# Glass

## by Mississippi

# GLASS

*by*

# MISSISSIPPI

POLISHED WIRE GLASS
POLISHED FIGURED WIRE GLASS
POLISHED FIGURED GLASS
PLAIN FIGURED GLASS


MISSISSIPPI GLASS COMPANY
MISSISSIPPI WIRE GLASS COMPANY

110 FERRY STREET
ST. LOUIS

220 FIFTH AVENUE
NEW YORK

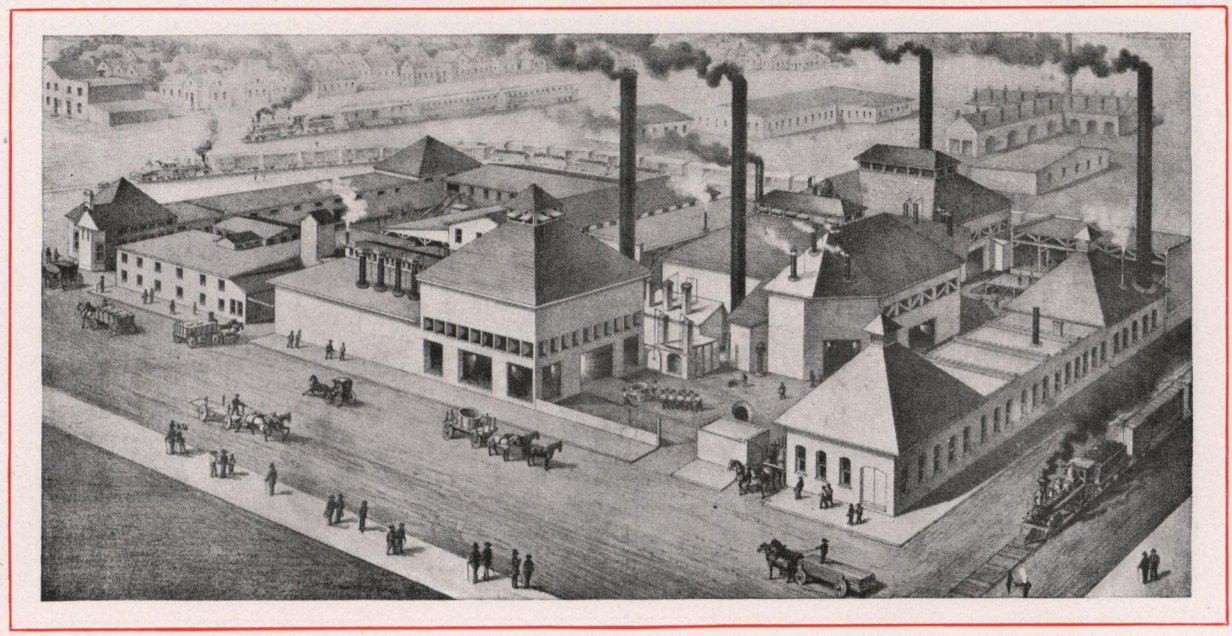
360 N. MICHIGAN BLVD.
CHICAGO

# Table of Contents

# *The Story of the* Mississippi Glass Company

THE ancient history of glass, dating back to many centuries before the Christian Era, when the Egyptians made glass ornaments, all of which contained some metallic color, and up to the time when the Venetians made small plates of glass which were used in church windows, is not so interesting to us as perhaps the origin of glass making in our own country, which started among the very first colonists. Craftsmen from the Continent engaged to make such necessities as tar, pitch, glass and other commodities which could not conveniently be transported. According to records, the glass manufacturing industry was started in the United States during the years 1608 or 1609 somewhere in Virginia, about a mile from what is now Jamestown. The industry, however, did not survive long, as tobacco raising proved much more profitable, and the glass plant is reported to have discontinued operating previous to 1617.

It is reported that a glass factory was built at Salem, Mass., in 1639 and one in Pennsylvania in 1683, both of which were unsuccessful, and not until about 1866 was Rough Rolled glass successfully made by Messrs. Page, Harding & Co., at Lenox, Mass. This concern, however, did not long survive, so that the oldest successful manufacturer of

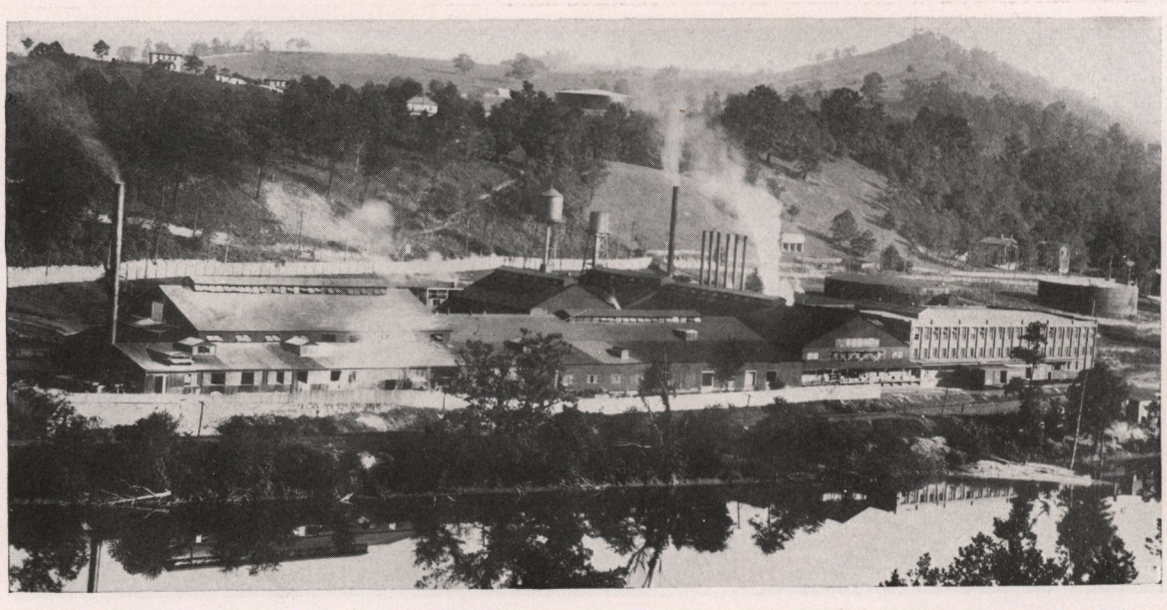


*An engraving of one of the early Mississippi factories in St. Louis, Missouri*

Rough, Ribbed and Colored Cathedral glass in the United States is the present Mississippi Glass Company, which started in 1876 with a small factory in St. Louis, Missouri, on the Mississippi River, from which the company's name was derived. At this time they employed fifty men and were the first to manufacture Ball fruit jars and bottles. In 1884 they completely remodeled the factory to manufacture Rough, Ribbed and Colored Cathedral glass and shortly afterward developed ornamental sheet glass in the patterns of Ondoyant, Florentine, Maze and Syenite, all of which are still available.

As time passed on new patterns were developed and methods of manufacture improved. Experiments were carried on and progressive ideas perfected. In 1893 experimental work in the manufacture of Wire Glass resulted in producing a salable product the latter part of that year. However, there were many difficulties to be overcome, new ideas experimented with and new methods employed, all of which were covered by patents. Wire Glass became very much talked about by architects and engineers who quite naturally were skeptical of this proposed fire retardant until the National Fire Protection Association's Laboratories at Chicago made severe tests subjecting Wire Glass, properly framed, to a break-down test of 1800 deg. Fahr., and at this temperature exposing it to a stream of water which crystallized the glass but did not cause it to fall apart. This proved beyond a doubt that Wire Glass as a fire retardant was a success.

*Morgantown, West Virginia*
*One of the modern Mississippi glass factories*



When the present Underwriters' Laboratories started, it accepted Mississippi Wire Glass as the standard and other glass manufacturers followed. They seemed to crop up like mushrooms about this time, realizing the possibilities of Wire Glass, which has become one of the most important materials entering into modern fireproof construction.

The World War seemed to put many manufacturers on their toes and even though the Mississippi Glass Company was working all factories full force to supply the demand for glass in war-time buildings, they were also experimenting with every type of glass made, both in this country and abroad, striving to produce a better product.

Rolled sheet glass had never been made to accomplish any specific purpose other than to admit light and obstruct vision or permit of unobstructed vision. The question of producing glass to improve daylight illumination had practically never been considered. The figured surface was and in many cases still is cut without any regard to scientific results. So far as illumination is concerned, glass patterns cut at certain angles totally reflect a great deal of the light which could go through, if it were properly designed.

This age of scientifically designed buildings demands the use of scientifically designed glass and the Mississippi Glass Company realizing this, studied the subject very thoroughly, testing the illumination through every style of glass it was possible to secure samples of, also testing its transverse strength, light and heat absorption, light and heat radiation, light diffusion and distribution; and as a result of this research, developed new patterns to accomplish definite purposes and today these


*A factory of the Mississippi Glass Company at Port Allegany, Pa.*

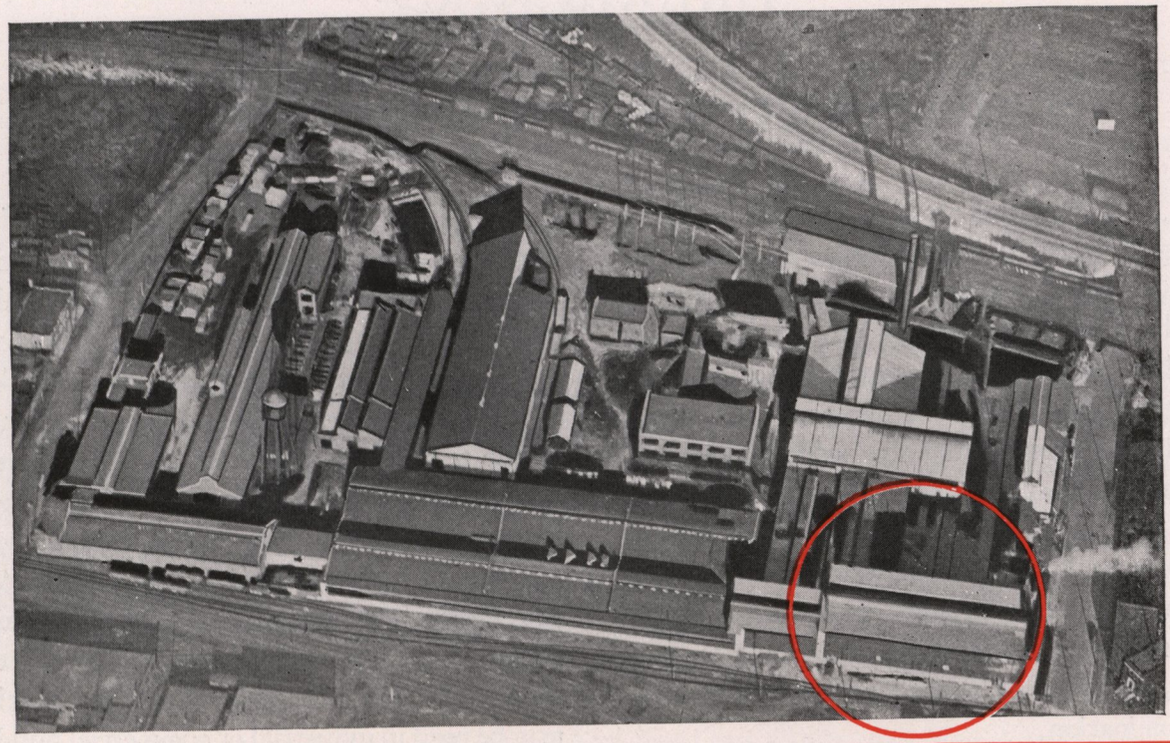
patterns are specified where specific results are to be accomplished.

