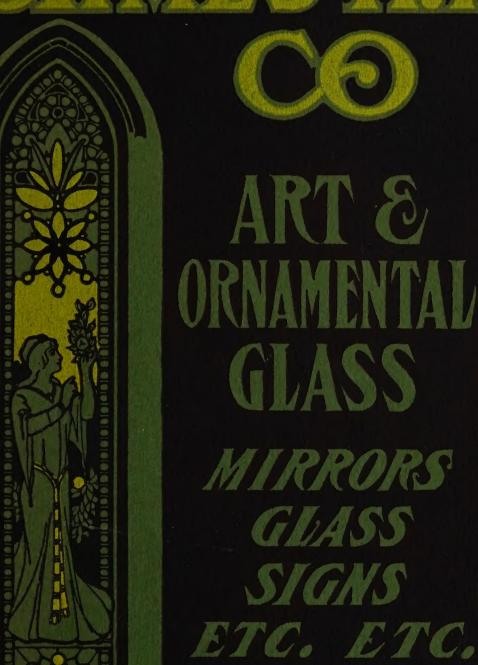
## Milli (



MIRRORS GUASS SIGNS ETC. ETC.



OFFICE AND SALESROOM 80-82 WABASH AVENUE

WAREHOUSE, 34-36-38-40 South WATER ST. Chicago, Illinois, U.S.A.

AVERY LIBRARY COLUMBIA UNIVERSITY

## James H. Rice Co.

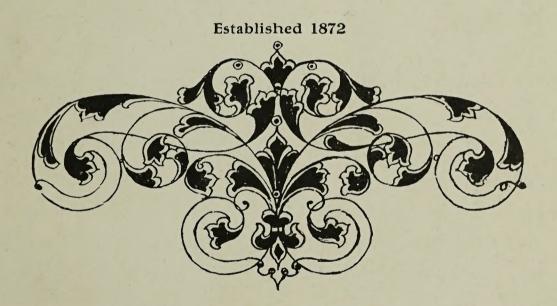
Manufacturers, Importers and Dealers in

## Art and Ornamental Glass

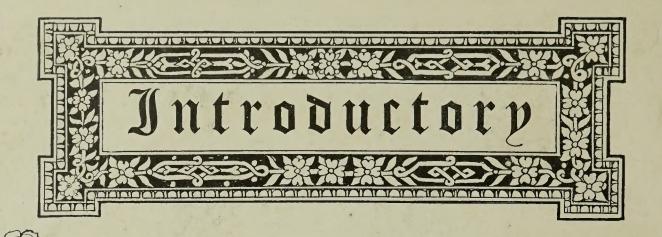
Sand Blast, Chipped, Embossed Glass, Etc.

Also Chipped Glass Signs, Mirrors & Glaziers' Supplies All Kinds of Glass for Churches and Buildings

Plate and Window Glass



Office and Salesroom 80 and 82 Wabash Avenue Warehouses 34 to 40 South Water Street CHICAGO, ILL., U.S.A.

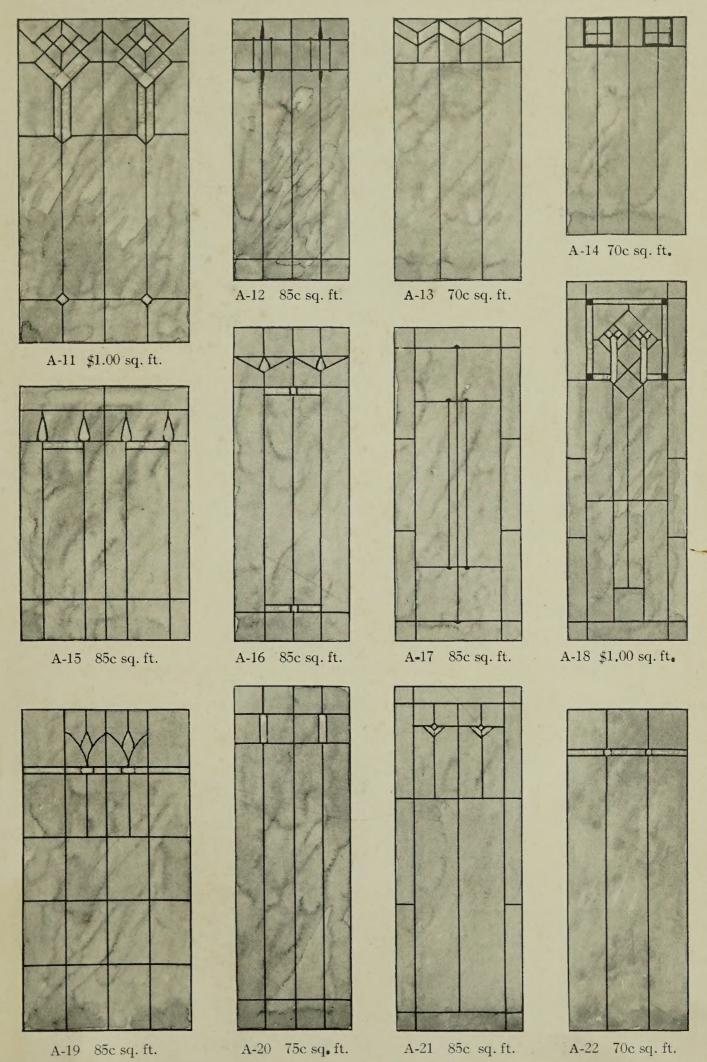


HIS book of designs presented represents the most complete line of art, ornamental and other various kinds of glass, also framed mirrors, etc., ever put before the trade. We especially call your attention to our "up-to-date" designs of art glass, which cannot be excelled in point of artistic work. We have spared no expense with our artists in making up the finest and most artistic designs procureable.

The Art Nouveau designs, as shown on pages 17 to 20 and 36 to 39, are designs that are very pleasing to the eye, and when made up and set in the sash they cannot be excelled. All designs of art and ornamental glass, as shown in catalogue (except figured, Florentine, etc.), are made to order, and generally require one to two weeks before shipping.



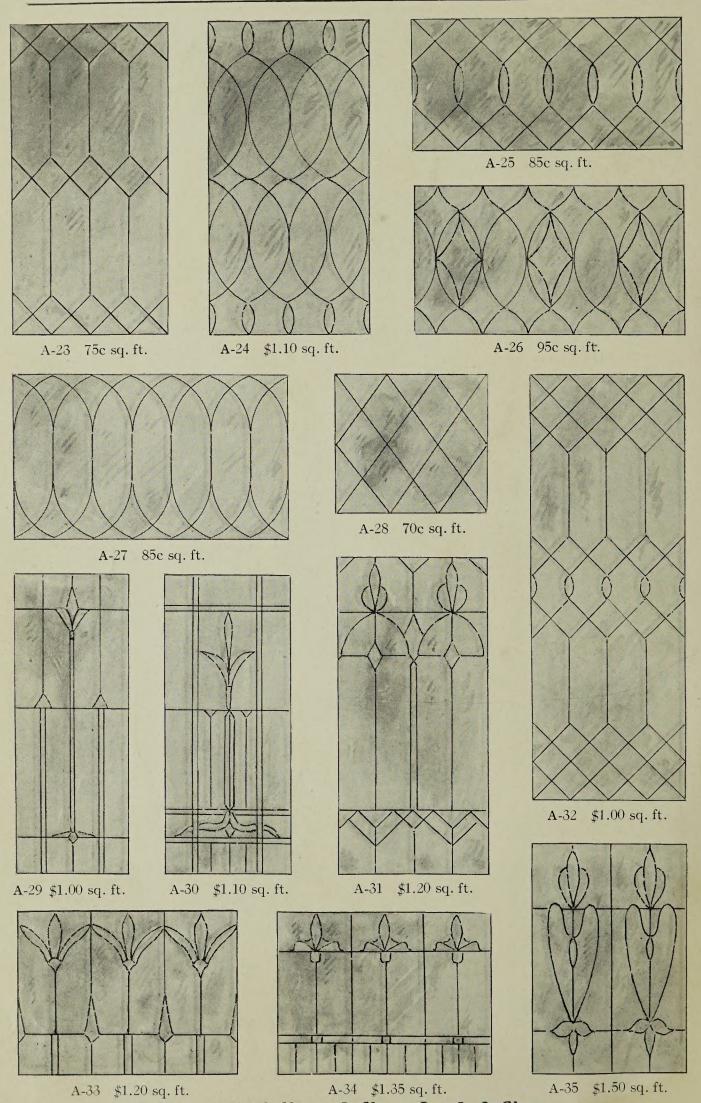
AVERY LIBRARY COLUMBIA UNIVERSITY



Newest Designs of Leaded Clear Glass

With white and black opal glass trimmings Very desirable

AT 3150 723

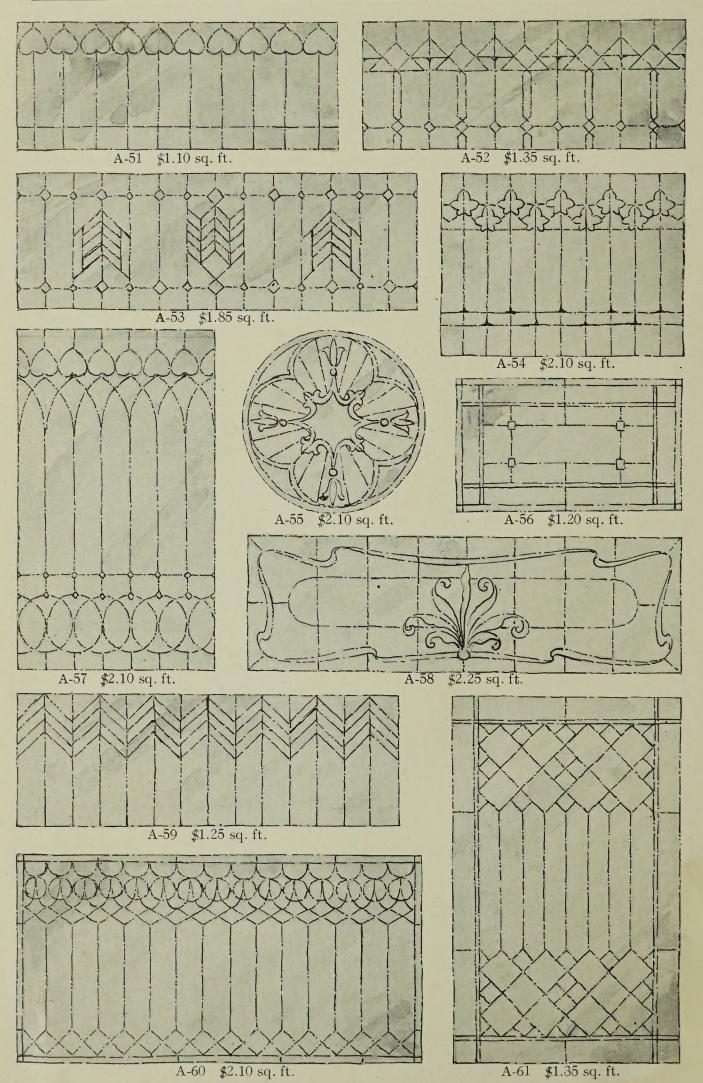


Geometrical Shaped Clear Leaded Glass
Made in stylish designs as above. Also furnished in Colonial, Florentine,

A-38 \$1.00 sq. ft. A-36 \$1.10 sq. ft. 95c sq. ft. A-39 85c sq. ft. \$1.10 sq. ft. A-40 \$1.00 sq. ft. A-41 A-44 \$1.20 sq. ft. A-43 95c sq. ft. A-42 \$1.00 sq. ft. A-46 \$1.00 sq. ft. A-45 \$1.00 sq. ft. A-50 \$1.00 sq. ft. A-48 \$1.00 sq. ft.

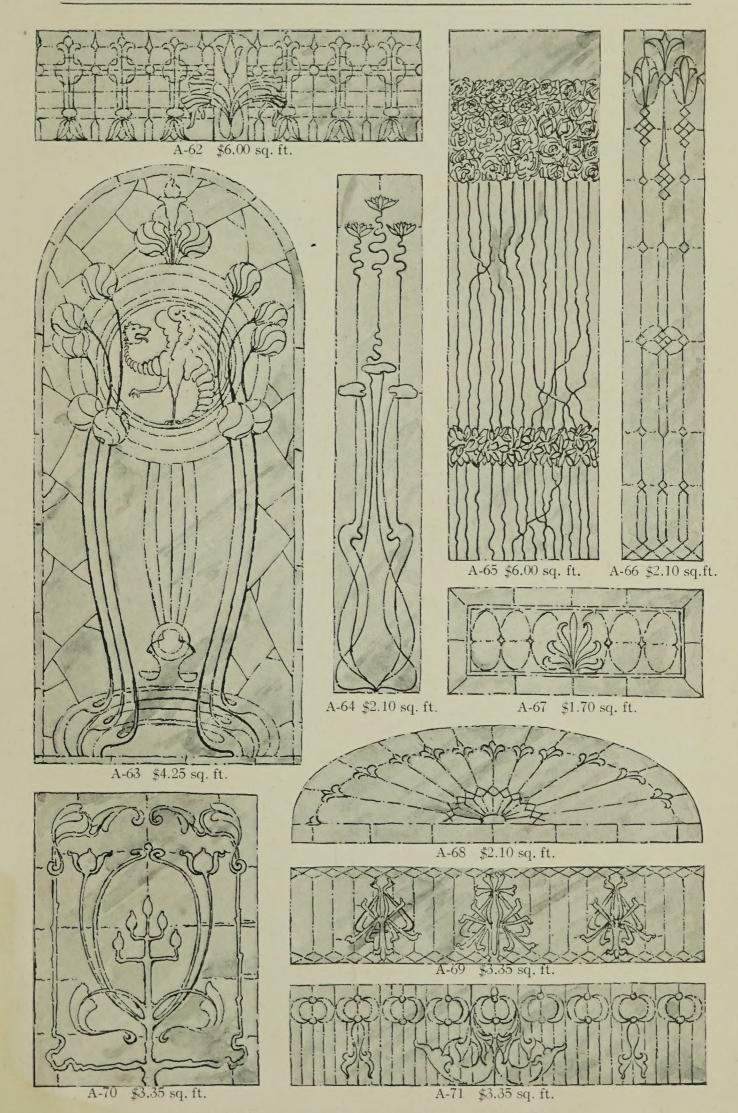
Geometrical Shaped Clear Leaded Glass
These may also be furnished in Colonial, etc., same as shown on preceding page Special attention is called to the fact that these designs are absolutely new.

A-47 95c sq. ft.



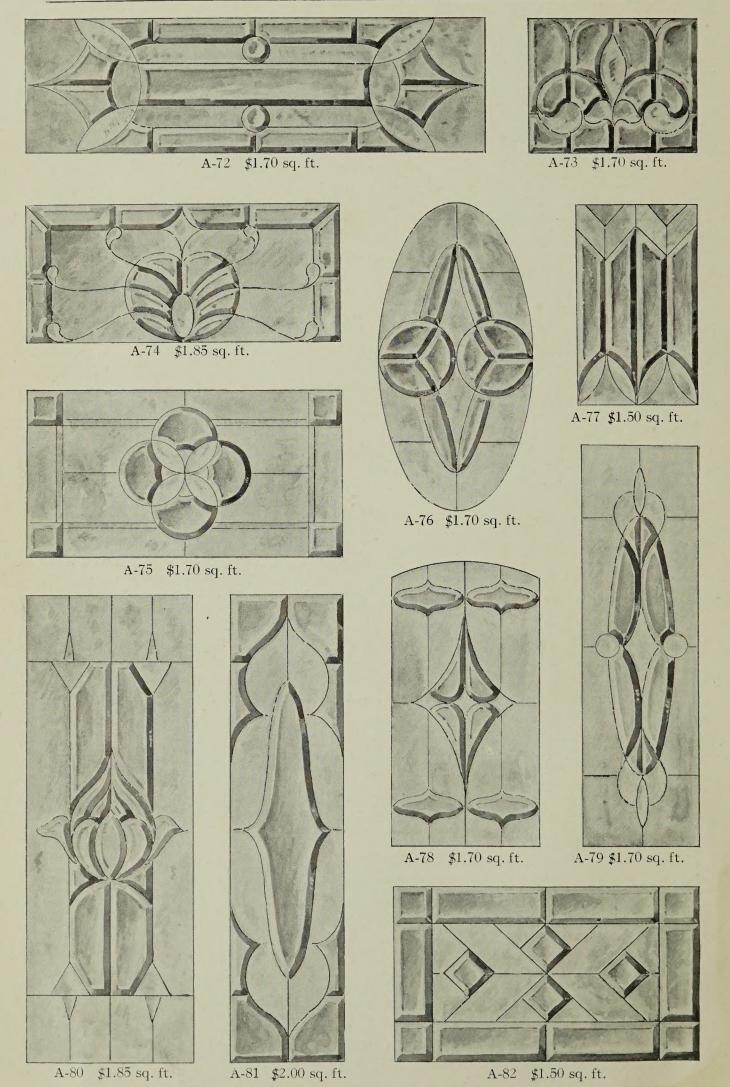
Clear Crystal Sheet and Crackeled Glass

Elaborate designs. For beauty these have never been excelled in this class of work

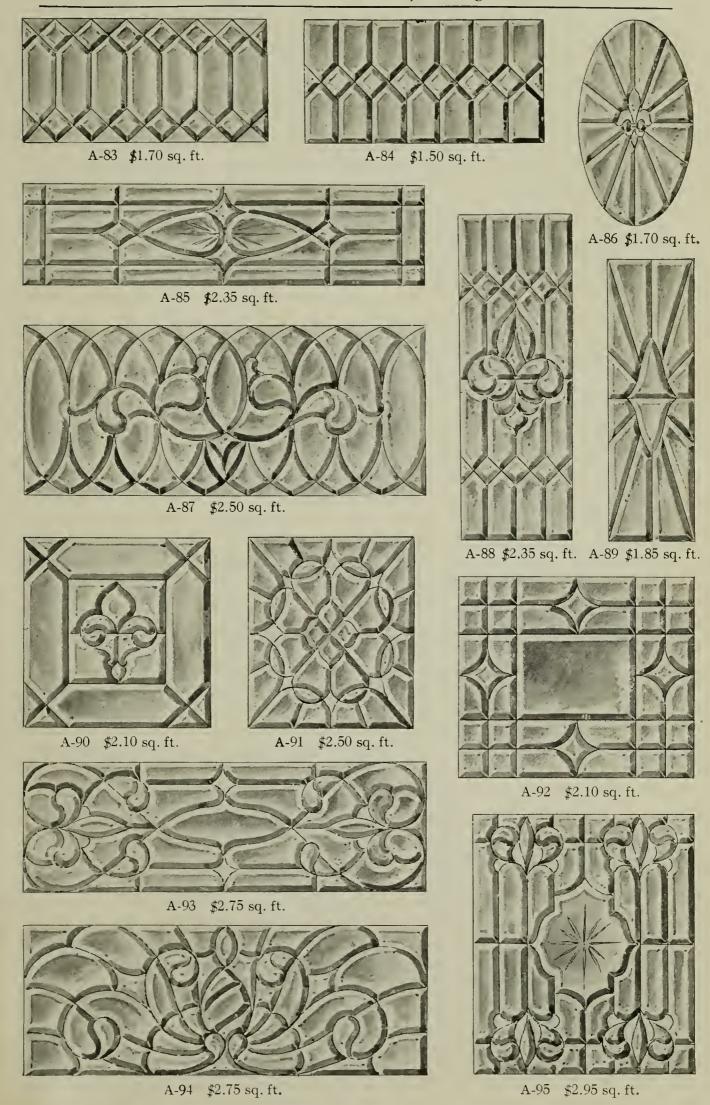


Leaded Crystal Sheet and Crackled Glass

Most intricate shapes—the embodiment of high designers' art

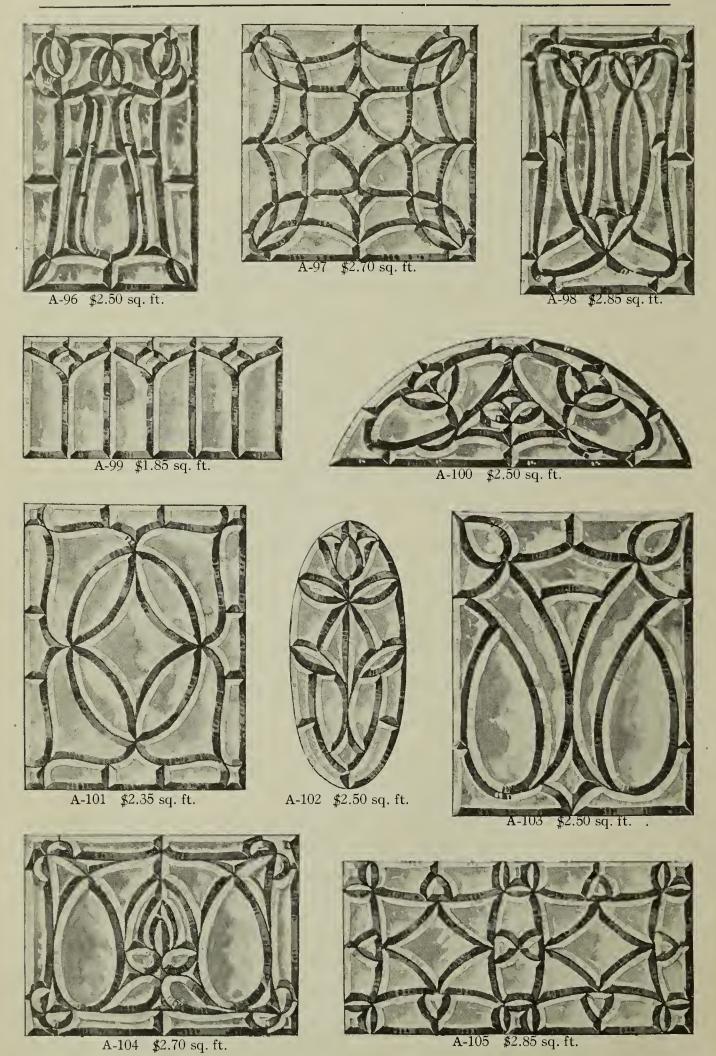


New Designs of Leaded Crystal Sheet Glass and Beveled Plate Glass



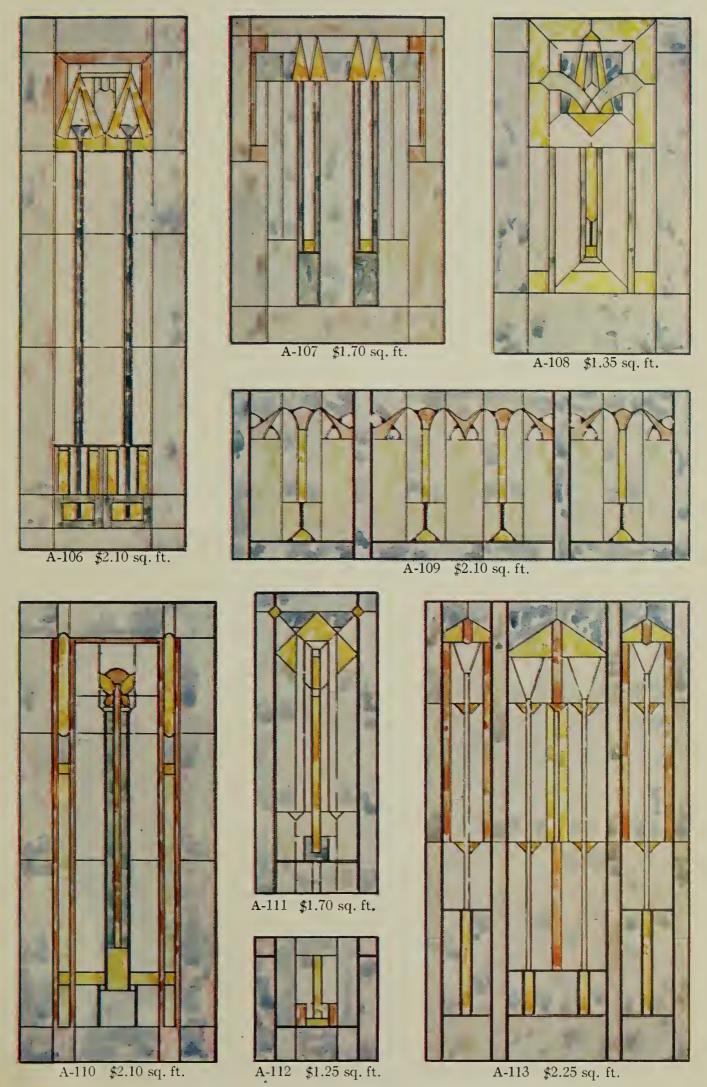
## Leaded Beveled Plate Glass

The most intricate and harmonious designs yet offered If set in copper instead of lead, 50 cents per square foot additional



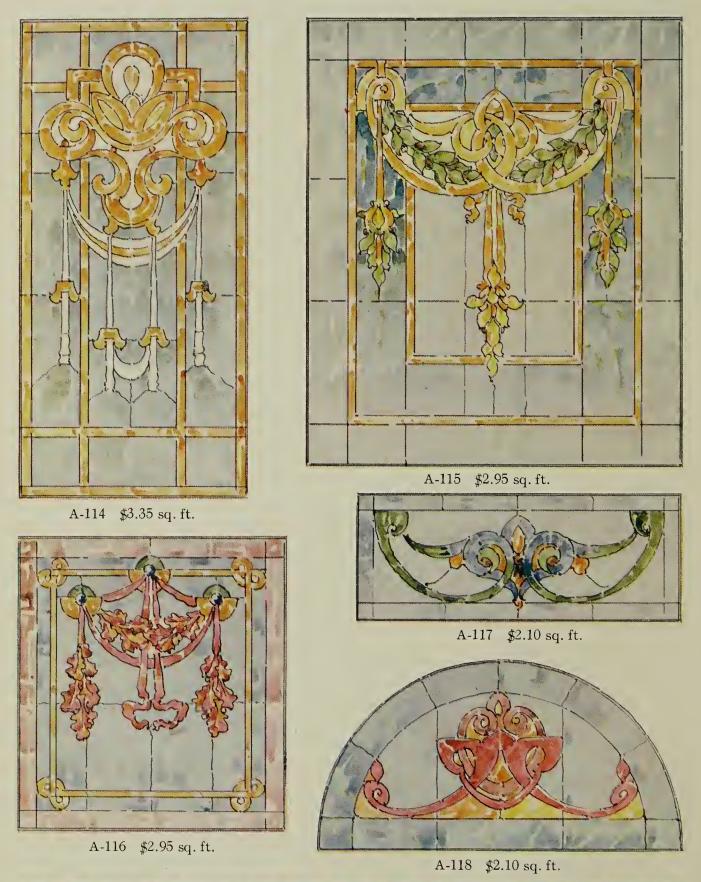
Perfectly New, Elaborate Designs of Leaded Beveled Plate Glass

If set in copper instead of lead, 50c per square foot additional



Designs from Ancient Egypt

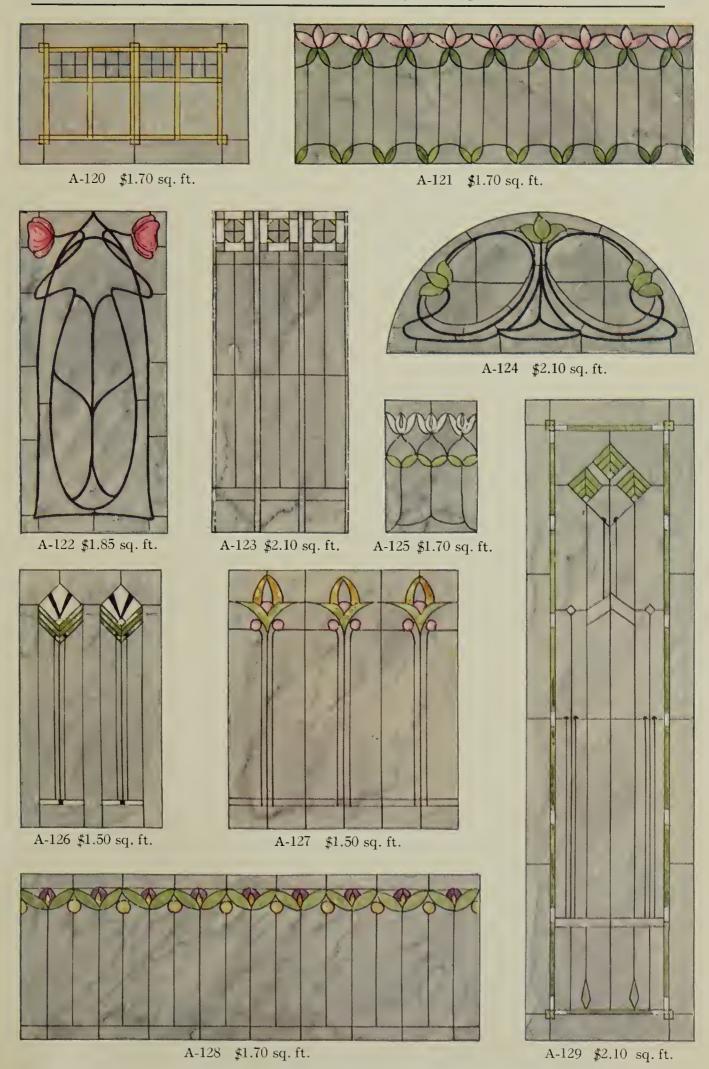
Odd and attractive Made of lightly tinted, variegated and opal cathedral glass, leaded



A-119 \$3.50 sq. ft.

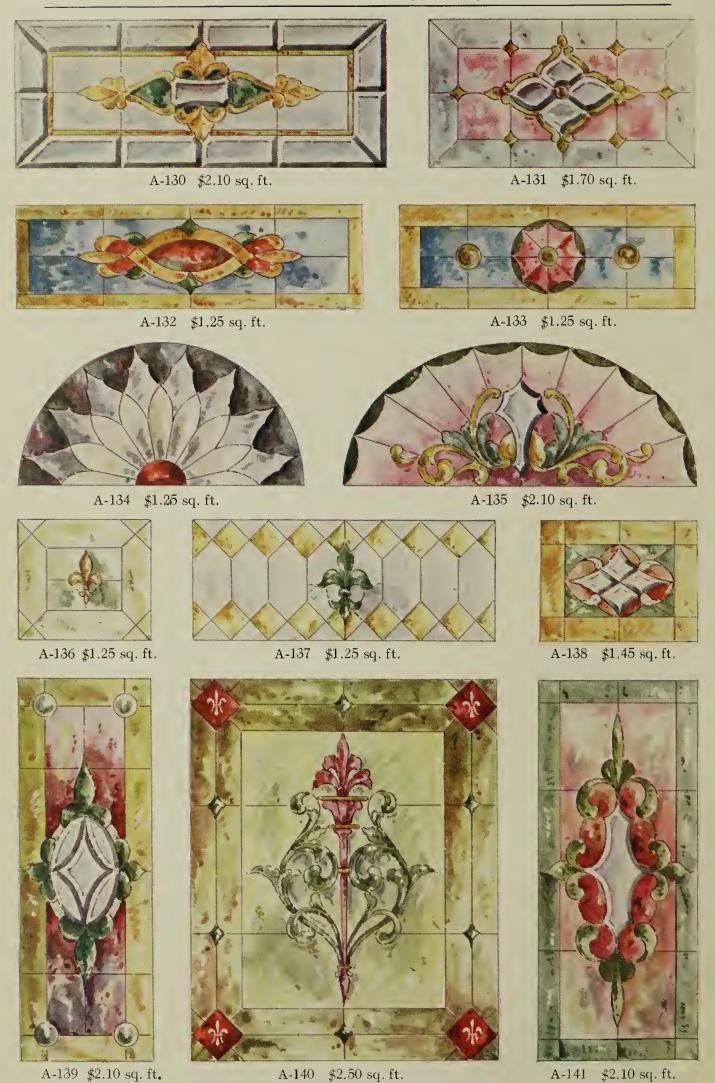
## Variegated Cathedral and Opalescent Leaded Glass

Light tints. In graceful designs



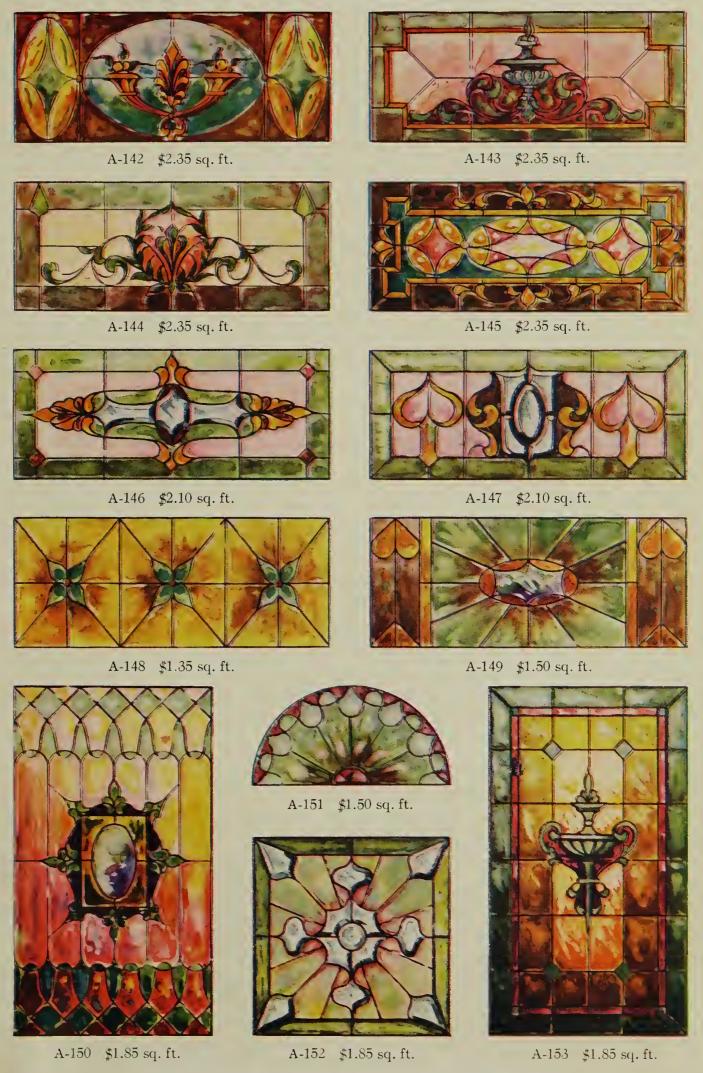
Leaded Crystal Sheet Glass, Varied with Black, White and Colored Opalescent Glass

Beautiful designs, drawn in charming taste



Colored Opalescent and Variegated Cathedral Glass Designs

Leaded. Very attractive. Some of them with beveled plate glass, as shown



Leaded Opalescent and Beveled Plate Glass

Warm colors, harmoniously arranged



A-154 \$2.10 sq. ft.



A-155 \$1.70 sq. ft.



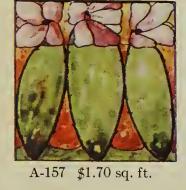
·A-156 \$2.50 sq. ft.



A-158 \$3.00 sq. ft.



A-159 \$2.50 sq. ft.





A-160 \$2.50 sq. ft.



A-161 \$2.50 sq. ft.



A-162 \$2.50 sq. ft.

Richly Colored Leaded Opalescent Glass

The glass itself must be seen to be fully appreciated

\$2.35 sq. ft.

A-167

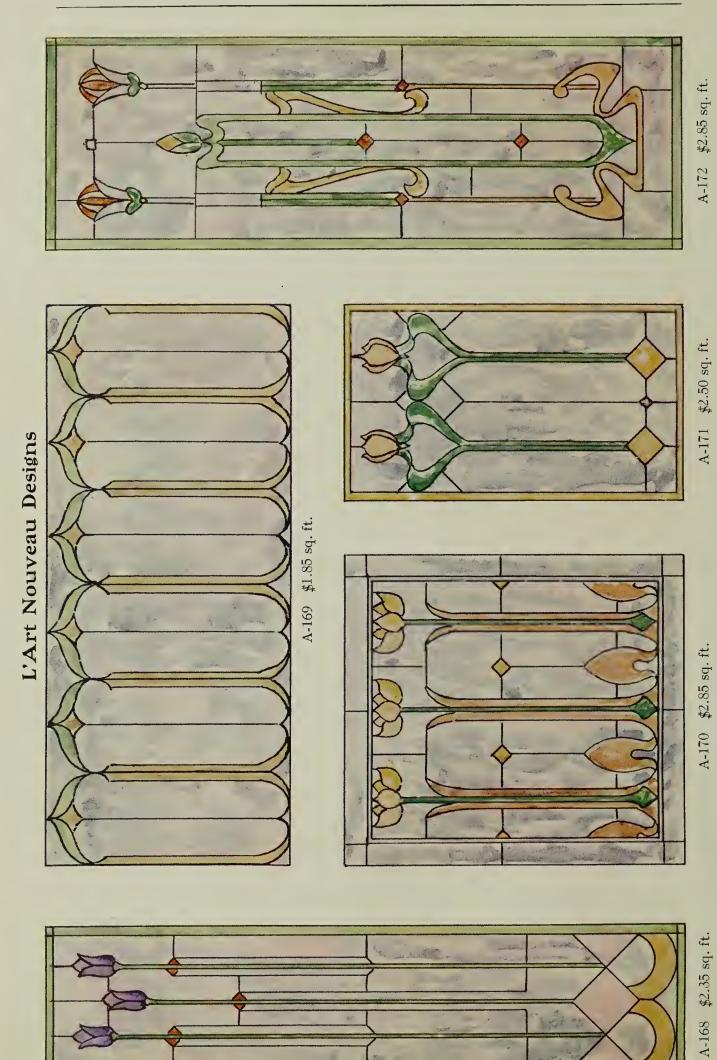
A-166 \$3.15 sq. ft.

## A-164 \$2.80 sq. ft. L'Art Nouveau Designs

The above is our very latest "Parisian" work of art, by our most skilled artist. Made up in opalescent and medium and light tints. Cannot be excelled in artistic point of beauty

A-165 \$3.15 sq. ft.

A-163 \$3.60 sq. ft.

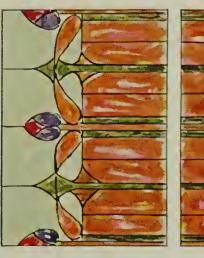


Our very latest "Parisian" designs. Made up in light tints; used for doors, transoms, dining-room windows, etc. None like them on the market. The above is far excelled when seen in reality

## L'Art Nouveau Designs



A-175 \$4.50 sq. ft.





A-174 \$2.25 sq. ft.

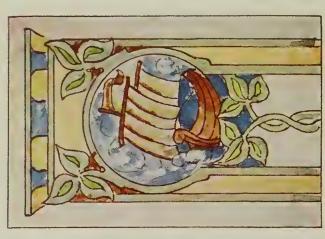


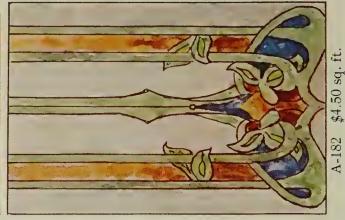
Made up in opalescent and variegated glass. They are carried out in a way far superior to that represented above



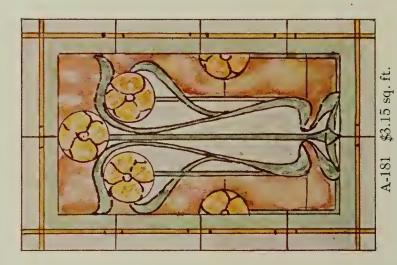
A-176 \$4.50 sq. ft.

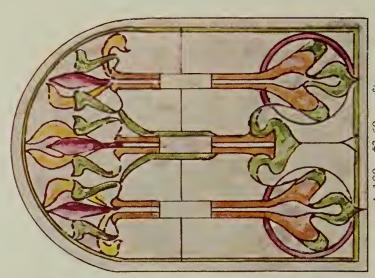
## L'Art Nouveau Designs

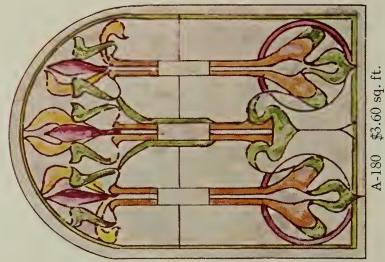




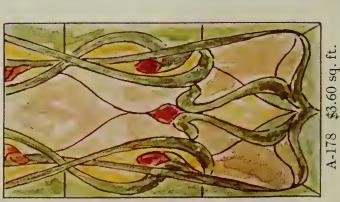
A-179 \$3.60 sq. ft.



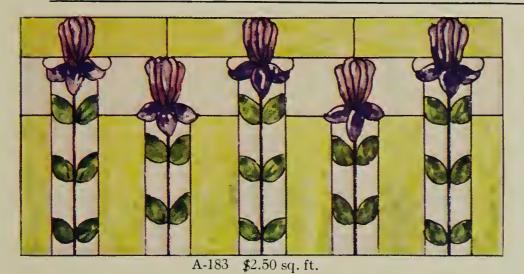






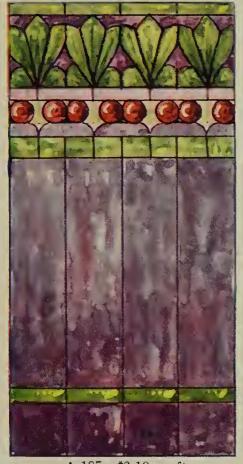


Made up in opalescent, medium and light tints, and carried out in the most artistic manner





A-184 \$2.10 sq. ft.



A-185 \$2.10 sq. ft.



A.186 \$2.50 sq. ft.



A-187 \$2.10 sq. ft.



A-188 \$2.10 sq. ft.



A-189 \$2.10 sq. ft.

