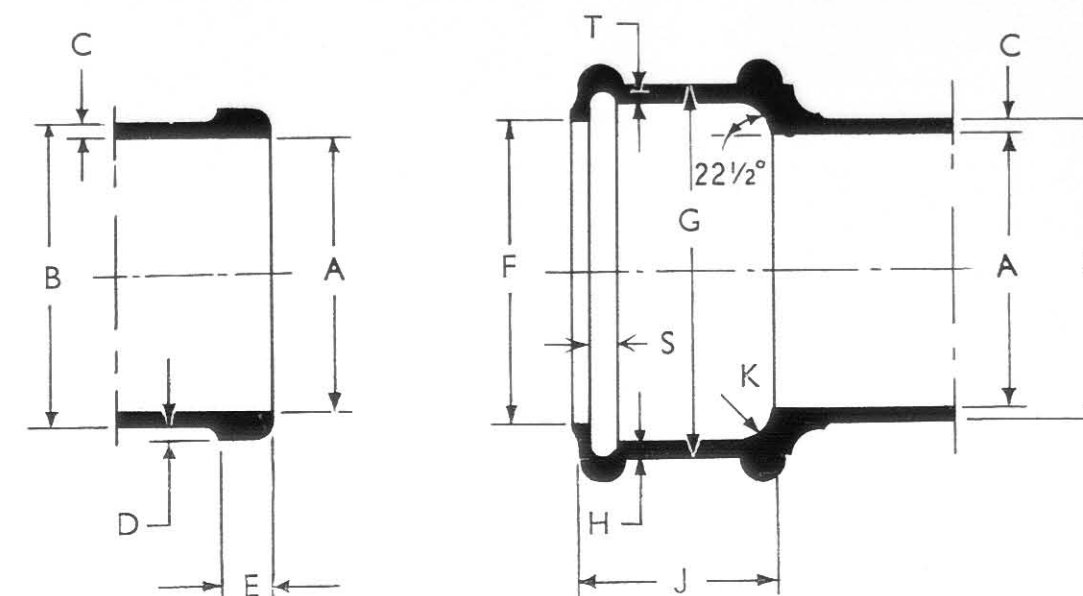
TYPICAL ARRANGEMENT OF PIPE STACKS TO ASSIST WHEN ORDERING



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

STRAIGHT PIPES AND TYPE "A" SOCKETS AND SPIGOTS

Dimensions of Straight Pipes and Type "A" Sockets and Spigots



NOTE. The Spigot Bead and Socket Groove shown above are optional features.

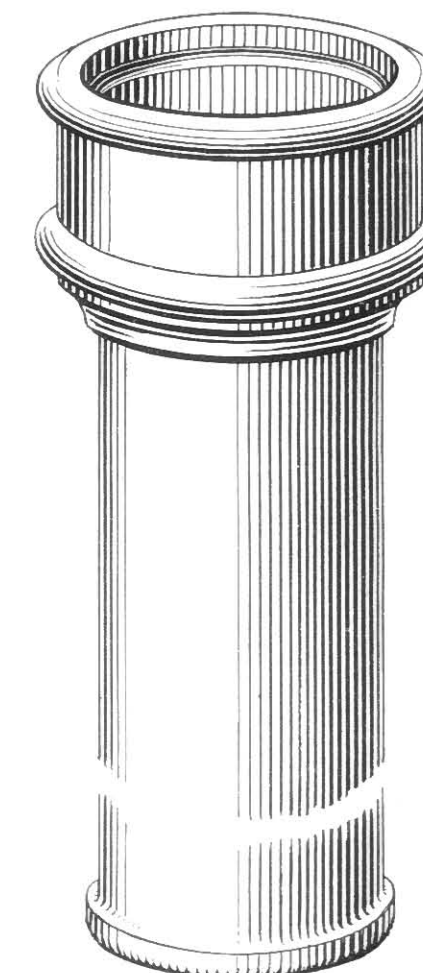


FIG. 1

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

STRAIGHT PIPES AND TYPE "A" SOCKETS AND SPIGOTS

TABLE I

Dimensions of Straight Pipes and Type "A".Sockets and Spigots

		Nominal Size	Extra Heavy Grade			Heavy Grade			Medium Grade					
			in. 3½	in. 4	in. 6	in. 3	in. 3½	in. 4	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
PIPE	Internal diameter minimum	A	3½	4	6	3	3½	4	2	2½	3	3½	4	6
	External diameter minimum	B	4	4½	6½	3½	3¾	4½	2¾	2¾	3¾	3¾	4¾	6¾
	Thickness nominal	C	¼	¼	¼	¼	¼	¼	¼	¼	¼	¼	¼	¼
	Projection of spigot band*	D	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝
	Width of spigot band*	E	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝
SOCKET TYPE "A"	Internal diameter minimum	F	4½	5	7½	3½	4½	5	2¾	3¾	3¾	4½	5	7½
	External diameter minimum	G	5½	5½	7¾	4½	5½	5½	3¾	3¾	4½	5	5½	7½
	Thickness nominal	H	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝
	Internal depth	J	3	3	3½	2¾	3	3	2½	2¾	2¾	3	3	3½
	Internal radius	K	¼	¼	¼	¼	¼	¼	¼	¼	¼	¼	¼	¼
	Width of groove*	S	½	½	½	½	½	½	½	½	½	½	½	½
	Depth of groove*	T	⅜	⅜	⅜	⅜	⅜	⅜	⅜	⅜	⅜	⅜	⅜	⅜

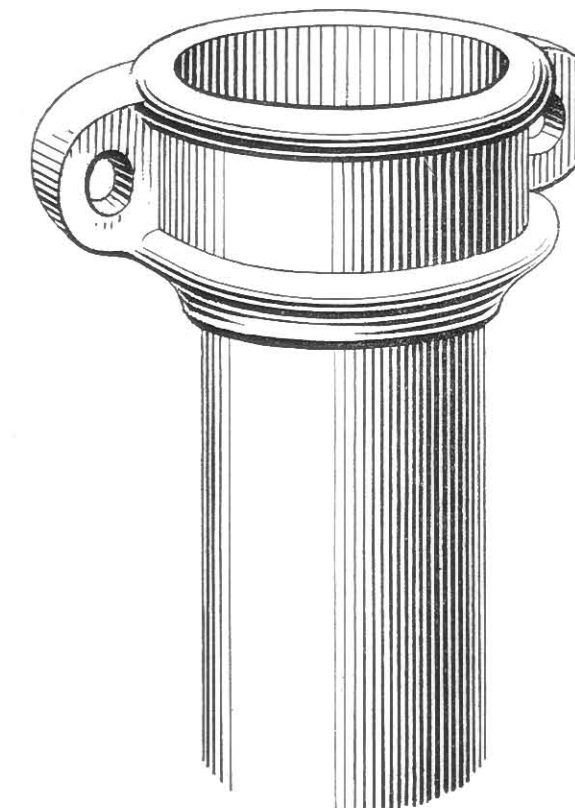
* Optional features.

PIPES WITH EARS

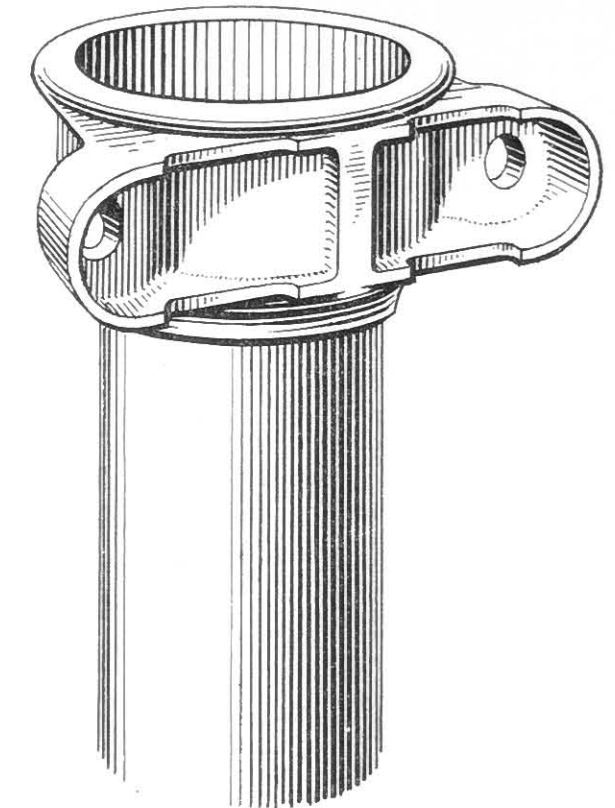
EARS.—Unless otherwise specified, pipes and fittings shall be supplied without ears. If ears are required they can be supplied as follows :—

- (a) SAND-CAST PIPES.—Cast during the manufacture of the pipe.
- (b) SPUN PIPES.—As loose bands, or rigidly attached to the socket of the pipe, or cast integrally with the pipe during the spinning operation.

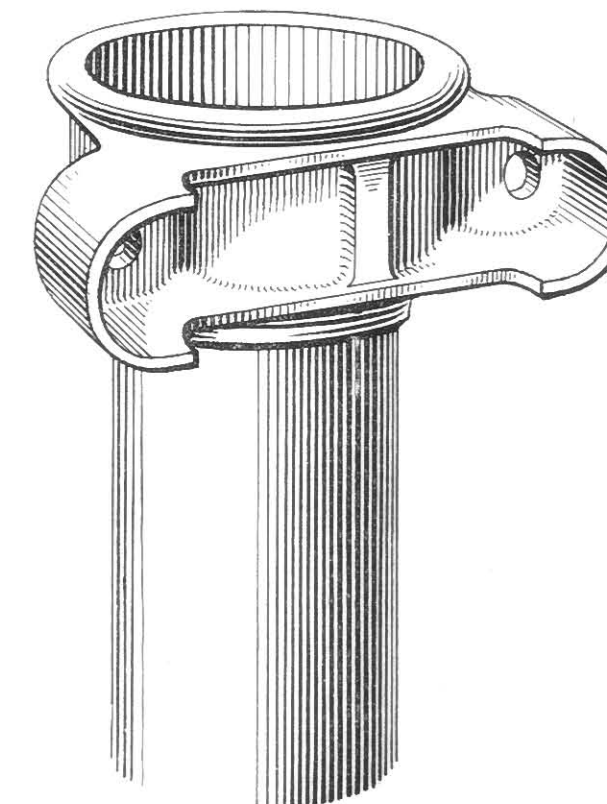
The purchaser shall state whether flat or projecting ears are required.



Front View



Flat Ear



Projecting Ear

FIG. 2

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

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SPUN PIPES



Two views of the Pipe showing the B.I.A. Ear cast integrally with the Pipe during the spinning operation.

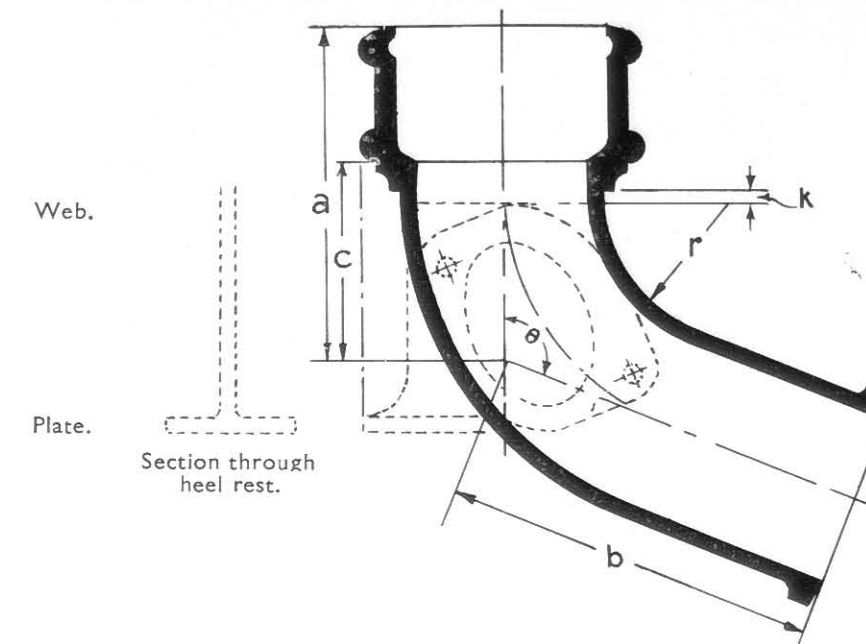


(Right)
Spun Pipe
without
ears.

FIG. 3

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SHORT RADIUS BENDS WITH AND WITHOUT ACCESS DOORS



Short Radius Bend

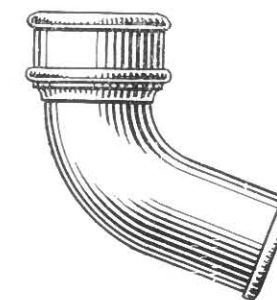


FIG. 4

92½° 95° 100° 112½°
120° 135°

Short Radius Bend
with Heel Rest

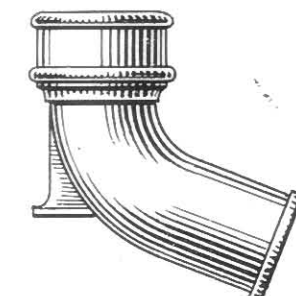


FIG. 5

92½° 95° 100° 112½°
120° 135°

Short Radius Bend
with Oval Access Door
on Heel

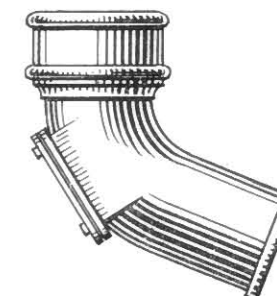


FIG. 6

92½° 95° 100° 112½°
120° 135°

Short Radius Bend
with Oval Access Door
on Side

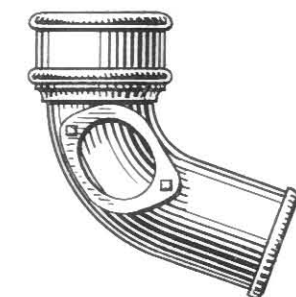


FIG. 7

92½° 95° 100° 112½°
120° 135°

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SHORT RADIUS BENDS WITH AND WITHOUT ACCESS DOORS

TABLE 3

$\theta = 92\frac{1}{2}^\circ$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	6	6½	6¾	7⅝	7⅝	9⅛
b	5½	6⅛	6¾	7	7⅛	8⅛
c	3½	3¾	4⅛	4⅝	4⅝	5⅝
k	⅝	⅝	⅜	¼	⅜	⅜
r	1½	1½	1½	1½	1½	1½

$\theta = 95^\circ$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5⅞	6⅜	6¾	7⅜	7⅞	8⅝
b	5½	6⅛	6¾	7	7	8⅛
c	3⅜	3⅝	4	4⅜	4⅞	5⅞
k	⅝	⅝	⅜	¼	⅜	⅜
r	1½	1½	1½	1½	1½	1½

$\theta = 100^\circ$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5⅝	6⅛	6½	6¾	7¼	8⅞
b	5½	6⅛	6¾	7	7⅛	8⅛
c	3⅛	3⅜	3¾	3⅞	4¼	5⅞
k	¼	⅝	⅜	¼	⅜	⅜
r	1½	1½	1½	1½	1½	1½

$\theta = 104^\circ$

Nom. Size	in. 3½	in. 4
a	6⅞	6⅞
b	7	7⅛
c	3⅞	3⅞
k	¼	¼
r	1½	1½

$\theta = 112\frac{1}{2}^\circ$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5¼	5⅝	5⅞	7⅛	7⅜	8⅞
b	5⅝	6¼	6⅝	6½	6⅝	7⅞
c	2¾	2⅞	3⅛	4⅛	4⅜	5⅞
k	⅝	⅝	⅝	¼	⅜	⅜
r	1½	1½	1½	2¼	2¼	2¼

$\theta = 120^\circ$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5	5⅜	5⅝	7⅛	7⅜	8½
b	5¾	6⅜	6⅝	6⅜	6½	7⅝
c	2½	2⅝	2⅞	4⅛	4⅜	5
k	⅝	⅝	⅝	¼	⅜	⅞
r	1½	1½	1½	3½	3½	3½

$\theta = 135^\circ$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5	5⅜	5⅝	6¾	7	7⅞
b	5⅝	6¼	6⅝	6⅜	6½	7⅝
c	2½	2⅝	2⅞	3¾	4	4⅝
k	¼	⅝	⅝	¼	⅜	⅝
r	2¾	2¾	2¾	4¾	4¾	4¾

OVAL ACCESS DOORS.—For details of oval access doors see Table 15.

The centre of an access door, when fitted, should be approximately symmetrical with the centre line of the fitting and as near the intersection of the two axes as possible.

HEEL RESTS.—The heel rests shall be located where the centre line through the socket strikes the outside edge of the pipe and extends outwards the same distance as the beads round the socket.

PLATE.—Width of plate, $\frac{2}{3}$ diameter of pipe. Thickness not less than $\frac{5}{16}$ in.

WEB.—Thickness of web, not less than $\frac{1}{4}$ in. from outside edge of pipe.

Spigots, sockets and ears of short radius bends to be the same as for straight pipes of corresponding nominal size.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LARGE RADIUS BENDS

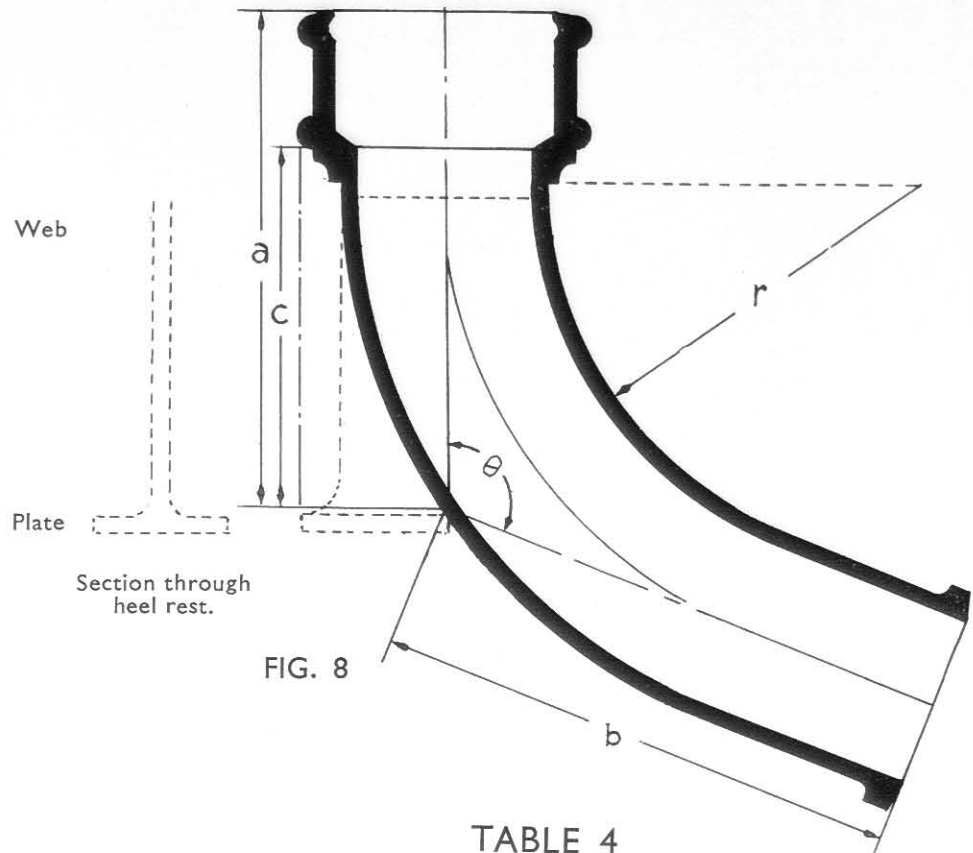


TABLE 4

$\theta = 92\frac{1}{2}^\circ$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	11	11½	11¾	13¼
b	11½	11¾	12	13
c	8¼	8½	8¾	9¾
r	6	6	6	6

$\theta = 95^\circ$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	10⅞	11⅜	11⅝	13
b	11½	11¾	12	13
c	8⅛	8⅜	8⅝	9½
r	6¼	6¼	6¼	6¼

$\theta = 100^\circ$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	10¾	11¼	11½	12¾
b	11¼	11½	11¾	12¾
c	8	8¼	8½	9¼
r	6¾	6¾	6¾	6¾

$\theta = 112\frac{1}{2}^\circ$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	10	10½	10½	11¾
b	11	11½	11½	12½
c	7¼	7½	7½	8¼
r	8	8	7¾	7¾

$\theta = 120^\circ$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	9¾	10	10¼	11¼
b	10¾	11	11¼	12¼
c	7	7	7¼	7¾
r	9	8¾	8¾	8½

$\theta = 135^\circ$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	9	9¼	9¼	9¾
b	10¼	10½	10¾	11¾
c	6¼	6¼	6¼	6¼
r	11¼	11	10¾	9¾

HEEL RESTS.—The heel rests shall be located where the centre line through the socket meets the outside edge of the pipe and shall extend outwards the same distance as the beads round the socket.

PLATE.—Width of plate, $\frac{2}{3}$ diameter of pipe. Thickness, not less than $\frac{5}{16}$ in.

WEB.—Thickness of web, not less than $\frac{1}{4}$ in. from outside edge of pipe.

Spigots, sockets and ears of large radius bends to be the same as for straight pipes of corresponding nominal size.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LARGE RADIUS BENDS WITH INSPECTION DOOR ON SIDE

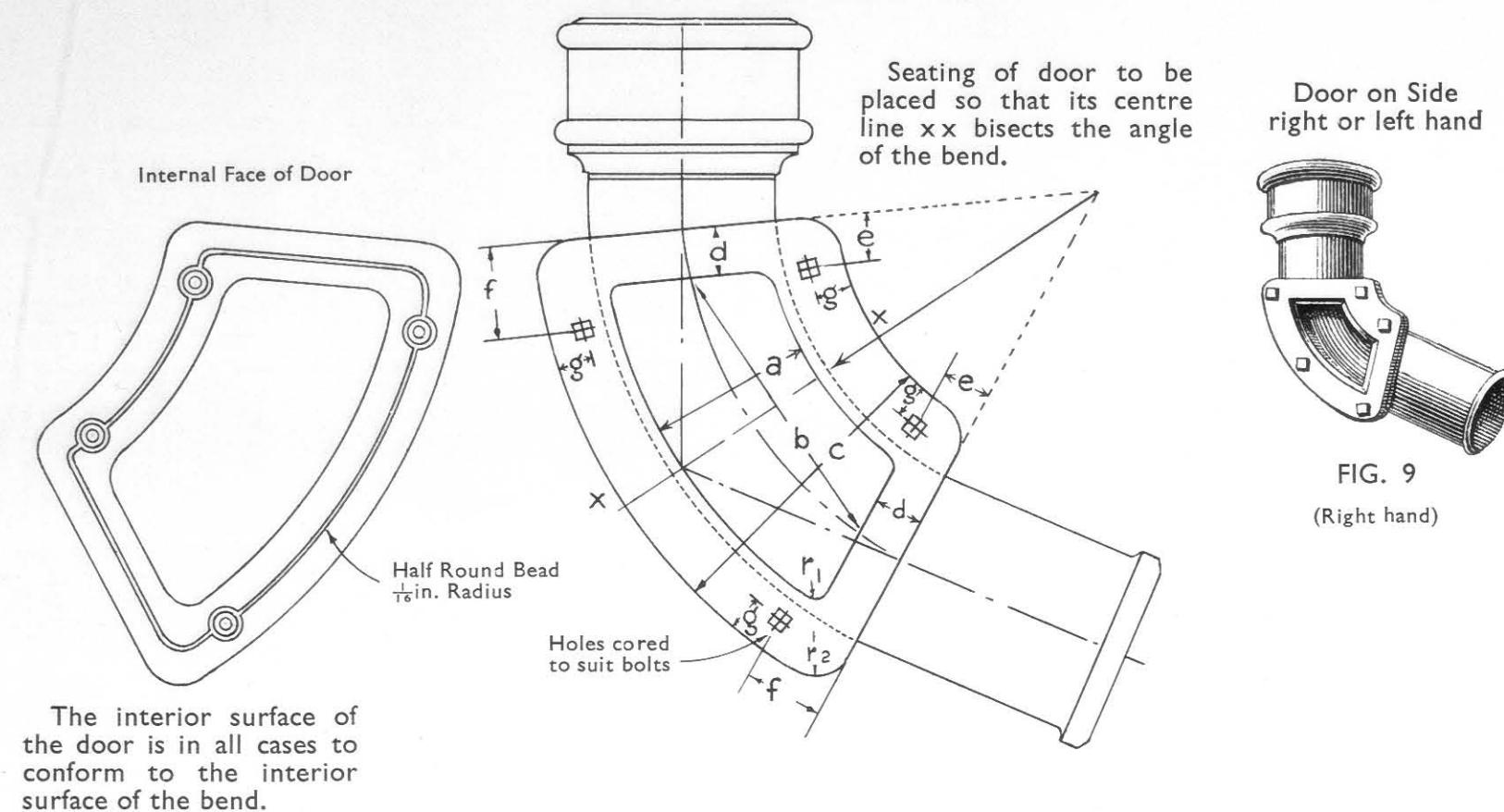
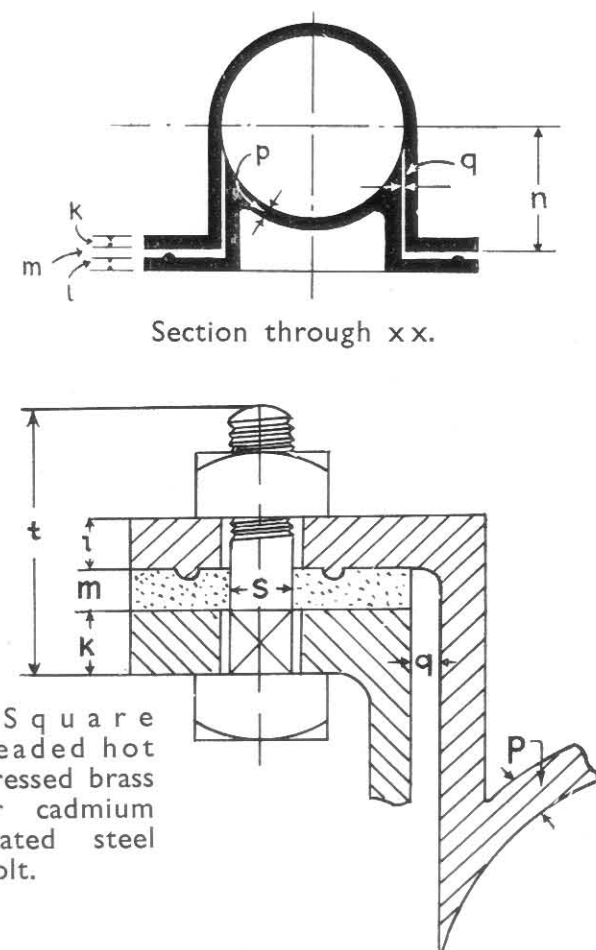


TABLE 5

Nominal Size	in. $3\frac{1}{2}$	in. 4	in. 6
a	$3\frac{1}{2}$	4	6
b	$7\frac{1}{2}$	$7\frac{1}{2}$	$7\frac{1}{2}$
c	$6\frac{3}{4}$	$7\frac{1}{4}$	$9\frac{1}{4}$
d	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$
e	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$
f	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{3}{4}$
g	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
k	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$
l	$\frac{5}{16}$	$\frac{5}{16}$	$\frac{5}{16}$
m	$\frac{3}{16}$	$\frac{3}{16}$	$\frac{3}{16}$
n	$2\frac{3}{8}$	$2\frac{5}{8}$	$3\frac{1}{4}$
p	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
q	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
r ₁	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
r ₂	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
s	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$
t	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$



The dimensions given above apply equally to left-hand bends.

Overall dimensions of large radius bends with inspection doors to be the same as for the plain large radius bends, Table 4.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LARGE RADIUS BENDS WITH RECTANGULAR INSPECTION DOOR ON HEEL

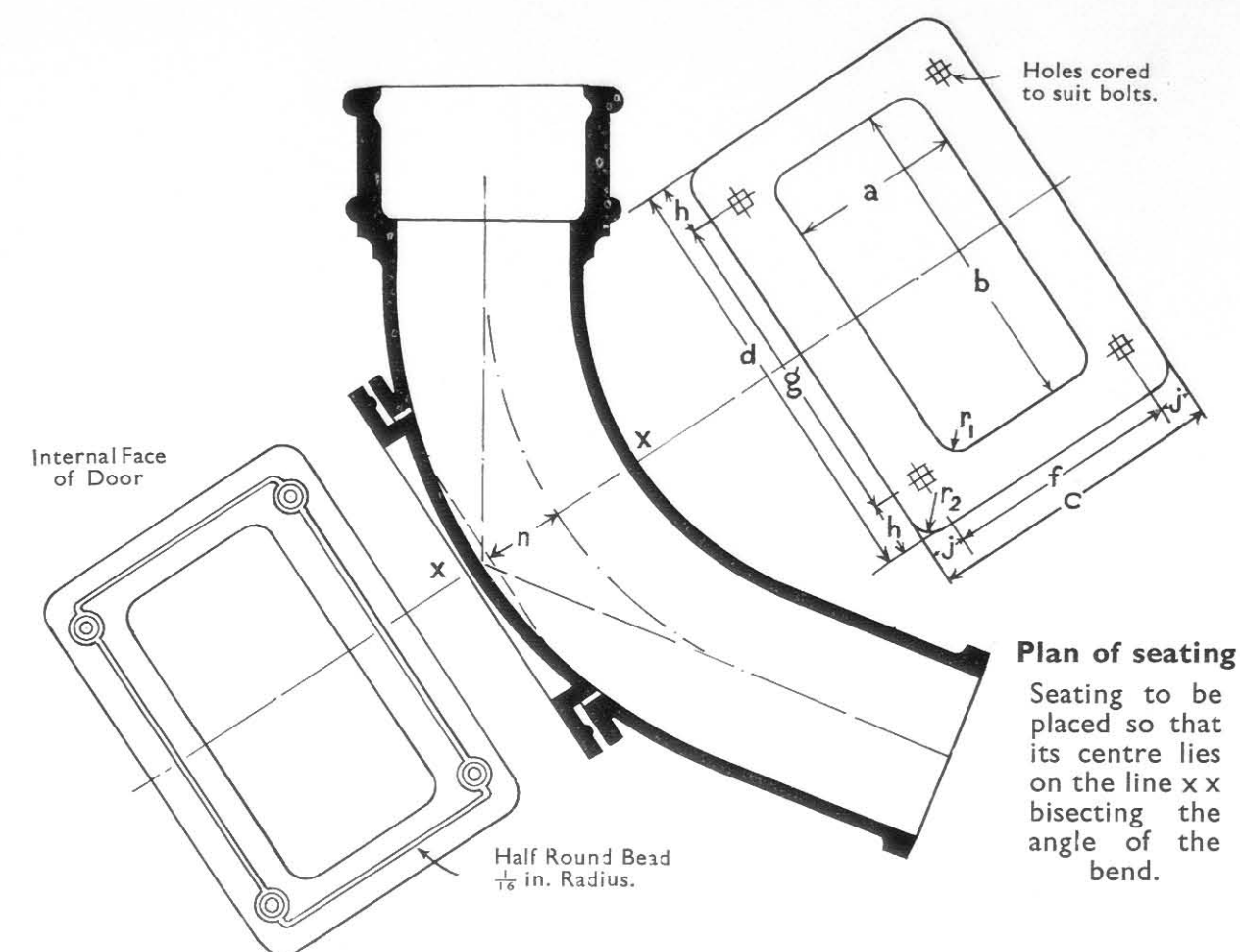
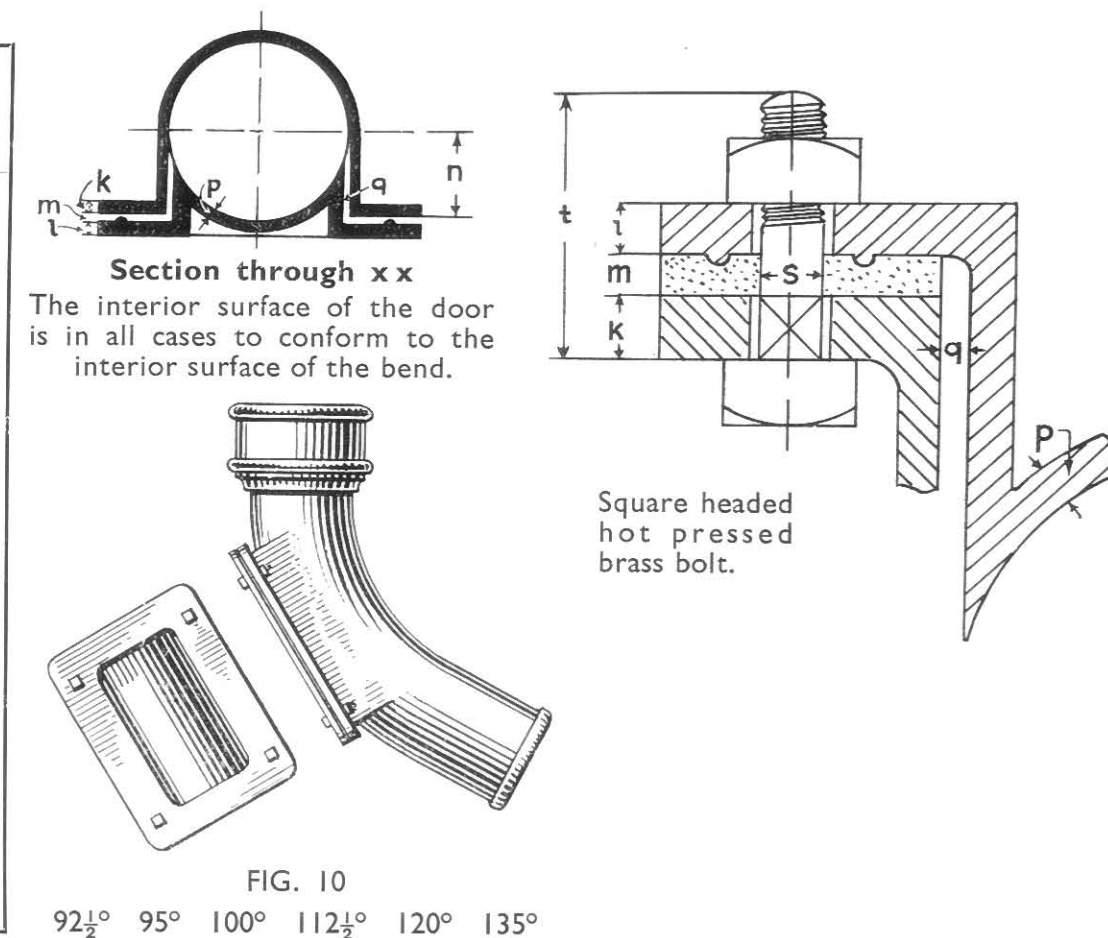


TABLE 6

Nominal Size	in. $3\frac{1}{2}$	in. 4	in. 6
a	$3\frac{1}{2}$	4	6
b	$7\frac{1}{2}$	$7\frac{1}{2}$	$7\frac{1}{2}$
c	$6\frac{3}{4}$	$7\frac{1}{4}$	$9\frac{1}{4}$
d	10	10	10
f	$5\frac{1}{4}$	$5\frac{3}{4}$	$7\frac{3}{4}$
g	$7\frac{1}{2}$	$7\frac{1}{2}$	$7\frac{1}{2}$
h	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$
j	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
k	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$
l	$\frac{5}{16}$	$\frac{5}{16}$	$\frac{5}{16}$
m	$\frac{3}{16}$	$\frac{3}{16}$	$\frac{3}{16}$
n	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{1}{8}$
p	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
q	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
r ₁	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
r ₂	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$
s	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$
t	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$



Overall dimensions of large radius bends with inspection doors to be the same as for the plain large radius bends, Table 4.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

OFFSETS

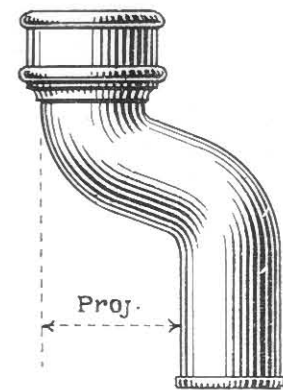
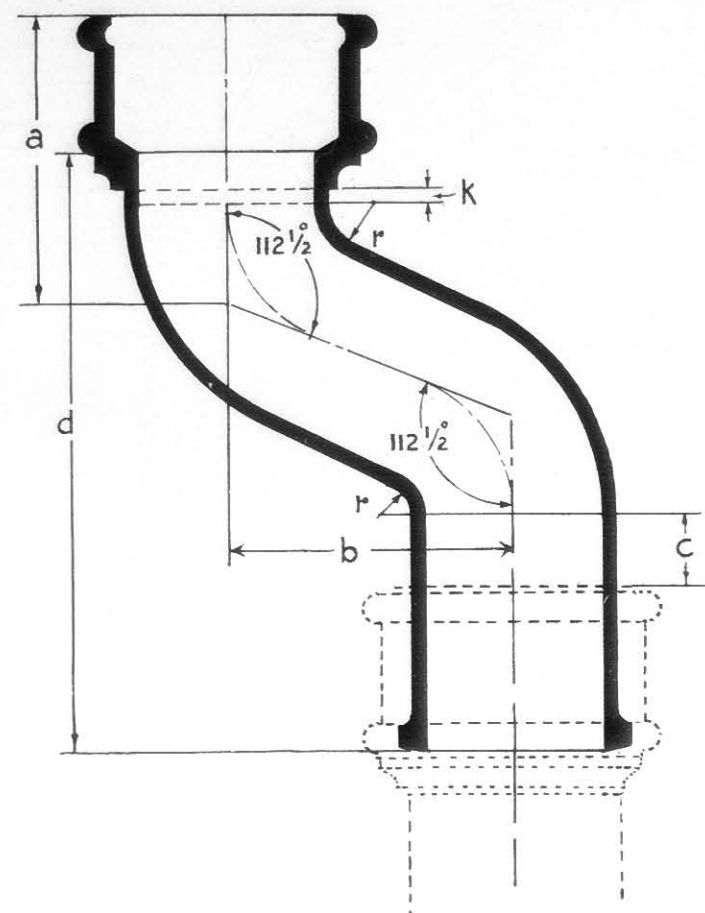


FIG. 11
Projections :
3", 4 1/2", 6", 9" and 12"

TABLE 7

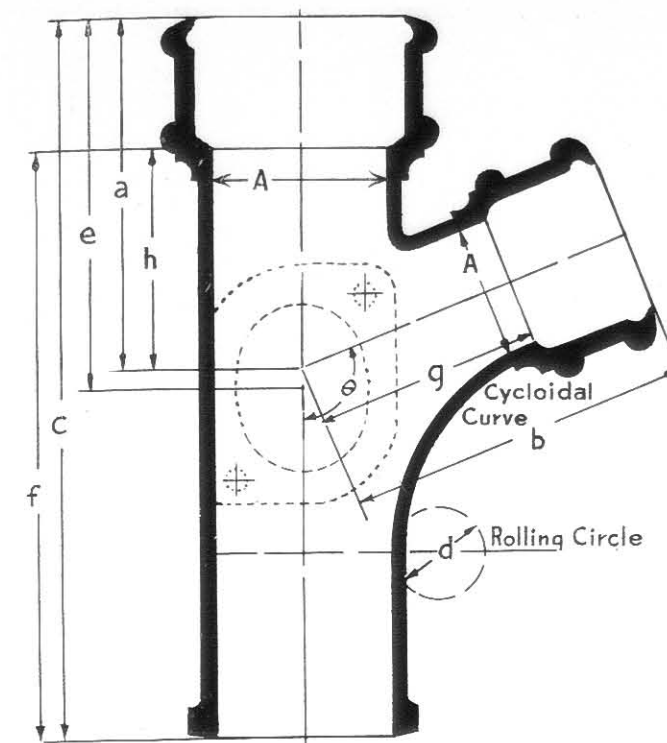
Nominal Sizes		in. 2	in. 2 1/2	in. 3	in. 3 1/2	in. 4	in. 6
Projections b	a	4 7/8	5 1/4	5 1/2	6	6 3/16	7 7/16
3 in., 4 1/2 in.	r	1	1	1	1	1	1
6 in., 9 in. and 12 in.	c	2	2	2	2	2	2
	k	1/4	1/4	1/4	1/4	1/4	1/4
Projections b	3 in.	d	9 1/2	10 1/8	10 1/2	11 1/8	11 3/8
	4 1/2 in.	d	10 3/16	10 3/4	11 3/16	11 3/4	12 1/8
	6 in.	d	10 13/16	11 3/8	11 13/16	12 3/8	12 3/4
	9 in.	d	12	12 5/8	13	13 5/8	14
	12 in.	d	13 1/4	13 7/8	14 1/4	14 7/8	15 1/4

In the case of fittings in which the projection $b=3$ in., the two radii at the centre of the pipe will be tangential to each other at a point slightly above the sloping centre line of the fitting, owing to the small projection.

Spigots, sockets and ears of swan neck bends to be the same as for straight pipes of corresponding nominal size.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

EQUAL BRANCHES WITH AND WITHOUT OVAL ACCESS DOORS



Equal Socket Branch

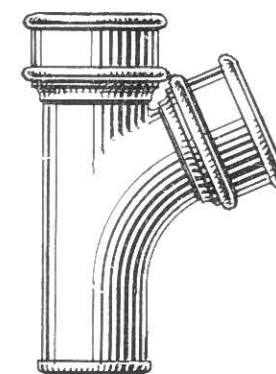


FIG. 12

92 1/2° 95° 100° 112 1/2° 120°

Equal Socket Branch
with Oval Access Door
on Back

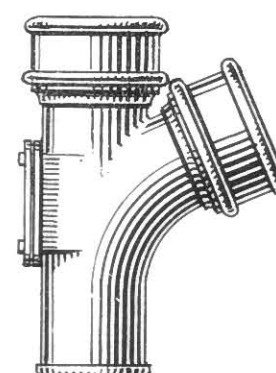
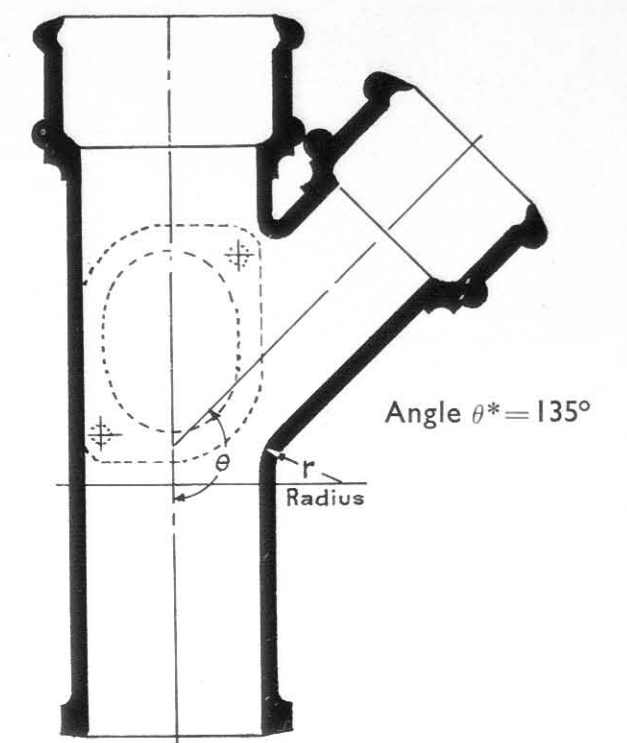


FIG. 14

92 1/2° 95° 100° 112 1/2°
120° 135°



Equal Socket Branch

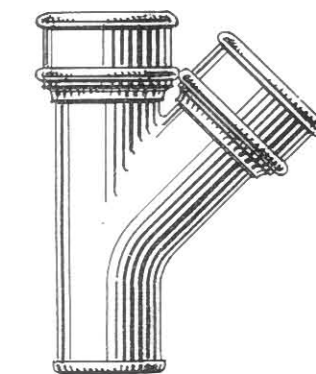


FIG. 13

135°

Equal Socket Branch
with Oval Access Door
on Side

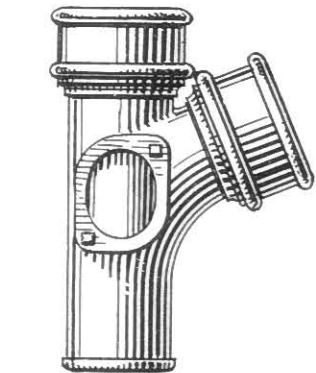


FIG. 15

92 1/2° 95° 100° 112 1/2°
120° 135°

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

EQUAL BRANCHES WITH AND WITHOUT OVAL ACCESS DOORS

$\theta = 92\frac{1}{2}^\circ$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	4¾	5⅙	5⅝	6⅙	6½	7⅞
b	6	6½	7⅞	7⅝	8⅞	10⅜
c	11¾	13	14	15	16	20
d	1½	1⅙	1⅞	2⅙	2¼	3
e	6⅙	6⅝	7	7⅙	7¾	9¼
f	9¼	10¼	11¼	12	13	16½
g	3½	3¾	4⅜	4⅝	5⅞	6⅞
h	2¼	2⅙	2⅞	3⅙	3½	4⅜

$\theta = 100^\circ$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5⅞	5⅙	6	6½	7	8⅝
b	5¾	6⅜	6⅞	7⅙	7¾	9⅞
c	11¾	13	14	15	16	20
d	1½	1⅙	1⅞	2⅙	2¼	3
e	6⅙	6⅝	7	7⅙	7¾	9¼
f	9¼	10¼	11¼	12	13	16½
g	3¼	3⅝	4⅞	4⅙	4¾	6⅜
h	2⅝	2⅙	3¼	3½	4	5⅞

$\theta = 120^\circ$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5⅞	6½	7⅞	7⅙	8¼	10⅜
b	5⅞	6½	7⅞	7⅙	8¼	10⅜
c	11¾	13	14	15	16	20
d	1½	1⅙	1⅞	2⅙	2¼	3
e	6⅙	6⅝	7	7⅙	7¾	9¼
f	9¼	10¼	11¼	12	13	16½
g	3⅜	3¾	4⅜	4⅙	5¼	6⅞
h	3⅜	3¾	4⅜	4⅙	5¼	6⅞

TABLE 8

$\theta = 92\frac{1}{2}^\circ$
SPECIAL LONG
BRANCHES

A	in. 3½	in. 4
a	6⅙	6½
b	7⅝	8⅞
c	39	39
d	2⅙	2¼
e	7⅙	7¾
f	36	36
g	4⅝	5⅞
h	3⅙	3½

$\theta = 104^\circ$

A	in. 3½	in. 4
a	6¾	7⅙
b	7¼	7½
c	15	16
d	2⅙	2¼
e	7⅙	7¾
f	12	13
g	4¼	4½
h	3¾	4⅙

For details of oval access doors, see Table 15.

For dimensions of equal branches with rectangular inspection doors, see Table 11.

Spigots, sockets and ears of equal branches to be the same as for straight pipes of corresponding nominal size.

NOTE.—When double branches are required repeat above dimensions on the other side.

$\theta = 95^\circ$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	4⅞	5⅙	5¾	6⅙	6⅝	8⅞
b	5⅞	6⅙	7	7½	8	10¼
c	11¾	13	14	15	16	20
d	1½	1⅙	1⅞	2⅙	2¼	3
e	6⅙	6⅝	7	7⅙	7¾	9¼
f	9¼	10¼	11¼	12	13	16½
g	3⅜	3⅙	4¼	4½	5	6¾
h	2⅜	2⅙	3	3⅙	3⅝	4⅝

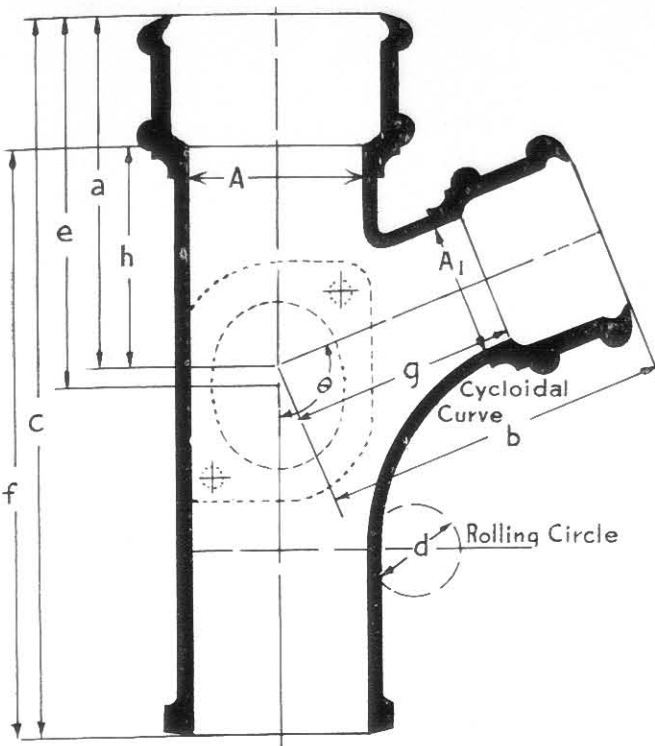
$\theta = 112\frac{1}{2}^\circ$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5⅝	6⅞	6¾	7¼	7¾	9¾
b	5⅝	6⅞	6¾	7¼	7¾	9¾
c	11¾	13	14	15	16	20
d	1½	1⅙	1⅞	2⅙	2¼	3
e	6⅙	6⅝	7	7⅙	7¾	9¼
f	9¼	10¼	11¼	12	13	16½
g	3⅞	3⅝	4	4¼	4¾	6¼
h	3⅞	3⅝	4	4¼	4¾	6¼

$*\theta = 135^\circ$

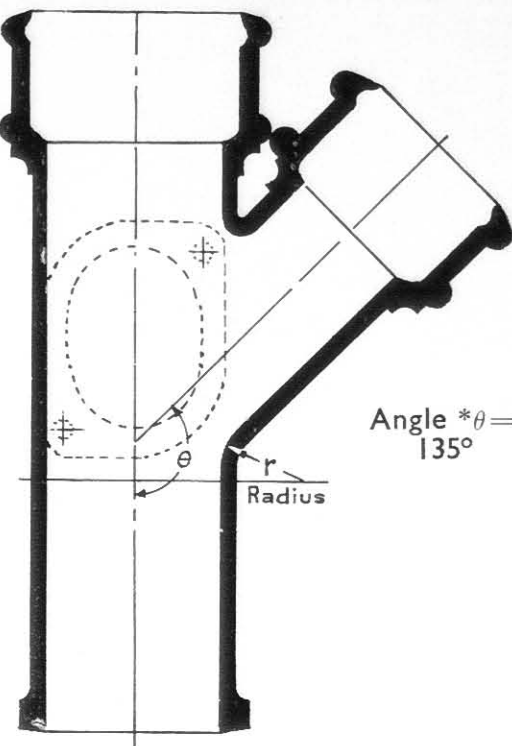
A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	7	7⅞	8¾	9¼	10¼	13⅜
b	7	7⅞	8¾	9¼	10¼	13⅜
c	11¾	13	14	15	16	20
e	6⅙	6⅝	7	7⅙	7¾	9¼
f	9¼	10¼	11¼	12	13	16½
g	4½	5⅞	6	6¼	7¼	9⅞
h	4½	5⅞	6	6¼	7¼	9⅞
r	1½	1½	1½	1½	1½	1½

UNEQUAL BRANCHES WITH AND WITHOUT OVAL ACCESS DOORS



The overall dimensions for standard unequal branches are determined on the following principle :

The projection of the arm from the outside of the body of the branch is the same as that on the standard equal branch having the same internal diameter of arm.



Unequal Socket Branch

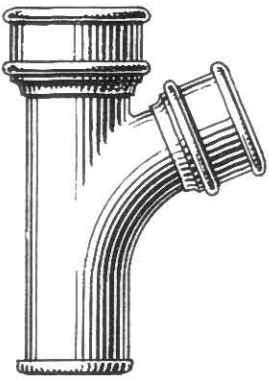


FIG. 16

92½° 95° 100° 112½° 120°

Unequal Socket Branch

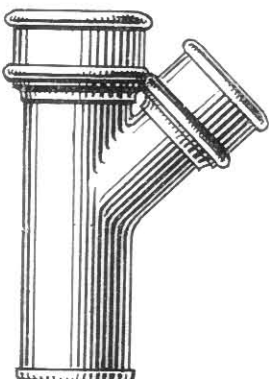


FIG. 17

135°

Unequal Socket Branch
with Oval Access Door
on Back

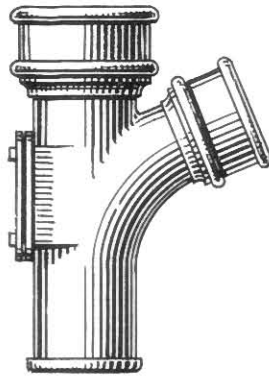


FIG. 18

92½° 95° 100° 112½°
120° 135°

Unequal Socket Branch
with Oval Access Door
on Side

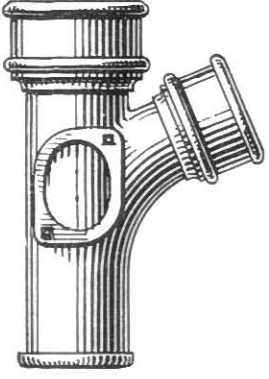


FIG. 19

92½° 95° 100° 112½°
120° 135°

UNEQUAL BRANCHES WITH AND WITHOUT OVAL ACCESS DOORS

$\theta=92\frac{1}{2}^\circ$

A	in. 3	in. 3½	in. 3½	in. 4	in. 4	in. 4	in. 6
A ₁	2	2	3	2	3	3½	4
a	5½ ₁₆	5½ ₈	6	5½ ₈	6	6	7½ ₁₆
b	6½	6¾	7¾	7	7½ ₈	7¾	9½ ₈
c	13	13½	14½	14	14½	39	17
d	1½	1½	1¾	1½	1¾	2½ ₁₆	2¼
e	6½	7	7½ ₈	7½ ₁₆	7½ ₁₆	7½ ₁₆	8¾
f	10¼	10½	11½	11	11½	36	13½
g	4	4¼	4½ ₈	4½	4¾ ₈	5½ ₈	6½ ₈
h	2¾ ₁₆	2¾ ₈	3	2¾ ₈	3	3	3¾ ₁₆

$\theta=95^\circ$

A	in. 3	in. 3½	in. 3½	in. 4	in. 4	in. 6
A ₁	2	2	3	2	3	4
a	5½ ₁₆	5½ ₁₆	6½ ₈	5½ ₁₆	6½ ₈	7¼
b	6¾ ₁₆	6¾ ₈	7¼	6¾ ₈	7½	9
c	13	13½	14½	14	14½	17
d	1½	1½	1¾	1½	1¾	2¼
e	6½	7	7½ ₈	7½ ₁₆	7½ ₁₆	8¾
f	10¼	10½	11½	11	11½	13½
g	3½ ₁₆	4½ ₈	4½	4¾ ₈	4¾ ₄	6
h	2¾ ₁₆	2¾ ₁₆	3¾ ₈	2¾ ₁₆	3¾ ₈	3¾ ₄

$\theta=100^\circ$

A	in. 3	in. 3½	in. 3½	in. 4	in. 4	in. 6
A ₁	2	2	3	2	3	4
a	5½ ₈	5½ ₁₆	6¾ ₈	5¾ ₈	6¾ ₈	7½ ₈
b	6¼	6½	7½ ₈	6¾ ₄	7¾ ₈	8½ ₁₆
c	13	13½	14½	14	14½	17
d	1½	1½	1¾	1½	1¾	2¼
e	6½	7	7½ ₈	7½ ₁₆	7½ ₁₆	8¾
f	10¼	10½	11½	11	11½	13½
g	3¾ ₄	4	4¾ ₈	4¼	4¾ ₈	5½ ₁₆
h	2¾ ₈	2¾ ₁₆	3¾ ₈	2¾ ₈	3¾ ₈	4½ ₈

TABLE 9

$\theta=104^\circ$

A	in. 4
A ₁	3½
a	7½
b	7¾
c	15
d	1¾ ₈
e	8
f	12
g	4¾ ₄
h	4½

For details of oval access doors, see Table 15.

For dimensions of unequal branches with rectangular inspection doors, see Table 11.

Spigots, sockets and ears of unequal branches to be the same as for straight pipes of corresponding nominal size.

NOTE.—When double branches are required repeat above dimensions on other side.

$\theta=112\frac{1}{2}^\circ$

A	in. 3	in. 3½	in. 3½	in. 4	in. 4	in. 6
A ₁	2	2	3	2	3	4
a	6½ ₈	6½	7½ ₈	6½ ₁₆	7¼	8¾ ₄
b	6½ ₈	6¾ ₈	7	6¾ ₈	7¼	8¾ ₈
c	13	13½	14½	14	14½	17
d	1½	1½	1¾	1½	1¾	2¼
e	6½	7	7½ ₈	7½ ₁₆	7½ ₁₆	8¾
f	10¼	10½	11½	11	11½	13½
g	3½ ₈	3¾ ₈	4¼	4½ ₈	4½	5¾ ₈
h	3¾ ₈	3½	4½ ₈	3¾ ₁₆	4¼	5¼

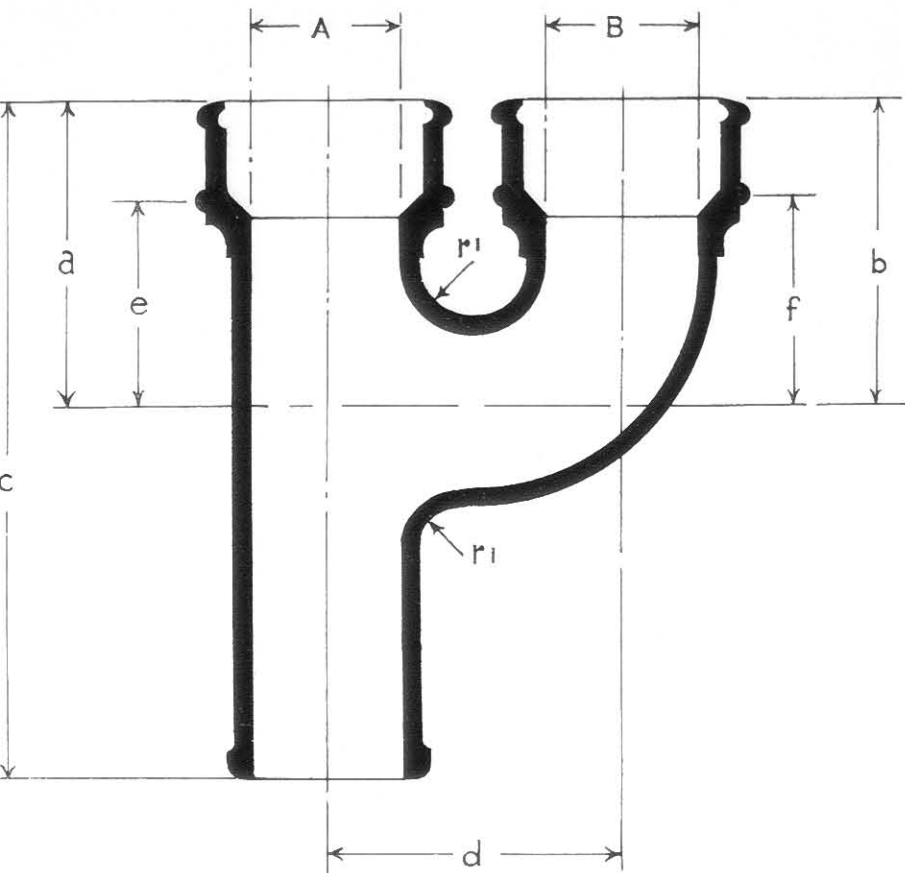
$\theta=120^\circ$

A	in. 3	in. 3½	in. 3½	in. 4	in. 4	in. 6
A ₁	2	2	3	2	3	4
a	6½	6¾ ₈	7½	7	7½ ₁₆	9¾ ₈
b	6½	6¾ ₄	7½	7½ ₁₆	7½ ₁₆	9½
c	13	13½	14½	14	14½	17
d	1½	1½	1¾	1½	1¾	2¼
e	6½	7	7½ ₈	7½ ₁₆	7½ ₁₆	8¾
f	10¼	10½	11½	11	11½	13½
g	4	4¼	4¾ ₄	4¾ ₁₆	4¾ ₁₆	6½
h	3¾ ₄	3¾ ₈	4½	4	4½ ₁₆	5¾

$*\theta=135^\circ$

A	in. 3	in. 3½	in. 3½	in. 4	in. 4	in. 6
A ₁	2	2	3	2	3	4
a	7¾ ₈	8½ ₁₆	9¼	8¾ ₁₆	9½	11¾ ₄
b	7¾ ₄	8½ ₈	9½	8½	9½	11¾ ₈
c	13	13½	14½	14	14½	17
e	6½	7	7½ ₈	7½ ₁₆	7½ ₁₆	8¾
f	10¼	10½	11½	11	11½	13½
g	5¼	5½ ₈	6¾ ₈	6	6¾ ₄	8½ ₈
h	5½ ₈	5½ ₁₆	6¼	5¾ ₁₆	6½	8¼
r	1½	1½	1½	1½	1½	1½

PARALLEL BRANCHES, SINGLE, EQUAL AND UNEQUAL



Parallel Branch

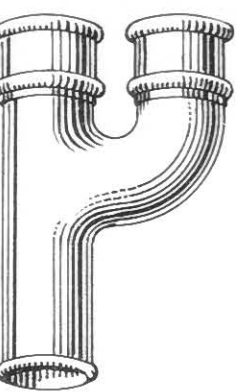


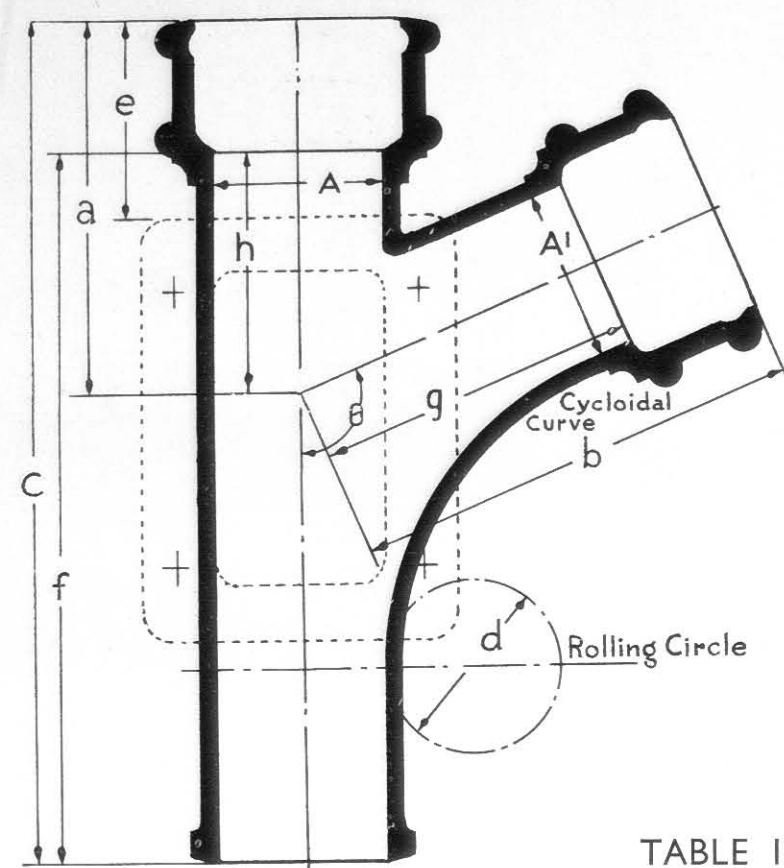
FIG. 20

TABLE 10.

A	in. 4	in. 4	in. 3½	in. 3½
B	4	2	3½	2
a	7¾ ₁₆	6½	7¼	6½
b	7	6½ ₁₆	6¾ ₄	6½ ₁₆
c	16	14	15	13½
d	6¾ ₁₆	5½	6½ ₁₆	5¼
e	4¾ ₁₆	3½	4¼	3½
f	4	3¾ ₁₆	3¾ ₄	3¾ ₁₆
r ¹	1½ ₁₆	1½ ₁₆	1½ ₁₆	1½ ₁₆

Note.—When double branches are required, repeat above dimensions on other side.

EQUAL AND UNEQUAL BRANCHES WITH RECTANGULAR INSPECTION DOORS ONLY



Equal Socket Branch with Rectangular Inspection Door

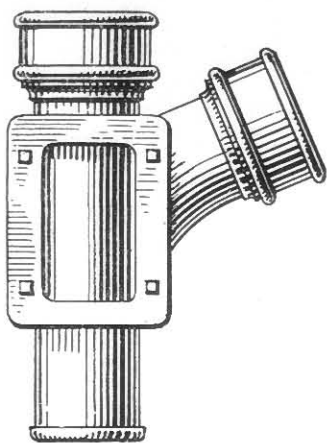


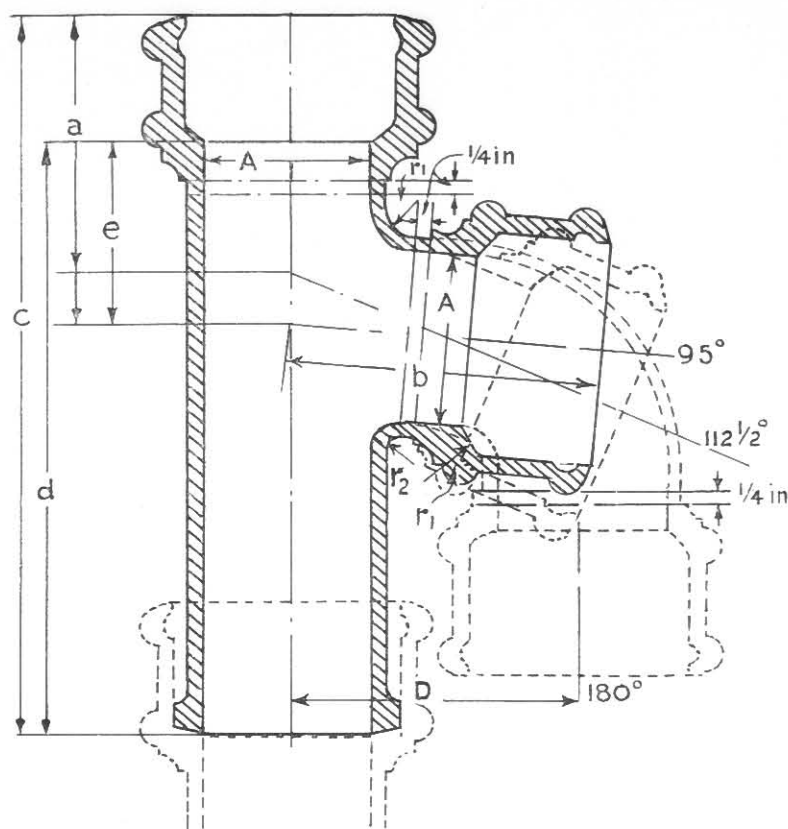
FIG. 21
92½° 95° 100° 112½° 120° 135°

TABLE II

θ°	EQUAL				UNEQUAL				
	A	in. 3½	in. 4	in. 6	A	in. 3½	in. 3½	in. 4	in. 4
92½	a b	6 3/16 9 3/8	6 7/16 9 7/8	8 1/8 12 3/8	a b	6 3/16 8	6 3/16 9 3/8	6 7/16 8 1/2	6 7/16 9 3/8
95°	a b	6 7/16 9 3/8	6 11/16 9 7/8	8 7/8 12 3/8	a b	6 7/16 8	6 7/16 9 3/8	6 11/16 8 1/2	6 11/16 9 3/8
100°	a b	6 11/16 9 3/8	7 3/8 12 3/8	9 1/8 12 3/8	a b	6 11/16 8	6 11/16 9 3/8	7 3/8 8 1/2	7 3/8 9 3/8
112½	a b	8 1/8 9 3/8	8 7/8 10 1/8	10 1/8 12 3/8	a b	8 1/8 8 3/16	8 7/8 9 1/2	8 7/8 9 1/2	8 7/8 9 1/2
120°	a b	8 3/8 9 3/8	9 1/8 10 1/8	11 3/8 12 3/8	a b	8 3/8 8 3/4	8 3/8 9 1/16	9 1/8 8 1/2	9 1/8 9 1/16
135°	a b	10 1/8 10 1/8	10 1/2 10 1/2	13 3/8 13 3/8	a b	10 1/8 9 1/16	10 1/8 9 3/8	10 1/2 9 1/16	10 1/2 9 1/16
All values of θ	c d e f	18 1/2 4 1/2 15 1/2	19 4 4 1/2 16	23 1/2 5 1/2 20	c d e f	18 1/2 3 1/2 15 1/2	18 1/2 4 1/2 15 1/2	19 3 4 1/2 16	19 4 4 1/2 16
92½	g h	6 5/8 3 3/16	6 7/8 3 7/16	8 7/8 4 3/8	g h	5 1/2 3 3/16	6 5/8 3 3/16	5 3/4 3 7/16	6 7/8 3 7/16
95°	g h	6 5/8 3 7/16	6 7/8 3 7/16	8 7/8 4 1/8	g h	5 1/2 3 7/16	6 5/8 3 7/16	5 3/4 3 7/16	6 7/8 4 1/8
100°	g h	6 5/8 3 1/16	6 7/8 4 3/16	8 7/8 5 5/8	g h	5 1/2 3 1/16	6 5/8 3 1/16	5 3/4 4 3/16	6 7/8 5 5/8
112½	g h	6 3/4 5 1/16	7 1/8 5 1/16	9 1/4 7 1/16	g h	5 1/16 5 1/16	6 3/4 5 1/16	5 1/16 5 1/16	7 1/8 7 1/16
120°	g h	6 3/4 5 1/8	7 1/8 6 1/8	9 1/4 8 1/16	g h	5 1/8 5 1/8	6 3/4 5 1/8	6 1/8 7 1/8	8 1/4 8 1/16
135°	g h	7 1/8 7 1/8	7 1/2 7 1/2	9 7/8 9 7/8	g h	9 7/8 7 1/8	6 7/8 7 1/8	6 1/2 7 1/2	8 1/2 9 7/8

INVERTED BRANCHES

Socket Type



Inverted Socket Branch

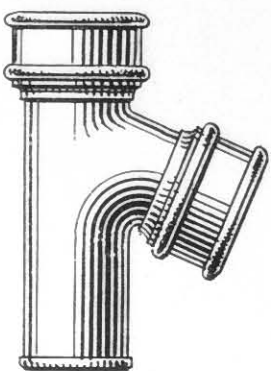


FIG. 22
95° 112½°

Inverted Socket Branch

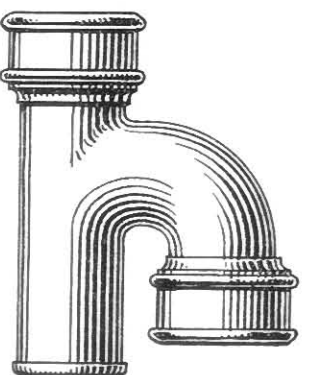


FIG. 23
180°

TABLE 12

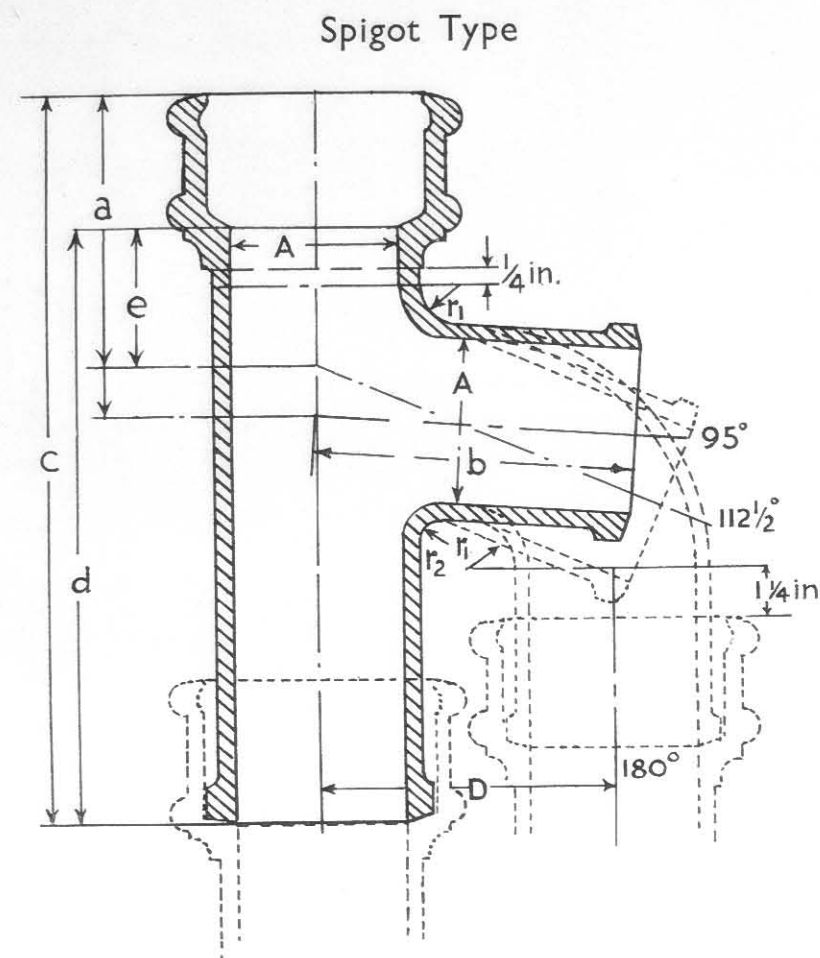
A Main Pipe	95°					112½°					180°				
	in. 2	in. 3½	in. 3½	in. 4	in. 4	in. 2	in. 3½	in. 3½	in. 4	in. 4	in. 2	in. 3½	in. 3½	in. 4	in. 4
A Branch	2	3½	2	4	2	2	3½	2	4	2	2	3½	2	4	2
a	5 3/8	6 1/16	5 7/8	6 7/8	5 7/8	4 3/4	5 1/16	5	5 7/8	4 7/8	5 3/8	6 1/16	5 7/8	6 7/8	5 7/8
b	5 3/8	6 3/4	6 1/8	7	6 3/8	6	7 1/16	6 3/4	8 1/16	7	4 7/16	6 1/16	5 1/4	6 9/16	5 1/2
c	12	15	13 1/2	16	14	12	15	13 1/2	16	14	12	15	13 1/2	16	14
d	9 1/2	12	10 1/2	13	11	9 1/2	12	10 1/2	13	11	9 1/2	12	10 1/2	13	11
e	2 7/8	3 1/16	2 7/8	3 7/8	2 7/8	2 1/4	2 1/16	2	2 7/8	1 7/8	2 7/8	3 1/16	2 7/8	3 7/8	2 7/8
r1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
r2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2

Spigots and sockets to be the same as for straight pipes of the same nominal size.

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INVERTED BRANCHES



Inverted Spigot Branch

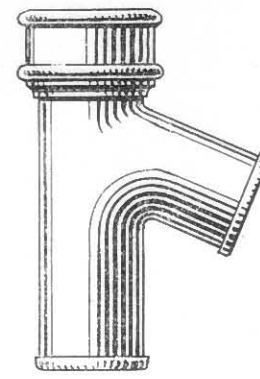


FIG. 24

95° 112 1/2°

Inverted Spigot Branch

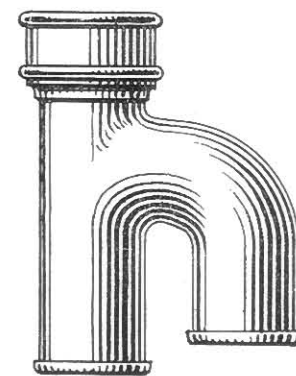


FIG. 25

180°

TABLE 13

	95°					112 1/2°						180°				
	in. 2	in. 3 1/2	in. 3 1/2	in. 4	in. 4	in. 2	in. 3 1/2	in. 3 1/2	in. 4	in. 4		in. 2	in. 3 1/2	in. 3 1/2	in. 4	in. 4
A Main Pipe																
A Branch	2	3 1/2	2	4	2	2	3 1/2	2	4	2		2	3 1/2	2	4	2
a	5 3/8	6 1/16	5 7/8	6 7/8	5 7/8	4 3/4	5 1/16	5	5 7/8	4 7/8	D	5 3/8	6 1/16	5 7/8	6 7/8	5 7/8
b	5 3/4	6 7/8	6 1/2	6 1/8	6 3/4	6 5/16	7 1/16	7 1/8	8 1/4	7 3/8		4 7/16	6 1/16	5 1/4	6 9/16	5 1/2
c	12	15	13 1/2	16	14	12	15	13 1/2	16	14		12	15	13 1/2	16	14
d	9 1/2	12	10 1/2	13	11	9 1/2	12	10 1/2	13	11		9 1/2	12	10 1/2	13	11
e	2 7/8	3 1/16	2 7/8	3 7/8	2 7/8	2 3/16	2 1/16	2	2 7/8	1 7/8		2 7/8	3 1/16	2 7/8	3 7/8	2 7/8
r ₁	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
r ₂	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2		1/2	1/2	1/2	1/2	1/2

Spigots and sockets to be the same as for straight pipes of the same nominal size.

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TRAPS

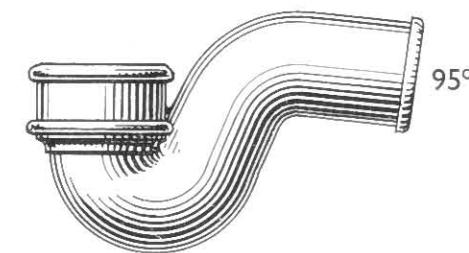
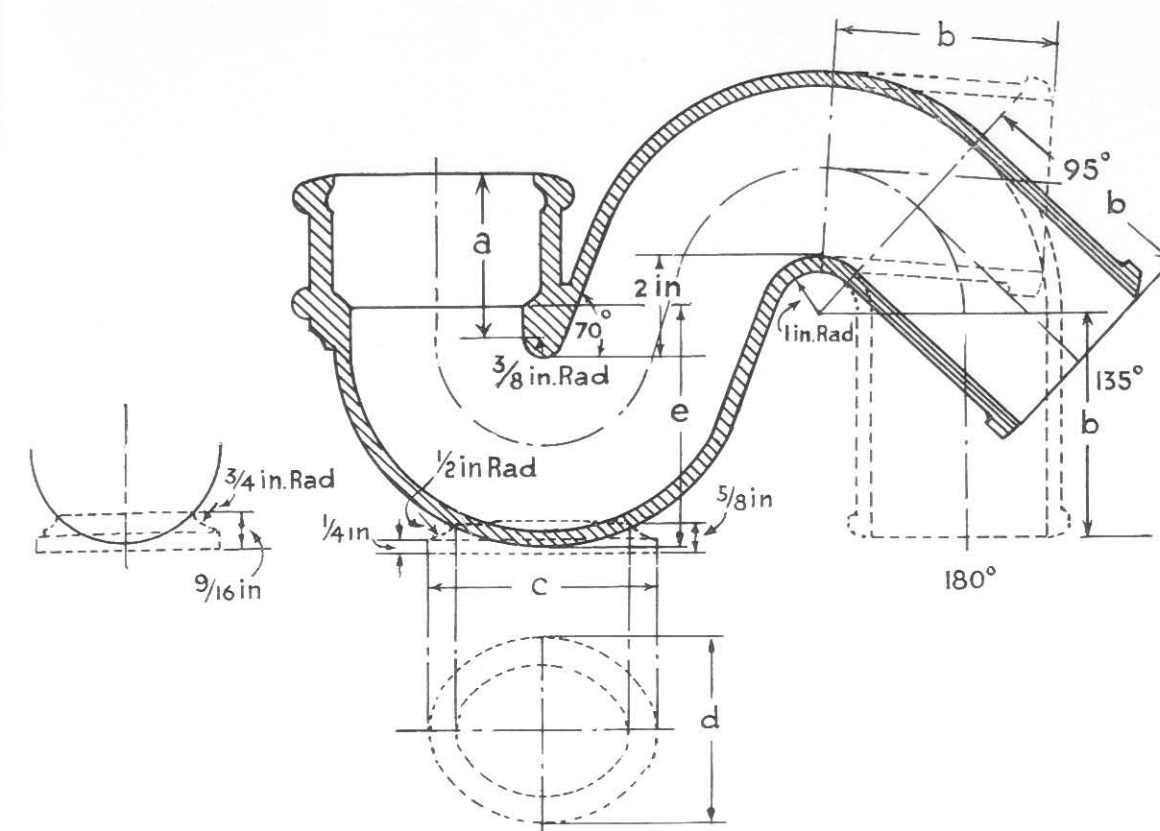


FIG. 28

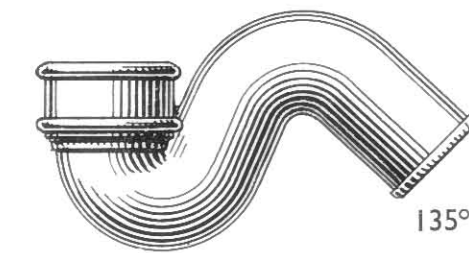


FIG. 29

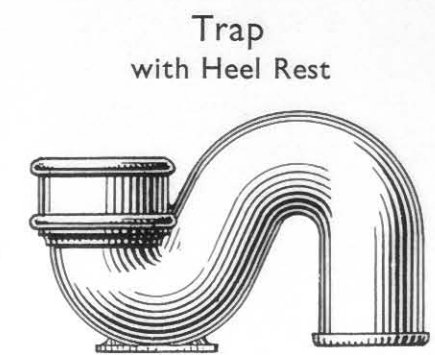


FIG. 26 180°

Any Trap can be supplied with Heel Rest

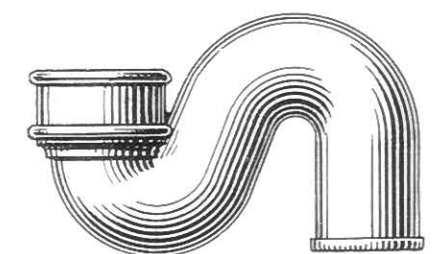


FIG. 27 180°

TABLE 14

Nominal Size	in. 2	in. 2 1/2	in. 3	in. 3 1/2	in. 4	in. 6
a	3 1/4	3 1/2	3 1/2	3 3/4	3 3/4	4 1/4
b	4 1/2	4 3/4	4 3/4	5	5	5 1/2
c	4	4 3/8	4 5/8	5	5 1/4	6
d	3 3/8	3 5/8	3 7/8	4 1/8	4 1/4	5
e	3 5/16	3 13/16	4 5/16	4 13/16	5 5/16	7 5/16

Spigots and sockets of traps to be the same as for straight pipes of corresponding nominal size.

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OVAL ACCESS DOORS

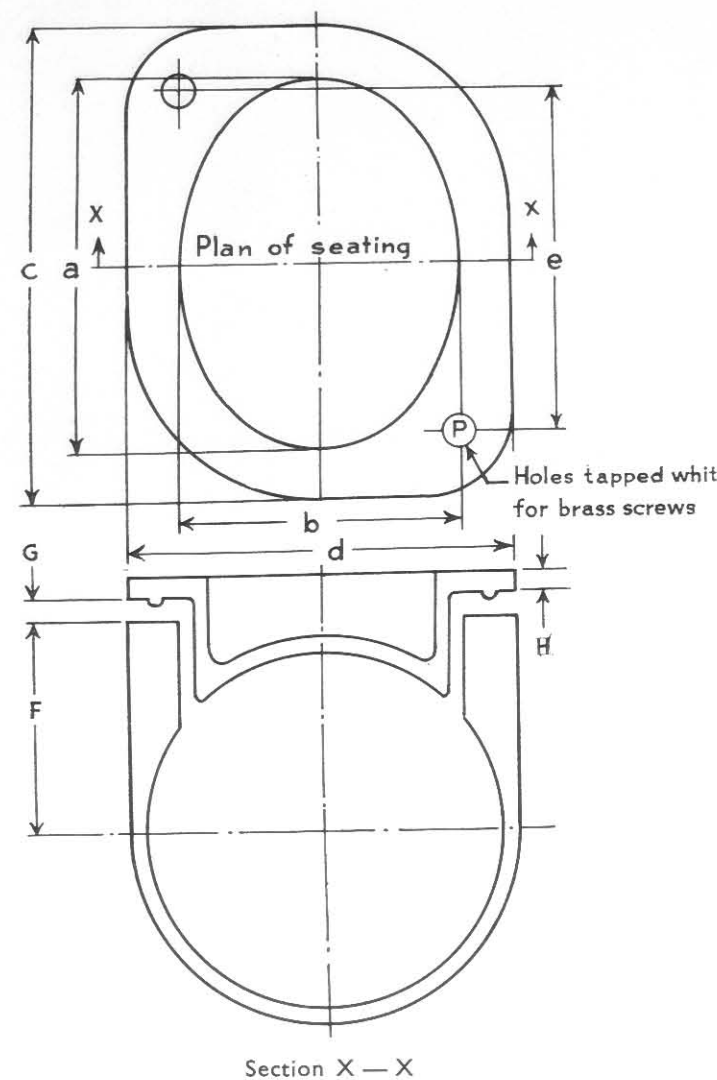


FIG. 30

Screws to be of brass or cadmium plated steel.

TABLE 15

Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	2½	3	3½	3¾	4	4¾
b	1¾	1¾	2¼	2¾	3⅛	3¾
c	3¾	4¼	4½	4¾	5⅛	6
d	2¼	2¾	3¼	3¾	4¼	5
e	2¾	3¼	3½	3¾	3¾	4½
F	1¾	1⅞	1⅞	2¾	2¾	3¾
G	¾	¾	¾	¾	¾	¾
H	¼	¼	¼	¼	¼	¼
P	⅝	⅝	⅝	⅝	⅝	¾

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RECTANGULAR INSPECTION DOORS

The interior surface of the door is in all cases to conform to the interior surface of the fitting to which the door is applied.

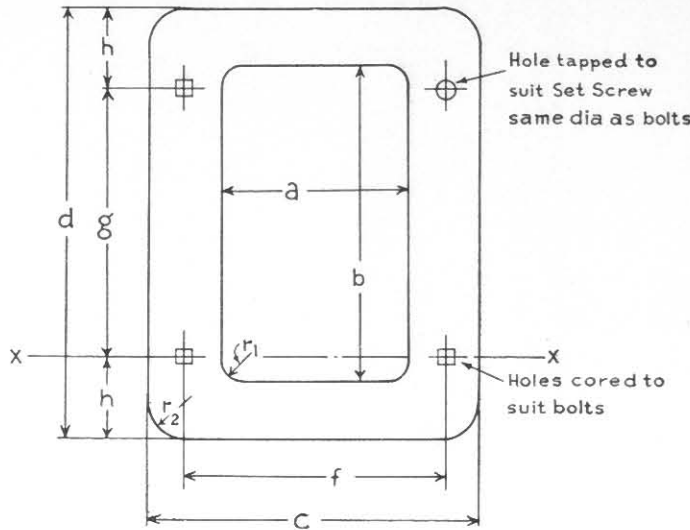
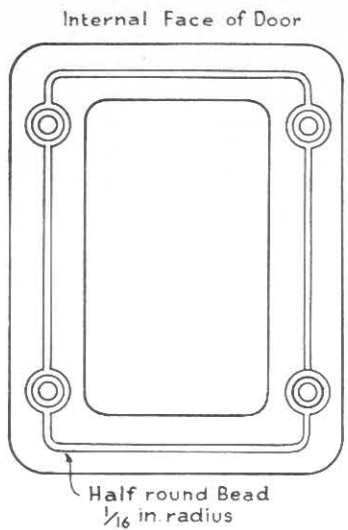
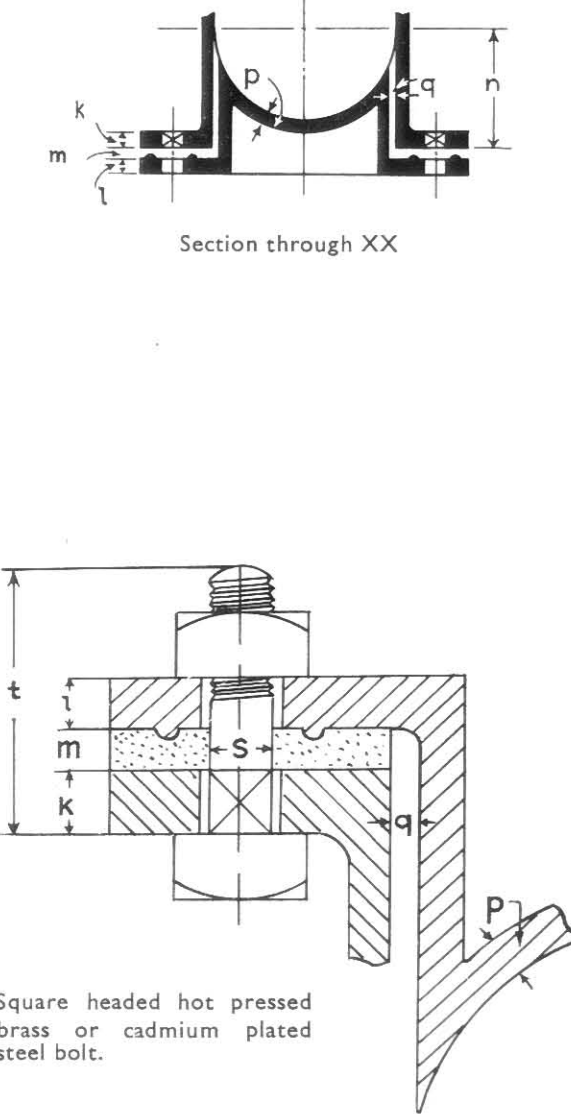


FIG. 31

TABLE 16

Nominal Size	in. 3½	in. 4	in. 6
a	3½	4	6
b	6½	7	10
c	6¾	7¼	9¼
d	9	9½	12½
f	5¼	5¾	7¾
g	5½	6	9
h	1¾	1¾	1¾
k	¾	¾	¾
l	¾	¾	¾
m	5/16	5/16	5/16
n	3/16	3/16	3/16
p	¼	¼	¼
q	⅛	⅛	⅛
r1	½	½	½
r2	7/8	7/8	7/8
s	¾	¾	¾
t	1½	1½	1½



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DIMINISHING PIECES

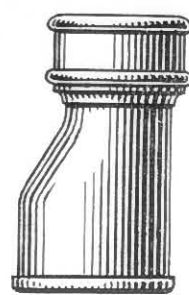
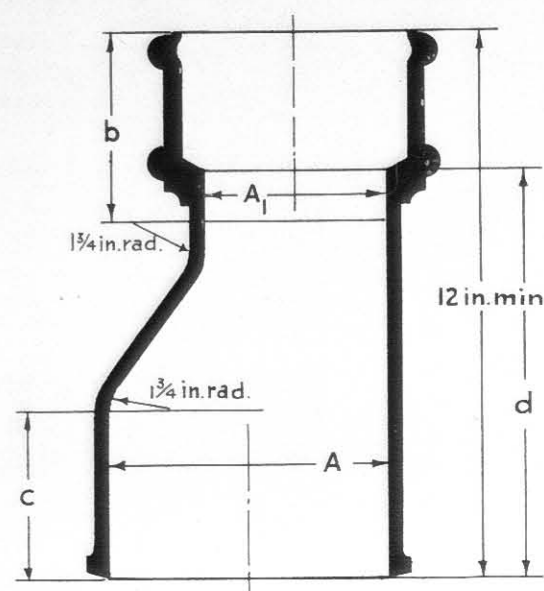


FIG. 32

TABLE 17

A	in. 2 1/2	in. 3	in. 3	in. 3 1/2	in. 3 1/2	in. 3 1/2	in. 4	in. 4
A ₁	2	2	2 1/2	2	2 1/2	3	2	2 1/2
b	3 3/8	3 3/8	3 5/8	3 3/8	3 5/8	3 3/4	3 3/8	3 5/8
c	3	3	3	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4
d	9 1/2	9 1/2	9 1/4	9 1/2	9 1/4	9 1/4	9 1/2	9 1/4

A	in. 4	in. 4	in. 6	in. 6
A ₁	3	3 1/2	3 1/2	4
b	3 3/4	4	4	4
c	3 1/4	3 1/4	3 3/4	3 3/4
d	9 1/4	9	9	9

Spigots, sockets and ears of diminishing pieces to be the same as for straight pipes of corresponding nominal size.

STRAIGHT INSPECTION PIECES

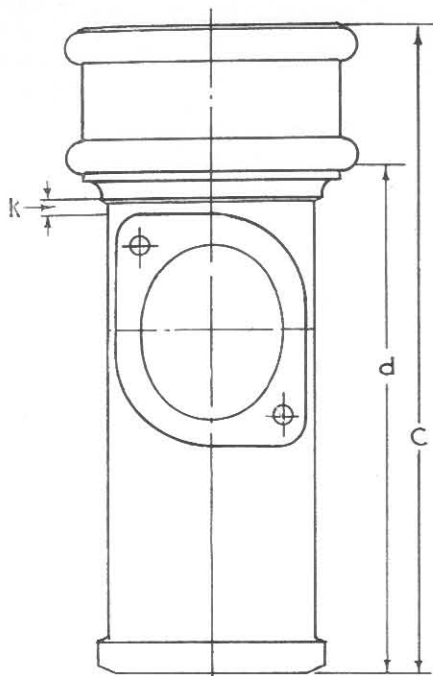


FIG. 33

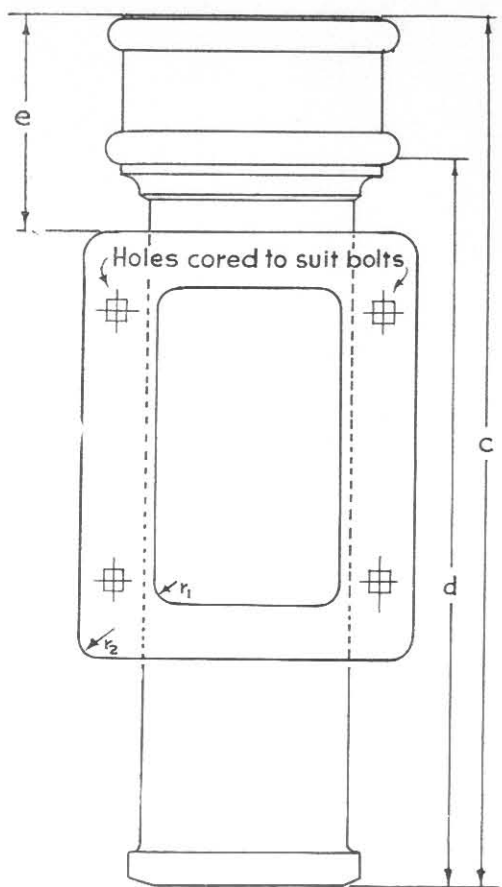


FIG. 34

TABLE 18

Nom. Size	in. 2	in. 2 1/2	in. 3	in. 3 1/2	in. 4	in. 6
c	11 3/4	12 3/4	13 1/4	13 3/4	14 1/4	16 1/4
d	9 1/4	10	10 1/2	10 3/4	11 1/4	12 3/4
k	1/4	1/4	1/4	1/4	1/4	1/4

For details of oval access doors, see Table 15.

Nom. Size	in. 3 1/2	in. 4	in. 6
c	18 1/2	19	23 1/2
d	15 1/2	16	20
e	4 1/2	4 1/2	5 1/4

For details of rectangular inspection doors, see Table 16.

Spigots, sockets and ears of inspection pieces to be the same as for straight pipes of corresponding nominal size.

LOOSE SOCKETS AND COLLARS

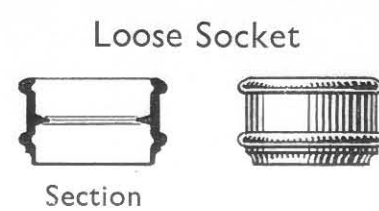
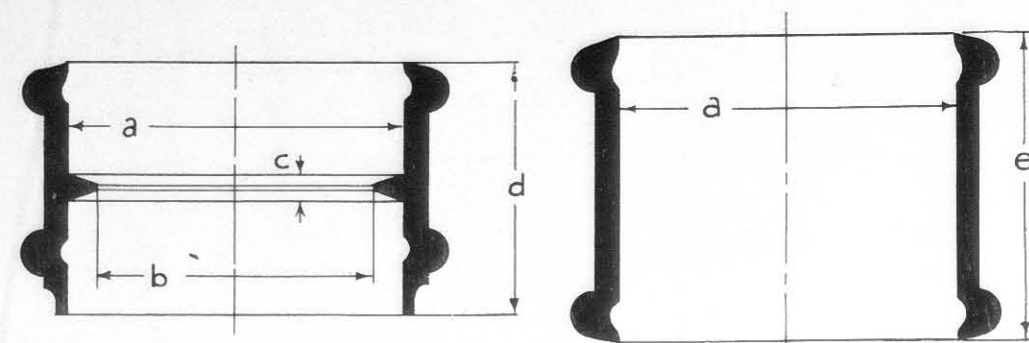


FIG. 35

TABLE 19

Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	This dimension is as given in Table 1 or Table 2					
b	2	2½	3	3½	4	6
c	⅜	⅜	⅜	⅜	⅜	⅜
d	3⅛	3⅜	3½	3¾	3¾	4¼
e	3½	4	4	4½	4½	5½

The dimensions of loose sockets shall correspond to those of the appropriate nominal size of pipe given in Table 1 or Table 2.

Collar

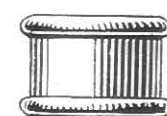


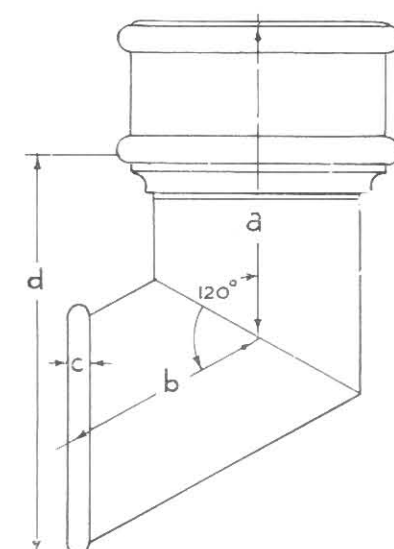
FIG. 36

SHOES

TABLE 20

Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	4¾	5⅜	6	6½	7	9
b	2½	3⅛	3¾	4¼	4⅞	7⅛
c	¼	⅝	⅜	⅞	½	⅝
d	5	5⅞	7	7⅞	9	12⅝

Sockets and ears of shoes to be the same as for straight pipes of corresponding nominal size.



Shoe

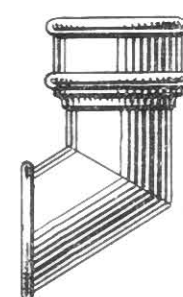


FIG. 37

CAST-IRON HOLDERBATS*

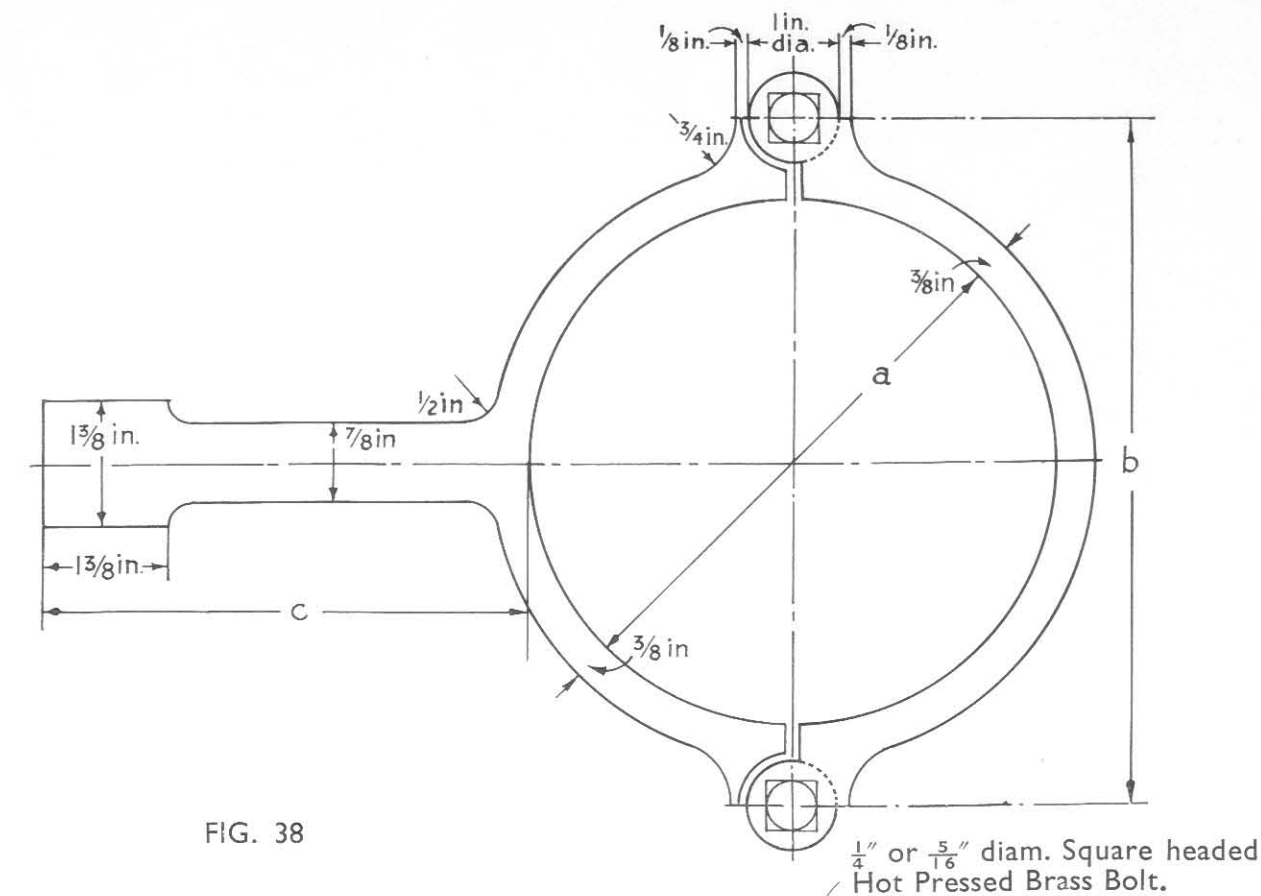


FIG. 38

¼" or ⅝" diam. Square headed Hot Pressed Brass Bolt.