Factrolite, for example, is specified by many architects and engineers for vertical sash in industrial buildings to break up the direct rays of the sun and diffuse them equally in all directions, thus reducing glare to a minimum and to a very large extent eliminating the necessity of shades.

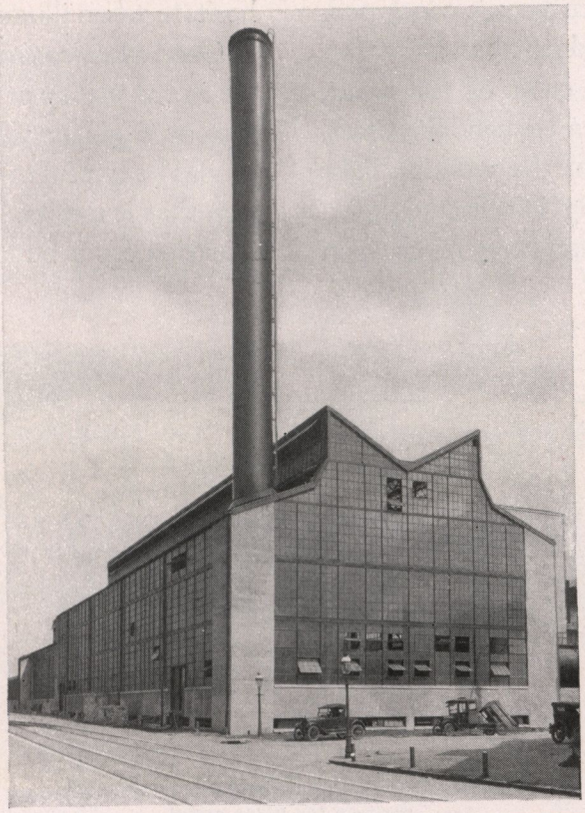
Pentecor is another pattern which transmits all the light which strikes it and is especially designed for skylights, while Aurora is for office partitions. Although these patterns do not appear to the naked eye to be vastly different from other types of glass, they most decidedly are, in that they are scientifically designed for the purpose of producing the best possible illumination when used in their respective places. Not only this, but from a maintenance and cleaning point, they are designed in such a manner that the low surfaces of the patterns are all straight lines which can be very easily cleaned, there being no pockets in which dirt becomes imbedded.

Present day industrial practices demand constant improvement both in processes of manufacture and products to meet such demands. The Mississippi Glass Company has maintained and is carrying out a constant and logical plan of experimentation and development, which has resulted in the present high standard of quality shown in the glass which it manufactures.

*A view from across the river of the Mississippi Glass factory at Floreffe, Pa.*



*Airview of the present Mississippi factory at St. Louis, Mo., the most modern rolled sheet glass factory in the world*



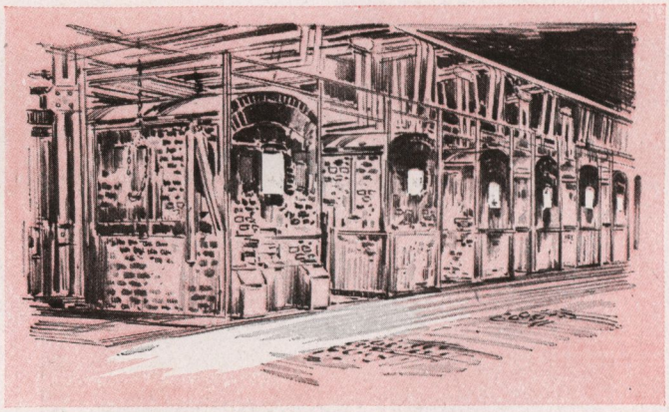
*A new unit in the Mississippi factory at St. Louis, Mo. (location of this unit is shown by red circle in photograph above)*

# *Illumination*
# In Modern Industrial Buildings

THE American factory or industrial building of today is scientifically constructed in every possible detail. It is designed to properly house a definite type of machinery or whatever its contents are to be, and so designed that additional units may be added without interrupting the work in units already in operation. It is furthermore designed to carry specified floor loads—roofs and supports are scientifically constructed to permit maximum unobstructed areas with proper ventilators, skylights and windows to produce a specified quantity of ventilation and illumination.

The efficient illumination of such buildings is the subject with which we are concerned.

Illumination is dependent upon many factors. For example, the color of the walls, ceilings and floors has a tremendous effect, as the greater portion of the working light in an industrial building is reflected light. Proper illumination depends very much upon the reflection values of the materials employed. In a building where these materials have a low reflection value, the illumination is bound to be poor and the contrasts of light and shadow very severe. The bare electric lamp is a striking example.



*Side view of glass tank furnace showing gas ports through which the gas flames pass for melting the glass metal*

A building may be well built but poorly planned, equipped and maintained as regards artificial or daylight illumination. The result of such neglect will be tired, strained eyes and a constant waste because of poor workmanship and low production, to say nothing of the morale and health of the employees. Proper illumination is therefore a certain and important producer of dividends, and no factory can be considered efficient that does not provide the best artificial and daylight illumination that it is possible to obtain. The difference in the relative cost of any glass which may be used in industrial or commercial buildings is so slight that it is not economy to even hesitate when illumination is at stake.

Good illumination is a very important factor in the utility of a building, and an architect or engineer who values his reputation should be careful to give this factor the attention that it merits. The study of proper illumination for a building under consideration is a point which should never be neglected. The selection of artificial lighting units for use at night or on dark days and of the proper glass for windows and skylights which will utilize daylight in an efficient manner will reflect the designer's judgment.

The use of the right glass in the right place to produce the type of illumination desired is a matter to which the engineers of the Mississippi Glass Company have given years of careful and detailed study both in the laboratory and in practical experience. Much daylight illumination can be lost or wasted by the use of the wrong glass.

The benefit of this accumulated experience is a service which the Mississippi Glass Company is desirous of giving to every architect and engineer. We invite you to consult us freely on your glass and illumination problems because we do not want you to specify a pattern of ours that will not be suitable for the place and service for which it is intended. The proper use of the proper glass adds to your reputation as well as to our own, and we naturally request that you specify Mississippi Glass of the pattern that we know will give you the result that is desired.

We engaged the Electrical Testing Laboratories to make photometric measurements of illumination through every type of building glass it was possible to secure samples of, which resulted in our having data requiring too much space for publication here. However, if you are interested, the information is all available, but a brief of the report is given below.

## Brief of Report No. 28482, Rendered to the Mississippi Glass Company

*Distribution of Illumination Through Figured Sheet Glass Windows in a Model Room*

Order No. 16649-S

OBJECT

To determine the effect of various types of figured sheet glass in windows upon the lighting of a room.

TEST ROOM

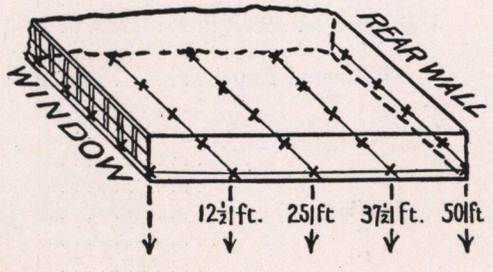
Model, representing a room 50x100x14 feet. Scale, 1 ft. = 25 ft. (24x48x7 inches).
Windows—Continuous on one side of room, 3 feet high; sill 4 feet from floor.
Ceiling and walls—White gloss finish (commercial factory paint).
Floor—Brown linoleum (having reflection factor of average factory floor).

SOURCE OF LIGHT

Concentrated filament incandescent lamp, representing the sun at 30 degrees from horizon. The intensity of the sun was approximately proportioned to the size of the room.
Sky uniformly bright within $(\pm)$ 20 per cent.
Light within the room—direct sunlight, 80 per cent; skylights, 20 per cent.

TESTS

(1) Horizontal illumination on working plane—equivalent to 40 inches above floor.
Test Stations in five lines as shown.
(2) Transmission of light through glass samples.




| | TRANSMISSION, PER CENT. OF CLEAR | AVERAGE HORIZONTAL ILLUMINATION OF LINES OF TEST STATIONS | | | | |
|---|---|---|---|---|---|---|
| Distance from window in feet | ... | 0 | 12½ | 25 | 37½ | 50 |
| Clear Glass | 100 | 28 | 16.8 | 1.4 | 0.80 | 0.85 |
| | | VALUES IN PER CENT. OF CLEAR | | | | |
| ⅛ Hammered Rough Glass (page 62) | | 107 | 107 | 107 | 99 | 106 |
| 3/16 Syenite Glass (page 44) | | 100 | 62 | 143 | 149 | 136 |
| ¼ Maze Wire Glass (page 28) | | 90 | 65 | 158 | 127 | 145 |
| ¼ Factrolite Wire Glass (page 32) | | 89 | 75 | 172 | 138 | 157 |
| ¼ Pentecor Wire Glass, Glazed Horizontally (page 34) | | 100 | 52 | 204 | 193 | 230 |
| ¼ Pentecor Wire Glass, Glazed Vertically (page 34) | | 96 | 92 | 123 | 104 | 106 |
| ¼ Ribbed Glass, Glazed Vertically (page 60) | | 100 | 96 | 124 | 101 | 103 |
| ¼ Ribbed Glass, Glazed Horizontally (page 60) | | 118 | 52 | 183 | 191 | 215 |

# Mississippi Products

*Thicknesses, maximum sizes and approximate weights of Wire Glass and Figured Glass*

## POLISHED FIGURED GLASS

| STYLE | THICKNESS INCHES | MAXIMUM WIDTH INCHES | MAXIMUM LENGTH INCHES | APPROXIMATE WEIGHT PER SQ. FT., LBS. |
|---|---|---|---|---|
| Apex.....about | 1/4 | 50 | 100 | 4 |
| Syenite..... | 1/4 | 50 | 100 | 4 |
| Aurora..... | 1/4 | 50 | 100 | 4 |

## PLAIN FIGURED GLASS

| | | | | |
|---|---|---|---|---|
| Aurora..... | 1/8 | 48 | 130 | 2 |
| " ..... | 3/16 | 60 | 130 | 2 1/2 |
| " ..... | 1/4 | 60 | 130 | 3 3/4 |
| Maze..... | 1/8 | 48 | 130 | 2 |
| " ..... | 3/16 | 60 | 130 | 2 1/2 |
| Florentine..... | 1/8 | 48 | 130 | 2 |
| " ..... | 3/16 | 60 | 130 | 2 1/2 |
| Syenite..... | 1/8 | 48 | 130 | 2 |
| " ..... | 3/16 | 60 | 130 | 2 1/2 |
| Ondoyant..... | 1/8 | 30 | 100 | 1 3/4 |
| Figure No. 2..... | 1/8 | 42 | 110 | 2 |
| " " ..... | 3/16 | 42 | 110 | 2 1/2 |
| Hammered Rough..... | 1/8 | 48 | 130 | 2 |
| " " ..... | 3/16 | 48 | 130 | 2 1/2 |
| " " ..... | 1/4 | 48 | 130 | 3 3/4 |
| " " ..... | 3/8 | 48 | 130 | 5 1/4 |
| " " ..... | 1/2 | 48 | 130 | 7 1/2 |
| Ribbed..... | 1/8 | 48 | 130 | 2 |
| " ..... | 3/16 | 48 | 130 | 2 1/2 |
| " ..... | 1/4 | 48 | 130 | 3 3/4 |
| " ..... | 3/8 | 48 | 130 | 5 1/4 |
| " ..... | 1/2 | 48 | 130 | 7 1/2 |
| Pentecor..... | 1/8 | 48 | 130 | 2 |
| " ..... | 3/16 | 48 | 130 | 2 1/2 |
| Factrolite..... | 1/8 | 48 | 130 | 2 |
| " ..... | 3/16 | 48 | 130 | 2 1/2 |
| " ..... | 1/4 | 48 | 130 | 3 3/4 |

## POLISHED WIRE GLASS PORT LIGHTS

Thicknesses 1/4–1/2–3/4 and scant 1". Diameter circles 6" to 24".

