

ART GLASS METALS

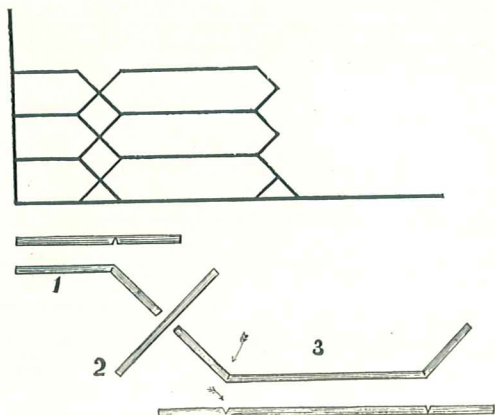
**COVERED MOULDINGS
VENTILATORS**

**Chicago
Metallic Sash Co.**

2112-14 Ogden Ave.

Chicago, Ill.

COPYRIGHT, 1925
CHICAGO METALLIC SASH CO.



FREIGHT CLASSIFICATION TO VARIOUS PARTS OF U. S.
Ascertained, July, 1925.

OFFICIAL Classification includes all states north of Ohio River and east of Mississippi, including Virginia.

WESTERN Classification includes all states west of Mississippi including that part of Louisiana west of this river.

SOUTHERN Classification takes balance of country.

TRANSCONTINENTAL tariffs apply to California, Oregon and Washington.

ARTICLE	Official Class	Southern Class	Western Class	Transcontinental Rate
Iron window frames, unglazed, crated.....	2	2	2	\$2.63
Zinc Glass setting bars.....	3	3	3	2.83
Copper plated zinc or copper glass setting bars....	2	2	2	2.83
Copper covered wood moulding.....	2	2	1	2.83
Steel wire, bundles.....	4	4	4	3.11
Metal working machines.....	2	3	1	5.10

Be sure and make your orders so plain that they cannot be misunderstood



HERE there are two or more glass channel sizes in the same number of bar, state both the number and the channel. Samples enclosed in the letter are usually mashed out of shape. Do not order "same as last time" without referring to the date. If you receive our metals and find that they are not of standard formation and bending quality, so that you cannot use it for the intended work, we want you to notify us at once, and send sample of defective metal.

The formation of hollow metallic bars is a more difficult process than that of the solid came lead; in the latter, sharp corners may be formed, without splitting, while in the hollow formation such sharp corners must be constantly tested as to bending quality and the splitting. It is not always possible to detect these defects until the glazier gets to work with it, and when he complains that the metal cannot be used, then please report it promptly.

The troublesome feature of scratch lines on the flat face of metals, and also the splitting of sharp cornered metals, is receiving our constant attention.

Of the 519 patterns shown herein, those patterns which are in common use are carried in stock, so that all small orders can be delivered promptly. You will find in this book quite a number of new patterns not heretofore shown, and to these we call your attention at page 25.

Occasionally a special metal will be needed for special work, and when such occasions arise, give us a correct, full-sized drawing of same. The extra charge for the special will be nominal, based on cost, without profit; and, if it is a pattern that may be used by others, there will be merely a pro rata charge.

We feel confident that those who have favored us with patronage will in the future find our goods, as well as the price, very satisfactory, as the equipment, methods, capacity and service are constantly receiving best attention.

Catalogue No. 8

1925

Chicago Metallic Sash Co.

Terms and Discounts

SUBJECT TO CHANGE WITHOUT NOTICE

All Prices F. O. B. Chicago.

2% Cash Discount applies on everything shown in this book if, paid by 10th of month following purchase—you may discount Statement.

When Ordering Sash Bars:

First—Order by number if possible. Second—If there is uncertainty as to the number, make an end view impression of the metal on the order. Third—If there is yet room for uncertainty, enclose the sample.

These three precautions will avoid delay and error.

Stock Zinc Bars are 7 feet long, but shorter and longer can be supplied.

Copper and Brass can be supplied in various lengths.

The weight of Copper and Brass Bars exceeds that of Zinc about 20%.

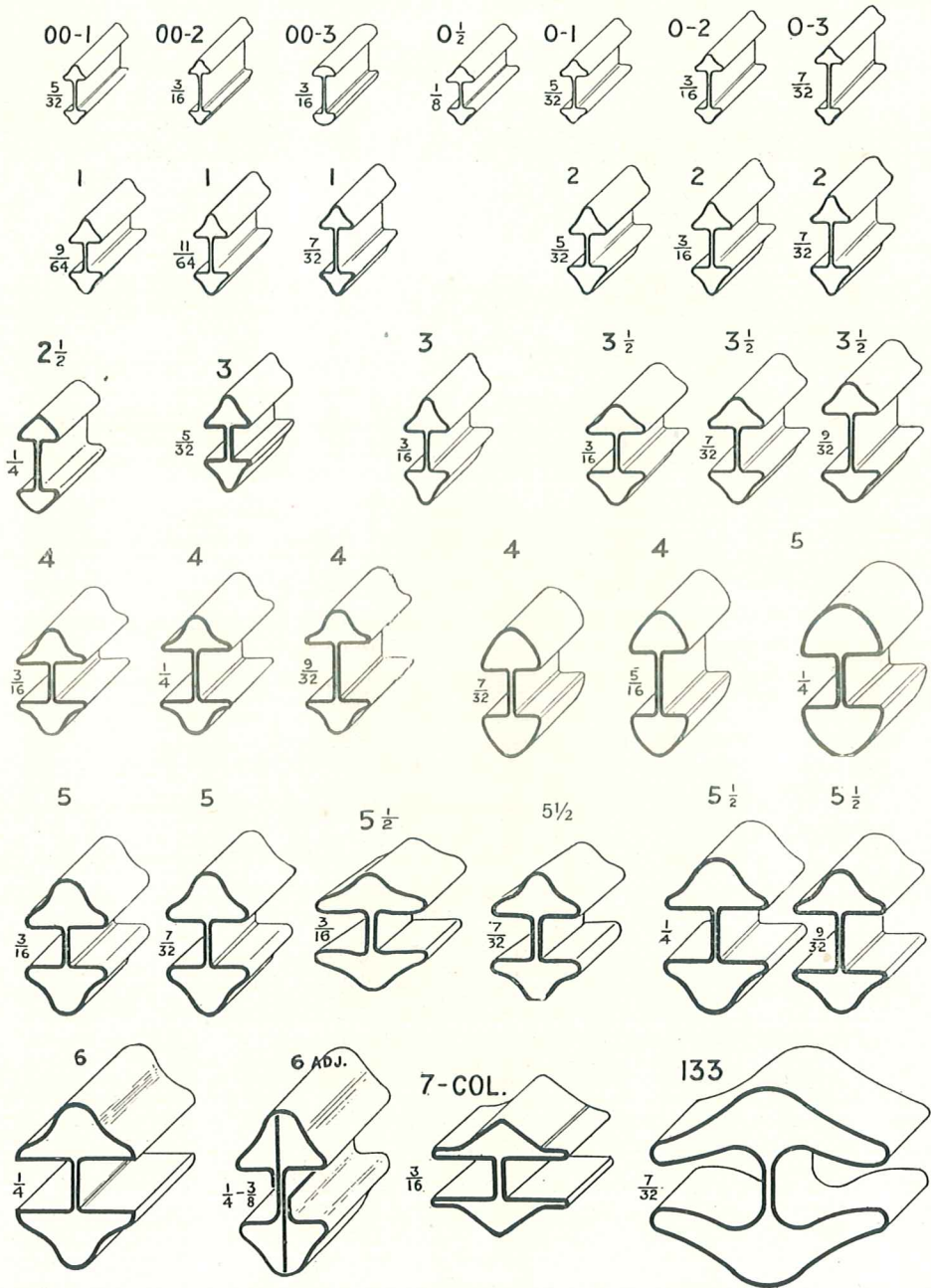
IMPORTANT

Many of the Inner and Outer Bars have the same number, as, for instance, numbers 0 to 6 Inner and numbers 0 to 6 Outer. It is therefore necessary and important when ordering, to distinguish one from the other by specifying **Inner or Outer Bar**.

All orders are invariably labeled "Rush" from force of habit, and so it really has no definite meaning. Please state just when it must be shipped, mentioning date. Most of our orders are shipped promptly from stock.

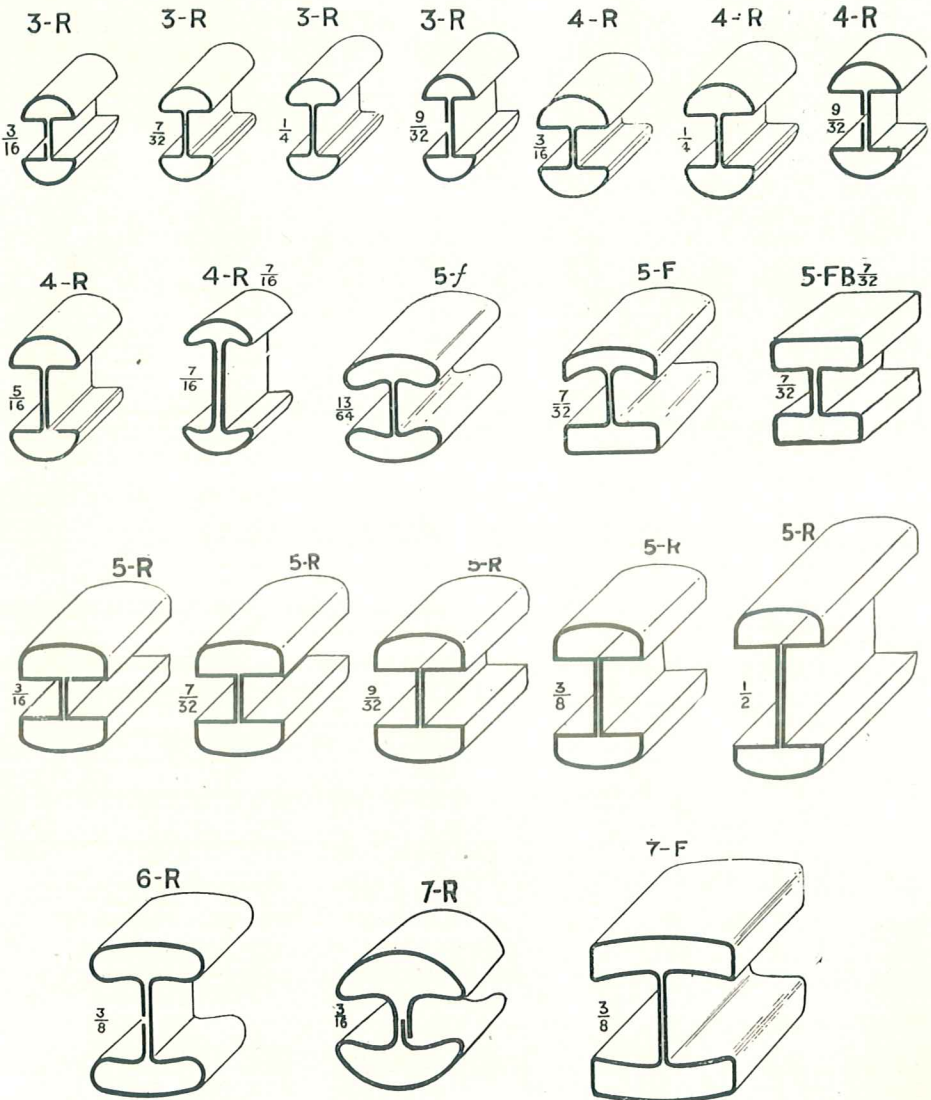
ACCOUNTS.—Those wishing to open up an account with us and not rated in the mercantile agencies, please give reference of bank, or other responsible concern.

INNER BARS—Colonial and Round.



The number of the Bar is always above the print.
The figures on the side indicate the exact glass-channel width.




















































INNER BARS—Colonial and Round.



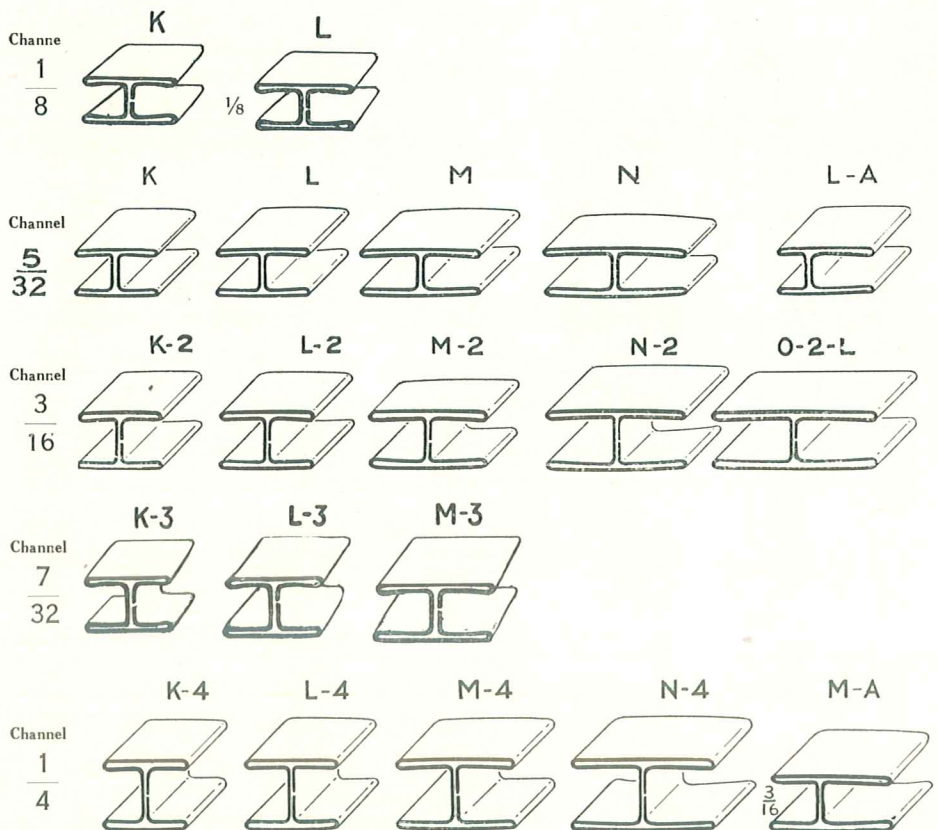
These various patterns, both round and colonial, have, for convenience, been arranged in seven groups—from No. 00 to No. 7, and the various patterns in each group have been set in relative order, according to channel space and proportion, so that when the book is opened here one gets a comprehensive view of all the inner bars for general work.

WHEN ORDERING, please state number of the bar, which is always above the print, also the channel space, indicated by figures on the side of the print, and mention INNER BARS.

THE INNER BAR—Lead Shapes.

	E	F	G	H	I	J
Channel Space $\frac{1}{8}$						
		F-R	G-R	H-R	I-R	J-R
Channel Space $\frac{5}{32}$						
	E-Flat	F-Flat	G-Flat	H-Flat	I-Flat	J-Flat
Channel Space $\frac{5}{32}$						
	E-2	F-I	G-I	H-I	I-I	J-I
Channel Space $\frac{3}{16}$						
	E-2	F-2	G-2	H-2	I-2	J-2
Channel Space $\frac{3}{16}$						
	E-3	F-3	G-3	H-3	I-3	J-3
Channel Space $\frac{7}{32}$						
		F-4	G-4	H-4	I-4	J-4
Channel Space $\frac{1}{4}$						
			G-4-R	H-4-R	I-4-R	J-4-R
Channel Space $\frac{1}{4}$						
				H-5	I-5	J-5
Channel Space $\frac{9}{32}$						
				H-6	I-6	J-6
Channel Space $\frac{5}{16}$						
	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{9}{32}$	$\frac{3}{8}$
	Face Width	Face Width	Face Width	Face Width	Face Width	Face Width

THE INNER BAR—Lead Shapes.

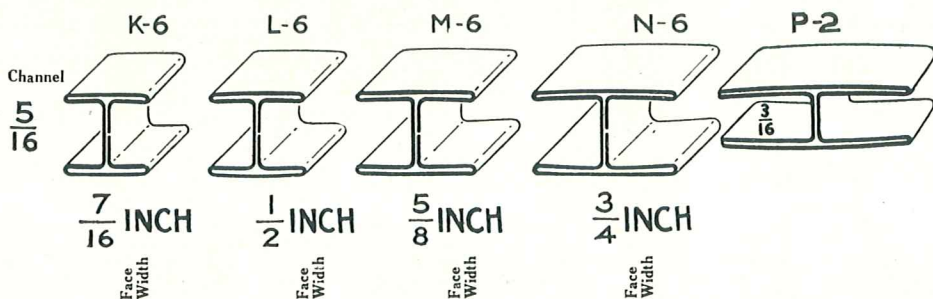


Each one of these patterns has a number, and that number is above the print.