## Richly Colored Leaded Opalescent Glass

Quaint shapes. Note the arrangement and contrast of colors. Very effective when made up



## Opalescent Glass, Leaded

We submit these designs as being the newest and best produced. Much more effective when the glass itself is seen



A-199



A-201



A-202



A-200



A-203



A-204

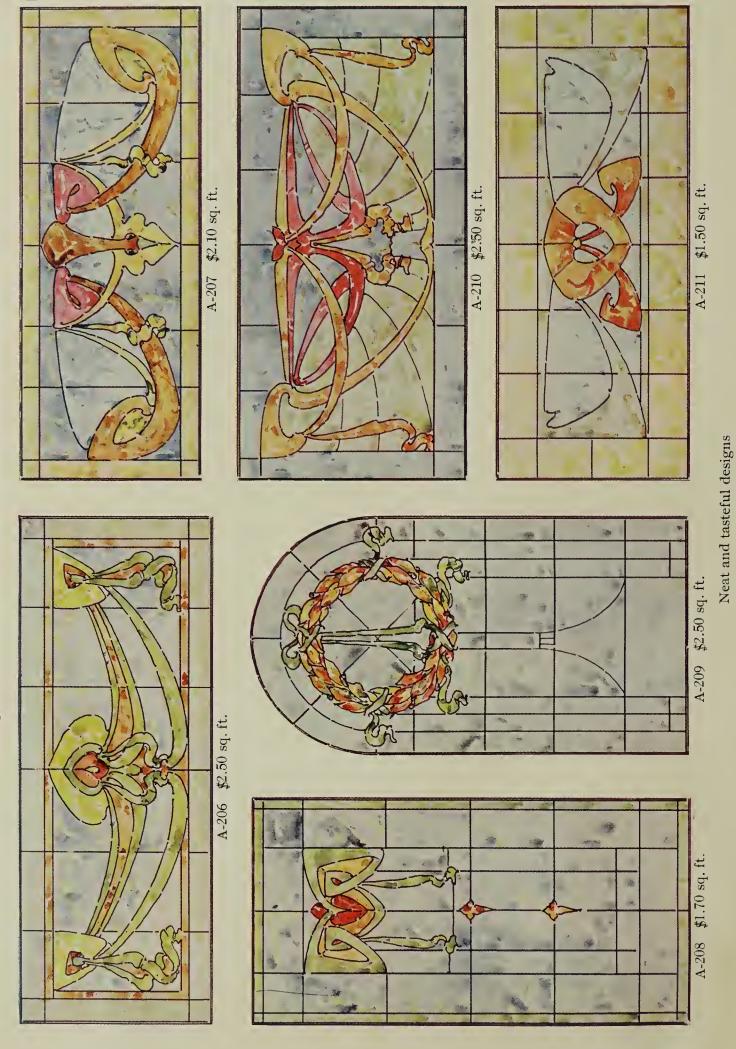
A-205

The Artist's Dream

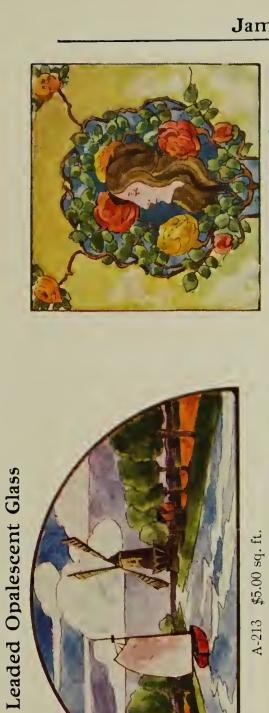
Absolutely the highest and best in the glass man's art. The product of years of study and progress, and can be seen best in all its beauty in the glass itself

Prices and information on application

# Variegated Cathedral and Opalescent Leaded Glass



A-217 \$5.00 sq. ft.



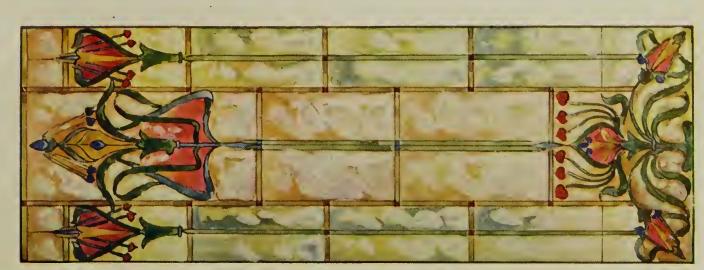
A-213 \$5.00 sq. ft.

\$10.00 sq. ft. A-214



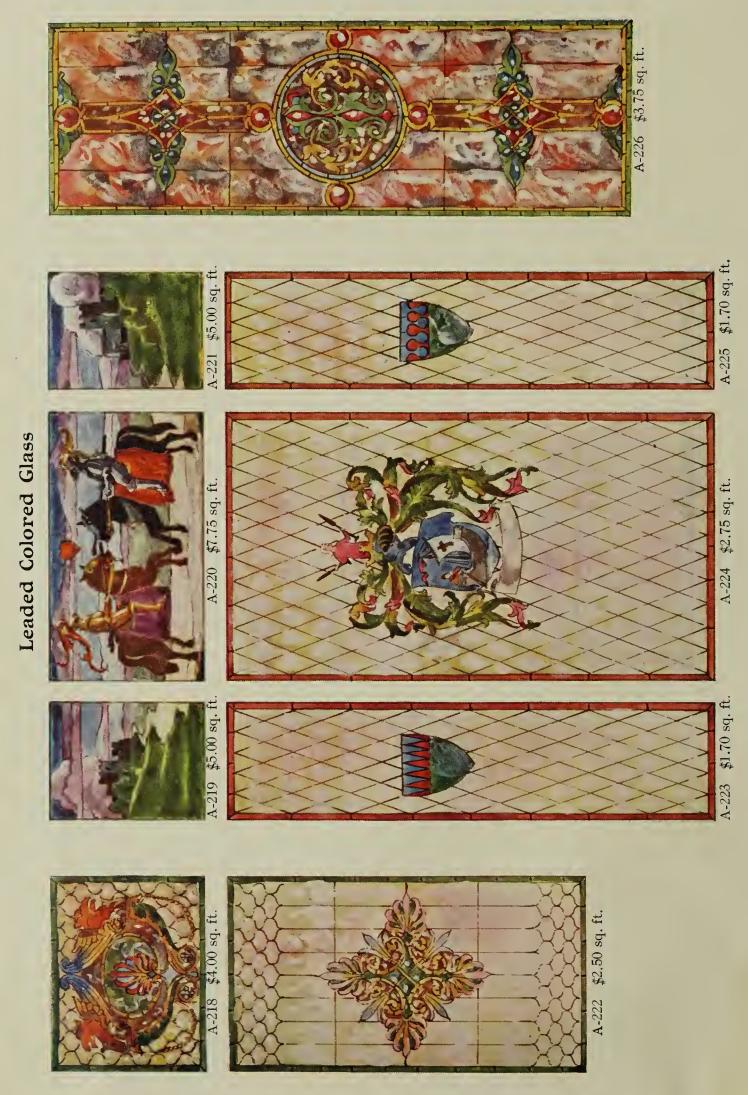
A-215 \$3.75 sq. ft.

A-216 \$5.00 sq. ft.



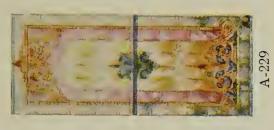
A-212 \$3.75 sq. ft.

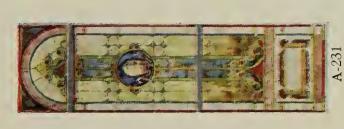
Examples of the best in Holland's art, which need no words of commendation. Very effective when made up



Descriptive of medieval times, giving the most pleasing effects





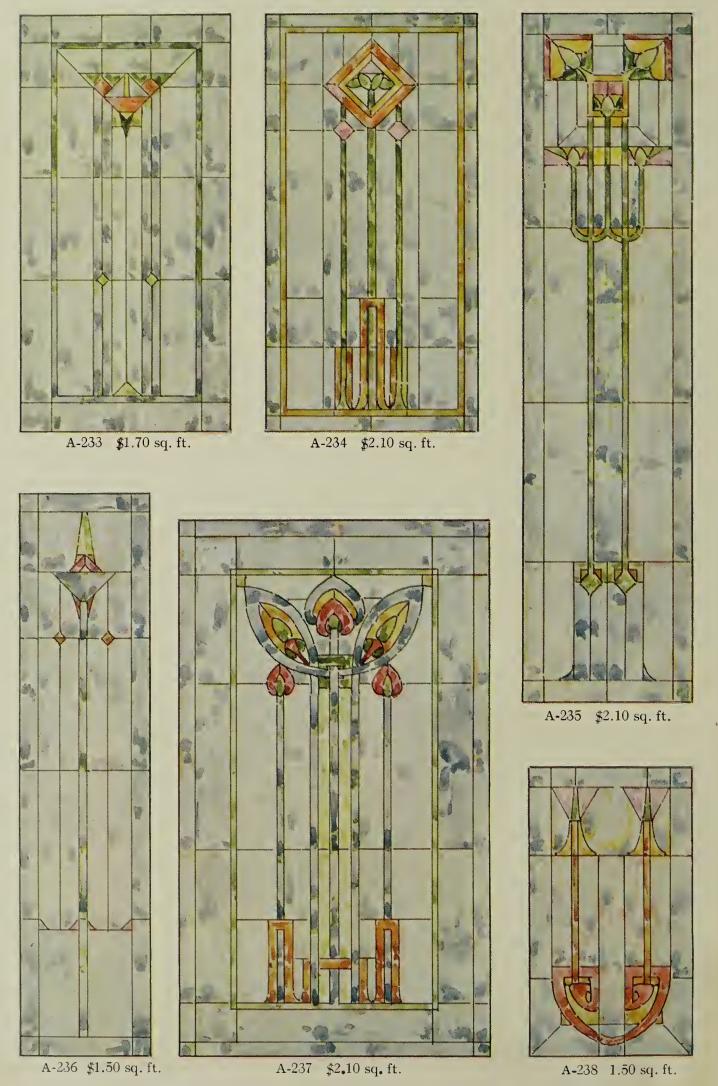






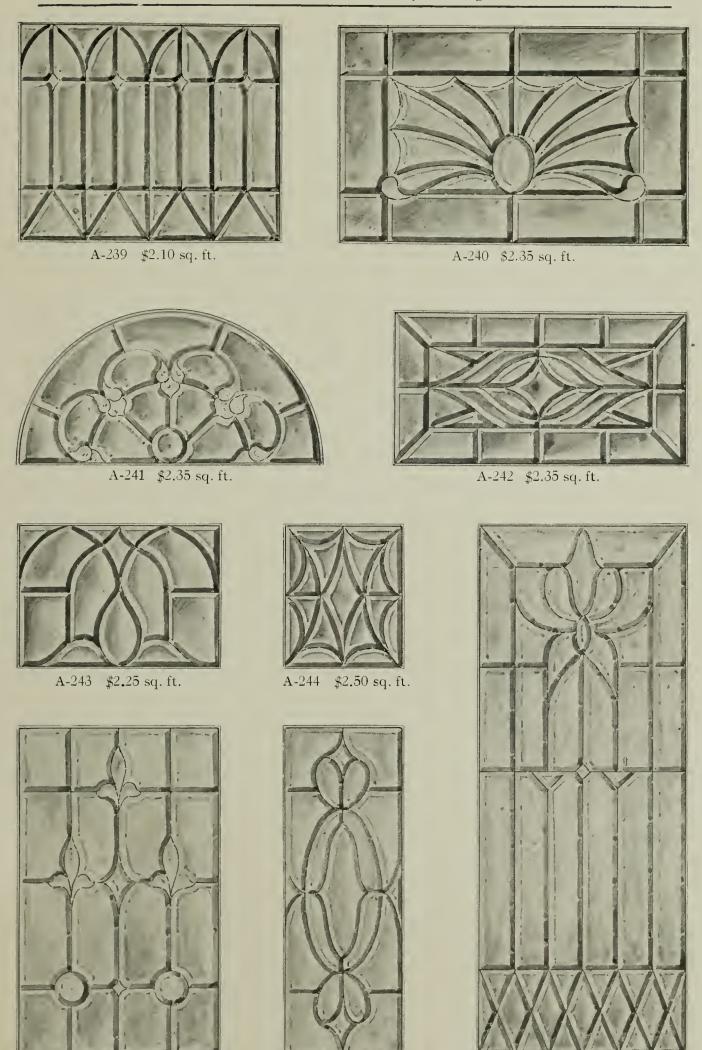


These church designs represent the apex of our artists' abilities, the best that can be offered. We are free to let the designs speak for themselves, confident that the impression created will be good Prices and information on application



Leaded, Variegated and Opal Cathedral Glass

Symphonies of color, in majestic designs



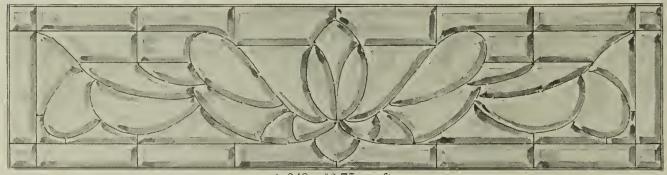
New Leaded Beveled Plate Glass Designs

A-246 \$2.35 sq. ft.

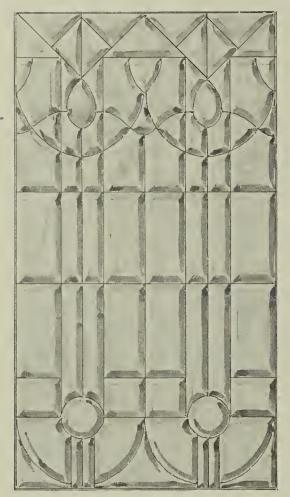
A-247 \$2.25 sq. ft.

A-245 \$2.35 sq. ft.

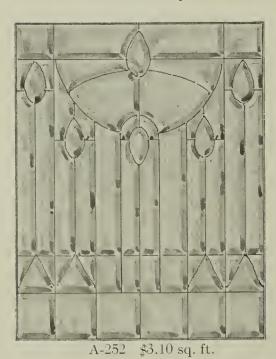
If metal-coppered sash, add 50 cents per sq. ft. to above prices



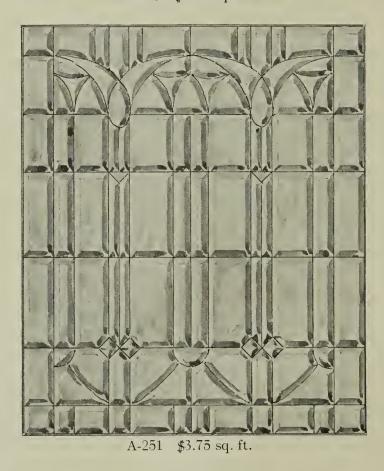
A-248 \$2.75 sq. ft.



A-250 \$3.10 sq. ft.



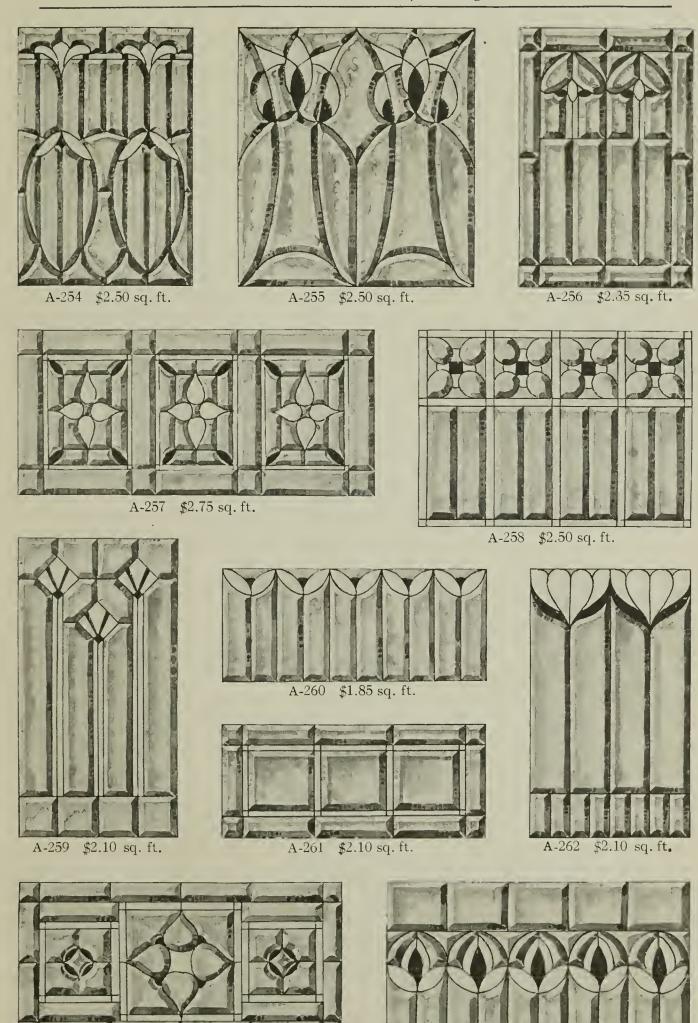
A-249 \$2.50 sq. ft.



A-253 \$3.35 sq. ft.

### Leaded Beveled Plate Glass

In accurately proportioned designs
If metal-coppered sash, add 50 cents per sq. ft. to above prices



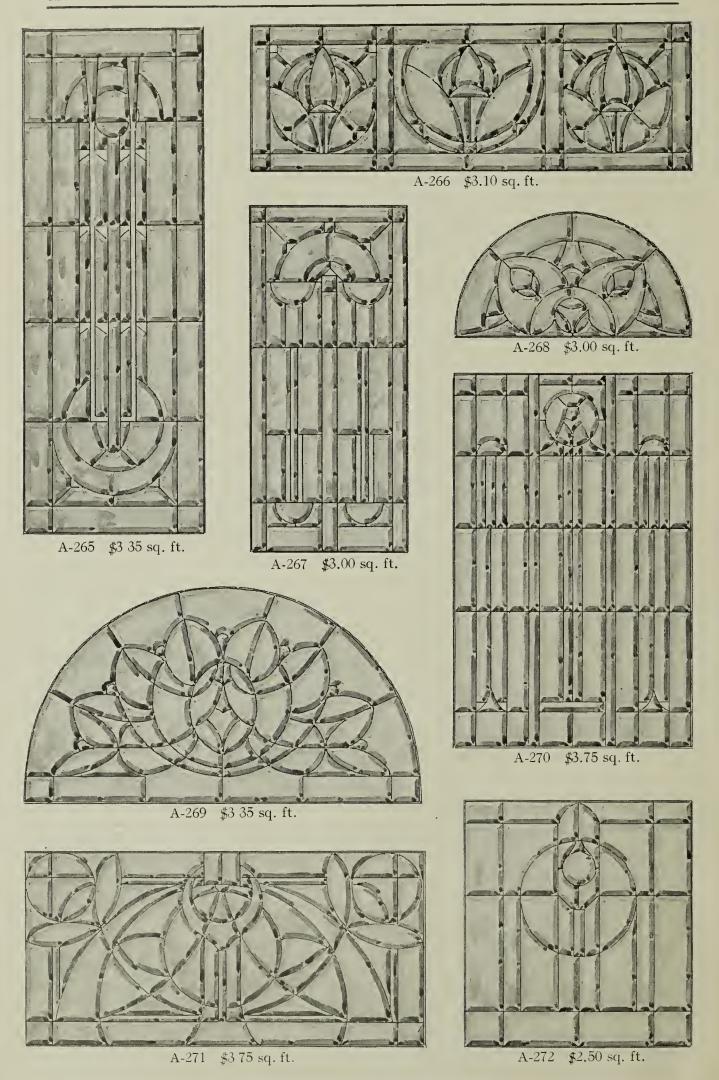
Leaded Beveled Plate Glass, with White and Black Opal Glass Trimmings

A-264

\$2.35 sq. ft.

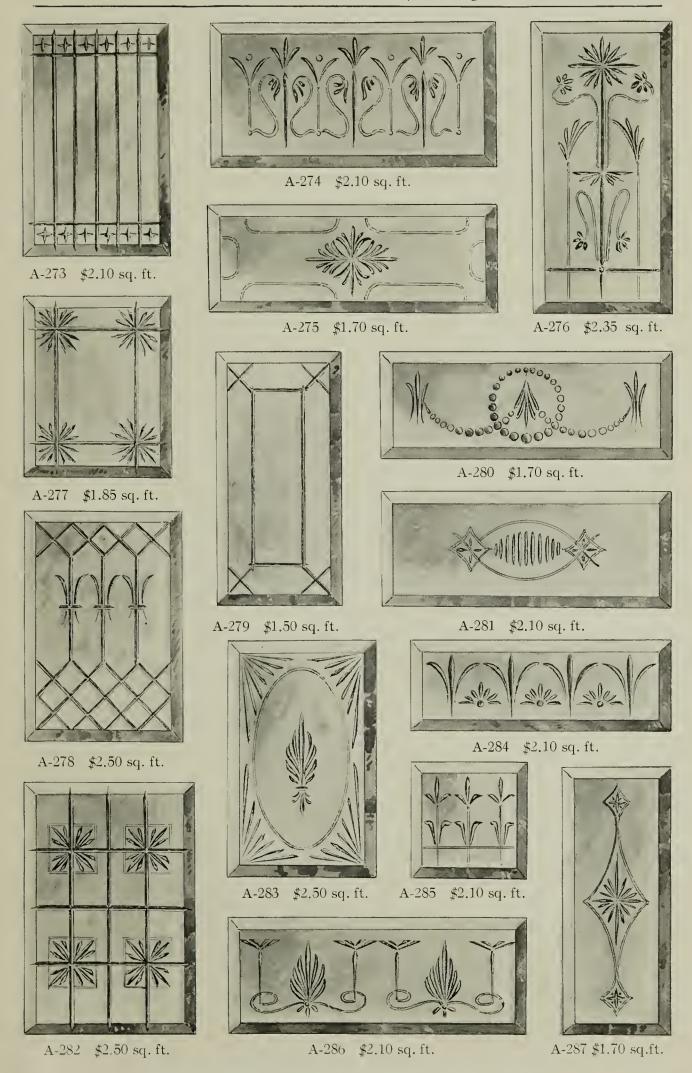
A-263 \$2.50 sq. ft.

New and approved designs
If metal-coppered sash, add 50 cents per sq. ft. to above prices



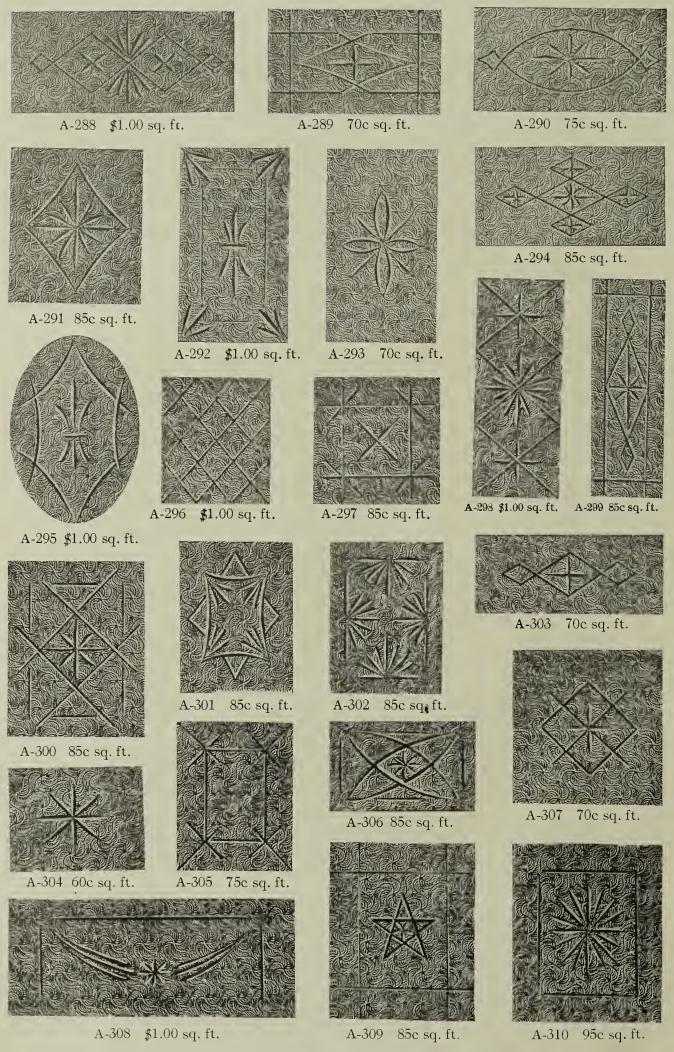
### Leaded Beveled Plate Glass

We challenge all competitors to produce the equal of the above designs
If metal-coppered sash, add 50 cents per sq. ft. to above prices



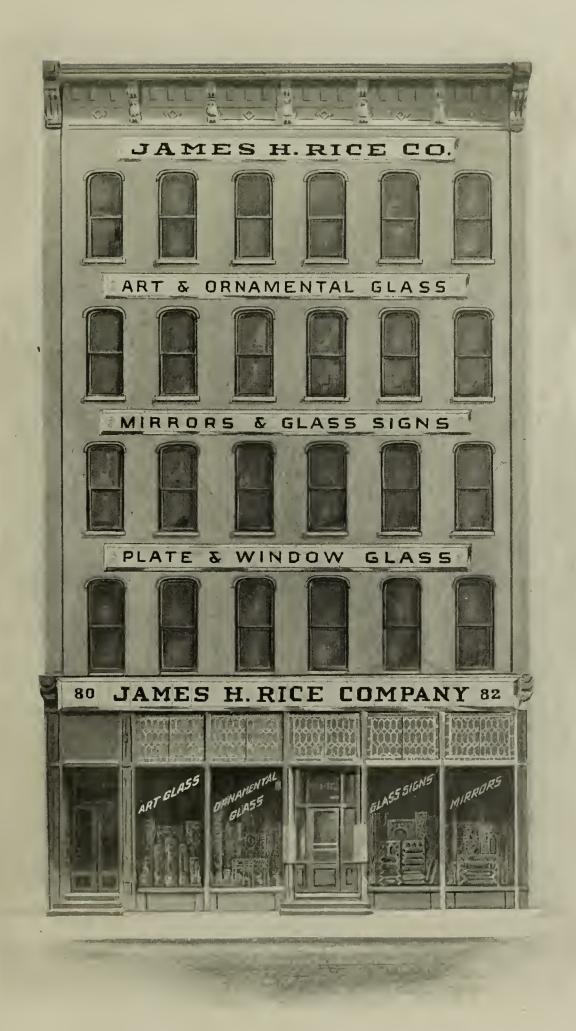
## Rich Polished Cut Plate Glass, Mitered

New and correct designs. Very proper for doors, side lights, transoms, etc.



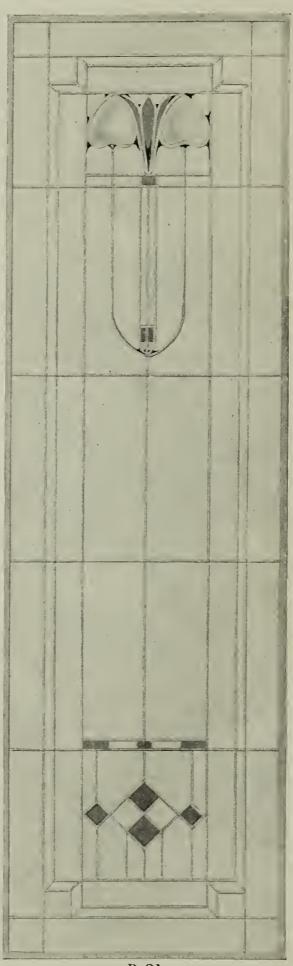
The Latest Maze Glass

Mitered (rich cut glass), with pleasing designs



Office and Salesroom: 80 and 82 Wabash Avenue Opposite Marshall Field & Co.

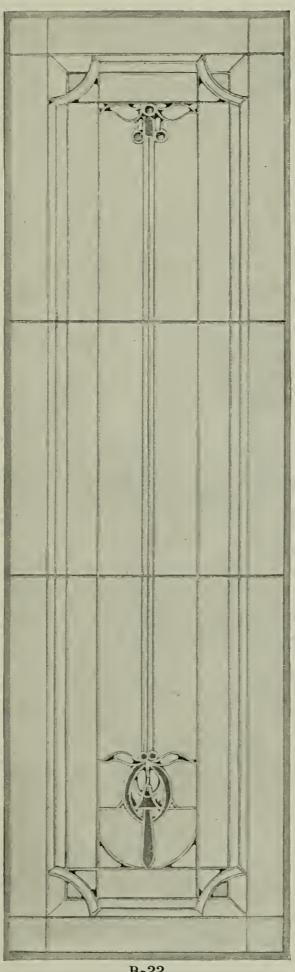
One of the most artistic designs on the market



B-21

Price \$3.75 per square foot, set in metal Made up in colors suitable for room where used Background carried out in crystal plate

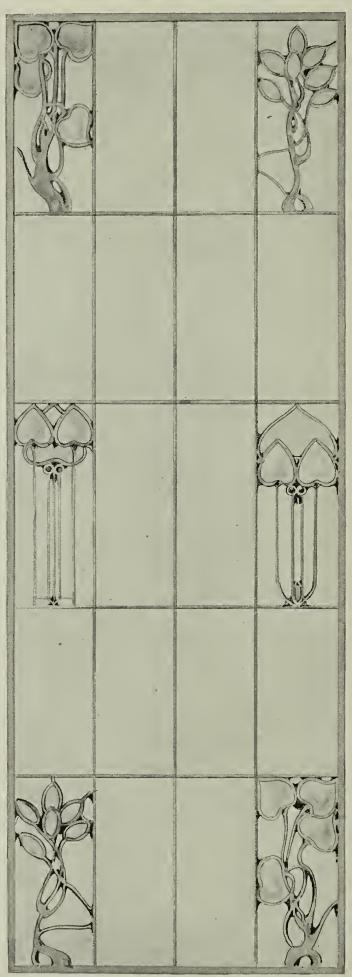
One of the most artistic designs on the market



B-22

Price \$3.75 per square foot, set in metal Made up in colors suitable for room where used Background carried out in crystal plate

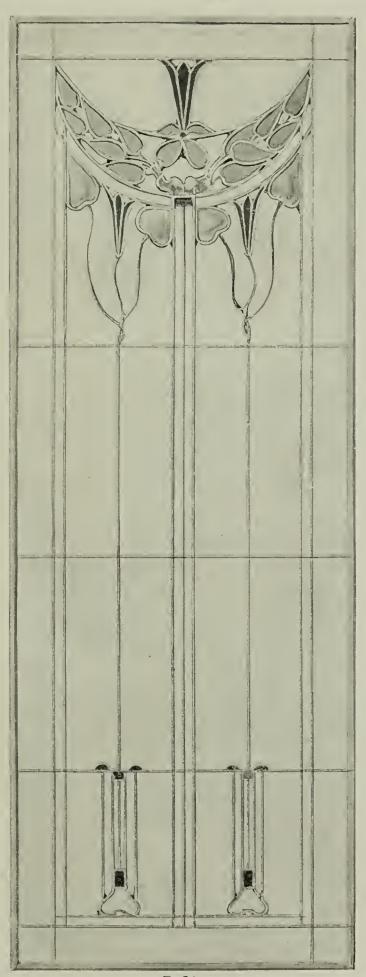
One of the most artistic designs on the market



B-23

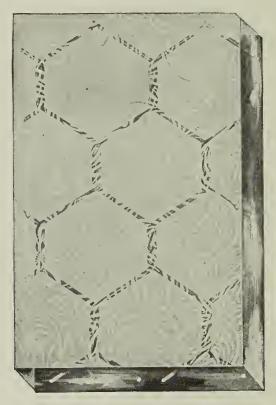
Price \$4.25 per square foot, set in metal Made up in colors suitable for room where used Background carried out in crystal plate

One of the most artistic designs on the market



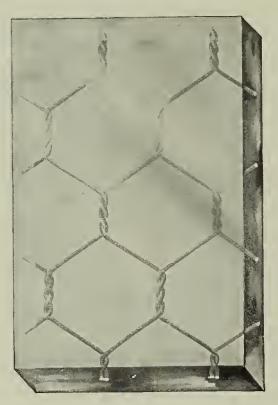
B-24

Price \$5.50 per square foot, set in metal Made up in colors suitable for room where used Background carried out in crystal plate



C-12 Maze Wired Glass

¼ and ¾ inch thick, up to 40 inches wide and 100 inches long ¼ inch cut to size, 40c per square foot ¾ inch cut to size, 50c per square foot

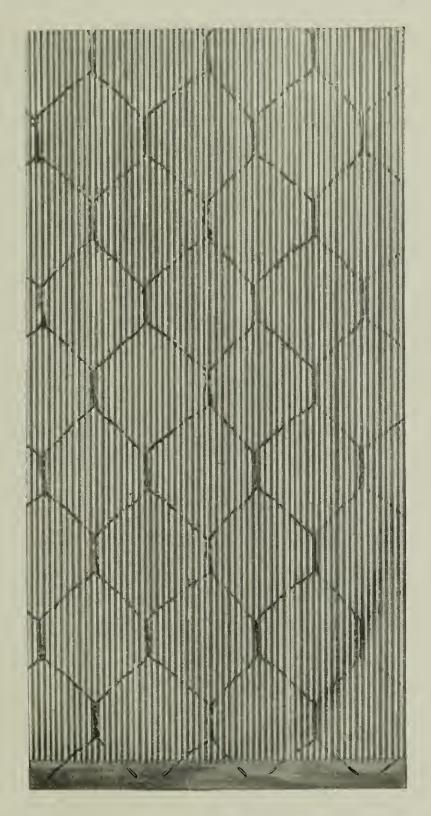


C-13 Polished Wire

Up to 40 inches wide and 100 inches long Polished in ¼ inch thick only Prices on application Same as page 46

- "Wire Glass—the approved Fire Stop."
- "Wire Glass—reduces Fire Hazard."
- "Wire Glass—the best for Skylights."
- "Wire Glass—the Underwriters recommend it."
- "Wire Glass—obtains minimum fire rates."
- "Wire Glass-stops draft and flame."
- "Wire Glass Windows lessen labor, save heat, reduce insurance rates."
- "Wire Glass Windows replace metal shutters, save space and always protect."
- "Adequate Fire Protection provided by Wire Glass Windows."
- "Conflagration Hazard reduced by Wire Glass."
- "Specify Wire Glass Windows and reduce your Insurance Rates."
- "Wire Glass retards Fire without hiding it."
- "Fire Hazard" and "Break Hazard" are reduced by using Wire Glass."
- "Wire Glass can't scatter when broken."

Used in Buildings of Every Description. Also Used for Diffusion of Light-see page 98



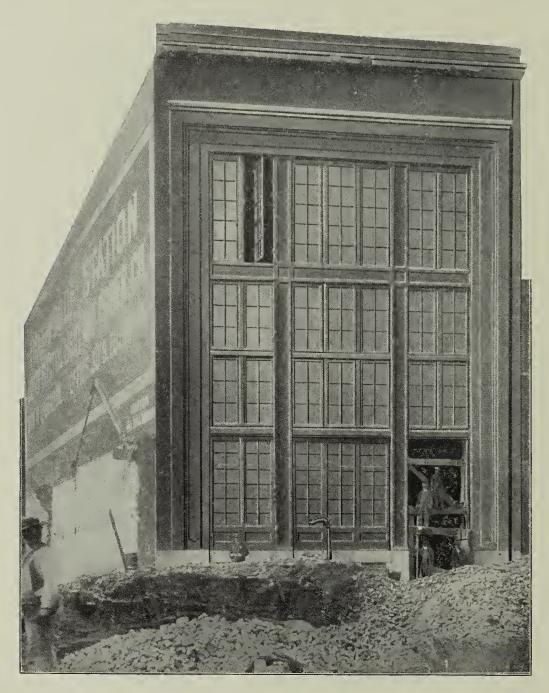
C-14 Ribbed Wire—¼ inch is standard thickness

1/8, 1/4 and 3/8 inch thick, up to 40 inches wide and 120 inches long (except 1/8, in which 40x84 inches is extreme)

1/8 cut to size, 30c per square foot

¼ cut to size, 40c per square foot

3/8 cut to size, 55c per square foot



United Electric Light and Power Company's." Transformer" Station

"The Baltimore buildings failed through their windows because they were not, as a rule, properly protected. \* \* \* I saw no metal window frames save in a building to the north of the Hurst store where the fire began. One of the wire glass windows was gone here, but the others were in good condition."

Ira H. Woolson, E. M., Columbia University.

"The accompanying photograph shows the present condition of the front of the building. It will be noticed that the wire glass, with its metal frames and sash, occupies a very large part of the surface. Some of the windows were broken by falling walls. The building escaped practically uninjured and served as a shield for the low brick building adjacent to it on the leeward side, as shown in the engraving."

Engineering News.

"Wire Glass has saved us many times its cost and is in all respects satisfactory"
United Electric Light & Power Co.

Note.—Sign painted on wall immediately after the fire.

### A Leaf from "A Reconnaissance of the Baltimore Fire District"



Continental Trust Building-Court View

"The fireproof buildings of Baltimore developed some important defects. Had these not existed the buildings might in numerous instances have escaped serious damage as well as proved barriers to the spread of the flames. The chief defect was want of proper protection from the outside. None of the fireproof buildings damaged or destroyed were supplied with wire glass or metallic frames. The absence of these permitted the flames to secure an entrance into the buildings through the exposed windows. They passed through and out on the other side only to communicate with some adjoining or nearby building."

John H. Packard, Jr., Vice-Pres. American Fire Insurance Co.

"The buildings found standing, after the fire, in which business could be transacted, were the buildings in which wire glass had been employed to protect openings in roofs and walls."

### Wire Glass Testimonial Bearing on Baltimore Fire

"The lesson to be drawn is that no building, no matter how fireproof its construction may be, can be expected to protect its contents unless the window openings are covered to prevent the entrance of the flames through them. Ordinary window glass breaks with the heat of a fire across the street; and, when the fire once enters upon any floor, the opened windows on the floors below and above turn the building into a chimney, the flues of which are the stair and elevator walls. \* \*

"There are evidences of wire glass being an efficient protection, of the glass cracking badly and the wire holding same together, which is all that is claimed for it. This was the case in a number of skylights. \* \* \*

"One of the surprises was the failure of the tin-clad fireproof shutter, such as advocated by the Board of Fire Underwriters. They apparently failed because of the many points on the surface. In most cases nothing but the empty shells, twisted in all sorts of shapes, remain."

Expert in Engineering News.

### Testimonial of Architect for Chicago World's Fair

"In many instances wire glass gave sufficient evidence of being fire-proof material and, where it is properly set in a rivited copper frame and sash, it affords the best possible protection that can be placed in an opening. It is especially to be recommended for use in skylights and windows for warehouse and factory buildings; and in the latter case a great deal of initial expense and labor is saved when compared to the cost of furnishing iron shutters and the daily expense incurred in opening and closing these shutters, besides the cost of keeping the iron painted. Again, in case of fire inside of a building at night or Sundays, the firemen can see where it is located from the outside, which they could not do if the building had iron shutters, as these would be closed. When fire attacks this glass it will crack, but no portion of it will fall out, so that the fire will not be fed with fresh air coming in through the openings. Furthermore, if necessary, the firemen can readily cut out as much of this glass as they see fit."

D. H. Burnham, Architect, Chicago.

# A Few Words Concerning Polished Wire Glass

THE changes and steps toward advancement, in which both the demand for and the manufacturing ability to supply wire glass, have been so rapid in recent years that it has, at times, embarrassed even us to keep mental pace with them.

In view of this it is not strange, then, that somewhat well defined and very general misapprehensions should have been engendered concerning our product in the minds of those not brought so closely into contact.

We have received a number of earnest, we might say fervid, complaints regarding the comparative appearance of polished wire glass and ordinary polished plate glass.

We think the basis of such complaint lies in the misapprehension of both the function of polished wire glass and the properties claimed for it by this company.

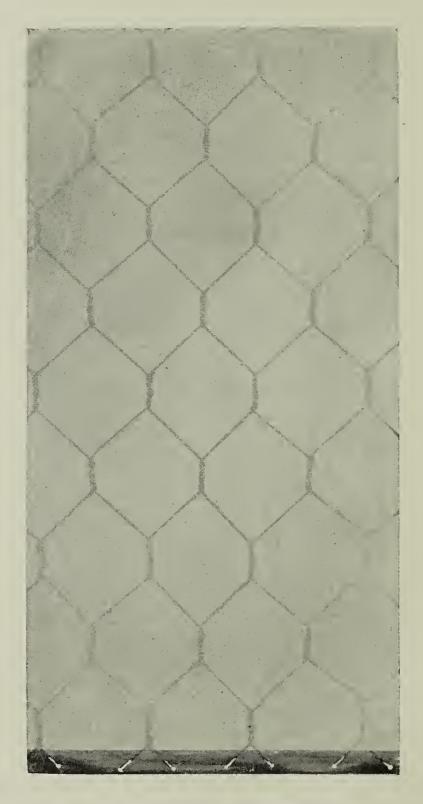
Polished wire glass had its origin in a positive necessity for a finished fire retardant glass for high-class buildings. The various semi-transparent forms of wire glass were already on the market and their efficiency demonstrated and realized. With the general progress of the science of fire protection, a comprehension of the necessity for completeness was obvious, and, when the demand came for a transparent, fireproof glass, polished wire glass was the result.

It was never claimed, nor was it ever anticipated by the makers, that polished wire glass should compete with polished plate glass in appearance. Its method of manufacture, together with the presence of the wire mesh, fundamentally precluded this.

Referring for a moment to the process of manufacture: Polished plate and polished wire glass differ only in the method of casting—polished plate glass being "teamed" or poured, polished wire glass, of necessity, being "ladled." All ladled glass bears imperfections which do not appear in polished plate glass, by reason of the difference in casting. Precisely the same method is employed for polishing the plates produced by both processes, and the surfaces are equally perfect.