## "WIRE GLASS"

| STYLE | THICKNESS INCHES | MAXIMUM WIDTH INCHES | MAXIMUM LENGTH INCHES | APPROXIMATE WEIGHT PER SQ. FT., LBS. |
|---|---|---|---|---|
| Polished | 5/16 | 50 | 130 | 4 |
| " | 5/8 | 30 | 72 | 8 |
| Polished Syenite | 5/16 | 50 | 130 | 4 |
| Maze | 1/4 | 48 | 130 | 3 3/4 |
| " | 3/8 | 48 | 130 | 5 1/4 |
| Syenite | 1/4 | 48 | 130 | 3 3/4 |
| Hammered Rough | 1/4 | 48 | 130 | 3 3/4 |
| " " | 3/8 | 48 | 130 | 5 1/4 |
| Ribbed | 1/4 | 48 | 130 | 3 3/4 |
| " | 3/8 | 48 | 130 | 5 1/4 |
| Pentecor | 1/4 | 48 | 130 | 3 3/4 |
| Factrolite | 1/4 | 48 | 130 | 3 3/4 |
| " | 3/8 | 48 | 130 | 5 1/4 |

## DECK, VAULT OR FLOOR LIGHTS

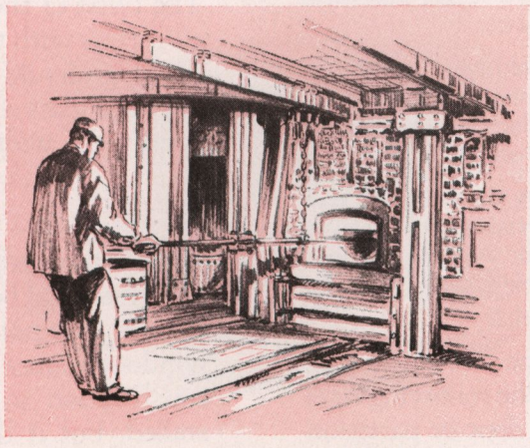
| | | | | |
|---|---|---|---|---|
| Hammered Rough "Wire Glass" | 3/4 | 30 | 72 | 9 3/4 |
| Ribbed "Wire Glass" | 3/4 | 30 | 72 | 9 3/4 |
| Ground " " | 3/4 | 30 | 72 | 9 3/4 |
| Polished " " | 3/4 | 30 | 72 | 9 3/4 |

## Mississippi Glass Sold by All Dealers

IT has always been the policy of the Mississippi Glass Co. to market its products only through glass distributors who always carry a large stock, assuring prompt delivery anywhere.

This policy has proven most beneficial to those who specify Mississippi, because the general contractor, owner or architect knows that he is assured of keen competition by inviting bids from reputable dealers.

Furthermore, by specifying a Mississippi pattern all dealers will figure on one and the same quality.



*The ladling method of taking molten glass from a tank furnace*

# *Information on Glazing*

## *When to order glass*

Glass being one of the last materials to go into a building, it is very often the case that plans are not in proper shape for the glass contractor to take off sizes sufficiently in advance. Thereby enabling him to place his order far enough ahead to give the manufacturers time to cut the glass to sizes and make shipment in time to enclose the building by the date desired. It is therefore advisable to give this point consideration in due time in order to facilitate matters and assure glazing being done on time. In many cases the delay is not the fault of the glass contractor or the manufacturer, as the tremendous demand for Standard "Wire Glass" and Figured Glass necessitates orders taking their turn as they are received.

## *Wire Glass Sizes*

The Publication of Rules and Requirements of the National Board of Fire Underwriters, 1906 edition, specifies the following points on the sizes of wire glass for window openings:

*a*—The unsupported surface of the glass allowed shall be governed by the severity of exposure and be determined in each case by the Underwriters having jurisdiction, but in no case shall it be more than 48 inches in either dimension or exceed 720 square inches.

*b*—The glass to be of such dimensions, after selvage is removed, that the bearing in the groove or rabbet is not to exceed 1/8 inch less than the full depth called for in rules 7 and 8.

*c*—The glass to be retained by the structural part of the frame or sash independently of the material which may be used for weatherproof purposes. Only non-inflammable material to be used in setting glass in the sash.

In consideration of the above extract, it is well to bear in mind the following sizes when planning window, door or partition openings to be glazed with Standard "Wire Glass," as these are the most advantageous sizes where glass is not to exceed 720 square inches:

15 x 48 18 x 40 20 x 36 24 x 30

## *Be sure to use the proper terms for specifying wire glass and figured glass*

Very often glass contractors receive specifications which are improperly made and, therefore, confusing. In many cases mistakes of this sort prove annoying and costly. Mistakes are commonly made in specifying "Plain Wire Glass," "Plain Polished Plate Wire Glass," "Polished Wire Glass," or "Plate Wire Glass," when what is wanted is "POLISHED WIRE GLASS." Another common error is made in specifying "Florentine" or "Maze Glass" as a common term for any figured glass when another specific style of figured glass is desired. To avoid possibility of error it is always best to consult the pages of this catalogue and make certain that the glass desired is correctly named. It is also important to prefix the name "Mississippi" to the particular pattern to insure receiving Mississippi quality.

## *Specify width first*

The twist of the wire in all styles of wire glass runs with the length of the sheet and the glass should be set vertically. In ordering wire glass always make sure that you specify the width first.

## *Metal frames for proper protection*

To have proper protection from wire glass it should be set in metal frames. Mississippi does not manufacture or sell metal window frames or other forms of metal construction in which wire glass is installed, but it does recommend their use for the proper protection and safety of a building.

# Mississippi Wire Glass

## *The Standard*

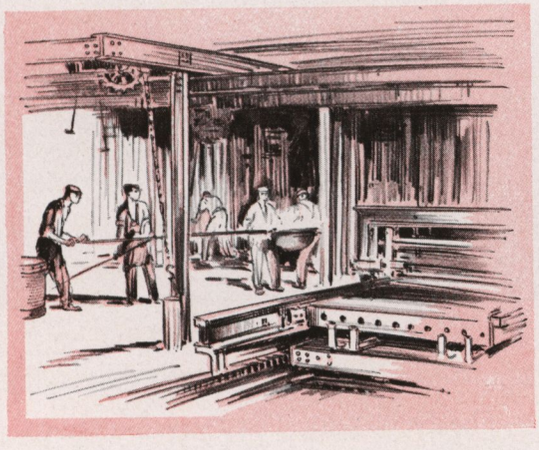
IN 1893 the Mississippi Company began the manufacture of wire glass. It was a rather crude-looking material in comparison with the present perfected product, but it served the purpose for which it was intended—a material which would permit light and vision and act as a fire retardant.

Many practical demonstrations soon convinced engineers, architects and the general public that it was possible to protect a building from fire by a material that would not keep the interior in utter darkness.

A circular sent out by the Mississippi Company on August 24, 1899, stated that "The Solid Wire Glass manufactured by the Mississippi Glass Company is the only make of Wire Glass which has been officially approved, after tests, by the Boards of Fire Insurance Underwriters of the principal cities of the United States, and acceptable for its superior manufacture and fire retardant quality, subject to their rules."

The present Underwriters' Laboratories, organized in 1901, following the earlier approval of underwriters throughout the United States, recognized the solid wire glass manufactured by the Mississippi Company as the Standard, and gave it the title of "FIRE RETARDANT NO. 32."

Naturally, processes of manufacture have been vastly improved, and are constantly being improved by the Company's engineers. Mississippi Wire Glass is *cast solid* and is made from specially refined glass metal. It has received universal recognition because of its superior quality and finish.



*Conveying a ladle of molten glass to the casting table where it is poured and rolled into a large sheet of glass*


A TYPICAL INSTALLATION OF POLISHED WIRE GLASS

The New York Telephone Building

Barclay and Vesey Streets, New York City

*Every outside window is Mississippi Polished Wire Glass*

# *The Importance of* Wire Glass in Fire Protection

*Proven Efficiency*

The efficiency of wire glass windows for protection against fire has been tested time and again in many conflagrations. Its use has saved hundreds of buildings all over the nation. Wire Glass has many decided advantages over other forms of window fire protection and the following points are taken from a paper read by Henry A. Fiske before the Insurance Society of New York.

"*First*—The 'Wire Glass' window can be used on all classes of buildings and on all sides, including street fronts. The ordinary shutter is not adaptable to many buildings, nor to street fronts. It is of the greatest importance to protect all important buildings on all sides. This is not only necessary where risk is exposed by other buildings, but also to complete the vertical cut-off between floors in any building.

In all modern buildings of ordinary or superior construction it is considered essential to protect floor openings and at least retard, if not prevent, fire spreading from one floor to another, and yet, almost universally, we find no protection on one or more sides for the window openings, and fire easily finds its way from one floor to another in this way. Two notable examples right here in New York City were the Parker and Asch Building fires. In the latter case the fire started on the eighth floor, while the loss of life was on the ninth, and it is quite possible that few or no lives would have been lost if all the windows had been protected with 'Wire Glass,' it being apparently the consensus of opinion that the fire spread from one floor to another chiefly by way of the windows.

The problem of preventing fires from spreading from one floor to another can, with our present knowledge, only be solved by 'Wire Glass,' as it is evident that shutters could not generally be closed in time, even should it be attempted, and while automatic shutters are mechanically possible there seems to be no good solution of this problem as yet.


*C. Shenkberg Building, Sioux City, Ia., Burned Building on the right, Davidson Department Store*

Three-story brick mercantile building occupied by C. Shenkberg Co. was destroyed by fire. Large department store across alley, also 8-story mercantile building across another alley. Both of these latter buildings were protected with "Wire Glass" windows, which remained intact. The Davidson Department Store Building was severely exposed, but no damage to contents.

*Second*—The 'Wire Glass' window is ordinarily closed at the time of fire. If open, it may be easily and quickly closed. It is tested as often as it is opened, and if not frequently tested it is because it is kept closed. It is susceptible of simple automatic closing, which should be reliable. In all of these vital points it is the opposite of the shutter, which latter is ordinarily open, may be seldom tested, may not work properly when needed, may not be closed at time of fire, and perhaps most important of all, could not in many cases be closed, especially with a fire in the building itself.

*Third*—Any device which is a protection against fire only will not receive the same care and maintenance as a device of daily necessity. The expense of maintenance is important, and the owner will naturally keep the expense at the minimum. Fire shutters are costly to maintain as compared to 'Wire Glass' windows, which latter are really a help, the upkeep being less costly than the ordinary window. The cost of opening and closing shutters daily, of keeping them in good condition, painting, keeping free from snow and ice, is of real importance, and these features are often neglected.

*Fourth*—'Wire Glass' is translucent. Fire may be seen from the outside. It may be broken easily by the firemen and is peculiarly fitted to act as a shield for the firemen while allowing a hose nozzle to be poked through the glass."

*A window in Rust Estate Building, Cleveland, Ohio, showing how wire glass stands severe fire exposure*

Mr. Fiske continued:

"These are perhaps the more important features which have been shown by experience to be of real value, and they are borne out by the fire record, leading to but one conclusion, namely—that 'Wire Glass' is generally adaptable for window openings, is quite certain to be in place when needed, and will necessarily be maintained in somewhere near its original condition.