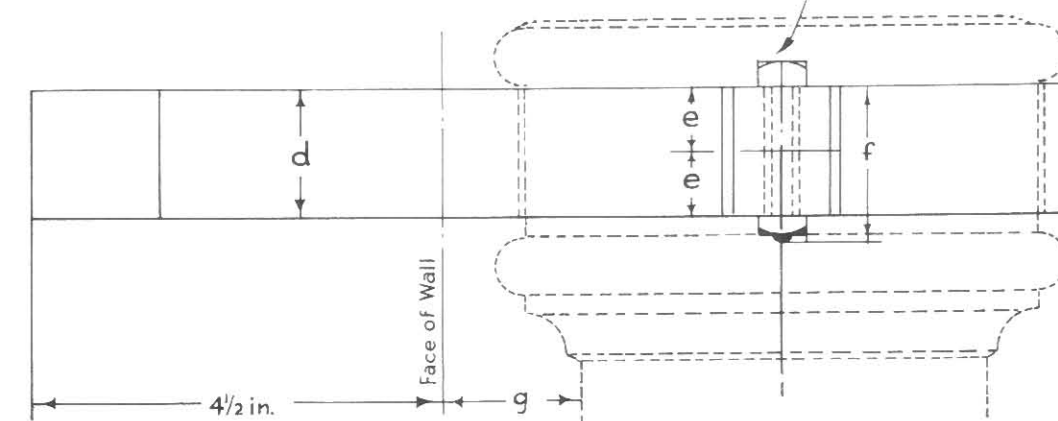


TABLE 21

Nom. Size of Pipe	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	3½	4	4⅝	5¼	5¾	7⅞
b	5¼	5¾	6⅜	7	7½	9⅜
c	5⅜	5⅞	5⅞	5⅞	5⅞	5⅞
d	1⅞	1⅞	1⅞	1⅞	1⅞	1⅞
e	1⅞	1⅞	1⅞	1⅞	1⅞	1⅞
f	1⅞	1⅞	1⅞	1⅞	1⅞	1⅞
g	1¼	1¼	1¼	1¼	1¼	1¼

*Similar Holderbats in Mild Steel can also be supplied.

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LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SANITARY CONNECTIONS

Applicable to 3½ in. and 4 in. Pipes only

Socket to fit W.C. outlet
KEY DIAGRAM

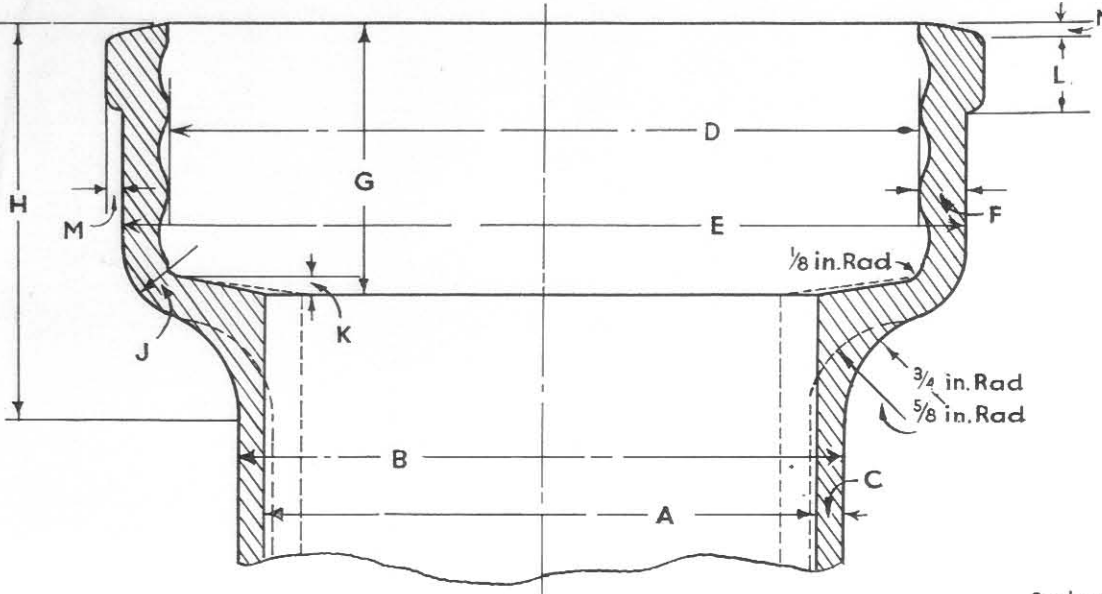


TABLE 22

PIPE	Nominal Size			in. 3½	in. 4
	Internal diameter, minimum	A	3½	4	
	External diameter	B	3¾	4½	
	Thickness, minimum	C	1¾	1¾	
SOCKET	Internal diameter, minimum	D	6		
	External diameter	E	6⅝		
	Thickness	F	⅝		
	Internal depth of socket	G	2		
	External depth of socket	H	2⅞		
	Internal radius	J	⅞		
	Depth of bevel	K	⅛		
	Width of bead	L	⅞		
	Projection of bead	M	⅛		
	Taper on end	N	⅞		

TYPE "A"

TYPE "B"

Nominal Size	in. 3½	in. 4	Nominal Size	in. 3½	in. 4
a	5½	5½	a		5½
b	3¾	4¼	b		3¾
c	⅛	⅛	c		4 I/D Earth Pipe
d	4	4	d		4
			e		2¾

Short Connection Pipe

Short Connecting Pipe
Faucet to fit Earthenware
Pipe.

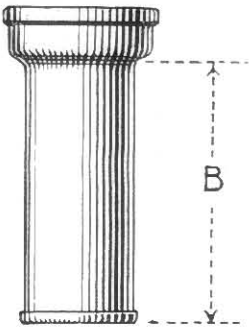
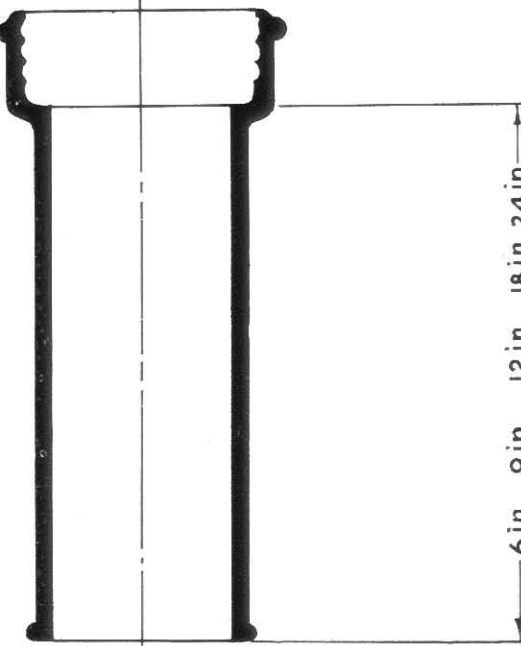


FIG. 39

Dimension "B"
6", 9", 12", 18" and 24"

Socket to fit W.C. outlet



Cast-Iron Connecting Sockets
for Earthenware Pipes

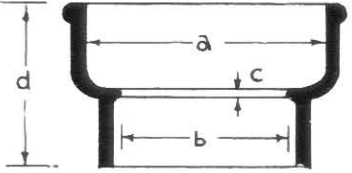


FIG. 40
Type "A"

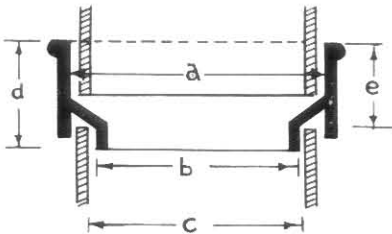


FIG. 41
Type "B"

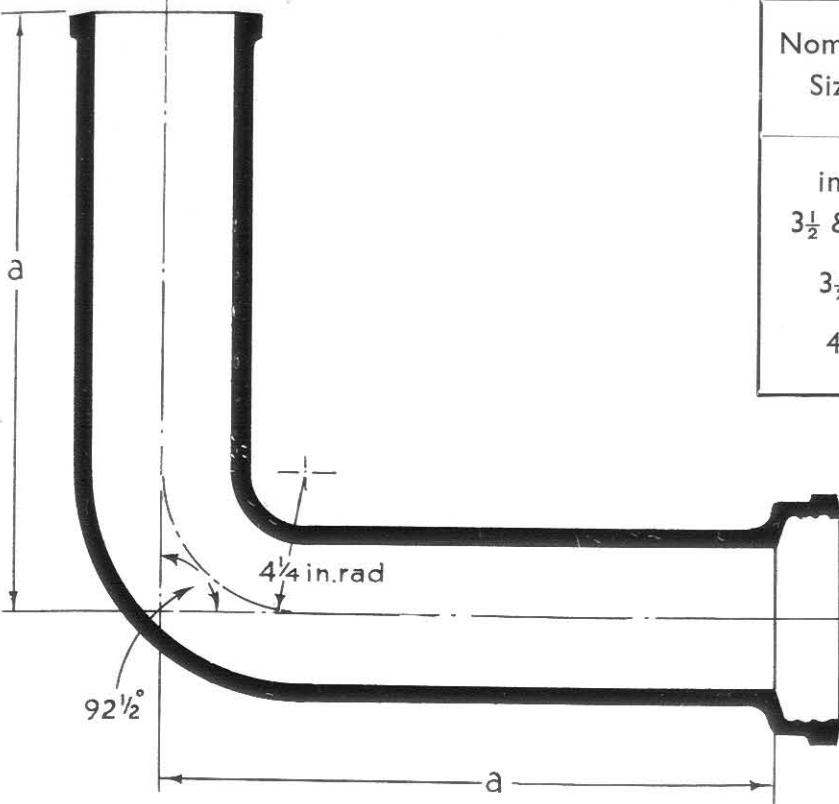
SANITARY CONNECTIONS

Applicable to 3½ in. and 4 in. Pipes only

TABLE 23

Nominal Size	Dimensions	6 in. wall	9 in. wall	11 in. wall	13½ in. wall
in. 3½ & 4	a	in. 15	in. 18	in. 20	in. 22
3½	b	12¾	15½	17¾	19¼
4	b	12½	15¼	17⅞	19

Bends



Socket to fit
W.C.
outlet.

Bend
Faucet to fit Earthenware
Pipe

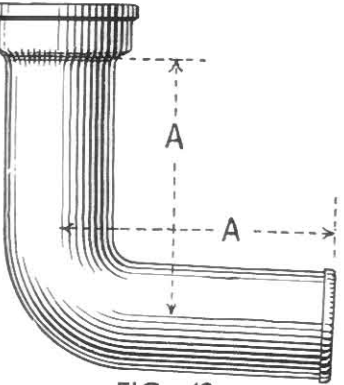
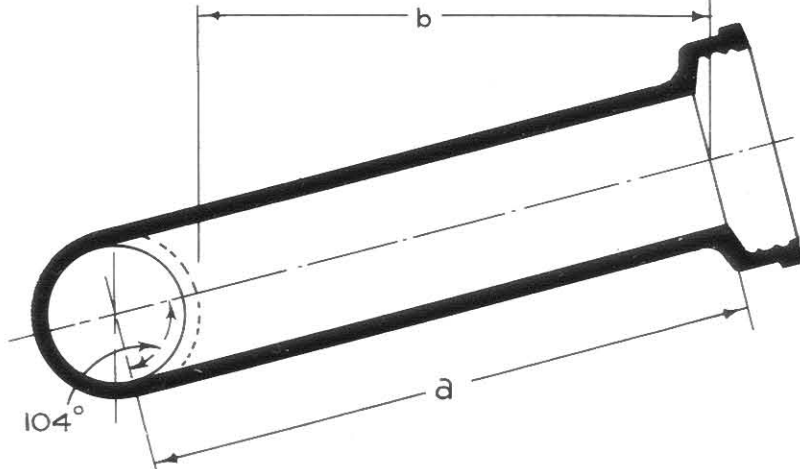


FIG. 42

Dimension "A" as "a" above
Other sizes available :
12", 14", 16", 17" and 24"



Long-Tailed Bend
Inside diameter of Faucet,
5¾"

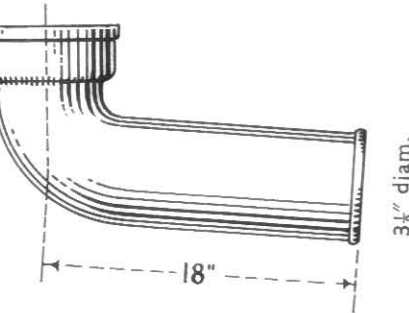


FIG. 43

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SANITARY CONNECTIONS

Applicable to $3\frac{1}{2}$ in. and 4 in. Pipes only

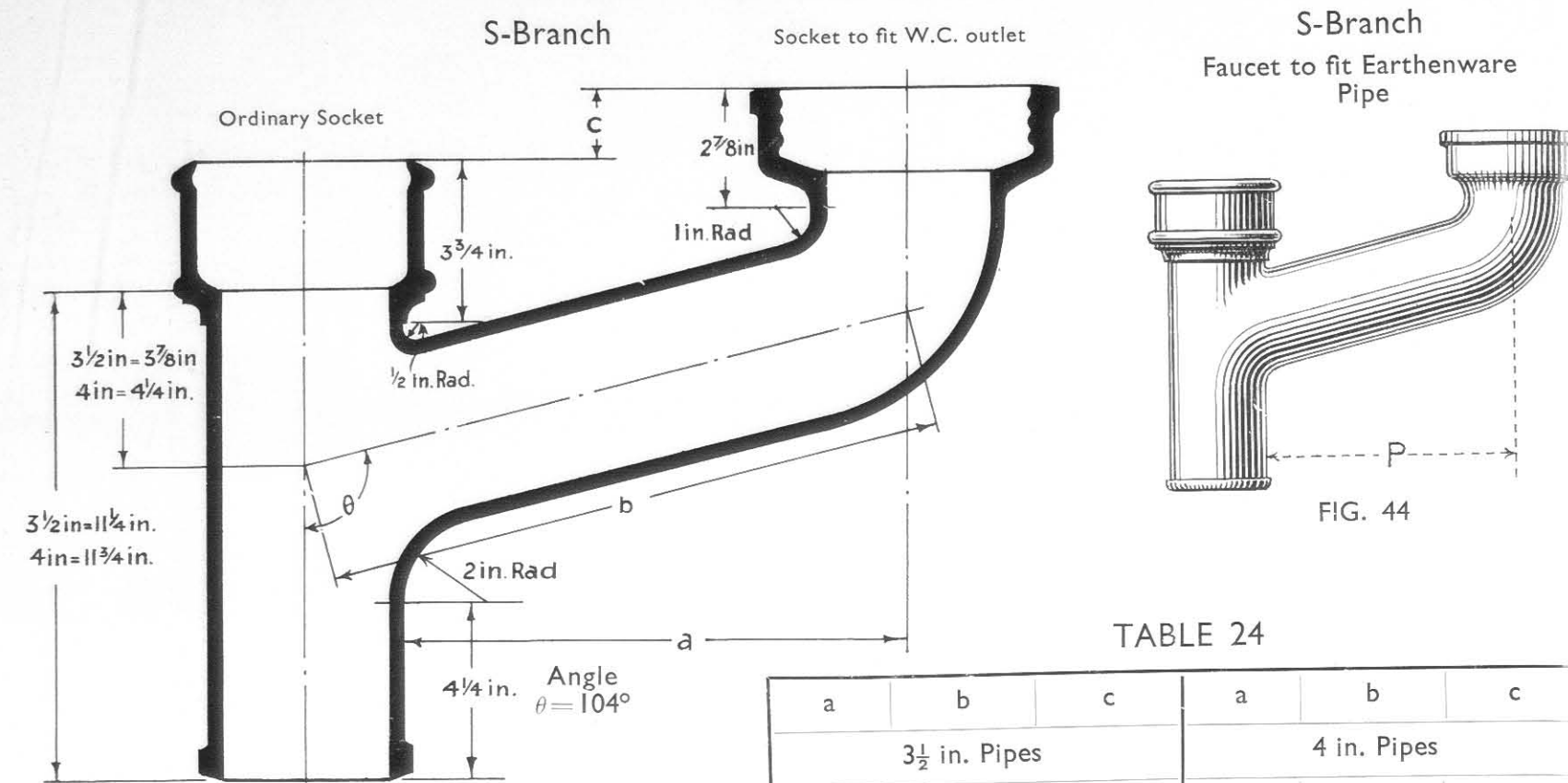
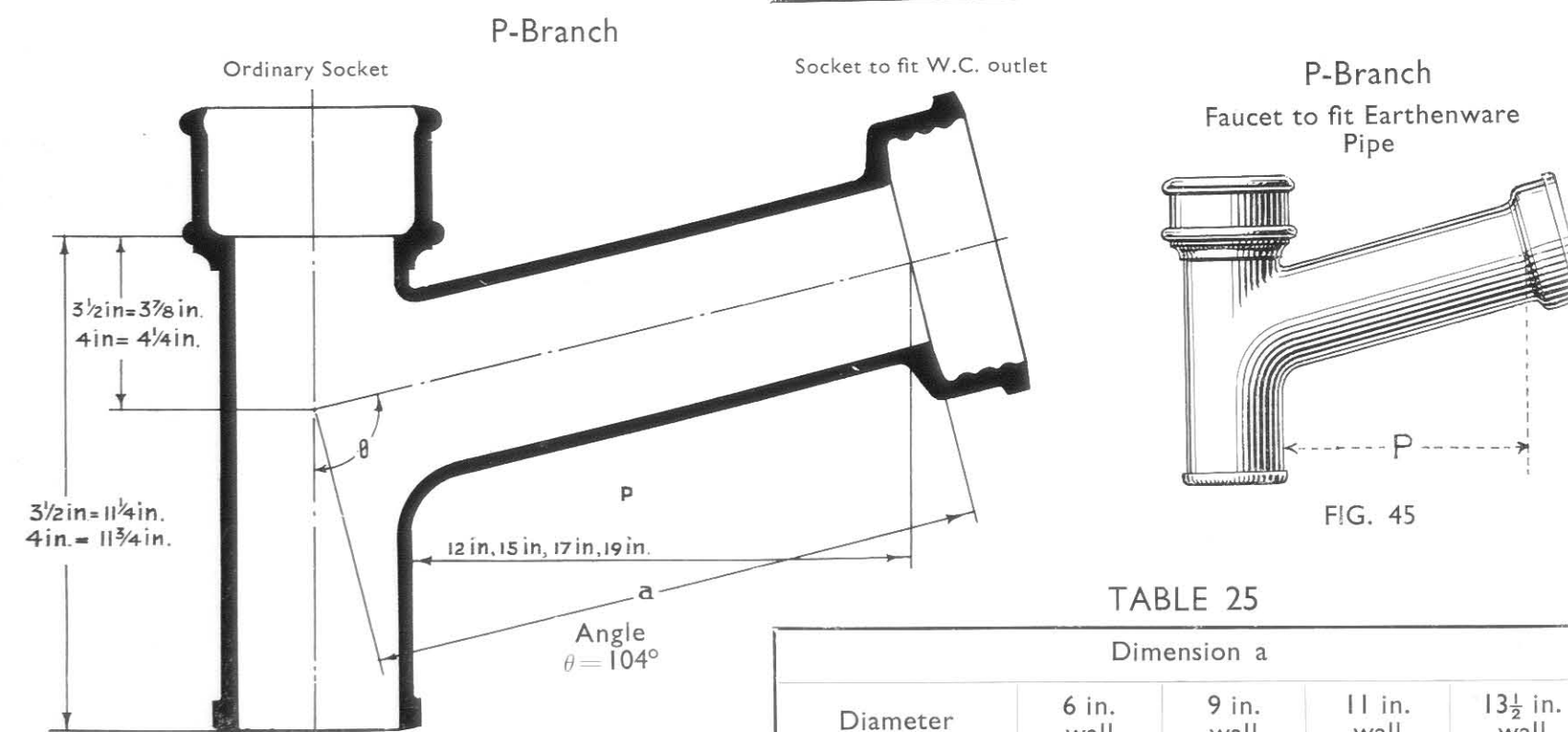


TABLE 24

3 1/2 in. Pipes			4 in. Pipes		
a	b	c	a	b	c
12	14 3/8	12 3/8	12	14 5/8	11 9/8
15	17 1/2	21 5/8	15	17 3/8	21 1/8
18	20 9/16	3 7/8	18	20 1/8	3 3/8
21	23 1/2	3 3/8	21	23 3/8	3 7/8
24	26 3/4	4 3/8	24	27	4 1/8



NOTE: The nominal sizes, 12", 15", 17" and 19", relate to the respective wall sizes in the Table.

TABLE 25

Dimension a				
Diameter	6 in. wall	9 in. wall	11 in. wall	13 1/2 in. wall
3 1/2	14 1/2	17 5/8	19 5/8	21 3/4
4	14 3/4	17 7/8	19 7/8	22

Dimension "P": 18", 21" and 24" Other sizes available.

BRITISH STANDARD SPECIFICATION "H" CAST-IRON MULTI-BRANCH PIPE FITTINGS

for Single-Stack Plumbing

Multi-Branch Fittings in various lengths—mainly 2' 6" to 3' 0" and 3' 6"—and in 3", 3 1/2" and 4" diameters. Bosses, Branches and Inspection Doors placed where required.

BOSSES

Normally set at 92 1/2° and tapped 1 1/4", 2" and 1 1/2" B.S. Pipe Thread to suit Lavatory Basin, Sink Outlet and Bath Waste respectively.

BRANCHES

Branches can be of varying diameters and can be set at any degree to order 92 1/2°, 95°, 100°, 104°, etc.

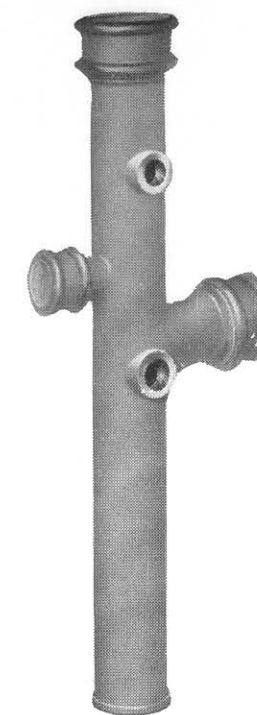


FIG. 46

Multi-Branch Pipe with ordinary branches.

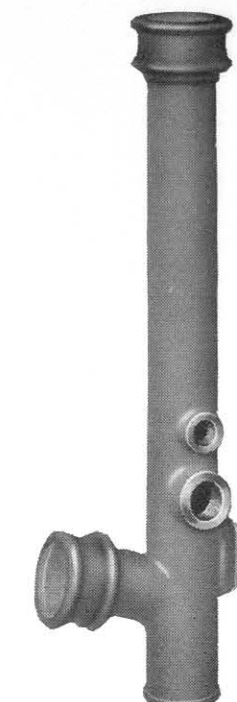


FIG. 47

Multi-Branch Pipe with ordinary branch and inspection door.

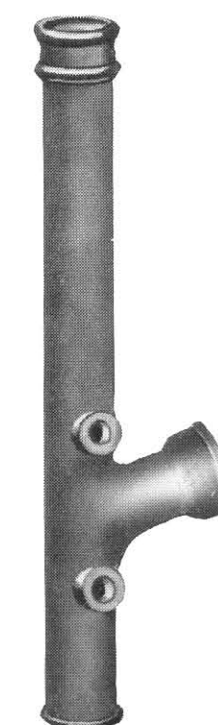


FIG. 48

Multi-Branch Pipe with branch to suit W.C. outlet. The projection of branch is similar to standard P-branch projections.

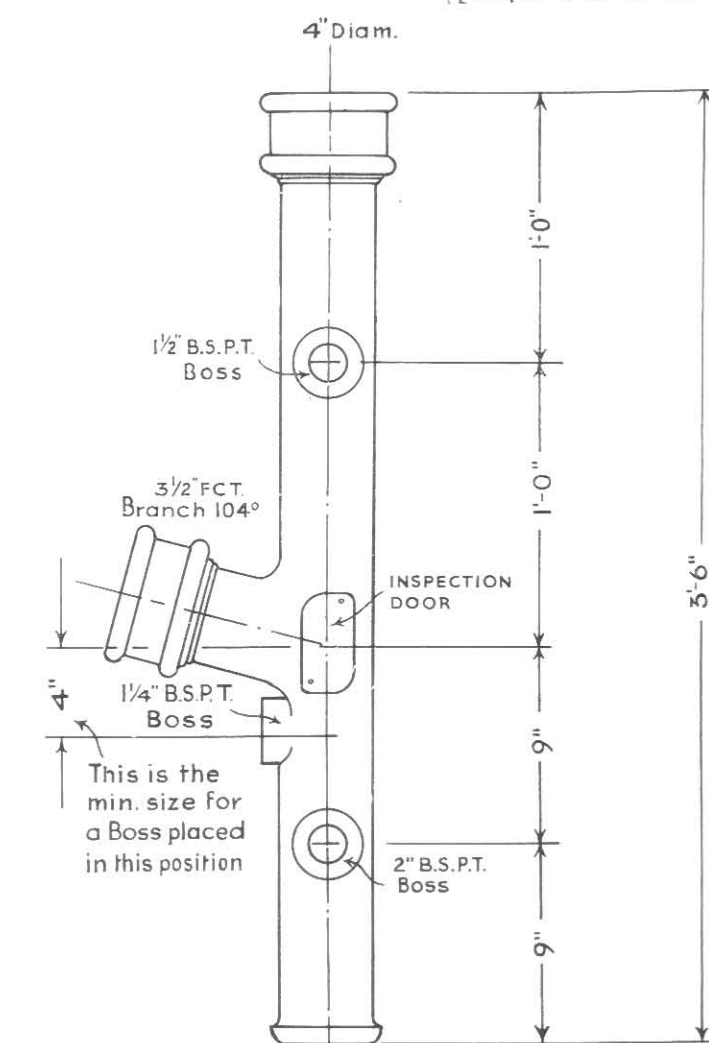


FIG. 49

Typical sketch of Multi-Branch Pipe showing sizes required when ordering.

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LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LAYOUT OF TYPICAL SINGLE-STACK SHOWING MULTI-BRANCH

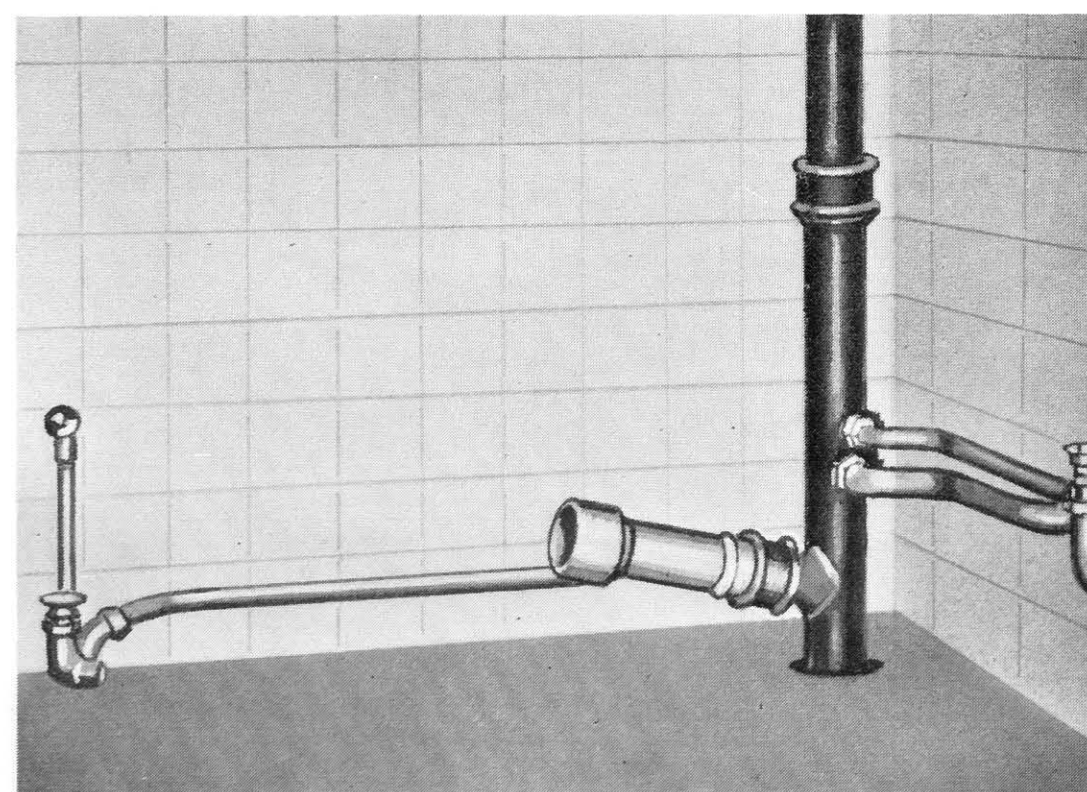
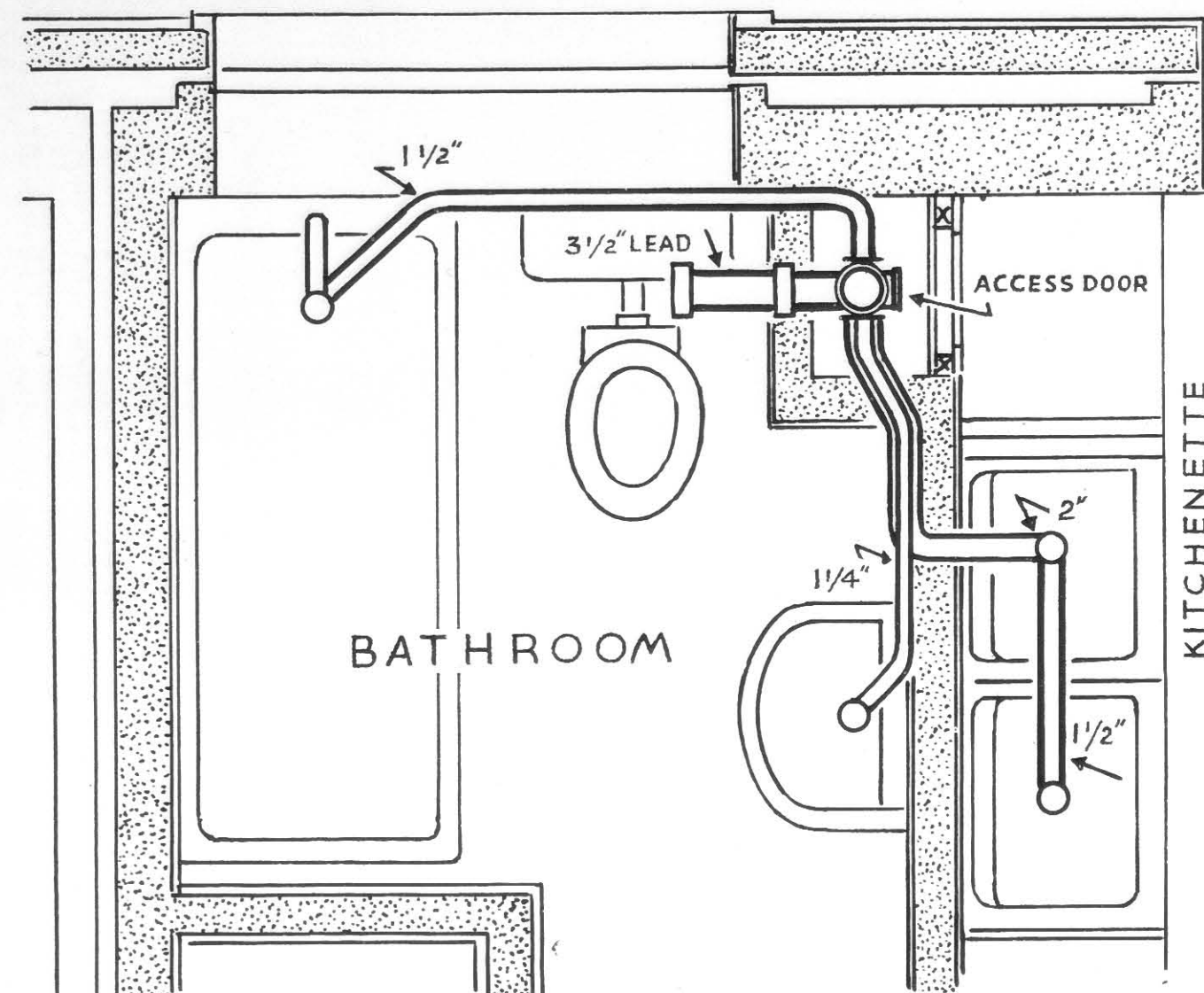
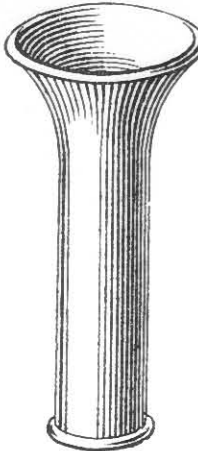


FIG. 50

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

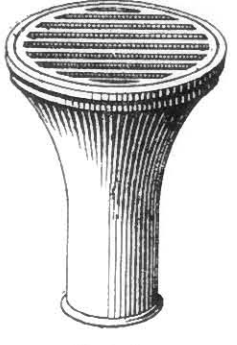
SOIL AND VENTILATING PIPES

No. 10
Bellmouth



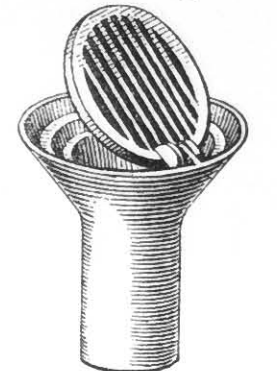
2", 2 1/2", 3", 3 1/2" and 4" Diam.
All 1' 6" Long

No. 11
Bellmouth with Loose or
Hinged Grating



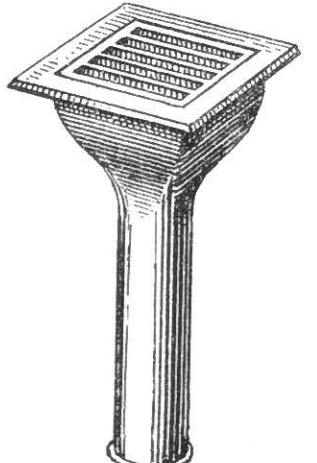
Diam.	Height	Grating
3"	1' 0"	7"
4"	1' 0"	8"
6"	1' 0"	9"

No. 667
Bellmouth Piece with Hinged
Grating



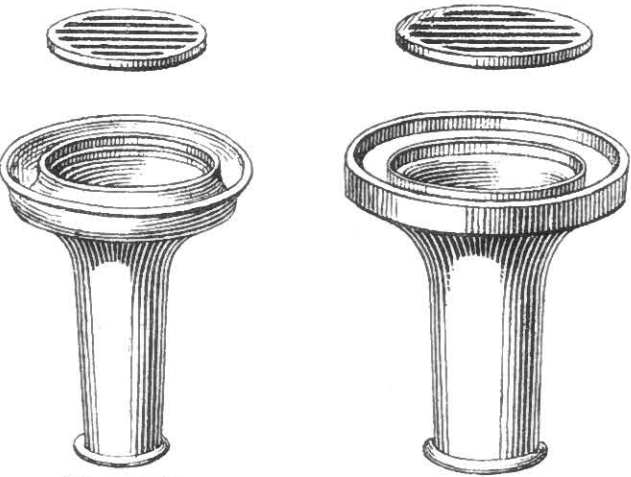
Diam.	Height	Grating
2"	10"	4 5/8"
2 1/2"	10"	6"
3"	10"	6 1/2"

No. 750
Square Bellmouth
with
6" x 6" Loose Grating



2 1/2" and 4"
10 1/4" x 10 1/4" over top
by 1' 6 1/2" Long overall

No. 751
Bellmouths with Loose Gratings



Diam.	Length
2" and 3"	11" Diam. over top by 1' 0" Long overall
3 1/2", 4" and 5"	1' 0 1/4" Diam. over top by 1' 0" Long overall

Union Slip and Packing Piece, for replacing Pipes

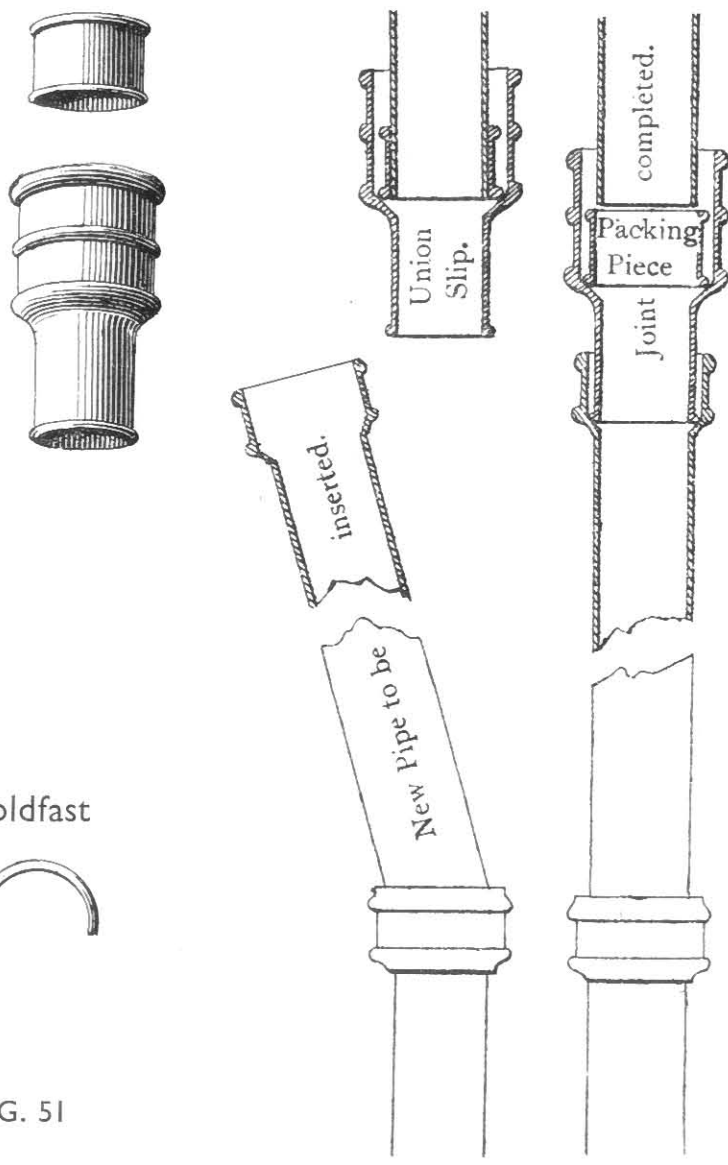


FIG. 51

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

No. 1 RAIN-WATER PIPES

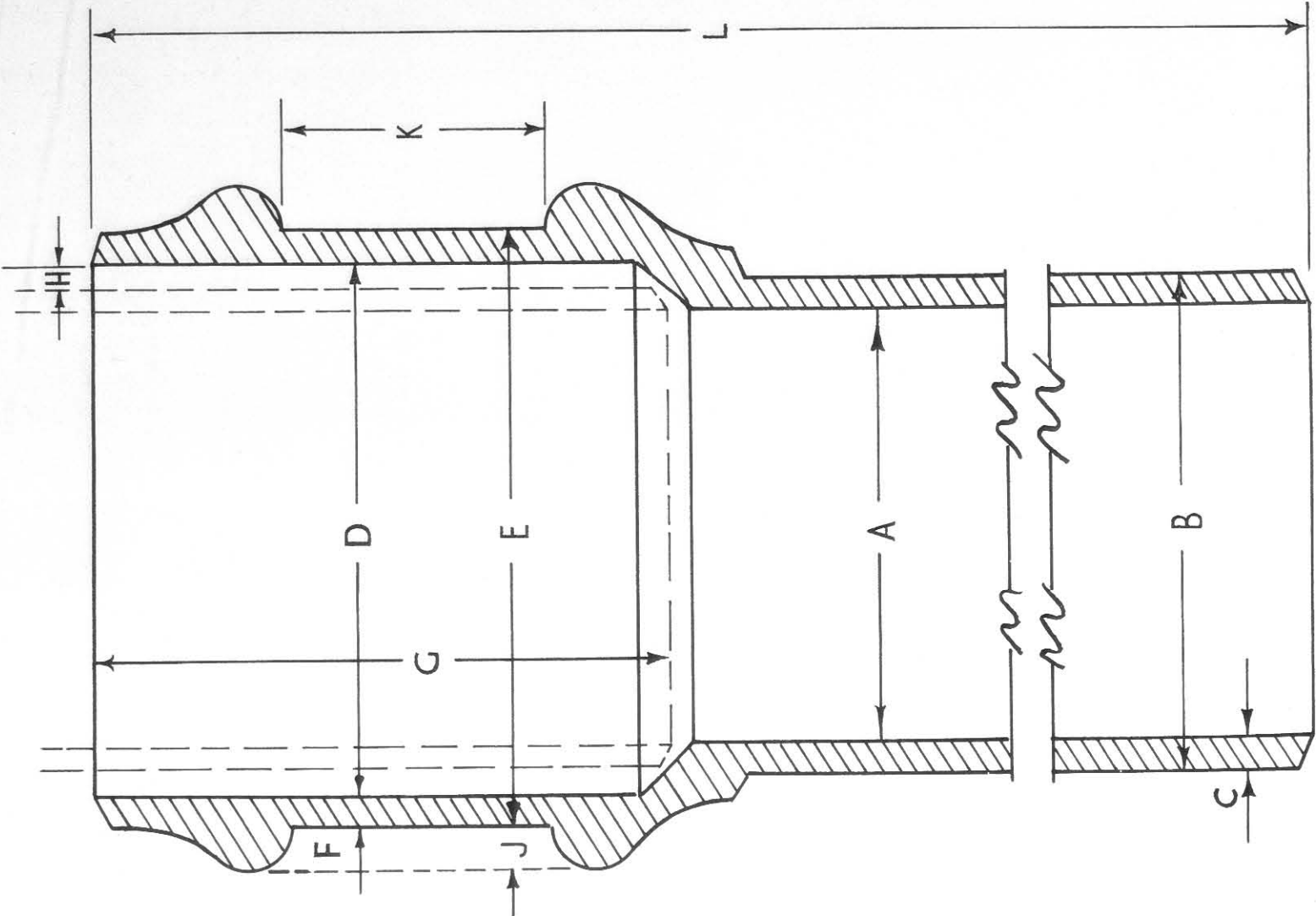


TABLE 26

Nominal Size			in. 2½	in. 3	in. 4	in. 5	in. 6
PIPE	Internal diameter	A	2⅜	2⅞	3⅞	4⅞	5⅞
	External diameter	B	2⅝	3⅛	4⅛	5⅛	6⅛
	Thickness	C	⅛	⅛	⅛	⅛	⅛
SOCKET	Internal diameter	D	2⅜	3⅞	4⅞	5⅞	6⅞
	External diameter	E	3⅞	4⅞	5⅞	6⅞	7⅞
	Thickness	F	⅜	⅜	⅜	⅜	⅜
	Internal depth of socket	G	2⅜	2⅜	3⅞	4⅞	5⅞
	Packing space	H	⅜	⅜	⅜	⅜	⅜
	Projection of beads	J	⅜	⅜	⅜	⅜	⅜
	Distance between beads	K	1⅜	1⅜	1⅞	2	2⅜
Overall length (feet)		L	6	6	6	6	6

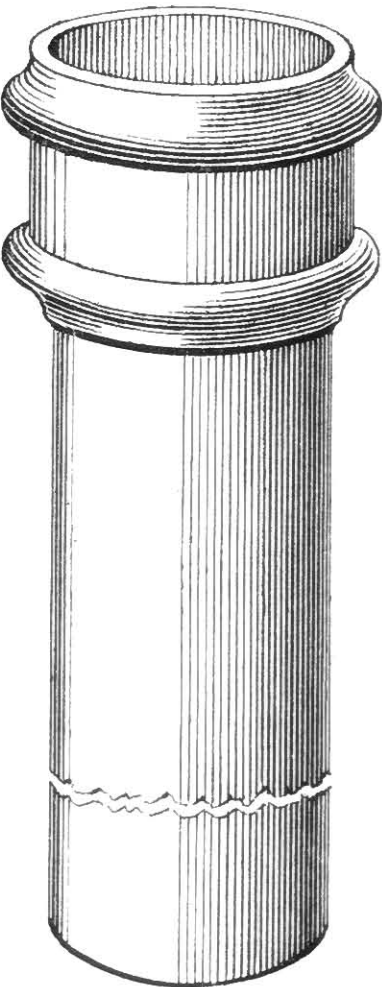


FIG. 53

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER OFFSETS

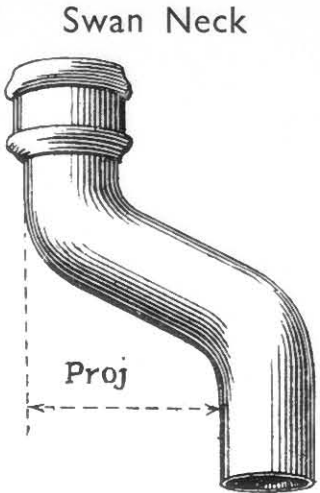
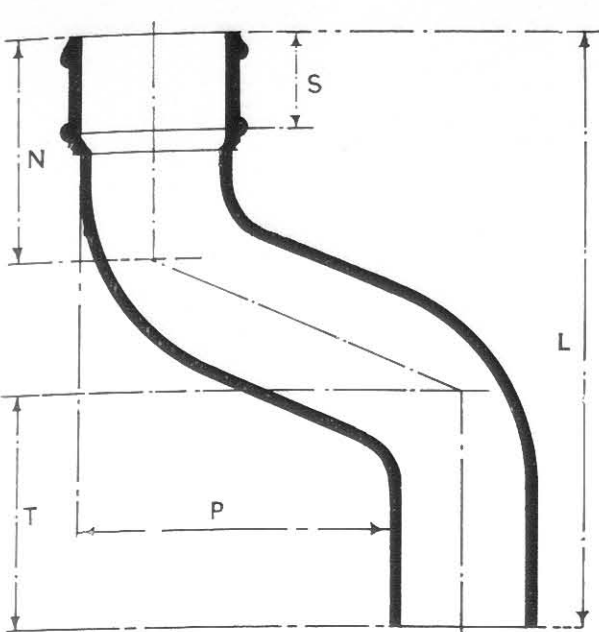


FIG. 54

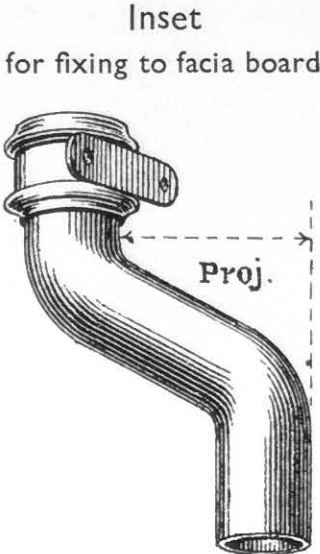


FIG. 55

TABLE 27

Nominal Size		in. 2½	in. 3	in. 4	in. 5	in. 6
P-Projection	L N T S			12⅞		
1 in.	L N T S			5⅞		
1½ in.	L N T S	11⅞	11⅞	13⅞	15⅞	
2 in.	L N T S	11⅞	12⅞	14⅞	16⅞	17⅞
2½ in.	L N T S	11⅞	12⅞	14⅞	16⅞	17⅞
3 in.	L N T S	10⅞	13⅞	13⅞	16⅞	18⅞
3½ in.	L N T S			15⅞		
4 in.	L N T S	10⅞	13⅞	15⅞	17⅞	19⅞
4½ in.	L N T S	10⅞	13⅞	15⅞	17⅞	19⅞
5 in.	L N T S	12⅞	13⅞	17⅞	17⅞	
5½ in.	L N T S	12⅞	13⅞	17⅞	17⅞	
6 in.	L N T S	11⅞	11⅞	16⅞	17⅞	19⅞
7 in.	L N T S			17⅞		
7½ in.	L N T S	13⅞	14⅞	15⅞		19⅞

Nominal Size		in. 2½	in. 3	in. 4	in. 5	in. 6
P-Projection	L N T S		14⅞	17⅞		
8 in.	L N T S		6⅞	6⅞		
9 in.	L N T S	12⅞	15⅞	17⅞	19⅞	21⅞
10 in.	L N T S	12⅞	15⅞	17⅞	19⅞	21⅞
10½ in.	L N T S	15⅞	16⅞	17⅞	20⅞	
12 in.	L N T S	13⅞	14⅞	18⅞	19⅞	22⅞
15 in.	L N T S	15⅞	19⅞	19⅞	22⅞	23⅞
18 in.	L N T S	20⅞	16⅞	19⅞	23⅞	24⅞
21 in.	L N T S	22⅞	22⅞	21⅞		
24 in.	L N T S	18⅞	19⅞	19⅞		
27 in.	L N T S	24⅞	25⅞	25⅞		
30 in.	L N T S	26⅞	25⅞	27⅞		

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER BENDS

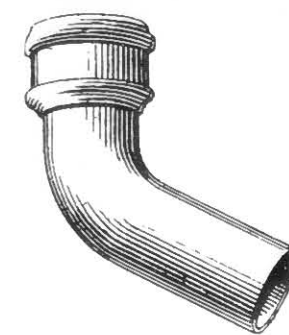
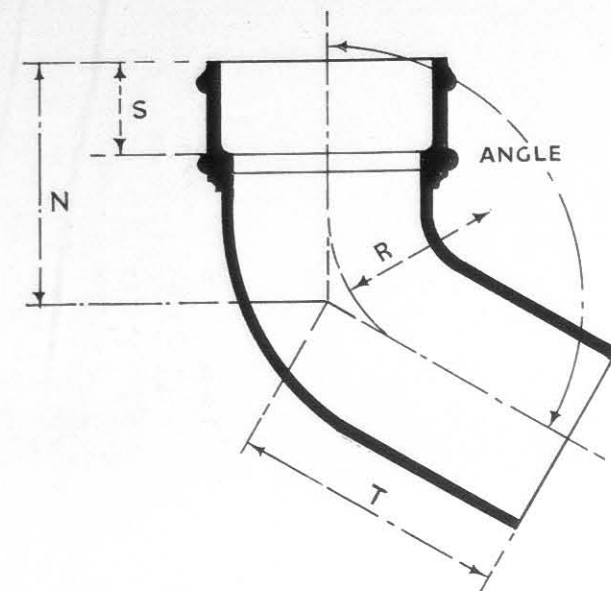


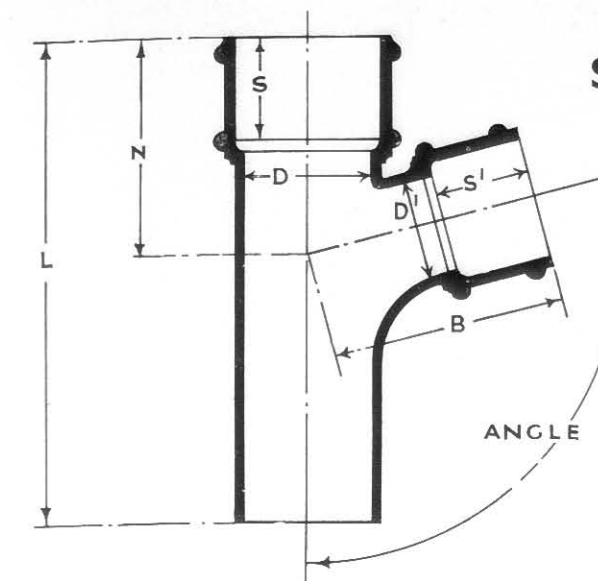
FIG. 56

TABLE 28

Nominal Size		in. 2½	in. 3	in. 4	in. 5	in. 6	Nominal Size		in. 2½	in. 3	in. 4	in. 5	in. 6
Angle	S	2½	2½	3½	3¾	3¾	Angle	S	2½	2½	3½	3¾	3¾
90°	N	5¾	6¼	7¾	9	10½	115°	N	4¾	5¾	6¾	7¾	9
	T	7¼	6¼	7½	9½	10½		T	6¾	6	6¾	8½	9
	R	2¾	2½	3¾	4¾	4¾		R	3	3½	3¾	4¾	5½
95°	N	6	6¼	7¼	8	8¾	120°	N	5	5½	6½	8	7¾
	T	6¾	6¾	7¾	8¾	9¼		T	6¾	6½	7¾	8	7¾
	R	3	3¼	3¾	4½	4¼		R	3½	3½	4	4¼	4¼
100°	N	5¾	6¾	7¾	7¾	8¾	135°	N	5	5½	5¾	7½	7
	T	6¾	6¾	7¼	8½	9½		T	5½	6¾	6¾	7	7¾
	R	3	3½	3¾	4¾	5¼		R	3¾	3¾	3¾	4¾	4¾
105°	N	5¾	6¾	7¼	8	8¾	147°	N	5½	5½			
	T	6¼	6¾	7½	8½	8¾		T	5¼	5¾			
	R	3	3¼	3¾	4¾	4¾		R	3½	5			
110°	N	5¼	6¾	6¼	8¼	8¾	158°	N	4¾				
	T	6	7¼	6¾	8½	8¾		T	5¼				
	R	3	3¾	3¾	4¾	4½		R	4¾				
112½°	S	2½	2½		3								
	N	4¾	4¾		6½								
	R	2¼	2¾		3¾								

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER SINGLE BRANCHES



Single Branch Piece (Socket Branch)

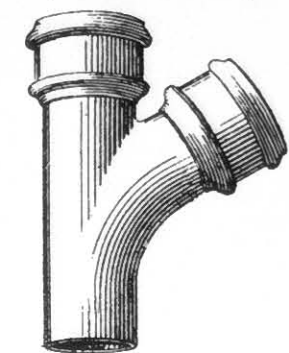


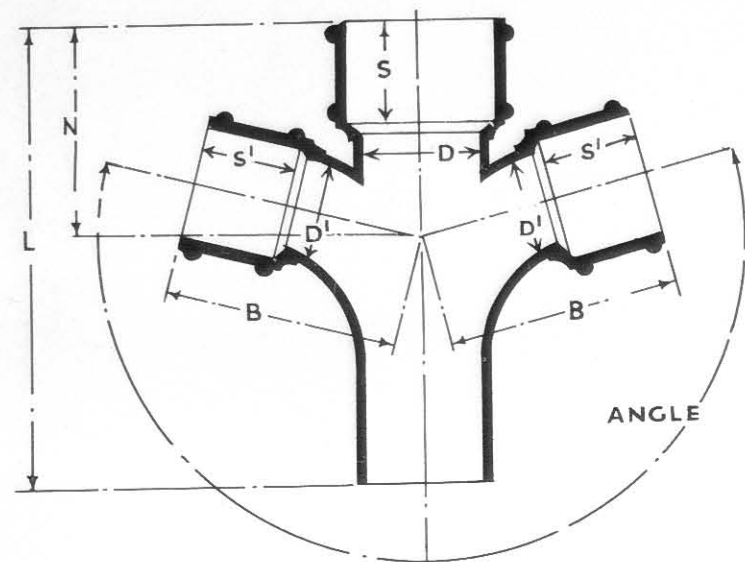
FIG. 57

TABLE 29

Diameter D		in. 2½	in. 2½	in. 2½	in. 3	in. 3	in. 3	in. 3	in. 4	in. 4	in. 4	in. 4	in. 5	in. 5	in. 6
S		2½	2½	2½	2½	2½	2½	2½	3½	3½	3½	3½	3¾	3¾	3¾
Diameter D'		1½	2	2½	1½	2	2½	3	2	2½	3	4	4	5	6
S'		2½	2¾	2¾	2½	2¾	2¾	2¾	2¾	2¾	2¾	3½	3½	3¾	3¾
90°	N			5	6	5½		5½	5½	5½		6¾	7½	8½	8
	L			6½	5½	6½		6½	6½	6½		7½	9½	7¾	9¾
95°	N		4¾	5¾		5		5¾	5¾	5¾					
	L		5¾	5¾		6½		6½	6½	6½					
100°	N		5½	6½				5½	5½	5½		6¾		9½	8¾
	L		6	6½				6½	6½	6½		6¾		8½	8¾
105°	N	4¾	5¼	5¾	4¾	5¾	5¾	5½			6¼	6¾	6¾	8¼	8¾
	L	5¾	5¾	5¾	5½	5½	5½	5½			6¼	6¾	6¾	8¼	8¾
110°	N														
	L														
112½°	N			5¾				5¾						9½	
	L			5¾				5¾						8	
115°	N		5½	5¾	5½	7		6¾							
	L		5½	5¾	5½	6		6¾							
120°	N	5¾	6	6½	5½	6½	6½	6½			7¼	7¾	8	9½	11
	L	5¾	6	6½	5½	6	6	6½			7¼	7¾	8	9½	10¾
135°	N			7½	7	6¼		7½							
	L			7½	6½	6¼		7½							
147°	N			8¾											
	L			8¾											

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER DOUBLE BRANCHES



Double Branch Piece
(Socket Branches)

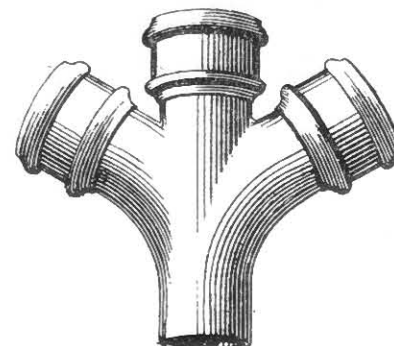


FIG. 58

TABLE 30

Diameter D	in. 2½	in. 2½	in. 2½	in. 3	in. 3	in. 3	in. 3	in. 4	in. 4	in. 4	in. 6
S	2⅝	2⅝	2⅝	2⅝	2⅝	2⅝	2⅝	3⅛	3⅛	3⅛	3⅞
Diameter D'	1½	2	2½	1½	2	2½	3	2	3	4	6
S'	2¼	2⅝	2⅝	2¼	2⅝	2⅝	2⅝	2⅝	2⅝	3⅛	3⅞
105°	N					6¼	5⅞	5¾	6⅛		6⅞
	B					6⅛	6	5¾	6¾		6⅞
	L					12⅞	12⅞	12½	12¼		14¼
110°	N			5½							
	B			5⅞							
	L			12¼							
112½°	N		5½								
	B		5½								
	L		12⅝								
120°	N	5⅞	6⅛	6½	5¾	6⅛	6⅝	6½	7⅛	8⅛	13
	B	5¾	5¾	6½	5½	6⅛	6¼	6½	7⅛	8⅛	14
	L	11⅞	12⅝	12¾	11¾	12⅝	13	13½	13⅛	14⅞	21⅝
135°	N									9⅝	
	B									9⅝	
	L									15¼	

RAIN-WATER INVERTED BRANCHES

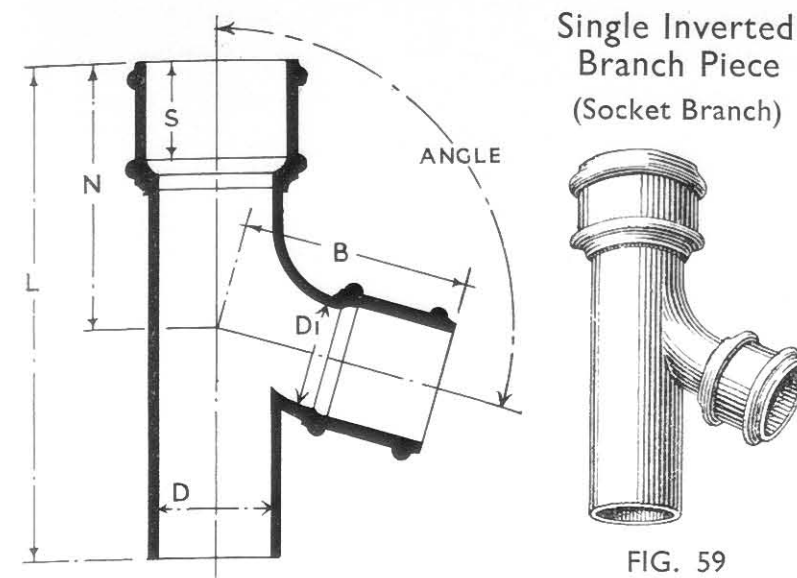
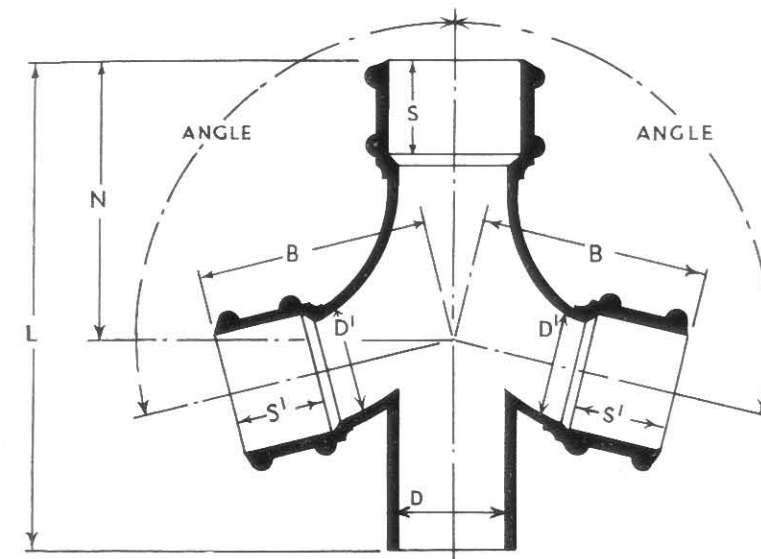


FIG. 59

TABLE 31

Diameter D	in. 2½	in. 3	in. 4
S	2⅝	2⅝	3⅛
Diameter D'	2½	2½	2
S'	2⅝	2⅝	2⅝
120°	N	6⅝	6⅛
	B	6	6⅝
	L	13¾	13⅝
135°	N	5½	
	B	7	
	L	14½	



Double Inverted Branch Piece
(Socket Branches)

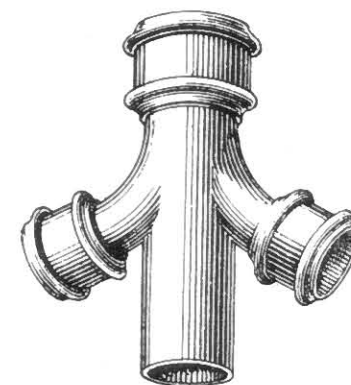


FIG. 60

TABLE 32

Diameter D	in. 2½	in. 3	in. 4
S	2⅝	2⅝	3⅛
Diameter D'	2½	2½	2½
S'	2⅝	2⅝	2⅝
110°	N	6	
	B	5⅞	
	L	13	
120°	N	6	6⅛
	B	6¼	6⅝
	L	13½	13⅝

RAIN-WATER SHOES

Shoes for Light Grade Pipes

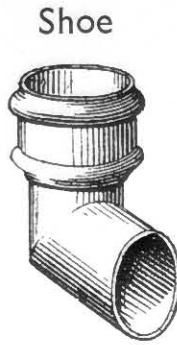
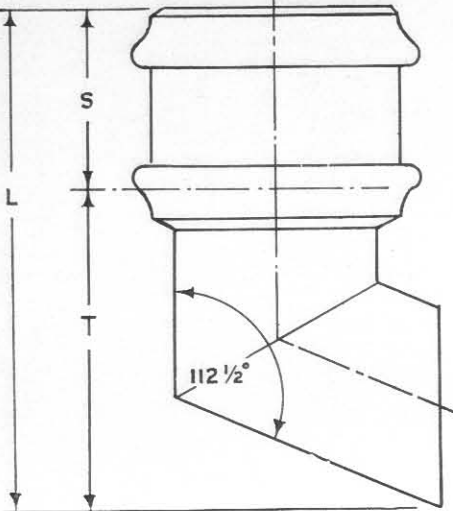


FIG. 61

TABLE 33

Nominal Size	in. 2 1/2	in. 3	in. 4	in. 5	in. 6
S	2 1/2	2 1/2	2 1/2	3 3/4	3 7/8
T	4	4 1/2	5 5/8	9 1/2	11 1/8
L	6 1/2	7	8 1/8	13 1/4	15

Anti-Splash Shoes for Light Grade Pipes

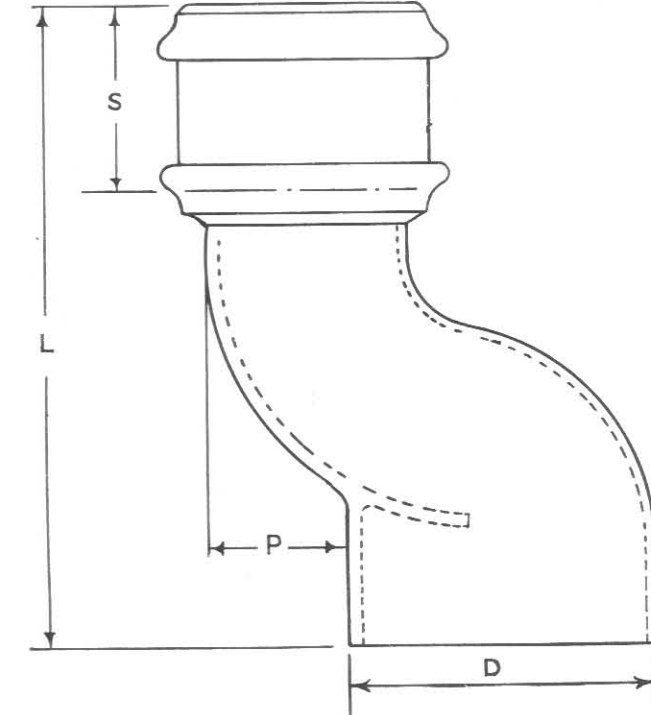


FIG. 62

TABLE 34

Nominal Size	in. 2 1/2	in. 3	in. 4	in. 5
S	2 5/8	2 5/8	3 1/8	3 3/4
P	3 1/4	3	3 1/2	3 1/4
D	3 5/8	4	5 1/4	6 1/4
L	9 1/4	9 3/4	12	13 3/4

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MISCELLANEOUS RAIN-WATER FITTINGS

Eaves Bend

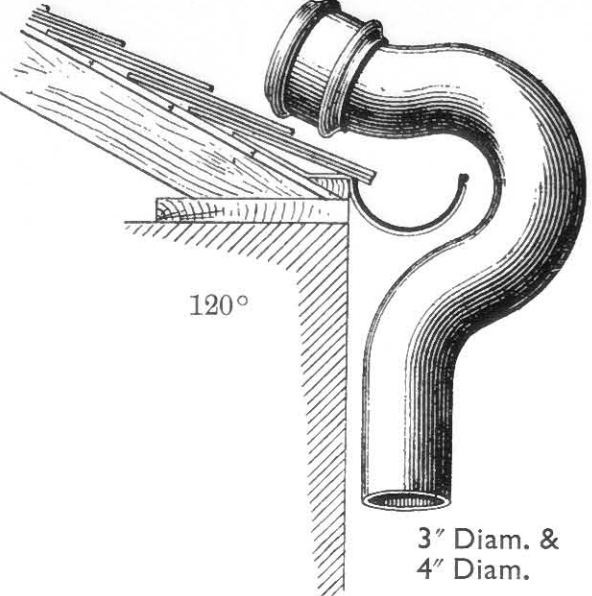


FIG. 63

Parallel Branch Piece (Socket Branch)

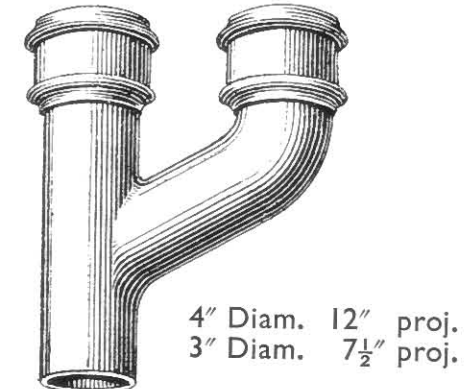


FIG. 65

Double Boot

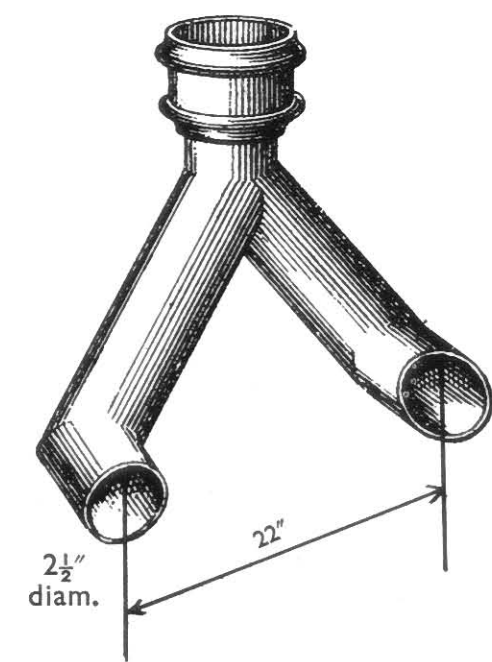


FIG. 67

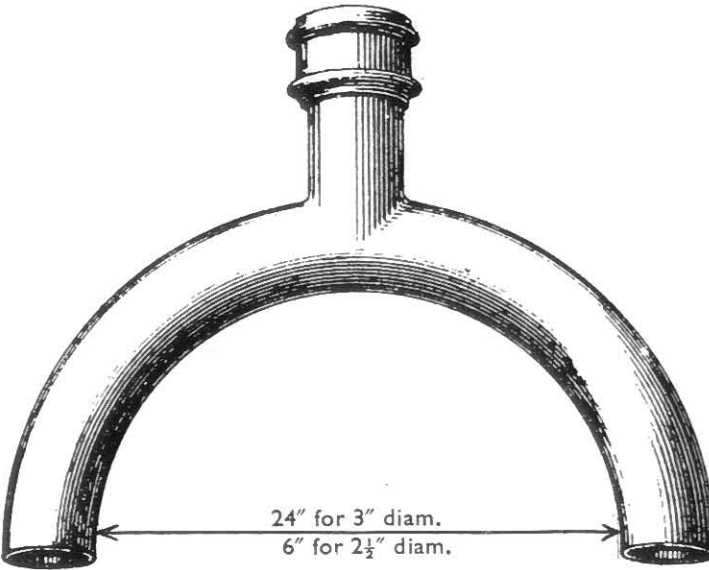
Y Piece



4" & 2 1/2" Diam.

FIG. 64

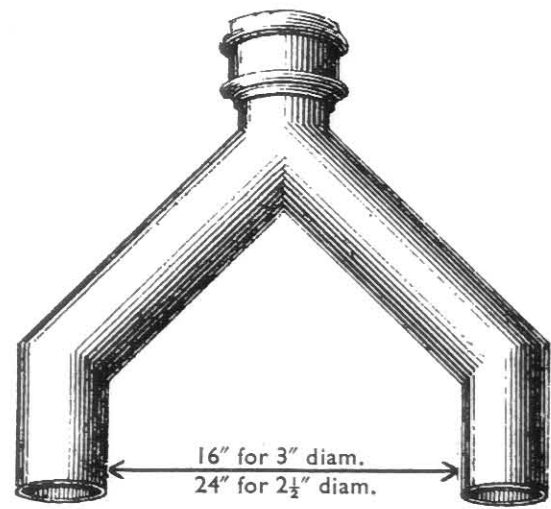
Curved Breeches Piece



3" Diam.
2 1/2" Diam.

FIG. 66

Straight Breeches Piece



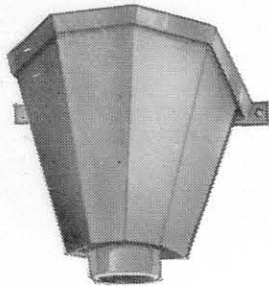
3" Diam.
2 1/2" Diam.

FIG. 68

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

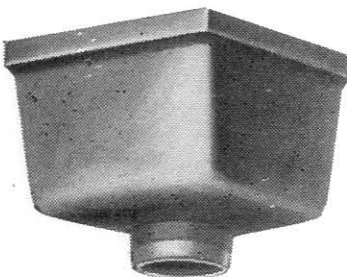
RAIN-WATER HEADS

No. 1
B.S.S. (Hopper Type)



Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 5	in. 6
A	7⅝	7⅝	7⅝	9½	9½	10¾	12
B	6⅜	6⅜	6⅜	8⅝	8⅝	9⅞	10⅞
C	7¼	7¼	7¼	8	8	8½	9
D	3⅛	3⅛	3⅛	3⅝	3⅝	4½	5
E	4⅛	4⅛	4⅛	5½	5½	6⅝	7⅞
F	10⅛	10⅛	10⅛	12	12	13¼	14½
G	2⅝	2⅞	2⅞	3⅝	3⅞	4⅞	4⅞
H	1⅞	2⅜	2⅞	3⅜	3⅞	4⅞	5⅞
J	2⅝	2⅞	3⅛	3⅝	4⅛	5⅛	6⅝
K	2⅝	2⅞	3⅝	3⅞	4⅝	5⅝	6⅝
L	3½	3½	3½	5	5	6	7
M	⅝	⅝	⅝	1	1	1¼	1½

No. 2
B.S.S. (Box Type)

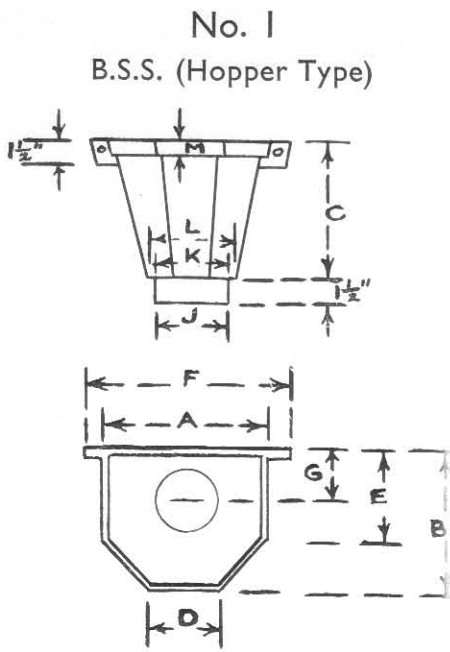


Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 5	in. 6
A	10	10	10	12	12	12	12
B	7	7	7	10	10	10	10
C	7	7	7	8	8	8	8
D	2⅝	2⅞	2⅞	3⅝	3⅞	4⅞	4⅞
E	1⅞	2⅜	2⅞	3⅜	3⅞	4⅞	5⅞
F	2⅝	2⅞	3⅛	3⅝	4⅛	5⅛	6⅝
G	2⅝	2⅞	3⅝	3⅞	4⅝	5⅝	6⅝
J	⅞	⅞	⅞	1	1	1	1

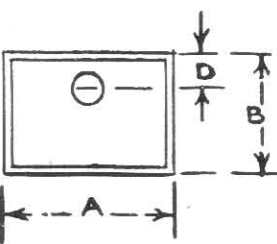
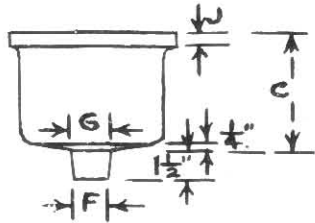
No. 1a Corner Heads

Drop	A	B	C	Depth
1½	6¼	8¾	7	8
2	6¼	9	7	7½
2½	7¼	10¼	8	8¼
3	7¾	11	8½	8¼
3½	8½	12	9½	9¼
4	8½	12	9½	9
4½	9¼	13	10½	9¼
5	9¾	14	11	10¼
6	11	15½	12½	10¾

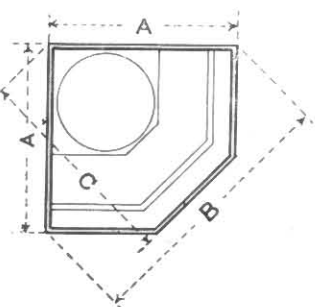
No. 1a



No. 2
B.S.S. (Box Type)



No. 1a
Sizes in Table



RAIN-WATER HEADS

* Can be supplied without date or enrichments to order

No. 12



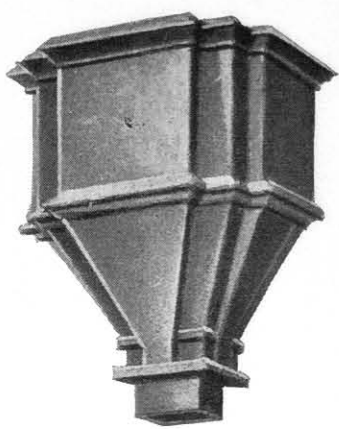
No. 15
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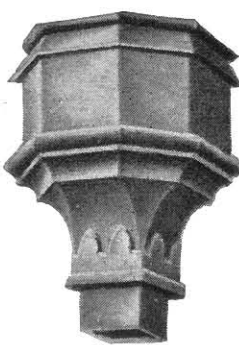
No. 18
*



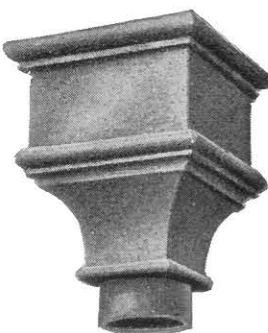
No. 32 and 32A



No. 45



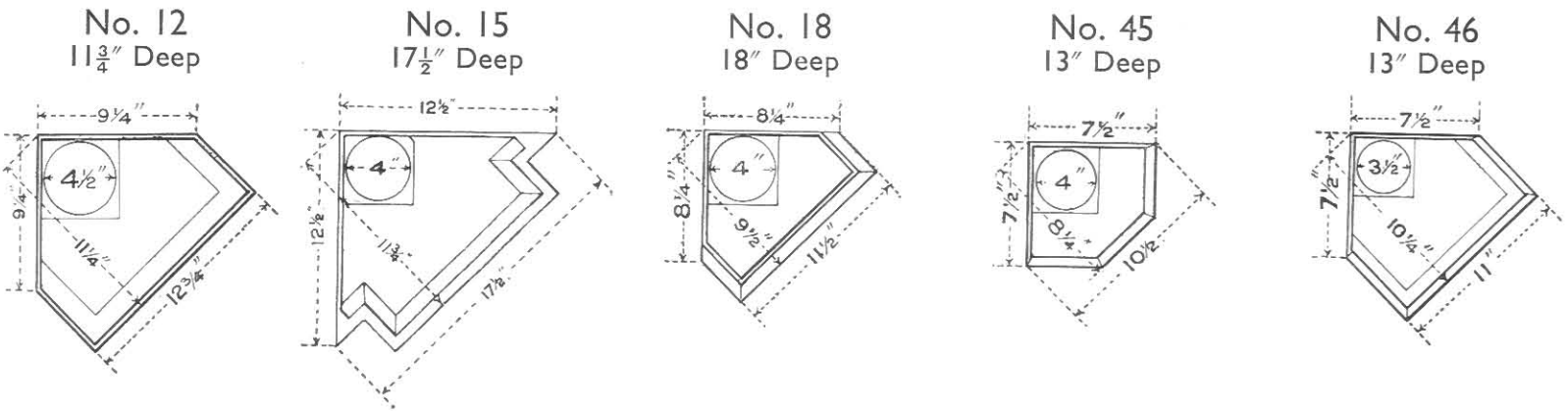
No. 46
Also Nos. 46A and P



No. 48



PLANS OF CORNER HEADS



SIZES (IN INCHES) OF FLAT HEADS						
No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
12	5	13	—	8¾	—	12½
12	6	14	—	10¼	—	13
15	6 x 4	17¾	—	9	9¾	17½
18	4	11¼	—	8½	—	16½
32	6 x 4	14¼	—	9	—	17½
32A	4 x 3	11¼	—	7¼	—	14
45	4½	11¼	—	7¼	—	14½
46	4½	11	—	8	—	12½
46A	3	8	—	6	—	10¾
46P	4	10¾	—	9¼	—	12¾
48	4½	14½	—	9¾	—	18

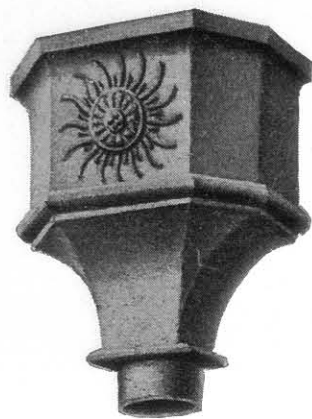
RAIN-WATER HEADS

* Can be supplied without enrichments to order

No. 70



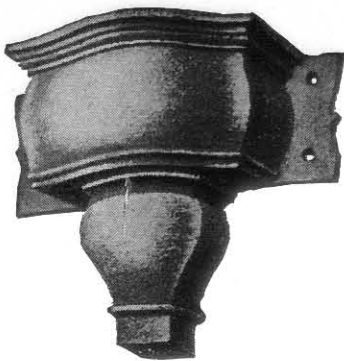
No. 96
*



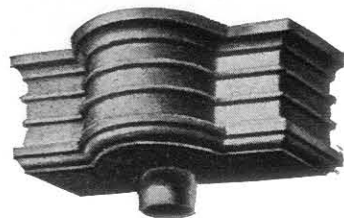
No. 163



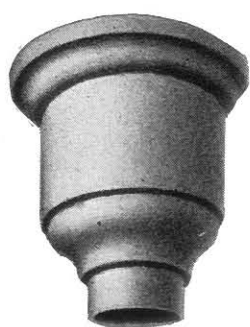
No. 168
Also No. 168B



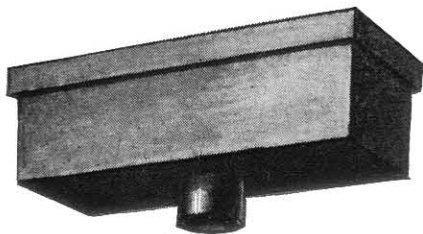
No. 170



No. 175

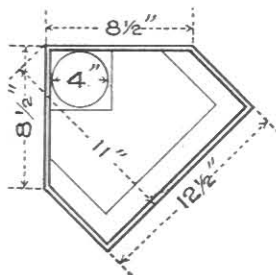


No. 188

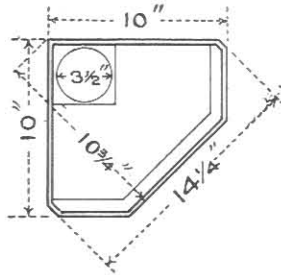


PLANS OF CORNER HEADS

No. 70
15" Deep



No. 96
16 1/2" Deep



No. 195. Also No. 195A
*
Handed or Central



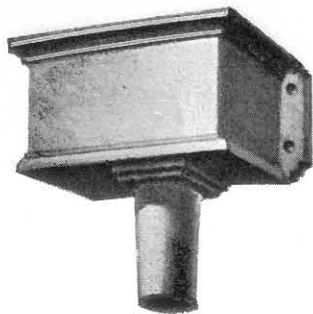
SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
70	5	13	—	8 1/2	—	15 1/2
96	4 1/2	14	—	7 1/2	—	16 1/2
163	4	16	—	9 3/4	—	12 1/2
168	4	16	19	8	6 3/4	15 1/2
168B	6	16	19	10 1/4	6 3/4	15 1/2
170	4	15 1/4	—	9	—	6 1/2
175	4	12	—	9	—	12
188	4	18	—	6	—	6
195	3 1/2	30 1/2	—	6	6	10 1/2
195A	3 1/2	15 1/4	—	5 3/4	6	10 1/2

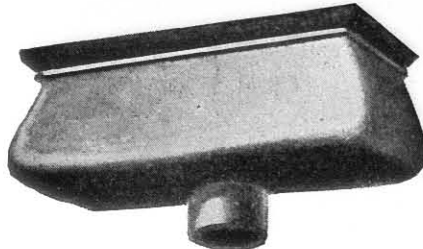
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER HEADS

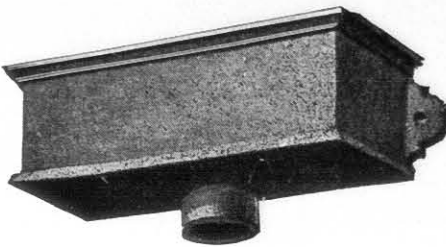
No. 177
Also Nos. 177A, B, C
and E
(Corner Head)



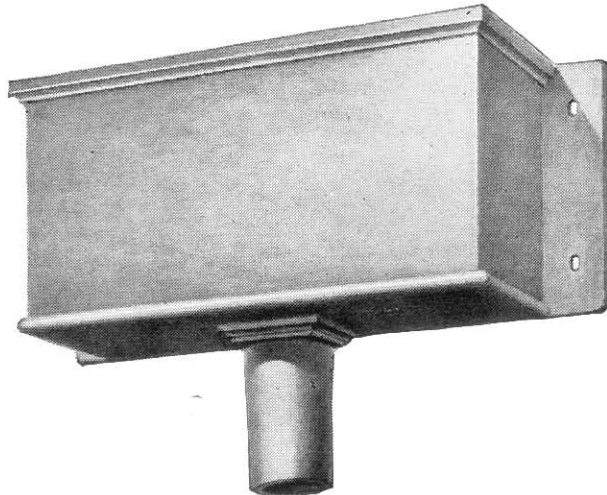
No. 196
Also Nos. 196A and B
(Handed or Central)



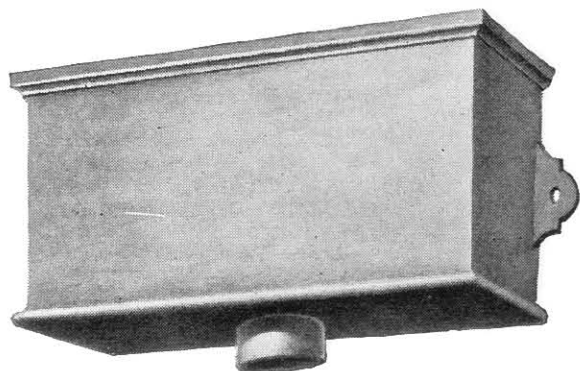
No. 201
Also Nos. 201A, C, D
and E (Corner Head)
Handed or Central



No. 177D

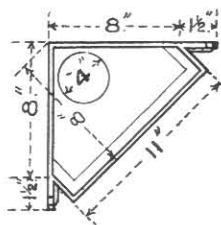


No. 201B

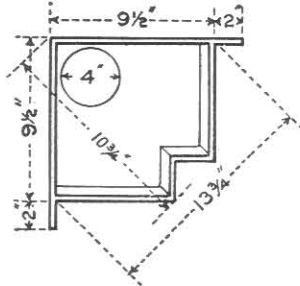


PLANS OF CORNER HEADS

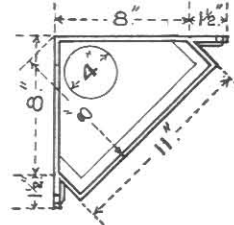
No. 177
12 1/2" Deep



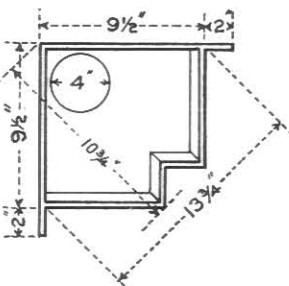
No. 177E
12 1/4" Deep



No. 201
7 1/4" Deep



No. 201E
7" Deep



SIZES (IN INCHES) OF FLAT HEADS

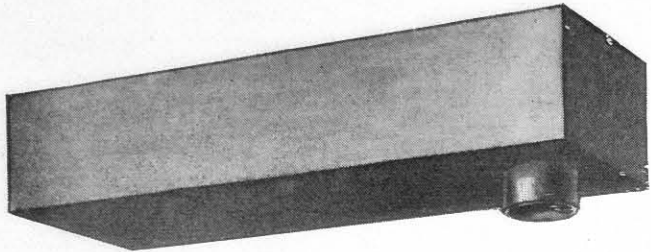
No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).	No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
177	3	11 1/4	13 1/4	6 3/4	7	12 1/2	201	3 1/2	18 1/2	22 1/2	7 1/4	—	7
177A	3 1/2	18 1/4	20 1/4	7 1/4	7 1/4	12 1/4	201A	3 1/2	11 1/2	15	6 3/4	—	7
177B	4	20	22	8	7 1/2	12 1/2	201B	6	26	29 1/2	9	—	13
177C	4	10 1/2	15 1/4	8 1/2	6	11 1/4	201C	5	10 1/2	14	8 1/2	—	6
177D	5	26	30 1/2	9	12 3/4	17 1/2	201D	5	20	23 1/2	8	—	7 1/2
196	4	12 1/2	—	7	—	6 1/2							
196A	5	18 1/2	—	7 1/2	—	9 1/2							
196B	4	24	—	7 1/2	—	9 1/2							

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER HEADS

* Can be supplied without date or enrichments to order

No. 208
Also Nos. 208A F, H
and J



No. 210
*

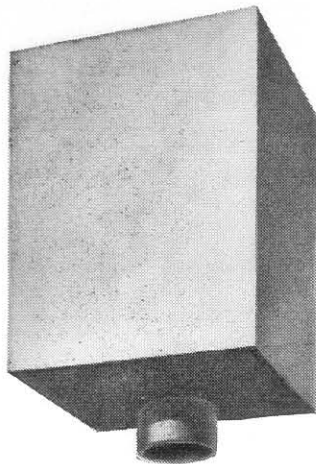


Any Crest to order

No. 226
Also Nos. 226A and C
*



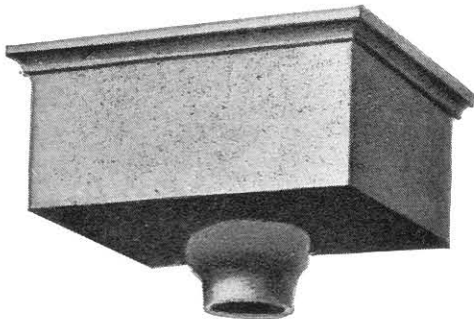
No. 208C
Also Nos. 208E, K, L,
O, P and R



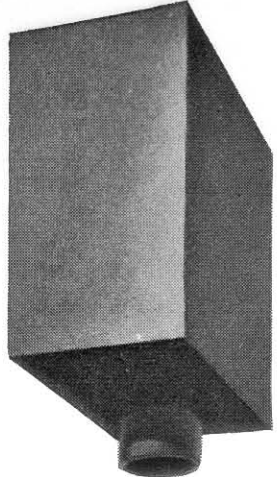
No. 210A
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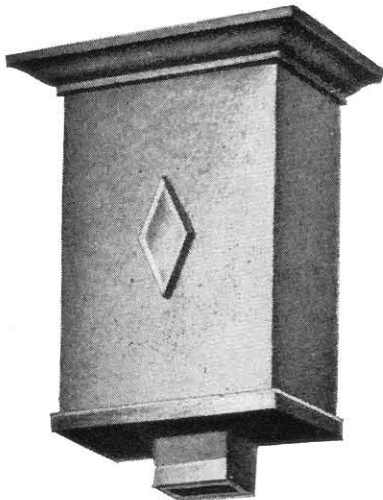
No. 231
Also Nos. 231A, B and C



No. 208B
Also Nos. 208D, G, M,
N, Q and S



No. 216
*



SIZES (IN INCHES) OF FLAT HEADS

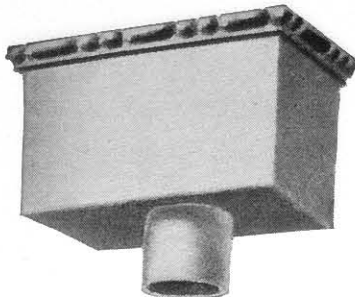
No.	Outlet up to	Length.	Length over Ears.	Pro- jection.	Depth of Box.	Depth (Exclusive of Outlet).	No.	Outlet up to	Length.	Length over Ears.	Pro- jection.	Depth of Box.	Depth (Exclusive of Outlet).
208	6	30	—	9	—	6	208P	6	15	—	12	—	18
208A	6	21	—	8½	—	9	208Q	6	12	—	15	—	18
208B	6	9	—	12	—	15	208R	6	18	—	15	—	13
208C	6	12	—	9	—	15	208S	6	15	—	18	—	13
208D	6	9	—	15	—	18	210	4½	17½	17½	9	9	16
208E	6	15	—	9	—	18	210A	4	12½	13½	6½	7½	9½
208F	6	18	—	15	—	9	216	5	16½	—	9	—	21
208G	4	8	—	9	—	8	226	4	16	19	8	—	7
208H	6	24	—	9	—	7	226A	5	16	19	10½	—	7
208J	6	18	—	9	—	7	226C	3	8½	11½	6¾	—	5
208K	4	9	—	8	—	9	231	6	19¾	—	13	9	9
208L	4	9	—	7	—	9	231A	6	24	—	9	—	9
208M	4	7	—	9	—	9	231B	6	24	—	11	10	10
208N	6	12	—	15	—	13	231C	6	24	—	15	12	12
208O	6	15	—	12	—	13							

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER HEADS

* Can be supplied without enrichments to order

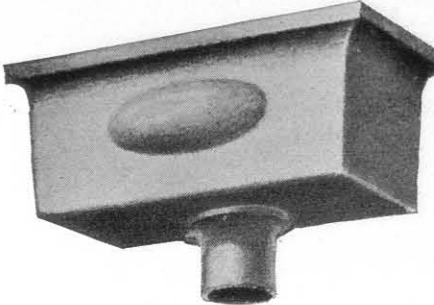
No. 237
Also No. 237A



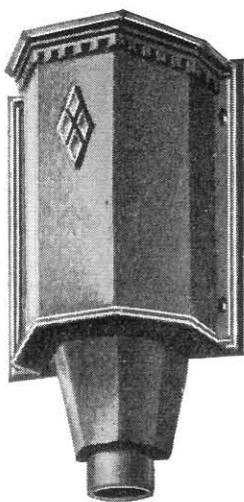
No. 238
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No. 239
*



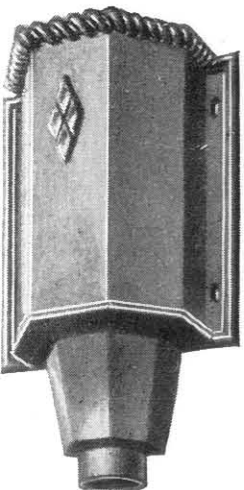
No. 250
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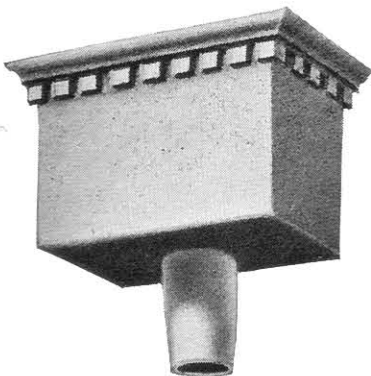
No. 246
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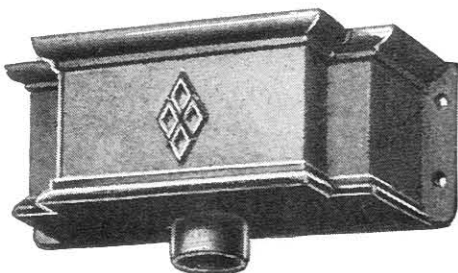
No. 252
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No. 242



No. 256
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SIZES (IN INCHES) OF FLAT HEADS

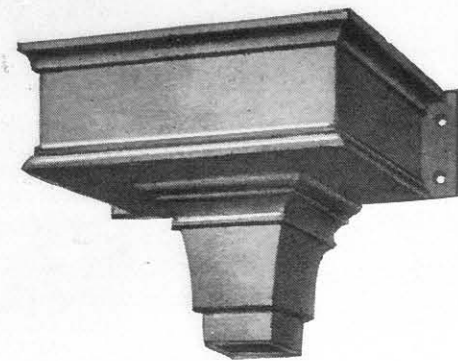
No.	Outlet up to	Length.	Length over Ears.	Pro- jection.	Depth of Box.	Depth (Exclusive of Outlet).
237	4	15	—	7	9	10
237A	4	21	—	9	14	14
238	4	18½	24	7½	8	16½
239	4	18	—	10	9	12
242	4	15	—	8½	10	14
246	6	25½	—	9½	9	15
250	3½	11	12	7	15½	20
252	3½	10½	12	6¾	15	20
256	5	20	23	8	—	8½

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

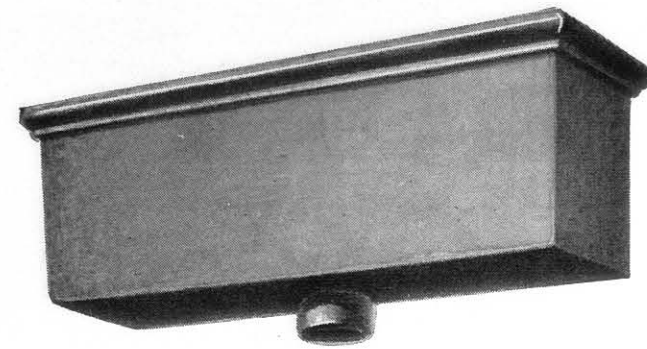
RAIN-WATER HEADS

* Can be supplied without enrichments to order

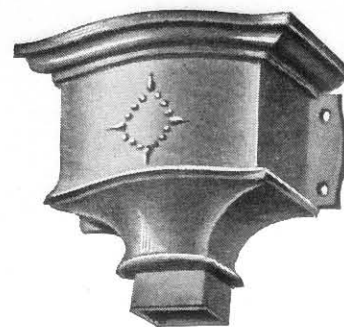
No. 258
Also No. 258A



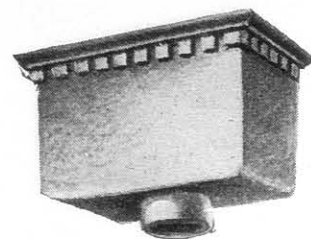
No. 268
Also Nos. 268A and B
Handed or Central



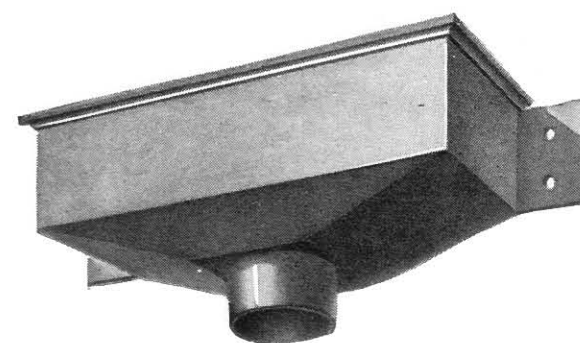
No. 267



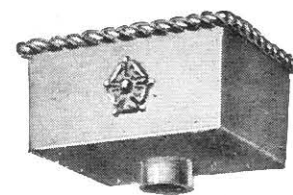
No. 271



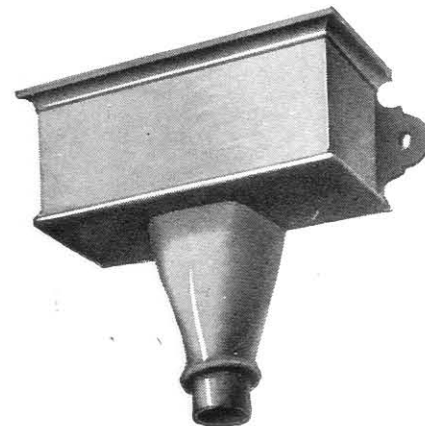
No. 274



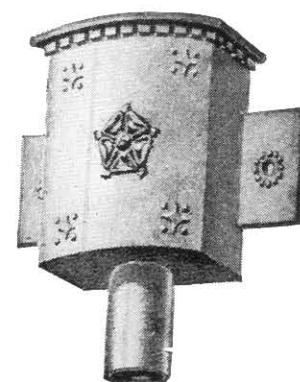
No. 273
Also Nos. 273A and B
*



No. 275



No. 281



SIZES (IN INCHES) OF FLAT HEADS						
No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box	Depth (Exclusive of Outlet).
258	3½	18½	21	9½	7	14½
258A	3½	13½	14	8½	—	14½
267	4	14½	15	7	—	12
268	6	29	—	10½	—	12
268A	6	17	—	10½	—	12
268B	4½	22	—	7½	—	7
271	4	12	—	7½	—	7½
273	4	11½	—	7	—	6½
273A	4	18	—	7	—	6½
273B	4	15	—	7	—	6½
274	6	25	31	9½	—	9
275	3½	18½	22½	7½	7½	15
281	4	10½	15	7	12½	15½

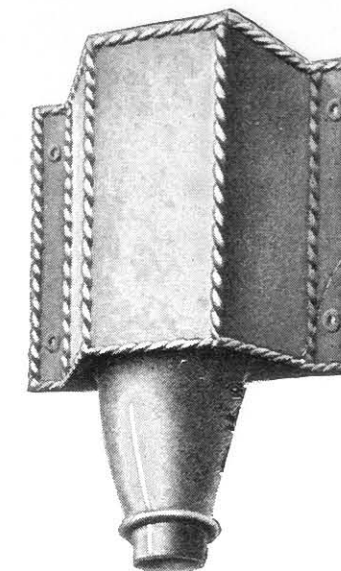
RAIN-WATER HEADS

* Can be supplied without date or enrichments to order

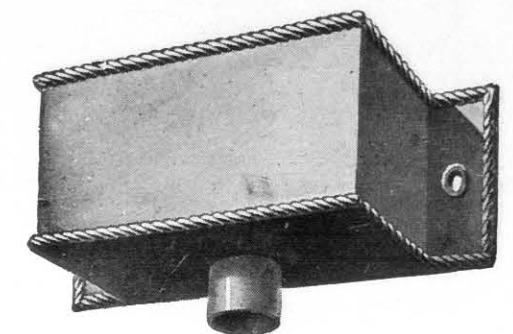
No. 283
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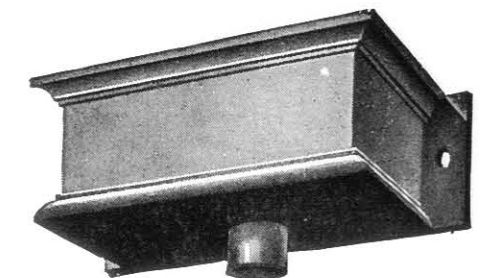
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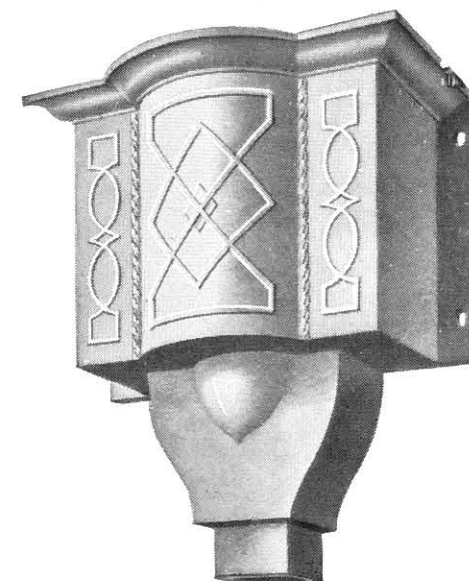
No. 285