The demand for polished wire glass is daily increasing, because it is essential to accomplish that completeness of fire protection toward which the science is rapidly approaching.

For Buildings of Every Description

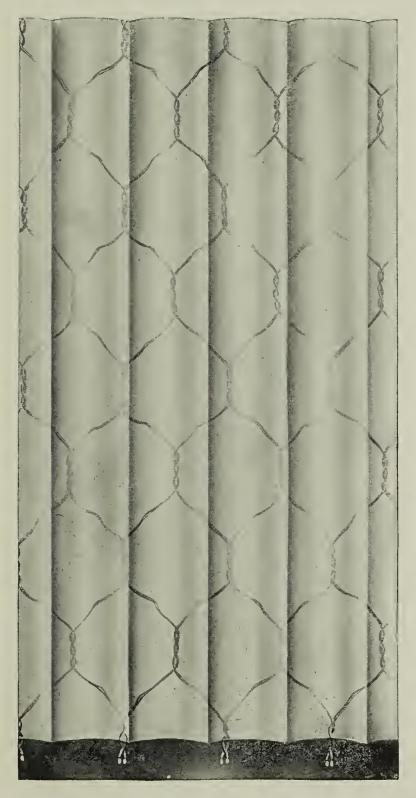


C-15 Polished Wired Glass

(See also C-13)

1/4 inch thick, up to 40 inches wide and 100 inches long Prices on application

For Buildings of Every Description

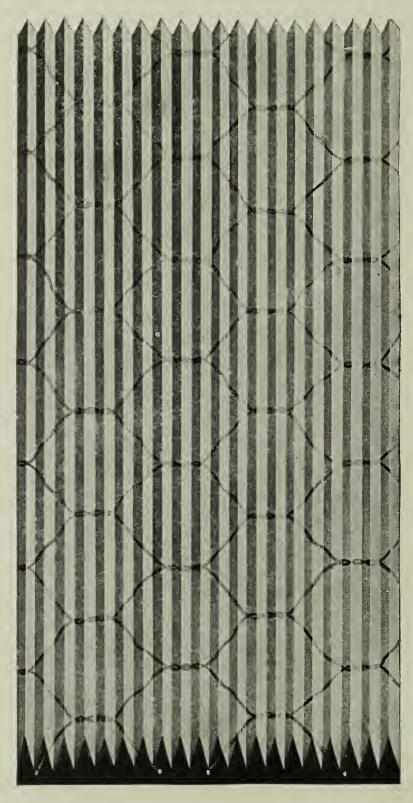


C-16

### Lenticular Wire Glass-% inch thick

Cut sizes up to 30x72Cut to any size, 50c per square foot Admits as much light as ribbed glass

For Buildings of Every Description

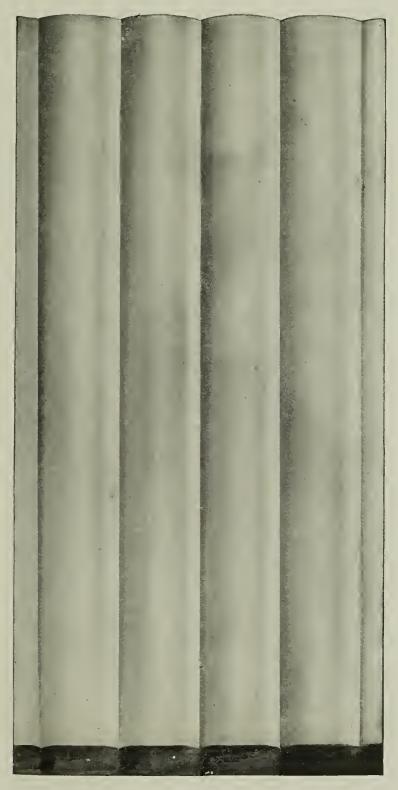


C-17

# Prismatic Wire Glass—¼ inch thick

Cut sizes up to 30x72Cut to any size, 90c per square foot
Light greatly increased over plain ribbed wire by using above. Suitable for lighting basements, stores, skylights, etc.

# For Skylights, Etc.



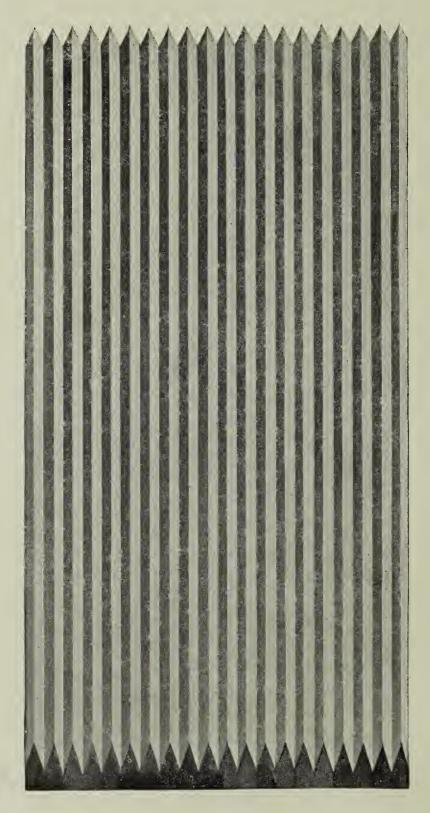
C-18

### Lenticular Skylight Glass-% inch thick

Cut sizes up to 40x80Cut to any size, 40c per square foot Admits as much light as ribbed glass

### Aristo Sheet Prism Glass

The Best Prism on the Market

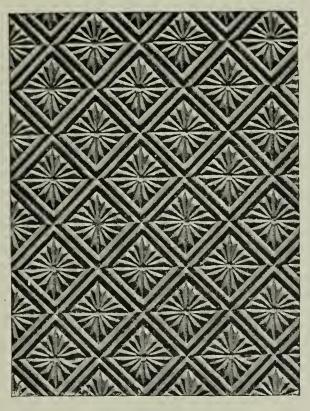


C-19

### Made especially to our order

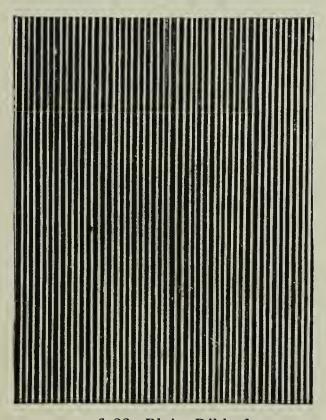
Cut sizes up to 40x72 65c per square foot

For greatly increasing the light for transoms in store windows, basements, skylights, etc.



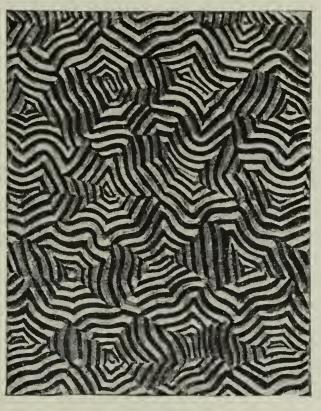
C-20 Pattern No. 1
In white

1/8 and 136 inch thick, up to
42 inches wide
1/8 cut to size, 20c per square foot
1/6 cut to size, 25c per square foot



C-22 Plain Ribbed

1/8, 1/6, 1/4 and 3/8 inch thick
Extreme size, 42 x 120
1/8 cut to size, 12c per square foot
1/4 cut to size, 14c per square foot
1/4 cut to size, 16c per square foot
1/3 cut to size, 20c per square foot



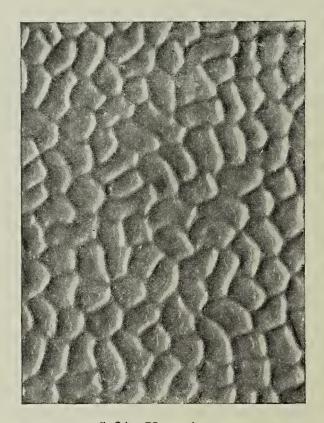
C-21 Pattern No. 2
In white

1/8 and 1/6 inch thick, up to
42 inches wide
1/8 cut to size, 20c per square foot
1/6 cut to size, 30c per square foot



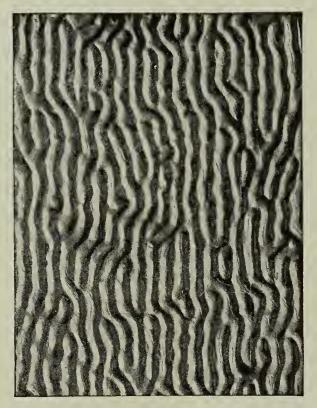
C-23 Syenite
In white

 $\frac{1}{8}$  and  $\frac{3}{6}$  inch thick Extreme size,  $42 \times 110$  $\frac{1}{8}$  cut to size, 20c per square foot  $\frac{3}{16}$  cut to size, 30c per square foot



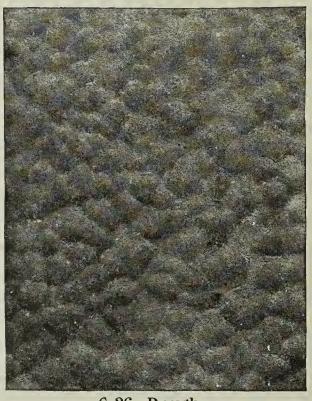
C-24 Venetian
In white

1/8 inch thick, 30 inches wide, cut to size
20c per square foot



C-25 Ondoyant
In white

1/8 inch thick, 30 inches wide, cut to size
20c per square foot



C-26 Rough

1/8, 1/8, 1/4 and 3/8 inch thick
Extreme size, 42 x 100
1/8 cut to size, 10c per square foot
1/3 cut to size, 12c per square foot
1/4 cut to size, 16c per square foot
1/8 cut to size, 20c per square foot



White and colors, 30 inches wide Thin for leaded work (Silver Ripple a specialty) Cut to size, 20c per square foot

For Diffusion of Light see page 98



C-28 Florentine-white or amber color

1/8 and 1/8 inch thick, up to 42 inches wide and 110 inches long 1/8 cut to size, 20c per square foot 1/8 cut to size, 30c per square foot

For Diffusion of Light see page 98



C-29 Maze-white only

 $\frac{1}{8}$  and  $\frac{3}{16}$  inch thick, up to 42 inches wide and 100 inches long

 $\frac{1}{8}$  cut to size, 20c per square foot  $\frac{3}{16}$  cut to size, 30c per square foot

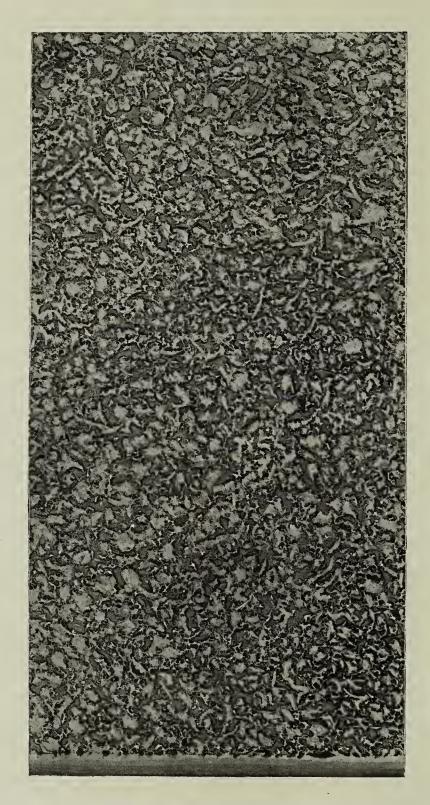
For Diffusion of Light see page 98



C-30 Colonial-white or colors

½ and 136 inch thick
Extreme size, 42 x 120
Also thin for leaded work
½ cut to size, 20c per square foot
136 cut to size, 25c per square foot

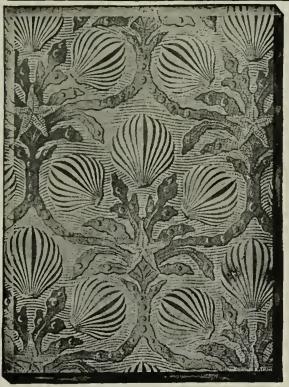
For Diffusion of Light



C-31 Moss—white or colors

1/8 and 1/8 inch thick, up to 42 inches wide and 100 inches long

½ cut to size, 20c per square foot  $^{3}_{6}$  cut to size, 30c per square foot



C-32 Oceanic

 $\frac{1}{8}$  and  $\frac{3}{16}$  inch thick, up to 42 inches wide

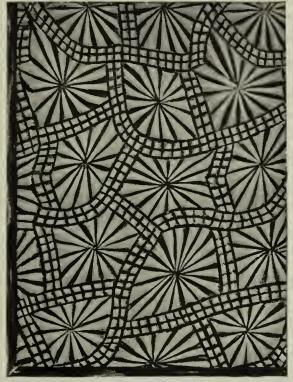
½ cut to size, 20c per square foot 3c cut to size, 30c per square foot



C-33 Pattern No. 3

 $\frac{1}{8}$  and  $\frac{3}{16}$  inch thick, up to 42 inches wide

½ cut to size, 20c per square foot 13 cut to size, 30c per square foot



C-34 Majestic

 $\frac{1}{8}$  and  $\frac{3}{16}$  inch thick, up to 42 inches wide

 $\frac{1}{8}$  cut to size, 20c per square foot  $\frac{3}{16}$  cut to size, 30c per square foot

We show on this and preceding pages a full line of figured rolled glass, etc., for use in public buildings, offices and private residences

Also used in the manufacture of leaded work

The Maze, Florentine, Colonial and Figure No. 3 are especially adapted for the diffusion of light, either in windows or in skylights

N issuing this book we have endeavored to lay before our customers and the general I trade what we believe to be the most handsome and complete catalogue of decorative glass for architectural and building purposes yet presented in the United States, both in its variety and the originality of work displayed. It marks a great advance in our own resources and skill, and in the development of the very art itself. A large portion of the designs shown are now presented to the public for the first time, and could only have been produced by the development of new and greatly improved methods such as recently introduced by us. We have also increased our mechanical resources in all lines to more than double their former capacity in order to keep pace with the increased demand for high-class work, and have now one of the largest and most completely equipped plants in the country for the ornamentation of glass in our line, which covers every kind of art glass made.

# Suggestions to Purchasers

WHEN ordering ornamental glass always state which is the width and which is the height of the glass, naming the width first, as it is the rule of the glass trade to do so, and, if no other directions are given, a light ordered 24 x 36 is understood to be 24 inches in width and 36 inches high, and if ordered 36 x 24 is understood to be 36 inches wide and 24 inches high. In order to be absolutely sure, however, the best way is to make a small sketch, thus:

24

36

marking the measurement on it proper side.

If glass is to be cut segment top, give the height at the side and also at the center, or, what is just as well, give the radius of segment desired. If ordering other shapes, send stout paper pattern cut the exact size and shape desired.

If ordering work on colored or beveled glass, state which side of the glass it is desired that the work should be on, and if the light has lettering included state whether it is preferred that the same should read from the side on which it is placed, or from the reverse side, the cost being the same.

If ordering pattern work, order by number only, and state whether the lines of the pattern are desired to be clear (remainder of surface being ground), or the lines of the pattern to be ground and the remainder of the surface to be clear.

In ordering lights with a simple border line, state whether lines are to cross and run out at the corner, or to form a continuous line around the light. If any particular width of rabbet (that is, part of the glass to be covered by putty or moulding) is desired, state what it is; unless instructed, we will allow 3/8 of an inch. Always state full size of glass, not "daylight" size.

In ordering lights with emblems for societies, orders and lodges, send cuts or drawings, if possible.

All goods shipped at purchaser's risk. We assume no responsibility in transit. We have the most experienced packers and you run but little if any risk of breakage.

Do not cut out designs. Order by number only

### Antique Glass

A NTIQUE GLASS is, as the name indicates, largely a reproduction of the early efforts of glass makers, and belongs rather to the order of curios than to legitimate merchandise. It is mainly used in the manufacture of leaded work, in which its very imperfections render it striking and picturesque. It is made in a wide variety of colors, some of them rich and expensive.

### Spun Glass

PRODUCED at an early date by gathering the molten metal upon a point which was revolved with sufficient rapidity to cause it to spread out by centrifugal force in a flat disc, thickest at the center, is still made and used to some slight extent in antique work and also for the manufacture of rondels for use in leaded work. It is, of course, of limited use and less value.

### Liquid Glass

Liquid form, has been used for a variety of purposes for some twenty-five years past, but has largely failed to satisfy the claims made for it. Although still used for a variety of mechanical purposes, they are used mainly as substitutes for transparent varnish, rather than the legitimate uses of glass. It is readily spread on with a brush, and hardens quickly, but rarely retains the vitreous appearance and transparency of glass for a long period.

### Lettering on Glass

THE varied character and extent of this work forbids giving exact quotations, but, as the inquiry as to our method of estimating is frequently made, we give below a schedule covering glass of ordinary sizes and letters of ordinary dimensions. It will be observed that footage charge is not to cover the cost of the glass, but is merely to equalize the additional expense and risk of lettering on large sized glass, the charge for putting the same lettering on two plates of widely different size varying in about the same ratio as the glass itself varies. For lights larger than 15 square feet, a much increased price will be charged, and for lettering in Old English, German Text or fancy letters, involving special ornamentation, special terms will also be made.

Prices for lettering are as follows:

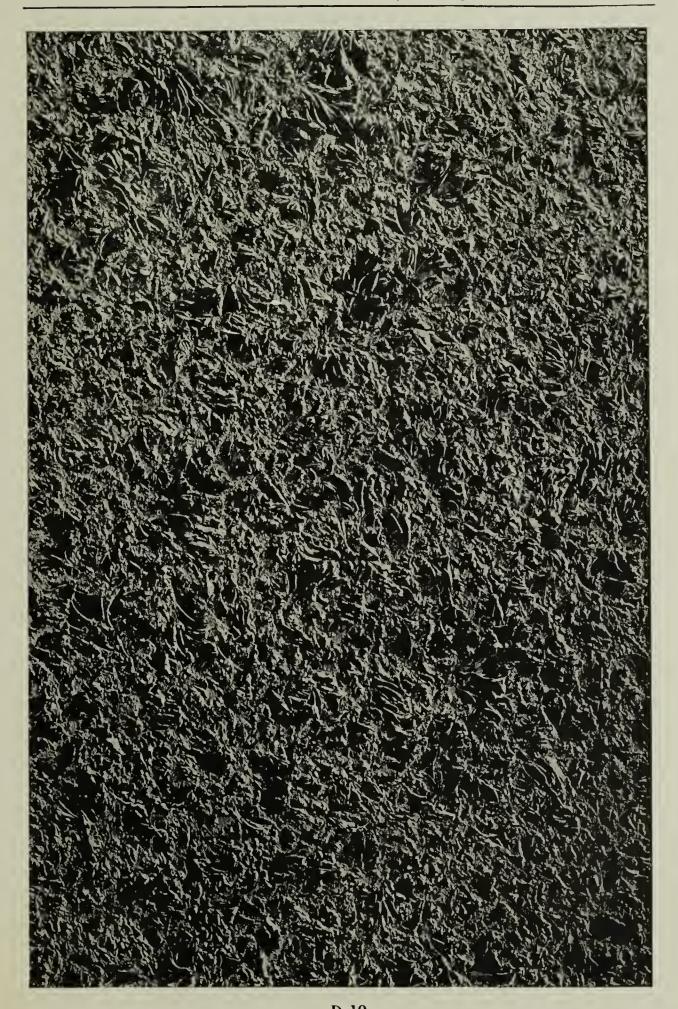
LETTERING	3 inches or less	4 inches or less	5 inches or less	
Sand Blast, per letter,	12 cents	18 cents	22 cents	Additional 2 cents per letter for
Chipped, "Combination, "	18 " 24 "	24 '' 30 ''	28 '' 34 ''	each inch in excess of 5 inches.
Wheel Cut, " plain	20 ''	25 ''	30 "	Additional 10 cents per letter for each inch in excess of 5 inches.

If done without other work, add to the price above: 20 cents per foot, D. T. Glass; 30 cents per foot, Plate; 40 cents per foot, Flashed.

The price of clear letters on a ground or chipped surface is the same as that of ground or chipped letters on a clear surface, and in colored glass the price of white letters on a colored surface is the same as colored letters on a white surface. Combination letters are either ground letters in a chipped surface or chipped letters in a ground surface, an outline of clear glass being always retained between the chipping and the grinding. Special and much lower rates for glass lettered in quantities alike. Minimum charge for any job of lettering, 75 cents. The prices are net—no discount.

### Drilling Glass

HOLES of small size, suitable for insertion of cord for hanging, are drilled in sheet or plate glass at a very moderate cost, but larger ones, say ½ to 3 inches in diameter, are much more difficult to make and involve considerable expense. Prices on application.



D-10
Photographic Reproduction of Chipped Glass—Double Process, Life Size 25c per foot, cut to size



D-11
Photographic Reproduction of Chipped Glass—single Process, Life Size
20c per foot, cut to size

# Plate Glass Top for Center Table



D-12

Most Elaborate Work Ever Produced on Glass-Mirror Effect

Chipped, etched and embossed designs finished in silver and several shades of gold

Size, 3 feet square Price, \$150.00

FILE

### Chipped Plate Glass Checker Board Mirror Effect



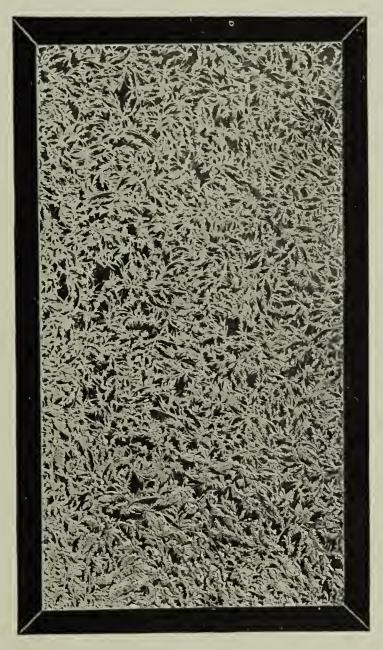
D-13

Very elaborate and elegant; finished either entirely in silver, or with gold and silver ornamentation, as preferred

Price, \$10.00 to \$25.00, according to size and finish

From 20 to 24 inches in diameter

### Imitation Bevel on Double Thick Chipped



D-14

### Single Process Chipping with Imitation Bevel

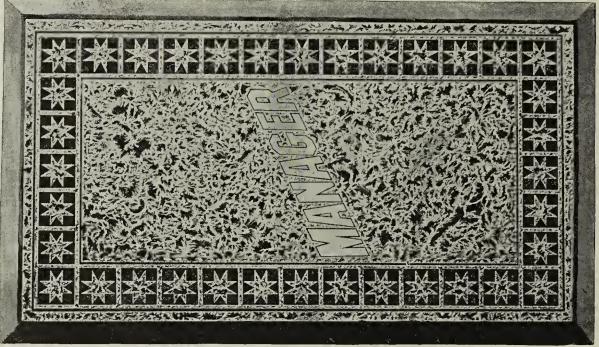
75c per square foot, cut to size

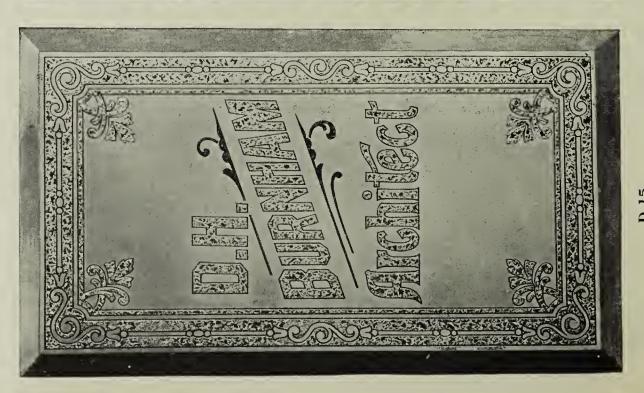
Imitation bevel is produced on any light having chipped or ground center by leaving a clear margin the width of any desired bevel, and running a fine line to the corners of the glass from the chipped or ground portion.

It is quite deceptive in appearance, giving much the appearance of beveled plate to ordinary window glass, and the additional expense over ordinary line chipping is very trifling

# Fancy Chipped Glass for Doors, on Double Thick Imitation Bevel





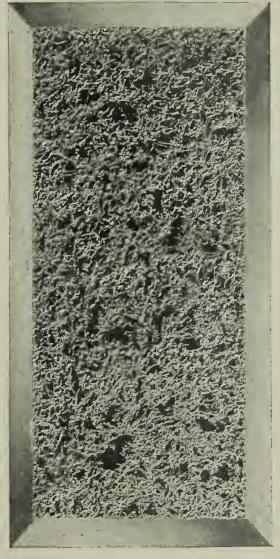


80c per square foot; letters extra

\$1.00 per square foot; letters extra
If ornamented on plate, cost of beveled plate to be added

\$1.00 per square foot; letters extra

### Double Chipped Beveled Plate

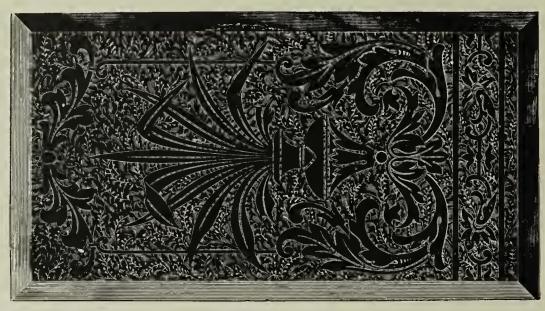


D-18

### Prices on application

The chipping of beveled plate "to line" may either be done on the beveled side or on the reverse, as preferred, and if there are letters or figures to be on it they can be arranged to read from the side on which they are placed or from the opposite. The work can also be done before or after beveling, as preferred. If, however, plates are to be "plain" chipped and beveled the chipping should be done first, and the beveling then done on the chipped side. It will be understood that the line or "crown" of the bevel will be ragged and uneven, as it is cut in the uneven surface of the chipping. The beveling can, if desired, be placed on the plain side of a chipped plate, but in that case the effect of the beveling is nearly lost, being invisible from the chipped side, and nearly so from the plain side.

# Fancy Chipped Glass for Doors, Etc.



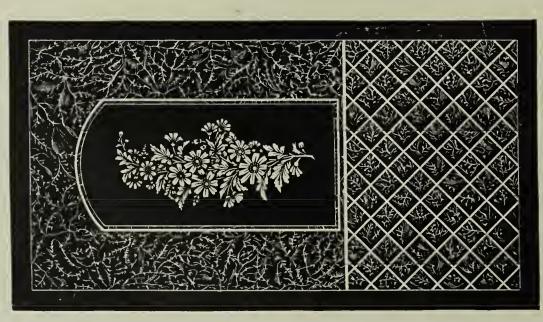
D-21

\$1.40 per square foot Additional price if beveled plate is used



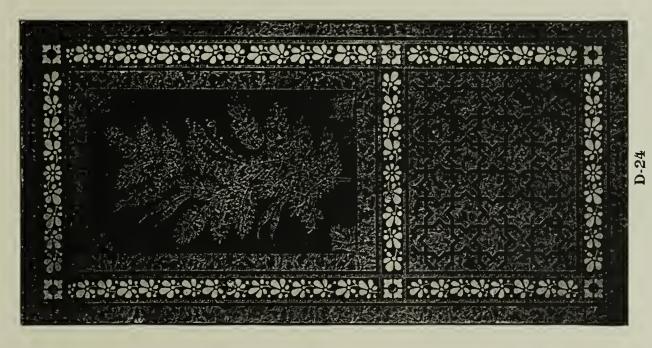
D-20

\$1.60 per square foot



D-19

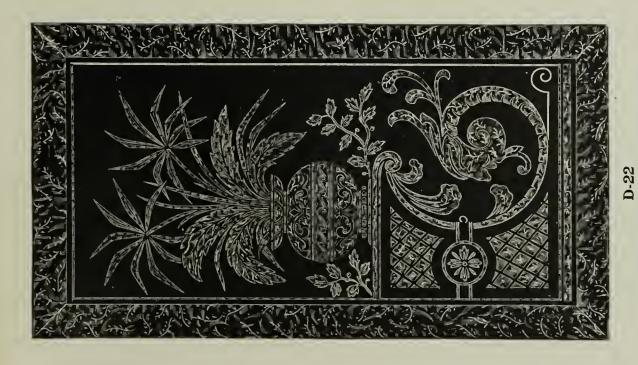
\$1.25 per square foot



\$2.00 per square foot. Fancy border ground, balance chipped on clear surface



\$1.75 per square foot



\$1.60 per square foot

# Fancy Chipped Glass for Doors, Etc.



D-25

\$1.65 per foot

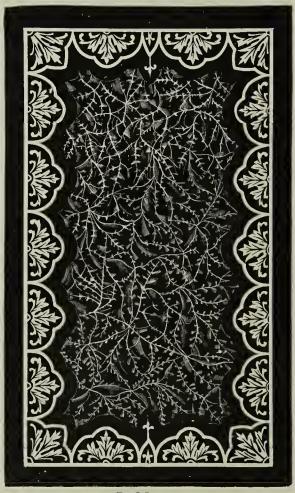


D-26

\$1.50 per foot



\$1.10 per foot

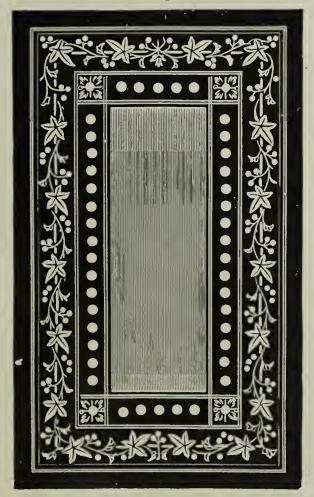


D-28

80c per square foot. Chipped center, ground border, clear margin



**D-29** 75c per foot



**D-31** \$1.00 per foot

Sand blast light, center and either border reversible without interference with balance of light



**D-36** 75c per foot



**D-32** \$1.00 per foot



**D-33** \$1.00 per foot



**D-34** \$1.00 per foot

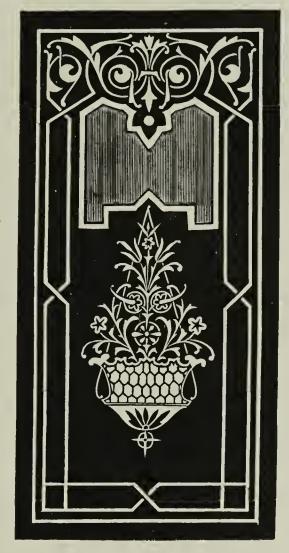
If on ruby or blue, 40c per foot extra



**D-35** 75c per foot



**D-36** 65c per foot



**D-37** 75c per foot



**D-38** 65c per foot



**D-39** 55c per foot

### Sand Blast Designs



D-40 75c per foot; letters extra



D-42 75c per foot; letters extra



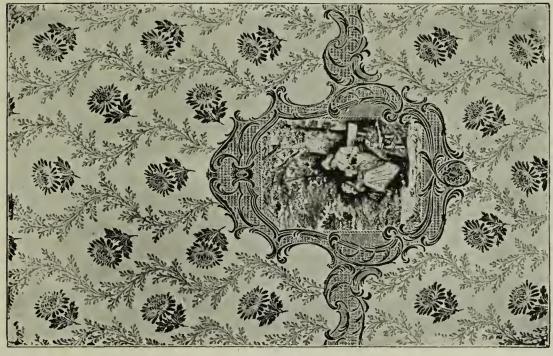
D-41 50c per foot; letters extra



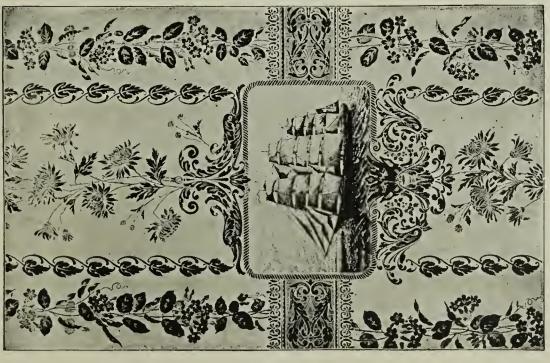
D-43 75c per foot

If on ruby or blue glass, 40c per square foot extra

### Neat Sand Blast Designs

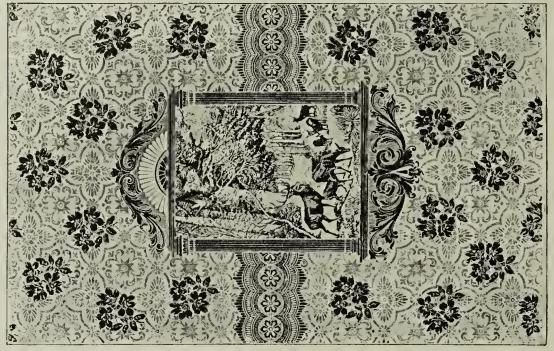


**D-45** 90c per foot

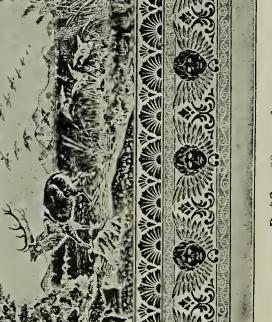


D-44 90c per foot Special prices on quantities of 50 lights and upwards

### Neat Sand Blast Designs

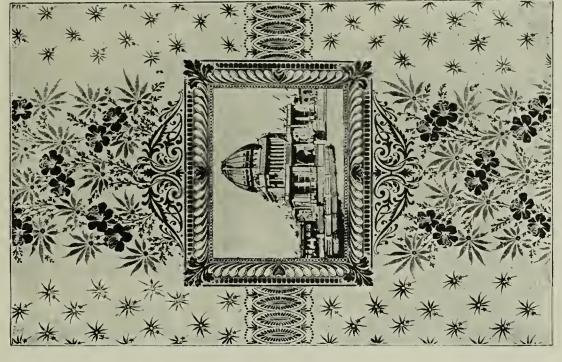


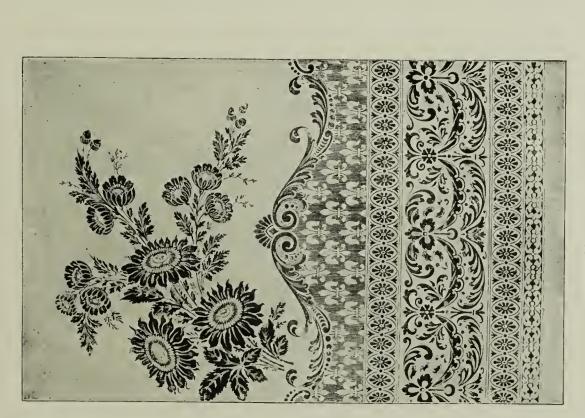
**D-47** 90c per foot



**D-46** 90c per foot

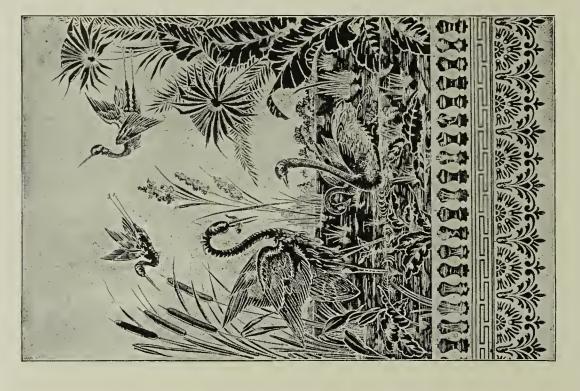
Special prices on quantities of 50 lights and upwards





**D-49** 90c per foot

Special prices on quantities of 50 lights and upwards

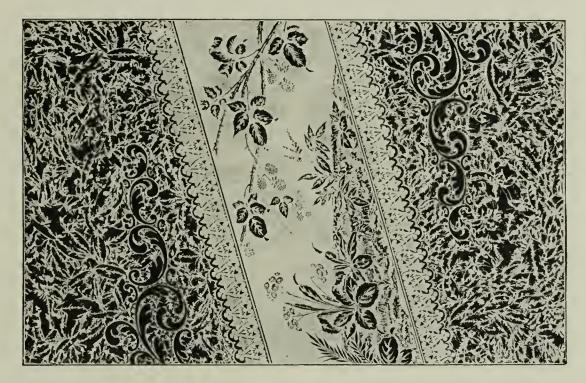




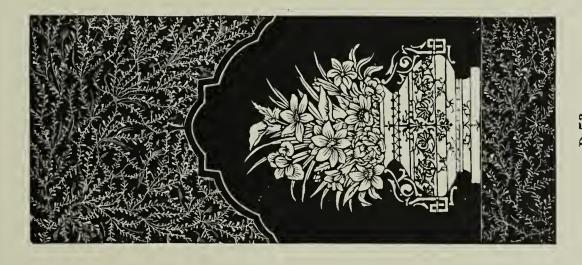
**D-51** 90c per foot **D-50** 90c per foot

Special prices on quantities of 50 lights and upwards

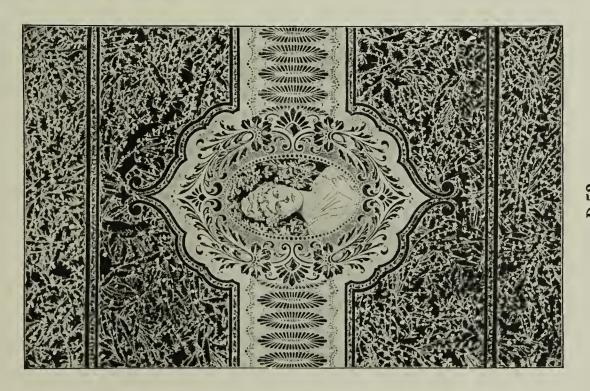
## Fancy Chipped Glass for Doors, Etc.



**D-54** \$1.00 per foot

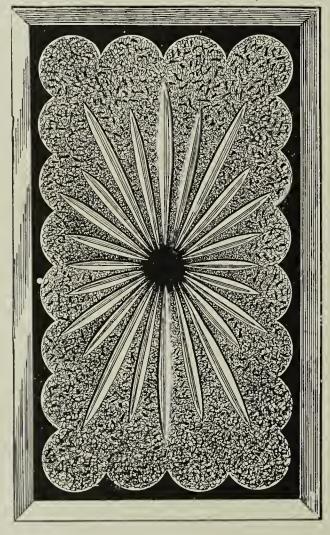


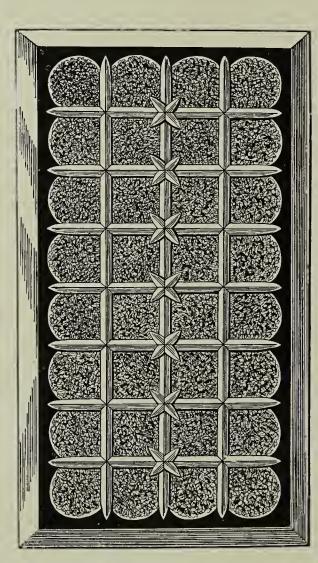
**D-53** \$1.00 per foot



**D-52** \$1.50 per foot

### For Doors, Partitions, Etc.





D-55

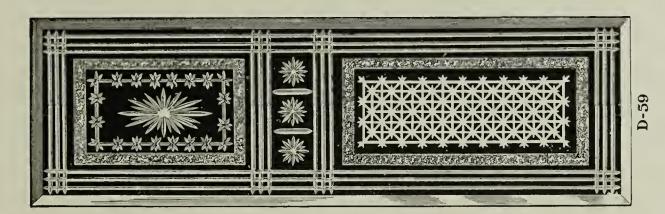
D-56

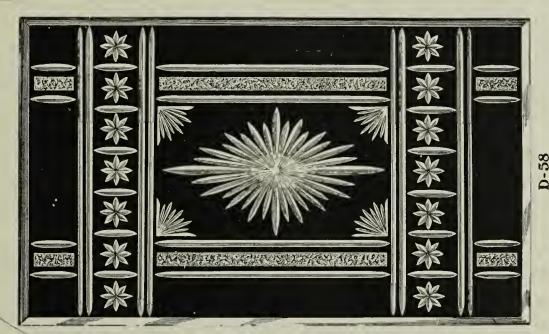
### Beveled Plates-Chipped and Mitered

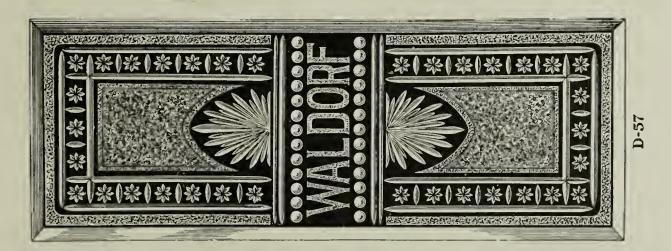
Special prices on application

### Miter Cut and Chipped Plate Glass

Exhibiting richness and brilliancy equal to finest cut glass table ware



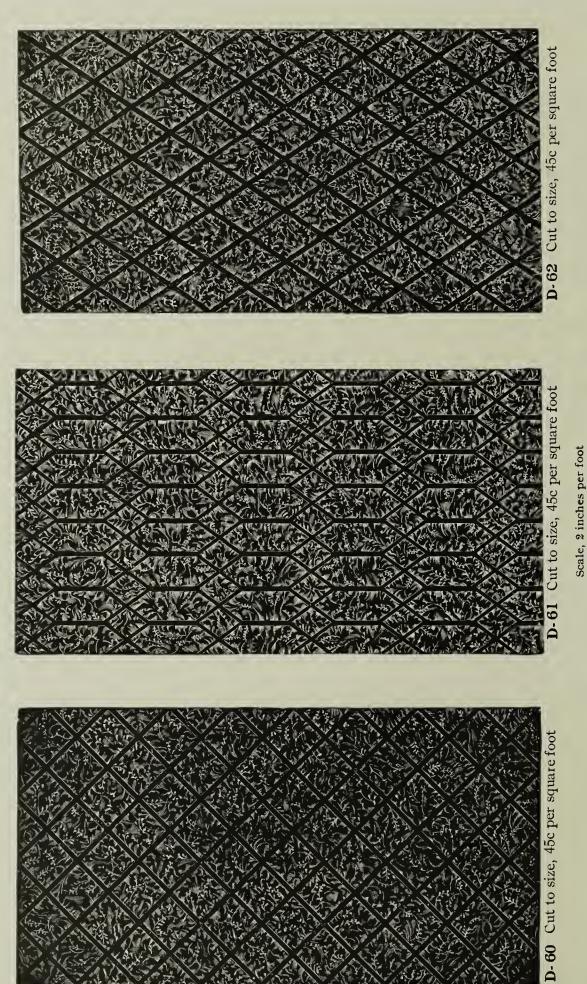




The combination of mitered and chipped work is much more effective than the plain miter work, as the background of chipping emphasizes and gives tone to the miter effects. The work may be either plain chipped or chipped to line; in the former the plate is first chipped and the miter work then cut in the chipped surface; in the latter the miters are not cut in the chipping, but a narrow margin of clear polished surface is left between the chipping and the miters, leaving the edges clear and sharp, instead of presenting rough edges, as when cut in the chipped surface. This method should be used in all fine work.