I will make the positive statement that 'Wire Glass' in standard frames is the best protection now available against serious exposure fires, and am confident that such a statement cannot be disproved. In fact, we can reasonably go further and state that 'Wire Glass' gives good protection against all ordinary exposure fires such as met with in congested districts, for while we have had few actual tests of 'Wire Glass' in conflagrations, such tests are in its favor, and our knowledge of conflagration temperatures is sufficient on which to base an opinion. The high temperature in burning buildings during a conflagration

is caused largely by the combustible contents, and this would not occur if all window openings were protected.

The general adoption of 'Wire Glass' windows would eliminate the conflagration hazard."

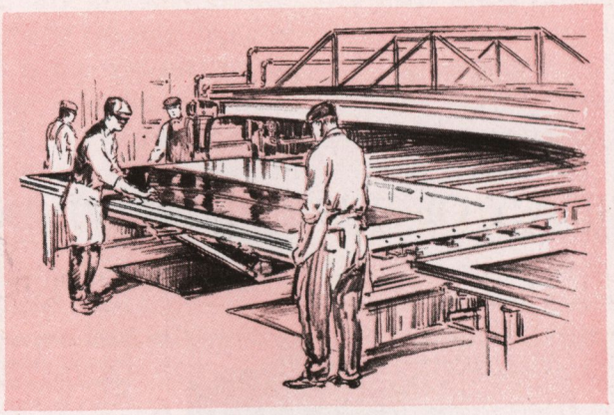
## EFFICIENCY OF WIRE GLASS WINDOWS

*Butler Bros. Warehouse, Jersey City, N. J.*

Block across street consisting of baking powder factory, chemical works, work factory, etc., practically a total loss. The exposed windows on Butler Brothers' large fireproof warehouse were equipped with "Wire Glass," which remained intact and prevented fire from entering. Some of the windows were open, but the fusible links released and the windows closed automatically. The four-story brick building adjoining Butler Brothers, also across the street from fire and occupied by the Riegel Sack Co., was not protected by "Wire Glass" windows. All of the windows burned out. This building was equipped with sprinklers, and a large number of the sprinklers near the windows opened and prevented the destruction of the building, but a serious loss of contents resulted.

*Staudte & Rueckoldt Manufacturing Co.'s Building, St. Louis, Mo.*

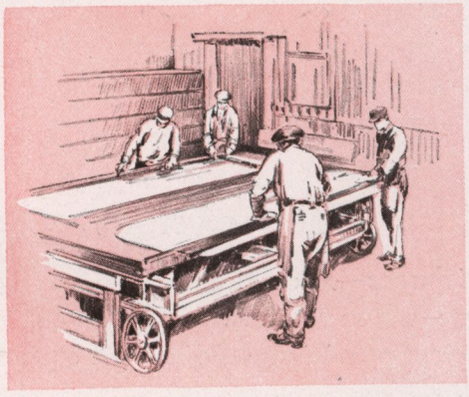
Two three-story factory buildings, subjected on one side to very severe exposure fire from large lumber yard and sheds 10 feet and more distant. One of these buildings was equipped with "Wire Glass" on the side against exposure while the other was not. The "Wire Glass" held intact and very slight damage in the former, while in the latter the windows burned out and serious internal loss. Both buildings were sprinklered; four heads opened in the building protected with "Wire Glass" and 117 in the other building.



*Receiving glass at the cool end of the lehr after it has been properly reduced in temperature*

# Mississippi Wire Glass

UNEQUALLED in quality, uniformity, and finish. The various styles of Mississippi Wire Glass are presented on the following pages. For best results make sure that you choose the proper pattern and that you specify "MISSISSIPPI"



*Cutting glass into stock sheets after it comes from the lehr. This glass is then sent to warehouse or polishing plant*

## *Mississippi*

# Polished Wire Glass

MISSISSIPPI Polished Wire Glass is made with particular care from specially refined glass metal and it has a real plate glass surface. It is specified by particular architects whenever a product of the highest quality is desired.

The twist of the wire runs with the length of the sheet and the glass should be set vertically. It is made in two thicknesses.

SPECIFICATIONS

*Thickness*—5/16 of an inch.
*Sizes*—Up to 50″ wide and 130″ long.
*Approximate Weight*—4 lbs. per square foot.

*Thickness*—5/8 of an inch.
*Sizes*—Up to 30″ wide and 72″ long.
*Approximate Weight*—8 lbs. per square foot


MISSISSIPPI-WIRE-GLASS-CO.
NEW YORK
MWG
POLISHED
WIRE GLASS

# Syenite Polished
## Wire Glass

A POPULAR and effective pattern now in the best possible quality of wire glass. It is made from specially refined glass metal by improved Mississippi processes of manufacture, and the smooth side is polished to a plate glass finish.

The irregularity of its pattern, which does not present the appearance of a set design, makes this glass particularly effective in many styles of architecture. It obstructs the vision and provides good diffusion of light.

SPECIFICATIONS

*Thickness*—5/16 of an inch.
*Sizes*—Up to 50″ wide and 130″ long.
*Approximate Weight*—4 lbs. per square foot.

# Syenite
## Wire Glass

THE same pattern as above with identical qualities of light diffusion but with an unpolished smooth surface.

SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—3¾ lbs. per square foot.

*Syenite and Syenite Polished are described on page 44.*


MISSISSIPPI-WIRE-GLASS-CO.
NEW YORK
POLISHED SYENITE
WIRE GLASS

# Maze

## Wire Glass

A GLASS with a brilliant pattern formed by a succession of prismatic figures filled with smaller prisms which, by nature of the angles at which they are cut, diffuse and distribute the light in all directions.

This effective style of wire glass can be used in conjunction with the plain figured glass of the same pattern described on page 48.

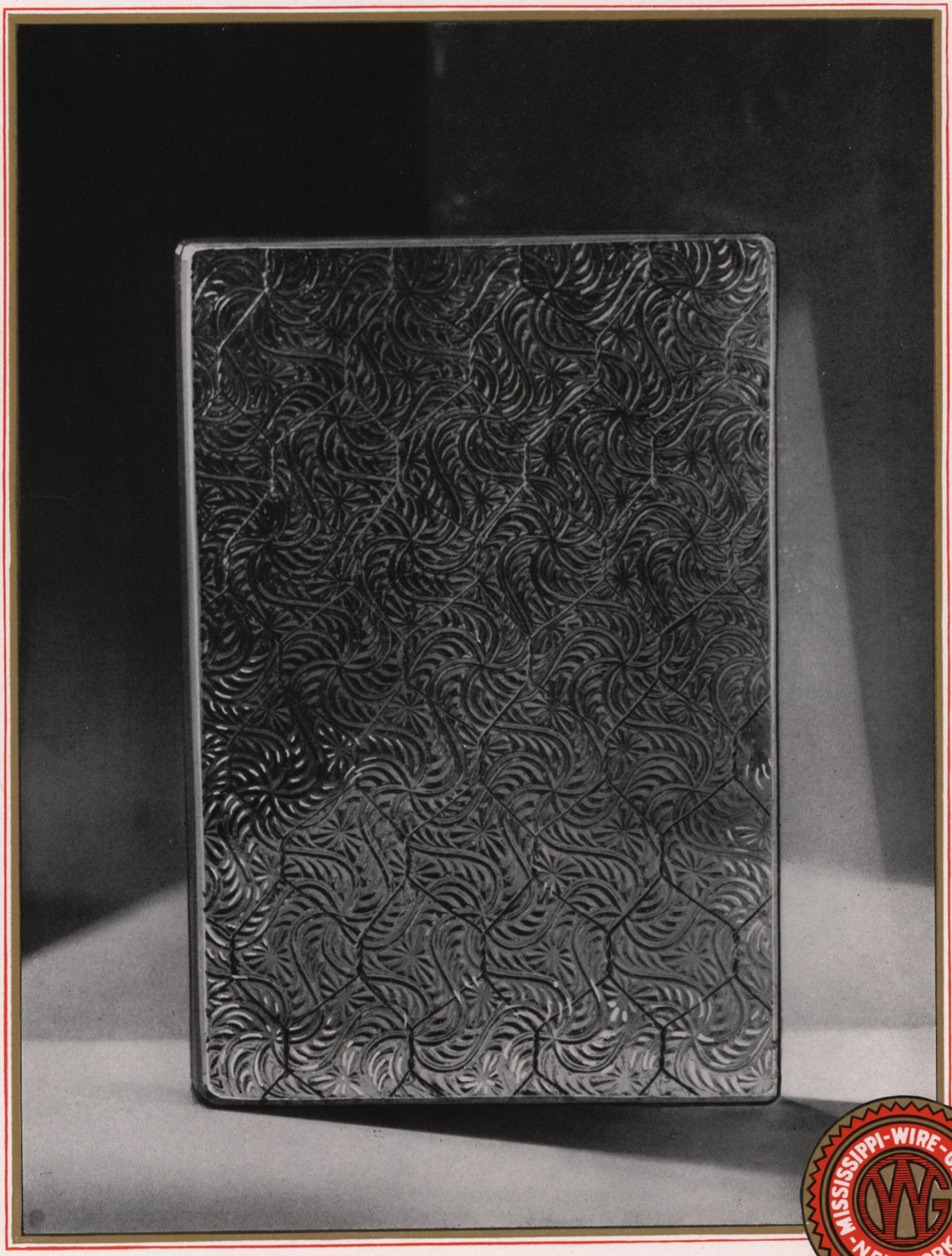
Maze Wire Glass is made in two thicknesses, as below.

SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—3¾ lbs. per square foot.

*Thickness*—⅜ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—5¼ lbs. per square foot.

*For Plain Figured Glass of the same design, see page 48.*


MISSISSIPPI-WIRE-GLASS-CO.
NEW YORK
MAZE
WIRE GLASS

FACTROLITE

# *As an Aid to Industry*

THIS pattern has been scientifically designed to accomplish definite results.

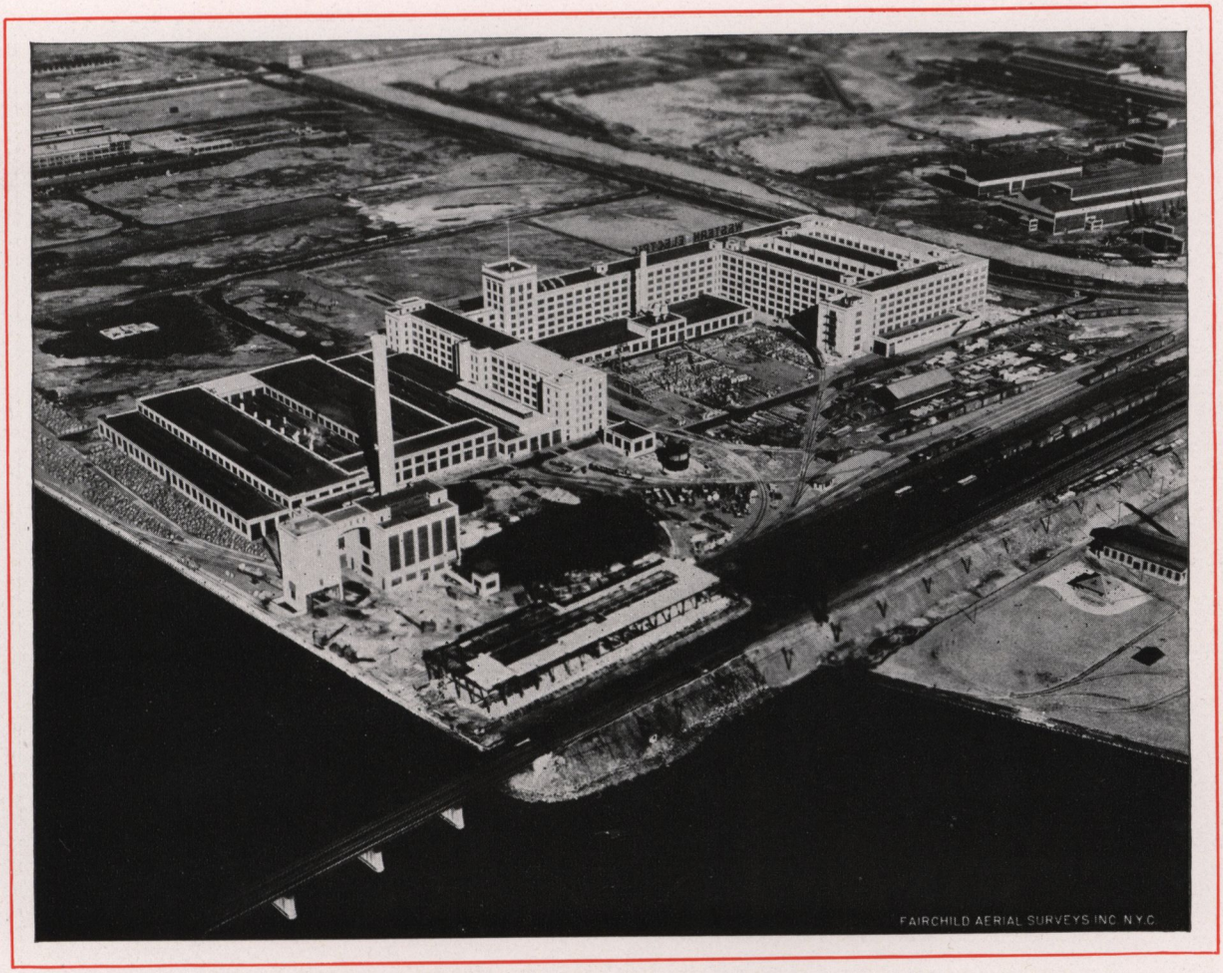
1. The elimination of glare so far as possible by the complete breaking up of the direct rays of the sun and the uniform diffusion of sunlight so that strong contrasts are eliminated and the illumination is softened, thus approaching that of north sky light.