No. 288
Also No. 288A



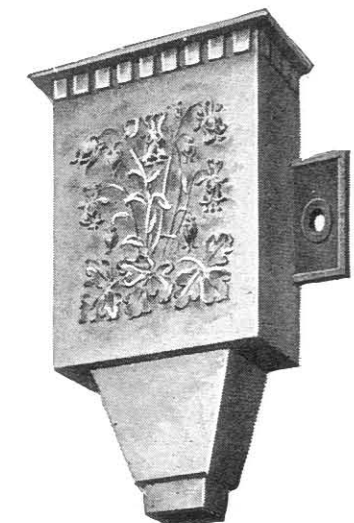
No. 289
*



No. 290



No. 291



SIZES (IN INCHES) OF FLAT HEADS						
No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
283	4	18	22	9½	23	32
284	4	14	18	8½	15½	23½
285	6	18½	26	9	—	9
288	6	18½	21	9½	—	7
288A	6	13½	14	8½	—	7
289	4½	20½	22	11½	14	22
290	4	13	18	6½	7	10½
291	4 x 3	13½	18½	6½	14½	20½

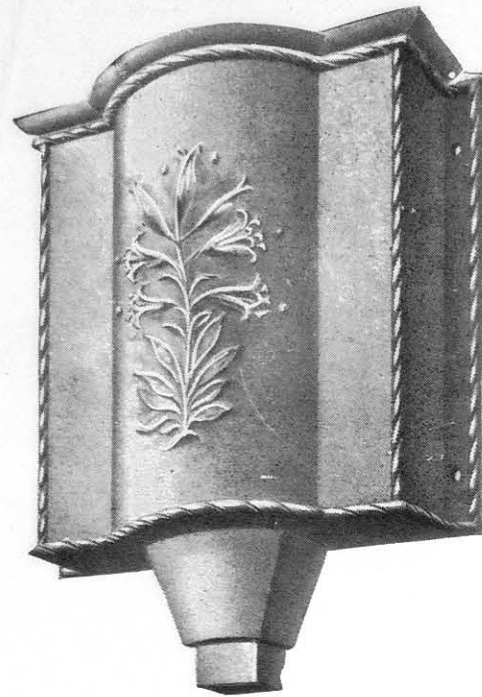
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

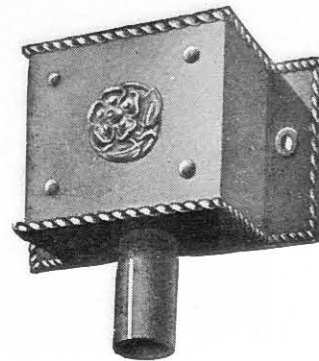
RAIN-WATER HEADS

* Can be supplied without enrichments to order

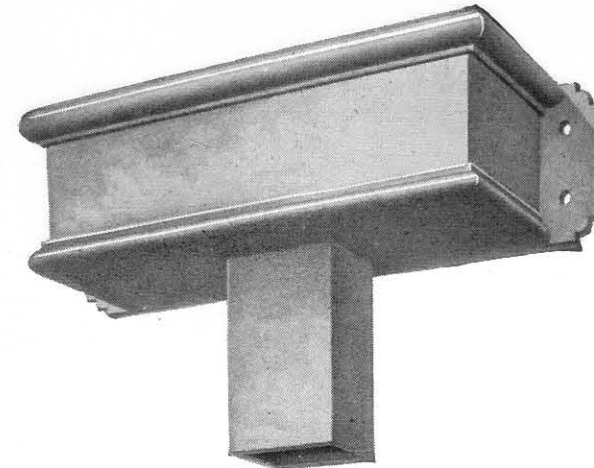
No. 292



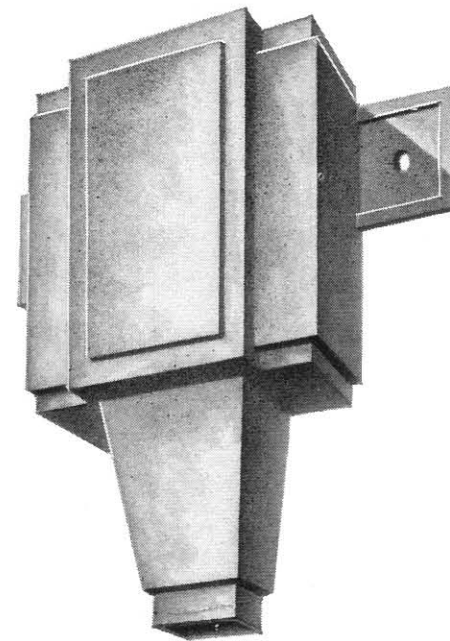
No. 294



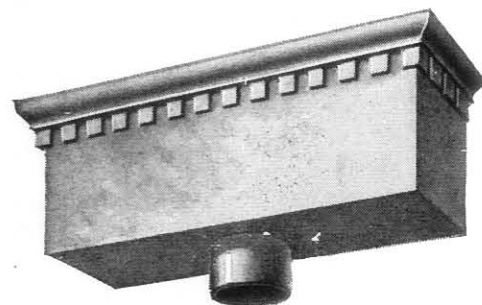
No. 296



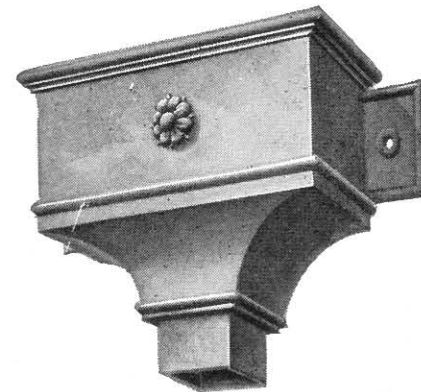
No. 300
Also No. 300A



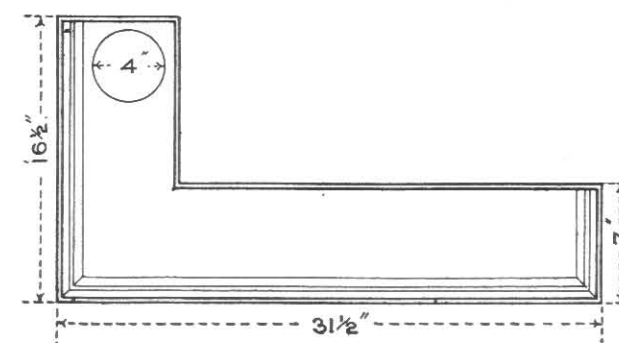
No. 297



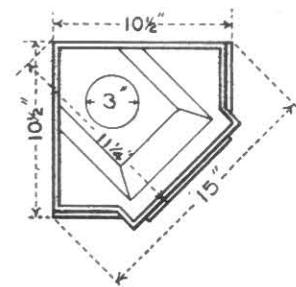
No. 298



Plans of Corner Heads
No. 297
(for External Corner)
8" Deep
Right or Left Hand



No. 300A
26" Deep

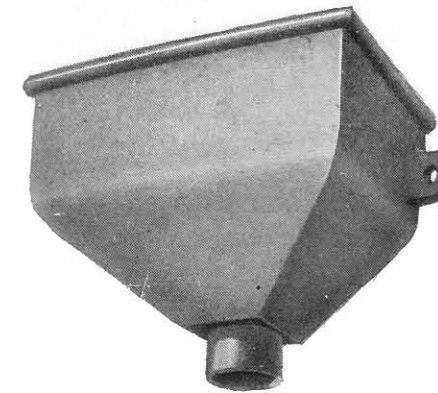


SIZES (IN INCHES) OF FLAT HEADS						
No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
292	4	25	27	9	23	29 1/2
294	4	12	17	6	9	12
296	6 x 4	26 1/2	30 1/2	9 1/2	8 1/2	15
297	4	24 1/2	—	7	—	8
298	4	17	22	8	—	12 1/2
300	5 x 3	15 1/2	25 1/2	10 1/2	16 1/2	26
300A	5 x 4	15 1/2	25 1/2	7 1/2	16 1/2	26

RAIN-WATER HEADS

* Can be supplied without enrichments to order

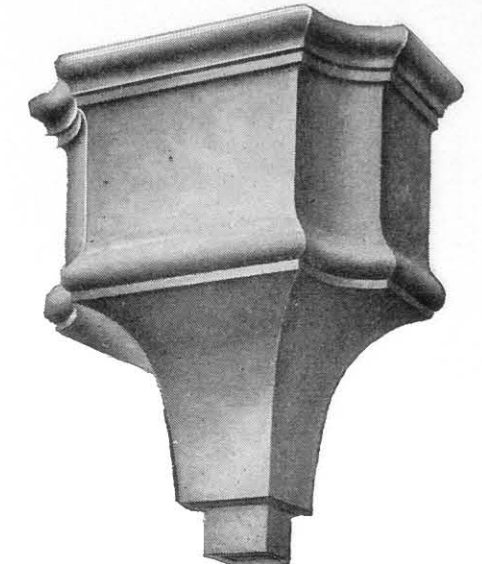
No. 304



No. 305



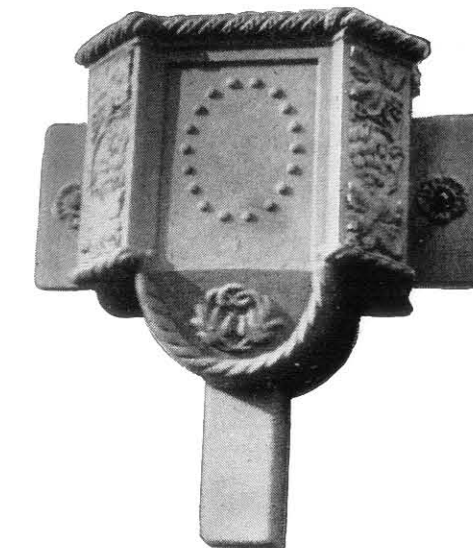
No. 306
Also No. 306A



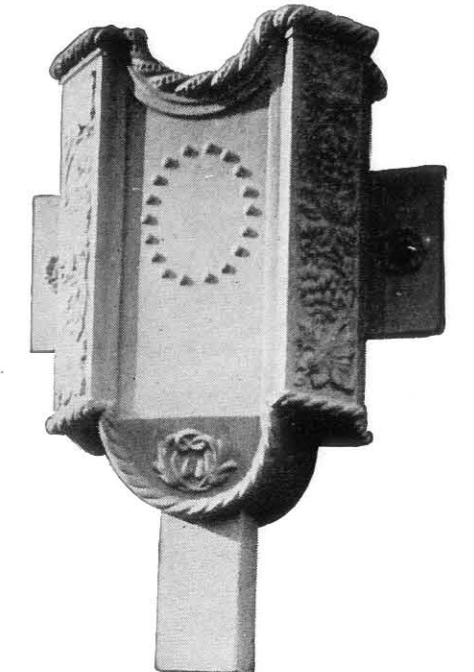
No. 307



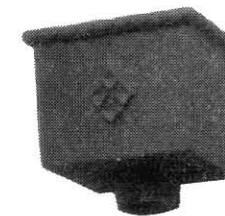
No. 313A



No. 313

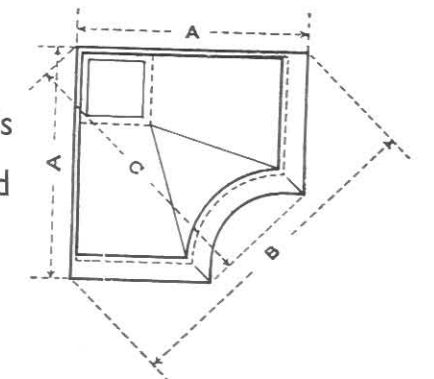


No. 309



SIZES (IN INCHES) OF FLAT HEADS						
No	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
304	3 1/2	19	21	11 1/4	—	11
305	4	20 3/4	22	11 1/4	14	24
306	5 x 4	21	—	10 1/2	—	21 1/2
306A	4 1/2 x 3 1/2	18 1/2	—	9 1/2	—	17 1/2
307	3 1/2	13	18	6	7	13
309	2 1/2	8	—	6	—	6
313	4 x 3	15 1/2	20	7	22	26
313A	4 x 3	15 1/2	20	7	15	19

Plan of
Corner Heads
Nos. 306 and
306A
Sizes in Table

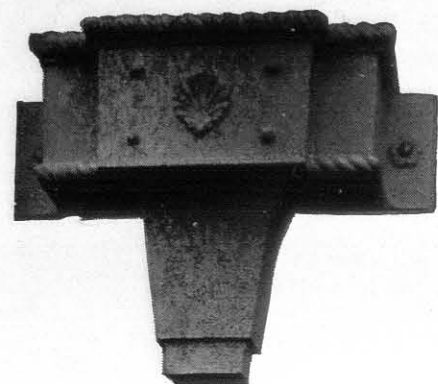


SIZES (IN INCHES)					
No.	Outlet up to	A	B	C	Depth
306	4 x 4	13 1/2	19	15 1/2	21 1/2
306A	4 x 4	12	17	14 1/2	17 1/2

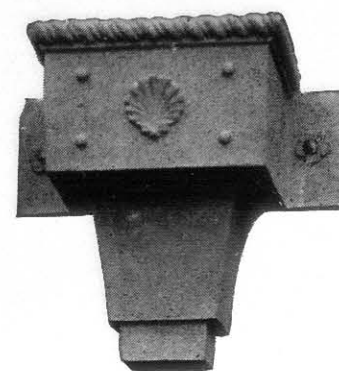
RAIN-WATER HEADS

* Can be supplied without enrichments to order

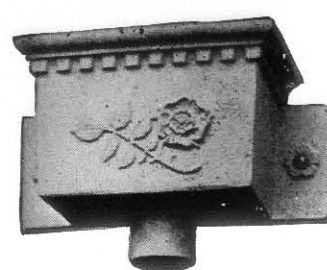
No. 314
*



No. 315
*



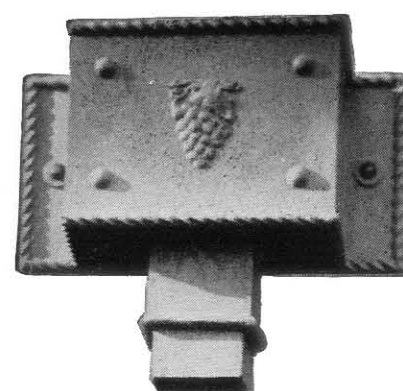
No. 316
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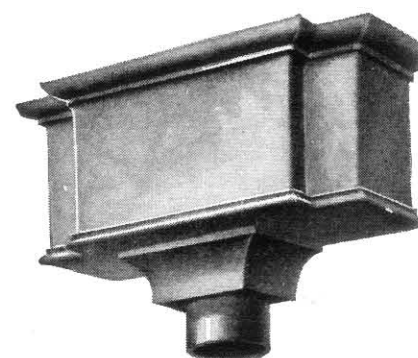
No. 317



No. 318
*



No. 319



No. 320
Also No. 320A
*



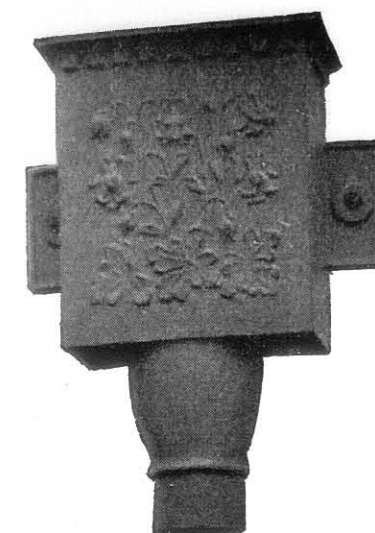
SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
314	4 x 3	18	22	9	7	14½
315	4 x 3	12	16	9	7	13½
316	4	12	15	7½	—	7½
317	4	15	17	10½	9	14½
318	4	12	17	6	9	12½
319	4	20	—	8	8½	11½
320	4	12	17	6	—	15½
320A	3	10	15½	5	—	13

RAIN-WATER HEADS

* Can be supplied without enrichments to order

No. 321



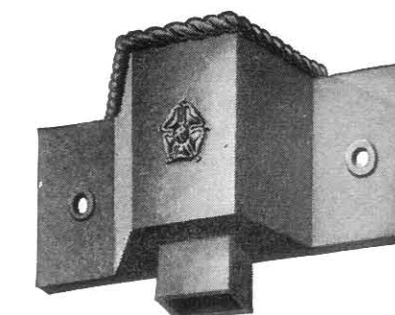
No. 322



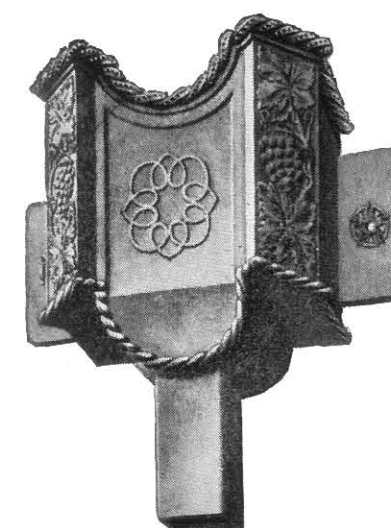
No. 323



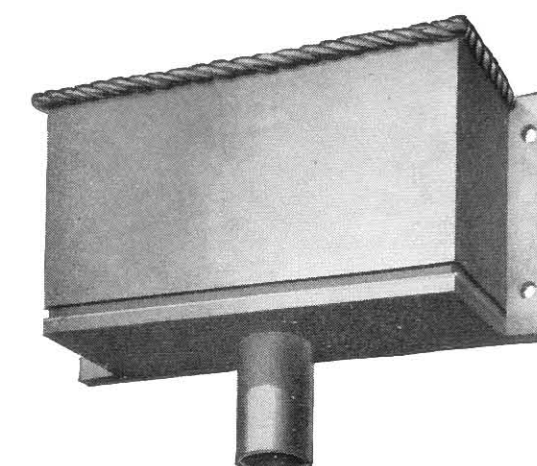
No. 328
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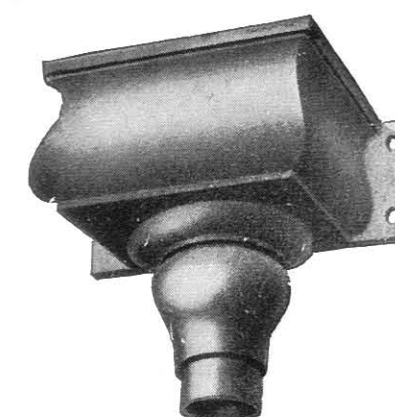
No. 325



No. 326
Also No. 326A



No. 329
Also No. 329A



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
321	4	13½	18½	6½	14½	20½
322	4	20	23	9	11½	19
323	4	20	23	9	—	11
325	4 x 3	15½	20	7	15½	19
326	5	24½	29	7½	12½	15½
326A	5	15	20	7½	7	10½
328	4 x 3	11	21	6	—	9
329	4	14	18½	11	6½	15
329A	4	14	18½	9½	6½	15

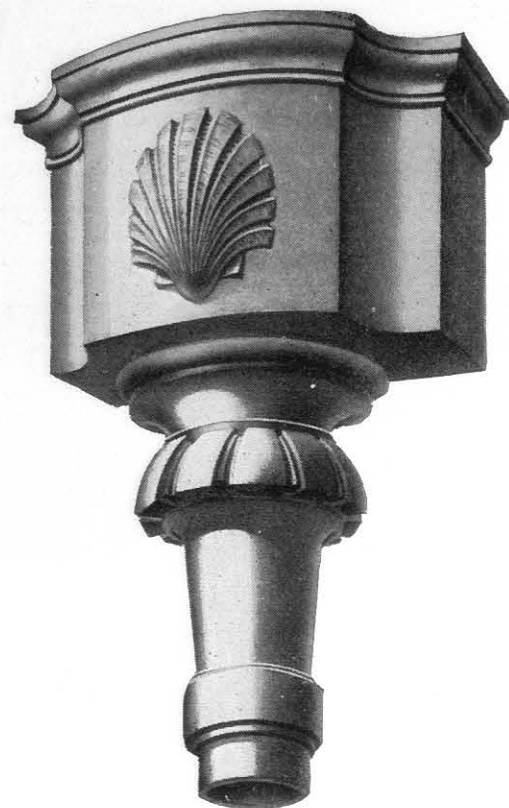
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

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RAIN-WATER HEADS

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No. 330
*



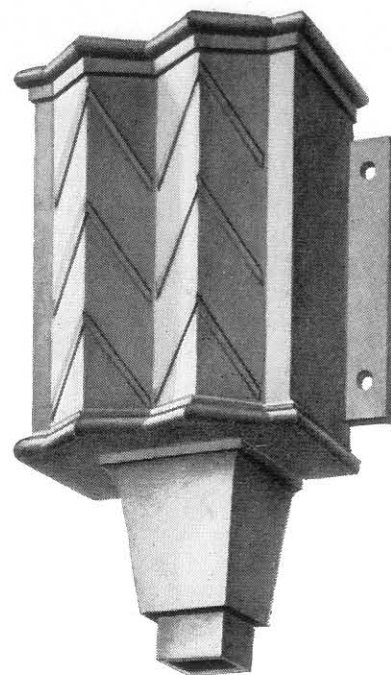
No. 331
Also No. 331A



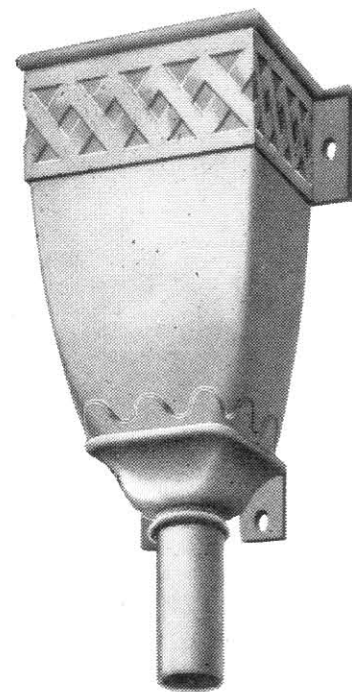
No. 335
Also No. 335A and 335B
*



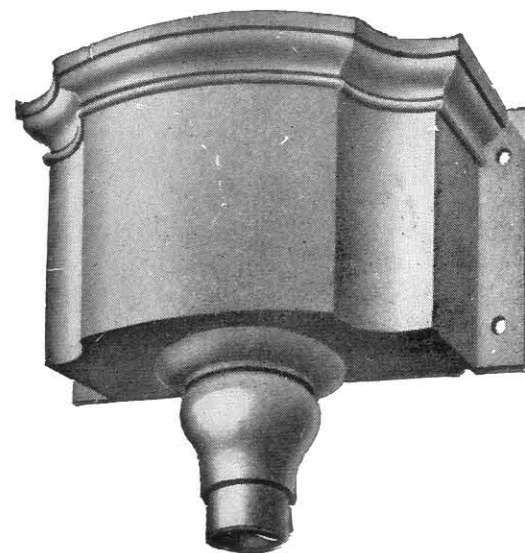
No. 332



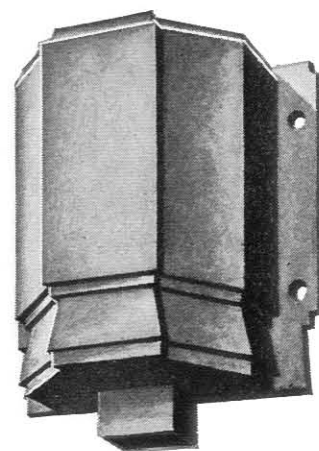
No. 337



No. 334



No. 336



SIZES (IN INCHES) OF FLAT HEADS

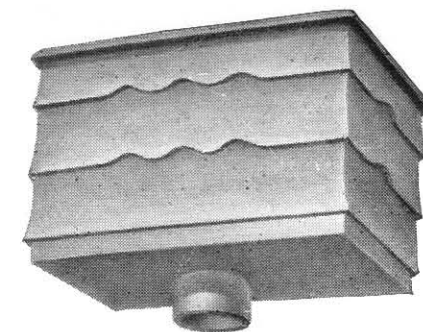
No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
330	6	24	—	12½	13½	30½
331	3½	10	12	9	—	7
331A	3½	10	12	7½	—	7
332	4 x 4	15½	18½	8½	18½	27
334	4	24	27	12½	18½	21¼
335	4½	10	12½	7	—	5½
335A	5	15	18	8	—	8
335B	6	12½	15½	9½	—	6
336	4 x 4	12	16½	7½	—	16
337	4	13½	17½	9	—	28

RAIN-WATER HEADS

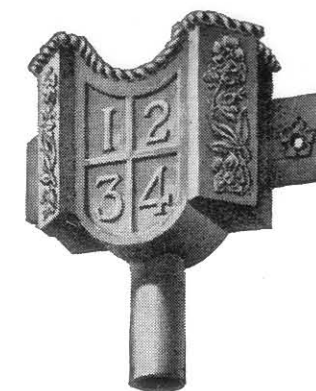
Supplied with date, where shown, unless otherwise ordered

* Can be supplied without enrichments to order

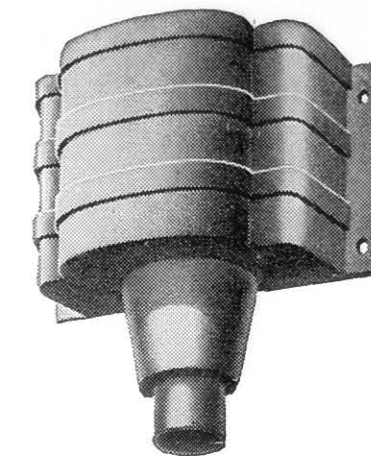
No. 338
Also Nos. 338A, B, C,
D and E



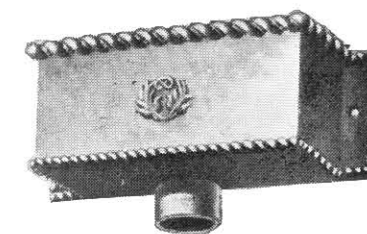
No. 339



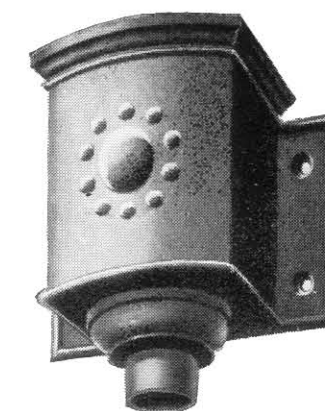
No. 340



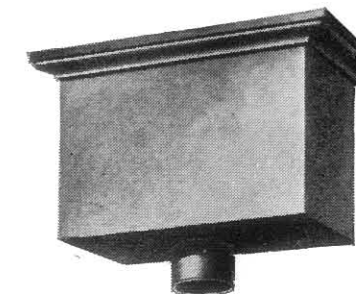
No. 344
Also No. 344B
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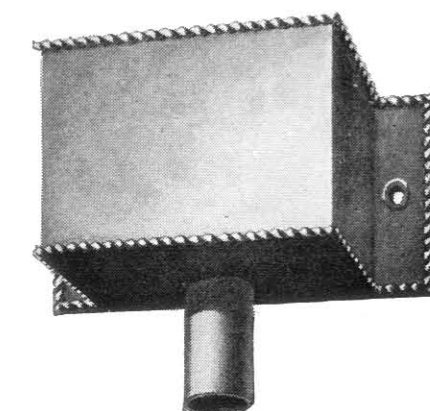
No. 345
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No. 347



No. 348



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
338	6	15½	—	9	—	10½
338A	4	12½	—	7½	—	8½
338B	4	8	—	8½	—	15½
338C	6	42	—	9	—	10½
338D	6	30	—	9	—	10½
338E	6	24	—	9	—	10½
339	3	11½	15½	6½	10½	15
340	4	15½	19½	8	10	16
344	4	11½	13½	7	—	6½
344B	4	15	17	7	—	6½
345	4	10½	16	9½	11	13½
347	3	15½	—	6½	—	9
348	5	15	20	8	10½	13

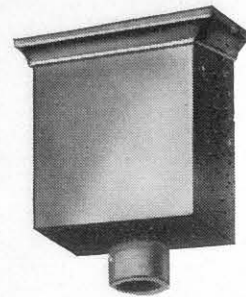
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LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

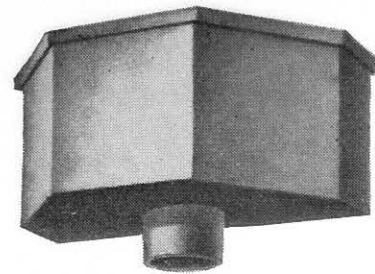
RAIN-WATER HEADS

* Can be supplied without enrichments to order

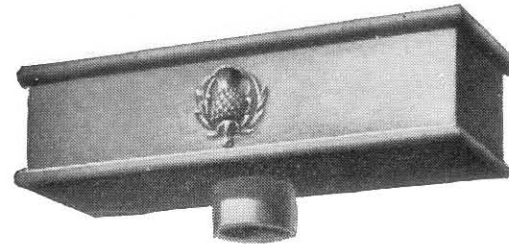
No. 352A



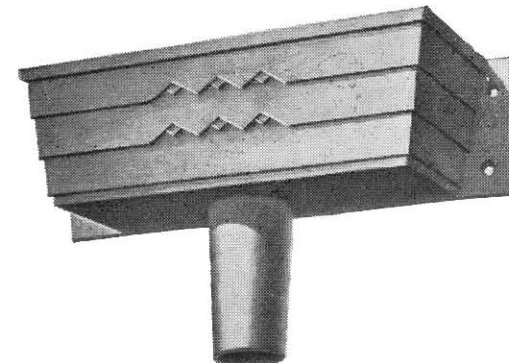
No. 354



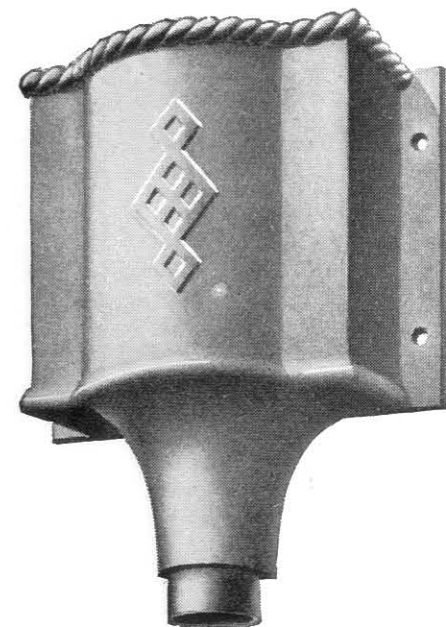
No. 355
Also Nos. 355A and B
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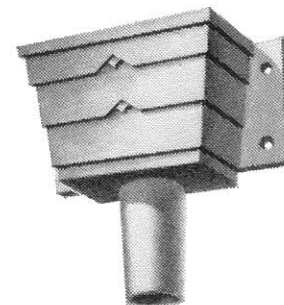
No. 358
Also No. 358A



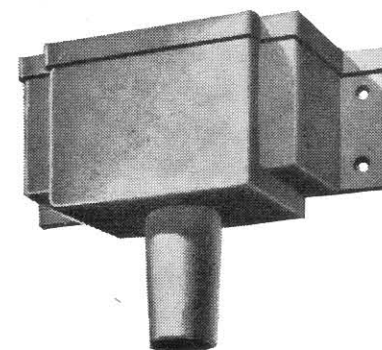
No. 356
*



No. 357



No. 359



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
352A	3½	12	—	6	—	12
354	6	18	—	9	—	8
355	3½	24	—	6	—	6
355A	3½	18	—	6	—	6
355B	3½	12	—	6	—	6
356	3½	18	21½	8½	16½	24½
357	3	10	13	6	7	11
358	3½	21½	25	7	7	12
358A	3½	29½	33½	7	—	12
359	3½	14½	19½	6½	7½	12½

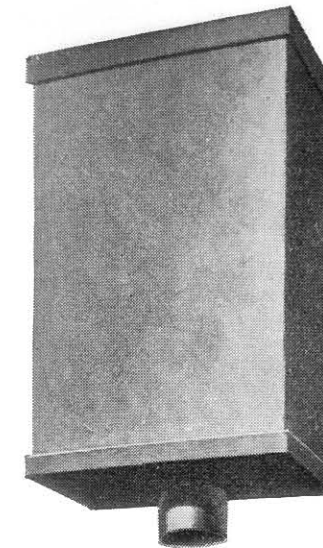
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER HEADS

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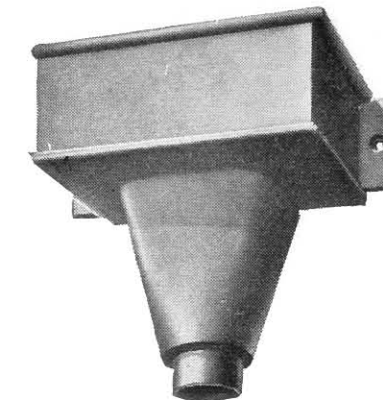
No. 362



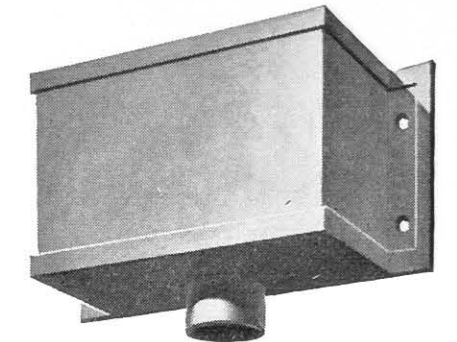
No. 363
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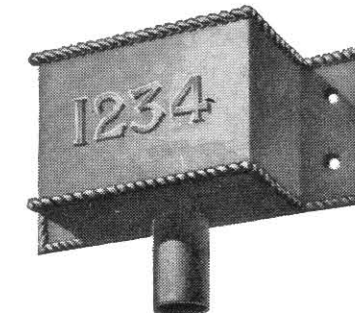
No. 364



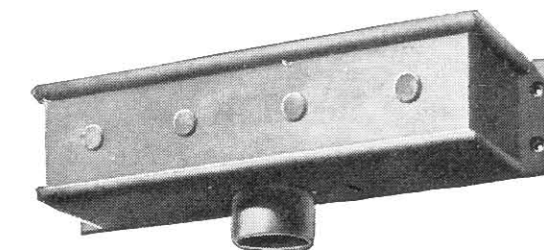
No. 365
Also No. 365A



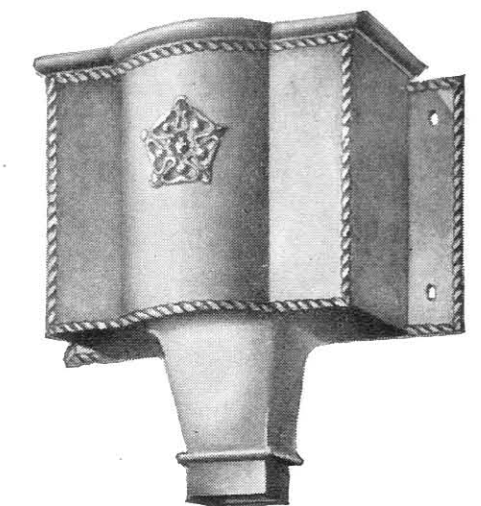
No. 367A



No. 372
Also No. 372A
*

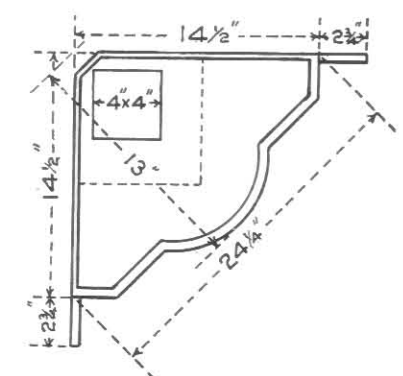


No. 375
Also No. 375A
*



Plan of Corner Head
No. 375

22½" deep



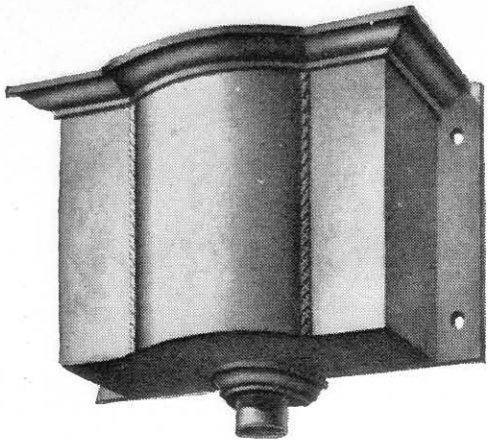
SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
362	5	13	—	7½	—	19½
363	3	11¾	—	6	—	9
364	4	15	18	9¼	6	14
365	6	15	20¼	9	—	10
365A	6	18	25	10	—	12
367A	4	12	18	6½	7½	11
372	4	24	26½	6	—	6
372A	4	18	20½	6	—	6
375	5 x 4	18	22½	9	14	23
375A	5 x 4	15	19¾	7¾	12	20

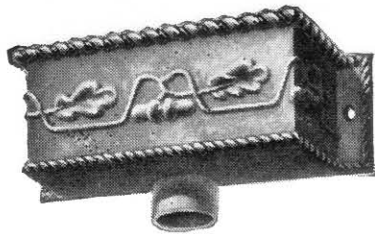
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER HEADS

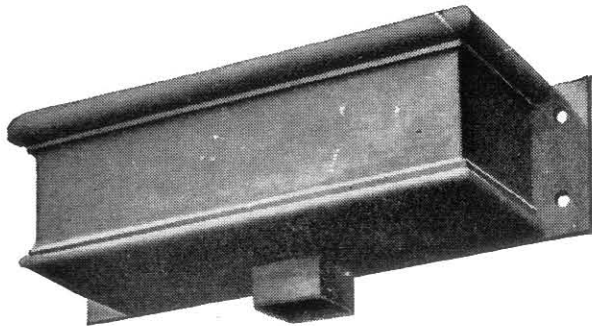
No. 377



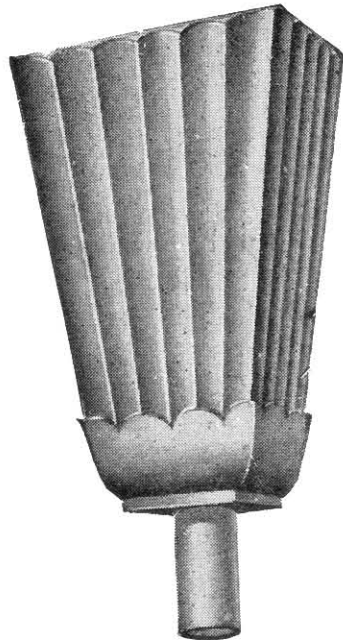
No. 385



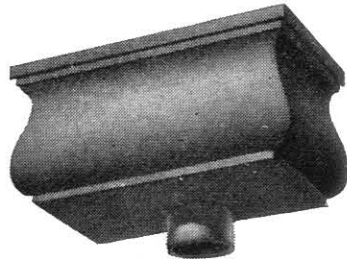
No. 388



No. 390



No. 391
Also No. 391A



SIZES (IN INCHES) OF FLAT HEADS

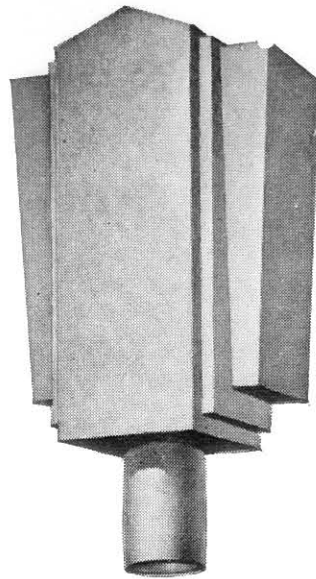
No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
376	3	10	13½	5½	—	9
377	2½	20¾	22	11¼	14	16
385	4	15	17	7	—	6½
386	3½	13½	18	8	13	18½
388	6	26½	30½	9½	—	8½
390	4½	13½	—	9	21	24½
391	6	14	—	11	—	7
391A	6	14	—	9½	—	7

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER HEADS

Supplied with date where shown, unless otherwise stated
* Can be supplied without enrichments to order

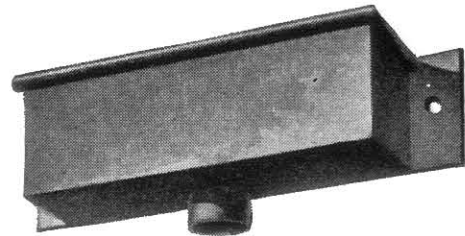
No. 392



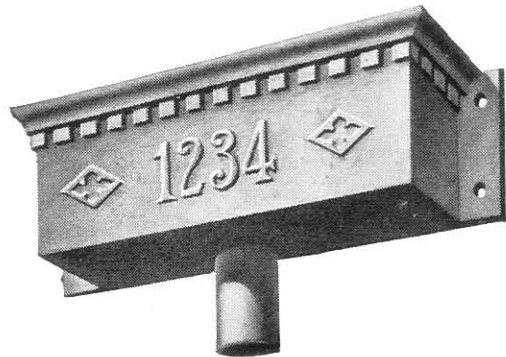
No. 396
Also No. 396A



No. 394
Also Nos. 394A, B, C and D



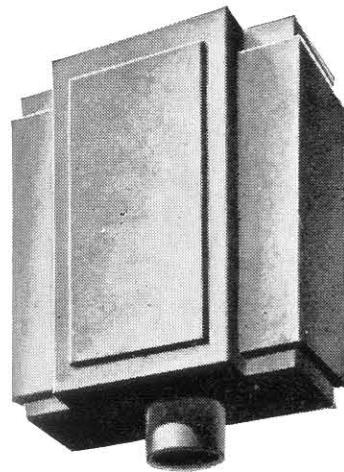
No. 398
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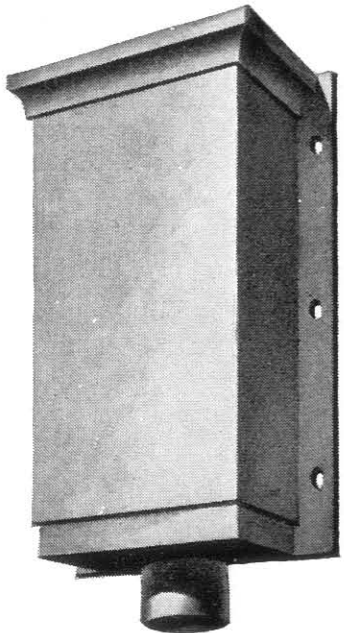
No. 399



No. 397
Also No. 397A



No. 400



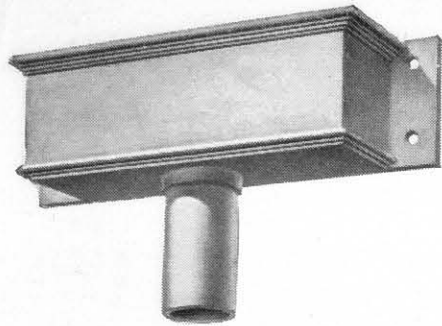
SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
392	6	14	—	8	20	23½
394	6	24	30	9½	6	6
394A	6	21	27	9½	6	6
394B	6	18	24	9½	6	6
394C	6	15	21	9½	6	6
394D	6	12	18	9½	6	6
396	3½	24	—	6	—	6
396A	3½	18	—	6	—	6
397	6	15½	—	10½	16½	16½
397A	4	15½	—	7½	16½	16½
398	4½	24½	28½	7	8	10½
399	4	19	24½	10½	10	18½
400	6	12	14	9	—	24

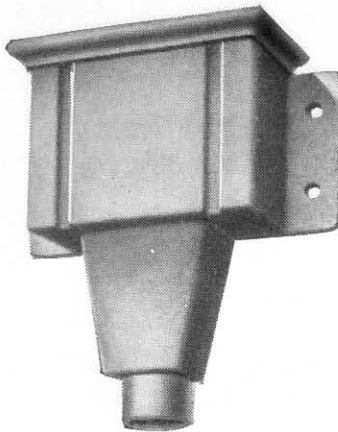
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

RAIN-WATER HEADS

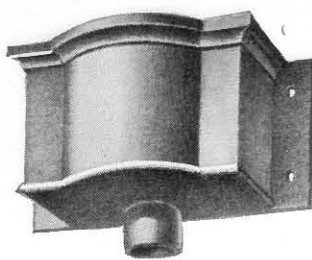
No. 401
Also Nos. 401A, B, C
and D



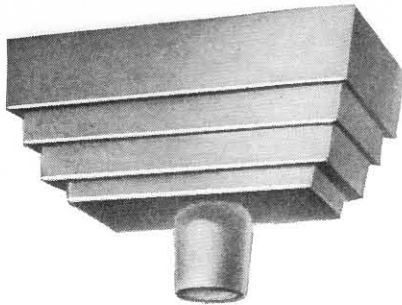
No. 402



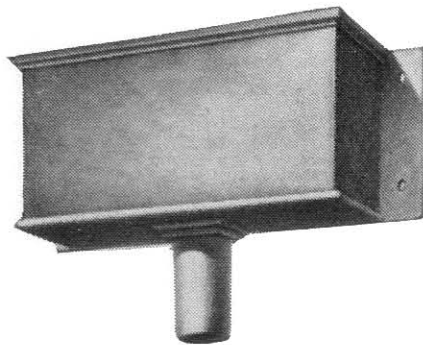
No. 405



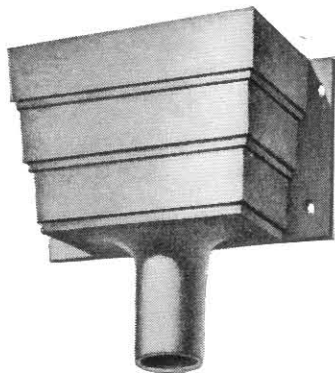
No. 406



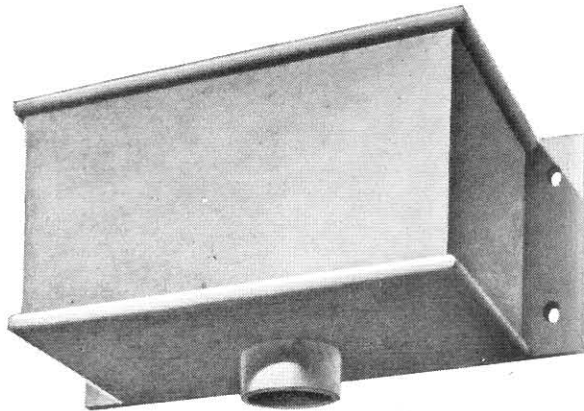
No. 408



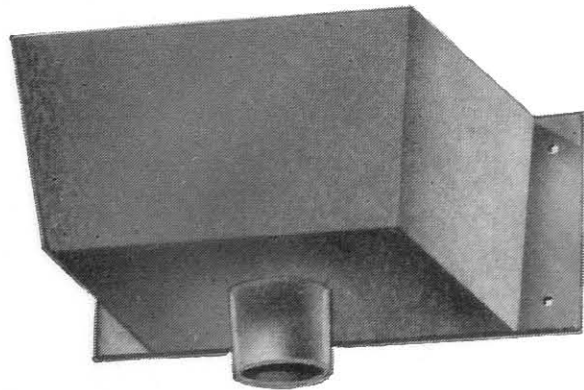
No. 414



No. 417



No. 424
Also No. 424A

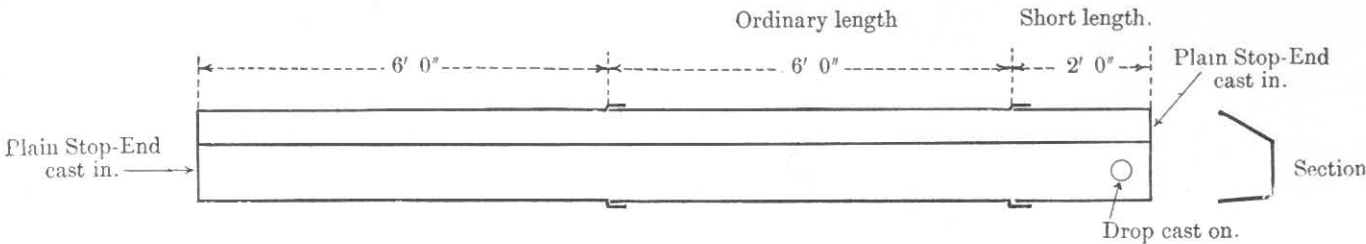


SIZES (IN INCHES) OF FLAT HEADS						
No.	Outlet up to	Length.	Length over Ears.	Pro-jection.	Depth of Box.	Depth (Exclusive of Outlet).
401	4½	18½	23	6½	6	10½
401A	4½	10½	15½	6½	6	10½
401B	4½	21	25½	6½	6	10½
401C	6	18½	23	8	6	10½
401D	3	7½	12	6½	6	10½
402	4	13½	16½	7	10	18
405	4	12	14½	7	—	7
406	4	18	—	8	8½	10½
408	3	18	22½	6	7	12
414	4	12	15½	8	9¼	12¾
417	6	24	30	12	—	6
424	6	26	30	13	—	12
424A	6	18	22	13	—	12

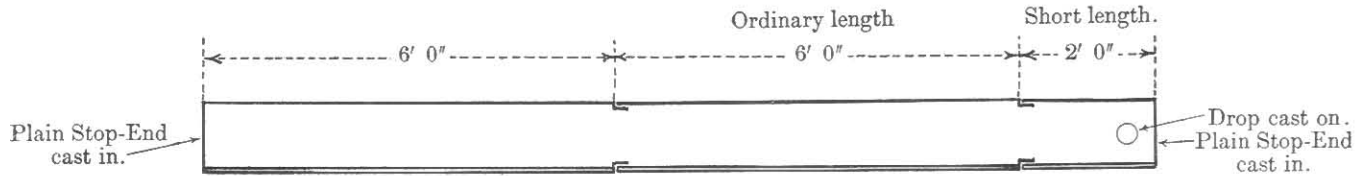
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

PLANS OF CAST-IRON GUTTERS AND CONNECTIONS
TO ASSIST IN ORDERING

TYPICAL STRETCH OF No. 24 BOUNDARY WALL GUTTER,
with outside joints on right hand.

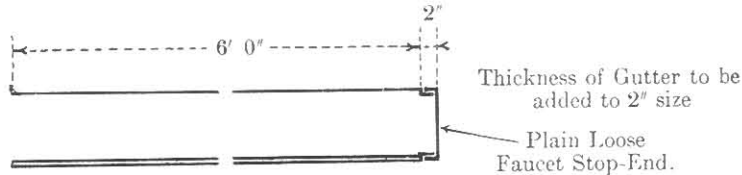


TYPICAL STRETCH OF ORNAMENTAL GUTTER,
with inside joints on right hand.
Front of gutter is denoted by double lines.

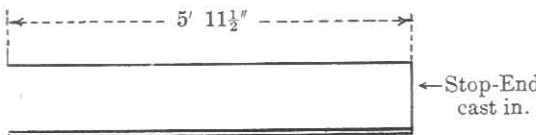


The effective length of gutters is intended to be 6' 0" but this size may vary from ½" to ⅓" either way and exact lengths can be obtained only from the castings laid in position.

ORDINARY LENGTH WITH LOOSE STOP-END



LENGTH WITHOUT INSIDE OR OUTSIDE JOINTS.



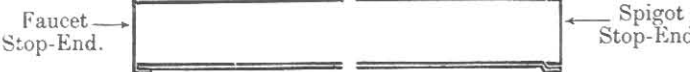
PLAIN STOP-ENDS

For Equal-Sided Gutters (as Nos 1 and 2).



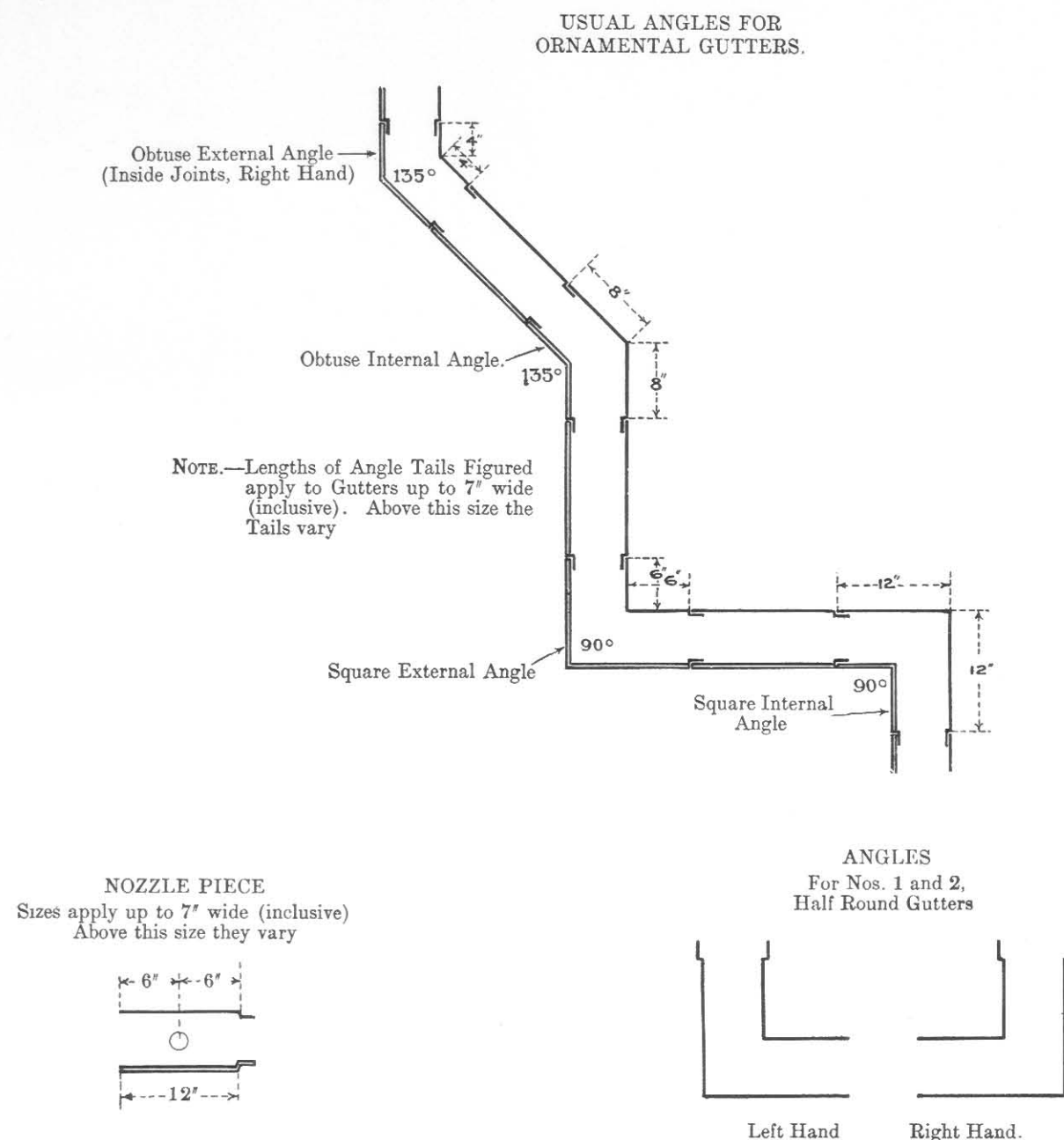
PLAIN STOP-ENDS

For Unequal-Sided Gutters (as Usual Ornamental Patterns).



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

PLANS OF CAST-IRON GUTTERS AND CONNECTIONS TO ASSIST IN ORDERING



GENERAL RULES

ORNAMENTAL GUTTERS have inside joints on right hand looking at front of gutter.

No. 3 O.G. GUTTERS have outside joints on right hand looking at front.

ORDINARY HALF-ROUND GUTTERS have outside joints.

BOUNDARY-WALL GUTTERS (as No. 24) have outside joints on right hand looking at upright side.

UNEQUAL-SIDED GUTTERS (as No. 35) have outside joints on right hand looking at steep side.

GUTTERS up to about 6" x 5" have one bolt hole at joint ; from 6" x 5" to about 14" x 6", two bolt holes ; above 14" x 6", three bolt holes.

For GUTTERS up to about 12" x 6", bolts for joints are $\frac{1}{4}$ " diam. x $\frac{3}{4}$ ", 1" or $1\frac{1}{4}$ " long, according to thickness, and above 12" x 6", $\frac{3}{8}$ " diam. x $1\frac{1}{4}$ " or $1\frac{1}{2}$ " long.

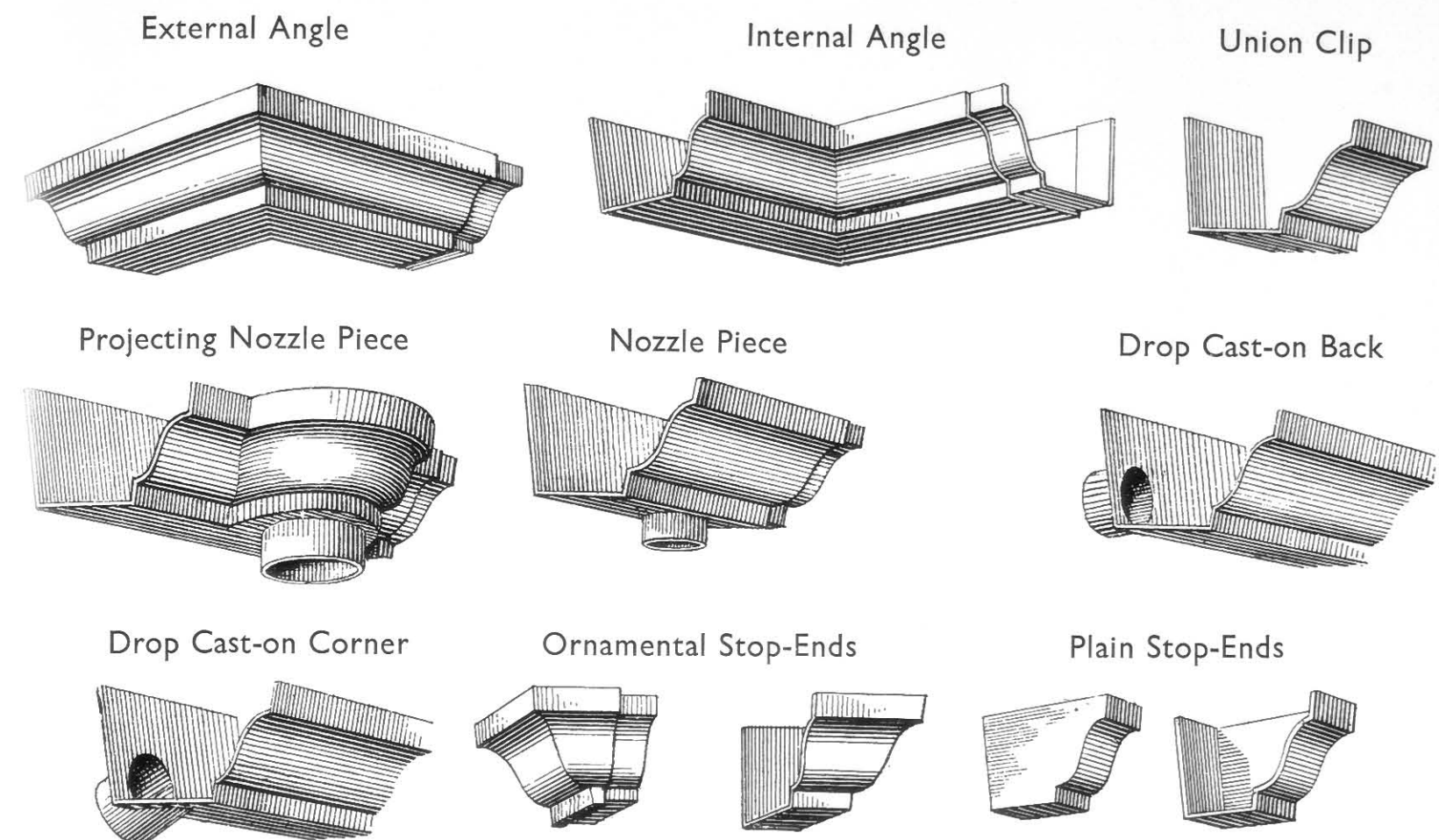
The above rules are only general, and each set of sections has a few exceptions

The term "Faucet" always applies to wider end.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

ORNAMENTAL GUTTER CONNECTIONS

These can be supplied to suit most of the Gutters shown in Catalogue

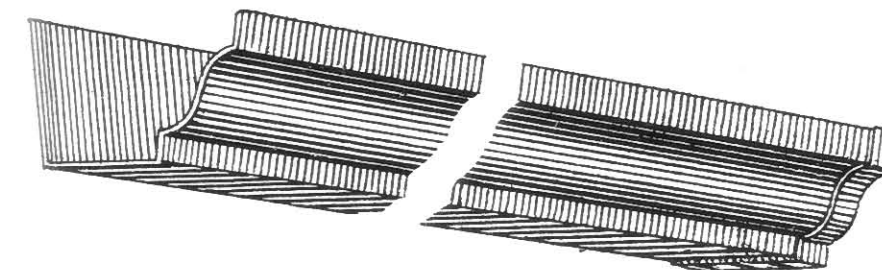


Above Connections are shown with Inside Joints at Right Hand

TYPICAL ORNAMENTAL GUTTERS

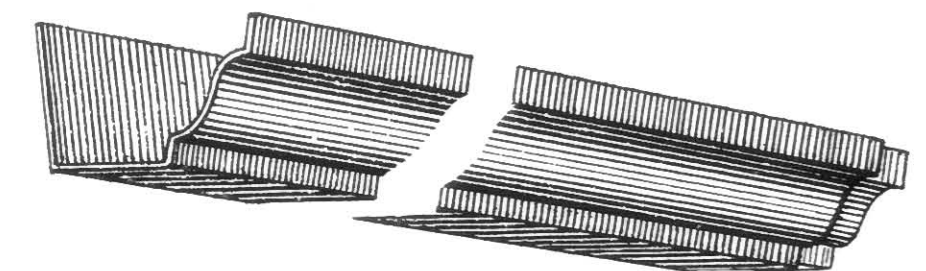
6' 0" Joint to Joint

With Outside Joints at Right Hand



Outside Joints give an uninterrupted water-way

With Inside Joints at Right Hand



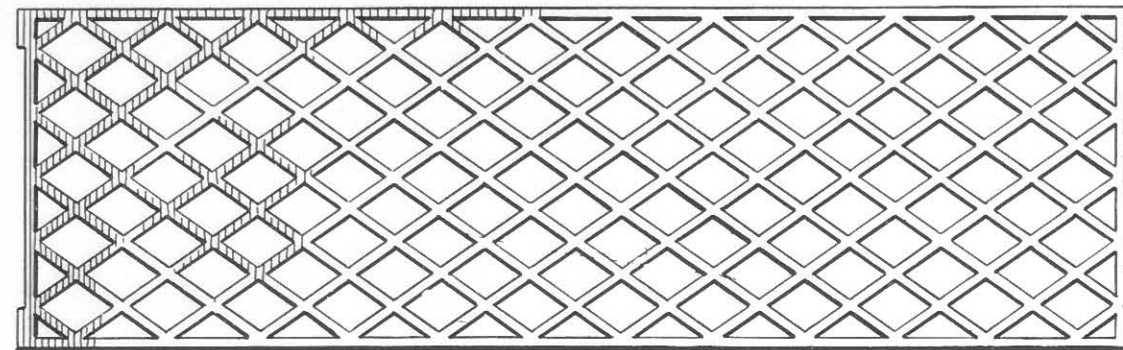
Inside Joints give, on the outside, an unbroken moulding

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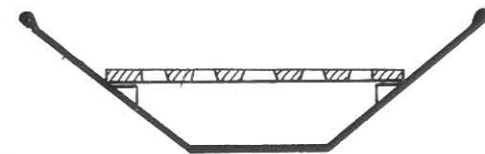
GUTTER GRATINGS

No. 136

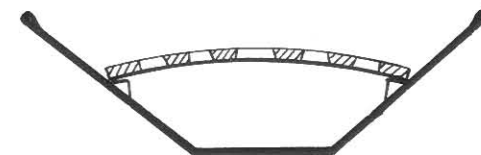
Snow Gratings
for Boundary-Wall and Valley Gutters



Flat Grating



Cambered Grating



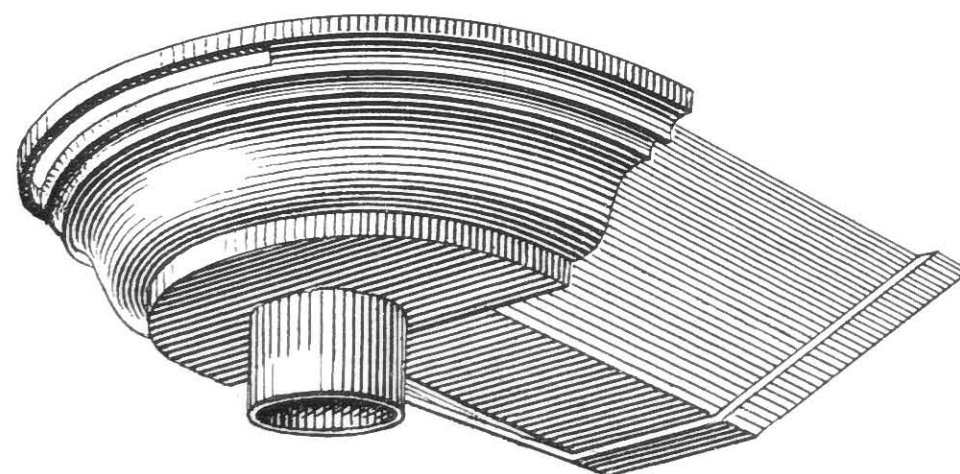
SIZES

Width	Thickness	Length	Width	Thickness	Length
6 $\frac{3}{4}$ "	$\times \frac{5}{16}$ "	$\times 3' 10\frac{1}{4}"$	14"	$\times \frac{5}{16}$ "	$\times 4' 0"$
8"	$\times \frac{5}{16}$ "	$\times 3' 11"$	15"	$\times \frac{1}{2}$ "	$\times 4' 0"$
9"	$\times \frac{5}{16}$ "	$\times 3' 11"$	16"	$\times \frac{1}{4}$ "	$\times 4' 0"$
10"	$\times \frac{5}{16}$ "	$\times 4' 0"$	16 $\frac{1}{2}$ "	$\times \frac{1}{2}$ "	$\times 4' 0"$
11"	$\times \frac{5}{16}$ "	$\times 3' 11"$	18 $\frac{3}{4}$ "	$\times \frac{5}{16}$ "	$\times 4' 0"$
11"	$\times \frac{3}{8}$ "	$\times 4' 0"$	24"	$\times \frac{1}{2}$ "	$\times 3' 1\frac{1}{2}"$
13"	$\times \frac{5}{16}$ "	$\times 4' 0"$			
13 $\frac{1}{4}$ "	$\times \frac{1}{2}$ "	$\times 4' 0"$			

SIZES

Width	Thickness
8"	$\times \frac{5}{16}$ "
9"	$\times \frac{5}{16}$ "
9"	$\times \frac{3}{8}$ "

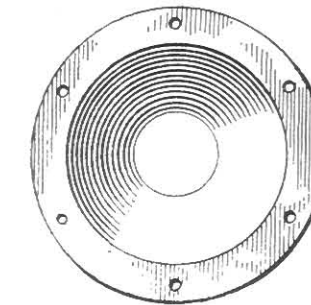
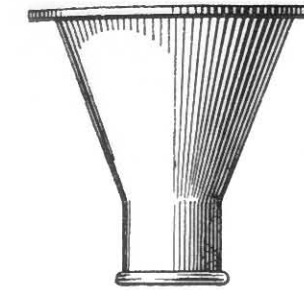
Ornamental Nozzle-End
for Valley Gutter



Supplied with or without overflow
and to suit any
Valley Gutter in Catalogue
up to 21" x 6"

HOPPER OUTLETS FOR GUTTERS

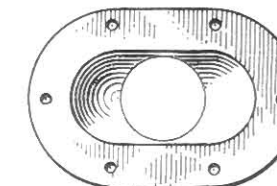
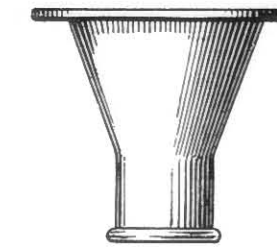
No. 1



4" Diam. x 13" Diam. Flange
12" High, $\frac{3}{8}$ " Thick

5" Diam. x 11" Diam. Flange
12" High, $\frac{1}{4}$ " Thick

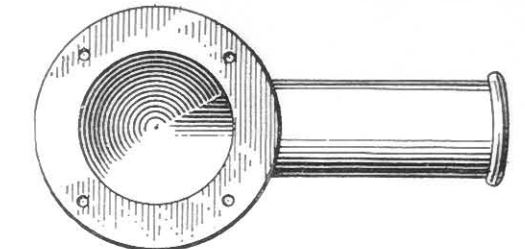
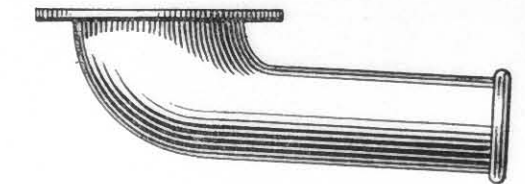
No. 2



4" Diam. x 12" x 8" Flange
10 $\frac{1}{4}$ " High, $\frac{3}{16}$ " Thick

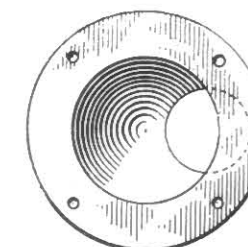
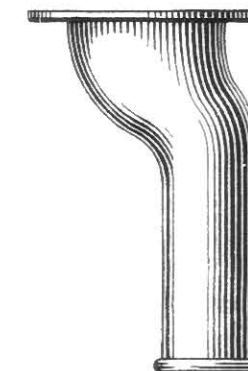
4" Diam. x 15 $\frac{3}{4}$ " x 12" Flange
9" High, $\frac{1}{4}$ " Thick

No. 3



4" Diam. x 11" Diam. Flange
15 $\frac{3}{4}$ " Tail from Centre
 $\frac{3}{16}$ " Thick

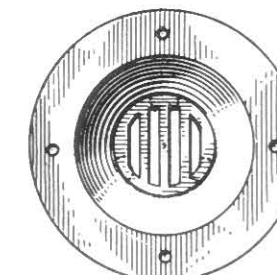
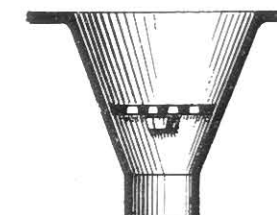
No. 4



4" Diam. x 10 $\frac{1}{2}$ " Diam. Flange
15 $\frac{3}{4}$ " High
 $\frac{3}{16}$ " Thick

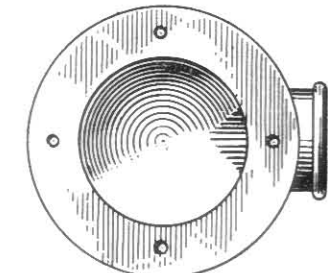
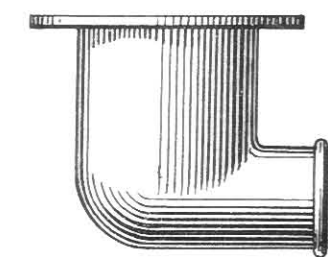
No. 5

with 4 $\frac{1}{2}$ " Diam. Grating



3" Diam. x 12" Diam. Flange
9" High, $\frac{3}{16}$ " Thick

No. 6



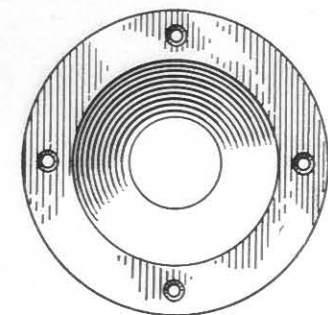
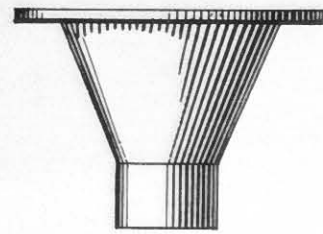
4" Diam. x 12" Diam. Flange
10 $\frac{1}{4}$ " High, $\frac{1}{4}$ " Thick

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LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

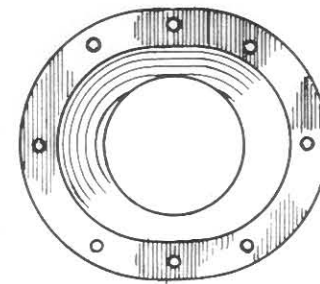
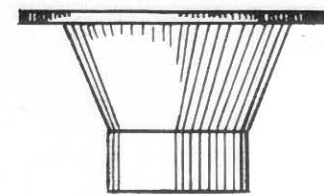
HOPPER OUTLETS FOR GUTTERS

No. 7



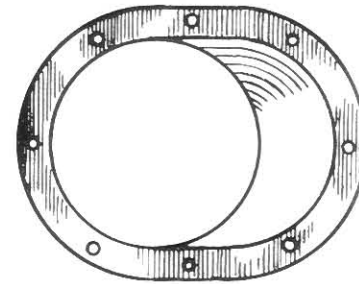
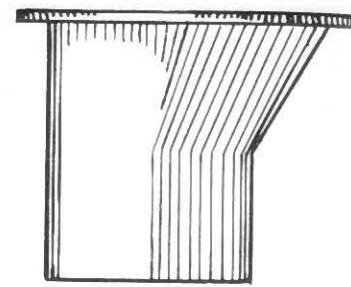
13½" Diam. Flange, 9½" High
4" and 6" Diam., ¼" Thick
16" Diam. Flange, 9" High
8" Diam., ¼" Thick

No. 8



6" Diam x 1' 1¼" x 11⅞" Flange
8" High x ⅜" Thick

No. 9



9" Diam. x 1' 3" x 1' 0" Flange
1' 0" High x ¼" Metal

GUTTER GRATES

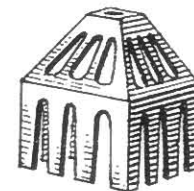
No. 1



No. 2



No. 3



No. 4



No. 5



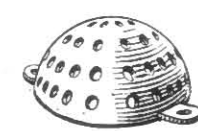
No. 6



No. 7



No. 9



No. 10

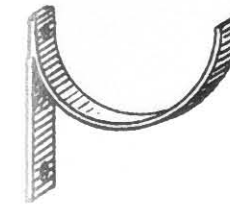


No. 11

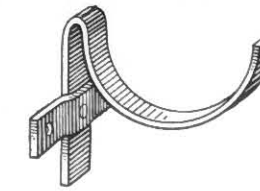


MILD STEEL GUTTER BRACKETS

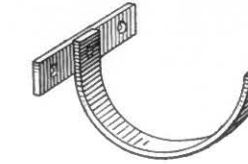
No. 15



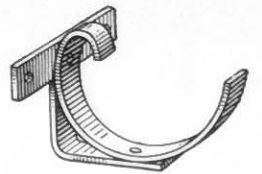
No. 24



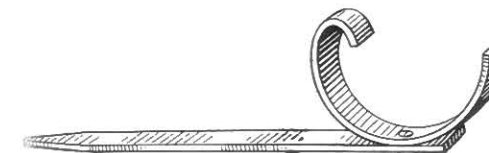
No. 25



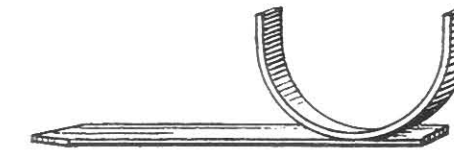
No. 26



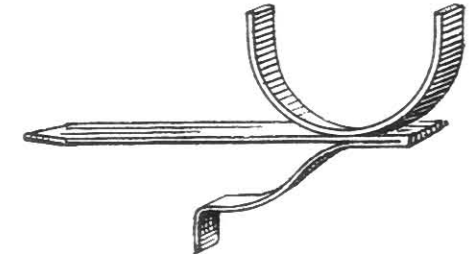
No. 30



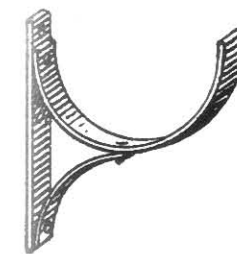
No. 18



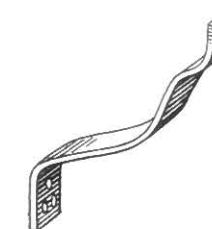
No. 19



No. 16



No. 27



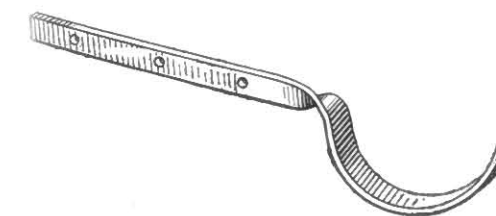
No. 29



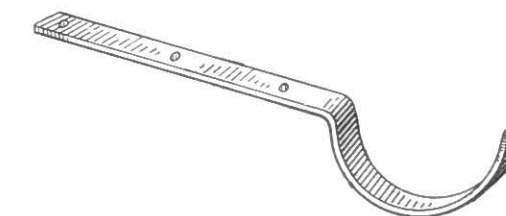
No. 17



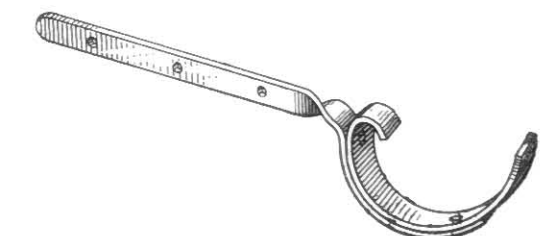
No. 32
for side fixing



No. 33
for top fixing



No. 28

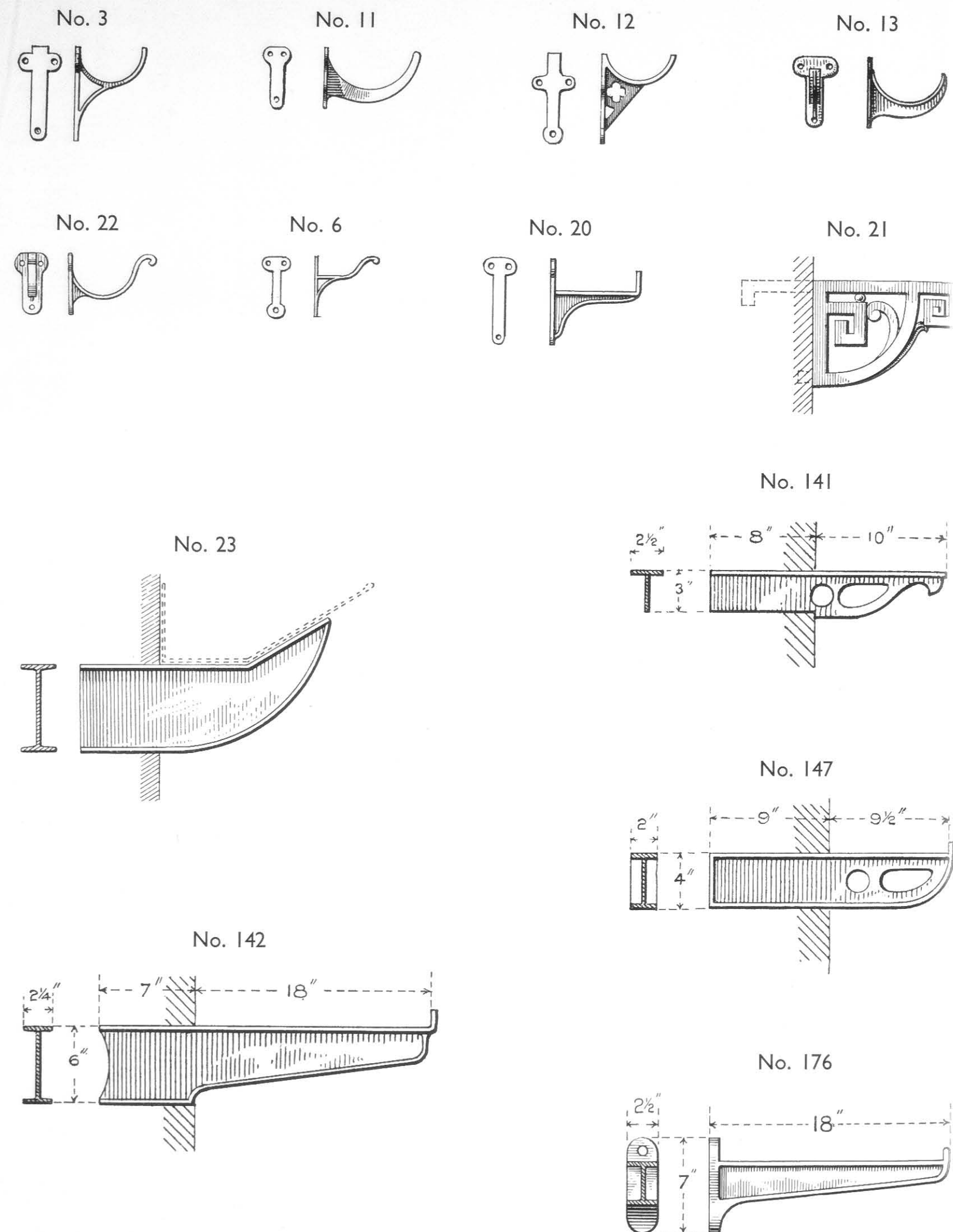


All the above Brackets to suit any Half-Round or Ornamental Gutter in Catalogue

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

CAST-IRON GUTTER BRACKETS



HALF-ROUND GUTTERS

No. 1. Plain Half-Round



SIZE

3"	6" x $\frac{3}{16}$ "
3" x $\frac{3}{16}$ "	6" x $\frac{1}{4}$ "
3" x $\frac{1}{4}$ "	7" x $\frac{3}{16}$ "
3 $\frac{1}{2}$ "	8" x $\frac{3}{16}$ "
3 $\frac{1}{2}$ x $\frac{3}{16}$ "	8" x $\frac{1}{4}$ "
3 $\frac{1}{2}$ x $\frac{1}{4}$ "	9"
4"	9 $\frac{1}{2}$ "
4" x $\frac{3}{16}$ "	9 $\frac{1}{2}$ x $\frac{1}{4}$ "
4" x $\frac{1}{4}$ "	9 $\frac{1}{2}$ x 4 $\frac{1}{4}$ x $\frac{1}{4}$ "
4 $\frac{1}{2}$ "	10"
4 $\frac{1}{2}$ x $\frac{3}{16}$ "	10" x $\frac{3}{16}$ "
4 $\frac{1}{2}$ x $\frac{1}{4}$ "	12" x 5" x $\frac{3}{16}$ "
5"	13" x 6" x $\frac{1}{4}$ "
5" x $\frac{3}{16}$ "	13 $\frac{3}{8}$ x 5 $\frac{3}{4}$ x $\frac{3}{16}$ "
5" x $\frac{1}{4}$ "	
5" x $\frac{3}{8}$ "	
6"	

No. 20. Deep Half-Round



SIZE

3" x 2 $\frac{1}{2}$ " x $\frac{3}{16}$ " I.J.
3 $\frac{1}{2}$ x 3 $\frac{1}{2}$ " x $\frac{3}{16}$ " I.J.
4" x 2 $\frac{1}{2}$ "
4" x 3"
4" x 3" x $\frac{3}{16}$ "
4" x 3" x $\frac{3}{16}$ " I.J.
4 $\frac{1}{2}$ x 2 $\frac{3}{4}$ x $\frac{1}{4}$ " I.J.
4 $\frac{1}{2}$ x 3"
4 $\frac{1}{2}$ x 3" x $\frac{3}{16}$ "
4 $\frac{1}{2}$ x 3" x $\frac{3}{16}$ " I.J.
4 $\frac{1}{2}$ x 3 $\frac{1}{2}$ "
4 $\frac{1}{2}$ x 3 $\frac{1}{2}$ " I.J.
4 $\frac{1}{2}$ x 3 $\frac{1}{2}$ x $\frac{3}{16}$ " I.J.
4 $\frac{1}{2}$ x 3 $\frac{1}{2}$ x $\frac{1}{4}$ "
4 $\frac{1}{2}$ x 3 $\frac{1}{2}$ x $\frac{1}{4}$ " I.J.
4 $\frac{1}{2}$ x 4"
4 $\frac{1}{2}$ x 4 $\frac{3}{4}$ "
5" x 3"
5" x 3" I.J.
5" x 3" x $\frac{3}{16}$ "
5" x 3" x $\frac{3}{16}$ " I.J.
5" x 3" x $\frac{1}{4}$ "
A5" x 3 $\frac{1}{2}$ "
A5" x 3 $\frac{1}{2}$ x $\frac{3}{16}$ " I.J.
B5" x 4"
B5" x 4" x $\frac{3}{16}$ "
A5" x 4" x $\frac{3}{16}$ " I.J.
5" x 4 $\frac{1}{2}$ x $\frac{3}{16}$ "
5" x 5" x $\frac{3}{16}$ " I.J.
5 $\frac{1}{2}$ x 4"
6" x 3 $\frac{1}{2}$ "
6" x 3 $\frac{1}{2}$ x $\frac{3}{16}$ " I.J.
A6" x 4" x $\frac{3}{16}$ "
A6" x 4" x $\frac{3}{16}$ " I.J.
A6" x 4" x $\frac{1}{4}$ "
C6" x 4"
6" x 5" x $\frac{3}{16}$ "
7" x 5" x $\frac{1}{4}$ "
A8" x 5"
8" x 6" x $\frac{3}{16}$ "
9" x 6" x $\frac{3}{16}$ "
10" x 7" x $\frac{3}{16}$ "
12" x 7" x $\frac{1}{4}$ "

No. 2. Beaded Half-Round



SIZE

3"	D5"
3" x $\frac{3}{16}$ "	5" x $\frac{3}{16}$ "
3 $\frac{1}{2}$ "	5" x $\frac{1}{4}$ "
3 $\frac{1}{2}$ x $\frac{3}{16}$ "	5" x $\frac{1}{4}$ " I.J.
4"	5 $\frac{1}{4}$ x 2 $\frac{1}{2}$ x $\frac{1}{4}$ " I.J.
D4"	6"
4" x $\frac{3}{16}$ "	6" x $\frac{3}{16}$ "
4" x $\frac{1}{4}$ "	6" x $\frac{1}{4}$ "
4 $\frac{1}{2}$ "	7"
4 $\frac{1}{2}$ x $\frac{3}{16}$ "	8"
4 $\frac{1}{2}$ x $\frac{1}{4}$ "	9" x $\frac{1}{4}$ "
5"	

Gutters with Outside Joints except where marked I.J.

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

HALF-ROUND GUTTERS

No. 20. Deep Half-Round



SIZE

4" x 3 1/2" x 3/16"
4 1/4" x 3" x 3/16"
A4 1/2" x 2 3/4" I.J.
A5" x 3" I.J.
5" x 3 1/2"
5" x 3 1/2" I.J.
5" x 3 1/2" x 3/16"
5" x 3 1/2" x 1/4"
5" x 3 1/2" x 1/4" I.J.
5 1/2" x 3" x 3/16" I.J.

A5 1/2" x 4" x 3/16"
B5 1/2" x 4" x 3/16" I.J.
6" x 4" I.J.
6" x 4" x 3/16"
B6" x 4" x 1/4"
B6" x 4" x 1/4" I.J.
6" x 4 1/2" x 1/4"
6 1/2" x 3" x 1/4"
10" x 6"

No. 20. Deep Half-Round



SIZE

A4" x 3" x 3/16"
A4 1/2" x 3" x 3/16"
4 3/4" x 2 1/4" x 1/4"
B5" x 3" x 3/16"
B5" x 3 1/2" x 3/16"
5 3/4" x 2 3/4" x 1/4"
A6" x 3" x 1/4"
A6" x 3 1/2" x 3/16"
6 1/4" x 4" x 3/16"

No. 20E. Deep Half-Round

SIZE

4" x 3" x 3/16" I.J.
4 1/2" x 3 1/2" x 3/16" I.J.
5" x 3 1/2" x 3/16" I.J.
5" x 4" x 3/16" I.J.



No. 20. Deep Half-Round.



SIZE

3 1/2" x 2 1/2" x 3/16" I.J.
4 1/2" x 2 1/4" x 1/4"
A4 1/2" x 3 1/2" x 3/16"
4 3/4" x 3"
4 3/4" x 3 1/2"
C5" x 4"
C5" x 4" x 3/16"
D5" x 4" x 3/16" I.J.
C5" x 4" x 1/4"
5 1/4" x 2 1/2" x 3/16"
5 1/4" x 3 1/2" x 3/16"
7" x 4" x 3/16"
8" x 5"

No. 20. Deep Half-Round

SIZE

5" x 4" I.J.
5" x 4" x 3/16" I.J.
5" x 4" x 1/4" I.J.



No. 20. Deep Half-Round

SIZE

6" x 3" x 1/4"



Gutters with Outside Joints except where marked I.J.

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

O.G. GUTTERS

With Outside Joints, except where marked I.J.

No. 3 O.G.



SIZE

B3" R.H. & L.H.
J 3" L.H.
3 1/2"
B3 1/2" L.H.
J 3 1/2" R.H. & L.H.
L3 1/2" x 2 1/2"
4"
A4"
B4" R.H. & L.H.
C4" R.H. & L.H.
D4" x 2 3/8" L.H.
H4" L.H.
J 4" R.H. & L.H.
4" x 3/16" R.H. & L.H.
4 1/2"
B4 1/2" R.H. & L.H.
C4 1/2" x 2 3/4"
4 1/2" x 2 7/8"
G4 1/2" L.H.
H4 1/2" L.H.
J 4 1/2" R.H. & L.H.
L4 1/2" x 2 3/4"
A4 1/2" x 3/16" R.H. & L.H.
5"
B5" L.H.
G5" L.H.
H5" L.H.
J 5" R.H. & L.H.
A5" x 3/16" R.H. & L.H.
5" x 2 1/2" x 1/4"
5" x 3"
A5" x 3"
5" x 3 1/4" L.H.
5" x 3 1/4" I.J., R.H.
5 1/4" x 2 1/2"
6"
B6" L.H.
J 6" L.H.
A6" x 3/16"
6" x 3 1/4" L.H.
6" x 3 3/4"
6" x 4" L.H.
K6" x 4"

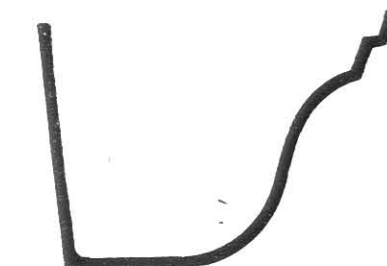
No. 4 O.G.



SIZES

as for No. 3

No. 19 (Notts O.G.)



SIZE

A3" L.H.
A4" L.H.
A4 1/2" L.H.
A4 1/2" x 2 7/8"
A4 1/2" x 3 L.H.
N4 1/2" x 3 L.H.
A5" L.H.
A6" x 4" R.H. & L.H.
N6" x 4" L.H.
A7 1/2" x 5" L.H.

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

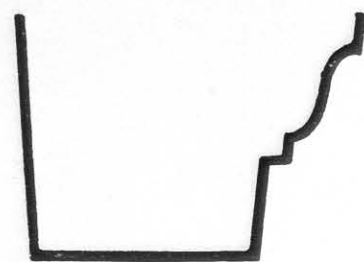
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

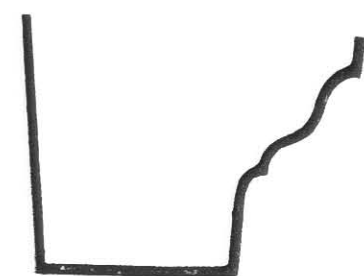
No. 6



SIZE

$4\frac{5}{8}" \times 4\frac{1}{2}"$ L.H.
 $4\frac{3}{4}" \times 3\frac{1}{2}"$
 $5\frac{1}{4}" \times 5\frac{1}{4}" \times \frac{3}{16}"$
 $7" \times 6" \times \frac{1}{4}"$
 $8\frac{1}{2}" \times 7" \times \frac{1}{4}"$
 $9" \times 5"$
 $9" \times 7\frac{1}{4}"$ L.H.
 $\{ 10" \times 6" \times \frac{3}{16}"$
 at front $\times \frac{1}{16}"$

No. 6



SIZE

$5\frac{1}{4}" \times 4"$
 $5\frac{1}{4}" \times 4" \times \frac{1}{4}"$

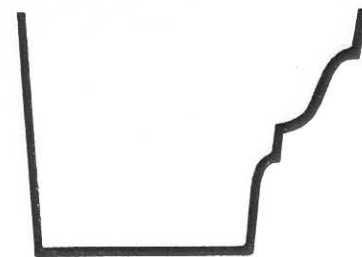
No. 6



SIZE

$\{ 6" \times 5" \times 4\frac{1}{2}"$
 at front $\times \frac{3}{16}"$
 $A9" \times 6" \times \frac{1}{4}"$

No. 6



SIZE

$3\frac{1}{2}" \times 2\frac{1}{2}"$
 $4" \times 3" \times \frac{3}{16}"$
 $4\frac{1}{2}" \times 3\frac{1}{2}"$
 $B4\frac{1}{2}" \times 3\frac{1}{2}"$ L.H.
 $K4\frac{1}{2}" \times 3\frac{1}{2}"$ L.H.
 $4\frac{1}{2}" \times 3\frac{1}{2}" \times \frac{3}{16}"$
 $5" \times 4"$ L.H.
 $A5" \times 4"$ L.H.
 $B5" \times 4"$ L.H.
 $5" \times 4" \times \frac{3}{16}"$
 $6" \times 4"$
 $6" \times 4" \times \frac{3}{16}"$ O.J.
 $6" \times 4" \times \frac{1}{4}"$
 $6" \times 4\frac{1}{2}"$
 $A6" \times 4\frac{1}{2}"$ Also L.H.
 $B6" \times 4\frac{1}{2}"$
 $6" \times 4\frac{1}{2}" \times \frac{3}{16}"$
 $6" \times 4\frac{1}{2}" \times \frac{1}{4}"$
 $6" \times 6"$
 $6" \times 6" \times \frac{3}{16}"$
 $\{ 6\frac{1}{4}" \times 5" \times 4\frac{1}{2}"$
 at front

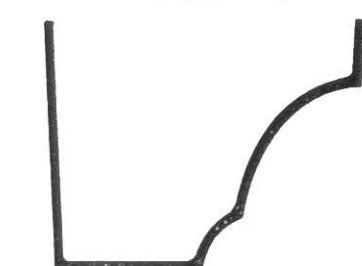
No. 7



SIZE

$5" \times 4\frac{1}{2}"$

No. 7



SIZE

$7\frac{1}{2}" \times 6"$

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

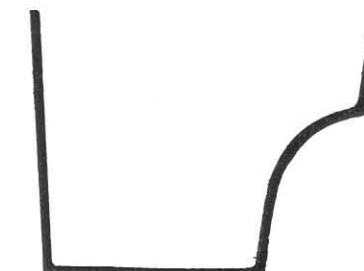
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 8



SIZE

$3" \times 2\frac{1}{8}"$
 $4" \times 2\frac{3}{4}"$
 $4" \times 3" \times \frac{3}{16}"$
 $4\frac{1}{4}" \times 2\frac{3}{4}"$
 $4\frac{1}{2}" \times 3"$
 $4\frac{1}{2}" \times 3" \times \frac{3}{16}"$
 $A4\frac{1}{2}" \times 3" \times \frac{1}{4}"$
 $4\frac{1}{2}" \times 4"$
 $4\frac{3}{4}" \times 3"$
 $4\frac{3}{4}" \times 4"$
 $4\frac{3}{4}" \times 4" \times \frac{1}{4}"$
 $4\frac{7}{8}" \times 4" \times \frac{3}{16}"$
 $5" \times 3\frac{1}{2}"$
 $A5" \times 3\frac{1}{2}" \times \frac{3}{16}"$
 $A5" \times 3\frac{1}{2}" \times \frac{3}{16}"$ O.J.
 $5" \times 4"$
 $A5" \times 4"$
 $5" \times 4" \times \frac{3}{16}"$
 $5" \times 4" \times \frac{1}{4}"$
 $5" \times 5"$
 $5\frac{1}{4}" \times 4"$
 $5\frac{1}{4}" \times 4\frac{1}{4}" \times \frac{3}{16}"$
 $5\frac{1}{2}" \times 3\frac{1}{2}" \times \frac{3}{16}"$
 $5\frac{1}{2}" \times 4"$
 $\{ 5\frac{1}{2}" \times 4\frac{1}{2}" \times 6\frac{1}{2}"$
 at front $\times \frac{3}{16}"$
 $5\frac{3}{4}" \times 3\frac{1}{4}"$

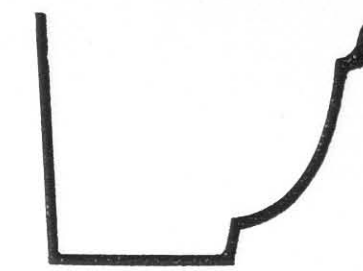
No. 8



SIZE

$6" \times 3\frac{1}{2}" \times \frac{3}{16}"$
 $6" \times 4\frac{3}{4}" \times \frac{1}{4}"$

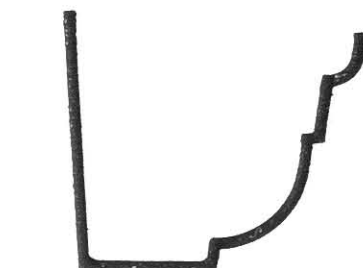
No. 9



SIZE

$5\frac{1}{2}" \times 3\frac{3}{4}"$

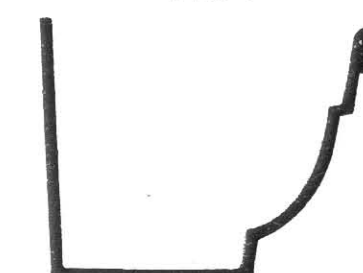
No. 9



SIZE

$5\frac{1}{2}" \times 4\frac{1}{2}"$

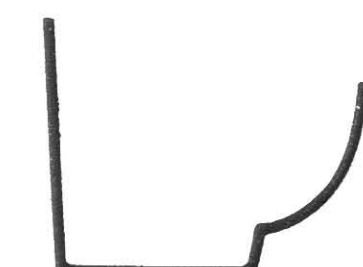
No. 9



SIZE

$5" \times 4\frac{1}{2}" \times \frac{1}{4}"$

No. 9



SIZE

$A4" \times 3"$
 $4\frac{1}{2}" \times 3\frac{1}{2}"$
 $A5" \times 4" \times \frac{3}{16}"$
 $6" \times 4"$
 $6" \times 4"$ O.J.
 $6" \times 4" \times \frac{1}{4}"$
 $6" \times 4" \times \frac{1}{4}"$ O.J.
 $6" \times 5"$
 $6" \times 5" \times \frac{1}{4}"$
 $6" \times 5" \times \frac{1}{4}"$ O.J.
 $6" \times 5" \times \frac{1}{4}"$
 $6" \times 5" \times \frac{1}{4}"$ O.J.
 $6" \times 5" \times \frac{1}{4}"$
 $6" \times 5" \times \frac{1}{4}"$ O.J.
 $6\frac{1}{4}" \times 3\frac{3}{4}"$
 $6\frac{1}{4}" \times 4" \times \frac{1}{4}"$
 $6\frac{1}{4}" \times 4" \times \frac{1}{4}"$ O.J.
 $6\frac{1}{4}" \times 3\frac{1}{2}"$
 $7" \times 4" \times \frac{3}{16}"$
 $7" \times 5\frac{1}{2}"$
 $8" \times 4"$
 $10" \times 6" \times \frac{3}{16}"$

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

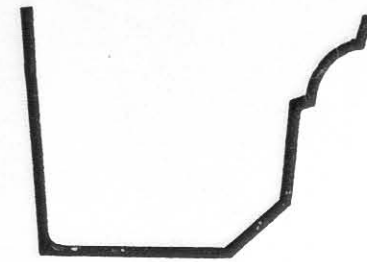
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

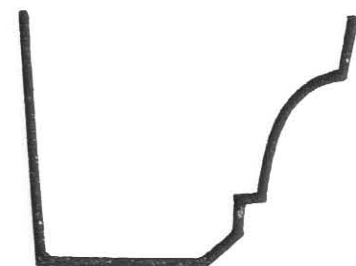
No. 10



SIZE

4" x 3"	6" x 3"
4" x 3" O.J.	6" x 3" O.J.
5" x 2 3/4" O.J.	6" x 3" x 1/4"
5" x 3 1/2"	6" x 4"
A5" x 3 3/4"	6" x 4" x 1/4"
5" x 4"	6" x 4 1/2" x 1/4" O.J.
5" x 4 1/2"	6" x 5"
5 1/4" x 3 1/4" O.J.	7 1/2" x 3 1/2"
5 1/4" x 3 1/4" x 3/16"	7 1/2" x 3 1/2" x 1/4"

No. 10



SIZE

7" x 5" x 1/4"

No. 12



SIZE

5" x 4"
A5" x 4" x 1/4"
5 1/2" x 4 1/2"
7 1/2" x 6 1/2"
7 1/2" x 6 1/2" x 1/4"

No. 12



SIZE

13 1/2" x 5 1/4" x 1/4"

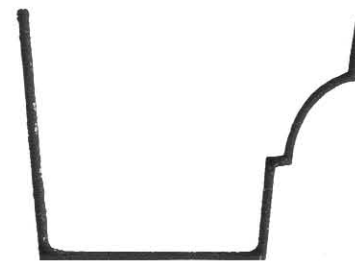
No. 12



SIZE

4 1/2" x 3 3/4" x 3/16"
6 1/4" x 3 1/2" x 3/16"

No. 12



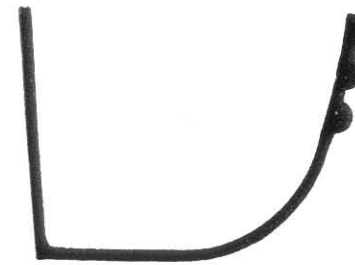
SIZE

4 1/2" x 3 1/2"
4 1/2" x 3 1/2" x 3/16"
B5" x 4" x 3/16"
5 1/2" x 3"

6" x 4 1/2"
6" x 4 1/2" x 3/16"
6" x 4 1/2" x 1/4"
6" x 5" x 3/16"
6 1/4" x 5" x 1/4"
6 3/4" x 5 5/8"

7" x 5"
7" x 5" x 3/16"
8" x 6"
8" x 4 1/2" x 3/16"
10" x 6" x 1/4"
A10" x 6" x 1/4" O.J.
10" x 8" x 1/4"
11 1/2" x 6" x 1/4"

No. 13



SIZE

6 3/4" x 4" x 3/16"

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

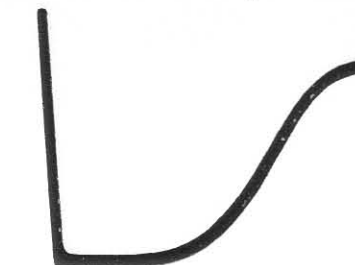
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

DEEP O.G. GUTTERS

With Inside Joints except where marked O.J.