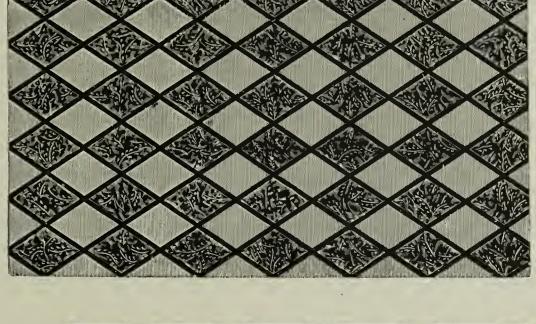
Prices according to size

# Ornamental Chipped Glass for Doors, Partitions, Etc.

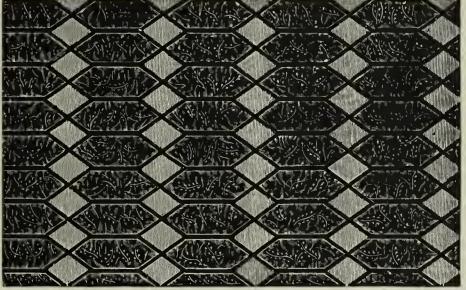


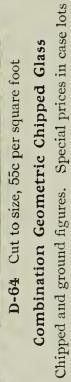
Clear Geometric Chipped Glass Special prices in case lots

# Ornamental Chipped Glass for Doors, Partitions, Etc.



-65 Cut to size, 55c per square foot

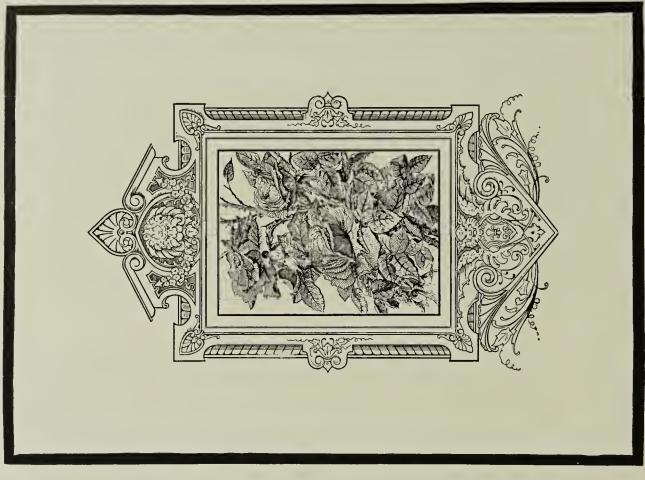




D-63 Cut to size, 55c per square foot

Cottage Lights

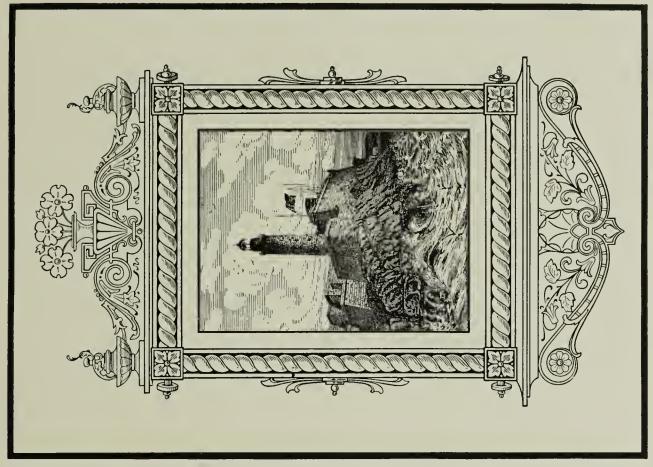
These designs are the very latest in sand blast work





D-67 American Beauty Roses

75c per square foot, cut to size. Stock sizes, 50 lights and upwards, special prices on application D-66 Manila

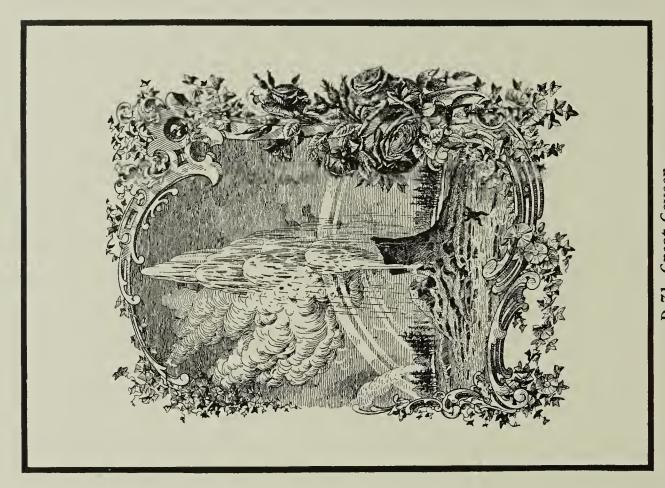


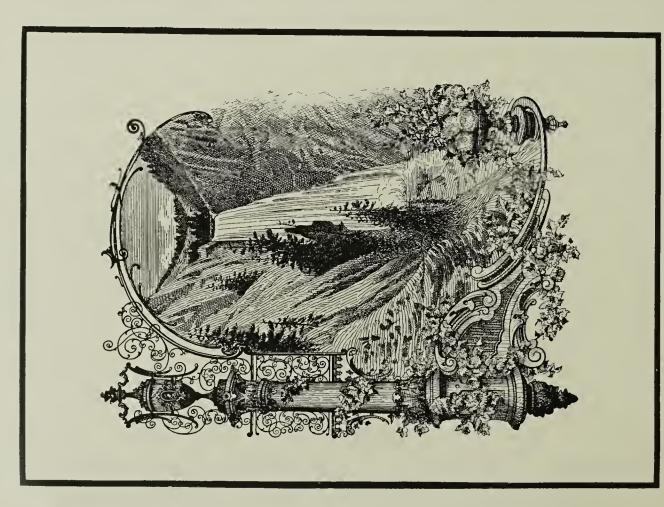


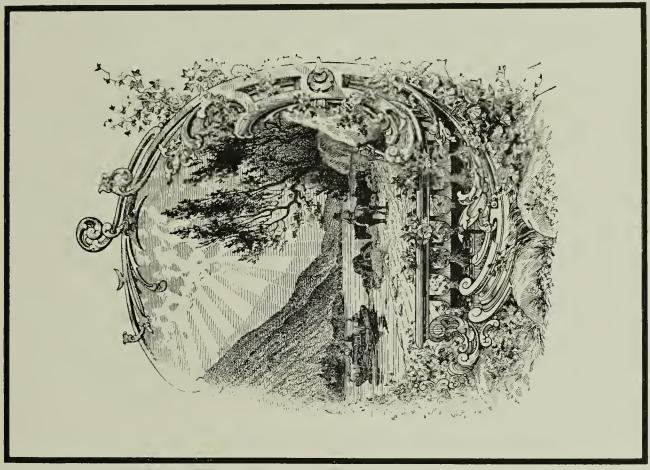
**D-68** Cupids

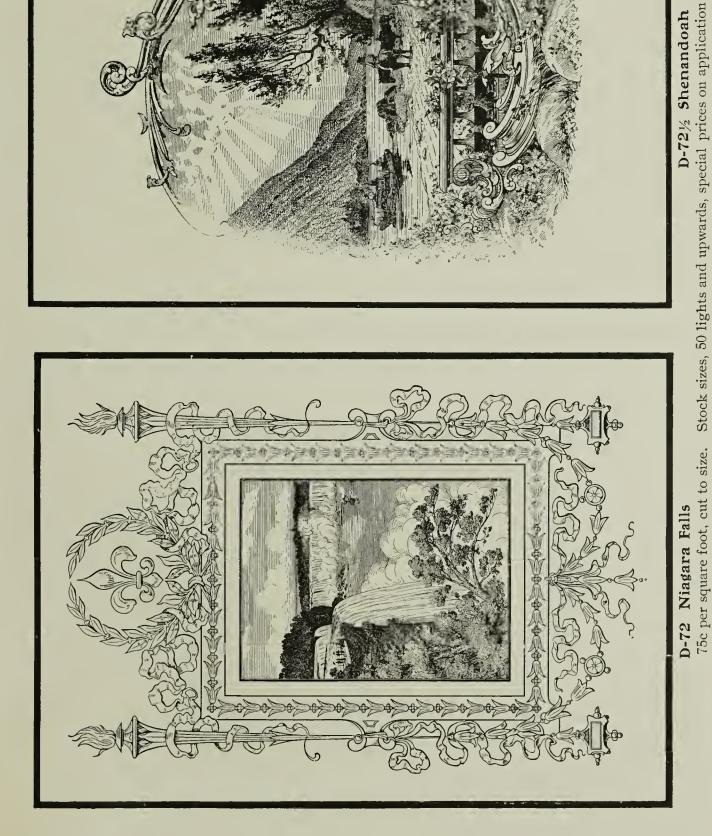
75c per square foot, cut to size. Stock sizes, 50 lights and upwards, special prices on application

James H. Rice Co., Chicago

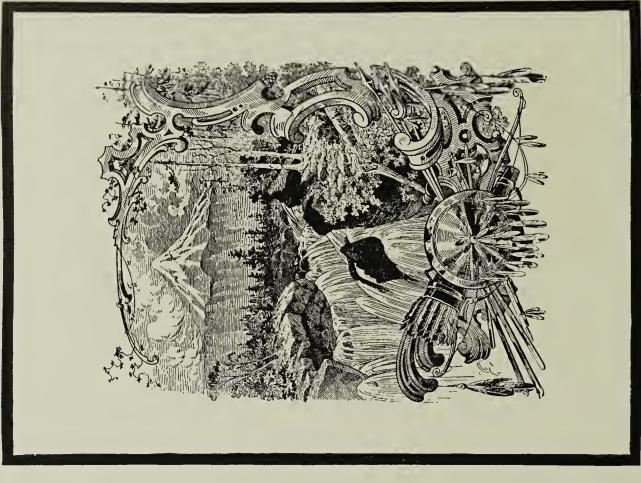


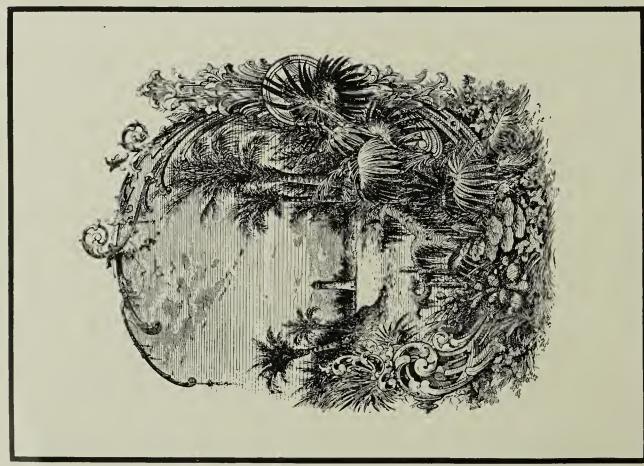








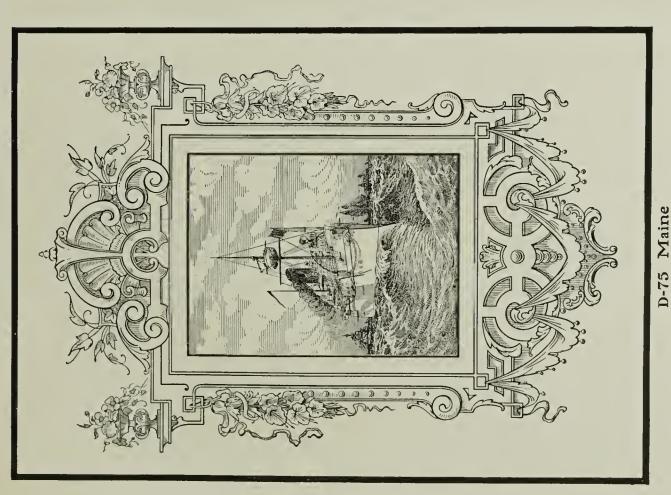




D-74 California

75c per square foot, cut to size. Stock sizes, 50 lights and upwards, special prices on application D-73 Florida

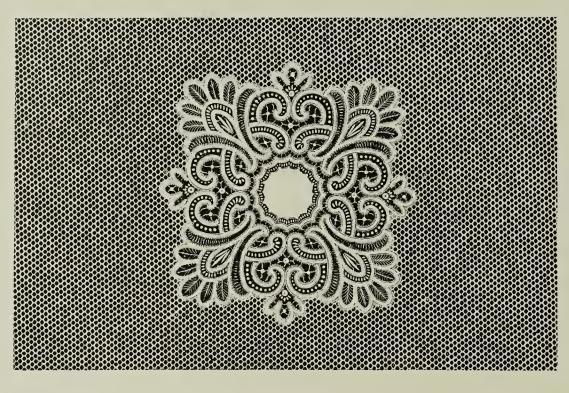




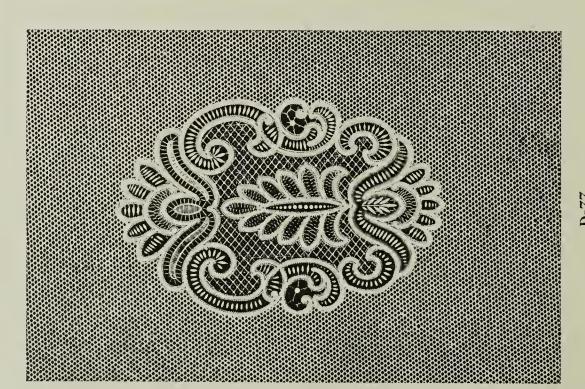
D-76 Moo

75c per square foot, cut to size. Stock sizes, 50 lights and upwards, special prices on application

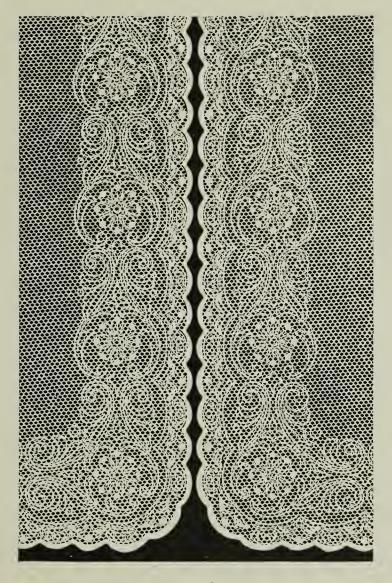
# An Approved 5tyle for Doors-Lace Patterns



80c per square foot. Special prices for 50 lights and upwards



### Latest Design for Vestibule Doors

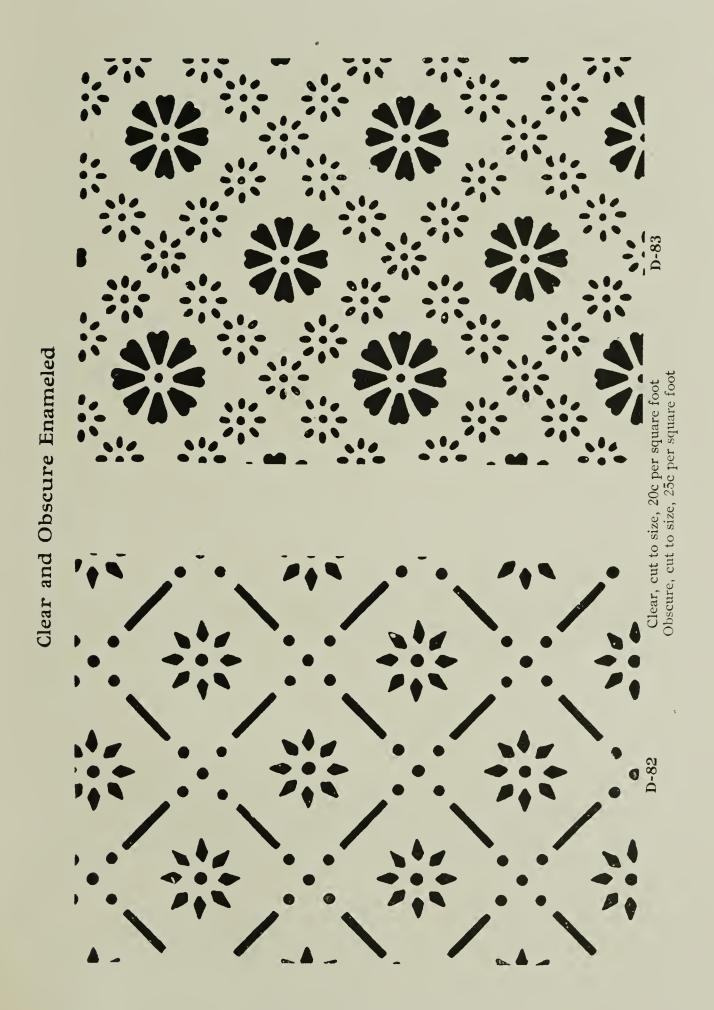


D-79

### A Very Effective Design

80c per square foot. Special prices for 50 lights and upwards





### Compound Sash Lights for Palace Cars



D-84



D-85



D-86

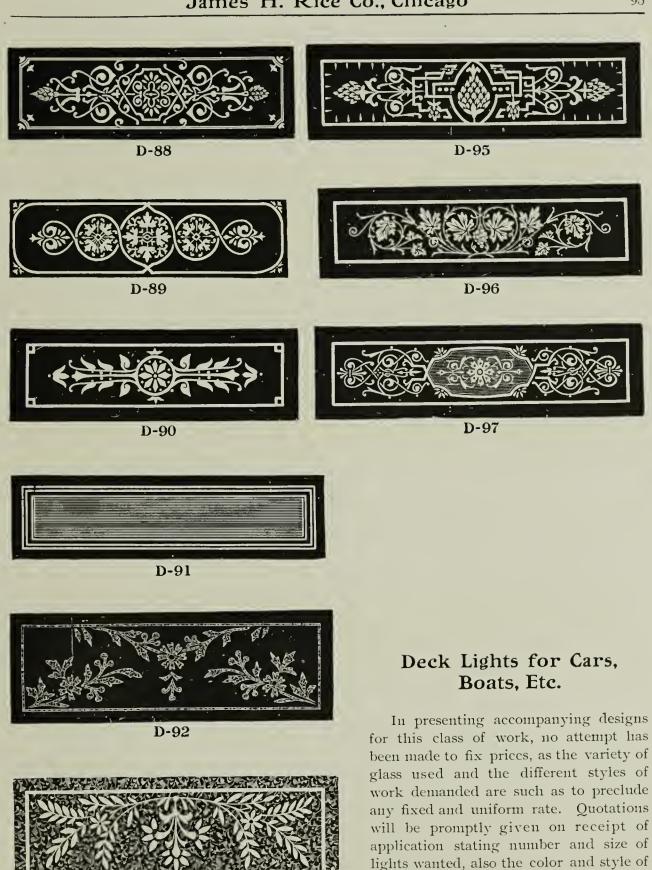


D-87

### Chipped, Embossed and Silvered

Far more elegant than any heretofore used

Prices on application



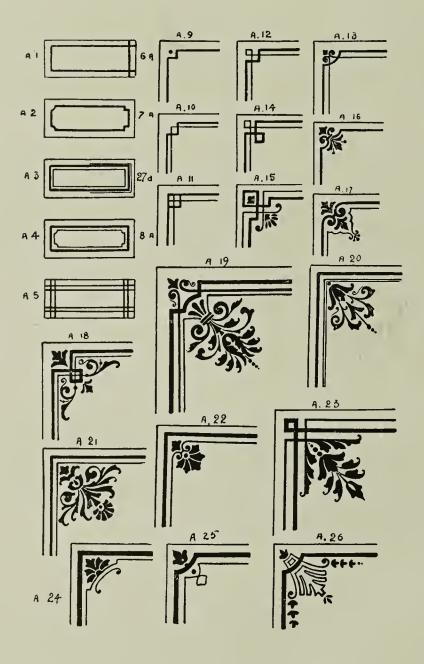
work desired.

D-93

D-94

### Corners for Sand Blast Work

Subject to slight modification for chipped work

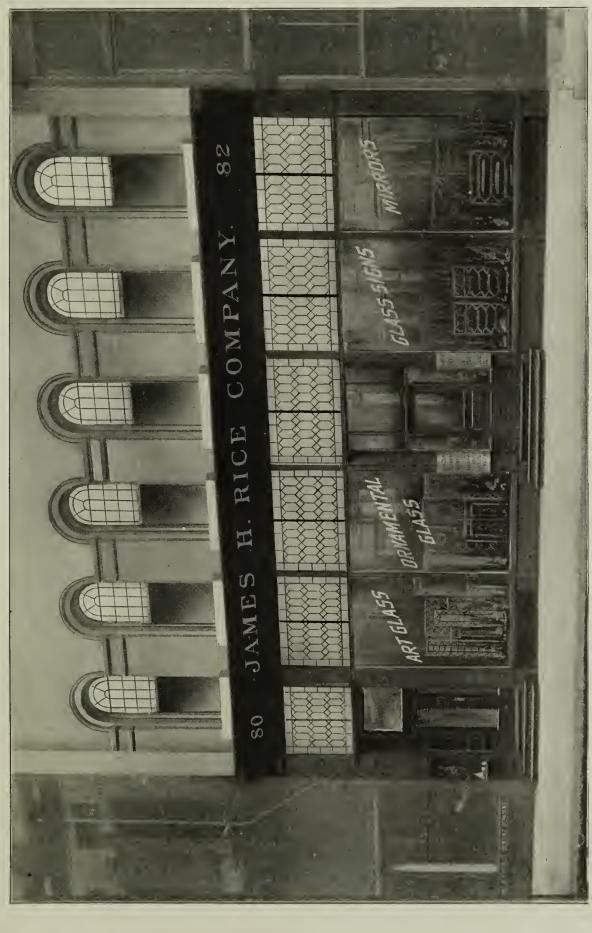


A1, A6	40c per square foot			A16	60c per square foot		
A2, A7, A9	. 45c	"	"	A25	.70c	"	"
A3, A5	50c	• •	"	A22, A24	.75c	"	"
A4, A8, A10, A11	50c	"	"	A15, A17	.75e	"	44
A12, A13, A14, A27	55c	"	"	A20	.80c	6.6	""
	A18, A	26		85c per square foot			
				.90c " "			

..... 95c

A19

## Aristo Geometric Prisms The best prisms on the market



This represents our Wabash Avenue office and salesroom. This front is installed with Aristo Geometric Prisms—50 foot front, 150 feet deep. We never use any artificial light except on very dark days

We are sole manufacturers of Aristo Prisms

### Very Important to Read

Report of a leading authority upon the diffusion of light through windows, as obtained by Maze, Colonial, Florentine and Ribbed Glass

THE use of glass in windows for the purpose of admitting light has been common for many years; but it is only within a few years that it has been deemed possible to give to the window glass a further use, that of so rearranging the light as to greatly increase its effectiveness. For twenty years or more rough plate glass and ground glass have been in use where it was desired to have a window which should be an obstruction to vision without materially diminishing the light. Deck-lights, used in ships for thirty years or more, have diffused or deflected the light to a certain extent.

In 1883 and 1884 examination of several types of commercial window glass was made by Mr. Edward Atkinson, who was apparently the first to recognize the immense gain in effective light in rooms when lighted by windows which were roughened so that the incident skylight or sunlight did not pass directly through them, but was diffused in directions in which it otherwise did not go. In the summer of 1894 Mr. Atkinson laid before me the problem, requesting an examination of some dozen or more different kinds of glass. The hopelessness of trying to get something for nothing, that is, to get a sheet of window glass to throw into a room more light than fell upon it, appeared so plain to me that I made all my preparations to measure not a gain but a loss of light in using Mr. Atkinson's samples. The results of my tests at that time showed how real was the gain in the amount of effective light in small rooms when glazed with a roughened or corrugated glass. The finely corrugated or ribbed glass, described more fully later, was found to give the greatest increase, and has since been widely used under the name of "Ribbed" glass. Just as I was completing my tests the now common prismatic glass began to be put upon the market, and I tested it, finding it slightly less effective as a diffusing medium than the "Ribbed" glass. An examination of the prisms then used and those now furnished by the company shows a considerable gain in efficiency in the newer ones.

The results of the tests on a score or more of different glasses may be stated briefly as follows:

We may increase the light in a room thirty feet or more deep to from three to fifteen times its present effect by using "Ribbed" glass instead of plain glass in the upper sash. By using prisms we may, under certain conditions, increase the effective light to fifty times its present strength. The gain in effective light on substituting ribbed glass or prisms for plain glass is much greater when the sky-angle is small, as in

the case of windows opening upon light shafts or narrow alleys. The increase in the strength of the light directly opposite a window in which ribbed glass or prisms have been substituted for plain glass is at times such as to light a desk or table fifty feet from the window better than one twenty feet from the window had previously been lighted.

The samples of glass tested were of two distinct types: First, glasses which were roughened or ribbed, primarily to blur distinct visions, and which happened to be of service as diffusing media as well; second, the special prismatic forms, designed especially to divert light of windows from the original downward direction to one more nearly horizontal.

The following samples were tested:

Ground Glass, Rough Plate, Ribbed or Corrugated Glass, Maze, Colonial and Florentine, or "Figured" Glass, in which a raised pattern is worked on one side, and Ribbed Wire Glass.

Of these several specimens, one or two may be dismissed with brief mention. Ground glass is of little value, except as a softening medium for bright sunlight. Its rapidly increasing opaqueness with moisture and dust makes it undesirable as a window glass. The common rough plate has very little action as a diffusing medium, giving no perceptible change in the effective light. Of the ribbed glasses, the fine "Ribbed," with twenty-one ribs to the inch, is distinctly the best—not, in all probability, because of the fineness, but because of the greater sharpness of the corrugation. The "Ribbed Wire" glass is about twenty per cent less effective than the ordinary "Ribbed" glass. The raised pattern imprinted upon one surface of the glass, as in the case of the "Maze," "Colonial" or "Florentine," gives the widest diffusion, especially in bright sunlight. A raised figure, when worked upon the back of "Ribbed" glass, renders it less offensive to the eye in bright sunlight, but less effective in deep rooms.



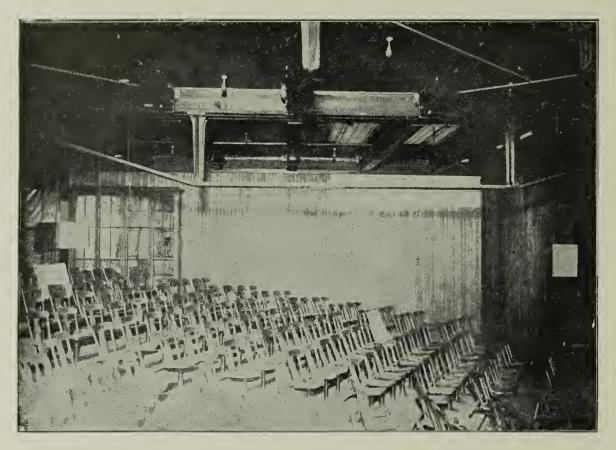


Figure 1

This represents the same room as the one underneath, but afterwards glazed with Maze, Colonial and Florentine. All sizes furnished up to 42 inches wide and 100 inches long. (See index for Maze, etc.)

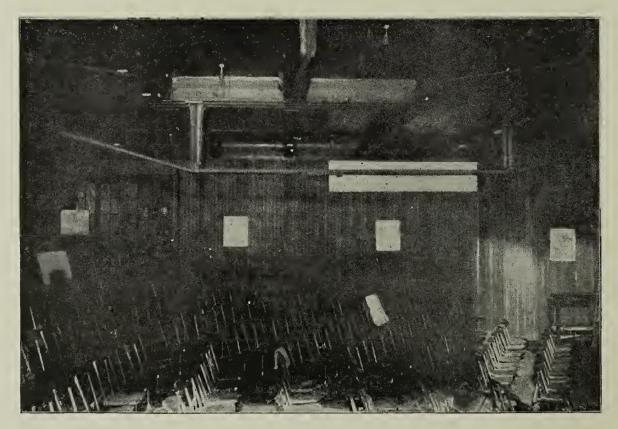


Figure 2

This represents the interior of a public hall glazed with *plain*, *clear glass*. Note the difference in light between this and the one above.

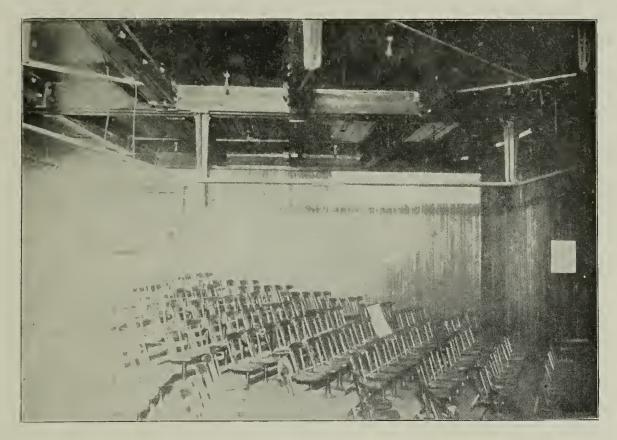


Figure 3

This represents the same room glazed with plain ribbed glass; all sizes furnished up to 42 inches wide and 100 inches long

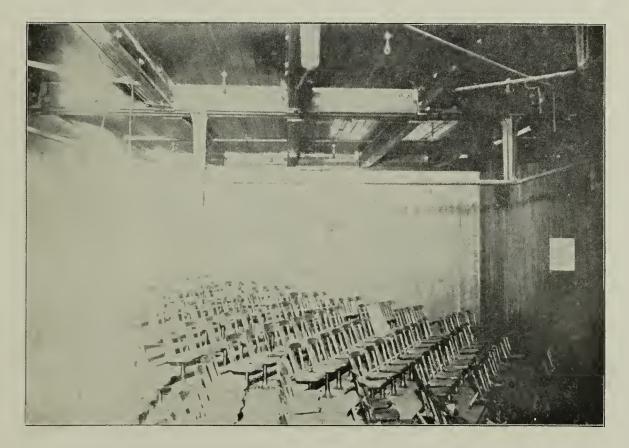


Figure 4

This represents the same room glazed with Aristo Prism glass, the best prism on the market for lighting dark rooms. (See index for sheet prisms.) (See next page for glazed prisms set in copper.)

### Aristo Prism Glass

ARISTO Prism Glass is a practical, modern article of utility for enhancing refraction.

It does not make light, but diffuses it, spreading divergent rays from the exterior, to illumine otherwise dark interiors without the use and accompanying expense of artificial lighting methods.

Considering beneficial results, this glass is not expensive.

It is now acknowledged that basements, storerooms, offices, etc., lighted by the use of prism glass are more eagerly sought by tenants, and command higher rentals, than the same character of places where prism glass is not installed.

This is strongly proven by instances of merchants who have enjoyed the effects of prism glass, insisting on its use in buildings which they may afterward occupy.

Basements not used at all, on account of darkness, may be made a source of income by placing prism glass in the openings where ordinary glass has been used.

Wherever possible, skylights—especially interior skylights—should be of prism glass.

Our "Aristo" Prisms are the latest improved, and come to you in 4-inch or 5-inch squares, already to be placed in the sash or opening; also for special orders we can furnish geometric shapes, or almost any odd designs.

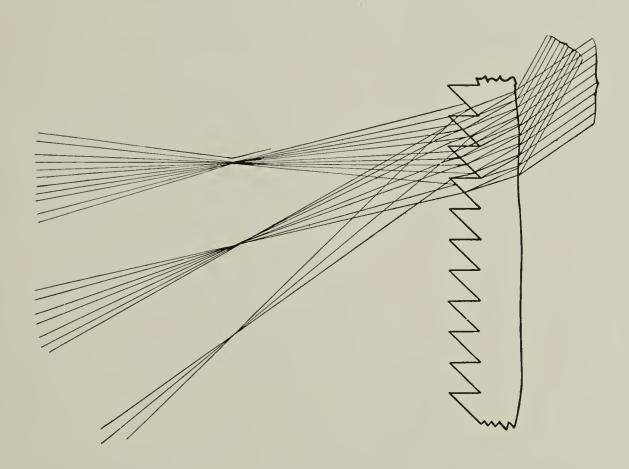
Our "Aristo" Sheet Prism Glass is cheaper and, being our own product, we can guarantee it to be of superior quality, unsurpassed.

Always specify "Aristo" make when ordering.

We are at all times much pleased to furnish information and prices promptly. Write to us.

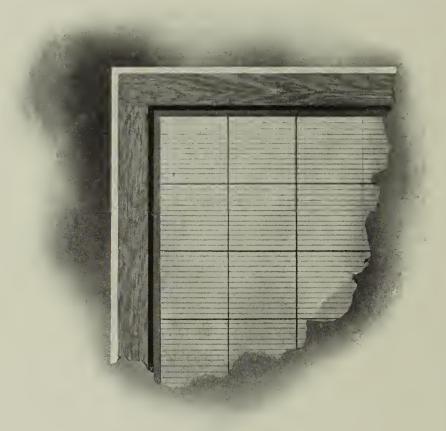
### See page 101, Figure 4, for increasing light over plain glass

When ordering, do not cut out pages-order by number only

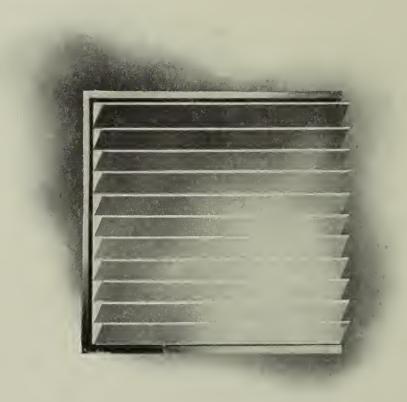


Showing method of reproduction and multiplication of light rays by means of Aristo Prisms

### Aristo Prism



Sheet Prism in 6-inch squares



4-inch Prism Tile

### Aristo Prism Glass

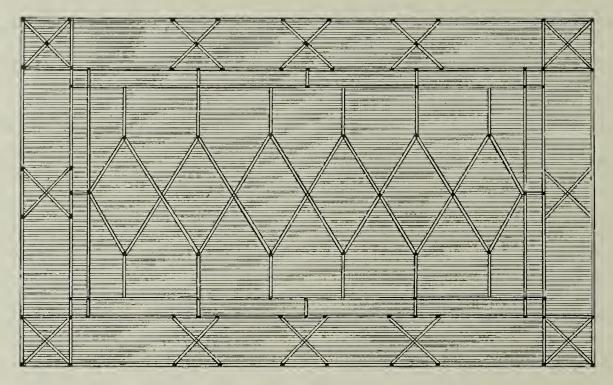




Giving a slight idea of the interior illumination produced Inside light greatly multiplied

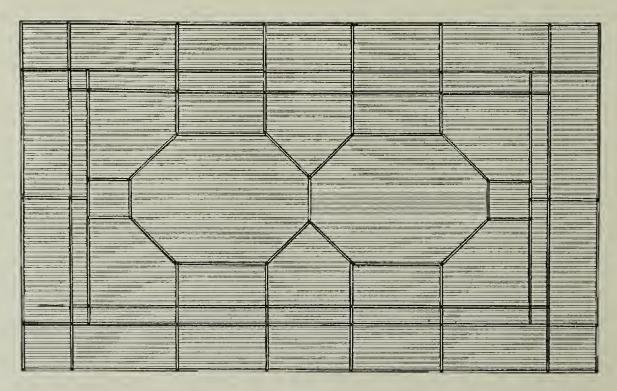
4-inch tiles, set in copper, \$1.50 per square foot

### Aristo Geometric Prism Glass



P-11

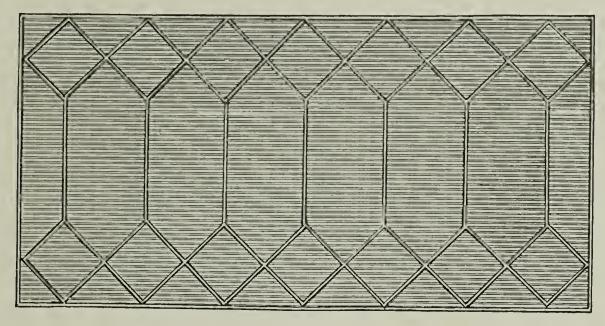
Price, \$1.40 per square foot



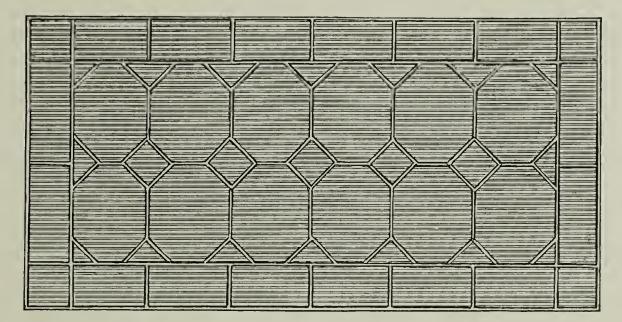
P-12

Price, \$1.25 per square foot

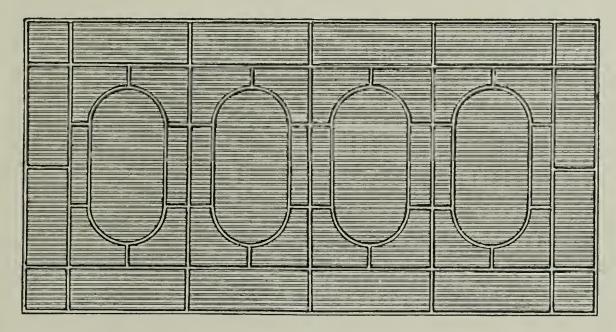
### Different Patterns of Aristo Geometric Prism Glass



P-13



P-14



P-15

### Aristo Prism Glass





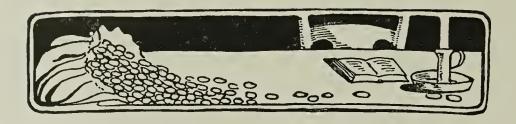
Illustrating the appearance and effect of Aristo Prism Glass installation 4-inch tiles, set in copper, \$1.50 per square foot

### Aristo Prism Glass





4-inch tiles, set in copper, \$1.50 per square foot



### Don't classify signs wrong

They are not "expense";

They are an "investment."

They are the best kind of an investment—

Because they pay the biggest dividends and keep on paying dividends.

They are not only advertisements;

They are the BEST of advertising—

Because most ENDUR-ING;

Because in the right location.

They attract the buyer's attention when he is at your door—

NOT when he is a thousand miles away.

As they are the first thing to attract the attention of the visitor, it is of the utmost importance that they should be the most attractive thing about your place.

They become identified with the personality of the concern.

It is important that they should fitly represent it and carry the impress of HIGH CHAR-ACTER.

### Most Effective Sign Made for Drug Stores

It Catches the Eye for Miles
Works Day and Night



F-10

Price, \$60.00. Net—no discount

The above is taken direct from the mortar when lighted, and is an exact reproduction of same.

This mortar is 44 inches in height and 2 feet in diameter, and is composed of irridescent opalescent glass set in metal sash.

The center band contains fifty-four imported cut glass jewels in colors—ruby, yellow and crystal. Suitable for drug stores.

The top and bottom parts are composed of imported bent ruby panels, with any sand blast lettering desired, which is indelible and will not come off.

The mortar is finished with the very best of aluminum bronzing, and is one of the hand-somest mortars for both day and night effect that has ever been produced.

The mortar is lighted from the inside by three 16 C. P. incandescent lamps, and the proper irons and chains for hanging are furnished without additional cost.