Illumination in a room 25 feet or more deep may be increased from 38 to 72 per cent by using Factrolite instead of plain glass. The improved illumination through Factrolite materially relieves eye fatigue and automatically increases quantity and quality of production.

2. Factrolite may be easily cleaned as all depressed surfaces are straight lines and there are no pockets in which dirt becomes embedded so that it can not be dislodged with a stiff brush.

Factrolite has been used in hundreds of the most efficient industrial plants in America, including such famous names in industry as Western Electric Company, Ford Motor Company, New York Edison Company, Dunlop Tire & Rubber Co., Pacific Mills. American Thread Co., Jenking Bros., Inc., and the United States Government.

The list of satisfied users is constantly growing because no factory can be considered truly efficient that does not make the proper use of daylight—and no product equals FACTROLITE for efficient daylight illumination.




A TYPICAL INSTALLATION OF FACTROLITE GLASS
WHICH WAS USED IN ALL OUTSIDE WINDOWS

Western Electric Company
Kearny, New Jersey

# FACTROLITE
## Wire Glass

THE article on the previous pages deals in detail with the definite advantages of this glass for the scientific daylight illumination of factories.

Factrolite Wire Glass is made in two thicknesses, as below.

SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—3¾ lbs. per square foot.

*Thickness*—⅜ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—5¼ lbs. per square foot.

*Factrolite Glass (plain) is illustrated on page 57.*


MISSISSIPPI-WIRE-GLASS-CO.
NEW YORK
FACTROLITE
WIRE GLASS

# Pentecor
## *Wire Glass*

A GLASS specially made for use in skylights with ribs cut at a specific angle to collect and transmit the maximum amount of light without loss from total reflection.

*Pentecor* deflects the light at right angles to the ribs and will increase the light in a building, at a point fifty feet from the light source, 130% as compared with plain glass.

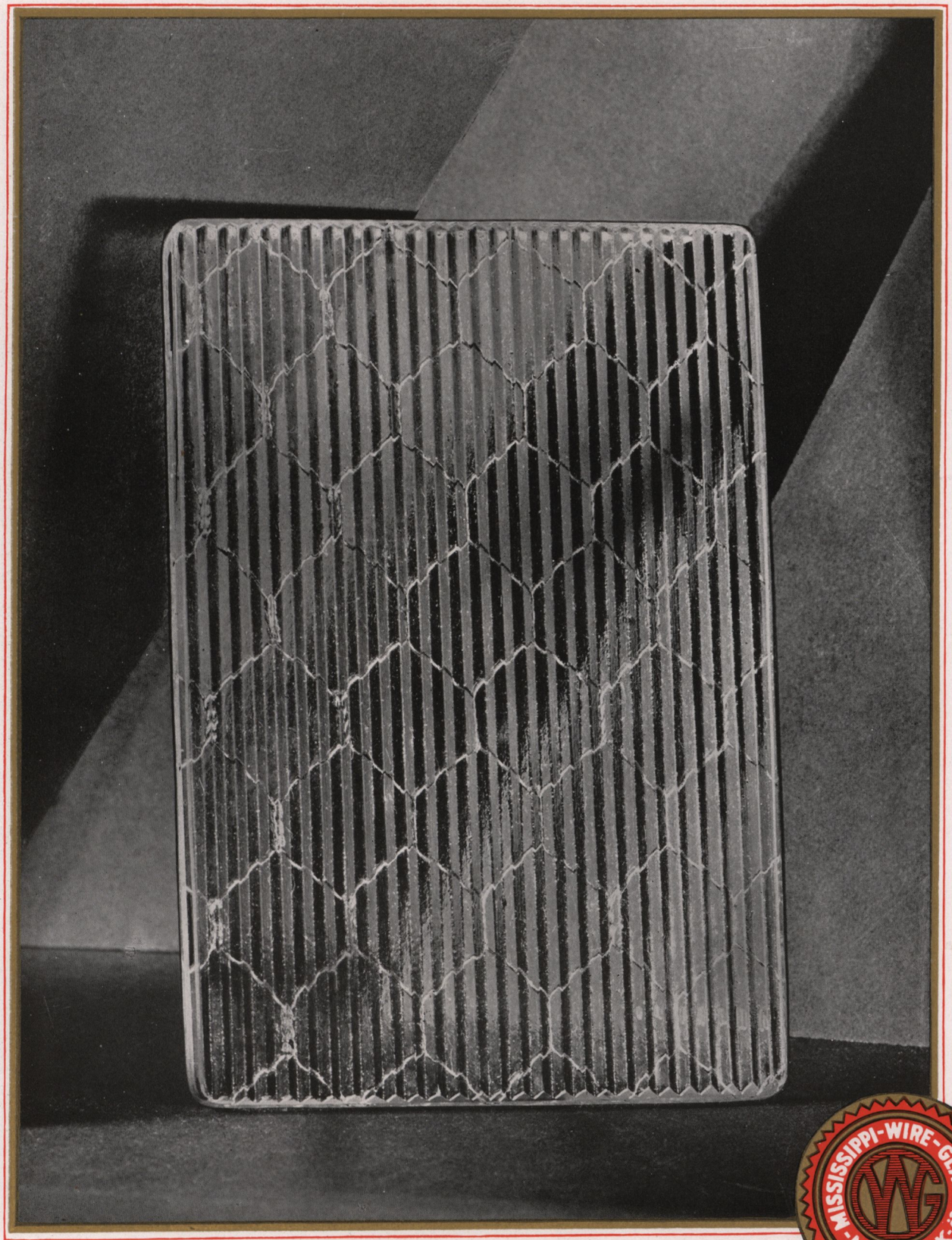
The qualities of *Pentecor* for light transmission have been tested and compared with every type of (skylight) glass, of which it was possible to secure samples, and proved conclusively that no other skylight glass compared with *Pentecor* in efficiency.

It is easily installed because it is a flat glass of standard thickness, and the contour of the ribs makes it easy to clean.

SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—3¾ lbs. per square foot.

*For Plain Figured Glass of the same design, see page 58.*


MISSISSIPPI-WIRE-GLASS-CO.
NEW YORK
PENTECOR
WIRE GLASS

# Hammered Rough

## Wire Glass

A PATTERN which diffuses light to a very small extent. Its use is recommended for buildings where light is not an important factor, but where efficient fire protection is desired.

It is extensively used in factories and industrial buildings where windows receive little or no attention.

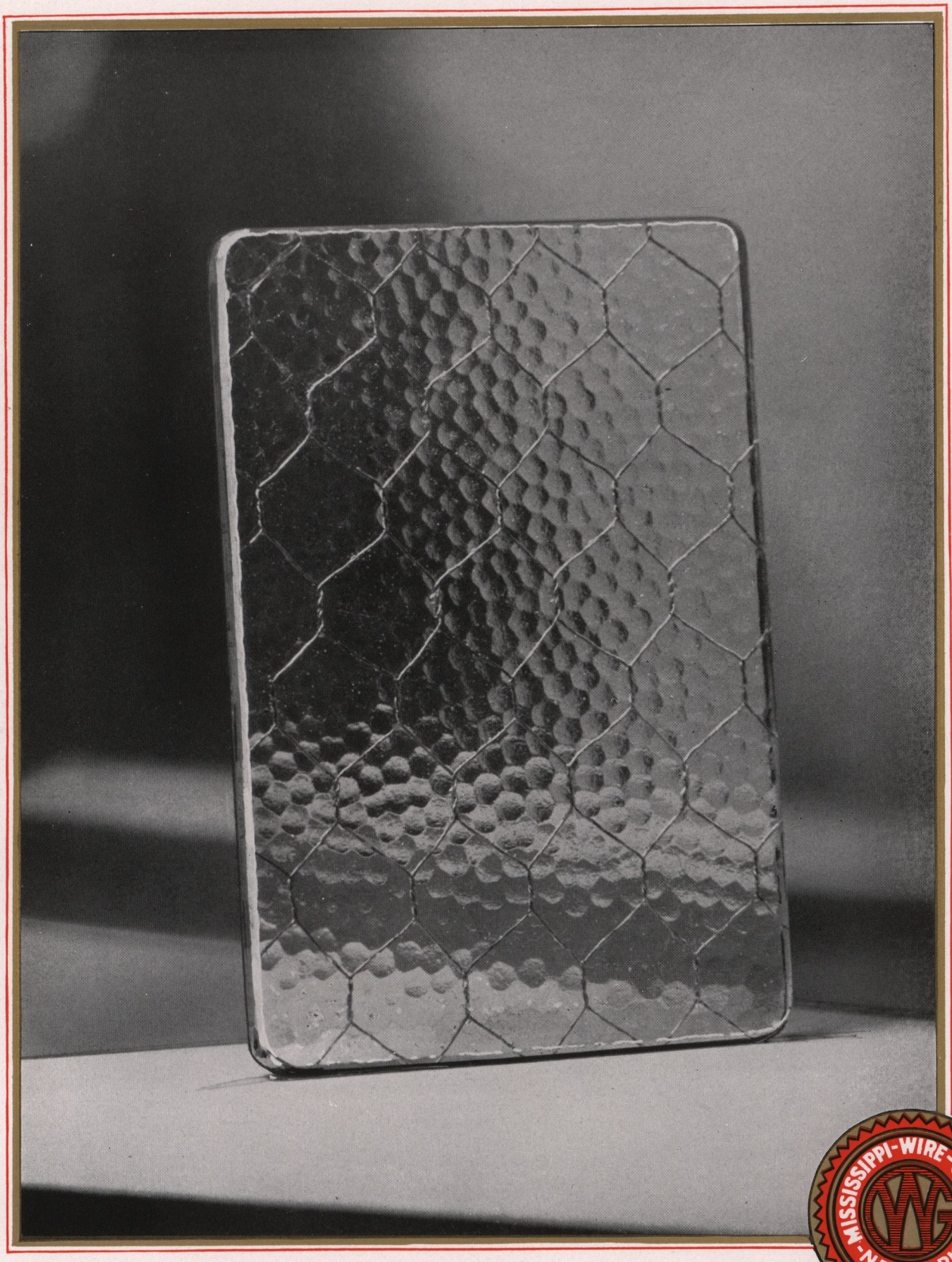
Hammered Rough Wire Glass is manufactured in two thicknesses, as below.

SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—3¾ lbs. per square foot.

*Thickness*—⅜ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—5¼ lbs. per square foot.

*For Plain Figured Glass of the same design, see page 62.*


MISSISSIPPI-WIRE-GLASS-CO.
NEW YORK
ROUGH
WIRE GLASS

# Ribbed
## Wire Glass

A WIRE glass of Mississippi Standard quality in a simple design which affords excellent light diffusion.

Ribbed Wire Glass is extensively used in factories, mills and all types of industrial buildings. Although it is sometimes used in office and loft buildings and even in structures of a more pretentious character, we do not recommend its use in many such cases because of its strictly commercial design.

It is manufactured in two thicknesses as below:

SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—3¾ lbs. per square foot.

*Thickness*—⅜ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—5¼ lbs. per square foot.

*For Plain Figured Glass of the same design, see page 60.*


MISSISSIPPI-WIRE-GLASS-CO.
NEW YORK
RIBBED
WIRE GLASS

*Warehouse where all styles or patterns of glass are kept in stock ready for immediate delivery*

# Mississippi
# FIGURED GLASS

THERE is a Mississippi Figured Glass style for every purpose. Make sure that you specify the correct glass by consulting the following pages.

For quality and results
*Specify*
"MISSISSIPPI"

*Packing Department, where the greatest possible care is exercised to insure safety and prevention of breakage in shipments which go to all parts of the country*

# AURORA

*(Goddess of Light)*

## POLISHED OR PLAIN

*THERE are four important questions to consider before deciding what type or pattern of glass to use for interior partitions. The rotation of their importance places light transmission and distribution first for the reason that glass is used in interior partitions for the purpose of admitting light. It is also desirable in most cases to obstruct the vision. A modest pattern, yet one with character, is preferable. Last, but not least, it is important to have a design which can be readily cleaned. With these points in mind, we designed a new pattern of glass and christened it "Aurora."*

### LIGHT TRANSMISSION AND DISTRIBUTION

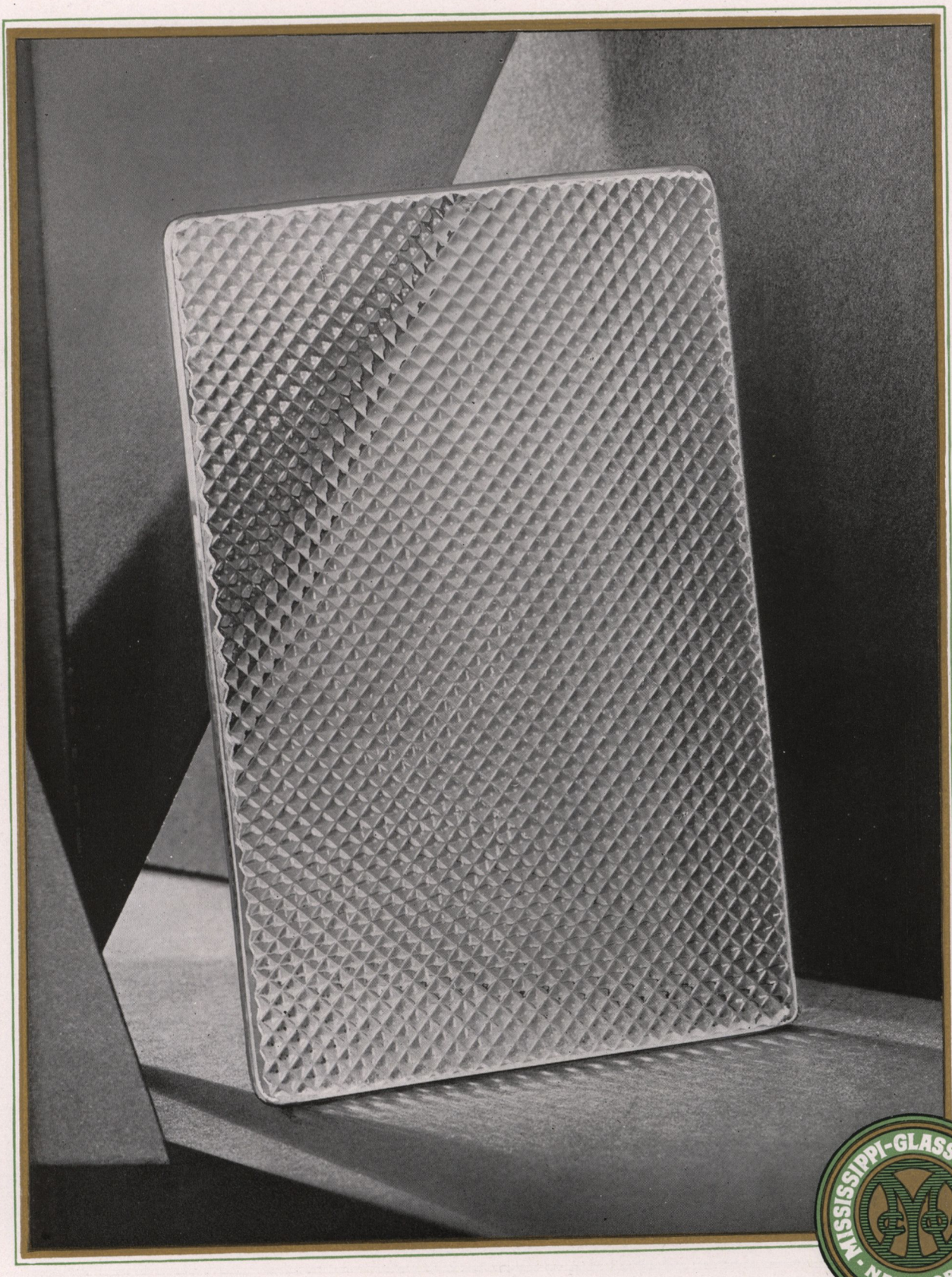
The pattern is scientifically cut at an angle which gives the highest transmission of light and at the same time deflects it to where it is wanted. The light source is daylight, supplied through outside windows. This must be picked up by the glass and deflected to the ceiling and working plane. The highest reflecting surface of a room is the ceiling, located in position to deflect light downward so that it is desirable to throw as much light to the ceiling as possible. Therefore, "Aurora" is designed to throw one-half of the light passing through it to the ceiling and the other half to the working plane. Side deflection which creates shadows is reduced to a minimum. "Aurora" utilizes to advantage all the light which reaches it.

### POLISHED OR PLAIN

"Aurora" was originally made with the flat surface rolled, which is more or less rough; but the demand for this glass in high class buildings made it advisable to polish the flat surface, giving it a high luster which very much improves the appearance. So we now make "Aurora" either Plain or Polished, both having the same illumination value, but the Polished "Aurora" has the appearance of a much higher quality glass.

### SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 50″ wide and 100″ long.
*Approximate Weight*—4 lbs. per square foot.


MISSISSIPPI-GLASS-COMPANY
NEW YORK
AURORA

# Syenite

A FIGURED glass which, because of its irregular pattern, is suitable for many styles of architecture. It obstructs the vision and provides ample diffusion of light.

It is made in two thicknesses and can be used in conjunction with Syenite Polished, described below, and with Syenite Polished Wire Glass and Syenite Wire Glass described on page 26.

SPECIFICATIONS

*Thickness*—⅛ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—2 lbs. per square foot.

*Thickness*—3/16 of an inch.
*Sizes*—Up to 60″ wide and 130″ long.
*Approximate Weight*—2½ lbs. per square foot.

*Graybar Building, New York City in which Polished Syenite was used for corridor and door lights*

# Syenite Polished

THE same pattern as Syenite with the smooth side ground and polished giving it a plate glass surface. It was developed to fill the demand for a popular design in a better quality.

Syenite Polished is made with particular care from specially refined glass metal.

Syenite Polished Wire Glass is described on page 26.

SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 50″ wide and 100″ long.
*Approximate Weight*—4 lbs. per square foot.


MISSISSIPPI-GLASS-COMPANY
NEW YORK
POLISHED
SYENITE

# Apex

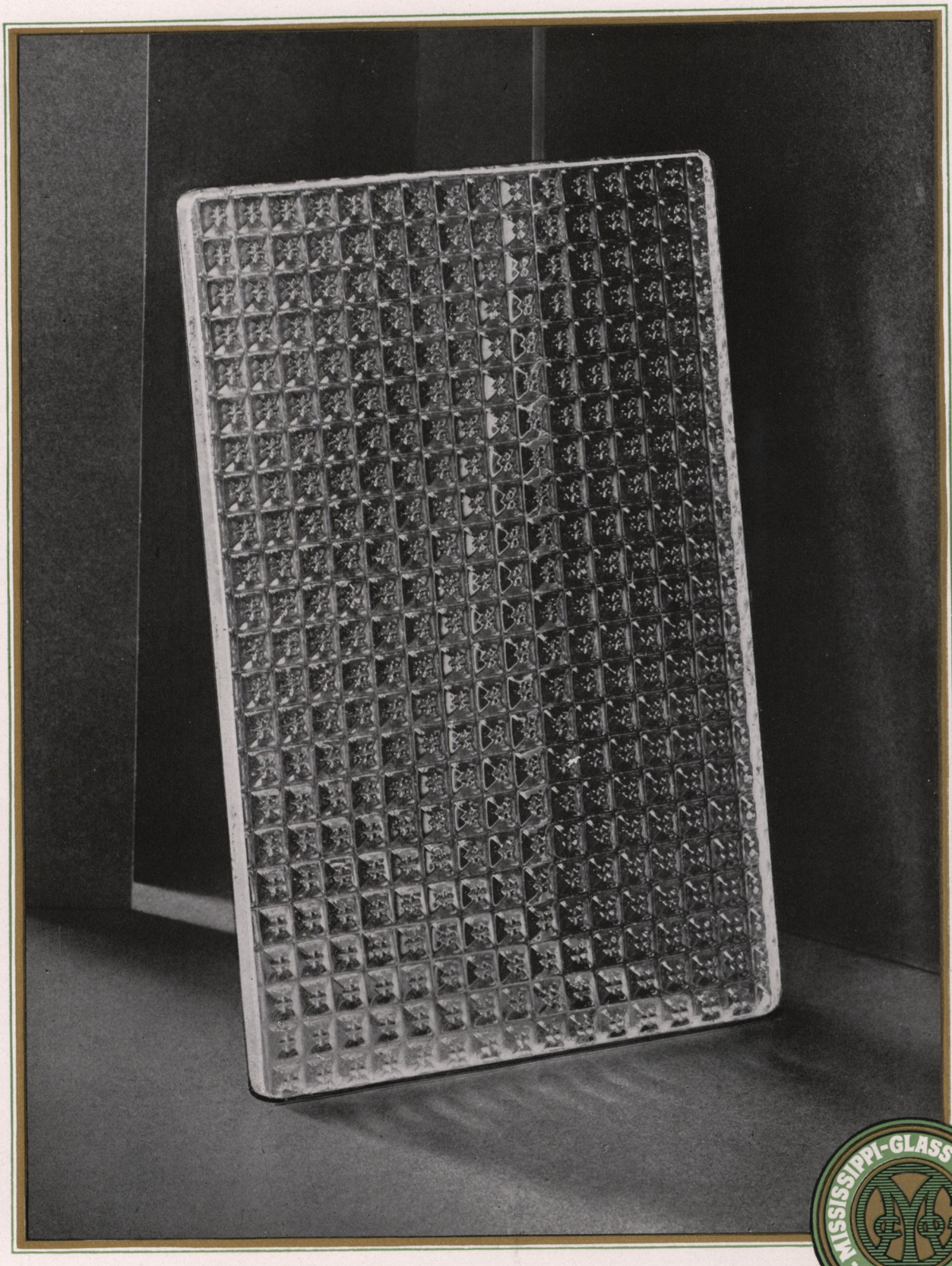
A FIGURED glass of quality and distinction. *Apex* has a substantial thickness, a brilliant figured surface and its flat side is beautifully polished.