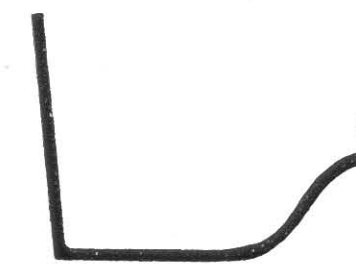
No. 19 Deep O.G.



SIZE

3" x 2 1/8"	5 1/4" x 3 1/4" x 3/16"
3 3/4" x 2 3/4" x 1/4"	5 1/4" x 3 1/2" x 1/4"
4" x 2 1/4" O.J.	5 1/2" x 3" O.J.
4" x 2 3/4" O.J.	5 1/2" x 3 1/2"
C4" x 2 3/4" O.J., L.H.	5 1/2" x 4"
4" x 3"	5 3/4" x 3 3/4" x 3/16"
4" x 3" O.J.	5 3/4" x 5 1/8" x 1/4"
C4" x 3" O.J.	6" x 3" x 3/16" O.J.
4" x 3" x 3/16"	6" x 3 1/2" O.J.
4 1/4" x 2 3/4" O.J.	B6" x 3 1/2"
4 1/2" x 2 1/2" x 3/16"	6" x 4"
4 1/2" x 3" x 3/16"	C6" x 4" O.J.
4 1/2" x 3" O.J.	6" x 4" x 3/16"
4 1/2" x 3" x 3/16" O.J.	B6" x 4" x 3/16" O.J.
4 3/4" x 3" x 3/16"	6" x 4 1/2" O.J.
4 3/4" x 3 1/2" x 3/16" O.J.	6" x 4 1/2" x 3/16"
4 3/4" x 3 3/4" x 1/4"	6" x 4 3/4" x 1/4"
B4 3/4" x 3 3/4" x 3/16"	6" x 5"
4 3/4" x 3 7/8" x 3/16"	6" x 5" O.J.
4 3/4" x 3 7/8" x 1/4"	6" x 5" x 1/4"
5" x 3"	6" x 5 1/2" x 1/6" O.J.
B5" x 3"	6" x 7" x 3/16"
5" x 3" x 3/16" O.J.	6 1/4" x 3 3/4" x 3/16"
5" x 4"	6 1/4" x 4 1/4" x 3/16"
5" x 4" O.J.	6 1/4" x 4 1/2"
D5" x 4" O.J., L.H.	6 1/4" x 5"
5" x 4" x 3/16"	
B5" x 4" L.H.	
C5" x 4" x 3/16"	
5" x 4" x 3/16" O.J.	
5" x 4" x 3 1/4"	
at front x 1/4"	
5" x 5" x 3/16"	

No. 19 Deep O.G.



SIZE

D6" x 4" L.H.

No. 19 (Notts O.G.) O.J.



SIZE

A3" L.H.	A5" L.H.
A4" L.H.	A6" x 4" L.H.
A4 1/2" L.H.	N6" x 4" L.H.
A4 1/2" x 2 3/8"	A 7 1/2" x 5" L.H.
A4 1/2" x 3" L.H.	
N4 1/2" x 3" L.H.	

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

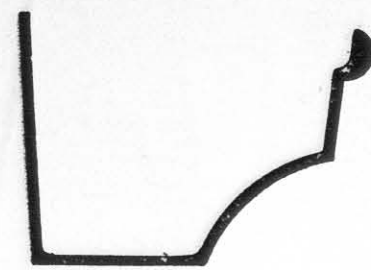
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

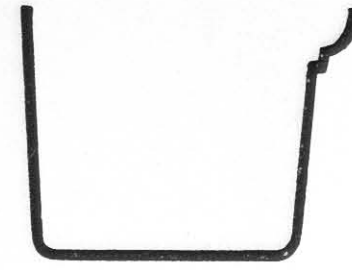
No. 29



SIZE

$4\frac{1}{2}" \times 3"$
 $4\frac{1}{2}" \times 3" \times \frac{1}{4}"$
 $5" \times 4"$
 $5" \times 4" \times \frac{1}{4}"$
 $5" \times 4\frac{1}{2}" \times \frac{1}{4}"$
 at front $\times \frac{3}{16}"$
 $5\frac{1}{2}" \times 4\frac{1}{2}" \times \frac{3}{16}"$
 $5\frac{1}{2}" \times 4\frac{1}{2}" \times \frac{1}{4}"$
 $5\frac{3}{8}" \times 4"$
 $6" \times 3\frac{1}{4}"$ O.J.
 $6" \times 4"$
 $6" \times 4\frac{3}{4}"$
 $7" \times 6"$

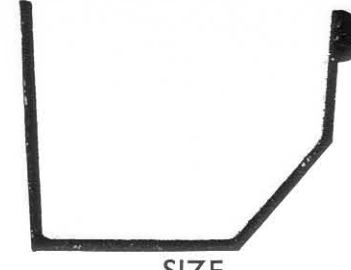
No. 29



SIZE

$4\frac{1}{2}" \times 4" \times \frac{3}{16}"$
 $5" \times 3\frac{3}{4}" \times \frac{3}{16}"$
 $A5" \times 3\frac{3}{4}" \times \frac{3}{16}"$
 $6" \times 5"$
 $6" \times 6" \times \frac{5}{16}"$
 $6" \times 8" \times \frac{3}{16}"$

No. 34



SIZE

$A4" \times 3" \times \frac{3}{16}"$ O.J.
 $4\frac{1}{2}" \times 3\frac{1}{2}" \times \frac{3}{16}"$
 $4\frac{1}{2}" \times 3\frac{1}{2}" \times \frac{1}{4}"$
 $4\frac{1}{2}" \times 3\frac{1}{2}" \times \frac{1}{4}"$ O.J.
 $4\frac{3}{4}" \times 4" \times \frac{3}{16}"$
 $4\frac{3}{4}" \times 4\frac{1}{2}" \times \frac{3}{16}"$ O.J.
 $5\frac{1}{4}" \times 4" \times \frac{3}{16}"$
 $6\frac{1}{4}" \times 5"$
 $6\frac{1}{4}" \times 5" \times \frac{1}{4}"$
 $B6\frac{1}{2}" \times 5" \times \frac{3}{16}"$
 $A6\frac{1}{2}" \times 5" \times \frac{1}{4}"$ O.J.
 $10\frac{1}{2}" \times 5" \times \frac{3}{16}"$

No. 29A



SIZE
 $4\frac{1}{2}" \times 4"$

No. 34

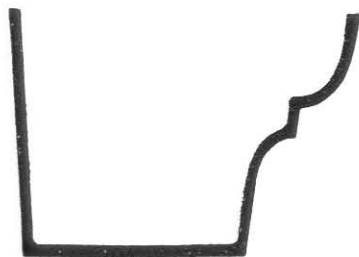


Note.—The following gutters can be used also as Trough Boundary-Wall Gutters. See page 97.

SIZE

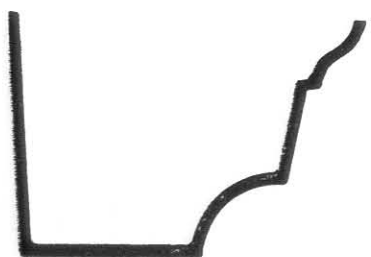
$3" \times 2"$ O.J.
 $4" \times 3"$
 $4" \times 3" \times \frac{3}{16}"$
 $4\frac{1}{2}" \times 3" \times \frac{3}{16}"$ O.J.
 $4\frac{1}{2}" \times 4" \times \frac{3}{16}"$
 $5" \times 3" \times \frac{3}{16}"$
 $5" \times 3" \times \frac{1}{4}"$ O.J.
 $5" \times 4"$
 $5" \times 4\frac{1}{2}" \times \frac{1}{4}"$ O.J.
 $5\frac{1}{2}" \times 3\frac{1}{2}" \times \frac{1}{4}"$
 $5\frac{1}{2}" \times 4\frac{1}{2}" \times \frac{1}{4}"$
 at front $\times \frac{1}{4}"$
 $6" \times 4"$
 $6" \times 4\frac{3}{4}" \times \frac{1}{4}"$
 $6" \times 5"$
 $6\frac{1}{4}" \times 4\frac{3}{4}" \times \frac{3}{16}"$
 $6\frac{1}{2}" \times 5" \times \frac{3}{16}"$
 $7" \times 5"$
 $7" \times 5"$ O.J.
 $7" \times 5" \times \frac{1}{4}"$
 $A7" \times 5" \times \frac{1}{4}"$ O.J.
 $8" \times 7" \times \frac{1}{4}"$
 $9" \times 5" \times 4\frac{1}{2}"$
 at front
 The following Gutters have O.J., L.H. looking at up-right side of Gutter except where marked otherwise
 $9" \times 6" \times \frac{3}{16}"$
 $10\frac{1}{4}" \times 8" \times \frac{1}{4}"$
 $10\frac{1}{2}" \times 8" \times \frac{3}{8}"$ O.J., R.H.
 $11" \times 4\frac{1}{2}" \times \frac{3}{16}"$ I.J., R.H.
 $11" \times 6" \times \frac{1}{4}"$ I.J., R.H.
 $11\frac{3}{4}" \times 6" \times \frac{1}{4}"$ I.J.
 $12" \times 6" \times \frac{3}{16}"$ I.J.
 $12" \times 7" \times \frac{5}{16}"$
 $13\frac{1}{2}" \times 7" \times \frac{1}{4}"$
 $14" \times 5" \times \frac{1}{4}"$
 $14\frac{1}{2}" \times 7" \times \frac{1}{4}"$
 $A16" \times 7" \times 10"$ sole $\times \frac{1}{4}"$
 I.J., R.H.
 $16" \times 7" \times \frac{3}{8}"$ I.J.
 $18" \times 6" \times \frac{5}{16}"$ O.J., R.H.
 $18" \times 9" \times \frac{1}{4}"$
 $21" \times 6" \times 14\frac{1}{2}"$ sole $\times \frac{1}{4}"$
 O.J., R.H.

No. 29A



SIZE
 $5\frac{1}{2}" \times 4\frac{1}{2}"$

No. 29



SIZE
 $5\frac{1}{2}" \times 4\frac{1}{2}" \times \frac{3}{16}"$

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

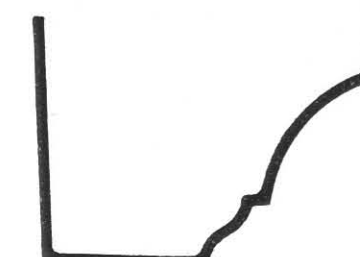
No. 36



SIZE

$4\frac{1}{2}" \times 4"$
 $4\frac{1}{2}" \times 4" \times \frac{1}{4}"$
 $5" \times 3" \times \frac{1}{4}"$
 $5" \times 3\frac{3}{4}" \times \frac{3}{16}"$
 $5\frac{3}{4}" \times 4" \times \frac{1}{4}"$
 $6" \times 5"$
 $6\frac{3}{8}" \times 5"$
 $7" \times 4\frac{1}{2}"$
 $7" \times 6" \times \frac{1}{4}"$

No. 40



SIZE

$4\frac{1}{2}" \times 3\frac{1}{2}"$
 $5" \times 4"$
 $6\frac{1}{2}" \times 4\frac{1}{2}"$
 $7" \times 3\frac{1}{2}"$
 $7\frac{1}{4}" \times 4\frac{1}{4}"$
 $8" \times 6"$
 $9" \times 4\frac{1}{2}"$
 $9" \times 6"$

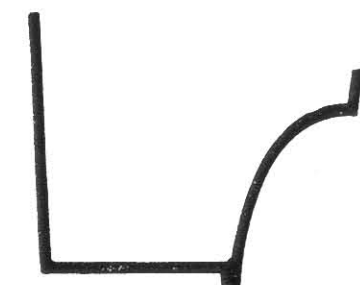
No. 41



SIZE

$4\frac{1}{2}" \times 3"$
 $6" \times 4"$
 $8" \times 5" \times \frac{1}{4}"$
 $8" \times 6"$
 $9" \times 5"$

No. 36



SIZE
 $6\frac{1}{2}" \times 5" \times \frac{1}{4}"$

No. 40



SIZE

$5\frac{1}{4}" \times 3\frac{1}{2}"$
 $5\frac{1}{2}" \times 4\frac{1}{4}" \times 3\frac{3}{4}"$
 at front
 $6\frac{1}{2}" \times 5"$
 $8" \times 5" \times \frac{1}{4}"$

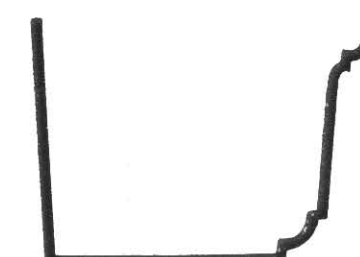
No. 41



SIZE

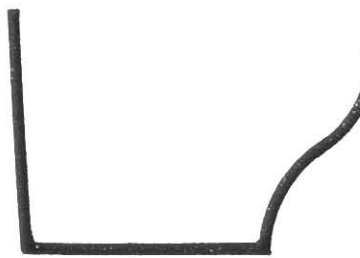
$6\frac{1}{2}" \times 3\frac{3}{4}" \times \frac{1}{4}"$

No. 39



SIZE
 $6\frac{1}{4}" \times 4"$

No. 41



SIZE

$9\frac{1}{2}" \times 6" \times \frac{1}{4}"$ O.J.

No. 41



SIZE

$5" \times 4"$ O.J.

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

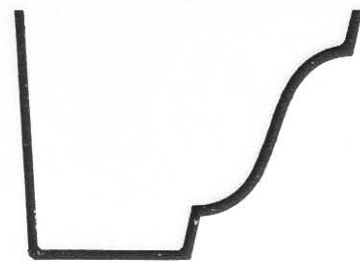
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 42



SIZE

$3\frac{1}{2}'' \times 2''$
 $3\frac{1}{2}'' \times 2''$ O.J., L.H.
 $3\frac{1}{2}'' \times 3''$
 $4'' \times 2\frac{1}{2}''$
 $4'' \times 2\frac{1}{2}''$ O.J.
 $4'' \times 2\frac{1}{2}'' \times \frac{3}{16}''$
 $4'' \times 3''$
 $B4'' \times 3''$ L.H.
 $N4'' \times 3''$ L.H.
 $4'' \times 3'' \times \frac{3}{16}''$
 $4'' \times 3'' \times \frac{3}{16}''$ O.J.
 $4'' \times 3'' \times \frac{1}{4}''$
 $4'' \times 3\frac{1}{2}''$
 $4\frac{1}{2}'' \times 3''$
 $4\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{3}{16}''$
 $C4\frac{1}{2}'' \times 3''$
 $D4\frac{1}{2}'' \times 3''$
 $D4\frac{1}{2}'' \times 3''$ O.J.
 $4\frac{1}{2}'' \times 3'' \times \frac{3}{16}''$
 $4\frac{1}{2}'' \times 3'' \times \frac{1}{4}''$
 $A4\frac{1}{2}'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$ O.J.
 $4\frac{3}{4}'' \times 3''$
 $5'' \times 2\frac{1}{2}''$
 $5'' \times 3''$
 $5'' \times 3'' \times \frac{3}{16}''$
 $5'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$
 $5'' \times 4''$
 $5'' \times 4''$ O.J.
 $A5'' \times 4''$
 $B5'' \times 4''$ L.H.
 $D5'' \times 4''$ L.H.
 $F5'' \times 4''$ L.H.
 $K5'' \times 4''$
 $N5'' \times 4''$ L.H.
 $5'' \times 4'' \times \frac{3}{16}''$
 $5'' \times 4'' \times \frac{3}{16}''$ O.J.
 $\{ 5'' \times 4'' \times \frac{3}{16}''$
 $\{$ O.J., L.H.
 $5'' \times 4'' \times \frac{1}{4}''$ O.J.
 $K5'' \times 4'' \times \frac{1}{4}''$
 $5'' \times 4\frac{1}{2}''$
 $5'' \times 4\frac{1}{2}''$ O.J., L.H.
 $5'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $\{ 5'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $\{$ at front O.J.
 $5\frac{1}{4}'' \times 4\frac{1}{2}'' \times \frac{1}{4}''$
 $5\frac{3}{8}'' \times 4\frac{1}{2}''$ O.J., L.H.
 $5\frac{1}{2}'' \times 4''$
 $5\frac{1}{2}'' \times 4''$ O.J.

$5\frac{1}{2}'' \times 4'' \times \frac{3}{16}''$
 $5\frac{1}{2}'' \times 4\frac{1}{4}'' \times \frac{3}{16}''$
 $5\frac{1}{2}'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $5\frac{3}{4}'' \times 4''$ L.H.
 $B5\frac{3}{4}'' \times 4''$ L.H.
 $6'' \times 3\frac{1}{2}''$
 $6'' \times 3\frac{1}{2}''$ O.J.
 $A6'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$
 $6'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$
 $6'' \times 4''$
 $6'' \times 4''$ O.J.
 $GD6'' \times 4''$ L.H.
 $6'' \times 4'' \times \frac{3}{16}''$
 $C6'' \times 4'' \times \frac{3}{16}''$
 $6'' \times 4'' \times \frac{1}{4}''$
 $6'' \times 4'' \times \frac{3}{8}''$
 $6'' \times 4\frac{1}{2}''$
 $6'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $6'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$ O.J.
 $6'' \times 4\frac{1}{2}'' \times \frac{1}{4}''$
 $6'' \times 4\frac{1}{2}'' \times \frac{1}{4}''$ O.J.
 $6'' \times 4\frac{1}{2}''$ L.H.
 $6'' \times 5''$
 $6'' \times 5''$ O.J., L.H.
 $6'' \times 5\frac{1}{2}'' \times \frac{3}{16}''$
 $6'' \times 5'' \times \frac{3}{16}''$
 $6'' \times 5'' \times \frac{1}{4}''$
 $6'' \times 5\frac{1}{2}''$
 $6'' \times 5\frac{1}{2}'' \times \frac{3}{16}''$ O.J.
 $6'' \times 5\frac{1}{2}'' \times \frac{1}{4}''$ O.J.
 $6'' \times 6'' \times \frac{3}{16}''$ O.J.
 $6\frac{1}{4}'' \times 4\frac{1}{2}''$ O.J.
 $6\frac{1}{4}'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $6\frac{3}{8}'' \times 4'' \times \frac{1}{4}''$
 $6\frac{1}{2}'' \times 4\frac{1}{2}''$
 $A6\frac{1}{2}'' \times 4\frac{1}{2}''$
 $6\frac{1}{2}'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $\{ 6\frac{1}{2}'' \times 5\frac{1}{8}'' \times 4\frac{3}{4}''$
 $\{$ at front
 $6\frac{7}{8}'' \times 5\frac{1}{8}''$
 $6\frac{7}{8}'' \times 5\frac{1}{8}'' \times \frac{3}{16}''$
 $B7'' \times 4''$ L.H.
 $D7'' \times 4''$
 $7'' \times 4\frac{1}{2}''$
 $7'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $A7'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $7'' \times 4\frac{3}{4}'' \times \frac{3}{16}''$ L.H.
 $7'' \times 5''$
 $7'' \times 5''$ O.J.

$7'' \times 5''$ O.J., L.H.
 $7'' \times 5'' \times \frac{3}{16}''$
 $C7'' \times 5'' \times \frac{3}{16}''$
 $7'' \times 5'' \times \frac{1}{4}''$
 $A7'' \times 5'' \times \frac{1}{4}''$ O.J., L.H.
 $B7'' \times 5'' \times \frac{1}{4}''$
 $7'' \times 5\frac{1}{2}'' \times \frac{1}{4}''$ O.J.
 $7'' \times 6''$
 $7'' \times 6'' \times \frac{1}{4}''$
 $7'' \times 8'' \times \frac{1}{4}''$
 $7\frac{1}{4}'' \times 4''$
 $7\frac{1}{4}'' \times 4'' \times \frac{3}{16}''$
 $7\frac{1}{2}'' \times 5'' \times \frac{1}{4}''$
 $7\frac{1}{2}'' \times 5\frac{1}{2}'' \times \frac{1}{4}''$
 $8'' \times 4\frac{1}{2}''$
 $A8'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $8'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$ O.J.
 $8'' \times 4\frac{1}{2}'' \times \frac{1}{4}''$
 $8'' \times 5''$
 $8'' \times 5'' \times \frac{3}{16}''$
 $A8'' \times 5'' \times \frac{3}{16}''$
 $8'' \times 5'' \times \frac{1}{4}''$
 $8'' \times 6''$
 $8'' \times 6''$ O.J.
 $8'' \times 6'' \times \frac{3}{16}''$
 $8'' \times 6'' \times \frac{1}{4}''$
 $8'' \times 6\frac{1}{4}'' \times \frac{3}{16}''$
 $8\frac{1}{8}'' \times 5\frac{1}{2}''$
 $8\frac{3}{8}'' \times 5\frac{1}{2}'' \times \frac{1}{4}''$
 $8\frac{3}{8}'' \times 5\frac{1}{2}''$
 $9'' \times 5\frac{3}{4}'' \times \frac{1}{4}''$
 $9'' \times 6''$
 $9'' \times 6'' \times \frac{3}{16}''$
 $9'' \times 6'' \times \frac{1}{4}''$
 $9'' \times 6'' \times \frac{1}{4}''$ O.J.
 $9'' \times 7'' \times \frac{3}{16}''$
 $9\frac{3}{4}'' \times 6'' \times \frac{1}{4}''$
 $10'' \times 6''$
 $10'' \times 6'' \times \frac{3}{16}''$
 $10'' \times 6'' \times \frac{3}{16}''$ O.J.
 $10'' \times 6'' \times \frac{1}{4}''$
 $10'' \times 7'' \times \frac{1}{4}''$
 $12'' \times 6''$
 $12'' \times 6'' \times \frac{1}{4}''$
 $A12'' \times 6'' \times \frac{1}{4}''$ L.H.
 $12'' \times 6'' \times \frac{3}{8}''$
 $12'' \times 6\frac{1}{2}'' \times \frac{1}{4}''$
 $12'' \times 9'' \times \frac{3}{16}''$

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

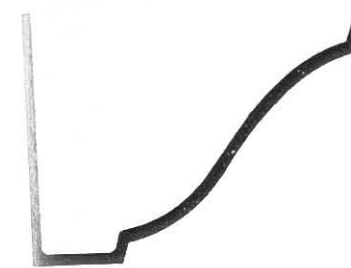
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 42



SIZE

$C4\frac{1}{2}'' \times 3''$
 $4\frac{1}{2}'' \times 3\frac{1}{2}''$
 $4\frac{1}{2}'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$
 $4\frac{1}{2}'' \times 3\frac{1}{2}'' \times \frac{1}{4}''$
 $B6'' \times 4'' \times \frac{3}{16}''$
 $9'' \times 4''$
 $9'' \times 5'' \times \frac{3}{16}''$
 $12'' \times 7\frac{3}{4}''$

No. 42



SIZE

$4'' \times 2\frac{3}{4}'' \times \frac{1}{4}''$
 $A5'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $A6'' \times 4\frac{1}{4}'' \times \frac{1}{4}''$
 $7'' \times 4'' \times \frac{3}{16}''$

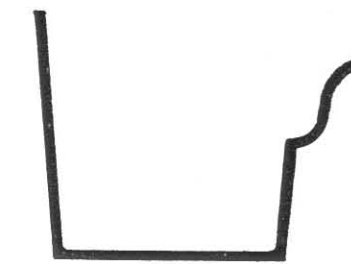
No. 42



SIZE

$A6'' \times 4'' \times \frac{3}{16}''$
 $9\frac{1}{2}'' \times 6''$

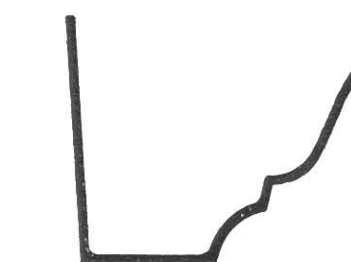
No. 42



SIZE

$A7'' \times 6'' \times \frac{5}{16}''$

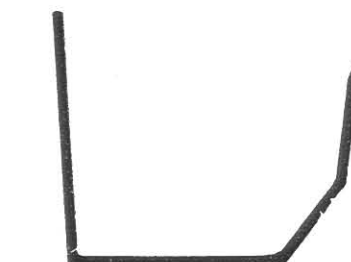
No. 44



SIZE

$4\frac{1}{2}'' \times 3\frac{1}{2}''$
 $4\frac{1}{2}'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$
 $A4\frac{1}{2}'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$ O.J.
 $5'' \times 4''$
 $5\frac{1}{2}'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$
 $5\frac{1}{2}'' \times 3\frac{1}{2}'' \times \frac{1}{4}''$
 $5\frac{1}{2}'' \times 4''$
 $6'' \times 4\frac{1}{2}''$
 $B6'' \times 4\frac{1}{2}''$ L.H.
 $6'' \times 4\frac{1}{2}'' \times \frac{1}{4}''$
 $7'' \times 5'' \times \frac{3}{16}''$
 $7'' \times 5'' \times \frac{1}{4}''$
 $8'' \times 6''$
 $10'' \times 6'' \times \frac{1}{4}''$

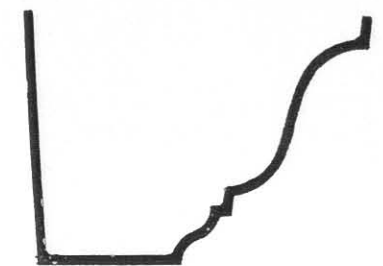
No. 45



SIZE

$4'' \times 3\frac{1}{2}'' \times \frac{3}{16}''$
 $4\frac{1}{2}'' \times 3\frac{1}{2}''$
 $5'' \times 3\frac{1}{4}''$ L.H.
 $5'' \times 3\frac{1}{4}'' \times \frac{1}{4}''$
 $5'' \times 3\frac{3}{4}'' \times \frac{3}{16}''$
 $6'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $6'' \times 4\frac{1}{2}'' \times \frac{1}{4}''$
 $6\frac{1}{2}'' \times 4\frac{1}{2}'' \times \frac{1}{4}''$
 $7'' \times 4\frac{1}{2}'' \times \frac{3}{16}''$
 $8'' \times 6''$
 $8'' \times 6'' \times \frac{1}{4}''$

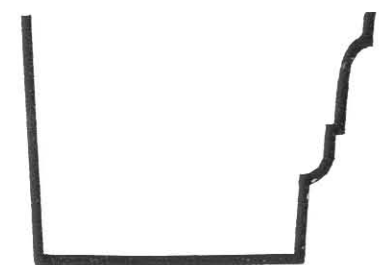
No. 51



SIZE

$6\frac{1}{4}'' \times 4\frac{1}{2}''$
 $6\frac{1}{2}'' \times 5''$

No. 53



SIZE

$5'' \times 4''$
 $6'' \times 5''$
 $6'' \times 5'' \times \frac{3}{16}''$

No. 53



SIZE

$A5'' \times 4''$
 $6'' \times 4''$

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

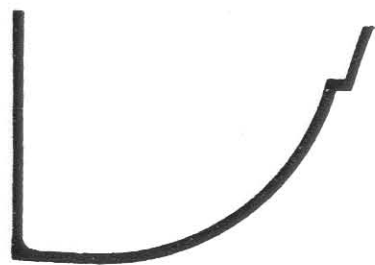
No. 78



SIZE

4" x 2½"
4" x 2½" x ⅜"
A4" x 3" x ⅜"
4½" x 3"
5" x 3" x ⅜"
5" x 5" x ⅜"
5½" x 4" x ⅜"
6½" x 4" x ⅜"
7" x 4" x ⅜"

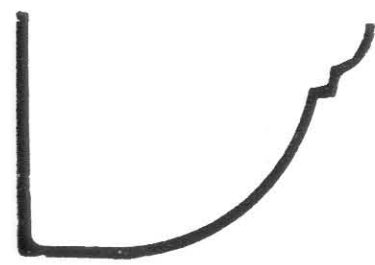
No. 78



SIZE

B4½" x 3" x ¼"
B5" x 3" x ⅜"
6" x 4" x ⅜"
6" x 4" x ¼"
6" x 4½"

No. 78



SIZE
4" x 3"
5" x 4"

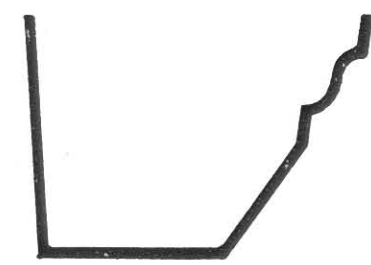
No. 78



SIZE

A4½" x 3" x ⅜"
A5" x 4" x ⅜"

No. 103



SIZE

5¾" x 4½" L.H.
6½" x 5"

No. 215



SIZE

5" x 3"
5" x 3½"
5" x 4" x ⅜"

No. 215



SIZE

A5" x 4" x ⅜"
6" x 5" x ¼"

No. 239



SIZE
6½" x 5"

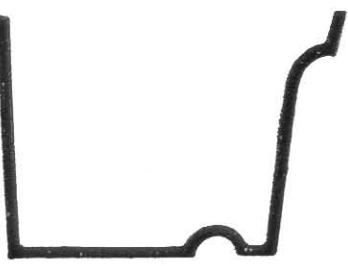
No. 248



SIZE

9½" x 4½"
11" x 5" x ⅜" with
drip on sole

No. 252



SIZE
5½" x 3¾"

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

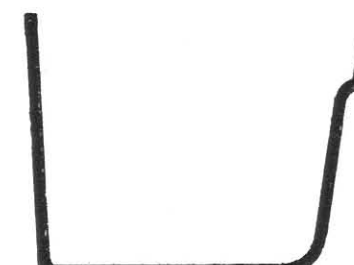
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 270



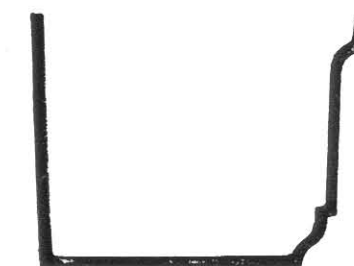
SIZE

6" x 4" x ⅜"

Also No. 270A
5" x 4" x ⅜"

but with square corner

No. 271



SIZE

5" x 4" x ¼"

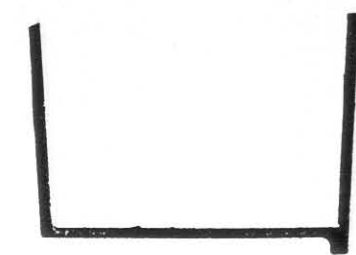
No. 278



SIZE

5" x 4" x ⅜"
6" x 4½" x ¼"
6" x 5" x ⅜"
6½" x 5" x ¼"

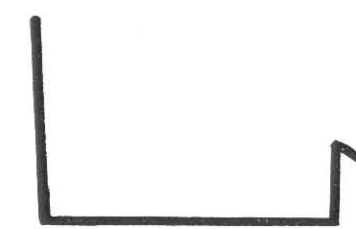
No. 278



SIZE

4½" x 3½" x ⅜"

No. 280



SIZE

6" x 3¾" x ⅜"

No. 287



SIZE

6" x 4" x ⅛"

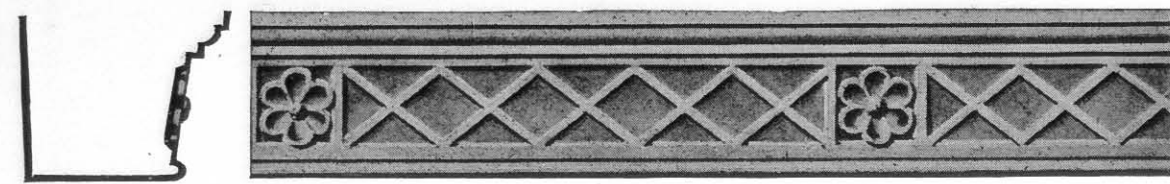
Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

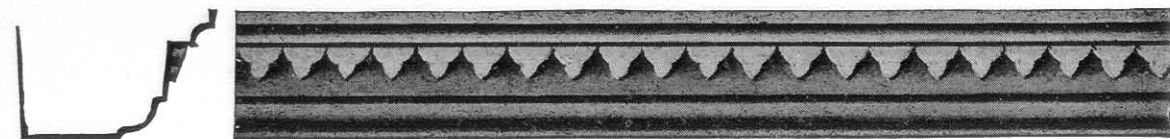
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

ENRICHED GUTTERS

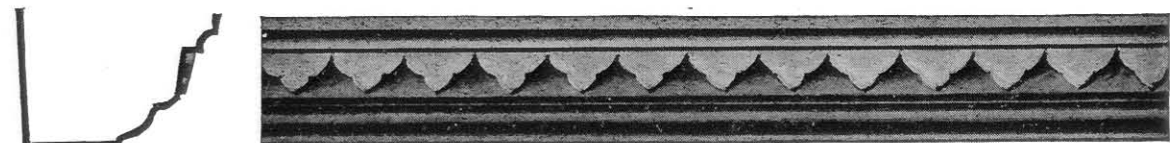
With Inside Joints except where marked O.J.



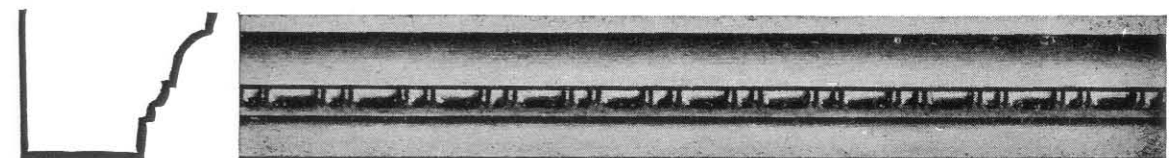
No. 116
6 $\frac{1}{4}$ " x 5"



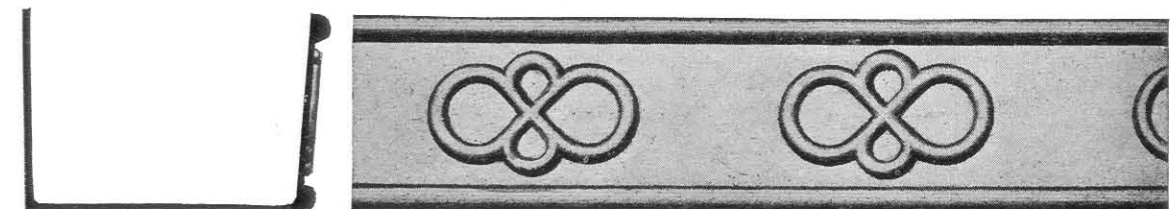
No. 202
6" x 4"
7" x 5"
8" x 5"



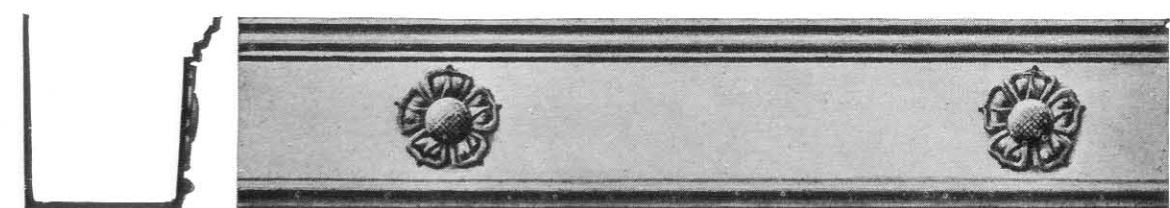
No. 202
A5" x 4" x $\frac{3}{16}$ "
A6" x 4" x $\frac{3}{16}$ "
A8" x 5" x $\frac{3}{16}$ "



No. 246
6" x 4 $\frac{1}{2}$ "



No. 251
9" x 6"



No. 253
6" x 6"

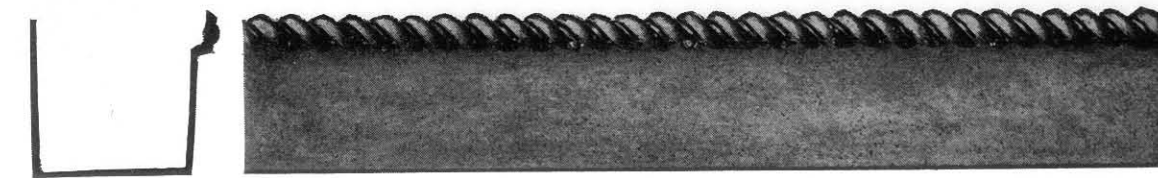
Joints are at Right Hand (except where marked L.H.) looking at front of gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

ENRICHED GUTTERS

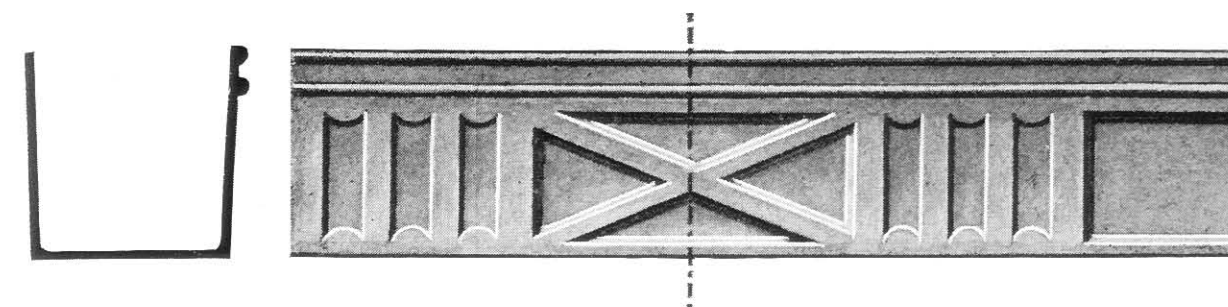
With Inside Joints except where marked O.J.



No. 255
6" x 5" x $\frac{3}{16}$ "



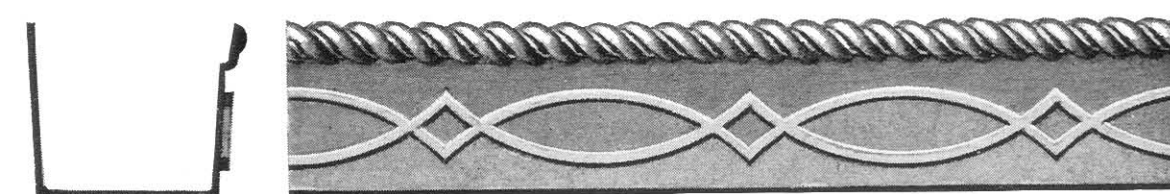
No. 257
6 $\frac{1}{4}$ " x 5" x $\frac{1}{4}$ "



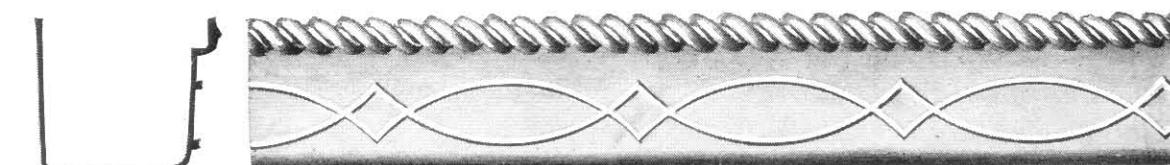
No. 261
6" x 6" x $\frac{1}{4}$ "



No. 264
4" x 4 $\frac{1}{2}$ "



No. 265
6" x 5" x $\frac{3}{16}$ "



No. 266
6" x 5" x $\frac{3}{16}$ "

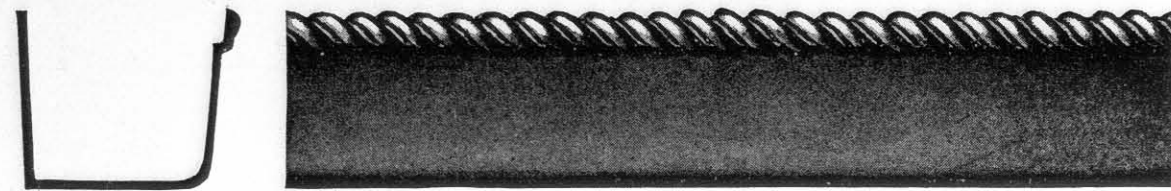
Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

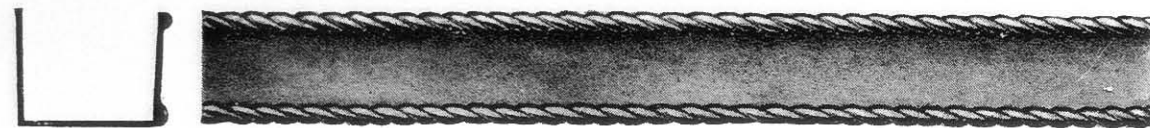
ENRICHED GUTTERS

With Inside Joints except where marked O.J.



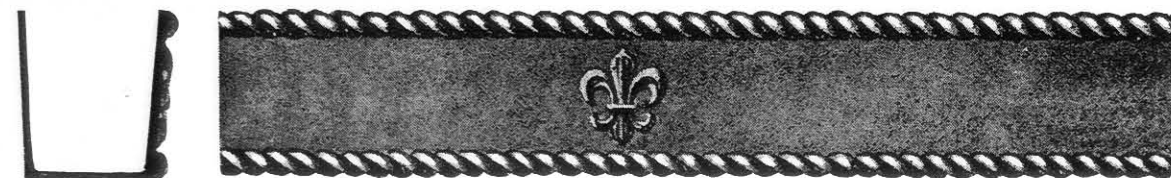
No. 268

6" x 4" x $\frac{3}{16}$ "
6" x 5" x $\frac{3}{16}$ "
7" x 5" x $\frac{1}{4}$ "



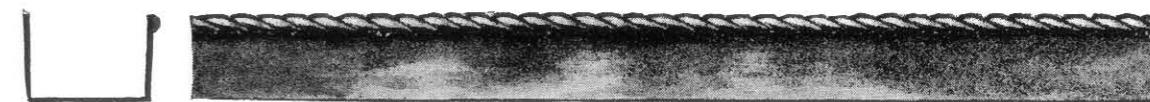
No. 273

4" x 5" x $\frac{3}{16}$ "
5" x 4" x $\frac{3}{16}$ "



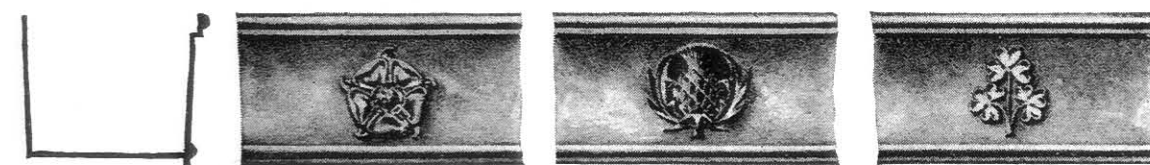
No. 273

F4" x 5" x $\frac{3}{16}$ "



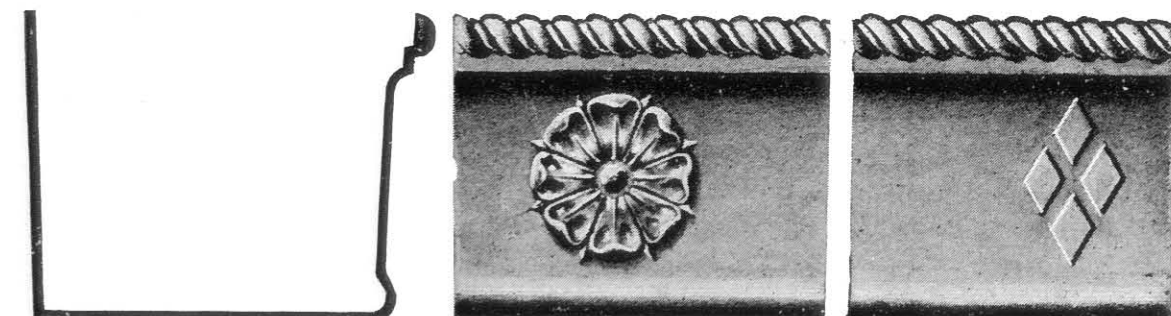
No. 274

4" x 3" x $\frac{3}{16}$ "



No. 275

6 $\frac{1}{4}$ " x 5" x $\frac{1}{4}$ "



No. 276

11 $\frac{3}{4}$ " x 9" x $\frac{1}{4}$ "

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

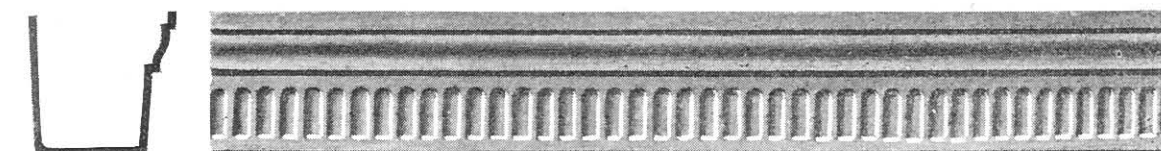
ENRICHED GUTTERS

With Inside Joints except where marked O.J.



No. 277

5" x 4 $\frac{1}{2}$ " x $\frac{3}{16}$ "



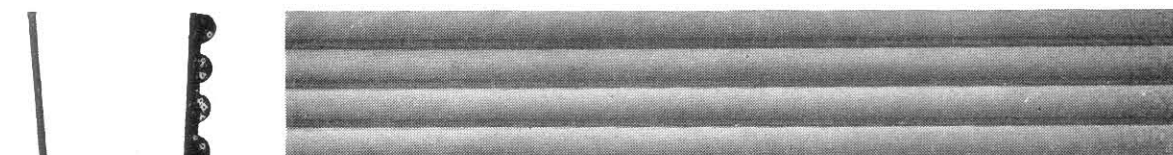
No. 279

4" x 3 $\frac{3}{4}$ " x $\frac{3}{16}$ "



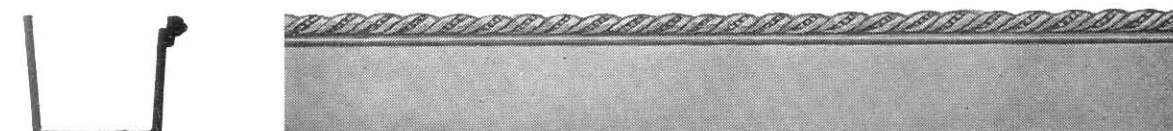
No. 281

5" x 4"



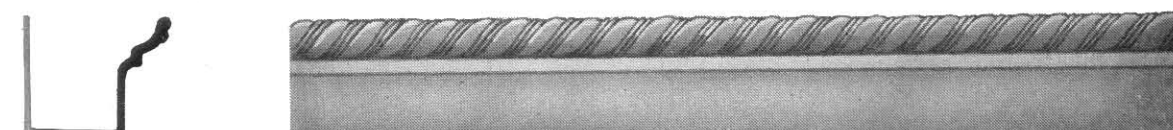
No. 282

5" x 4 $\frac{1}{2}$ " x $\frac{1}{4}$ "



No. 284

5" x 4 $\frac{1}{2}$ " x $\frac{3}{16}$ "



No. 285

10" x 6" x $\frac{1}{4}$ "

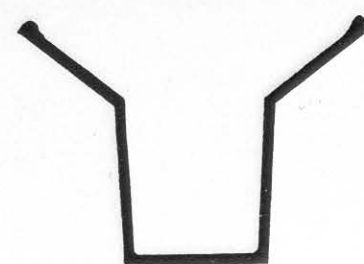
Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

VALLEY AND BOX GUTTERS

With Outside Joints except where marked I.J.



No. 15
Valley Gutter

SIZE
12" x 5½" x 6¾" sole x ⅜"
14" x 7½" x 8" sole x ⅜"
30" x 11½" x 23" sole x ⅜"

Roof
Pitch
37°
32° & 27°
54°

No. 21
Box Gutter



SIZE

4" x 2"
4" x 3"
4" x 3" I.J.
4" x 3" x ⅜" I.J.
4" x 3" x ⅜" I.J.
4" x 4" x ⅜"
4" x 4" x ⅜"
4" x 4" x ⅜"
4" x 6"
4½" x 3"
4½" x 4"
4½" x 4" x ⅜" I.J.
4½" x 4" x ⅜"
4½" x 4½" x ⅜"
4½" x 4½" x ⅜"
A5" x 3"
A5" x 3" x ⅜"
A5" x 3" x ⅜"
5" x 4"
5" x 4" I.J.
5" x 4" x ⅜"
5" x 4" x ⅜"
5" x 5"
5" x 5" x ⅜"
6" x 2"
6" x 3"
6" x 3" x ⅜"
6" x 4"
6" x 4" x ⅜"
6" x 4" x ⅜"
6" x 4½" x ⅜"
6" x 4½" x ⅜"
6" x 4½" x ⅜"
6" x 5"
6" x 5" x ⅜"
6" x 5" x ⅜"
6" x 5½"

6" x 6"
6" x 6" x ⅜"
6" x 6" x ⅜"
6" x 6" x ⅜" I.J.
B7" x 4" x ⅜"
B7" x 4" x ⅜"
7" x 5"
7" x 5" x ⅜"
7" x 5" x ⅜"
7" x 6"
7" x 6" x ⅜"
7" x 6" x ⅜"
7" x 6" x ⅜"
7½" x 3¼" x ⅜" I.J.
8" x 4" x ⅜"
8" x 4" x ⅜"
8" x 5" x ⅜"
8" x 5" x ⅜"
8" x 6" x ⅜"
8" x 6" x ⅜"
8" x 6" x ⅜"
9" x 4" x ⅜"
9" x 4" x ⅜"
9" x 4½" x ⅜"
9" x 5" x ⅜"
9" x 5" x ⅜"
9" x 5" x ⅜"
9" x 6" x ⅜"
9" x 6" x ⅜"
9" x 6" x ⅜" I.J.
9" x 6" x ⅜"
B9" x 6" x ⅜"
10" x 4" x ⅜"
10" x 4" x ⅜"
10" x 4" x ⅜"
10" x 4" x ⅜"
10" x 5" x ⅜"
10" x 5" x ⅜"

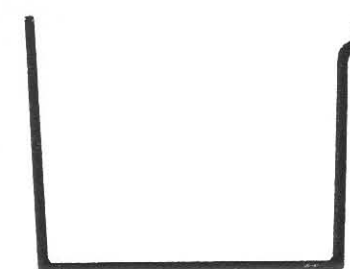
10" x 6" x ⅜"
10" x 6" x ⅜"
10" x 7" x ⅜"
10" x 7½" x ⅜" I.J.
10" x 8" x ⅜"
11" x 5" x ⅜" I.J.
11" x 5" x ⅜"
11" x 5" x ⅜"
11" x 5" x ⅜"
11" x 6" x ⅜"
11" x 6" x ⅜"
11" x 8" x ⅜"
12" x 5" x ⅜"
12" x 5" x ⅜"
12" x 6" x ⅜"
12" x 6" x ⅜"
A12" x 6" x 10" sole x ¼"
12" x 7" x ⅜"
12" x 8" x ⅜"
12" x 9" x ⅜"
12" x 10" x ⅜"
12½" x 4" x ⅜"
13" x 6" x ⅜"
13½" x 8" x ⅜"
14" x 6" x ⅜"
14" x 6" x ⅜"
14" x 7" x ⅜"
14" x 7" x ⅜"
15" x 6" x ⅜"
15" x 6" x ⅜"
16" x 6" x ⅜"
16" x 7" x ⅜"
16½" x 6" x ⅜"
18" x 4½" x ⅜"
18" x 9" x ⅜"
24" x 6" x ⅜"

Full-size sections on application

BOX GUTTERS

With Outside Joints except where marked I.J.

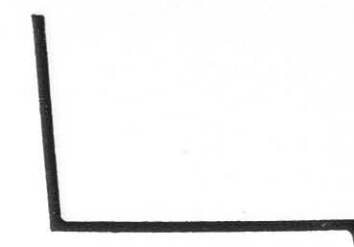
No. 21



SIZE

A4" x 3" I.J.
6½" x 5" x ¼" I.J.
A7" x 4" I.J.

No. 21



SIZE

12" x 6" x ⅜" I.J.
12½" x 6" x ⅜" I.J.
12½" x 6" x ⅜" I.J.

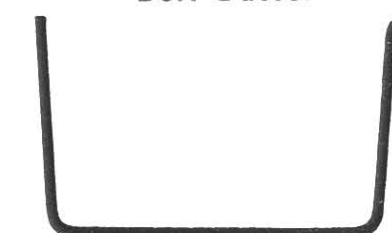
No. 21



SIZE

5" x 3½" x ⅜" I.J.
with 1" drip on sole
A 9" x 6" x ⅜"
A10" x 6" x ⅜" I.J.
A10" x 6" x ⅜" I.J.
13¾" x 6" x ⅜"

No. 21
Box Gutter



SIZE

5" x 3" x ⅜" I.J.
7" x 4" x ⅜"

No. 21



SIZE

A10" x 7" x ⅜"

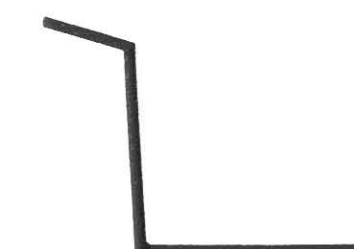
No. 21



SIZE

A6" x 4" x ⅜"
A6" x 4½" x ⅜" I.J.

No. 21



SIZE

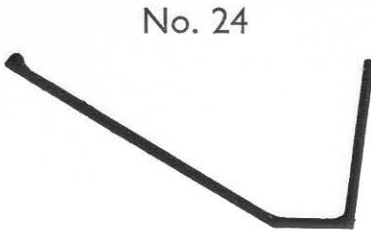
5½" x 3" x ¼" I.J.

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

BOUNDARY-WALL GUTTERS

With Outside Joints except where marked I.J.



SIZE	Roof Pitch	SIZE	Roof Pitch	SIZE	Roof Pitch
6" x 4" x 3 1/2" sole x 1/4"	58°	13" x 5" x 6" sole x 3/16"	35°	17" x 6" x 6" sole x 1/4" I.J.	28°
6 1/2" x 5" x 2 3/4" sole x 1/4"	56°	13" x 5" x 7" sole x 1/4"	40°	17" x 6" x 6" sole x 5/16"	26°
7" x 3 1/2" x 3" sole	41°	13" x 5" x 9" sole x 1/6"	52°	17" x 6" x 10" sole x 1/4"	45°
7" x 4" x 4 1/2" sole	63°	13" x 5" x 9" sole x 5/16"	52°	17" x 7" x 9" sole x 3/16"	43°
7" x 5" x 3 3/4" sole x 3/8"	60°	13" x 6 1/2" x 5" sole x 1/6"	40°	17 1/2" x 5 1/2" x 5 3/4" sole x 1/4"	21°
8" x 4" x 6" sole x 3/16"	64°	13 1/4" x 9" x 7" sole x 3/16"	58°	18" x 5" x 10" sole x 1/4"	32°
8" x 4" x 6" sole x 1/4"	64°	13 3/8" x 6 1/2" x 6 1/4" sole x 1/6"	42°	18" x 6" x 7 3/4" sole x 3/16"	30°
8" x 5" x 5" sole x 3/16"	59°	14" x 4" x 6" sole x 5/16" L.H.	26°	18" x 6" x 7 3/4" sole x 1/4"	30°
8" x 5" x 5" sole x 1/6" I.J.	59°	14" x 4 1/2" x 6" sole x 1/6"	28°	18" x 6" x 9" sole x 3/16"	35°
8 1/4" x 5" x 1 3/4" sole x 1/6"	38°	14" x 5" x 5" sole x 3/16"	26°	18" x 6" x 9" sole x 1/4"	35°
9" x 5 3/4" x 4 1/4" sole x 1/6"	54°	14" x 5" x 5" sole x 1/6"	31°	18" x 6" x 10" sole x 1/4"	37°
9" x 6" x 5 1/2" sole x 3/16"	60°	14" x 5" x 6" sole x 3/16"	31°	18" x 6" x 10" sole x 1/4" L.H.	37°
9 1/4" x 3" x 3" sole x 3/16"	27°	14" x 5" x 6" sole x 1/4"	31°	18" x 6" x 12" sole x 1/4"	50°
9 1/2" x 3" x 3" sole x 3/16"	20°	14" x 5" x 6" sole x 5/16"	31°	18" x 6" x 12" sole x 5/16"	48°
9 1/2" x 5 1/4" x 4 3/4" sole x 1/4"	48°	14" x 5" x 6 1/2" sole x 3/16"	35°	18" x 6" x 14 3/4" sole x 3/16"	61°
10" x 4" x 4 1/4" sole x 3/16"	35°	14" x 5" x 6 1/2" sole x 1/4"	35°	18" x 6" x 14 3/4" sole x 1/4"	61°
10" x 4" x 4 1/4" sole x 1/4"	35°	14" x 5" x 7" sole x 1/4"	36°	18" x 6 1/2" x 11 1/4" sole x 1/4"	46°
10" x 4" x 6" sole x 1/4"	45°	14" x 5" x 8" sole x 1/6" L.H.	40°	18" x 9" x 12" sole x 5/16"	59°
10" x 4 1/2" x 3 3/4" sole x 3/16"	37°	14" x 6" x 8" sole x 3/16"	42°	18 1/2" x 7" x 6 1/2" sole x 1/4"	29°
10" x 4 1/2" x 3 3/4" sole x 1/4"	37°	14" x 6" x 8" sole x 1/4"	42°	19" x 5" x 10 1/2" sole x 1/4"	30°
10" x 5" x 4 3/4" sole x 3/16"	45°	14" x 6" x 8" sole x 5/16"	42°	19" x 5" x 10 1/2" sole x 1/4" L.H.	30°
10" x 5" x 6 1/2" sole x 1/6"	56°	14" x 6" x 8" sole x 1/6"	42°	19" x 6" x 9 1/2" sole x 1/4"	34°
10 3/4" x 6 1/2" x 7" sole x 3/16"	59°	14" x 8" x 5 3/4" sole x 5/16"	45°	19" x 7" x 11" sole x 1/4"	42°
11" x 5" x 6" sole x 1/6"	46°	14" x 8" x 8" sole x 1/4" I.J.	55°	19 1/2" x 6 1/2" x 12 3/4" sole x 5/16"	45°
11 1/2" x 4" x 6" sole x 1/4"	37°	14 1/2" x 6 1/4" x 9" sole x 1/4"	51°	20" x 6" x 11 1/2" sole x 1/4"	35°
12" x 4" x 4 3/4" sole x 3/16"	29°	14 1/2" x 7" x 5 1/4" sole x 5/16"	38°	20" x 6" x 8 1/2" sole x 1/4"	29°
12" x 4 1/2" x 5" sole x 3/16"	34°	14 1/2" x 7" x 6 1/4" sole x 3/16"	34°	20" x 6 1/2" x 12" sole x 1/4"	38°
12" x 5" x 5" sole x 3/16"	36°	15" x 5" x 6" sole x 3/16"	30°	20 1/4" x 7" x 14" sole x 1/4"	49°
12" x 5" x 5" sole x 1/4"	36°	15" x 5" x 9" sole x 1/6"	41°	21" x 6" x 9 1/2" sole x 1/4"	28°
12" x 5" x 6" sole x 3/16"	40°	15" x 5" x 11" sole x 3/16"	53°	21" x 6" x 10" sole x 1/4"	29°
12" x 5" x 6" sole x 1/4"	40°	15" x 5" x 11" sole x 1/4"	53°	21" x 6" x 11 3/4" sole x 1/4"	33°
12" x 5" x 9 1/2" sole x 3/16"	65°	15" x 6" x 9" sole x 3/8"	47°	22" x 6" x 16" sole x 1/4"	45°
12" x 6" x 2 3/4" sole x 1/6"	35°	15 1/4" x 7" x 9" sole x 1/6"	50°	22" x 10 1/4" x 4 3/4" sole x 1/4"	30°
12" x 6" x 2 3/4" sole x 1/4"	35°	15 1/2" x 5 3/4" x 7 3/4" sole x 3/16"	38°	23" x 5" x 12" sole x 1/4"	26°
12" x 6" x 5" sole x 3/16"	40°	15 3/4" x 6" x 8" sole x 1/6"	40°	23" x 6" x 12" sole x 1/4"	29°
12" x 6" x 5" sole x 3/8"	40°	15 3/4" x 6" x 9" sole x 3/16"	45°	23 1/2" x 7" x 8 3/4" sole x 1/4"	25°
12" x 6" x 6" sole x 3/16"	45°	15 3/4" x 6" x 9" sole x 1/4"	45°	24" x 6" x 14 1/4" sole x 1/4"	32°
12" x 6" x 6" sole x 1/2" L.H.	45°	16" x 5" x 5 3/4" sole x 3/16"	25°	24" x 6" x 14 3/4" sole x 3/8"	36°
12" x 8" x 6" sole x 1/4" L.H.	56°	16" x 6" x 6" sole x 3/16"	32°	27" x 7" x 18" sole x 5/16"	38°
12" x 8" x 8 1/2" sole x 1/4"	68°	16" x 6" x 6" sole x 1/4"	32°	27" x 7" x 18" sole x 5/16" I.J.	38°
12 1/2" x 6 1/2" x 5 1/2" sole x 3/8"	42°	16" x 6 1/2" x 8" sole x 3/16" I.J.	35°	28" x 8" x 16" sole x 5/16"	33°
		16" x 7" x 7 3/4" sole x 5/16"	42°		
		16" x 7 1/4" x 7 1/4" sole x 1/4"	40°		
		16 3/4" x 6" x 8" sole x 1/4"	34°		
		16 3/4" x 7 1/4" x 7 1/4" sole x 5/16"	38°		

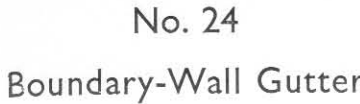
Joints are at Right Hand (except where marked L.H.) looking at upright side of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

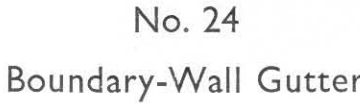
BOUNDARY-WALL AND VALLEY GUTTERS

With Outside Joints except where marked I.J.



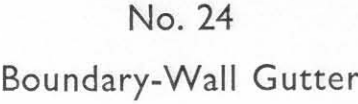
SIZE
6" x 4" x 3" sole x 3/8"

Roof Pitch
52°



SIZE
20 3/4" x 6" x 14 1/4" sole x 1/4"

Roof Pitch
44°



SIZE
A 9" x 6" x 6 1/2" sole x 1/4"
13 1/2" x 6 1/2" x 11" sole x 1/4"

Roof Pitch
68°
71°

No. 34. Trough Boundary-Wall Gutter



SIZE

3" x 2"
4" x 3" I.J.
4" x 3" x 3/16" I.J.
4 1/2" x 3" x 3/16"
4 1/2" x 4" I.J.
4 1/2" x 4" x 3/16" I.J.
5" x 3" I.J.
5" x 3" x 1/4"
5" x 4" I.J.
5" x 4 1/2" x 1/4"
5 1/2" x 3 1/2" x 1/4" I.J.
5 1/2" x 4 1/2" x 4" at front x 1/4" I.J.
6" x 4" I.J.
6" x 4 3/4" x 1/4" I.J.
6" x 5" I.J.
6 1/4" x 4 3/4" x 3/16" I.J.
6 1/2" x 5" x 3/16" I.J.
7" x 5" I.J.
7" x 5"
7" x 5" x 1/4" I.J.
A7" x 5" x 1/4"
8" x 7" x 1/4" I.J.

9" x 5" x 4 1/2" at front I.J.
* 9" x 6" x 3/16" O.J., L.H.
* 10 1/4" x 8" x 1/4" O.J., L.H.
* 10 1/2" x 8" x 3/8" O.J., R.H.
* 11" x 4 1/2" x 3/16" I.J., R.H.
* 11" x 6" x 1/4" I.J., R.H.
* 11 3/4" x 6" x 1/4" I.J., L.H.
* 12" x 6" x 3/16" I.J., L.H.
* 12" x 7" x 5/16" O.J., L.H.
* 13 1/2" x 7" x 1/4" O.J., L.H.
* 14" x 5" x 1/4" O.J., L.H.
* 14 1/2" x 7" x 1/4" O.J., L.H.
* A16" x 7" x 1/4" I.J., R.H.
* 16" x 7" x 5/8" I.J., L.H.
* 18" x 6" x 5/16" O.J., R.H.
* 18" x 9" x 1/4" O.J., L.H.
* 21" x 6" x 14 1/2" sole x 1/4" O.J.
{ R.H.

*These Gutters have O.J., L.H. or R.H. looking at upright side except where marked I.J.

Joints are at Right Hand (except where marked L.H.) looking at front & upright side of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

VALLEY GUTTERS

With Outside Joints except where marked I.J.

No. 31
Valley Gutter



SIZE	Roof Pitch	SIZE	Roof Pitch
9" x 5" x 6" sole x 1/4"	73°	19" x 4" x 5" sole x 1/4"	30°
10" x 4" x 2 1/2" sole x 1/6"	47°	19" x 5" x 5" sole x 1/4"	37°
12" x 3" x 5 3/4" sole x 1/6"	43°	19" x 5" x 5" sole x 1/6"	37°
12" x 3 1/2" x 3" sole x 1/6"	37°	19" x 5" x 7" sole x 1/4"	39°
12" x 3 1/2" x 3" sole x 1/4"	37°	19" x 5" x 7 1/2" sole x 1/4"	39°
12" x 5" x 3 1/2" sole x 1/6"	50°	19" x 5" x 9" sole x 1/4"	45°
12" x 5" x 3 1/2" sole x 1/4"	50°	19" x 5 1/2" x 4 3/4" sole x 1/4"	37°
12" x 6" x 5" sole x 1/4"	60°	19" x 5 3/4" x 8" sole x 1/4"	47°
12" x 6" x 5" sole x 1/6"	63°	19" x 6" x 5" sole x 1/6"	40°
12" x 8" x 4 1/2" sole x 1/6"	65°	19" x 6" x 5 1/4" sole x 1/4"	40°
12 1/2" x 4" x 6 1/4" sole x 1/6"	52°	19" x 6" x 7" sole x 1/4" I.J.	45°
13" x 4 1/2" x 2 1/4" sole x 1/6"	38°	19" x 6 1/4" x 7" sole x 1/4"	46°
13 1/4" x 4 3/4" x 6" sole x 1/4"	53°	20" x 6" x 6 1/2" sole x 1/4"	42°
14" x 4" x 6" sole x 1/4"	45°	20" x 6" x 8" sole x 1/6"	45°
14" x 5" x 6" sole x 1/6"	52°	20" x 6" x 9" sole x 1/6"	47°
14" x 5" x 8 1/4" sole x 1/6"	59°	20" x 6" x 10" sole x 1/4"	50°
14" x 6" x 7" sole x 1/6"	60°	20" x 7" x 16" sole x 1/4"	74°
14" x 6" x 7" sole x 1/4"	60°	20 1/2" x 5 1/2" x 6" sole x 1/4"	35°
14 1/2" x 3 3/4" x 6" sole x 1/4"	38°	20 3/4" x 4" x 5 1/2" sole x 1/4"	29°
15" x 4" x 6" sole x 1/6"	40°	21" x 6" x 9 1/2" sole x 1/4"	47°
15" x 4 1/2" x 6" sole x 1/6"	45°	21" x 6" x 16" sole x 1/4"	66°
15" x 5" x 2" sole x 1/6"	36°	21" x 7" x 13" sole x 1/6"	60°
15" x 5" x 2" sole x 1/4"	36°	21 1/4" x 8" x 9" sole x 1/4"	50°
15" x 5" x 5" sole x 1/6"	45°	21 1/4" x 8" x 9" sole x 1/6"	50°
15" x 5" x 5" sole x 1/4"	45°	21 1/2" x 4 3/4" x 12" sole x 1/6"	44°
15" x 5" x 7" sole x 1/6"	51°	22" x 4" x 3 1/2" sole x 1/6"	25°
15" x 5" x 10 1/4" sole x 1/4"	64°	22" x 5 3/4" x 8" sole x 1/6"	37°
15" x 6" x 8" sole x 1/6"	60°	22" x 6" x 12" sole x 1/4"	50°
15" x 6" x 8" sole x 1/4"	60°	22" x 6 1/2" x 9" sole x 1/4"	44°
16" x 6" x 5" sole x 1/6"	47°	22" x 7" x 8" sole x 1/4"	45°
16" x 6" x 5" sole x 1/4"	47°	22" x 7" x 10" sole x 1/4"	48°
16" x 6" x 9" sole x 1/4"	59°	22" x 7 1/2" x 12" sole x 1/4"	57°
16" x 7" x 8" sole x 1/4"	60°	22 1/4" x 5 1/4" x 14 1/2" sole x 1/6"	52°
16" x 8" x 9 3/4" sole x 1/4"	67°	23" x 5 3/4" x 6" sole x 1/4"	33°
17" x 4 1/2" x 8" sole x 1/6"	45°	24" x 5" x 7" sole x 1/4"	30°
17" x 5" x 10" sole x 1/6"	54°	24" x 5 1/4" x 5" sole x 1/4"	29°
17 1/2" x 4 1/2" x 6" sole x 1/6"	37°	24" x 6" x 6" sole x 1/4"	33°
17 1/2" x 6" x 3" sole x 1/6"	38°	24" x 6" x 6" sole x 1/6"	38°
18" x 4" x 6 1/4" sole x 1/6"	30°	24" x 6" x 8 1/2" sole x 1/4"	36°
18" x 5" x 9" sole x 1/4"	48°	24" x 6" x 10" sole x 1/4"	40°
18" x 5" x 12" sole x 1/4"	59°	24" x 6" x 12" sole x 1/4"	45°
18" x 6" x 3 3/4" sole x 1/4"	40°	24" x 6" x 15" sole x 1/4"	53°
18" x 6" x 5" sole x 1/6"	42°	24" x 6" x 16" sole x 1/6"	55°
18" x 6" x 7" sole x 1/6"	47°	24" x 6 1/2" x 5" sole x 1/4"	33°
18" x 6" x 7 3/4" sole x 1/6"	50°	24" x 6 1/2" x 5" sole x 1/6"	33°
18" x 6" x 8" sole x 1/6"	50°	25" x 7" x 12" sole x 1/4"	48°
18" x 6" x 9" sole x 1/6"	53°	26" x 4 3/4" x 9" sole x 1/4"	30°
18" x 6" x 12" sole x 1/4"	63°	27 1/2" x 7" x 9 1/2" sole x 1/6"	38°
18" x 6 1/2" x 15 3/4" sole x 1/6"	80°	29" x 7" x 6 1/2" sole x 1/6"	32°
		29 1/2" x 7" x 9 1/2" sole x 1/6"	33°
		30" x 6" x 18" sole x 1/6"	44°
		30" x 7" x 15" sole x 1/6"	41°
		30" x 8" x 12" sole x 1/4"	42°
		32 3/4" x 6" x 12" sole x 1/6"	28°

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

NORTH-LIGHT AND TROUGH VALLEY GUTTERS

With Outside Joints except where marked I.J.

No. 35. North-Light Valley Gutter



SIZE	Roof Pitch	SIZE	Roof Pitch
11" x 6" x 6" sole x 1/4"	65° & 70°	15 1/2" x 5" x 6 1/4" sole x 1/4"	37° & 63°
12 1/2" x 5" x 2 1/2" sole x 1/6"	35° & 60°	also L.H.	
13 1/4" x 4 3/4" x 5 1/4" sole x 1/4"	39° & 65°	15 1/2" x 5 1/2" x 9" sole x 1/4"	50° & 69°
14" x 4" x 4 3/4" sole x 1/6"	30° & 60°	15 1/2" x 5 1/2" x 9" sole x 1/6"	50° & 69°
14" x 5" x 8" sole x 1/6"	52° & 65°	15 1/2" x 6" x 4 1/2" sole x 1/4"	39° & 60°
14 1/4" x 5 1/2" x 7" sole x 1/4"	45° & 71°	15 3/4" x 5 3/8" x 6 3/8" sole x 1/6"	36° & 64°
15" x 5" x 5" sole x 1/6"	37° & 59°	16" x 6" x 7 1/8" sole x 1/8"	39° & 75°
15" x 5" x 6" sole x 1/6"	37° & 63°	L.H.	
15" x 5" x 6" sole x 1/4"	37° & 63°	16" x 6" x 9" sole x 1/4"	50° & 70°
15" x 6" x 4 1/4" sole x 1/4"	44° & 59°	17" x 6" x 5 1/2" sole x 1/6"	32° & 67°
		17" x 7" x 9" sole x 1/4"	50° & 69°
		18" x 5" x 6" sole x 1/6"	30° & 60°
		18" x 6" x 5 1/4" sole x 1/6"	31° & 60°
		18" x 6" x 5 1/4" sole x 1/4"	31° & 60°
		18" x 6" x 6" sole x 1/6"	35° & 60°
		18" x 6" x 6 5/8" sole x 1/6"	33° & 66°
		18" x 6" x 6 3/4" sole x 1/6"	37° & 65°
		L.H.	
		18" x 6" x 8" sole x 1/4"	35° & 76°
		18" x 7" x 8" sole x 1/4"	45° & 67°
		18 1/2" x 6" x 6" sole x 1/6"	32° & 59°
		18 1/2" x 6" x 9 1/2" sole x 1/6"	45° & 61°
		19" x 6" x 6" sole x 1/6"	29° & 60°
		I.J.	
		19" x 6" x 7" sole x 1/4"	32° & 69°
		19" x 6 1/4" x 7" sole x 1/4"	37° & 59°
		19" x 7" x 13 1/2" sole x 1/6"	57° & 82°
		20" x 5" x 8" sole x 1/4"	39° & 44°
		20" x 6" x 13" sole x 1/6"	47° & 70°
		20" x 6 1/2" x 5" sole x 1/4"	30° & 61°
		20 1/4" x 6" x 7 1/2" sole x 1/4"	32° & 60°
		20 3/4" x 5 1/2" x 6" sole x 1/4"	29° & 47°
		L.H.	
		21" x 5 1/2" x 10 3/4" sole x 1/4"	38° & 58°
		21" x 5 1/2" x 10 3/4" sole x 1/6"	38° & 58°
		21" x 5 3/4" x 9" sole x 1/4"	30° & 67°
		21" x 6" x 7" sole x 1/4"	29° & 60°
		L.H.	
		21" x 6" x 7 3/4" sole x 1/4"	30° & 60°
		21" x 6" x 7 3/4" sole x 1/6"	30° & 60°
		21" x 6" x 10" sole x 1/4"	34° & 67°
		21" x 6" x 12" sole x 1/6"	45° & 67°
		21 1/2" x 5 1/2" x 7" sole x 1/4"	32° & 41°
		21 1/2" x 6" x 8 1/4" sole x 1/4"	30° & 60°

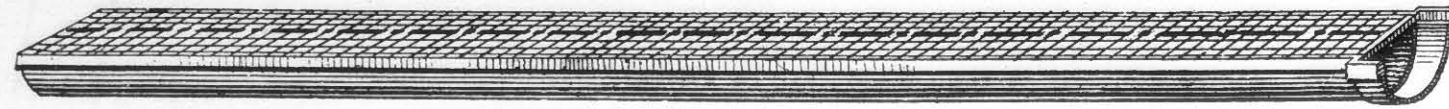
Joints are at Right Hand (except where marked L.H.) looking at steep side of Gutters

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

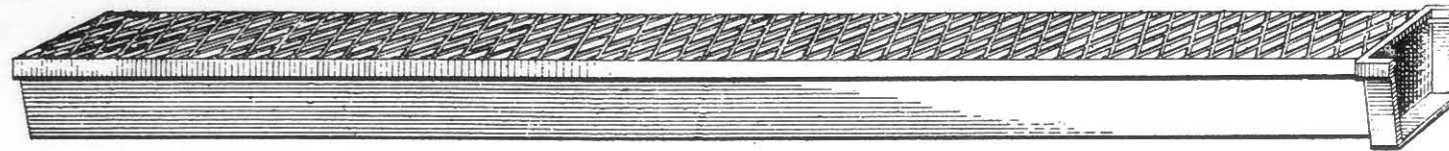
PAVEMENT GUTTERS

No. 1. With Perforated Cover, Loose or Fixed



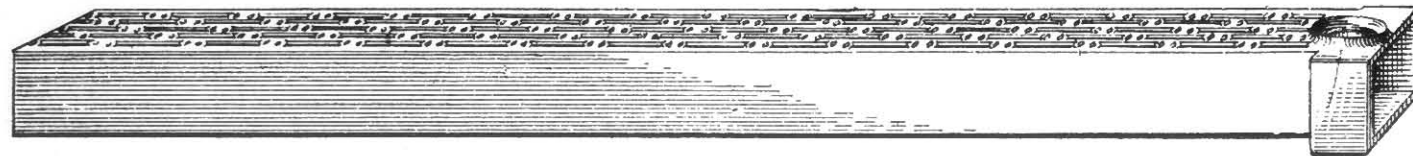
4" x 2½" x ⅝" Thick. Cover ½" Thick
and 6" x 3" x ⅝" Thick. Cover 1" Thick (maximum)

No. 2. With Solid Cover, Loose or Fixed



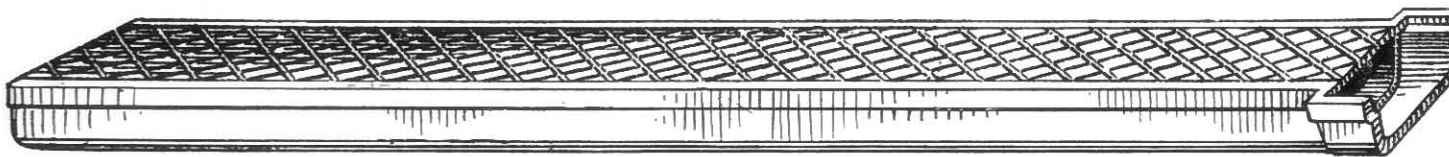
5" x 4" x ¼" Thick. Cover ⅝" Thick

No. 3. Cast with Solid Top



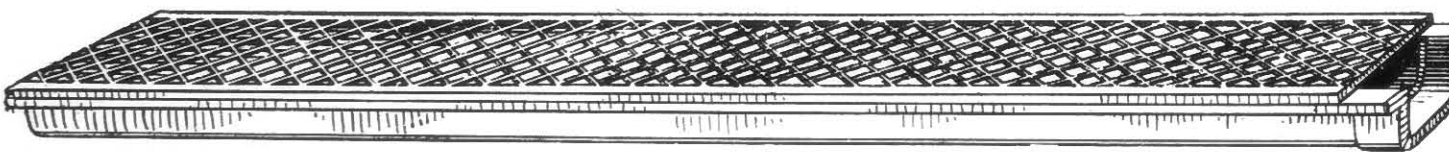
3" x 3" x ¼" Thick and 4½" x 3½" x ⅝" Thick
Top ⅞" over Roughening

No. 4. With Solid Cover, Loose or Fixed



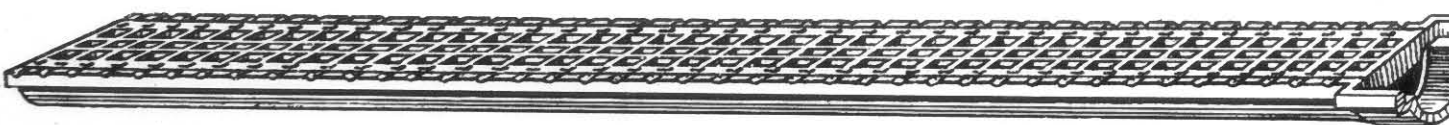
6½" x 2¾" x ¼" Thick. Cover ⅞" Thick

No. 5. With Solid Cover, Loose or Fixed



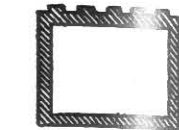
7" x 2½" x ¼" Thick. Cover ¼" Thick over Chequer

No. 6. With Heavy Perforated Cover, Loose or Fixed



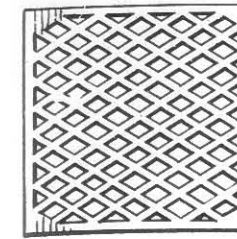
6" x 3" x ⅝" Thick. Cover 1" Thick

SECTIONS



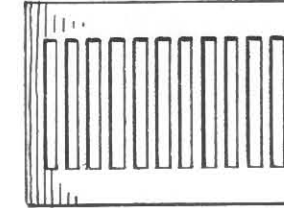
VENTILATING GRATINGS AND PANELS

No. 8



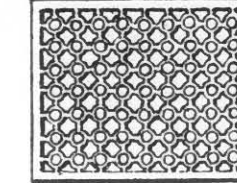
9" x 4½" x ⅛" Thick
9" x 6" x ⅛" Thick
10" x 5" x ⅛" Thick
10" x 10" x ⅛" Thick

No. 9



8" x 6" x ⅜" Thick
9" x 4" x ¼" Thick
10" x 6½" x ¼" Thick
12" x 4" x ¼" Thick
12" x 9" x ½" Thick

No. 15



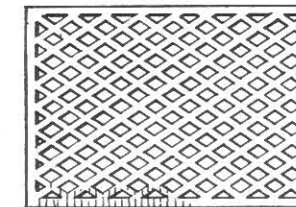
6" x 6" x ¼" Thick
9" x 3" x ¼" Thick
9" x 4" x ¼" Thick
9" x 6" x ¼" Thick
10" x 8" x ¼" Thick
11" x 11" x ¼" Thick
12" x 3" x ¼" Thick
12" x 6" x ¼" Thick
12" x 8" x ¼" Thick
12" x 12" x ¼" Thick
14" x 7" x ¼" Thick
18" x 12" x ¼" Thick
18" x 18" x ¼" Thick

No. 35



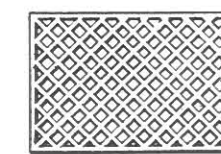
5½" x 5½" x ½" Thick
8" x 8" x ½" Thick

No. 33



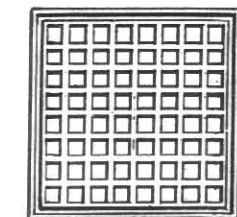
7" x 7" x ¼" Thick
8" x 8" x ¼" Thick
10" x 6" x ¼" Thick
12" x 8" x ¼" Thick
12" x 9" x ⅝" Thick
12" x 12" x ⅝" Thick
13" x 7" x ⅝" Thick
13" x 9" x ⅝" Thick
14" x 8" x ⅝" Thick
21" x 12" x ⅝" Thick
23" x 16" x ⅝" Thick

No. 36



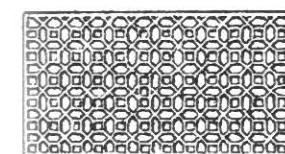
6" x 4" x ¼" Thick
6" x 6" x ¼" Thick
9" x 3" x ¼" Thick
9" x 4½" x ¼" Thick
9" x 6" x ¼" Thick
9" x 9" x ¼" Thick
12" x 6" x ¼" Thick
15½" x 5½" x ⅝" Thick

No. 46



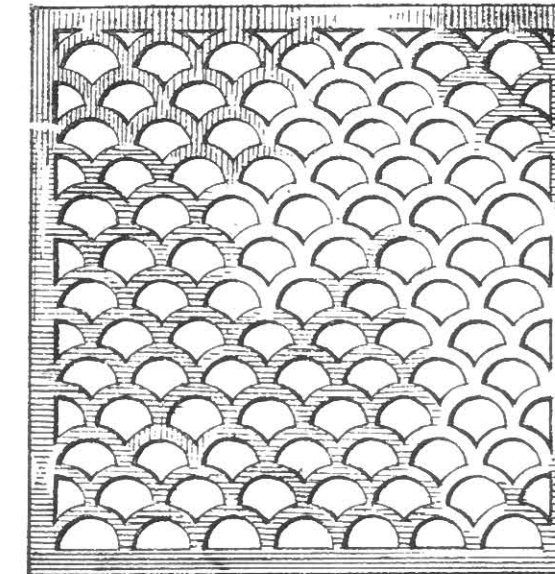
6" x 6" x ½" Thick
9" x 6" x ½" Thick
9" x 6" x 1" Thick
9" x 9" x ½" Thick
12" x 6" x ½" Thick
12" x 7" x ½" Thick
12" x 9" x ⅝" Thick
12" x 9" x 1" Thick
12" x 12" x ½" Thick
14" x 7" x ½" Thick
14" x 10" x 1" Thick
14" x 14" x ½" Thick
15" x 7" x ½" Thick
15" x 12" x ½" Thick
17" x 15" x ½" Thick
18" x 12" x ½" Thick
24" x 12" x ½" Thick
36" x 15" x ⅝" Thick

No. 45



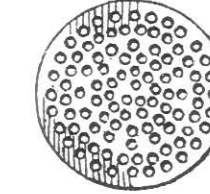
5" x 5" x ¼" Thick
6" x 6" x ¼" Thick
9" x 3¾" x ⅝" Thick
9" x 6" x ⅝" Thick
12" x 2½" x ⅝" Thick
12" x 6" x ⅝" Thick
13½" x 8½" x ⅝" Thick
14" x 3½" x ⅝" Thick
14" x 6" x ⅝" Thick
14" x 7" x ⅝" Thick

No. 47



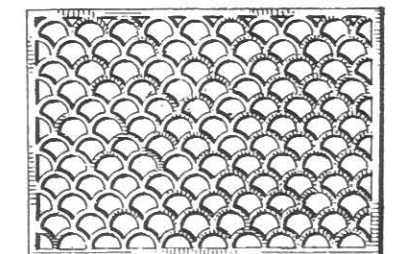
23½" x 25" x ⅝" Thick

No. 76



Diam.	Thick
3"	x ½"
3⅞"	x ⅞"
4"	x ⅞"
5"	x 1½"
6"	x 1½"
6"	x 1½"
6½"	x 1½"
7"	x 1½"
7½"	x 1½"
8"	x 1½"
9"	x 1½"
9"	x 1½"

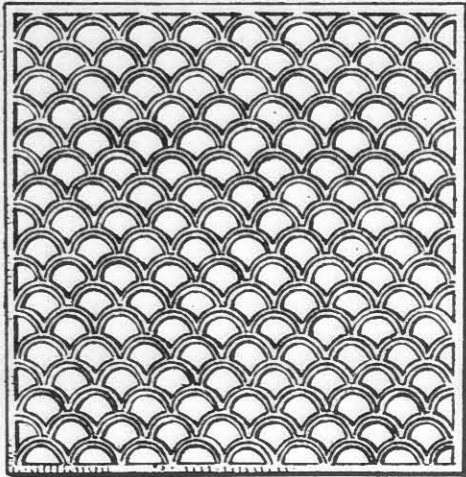
No. 84



15" x 7" x ⅝" Thick
15" x 9" x ⅝" Thick
16" x 11" x ⅝" Thick
19" x 31" x ⅝" Thick
21" x 17" x ⅝" Thick

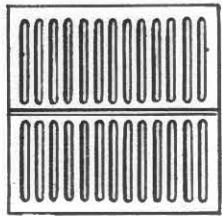
VENTILATING GRATINGS AND PANELS

No. 85



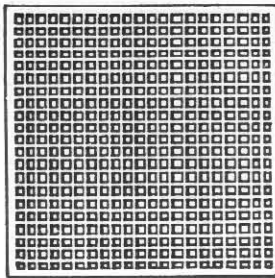
20½" x 20¾" x ⅜" Thick

No. 95



9" x 9" x ¼" Thick

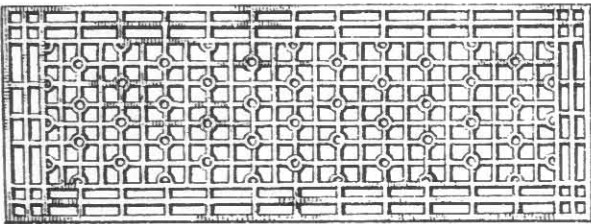
No. 96



6" x 4"	9" x 4½"	12" x 6"
6" x 6"	9" x 6"	12" x 8"
7" x 7"	9" x 8"	12" x 9"
8" x 6"	9" x 9"	12" x 10"
8" x 7"	10" x 4"	12" x 12"
8" x 8"	10" x 6"	14" x 10"
9" x 3"	10" x 8"	18" x 6"
9" x 3½"	10" x 10"	18" x 12"
9" x 4"	12" x 4"	18" x 18"

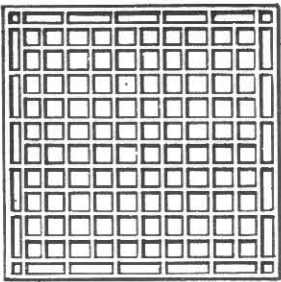
All ⅝" Thick

No. 147



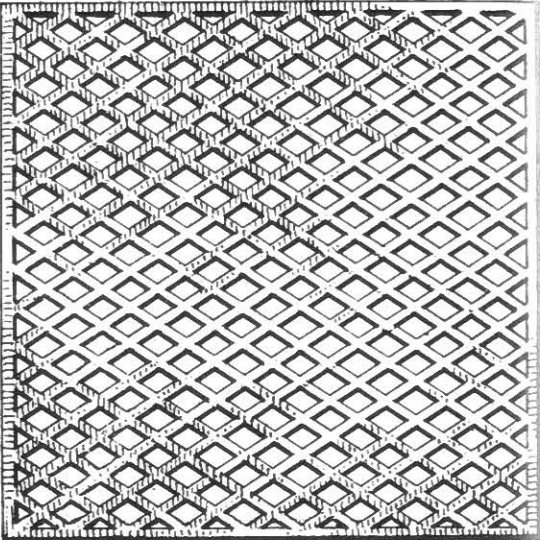
34" x 12½" x ⅞" Thick

No. 141



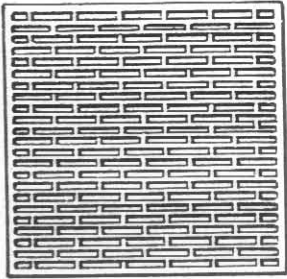
9" x 9" 12" x 12"
12" x 8½" 22" x 12"
All ½" Thick

No. 248



23½" x 23½" x ½" Thick

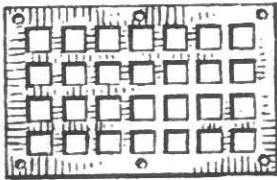
No. 622



6" x 3"	9" x 9"	12" x 9"
6" x 4"	10" x 4"	12" x 12"
6" x 6"	10" x 6"	14" x 10"
8" x 6"	10" x 10"	18" x 6"
9" x 4"	12" x 3"	18" x 12"
9" x 6"	12" x 4"	18" x 18"
9" x 8"	12" x 6"	

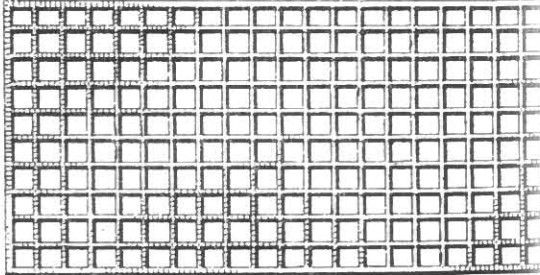
All ⅝" Thick

No. 652



12" x 7" x ¼" Thick

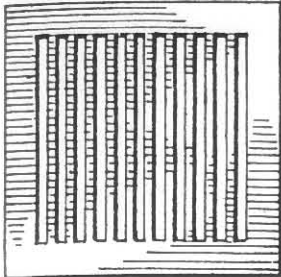
No. 651



17½" x 11½" x ⅜" Thick
22" x 12½" x ½" Thick
24" x 12" x ½" Thick

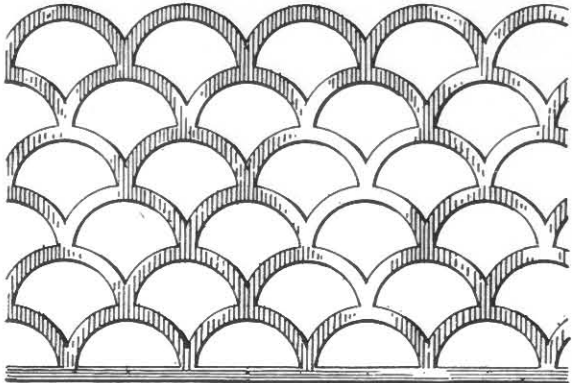
VENTILATING GRATINGS AND PANELS

No. 677



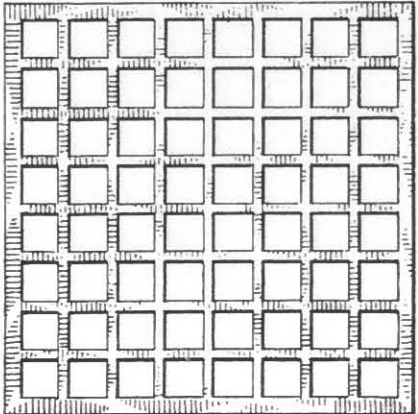
12" x 12" x ½" Thick

No. 718



Up to 44½" x 30¼" x ¾" Thick

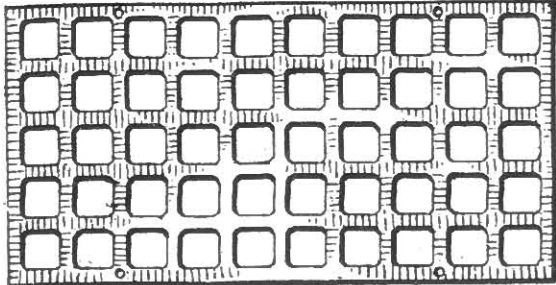
No. 724



24" x 24" x ½" Thick

No. 726

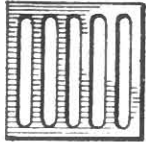
Double Grating for Mosquito Gauze



23½" x 13" x ½" Thick

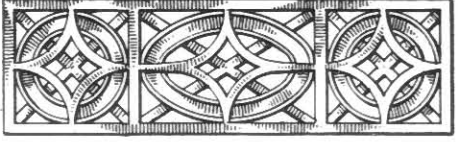
Inner Grating Detachable for Removal of Gauze

No. 819



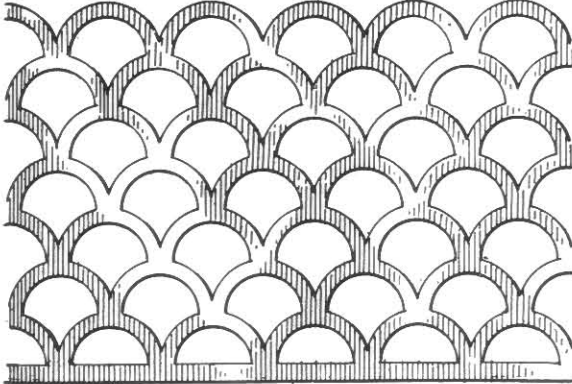
6" x 6" x ⅝" Thick
9" x 9" x ⅝" Thick

No. 844



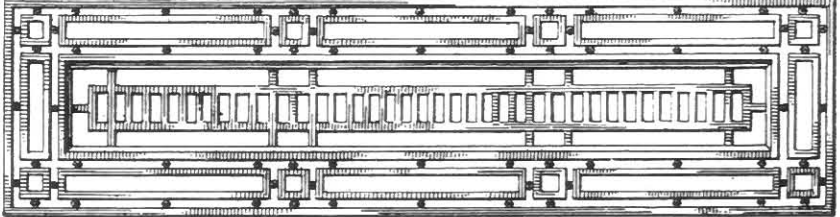
26¼" x 8" x ½" Thick

No. 787



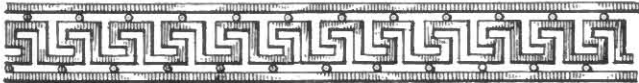
Up to 62" x 23¼" x ⅝" Thick

No. 795



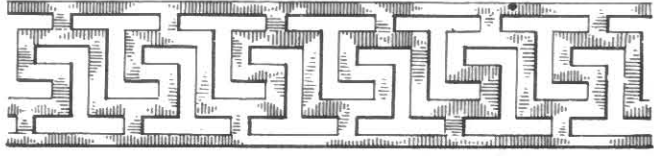
48¾" x 13" x ¾" Thick

No. 810



4½" x ⅜" Thick

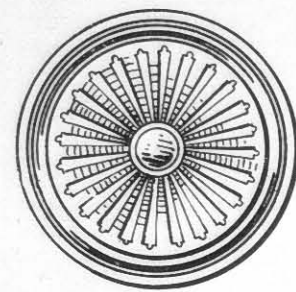
No. 867



8½" x ¼" Thick

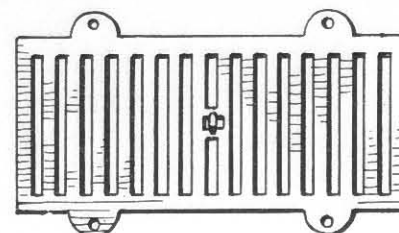
VENTILATING GRATINGS WITH MOVABLE BACK PLATES

No. 12



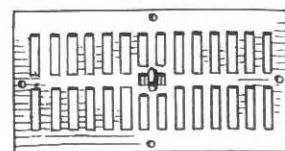
6" and 12" Diam.
 $\frac{3}{16}$ " Thick

No. 16



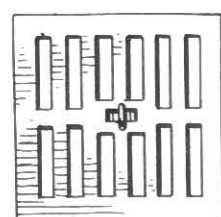
9" x 6" x $\frac{1}{2}$ " Thick
12" x 8" x $\frac{1}{2}$ " Thick
13 $\frac{3}{4}$ " x 10" x $\frac{1}{2}$ " Thick
14" x 9" x $\frac{1}{2}$ " Thick
15 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ " x $\frac{1}{2}$ " Thick
18" x 7 $\frac{1}{2}$ " x $\frac{1}{2}$ " Thick
18" x 10" x $\frac{1}{2}$ " Thick
24" x 10" x $\frac{1}{2}$ " Thick

No. 70



9" x 5" x $\frac{1}{4}$ " Thick
9" x 6" x $\frac{1}{4}$ " Thick
12" x 6" x $\frac{1}{4}$ " Thick
14" x 6" x $\frac{1}{4}$ " Thick

No. 72



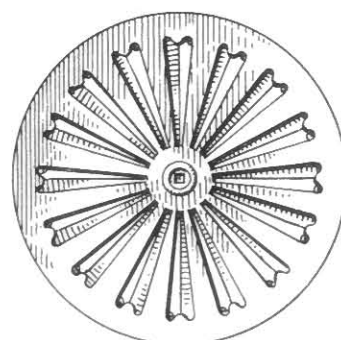
5" x 5" x $\frac{5}{16}$ " Thick
6" x 6" x $\frac{5}{16}$ " Thick
7" x 7" x $\frac{5}{16}$ " Thick
9" x 9" x $\frac{5}{16}$ " Thick
11" x 11" x $\frac{5}{16}$ " Thick

No. 94



9" Diam. x $\frac{3}{16}$ " Thick
22" Diam. x $\frac{5}{16}$ " Thick

No. 803
Movable Back Plate



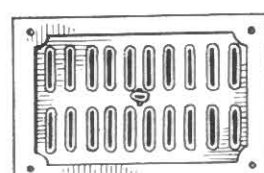
17" Diam.
Fixed Plate $\frac{3}{8}$ " Thick
Movable Plate $\frac{5}{16}$ " Thick

No. 143



10" x 4" x $\frac{1}{4}$ " Thick

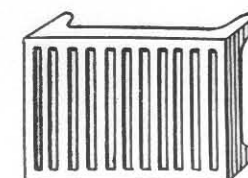
No. 585



11 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick

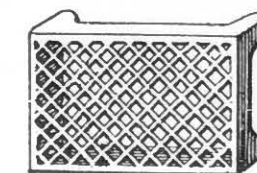
AIR BRICKS

No. 2



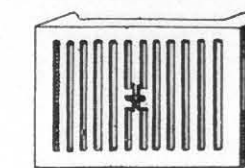
4 $\frac{1}{2}$ " x 3" x 2" x $\frac{1}{4}$ " Thick
9" x 3" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 3 $\frac{1}{2}$ " x 2 $\frac{3}{4}$ " x $\frac{1}{4}$ " Thick
9" x 4" x 2 $\frac{3}{8}$ " x $\frac{3}{16}$ " Thick
9" x 6" x 2 $\frac{1}{2}$ " x $\frac{5}{16}$ " Thick
9" x 6 $\frac{1}{2}$ " x 3" x $\frac{5}{16}$ " Thick
12" x 6" x 2 $\frac{3}{4}$ " x $\frac{1}{4}$ " Thick
12" x 6 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x $\frac{3}{16}$ " Thick
13 $\frac{1}{2}$ " x 9" x 3" x $\frac{5}{16}$ " Thick
14" x 3 $\frac{1}{2}$ " x 2 $\frac{3}{4}$ " x $\frac{3}{16}$ " Thick