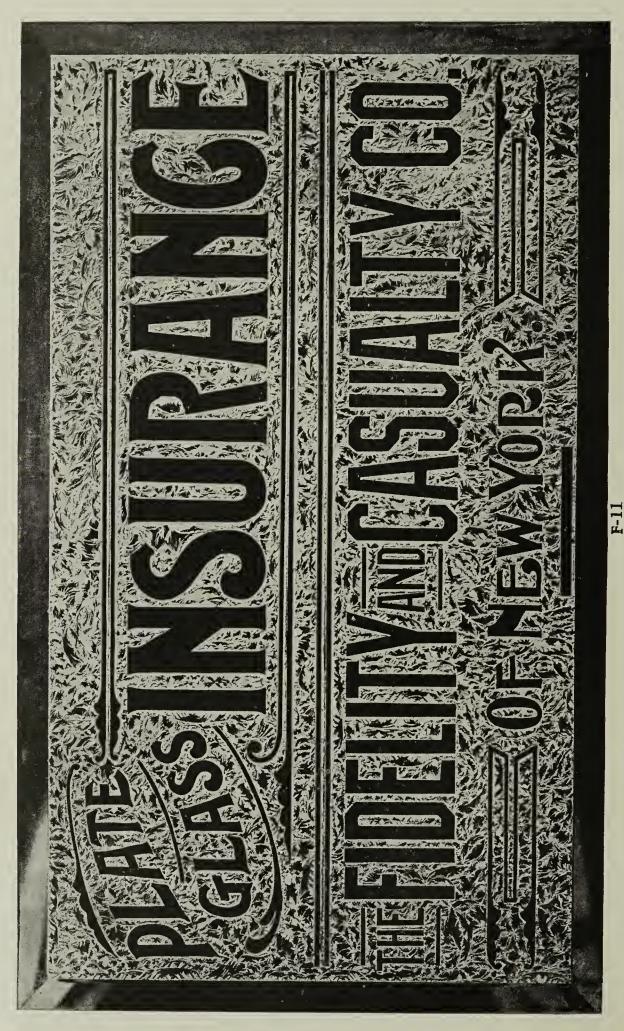
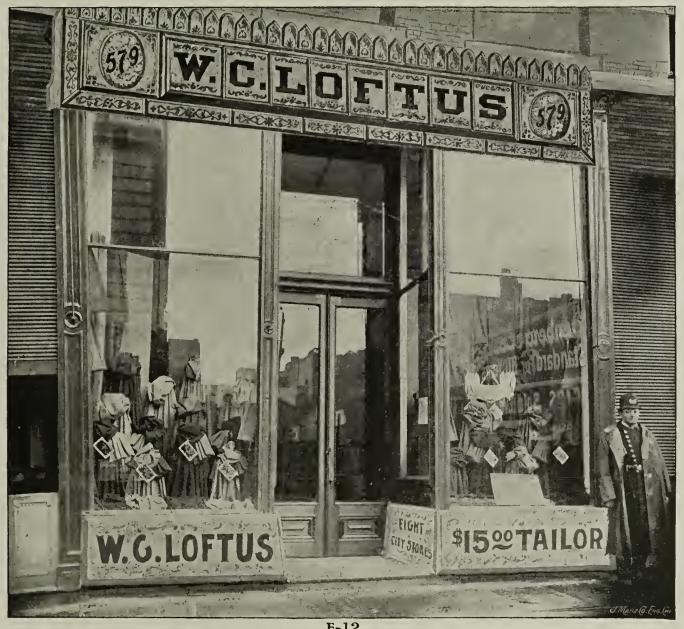


Plate glass signs may be insured against breakage in responsible plate glass insurance companies if desired Special prices on application \$5.00 to \$8.00 per square foot, according to size.

### These Signs are Made of Plate Glass and are Most Magnificent

They Have a Mirror Effect Which is More Beautiful Than Can be Represented Here



F-12

579 Broadway, New York City — All Signs Chipped Plate Glass \$5.00 to \$10.00 per foot, according to size. Special price on application



F-13

### Chipped Silver Signs-most effective made

With profuse acid ornamentation; about 6 feet by 4. Photographed from building Special price on application. \$5.00 to \$8.00 per foot, according to size

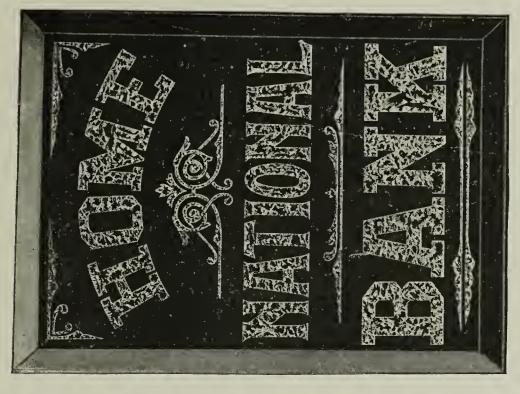


D-14
Elaborate Chipped Sign

Photo from building, much reduced Special prices on application

# Magnificent Chipped Plate Glass Signs

These signs are more beautiful than can be represented here. The Siegel-Cooper and Chapman signs have an elaborate mirror effect



D-17

Special prices on application, according to size



**D-16** \$5.00 to \$8.00 per square foot Special prices on application



D-15

Chipped Plate Sign

Size, 9 by nearly 11 feet. Photographed from building after three years' use

\$5.00 to \$8.00 per square foot, according to size

### Chipped Plate Glass Signs



D-18
Special prices on application, according to size



**D-19**Special prices on application, according to size



D-20

Special prices on application, according to size Chipped silver or gold letters on color panel

### Elaborate Chipped and Embossed Signs with Mirror Effect



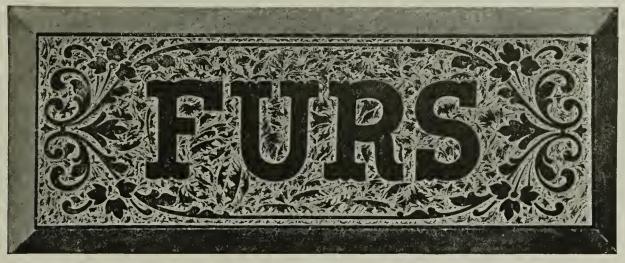
D-21
Special prices on application, according to size



D-22
Special prices on application



D-23
Colored letters on chipped silvered glass. Special prices on application



D-24
Colored letters on chipped silvered glass. Special prices on application



D-25

\$1.00 per foot; letters extra Ornaments clear on chipped surface; letters ground with clear outlines



D-26

50c per square foot; letters extra





Ruby Letter Signs on White Chipped Surface (Also made in other colors)

1 foot or less, not exceeding ten letters, \$2.501½ " " 3.50 2 feet or less, not exceeding ten letters, \$5.50 6.00 3 feet or less, not exceeding ten letters, \$7.00

Add 50c per square foot for larger sizes, and 15c per letter in excess of ten. Beveling, if any, charged extra

### Framed Mirror Department

WE call your attention to our Framed Mirror Department. We carry a complete line of the most modern styles at the lowest prices. Special prices made on large quantities.

All mirrors shipped at the purchaser's risk

Boxing is charged on all shipments



This is an irregularshaped mirror, as observed by the frame and white shading on the glass

It shows distorted effects, and any person standing in front or sidewise of it resembles a freak

Slightly tipping the mirror or standing in front of it and moving backward and then forward will produce still different effects

The posing is by the same person, but in different positions

It is a good drawing card for Amusement Halls Restaurants Cigar Stores Saloons, etc.

In certain lines of business the receipts can be doubled by purchasing this mirror

Makes a great "hit" for saloons

Amusement Mirror No. 1, showing different pose
This "freak" plate glass mirror, 30 x 72, nicely framed, boxed for shipment, only \$90.00

Special price if Nos. 1 and 2 are both purchased



Amusement Mirror No. 1, showing different pose



Amusement Mirror No. 1, showing a different pose
This "freak" plate glass mirror, 30x72, nicely framed, boxed for shipment, only \$90.00



This irregular-shaped mirror produces a different effect from Mirror No. 1

In addition to the effect produced herewith, it also produces the "fat man" effect (as shown in Mirror No. 741)

A person will resemble a freak by placing himself in front of this mirror, but the effect will not be so distorted as in Mirror No. 1

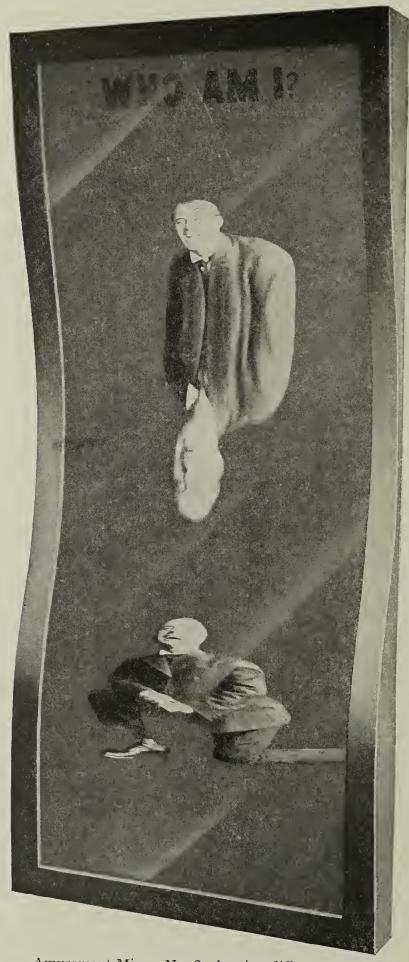
Slightly tipping the mirror will produce still different effects

It is a good drawing card for Amusement Halls
Restaurants
Cigar Stores
Saloons, etc.

In certain lines of business the receipts can be doubled by purchasing this mirror

Makes a great "hit" for saloons

Amusement Mirror No. 2, showing different pose. This "freak" plate glass mirror, 30 x 72, nicely framed, boxed for shipment, only \$90.00

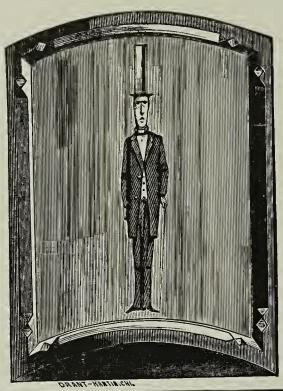


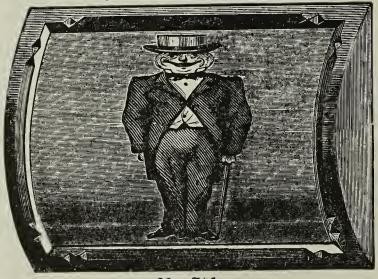
Amusement Mirror No. 2, showing different pose See same mirror on opposite page



Amusement Mirror No. 2, showing different pose

### Convex Distorting Mirror





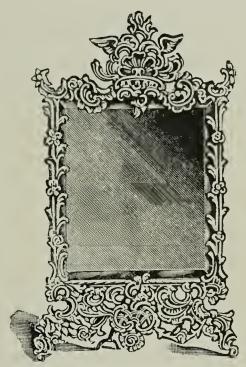
No. 741

An Attractive Advertisement for Your Store
It Draws the Crowd
Thick Plate Glass. 18x24 Inches

Cuts show the effects produced by this one mirror in perpendicular and horizontal positions.

The attachment on the back is so constructed that the mirror revolves upon the same, thereby enabling one to place it in different positions and create much laughter

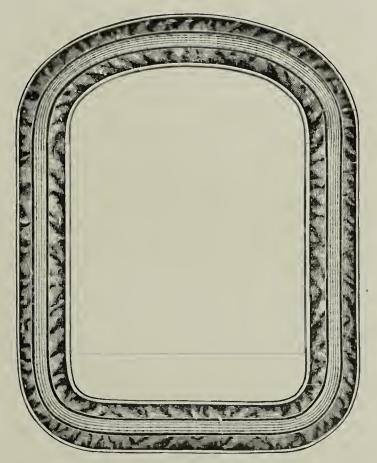
In order to handle these goods in large quantities, so as to come within the reach of almost every merchant, we have reduced the price to \$12.00 each



M-13 New Toilet Mirror

Handsome ornamental metal frame, with back support; finished in dead ebony, with gold burnishes. Fitted with a 10x12 bevel French plate. Size, outside, 13x21½ inches

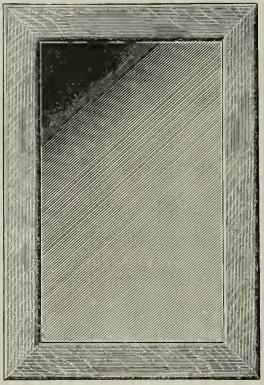
Price.....each, \$4.00



M-14 Imitation Oak Veneer

	American					American			
7x 9	. per doz.,	\$0.00	each,	₽0.00	10x17	per doz.,	\$0.10	eacn,	\$1.0U
8x10		4.00	6.6	.80	12x20		9.10	6.6	2.10
9x12	•	4.80	"	.90	13x22	6.6	10.60	6.6	2.50
10x14	4.6	5.52	6.6	1.30	14x24	"	12.30	"	3.00

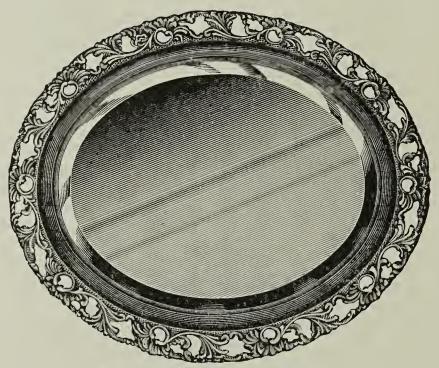
Unless otherwise ordered, German plates will be furnished



M-15 Mirror

2-inch solid polished oak moulding. Fitted with plain or beveled French plates. M-48 mirror will not be sold in less than ½ doz. lots of one size at these prices. All sizes given are glass sizes Special prices for half dozen lots of one size

		*	^					
Size	Plain	Plates	Beveled	Plates	Size			
8x10	each,	\$0.68	each,	\$0.90	14x24e	aclı, \$2.60	each, 🕻	\$3.00
9x12		.86	"	1.08	15x26	" 3.26	6.6	3.80
10x14		1.12	"	1.38	16x28			4.18
10x17		1.30	"	1.70	$17x30 \dots$	" 4.30	" "	4.94
12x20		1.85	"	2.25	18x32	" 4.60	"	5.26
13x22								



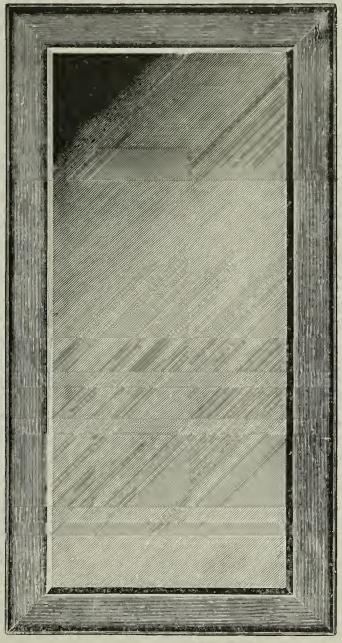
M-16 Oval and Circle Mirror

Frame is  $3\frac{1}{2}$  inches wide, all gilt with inside edge and parts scroll ornaments in gold burnish A handsome mirror at a very low price. Fitted with French bevel plates

OVALS	CIRCLES
16x20 each, \$5.00	16-incheach, \$4.80
14x24	18-inch 6.00
$20 \times 24$	20-inch

M-49½ Ebony and Gold Frame. Same price as above

### Plain Oak Framed Mirrors

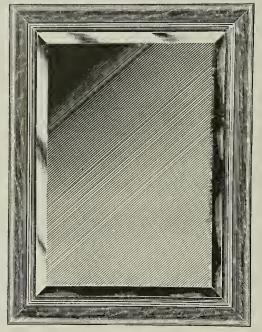


M-17

Solid oak frames, golden oak finish, fitted with plain or beveled French or German plates A staple pattern. In great demand

	Fitted with	Plain Gern Mirror Plat	nch	Fitted with Bevel French Mirror Plates				
Size	2-inch Frame No. 86	2½-inch Frame No. 87	3-inch Frame No. 88	4-inch Frame No. 89	2-inch Frame No. 86	2½-inch Frame No. 87	3-inch Frame No. 88	4-inch Frame No. 89
8x10	\$0.63				\$0.82			
9x12	.84				1.10			
10x14	1.04	\$1.16			1.28	\$1.40		
10x17	1.30	1.38			1.68	1.74		
12x20	1.84	1.90			2.24	2.30		
14x24	2.60	2.62	\$2.80		2.90	3.00	\$3.16	
15x26	3.12	3.30	<sup>™</sup> 3.32		3.50	3.60	"3.70	
16x28	3.46	3.54	3.70		4.00	4.10	4.16	
17x30	4.00	4.10	4.20		4.76	4.90	5.00	
18x32	4.40	4.54	4.70	\$5.00	5.00	5.18	5.30	\$5.72
18x36	4.90	5.00	5.20	*5.80	5.80	5.94	6.00	*6.40
18x40	5.80	5.90	6.00	6.50	6.50	6.66	6.80	7.20

Always mention in your order if plain or beveled plates are wanted, also whether  $2, 2\frac{1}{2}, 3$  or 4-ineh frames are wanted



### Oak Mirror

Oak frame, fitted with American or German plate, or French plain or bevel plate

Made of 1½-inch solid oak moulding well finished

The most salable mirror on the market

Jobbers write for special prices for large quantities Plain French plates same price as German

M-18	FITTED WITH				
1115	American Plate	German Plate	Pl. French Plate	Bev. French Plate	
Size	per dozen	each	each	each	
6x 8	\$2.20	\$0.46	\$0.46	\$0.58	
7x 9	"2.40	.50	.50	.70	
8x10	3.00	.56	.56	.76	
9x12	3.60	.78	.78	1.00	
10x14		.96	.96	1.20	
10x17:	5.70	1.20	1.20	1.56	
12x18				,	
12x20	7.20	1.70	1.70	2.10	
13x22	8.70	2.04	2.04	2.60	
14x24	10.00	2.40	2.40	2.80	
15x26		3.10	3.10	3.60	
		2.40 3.10	2.40 3.10		

For the convenience of customers, we will put up above mirrors assorted, one dozen in a box, as follows:

ASSORTMENT No. 1	ASSORTMENT No. 2
$\left\{\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
,	,

### Mirror Plates

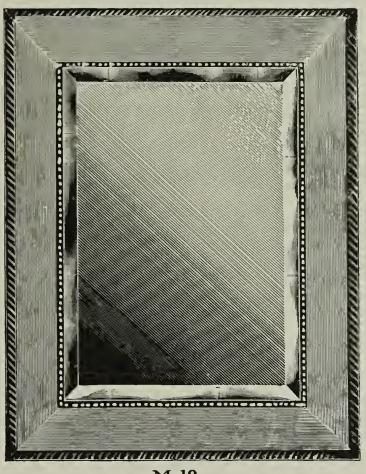
### American, German and French Mirror Plates

Write for prices on large size French plates

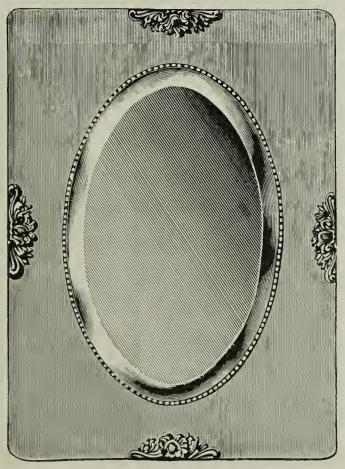
a.	American	Pl. German	Bev. German	Pl. French	Bev. French
Size	each	each	each	each	each
6x 8		\$0.40		\$0.40	)
$7x 9 \dots 7x 9 \dots$	12	.44			
8x10	15	.56		.56	\$0.76   3-inch
9x12	20	.70			.96 Bevel
10x14	0.0	1.00		1.00	1.30
10x17	36	1.20		1.20	1.60
12x20	= 0	1.70	2.10	1.70	2.10 )
13x22	62	2.10	2.60		
14x24		2.40	2.84	2.40	2.84
15x26	1.00	3.20	3.70	3.20	3.70
16x28		3.50	4.10	3.50	4.10
17x30		4.24	4.90	4.24	4.90 1-inch
18x32		4.50	5.20	4.50	5.20 [ Bevel
18x36		5.00	5.90	5.00	5.90
18x40		6.00	6.50	6.00	6.50
20x24		3.90	4.50	3.90	4.50
22x28		5.00	5.80	5.00	5.80
24x30		6.00	6.50	6.00	6.50
		- • • •		0.00	0.00

For box lots or larger quantities, write for special prices, on American, German or French plates

### Mirrors



M-19



### Handsome, Salable Pattern

M-44 Frame is about 2½ inches wide, made of wood fiber, ornamented on outer and inner edges; finished in soft colors of gray, green or black, with ornaments gilt tipped. Fitted with plain or beveled French plates. Sure to take. Order a sample lot.

7x 9, plain	eacl1,	\$ .80
beveled		.96
10x14, plain	6.6	1.60
beveled	. "	1.90
10x17, plain		1.80
beveled	. "	2.20

In ordering, state color wanted

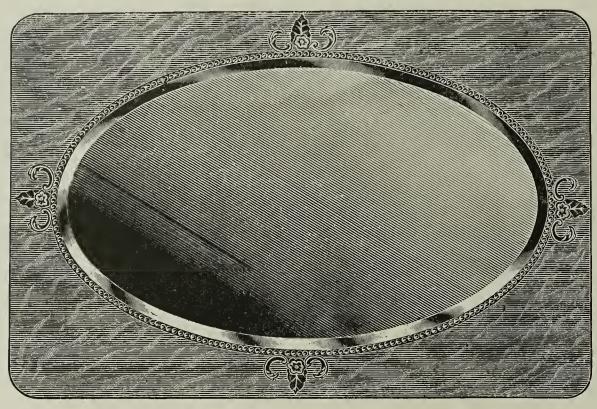
### New, Cheap and Pretty

M-45 Wood fiber frame, neat, pretty ornamentation, and finished in soft, delicate tints of green, gray or black, with ornaments tipped with gilt. Fitted with plain or beveled French plates.

### NOTICE THE PRICES

10x14,	plain	each,	\$1.60
	beveled	"	2.00
10x17,	plain	6.6	1.80
	beveled	4.4	2.30

In ordering, state color wanted

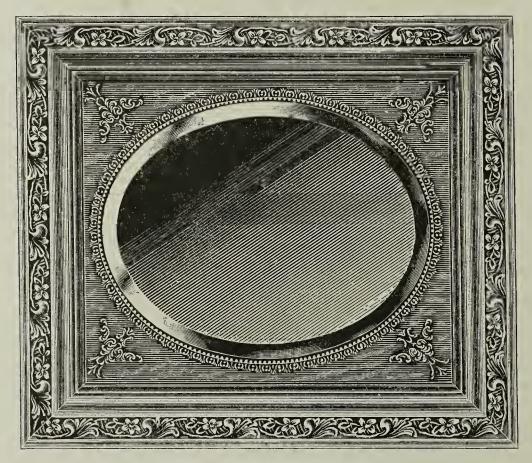


M-21 Something New

Frame is made of quartered oak veneer, 3-ply, neatly ornamented and finished in black Flemish or dark brown oak color. Fitted with plain or beveled French plates

Size 12x20, plain plate.....each, \$3.10 Size 12x20, beveled plate....each, \$3.50

Order by number and state if plain or bevel plate is wanted

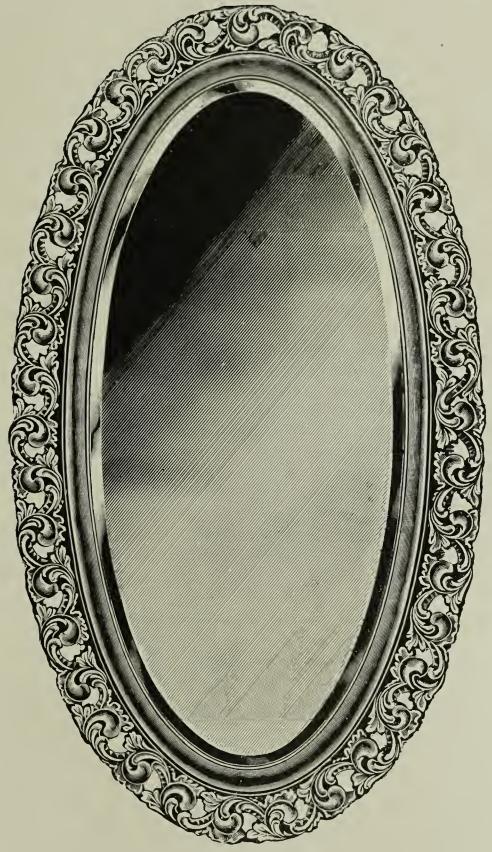


M-22 16x20 Gilt Mirror

Outside moulding is nearly 4 inches wide, with wide burnish on inner edge; inside of this is an ornamental gilt panel. Fitted with French bevel plate

Price.....each, \$4.50

### Popular Pattern in Oval Mirrors

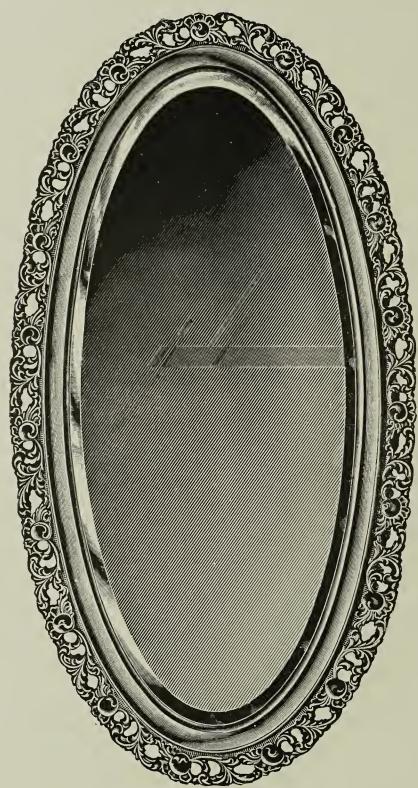


M-23 and M-25

### All Gilt or Ebony and Gilt

Above is a rich, elegant mirror, five inches wide. The deep inside member has gold burnished edge; outside is heavily ornamented, bored and cut out. The scroll ornament has heavy gold burnishes between each opening. Finished all gilt or in ebony with gold burnishes

M-23	All gilt, 18x40, I	French	bevel plate	each,	\$15.00
			French bevel plate		15.00



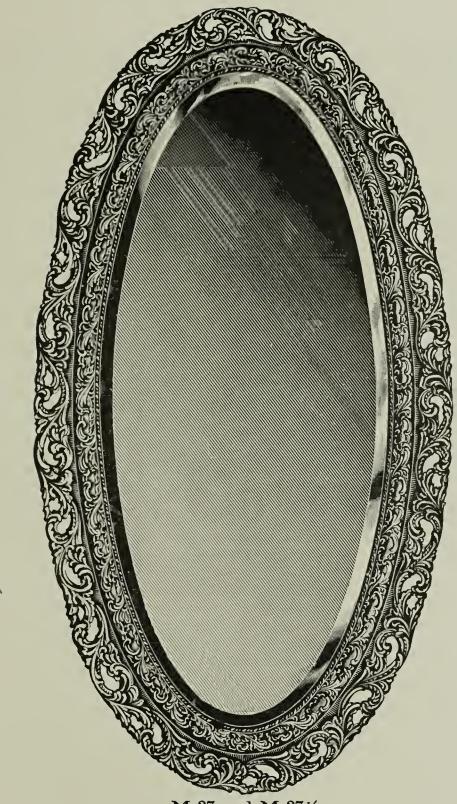
M-26 and M-261/2

### Gilt or Ebony and Gilt Oval Mirror

About 4 inches wide, handsome Florentine shape, carved and cutout ornaments, rich gold burnishes on ornaments and inside edges. Finely finished all gilt, or in ebony finish with gold burnishes. A very attractive and salable mirror.

### FITTED WITH BEVEL FRENCH PLATES

M-26	All gilt, 18x40	eaclı,	\$11.00
M-26	All gilt, 16x20	6.6	<b>5.</b> 00
$M-26\frac{1}{2}$	Ebony and gilt, 18x40	"	11.00
$M-26\frac{1}{2}$	Ebony and gilt, 14x24	"	6.00
$M-26\frac{1}{2}$	Ebony and gilt, 16x20	6.6	5.00



M-27 and M-271/2

### Gilt or Ebony and Gilt Oval Mirror

Sizes 16x20 and 18x40

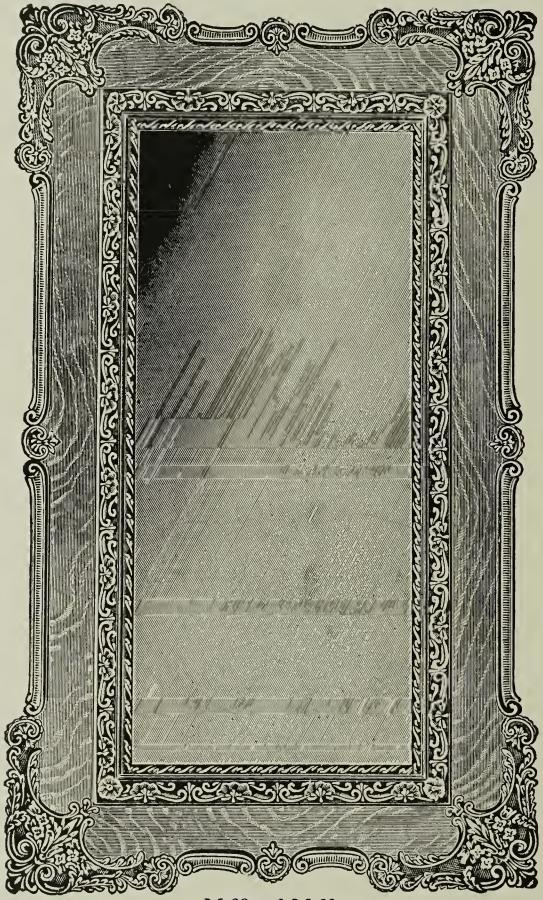
Frame is nearly 4 inches wide, open scroll ornament and carved edge
Finished in all gilt, or in ebony with gilt tips
Fitted with French bevel plates

### NOTICE THE PRICES

M-27	All gilt, 18x10	each,	\$8.50
M-27	All gilt, 16x20	* *	4.00
M-27 1/2	Ebony and gilt, 18x40	6.6	8.50
$M-27\frac{1}{2}$	Ebony and gilt, 16x20	6.6	4.00

### A Wonder for the Money

7½ inches wide



M-28 and M-29

Handsomely cut out and ornamented on solid oak, with raised inside member All ornaments are finished in gilt, with body of frame in antique oak or green finish Fitted with 18x40 French bevel plates

M-28	Oak with gilt ornaments	each, \$11.20
M-29		0001 11 20

A standard salable mirror

### Elegant New Pattern

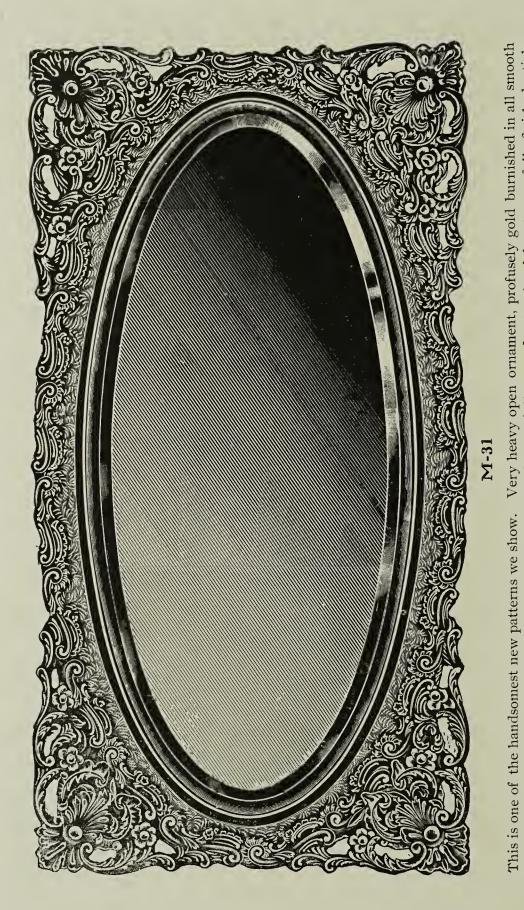


Finished in Brown Oak Color

One of the richest oak frames made. Heavy raised ornament, very heavily gold burnished. All parts of ornament showing light are burnished Suitable for any room where a fine mirror is wanted

18x40, with French bevel plate.....each, \$16.40

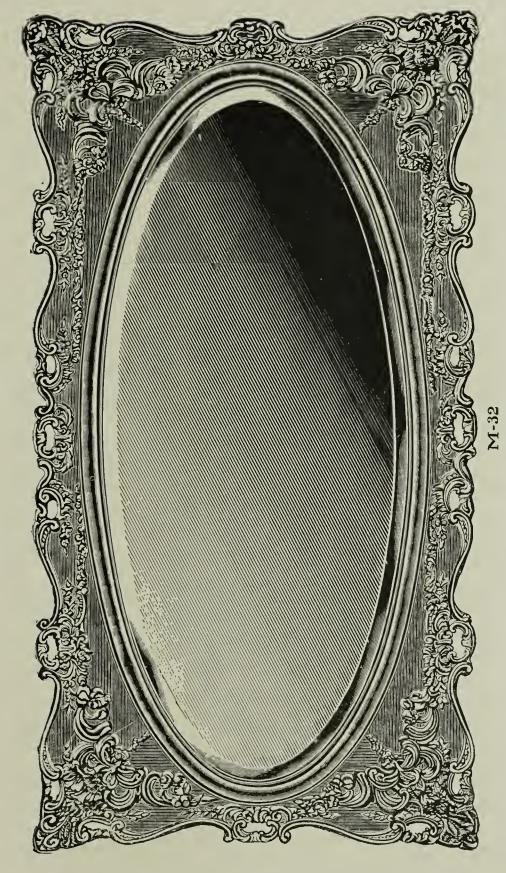
### Handsome Gilt Mirror



parts. Raised inside has two wide lines of burnish. Outer edge carefully carved out. An elaborate, carefully finished article

18x40, with French bevel plate .... ..... each, \$15.60

## Elegant New Gilt Mirror

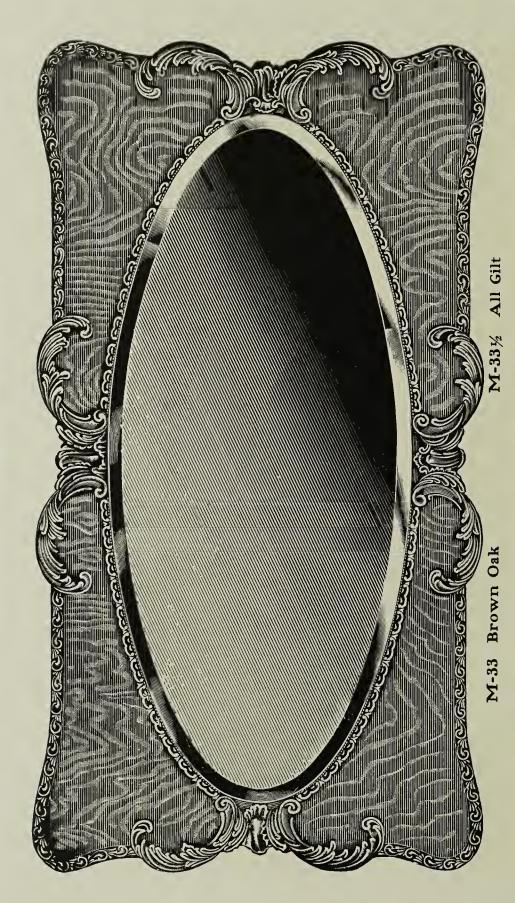


New shape and first-class finish; rich, open ornament on reeded ground work. Raised inside rim is burnished on both edges. Extreme outer edge of ornament is burnished; also gold burnishes in corners

18x40, with French bevel plate. ........

.....each, \$14.00

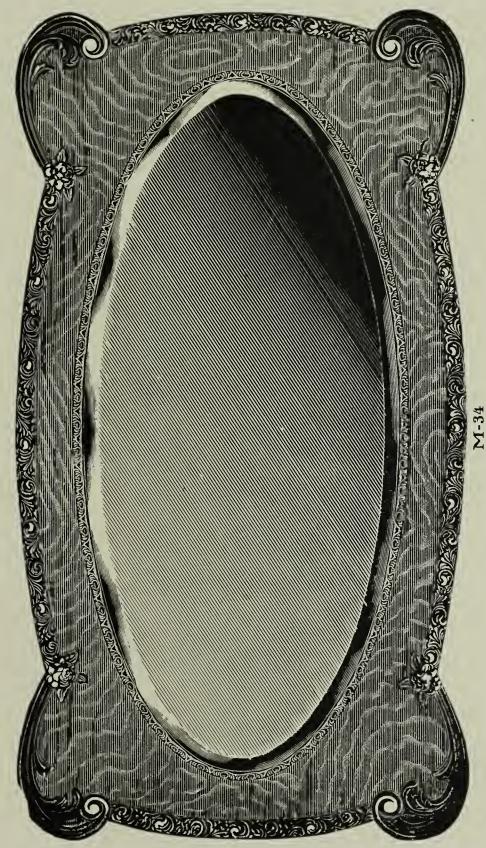
# Rich, New Designs in Mirrors



Rich, new pattern, oak veneer, handsomely ornamented, with portions of the heavy ornament in burnished gold Finished in a rich brown or in all gilt

.....each, \$13.40 Brown, with 18x40 French bevel plate...... M-33½ Gilt, with 18x40 French bevel plate.....

## Fine, Showy New Mirror

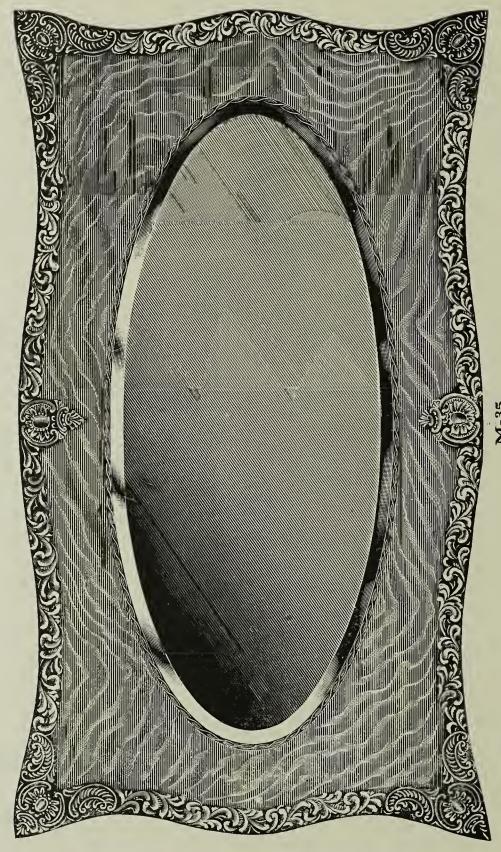


One of Our Latest

Oak veneer, nicely ornamented; parts of ornament showing light in cut are gold burnished Finished in a rich brown color. Sure to sell

18x40, with French bevel plate ......each, \$12.00

### Oak Veneer Mirror

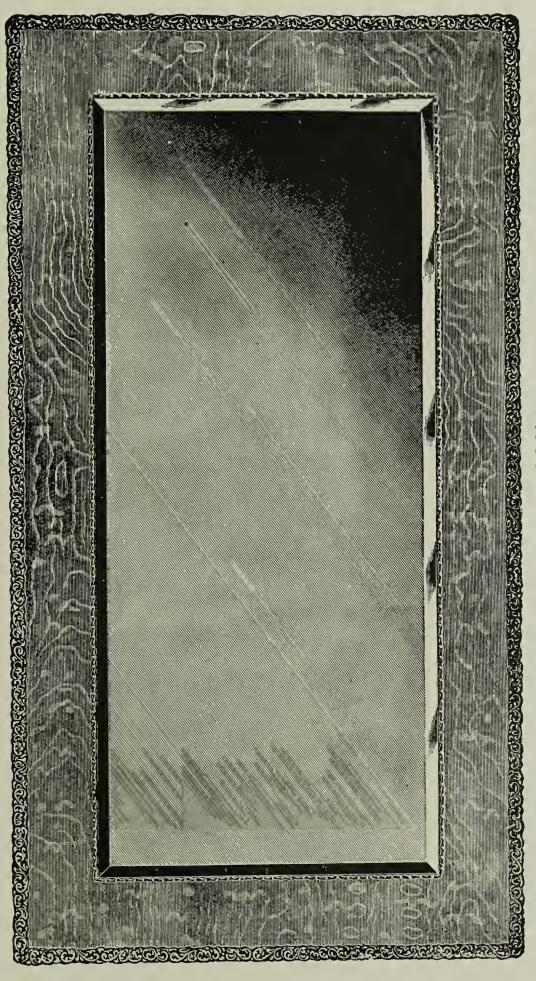


M-35

New showy pattern. Frame is 5½ inches wide at narrow parts. Well ornamented, with gold burnishes at corners and center, and inside ornament gilt tipped. Brown oak finish

18x40, with French bevel plate ......

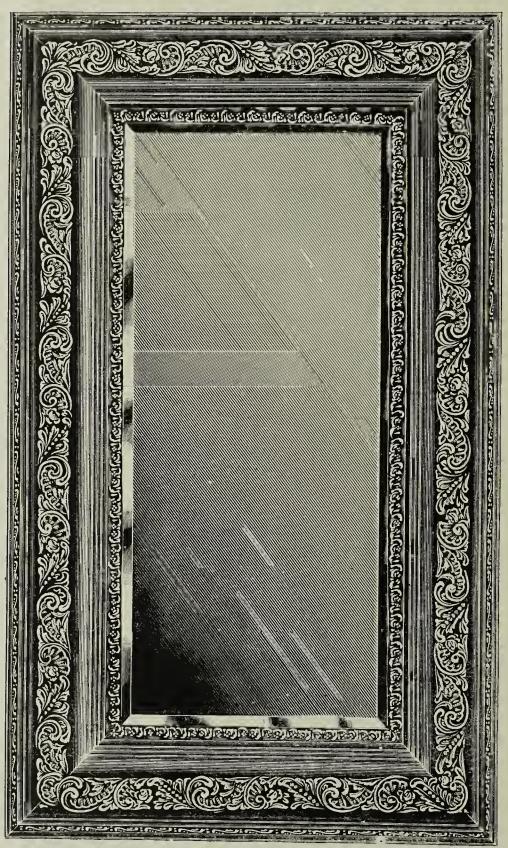
## New Flemish Oak Mirror



### M-36 and M-361/2

4½ inches wide oak veneer in one piece. No miters to open. Handsome ornament on each edge Finished in brown or black Flemish finish, with inside ornament burnished gilt

### Handsome Gilt Mirror



M-37

Very showy new pattern, wide massive frame, 7½ inches wide, heavily ornamented raised center, well finished in all gilt. A Seller

18x40, with French bevel plate..... each, \$11.00

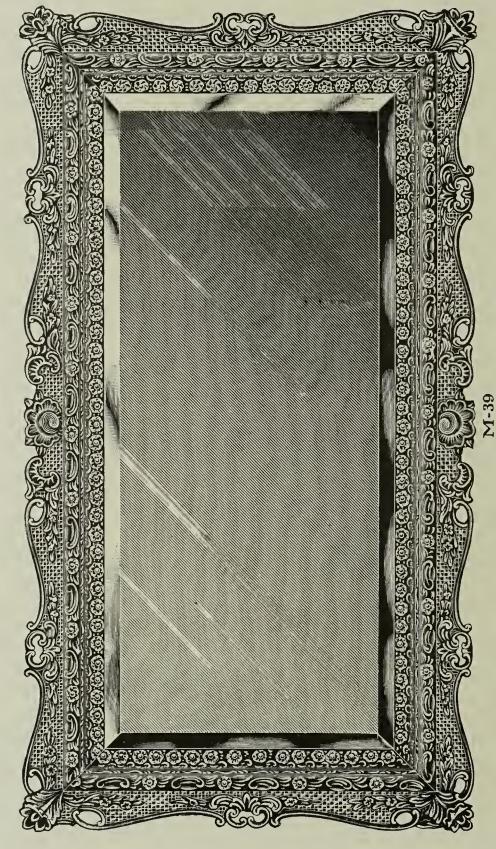
## New Oak and Gilt Mirror



Frame about 6 inches wide. Elegant new pattern; very showy. The reeded stem lining and outside ornament are gilt and the two panels polished oak. One of the best in the market. Gold burnishes on corners. Try it 18x40, with bevel German or French plate ......