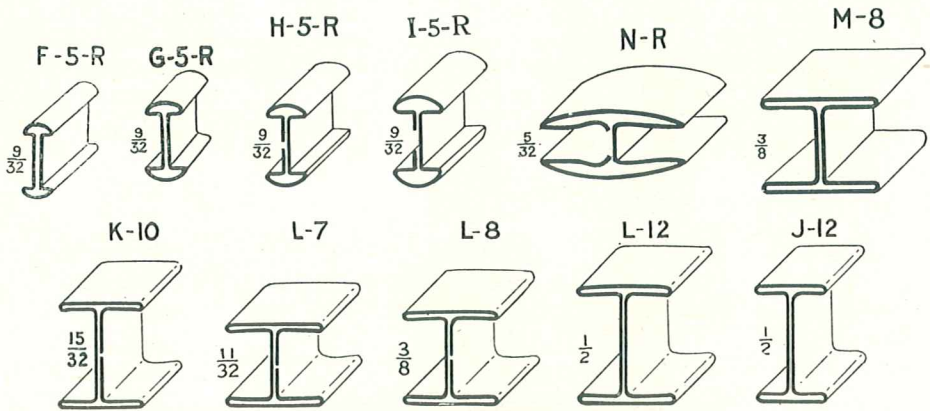
The figures along the marginal line at the extreme left of the page indicate the width of the glass channel for every pattern of bar in that line across the two pages, except No. M-A and No. P-2 on this page.

The figures on the marginal line, at the bottom of page, indicate the face width of every pattern of bar in that line upward.

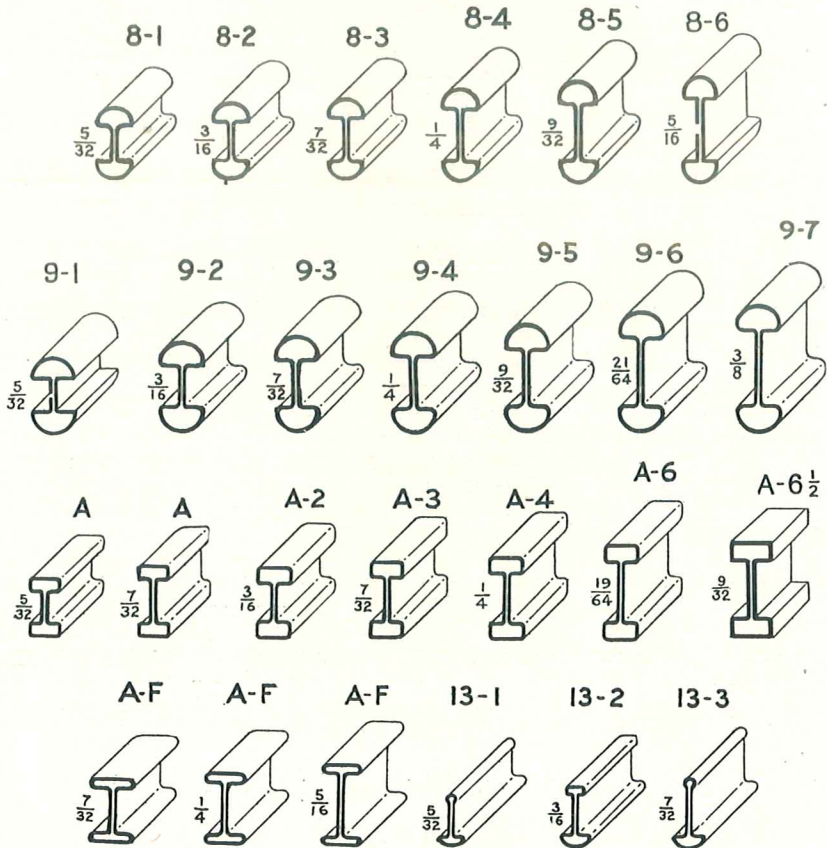
When ordering, please state the pattern number, also the channel, and mention INNER BARS.



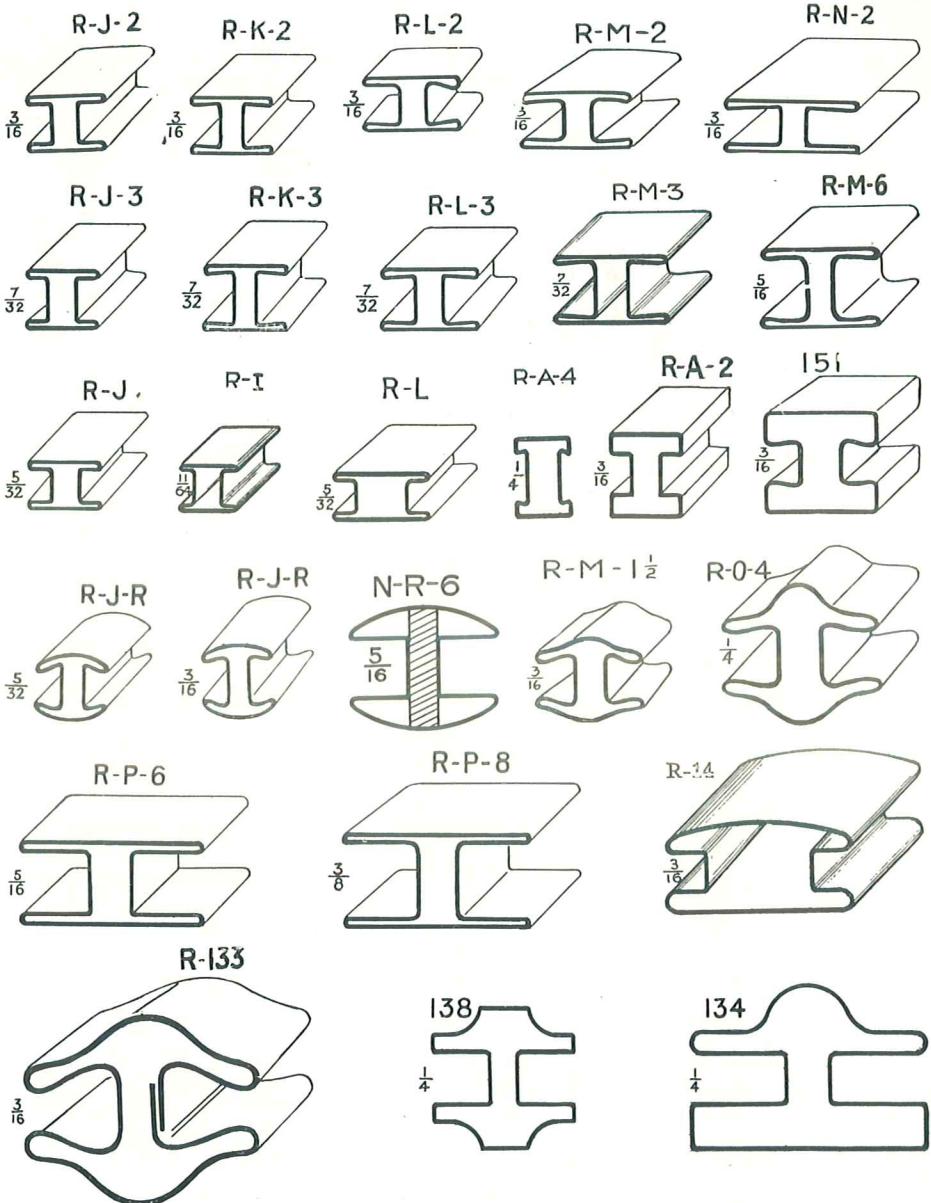
THE INNER BAR—Lead Shapes. (Continued).



INNER BARS—Round and Flat.
For Prism and Straight-Line Work.



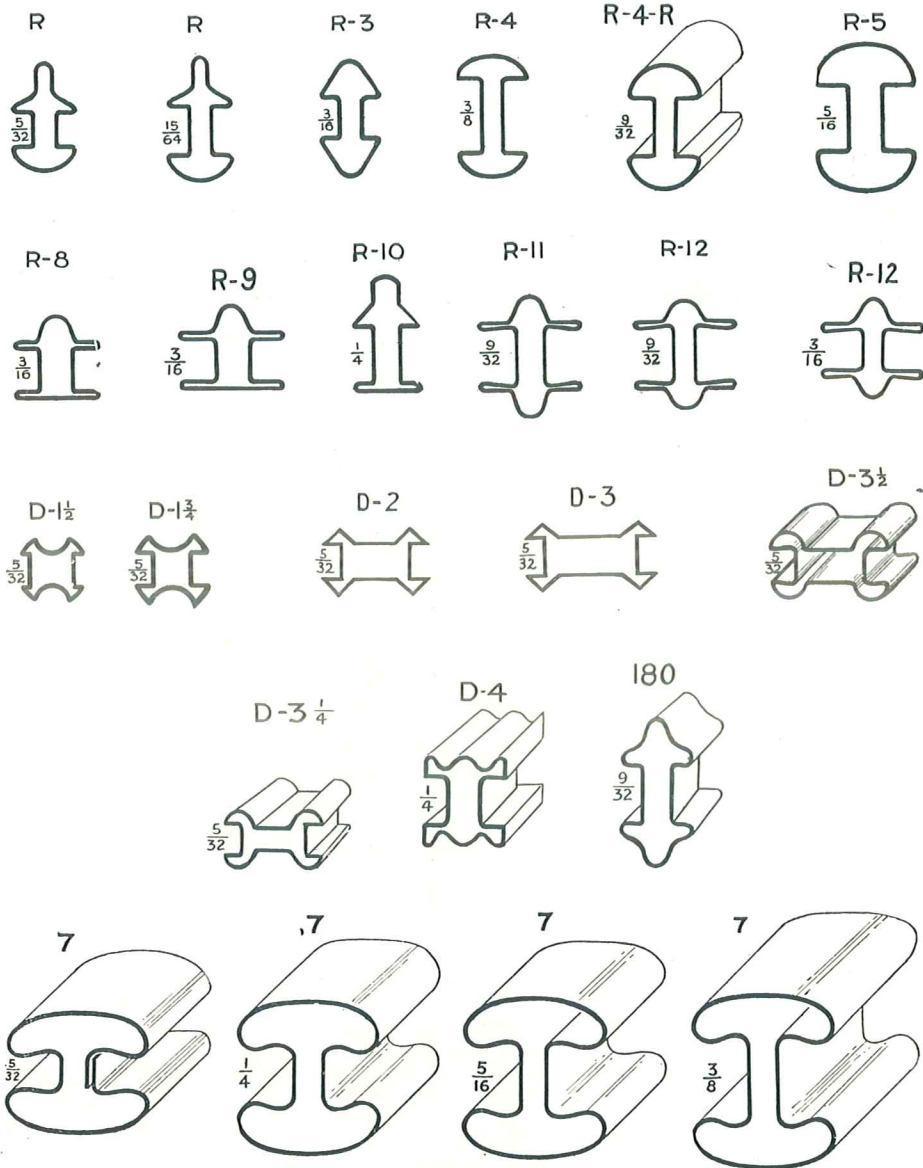
REINFORCEMENT BARS.



The above patterns of reinforcement bars, with a few exceptions, are designed to conceal the steel strengthening bars, within the interior hollow space, instead of exposing and wiring them to the outer surface. The proper size of steel to be used can be determined by rule measurement of the space referred to in each of the above patterns. The steel should fit loose in both width and height. R-I and R-J require size $\frac{3}{16} \times \frac{1}{8}$ steel.

No steel is supplied with these patterns, unless especially ordered. The various sizes carried in stock, and the price list for same are shown elsewhere.

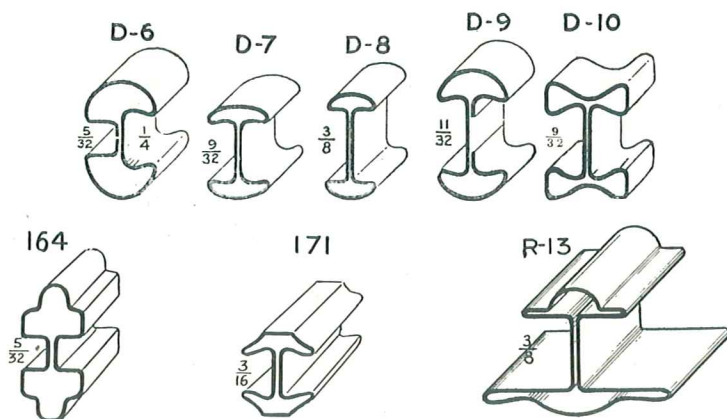
REINFORCEMENT BARS. (Continued).



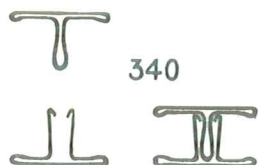
The above patterns of reinforcement bars, with a few exceptions, are designed to conceal the steel strengthening bars, within the interior hollow space, instead of exposing and wiring them to the outer surface. The proper size of steel to be used can be determined by rule measurement of the space referred to in each of the above patterns. The steel should fit loose in both width and height.

No steel is supplied with these patterns, unless especially ordered. The various sizes carried in stock, and the price list for same are shown elsewhere.

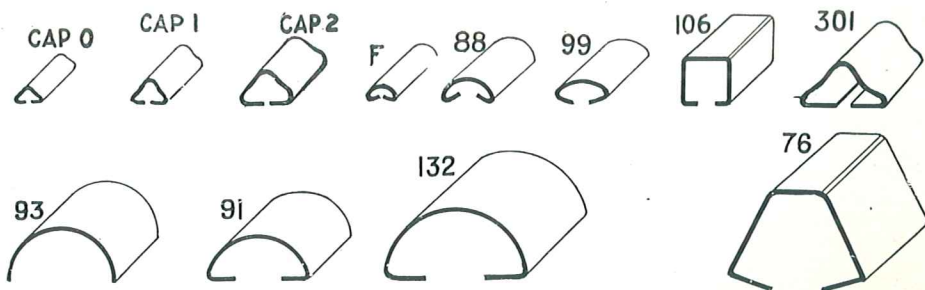
MISCELLANEOUS.



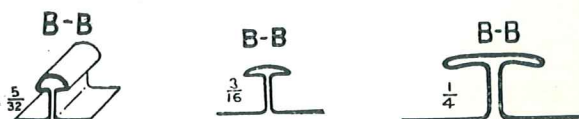
MIRROR BAR



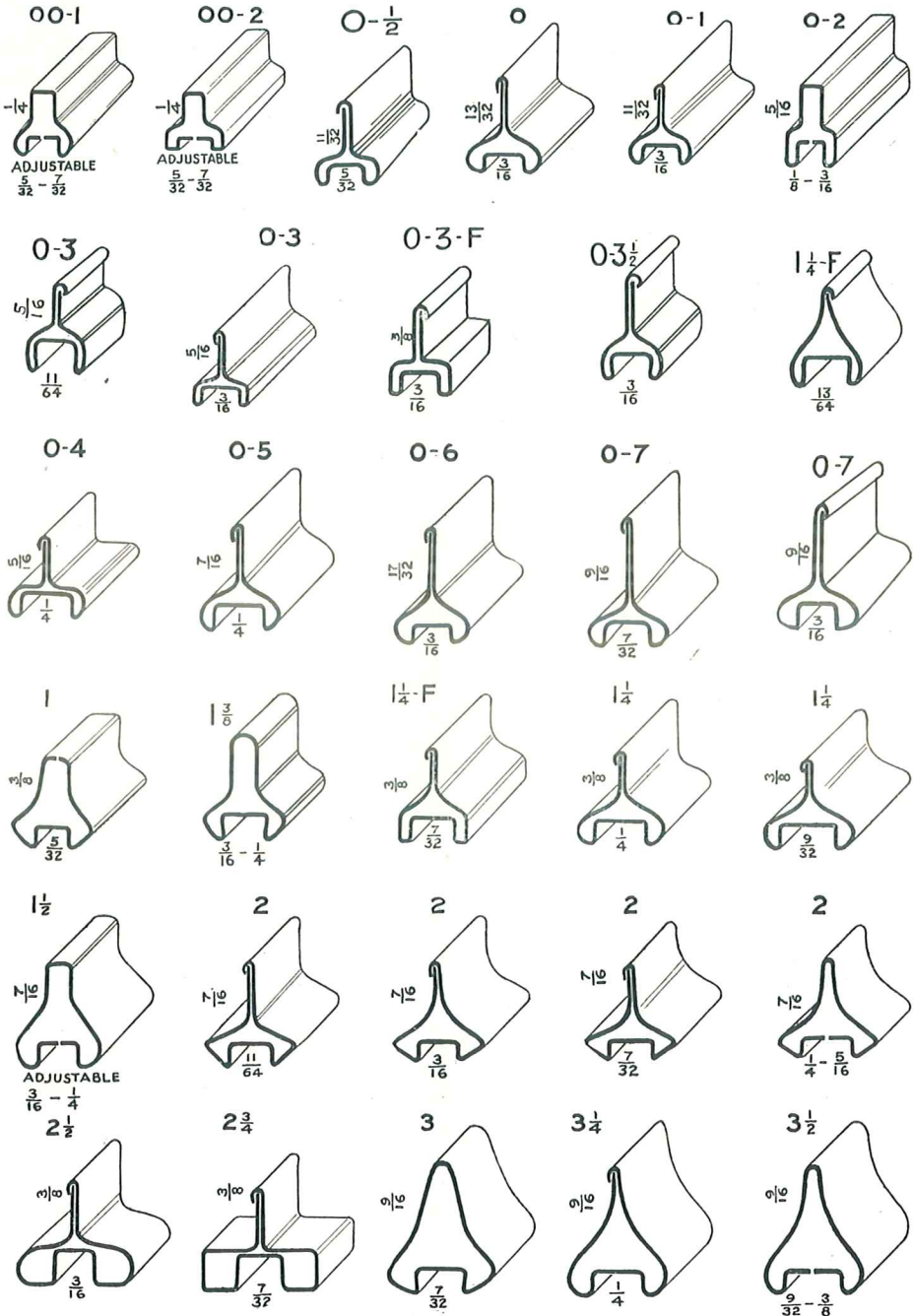
CAPS



For Mirror On A Board, Without Soldering.