No. 3



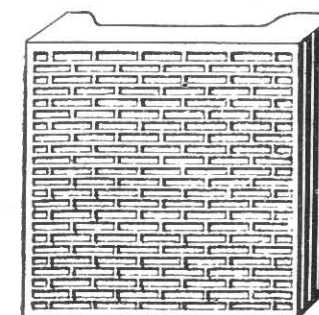
6" x 6" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 3" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 6" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 6 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 9" x 2 $\frac{3}{4}$ " x $\frac{5}{16}$ " Thick
12" x 6 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
12" x 12" x 2" x $\frac{5}{16}$ " Thick
16" x 9" x 2 $\frac{3}{4}$ " x $\frac{5}{16}$ " Thick

No. 4
Movable Back Plate



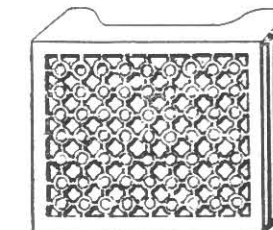
6" x 3" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 3" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 4" x 2 $\frac{1}{4}$ " x $\frac{3}{16}$ " Thick
9" x 6" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
9" x 9" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
12" x 6" x 2 $\frac{3}{4}$ " x $\frac{3}{16}$ " Thick
12" x 8" x 2 $\frac{3}{4}$ " x $\frac{3}{16}$ " Thick
12" x 9" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
12" x 12" x 3" x $\frac{3}{8}$ " Thick
14" x 10 $\frac{1}{4}$ " x 3" x $\frac{3}{8}$ " Thick
24" x 9" x 2 $\frac{1}{2}$ " x $\frac{5}{16}$ " Thick

No. 22



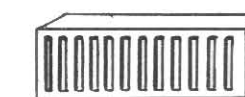
9" x 3" x 2 $\frac{1}{2}$ "
9" x 9" x 2 $\frac{1}{2}$ "
12" x 6" x 2 $\frac{1}{2}$ "
12" x 9" x 2 $\frac{1}{2}$ "
12" x 12" x 2 $\frac{1}{2}$ "
All $\frac{5}{16}$ " Thick

No. 23



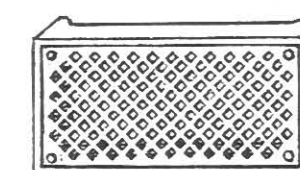
10" x 8" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick

No. 30



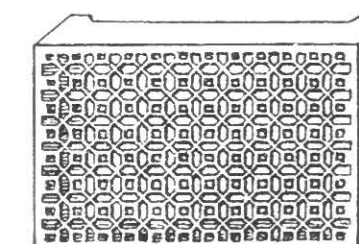
3" x 3" x 3" x $\frac{3}{8}$ " Thick
9" x 3" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick

No. 71
Front can be taken out



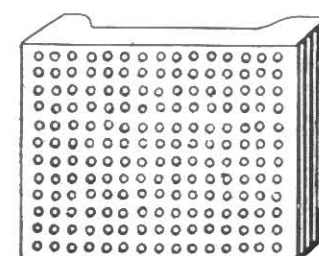
9" x 6" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick
12" x 6" x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Thick

No. 55



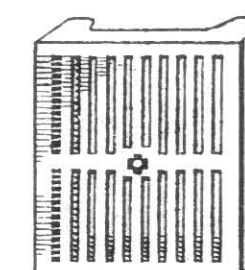
9" x 6" x 2 $\frac{1}{2}$ " x $\frac{5}{16}$ " Thick
9" x 6 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x $\frac{5}{16}$ " Thick
12" x 6" x 3" x $\frac{5}{16}$ " Thick
14" x 3 $\frac{1}{2}$ " x 2 $\frac{3}{4}$ " x $\frac{1}{4}$ " Thick
14" x 7" x 2 $\frac{3}{4}$ " x $\frac{1}{4}$ " Thick
14" x 7 $\frac{1}{2}$ " x 2 $\frac{3}{4}$ " x $\frac{1}{4}$ " Thick
14" x 9" x 2 $\frac{3}{4}$ " x $\frac{3}{8}$ " Thick
14 $\frac{1}{2}$ " x 5 $\frac{3}{4}$ " x 3" x $\frac{5}{16}$ " Thick

No. 34



12" x 9" x 2 $\frac{1}{2}$ " x $\frac{5}{16}$ " Thick
12" x 12" x 2 $\frac{1}{2}$ " x $\frac{5}{16}$ " Thick

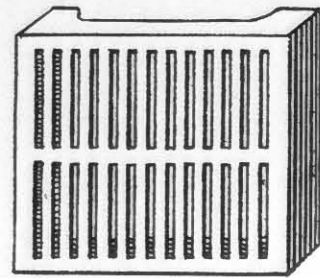
No. 97
Movable Back Plate



10 $\frac{1}{2}$ " x 9" x 2 $\frac{3}{4}$ " x $\frac{1}{4}$ " Thick

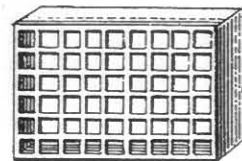
AIR BRICKS

No. 98



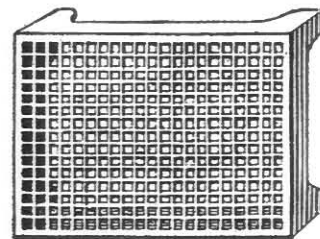
9" x 9" x 2 3/4" x 1/4" Thick
12" x 10 1/2" x 2 3/4" x 3/16" Thick
18" x 10 1/2" x 2 3/4" x 3/16" Thick

No. 123



6" x 6" x 1 1/2" x 3/8" Thick
9" x 3" x 1 1/2" x 3/8" Thick
9" x 6" x 1 1/2" x 3/8" Thick
12" x 6" x 1 1/2" x 3/8" Thick
12" x 12" x 1 1/2" x 3/8" Thick
14" x 6 1/2" x 1 1/2" x 3/8" Thick
14" x 9" x 1 1/2" x 3/8" Thick
14" x 10" x 1 1/2" x 3/8" Thick
24" x 12" x 1 1/2" x 3/8" Thick

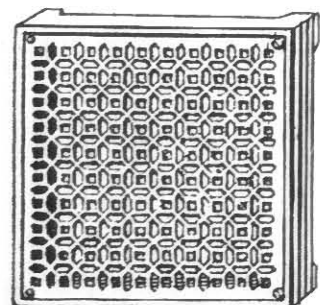
No. 590



12" x 9" x 3" x 5/16" Thick
16" x 9" x 3" x 5/16" Thick

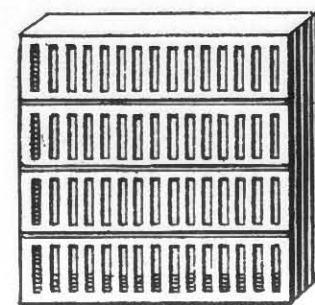
No. 625

Front can be taken out



12" x 12" x 2 1/2" x 5/16" Thick
14" x 6 1/2" x 2 1/2" x 1/4" Thick

No. 99



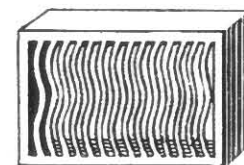
12" x 12" x 2 1/2" x 1/4" Thick

No. 138
Movable Back Plate



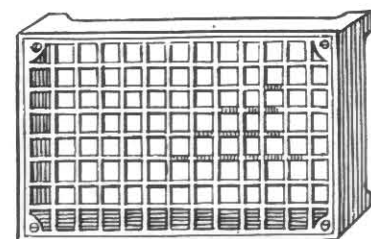
9" x 3" x 2 1/2" x 3/16" Thick

No. 618



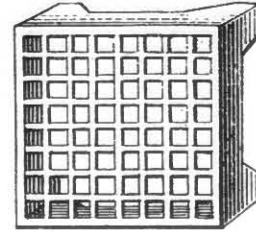
9" x 6" x 3" x 3/8" Thick

No. 628
Front can be taken out



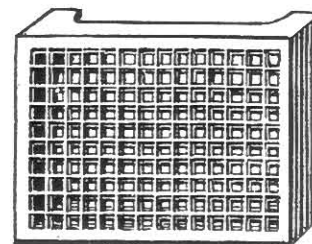
9" x 3" x 2 1/2" 9" x 6" x 2 1/2"
9" x 9" x 2 1/2" 12" x 9" x 2 1/2"
12" x 12" x 2 1/2" 14" x 9" x 2 1/2"
14" x 14" x 2 1/2" 18" x 6" x 2 1/2"
and 18" x 18" x 2 1/2"
All 5/16" Thick

No. 123



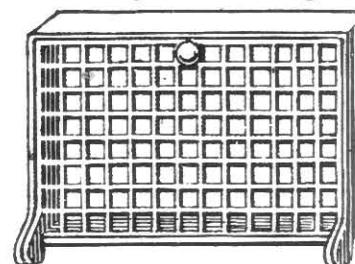
9" x 3" x 2 3/8" x 1/4" Thick
9" x 9" x 2 3/8" x 3/8" Thick
12" x 12" x 1 1/2" x 1/2" Thick
12" x 12" x 2 3/4" x 1/2" Thick

No. 589



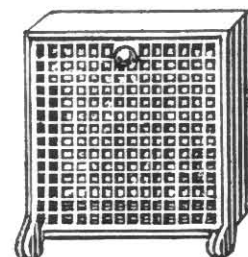
9" x 5 1/4" x 2 1/2" x 1/4" Thick
9" x 6" x 2 1/2" 9" x 9" x 2 1/2"
12" x 6" x 2 1/2" 12" x 8 1/2" x 2 1/2"
and 12" x 9" x 2 1/2"
All 5/16" Thick

No. 626
Hinged Grating



14" x 9" x 2" x 1/4" Thick

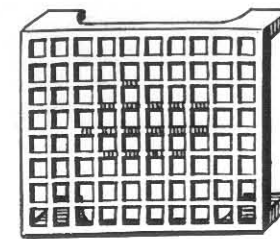
No. 627
Hinged Grating



9" x 9" x 2" x 5/16" Thick

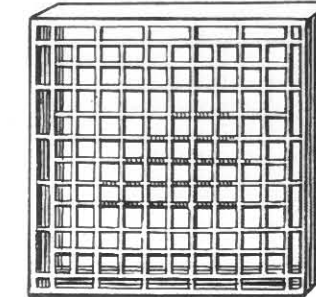
AIR BRICKS

No. 629



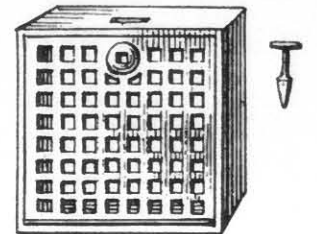
11" x 9" x 1 1/2" x 3/8" Thick

No. 641



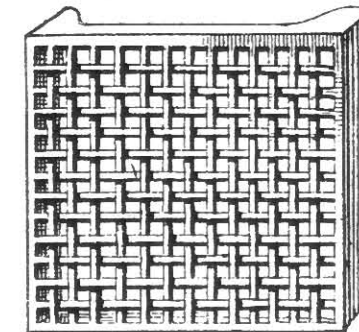
9" x 6" x 1 1/2" x 3/8" Thick
9" x 9" x 2" x 1/2" Thick
12" x 12" x 2" x 1/2" Thick

No. 656
Hinged Grating



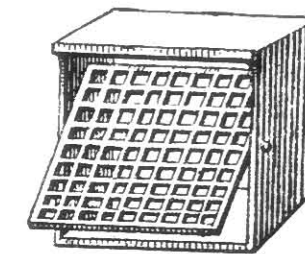
9" x 9" x 2" 14" x 9" x 2"
3/8" Thick

No. 658



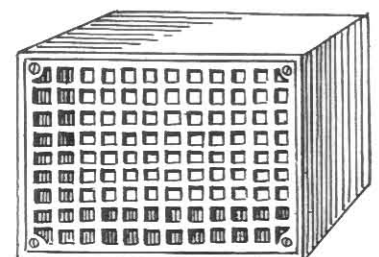
9" x 3" x 2 1/2" x 1/2" Thick
9" x 6" x 2 1/2" x 1/2" Thick
9" x 9" x 2 1/2" x 1/2" Thick
10" x 10" x 2 1/2" x 1/2" Thick
13" x 9" x 2 1/2" x 1/2" Thick
14" x 9" x 2 1/2" x 1/2" Thick
14" x 13" x 2 1/2" x 1/2" Thick
18" x 9" x 2 1/2" x 1/2" Thick
18" x 13" x 2 1/2" x 1/2" Thick

No. 669
Hinged Grating



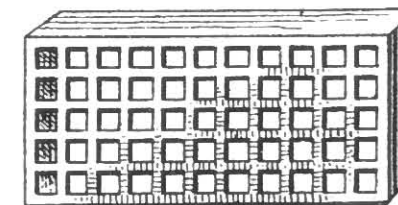
9" x 9" x 4 1/2" 12" x 6" x 4 1/2"
and 14" x 6" x 4 1/2"
All 1/4" Thick

No. 686
Front can be taken out



12" x 9" x 4 1/2" 14" x 9" x 4 1/2"
and 18" x 9" x 4 1/2"
All 1/4" Thick

No. 699



12" x 6 1/4" x 2" x 1/2" Thick
16" x 7 1/2" x 2" x 1/2" Thick

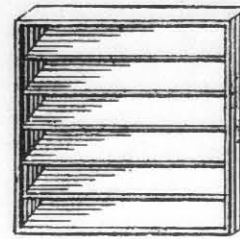
No. 709



5" Diam. x 2 1/2" x 5/16" Thick

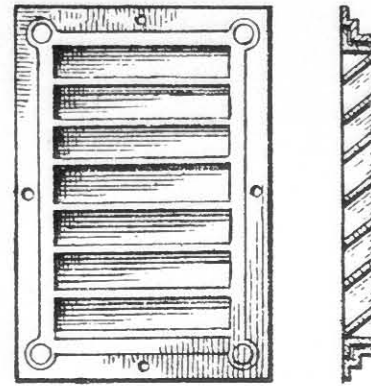
LOUVRE VENTILATORS

No. 65
Fixed Louvres



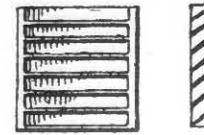
$9\frac{1}{2}'' \times 9\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{16}''$ Thick
 $11'' \times 4'' \times 1\frac{1}{2}'' \times \frac{3}{16}''$ Thick
 $14'' \times 7'' \times 1\frac{1}{2}'' \times \frac{3}{16}''$ Thick
 $14'' \times 13'' \times 1\frac{1}{2}'' \times \frac{3}{16}''$ Thick
 $17'' \times 18'' \times 1\frac{1}{2}'' \times \frac{3}{16}''$ Thick

No. 681
Fixed Louvres



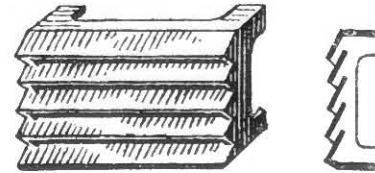
$11'' \times 16'' \times 1\frac{3}{4}'' \times \frac{3}{16}''$ Thick
 Front can be taken out

No. 698
Fixed Louvres



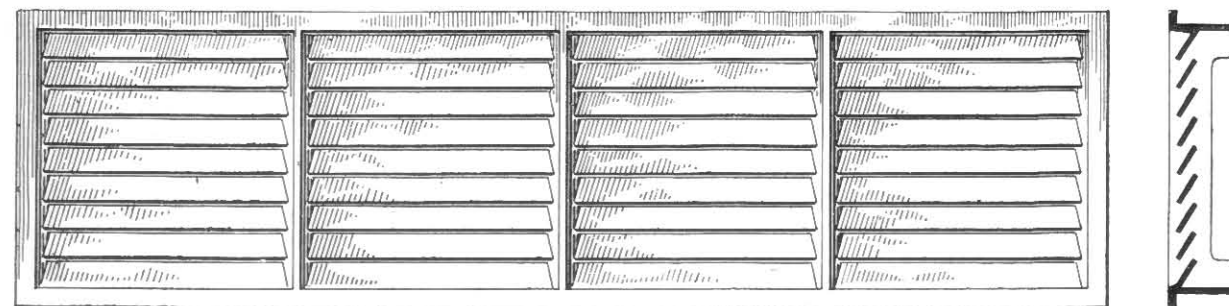
$5\frac{1}{4}'' \times 5\frac{1}{4}'' \times \frac{3}{4}''$

No. 703
Fixed Louvres
(Vermin Proof)



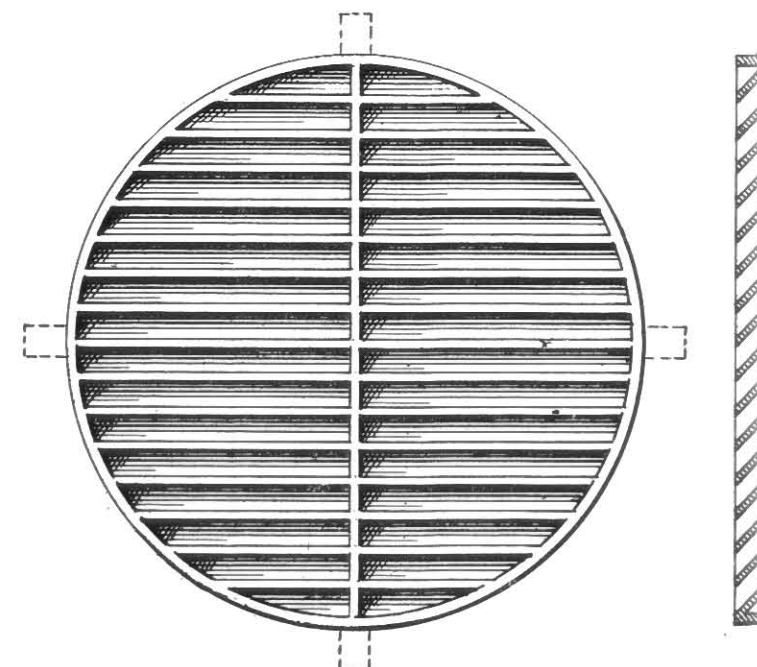
$9'' \times 3'' \times 2\frac{3}{4}''$
 $9'' \times 4\frac{1}{2}'' \times 2\frac{3}{4}''$
 $9'' \times 6'' \times 2\frac{3}{4}''$
 $9'' \times 9'' \times 2\frac{3}{4}''$
 $12'' \times 6'' \times 2\frac{3}{4}''$
 $12'' \times 9'' \times 2\frac{3}{4}''$
 $12'' \times 12'' \times 2\frac{3}{4}''$
 Also No. 891
 $6'' \times 6'' \times 1\frac{3}{4}''$
 $8'' \times 6'' \times 1\frac{3}{4}''$

No. 817
Fixed Louvres



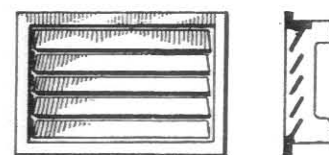
$47'' \times 12'' \times 3''$

No. 809
Fixed Louvres



$13'', 19\frac{1}{4}''$ and $25\frac{1}{4}''$ Diam. $\times 1\frac{1}{2}''$

No. 817
Fixed Louvres



$9'' \times 3'' \times 2''$
 $9'' \times 6'' \times 2''$
 $9'' \times 9'' \times 2''$

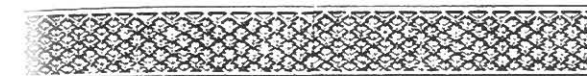
CONTINUOUS GRATINGS

No. 35



$3'' \times 4' 2\frac{3}{4}''$ Long $\times \frac{1}{2}''$ Thick. $\frac{3}{4}''$ Mesh
 $3'' \times 3' 0''$ Long. (Border All Round)

No. 107



$4'' \times 2' 9''$ Long $\times \frac{3}{16}''$ Thick

No. 35



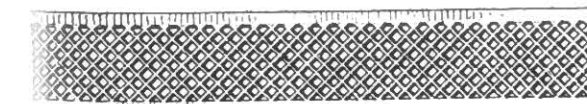
$6'' \times 1' 8''$ Long $\times \frac{1}{2}''$ Thick. $\frac{3}{4}''$ Mesh
 $6'' \times 2' 6\frac{3}{4}''$ Long $\times \frac{1}{2}''$ Thick. $\frac{3}{4}''$ Mesh
 $6'' \times 4' 2''$ Long $\times \frac{1}{2}''$ Thick. $\frac{3}{4}''$ Mesh

No. 117



$6'' \times 4' 0''$ Long $\times \frac{1}{2}''$ Thick

No. 101



$6'' \times 4' 5\frac{7}{8}''$ Long $\times \frac{5}{16}''$ Thick. $\frac{7}{16}''$ Mesh

No. 129



$3'' \times 3' 2\frac{1}{2}''$ Long $\times \frac{3}{8}''$ Thick. $\frac{7}{8}''$ Mesh

No. 688



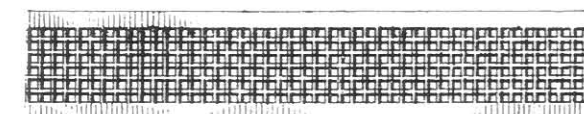
$4'' \times 3' 6''$ Long $\times \frac{1}{4}''$ Thick. $\frac{7}{16}''$ Mesh

No. 46



$5'' \times 3' 11\frac{1}{2}''$ Long $\times \frac{7}{16}''$ Thick. $\frac{9}{16}''$ Mesh
 $6'' \times 1' 10''$ Long $\times \frac{3}{8}''$ Thick. $\frac{9}{16}''$ Mesh
 $6'' \times 2' 5\frac{3}{4}''$ Long $\times \frac{3}{8}''$ Thick. $\frac{9}{16}''$ Mesh
 $6'' \times 4' 0''$ Long $\times \frac{7}{16}''$ Thick. $\frac{9}{16}''$ Mesh

No. 639



$6'' \times 4' 0''$ Long $\times \frac{5}{8}''$ Thick. $\frac{1}{2}''$ Mesh
 $6\frac{1}{2}'' \times 2' 0''$ Long $\times \frac{5}{8}''$ Thick

No. 48



$6\frac{3}{4}'' \times 4' 2\frac{7}{8}''$ Long $\times \frac{3}{4}''$ Thick. $1\frac{1}{2}''$ Mesh
 Border All Round

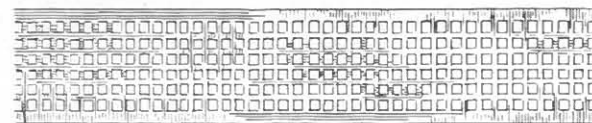
CONTINUOUS GRATINGS

No. 720



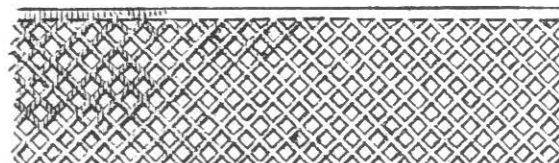
6" x 3' 11 $\frac{3}{8}$ " Long x 1" Thick. $\frac{5}{8}$ " Mesh

No. 46



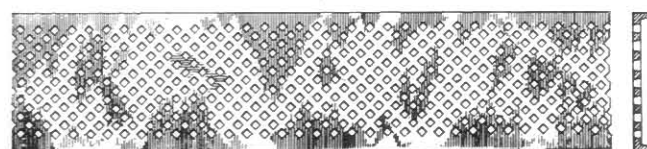
7" x 3' 11 $\frac{1}{2}$ " Long x $\frac{1}{2}$ " Thick. $\frac{9}{16}$ " Mesh

No. 35



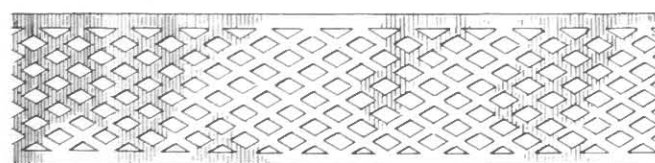
8" x 3' 0 $\frac{1}{2}$ " Long x $\frac{1}{2}$ " Thick. $\frac{3}{4}$ " Mesh
8 $\frac{1}{2}$ " x 2' 11 $\frac{1}{8}$ " Long x $\frac{1}{2}$ " Thick. $\frac{3}{4}$ " Mesh
9" x 4' 2 $\frac{7}{8}$ " Long x $\frac{1}{2}$ " Thick. $\frac{3}{4}$ " Mesh

No. 596



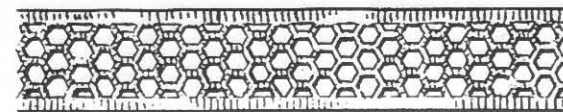
8 $\frac{1}{4}$ " x 4' 0" Long x $\frac{1}{2}$ " Thick. $\frac{3}{8}$ " Mesh
1" Thick on Edges

No. 868



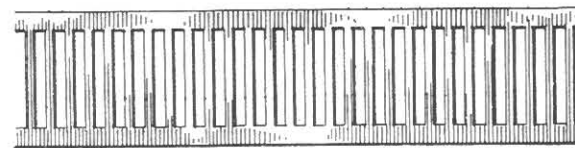
9" x 3' 0" Long x 1" Thick. $\frac{7}{8}$ " Mesh

No. 749



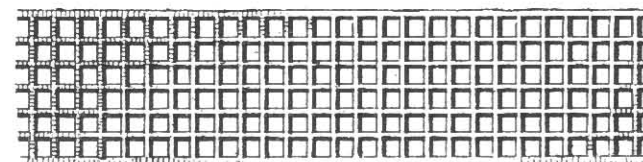
6" x 2' 0" Long x $\frac{5}{8}$ " Thick. $\frac{7}{8}$ " Mesh

No. 798



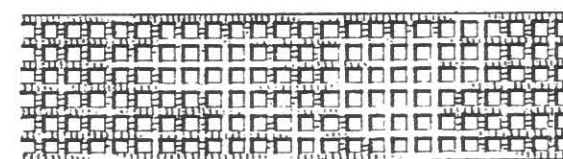
7 $\frac{3}{4}$ " x 3' 0 $\frac{3}{8}$ " Long x $\frac{1}{2}$ " Thick. $\frac{5}{8}$ " Slots

No. 587



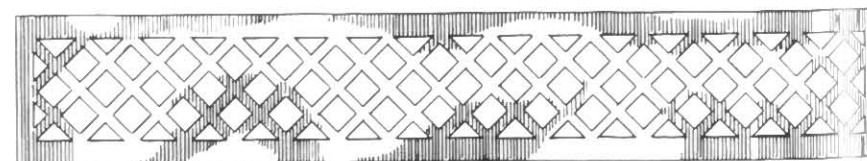
8" x 2' 11 $\frac{3}{8}$ " Long x $\frac{3}{4}$ " Thick. 1" Mesh
9" x 4' 0" Long x $\frac{3}{4}$ " Thick. 1" Mesh

No. 710



8 $\frac{1}{2}$ " x 3' 11 $\frac{1}{2}$ " Long x 1" Thick. $\frac{7}{8}$ " Mesh

No. 48

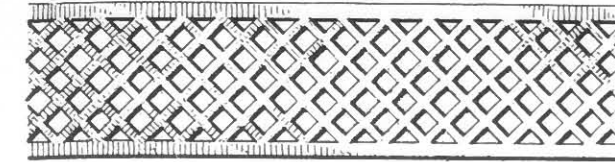


8 $\frac{3}{4}$ " x 4' 2 $\frac{7}{8}$ " Long x $\frac{3}{4}$ " Thick. 1 $\frac{1}{2}$ " Mesh
(Border All Round)

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

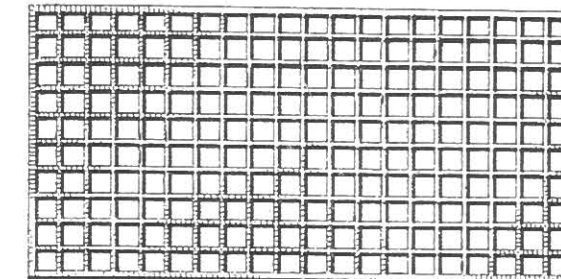
CONTINUOUS GRATINGS

No. 116



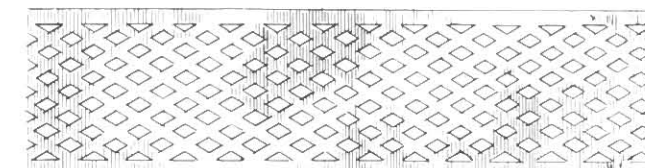
9" x 4' 2 $\frac{3}{8}$ " Long x $\frac{3}{8}$ " Thick. 1 $\frac{1}{8}$ " Mesh

No. 651



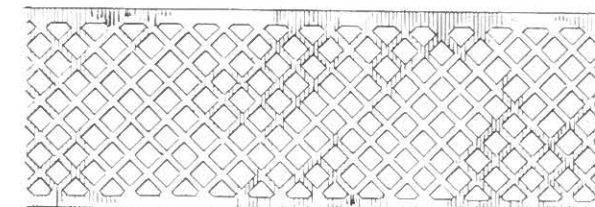
10" x 2' 2 $\frac{1}{4}$ " Long x $\frac{1}{2}$ " Thick. $\frac{7}{8}$ " Mesh
11 $\frac{5}{8}$ " x 1' 5 $\frac{5}{8}$ " Long x $\frac{3}{8}$ " Thick. $\frac{7}{8}$ " Mesh
11 $\frac{3}{4}$ " x 1' 11 $\frac{1}{2}$ " Long x $\frac{1}{2}$ " Thick. $\frac{7}{8}$ " Mesh
1' 0" x 2' 0" Long x $\frac{1}{2}$ " Thick. $\frac{7}{8}$ " Mesh
1' 0 $\frac{7}{8}$ " x 1' 8 $\frac{5}{8}$ " Long x $\frac{1}{2}$ " Thick. $\frac{7}{8}$ " Mesh
(Border All Round)

No. 869



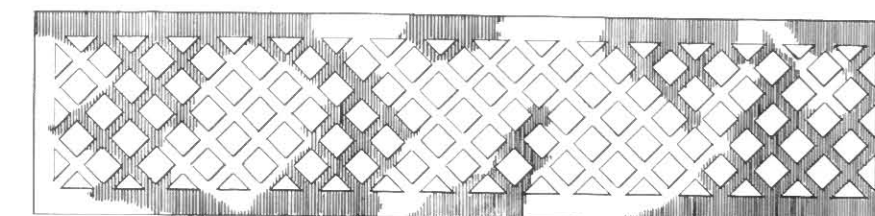
10" x 4' 2 $\frac{1}{8}$ " Long x $\frac{1}{2}$ " Thick. $\frac{7}{8}$ " Mesh

No. 645



1' 0" x 3' 6" Long x $\frac{3}{4}$ " Thick. 1 $\frac{1}{8}$ " Mesh

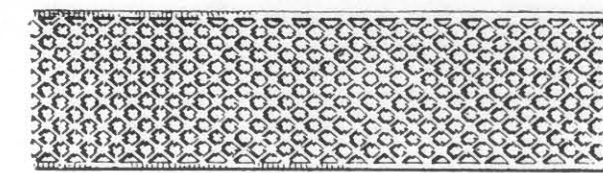
No. 48



1' 0" x 4' 2 $\frac{7}{8}$ " Long x $\frac{3}{4}$ " Thick. 1 $\frac{1}{2}$ " Mesh

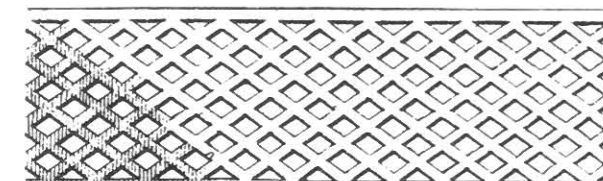
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

No. 117



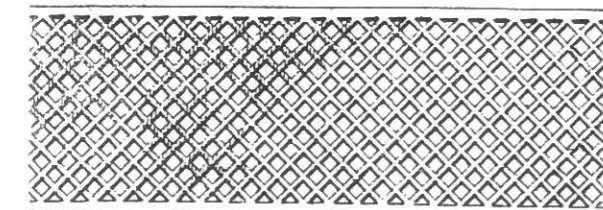
9" x 4' 0" Long x $\frac{1}{2}$ " Thick

No. 249



10 $\frac{3}{4}$ " x 4' 2 $\frac{3}{4}$ " Long x $\frac{1}{16}$ " Thick. $\frac{1}{16}$ " Mesh

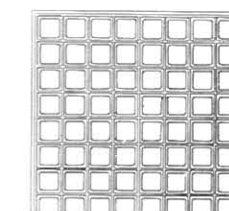
No. 35



11 $\frac{3}{4}$ " x 4' 2 $\frac{3}{8}$ " Long x $\frac{1}{2}$ " Thick. $\frac{3}{4}$ " Mesh
1' 0" x 4' 2 $\frac{3}{4}$ " Long x $\frac{1}{2}$ " Thick. $\frac{3}{4}$ " Mesh

No. 907

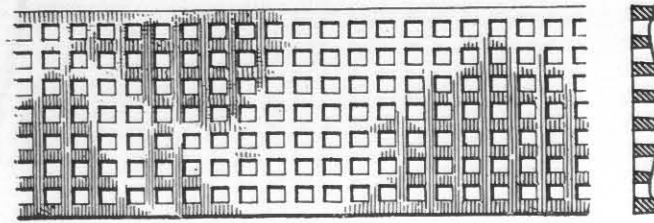
For reinforcing the surface of Concrete Floors



1' 0" x 1' 0" Long x $\frac{3}{4}$ " Thick. 1" Mesh
(with Border on Two Sides only)
1' 0 $\frac{1}{2}$ " x 1' 0 $\frac{1}{2}$ " Long x $\frac{3}{4}$ " Thick. 1" Mesh
(with Border on All Four Sides)

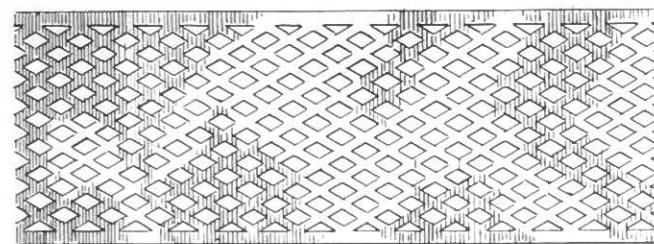
CONTINUOUS GRATINGS

No. 799



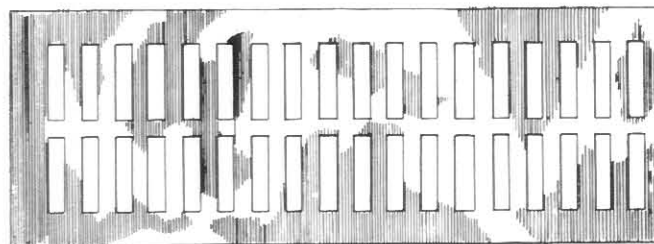
1' 0" x 3' 3" Long. $\frac{7}{8}$ " Mesh
 $\frac{1}{8}$ " Thick at Edge, $\frac{1}{8}$ " Thick at Centre

No. 868



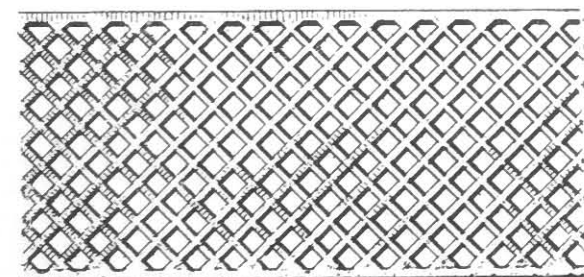
1' $1\frac{1}{2}$ " x 4' 0 $\frac{5}{8}$ " Long x 1" Thick. $\frac{7}{8}$ " Mesh

No. 741



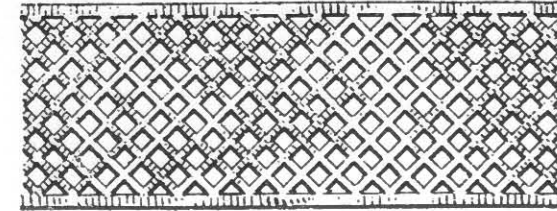
1' 2" x 5' 4 $\frac{7}{8}$ " Long x $\frac{3}{4}$ " Thick. 1" Slots

No. 645



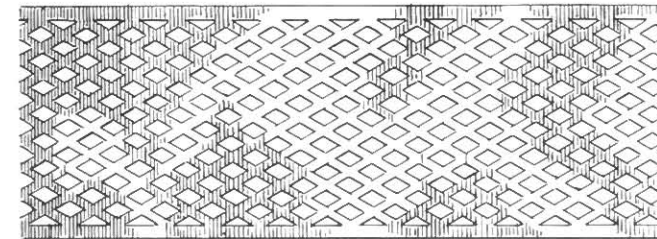
1' 2 $\frac{7}{8}$ " x 4' 3" Long x $\frac{3}{4}$ " Thick. $\frac{1}{8}$ " Mesh
 1' 3 $\frac{3}{8}$ " x 3' 6 $\frac{1}{2}$ " Long x $\frac{3}{4}$ " Thick. $\frac{1}{8}$ " Mesh

No. 739



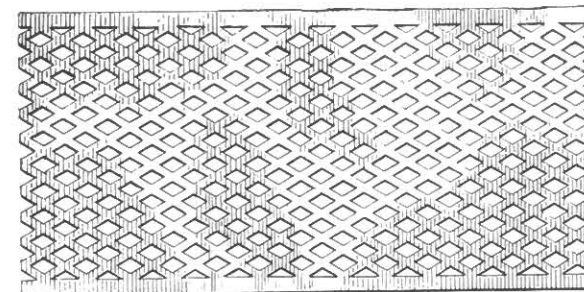
1' 0" x 4' 2" Long x $\frac{5}{8}$ " Thick. 1" Mesh

No. 869



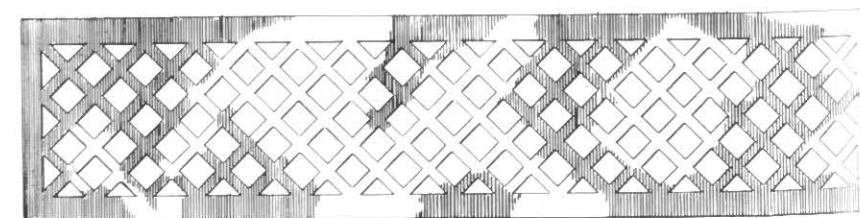
1' 1" x 4' 2 $\frac{1}{8}$ " Long x $\frac{1}{2}$ " Thick. $\frac{7}{8}$ " Mesh

No. 833



1' 2 $\frac{3}{4}$ " x 3' 1 $\frac{5}{8}$ " Long x $\frac{7}{8}$ " Thick. $\frac{1}{16}$ " Mesh

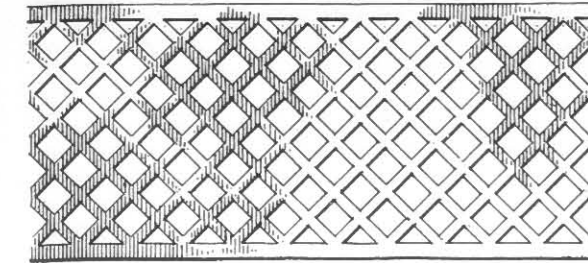
No. 911



1' 2 $\frac{7}{8}$ " x 3' 0" Long x $\frac{1}{2}$ " Thick. $\frac{1}{2}$ " Mesh

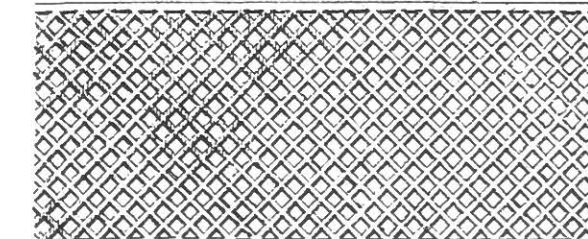
CONTINUOUS GRATINGS

No. 48



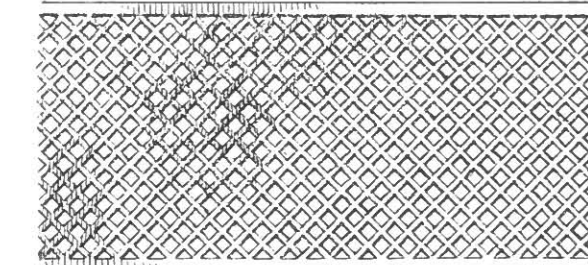
1' 3" x 4' 3" Long x $\frac{3}{4}$ " Thick. $\frac{1}{2}$ " Mesh

No. 35



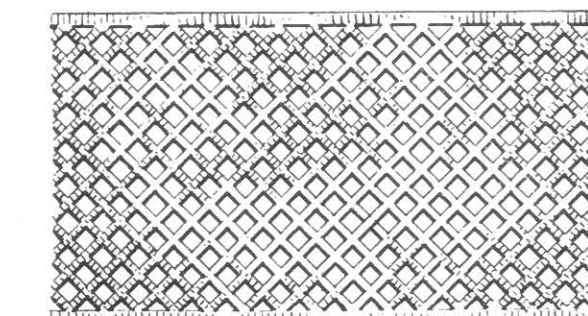
1' 3" x 4' 2 $\frac{3}{4}$ " Long x $\frac{1}{2}$ " Thick. $\frac{3}{4}$ " Mesh

No. 35



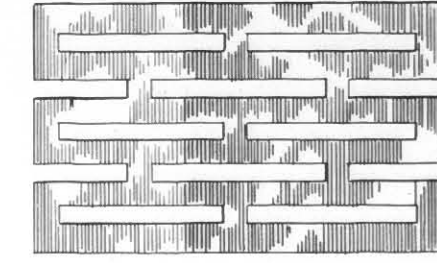
1' 4 $\frac{3}{8}$ " x 3' 10 $\frac{3}{4}$ " Long x $\frac{1}{2}$ " Thick. $\frac{3}{4}$ " Mesh

No. 739



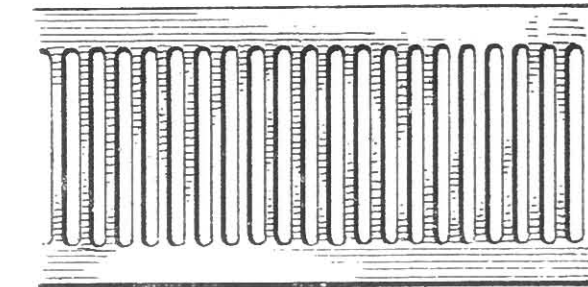
1' 5 $\frac{3}{4}$ " x 4' 1 $\frac{7}{8}$ " Long x $\frac{5}{8}$ " Thick. 1" Mesh

No. 864



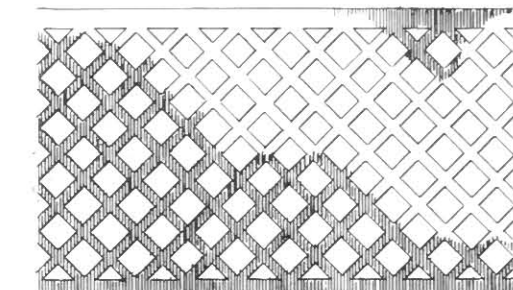
1' 3" x 2' 0" Long x 2" Thick. 1" Slots

No. 741



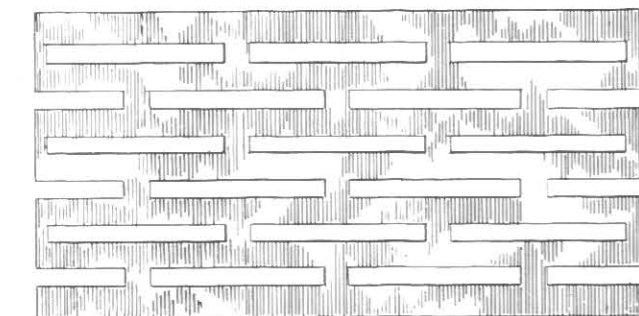
1' 3 $\frac{7}{8}$ " x 2' 6" Long x 1" Thick. $\frac{3}{4}$ " Slots

No. 68



1' 5" x 2' 4" Long x 1" Thick. $\frac{1}{2}$ " Mesh

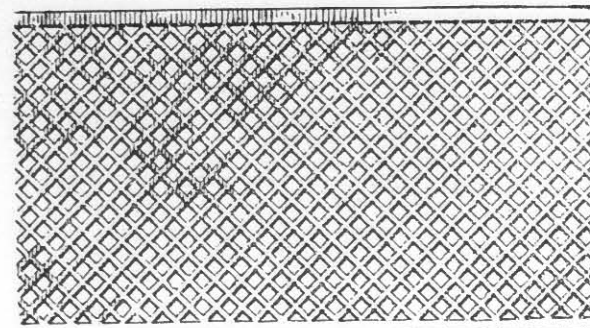
No. 864



1' 6" x 3' 11 $\frac{1}{2}$ " Long x 2" Thick. 1" Slots

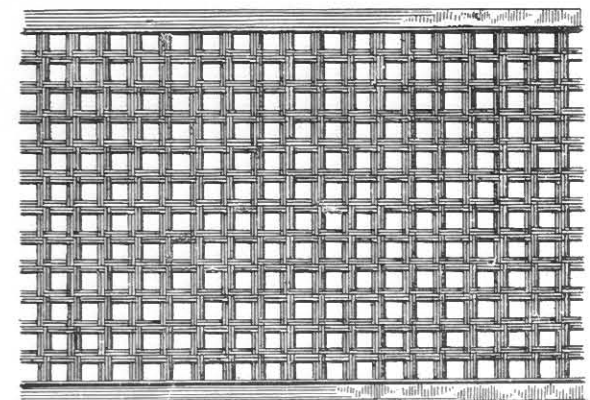
CONTINUOUS GRATINGS

No. 35



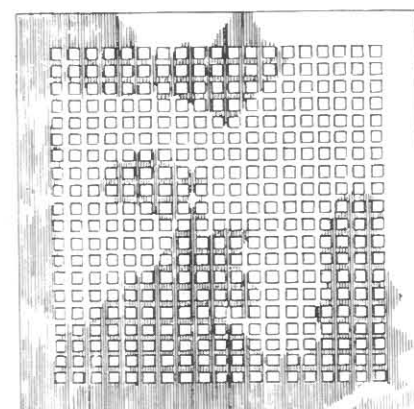
1' 6" x 4' 2 3/4" Long x 1/2" Thick. 3/4" Mesh

No. 149



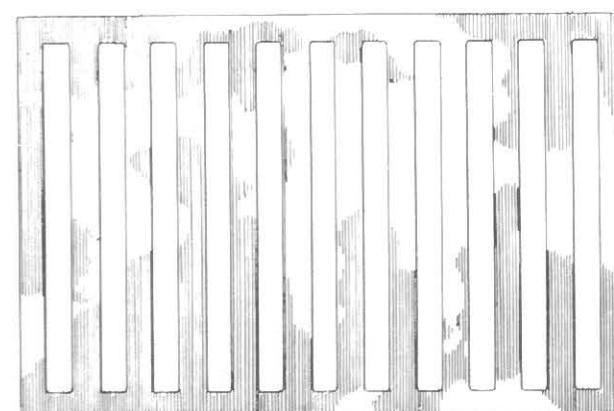
1' 11 1/4" x 2' 10 1/8" Long x 1/2" Thick. 1" Mesh

No. 913



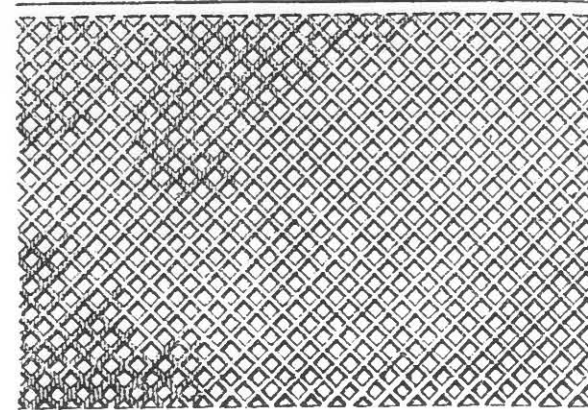
1' 11 3/4" x 1' 11 3/4" Square x 5/8" Thick. 3/4" Mesh

No. 912



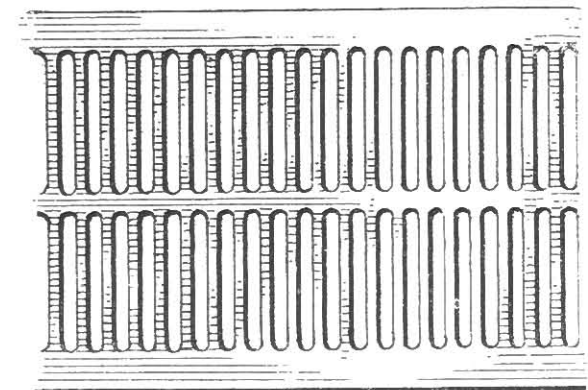
1' 11 3/4" x 2' 11 3/8" Long x 2" Thick. 1 1/2" Slots

No. 35



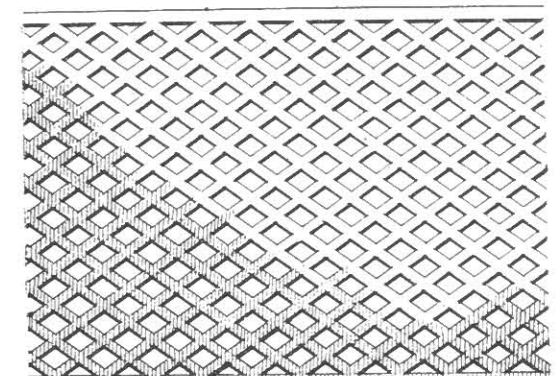
1' 11 7/8" x 4' 3" Long x 1/2" Thick. 3/4" Mesh

No. 741



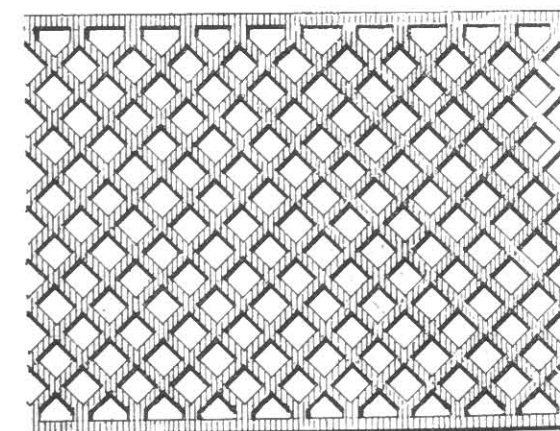
1' 9 3/4" x 2' 6" Long x 1" Thick. 3/4" Slots

No. 249



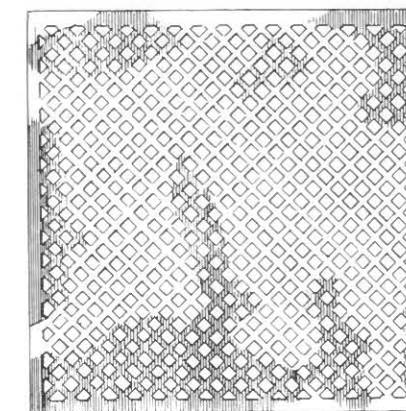
1' 10" x 3' 9 1/4" Long x 1 1/16" Thick. 1 5/16" Mesh

No. 144



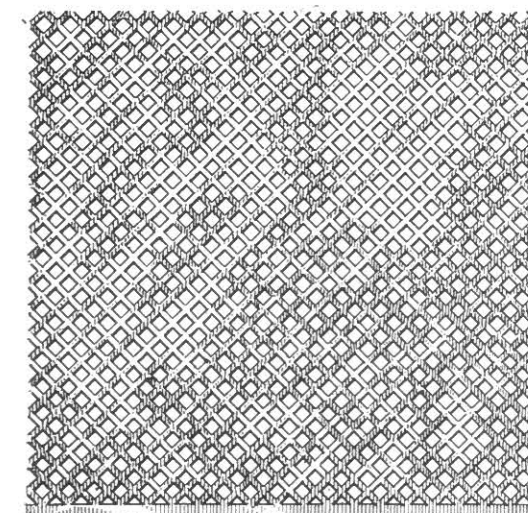
2' 0" x 3' 1 1/2" Long x 1/2" Thick. 1 5/8" Mesh

No. 755



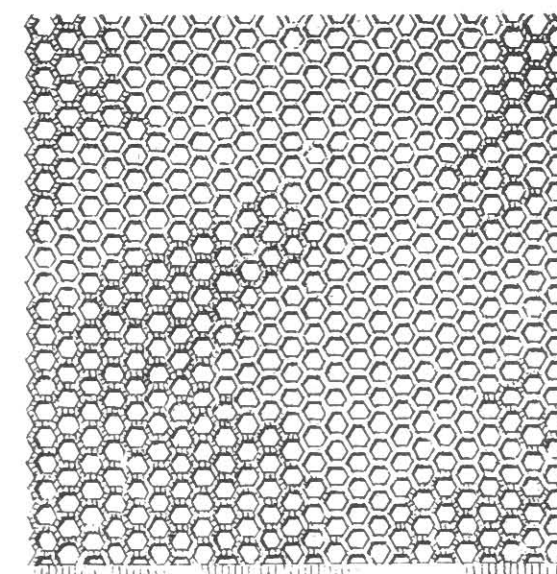
2' 0" x 2' 0" Square x 5/8" Thick. 5/8" Mesh

No. 755



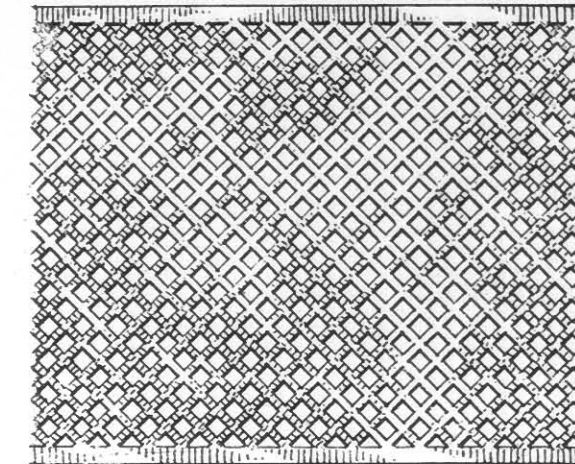
Up to 2' 11 1/2" x 3' 10 3/4" Long x 5/8" Thick
5/8" Mesh

No. 749



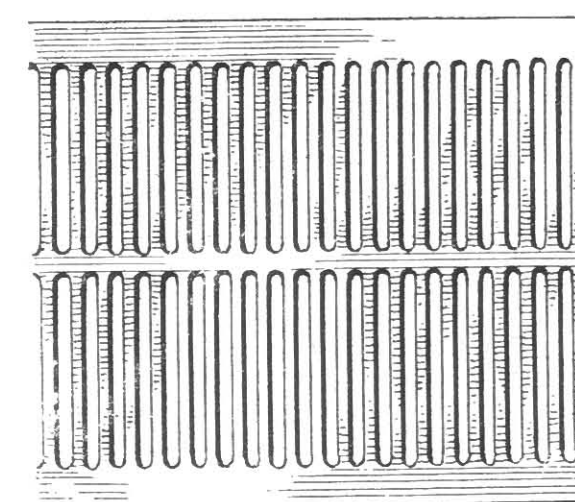
3' 0" x 3' 0" Long x 5/8" Thick. 7/8" Mesh

No. 738



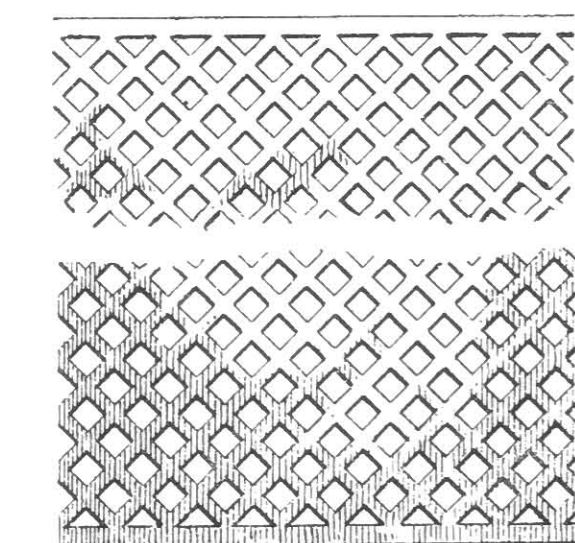
2' 3" x 3' 0" Long x 3/4" Thick. 1" Mesh

No. 741



2' 4" x 2' 6" Long x 1" Thick. 3/4" Slots

No. 68



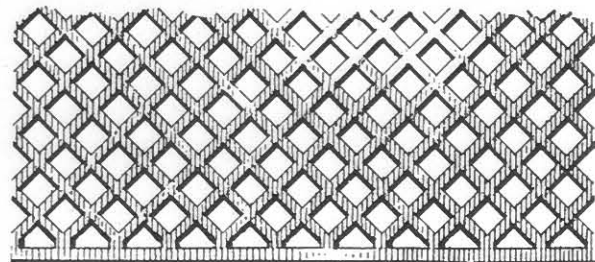
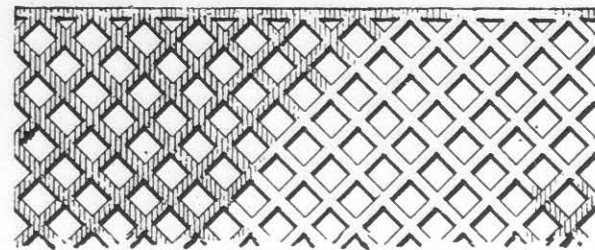
2' 11 3/8" x 3' 1 1/4" Long x 1" Thick. 1 1/2" Mesh
T Section of Bar

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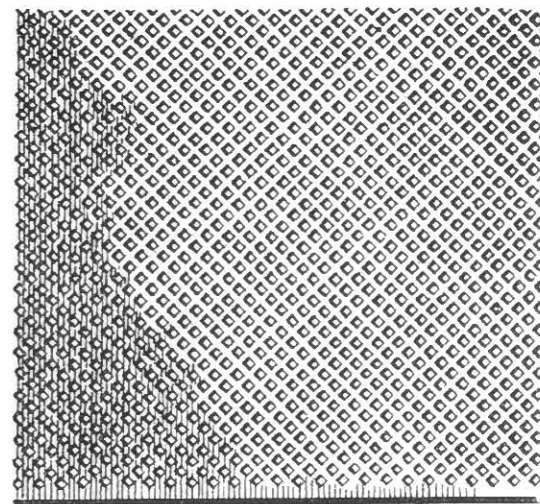
CONTINUOUS GRATINGS

No. 144



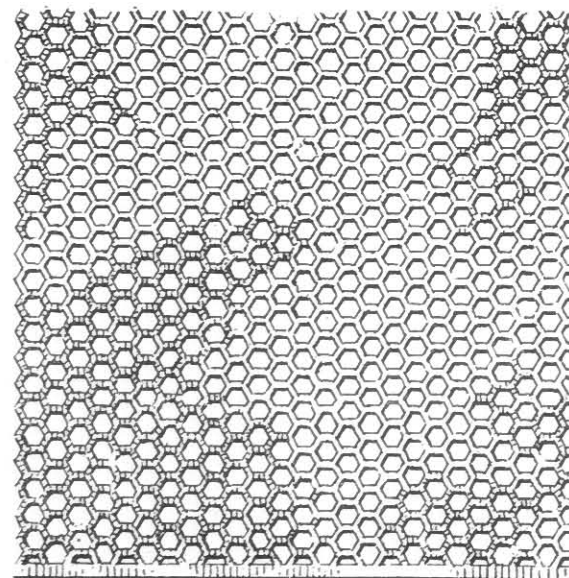
3' 0" x 2' 10" Long x $\frac{1}{2}$ " Thick. $1\frac{5}{8}$ " Mesh

No. 596



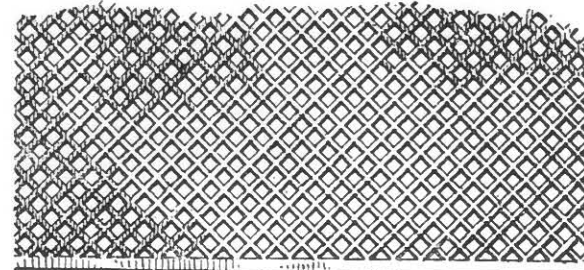
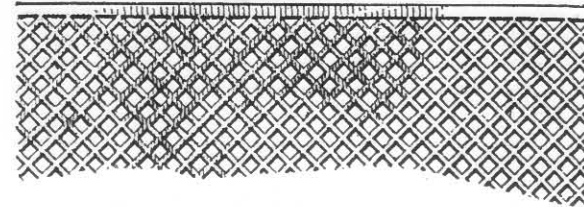
Up to 3' 11" x 2' 4" Long x $\frac{1}{2}$ " Thick. $\frac{3}{8}$ " Mesh

No. 831



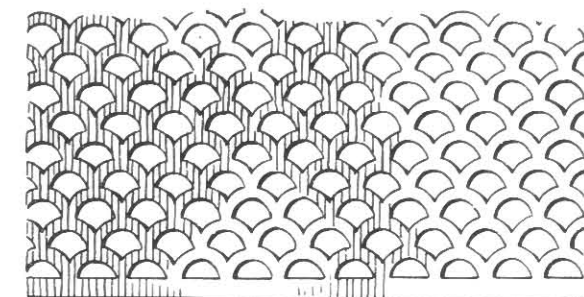
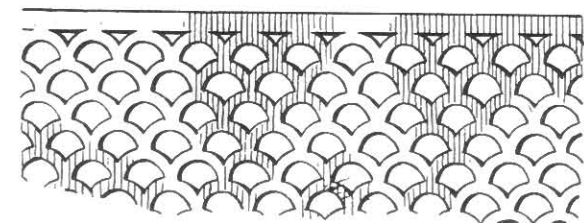
Up to 4' 0" x 3' 0" Long x 1" Thick. $\frac{7}{8}$ " Mesh

No. 35



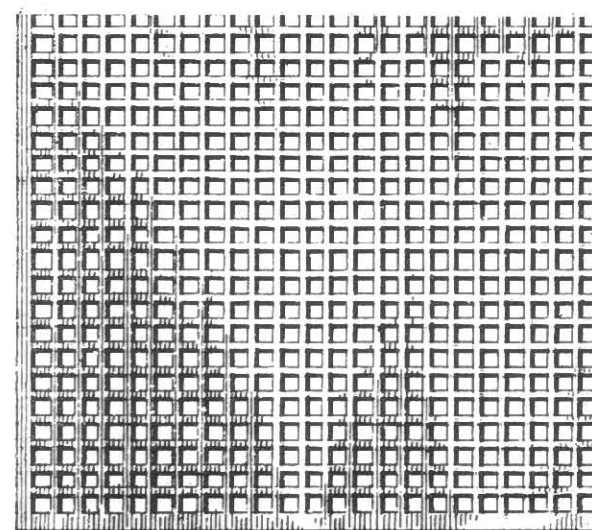
2' $11\frac{7}{8}$ " x 3' $0\frac{3}{4}$ " Long x $\frac{1}{2}$ " Thick. $\frac{3}{4}$ " Mesh

No. 47



3' 6" x 3' 6" Long x $\frac{5}{8}$ " Thick

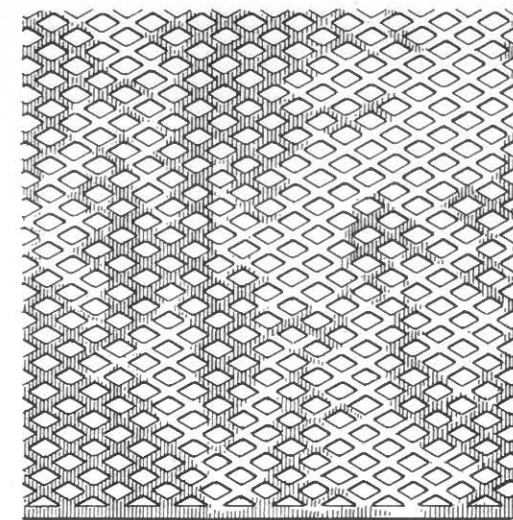
No. 164



Up to 3' 4" x 3' 4" Long x $\frac{7}{8}$ " Thick. $\frac{3}{4}$ " Mesh

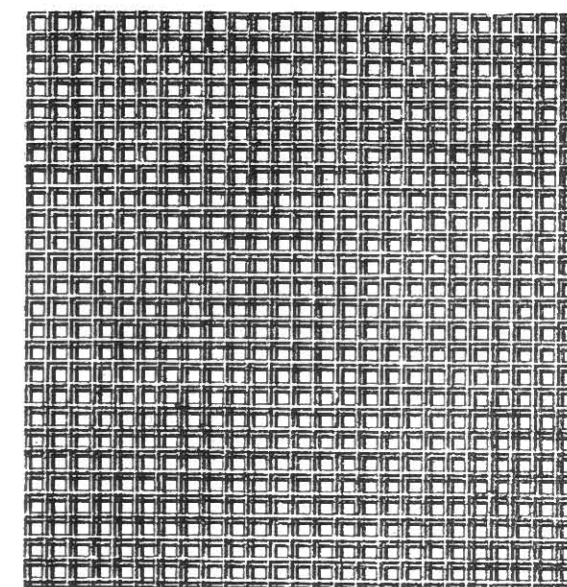
CONTINUOUS GRATINGS

No. 868



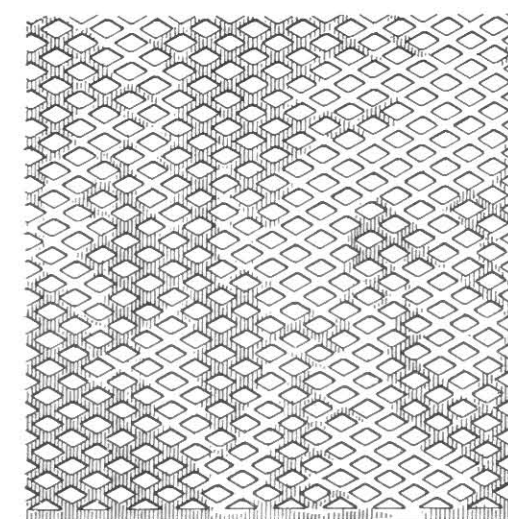
Up to 4' 3" x 4' $1\frac{3}{4}$ "
1" Thick, $\frac{7}{8}$ " Mesh

No. 649



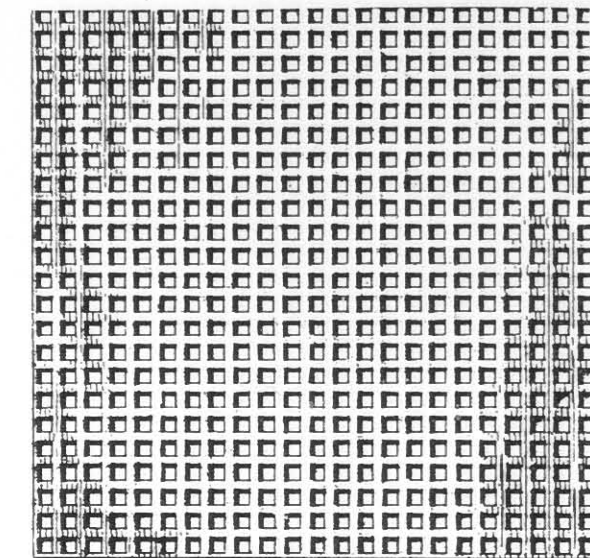
Up to 4' 4" x 3' 2"
 $\frac{9}{16}$ " Thick, $\frac{5}{8}$ " Mesh

No. 869



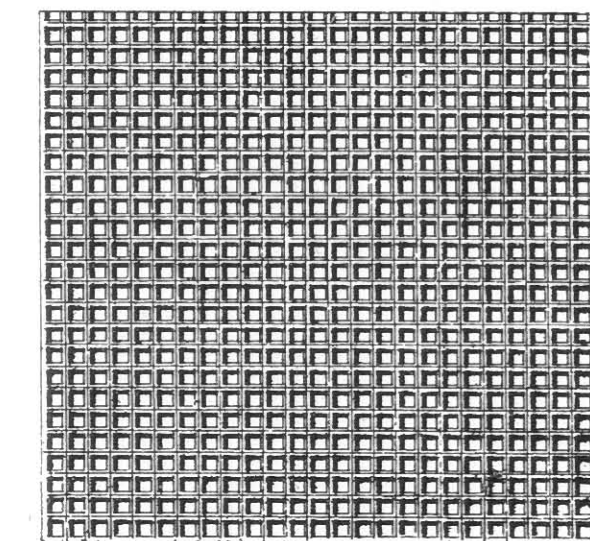
Up to 4' $4\frac{1}{4}$ " x 4' 2"
 $\frac{1}{2}$ " Thick, $\frac{3}{4}$ " Mesh

No. 672



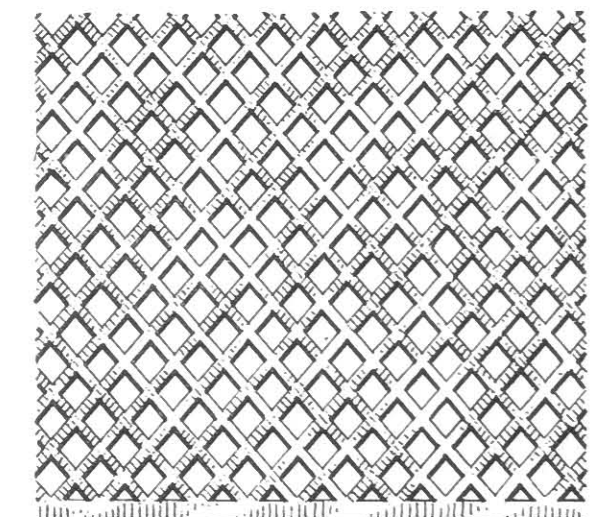
Up to 4' 3" x 3' 3"
 $\frac{7}{8}$ " Thick, $\frac{3}{4}$ " Mesh

No. 659



Up to 4' 4" x 3' 2"
 $\frac{5}{8}$ " Thick, $\frac{11}{16}$ " Mesh

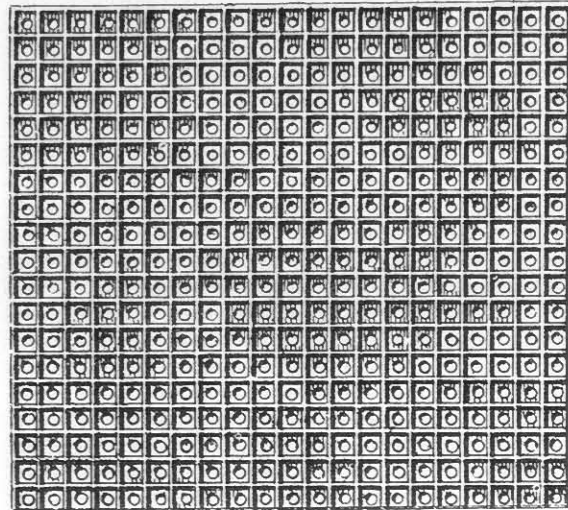
No. 714



Up to 4' $6\frac{5}{8}$ " x 4' $0\frac{5}{8}$ "
 $1\frac{1}{4}$ " Thick, $1\frac{3}{8}$ " Mesh

CONTINUOUS GRATINGS AND PLATES

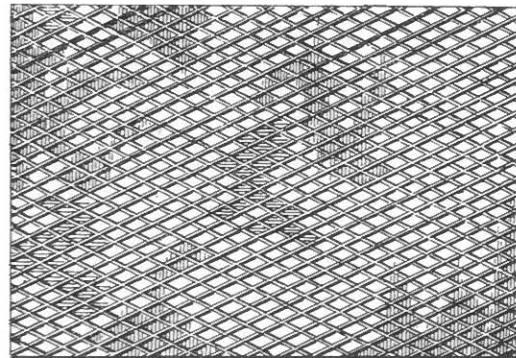
No. 162



Up to 4' 10" x 3' 7" Long x $\frac{1}{16}$ " Thick

No. 684

Solid



Up to 3' 0" x 1' 6"

Up to 3' 0" x 1' 9"

$\frac{1}{4}$ " Thick min., $\frac{3}{8}$ " max. x $\frac{7}{8}$ " Chequer

Up to 4' 0" x 2' 0"

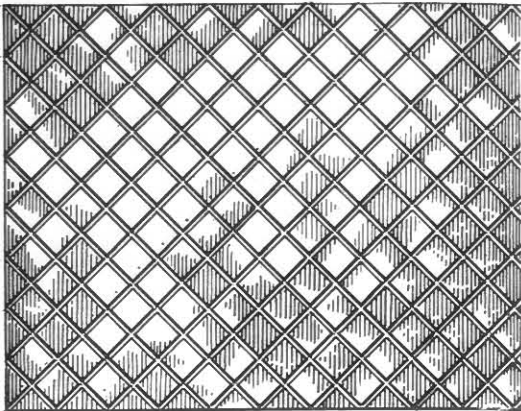
$\frac{3}{8}$ " Thick min., $\frac{1}{2}$ " Thick max., x $\frac{7}{8}$ " Chequer

3' $3\frac{3}{8}$ " x 1' 0" x $\frac{7}{8}$ " Chequer x $\frac{3}{8}$ " Thick

2' 0 $\frac{1}{4}$ " x 1' 0" x $\frac{7}{8}$ " Chequer x $\frac{3}{8}$ " Thick

No. 105

Solid



Up to 3' 0" x 2' 0" x $2\frac{1}{8}$ " Chequer. Also 3' 0" x 11"
 $\frac{5}{8}$ " Thick min., $\frac{3}{4}$ " Thick max.

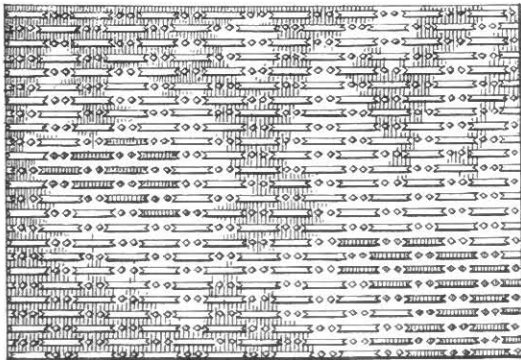
Up to 11" x 4' $5\frac{3}{8}$ " x $1\frac{1}{8}$ " Chequer. Also 8' x 4' x $0\frac{1}{4}$ "
 $\frac{3}{8}$ " Thick min., $\frac{1}{2}$ " Thick max.

Up to 2' 11" x 2' 10" x $\frac{9}{16}$ " Chequer
 $\frac{1}{4}$ " Thick min., $\frac{3}{8}$ " Thick max.

Also 2' 11" x 1' 2" x $\frac{9}{16}$ " Chequer
2' 11" x 10" x $\frac{9}{16}$ " Chequer
2' 11" x 4" x $\frac{9}{16}$ " Chequer
2' $5\frac{3}{4}$ " x 6" x $\frac{9}{16}$ " Chequer
2' 6" x 6" x $\frac{9}{16}$ " Chequer
3' 0" x 10 $\frac{3}{4}$ " x $\frac{9}{16}$ " Chequer

No. 114

Solid

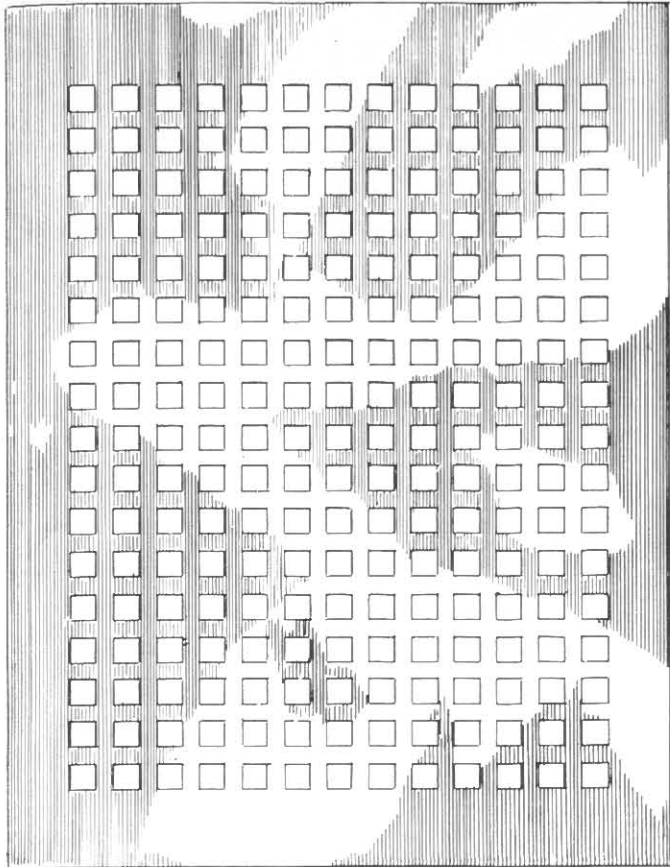


Up to 4' 3" x 3' 3"
 $\frac{1}{2}$ " Thick min., $\frac{5}{8}$ " Thick max.

Up to 3' 6" x 2' 7 $\frac{1}{4}$ "
 $\frac{3}{8}$ " Thick min., $\frac{1}{2}$ " Thick max.

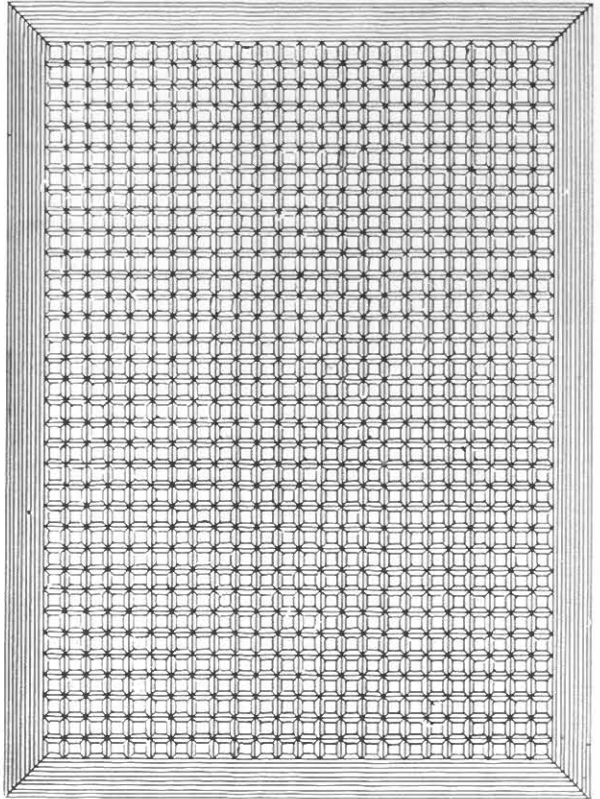
GRATINGS

No. 900



4' $2\frac{7}{8}$ " x 3' $2\frac{7}{8}$ "
(border all round)
 $1\frac{1}{2}$ " Thick. $1\frac{1}{2}$ " Mesh

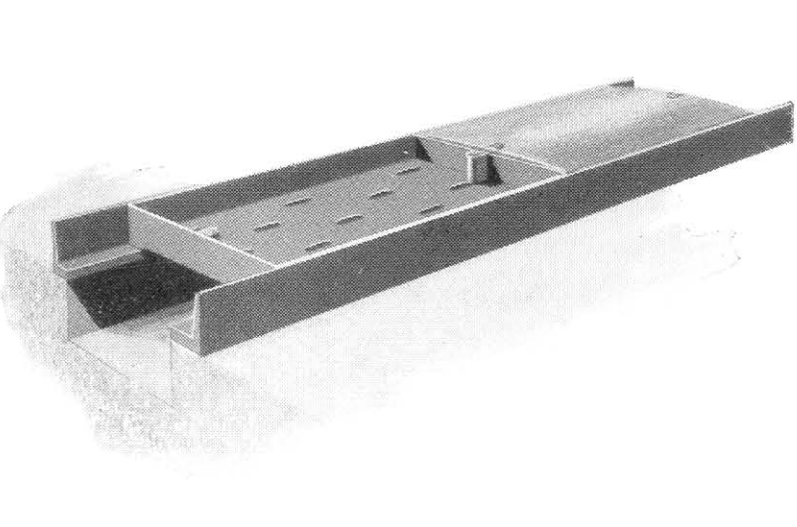
No. 901



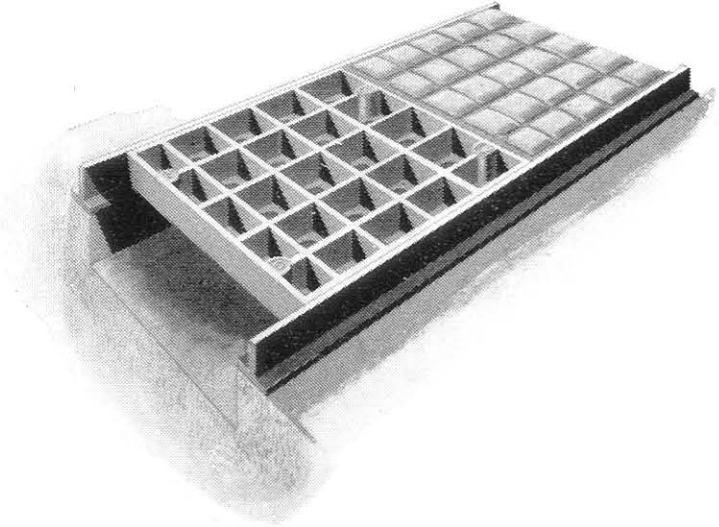
3' $10\frac{3}{4}$ " x 2' $10\frac{1}{4}$ "
(border all round)
 $1\frac{3}{8}$ " Thick. $\frac{3}{4}$ " Mesh

CAST-IRON DUCT TRAY COVERS

No. 906



No. 910



Clear Width of Duct	Sizes of Cover
1' 0"	1' $3\frac{1}{4}$ " wide x 3' 0" long x $1\frac{3}{4}$ " deep
1' 3"	1' $6\frac{1}{4}$ " wide x 3' 0" long x $1\frac{3}{4}$ " deep
1' 6"	1' $9\frac{1}{4}$ " wide x 3' $5\frac{1}{8}$ " long x $1\frac{3}{4}$ " deep

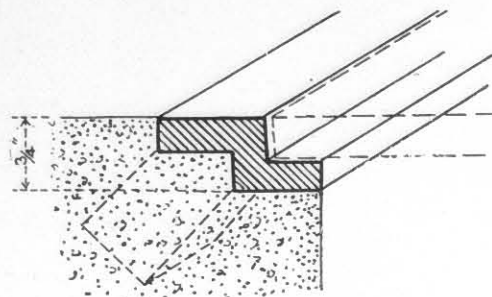
Clear Width of Duct	Sizes of Covers
2' 0"	2' $3\frac{1}{4}$ " wide x 2' $3\frac{1}{2}$ " long x $4\frac{3}{8}$ " deep
2' 9"	3' $0\frac{1}{4}$ " wide x 3' $0\frac{1}{8}$ " long x $4\frac{3}{8}$ " deep
3' 0"	3' $3\frac{1}{4}$ " wide x 3' $0\frac{5}{8}$ " long x $4\frac{3}{8}$ " deep

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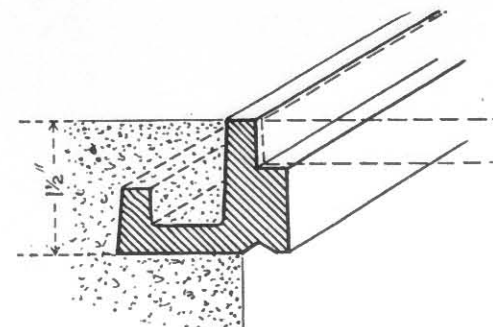
CURBS FOR TRENCH COVERS

No. 1



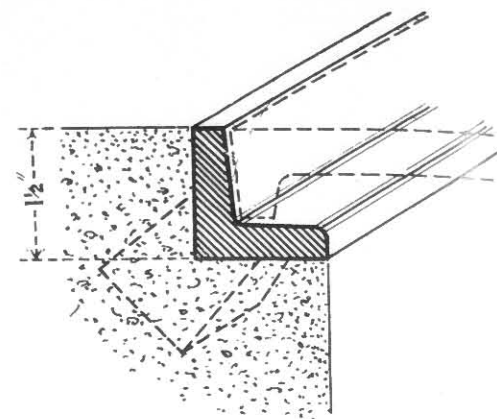
For $\frac{1}{2}$ " Thick Cover
4' 3" and 4' 7" Long
Also $1\frac{3}{8}$ " High for 1" Thick Cover
4' 6" Long

No. 2



For $\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ " Thick Covers
4' 2" Long

No. 3

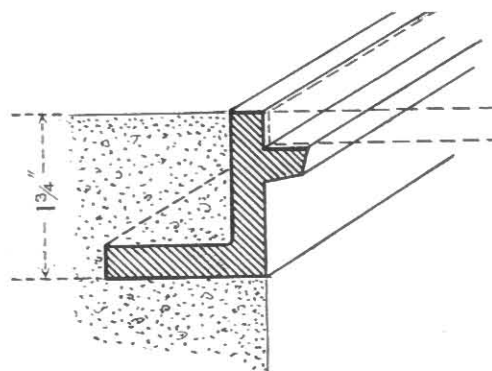


For $\frac{3}{8}$ ", $\frac{7}{16}$ ", $\frac{1}{2}$ ", $\frac{9}{16}$ ", $\frac{5}{8}$ ", $\frac{3}{4}$ " 1" and $1\frac{1}{4}$ "
Thick Cover 4' 0" Long

Also :

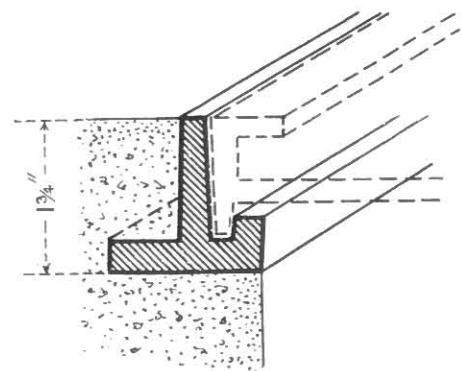
For $\frac{1}{4}$ " Thick Cover 3' $10\frac{1}{8}$ " Long
For $1\frac{1}{8}$ " Thick Cover 4' $8\frac{1}{2}$ " Long
For $1\frac{1}{4}$ " Thick Cover 3' $5\frac{1}{2}$ " Long
For $1\frac{1}{6}$ " Thick Cover 4' 6" Long

No. 4



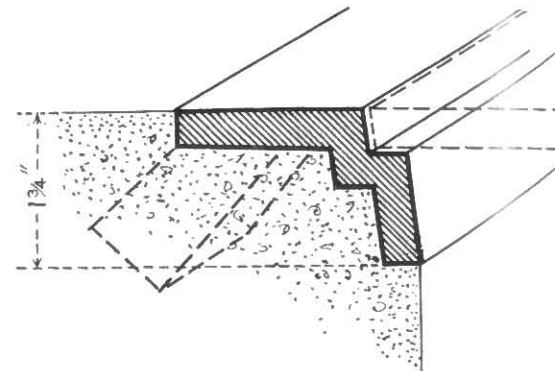
For $\frac{5}{8}$ " Thick Cover 4' 6" Long
For $\frac{3}{4}$ " Thick Cover 4' 0" Long

No. 5



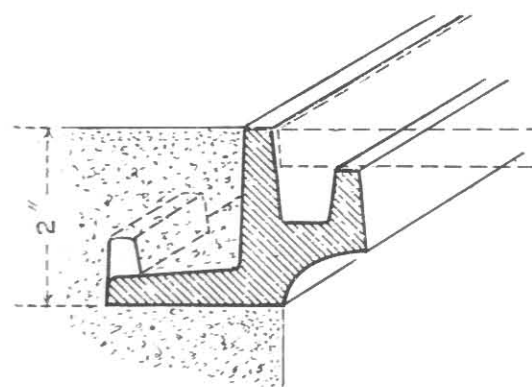
For Tray 1" Deep
4' $2\frac{1}{2}$ " Long

No. 6



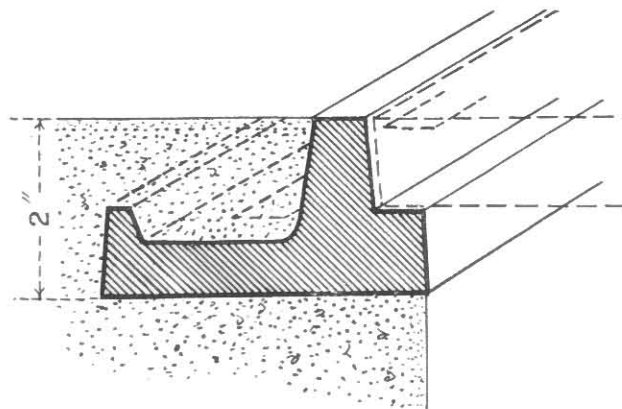
For $\frac{1}{2}$ " Thick Cover
4' 0" Long

No. 7



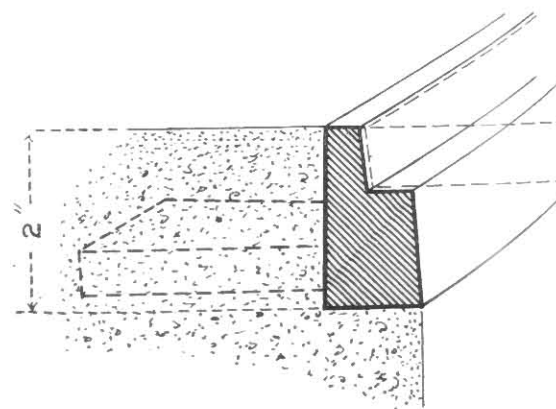
For $\frac{7}{8}$ " Thick Cover
4' 6" Long
Also for $\frac{1}{2}$ " Thick Cover
3' 7" and 4' 0" Long

No. 8



For 1" Thick Cover
3' $11\frac{1}{2}$ " Long

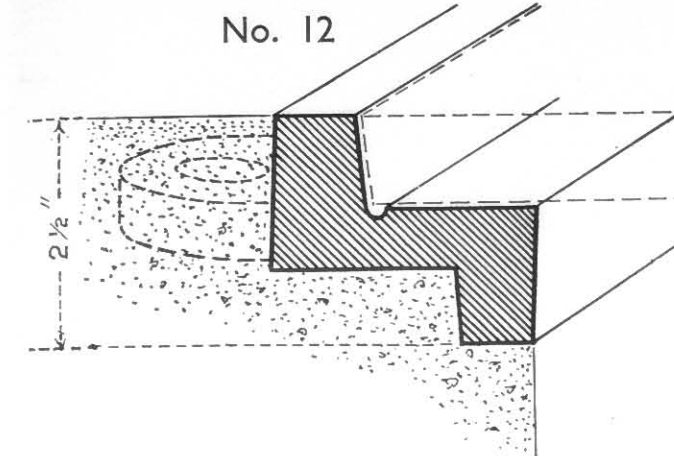
No. 9



For $\frac{3}{8}$ " Thick Cover 4' $2\frac{1}{4}$ " Long
For $\frac{1}{2}$ " Thick Cover 4' 0" Long
For $\frac{1}{2}$ " Thick Cover 4' $2\frac{1}{4}$ " Long ($1\frac{1}{4}$ " High)
For $1\frac{1}{8}$ " Thick Cover 4' 0" Long

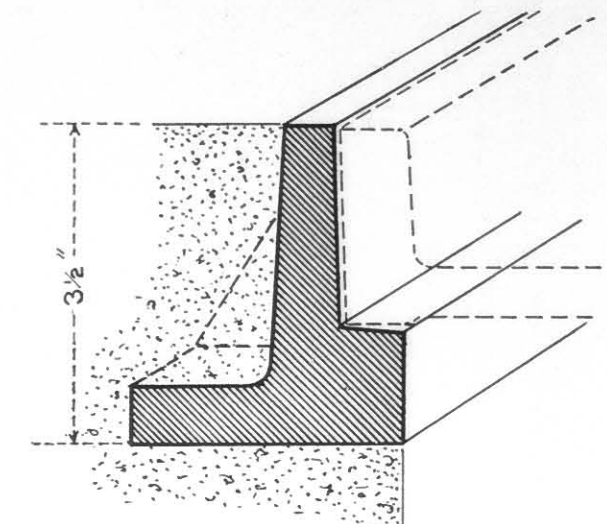
CURBS FOR TRENCH COVERS

No. 12



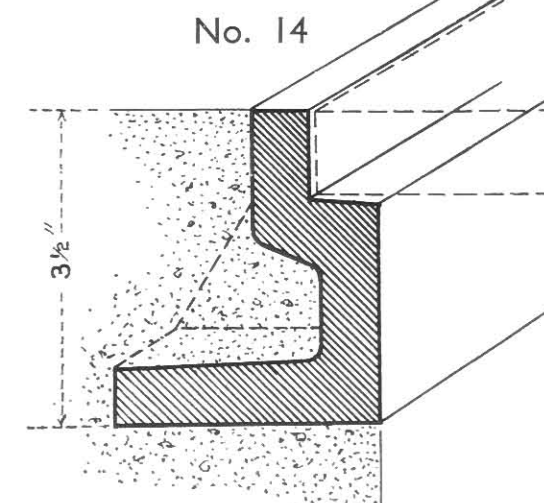
For 1" Thick Cover 5' 0" Long

No. 13



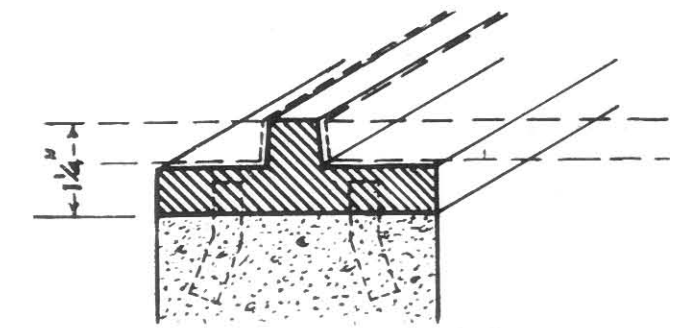
For Tray $2\frac{1}{4}$ " Deep 4' 9" Long

No. 14



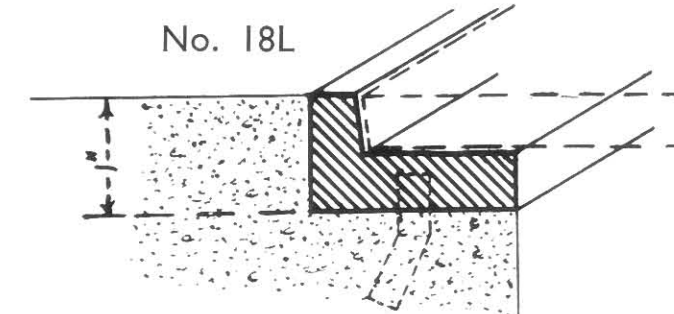
For 1" Thick Cover 6' 6" Long

No. 18T



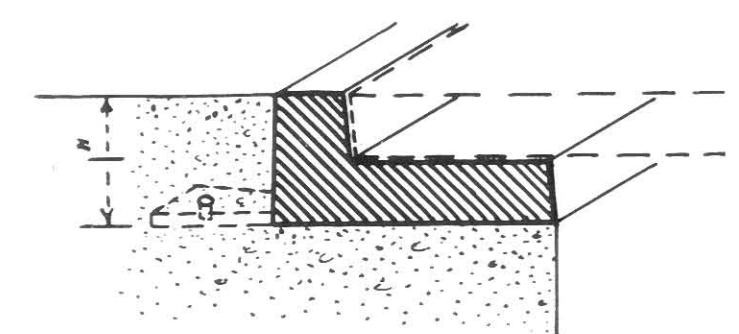
For $\frac{1}{2}$ " Thick Cover 4' 6" Long
Also 2" High for $1\frac{1}{4}$ " Thick Cover 4' 6" Long

No. 18L



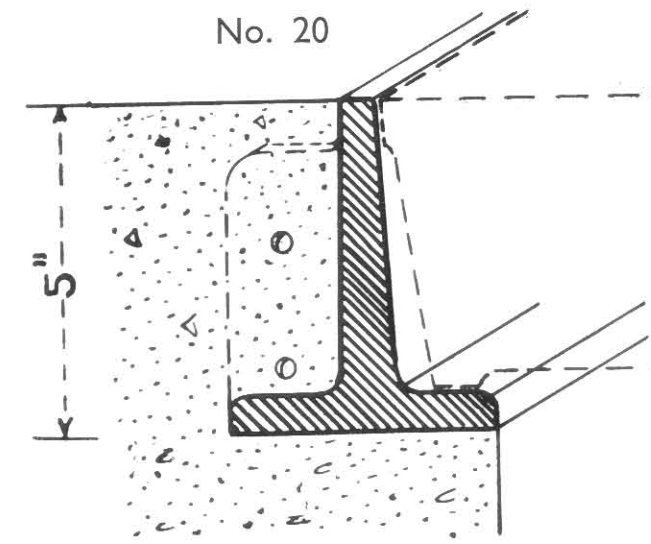
For $\frac{1}{4}$ " Thick Cover 3' $10\frac{5}{8}$ " Long
Also $1\frac{1}{4}$ " High for $\frac{1}{2}$ " Thick Cover 4' 6" Long

No. 19



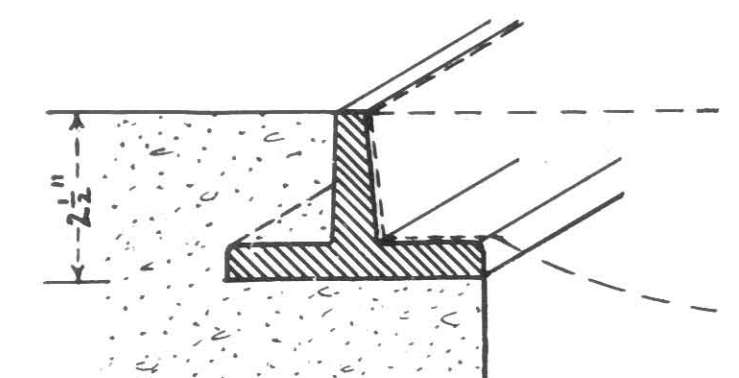
For $\frac{3}{8}$ ", $\frac{5}{8}$ ", $\frac{3}{4}$ ", 1" and $1\frac{5}{8}$ " Thick Covers 4' 0" Long
Also for $\frac{1}{2}$ " and $1\frac{3}{4}$ " Thick Covers 5' 0" Long

No. 20



For $4\frac{3}{8}$ " Thick Cover 4' 0" Long
with end Flanges for fixing Curbs

No. 21



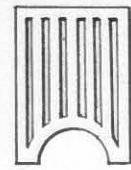
For 2" Thick Cover 4' 6" Long

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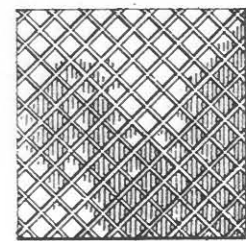
SURFACE GRATINGS AND PLATES

No. 41
Hart's Trap



$4\frac{3}{4}$ " x 7" x $\frac{3}{8}$ " Thick
 $5\frac{1}{4}$ " x $6\frac{3}{4}$ " x $\frac{1}{16}$ " Thick
 To suit Pipes
 $2\frac{1}{2}$ ", 3", $3\frac{1}{2}$ " and 4" Diam.