# Rich, New Pattern-Notice the Price

All Gilt. New Mirror

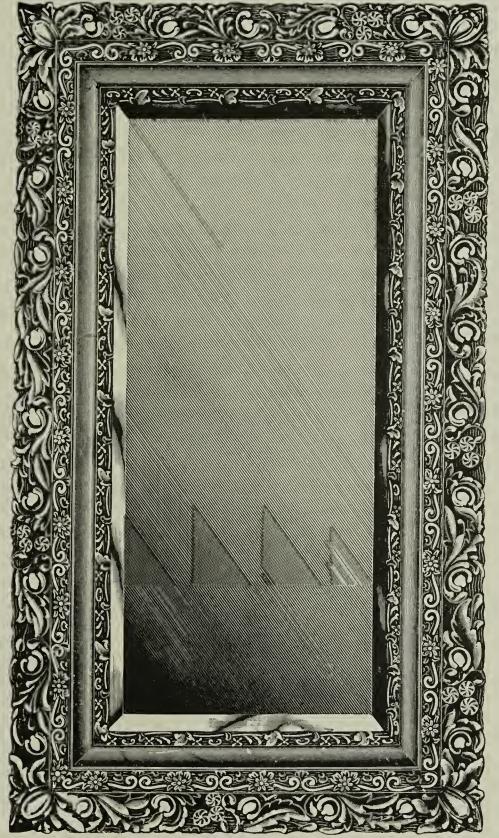


Handsome shape, carved and bored, neat ornamentation, all gilt finish, 5 inches wide at centers A Sure Seller. Notice the Price

18x40, with French bevel plate .....each, \$

In lots of four, each, \$8.50

## All Solid Gilt Open Work

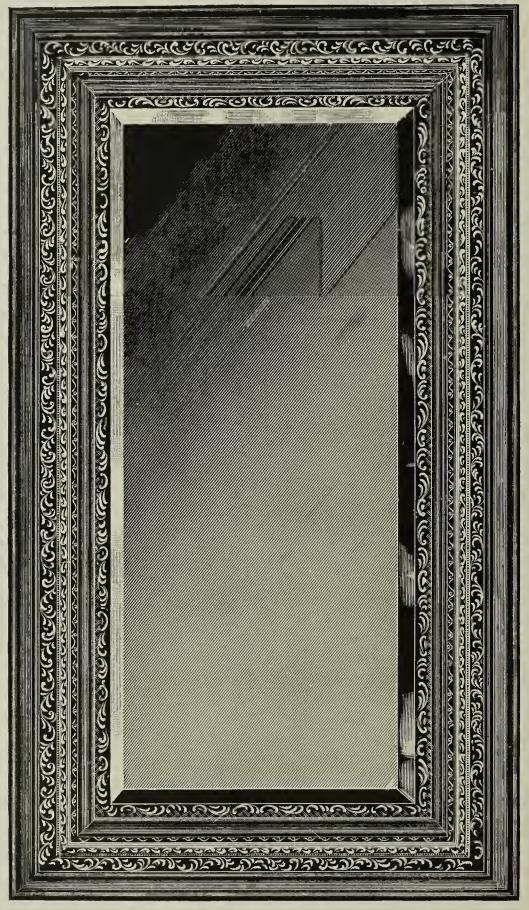


M-40

Heavily ornamented, 7 inches wide, 3%-inch outside scroll open work, with heavy ornamented stem, 2 inches wide, next a 1-inch gilt burnished member and extra heavy ornamental lining.

18x40, with French or German plain plate.......

### Oak and Gilt



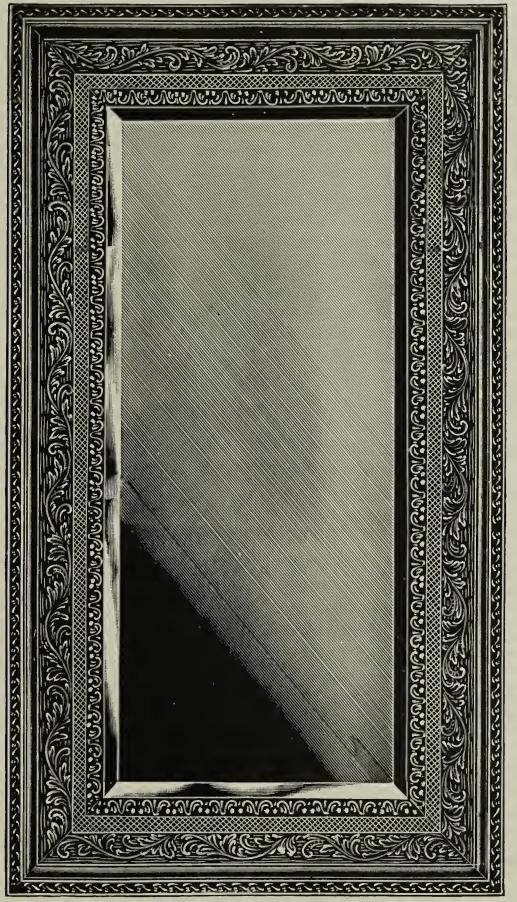
M-41

Combination frame, about six inches wide. Polished oak, with center and lining gilt

18x40, with plain German plate .... each, \$7.50 18x40, with German or French bevel plate ... 8.50

German or French bevel, in lots of four, each, \$8.00

### Oak and Gilt

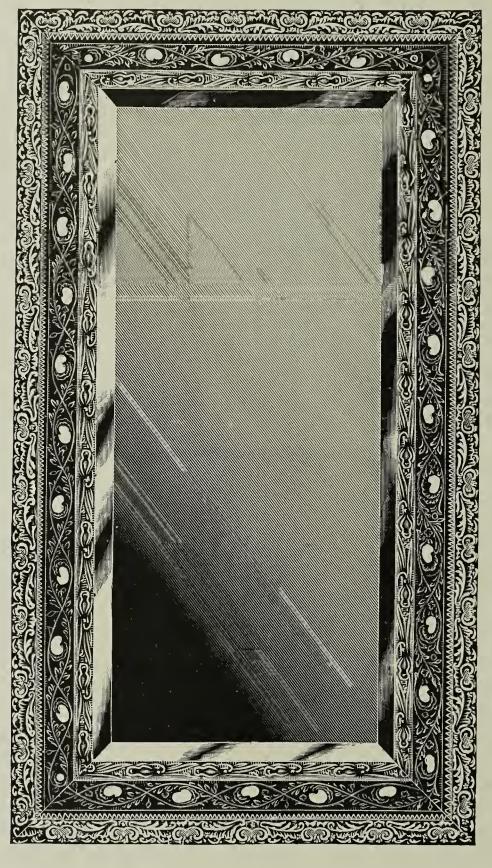


### M-42

Combination frame, nearly six inches wide, outside stock in solid oak three inches wide, with one strap ornament, and inside a three-inch ornamented gilt moulding

German or French bevel, in lots of four, each, \$8.00

## The Latest Thing Out. A Showy, Cheap, Salable Mirror The Leader-Notice the Price

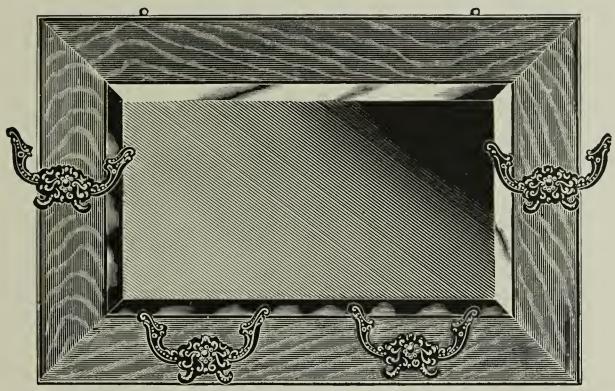


### All Gilt M-43

### M-43% Ebony and Gilt

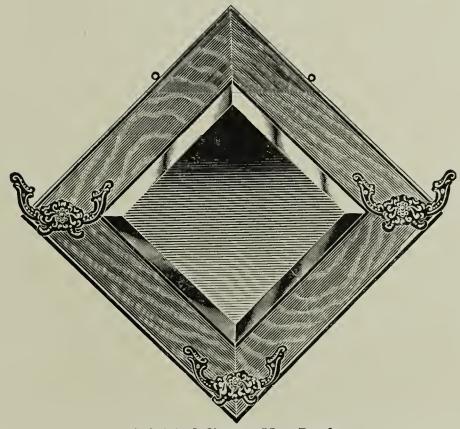
Entirely new pattern, finished all gilt or with the outside and inside members in gilt, and the open work panel in ebony Gilt, 18x36, French beveled plate.....each, \$7.00 Gilt, 18x40, French beveled plate......

### New Mirror Hall Racks



M-44 Hanging Mirror Hat Rack

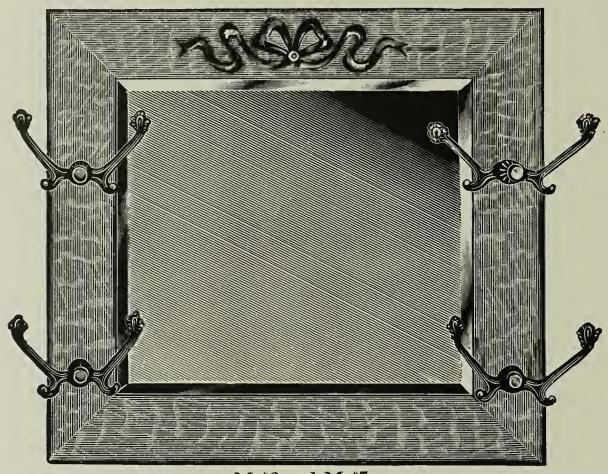
4-inch polished golden oak frame, with four large double hat hooks. Fitted with beveled French plates. Sizes given are the size of mirror plate



M-45 Mirror Hat Rack

4-inch polished golden oak frame, with three double hat hooks Fitted with French bevel plates

With 14x14 French bevel plate...each, \$4.00 With 18x18 French bevel plate...each, \$5.60 " 16x16 " " 5.00 " 20x20 " " " " ... " 6.80



M-46 and M-47

### Hanging Hat Racks

M-20 Made of 4-inch quarter-sawed, finely polished golden oak, with carved ornament and four double brass hooks. Fitted with French plates only

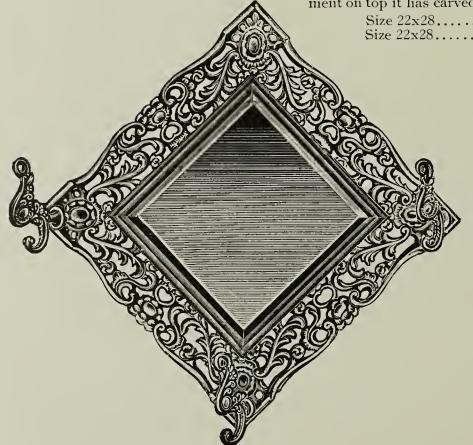
 

 Size 18x20
 plain, \$7.50
 beveled, \$8.00

 Size 20x24
 plain, 9.00
 beveled, \$9.50

 Size 20x24 ....

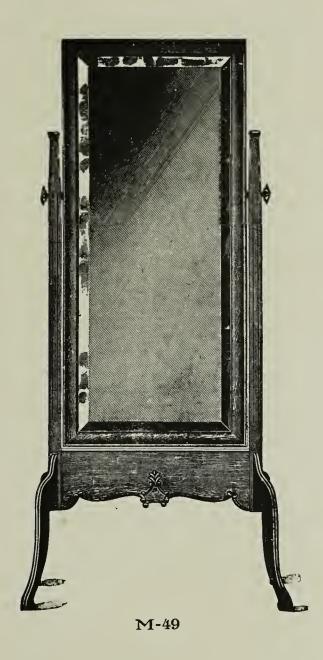
M-21 Similar to M-20, but in addition to ornament on top it has carved ornaments on each corner Size 22x28.....plain, \$11.00 Size 22x28.....beveled, 12.00



M-48

### Brass Hat Rack

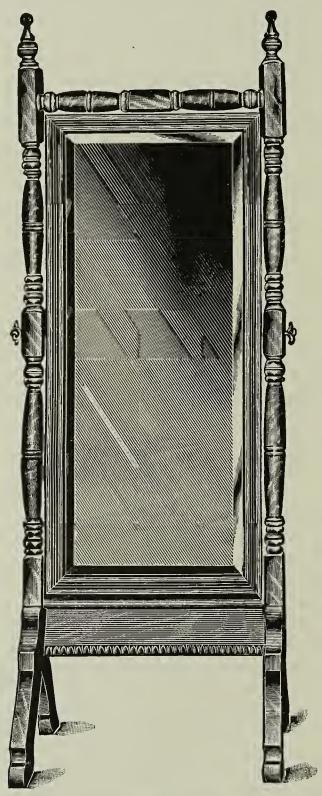
Gold plated; rich, heavy ornaments Fitted with 8x8 French bevel plate Price, each, only \$3.00



### Cheval Mirror

Made of select oak, finished in golden or Flemish oak, or curly birch in mahogany finish Fitted with French plates

Size of plates	F <b>r</b> ench plain each	French bevel each
18x40	\$17.20	<i>\$</i> 18.00
20×48	25.00	27.00

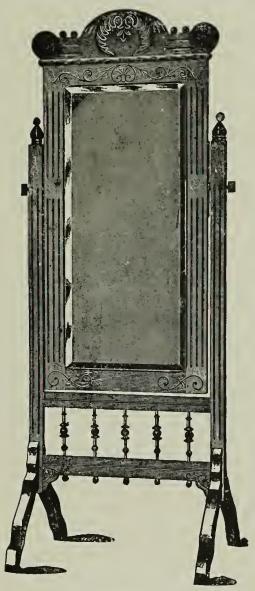


**M-50** 

### Cheval Swing Mirror

Graceful and strong, the outside frame forming an additional support Finished in antique oak

Fitted with	18x40 plain German plate	each,	\$18.50
6.6	18x40 beveled German plate	"	19.50
6.6	18x40 beveled French plate	"	20.00
"	20x48 plain German or French plate	"	26.50
4.6	20x48 beveled German or French plate	4.6	28.50

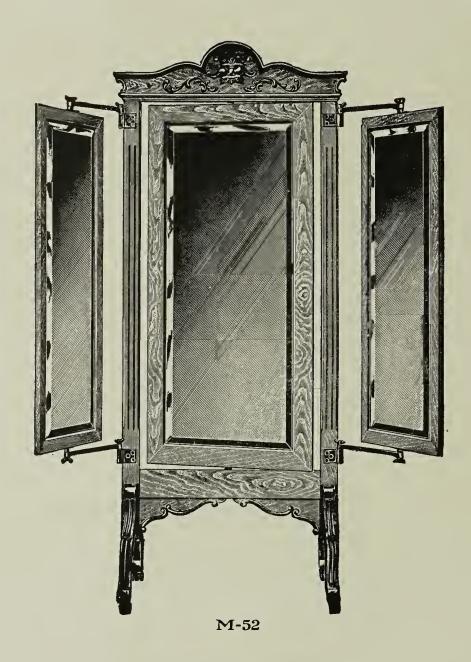


M-51

### Cheval

Golden oak polished, or weathered oak. Fitted with French plates

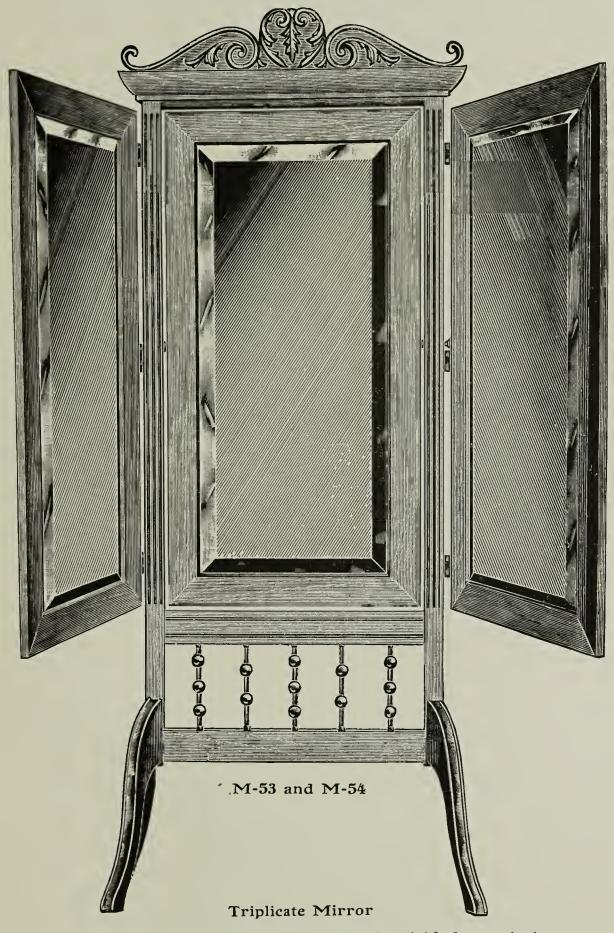
Size of plates	French plain each	French bevel each
18x40	\$18.50	\$19.30
20x48	27.50	29.50



### Triplicate Mirror

Made of oak, in polished golden oak or Flemish oak finish Finished veneer backs, handsome hand carvings Hinges and casters oxidized copper finish Fitted with one 20x48 and two 16x44 French plates

| Price, | with plain | plates | <br> | .each,  | \$60.00 |
|--------|------------|--------|------|------|------|------|------|------|------|---------|---------|
| Price, | with bevel | plates | <br> | <br>. " | 66.00   |

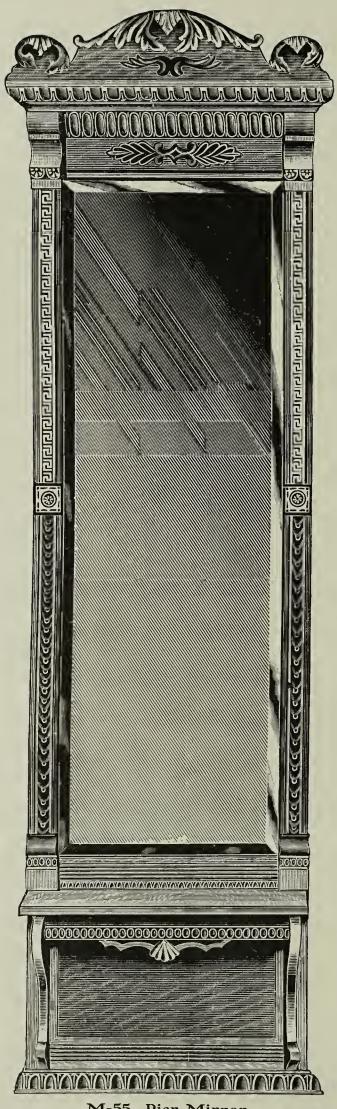


Made of oak, finished in golden oak, polished. Finished veneer backs, Fitted with French plates

M-11 18x40, with French plain...\$34.70 French bevel......\$37.50

Furnished and made as above, with center plate 20x48 and side plates 18x40

M-12 French plain......\$44.00 French bevel....\$48.00



M-55 Pier Mirror

A popular style of frame, finished in highly polished golden oak, ornamented with massive hand-carved ornaments and moulding, and fitted with wood slab at base. Fitted with French plate. 20 x 60, plain . . . . each, \$36.00 | 20 x 60, beveled . . . each, \$39.00



M-56

### Hall Rack

Quartered golden oak, polished, or weathered oak finish 18x40, with French bevel plate.....each, \$30.00



### Effect of Triplicate Mirrors

Cuts on pages 156-157

They are particularly suitable for tailors, dressmakers, etc.

They are an ornament to most any store where wearing apparel is sold

When ordering do not cut out pages—order by number only

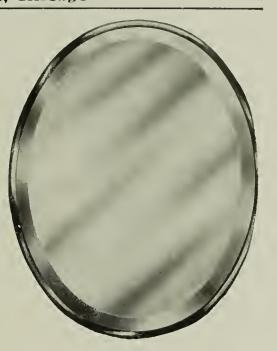
### Oval Nickel Plated Metal Frames

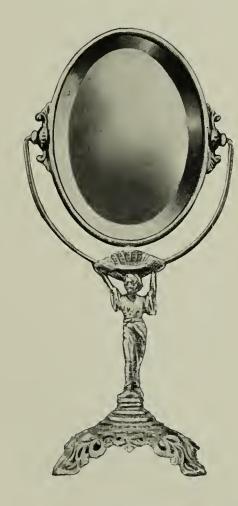
Dust-proof metal telescope backs. Fitted with beveled French mirror plates

Can also be furnished in brass plate, if desired

A chain can be attached to this frame for hanging

	Size of Plates	Price each
G11	8x10	\$2.85
G12	10x12	3.50
G13	11x14	4.25
G14	14x17	4.50
G15	16x20	6.00





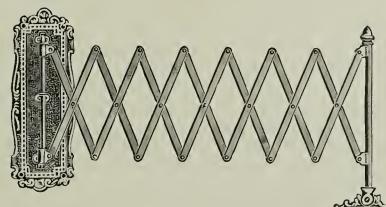
### Swivel Stand Mirrors

Made entirely of metal, nickel plated and fitted with beveled French mirror plates

Can be supplied in brass plate also, if desired

Very appropriate to put on show cases, or for dresser in a room

	Size of Plates	Price each
G16	6x 8	\$2.00
G17	8x10	2 50
G18	10x12	4.00



### Extension Swivel Mirrors

Made entirely of metal, finished in nickel plate. Size of mirror plate, 10x12. Can be fastened to wall or dresser and so adjusted in a minute as to give a perfect view of the back or profile, as may be desired

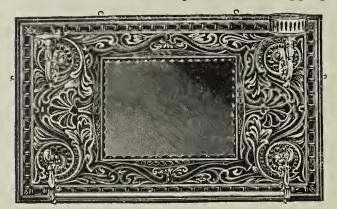
When not in use it occupies but a very small space, and is practically out of sight.

G19 Price each......\$8.00



### Combination Towel Rack and Cup and Brush Holder

With French plate mirror. Appropriate for bathrooms. Very elegant



This article is made entirely of metal Background finished in oxidized copper plate

> Fittings in nickel plate Size, 14 x 18 Mirror plate, 8 x 10

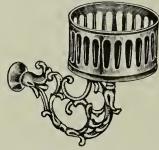
**G-20** Price per dozen ...... \$60.00

Three or less, \$6.00 each





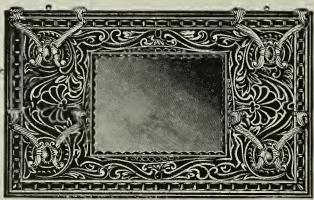
Detail Design of Posts Holding Towel Roller in Position



Detail Design of Cup Holder

### Combination Hat and Coat Rack

With French plate mirror



This article is made entirely of metal
Background finished in oxidized copper plate
Hooks in nickel plate
Size, 14x18
Mirror plate, 8x10

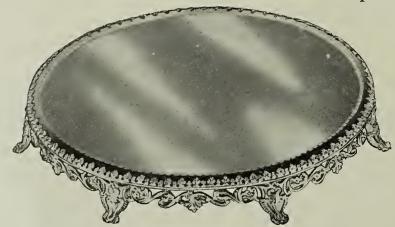


Cut Showing Design of Hooks

### Silver Mounted Plateau

Very appropriate for parlor or dining-room table

These plateaux are mounted in silver-plated metal frames and fitted with beveled and beaded French mirror plates

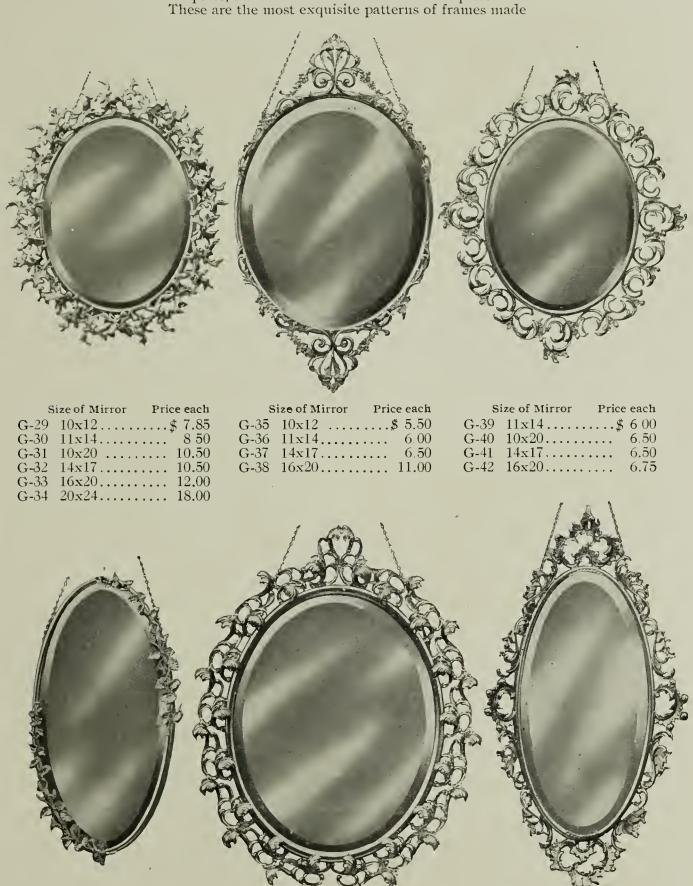


G-22	8-inch,	price	each	\$	3.00
G-23	10-inch	- "	4.6		4.20
G-24	12-inch	"	"		5.30
G-25	14-inch	"	"		6.70
G-26	16-inch	"	4.6		8.20
G-27	18-inch	te	"		9.60
G-28	20-inch	ic	"	,	12.00

Prices subject to fluctuations in prices of mirror plates

### Gold Plated Metal Frames

Fitted with beveled French mirror plates. These frames are guaranteed genuine 24-karat gold plate, hand-burnished and celluloid lacquered These are the most exquisite patterns of frames made



S	ize of Mirror	Price	each
G-43	10x12	\$	4.00
G 44	11x14		5 00
G-45	10x20		6.00
G-46	14x17		6.00
G-47	16x20		6.50

S	ize of Mirror	Price each
G-48	14x17	\$11.50
	16x20	
G-50	20x24	19.00

S	ize of Mirror	Price each
G-51	10x20	\$11.50
	14x17	
G-53	16x20	15 00
G-54	20x24	18.00

### Sash Bars

E take pleasure in submitting to you our new designs of standard metal and wood mouldings for show cases and store fronts. Also a number of frame metal mouldings.

All cuts of mouldings are of exact size, end view.

The metal mouldings are covered with nickel-silver, brass, copper, gold bronze and aluminum.

Oxidized black and antique copper mouldings.

The nickel-silver used in the manufacture of our mouldings is made to our order and guaranteed 20 per cent 28 gauge on store front bars, etc. Where required we use 24 gauge. We also manufacture mouldings made of 15 per cent nickel-silver when so ordered. Our 15 per cent metal equals, by actual test, many of the so-called 18 per cent metals now on the market. Metal arms are drawn on soft elm, which cuts out for joint as easy as pine, and makes a more perfect arm than can be made on any other wood.

We furnish iron rabbit sash bars complete, ready for set-

ting, on application.

We make a specialty of metal mouldings of a special pattern, and would be pleased to give any information desired. For special mouldings, please furnish sketch of exact size, end view of pattern desired, also the purpose it is to be used for.

We feel confident in saying we manufacture a line of show case makers' supplies which are superior in quality, excellence and exactness in manfacture not equaled by any other maker. Our individual attention, together with 30 years' experience, and customers in every state of the Union, are sufficient guarantees of the quality, etc., of our mouldings. All of our machinery is of the latest improved pattern. We employ none but experienced workmen, use strictly first-class picked lumber, and metals of guaranteed percentage and quality, manufactured expressly for

us, which enables us to warrant our products.

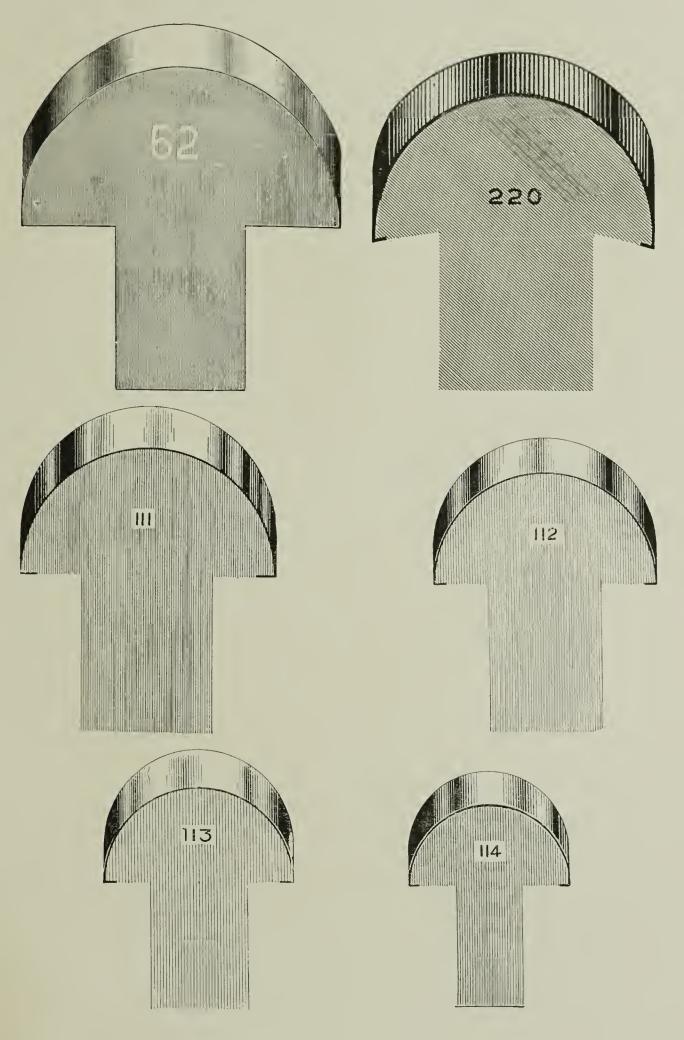
Wood mouldings of our make are accurately fitted to any

metal corner desired and are made perfect and smooth.

Always order by number in catalogue Prices on application Correspondence solicited

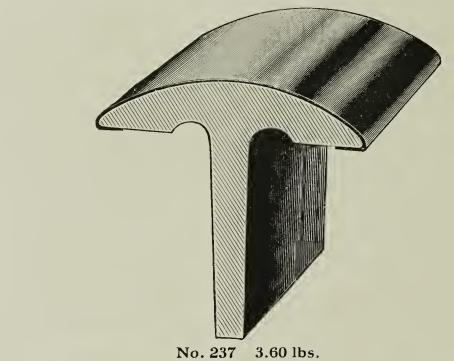
Always specify in shipping directions whether by express or freight, and by what railroad or express company preferred

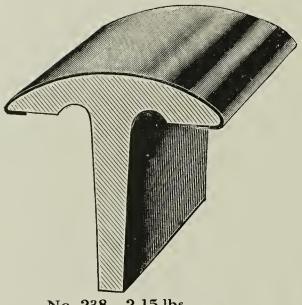
Metal Covered Sash Bars



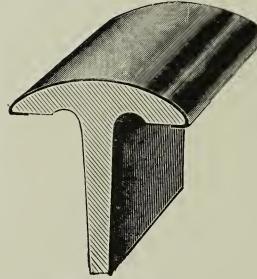
### Metal Covered Steel Sash Bars

Approximated weights in pounds per running foot

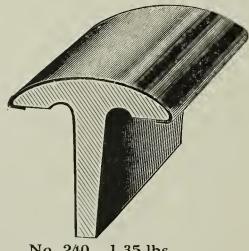




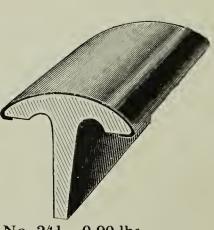
No. 238 2.15 lbs.



No. 239 1.70 lbs.

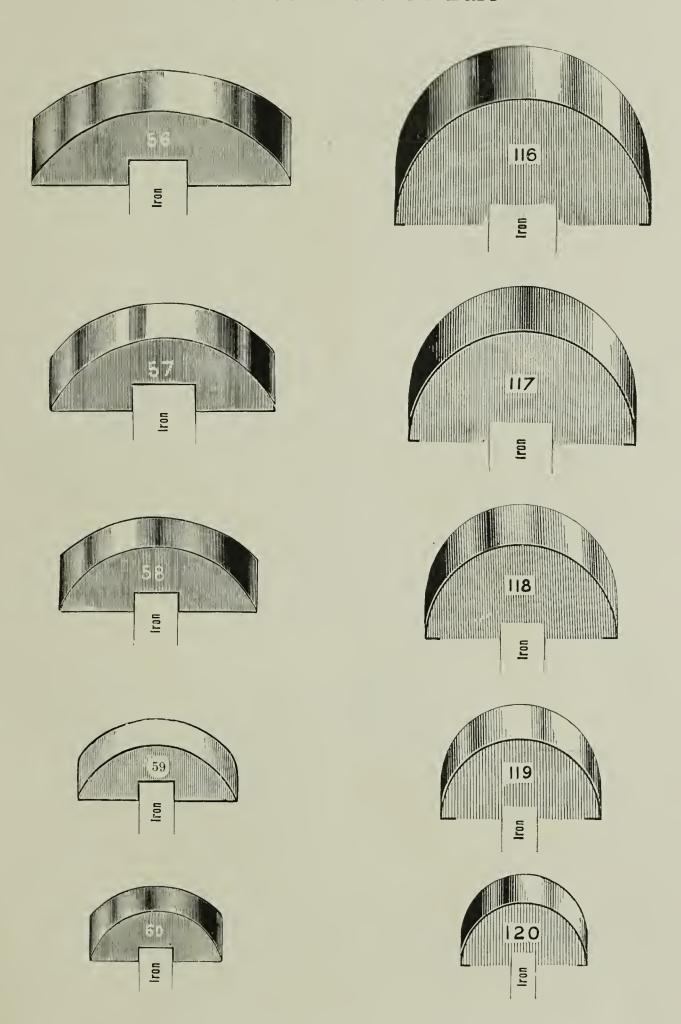


No. 240 1.35 lbs.

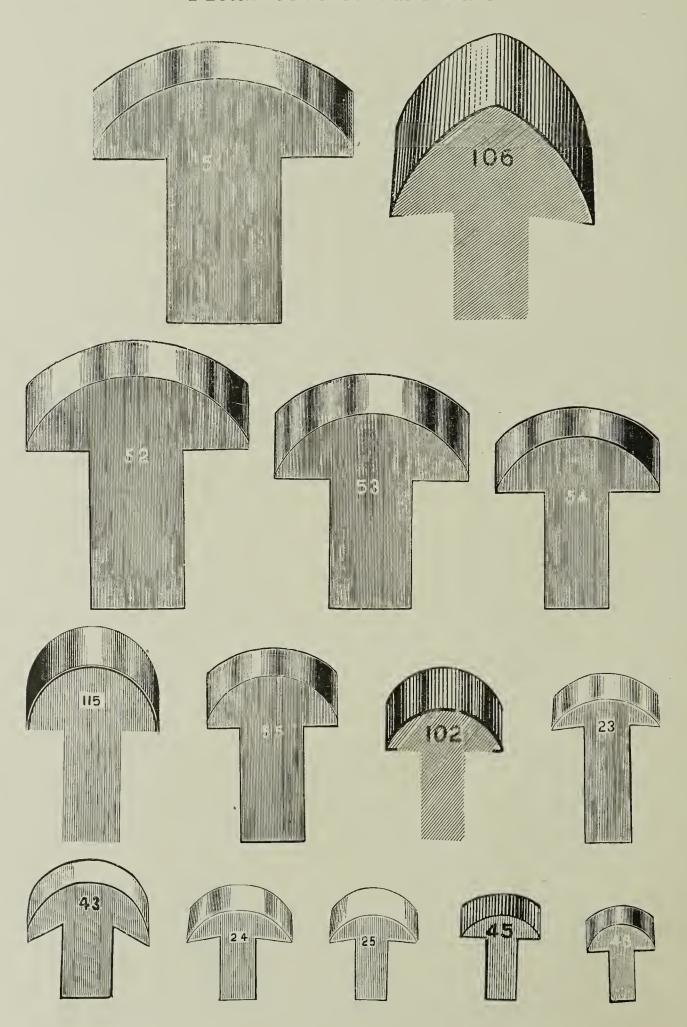


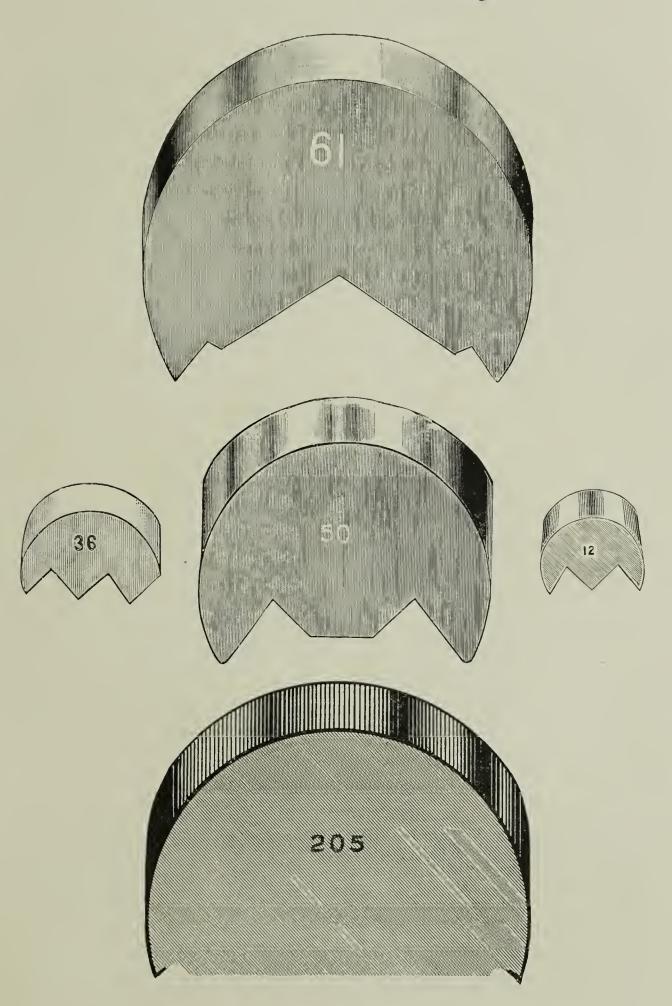
No. 241 0.90 lbs.