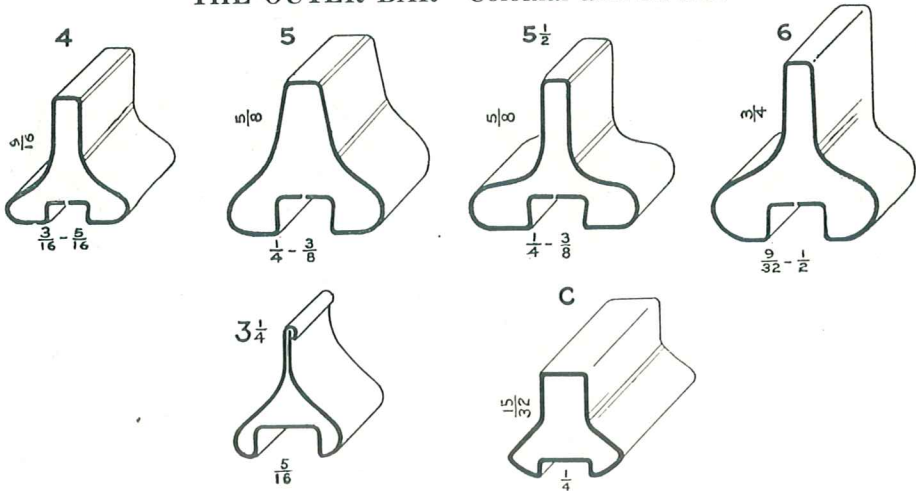


THE OUTER BAR—Colonial and Round.

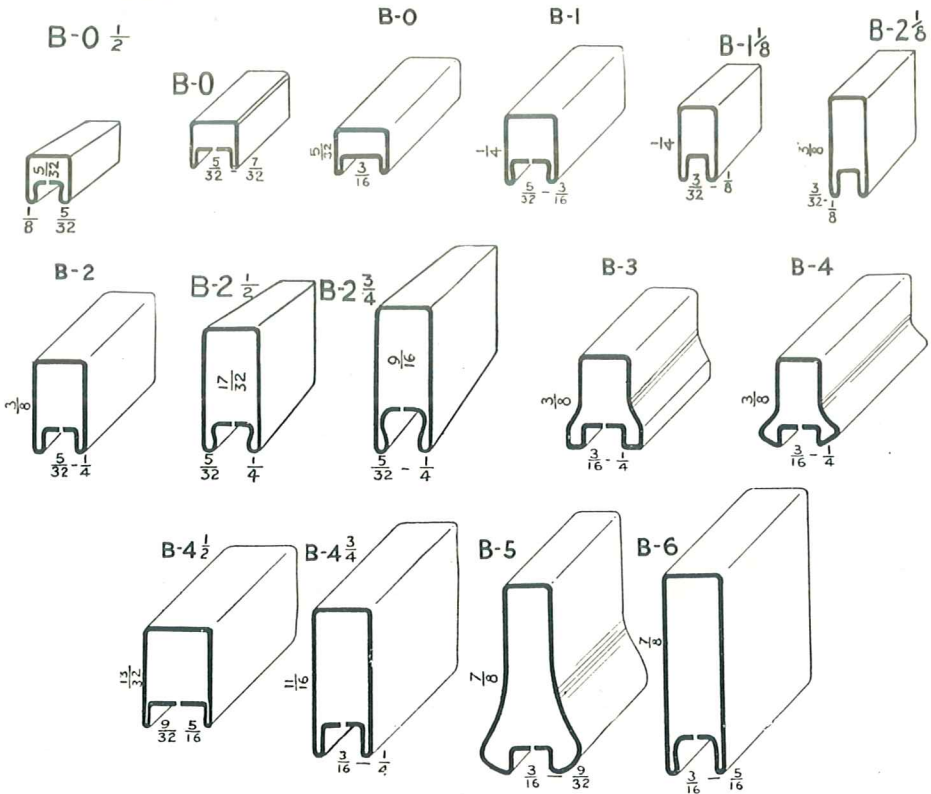


The number of the bar is above the print. The figures below give glass channel width. Figures on side give glass size to full size.

THE OUTER BAR—Colonial and Round.

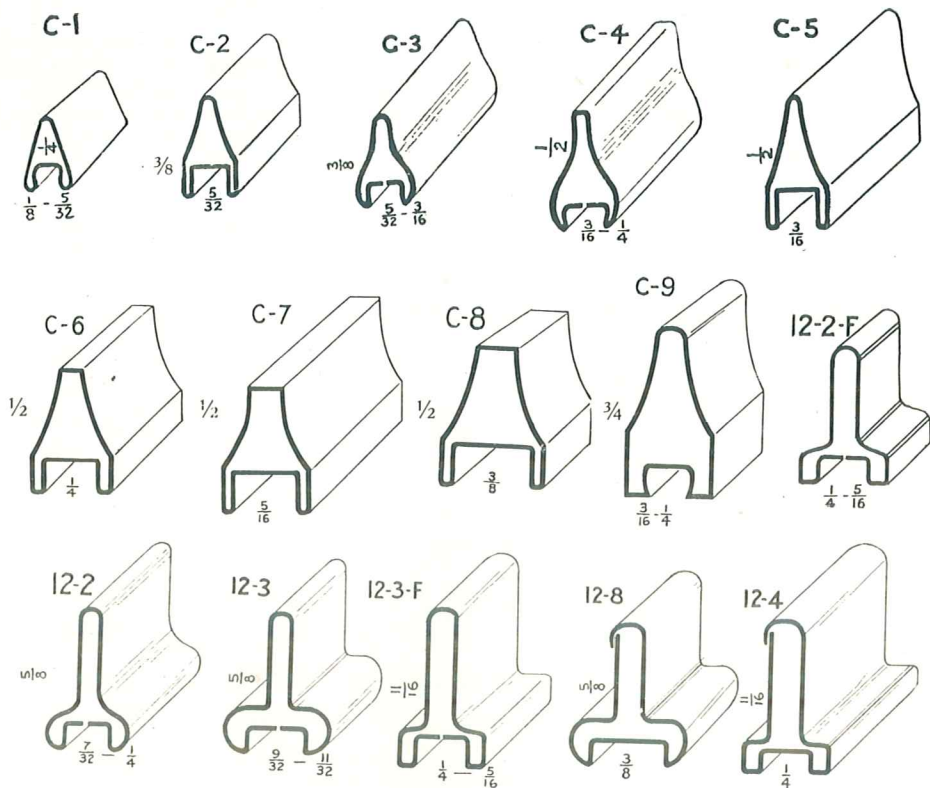


OUTER BAR—To Match Lead and Prism Patterns.

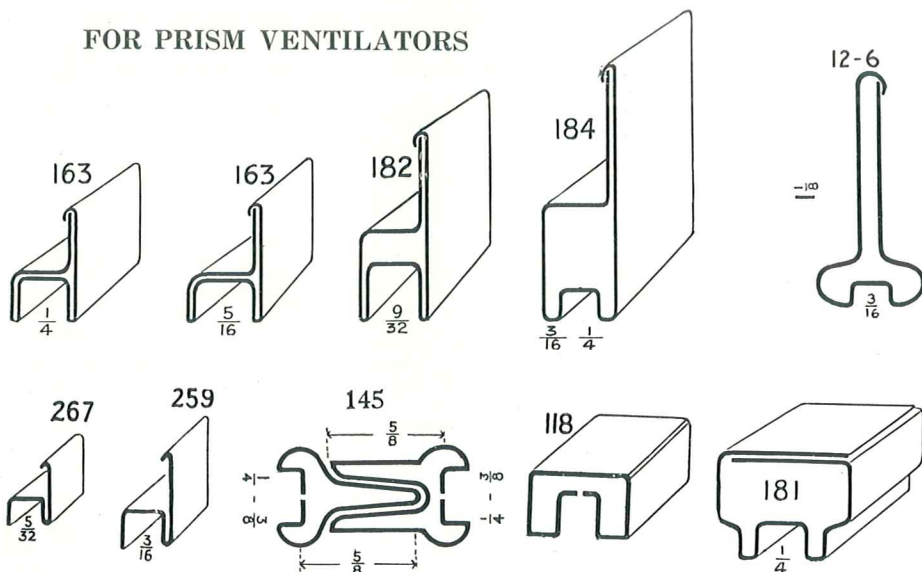


The number of the bar is above the print. The figures below in the channel give exact glass-channel width, and the figures on the side give measure from glass size to full size. When ordering, please mention OUTER BARS. Same lead shape inner bars can be used for outer bars if rabbet will allow it.

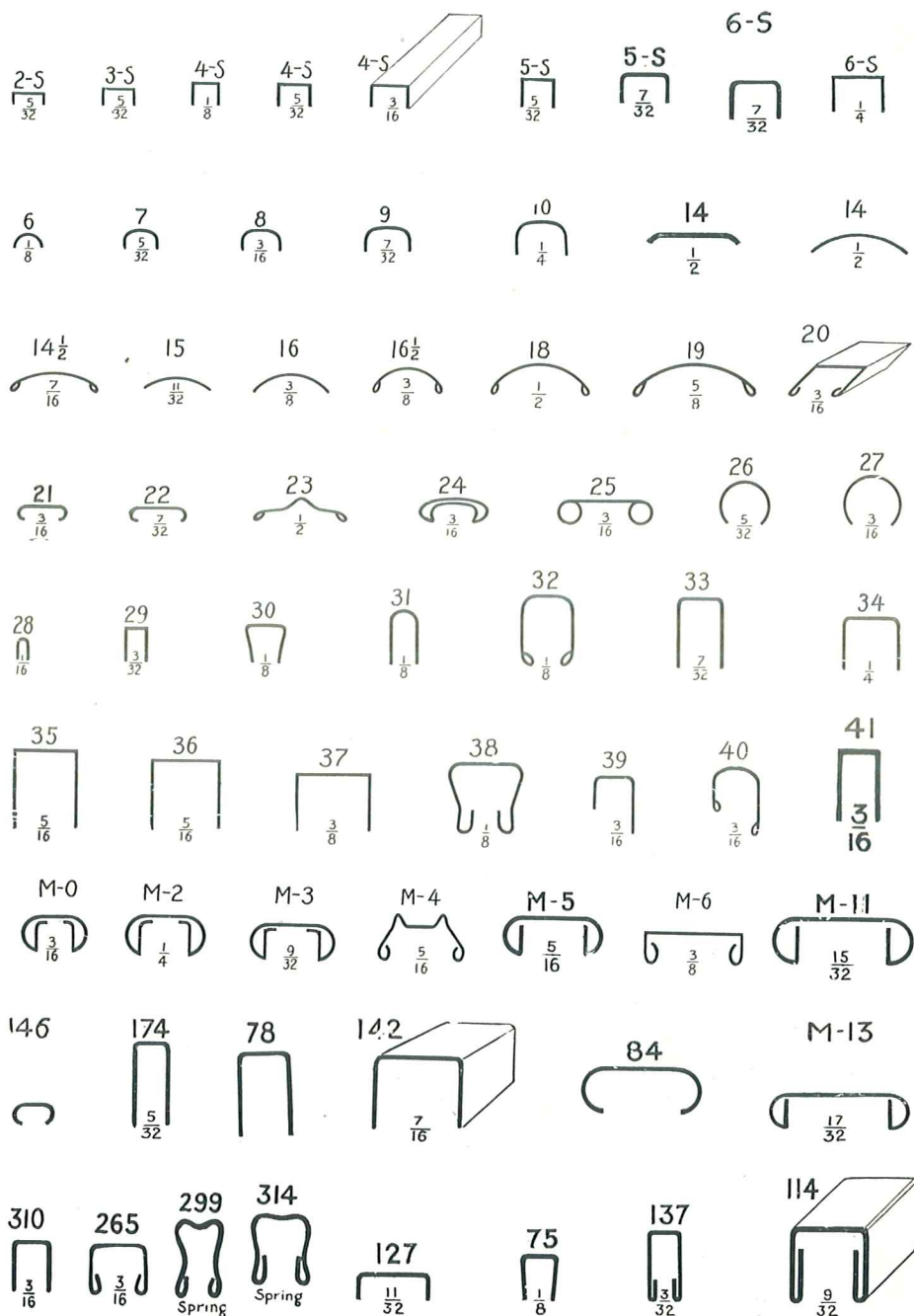
OUTER BAR—To Match Lead and Prism Patterns.



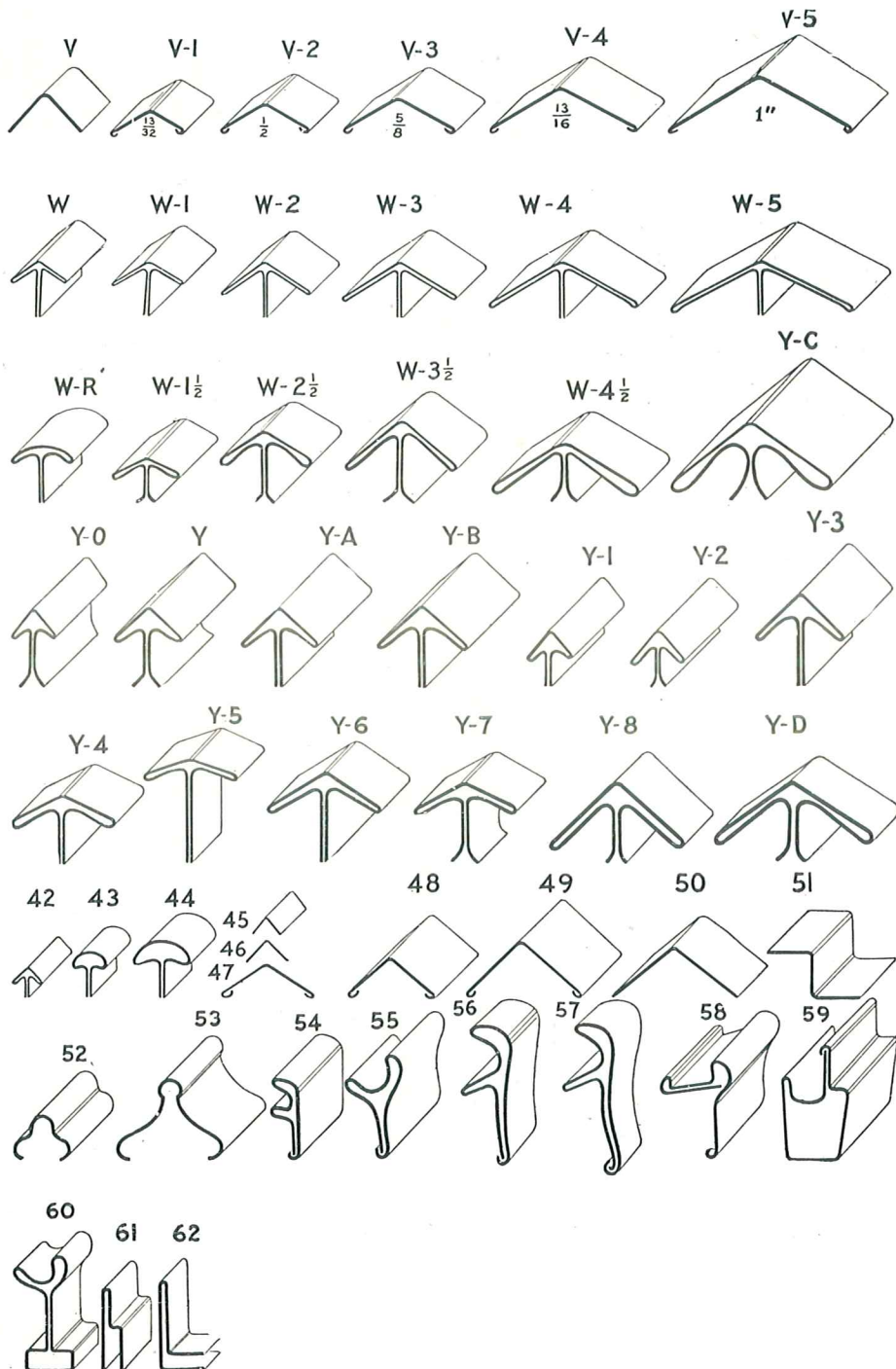
FOR PRISM VENTILATORS



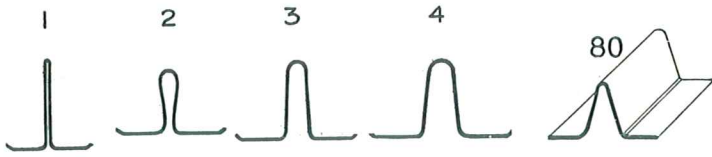
CHANNELS



LAMP SHADE TRIMMINGS.



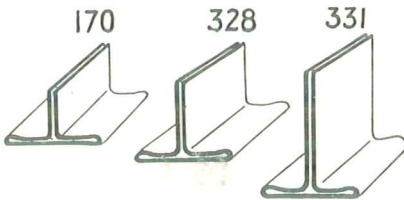
SCREEN RAILS



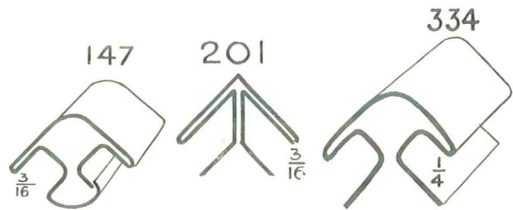
GREEN HOUSE STRIPS



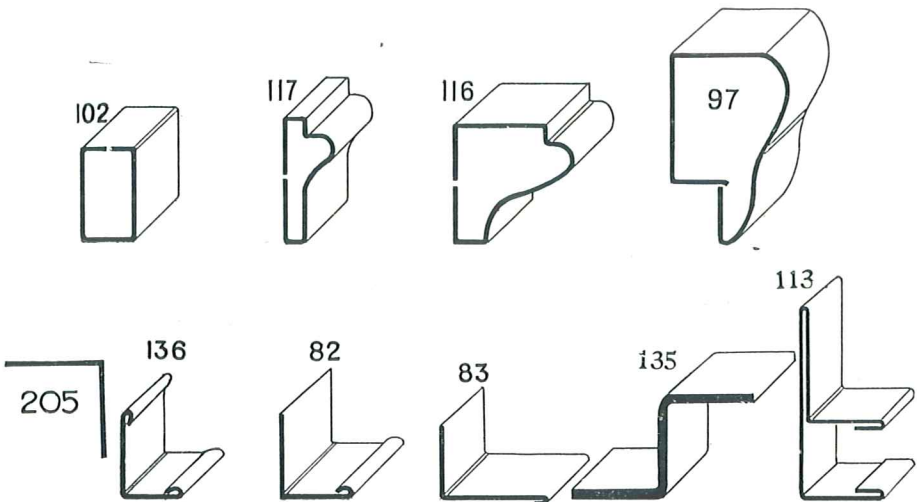
TEES



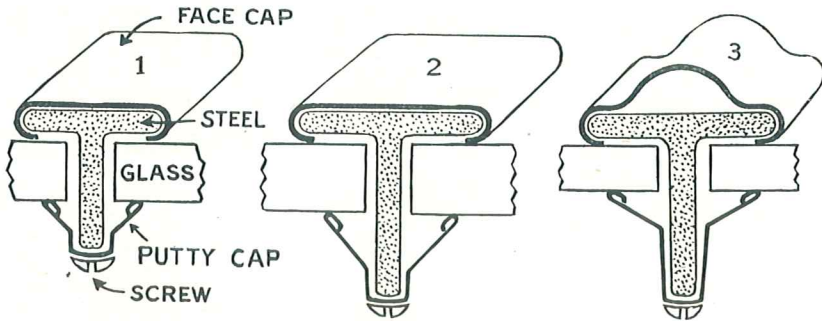
CORNERS



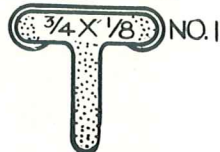
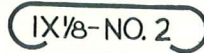
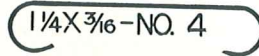
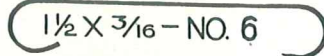
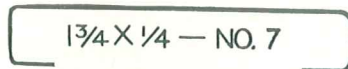
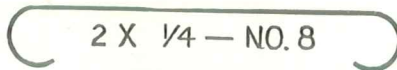
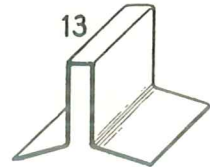
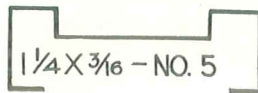
SHELLS—ANGLES



T BAR FACING CAPS



T BAR FACING CAPS

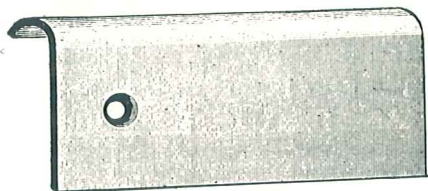


The above gives merely an outline of what can be done with Tee Bars and Caps for church and skylight work. Other shapes and types can be supplied for your needs.

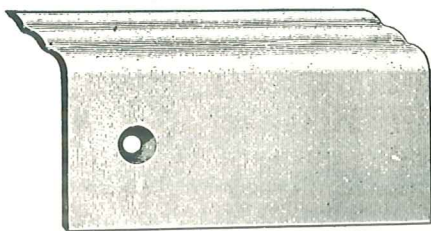
AUTOMOBILE TRIMMINGS.

Windshield Channels, Running Board Angles.

Also other patterns not shown; any length up to 14 feet. See price list, page 29.



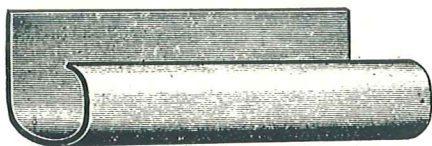
No. 1 Running Board



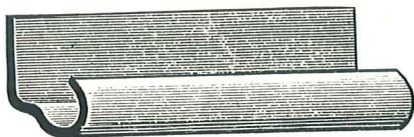
No. 2 Corrugated Running Board



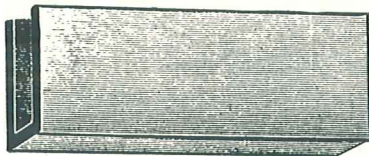
No. 3 Floor Board



No. 4 Drip



No. 5 Ribbed Drip



No. 6 Frameless Window Channel



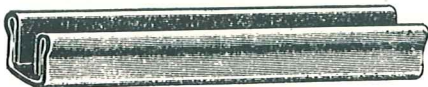
No. 7 Glass Slide Channel
Specify whether for $\frac{1}{4}$ or $\frac{3}{16}$ glass.



No. 8 Glass Lifter Channel



No. 9 Fence Plate

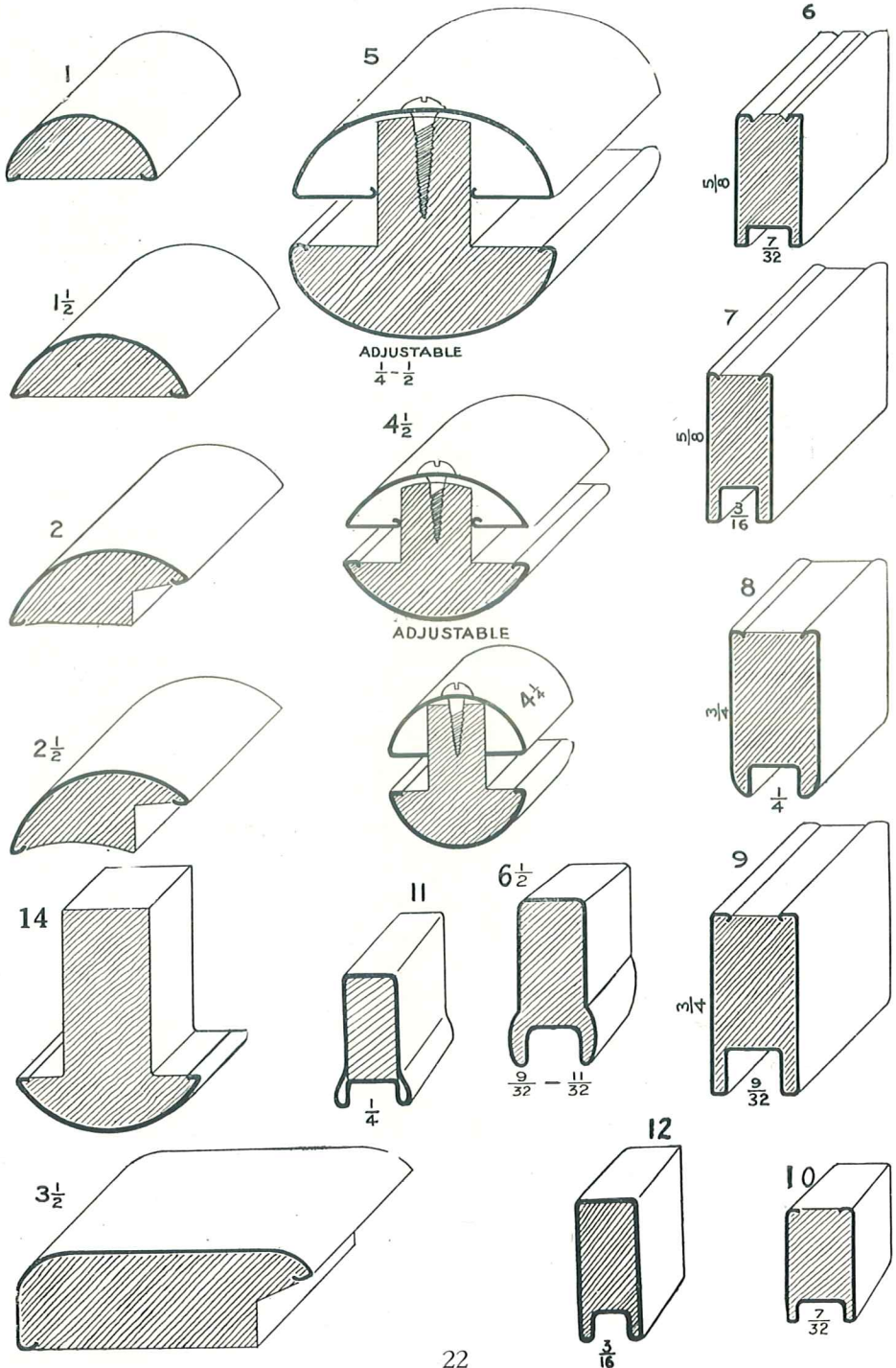


No. 10 Windshield Filler

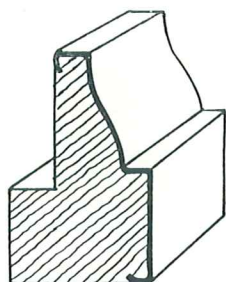
No. 11



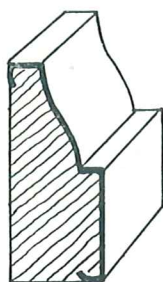
METAL COVERED WOOD MOULDINGS.



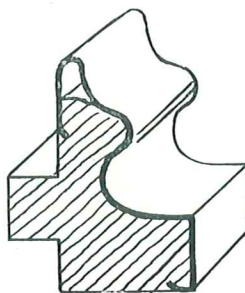
METAL COVERED WOOD MOULDINGS.



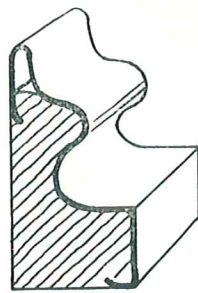
16-A



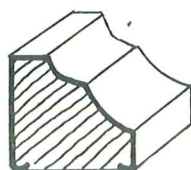
16-B



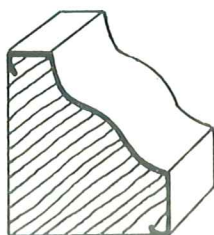
17-A



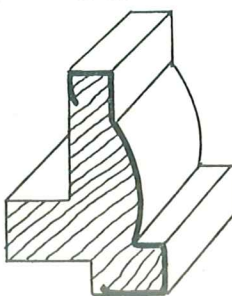
17-B



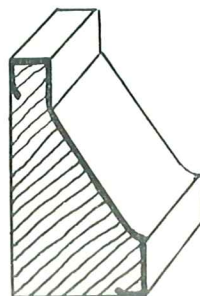
18



19



20



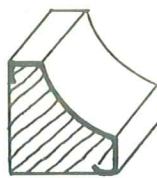
21



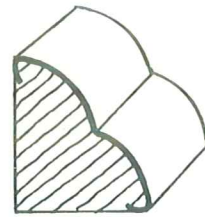
22



23



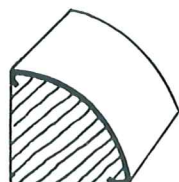
24



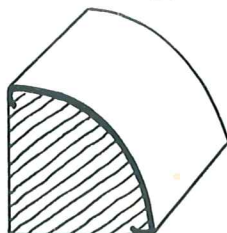
25



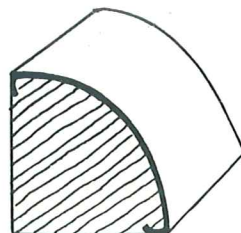
26



27

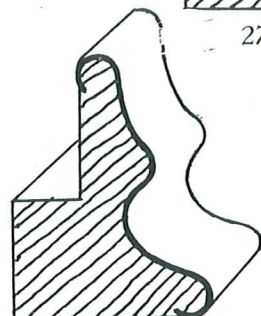


28

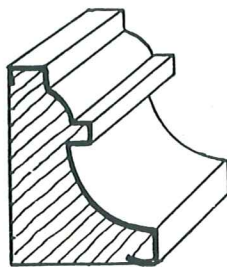


29

32 = 1½" wide



30

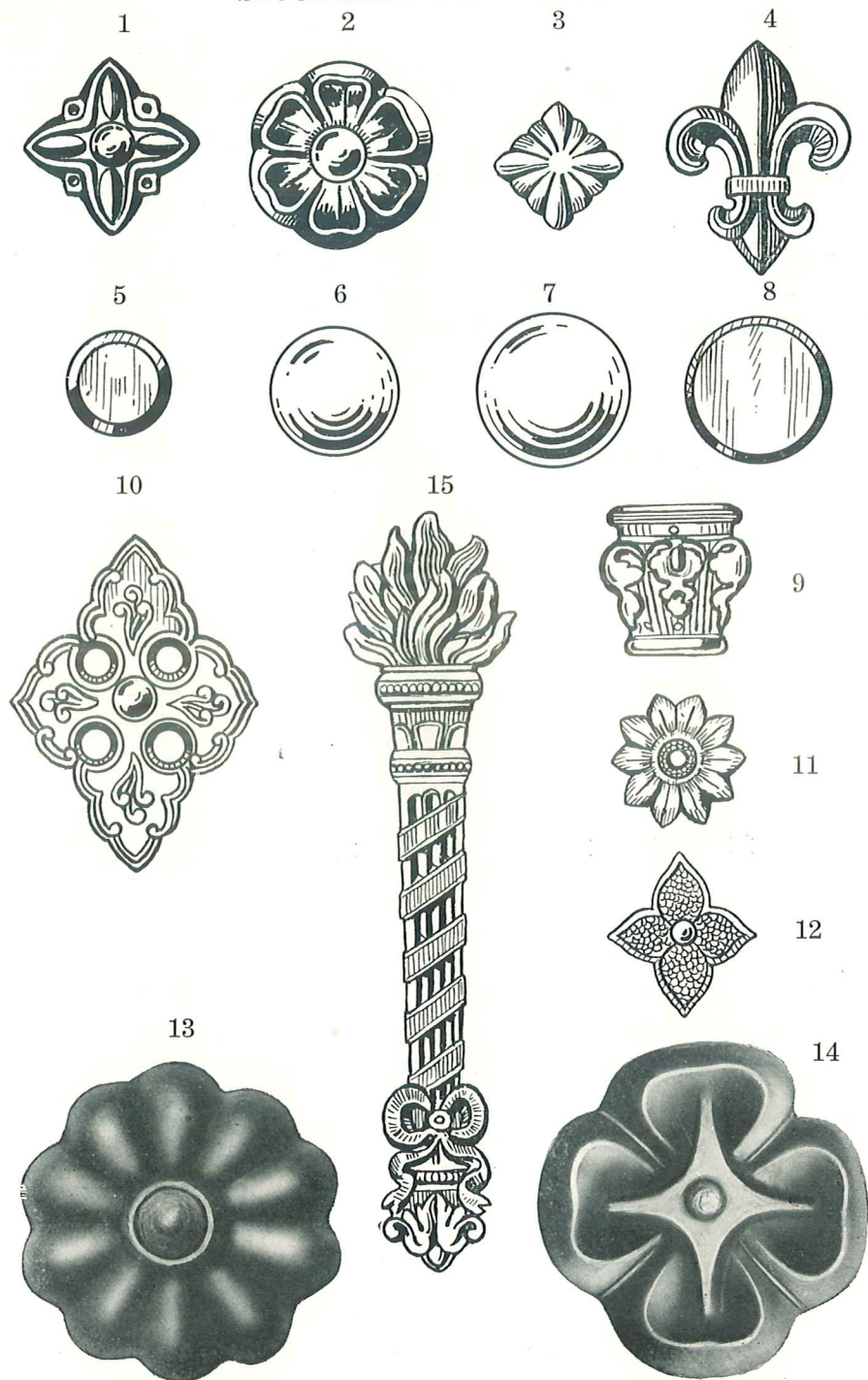


31



33 = 1¾" wide

STOCK ROSETTES—Full Size.