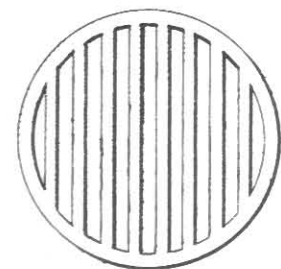
No. 105
Solid Plate



6" x 6" x $\frac{1}{8}$ " Thick
 6" x 6" x $\frac{1}{16}$ " Thick
 $7\frac{1}{2}$ " x $7\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 8" x 8" x $\frac{1}{8}$ " Thick
 8" x 8" x $\frac{1}{16}$ " Thick
 9" x 9" x $\frac{1}{8}$ " Thick
 $9\frac{1}{2}$ " x $9\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 10" x 10" x $\frac{1}{8}$ " Thick
 $11\frac{1}{2}$ " x $11\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 12" x 12" x $\frac{1}{8}$ " Thick
 15" x 15" x $\frac{1}{8}$ " Thick
 16" x 10" x $\frac{1}{8}$ " Thick
 18" x 14" x $\frac{1}{8}$ " Thick
 23" x 13" x $\frac{1}{8}$ " Thick
 35" x 34" x $\frac{1}{8}$ " Thick
 36" x 15" x $\frac{1}{8}$ " Thick

Can also be supplied any
 Size or Shape up to
 8" x 8"

No. 87



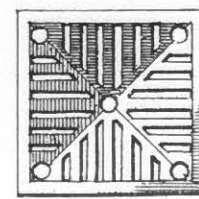
3", 4", $4\frac{1}{2}$ ", 5", $5\frac{1}{2}$ ", 6",
 $6\frac{1}{2}$ ", 7", 8", $11\frac{1}{2}$ ", $17\frac{1}{2}$ "
 Diam. x $\frac{1}{2}$ " Thick

Also

6" Diam. x $\frac{3}{8}$ " Thick
 $8\frac{1}{2}$ " Diam. x $\frac{1}{2}$ " Thick
 9" Diam. x $\frac{1}{2}$ " Thick
 10" Diam. x $\frac{1}{2}$ " Thick

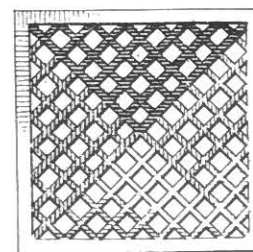
Also No. 510D
 $10\frac{3}{4}$ " Diam. x $\frac{3}{4}$ " Thick
 with six $1\frac{1}{4}$ " Deep Legs

No. 56



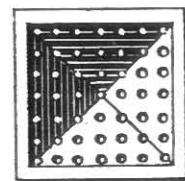
4" x 4" x $\frac{1}{2}$ " Thick
 6" x 6" x $\frac{1}{2}$ " Thick
 7" x 7" x $\frac{1}{2}$ " Thick
 $7\frac{1}{2}$ " x $7\frac{1}{2}$ " x $\frac{1}{2}$ " Thick
 $7\frac{3}{4}$ " x $7\frac{3}{4}$ " x $\frac{1}{2}$ " Thick
 8" x 8" x $\frac{1}{2}$ " Thick
 9" x 9" x $\frac{1}{2}$ " Thick
 10" x 10" x $\frac{1}{2}$ " Thick
 10" x 10" x $\frac{1}{4}$ " Thick
 11" x 11" x $\frac{1}{2}$ " Thick
 18" x 18" x $\frac{1}{8}$ " Thick

No. 50



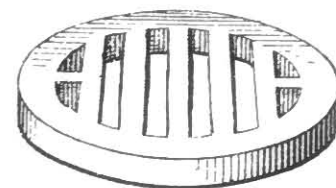
$10\frac{3}{4}$ " x $10\frac{3}{4}$ " x $\frac{1}{2}$ " Thick

No. 619



$6\frac{1}{2}$ " x $6\frac{1}{2}$ " x $\frac{1}{2}$ " Thick
 7" x 7" x $\frac{1}{2}$ " Thick
 $7\frac{1}{2}$ " x $7\frac{1}{2}$ " x $\frac{1}{2}$ " Thick
 8" x 8" x $\frac{1}{2}$ " Thick
 $8\frac{1}{2}$ " x $8\frac{1}{2}$ " x $\frac{1}{2}$ " Thick
 9" x 9" x $\frac{1}{2}$ " Thick
 $9\frac{1}{2}$ " x $9\frac{1}{2}$ " x $\frac{1}{2}$ " Thick

No. 86



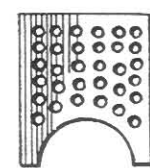
6" Diam. x $\frac{3}{4}$ " Thick
 7" Diam. x $\frac{3}{4}$ " Thick
 $14\frac{1}{2}$ " Diam. x $1\frac{3}{8}$ " Thick

No. 67



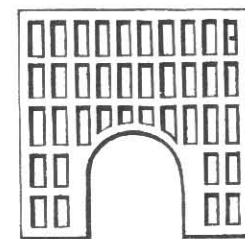
7" x 7" x $\frac{3}{16}$ " Thick
 9" x 9" x $\frac{3}{16}$ " Thick
 12" x 12" x $\frac{1}{4}$ " Thick

No. 103



$5\frac{1}{2}$ " x $6\frac{1}{2}$ " x $\frac{1}{2}$ " Thick
 To suit
 4" Diameter Pipe

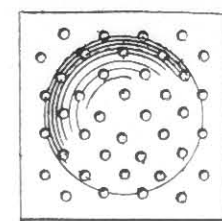
No. 694



10" x 10" x $\frac{1}{2}$ " Thick

To suit 4" Diameter Pipe

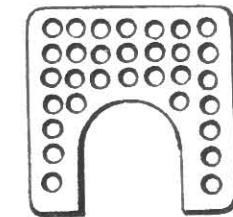
No. 118



Section

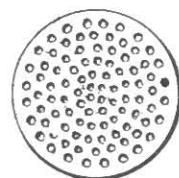
6" x 6" x $\frac{1}{4}$ " Thick
 7" x 7" x $\frac{1}{4}$ " Thick
 8" x 8" x $\frac{1}{4}$ " Thick
 9" x 9" x $\frac{1}{4}$ " Thick
 10" x 10" x $\frac{1}{4}$ " Thick
 12" x 12" x $\frac{1}{8}$ " Thick

No. 695



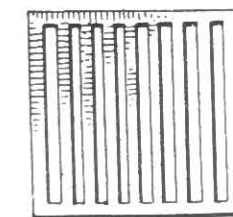
9" x 9" x $\frac{1}{2}$ " Thick

No. 76



3" Diam. x $\frac{1}{2}$ " Thick
 $3\frac{7}{8}$ " Diam. x $\frac{7}{16}$ " Thick
 4" Diam. x $\frac{3}{8}$ " Thick
 5" Diam. x $\frac{1}{2}$ " Thick
 6" Diam. x $\frac{1}{2}$ " Thick
 6" Diam. x $\frac{1}{4}$ " Thick
 $6\frac{1}{2}$ " Diam. x $\frac{1}{2}$ " Thick
 7" Diam. x $\frac{1}{2}$ " Thick
 $7\frac{1}{2}$ " Diam. x $\frac{1}{16}$ " Thick
 8" Diam. x $\frac{1}{16}$ " Thick
 9" Diam. x $\frac{1}{8}$ " Thick
 9" Diam. x $\frac{1}{2}$ " Thick

No. 78
Rebated Border

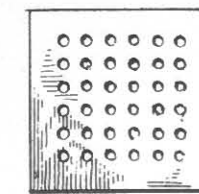


5" x 5" x $\frac{1}{8}$ " Thick
 6" x 6" x $\frac{1}{8}$ " Thick
 6" x 6" x $\frac{1}{16}$ " Thick
 7" x 7" x $\frac{1}{8}$ " Thick
 8" x 8" x $\frac{1}{8}$ " Thick
 9" x 9" x $\frac{1}{8}$ " Thick
 10" x 10" x $\frac{1}{2}$ " Thick
 12" x 12" x $\frac{1}{2}$ " Thick

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SURFACE GRATINGS AND PLATES

No. 64

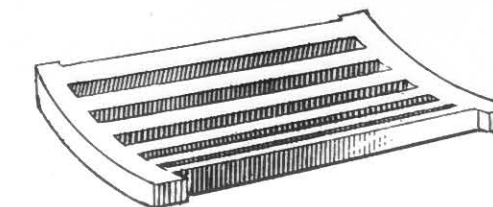


4" x 4" x $\frac{3}{8}$ " Thick
 4" x 4" x $\frac{1}{16}$ " Thick
 6" x 6" x $\frac{1}{16}$ " Thick
 6" x 6" x $\frac{1}{8}$ " Thick
 7" x 7" x $\frac{1}{8}$ " Thick
 7" x 7" x $\frac{1}{16}$ " Thick
 $7\frac{1}{2}$ " x $7\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 8" x 8" x $\frac{1}{8}$ " Thick
 8" x 8" x $\frac{1}{16}$ " Thick
 9" x 5" x $\frac{1}{8}$ " Thick
 9" x 6" x $\frac{1}{8}$ " Thick
 9" x 6" x $\frac{1}{16}$ " Thick
 9" x 9" x $\frac{1}{8}$ " Thick
 $9\frac{1}{2}$ " x $9\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 $9\frac{3}{4}$ " x $9\frac{3}{4}$ " x $\frac{1}{16}$ " Thick
 10" x 10" x $\frac{1}{2}$ " Thick
 10" x 10" x $\frac{1}{4}$ " Thick
 $10\frac{1}{4}$ " x $10\frac{1}{4}$ " x $\frac{1}{8}$ " Thick
 $11\frac{1}{2}$ " x $11\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 12" x 12" x $\frac{1}{8}$ " Thick
 12" x 12" x $\frac{1}{16}$ " Thick
 14" x 14" x $\frac{1}{8}$ " Thick
 15" x 12" x $\frac{1}{8}$ " Thick
 6" x 10" x $\frac{1}{8}$ " Thick
 18" x 18" x $\frac{1}{8}$ " Thick
 23" x 13" x $\frac{1}{8}$ " Thick
 27" x $22\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 30" x 24" x $\frac{1}{8}$ " Thick
 36" x 15" x $\frac{1}{8}$ " Thick

Also with Smaller Holes

6" x 6" x $\frac{1}{2}$ " Thick
 $7\frac{3}{4}$ " x $7\frac{3}{4}$ " x $\frac{1}{2}$ " Thick
 8" x 8" x $\frac{1}{2}$ " Thick
 $9\frac{1}{2}$ " x $9\frac{1}{2}$ " x $\frac{1}{2}$ " Thick
 12" x 6" x $\frac{1}{8}$ " Thick

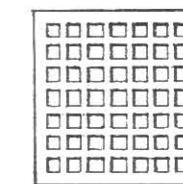
No. 88



18" x 12" x $\frac{1}{4}$ " Thick

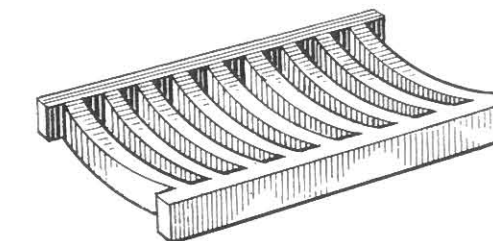
No. 115

Ribbed on Underside



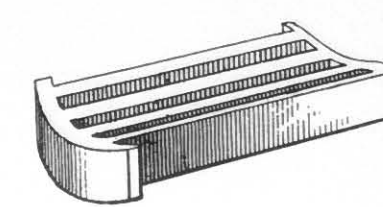
6" x 6" x $\frac{7}{16}$ " Thick
 $7\frac{1}{2}$ " x $7\frac{1}{2}$ " x $\frac{7}{16}$ " Thick
 9" x 9" x $\frac{7}{16}$ " Thick
 $9\frac{1}{2}$ " x $9\frac{1}{2}$ " x $\frac{7}{16}$ " Thick
 $9\frac{3}{4}$ " x $9\frac{3}{4}$ " x $\frac{7}{16}$ " Thick

No. 785



18" x $12\frac{1}{4}$ " x $\frac{1}{2}$ " Thick

No. 89



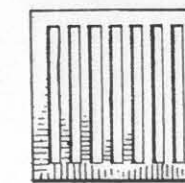
14" x $8\frac{3}{4}$ " x $2\frac{1}{4}$ " Thick

No. 119



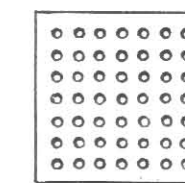
4" Diam. x $\frac{1}{2}$ " Thick
 $5\frac{3}{4}$ " Diam. x $\frac{1}{2}$ " Thick
 $6\frac{3}{4}$ " Diam. x $\frac{1}{2}$ " Thick

No. 104



6" x 6" x $\frac{3}{8}$ " Thick
 6" x 6" x $\frac{1}{16}$ " Thick
 7" x 7" x $\frac{1}{16}$ " Thick
 $7\frac{1}{2}$ " x $7\frac{1}{2}$ " x $\frac{1}{16}$ " Thick
 8" x 8" x $\frac{1}{16}$ " Thick
 8" x 8" x $\frac{1}{8}$ " Thick
 9" x 9" x $\frac{1}{16}$ " Thick
 9" x 9" x $\frac{1}{8}$ " Thick
 $9\frac{1}{2}$ " x $9\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 $10\frac{1}{2}$ " x $10\frac{1}{2}$ " x $\frac{1}{8}$ " Thick
 $11\frac{3}{4}$ " x $11\frac{3}{4}$ " x $\frac{1}{8}$ " Thick
 12" x 6" x $\frac{1}{8}$ " Thick
 12" x 9" x $\frac{1}{2}$ " Thick

No. 616



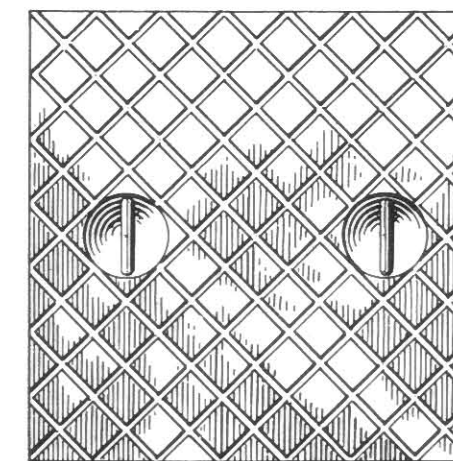
7" x 7" x $\frac{3}{8}$ " Thick
 $7\frac{1}{2}$ " x $7\frac{1}{2}$ " x $\frac{3}{8}$ " Thick
 8" x 8" x $\frac{3}{8}$ " Thick
 $8\frac{1}{2}$ " x $8\frac{1}{2}$ " x $\frac{3}{8}$ " Thick
 9" x 6" x $\frac{3}{8}$ " Thick
 9" x 9" x $\frac{3}{8}$ " Thick
 $9\frac{1}{2}$ " x $9\frac{1}{2}$ " x $\frac{3}{8}$ " Thick
 10" x 10" x $\frac{3}{8}$ " Thick

No. 120



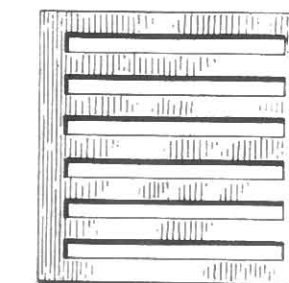
8", $9\frac{3}{4}$ ", 11", 12", $12\frac{1}{2}$ "
 and 14" Diam.
 All $\frac{1}{2}$ " Thick

No. 847



20" x 20" x $\frac{1}{16}$ " Thick

No. 839

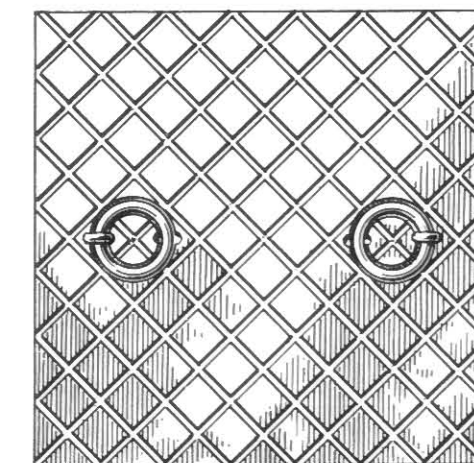


12" x 12" x 1" Thick
 12" x 12" x $\frac{1}{2}$ " Thick

Also No. 889

12" x $8\frac{3}{4}$ " x 1" Thick
 12" x $13\frac{3}{4}$ " x 1" Thick

No. 848

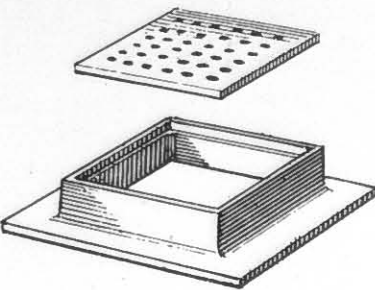


20" x 20" x $\frac{1}{16}$ " Thick

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SURFACE GRATINGS WITH FRAMES

No. 64

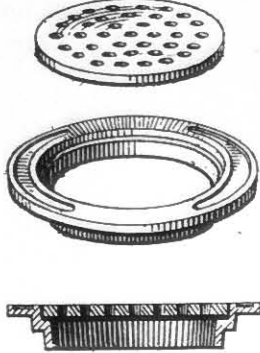


Opening	Overall	Depth	Thickness of Grating
*6" x 6"	8 3/4" x 8 3/4"	1 1/2"	3/8"
*6" x 6"	8 3/4" x 8 3/4"	1 1/2"	1/2"
*6" x 6"	8 3/4" x 8 3/4"	2 1/2"	1 1/2"
*6" x 6"	9 1/4" x 9 1/4"	3"	1 1/2"
*7" x 7"	9 1/4" x 9 1/4"	1 1/2"	3/8"
*7" x 7"	9 1/4" x 9 1/4"	1 1/2"	1/2"
*7" x 7"	9 1/4" x 9 1/4"	1 1/2"	1 1/2"
*8" x 8"	10" x 10"	1 1/2"	3/8"
*8" x 8"	10" x 10"	1 1/2"	1/2"
*8" x 8"	10 3/4" x 10 3/4"	2 1/2"	1 1/2"
*8" x 8"	12 1/4" x 12 1/4"	3"	1 1/2"
*8" x 8"	11 1/2" x 11 1/2"	1 1/2"	3/8"
*9" x 9"	11 1/2" x 11 1/2"	1 1/2"	1/2"
*9" x 9"	11 1/2" x 11 1/2"	1 1/2"	1 1/2"
*10" x 10"	12 1/2" x 12 1/2"	1 1/2"	3/8"
*10" x 10"	12 1/2" x 12 1/2"	1 1/2"	1/2"
*10" x 10"	12 1/2" x 12 1/2"	2 1/2"	1 1/2"
*10" x 10"	13 1/2" x 13 1/2"	3"	1 1/2"
*10" x 10"	14 1/4" x 14 1/4"	3 1/2"	1 1/2"
*12" x 12"	14 1/4" x 14 1/4"	1 1/2"	3/8"
*12" x 12"	14 1/4" x 14 1/4"	1 1/2"	1/2"
*12" x 12"	14 1/4" x 14 1/4"	2 1/2"	1 1/2"
*12" x 12"	16" x 16"	3"	1 1/2"
*16" x 10"	19 3/4" x 13 1/2"	2"	1/2" solid
*18" x 18"	21 1/2" x 21 1/2"	2"	1/2" solid
*18" x 18"	22 1/2" x 22 1/2"	3 1/2"	1 1/2" solid
*23" x 13"	27 1/2" x 17 1/2"	3 1/2"	1 1/2" solid
*20" x 9"	24 1/2" x 13 1/2"	4"	1 1/2" solid

Any of these can be supplied with Solid Plate Cover as No. 105

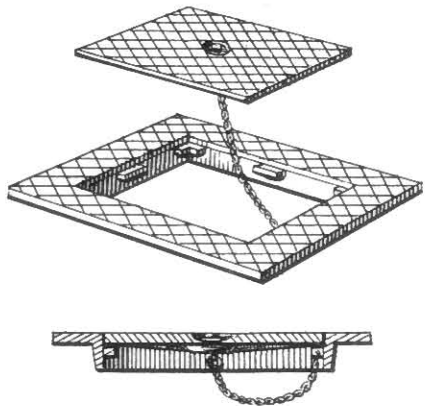
* Also Hinged

No. 64A



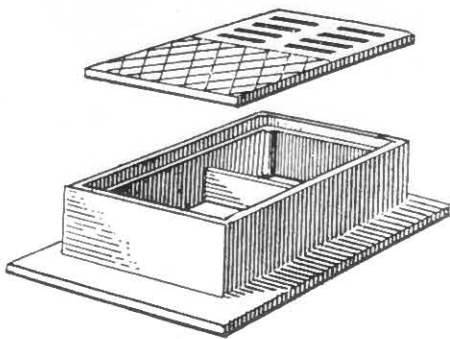
Opening	Overall	Depth	Thickness of Grating
8" Diam.	11" Diam.	2"	1/2"
10" Diam.	13" Diam.	2"	1/2"

No. 64C



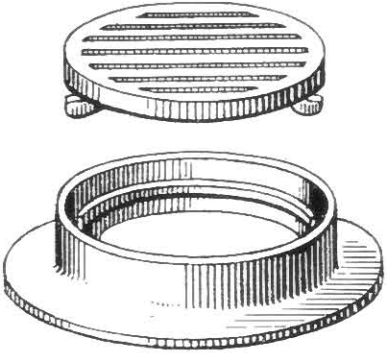
Opening	Overall	Depth	Thickness of Cover
10" x 10"	14" x 14"	1 3/8"	3/8"
10" x 10"	14" x 14"	2"	1/2"
11" x 11"	16" x 16"	1 3/8"	3/8"
12" x 12"	16" x 16"	2"	1/2"

No. 64B
For Buchan's Trap



Opening	Overall	Depth	Thickness of Cover	Style of Perforations
12" x 6"	14 1/2" x 8 3/4"	1 1/4"	5/16"	Round Holes
12" x 7"	16" x 11"	3 3/4"	1 1/2"	Round Holes or Slots To lock Do.
14" x 7"	17" x 10"	2 3/4"	1 1/2"	Do.
14" x 9"	18" x 13"	4 1/4"	1 1/2"	Round Holes Do.
16" x 8"	20 1/4" x 12"	3 1/4"	1 1/2"	Round holes or Slots Do.
16" x 8"	20" x 12"	4"	1 1/2"	Round Holes throughout
18" x 7"	22" x 11"	4 1/2"	1 1/2"	Round Holes To lock
18" x 7"	22" x 11"	5"	1 1/2"	Do.
18" x 7"	22" x 11"	5"	1 1/2"	Round Holes throughout
16" x 8"	18" x 10"	2"	7/8"	Round Holes To lock

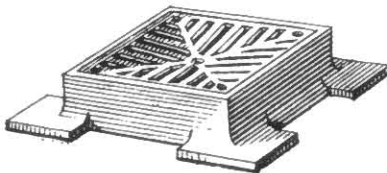
No. 66



Opening	Overall	Depth	Thickness of Grating
6" Diam.	11" Diam.	3"	1"
8 1/2" Diam.	13 1/2" Diam.	3"	1"
*11 3/4" Diam.	16 3/4" Diam.	3"	1"

*Also with Dished Grating

No. 102

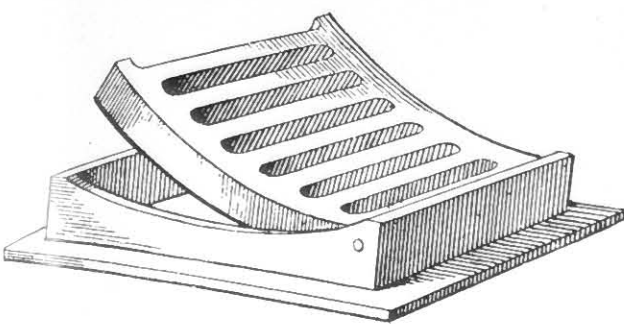


Over Top	Overall	Depth	Thickness of Grating
7" x 7"	10" x 10"	2"	1/2"
8" x 8"	11" x 11"	2"	3/8"
*9" x 9"	12" x 12"	2 3/8"	1/2"
11" x 11"	14" x 14"	2 3/8"	1/2"

*Also Hinged

SURFACE GRATINGS WITH FRAMES

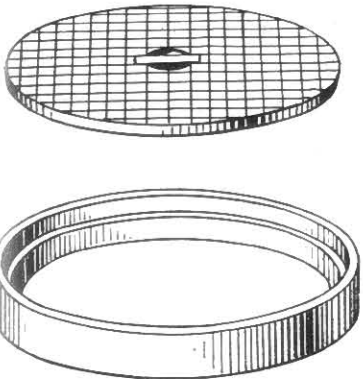
No. 133



Opening	Overall	Depth	Thickness of Grating
12" x 12"	15 1/2" x 15 1/2"	3 1/2"	1 1/4"
14" x 14"	18 1/2" x 18 1/2"	3 3/4"	2"
19" x 13"	23" x 17"	6"	2 1/2"
19 1/2" x 14"	23" x 17 3/8"	6"	1 1/4"

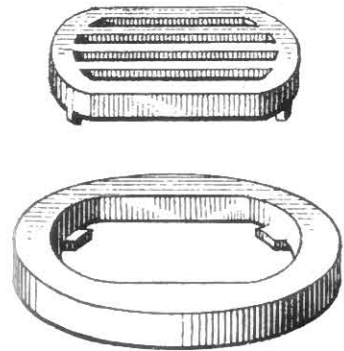
No. 144

Coal Shoot Frame and Cover



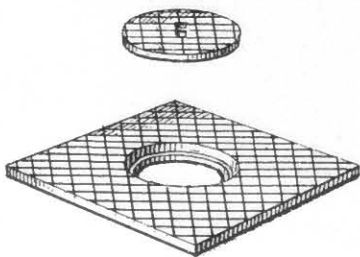
Opening	Overall	Depth	Thickness of Cover
14" Diam.	16" Diam.	1 1/2"	1/2"

No. 662



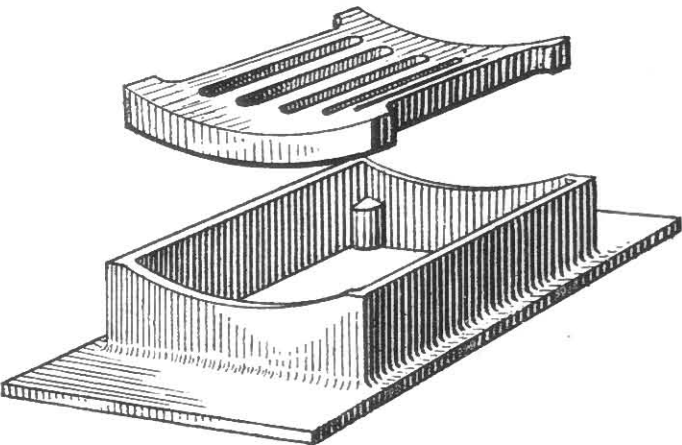
Opening	Overall	Depth	Thickness of Grating
11" x 9 3/4"	14" Diam.	2"	1 1/8"

No. 126



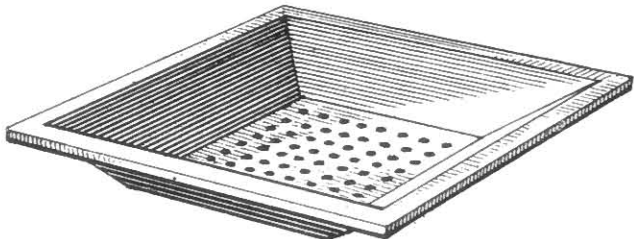
Opening	Overall	Thickness of Cover
5" Diam.	10" x 10"	5/8"

No. 133L



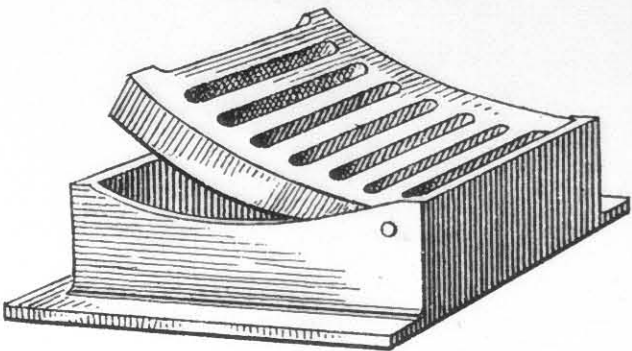
Opening	Overall	Depth	Thickness of Grating
12" x 18"	14" x 26"	4 1/2"	1 1/4"

No. 675



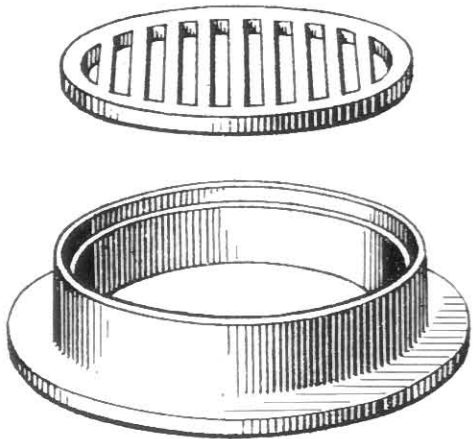
18" x 18" x 3 1/4" x 1/2" Thick Grating (Cast in) 9" x 9"

No. 133K



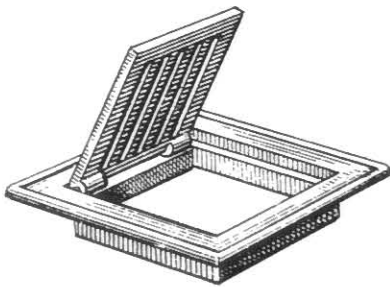
Opening	Overall	Depth	Thickness of Grating
14" x 14"	17" x 18 1/2"	6"	2 1/2"

No. 621



Opening	Overall	Depth	Thickness of Grating
15 1/2" Diam.	20" Diam.	4"	3/4" also 1"

No. 682



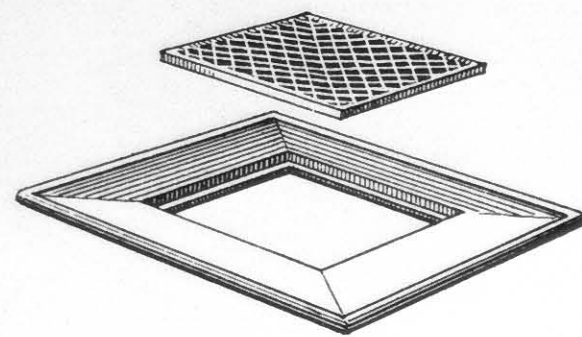
Opening	Overall	Depth	Thickness of Grating
5" x 5"	10" x 10"	2 3/8"	5/8"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

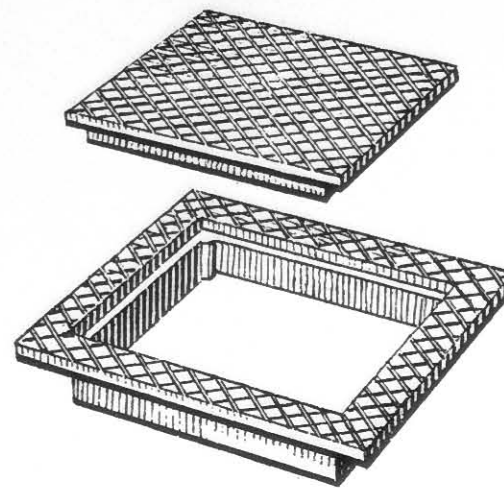
SURFACE GRATINGS AND PLATES WITH FRAMES

No. 683



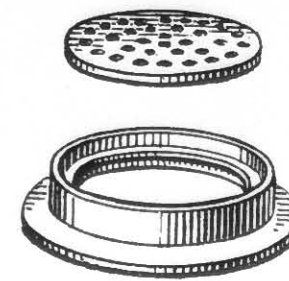
Opening	Overall	Depth	Thickness of Grating
8 $\frac{3}{4}$ " x 8 $\frac{3}{4}$ "	15 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ "	1 $\frac{3}{4}$ "	$\frac{1}{2}$ "

No. 725



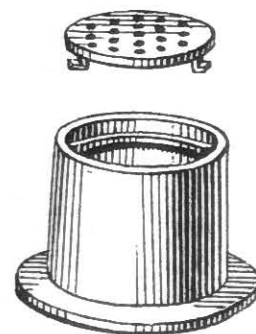
Opening	Overall	Depth	Thickness of Cover
15" x 15"	19 $\frac{1}{4}$ " x 19 $\frac{1}{4}$ "	2 $\frac{1}{2}$ "	$\frac{7}{16}$ "

No. 711



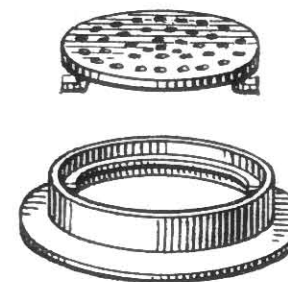
Opening	Overall	Depth	Thickness of Grating
6" Diam.	8 $\frac{3}{4}$ " Diam.	2 $\frac{1}{4}$ "	$\frac{1}{2}$ "

No. 712



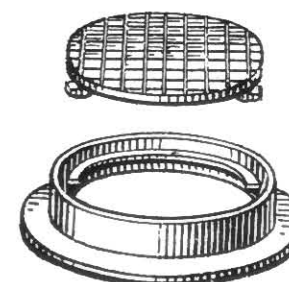
Opening	Overall	Depth	Thickness of Grating
6" Diam.	9" Diam.	6 $\frac{1}{4}$ "	$\frac{3}{8}$ "

No. 712



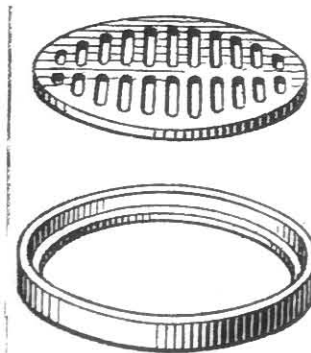
Opening	Overall	Depth	Thickness of Grating
6" Diam.	9" Diam.	2"	$\frac{3}{8}$ "
9" Diam.	12" Diam.	2"	$\frac{3}{8}$ "
9" Diam.	12" Diam.	2"	$\frac{3}{8}$ "

No. 712s



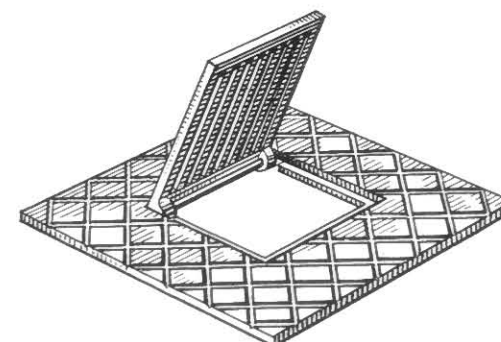
Opening	Overall	Depth	Thickness of Cover
6" Diam.	9" Diam.	2"	$\frac{3}{8}$ "
9" Diam.	12" Diam.	2"	$\frac{3}{8}$ "

No. 743



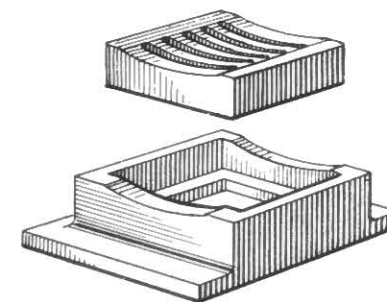
Opening	Overall	Depth	Thickness of Grating
10 $\frac{1}{2}$ " Diam.	11 $\frac{1}{2}$ " Diam.	1"	$\frac{3}{8}$ "
12" Diam.	13 $\frac{1}{2}$ " Diam.	1 $\frac{1}{4}$ "	$\frac{1}{2}$ "

No. 805



Grating	Overall	Thickness
9" x 9"	18" x 18"	$\frac{1}{2}$ "

No. 808

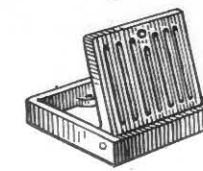


Grating	Overall	Depth	Thickness of Grating
9 $\frac{1}{2}$ " x 8 $\frac{1}{4}$ "	16" x 12 $\frac{1}{2}$ "	3"	2"

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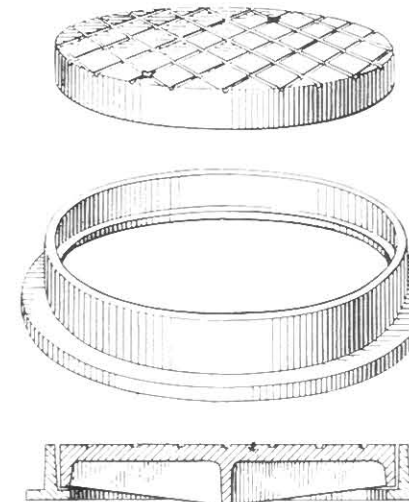
SURFACE GRATINGS WITH FRAMES

No. 834
With Hinged Grating



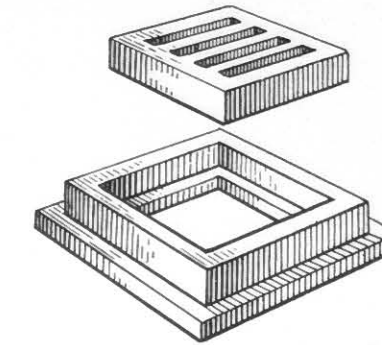
Grating	Overall	Depth	Thickness of Grating
5" x 5"	5 $\frac{3}{4}$ " x 5 $\frac{3}{4}$ "	1"	$\frac{1}{2}$ "

No. 892
Coal Shoot Frame and Cover



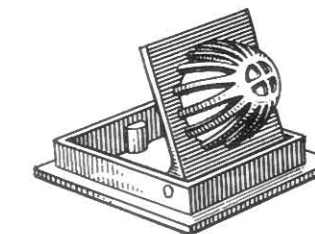
Opening	Overall	Depth	Thickness of Cover
18" Diam.	23 $\frac{1}{2}$ " Diam.	3 $\frac{1}{4}$ "	1 $\frac{1}{4}$ "

No. 840



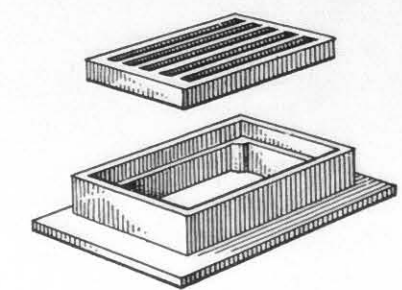
Grating	Overall	Depth	Thickness of Grating
8" x 8"	11 $\frac{3}{4}$ " x 11 $\frac{3}{4}$ "	2 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "

No. 877



Opening	Overall	Depth of Frame	Thickness of Grating
6" x 6"	8 $\frac{3}{4}$ " x 8 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	$\frac{5}{16}$ "

No. 870



Opening	Overall	Depth	Thickness of Grating
8 $\frac{1}{4}$ " x 5 $\frac{3}{4}$ "	12" x 9 $\frac{1}{2}$ "	3"	1"

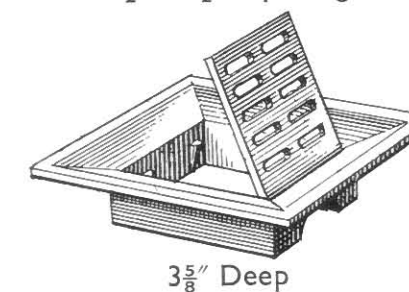
No. 882



Opening	Overall	Depth	Thickness of Grating
2 $\frac{5}{8}$ " Diam.	4" Diam.	$\frac{5}{8}$ "	$\frac{3}{8}$ "

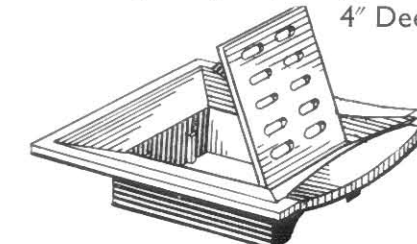
GREASE BOX COVERS

No. 121A
6 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ " Opening



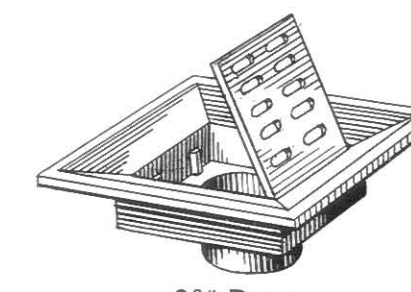
3 $\frac{5}{8}$ " Deep

No. 121E
6 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ " Opening
4" Deep



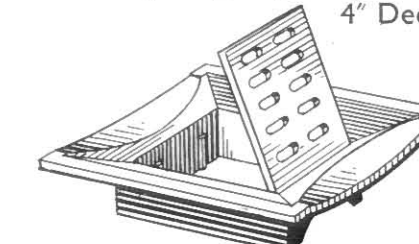
No. 121F
As above but with 4" Diam. Outlet
3 $\frac{1}{4}$ " Deep

No. 121B
With 4" Diam. Outlet



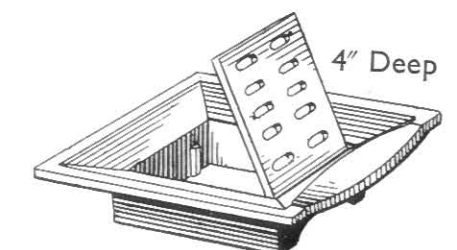
2 $\frac{3}{4}$ " Deep

No. 121G
6 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ " Opening
4" Deep



No. 121H
As above but with 4" Diam. Outlet
3 $\frac{1}{4}$ " Deep

No. 121D
6 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ " Opening



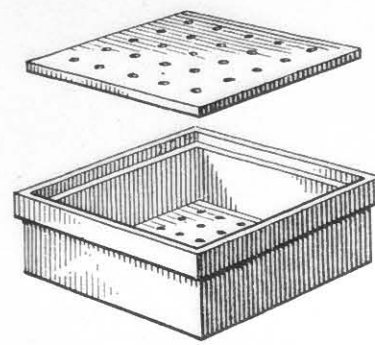
4" Deep

No. 121C
As above but with 4" Diam. Outlet
3 $\frac{1}{4}$ " Deep
13" x 13" Overall x $\frac{5}{8}$ " Thick

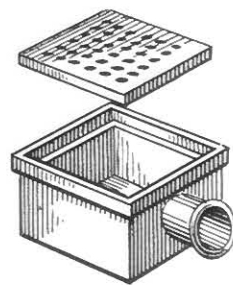
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CESSPOOL BOXES

No. 92



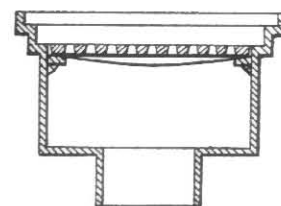
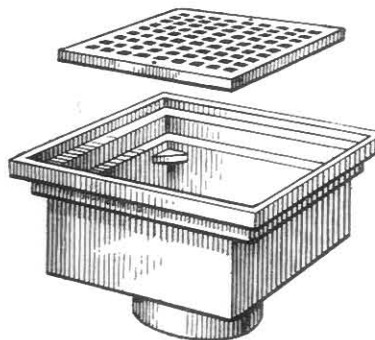
No. 758



Outlet on Side or Bottom

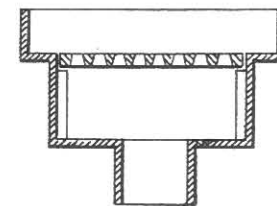
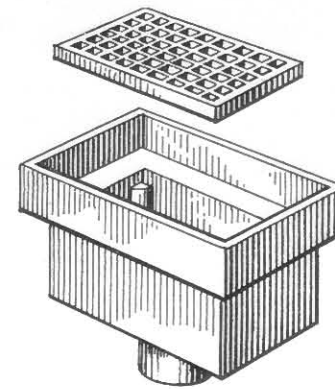
No.	Grating	Overall	Depth	Thickness of Grating
92	9½" x 9½"	10½" x 10½"	3⅝"	⅜"
758	6⅜" x 6⅜"	7" x 7"	3⅝"	⅜"

No. 842



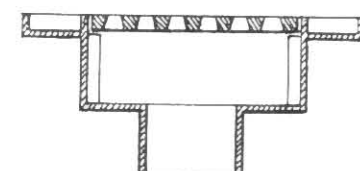
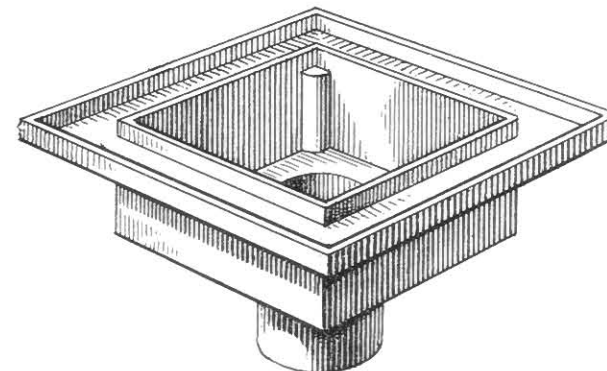
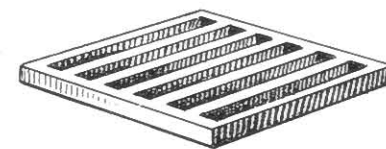
Grating	Overall	Depth	Thickness of Grating
9" x 9"	12" x 12"	6"	½"

No. 759



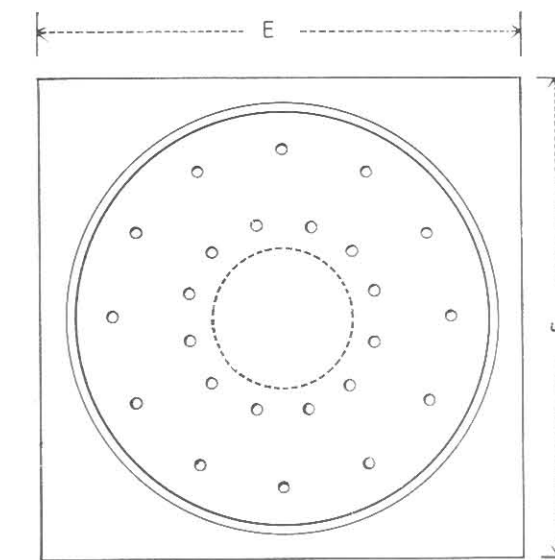
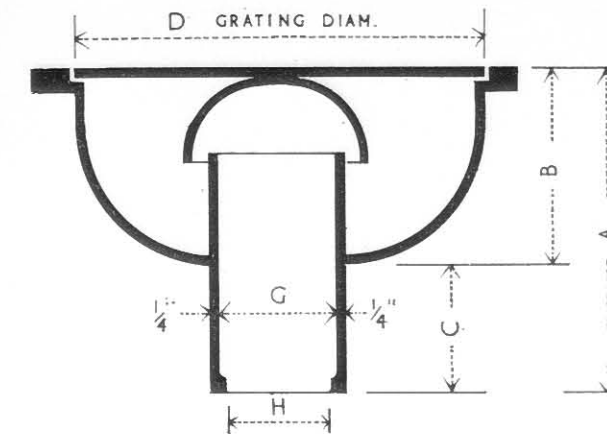
Grating	Overall	Depth	Thickness of Grating
9" x 6"	11¾" x 8¾"	6¼"	½"

No. 896



Grating	Overall	Depth	Thickness of Grating
6" x 6"	10" x 10"	3¾"	⅜"

BELL-TRAP CESSPOOLS



NOTE.—Inlet Pipes can be supplied for any of these Traps

Dimensions in Inches								
No.	A	B	C	D	E	F	G	H
1	3⅜	3¼	3¼	5⅜	6	6	1½	
1 In brass	3⅜	3¼	3¼	5⅜	8	8	2	
2	2⅞	2¼	2¼	2⅞	3	3	1½	
3	3⅜	3¼	3¼	5⅜	6	6	1½	
9	6	4	2	11	13	13	4	
10	12	4	8	11	13	13	4	
10	12	4	8	11	18	18	4	
13	6¾	4	2¾	11	13	13	4	3¾
14	6¾	3¾	3	11	13	13	5⅜	4⅝
14A	6¾	3¾	3	11	13	13	5⅜	4⅝
14B	7¾	4¾	3	14	16	16	7¾	7⅞

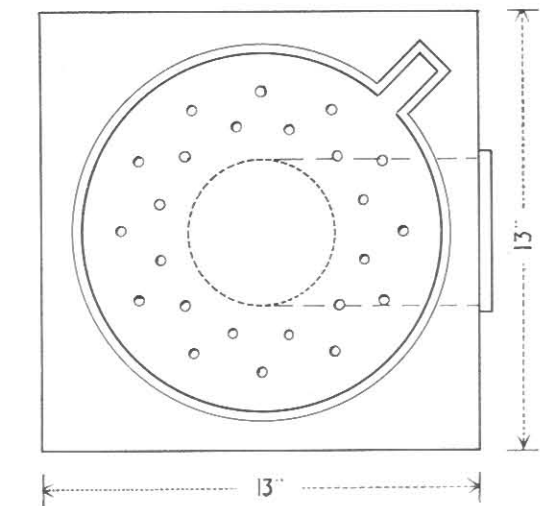
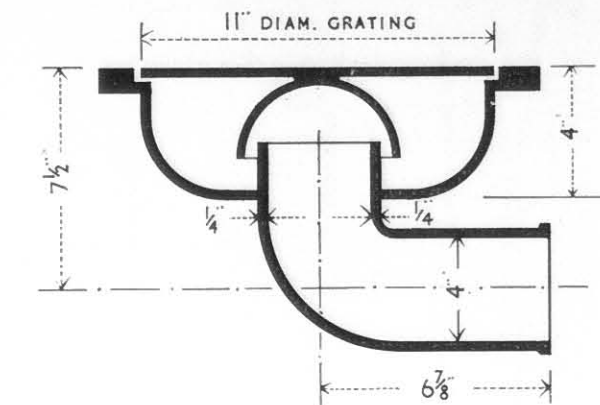
GRATINGS

Loose	Hinged	Screwed
No. 1	Nos. 2, 9, 10, 13, 14, 14A & 14B	No. 3

Dimensions in Inches								
No.	A	B	C	D	E	F	G	H
12	7½	4	11	13	4	5⅜	13	13
15	9¼	4¼	12	14	6	7⅞	14	14

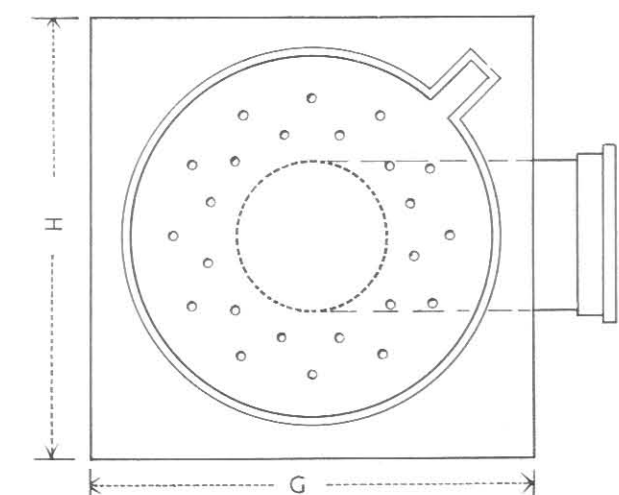
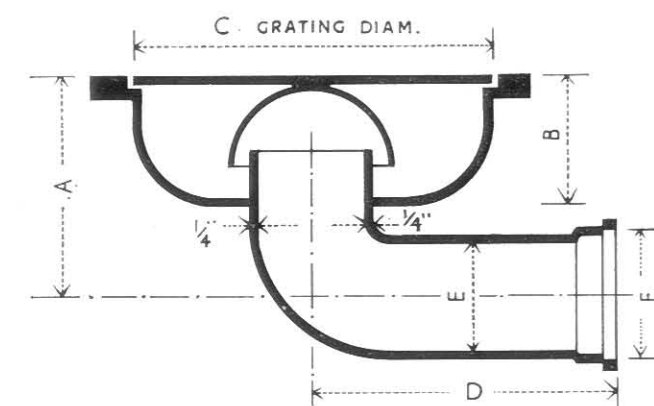
No. 11

with Bent Spigot Outlet



No. 12 & 15

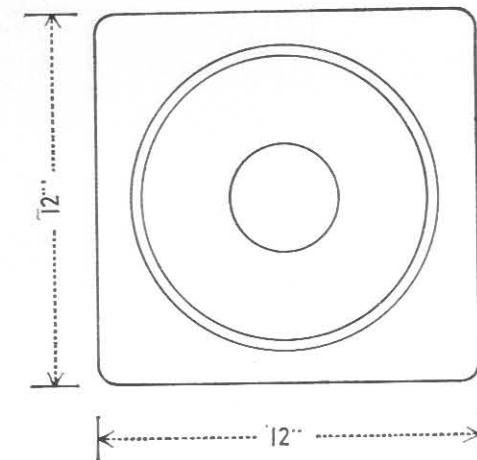
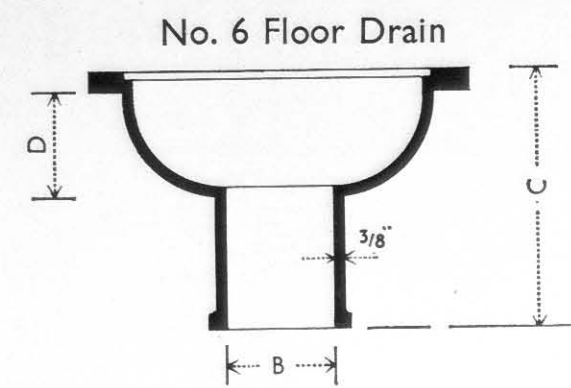
with Bent Sanitary Faucet Outlet. For dimensions, see Table bottom left.



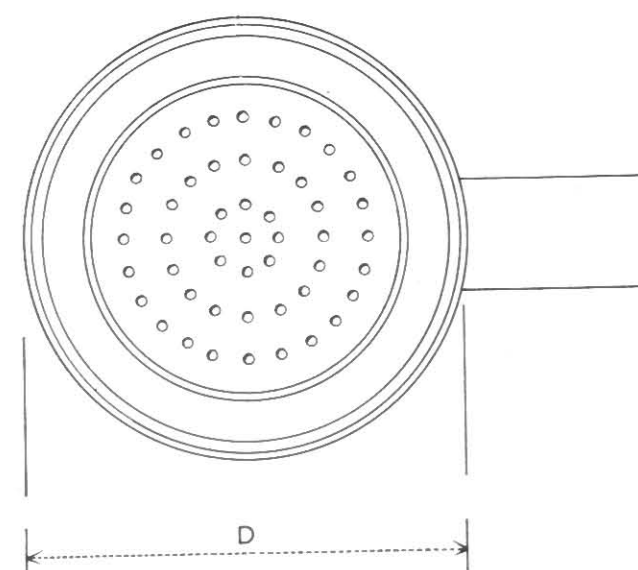
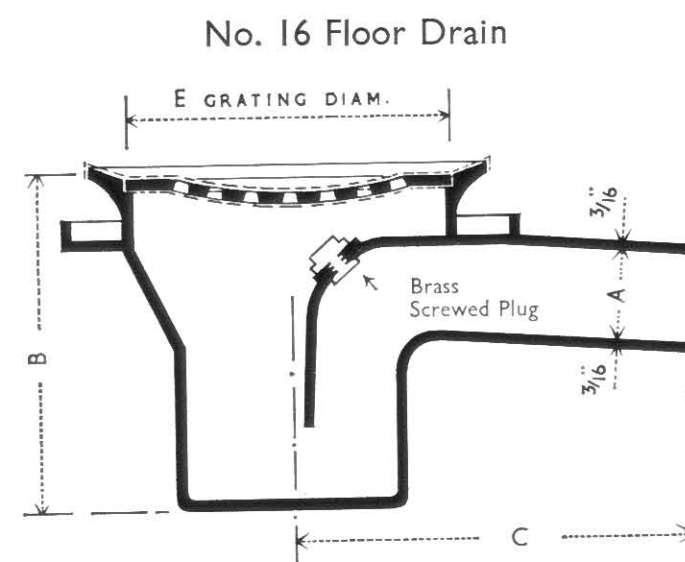
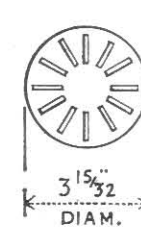
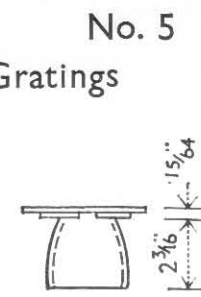
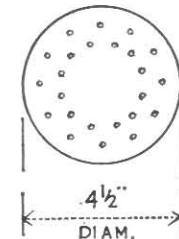
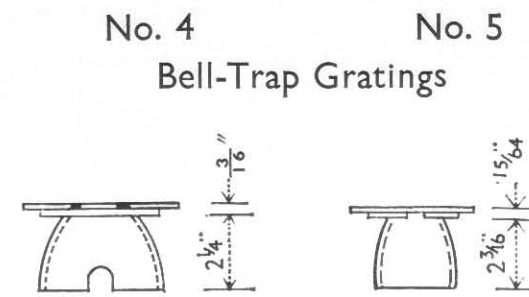
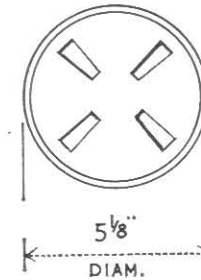
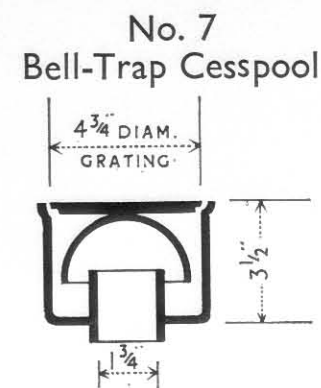
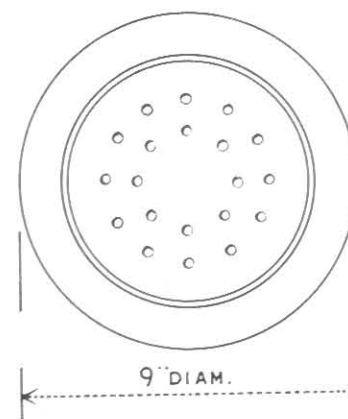
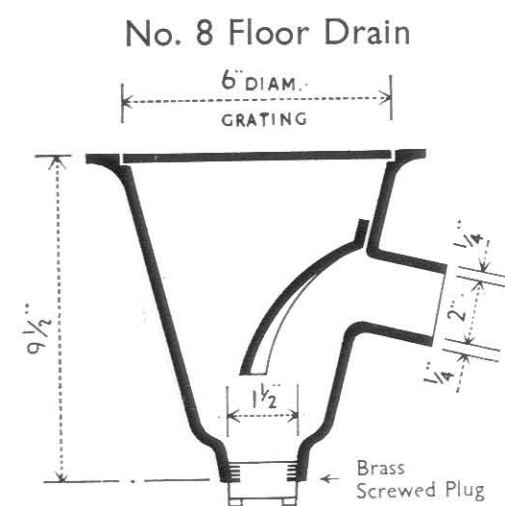
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FLOOR DRAINS AND CESSPOOL TRAPS



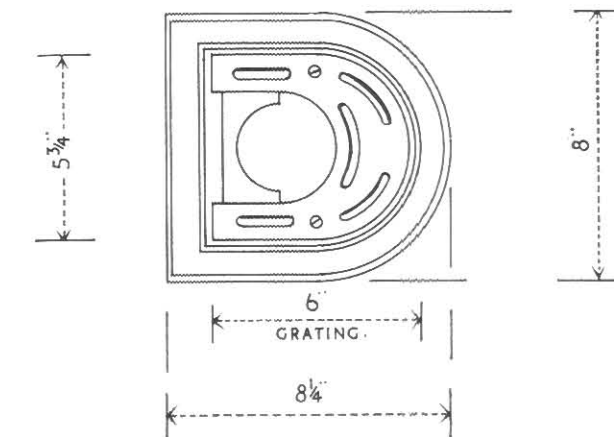
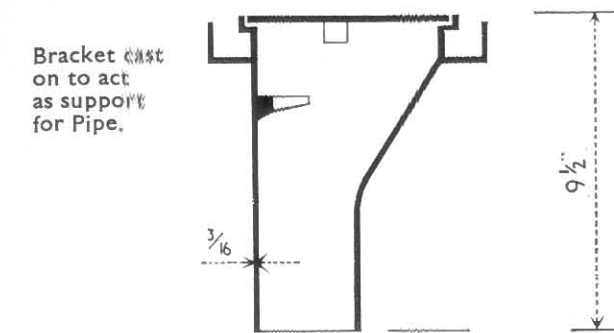
B	C	D	B	C	D
4"	6 3/4"	3 1/4"	6"	10 1/2"	2 1/2"
4"	8 1/2"	3 1/4"	6"	11 1/2"	2 1/2"
4"	11 1/2"	3 1/4"			



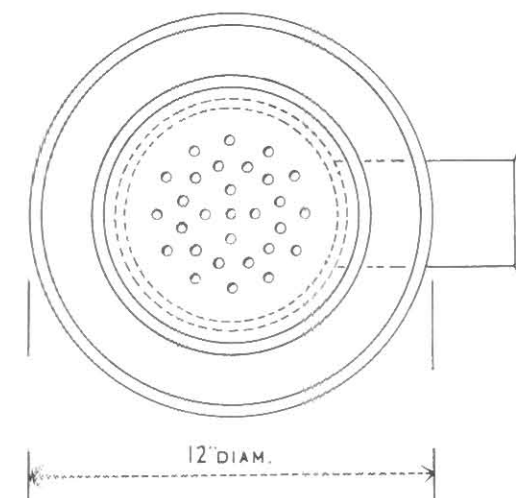
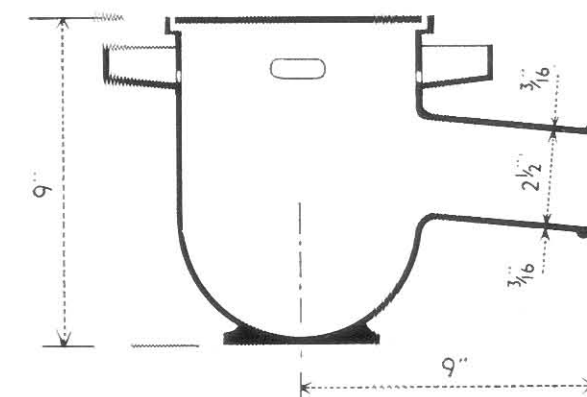
A	B	C	D	E
3"	10"	1' 0"	1' 1"	9 1/4"
4"	10"	1' 0"	1' 4"	1' 0 1/4"

BALCONY AND ROOF GULLIES

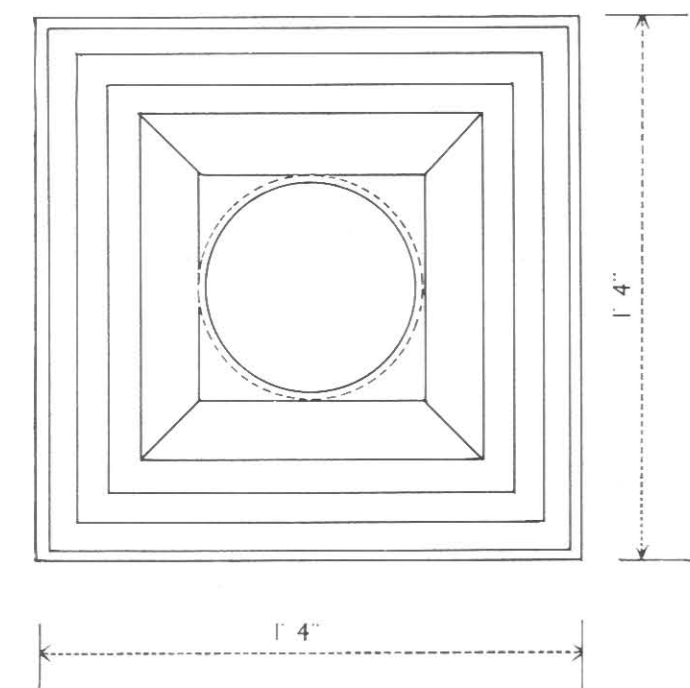
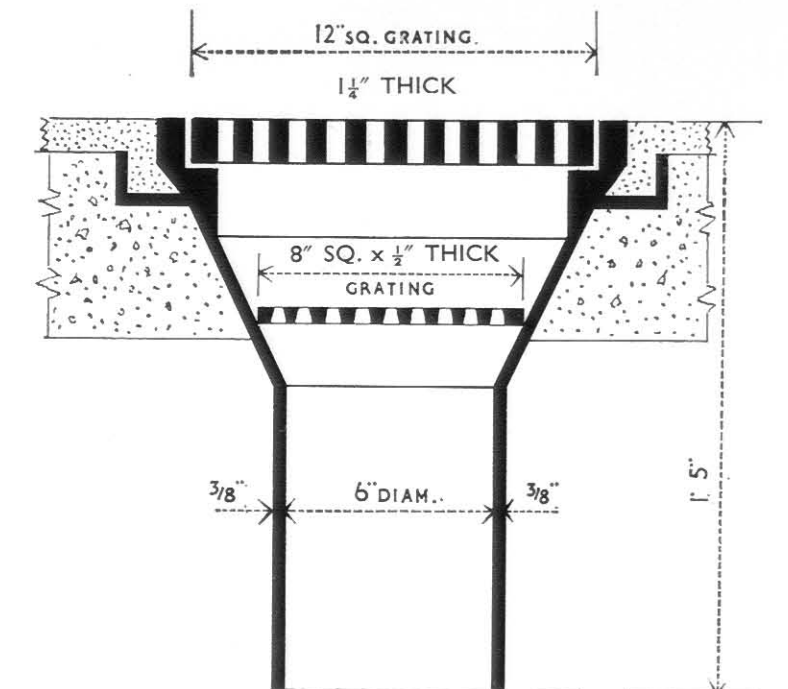
No. 908
C.I. Balcony Gully
Outlet to suit 2 1/2" and 3" Light Rain-Water Pipes.



No. 17
C.I. Roof Gully



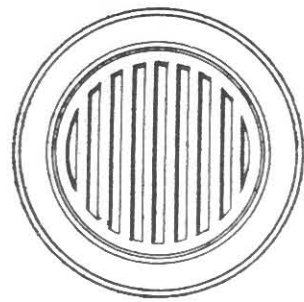
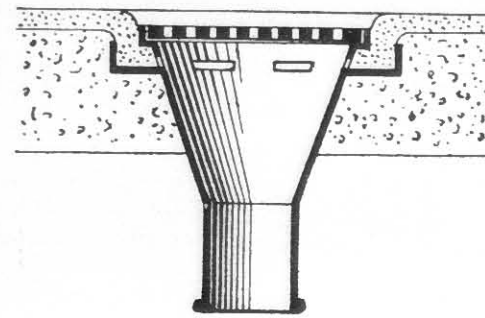
No. 909
Roof Gully



LEAK-PROOF OUTLETS FOR ASPHALTE

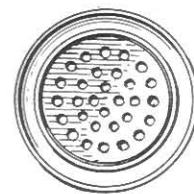
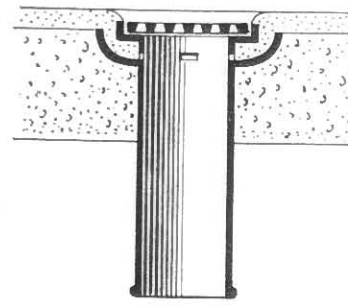
No. 796

1' 1 1/2" Diam. x 1' 0" Long Overall
Grating 9" Diam. 1/2" Thick



For Pipes 2 1/2", 3", 3 1/2", 4", 5" and 6" Diam.
3/16" Metal
Also for No. 1, 4" Diam.

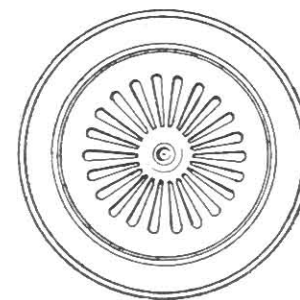
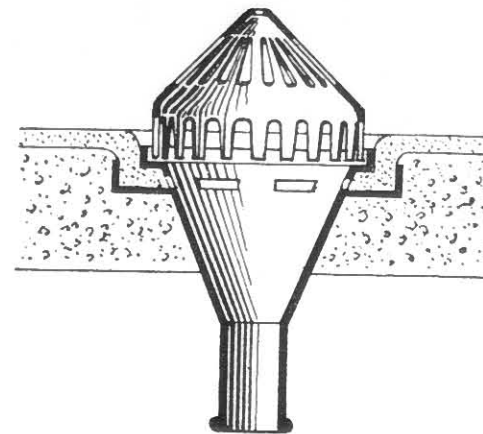
No. 796A
8" Diam. x 1' 0" Long
Overall
Grating 5 1/2" Diam.
1/4" Thick



Outlet up to 4" Diam.
3/16" Metal

No. 797

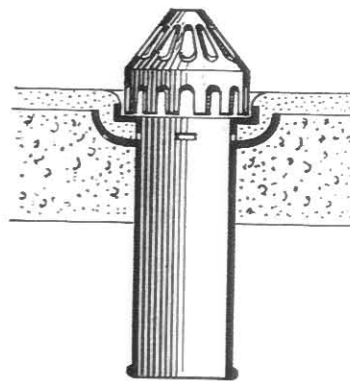
1' 1 1/2" Diam. x 1' 0" Long Overall
Grating 9" Diam. 3/16" Thick



For Pipes 2 1/2", 3", 3 1/2", 4", 5" and 6" Diam.
3/16" Metal
Also for No. 1, 4" Diam.

No. 797A

8" Diam. x 1' 0" Long
Overall
Grating 5 1/2" Diam.
3/16" Thick

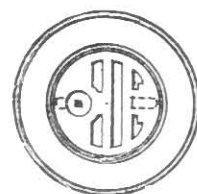
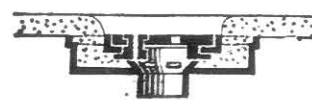


Outlet up to 4" Diam.
3/16" Metal

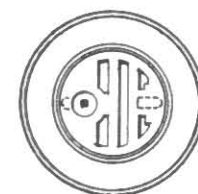
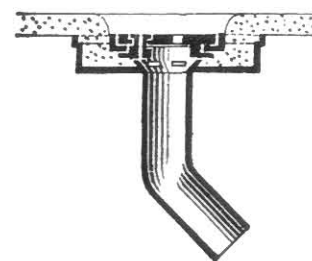
No. 816

7 3/4" Diam. Overall. Grating 4 1/2" Diam., 1/2" Thick

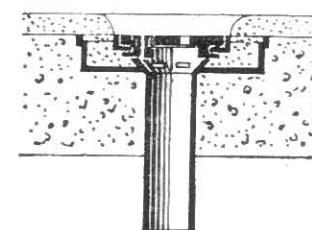
with 1 1/8" Short Tail
for Lead Pipe



with Bent Tail



with 7" Long Straight
Tail



To suit 2" Diam. Pipes. 1/8" Metal

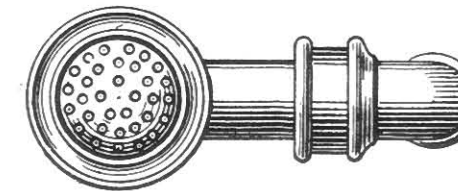
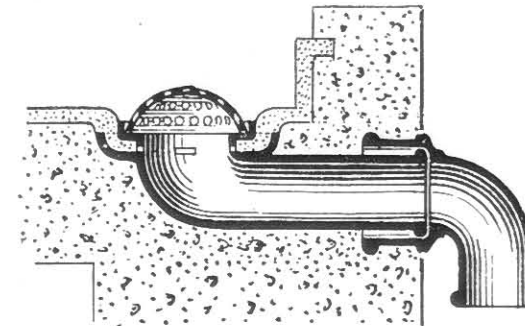
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LEAK-PROOF OUTLETS FOR ASPHALTE

No. 845

8" Diam. Overall
Grating 5 1/2" Diam., 1/4" Thick
(2" to 4" Pipe)

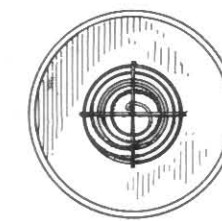
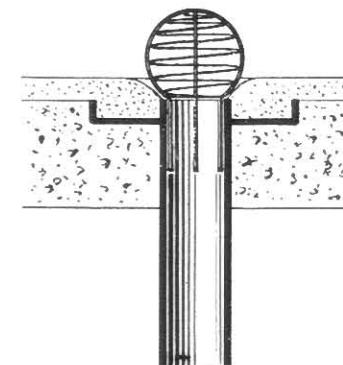
Also 10 3/4" Diam. Overall
Grating 8" Diam., 1/4" Thick
(6" Pipe)



2", 3", 3 1/2" and 4" Diam., 3/16" Metal
with Spigot Tail
10 1/2" Long from Centre of Grating
Also 6" Diam., 3/16" Metal
with Spigot Tail
14 1/2" Long from Centre of Grating

No. 849

9 1/4" Diam. x 1' 0" Long
Overall



To suit 3" Diam. Pipes
1/8" Metal

No. 874

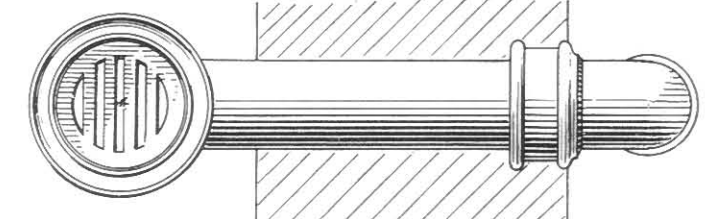
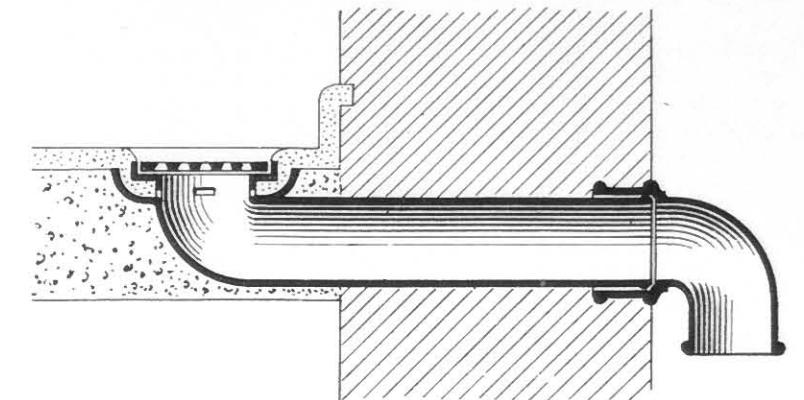
6" Diam. x 1" Deep
Overall
Grating 4" Diam.,
3/8" Thick



No. 850

8" Diam. Overall
Grating 5 1/2" Diam., 1/4" Thick. (2" to 4" Pipe)

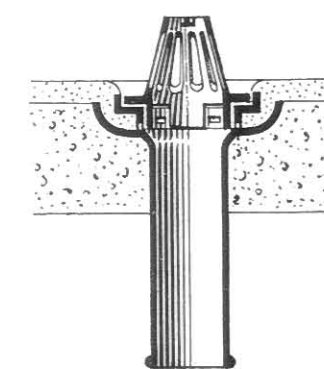
Also 10 3/4" Diam. Overall
Grating 8" Diam., 1/4" Thick. (6" Pipe)



2", 3", 3 1/2" and 4" Diam., 3/16" Metal
with Spigot Tail. 10 1/2" Long from Centre of Grating
Also 6" Diam., 3/16" Metal
with Spigot Tail. 14 1/2" Long from Centre of Grating

No. 875

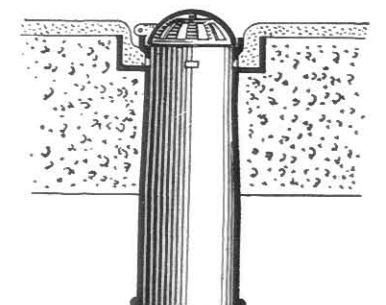
8" Diam. x 1' 0" Long
Overall
Also 1' 6" Long
Overall
Grating 4" Diam.,
3/16" Thick



Outlet up to 4" Diam.
3/16" Metal

No. 881

6 1/2" Diam. x 1' 0" Long
Overall
Hinged Grating
3 3/4" Diam.



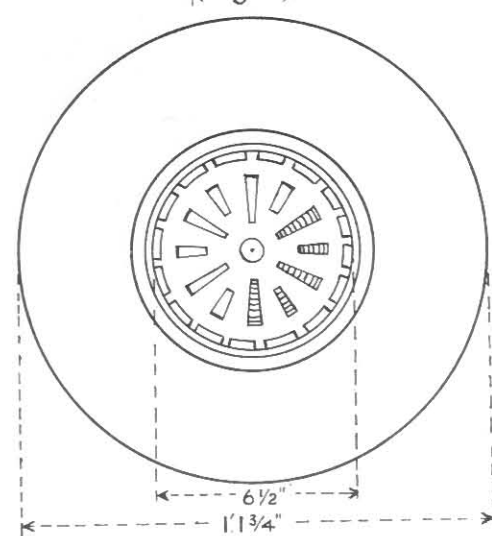
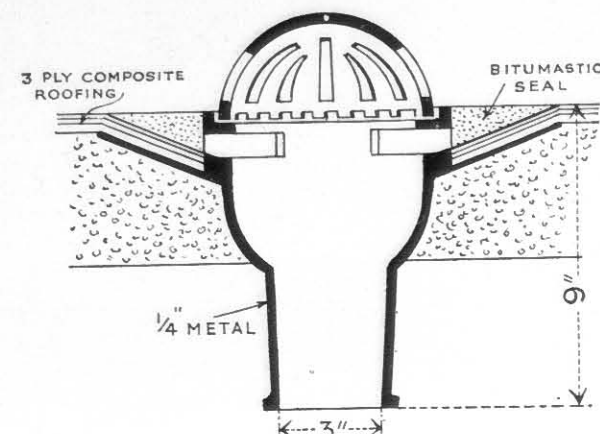
To suit Pipe 4" Diam.
1/4" Metal

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LEAK-PROOF OUTLETS FOR ASPHALTE

No. 883

1' 1 3/4" Diam. Overall
Grating 6 1/2" Diam. 1/4" Thick

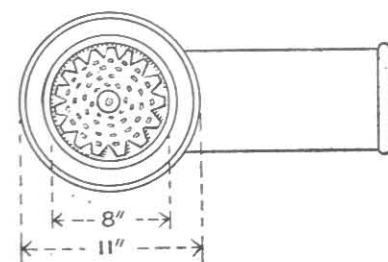
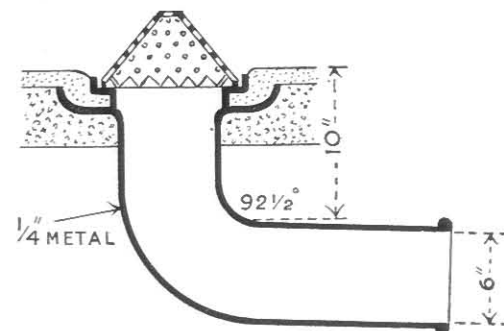


9" Long. 3" and 6" both with Bead to suit B.S.S. M.H. or E.H. Pipes.

8 1/2" Long. 2", 2 1/2", 3 1/2" and 4" all with Bead to suit B.S.S. M.H. or E.H. Pipes.

No. 888

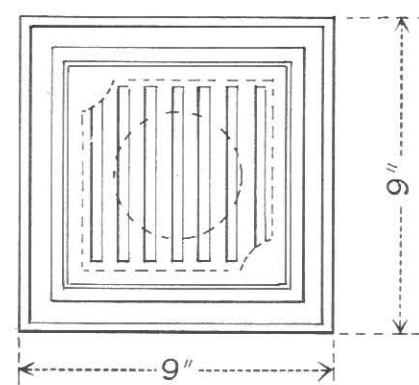
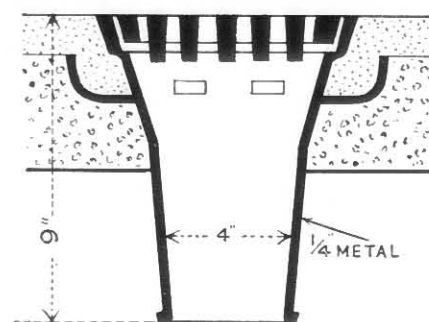
11" Diam. Overall
Grating 8" Diam. 1/4" Thick



6" Diam. Outlet

No. 886

9" x 9" Overall
Grating 6 1/2" x 6 1/2" x 1 1/16" at Centre
and 1/2" at edge

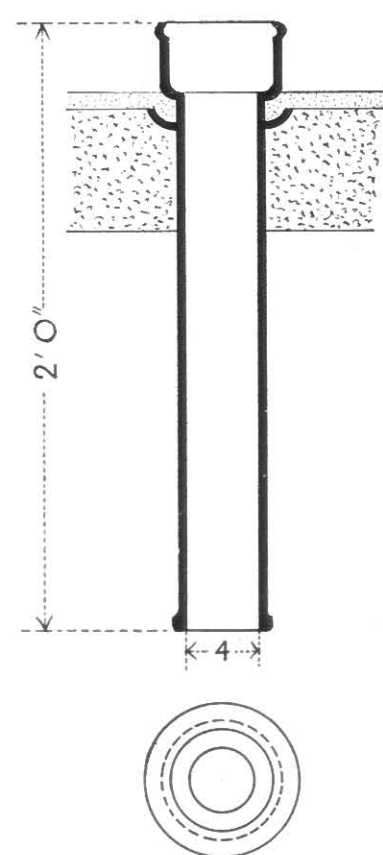


9" Long 4" Diam.

LEAK-PROOF VENT PIPES FOR ASPHALTE ROOF

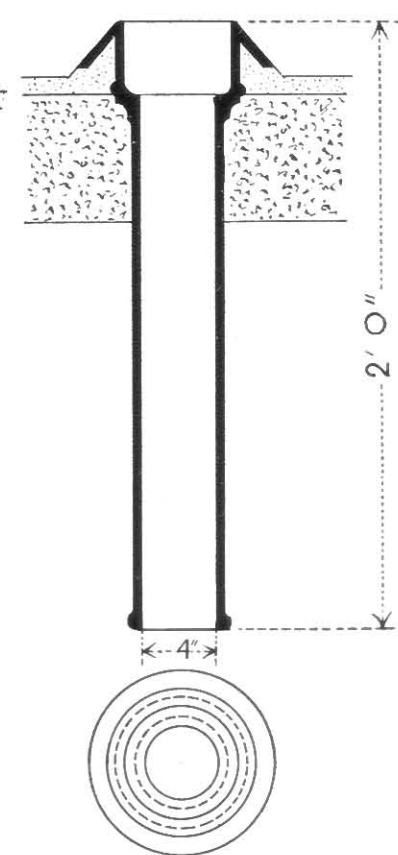
No. 894

2' 0" Long Overall



No. 895

2' 0" Long Overall

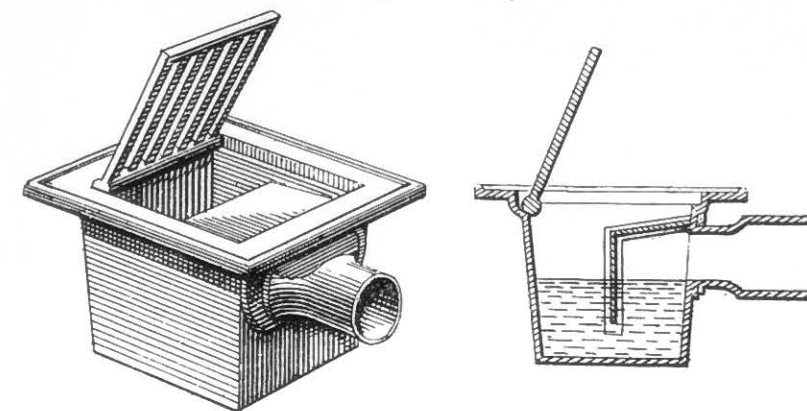


LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

TRAPS

No. 4

Regent Trap

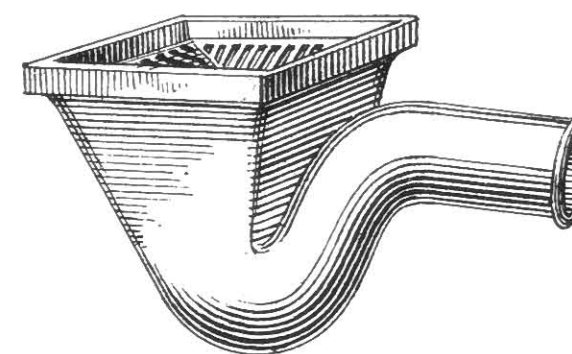


Overall	Grating	Thickness of Grating
10" x 10" x 6 1/4" Deep	6" x 6" Hinged	5/8"
12" x 12" x 7 1/2" Deep	8" x 8" Hinged	5/8"
15" x 15" x 9" Deep	10" x 10" Loose	1/2"
18" x 18" x 13" Deep	12" x 12" Loose	1/2"

No. 3

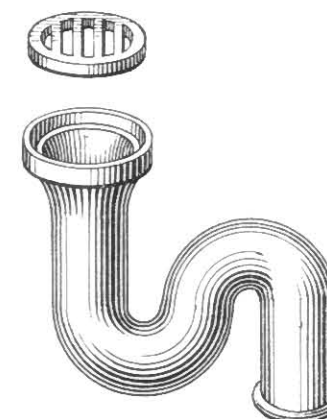
Gully Trap

with 10" x 10" Loose Grating



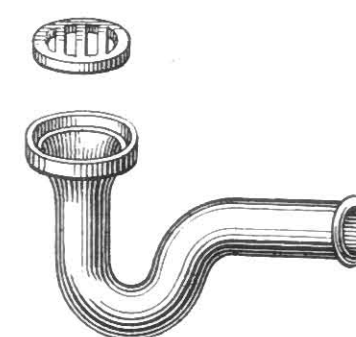
No. 818 S-Trap

3" Diam.
with 5" Diam. Grating
1/2" Thick



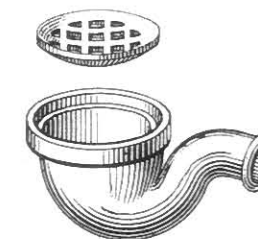
No. 818 P-Trap

2" Diam. 90°
with 4" Diam. Grating
1/2" Thick



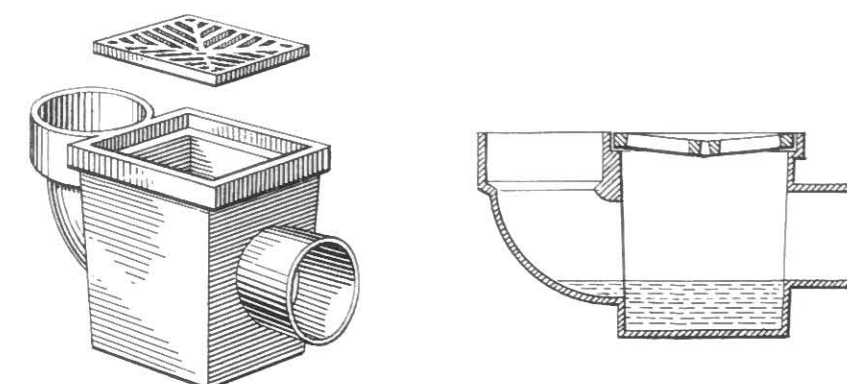
No. 815 P-Trap

2" Diam. 115°
with 5" Diam. Grating
3/8" Thick



No. 786
Rain-Water Gully Inlet

9" x 9" x 9" Deep
with 8" x 8" Grating 1/2" Thick



S-Trap
with 6" Hinged Grating

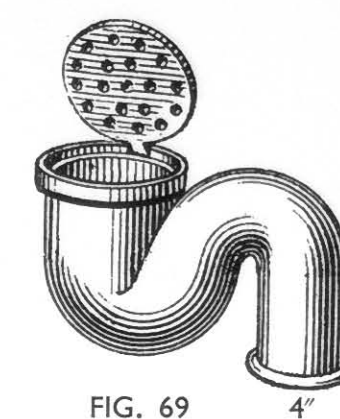


FIG. 69

P-Trap
with 6" Hinged Grating

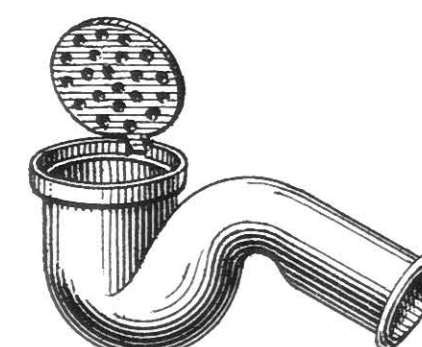


FIG. 71

Flat-Bottomed
S-Trap
with 4 3/4" Hinged Grating

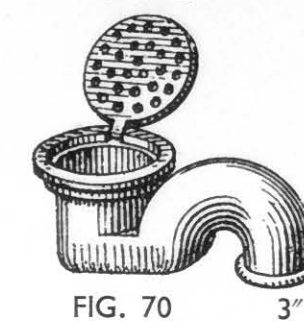


FIG. 70

Flat-Bottomed
P-Trap
with 4 3/4" Hinged Grating

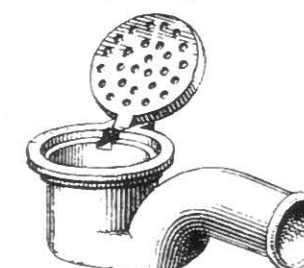
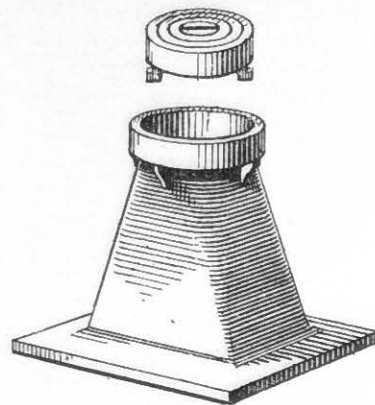


FIG. 72

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

STOP COCK CASES

No. 1



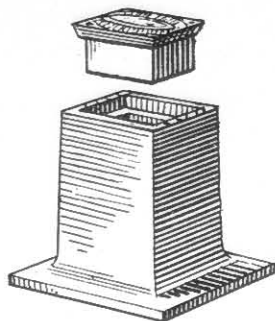
Overall	Opening
10½" x 10½" x 9½" Deep	3½" Diam.

No. 2



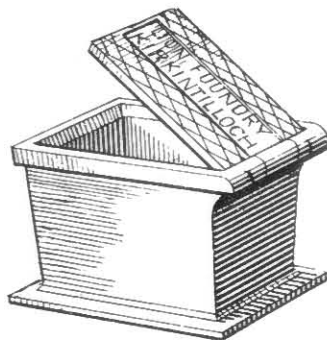
Overall	Clear Opening
6½" x 1" Deep	4½" Diam.
6¾" x 7" Deep	4½" Diam.
9½" x 1" Deep	6½" Diam.
9¾" x 1" Deep	6½" Diam.
12" x 1½" Deep	7½" Diam.

No. 3



Overall	Clear Opening
7" x 7" x 6" Deep	3" x 3"
8" x 8" x 8" Deep	3½" x 3½"

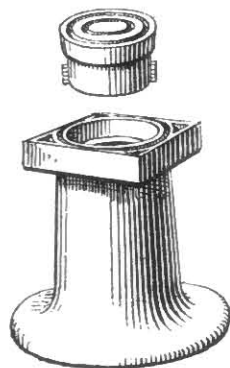
No. 4



Nominal Size	Overall	Clear Opening
6" x 6" x 7" Deep	7" x 7"	5" x 5"
8" x 6" x 7" Deep	9" x 7"	7" x 5"
*9" x 8" x 6" Deep	10½" x 9½"	8" x 7"

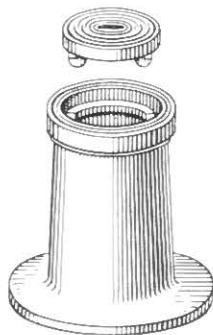
*Also with Chained Cover

No. 5



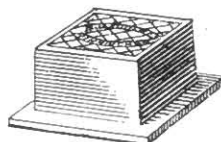
Overall	Clear Opening
9½" Diam. x 8" Deep	3½" Diam.

No. 6



Overall	Clear Opening
9" Diam. x 7½" Deep	3¾" Diam.

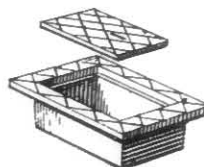
No. 10



Top can be supplied either Hinged or Chained

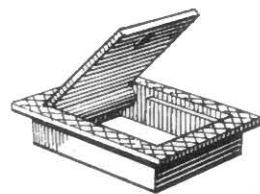
Overall	Clear Opening
6½" x 6½" x 3¾" Deep	4½" x 4½"
7" x 7" x 3" Deep	4½" x 4½"
87" x 7" x 3" Deep	4½" x 4"
7" x 7" x 4½" Deep	4½" x 4½"
7½" x 7" x 3½" Deep	5½" x 4½"
8½" x 8½" x 3½" Deep	5½" x 5½"
8½" x 8½" x 4" Deep	5½" x 5½"
9½" x 9½" x 3½" Deep	6" x 6"
10½" x 10½" x 3½" Deep	7" x 7"
11" x 8" x 3½" Deep	9" x 6"
11" x 11" x 3" Deep	9" x 9"
11" x 11" x 4" Deep	9" x 9"

No. 7



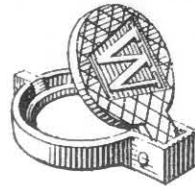
Overall	Clear Opening
6¾" x 5" x 2½" Deep	3¾" x 2½"

No. 8



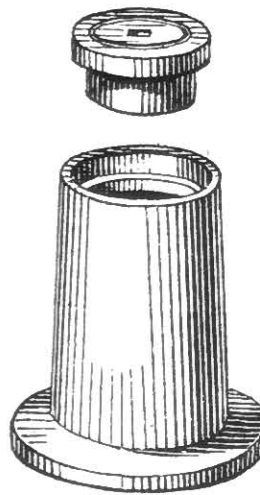
Overall	Clear Opening
7¼" x 6" x 2¼" Deep	5½" x 4½"

No. 12



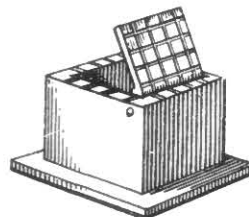
Overall	Clear Opening
6½" x 1" Deep	4½" Diam.

No. 15



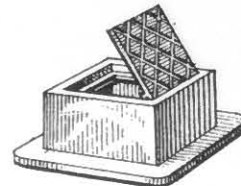
Overall	Clear Opening
10½" Diam. x 10½" Deep	4¾" Diam.
9" Diam. x 5¾" Deep	4" Diam.

No. 18



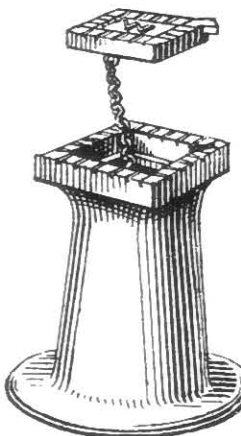
Overall	Clear Opening
7¼" x 7" x 4½" Deep	4¾" x 4½"

No. 13



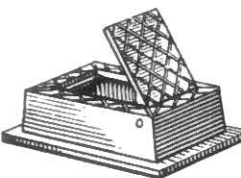
Overall	Clear Opening
7" x 7" x 3½" Deep	3¾" x 3¾"
7½" x 7½" x 3½" Deep	4" x 3¾"
12" x 10" x 3½" Deep	8" x 6"

No. 16



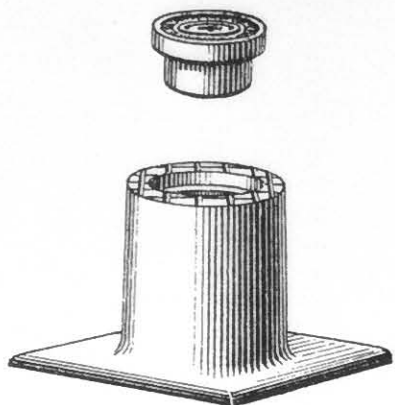
Overall	Clear Opening
10" Diam. x 9" Deep	4" Diam.

No. 19



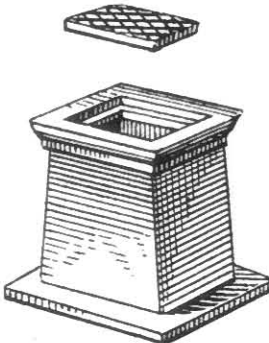
Overall	Clear Opening
8" x 6¼" x 2" Deep	5½" x 3½"

No. 14



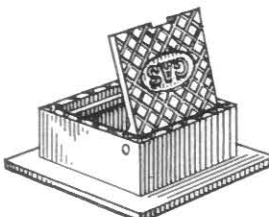
Overall	Clear Opening
12" x 12" x 9" Deep	3½" Diam.

No. 17



Overall	Clear Opening
8" x 8" x 8" Deep	3¾" x 3¾"

No. 21

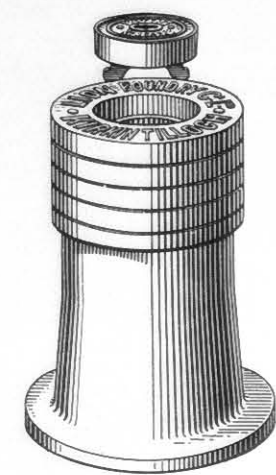


Overall	Clear Opening
8" x 8" x 3½" Deep	4¾" x 4¾"

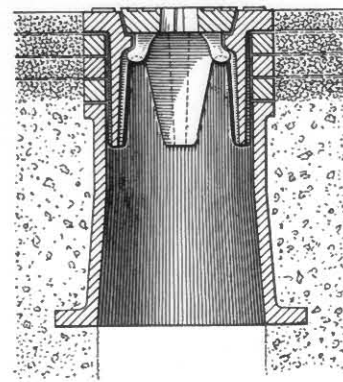
STOP COCK CASES

No. 22

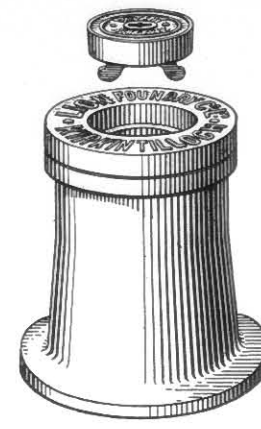
Adjustable Road Surface Box



General View
with Three Packing
Rings



Section
showing application
of Packing Rings
Sizes



General View
without
Packing Rings

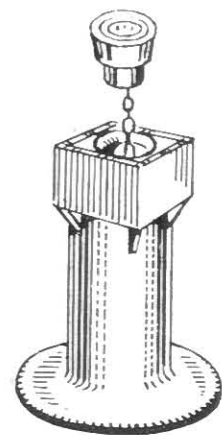
10" Diameter x 9" High Overall ; $3\frac{3}{4}$ " Diameter Clear Opening

Can be made to other Sizes and Shapes to Order

By the insertion of one or more Packing Rings the Cover can be raised to suit New Surface Level of Road without disturbing the Box.

STOP COCK AND VALVE CASES

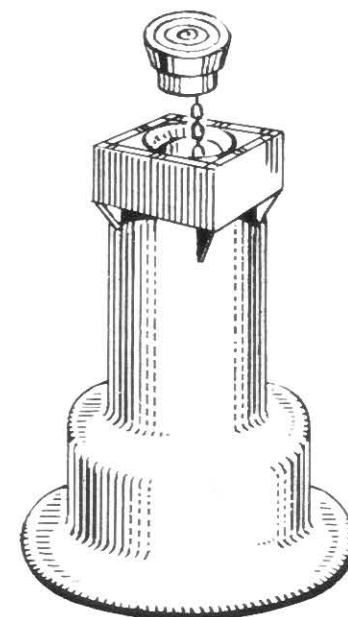
No. 24



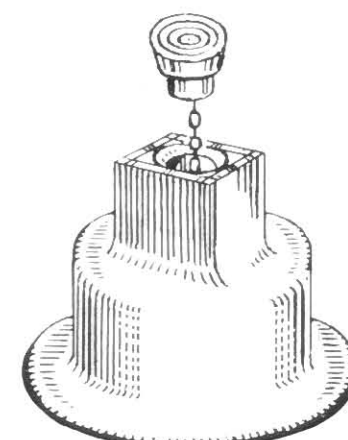
No.	Overall	Clear Opening
24	9" Diam. x $8\frac{1}{4}$ " Deep	$3\frac{1}{4}$ " Diam.

No.	Overall	Clear Opening
25	$14\frac{1}{2}$ " Diam. x 16" High	$3\frac{1}{4}$ " Diam.

No. 25



No. 27



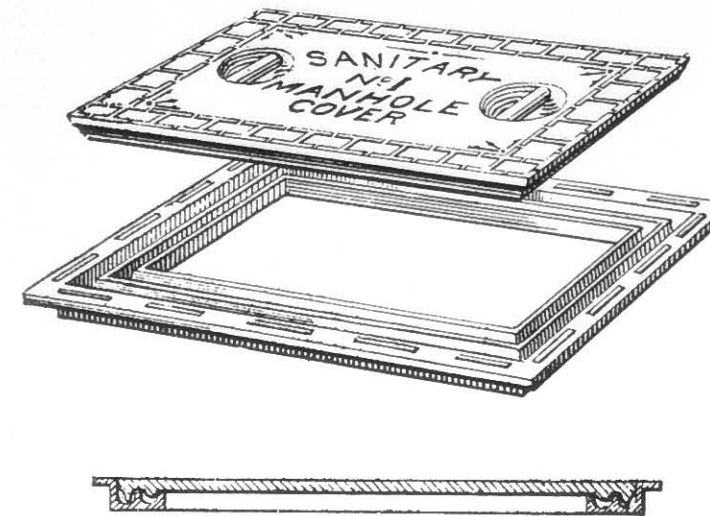
No.	Overall	Clear Opening
26	$14\frac{1}{2}$ " Diam. x 12" Deep	$3\frac{1}{4}$ " Diam.

No.	Overall	Clear Opening
27	$14\frac{1}{2}$ " Diam. x $8\frac{3}{8}$ " Deep	$3\frac{1}{4}$ " Diam.