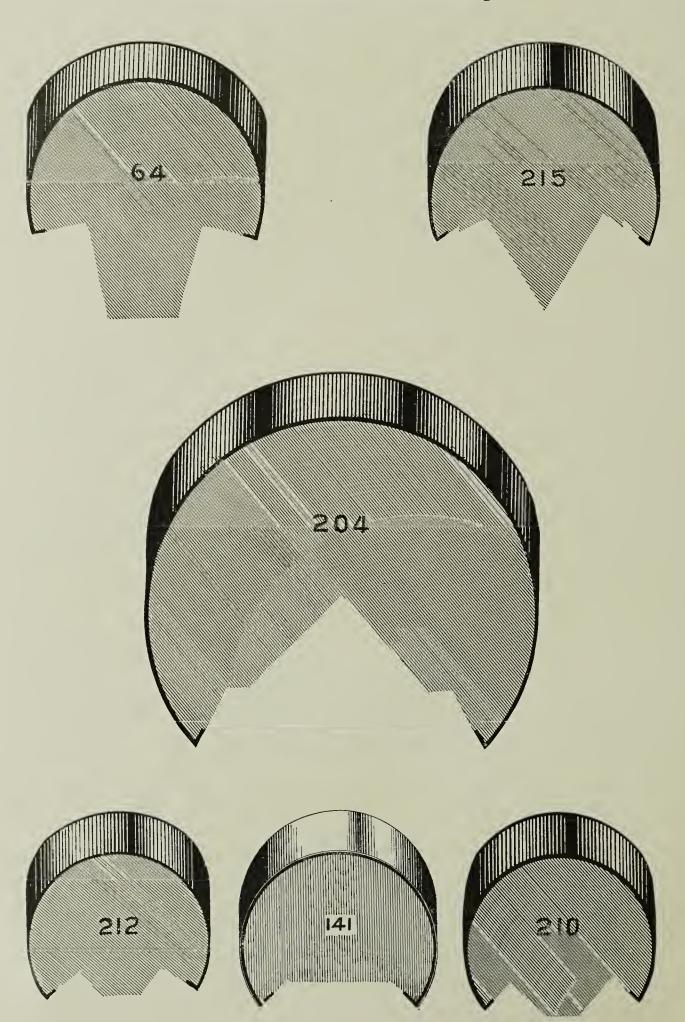
### Metal Covered Sash Bars

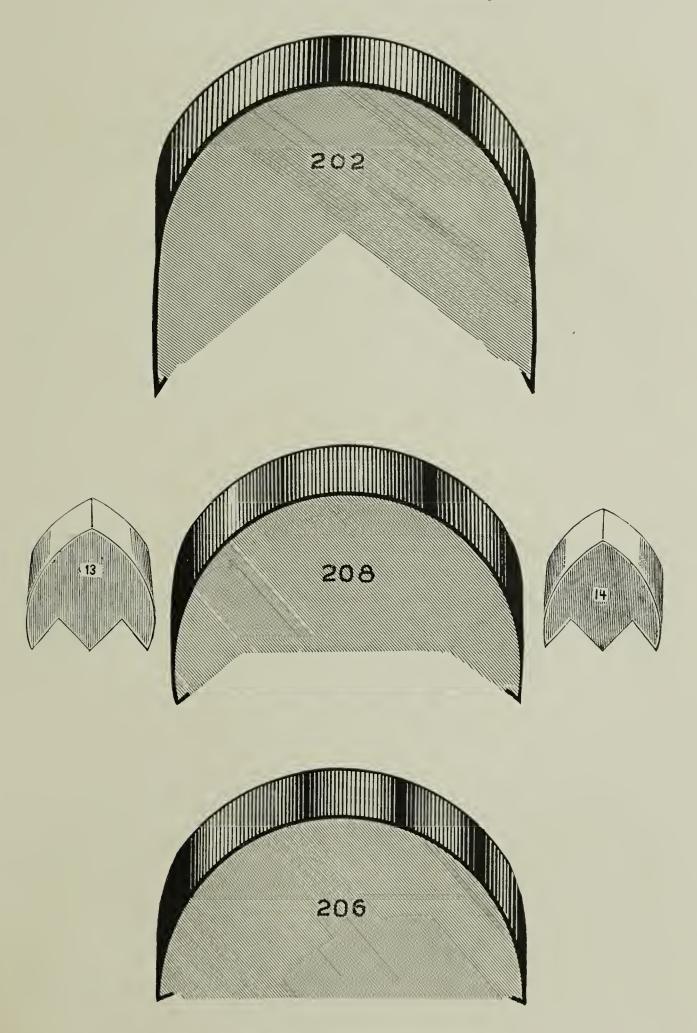


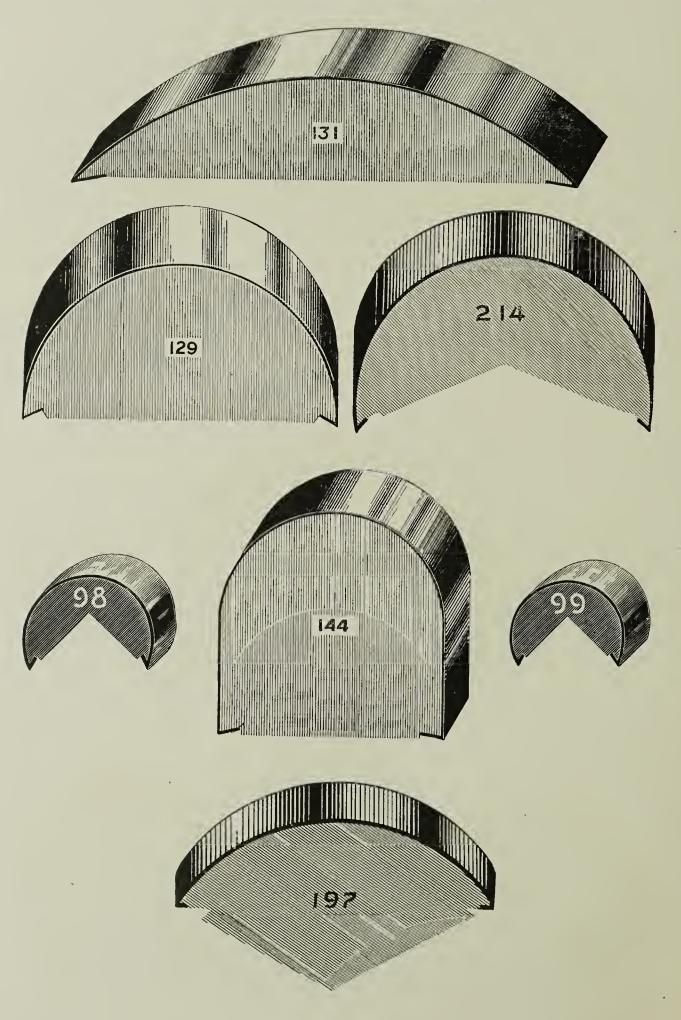
### Metal Covered Sash Bars

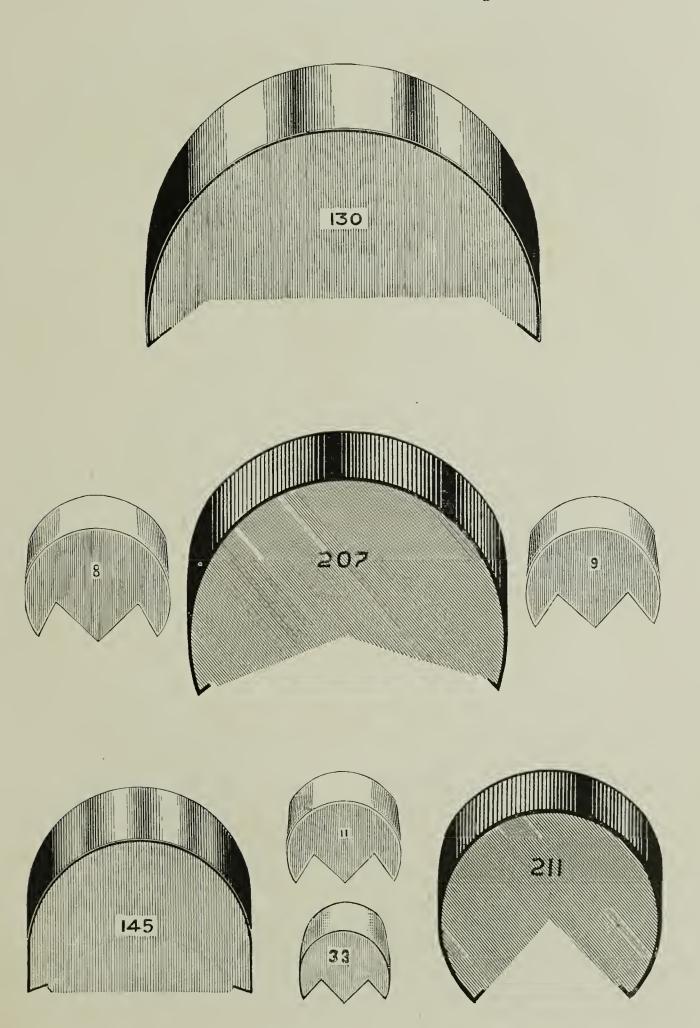


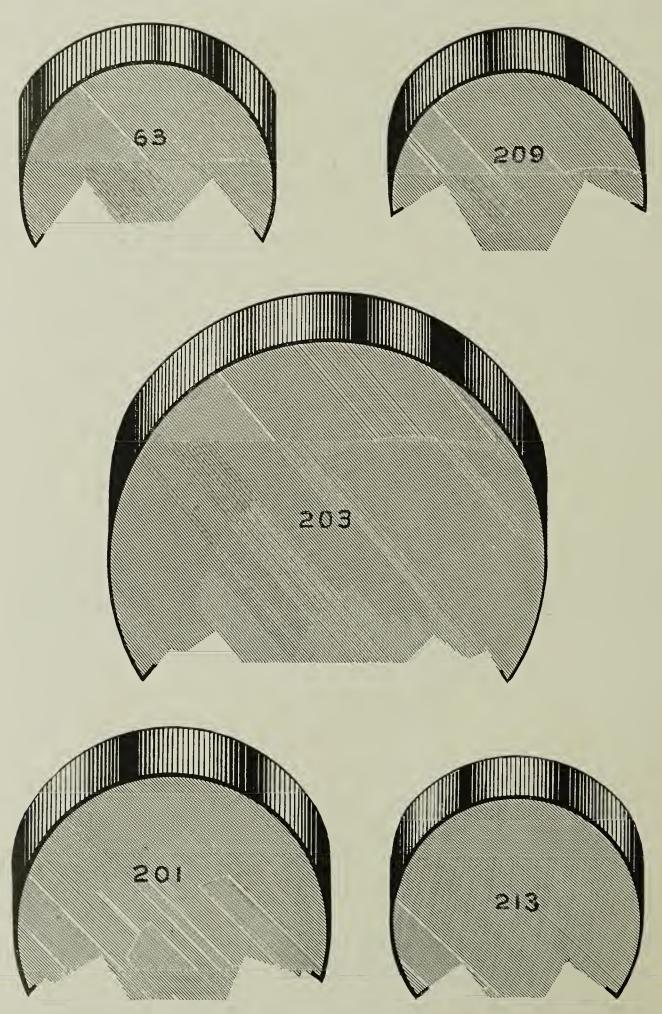


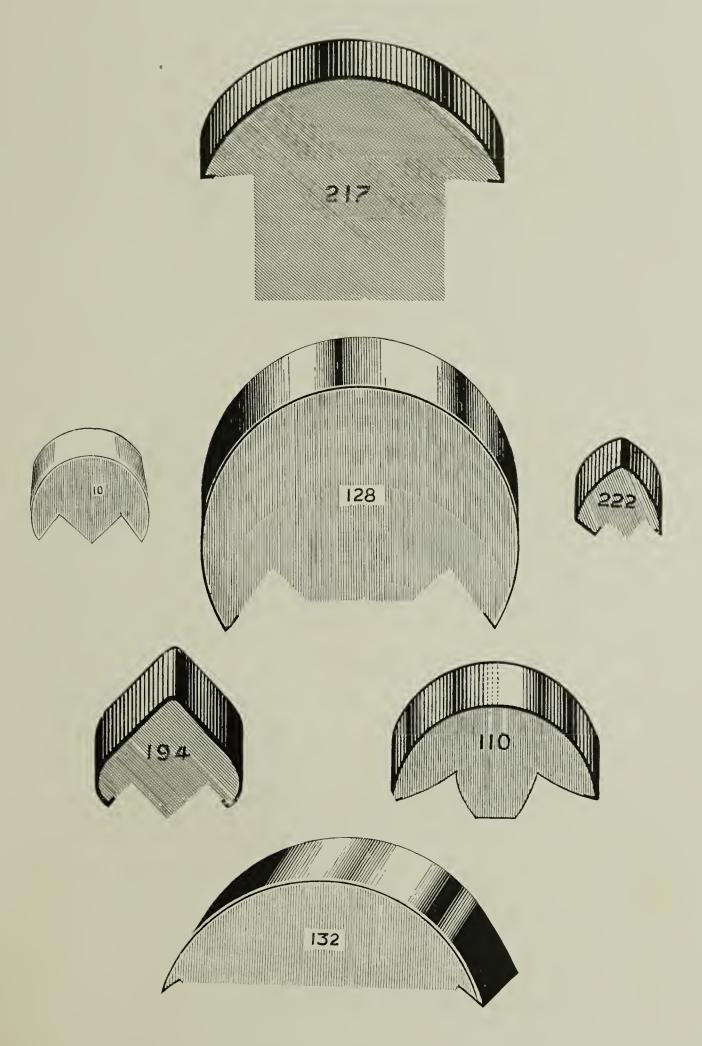


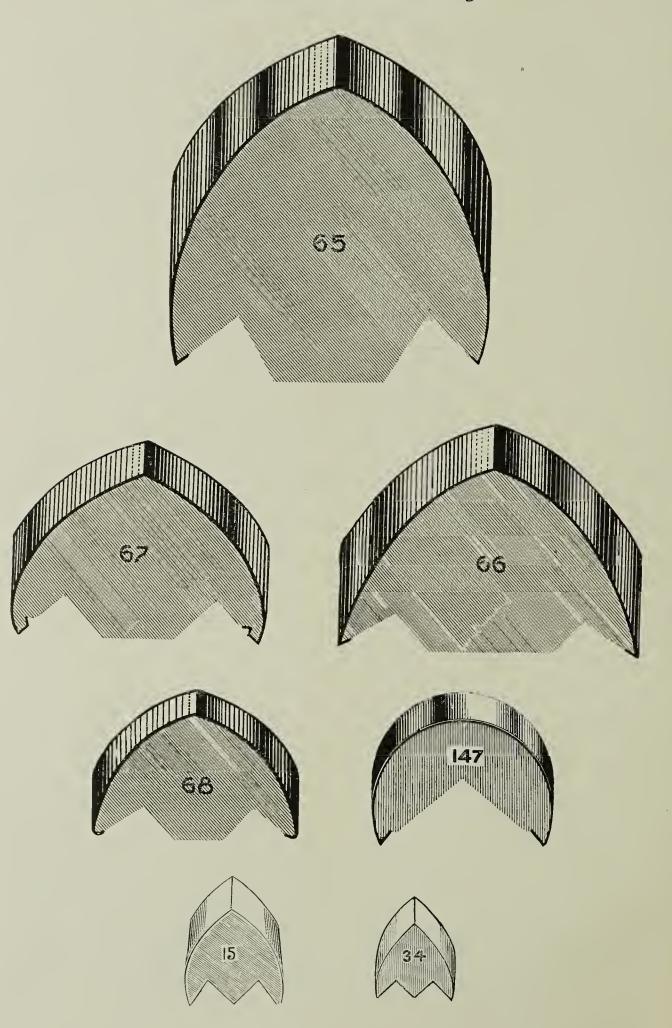












### Pointers on Using Diamonds

THERE is very little doubt but that few of those using a glaziers' diamond know little about its history. Therefore, in issuing our new illustrated catalogue, we think a few remarks relative to its origin, and some hints about the methods of using and caring for same, may not be out of place.

Diamonds: Diamonds are found in many portions of the world, but, as those from Brazil have proved to be much harder and more suitable for our purpose than any other, we use only the diamonds from that quarter in all the articles illustrated herewith.

Setting: In setting and adjusting the diamond, great care is required to put it on its true cutting angle, during which process it is many times tested by different hands before finally becoming a finished article.

**Testing:** Before being sent out it is again tested, which almost precludes the possibility of a purchaser having a defective tool.

Cutting: It is hardly necessary to say that in cutting glass, however thick, only one cut is requisite, and for plate glass a little more pressure should be used and the cut tapped so that it just starts to run, when it can easily be parted with pliers made for that purpose.

Method of Holding: The diamond should be held between the first and second finger, with the thumb and finger upon the flats on the handle, and held about the same slope as the bevel on the block; if held too high it will "score" and throw up the white, and the angle of the diamond will soon wear; but if held at the true cutting angle it will "sing" and make a clean cut, and its cutting angle will last far longer.

Care of Tool: To keep a diamond in good condition, it should be used by one person only, and not used on any rough surface, such as rolled or cast glass. It will be found advisable to keep one specially for this work. Steel wheels are used very extensively for cutting rough glass, and should be dipped in coal oil before using.

Resetting: We undertake to reset all diamonds illustrated herewith, or, in fact, any other make, and return same with "cut" equal to when new.

### Sharratt & Newth's Best English Diamonds

Made especially to our order



For cutting single and double thickness. Price, \$7.50

Subject to Discount

Made especially to our order



No. 501

For cutting single and double thickness. Price, \$8.50

Made especially to our order



No. 502

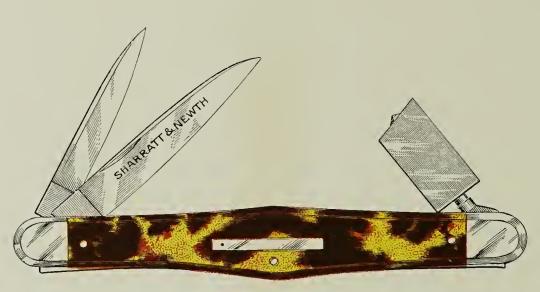
For cutting rough or polished plate. Price, \$11.00

Made especially to our order



Price, \$15.00

Made especially to our order



No. 504

#### Knife Diamond

For cutting window glass. Two blades Tortoise shell handle Price, \$9.50

#### Rice's Celebrated Plate Glass Diamond

Made especially to our order



No. 505

It is best quality of diamond and large spark

For all kinds of glass, and all work where an extra heavy diamond is required

Can be used when needed on single-thick glass

Price, \$20.00

#### Rice's Celebrated Glaziers' Diamonds

All goods are finished in best manner and heavily nickel plated Below are the leading styles



Rice's Glaziers' Diamonds
are guaranteed to reset several times and to give entire satisfaction

Old Diamonds Reset on Short Notice



#### Sure-Cut Glaziers' Diamonds

TWO QUALITIES

Any one can cut with this style, however inexperienced in glass cutting, as it merely requires to be set on the glass and drawn over it to make a perfect cut

No. 55	Extra Key Glaziers' Diamond. For general use on ordinary glasseach, §	\$ 4.50
No. 56	Extra Key Glaziers' Diamond. Very good for general useeach,	6.00
No. 57	Superior Key Glaziers' Diamond. Adapted to single and double-thick glass. Well suited for heavy work, and where a constant use is necessaryeach,	8.00
No. 58	Superior Glaziers' Diamond. Specially adapted to single and double-thick glass. For general use by glass stainers, dealers in glass, and where a diamond for heavy work is con-	
Diamor	stantly requiredeach,  A. Specially adapted to plate and rough plate	12.00

#### Rice's Standard Steel Wheel Cutters

In presenting our catalogue we do not deem it necessary to dwell on the method of construction, etc., beyond the fact that we use the best material in the manufacture of our Steel Wheel Cutters that we, with our experience of over twenty years, consider the most suitable for this purpose.

We employ only skilled and experienced labor, and are satisfied that, by our constantly increasing trade and the fact that our goods find a market in nearly every country in the world, we produce an article that meets the demands of the trade, and can be handled with profit.



Is designed for the glass men—one that we recommend to give the best satisfaction No better made. Weight, per gross, 11 pounds. 10 gross in case Outside measure,  $16 \times 10 \times 8$  inches

Price, per gross, \$11.00



For heavy plate glass
Weight, per gross, 12½ pounds. 10 gross in case
Outside measure, 24 x 13 x 10 inches
Price, per gross, \$11.25



#### No. 2

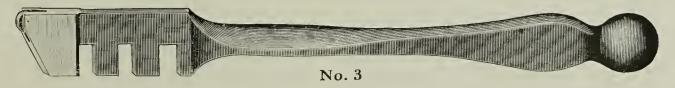
Has an enameled wood handle; the metal parts are all nicely finished

The favorite of the hardware men

Weight, per gross, 7½ pounds. 10 gross in case

Outside measure, 20 x 13 x 12 inches

Price, per gross, \$9.00



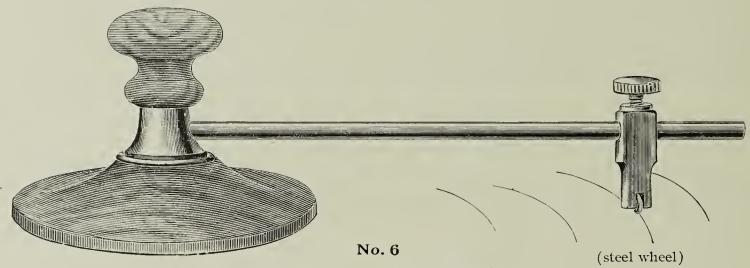
This is a cheap, serviceable glass cutter, and one that gives good satisfaction Weight, per gross, 16 pounds. 10 gross in case

Outside measure,  $25 \times 13 \times 10$  inches

Price, per gross, \$8.00

Note.—The different styles of handles are made to conform to the hand, and will be found as suitable as the old glaziers' diamond; but instead of the diamond point they are fitted with a small hardened steel revolving wheel, the sharp edge of which cuts as well as the diamond.

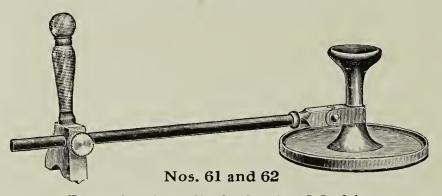
#### Rice's Standard Glass Cutters for Cutting Circles



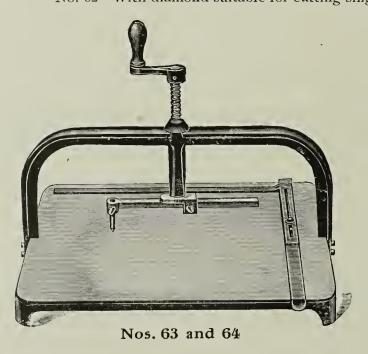
Circle sweep for cutting circles, rounding lights, etc.

We make these in two sizes, 20 and 40 inches

The metal parts are nickel plated throughout, and bottom of disk rubber covered



#### Extension Bar Circle Cutting Machine

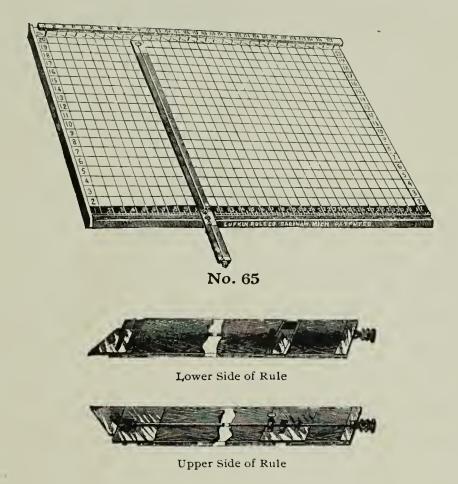


## Iron Platform Circle Cutting Machine

Will cut circles for one-half to twelve inches

- No. 63 With diamond suitable for cutting ordinary glass.....\$34.00

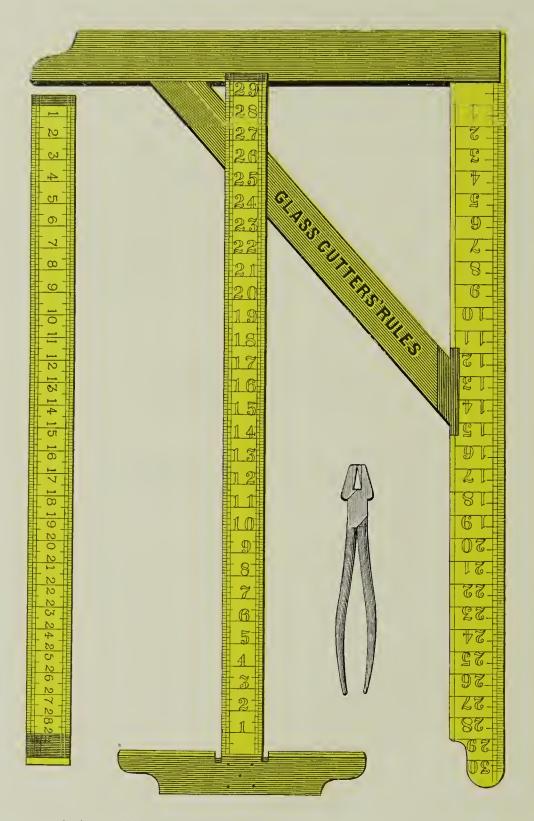
#### The "Perfection" Glass Board



## An Indispensable Article to All Dealers in Window Glass It Will Save Its Cost in a Short Time

Can be instantly adjusted to cut glass of any size in eighths, quarters, halves and inches. This board is strongly made of well seasoned lumber and will always remain true. It is ruled both ways in inches, with steel rule on front end graduated in inches and eighths. The straight edge of rule is adjustable, being fitted at each end with adjustable gauges, connected with and moving simultaneously equal distances by connecting rod, and, as it is impossible to move one end more than another, an absolutely straight line is secured. It has a wedged point at the top end and a lug at the bottom end, and readily fits into one-inch spaces, provided at both top and bottom of board, and at any point desired. For cutting even inches, the connecting rod is turned back as far as it will go and secured there by a set screw. It is then dropped into the one-inch spaces at both top and bottom of board at any point desired, and is thus firmly held in place and ready for the cutter. The rule is fitted with a very simple device by which it can be moved forward and backward and readily set for cutting fractions of inches. When several lights of glass of the same size are to be cut, and the screw is once set, every one will be of exact size.

Size	24 x 36	30 x 48	36 x 54	42 x 60	$48 \times 72$
Price, each	\$12.50	\$15.00	\$17.50	\$20.00	\$22.50



The constantly increasing demand for rules, straight edges, etc., of a superior quality, suitable for the requirements of parties engaged in the cutting of glass, paper, felts, linens, silks, etc., has induced us to compile a list of articles as manufactured by us, and devoted to the above uses. With a large corps of skilled workmen, new and improved machinery, largely increased factory space, a life-long acquaintance with the requirements of cutters in every branch of business, we are warranted in making the assertion that at no previous time in the history of the trade have goods of equal quality been quoted at correspondingly low figures. Quotations on specialties of every description in the rule line cheerfully furnished. Remember that on boxing, baling or packing we make no charge.

Small packages sent by mail subject to the added cost of postage.

On C. O. D. packages the charges for return of money are added to the bill.

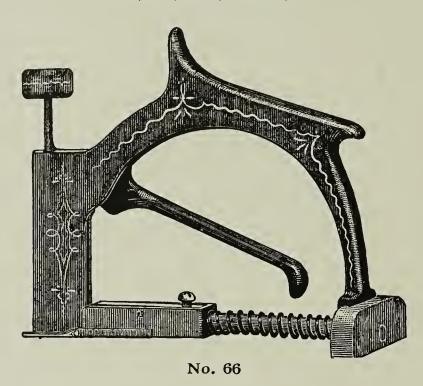
Care is used in the packing of goods, and we will not be responsible for loss or breakage in transit.

## Glass Cutters' Rules and Nippers

							T 11	D DIII	rec	•	•		
No	1	144 in	10110	31/	in wide	1/		P RUI 1-				Dozen \$180.00	
"		120	. long	31/2	111. WILL	, /4	111. 61110					$\dots$ $138.00$	π
	O	108		31/2		1/4	6.6		<b></b> .			120.00	
	4 5	100 96		31/2		1/4		• • • •				108.00 . 102.00	9.00 8.50
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6.6	7	72	6.6	21/2		14	4.6					66.00	5.50
	8	60 48		21/2		1/4	16						4.50
	10	- 40 - 36		134	6.6	/4 1/	"		• • • • • • • • • •	• • • • • • • •	• • • • • •	42.00	3.50 2.50
	11	30	"	13/	6.6	1/4	6.6					24.00	2.00
	Ii	f ¾ in. th	iick ar	e wan	ted, add 3	∕₂ to tl				ean same	as No. 1,	only 3% in. t	thick
							L.,	SQUA	ARES			Dozen	Each
No	. 12	Blade	: 60 ii - 48 i									\$180.00	\$15.00
4.6	13		48 · 42 ·		$\begin{array}{cccccccccccccccccccccccccccccccccccc$							144.00	12.00 11.00
"	15		36 '		24							120.00	10.00
4.11	16		.30 '		24 (			1-4				108.00	9.00
AI	tne	above ar	e neav	y bras	s lined or	1 1ns10				wnen use	a agains	t rough edge	es of glass
		<i>c</i> o :		10/		.,.		SQUA				Dozen	Each
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6.6	26	,-			GL.				-Roller			Dozen	Each
No.	27	13 in.		jaws	<b>GL</b> .							Dozen \$36.00	Each \$6.00
		,-	long,	jaws	GL.							Dozen \$36.00 30.00	Each
No.	27	13 in.	long,	jaws	GL. 3 '' pers are a	all ma	de of be	st wrou	ght iron, w	vith brasse		Dozen \$36.00 30.00	Each \$6.00 5.00
No.	27 28	13 in. 12	long, "Abo	jaws  ve nip	GL:	all ma	ade of be	st wroug	ght iron, w	vith brasse	ed steel ja	Dozen\$36.00 30.00 aws	Each \$6.00 5.00
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No.	27 28 29 30 31 32	13 in. 12 84 in. 72 60 48 36	long,  Abo  long,	jaws ve nip  2 in 134 134 134 138	GL. 3 in 3 " pers are a	LON  1/4 in  1/4  1/4  1/4  1/4  1/4  1/4  1/4  1/	ade of be IG "No i. thick '' '' '' s are all	st wroug O LIP	ght iron, w	rith brasse	ed steel ja	Dozen \$36.00 aws  Dozen \$66.00 48.00 36.00 12.00 7.00	Each \$6.00 5.00 Each \$5.50 4.00 3.00 2.00
No.	27 28 29 30 31 32 33	13 in. 12 84 in. 72 60 48 36	long,  Abo  long,	jaws ve nip 2 ii 134 134 134 138	GL. 3 in 3 " pers are a	LON 1/4 in 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4	ade of be IG "No i. thick '' '' '' s are all SECTI	st wroug O LIP	ght iron, w	rith brasse	ed steel ja	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 12.00 7.00  Dozen \$48.00 12.00 7.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00
No	27 28 29 30 31 32 33 34 35	13 in. 12 84 in. 72 60 48 36	long, "Abo" long, " " " " " " " " " "	jaws ve nip 2 ii 134 134 134 138 5, 38 i	GL. 3 in 3 " pers are a	LON 1/4 in 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4	ade of be IG "No in thick "" is are all SECTI	o LIP	ght iron, w	rith brasse	ed steel ja	Dozen\$36.0030.00 aws  Dozen\$66.0048.0036.007.00  Dozen\$48.007.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00
No	27 28 29 30 31 32 33 34 35 36	13 in. 12 84 in. 72 60 48 36	long,  Abo  long,	jaws ve nip  2 in 134 134 134 138 5, 38 i 38	GL. 3 in 3 " pers are a  1. wide, " " Above  n. squar " "	LON  4 in  4  4  4  4  4  4  4  4  4  4  4  4  4	ade of be IG "No i. thick " " is are all SECTI	st wroug O LIP brass ca	ght iron, w	rith brasse	d steel ja	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 12.00 7.00  Dozen \$48.00 12.00 7.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 3.00
No	27 28 29 30 31 32 33 34 35 36	13 in. 12 84 in. 72 60 48 36	long,  Abo  long,	jaws ve nip  2 in 134 134 134 138 5, 38 i 38	GL. 3 in 3 " pers are a  1. wide, " " Above  n. squar " "	LON  1/4 in  1/4  1/4  1/4  1/4  1/4  1/4  1/4  1/	ade of be IG "No i. thick " is are all SECTI	o LIP	ght iron, we reped, with	rith brasse	d steel ja	Dozen\$36.0030.00 aws  Dozen\$66.0036.0012.007.00  Dozen\$84.00\$60.00\$60.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 3.00
No	27 28 29 30 31 32 33 34 35 36 No.3	13 in. 12 84 in. 72 60 48 36 144 in. 108 84 4 is in 4	long, Abo long,	jaws ve nip  2 in 134 134 134 134 138 5, 38 No. 35	GL. 3 in 3 '' pers are a  1. wide, ''  Above  1. squar  ii ii 3 join  s to 20 ft	LON  4 in  4  4  4  4  4  4  4  4  4  5  The rule	ade of be IG "No i. thick " is are all SECTI  36 in 2 j	st wroug O LIP brass ca ON F	pped, with	rith brasse	d steel ja	Dozen\$36.0030.00 aws  Dozen\$66.0036.0012.007.00  Dozen\$84.0036.00 por large plate Dozen\$192.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 at glass
No	27 28 29 30 31 32 33 35 36 No.3	13 in. 12 84 in. 72 60 48 36 144 in. 108 84 4 is in 4;	long,  Abo  long,	jaws ve nip  2 in 134 134 134 134 138  5, 38 in 38 No. 35	GL. 3 in 3 '' pers are a  1. wide, ''  Above  1. squar  5 in 3 join  5 to 20 ft 16 ''	LON  4 in  4  4  4  4  4  4  4  4  4  4  4  4  4	ade of be IG "No i. thick " is are all SECTI  36 in 2 j	o LIP brass ca ON F	ght iron, we reped, with RODS	rith brasse	d steel ja	Dozen\$36.0030.00 aws  Dozen\$66.0048.0036.007.00  Dozen\$84.0036.00 por large plate Dozen\$192.00\$192.00\$192.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 at glass  Each \$16.00 13.50
No	27 28 29 30 31 32 33 35 36 No.3	13 in. 12 84 in. 72 60 48 36 144 in. 108 84 4 is in 4	long,  Abo  long,	jaws ve nip  2 in 134 134 134 134 138  5, 38 i 38 No. 35	GL. 3 in 3 '' pers are a  1. wide, '' '' '' Above  1. squar '' 5 in 3 join  5 to 20 ft 16 '' 14 ''	LON  4 ir  14  4  4  4  4  4  4  4  4  4  4  4  4	ade of be IG "No i. thick " is are all SECTI36 in 2 j	o LIP brass ca	ght iron, we reped, with RODS	rith brasse	od steel ja	Dozen\$36.0030.00 aws  Dozen\$66.0048.0036.0012.007.00  Dozen\$84.0036.0036.0036.0036.0036.0036.0036.0036.0036.0036.0036.0036.0036.0036.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 a.e glass  Each \$16.00 13.50 11.00
No No	27 28 29 30 31 32 33 35 36 No.3	13 in. 12 84 in. 72 60 48 36 144 in. 108 84 4 is in 4	long,  Abo  long,	jaws ve nip  2 in 134 134 134 138  5, 38 i 38 No. 35	GL. 3 in 3 '' pers are a  1. wide, '' '' '' Above  1. squar '' 5 in 3 join  5 to 20 ft 16 '' 14 ''	LON  A ir  1/4  1/4  1/4  1/4  1/4  1/4  1/4  1/	ade of be IG "No i. thick " is are all SECTI36 in 2 j	st wroug O LIP brass ca ON I	ght iron, we reped, with RODS	rith brasse	od steel ja	Dozen\$36.0030.00 aws  Dozen\$66.0048.0036.0012.007.00  Dozen\$84.0036.0012.0036.0036.00 or large plat Dozen\$192.00162.00132.00108.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 at glass  Each \$16.00 13.50
No	27 28 29 30 31 32 33 33 34 35 36 No. 3	13 in. 12 84 in. 72 60 48 36 144 in. 108 84 4 is in 4; 6 6 6 6 6 6 7 6 6 6 7 6 6 6 7 6 6 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	long,  Abo  long,   i  i  long,  ii  long,  ii  ii  ii  ii  ii  ii  ii  ii  ii	jaws ve nip  2 in 134 134 134 138  5, 38 i 38 No. 35	GL. 3 in 3 " pers are a land a	LON  4 ir  4  4  4  4  4  4  4  5  The rule	ade of be IG "No i. thick " is are all SECTI36 in 2 j	st wroug O LIP brass ca ON F	ght iron, we reped, with RODS	rith brasse	od steel ja	Dozen\$36.0030.00 aws  Dozen\$66.0048.0036.0012.007.00  Dozen\$84.0036.00 or large plat Dozen\$192.00162.00132.00180084.0066.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 2.00 1.00 5.50
No	27 28 29 30 31 32 33 33 34 35 36 No. 3	13 in. 12  84 in. 72 60 48 36  144 in. 108 84 4 is in 4 5 6 6 7 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8	long,  Abo  long,   i  i  long,  i  long,  i  i  i  i  i  i  i  i  i  i  i  i  i	jaws ve nip  2 in 134 134 134 138  5, 38 i 38 No. 35	GL. 3 in 3 " pers are a  1. wide, " " Above  1. squar " 5 in 3 join  5 to 20 ft 16 " 14 " 12 " 10 " 8 "	LON  4 in  4 in  4 in  4 in  5 in  6 in  7	ade of be IG "No i. thick " is are all SECTI36 in 2 j	st wroug O LIP brass ca ON F	ght iron, we reped, with RODS	rith brasse	od steel ja	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 36.00 7.00  Dozen \$84.00 60.00 36.00 or large plat  Dozen \$192.00 162.00 132.00 188.00 48.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 3.00 3.00 3.00 13.50 11.00 9.00 7.00 5.50 4.00
No	27 28 29 30 31 32 33 33 34 35 36 No. 3	13 in. 12  84 in. 72 60 48 36  144 in. 108 84 4 is in 4 5 6 6 7 30 in. 1	long,  'Abo'  long,  'i  ii  long,  ii  long,	jaws ve nip  2 in 134 134 134 134 138  5, 38 i 38 No. 35	GL. 3 in 3 " pers are a land a	LON  1/4 ir  1/4  1/4  1/4  1/4  1/4  1/4  1/4  1/	ade of be IG "No i. thick " is are all SECTI36 in 2 j	st wroug O LIP brass ca ON F	ght iron, we will reped, with RODS	rith brasse	od steel ja	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 36.00 7.00  Dozen \$84.00 60.00 36.00 or large plat  Dozen \$192.00 162.00 132.00 188.00 48.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 2.00 1.00 5.50
No	27 28 29 30 31 32 33 33 34 35 36 No. 3 37 38 39 40 41 42 43 44 45 46	13 in. 12  84 in. 72 60 48 36  144 in. 108 84 4 is in 4 5 6 7 6 3 30 in. 1 24 6 ft. 1	long,  Abo  long,  ii  ii  long,  ii  ong,  ong,	jaws ve nip  2 in 134 134 134 134 138  5, 38 i 38 No. 35	GL.  3 in  3 "  pers are a  1. wide,  "  Above  1. squar  "  5 in 3 join  8 to 20 ft  14 "  12 "  10 "  8 "  6 "  5 "  4 "  18 "	LON  A ir  If  If  If  If  If  If  If  If  If  I	ade of be IG "No i. thick " is are all SECTI  3.36 in 2 j	st wroug O LIP brass ca ON F	ght iron, we will reped, with RODS	rith brasse	fronts fo	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 12.00 7.00  Dozen \$84.00 60.00 36.00 or large plat  Dozen \$192.00 162.00 162.00 180.00 48.00 48.00 36.00 36.00 36.00 36.00 30.00 240.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 2.00 3.00 3.00 4.00 3.50 11.00 9.00 7.00 5.50 4.00 3.00 2.50 20.00
No	27 28 29 30 31 32 33 33 34 35 36 No. 3 37 38 39 40 41 42 43 44 45 46 47	13 in. 12  84 in. 72 60 48 36  144 in. 108 84 4 is in 4 5 6 7 6 3 30 in. 1 24 6 ft. 1 5	long,  Abo  long,  ii  ii  long,  ii  cong,  ong,	jaws ve nip  2 in 134 134 134 134 138  5, 38 i 38 No. 35	GL.  3 in  3 "  3 pers are a  1. wide,  "  Above  1. squar  "  5 in 3 join  5 to 20 ft  14 "  12 "  10 "  8 "  6 "  18 "  18 "  15 "	LON  1/4 ir  1/4  1/4  1/4  1/4  1/4  1/4  1/4  1/	ade of be IG "No i. thick " is are all SECTI  3.36 in 2 j	st wroug O LIP brass ca ON F	ght iron, we will reped, with RODS	rith brasse	fronts fo	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 36.00 7.00  Dozen \$84.00 60.00 36.00 or large plat  Dozen \$192.00 162.00 132.00 180.00 48.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 30.00 240.00 180.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 3.00 13.50 11.00 9.00 7.00 5.50 4.00 3.00 2.50 20.00 15.00
No	27 28 29 30 31 32 33 33 34 35 36 No. 3 37 38 39 40 41 42 43 44 45 46	13 in. 12  84 in. 72 60 48 36  144 in. 108 84 4 is in 4 5 6 7 6 3 30 in. 1 24 6 ft. 1	long,  Abo  long,  ii  ii  long,  ii  ong,  ong,	jaws ve nip  2 in 134 134 134 134 138  5, 38 i 38 No. 35	GL.  3 in  3 "  pers are a  1. wide,  "  Above  1. squar  "  5 in 3 join  8 to 20 ft  14 "  12 "  10 "  8 "  6 "  5 "  4 "  18 "	LON  1/4 ir  1/4  1/4  1/4  1/4  1/4  1/4  1/4  1/	ade of be IG "No i. thick " is are all SECTI  XTEN	st wroug O LIP brass ca ON F	ght iron, we will reped, with RODS	rith brasse ES  hont lip	fronts fo	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 36.00 7.00  Dozen \$84.00 60.00 36.00 or large plat  Dozen \$192.00 162.00 132.00 180.00 48.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 180.00 144.00 144.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 3.00 13.50 11.00 9.00 7.00 5.50 4.00 3.00 2.50 20.00 15.00 12.00
No	27 28 29 30 31 32 33 33 34 35 36 No. 3 37 38 39 40 41 42 43 44 45 46 47 48	13 in. 12  84 in. 72 60 48 36  144 in. 108 84 4 is in 4 5 6 7 6 3 30 in. 1 24 6 ft. 1 5 4 3 30 in. 1	long,  Abo  long,  ii  long,  ii  long,  ii  long,  long,  long,  long,	jaws ve nip  2 in 134 134 134 138  5, 38 i 38 No. 35	GL: 3 in 3 " pers are a  1. wide, " " Above  1. squar " 16 in 3 join  16 " 14 " 10 " 8 " 6 " 18 " 15 " 12 " 90 in	LON  1/4 ir  1/4  1/4  1/4  1/4  1/4  1/4  1/4  1/	ade of be IG "No i. thick " is are all SECTI  XTEN	st wroug O LIP brass ca ON F	ght iron, we will reped, with RODS	rith brasse ES  hout lip	fronts fo	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 36.00 7.00  Dozen \$84.00 60.00 36.00 or large plat  Dozen \$192.00 162.00 162.00 180.00 48.00 36.00 36.00 180.00 48.00 36.00 36.00 30.00 240.00 180.00 144.00 108.00 96.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 3.00 13.50 11.00 9.00 7.00 5.50 4.00 3.00 2.50 20.00 15.00
No	27 28 29 30 31 32 33 33 34 35 36 No. 3 37 38 39 40 41 42 43 44 45 46 47 48 49	13 in. 12  84 in. 72 60 48 36  144 in. 108 84 4 is in 4 5 6 7 6 3 30 in. 1 24 6 ft. 1 5 4 3 30 in. 1	long,  Abo  long,  ii  ii  long,  cong,  long,  cong,  long,  cong,	jaws ve nip  2 in 134 134 134 134 138  5, 38 i 38 No. 35	GL.  3 in  3 "  pers are a  1. wide,  "  Above  1. squar  "  1. in 3 join  1. squar  1. in 3 join  1. squar  1. in 4 "  1. in 4 "  1. in 4 "  1. in 5 "  1. in 90 in 5 separable	LON  4 ir  14  4  4  4  4  4  4  4  4  4  4  4  4	ade of be IG "No i. thick " is are all SECTI  XTEN  are work	st wroug O LIP brass ca ON F	ght iron, we will reped, with RODS	rith brasse ES  hont lip	fronts for	Dozen \$36.00 30.00 aws  Dozen \$66.00 48.00 36.00 7.00  Dozen \$84.00 60.00 36.00 or large plat  Dozen \$192.00 162.00 132.00 162.00 180.00 48.00 36.00 36.00 36.00 36.00 36.00 36.00 36.00 180.00 144.00 108.00 144.00 108.00 96.00 96.00	Each \$6.00 5.00  Each \$5.50 4.00 3.00 2.00 1.00  Each \$7.00 5.00 3.00 3.00 13.50 11.00 9.00 7.00 5.50 4.00 3.00 2.50 20.00 15.00 12.00 9.00

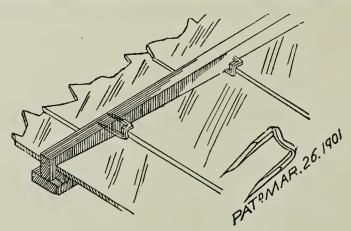
#### Diamond Point Driver

(Pat. January 17, 1882)



Length, 6¾ inches Price, \$2.50 net

#### The Peerless Glazing Point-for Greenhouses



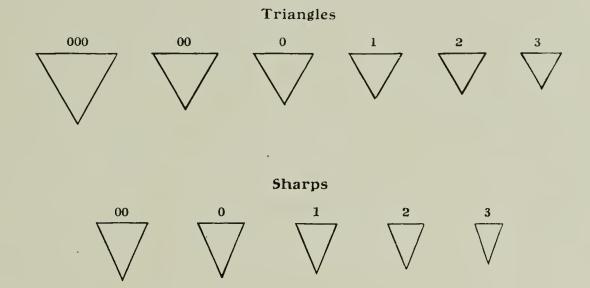
A new name and a new point. There are others, but none like it

A Few of Its Good Points:

No raising up when driven. No rights. No lefts. No sliding. No trouble to apply Cheap. Indestructible. Once used, always used. Try them once

Price, per box of 1,000.....\$0.60

#### Standard Glaziers' Points



Price, \$8.00 per box

Put up in 50-lb. boxes, in half-pound papers, or bulk

Subject to discount

#### Patent <> Glaziers' Points

#### PRICE LIST OF <> POINTS

#### No. 1 Points—% inch long For use in No. 1 Driver

	itaming	9 hrs	33. (	,000	each)	<b>,</b> \$2.75
1 "	1			4.4		5 <b>.</b> 00
1 "	٠، 3	6 "		6.6		9 <b>.</b> 50
2 Boxes o	containing	g each	36 1	okgs.	(5,000 each	1)
4 "	6.6		00	"	4.6	34.00
8 "	" (		36	"	6.6	64.00
					N 0 D 1	.,
					No. 2 Poin	its—½ inch long
						in No. 2 Driver
1 Box con	ıtaining	9 pkg	gs. (4	4,000	For use i	
1 Box con	ntaining '' 1				For use i	in No. 2 Driver
1 ''	" 1		,		For use i	in No. 2 Driver \$2.75
1 '' 1 ''	" 1 " 3	8 · · · 6 · · ·	,	"	each)	\$2.75 
1 '' 1 ''	" 1 " 3	8 '' 6 '' geach	,	okgs.	each)	in No. 2 Driver \$2.75
1 " 1 " 2 Boxes o	" 1 " 3 containing	8 · · · 6 · · · · · · · · · · · · · · ·	36 1	okgs.	each)	\$2.75 

These prices are all net, with no discount

# BENT Glass Gives Tone to the Structure

I T is a well-known fact that bent glass adds to the attractiveness of any building or store front; in fact, it gives extra tone to the whole structure.

To those contemplating building, or making alterations, it is important to know that common double-thick glass can be bent to any part of a circle not exceeding half circle. Polished plate can also be bent in the same manner. The difference in appearance between the two lights after bending is hardly perceptible; in fact, when set in a building it would require an expert to detect any difference at all. However, there is quite a difference in the cost. Bent double-thick glass is only about one-fifth of the cost of bent plate glass, which is a considerable saving in the construction of a building.

The curving or bending of double-thick glass takes away the waviness, gives a polish to the glass and adds to its strength and resistance to high winds and severe storms. This was clearly demonstrated in the city of St. Louis by the tornado that visited that city May 27, 1896.

We manufacture all kinds of bent glass for buildings, show cases, fancy furniture, etc., the product being all of superior make and finish, and ship to all points of the compass.



This beautiful bent glass store front, typical of modern times and progressiveness, illustrates what is probably the best mode of making a show window attractive of itself, and compelling attention from even the most casual passerby.



Ruppert's Store, Chicago

#### Bent Glass Store Front

A representative modern bent glass store front installed by us

A bent plate glass front is very much more attractive than glass not bent, and is

money well invested

Bent plate glass is far superior in brilliancy

to the plain plate

## Net Prices of Double Thick Bent Glass

For Show Cases—Regular bends

16 x 24	\$0.75	per light,	net
18 x 28	1.00	"	"
18 x 30	1.00	"	"
18 x 32	1.25	"	"
18 x 34	1.50	"	"
18 x 36	1.75	"	"
18 x 40	2.00	"	"
18 x 4 2	2.25	"	"
18 x 46	2.75	"	"
18 x 52	3.50	"	"
18x60	4.00	"	"

Boxing extra

#### Official Bending List

Adopted March 1, 1900

Bending only; glass extra

#### \*PLATE GLASS

Dinter	villara 1	lauath	2117 11	ridth a	dded ar	a less th	an 76 inches
		0					
Plates	of 16 o	r more	e, but I	ess th	an 90 un	ited inc	hes
6.6	90	6.6	"	4.6	100	" "	1.00
"	100	"	"	"	110	"	1.50
	110	"	6.6		120	"	2.00
6.6	120	"		"	140	"	2.50
6.6	140	"		"	160	" "	3.00
6.6	160	"	6.6	"	180	"	3.50
6.6	180	6.6	"	6.6	200	"	
67	200	"	"	66	210	4.6	4.50
"	210	"		"	220	"	5.00
"	220	"	"	"	230	"	5.50
"	230	"	"	"	240	"	6,00
					* <b>W</b>	INDOX	V GLASS
Lights	of less	than	60 mii	ed in			\$0.25
0							
6.6	60 c	or mor	e, but	less th	ian 70 ui	iited in	ches
6.6	70	"	"		" 80	"	40

1. Larger sizes, irregular shapes, bends exceeding quarter circle, and rough and ornamental glass, charged at special prices.

"

.50

.60

.90

2. Beveled glass, 25 per cent additional and at owner's risk.

90

" 100

" 110

- 3. Bending on the length, where it exceeds the width by more than 6 inches, 25 per cent additional.
- 4. Odd or fractional parts of inches charged as even inches of next larger size; for example,  $36_{\frac{1}{4}}$ x $37_{\frac{1}{4}}$  will be charged as 38x38.
- 5. Above charges are for bending only. Flat glass will be charged at current discounts.
- 6. Boxing will be charged on all orders at 8 cents per superficial foot of actual lid measurement of cases shipped, irrespective of value.
- 7. Sizes containing less than one square foot will be charged as a full foot, and in figuring narrow widths no size will be figured as less than 12 inches wide. Minimum charge for bending plate \$1.00, and sheet 50 cents, irrespective of size.

#### Explanation of Curves and Diagrams

-Curves are those which are bent to a given radius one way of the pane only, which applies to the whole length or width of the pane, and not to one part only. The depth of bend not to exceed one-eighth of the length of the bent side of pane. Example, length of the bent side of pane, 96 in., depth of bend not above 12 in.

B—Curves are those which are bent more than one-eighth, but not to exceed the quarter of a circle, or about

1 in 5½. Example, pane 77 in., bend 14 in.

C—For the same curve as B, but a part flat, the flat part not to exceed one-third. Example, pane 72 iu., bend

80

90

100

48 in., flat 24 in.

D—For flat curves, with one part flat, the depth of the bent part not to exceed 1 in 12, and the flat part one-half. Example, pane 72 in., bend 36 in., depth 3 in., flat 36 in.

E—For curves, the bent part not less than a 6-in. radius, and not to exceed the quarter of a circle, with flat part, the flat part to exceed one-third, but not to exceed two-thirds. Example, pane 72 in., bend 21 in., flat 48 in.

F—Curves are those which are bent beyond the quarter of the circle, but not to exceed 1 in 4. Example, pane 84 in., depth 21 in.

G—For OG curves, depth not to exceed 1 in 16. Example, pane 64 in., depth, 4 in.

H—For angular curves, viz.: Flat parts on each side, the centers not to exceed a quarter of a circle, and the flat parts one-fourth of the sides bent. Example, pane 80 in., bend 60 in., flat 10 in. each side, or about 5 one side and 15 the other.

L—For angular curves (radius not less than 6 in ), the center not to exceed the greater size and the flat form.

J—For angular curves (radius not less than 6 in.), the center not to exceed the quarter circle, and the flat to exceed one-fourth, but not to exceed three-fourths. Example, pane 72 in., bend 18 in, flat 27 in. each side, or about 14 in. on one side and 40 in. on the other.

K—Curves are those which are bent beyond 1 in 4, but not to exceed the half circle (diameter not less than 12 in.). Example, pane 75 in., depth about 24 in.

L—Curves not to exceed the quarter of a circle at each side (depth of bend not less than 6 in.), the bent part not less than one-third, and the flat not more than two-thirds. Example, pane 72 in., bend 12 in. each side, center flat 48 in.

In ordering specify width (measurement around curve) first, and then the height. We prefer pattern or

In ordering specify width (measurement around curve) first, and then the height. We prefer pattern or template of sweep in all cases.

\*Plate and wind iw glass not exceeding quarter circle.

## Our Clamp System Plate Glass Store Fronts

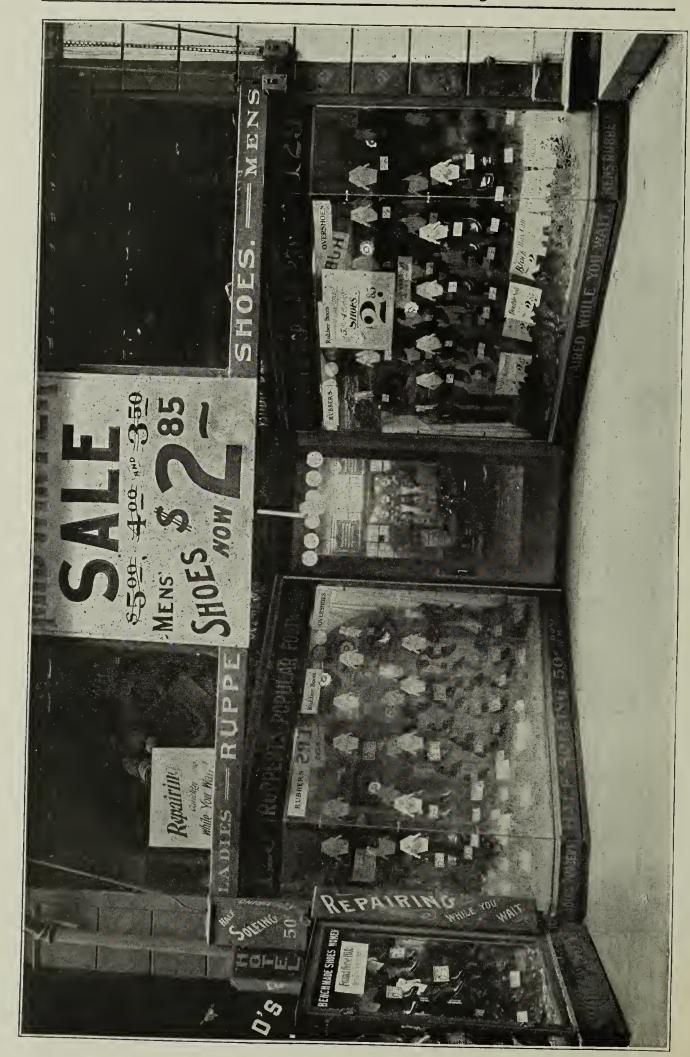
THESE are not only "things of beauty," but are an illustration of the only practical improvement made in store front glass for many years past.

The edges of the plate glass being prepared in our shop, the lights are placed in position, then fastened together by means of patent clamps inserted in holes which have been bored in the glass for this purpose, thus forming a handsome, modern, brilliant store front which shows the goods offered for display to the very best advantage.

The clamps, though very strong, are so small as to be scarcely noticeable, and, the usual posts or bars being absent, the vision from any view-point is practically unobstructed.

Increased cost over ordinary plate glass for store fronts is not so great as might be imagined.

Write us for estimates



One of the many "Clamp System" plate glass store fronts manufactured and installed by James H. Rice Co. NOTE.—The clamps are almost invisible, and the eye can view the entire display without being obstructed by posts or bars Special prices on application

## Glass Measurement

A table giving the number of square feet in glass of given dimensions

gth							V	Vidtl	n of	Glass					
Length	6	7	8	9	10	12	14	16	18	20	22	24	26	28	30
20	05	1	1,1,2	11/4	1 5	12/3	1112	21/4	21/2	23/4				• • • • •	
22	011	112	11/4	15	11/2	15/6	21/6	2,5	23/4	31.	31/3				
24	1	11/6	11/3	1 ½	12/3	2	21/3	22/3	3	31/3	32/3	4			• • • • • •
26	1,12	1¼	1,5	12/3	15	21/6	21/2	211	31/4	372	4	41/3	42/3		
28	11/6	11/3	$\frac{1_{\overline{1}}^{\overline{7}}}{1}$	13/4	111	21/3	23/4	312	31/2	311	41/4	42/3	$5_{\bar{1}\bar{2}}^{1}$	$5_{\overline{1}\widehat{2}}^{5}$	••••
30	11/4	1 ½	12/3	111	212	21/2	211	31/3	3¾	416	4 7 1 2	5	5,5	55	61/4
32	11/3	1,7	1 3/4	2	21/4	22/3	312	3,7,	4	4.5	4112	51/3	5¾	61/4	62/3
34	1,5	12/3	111	216	21/3	25	31/3	33/4	41/4	43/4	5 <u>1</u>	52/3	61	$6_{\overline{1}_{2}}$	712
36	1 ½	1 3/4	2	21/4	21/2	3	31/2	4	4 1/2	_5	51/2	6	6½	7	7 1/2
38	1 7	15	212	2,5	22/3	31	32/3	41/4	43/4	51/4	5 <u>5</u>	61/3	6 <u>5</u>	$7\frac{5}{12}$	711
40	12/3	1+1	21/4	21/2	23/4	31/3	311	45	5	$5_{\overline{12}}^{7}$	$6_{\bar{1}2}^{1}$	62/3	71/4	7 3/4	81/3
42	13/4	212	21/3	22/3	$2\frac{1}{1}\frac{1}{2}$	31/2	4,12	42/3	51/4	55	6 5 1 2	7	7,7,	81	83/4
44	15	21	2,5	23/4	312	$\frac{3^{2}/_{3}}{}$	41/4	411	5½	$6\frac{1}{12}$	63/4	71/3	711	87	91
46	1112	21/4	2,7	211	31	35	4 1/2	5,1,2	5¾	$6_{\frac{5}{12}}$	7	72/3	81/3	811	9,7
48	2	21/3	22/3	3	31/3	4	42/3	51/3	6	62/3	71/3	8	82/3	91/3	10
50	212	2,5	23/4	31/6	31/2	416	45	5,7,	61/4	$6^{1}_{12}$	72/3	81/8	9	93/4	10,5
52	21	21/2	211	31/4	3,7	41/3	512	53/4	6½	71/4	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	82/3	9.5	1012	105
54	21/4	22/3	3	3,5	33/4	4 1/2	51/4	6	63/4	71/2	81/4	9	93/4	10½	111/4
56	21/3	23/4	312	3½	311	42/3	5,5	61/4	7	73/4	87	91/3	1012	1011	112/3
58	25	25/6	31/4	32/3	4	45/6	52/3	612	71/4	$8_{\frac{1}{12}}$	85	92/3	101/2	111/4	1212
60	21/2	211	31/3	33/4	41/6	5	556	62/3	7½	81/3	91	10	105	112/3	121/2
62	2,72	3	3,5	311	4 1/3	5 <del>1</del>	6	611	73/4	87/12	91/2	101/3	111	1212	1211
64	22/3	3,1,3	372	4	4 5 2	51/3	61/4	712	8	811	93/4	102/3	$11\frac{7}{12}$	125	133/8
66	23/4	31/4	32/3	41/6	4,72	5½	6,5	71/3	81/4	91	1012	11	1111	125	13¾
68	25	31/3	33/4	41/4	43/4	52/3	6,7	7,72	81/2	$9_{\tilde{1}\tilde{2}}$	10,5	111/3	121/4	131/4	141
70	211	3,5	311	4,5	45	$5\frac{5}{6}$	65	73/4	83/4	93/4	102/3	112/3	122/3	13,7	1472
72	3	31/2	4	4 1/2	5	6	7	8	9	10	11	12	13	14	15

## Prices of Colored Glass, Etc.

										F	Per sq. ft.
Plain	ruby,	single-thick, cu	t to size			•					300
"	"	double-thick	"	•				•			350
"	blue,	single-thick	"	•	•	•	•		•	•	300
"	amber,	"	"		•						300
"	green,	"	66	•			•	•	•	•	350
"	purple,	"	"			•	•		•	•	300
"	ground,	double-thick	"		•	•			•		200
"	cathedr	al, all colors	"		•	•					200
"	66	variegated, in	n sheets	onl	y	•	•		•		200

Special prices in original stock sizes in case lots on all the above

Each stock size case (except plain and variegated cathedral) contains 100 square feet

Cathedral and variegated cathedral contain approximately, in case lots, 350 square feet

Approximate size, in cases, 30x80

	1									Pe	r sq. ft.
½ -inch	rough	plate glass,	cut to size	•	•	•	•	•		•	40C
$\frac{3}{4}$ - inch	"	"	"		•	•	•	•	•	•	70c
ı - inch	"	"	"						4		ooc

Boxing extra on any of the above, when cut to size

#### Official Price List for Beveling

JULY 1, 1899 Price per Plate for Beveling Plate Glass

United				OF B	EVEL		
Inches	½ INCH	¾ Inch	1 Inch	1¼ Inches	1½ Inches	1¾ INCHES	2 INCHES
6	.30	.36	.42	.54	.60	.72	.84
8	.40	.48 ·	.56	.72	.80	.96	1.12
10	.54	.64	.78	.98	1.12	1.32	1.52
12	.68	.80	1.	1.24	1.44	1.68	1.92
14	.82	.96	1.22	1.50	1.76	2.04	2.32
16	.96	1.12	1.44	1.76	2.08	2.40	2.72
18	1.10	1.28	1.66	2.02	2.40	2.76	3.12
20	1.24	1.44	1.88	2.28	2.72	3.12	3.52
22	1.38	1.60	2.10	2.54	3.04	3.48	3.92
24	1.52	1.76	2.32	2.80	3.36	3.84	4.32
26	1.66	1.92	2.54	3.06	3.68	4.20	4.72
28	1.80	2.08	2.76	3.32	4.	4.56	5.12
30	1.94	2.24	2.98	3.58	4.32	4.92	5.52
32	2.08	2.40	3.20	3.84	4.64	5.28	5.92
34	2.22	2.56	3.42	4.10	4.96	5.64	6.32
36	2.36	2.72	3.64	4.36	5.28	6.	6.72
38	2.50	2.88	3.88	4.62	5.60	6.36	7.12
40	2.64	3.04	4.10	4.88	5.92	6.72	7.52
42	2.78	3.20	4.32	5.14	6.24	7.08	7.92
44	2.92	3.36	4.54	5.40	6.56	7.44	8.32
46	3.06	3.52	4.76	5.66	6.88	7.80	8.72
48	3.20	3.68	4.98	5.92	7.20	8.16	9.12
50	3.34	3.84	5.20	6.18	7.52	8.52	9.52
52	3.48	4.14	5.54	6.54	7.88	8.92	9.96
54	3.62	4.44	5.86	6.90	8.24	9.32	10.40
56	3.76	4.74	6.18	7.26	8.60	9.72	10.84
58	3.90	5.04	6.50	7.62	8.96	10.12	11.28
60	4.04	5.34	6.82	7.98	9.32	10.52	11.72
62	4.18	5.64	7.14	8.34	9.68	10.92	12.16
64	4.32	5.94	7.46	8.70	10.04	11.32	12.60
66	4.46	6.24	7.78	9.06	10.40	11.72	13.04
68	4.60	6.54	8.10	9.42	10.76	12.12	13.48
70	4.74	6.84	8.42	9.78	11.12	12.52	13.92
72 74 76 78 80	and not inch,	7.14 7.76 8.38 9.00 9.62	8.74 9.36 9.98 10.60 . 11.22	10.14 10.90 11.66 12.42 13.18	11.48 12.38 13.28 14.18 15.08	12.92 13.96 15. 16.04 17.08	14.36 15.54 16.72 17.90 19.08
82	70 united inches, and beveled less than ¾ inch ist price	10.24	11.84	13.94	15.98	18.12	20.26
84		10.86	12.46	14.70	16.88	19.16	21.44
86		11.48	13.08	15.46	17.78	20.20	22.62
88		12.10	13.70	16.22	18.68	21.24	23.80
90		12.72	14.32	16.98	19.58	22.28	24.98
92 94 96 98 100	ver 70 unit hcs, beveled at ¾ inch 1	90 united 150 united than one inch list	14.94 15.56 16.18 16.80 17.42	17.74 18.50 19.26 20.02 20.78	20.54 21.44 22.34 23.24 24.14	23.34 24.38 25.42 26.46 27.50	26.16 27.34 28.52 29 70 30.88
102 104 106 108 110	ates measuring over 70 united inches, and over 90 united inches, beveled less than 34 inch, charged at 34 inch list price	Plates measuring over 90 united inches, and not over 150 united inches, beveled less than one inch, charged at one inch list price	18.08 18.74 19.40 20.06 20.72	21.60 22.40 23.20 24. 24.80	25.10 26.06 27. 27.94 28.88	28.60 29.72 30.80 31.88 32.98	32.12 33.36 34.60 35.84 37.08
112 114 116 118 120	Plates n over 90	J.	21.38 22.04 22.70 23.36 24.	25 60 26.42 27.22 28.02 28.82	29.84 30.80 31.74 32.70 33.64	34.08 35.18 36.26 37.36 38.46	38.32 39.56 40.80 42.04 43.28

Discounts furnished on application

Price per Plate for Beveling Plate Glass-Continued

United		SIZE	OFBE	VEL	
Inches	1 Inch	1¼ Inches	1½ Inches	1¾ Inches	2 Inches
122 124 126 128 130	25.40 26.80 28.20 29.60 31.	30.50 32.18 33.86 35.54 37.20	35.60 37.56 39.52 41.48 43.40	40.70 42.94 45.18 47.42 49.60	45.80 48.32 50.84 53.36 55.80
132 134 136 138 140	32.40 33.80 35.20 36.60 38.	38.88 40.56 42.24 43.92 45.60	45.36 47.32 49.28 51.24 53.20	51.84 54.08 56.32 58.56 60.80	58.34 60.86 63.38 65.90 68.42
142 144 146 148 150	39.40 40.80 42.20 43.60 45.	47.28 48.96 50.64 52.32 54.	55.16 57.12 59.08 61.04 63.	63.04 65.28 67.52 69.76 72.	70.94 73.46 75.98 78.50 81.
152 154 156 158 160	than	59.20 64.24 69.28 74.32 79.36	69. 74.88 80.76 86.64 92.52	78.80 85.52 92.24 98.96 105.68	88.58 96.14 103.70 111.26 118.82
162 164 166 168 170	eveled less	84.40 89.44 94.48 99.52 104.56	98.40 104.28 110.16 116.04 121.92	112.40 119.12 125.84 132.56 139.28	126.40 133.96 141.50 149.08 156.64
172 174 176 178 180	180 united inches, beveled less than	109.60 114.64 119.68 124.72 129.76	127.80 133.68 139.56 145.44 151.32	146. 152.72 159.44 166.16 172.88	164.20 171.76 179.32 186.88 194.44
182 184 186 188 190		han 1½	163. 175. 187. 199. 211.	186.50 200. 213.50 227. 240.50	210. 225. 240. 255. 270.
192 194 196 198 200	united inches, and not over $1\%$ inches, charged at $1\%$ in	weled less the	223. 235. 247. 259. 271.	254. 267.50 281. 294.50 308.	285. 300. 315. 330. 345.
202 204 206 208 210	nited inches	l inches, be	300. 330. 360. 390. 420.	330. 360. 390. 420. 450.	360. 390. 420. 450. 480.
212 214 216 218 220	Plates measuring over 150 united inches, and not over $1\%$ inches, charged at $1\%$ in	Plates measuring over 180 united inches, beveled less tha inches, charged at 1½ inch list price	450. 480. 510. 540. 570.	480. 510. 540. 570. 600.	510. 540. 570. 600. 630.
222 224 226 228 230	s measuring	asuring ove inches,	600. 630. 660. 690. 720.	630. 660. 690. 720. 750.	660. 690. 720. 750. 780.
232 234 236 238 240	Plate	Plates me	750. 780. 810. 840. 870.	780. 810. 840. 870. 900.	810. 840. 870. 900. 930.

#### Price per Plate for Beveling Plate Glass-Continued

United	SIZE OF BEVEL							
Inches	1½ Inches	1¾ INCHES	2 Inches					
242	900.	930.	960.					
244	930.	960.	990.					
246	960.	990.	1020.					
248	990.	1020	1050.					
250	1020.	1050.	1080.					

For 2¼ inch bevel, add ½ to 2 inch list price 2½ " ½ to 2 " " 2¾ to 2 " 3 to 2 " " 3 to 2 " " 3 to 2 " "

Angles, inward miters, in-curves and all difficult patterns, extra price

All odd-sized plates charged as even inches

Bent plates, convex or concave sides, special discount

#### Grinding and Polishing Hand Holes

То	5 square feet	in plat	e (not d	lifficult	)	each	\$1.50
To I	10 ''	"	"	"		"	2.00
To 2	20 ''	"	6.6	4.6		"	3.00
Ove	er 20 square fe	et in pl	late		Sp	ecia1	price

Difficult holes, special price

#### Drilling Holes in Plate

Up to	I/4	inch	diameter	each	\$0.12
¼ to	1/2		"		.30
½ to	3/4				.60
3/4 to	1	* *			1.25
1 to	1 ½	"	"	each \$2.00 t	o 3.00
Over 1	½ i1	nche	s in diame	eterSpecial	price

Drilling holes in plates thicker than ¼ inch, special price

#### Grinding and Polishing Edges on Quarter-Inch Plate

Up to 24 inches long, PER INCH not over 12 in. wide1 cent	Up to 120 inches long, PER INCH not over 24 in. wide3 cents 24 to 36 in. wide3½ cents
## Up to 48 inches long,  not over 24 in. wide	36 to 48 in. wide
Up to 72 inches long,  not over 12 in. wide	36 to 48 in. wide
Up to 96 inches long,  not over 24 in. wide	Plates 1/2 inch thickdouble 1/4 in. price Plates 3/4 inch thicksix times 1/4 in. price Plates 1 inch thicksix times 1/4 in. price Plates over 1 inch thicksix times 1/4 in. price Plates over 1 inch thickspecial price

Grinding edges without polishing, one-half of above prices

Grinding and polishing edges of beveled plates, one-half of ¼ inch G. & P. price

#### Silvering and Re-Silvering

#### Silvering

Plate, Germans, Window Glass, etc.

Plates containing less than ½ foot each, \$0.08									
					PER FOOT				
Plates containing ½ foot up to 10 square feet									
"	6.6	10 to 20 s	quare	feet					
"	4.4	20 to 40	"						
"	4.4	40 to 50	"	- (					
" "	"	50 to 60	. (						
"				((					
"	6.6	75 to 100	"						
"	• •	100 to 120	"		<b></b> 1.50				

#### Re-Silvering

#### Add 8 cents per square foot to above prices

Germans, window glass or shocks silvered or re-silvered at owner's risk of breakage

N. B.—Where more than the usual quantity of blocking or polishing is necessary, an extra charge will be made for the extra time required

## N. B.—All odd-sized plates beveled, ground and polished, silvered, or re-silvered, charged as even inches

## Price List of American Looking Glass Plate (Shocks)

SIZE	Price per Light	No. Lights in Box	SIZE	Price per Light	No. Lights in Box
4½ x 7 5 x 8 6 x 8 7 x 9 8 x 10 8½ x 10½ 8 x 12 9 x 12 10 x 14 10 x 17 10½ x 17 12 x 18 12 x 20 13 x 22 14 x 24	\$0.14 .18 .21 .28 .36 .44 .42 .47 .60 .81 .87 1.00 1.15 1.45 1.65	230 180 150 115 90 81 75 67 52 43 40 34 30 25 22	10 x 18 10 x 20 10 x 22 10 x 24 10 x 26 10 x 28 10 x 30 10 x 32 10 x 32 10 x 34 10 x 36 12 x 22 12 x 24 12 x 26 12 x 28 12 x 28 12 x 30	\$0.90 1.00 1.10 1.20 1.35 1.45 1.65 1.85 2.00 2.10 1.30 1.50 1.60 1.80 2.10	40 36 33 30 28 26 24 23 21 20 27 25 23 22 20
15 x 26 16 x 28 18 x 30 18 x 32	2.40 2.80 3.20 3.50	19 16 14 13	12 x 32 12 x 34 12 x 36	2.20 2.30 2.60	19 18 17

## Price List of Special Sizes

SIZE	PRICE Each	SIZE	PRICE Each	SIZE	PRICE Each
9 x 16 10 x 12 10 x 15 10 x 16 12 x 14 12 x 16 12 x 40 13 x 26 14 x 16 14 x 18 14 x 20 14 x 22 14 x 26 14 x 28 14 x 30 14 x 32		16 x 24 16 x 26 16 x 30 16 x 32 16 x 34 16 x 36 16 x 38 16 x 40 18 x 20 18 x 22 18 x 24 18 x 26 18 x 28 18 x 34 18 x 36 18 x 40		20 x 40 20 x 48 22 x 24 22 x 26 22 x 28 22 x 30 22 x 34 22 x 36 22 x 48 24 x 24 24 x 26 24 x 28 24 x 30 24 x 30 24 x 32 24 x 36 24 x 36	
14 x 34 14 x 36 14 x 44 15 x 18 15 x 22 15 x 24 15 x 30 16 x 20 16 x 22	2.97 3.17 4.10 1.44 1.85 2.03 2.78 1.77 1.94	18 x 42 20 x 22 20 x 24 20 x 26 20 x 28 20 x 30 20 x 32 20 x 34 20 x 36	5.00 2.78 2.97 3.17 3.42 3.70 4.20 4.30 4.92	25 x 30 26 x 28 26 x 30 26 x 40 28 x 30 28 x 32 28 x 34 30 x 36	5.47 4.92 5.47 7.70 5.47 6.75 6.75 7.60

From 50 to 60 square feet in a box

	Size	10	12	14	16	18	20	22	24
Price List of	12 14	#Q.65 .80	\$1.00	\$1.20					
Crystal Plate	16 18	.90	1.20	1.35	\$1.60 1.75	<b>\$2.30</b>			
Odd and fractional parts of inches	20 22	1.25	1.50	1.85	2.10	3.00	\$3.05 3.40	<b>\$3.90</b>	
charged next larger size.	24 26	$\begin{vmatrix} 1.70 \\ 2.05 \\ 2.30 \end{vmatrix}$	1.95	2.35	3.00	3.25	$\begin{vmatrix} 3.70 \\ 4.10 \\ 4.40 \end{vmatrix}$	4.25	\$4.65
	28 30	$\begin{vmatrix} 2.30 \\ 2.45 \end{vmatrix}$	2.60	$\begin{bmatrix} 2.95 \\ 3.50 \end{bmatrix}$	3.35	$\begin{vmatrix} 3.85 \\ 4.10 \end{vmatrix}$	$\begin{vmatrix} 4.40 \\ 4.80 \end{vmatrix}$	$\begin{vmatrix} 5.10 \\ 5.50 \end{vmatrix}$	5.85 6.25

## Plate and Window Glass Making

#### PLATE GLASS

PLATE GLASS is of wholly different manufacture and slightly different material from window glass; it is a double silicate of lime and soda or potash. It is cast in large sheets, sometimes as large as 12 x 20 feet in size, then polished to a high degree of perfection. The glass is 9-16 of an inch in thickness when cast; but, as each light is ground down until all imperfections of surface are removed, the thickness of the polished plate varies from 3-16 to 7-16. For ordinary glazing and mirror plate no extra charge is made for selecting heavy plate within the ordinary limits; but plate ½, ¾, 1, 1¼ and 1½ inches, which is only made to order, is very much more expensive.

Three-sixteenths plate is more valuable than heavier weights, for the reason that but little is produced and that a large excess of labor in grinding down is necessary. We estimate the value of this at fifteen per cent above the price of ordinary thickness.

Quotations on plate glass apply to regular glazing quality; selected plate glass for mirrors or other purposes will be subject to a moderate extra charge.

#### WINDOW GLASS

The manufacture of glass (for building purposes) covers a number of distinct varieties; some have already been mentioned. The best known are blown glass (window glass) and plate glass, such as is ordinarily used for store fronts and mirrors. Window glass is a silicate of lime or potash, the proportions of which vary in different factories to some extent. The following is "batch" used by well known manufacturers and considered desirable:

```
100 lbs. white sand
1 lb. carbon (charcoal)
1 lbs. sulphate of soda (''salt cake'')
1/2 lbs. arsenic
1 lbs. ground limestone
```

A small portion of "cullet" (broken glass) is also used with the "batch" to facilitate the process, and also to protect the pots or tanks from the destructive effects of the mixture used.

The glass is blown by collecting a quantity of the molten "metal" on the end of a blow-pipe about five feet in length, and blowing it much as a child blows a soap-bubble, the "roller" so produced being fashioned with extreme dexterity and skill into a cylinder, the length of which, usually from four to eight feet, is a little in excess of the length of the sheet to be made, and the circumference equal to the width of the same, sometimes five feet. This "roller" is broken off as neatly and quickly at the end as though cut, by simply throwing around it a thread of molten glass and then touching the heated point wih a cold iron. The "roller" is then split along one side and reheated until sufficiently plastic to enable it to be spread out into a flat sheet, or rather partially flat, for it is very seldom that a light of window glass is quite flat, the "bow" in large lights being sometimes an inch or more.

Window glass is made in "single" thickness, which is about one-twelfth of an inch, and "double" thickness, about one-eighth of an inch; neither measure is exact, however, as the blower is only guided by his judgement in making it, and the lights vary considerably.

The glass is assorted into different grades, "AA," "A," "B," and "C," which differ only in degree of perfection, as all are made alike. "AA" is the best grade, "A" being the grade most commonly used for glazing purposes.

## Window Glass

The cut on opposite page will give you an idea of our extensive purchases of window glass. This order for 125 cars was placed December 5, 1895, and was absolutely the largest order of window glass ever placed at one time up to that date. Since then our purchases have increased even larger in proportion. We are the largest individual handlers of window glass in the United States—are manufacturers as well as jobbers. We carry in our Chicago warehouses the largest stock of window glass in this country, which at some periods will run as high as 125,000 boxes (300 cars), and seldom under 50,000 boxes (125 cars). This statement can be verified by any manufacturer. The foregoing statement should convince you that we are "The" source of supply in this line. With such an enormous stock constantly on hand, we are prepared to fill practically any and all orders on short notice.

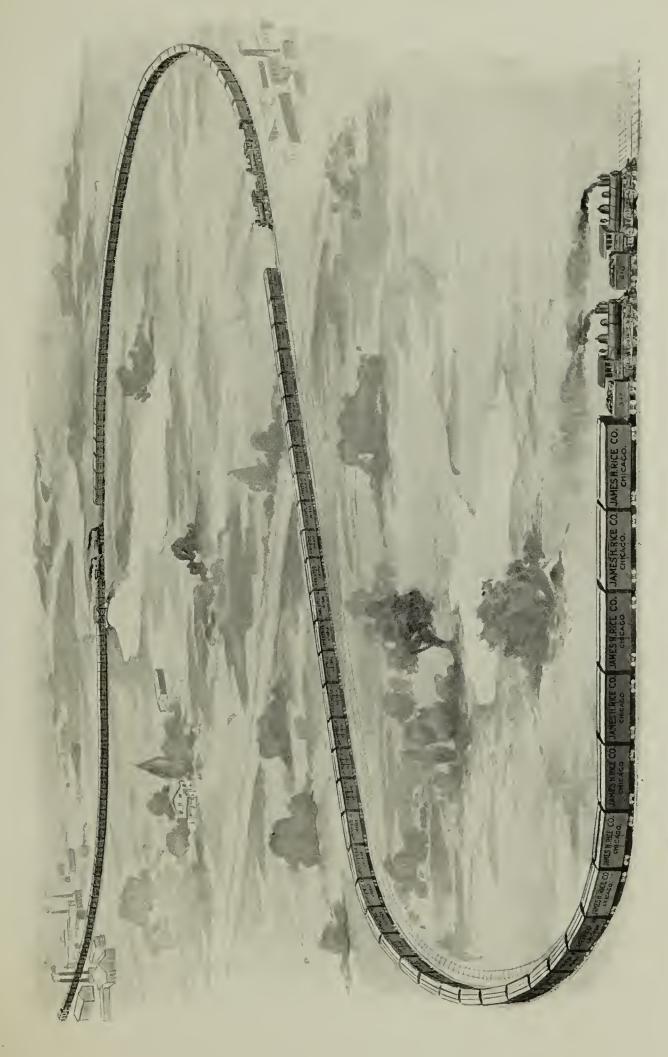
We make a specialty of carrying in stock a special brand of picture glass, "Selected Belgium Picture Glass," which is the best on the market. Each and every light of glass in a box is very carefully selected, and, to prevent its being scratched, paper is packed between each light. We also carry a large line of "American Made Picture Glass" of AA quality, which is especially selected for this trade, and has paper packed between each light. This compares favorably with the Belgium glass, and is much less expensive.

Special attention is given to orders for selected glass required for show cases, bookcases, residences, etc.

## Polished Plate Glass

We carry one of the largest stocks of plate glass in the country, averaging 300,000 feet all the year around, and can fill almost any kind of an order within two or three days.

We particularly call your attention to the high quality of plate glass carried in stock for fine residences, stores, etc.; also a superior grade for mirror purposes.



A Gigantic Order.—A window glass order of almost incredible size. Impossible except to the "Leaders" Three double-header trainloads, 125 cars, purchased by the James H. Rice Co. in one order Special inducements always offered for carload orders

We have furnished the entire plate glass required for the following well-known buildings in Chicago:

```
. . $75,000 glass contract
The Masonic Temple (21 stories high)
                                                               66
Marshall Field & Co. (wholesale).
                                                 50,000
                                                               "
J. V. Farwell & Co. (wholesale)
                                                  50,000
The Auditorium Annex, Chicago . . .
                                                               "
                                                  20,000
Stock Exchange Building .
                                                               "
Lake Shore, Rock Island & Pacific Ry. $3,000,000 depot 30,000
                                                               "
New York Life Insurance Co. Building .
```

Also for various other prominent buildings in Chicago.

In consideration of our facilities to furnish plate and window glass at lowest market rates, we would be pleased to have you submit your requirements in this line for our prices.

In ordering plate glass it is well for you to note the following:

Odd and fractional parts of inches are charged at the price of the next highest even number. As an illustration, 41 x 75 charged as 42 x 76. Irregular shaped glass, or glass cut to pattern, will be charged as it squares. No special thickness guaranteed; but when heavy plate is required, and so ordered, care will be exercised in selecting the heaviest in stock at the time.

Discounts apply to "glazing quality" only, and to glass of ordinary thickness. Selected glass and special thickness charged at special prices.

Glass exceeding the sizes comprised in the tables will be furnished at special prices.

On all orders amounting to less than \$100 net, or for less than three plates of whatever value, boxing will be charged at the rate of 8 cents per square foot, lid measurement, said measurement to be six inches larger each way than the widest and the longest plates in the case.

## To Approximate Weight of Polished Plate Glass Boxed

Extend the glass at  $3\frac{1}{2}$  lbs. per square foot. Weight of box equals the contents of a plate of greatest width and length of those packed therein, multiplied by ten. Thus:

```
I plate 36 x 96 inches = 59 feet, multiplied by 3\frac{1}{2}, equals 206\frac{1}{2} lbs. Size of box, 60 \times 96 inches = 40 feet, multiplied by 10, equals 400 lbs. = 606\frac{1}{2} lbs.
```

## ONE OF OUR FIVE WAREHOUSES



Warehouse No. 1

Warehouse: 34, 36, 38 and 40 South Water Street, Chicago, U. S. A.

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