Its attractive pattern and its remarkable qualities for obscurity of vision make *Apex* specially desirable for partitions, doors, transoms and corridor lights in the better class of buildings.

Its pattern completely intercepts the vision, assuring absolute privacy without sacrificing light.

SPECIFICATIONS

*Thickness*—¼ of an inch.
*Sizes*—Up to 50″ wide and 100″ long.
*Approximate Weight*—4 lbs. per square foot.


MISSISSIPPI-GLASS-COMPANY
NEW YORK
APEX

# Maze

A PRISMATIC design which diffuses and distributes the light in a very efficient manner.

In tests of this glass conducted by Professor Norton of the Massachusetts Institute of Technology under the supervision of the late Edward Atkinson, it was found that by the use of this style of glass in the upper sash of a window the light in a room 30 feet or more in depth can be increased from 3 to 15 times as against ordinary window glass.

Maze Glass is highly recommended because of its efficiency for partitions in banks, office and mercantile buildings where many departmental partitions are necessary and privacy is required as well as light.

It is manufactured in two thicknesses, as below:

SPECIFICATIONS

*Thickness*—⅛ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—2 lbs. per square foot.

*Thickness*—3/16 of an inch.
*Sizes*—Up to 60″ wide and 130″ long.
*Approximate Weight*—2½ lbs. per square foot.

*For Maze Wire Glass, see page 28.*


MISSISSIPPI-GLASS-COMPANY
NEW YORK
MAZE

# Florentine

THIS is one of the earliest styles of figured glass that was produced. It is still used in large quantities because of the efficient manner in which its attractive prismatic design diffuses light while obstructing the vision. Because of these qualities Florentine Glass is very effective for doors, transoms and partitions. Its rich design makes it adaptable for many styles of architecture.

Florentine Glass is made in two thicknesses as below.

SPECIFICATIONS

*Thickness*—⅛ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—2 lbs. per square foot.

*Thickness*—3/16 of an inch.
*Sizes*—Up to 60″ wide and 130″ long.
*Approximate Weight*—2½ lbs. per square foot.


MISSISSIPPI-GLASS-COMPANY
NEW YORK
FLORENTINE

# Figure No. 2

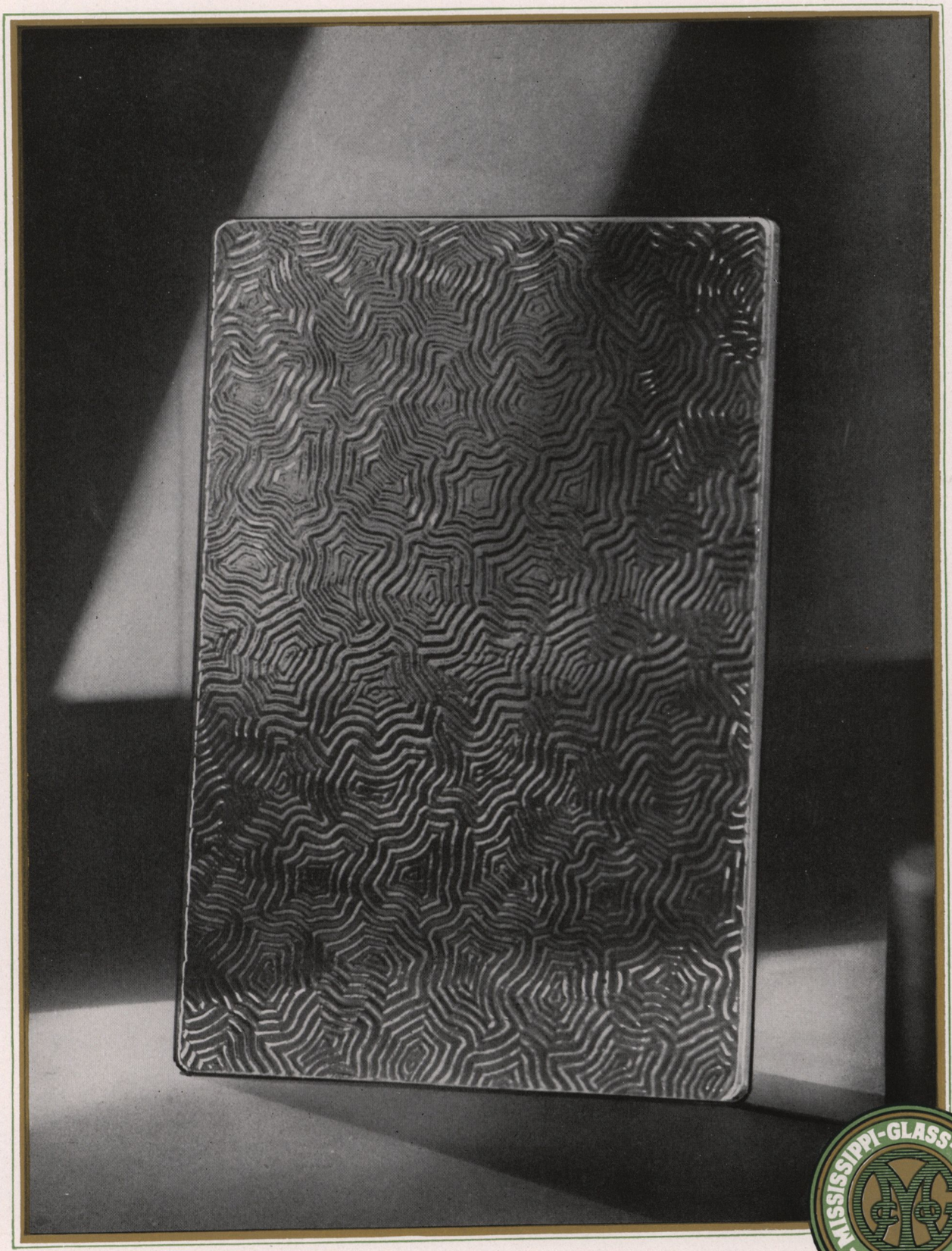
A CONVENTIONAL design, brilliant in surface, and insuring a liberal diffusion of light. While this design is sufficiently attractive to harmonize with many styles of architecture, it is most appropriately used where Colonial effects are an important consideration.

Figure No. 2 Glass is manufactured in two thicknesses, as below.

SPECIFICATIONS

*Thickness*—⅛ of an inch.
*Sizes*—Up to 42″ wide and 110″ long.
*Approximate Weight*—2 lbs. per square foot.

*Thickness*—3/16 of an inch.
*Sizes*—Up to 42″ wide and 110″ long.
*Approximate Weight*—2½ lbs. per square foot.


MISSISSIPPI-GLASS-COMPANY
NEW YORK
FIGURE NO. 2

# Ondoyant

THIS is the oldest pattern of figured glass produced by the Mississippi Glass Company, and one that has retained its popularity since its introduction.

It obstructs the vision while affording a liberal distribution of light. It is widely used for transom and ceiling lights, and is predominant in leaded work because of the pleasing light effects produced by its light-retaining, rippled surface corrugations. Its popularity owes much to the fact that its casual pattern harmonizes with nearly all decorations.

SPECIFICATIONS

*Thickness*—⅛ of an inch.
*Sizes*—Up to 30″ wide and 100″ long.
*Approximate Weight*—1¾ lbs. per square foot.


MISSISSIPPI-GLASS-COMPANY
NEW YORK
ONDOYANT

# FACTROLITE

THIS glass is the product of extensive research in the efficient use of daylight in modern factories, and represents the last word in the scientific day-lighting of modern factory buildings. Factrolite will give the most uniform distribution of light in all directions that it is possible to obtain, and increase the illumination of a building from 38 to 72 per cent as compared with plain glass.

It eliminates glare to a very large extent because in every inch of its surface there are 900 prisms to break up and scatter the rays of light.

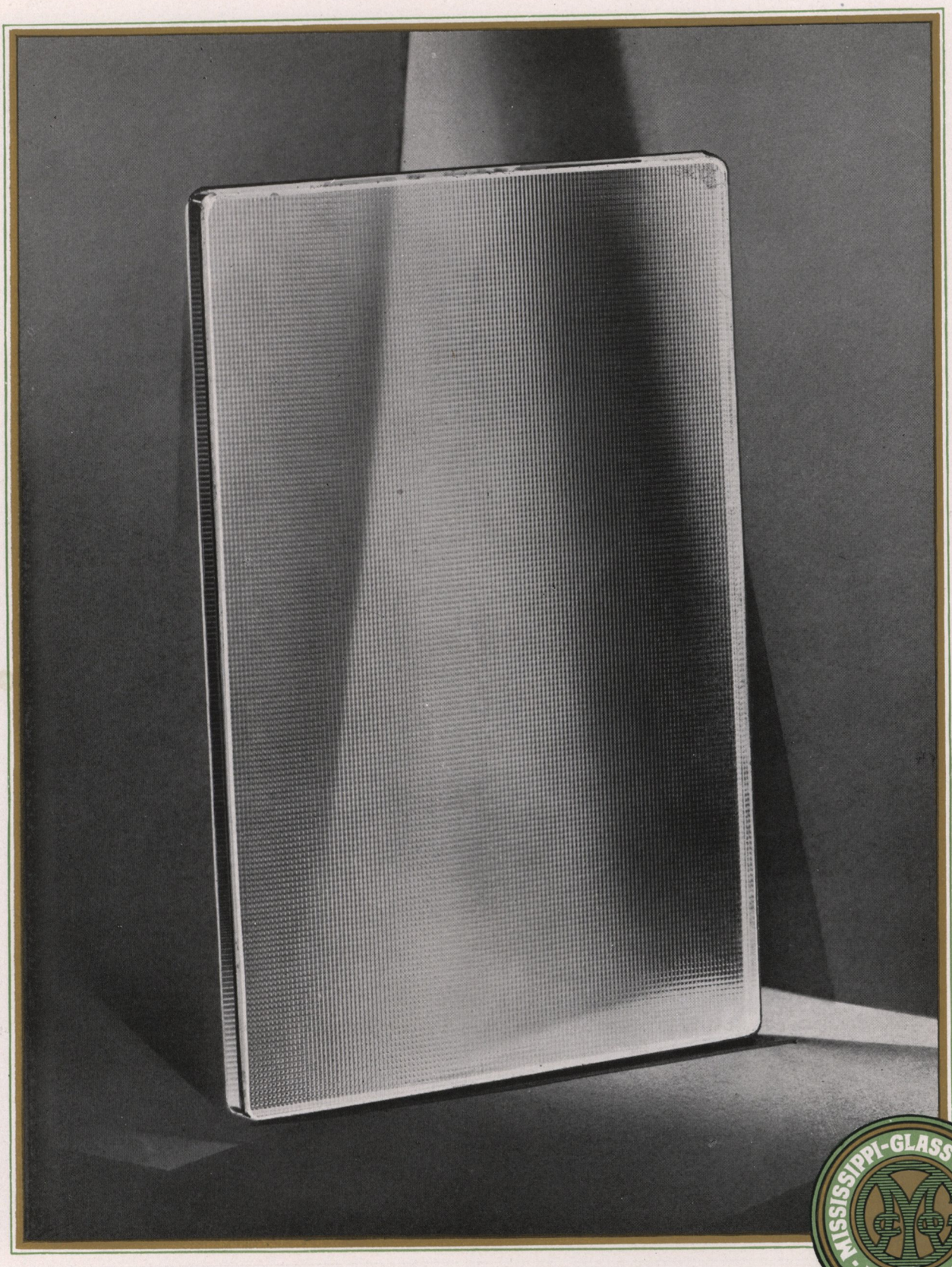
Factrolite is manufactured in three thicknesses, as below.