MANHOLE FRAMES AND COVERS

No. 1

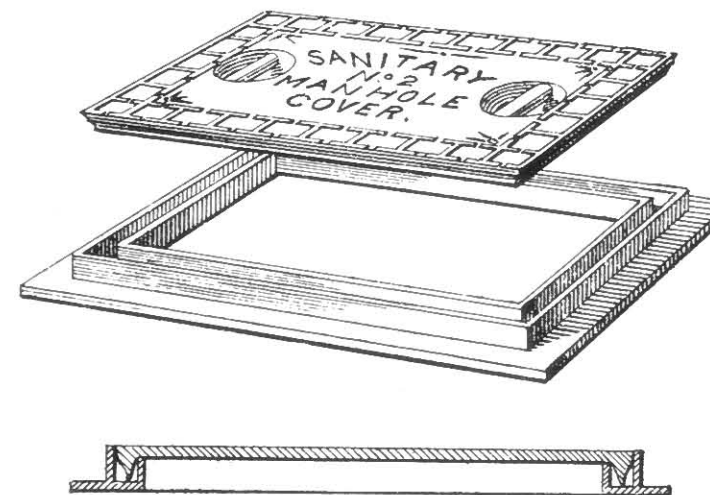
Air-Tight Double Seal



Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
18" x $10\frac{1}{2}$ "	25" x $17\frac{1}{2}$ "	2"	$\frac{9}{16}$ "	$\frac{7}{16}$ "
22" x $16\frac{1}{2}$ "	29 $\frac{1}{2}$ " x $23\frac{1}{2}$ "	2"	$\frac{5}{8}$ "	$\frac{1}{2}$ "

No. 2

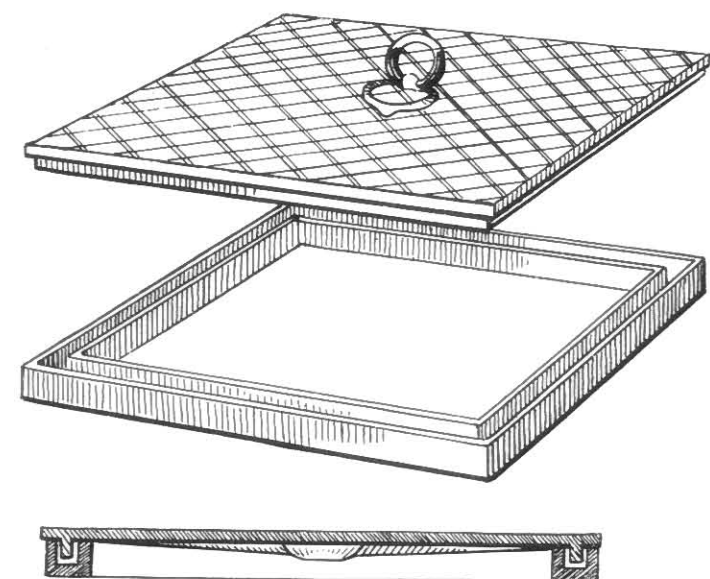
Air-Tight Single Seal



Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
11" x 11"	$15\frac{1}{2}$ " x $15\frac{1}{2}$ "	2"	$\frac{1}{2}$ "	$\frac{3}{8}$ "
20" x 13"	25" x $17\frac{3}{4}$ "	2"	$\frac{1}{2}$ "	$\frac{3}{8}$ "
20" x 14"	$26\frac{1}{2}$ " x $20\frac{1}{2}$ "	2"	$\frac{9}{16}$ "	$\frac{7}{16}$ "
22" x 16"	$26\frac{1}{2}$ " x $20\frac{1}{2}$ "	2"	$\frac{1}{2}$ "	$\frac{3}{8}$ "
22" x 18"	$28\frac{1}{2}$ " x 25"	2"	$\frac{9}{16}$ "	$\frac{7}{16}$ "
24" x 12"	$30\frac{3}{4}$ " x $18\frac{1}{2}$ "	2"	$\frac{9}{16}$ "	$\frac{7}{16}$ "
24" x 12"	$29\frac{1}{2}$ " x $17\frac{3}{4}$ "	2 $\frac{1}{2}$ "	$\frac{9}{16}$ "	$\frac{7}{16}$ "
24" x 16"	29" x $21\frac{1}{2}$ "	2 $\frac{1}{2}$ "	$\frac{9}{16}$ "	$\frac{7}{16}$ "
25" x 19"	30" x 24"	2"	$\frac{1}{2}$ "	$\frac{3}{8}$ "

No. 3

Air-Tight Single Seal

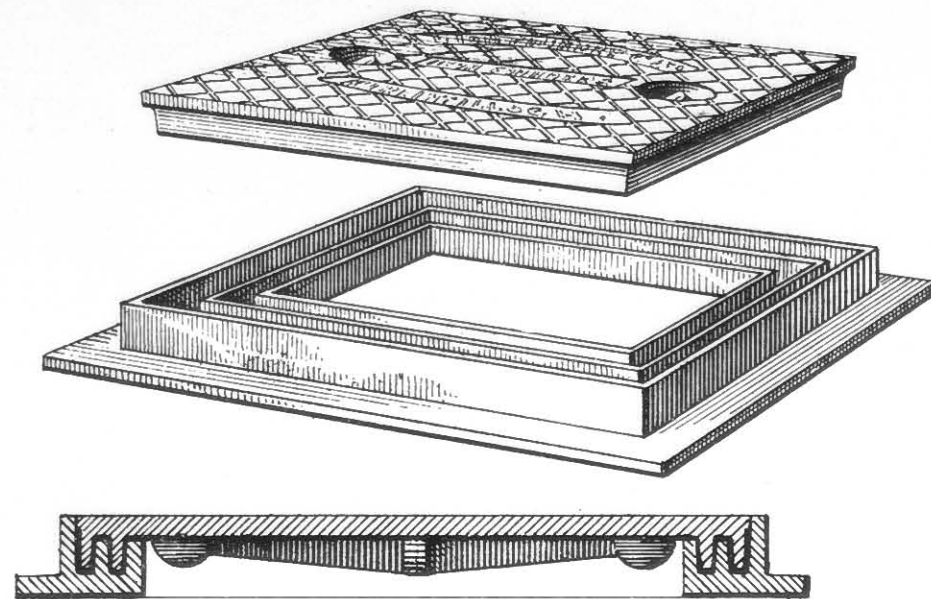


Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
$20\frac{1}{4}$ " x $20\frac{1}{4}$ "	24" x 24"	$1\frac{3}{4}$ "	$\frac{3}{8}$ "	$\frac{1}{4}$ "

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MANHOLE FRAMES AND COVERS

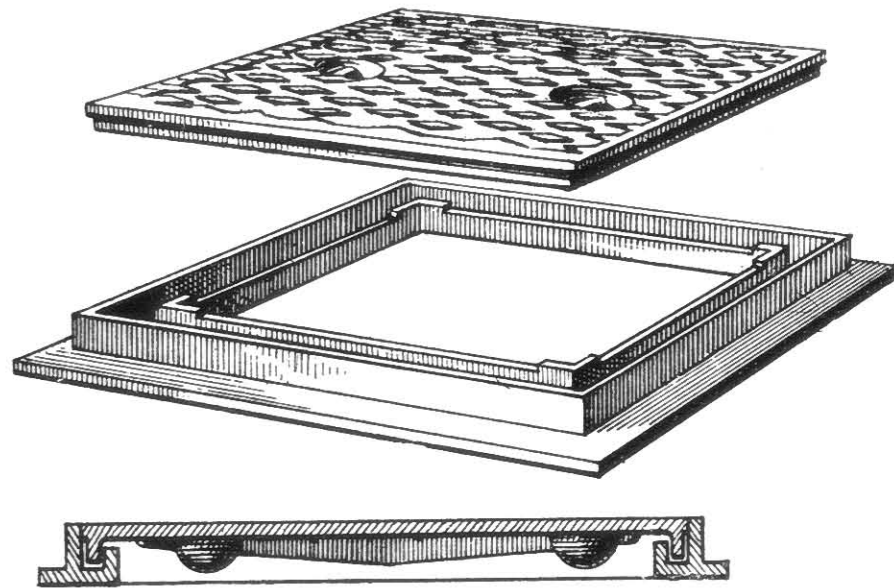


No. 4—Air-Tight Double Seal

Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
24" x 18"	34" x 28"	3½"	1"	7⁄8"

No. 5 similar to No. 4, but lighter

Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
24" x 18"	31¼" x 25¼"	2¼"	½"	¾"



No. 6—Air-Tight Single Seal

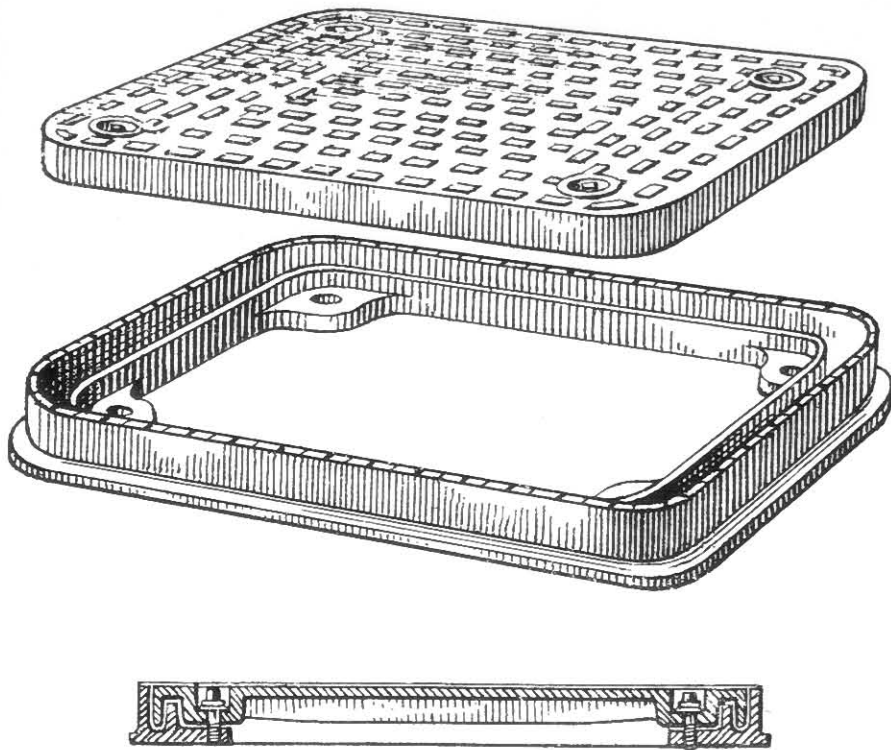
Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
12" x 12"	18" x 18"	2½"	1½"	1½"
18" x 18"	21¼" x 21¼"	1½"	1½"	1½"
18" x 18"	22¾" x 22¾"	1½"	1½"	1½"
18" x 18"	23" x 23"	2½"	1½"	1½"
20" x 20"	26" x 26"	2½"	1½"	1½"
24" x 18"	27" x 21"	1½"	1½"	1½"
24" x 18"	27½" x 21½"	1½"	1½"	1½"
24" x 18"	30" x 24"	2½"	1½"	1½"
24" x 18"	30" x 24"	2½"	1½"	1½"
24" x 24"	30" x 30"	2½"	1½"	1½"
24" x 24"	30½" x 30½"	2½"	1½"	1½"
30" x 24"	36" x 30"	2½"	1½"	1½"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MANHOLE FRAMES AND COVERS

No. 7

With Rubber Joints and Gunmetal Screws



Lifting Key

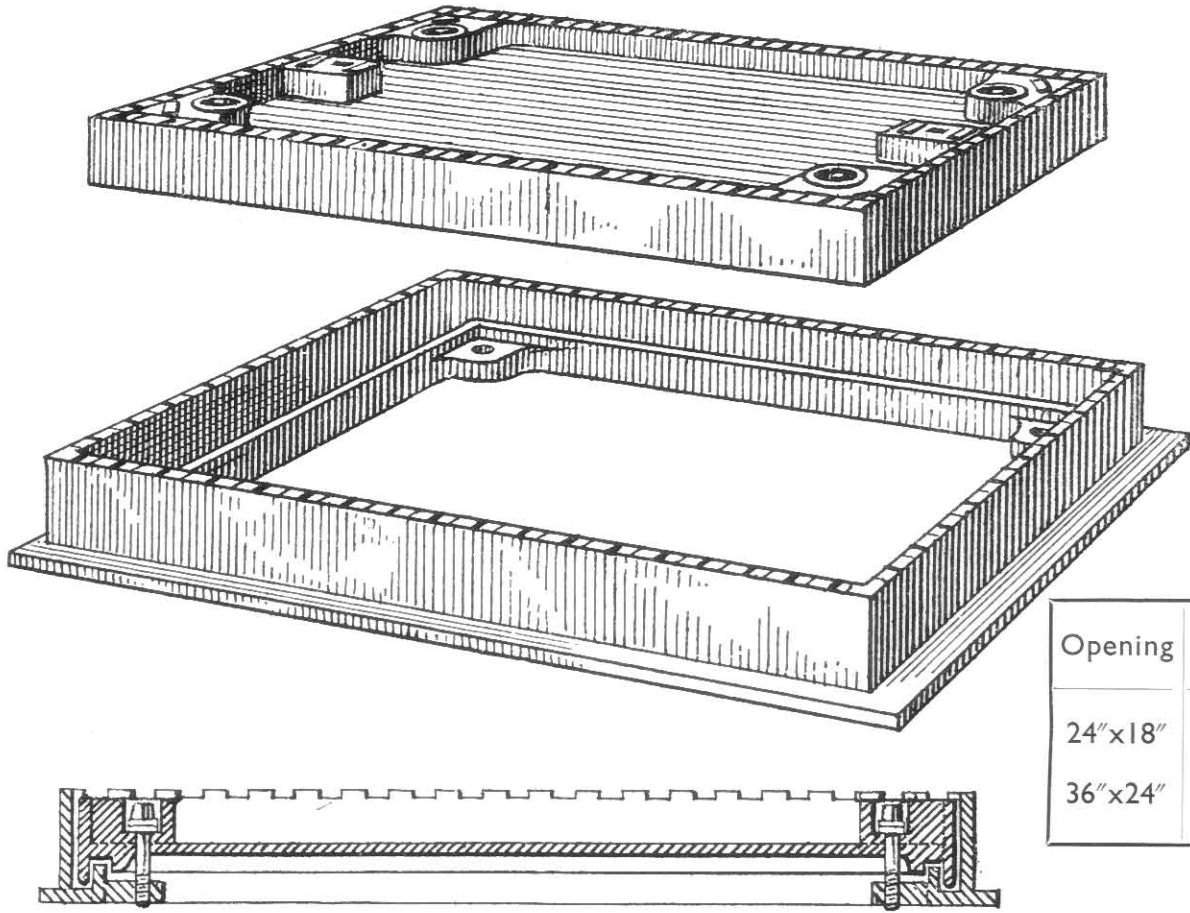


Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
24" x 18"	28¼" x 22¼"	2½"	9⁄16"	7⁄16"
30" x 24"	34¼" x 28¼"	2½"	9⁄16"	7⁄16"

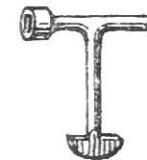
No. 8

With Rubber Joints and Gunmetal Screws

Top prepared for Asphalt filling



Lifting Key



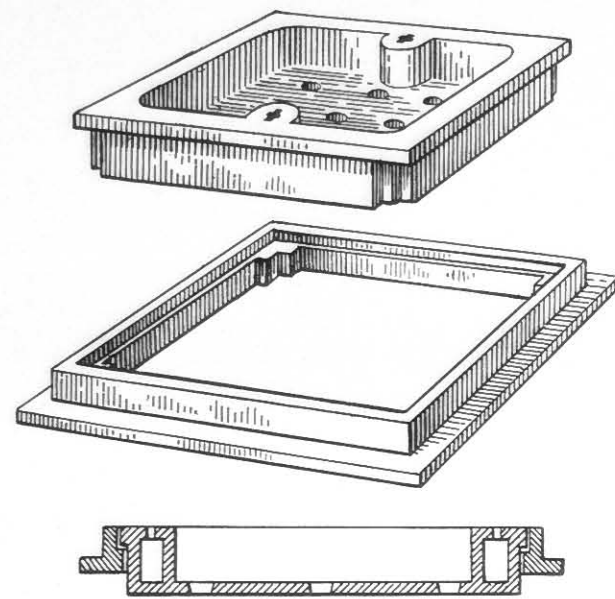
Opening	Overall	Depth	Thickness of Cover
24" x 18"	29¾" x 24"	3¾"	7⁄16"
36" x 24"	41¾" x 29¾"	3¾"	1⁄2"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MANHOLE FRAMES AND COVERS

No. 13

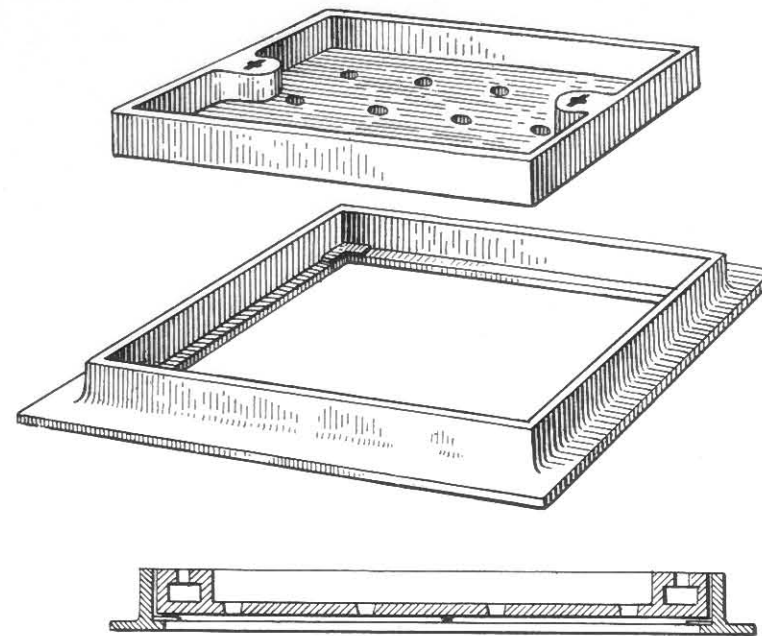
Cover prepared for Asphalte Filling



Opening	Overall	Depth	Thickness of Cover
18" x 18"	21½" x 21½"	3"	½"

No. 14

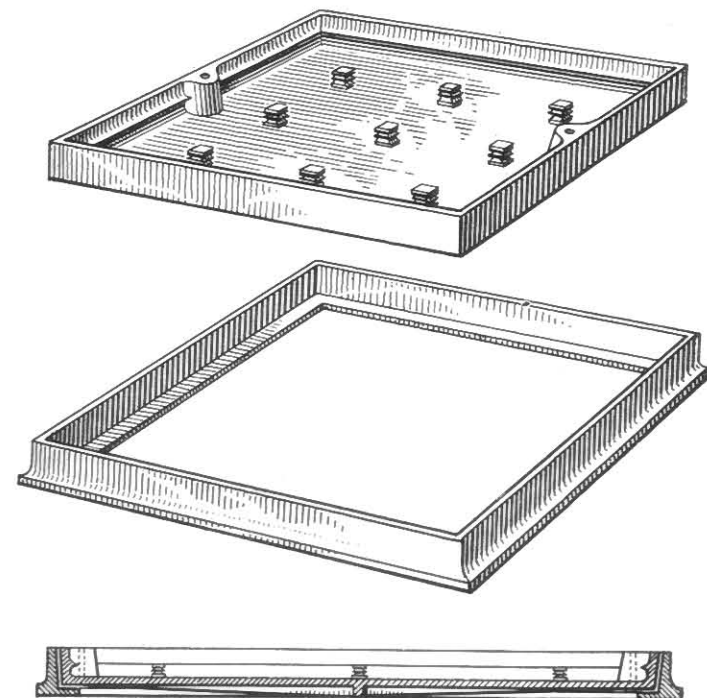
Cover prepared for Asphalte Filling



Opening	Overall	Depth	Thickness of Cover
24" x 18"	28" x 22"	2½"	½"

No. 15

Cover prepared for Asphalte Filling



Opening	Overall	Depth	Thickness of Cover
24" x 24"	27½" x 27½"	2⅜"	¼"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MANHOLE FRAMES AND COVERS

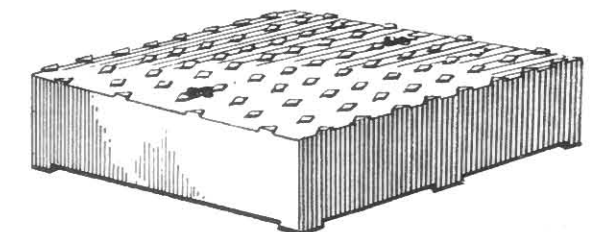
No. 914

B.S.S. Light Manhole Frame and Cover to B.S. 437—1933

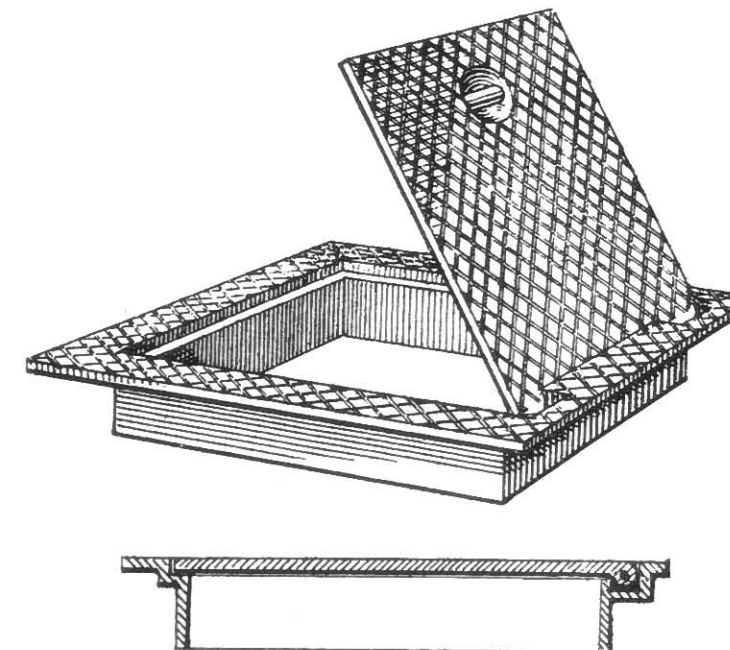


Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
24" x 24"	28" x 28"	1½"	⅜"	⅝"

No. 757



No. 700



Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
18" x 18"	23" x 23"	4"	⅞"	⅞"

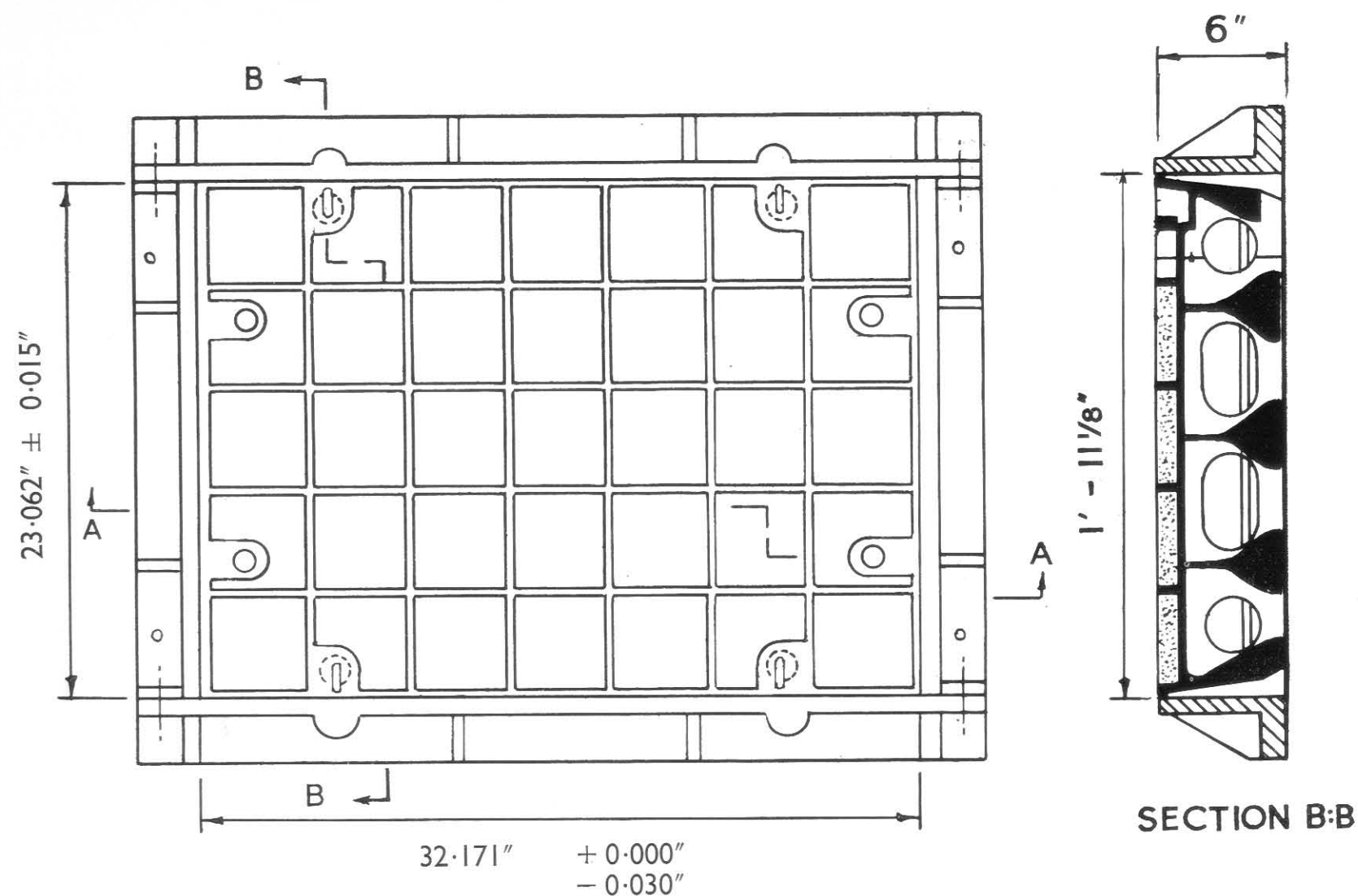
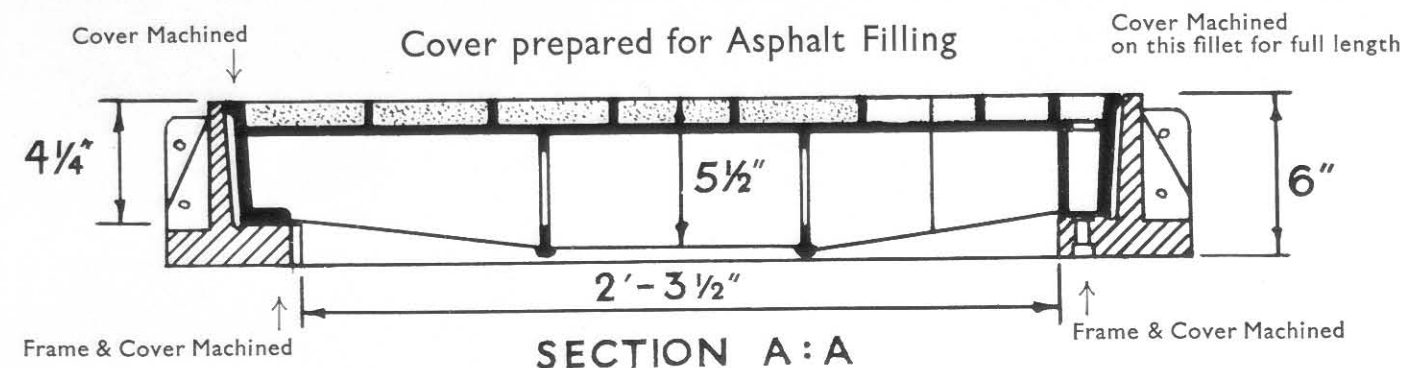
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MANHOLE FRAME AND COVER

Unit consisting of End and Side Frames and Covers

Patent Applied for

No. 916



Can be supplied in Units to suit multiples of 1' 11 1/8"

SPECIFICATION

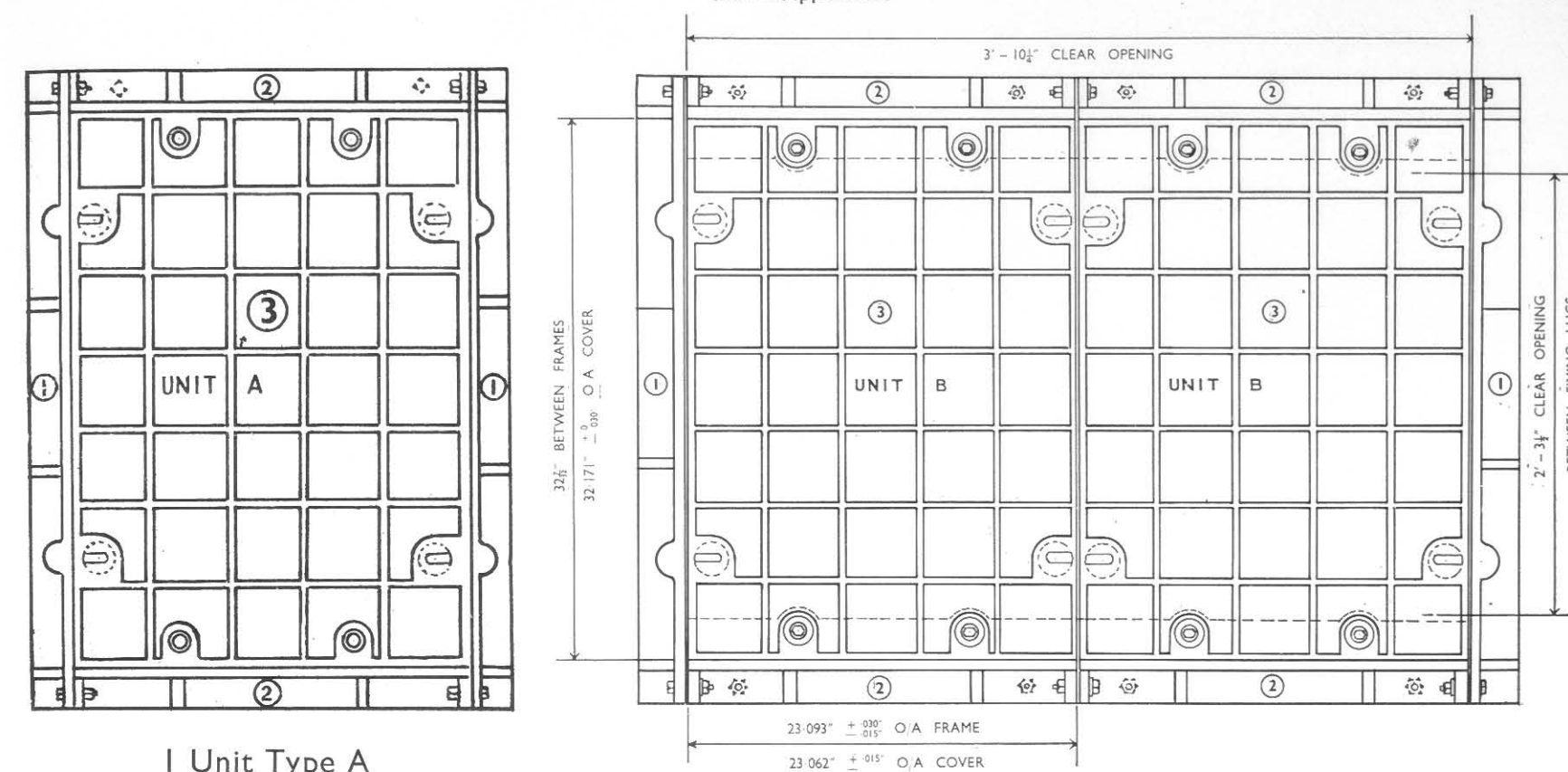
1. Material : Cast-Iron to B.S. 1452 Grade 12.
2. Cover Filling : Hot Mastic Asphalt containing 25% by volume of ground granite.
3. Protective Coating : Black Bituminous composition.
4. All Covers capable of withstanding a load of 45 tons applied for 5 minutes to a 12" disc placed centrally on the cover.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

MANHOLE FRAME AND COVER

Unit consisting of End and Side Frames and Covers

Patent Applied for



1 Unit Type A

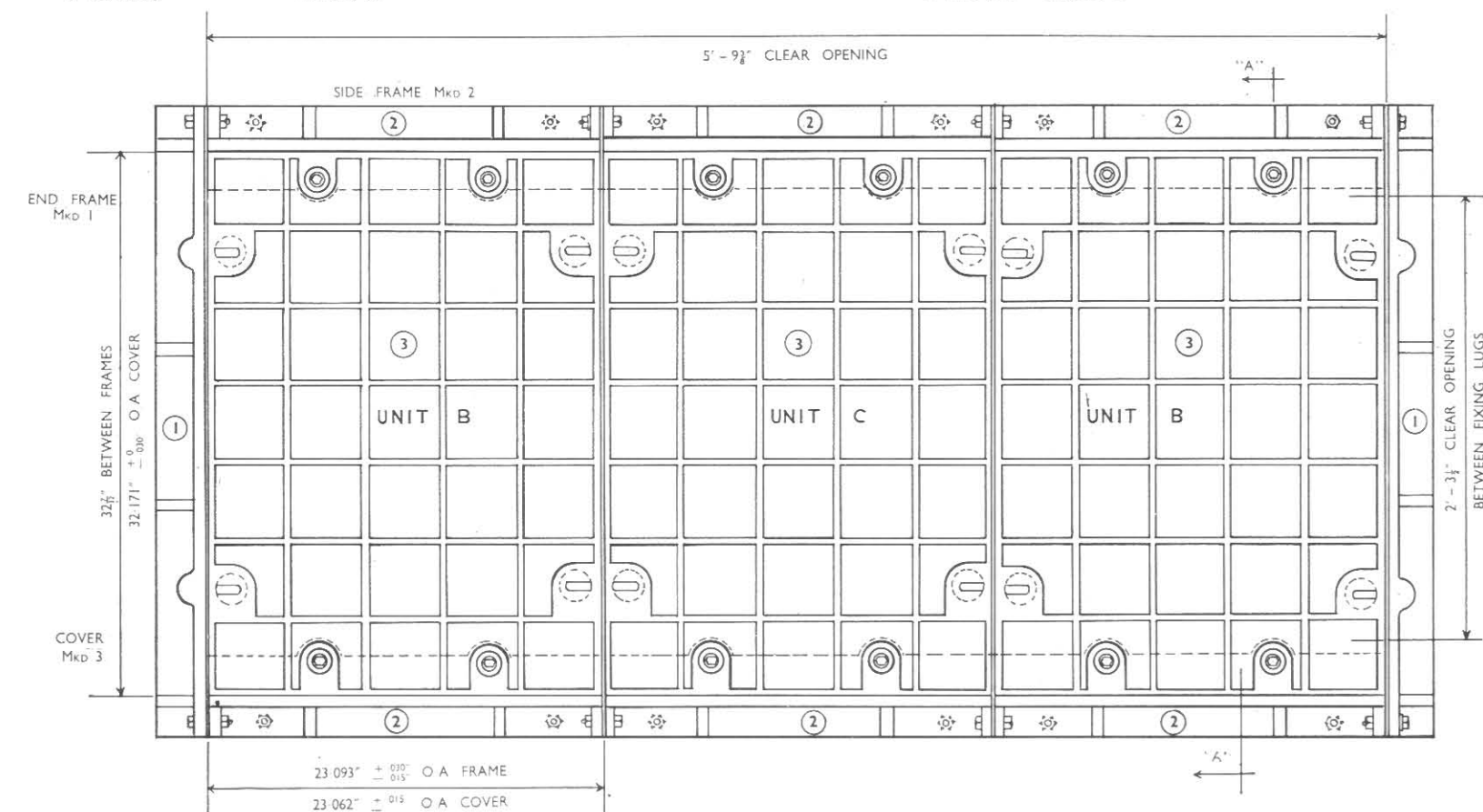
Unit A consists of

- | | |
|---------------|--------|
| 2 End Frames | Mkd. 1 |
| 2 Side Frames | Mkd. 2 |
| 1 Cover | Mkd. 3 |

2 Units Type B

Unit B consists of

- | | | | |
|-------------|--------|---------------|--------|
| 1 End Frame | Mkd. 1 | 2 Side Frames | Mkd. 2 |
| 1 Cover | Mkd. 3 | | |



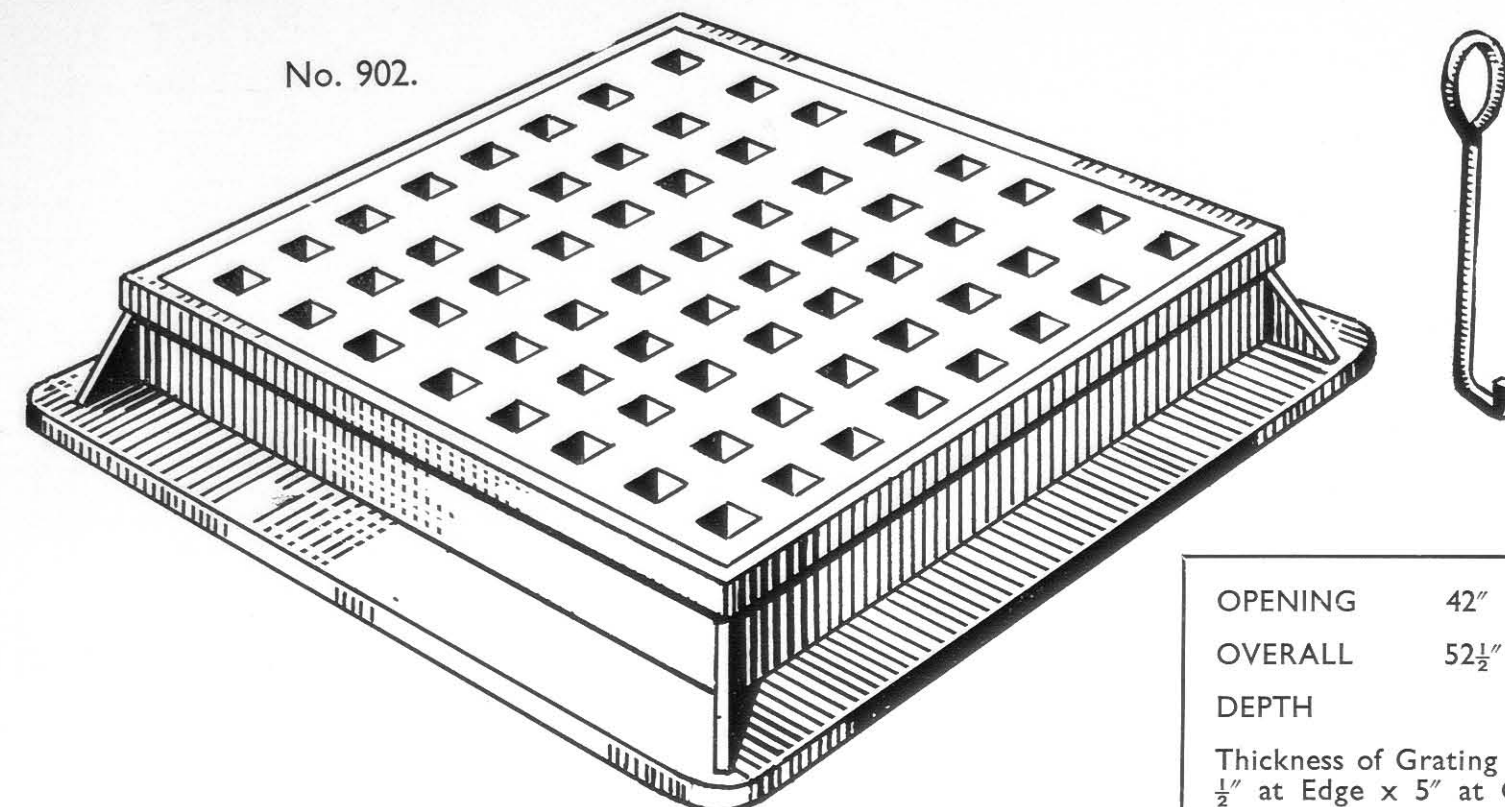
3 Units (& Over)

Comprising : 2 Units Type B. 1 or more Units Type C
Unit B as above Unit C consists of no End Frames Unit B as above
2 Side Frames, Mkd. 2. 1 Cover, Mkd. 3

Can be supplied in any number of Units from one upwards

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

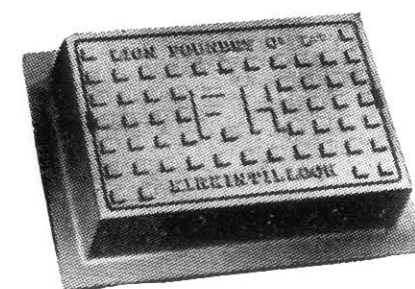
MANHOLE FRAME AND COVER



No. 902.

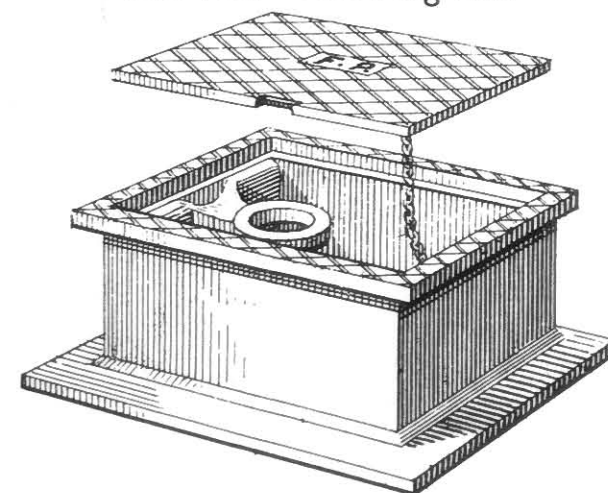
OPENING	42" x 42"
OVERALL	52½" x 52½"
DEPTH	10"
Thickness of Grating Cover ½" at Edge x 5" at Centre	

No. 905. Fire Hydrant Box



Opening	Overall	Depth	Thickness of Cover
16½" x 10½"	20¾" x 14¾"	5"	7/8" o/c ¾" u/c

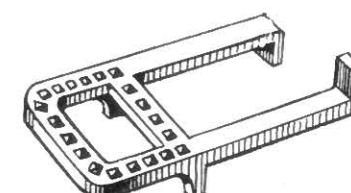
No. 789. Fire Plug Box



Overall	Opening
16¾" x 14¼" x 9" Deep	11½" x 9"
18¾" x 16" x 8½" Deep	13½" x 11"

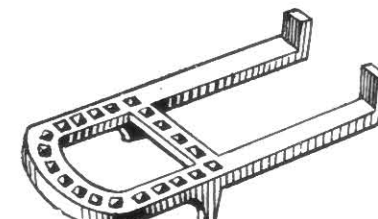
Manhole Step Irons
9" Wall Hold

No. 1



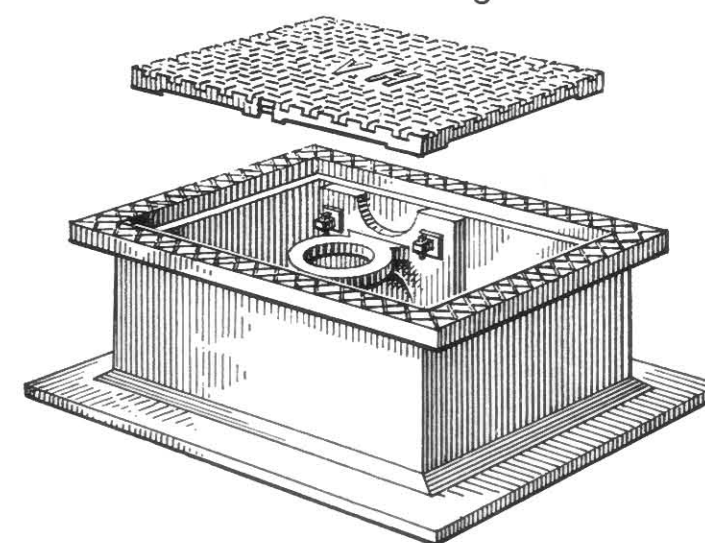
15½" x 5"

No. 2



16" x 6"

No. 790. Fire Plug Box

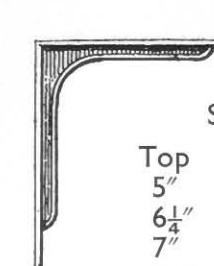


Overall	Clear Opening
24" x 18¾" x 8¾" Deep	18½" x 13¼"

With Chained Cover.

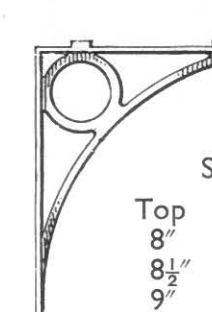
CISTERN BRACKETS

No. 50



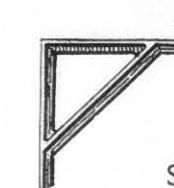
Sizes	
Top	Back
5" x 7"	
6¼" x 9"	
7" x 9½"	
7½" x 10"	
8¼" x 10"	
8½" x 7"	
8½" x 11½"	
8¾" x 10"	
9½" x 12"	
10" x 12"	
12" x 12"	

No. 71



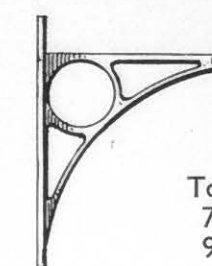
Sizes	
Top	Back
8" x 10"	
8½" x 11¾"	
9" x 9"	
10" x 12"	
10¼" x 10"	
10½" x 12"	
10¾" x 11¾"	
11" x 19"	
12" x 12"	
12½" x 11¾"	

No. 77



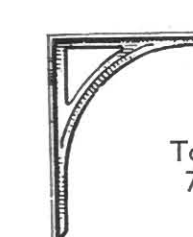
Sizes	
Top	Back
6¼" x 6¾"	
6¾" x 7½"	

No. 84



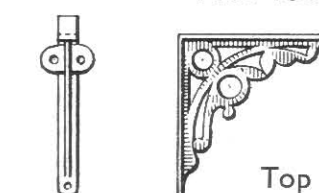
Sizes	
Top	Back
7½" x 9¼"	
9" x 9¼"	
10" x 9¼"	

No. 102



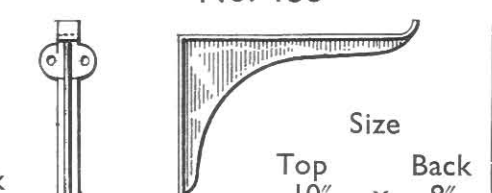
Size	
Top	Back
7½" x 9½"	

No. 153



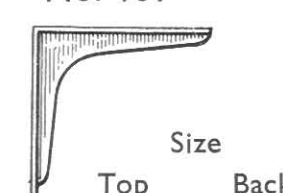
Sizes	
Top	Back
7" x 7"	
8¼" x 7"	

No. 158



Size	
Top	Back
10" x 8"	

No. 161



Size	
Top	Back
8" x 8"	

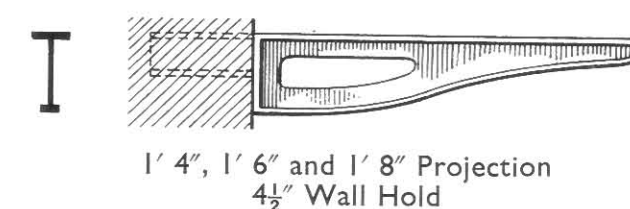
No. 173



Size	
Top	Back
8" x 8"	

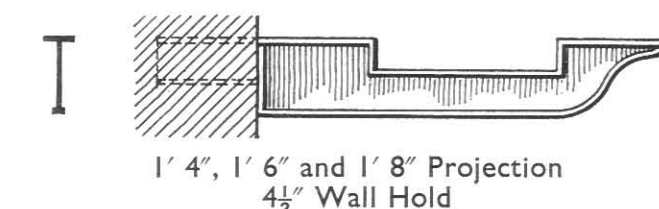
CANTILEVER BRACKETS FOR TUB AND SINK

No. 156



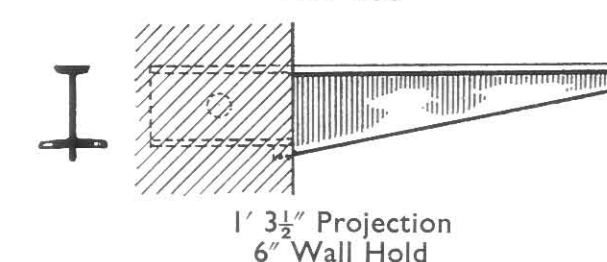
1' 4", 1' 6" and 1' 8" Projection
4½" Wall Hold

No. 156R



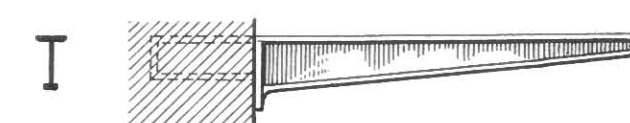
1' 4", 1' 6" and 1' 8" Projection
4½" Wall Hold

No. 168



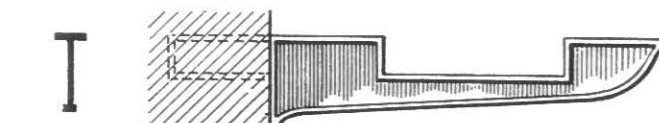
1' 3½" Projection
6" Wall Hold

No. 157



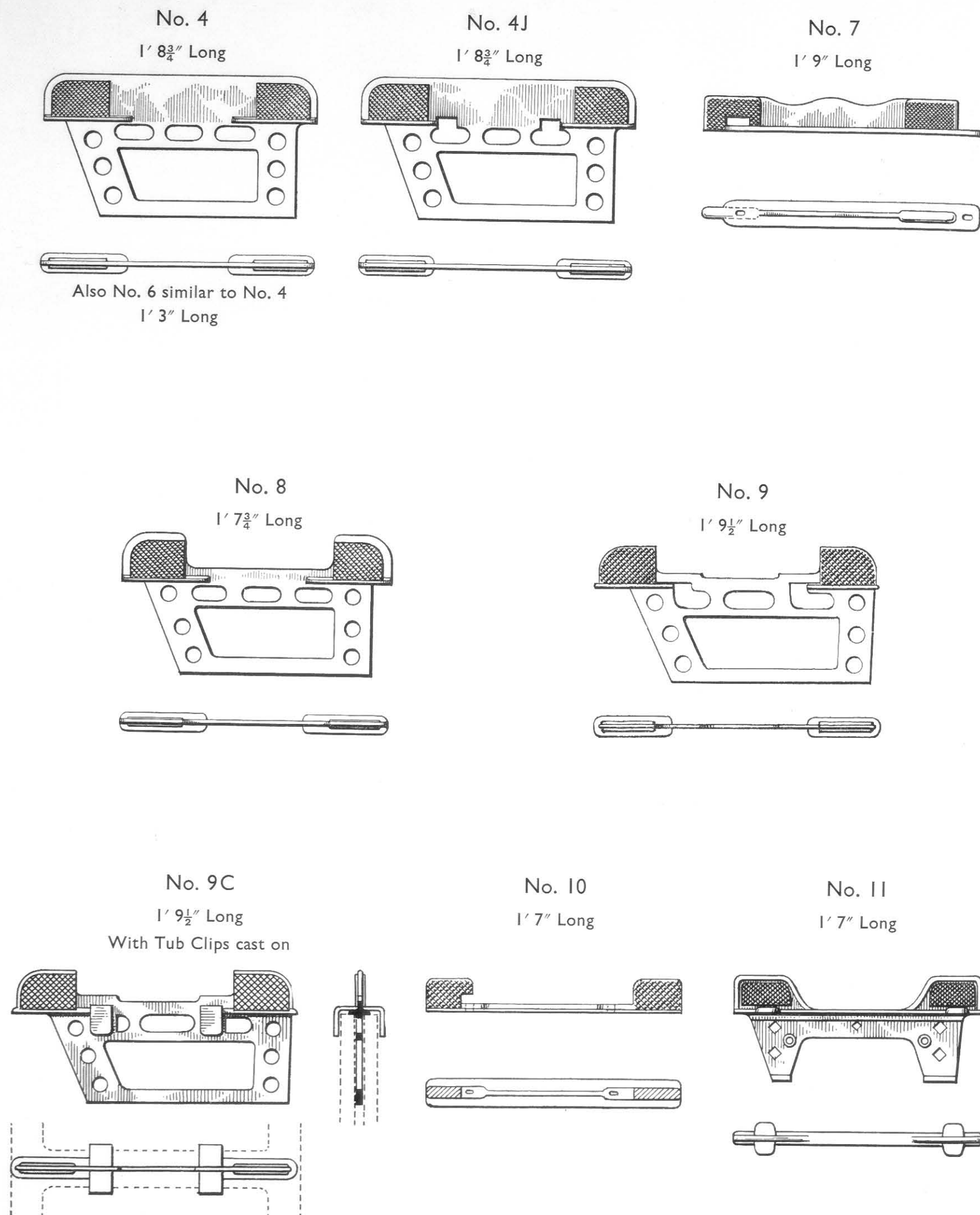
1' 4" and 1' 5½" Projection
4½" Wall Hold

No. 157R



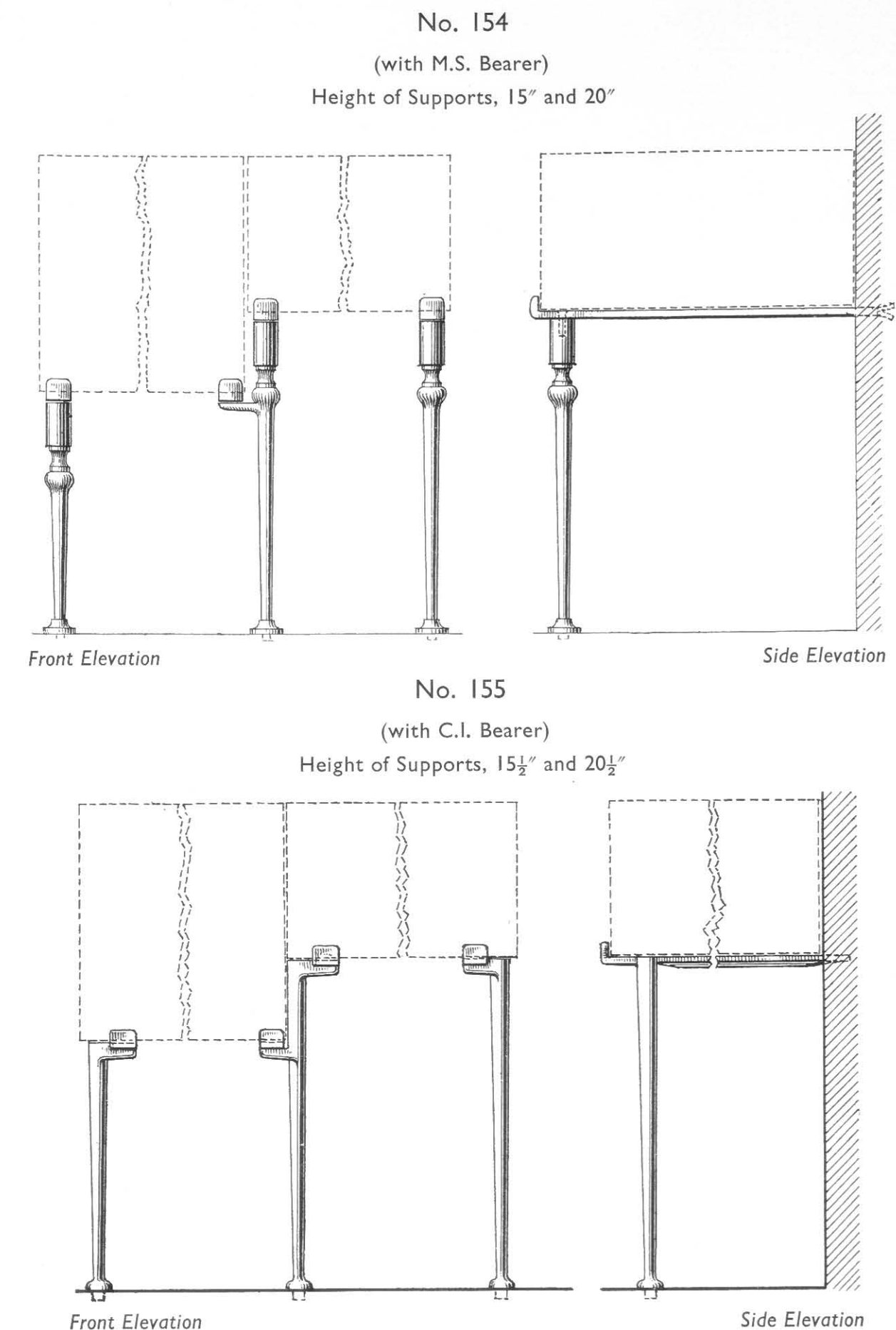
1' 4" and 1' 5½" Projection
4½" Wall Hold

WRINGER PLATES



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

PILLAR-LEG SUPPORTS AND BEARERS FOR COMBINATION TUB AND SINK



No. 155 can also be supplied with Pillar-Leg and broad Centre Bearer to suit Double Tubs.

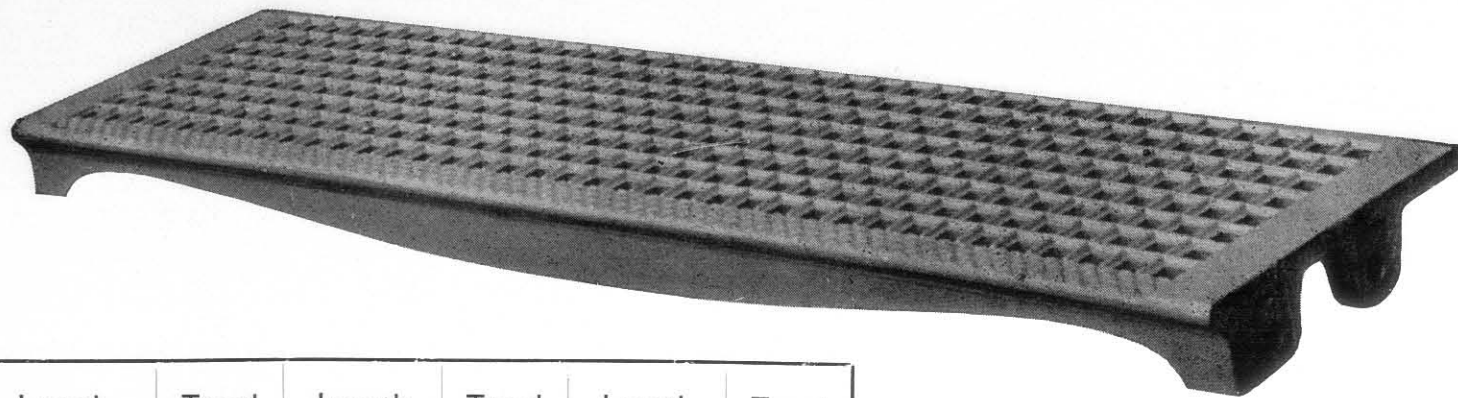
Sink Bearers supplied, 16", 18" or 20" projection.

Bearers can be supplied Recessed for Waste, also for Screwing to Wall.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

CAST-IRON STAIR STEPS

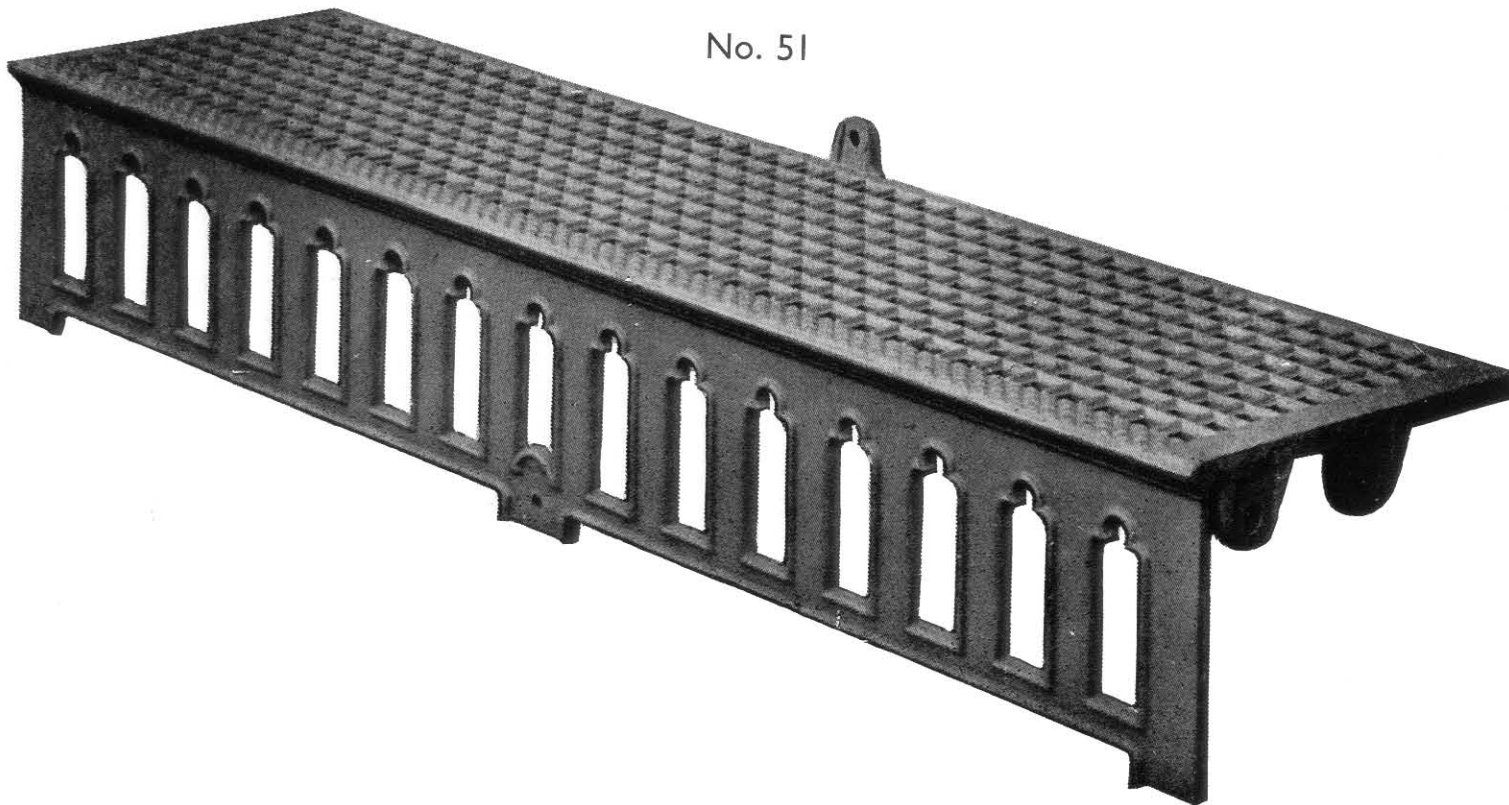
No. 50



Length	Tread	Length	Tread	Length	Tread
1' 6"	3"	2' 6"	3"	3' 0"	10"
1' 6"	6"	2' 6"	8"	3' 6"	10"
2' 0"	10"	2' 6"	10"	4' 0"	10"
2' 3"	10"	2' 9"	8"		
2' 4½"	3"	2' 9"	10"		

Tread $\frac{9}{16}$ " Thick
With $\frac{3}{4}$ " sq. perforations

No. 51



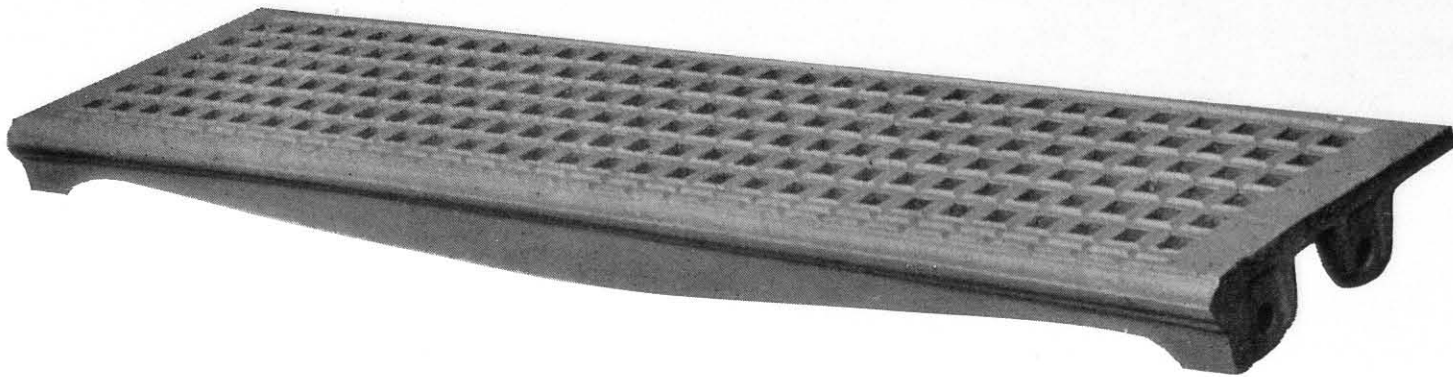
Length	Tread	Riser	Length	Tread	Riser
2' 0"	9"	7½"	3' 0"	10"	7½"
2' 3"	10"	7½"	3' 6"	10"	7½"
2' 6"	10"	7½"	4' 0"	10"	7½"
2' 9"	10"	7½"			

Tread $\frac{9}{16}$ " Thick
With $\frac{3}{4}$ " sq. perforations

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

CAST-IRON STAIR STEPS

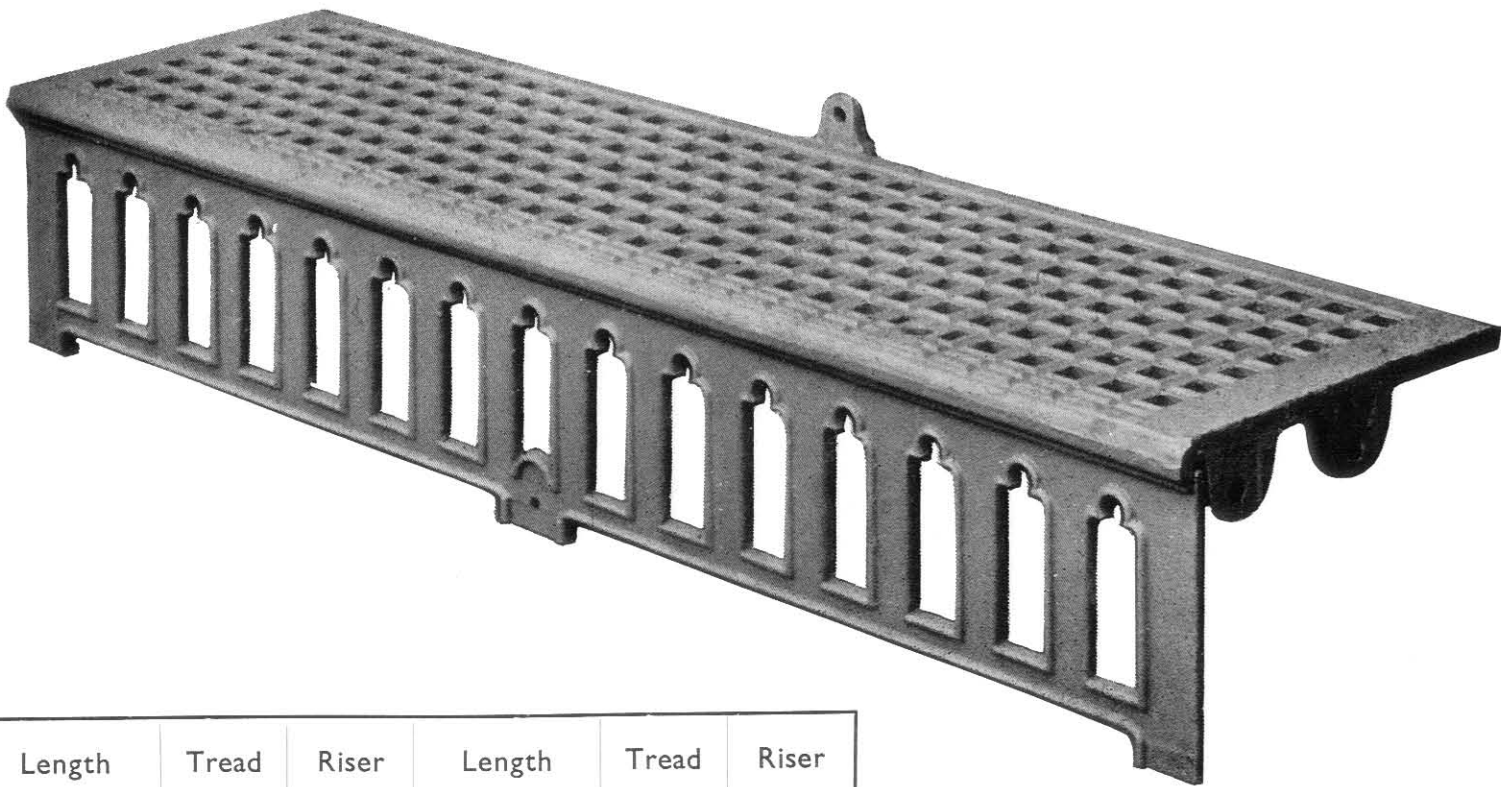
No. 54



Length	Tread	Length	Tread	Length	Tread
2' 0"	10"	3' 0"	10"	4' 0"	10"
2' 3"	10"	3' 6"	10"	4' 0"	11"
2' 6"	10"	3' 6"	11"	4' 6"	10"

Tread $\frac{5}{8}$ " Thick
With $\frac{3}{4}$ " sq. perforations

No. 55

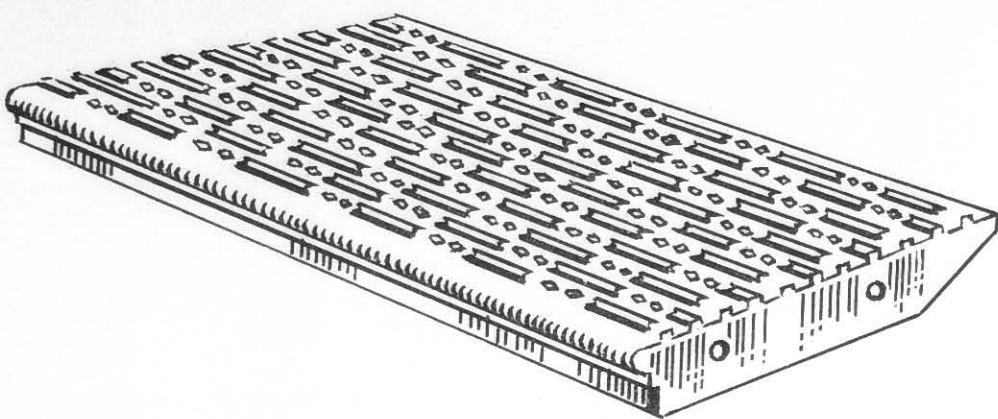


Length	Tread	Riser	Length	Tread	Riser
2' 0"	10"	7½"	3' 6"	10"	7½"
2' 3"	10"	7½"	3' 6"	11"	7½"
2' 6"	10"	7½"	3' 6"	12"	7½"
2' 6"	12"	7½"	4' 0"	10"	7½"
2' 9"	10"	7½"	4' 3"	9½"	7½"
3' 0"	10"	7½"	4' 6"	10"	7½"

Tread $\frac{5}{8}$ " Thick
With $\frac{3}{4}$ " sq. perforations

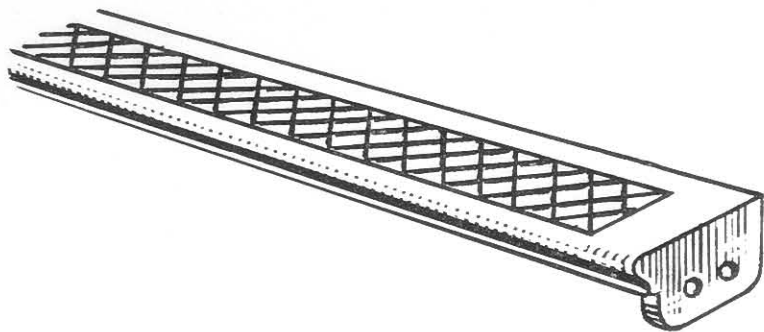
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

CAST-IRON STAIR STEPS



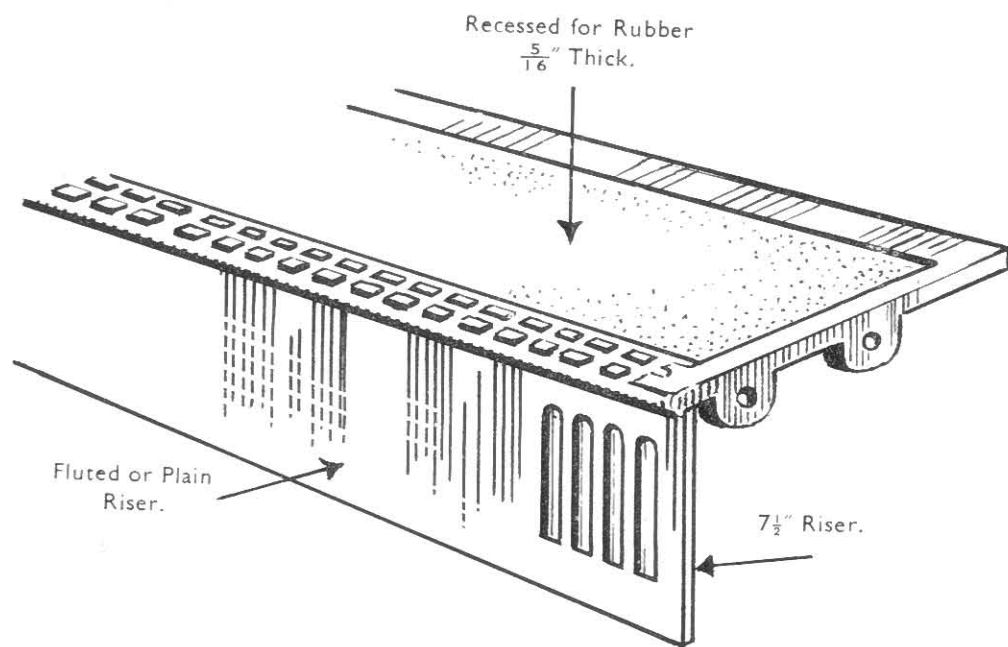
No. 21

Length	Tread	Thickness
1' 10 $\frac{1}{4}$ "	8 $\frac{1}{2}$ "	$\frac{7}{16}$ " U/C, $\frac{9}{16}$ " O/C
2' 9 $\frac{3}{4}$ "	8 $\frac{3}{8}$ "	$\frac{3}{8}$ " U/C, $\frac{1}{2}$ " O/C
2' 11 $\frac{1}{2}$ "	10 $\frac{3}{8}$ "	$\frac{1}{2}$ " U/C, $\frac{5}{8}$ " O/C
2' 11 $\frac{3}{4}$ "	9"	$\frac{3}{8}$ " U/C, $\frac{1}{2}$ " O/C
3' 5"	8 $\frac{1}{2}$ "	$\frac{1}{2}$ " U/C, $\frac{5}{8}$ " O/C



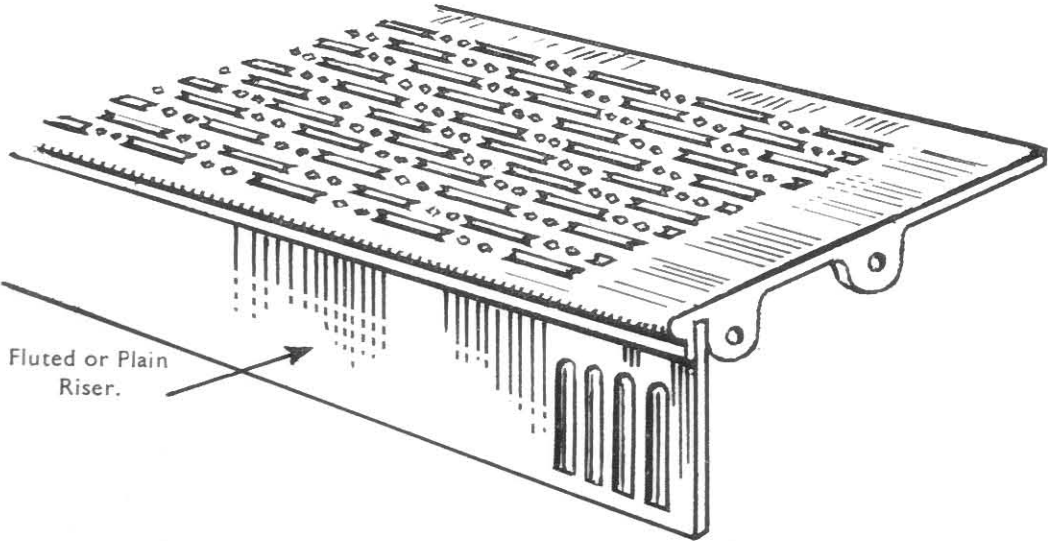
No. 23

Length	Tread	Thickness
1' 5"	3 $\frac{1}{2}$ "	$\frac{5}{8}$ "
2' 0"	4"	$\frac{5}{8}$ "
1' 2"	4 $\frac{5}{8}$ "	$\frac{5}{8}$ "



No. 69

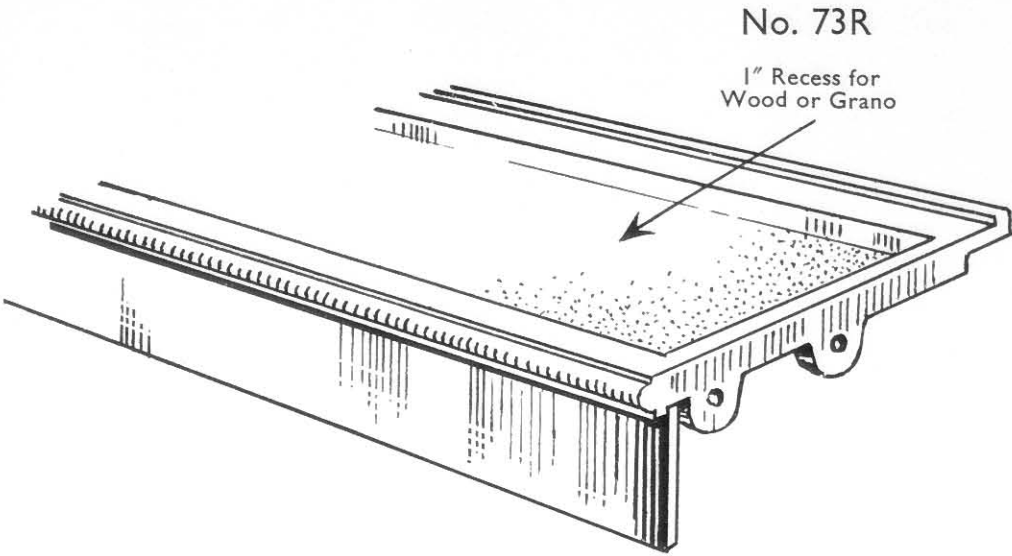
Length	Tread	Thickness
2' 11"	9 $\frac{1}{2}$ "	$\frac{11}{16}$ "



No. 73

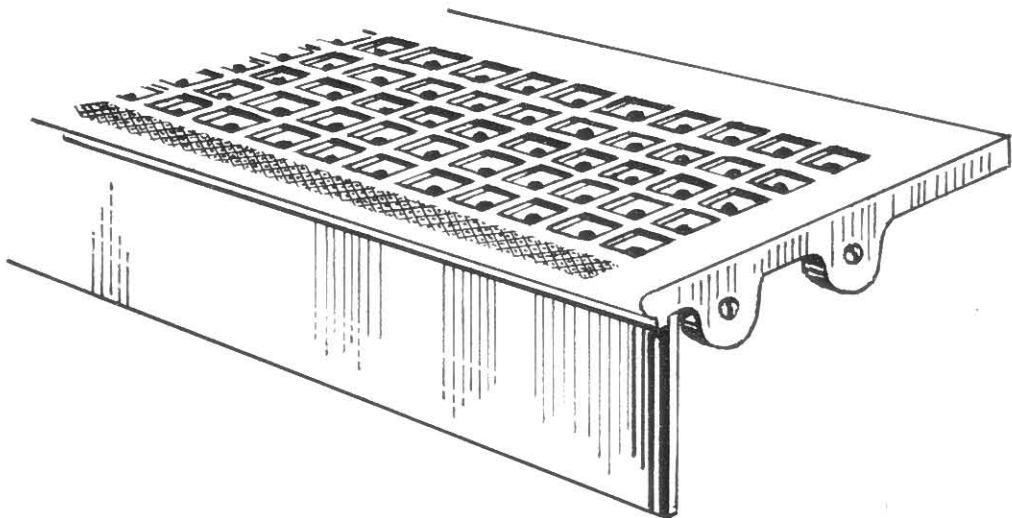
Length	Tread	Riser	Thickness
2' 0"	10"	6 $\frac{3}{4}$ "	$\frac{5}{16}$ " U/C $\frac{7}{16}$ " O/C
2' 6"	10"	6 $\frac{3}{4}$ "	
2' 9"	8"	8 $\frac{9}{16}$ "	
3' 0"	10"	6 $\frac{3}{4}$ "	
3' 6"	10"	6 $\frac{3}{4}$ "	$\frac{7}{16}$ " U/C $\frac{9}{16}$ " O/C
4' 0"	10"	6 $\frac{3}{4}$ "	
5' 6"	12"	7"	
6' 0"	10 $\frac{1}{4}$ "	7"	

CAST-IRON STAIR STEPS



No. 73R

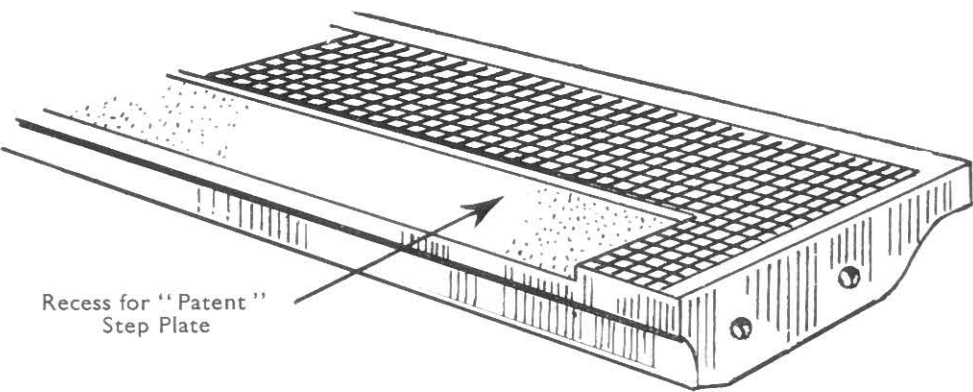
LENGTH	TREAD	RISER
4' 0"	10"	6 $\frac{3}{8}$ "
3' 6"	11"	6 $\frac{3}{8}$ "



No. 82

LENGTH	TREAD	RISER
4' 0"	10"	6 $\frac{1}{8}$ "
4' 9"	10"	6 $\frac{7}{8}$ "

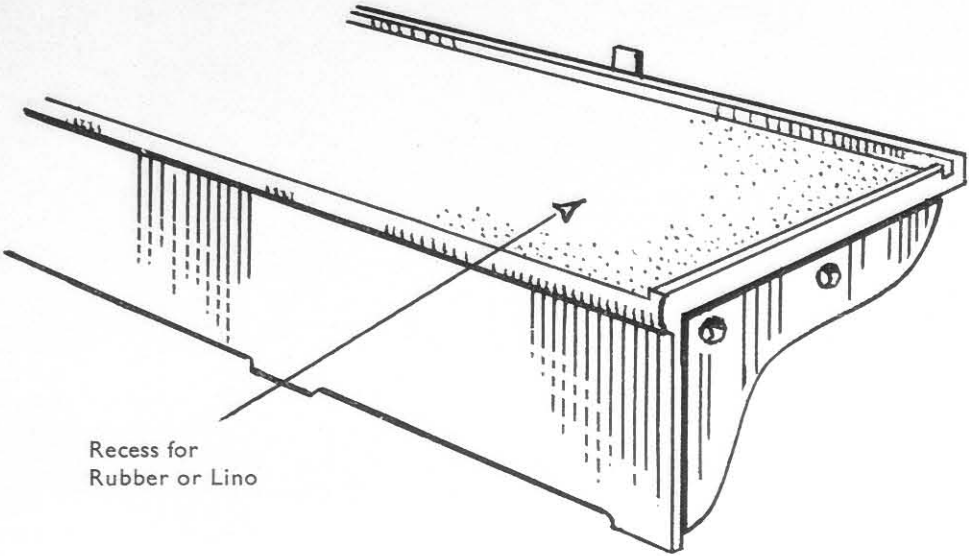
$\frac{3}{4}$ " Thick



No. 90

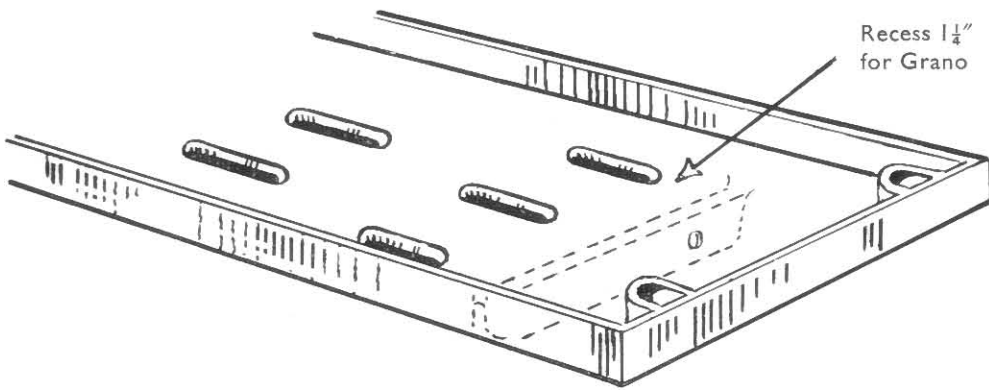
LENGTH	TREAD	THICKNESS
3' 0"	9 $\frac{1}{2}$ "	$\frac{1}{2}$ " U/C $\frac{3}{4}$ " O/C
4' 0"	9 $\frac{1}{2}$ "	
2' 9"	9 $\frac{1}{2}$ "	

CAST-IRON STAIR STEPS



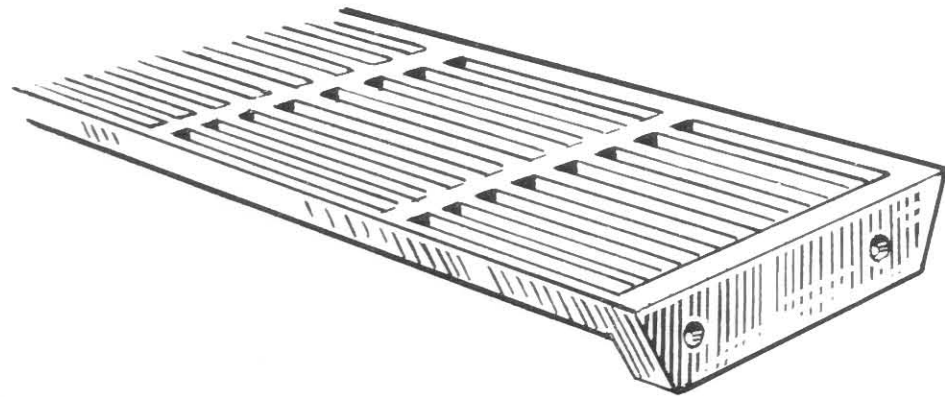
No. 91

LENGTH	TREAD	RISER	THICKNESS
3' 6"	9"	7½"	⅝"



No. 92

LENGTH	TREAD
4' 0"	1' 0"



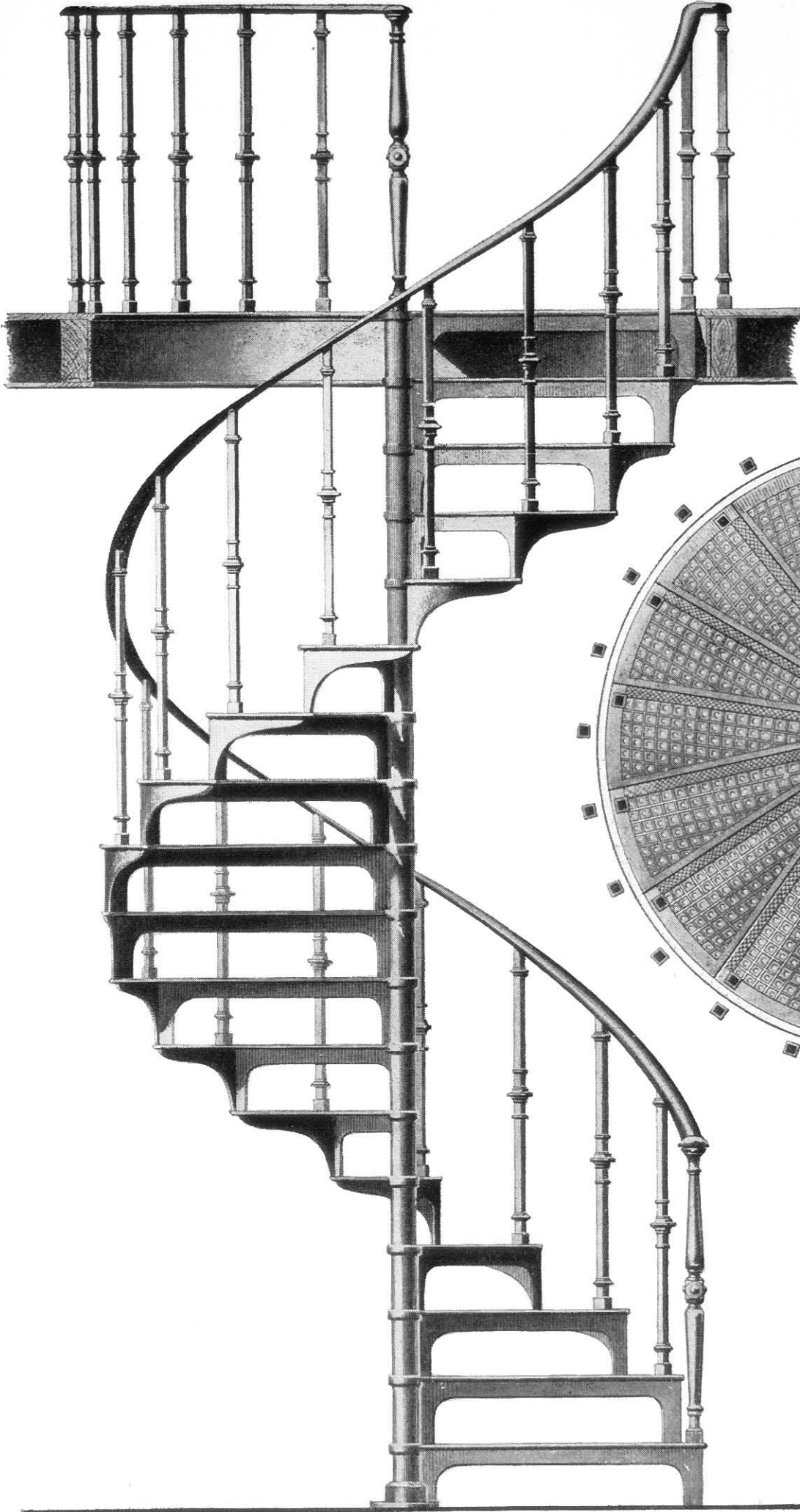
No. 93

LENGTH	TREAD	THICKNESS
2' 6"	10"	1"
3' 0"	10"	1"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SPIRAL STAIR

No. 5



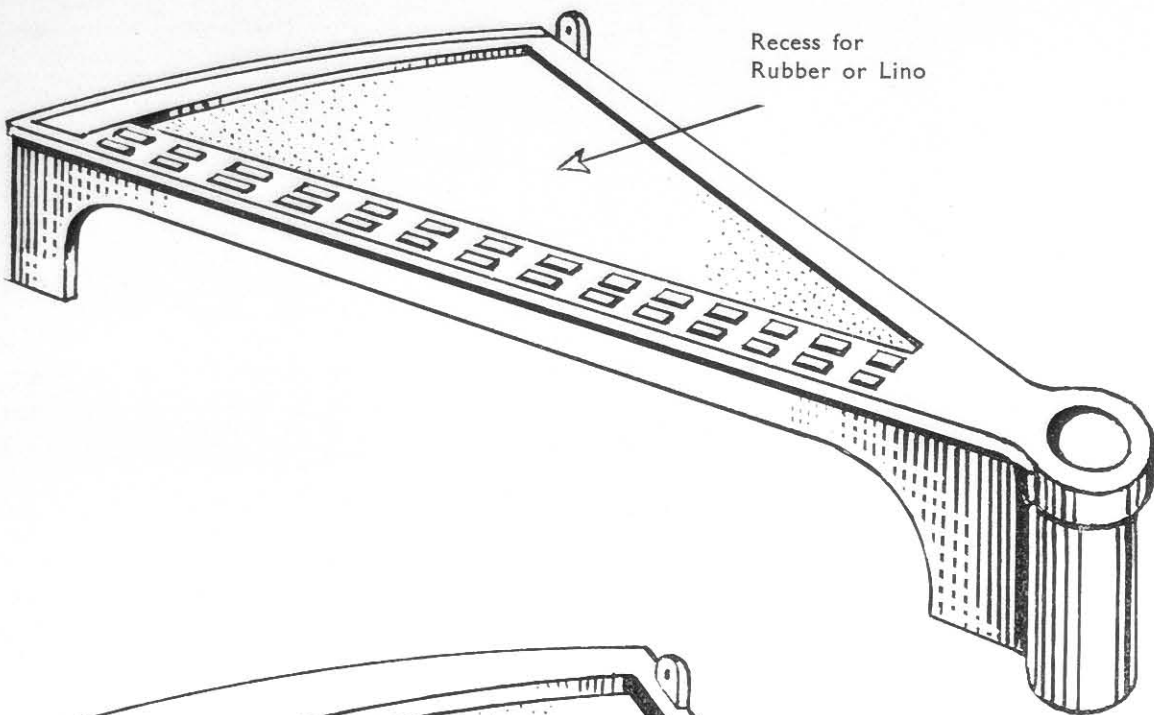
SIZES			
Radius Overall	Clear Width	Tread	Riser
1' 6"	1' 1¼"	11"	9"
1' 9"	1' 4¼"	11"	8"
2' 0"	1' 7¼"	1' 0"	8"
2' 3"	1' 10¼"	1' 1"	8"
2' 6"	2' 1¼"	1' 1"	8"
2' 9"	2' 4¼"	1' 1"	8"
3' 0"	2' 7¼"	1' 1"	8"

Supplied to any Height
Right-Hand or Left-Hand Wheel
Illustration shows Left-Hand Wheel

NOTE
Can be supplied with C.I. Balusters
as shown, or with ¾" square M.S.
Balusters.

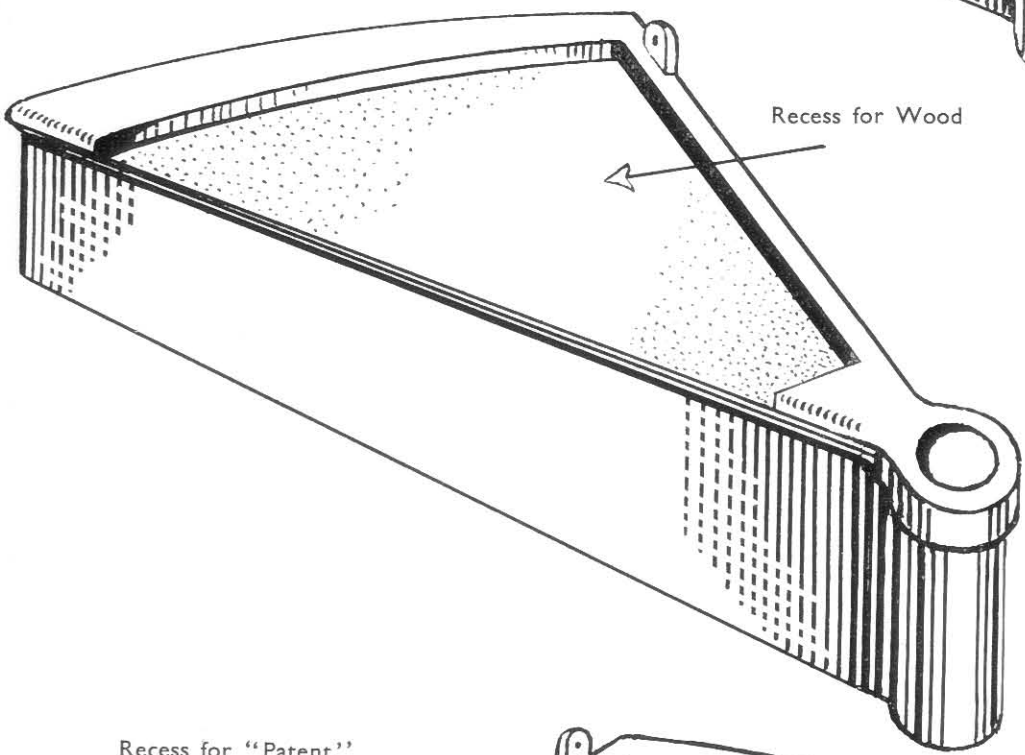
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

CAST-IRON SPIRAL STAIR STEPS



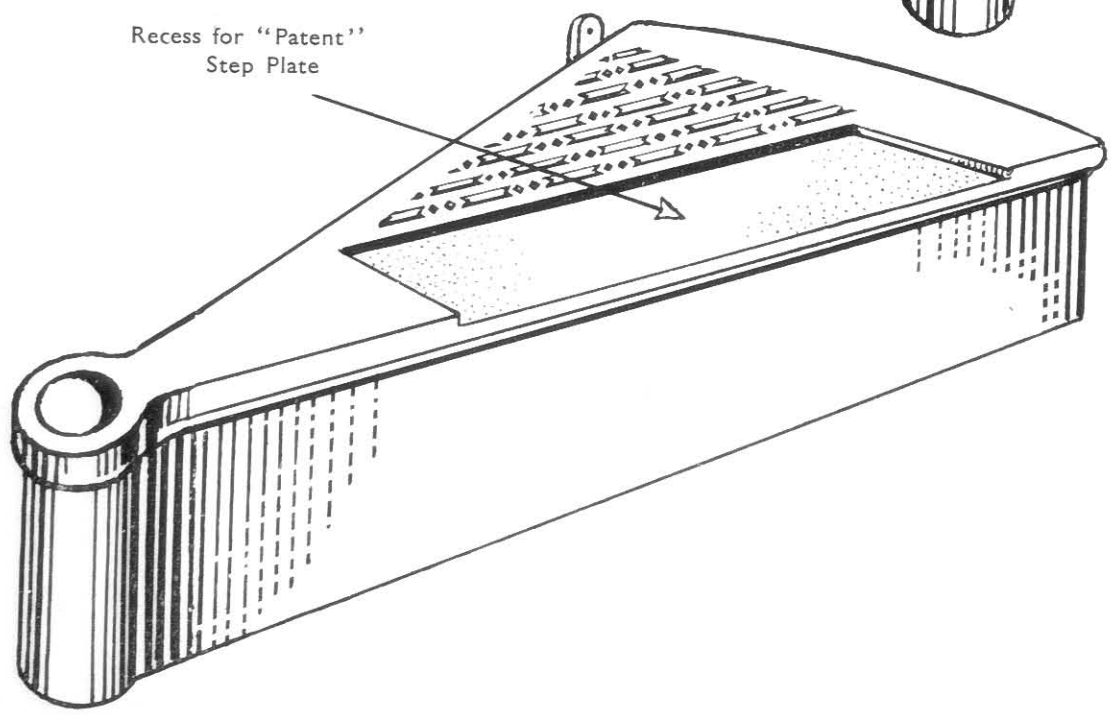
No. 66

Radius	Tread	Riser	Newel
2' 9"	1' 1"	7½"	2½" R.H.



No. 86

Radius	Tread	Riser	Newel
2' 6"	1' 3½"	8"	2" R. & L.H.



No. 87

Radius	Tread	Riser	Newel
2' 6"	1' 1"	8"	2" L.H.