NEW PATTERNS OF SASH BARS, IN THIS CATALOG No. 8.

We shall be pleased to answer any inquiries regarding the use and purpose of these 62 new types of Sash Bars and four Rosettes.

Briefly—No. 340 is for Mirror glazing; use under part of bar for the glass before Silvering or use paper patterns instead. After silvered glass is inserted, PRESS ON THE CAP WITHOUT SOLDERING.

Nos. 163, 182, and 259, intended for small size, low cost Prism Vents, preferably hinged at the bottom with screens. We can supply hinge, catch, side arms, etc., at 50 cents per set.

INNER BARS—Page 5, number 7-R. Page 7, No. K- $\frac{1}{8}$, L- $\frac{1}{8}$, K-3, L-3, M-3. Page 8, No. G-5-R. Page 9, R-M-6, R-133. Page 11, No. 301, BB- $\frac{1}{4}$, No. 340.

OUTER BARS—Page 13, No. B-1- $\frac{1}{8}$, B-2- $\frac{1}{8}$, 2 $\frac{1}{2}$. Page 14, No. C-2, C-5, C-6, C-7, C-8, C-9, 259, 267.

CHANNELS—Page 15, No. 265, 299, 310, 314, 78.

MISCELLANEOUS—Page 17, No. 262, 263, 311, 312, 313, 338, 170, 328, 331, 334.

T-BAR CAPS—Page 18, No. 1, 2, 308.

AUTOMOBILE TRIMMINGS—Page 19, No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.

METAL COVERED MOULDINGS, FOR STORE FRONT—Page 21, No. 16-A, 17, A & B, 18, 19, 20, 21, 32, 33, 12.

ROSETTES—Page 22, No. 9, 11, 12, 15.

OLD PATTERNS OF SASH BARS DISCARDED.

73 types of Sash Bars and 13 types of covered Moulding, shown in previous Catalog No. 7, are discarded and not shown in this Catalog No. 8, and will not hereafter be shown in Catalog nor be carried in stock; but can be supplied on order, promptly, if ordered by regular discard number, as listed in the old Catalog No. 7.

We suggest that you save the old Catalog No. 7 for a while, for this purpose.

Caution—when ordering discard types of Bars, don't forget to mention old Catalog No. 7.

Price List Zinc Bars

f. o. b. Chicago

(For Copper and Brass, see regular Price List Sheet)

This Price List of Zinc Sash Bars, may not to day be the correct BASE PRICE, because subject to change according to the metal market; and therefore, to find the present correct BASE PRICE, see our latest Price List Sheet. If you are a regular user of these metals, your name should be on our mailing list for price quotations.

DISCOUNTS

There is also a QUANTITY DISCOUNT on Zinc and Copper Plated Bars as stated on the regular Price List Sheet above mentioned and a CASH DISCOUNT of 2% applying on everything shown in this Catalog, if paid by 10th of month following purchase. In other words, the full Statement may be discounted on the 10th.

THE EXTRAS

All Stock Sash Bars, Zinc, Copper and Brass, are 7 feet long; but longer or shorter can be supplied, without delay, if stated on the order. On longer lengths, up to 12 ft., there is no extra, except on boxing charge and on shorter lengths, there is no extra except on re-sawing.

There will be a small extra charge for less than one crate of 200 pounds and also for numerous small items.

For your information, to check your invoices, this book has 18 pages, 519 types, of Sash Bars; and to shorten this Price List, instead of fixing price for each type, it is made to apply on GROUPS, based on size and structure. For example: On the first pages of Inner Bars, note that each number, from 00 to 7, carries a group of different channels and in the Price List these 55 types are reduced to 9 GROUPS. Likewise, the 75 Lead Shape Inner Bars are reduced to 13 GROUPS; and on this plan, ALL ARE GROUPEd, both Inner and Outer Bars.

Coppered Zinc Bar, \$4.50 per hundred, above Zinc price. The lineal feet per pound, as stated in this Price List, is only approximate. The weight of Copper and Brass Bars is about 20% more than Zinc Bars.

Claims for imperfect metal bars, or shortage, should be made at once, and will have our prompt and best attention.

Price List Zinc Bars

INNER BARS Colonial and Round See Shapes Pages 6 and 7

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
00	\$21.00	42
0	19.00	28
1	18.50	20
2	18.35	17
3	18.20	14
4	18.10	12
5	18.10	6
6	18.00	5
7	18.00	4

INNER BARS Round and Flat Lead Shapes See Shapes Pages 8 and 9

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
E	\$21.00	44
F	19.50	34
G	19.10	28
H	18.80	23
I	18.50	19
J	18.40	15
K	18.30	12
L	18.20	9
M	18.15	8
N	18.15	7
O	18.15	6
P	18.15	5

INNER BARS Round and Flat Prism See Shapes Page 10

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
8-1 to 8-6	\$18.40	22
9-1 to 9-9	18.30	17
A- $\frac{5}{32}$ & $\frac{7}{32}$	19.00	26
A-2 to A-8	18.40	22
A-F, $\frac{7}{32}$ - $\frac{5}{16}$	18.40	22
13-1 to 13-3	19.00	30

REINFORCED BARS See Shapes Page 11 Insert Steel Bars

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
R-I	\$18.75	21
R-J	18.50	17
R-K	18.50	14
R-L	18.40	10
R-M	18.40	9
R-N	18.40	8
R-O & R-P	18.25	8
R-14, 133, 134	18.00	4
138	18.40	5

Shapes—Continued Page 12

R- $\frac{5}{32}$ & $\frac{11}{16}$	\$18.50	14
R-3 to R-12	18.50	12
D-1 to D-4	18.75	12
7	18.00	4

Miscellaneous Shapes Page 13

D-6 to D-10	\$18.60	10
164	18.50	12
171	18.75	19
R-13	18.25	7
340	19.50	19

CHANNEL CAPS See Shapes Page 13

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
0, 1, 2, F, 88, 99	\$23.00	40
106, 301	22.00	30
76, 91, 93, 132	19.00	20
B.B. $\frac{5}{32}$, $\frac{3}{16}$	19.50	25
B.B. $\frac{1}{4}$	19.00	17

All other patterns, Inner Bar, not listed here, will take average price of class, nearest related.

The lineal feet per pound for the above has all been based on $\frac{3}{16}$ channel, and the metals having wider channel will have less footage.

Price List Zinc Bars

OUTER BARS

See Shapes Page 14

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
00	\$19.00	25
0 to 0-4	18.35	14
0-5 to 0-7	18.20	10
1	18.20	14
2	18.20	14
3	18.00	9
4	18.00	7
5	18.00	6
6	18.00	5

OUTER BARS

See Shapes Pages 15 and 16

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
B-0 $\frac{1}{2}$	\$19.00	30
B-0- $\frac{5}{32}$ & $\frac{3}{16}$	18.70	26
B-1	18.40	22
B-2	18.20	16
B-3 & 4	18.20	16
B-4 $\frac{1}{2}$ to 6	18.00	11
C-1 & C-2	18.50	18
C-3	18.35	15
C-4 to C-7	18.25	12
C-8 & C-9	18.10	12
12	18.00	12
145	18.00	9
163	18.00	9
182	18.00	7

All other patterns, Outer Bars, not listed here, take average price of class nearest related.

CHANNELS

Straight Stock, Not Coils

See Shapes Page 17

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
2-S- $\frac{5}{32}$	\$62.00	85
3-S- $\frac{5}{32}$	37.00	70

CHANNELS—Continued

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
4-S- $\frac{5}{32}$ & $\frac{3}{16}$	\$27.00	55
5-S- $\frac{5}{32}$	22.00	45
6-S- $\frac{7}{32}$ & $\frac{1}{4}$	20.00	35
6	37.00	65
7	27.00	60
8	24.50	55
9	22.00	45
10	20.00	35
M-0 to M-6	18.50	20
24	20.00	30
25	19.00	22
29	27.00	50
30 & 31	22.00	40
32, 33 & 34	19.00	20
35 to 38	19.00	20
39 to 41	19.00	25
75	20.00	40
78	19.00	23
84 & M-13	18.50	18
114	18.25	12
127	20.00	35
137	20.00	26
142	19.00	19
146	27.00	53
174	20.00	21
265 & 310	20.00	30
299 & 314	20.00	25

CHANNEL CAPS—IN COILS

See Shapes Page 17

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
14	\$20.00	35
15	24.00	50
16	22.00	45
18 & 23	20.00	30

All other patterns of Channel and Caps not listed here, take average price of next related class.

Price List Zinc Bars

LAMP SHADE TRIMMINGS—

See Shapes Page 18

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
V, V-1	\$21.00	40
V-2, V-3	20.00	29
V-4, V-5	19.00	16
W, W-1	19.50	18
W-2, W-3	19.00	14
W-4, W-5	18.75	9
W-R, W-1½	19.50	18
W-2½, W-3½	19.00	13
W-4½, Y-C	18.75	8
Y-0, Y-1, Y-2	19.50	20
Y, Y-A, Y-B	19.00	15
Y-3, Y-4, Y-5	19.00	13
Y-6, Y-7	19.00	10
Y-8, Y-D	18.75	9
42, 43	27.00	48
44	21.00	22
45, 46	37.00	70
47, 48	20.00	29
49, 50	19.50	20
51, 52	20.25	29
53, 54, 55	19.25	18
56, 57	18.75	9
58, 59, 60	19.00	18
61, 62	21.00	20

MISCELLANEOUS.

Screen Rails, Tees, Strips, Corners
and Angles.

See Shapes, Page 19.

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
Screen Rail:		
1, 2, 3, 4, 80	\$19.50	17
Green House Strips:		
262, 263, 311, 312, 313, 338	\$20.00	17
Tee Bar Shapes:		
170, 328, 331	\$19.50	15
Corners:		
147, 201, 334	\$19.00	10

MISCELLANEOUS, Continued.

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
Shells:		
97, 116	\$19.00	9
102, 117	19.50	15
Angles:		
82, 83, 136, 205	\$19.50	20
113, 135	19.00	11

T BAR FACING CAPS

See Shapes Page 20.

The No.	Price 100 Lbs.	Approx. Feet Per Lb.
1	\$19.00	16
2	19.00	13
3	19.00	10
4	18.75	9
5	18.50	7
6	18.50	8
7	18.50	7

T BAR PUTTY CAPS

11, 12	\$18.75	14
13, 14	18.50	10

AUTOMOBILE TRIMMINGS

See Shapes, Page 21.

The No.	Price 100 Lbs.
1 and 2	\$18.00
3, 4, 5	18.25
6, 7, 8	18.00
9, 10, 11	18.50

ROSETTES.

See Shapes, Page 24.

	Per 100—	Zinc	Copper
Nos. 1 to 8	\$.75	\$.85	
No. 10			1.25
No. 13	3.25		
No. 14	4.25		
65 cents, if 500 and 50 cents, if			
1000, applying on Nos. 1 to 11.			

Metal Covered Moulding

The patterns of Zinc Covered Moulding, as shown on page 22, are adapted especially, to Prism Glass Work and Art Glass Work.

The Copper Covered Moulding, shown on page 23, is adapted to Store Front Construction and the illustrations show our line of regular STOCK PRODUCTION, the material for these patterns being carried in STOCK to enable us to give you quick service, uniform product and lowest price.

However, if you are in need of other patterns not shown, we will be pleased to quote price on same, if you will mail sketch or sample.

When ordering, be sure to state what finish is desired—whether plain copper, polished or statuary finish; and if latter, it is well to send sample showing the finish, so that material can be made to match your stock on hand.

Automobile Trimming

(See Shapes, Page 21; Price List, Page 29)

(Same Quantity and Cash Discount, as for Sash Bar)

This material is not carried in stock and an order should be for at least 200 pounds; which can be shipped in about ten days.

The illustrations, page 19, show actual size of the patterns; but these may be varied, to suit requirement; also, we have other types of these Strips, not shown herein and if interested along this line, we suggest that you ask for a full set of Auto-Trim Samples and get our prices, on large quantity.

There will be extra charge on small retail lots.

Price List, Metal Covered Moulding

Subject to Quantity also cash DISCOUNT

(See Shapes, pages 22 and 23)

PRICE LIST APPLYING ON 1000 FEET OR MORE

Extra on less than 1000 feet, according to quantity.

(Subject to change, according to metal market)

PLAIN COPPER COVERED

The Number	Price 1000 Feet
1	\$ 59.00
1-1/2	59.00
2	59.00
2-1/2	59.00
3-1/2	91.00
4-1/4	72.00
4-1/2	76.00
5	132.00
14	86.00
16-A and B	70.00
17-A and B	75.00
18	54.00
19	68.00
20	74.00
21	74.00
22	41.00
23	54.00
24	61.00
25	65.00
26	41.00
27	57.00
28	65.00
29	82.00
30	120.00
31	78.00
32	85.00
33	87.00

Above Prices apply on Plain Copper Finish.

(See Quantity Discount)

PLAIN ZINC COVERED

The Number	Price 1000 Feet
6	\$31.00
6-1/2	36.50
7	32.00
8	36.50
9	38.00
10	29.00
11	32.00
12	33.50

Above Prices apply on Plain Zinc Finish.

(See Quantity Discount)

EXTRAS

To be added, to above prices of Copper Covered Moulding 1000 ft.

Creosoting	\$ 8.00
Drilling	6.50
Polishing	11.00
Statuary Finish	20.00

These EXTRAS, also subject to same quantity Discount.

The LENGTH, of Zinc Covered Moulding, averages 10 to 16 feet, but the Copper Covered, averages 16 feet.

Copper Plated Sash Bars

The Price is $4\frac{1}{2}$ ¢ per pound, added to the price of Zinc Bars, with the same quantity and cash discounts as for Zinc Bars. Zinc, exposed to the weather—especially salt air, should be Copper Plated or otherwise protected by Copper or Aluminum Bronze or paint.

Copper Plated Sash Bars may be used in overhead plain work, Prism work, transoms, partitions etc., so as to avoid plating the glass panels after glazing, but not for door lights or real art work.

Nothing has been discovered, to color the soldered joints to match the copper except, ordinary bronze.

In plating these strips, we try to coat them with a uniform, liberal deposit, for wear and service.

In cementing, the brush should not be applied too vigorously across the lines, but parallel with the lines.

Antique oxidizing, is a very simple process and can be done by glazier, before cementing. If the acid, used in soldering, is left about $\frac{1}{3}$ raw, to blacken the joints and then the oxidize applied, overall, the result will be, a nearly uniform black, on bar and joint alike; but do not try this without first experimenting.

Black joints, on plain Zinc Bars.

We see it everywhere—black joints on Zinc Bars—the black pest, caused by raw acid. Of course the acid must be raw, 10 to 15%, for good soldering, but no doubt it's overdone and a joint once black, will stay black. The remedy is, in the use of acid NOT TOO RAW and in washing the joints after the panel is soldered, with a wet cloth and then dry with saw-dust. A little care and attention will be helpful in avoiding the objectionable black joints.

Some glaziers, after violating the simple rules of soldering, try to fix up the joints, by the expensive use of emery wheels, on flexible shaft and other devices to grind away the defects of imperfect soldering.

In Display Windows, perhaps the most attractive, durable and cheapest process is, to simply paint the Zinc lines, with an enamel paint, to blend with the color scheme—preferably gray. A little more attention to the FINISH, will please your client, your Architect and the thousands who daily observe, admire and criticize your work and incidentally will result in better business for you.

Smooth Galvanized Band Steel

This Smooth Galvanized Band Steel, is of straight Stock, 12 foot lengths, approximate 100 pound bundles and wrapped with burlap.

It is the best steel for strengthening bars on Leaded Work, because of its superior strength, as cold rolled steel, over the ordinary hot rolled; but it has the disadvantage of being electro galvanized, with a very thin coat of Zinc, which does not solder well and which does not withstand the weather very long.

Heretofore, it seemed impossible to get anything but this Zinc Plating on the hard steel, as all of the Mills are doing it that way; but the new methods, now being started, may soon result in getting for you, a HARD—STRAIGHT STEEL, COATED WITH THE STANDARD HOT DIP GALVANIZE, thus combining the two desirable features.

HOT-DIP GALVANIZED BAND STEEL

The Hot-Dip Process, is the oldest and most widely used, because dependable. It is specified by Engineers and the Government, for material subjected to weather conditions. Hot-Dip, gives a coating of Zinc, of about three ounces per square foot and is applied, by dipping into molten Zinc, at a temperature of from 800 to 900 degrees Fahr., which allows it to penetrate and adhere to the steel surface.

The Mills will not hot-dip the hard steel, and so, up to now, we had to use the Hot rolled, rather soft steel, for the hot-dip, in 16 ft. lengths. This is in 100 pound bundles, not burlapped. It is straight enough for cross-bars and the galvanize is smooth enough. We also carry 3/16 x 1/8 ungalvanized steel for small reinforcement bars, where the 1/4 x 1/8 is too large.

GALVANIZED BAND STEEL, SIZES IN STOCK

2% Cash Discount and subject to change without notice.

SMOOTH Galvanize SIZES	PRICE per 100 Pounds	HOT-DIP Galvanize SIZES	PRICE per 100 Pounds	Approx. Feet per Pound
1/4 x 1/8	10.80			8
3/8 x 1/8	10.80	3/8 x 1/8	10.50	6
1/2 x 1/8	9.70	1/2 x 1/8	9.65	4 1/3
5/8 x 1/8	9.70	5/8 x 1/8	9.25	3 2/3
3/4 x 1/8	9.70	3/4 x 1/8	8.95	3
1/2 x 3/16	9.85	1/2 x 3/16	8.77	3
		5/8 x 3/16	8.65	2 1/4

EQUIPMENT

Saw Machines, Benders, Cutters and Saws

It is certainly wrong economy, to maintain a wornout and inferior equipment of Glazier's tools, as it will result in low production with high priced labor. Too much stress cannot be laid on the important factor of good tools and sharp saws, because therein lies the possibility of greater production and better work.

Where considerable mitering is needed, our Universal Miter Gauge will do it better and quicker. Also, a steel Rule on your machine—always in place, ready for use, will be a time saver. This Miter Gauge and Rule, are attachments for the No. 3 Saw Machine, but can also be attached to Nos. 1 or 2, whether new machines or old ones in service.

When two holes are cut in base for belt to run below, that weakens it and often the upright breaks off, right there, while in transit and so we cut the holes only when ordered, without guarantee against breakage. The only excuse for belt running below is, that it is out of the way; but there is much against it—Motor near the floor is in darkness and dirt—short belt below never pulls well and may catch and scrape going thru holes—Motor needed for each machine etc. Why not set Motor back of Saw, either on the table or against wall?

Like Automobile, so with Saw Machine—the first few months of use means much. In some respects, grease is better than oil and if watched and pressed down several times daily, the saw will run smoothly, with longer life for the bearings. If oil is used, then use a heavy thick grade and for a week or two, watch and regulate the pin, inside of oil cups, to get the right flow.

If grease is used, take the pin out.

PRICE LIST SAW MACHINES, CUTTERS AND BENDERS

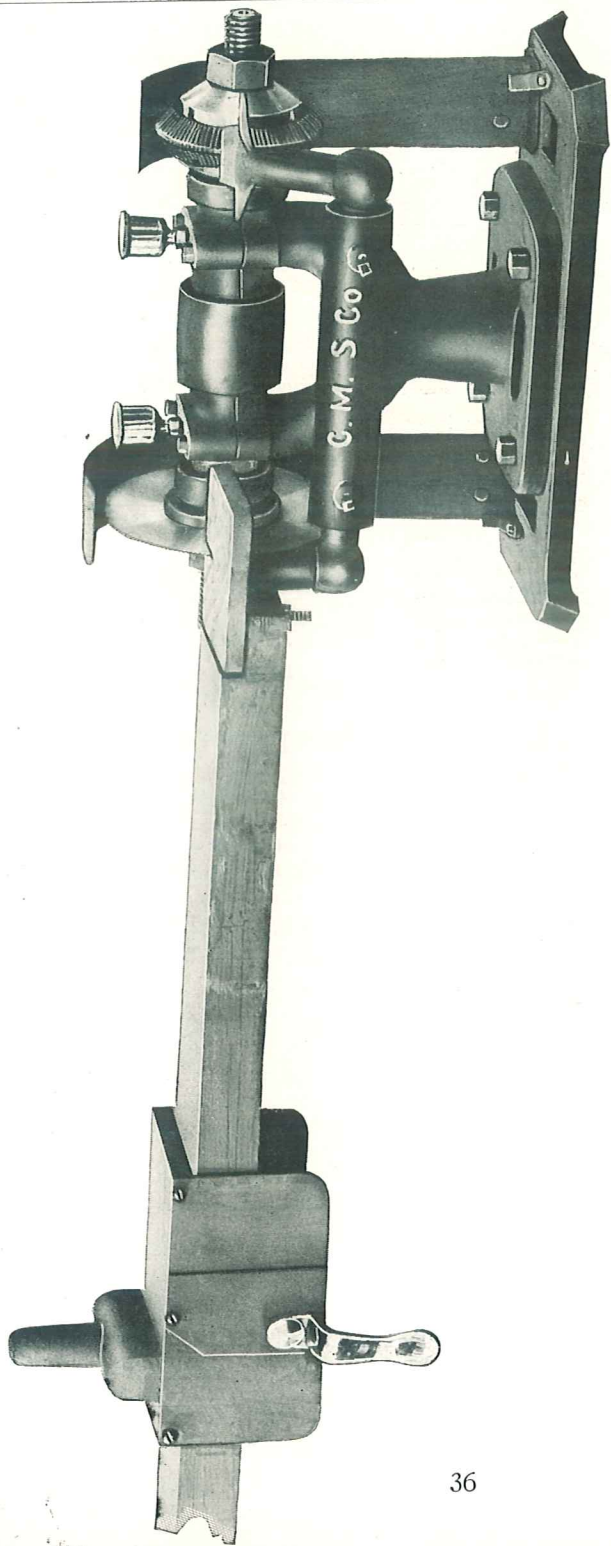
No other, except 2% Cash Discount.

We try to have these Machines and Cutters, in Stock, at all times, except the Foot Power Saws.

No. 1 Saw Machine	\$26.00
No. 2 Saw Machine	40.00
No. 3 Saw Machine, with Steel Rule and Mitre.....	58.00
No. 1 Foot Power Saw Machine.....	58.00
No. 1 Bending Machine, 2 sets blank rolls.....	20.00
No. 2 Bending Machine, 1 set blank rolls.....	40.00
No. 3 Bending Machine, 2 sets blank rolls.....	57.00
Standard Notcher, hardened and ground.....	8.00
Standard "V" Cutter, hardened and ground.....	7.00
Extra for Steel Rule, on No. 1 and 2 Machines.....	5.00
5 inch Saw, 22 gauge, medium filing temper.....	1.00
6 inch Saw, 20 gauge, medium filing temper.....	1.25
1 dozen slim taper saw Files.....	1.25
Sharpening Filing temper Saw, average charge.....	.25
Sharpening hard tempered Saws, average charge.....	.60
Sharpening Notchers, average charge.....	1.25
Sharpening "V" Cutters, average charge.....	1.50
Short Spindle Saw Stand, used for No. 1 Machine.....	9.90
Long Spindle Saw Stands, for Nos. 2 and 3 Machine.....	11.00
Single Gauge, with Bar, like in No. 1 Machine.....	4.50
Triple Gauge, with Bar, like in Nos. 2 and 3 Machines.....	6.00
Base and Fender, for No. 1 Saw Machine, with bolts.....	2.50
Base and Fender, for Nos. 2 and 3 Saw Machines, with bolts.....	4.00

As mentioned above, the Benders have only BLANK ROLLS, and the cutting of grooves, is EXTRA, averaging \$2.50 per set, for the Inner Bar and \$5.00 per set, for the Outer Bar; but this is jobbing work.

All of the above Machines and Cutters, are guaranteed for workmanship and material. If defective, or damaged in transit, please notify promptly. Instructions for setting up and operating, enclosed with each Machine.



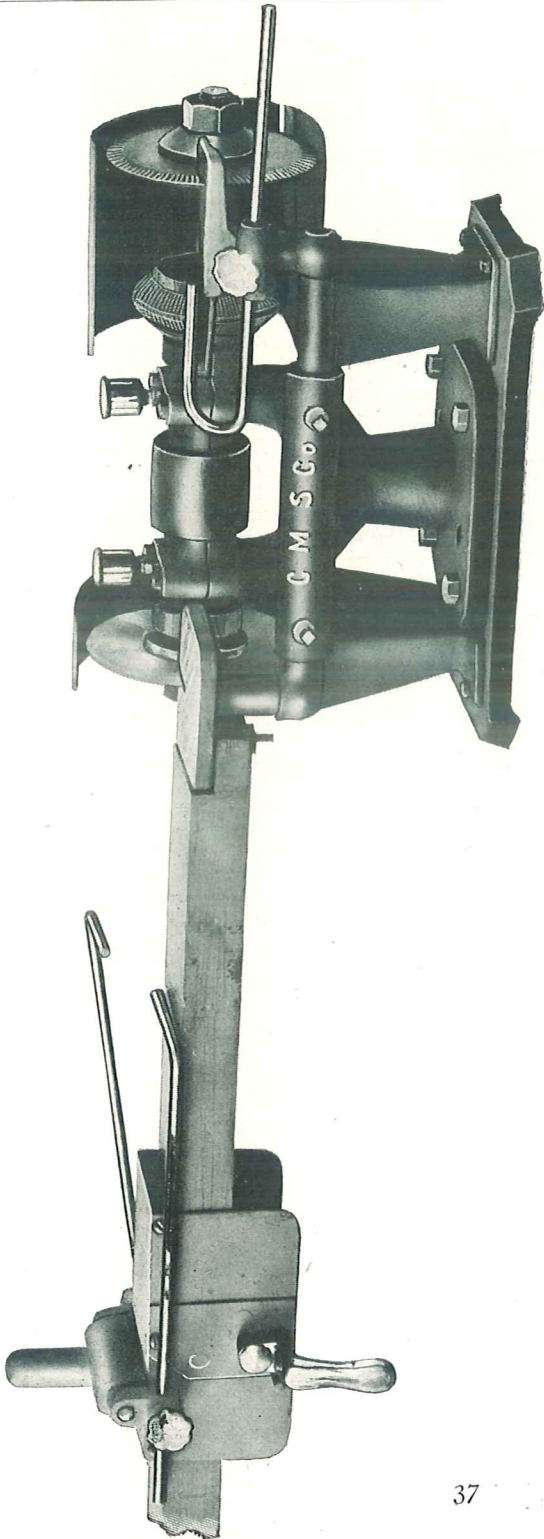
SAW MACHINE NO. 1

Cut, $\frac{1}{4}$ Size. See Price, Page 35.

This machine is made up of the following parts: Cut-off Saw and Notcher, on Saw Stand, short spindle, with large oil cups, Base with Fenders over Cutters, Sliding Gauge, single, on Gauge Pole, with end support, miter lines on Saw Table, for outer bar corners and with the necessary screws and bolts.

This machine has all that is needed, for a small line of Art Glass Work, but, not having all of the necessary attachments for general work, it is suitable only for small jobs, or a few panels of a kind and not, for quantity production, where speed is gained, by the setting of gauges for machining a duplication of parts.

Saw speed, 2000 rev. per minute; requiring $\frac{1}{4}$ H. P. Motor. Change diam. of Motor pulley, to get required speed for Saw. Grease Saw daily, or oil several times daily, when in use. See elsewhere herein, instruction for grease and oil, and also, full instruction is enclosed with each machine.



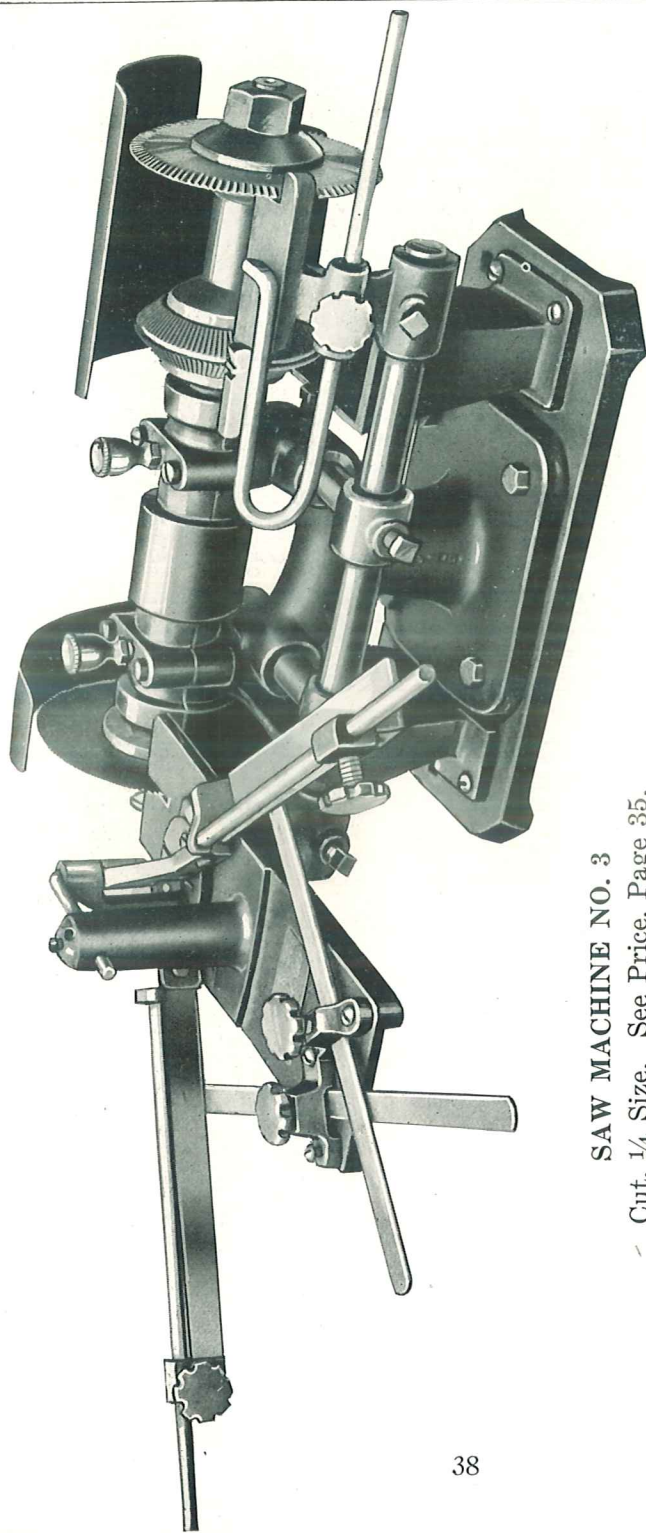
SAW MACHINE NO. 2

This machine is made up of following parts: Cut-off Saw, Notcher and V Cutter, on Saw Stand, long spindle, allowing 3 inches between Notcher and V Cutter, large oil cups, iron Base with Fenders over Cutters, Hoppers for saw dust escape, Sliding Gauge, Triple, on Gauge Pole, with end support, miter-lines on large Saw Table, for outer bar corners and with the necessary screws and bolts.

Cut, $\frac{1}{4}$ Size. See Price, Page 35.

This machine has all necessary attachments for general Art Glass Work and is practical for quantity production and where advantage is obtained, by use of the various Gauges, on Saw and V Cutter, to machine a quantity duplication of metal parts.

Saw speed, 2000 rev. per minute; requiring $\frac{1}{4}$ H. P. Motor. Change diam. of Motor pulley, to get required speed for Saw. Grease saw daily, or oil several times daily, when in use. See elsewhere herein, instruction for grease and oil, and also, full instruction is enclosed with each machine.



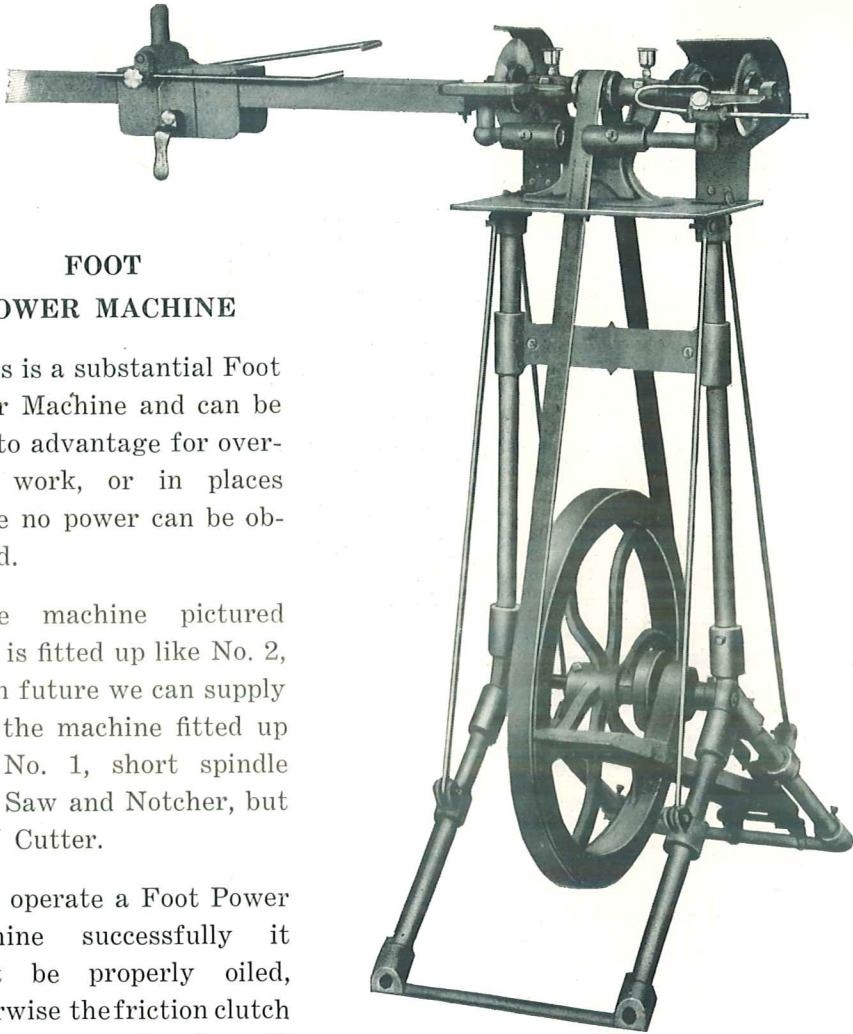
SAW MACHINE NO. 3

Cut, $\frac{1}{4}$ Size. See Price, Page 35.

This machine is made up of the same parts and attachments as mentioned in description of the No. 2, but, with the extras, as follows: a graduated Steel Rule, attached to Gauge Pole, so Gauge may be quickly set to accurate positions—Rule always in place. Instead of the ordinary saw-table, as on the No. 2, this is equipped with a special table, with a sliding Miter Gauge, having one for right and one for left cutting, which may be quickly set at various angles.

This machine meets about all of the requirements of the Art Glass Worker.

Saw speed, 2000 rev. per minute; requiring $\frac{1}{4}$ H. P. Motor. Change diam. of Motor pulley, for right speed. See elsewhere herein, instruction for grease and oil, and also full instruction with each machine. The pole and sliding gauge included in price but not shown in above photograph.



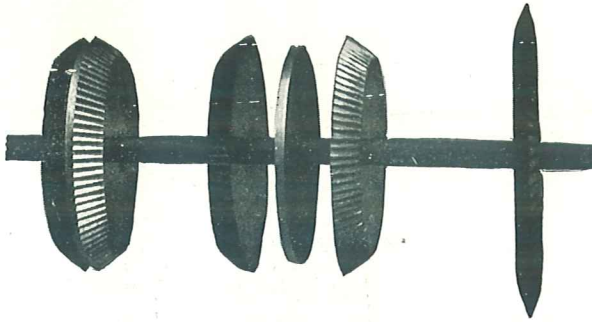
FOOT POWER MACHINE

This is a substantial Foot Power Machine and can be used to advantage for over-time work, or in places where no power can be obtained.

The machine pictured here, is fitted up like No. 2, but in future we can supply only the machine fitted up like No. 1, short spindle with Saw and Notcher, but no V Cutter.

To operate a Foot Power Machine successfully it must be properly oiled, otherwise the friction clutch will get out of order. It should be oiled daily when in use with suitable light machine oil. If it runs dry a long while, the clutch will wear out. If unsuitable, heavy oil is used, which gums up like tar and prevents the clutch from doing its work, then the pedal will strike the floor on an idle stroke. In such cases flush out the clutch with gasoline or kerosene.

See Price Page 35



THE NOTCHER

Standard size, $3\frac{3}{8}$ -inch diameter, bevel 50 degrees, 8 teeth per inch, $\frac{3}{4}$ hole; made of tool steel, milled, hardened, temper corrected and ground. Always in stock.

THE V CUTTER

Standard size, $4\frac{3}{4}$ -inch diameter. Bevel as shown in cut, 8 teeth per inch, $\frac{3}{4}$ hole. Tool steel, milled, hardened and ground.

The Notcher, being hardened tool steel, cannot be filed like a saw, but must be ground. After grinding three or four times it ought to be softened, recut and rehardened. Average charge for grinding, \$1.25.

It is better to get a new notcher than to have the old recut.

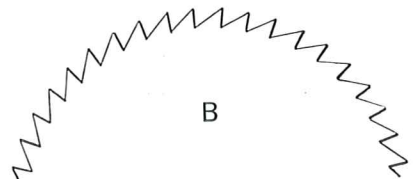
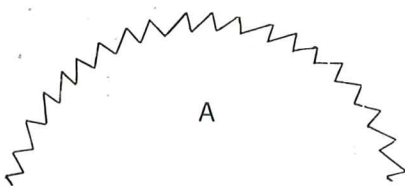
Extra Center Plates for Notchers.

The regular standard Notcher cannot be used for all the different patterns of Sash Bars and result in neat fitting joints; but a large variety of the metals can be notched with one set of notchers, if different center plates, differing in thickness and diameter, are placed between the cutters. When ordering center plates state thickness and diameter.

Keeping the Saw Sharp.—The Cut-off Metal Saw ought to be filed every day when in use, but need not be removed from the arbor for this purpose. If the saw is in good order, one light stroke of the file, for each tooth, is enough. If out of order and rough, true up and file only the longer teeth which project. The tooth should be filed slanting on one side and straight on the other, pointing to the center of saw.

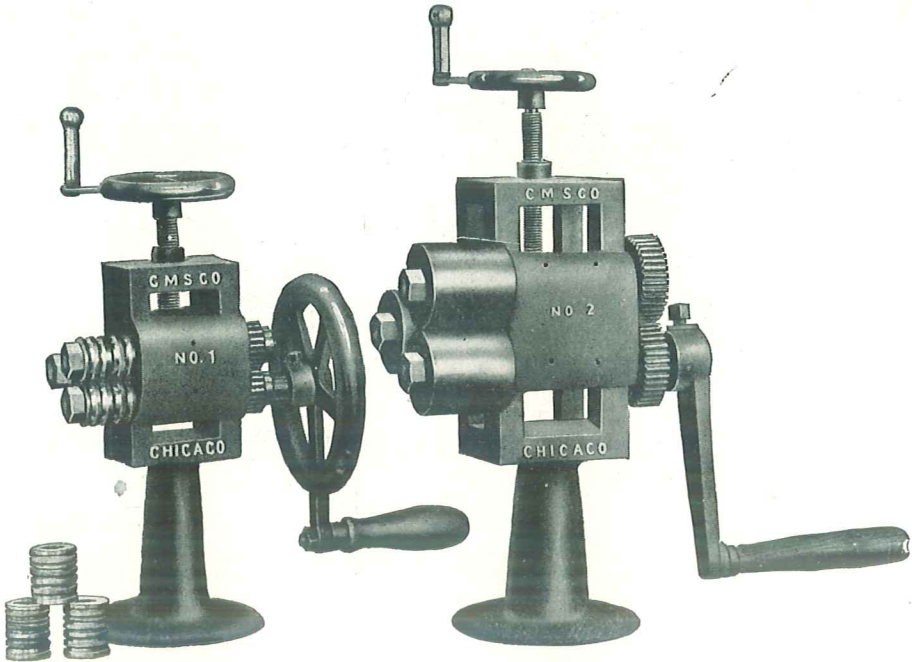
Saws come in here to be sharpened, in which the teeth have been filed, by the glazier, in a very irregular, hit and miss fashion, like sketch A below. A saw filed in this way does not cut—it merely scratches—just like a saw running backward.

A slight difference in the shape of saw teeth gives surprising results and most of the work is done with the saw, therefore so important.



No. 1 BENDER.

No. 2 BENDER.



No. 1 BENDER. For small Inner Bars.

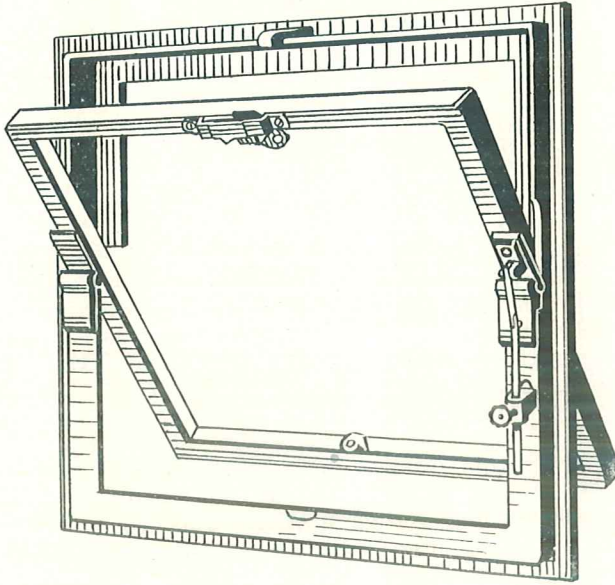
Blank Rolls, extra charge for cutting grooves. Width of machine, 9 inches; height, 16 inches; weight, 45 lbs.; Shafts, $\frac{3}{4}$ inch; brass Gears connect front shafts; rear roll operated by top hand wheel; 2 sets blank rolls $1\frac{1}{2}$ inch diam., $1\frac{3}{4}$ inch long. The rolls are left blank, and when ordering Bender, state numbers of bars for which grooves are to be cut. The two sets of rolls have room for 5 or 6 sets of grooves. This machine is for bending small inner Bars like Nos. 1 to 4 and G to I and will not bend anything larger.

Attachments for REVERSE BENDING, SIDE-WISE, for domes, price on application.

No. 2 BENDER.—For Outer Bars and large Inner Bars Blank rolls, extra charge for cutting grooves. Width of machine, 12 inches; height, 20 inches; weight, 75 lbs; shafts, 1 inch diam.; rear roll operated by hand wheel; steel gears connect front shafts; one set blank rolls, $2\frac{3}{4}$ diam., 3 inches long. These rolls are left blank and when ordering Bender, state Nos. of Bars for which grooves are to be cut. The rolls have room for 4 sets of grooves and more grooves require extra rolls. Will bend inner Bars from J to N and certain outer Bars which do not collapse under bending strain.

Reliance Church Ventilators

SINGLE GLAZING



In our Church Ventilators, Single Glazing, as pictured above, note Hinge Section gives a wide bearing, of upper against lower, which is essential and necessary to the life of the Ventilator; as a scant bearing with rust and wear, will in time sag and bind the inner frame.

OUTER FRAME, one inch Angle, with flange top or bottom, PAINTED.

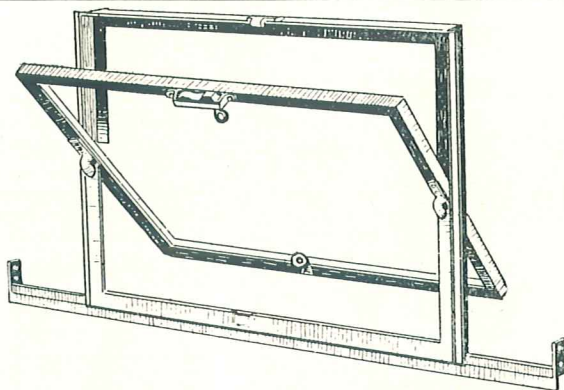
DETACHABLE SWINGING FRAME, $\frac{3}{4}$ inch Angle, GALVANIZED.

FLANGES AT TOP OR BOTTOM, to join Ventilator with Glass above and below.

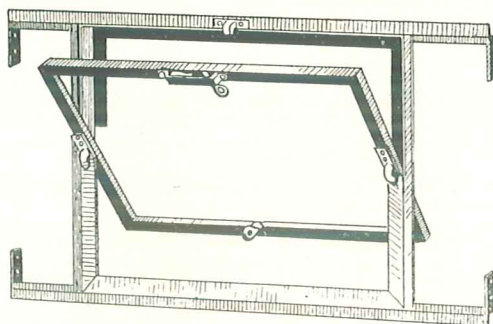
Wide Bearing Pivot Hinge, Lock and Cord Ring.

All mentioned above are included in the Price List of regular Ventilators and all else, not mentioned, is extra. See Price List.

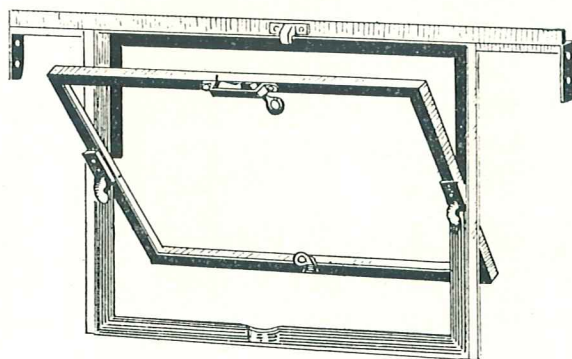
We shall be pleased to estimate on your requirements, orders or prospects on which you are figuring.



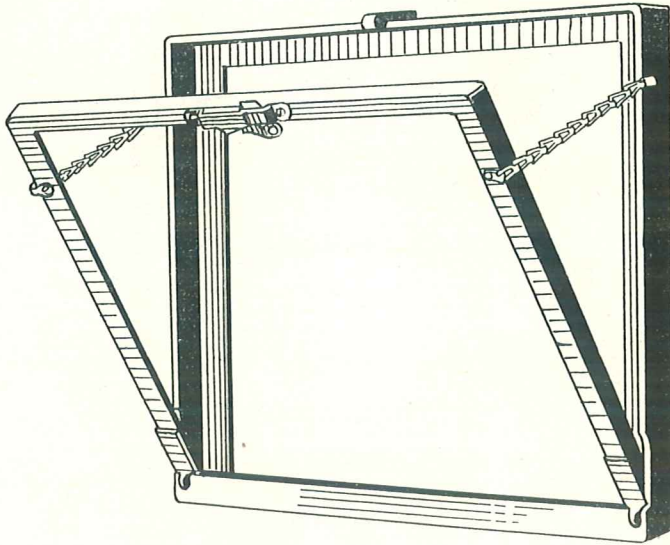
TOP EXTENSION VENTILATOR
For Single Glazing.



MIDDLE EXTENSION VENTILATOR
For Single Glazing.



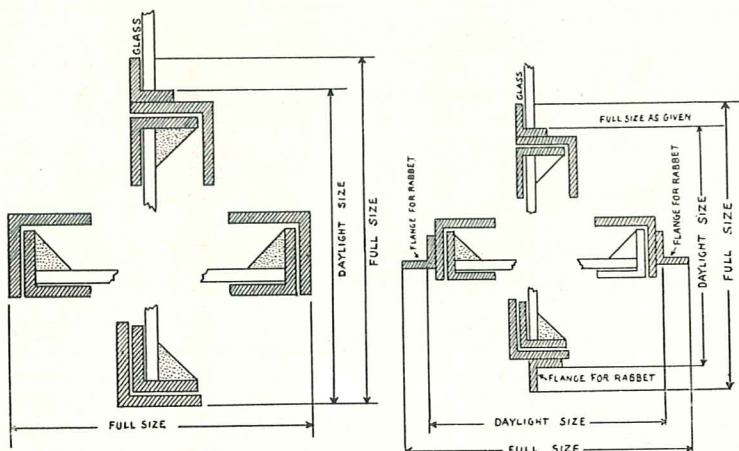
BOTTOM EXTENSION VENTILATOR
For Single Glazing.

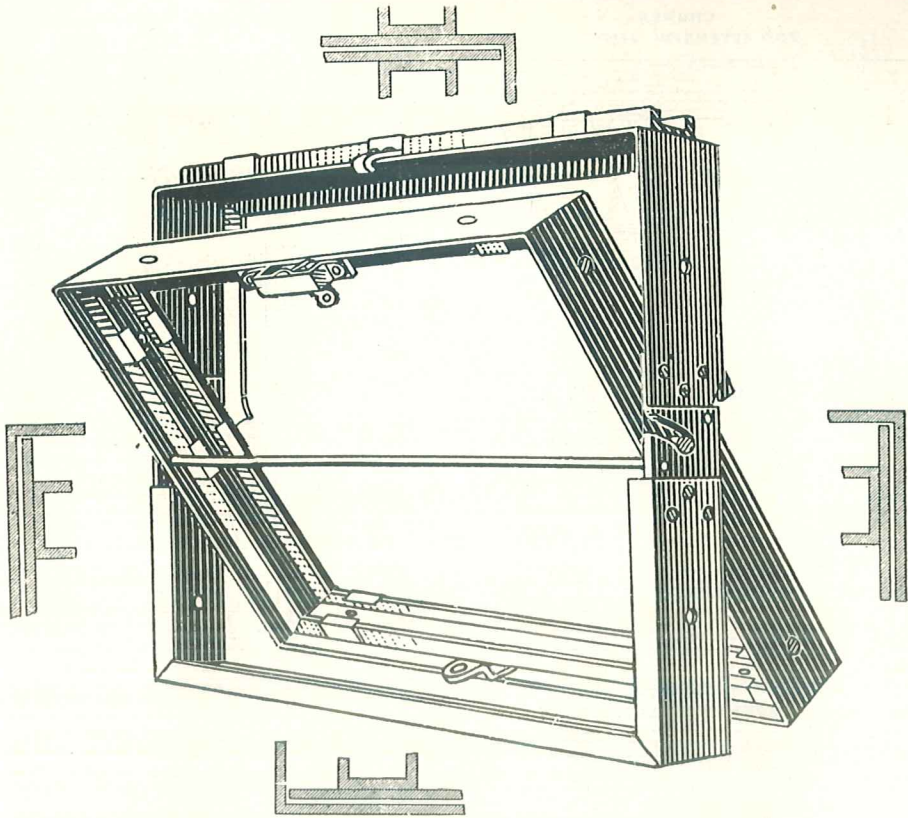


CHURCH VENTILATOR—HINGED AT BOTTOM

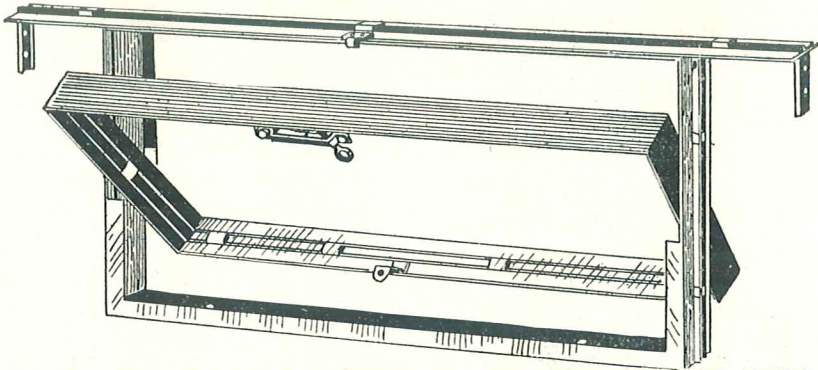
The above, pictures a Ventilator for single or double glazing, and being hinged at bottom, makes this Ventilator desirable where screens are needed. It is obvious however, that this style of hinge is adapted only to Bottom Vents, within reach of the hand; and the old time Pivoted Vents, are regarded as safer for overhead.

The drawing below, pictures side view and top view, applying to any and all styles of single glazing Vents, to show daylight and full measure. Be sure to state daylight and full size and show by sketch where you took the measure from.





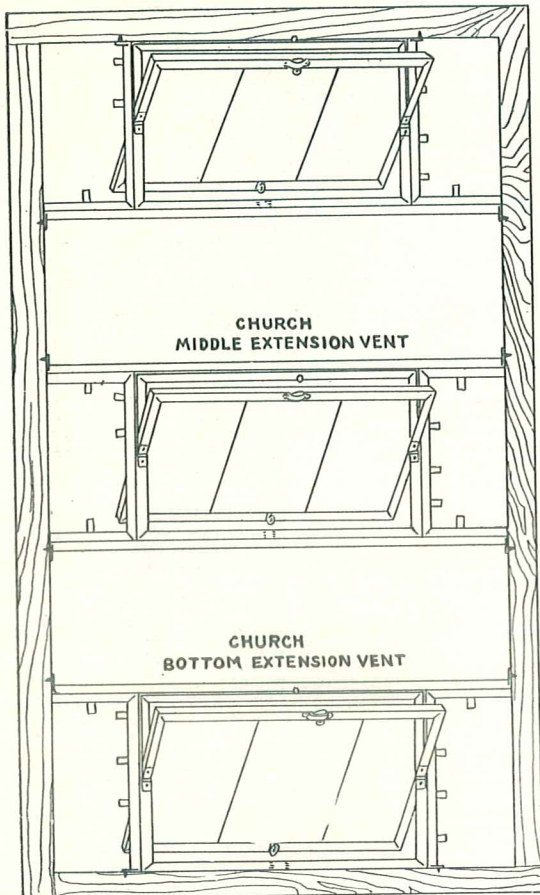
DOUBLE GLAZING BOTTOM VENTILATOR.



DOUBLE GLAZING BOTTOM EXTENSION VENTILATOR.

Outer Frame usually $2\frac{1}{2} \times 1$ inch angle, painted; swinging frame of band steel, with channel on inside, usually 1 inch for division space between Leaded and protection glass. This Vent. with 1 inch space can be also used in cases where window-wood-space is larger, by simply placing larger channel on top or bottom, to match wood, leaving space inside of Vent. 1 inch. Cleats on both sides of inner frame to hold glass. Cord Ring and Lock. See Price List for extras.

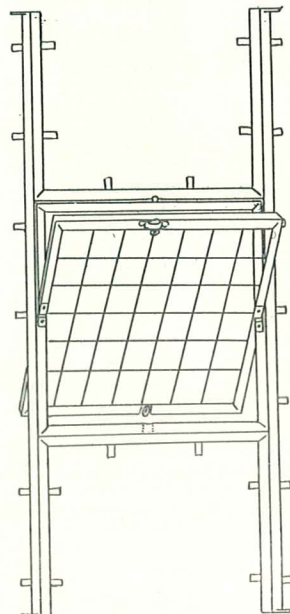
CHURCH
TOP EXTENSION VENT



PRISM

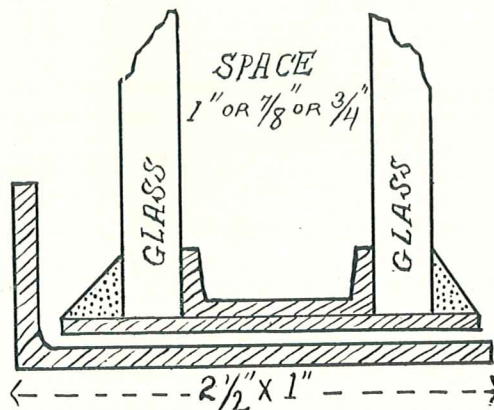
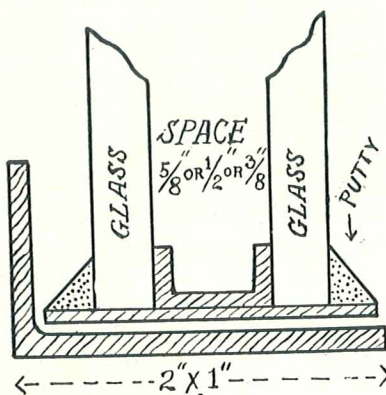
EXTENSION VENT

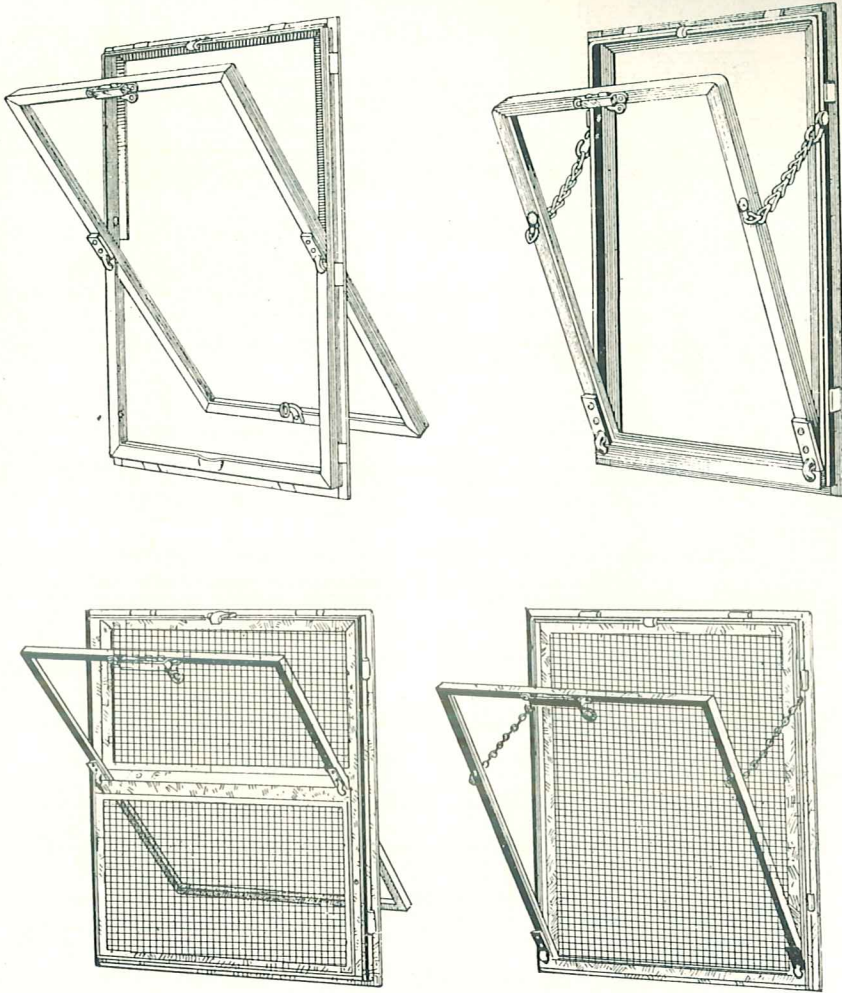
FOR STORE FRONT



FLANGE ALL AROUND TO
CONNECT WITH GLASS.
ALL GALVANIZED.

SECTIONAL VIEW OF VENTS FOR DOUBLE GLAZING



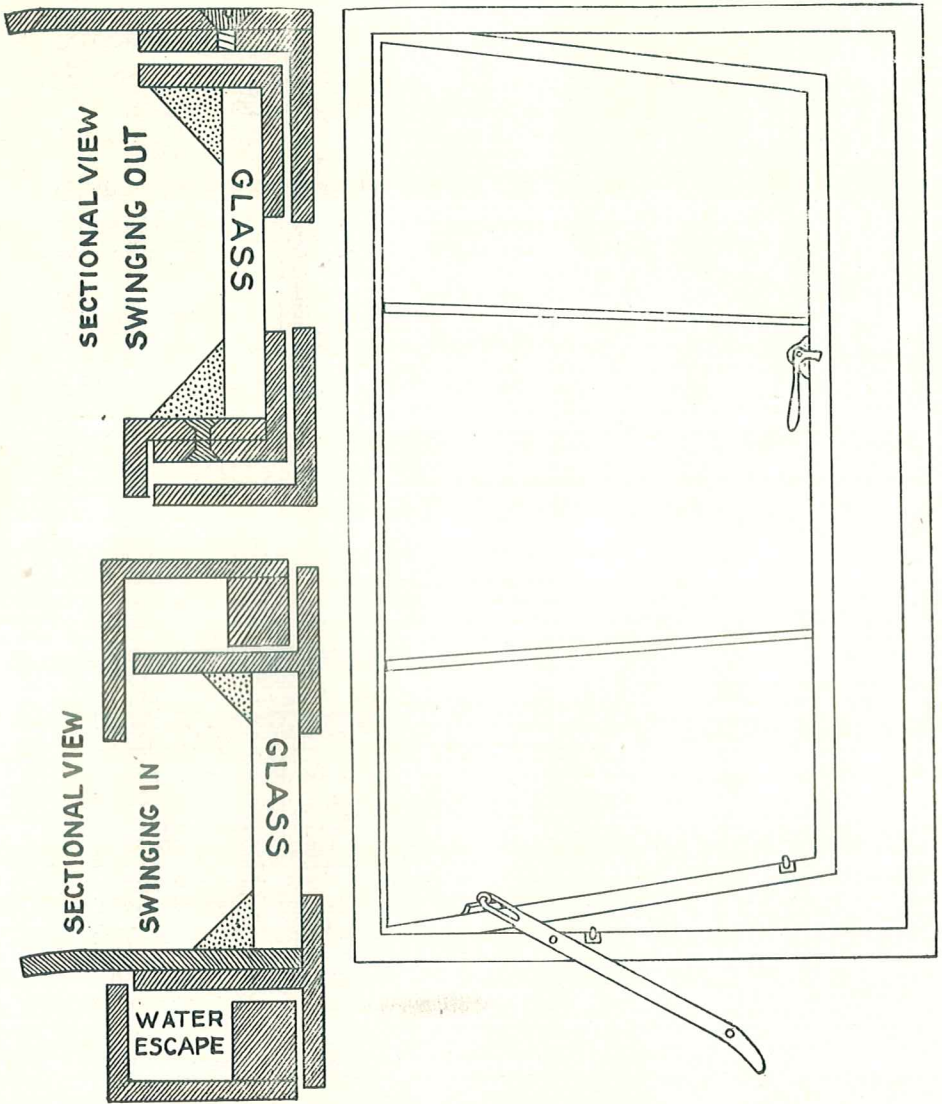


ALL GALVANIZED PRISM VENTILATORS.

Outer frame $\frac{3}{4}$ inch angle, detachable swinging frame $\frac{1}{2}$ inch angle, or, $\frac{5}{8}$ inch if specified, pivot hinge, lock, cord ring, galvanized angle or channel all around, to connect with glass or sash.

Pivoted above center for self closing and requiring two piece screen, divided across center; or, hinged at bottom for one piece screen. See Price List for Ventilators and Copper Plating.

For STORE FRONTS, we make ventilators like above with 1 inch outer frame, $\frac{3}{4}$ inch inner frame, corners welded, flange all around to fit in copper sash. Prices on application.

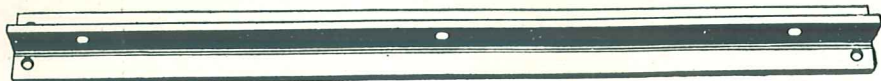


STEEL CASEMENTS.

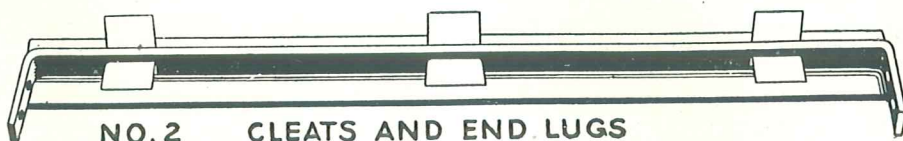
Hinged on the side to open right or left and to swing inward or outward. On account of weather proofing, it is best to have them swing outward as shown in cut above, if conditions will permit. Outer frame, one inch angle, painted; swinging frame, galvanized, water drip at top, handle lock at side, adjusting bar at bottom to hold swinging frame when open and also to serve as a lock when closed.

Prices on application.

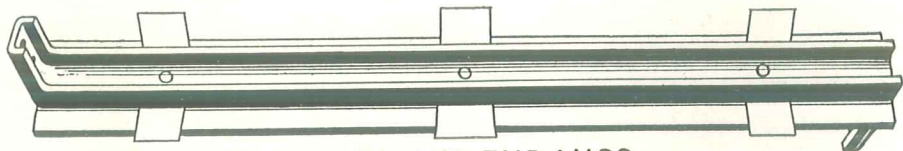
T-BARS



NO. 1 PEG HOLES AND END SCREW HOLES



NO. 2 CLEATS AND END LUGS



NO. 3 CLEATS AND END LUGS

The above No. 1 and 2 types are for single glazing and the No. 3 for double glazing. It should be stated when ordering, if the measure given, is intended for inside of lugs or outside, overall and if cleats on T-Bars shall be located to match Lead Lines, then such spacing should be shown by sketch or otherwise.

Unless otherwise ordered, it will be assumed that T-Bars shall be only painted. Galvanizing and Copper Plating are extra.

Your attention is again drawn to Metal Covered T-Bars and Metal Putty Caps, as pictured on page 18. On the ordinary Church job, you would not want to bother with such Caps and Metal Covering, because not specified or figured, but there are places where it can be used for better appearance and real durability, of Zinc, Copper or Brass.

PRICE LIST, T-BARS, ALL PAINTED.

		Size	per Foot
No. 1	1	inch T	.15
No. 2	1	inch T	.18
No. 2	1 1/4	inch T	.25
No. 2	1 1/2	inch T	.28
No. 3	3	inch T	.35

PRICE LIST—VENTILATORS.

FEET	Church Vents Single Glazing	Church Vents Double Glazing	Prism Galv.
6 Feet.....	\$2.75	\$4.75	\$2.75
7 "	2.95	5.10	3.00
8 "	3.15	5.45	3.25
9 "	3.35	5.80	3.50
10 "	3.55	6.15	3.75
11 "	3.75	6.50	4.00
12 "	3.95	6.85	4.25
13 "	4.15	7.20	4.50
14 "	4.40	7.55	4.75

THE EXTRAS ON SINGLE GLAZING VENTILATORS.

Extension on top or bottom, not over 1 foot.....	\$1.00
Extension both top and bottom, not over 1 foot.....	1.50
Each additional foot extra.....	.20
Flanges on sides to fit rabbet of sash.....	.35
Flanges sides and bottom for rabbet of sash.....	.45
Square flange sides and bottom, for rabbet.....	.55
For stone setting, screwed on, detachable extra.....	.25
Cross bars, not over 3 ft., loose, 10¢, riveted.....	.15
Adjusting Bars, ordinary kind.....	.20
Circle Vent., extra to regular price, about.....	2.00
Vents. hinged at top and at bottom with chains.....	.50
All Galvanizing per ft. 10¢. Weather Strips.....	.60
Screens not over 7 feet, \$2.00. Sliding Screen.....	2.50
Crating order less than three Vents.....	.65
Cleats in inner frame of Vents.....	.25
Joining Twin Vents.....	.50
Copper plating (discount for large lots) per ft.....	.12

THE EXTRAS ON DOUBLE GLAZING VENTILATORS.

Extension on top or bottom, not over one ft.....	\$1.75
Extension both top and bottom, not over one ft.....	2.25
All Galvanizing per running foot.....	.25
Flanges on sides, Cross Bars, adjusting Bars, etc., same price extra, as above for single Vents.	
Ventilators hinged at bottom with Side Arms.....	1.75

We shall be pleased at all times, to estimate on your requirements, orders or prospects, on which you are figuring. The usual discount applies on the above prices.