SPECIFICATIONS

| | | | | |
|---|---|---|---|---|
| *Thickness* . . . . . | 1/8 | 3/16 | 1/4 | of an inch. |
| *Weight* . . . . . | 2 | 2½ | 3¾ | lbs. per sq. foot. |

*Sizes for All Thicknesses*—Up to 48″ wide and 130″ long.

*Factrolite Wire Glass is illustrated on page 33.*


MISSISSIPPI-GLASS-COMPANY
NEW YORK
FACTROLITE

# Pentecor

A PLEASING combination of rib and prism in a most brilliant pattern with remarkable prismatic qualities. Pentecor offers a less expensive style than prism glass in a pattern that is efficient and easily cleaned. It is very effective for use in factories and industrial buildings and is used for skylights to conduct condensation.

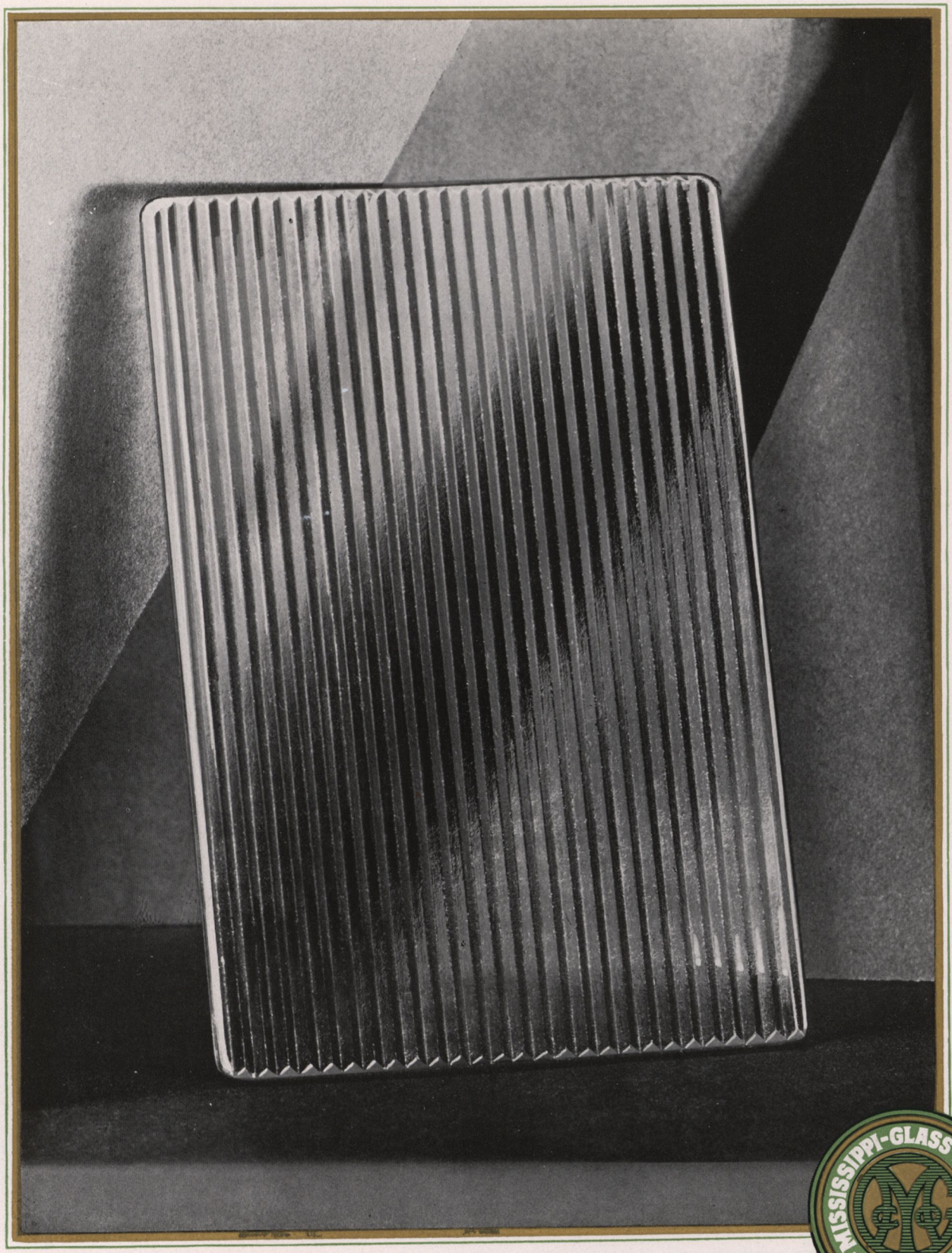
Pentecor is made in two thicknesses as below.

SPECIFICATIONS

*Thickness*—⅛ of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—2 lbs. per square foot.

*Thickness*—3/16 of an inch.
*Sizes*—Up to 48″ wide and 130″ long.
*Approximate Weight*—2½ lbs. per square foot.

*For Pentecor Wire Glass see page 34.*



MISSISSIPPI-GLASS-COMPANY
NEW YORK
PENTECOR

# Ribbed

A RIBBED glass supreme in the quality of its material and in its cutting surface. It is a simple design which affords excellent light diffusion and is extensively used for skylights and windows in factories, power plants, and other industrial buildings.

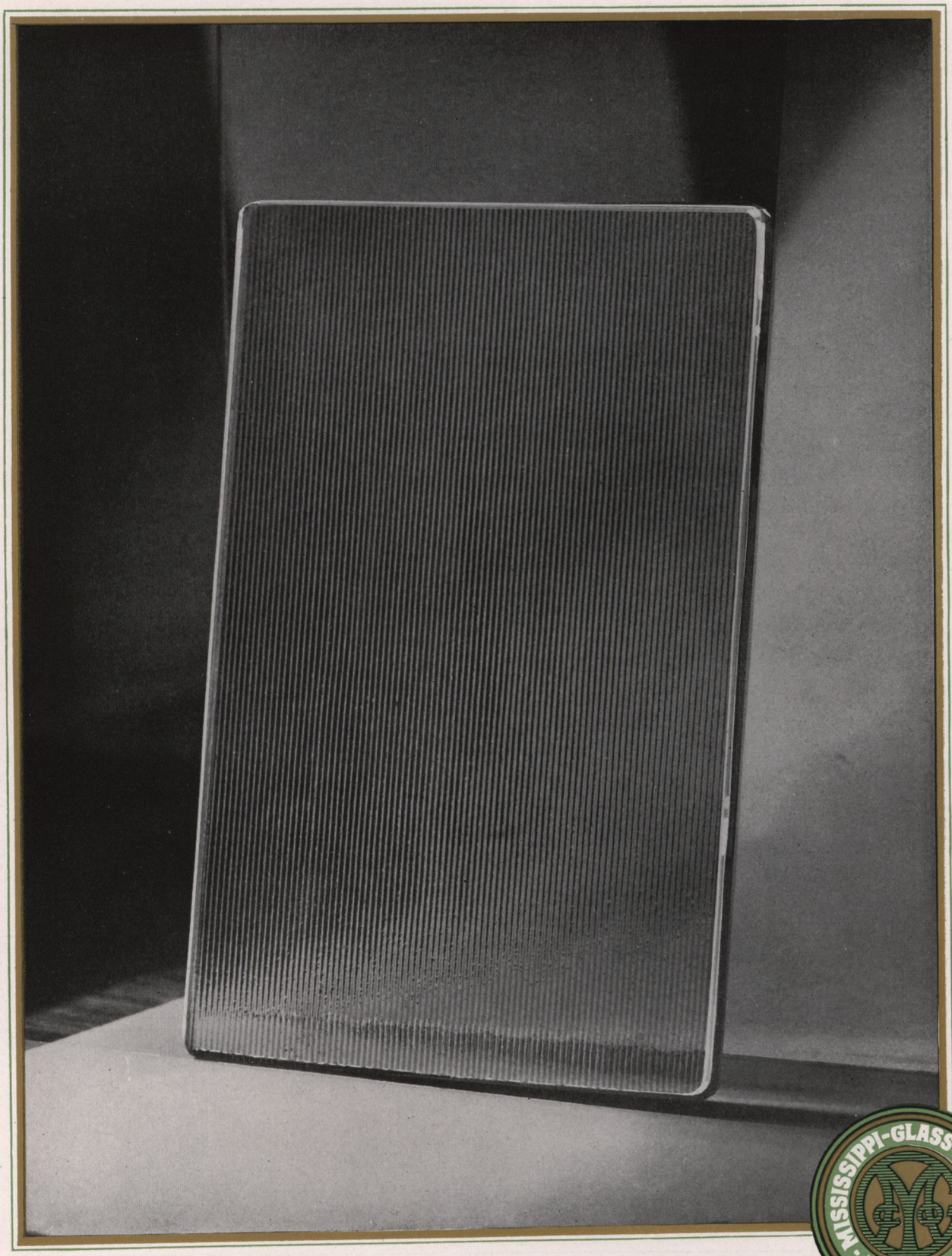
Ribbed glass is made in 5 thicknesses as below.

SPECIFICATIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| *Thickness* . . . . . | 1/8 | 3/16 | 1/4 | 3/8 | 1/2 | of an inch |
| *Approximate Weight* | 2 | 2½ | 3¾ | 5¼ | 7½ | lbs. per sq. foot |

*Sizes for All Thicknesses*—Up to 48″ wide and 130″ long.

*For Ribbed Wire Glass, see page 38.*


MISSISSIPPI-GLASS-COMPANY
NEW YORK
RIBBED

# Hammered Rough

THIS is an example of superior Mississippi quality—the best plain Hammered Rough Glass that is produced.

It is most appropriate for use in skylights and windows in factories and industrial buildings where distribution of working light is not an important consideration. Its design and fine qualities make it also popular to harmonize with certain styles of architecture.

Hammered Rough Glass is made in 5 thicknesses as below.

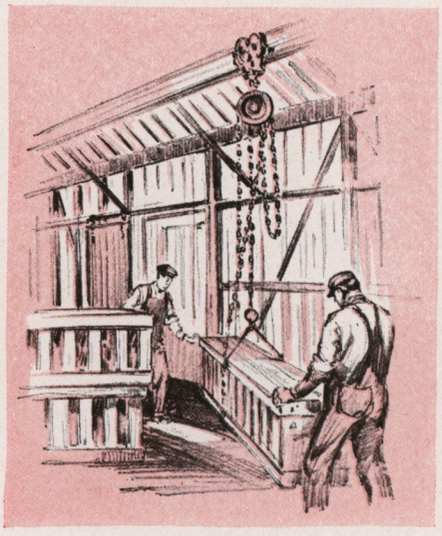
SPECIFICATIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| *Thicknesses* . . . . . | 1/8 | 3/16 | 1/4 | 3/8 | 1/2 | of an inch. |
| *Approximate Weights* . . . | 2 | 2½ | 3¾ | 5¼ | 7½ | lbs. per sq. ft. |

*Sizes for All Thicknesses*—Up to 48″ wide and 130″ long.

*For Hammered Rough Wire Glass see page 36*


MISSISSIPPI-GLASS-COMPANY
NEW YORK
ROUGH



*Platform showing cases of glass being loaded on to freight cars*

FORM 106—2-1-29—30M

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NEW YORK
MISSISSIPPI-GLASS-COMPANY
NEW YORK