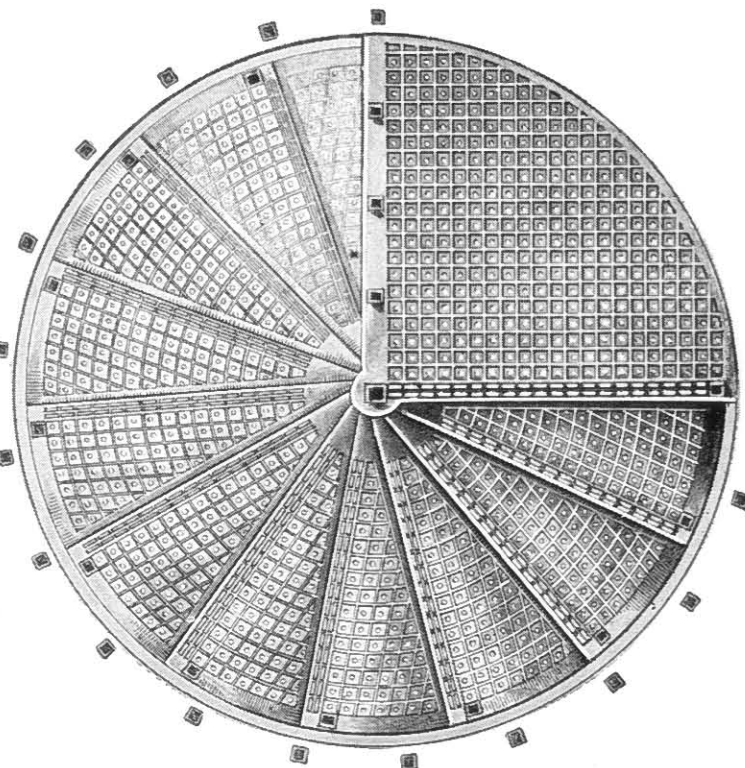
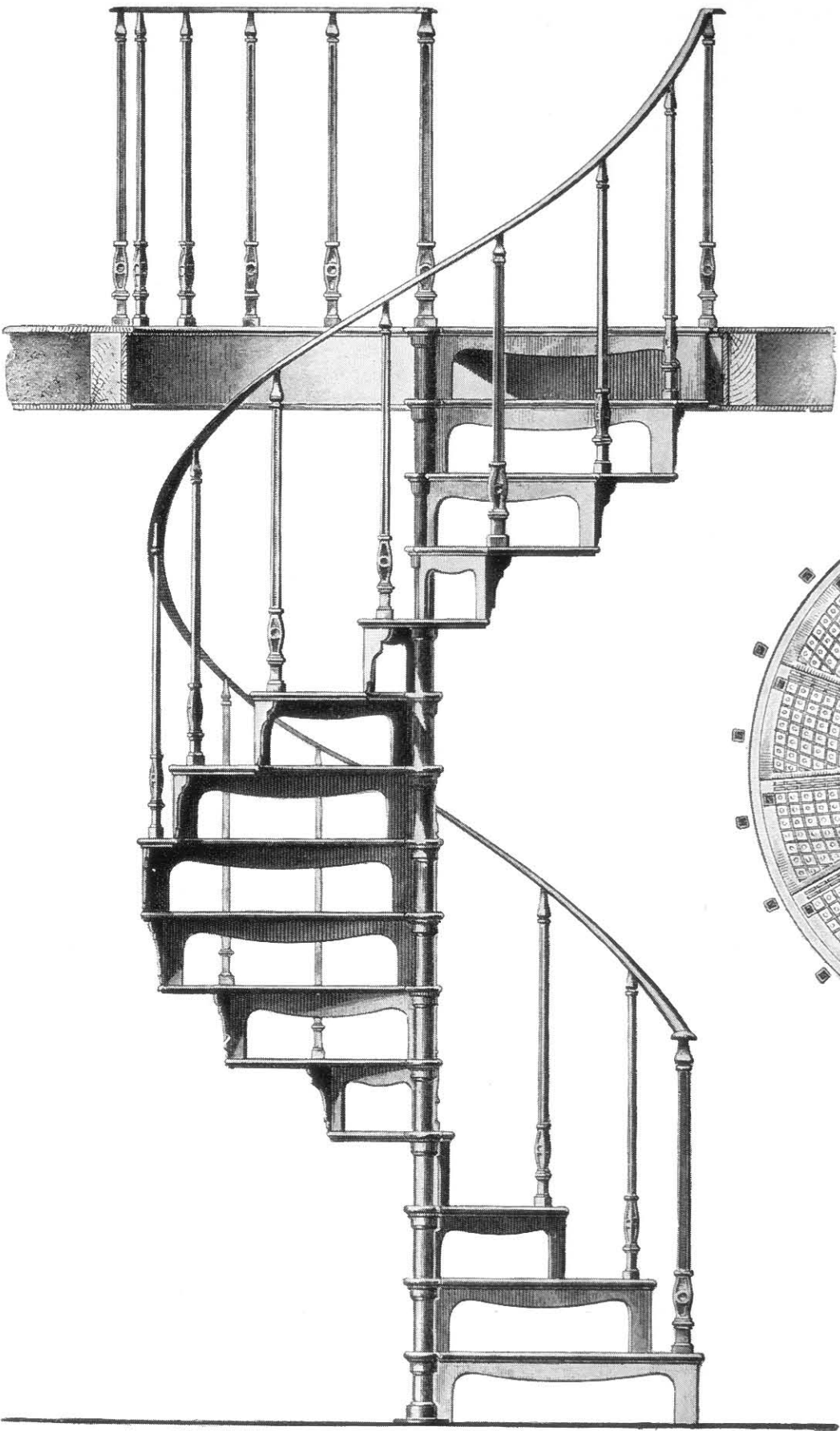
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SPIRAL STAIR

No. 56

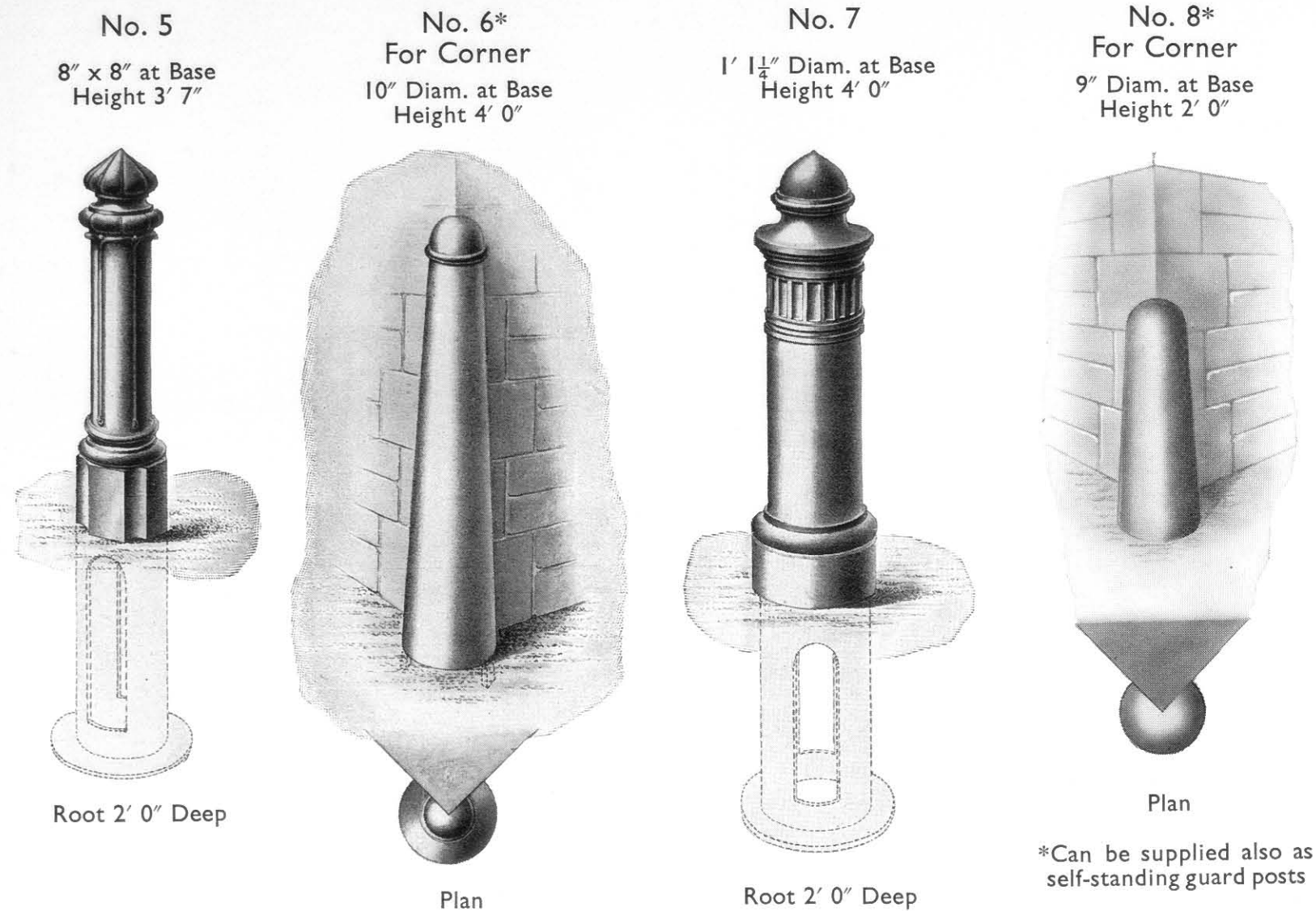
SIZES			
Radius Overall	Clear Width	Tread	Riser
1' 9"	1' 5"	0' 11"	8"
2' 0"	1' 8"	1' 0"	8"
2' 3"	1' 11"	1' 1"	8"
2' 6"	2' 2"	1' 1"	8"
2' 9"	2' 4½"	1' 1"	8"
3' 0"	2' 7½"	1' 1"	8"

Supplied to any Height,
Right-Hand or Left-Hand Wheel
Illustration shows Left-Hand Wheel

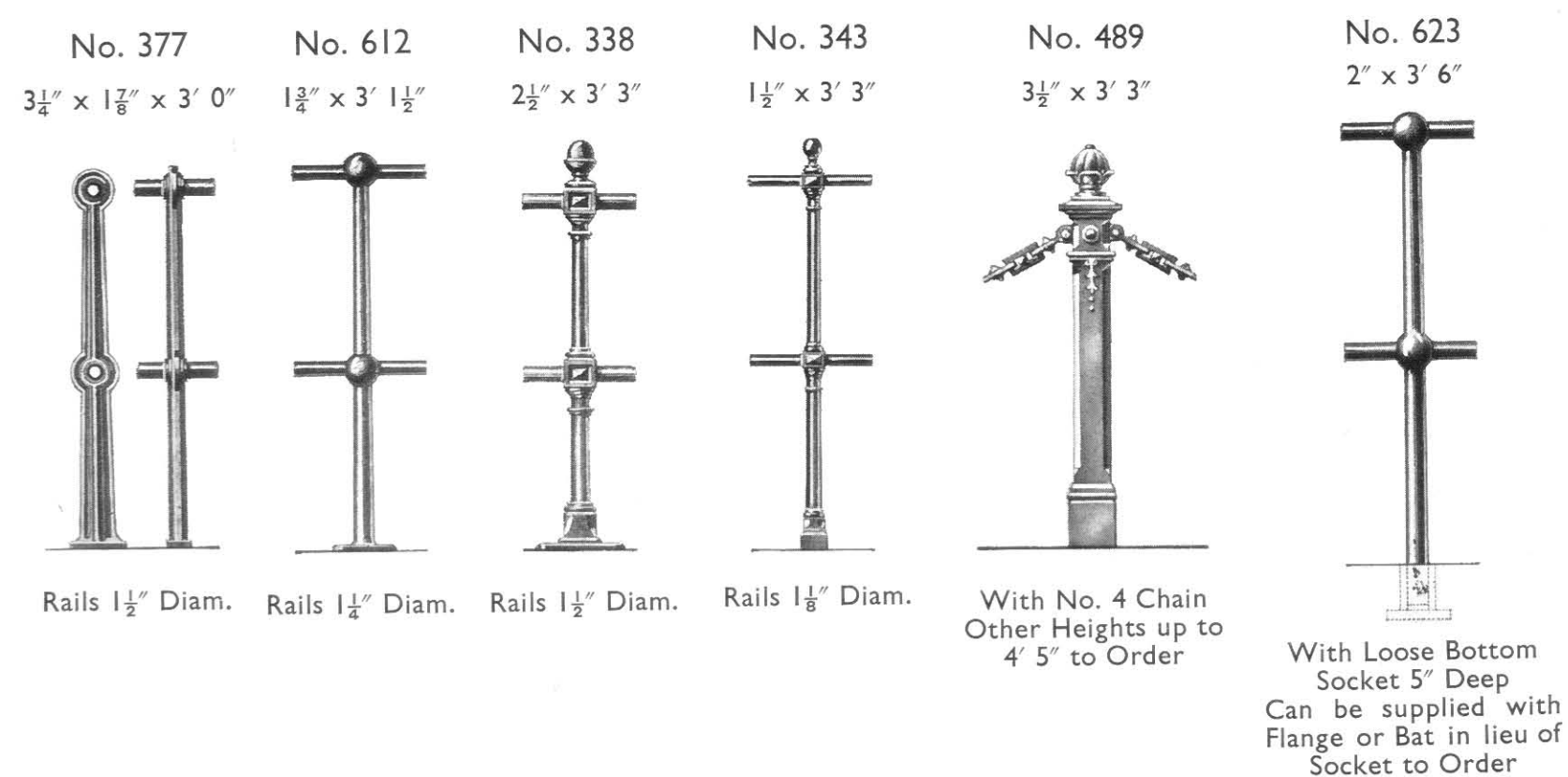


LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

ROAD AND GUARD POSTS

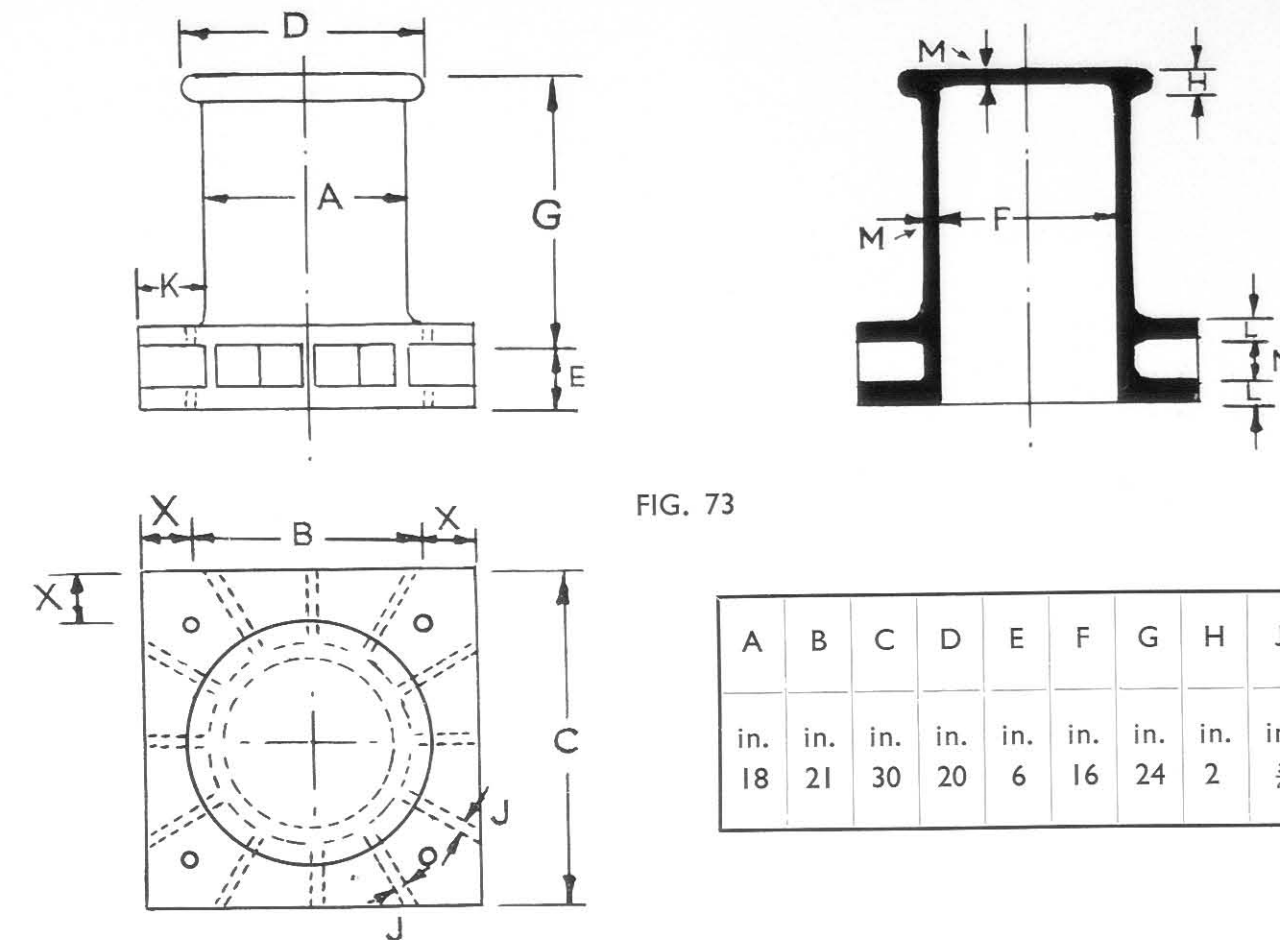


RAIL STANDARDS

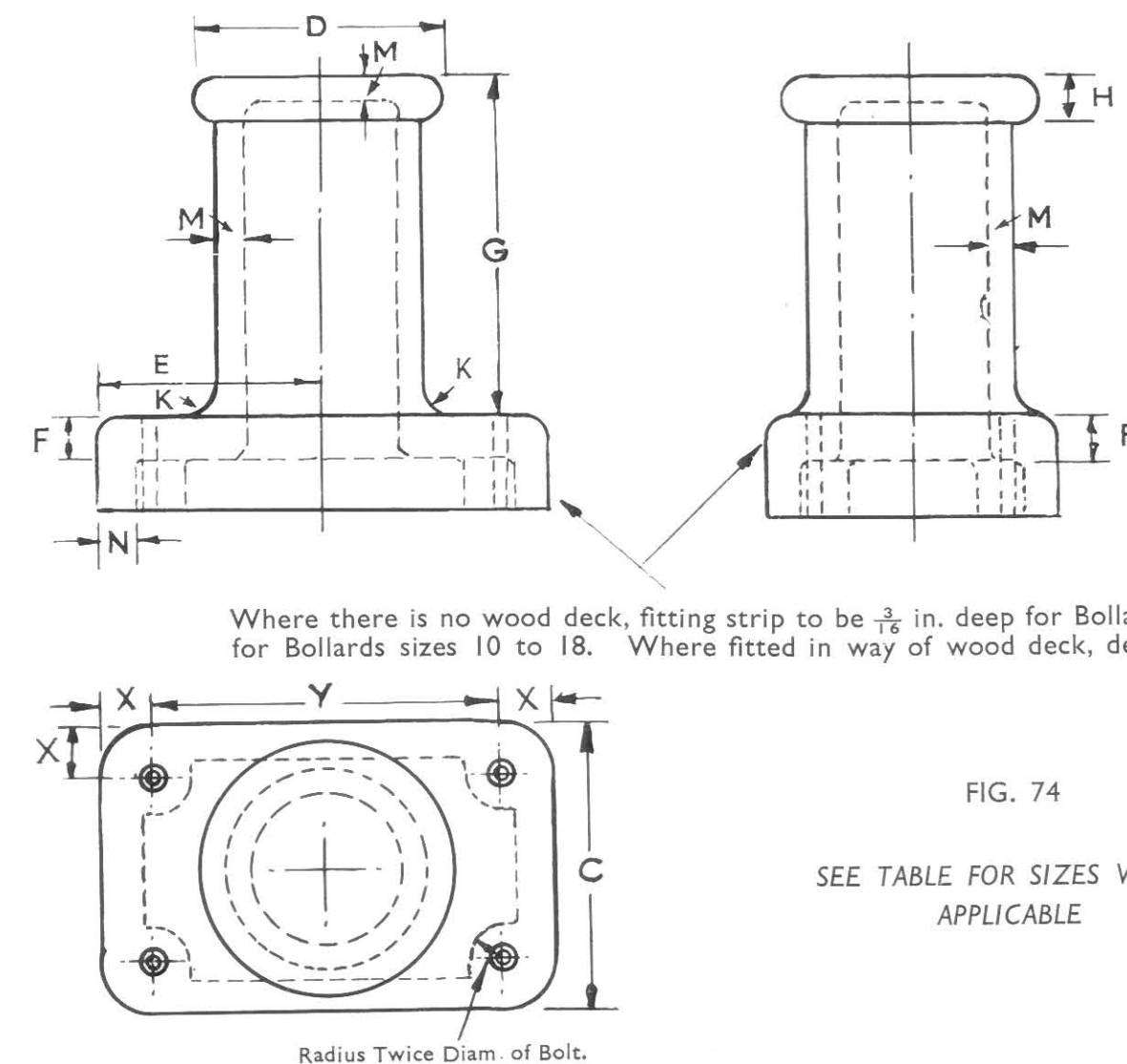


LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

BOLLARD



BOLLARD (B.S.S.) SINGLE TYPE



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

BOLLARDS (B.S.S.) DOUBLE TYPE

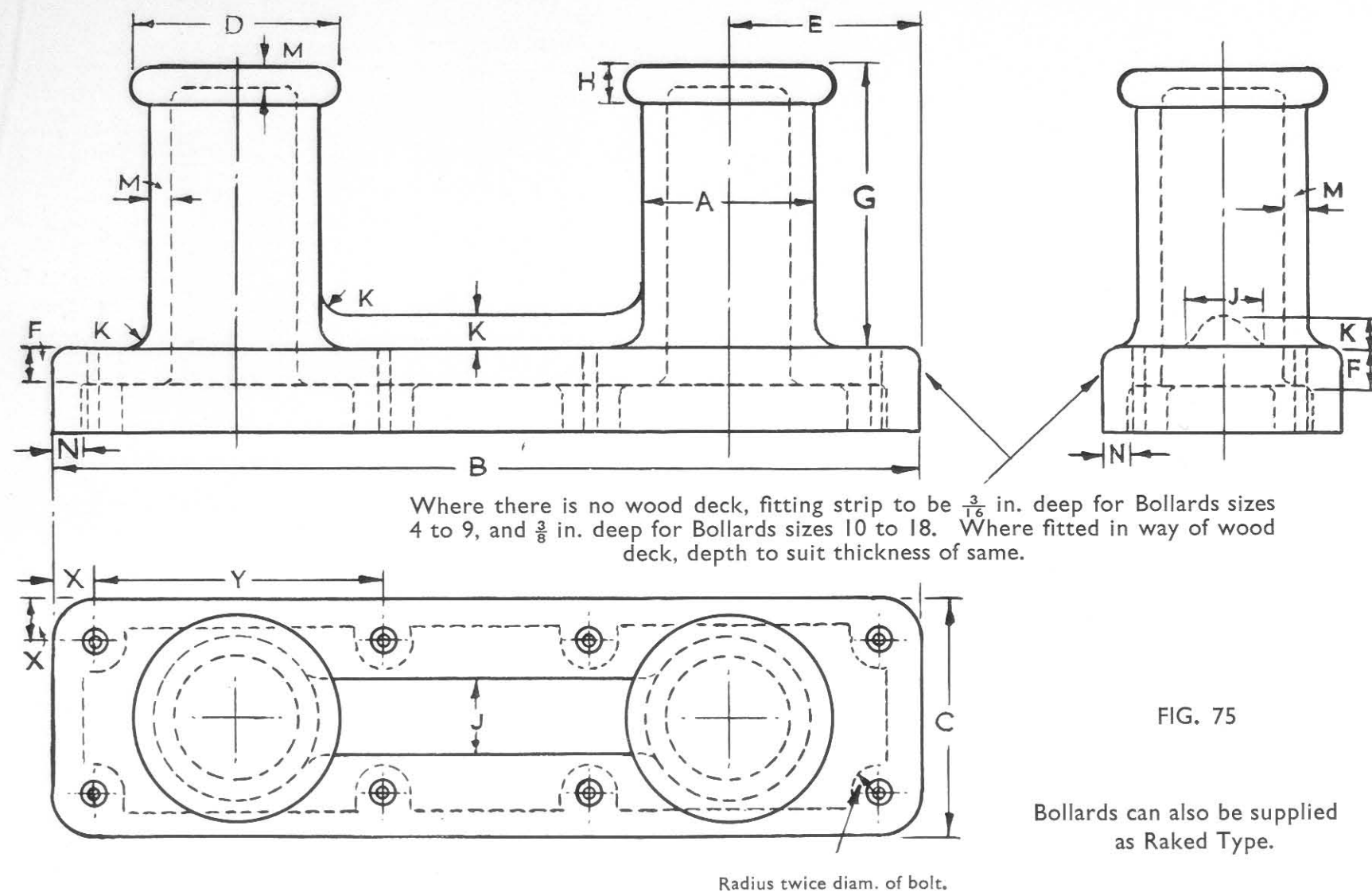


FIG. 75

Bollards can also be supplied as Raked Type.

TABLE 35

DIMENSIONS OF VERTICAL TYPE BOLLARDS

B.S. Item Number	Size of Chain Cables		Size of Bollard A	B		C	D	E	F	G	H	Web		M	N	Rivets (Iron)		Spacing of Rivets	
	in.	in.		ft.	in.							J	K			No.	Diam.	X	Y
B.S.S. B 171	$\frac{1}{16}$ to $\frac{1}{8}$	$\frac{1}{16}$	4	1	9	6	5	$4\frac{1}{2}$	1	$7\frac{1}{2}$	1	2	$\frac{1}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	4	$\frac{3}{4}$	1	—
B.S.S. B 172	$\frac{1}{8}$ to $\frac{1}{4}$	$\frac{1}{8}$	5	2	$2\frac{1}{4}$	$7\frac{1}{2}$	$6\frac{1}{4}$	$5\frac{5}{8}$	$1\frac{1}{4}$	$9\frac{3}{8}$	$1\frac{1}{4}$	$2\frac{1}{2}$	1	$\frac{1}{8}$	$\frac{1}{2}$	4	$\frac{1}{4}$	$1\frac{1}{4}$	—
B.S.S. B 173	$\frac{1}{16}$ to $\frac{3}{16}$	$\frac{3}{16}$	6	2	$7\frac{1}{2}$	9	$7\frac{1}{2}$	$6\frac{3}{4}$	$1\frac{1}{2}$	$11\frac{1}{4}$	$1\frac{1}{2}$	3	$\frac{1}{16}$	$\frac{5}{8}$	$\frac{1}{2}$	6	$\frac{7}{8}$	$1\frac{1}{2}$	$10\frac{1}{2}$
B.S.S. B 174	$\frac{1}{4}$ to $\frac{3}{8}$	$\frac{3}{8}$	7	3	1	$10\frac{1}{2}$	$8\frac{3}{4}$	$7\frac{7}{8}$	$1\frac{3}{4}$	$13\frac{1}{8}$	$1\frac{3}{4}$	$3\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{4}$	6	$\frac{7}{8}$	$1\frac{3}{4}$	$12\frac{1}{4}$
B.S.S. B 175	$\frac{1}{16}$ to $\frac{1}{8}$	$\frac{1}{16}$	8	3	6	12	10	9	2	15	2	4	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{2}$	6	1	2	14
B.S.S. B 176	$\frac{1}{8}$ to $\frac{1}{4}$	$\frac{1}{4}$	9	3	$11\frac{1}{4}$	$13\frac{1}{2}$	$11\frac{1}{4}$	$10\frac{1}{8}$	$2\frac{1}{4}$	$16\frac{7}{8}$	$2\frac{1}{4}$	$4\frac{1}{2}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{2}$	6	1	$2\frac{1}{4}$	$15\frac{3}{4}$
B.S.S. B 177	$\frac{1}{16}$ to $\frac{1}{8}$	$\frac{1}{16}$	10	4	$4\frac{1}{2}$	15	$12\frac{1}{2}$	$11\frac{1}{4}$	$2\frac{1}{2}$	$18\frac{3}{4}$	$2\frac{1}{2}$	5	2	$\frac{1}{16}$	$\frac{1}{4}$	8	$\frac{1}{8}$	$2\frac{1}{2}$	$17\frac{1}{2}$
B.S.S. B 178	$\frac{1}{8}$ to $\frac{1}{4}$	$\frac{1}{8}$	11	4	$9\frac{3}{4}$	$16\frac{1}{2}$	$13\frac{3}{4}$	$12\frac{3}{8}$	$2\frac{3}{4}$	20	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{16}$	2	8	$\frac{1}{8}$	$2\frac{3}{4}$	$19\frac{1}{4}$
B.S.S. B 179	$\frac{1}{4}$ to $\frac{3}{8}$	$\frac{3}{8}$	12	5	3	18	15	$13\frac{1}{2}$	3	$22\frac{1}{2}$	3	6	$\frac{1}{8}$	$\frac{1}{16}$	$2\frac{3}{8}$	8	$\frac{1}{4}$	3	21
B.S.S. B 180	$\frac{3}{8}$ to $\frac{1}{2}$	$\frac{1}{2}$	14	6	$1\frac{1}{2}$	21	$17\frac{1}{2}$	$15\frac{3}{4}$	$3\frac{1}{2}$	$26\frac{1}{4}$	$3\frac{1}{2}$	7	$\frac{1}{8}$	$\frac{1}{16}$	$2\frac{1}{2}$	10	$\frac{1}{8}$	$3\frac{1}{2}$	$24\frac{1}{2}$
B.S.S. B 181	$\frac{1}{2}$ to $\frac{3}{4}$	$\frac{3}{4}$	16	7	0	24	20	18	4	30	4	8	$\frac{1}{8}$	$\frac{1}{16}$	$2\frac{3}{8}$	10	$\frac{1}{2}$	4	28
B.S.S. B 182	$\frac{3}{4}$ to $1\frac{1}{2}$	$1\frac{1}{2}$	18	7	$10\frac{1}{2}$	27	$22\frac{1}{2}$	$20\frac{1}{4}$	$4\frac{1}{2}$	$33\frac{3}{4}$	$4\frac{1}{2}$	9	$\frac{1}{8}$	$\frac{1}{16}$	$2\frac{1}{2}$	12	$\frac{1}{2}$	$4\frac{1}{2}$	$31\frac{1}{2}$

"A" is the nominal size of Bollard.

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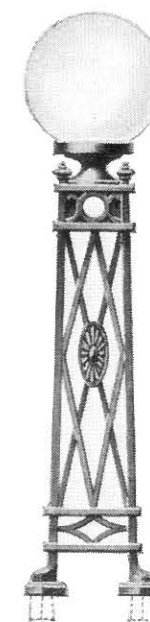
LAMP PILLARS

No. 164
10' 7 $\frac{1}{2}$ " High
Also 12' 7 $\frac{1}{2}$ " High
Spigot 2 $\frac{3}{8}$ " Diam. x 2 $\frac{3}{4}$ " High

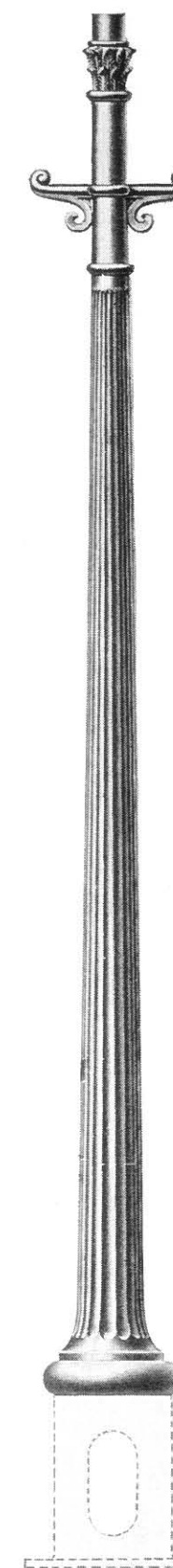
No. 166
10' 0" High
With Door in Base
Spigot 2 $\frac{3}{4}$ " Diam. x 2 $\frac{3}{4}$ " High

No. 167
11' 0" High
Also 13' 0" High
With Door in Base
Spigot 2 $\frac{3}{8}$ " Diam. x 2 $\frac{1}{2}$ " High

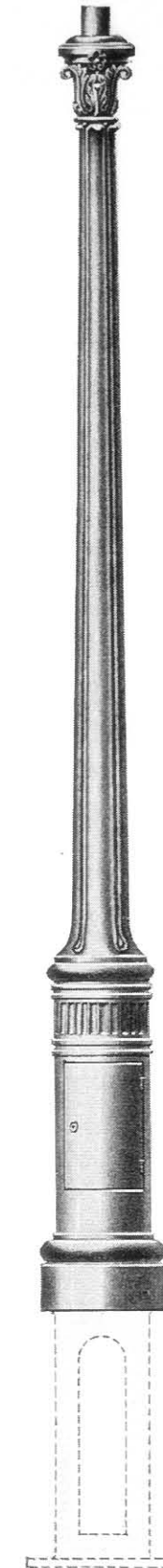
No. 157
3' 4" High



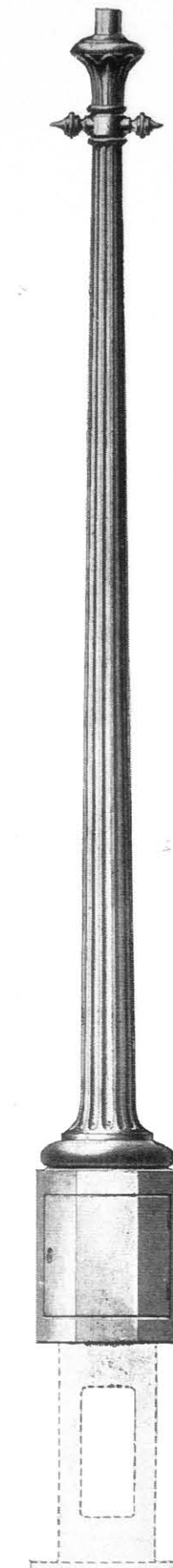
Base 11 $\frac{1}{2}$ " Square



Root 1' 4 $\frac{1}{2}$ "
Earth Plate 1' 5" Square



Base 8 $\frac{1}{4}$ " Diam. Inside
Root 2' 0"
Earth Plate 1' 2" Square

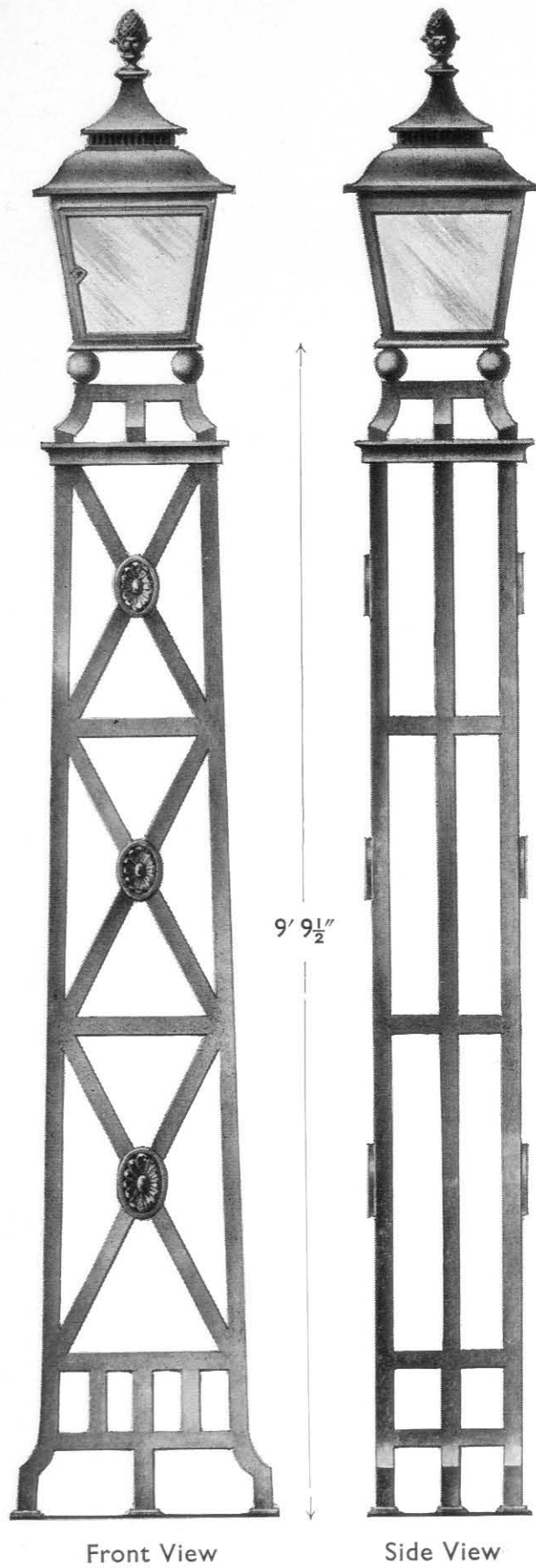


Octagonal Base 1' 1 $\frac{1}{2}$ " Inside
Root 1' 11"
Earth Plate 1' 3 $\frac{1}{2}$ " Diam.

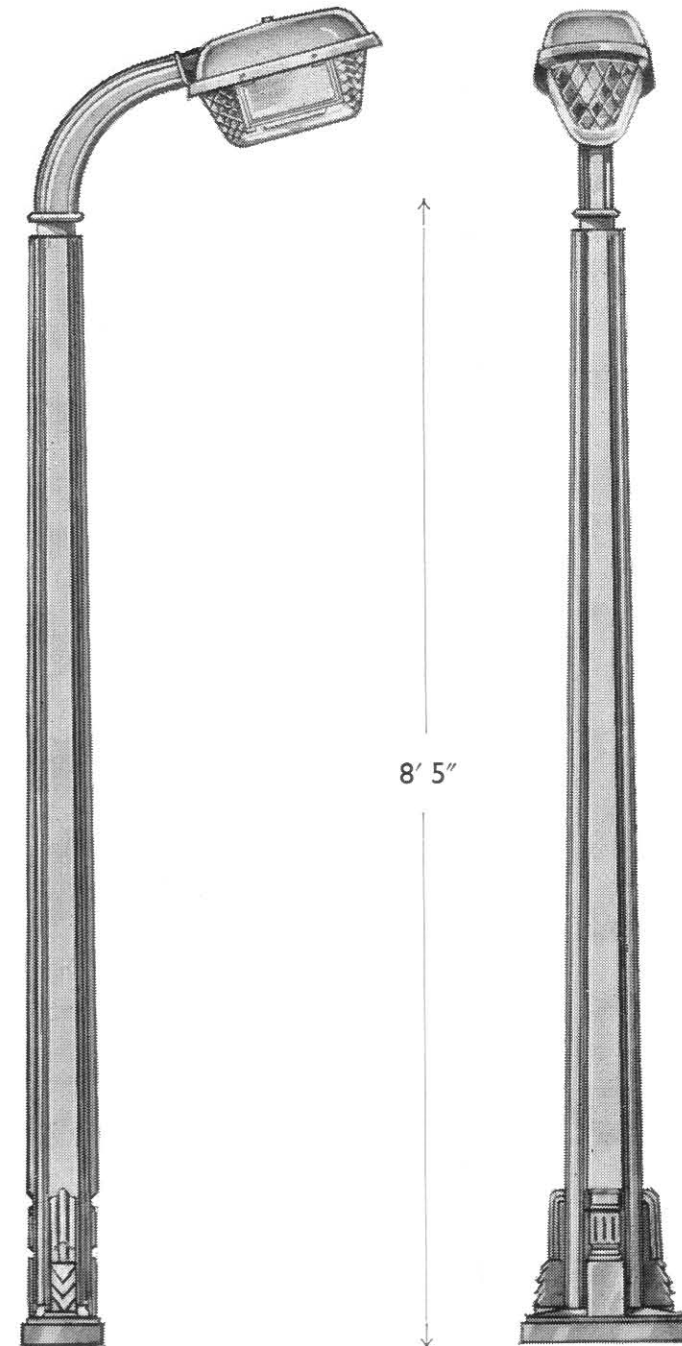
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

LAMP PILLARS

No. 173
9' 9½" High



No. 915

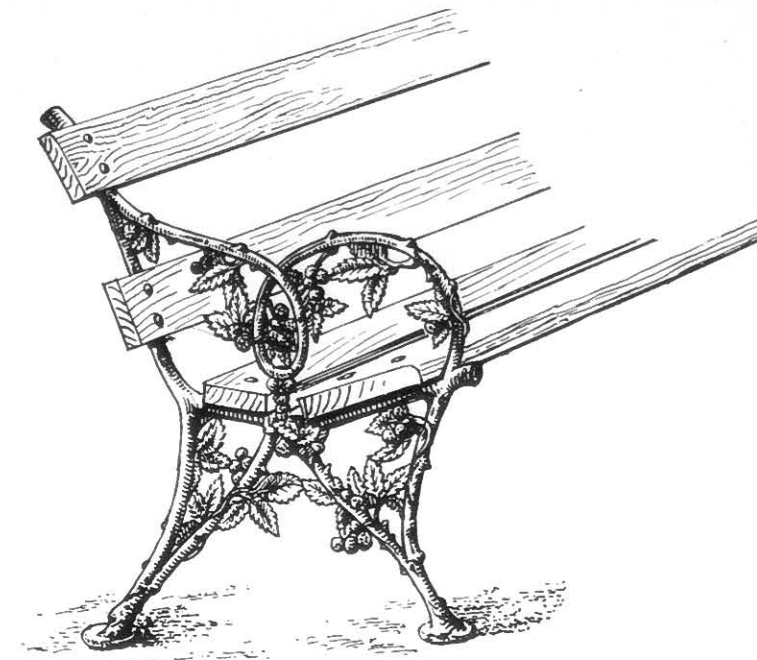


8' 5" High
with 15" x 7" Base
Also with 15" x 15" Base

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

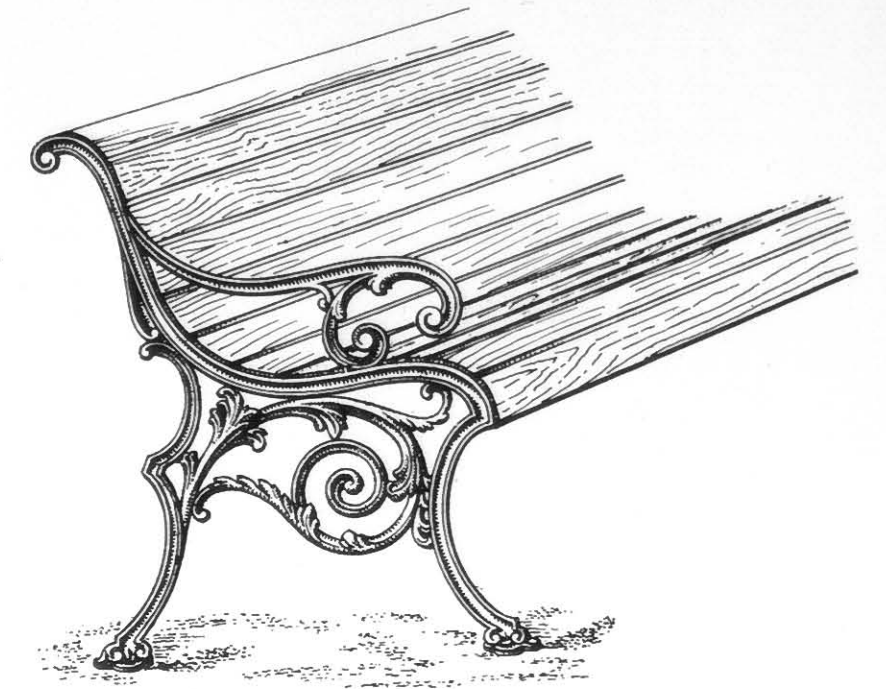
GARDEN AND PARK SEAT STANDARDS

No. 8



1' 10½" x 2' 8" High Overall

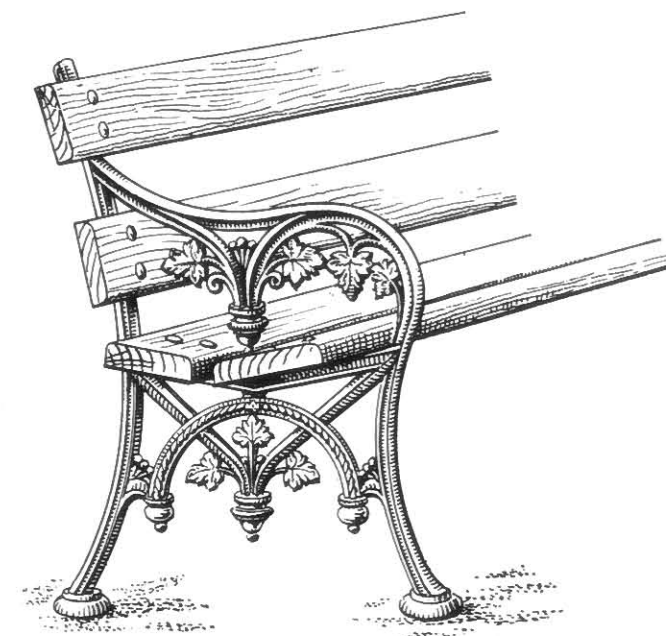
No. 73



2' 2" x 2' 7½" High Overall

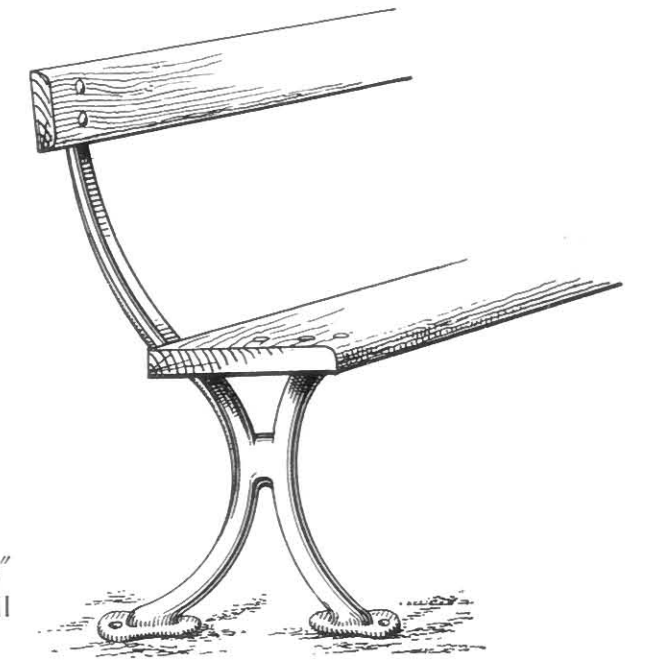
No. 89

1' 11" x 2' 8"
High Overall

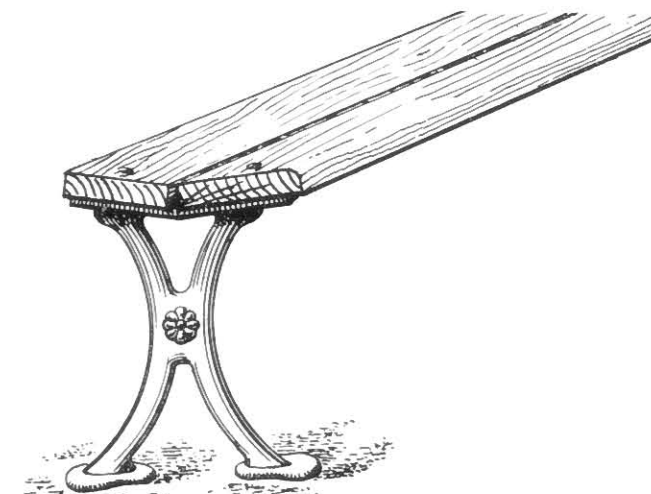


No. 2

1' 5" x 2' 9½"
High Overall

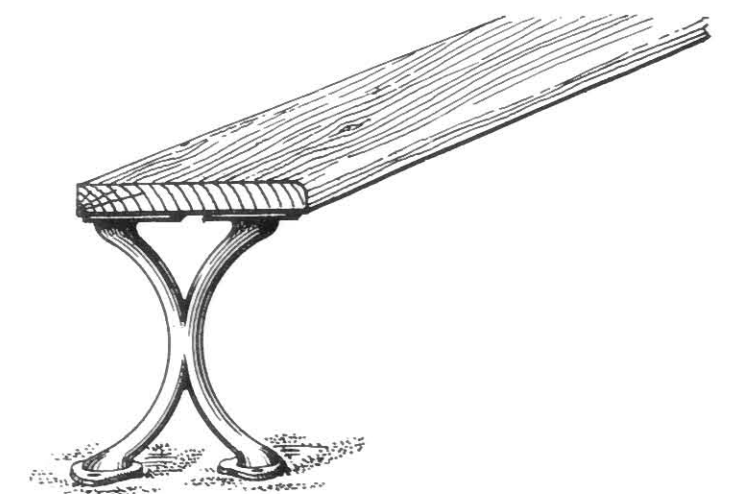


No. 79



1' 2½" x 1' 4½" High Overall

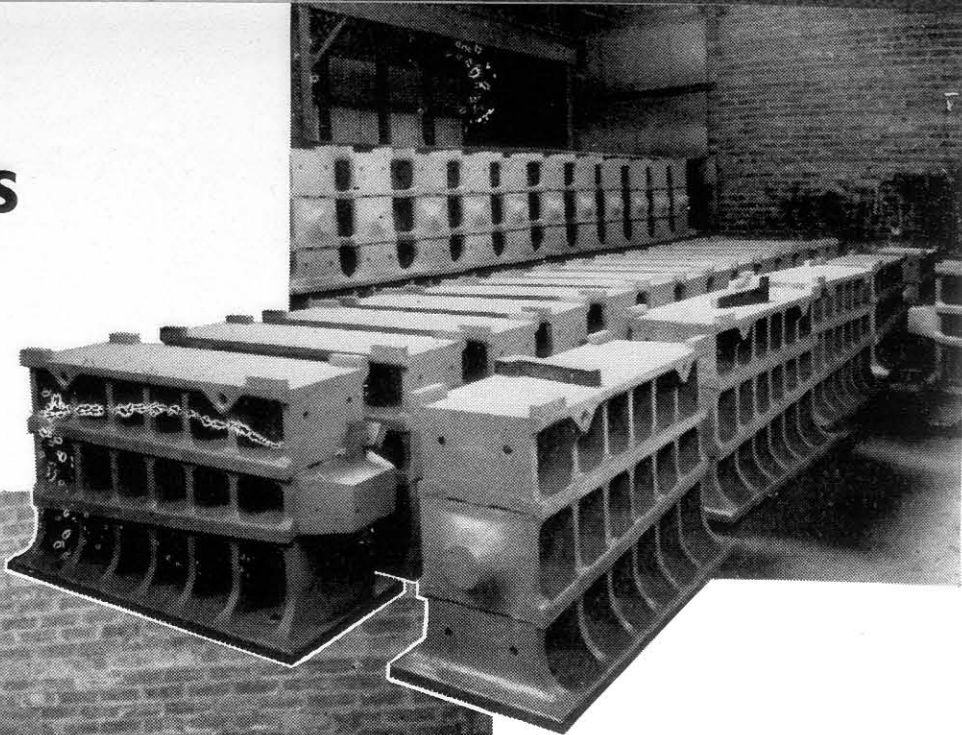
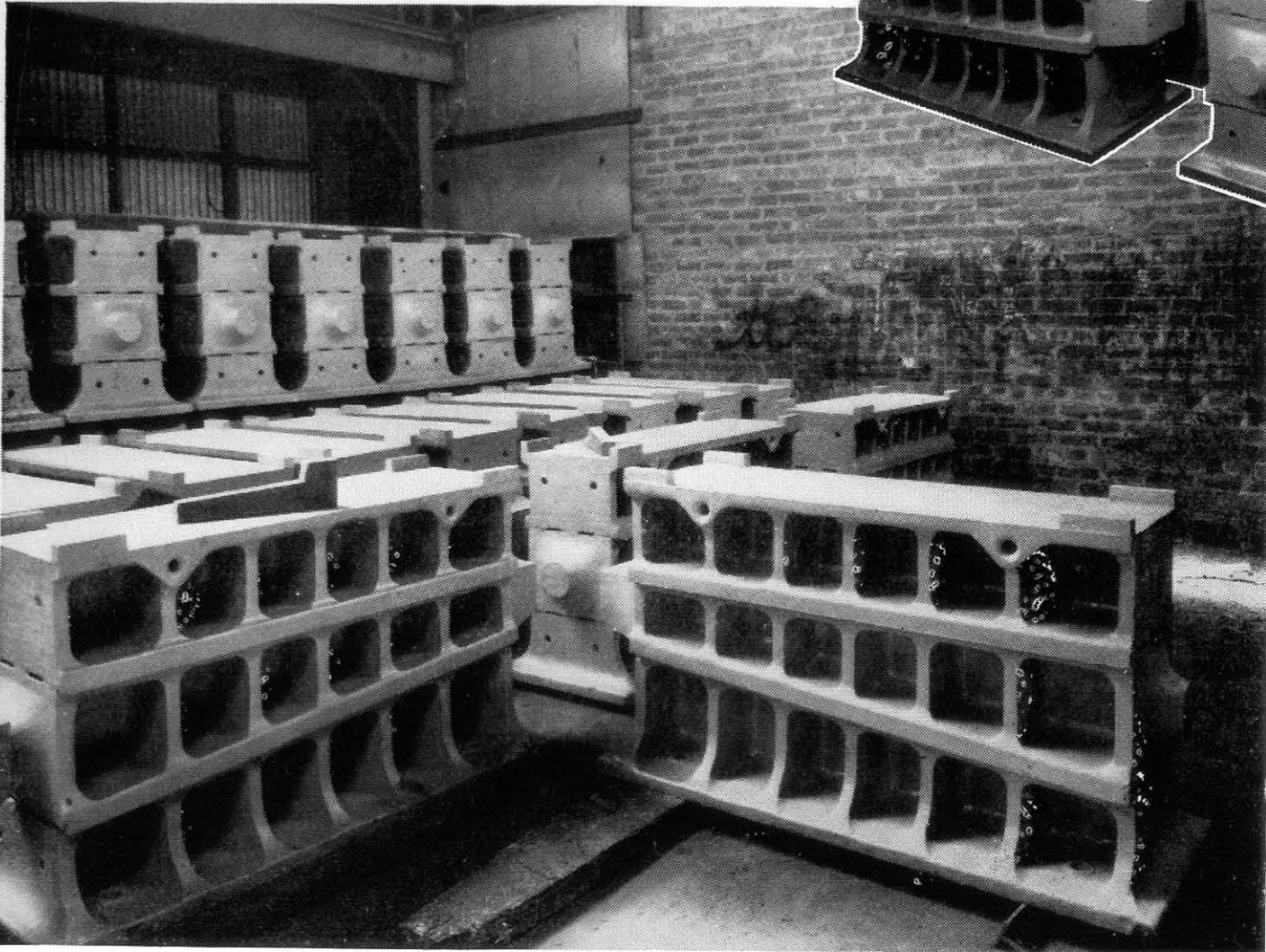
No. 88



1' 0" x 1' 3¼" also 1' 0" x 1' 2" High Overall

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

Cast-Iron Keel Blocks



Keel Blocks for No. 4 Dry Dock for Messrs Swan, Hunter & Wigham Richardson Ltd., Wallsend-on-Tyne. Dimensions of Dock : 715 ft. long, 105 ft. wide, 29 ft. deep at H.W.O.S.T.

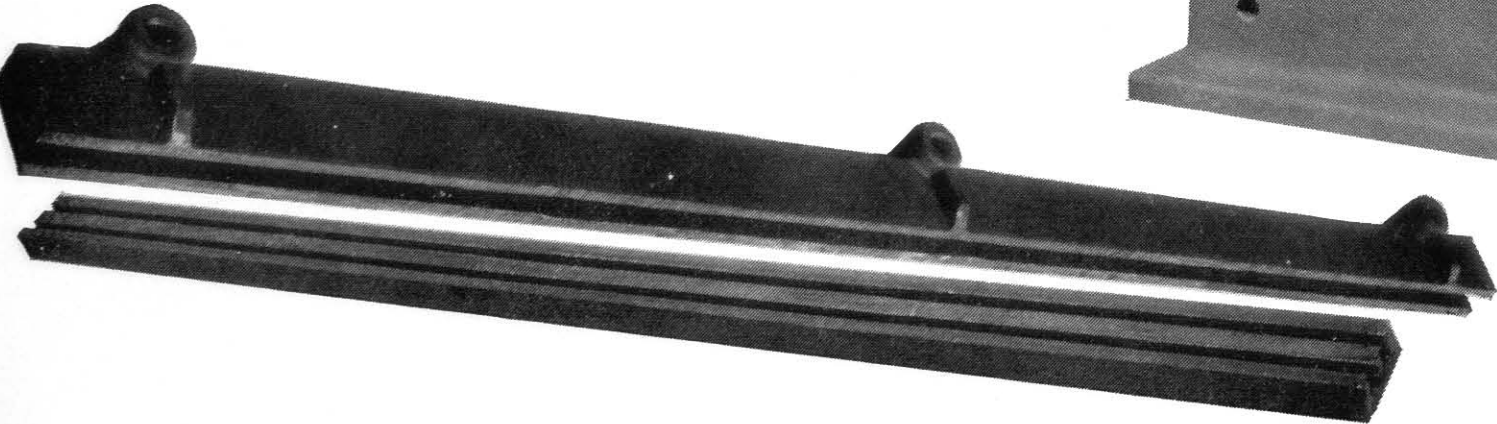
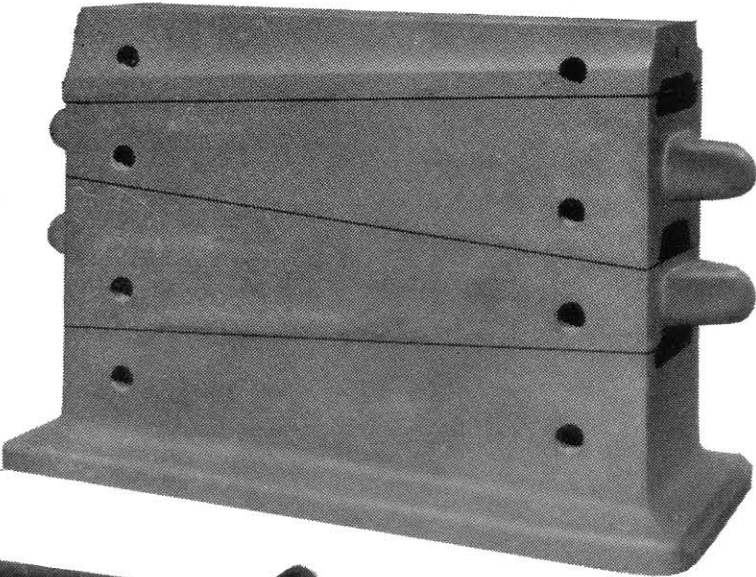
Consulting Engineers : T. F. Burns & Partners, London and Newcastle-on-Tyne.

Main Civil Engineering Contractors : Sir Robert McAlpine & Sons (Newcastle-on-Tyne) Ltd.

Photograph illustrates some of the many sets of Keel Blocks supplied to the Mersey Docks and Harbour Board, Liverpool.

Reproduced by Courtesy of the Board.

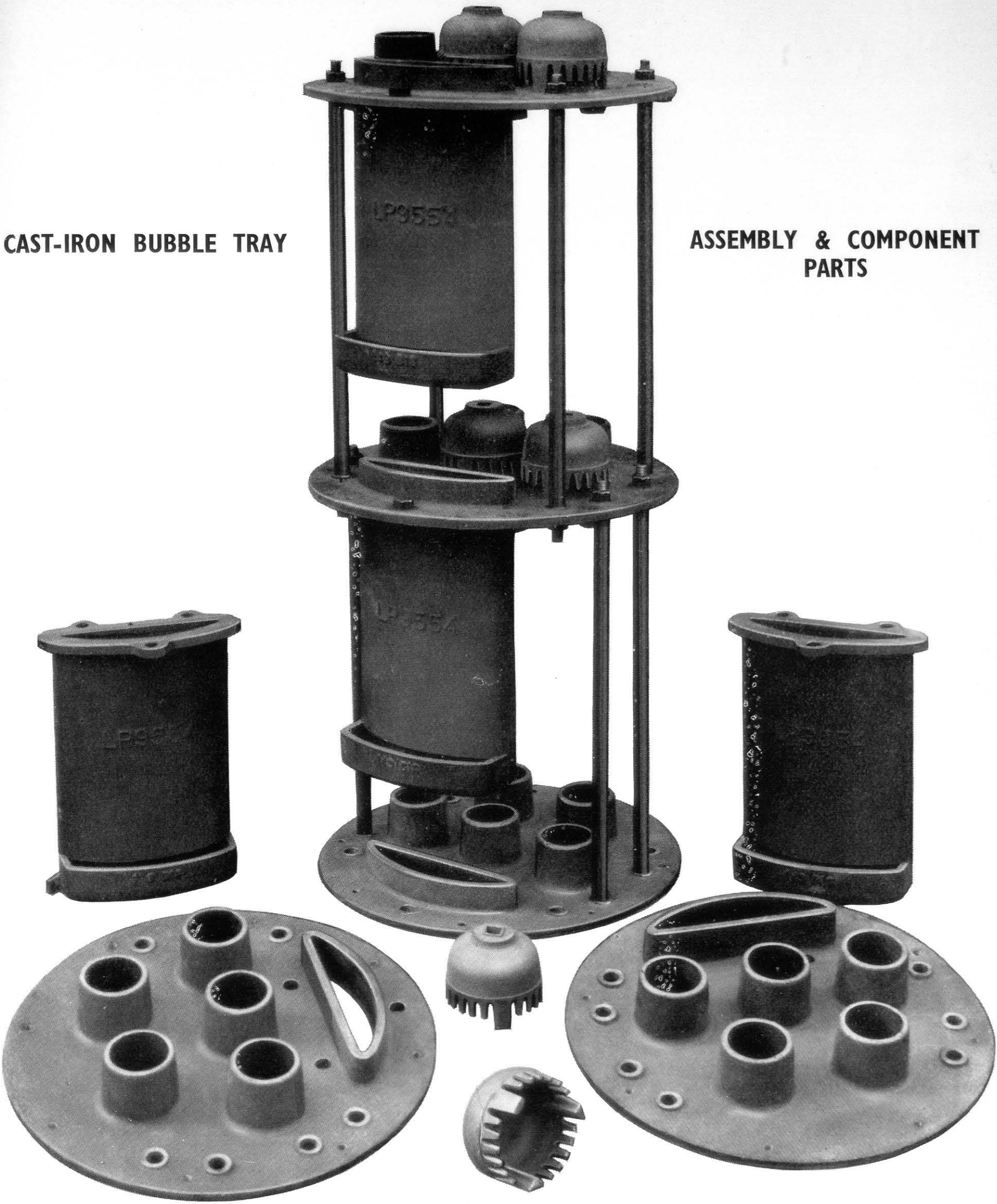
Slide and Guide Rails for Dockyard Doors.



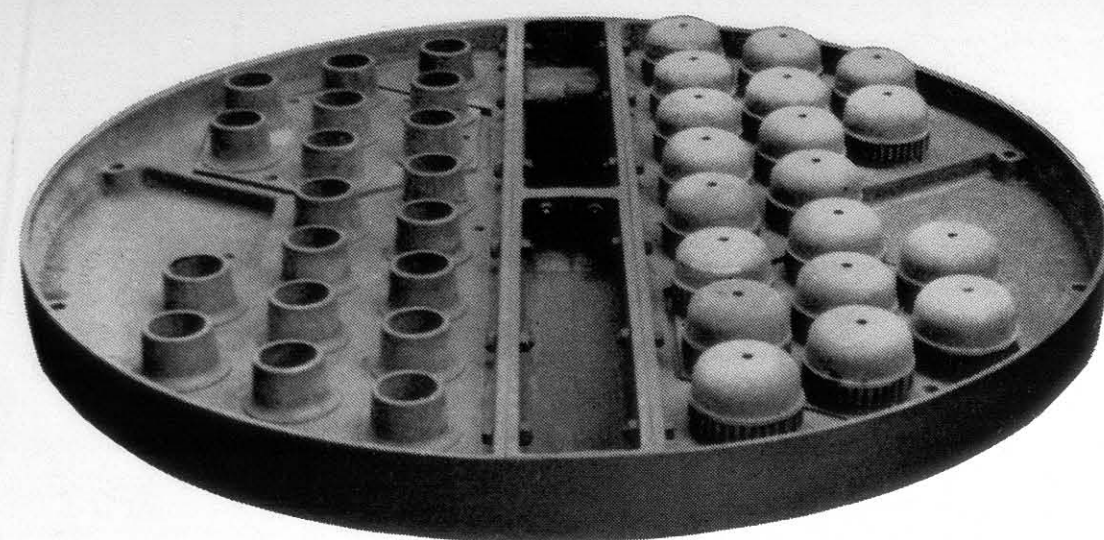
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

CAST-IRON BUBBLE TRAY

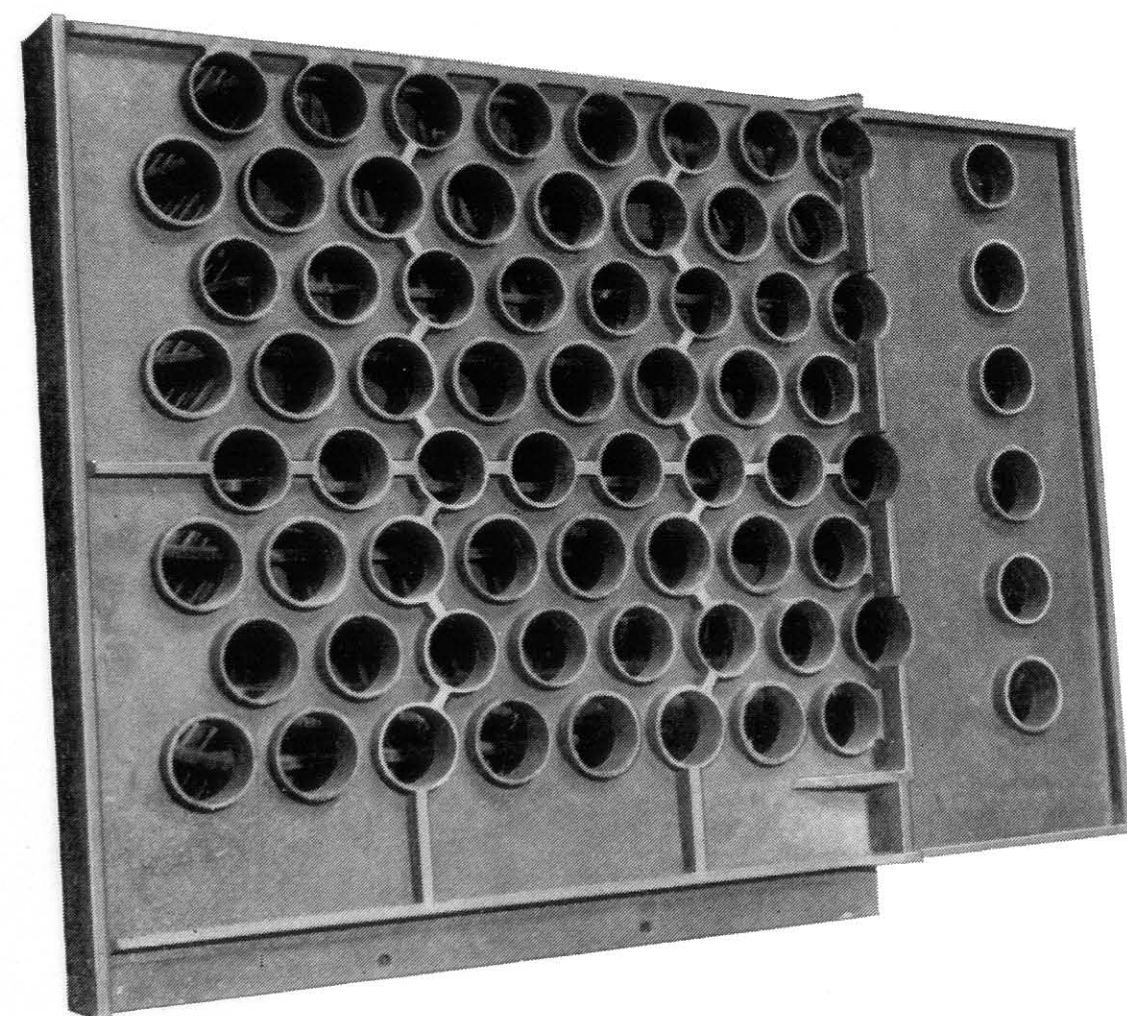
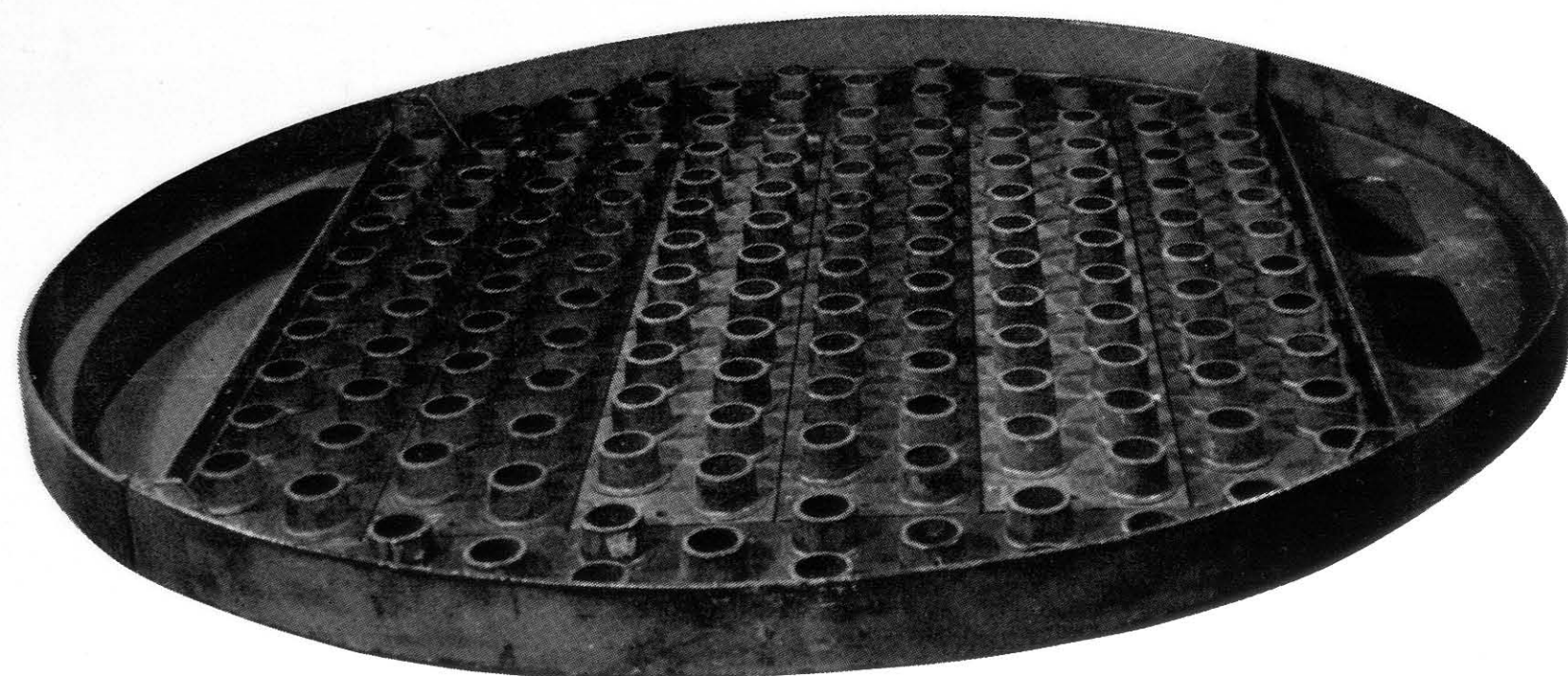
ASSEMBLY & COMPONENT PARTS



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

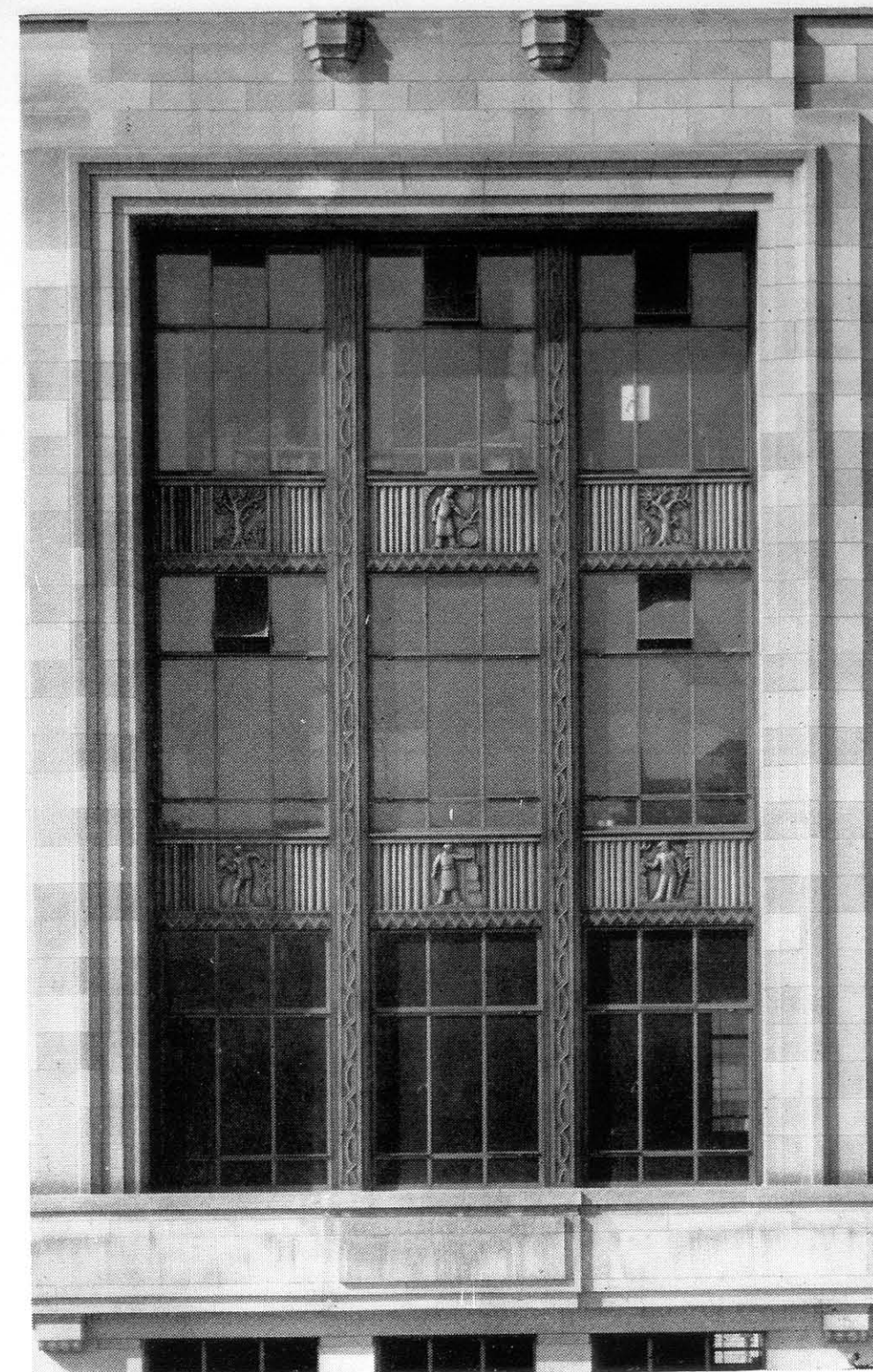


Typical Oil Bubble Trays with
Bubble Caps and Risers
as supplied to the Oil & Petroleum
Industry.



Convector End Tube Support.

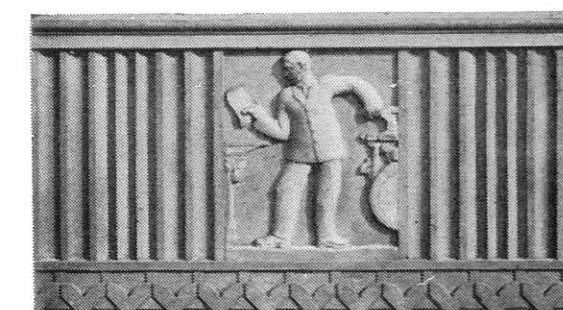
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

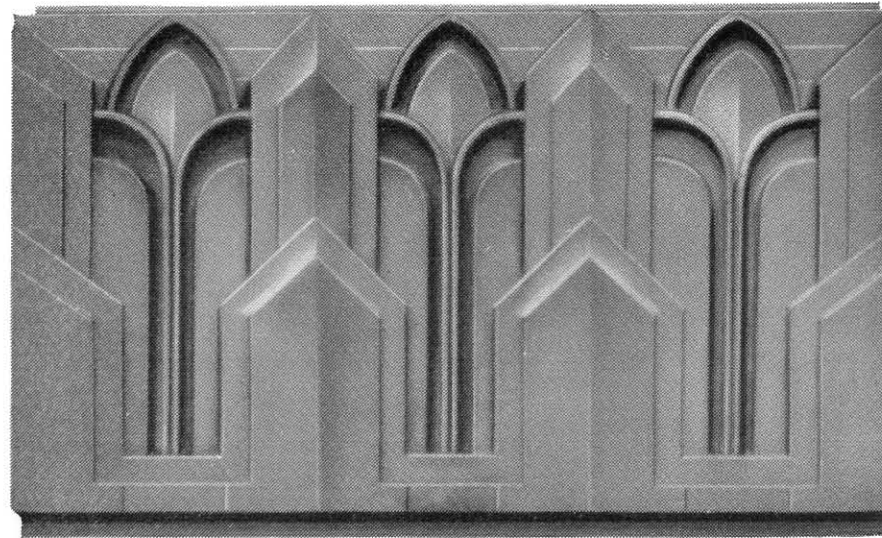
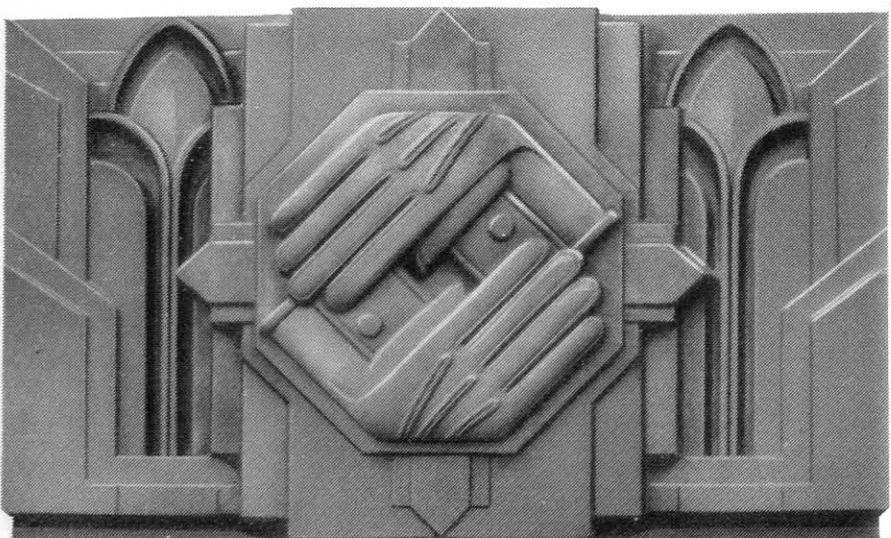
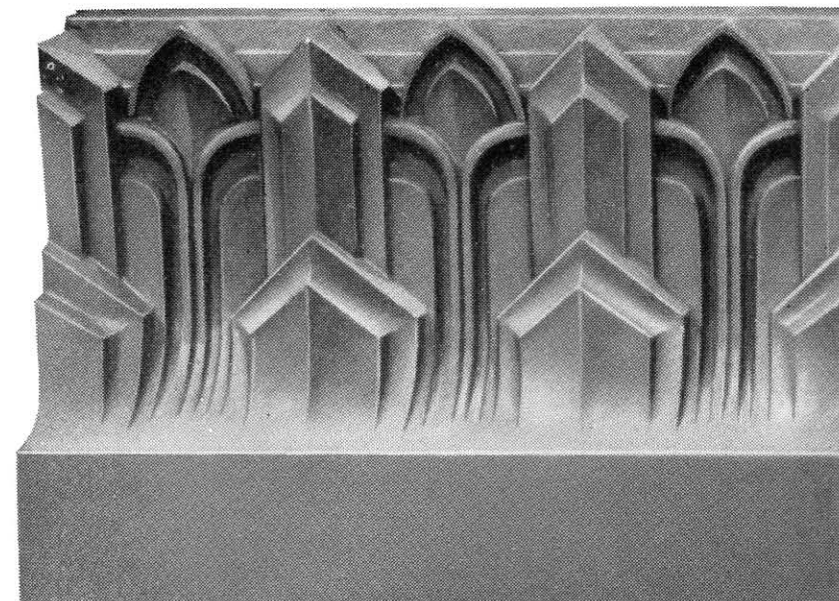
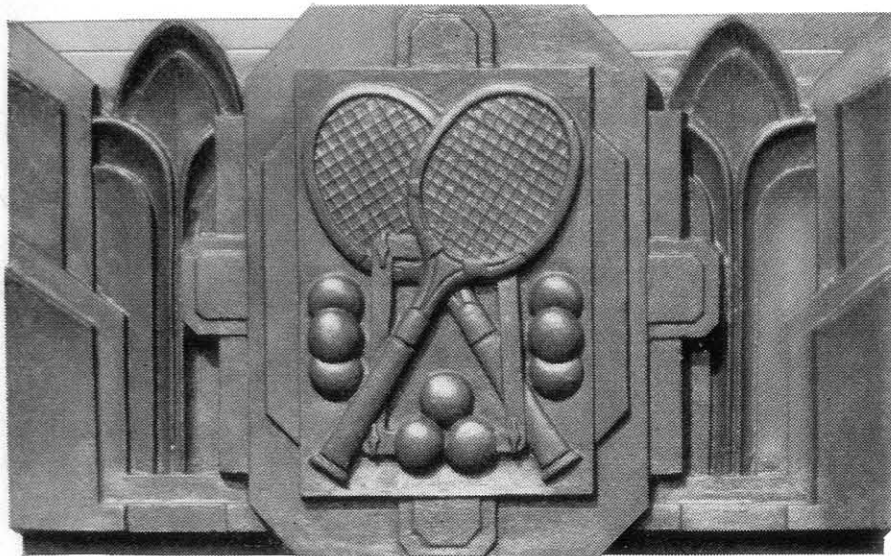
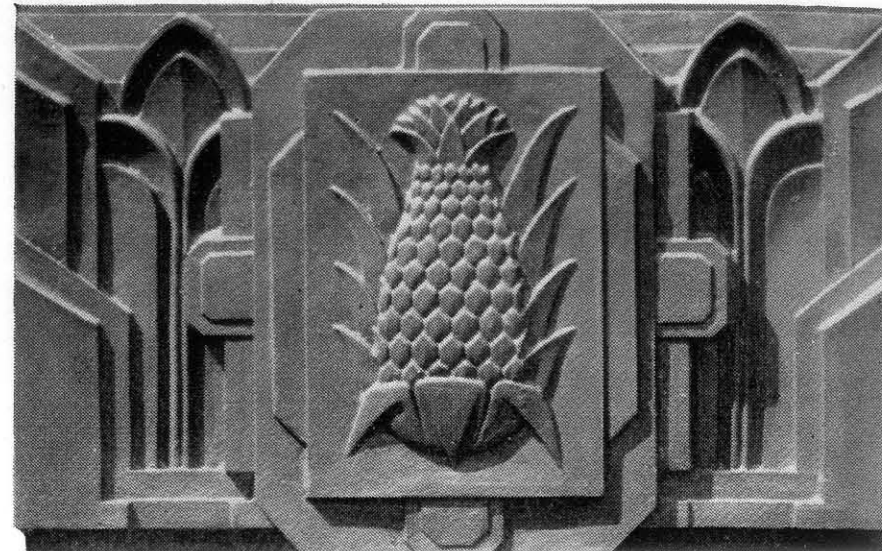
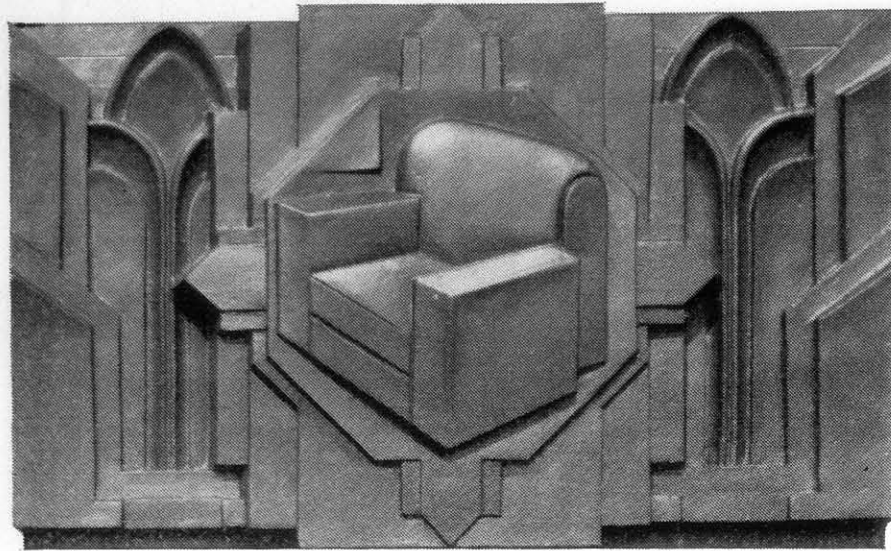
Lothian House,
Lothian Road,
Edinburgh.

Architects :
Messrs Stewart, Kaye & Partners



ORNAMENTAL AND "MOTIF" CAST-IRON BUILDING FRONT PANELS

As supplied and erected on the façade of a city building

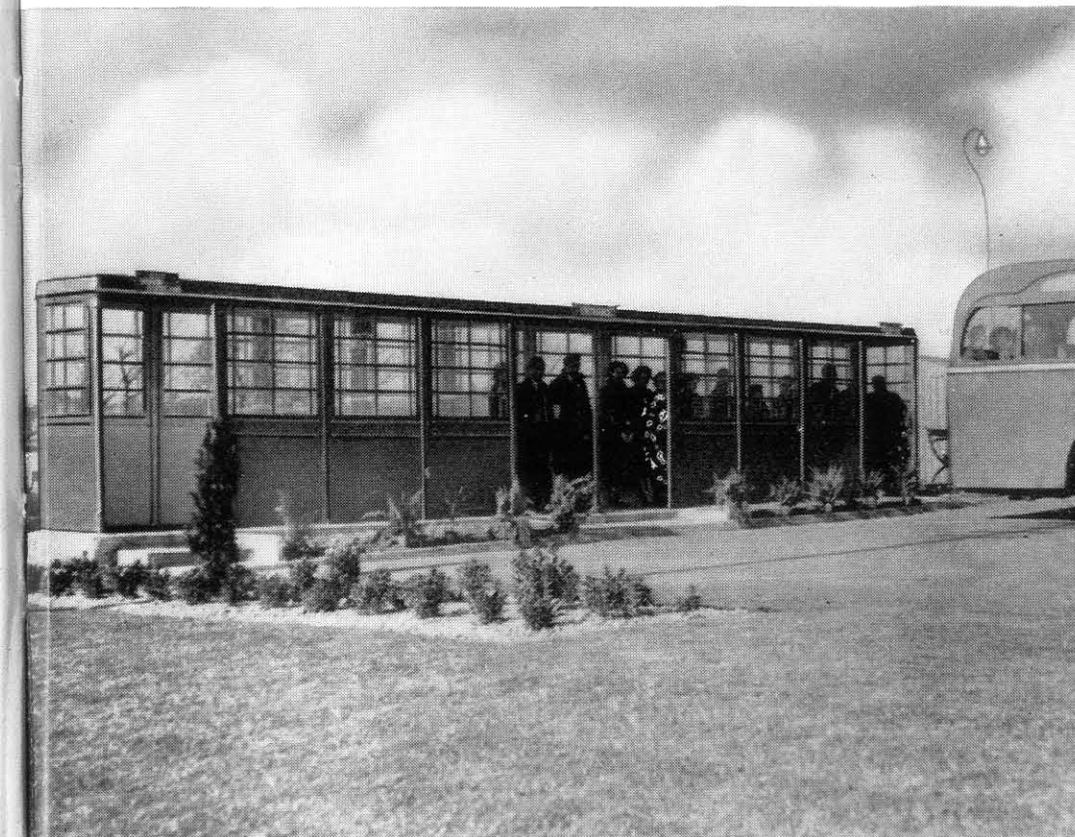
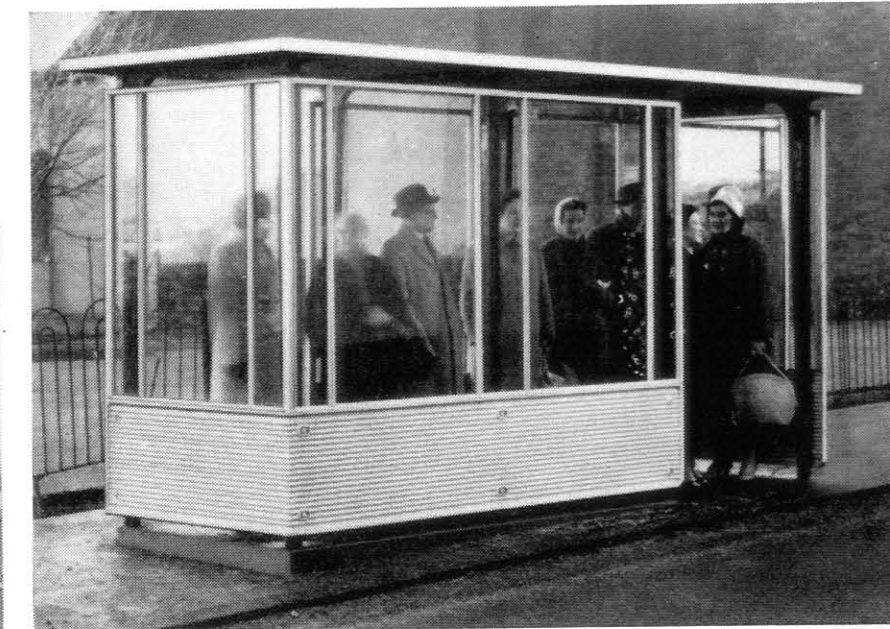


LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



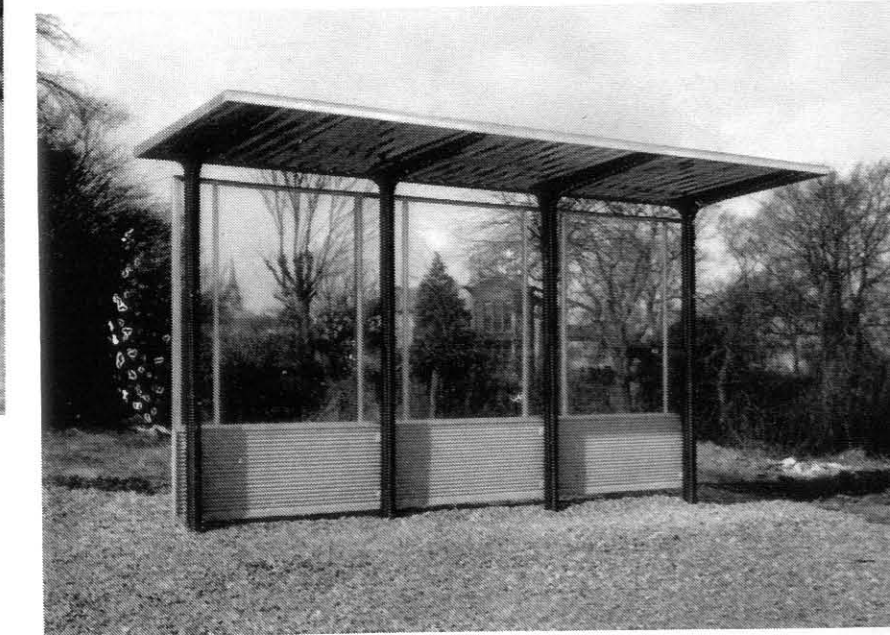
(Above)
88' 0" long x 5' 9" wide Shelter, Rothesay.

(Right)
15' 3" long Enclosed Bus Shelter designed by
David Mellor, Des. R.C.A., and approved by
the Council of Industrial Design.



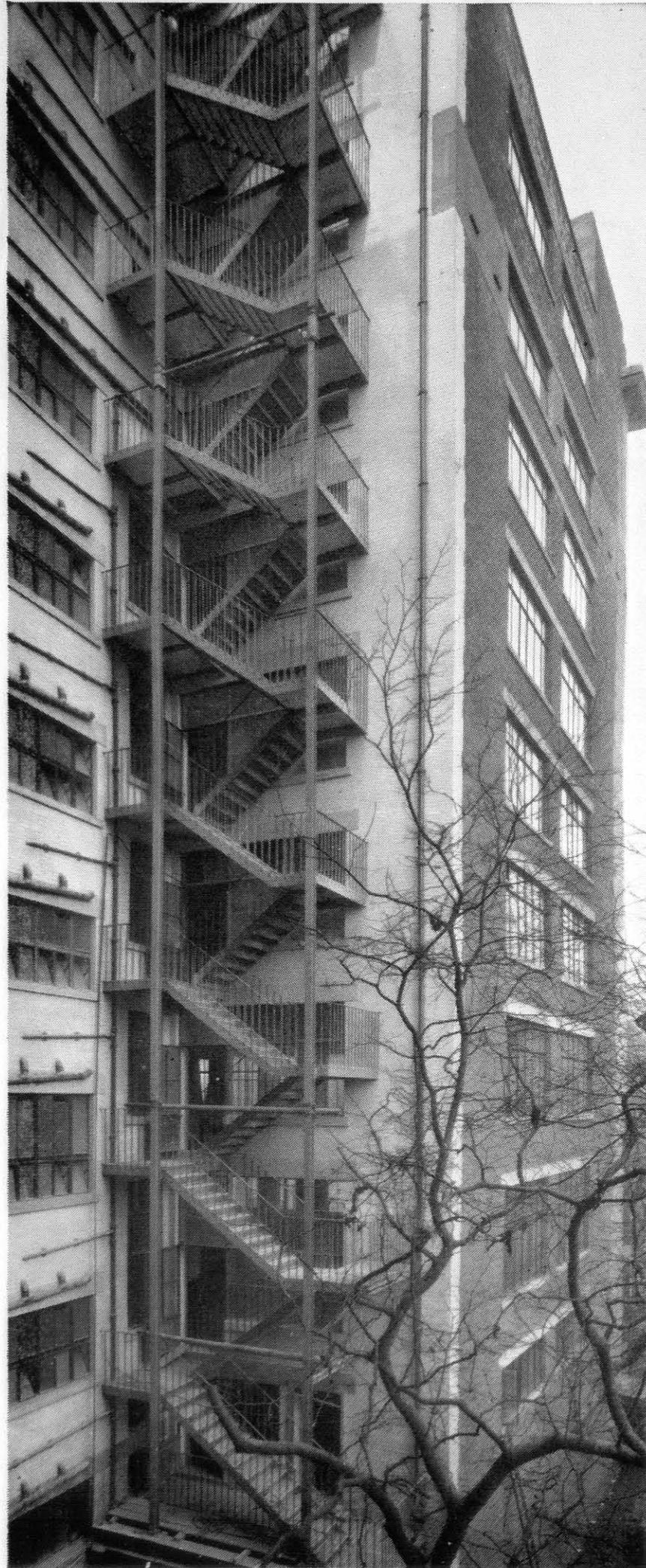
(Above)
40' 0" long Enclosed type Shelter at the Glaxo
Works, Barnard Castle, Co. Durham.

(Right)
15' 3" long Cantilever Shelter designed by
David Mellor, Des. R.C.A., and approved by
the Council of Industrial Design.



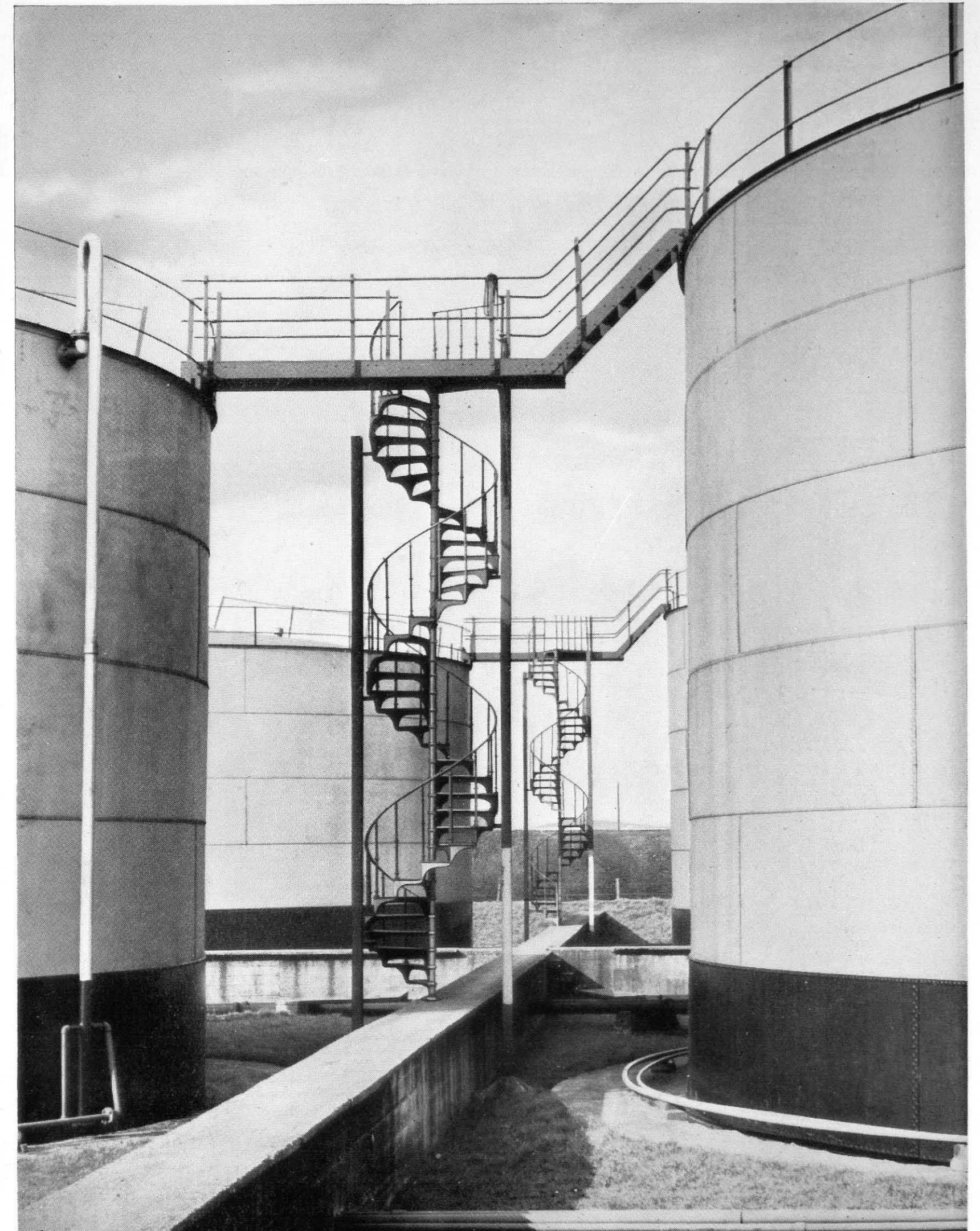
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

TYPICAL IRON FIRE-ESCAPE STAIRS



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

SPIRAL STAIRS AND GANGWAYS TO OIL STORAGE TANKS

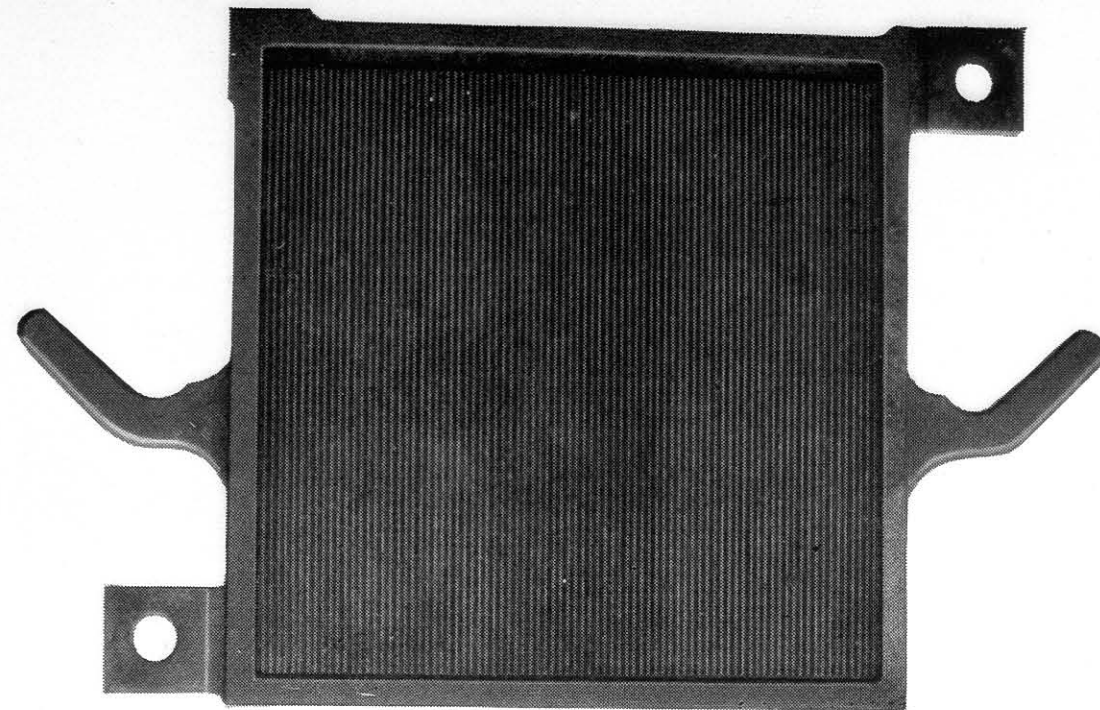


LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

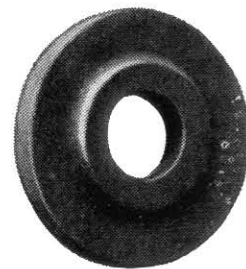
HIGH-GRADE CASTINGS



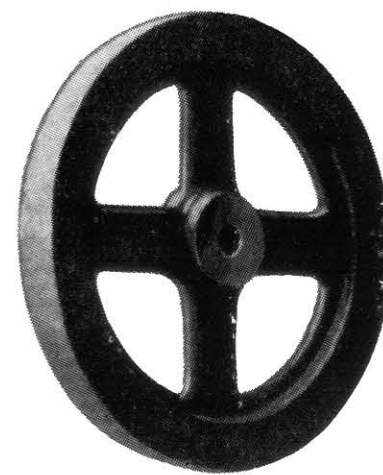
C.I. Machine Frame
6' 4" High x 3' 8" Wide Overall x 2" Deep



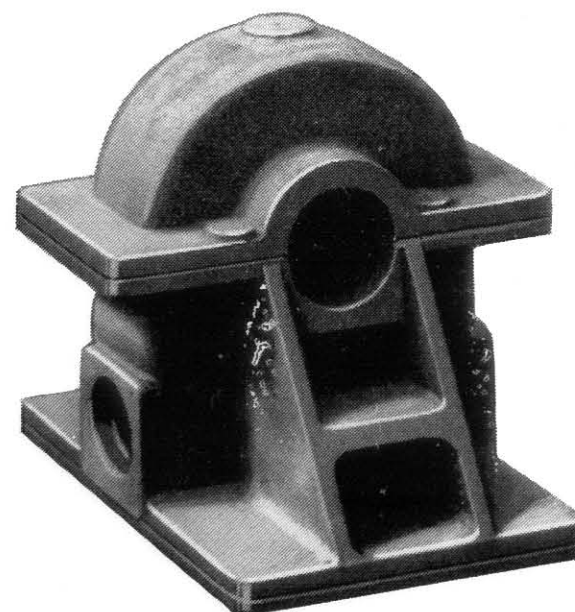
C.I. Filter Press Plate
2' 11" x 2' 11" x 1 1/4" Thick



C.I. Flange
2 1/4" Bore x 7 1/4" Diam. x 1 3/8" Thick



C.I. Wheel
12 3/8" Diam. x 1 3/8" Thick



C.I. Gear Box
16 3/4" x 14 3/4" x 14 1/2" Overall

A selection from the
wide range of high-grade
castings made for the engineering
industry, from our own or
customers' patterns.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW