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PITTSBURGH  
PLATE GLASS  
COMPANY

PLATE GLASS COMPANY  
PITTSBURGH, PA.



“The glass of fashion  
and the mould of form.”

—Shakespeare.



THE origin of "Glass" has been lost in the fog of antiquity, and it little concerns us now, how, when or where it had its origin.

What we are interested in is "Plate Glass," and we know its history, for it dates back only a little over two hundred years.

To France we are indebted for the crystal show-windows that ornament our thoroughfares, for the splendid mirrors that reflect the faces and forms of our beautiful women, and for the plate glass that shields our loved ones from the inclemency of the weather, and adds so much to the attractiveness and beauty of our homes.

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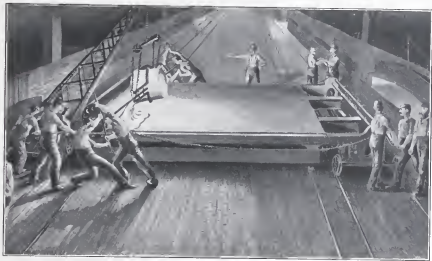


A MODERN HOME.

WE have often been asked, what is plate glass made of? How is it made? To answer these questions briefly, we say, first, that it is made of sand, soda and lime, fused at a very high temperature into a double silicate which is called glass.

As to how it is made, we cannot do better than give the description of casting as written by Mr. M. A. Cochin:

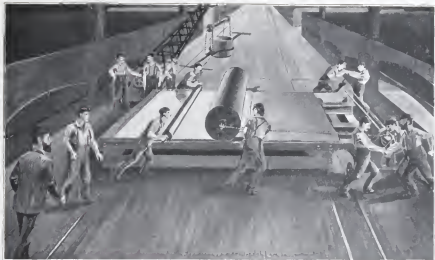
When one enters for the first time into one of the vast plate glass works at night, the furnaces are closed, and the dull sound of a violent though captive fire alone interrupts the silence. From time to time a workman opens the working hole to look into the furnace at the condition of the glass; long bluish flames then light up the sides of the annealing ovens, the blackened beams, the heavy casting tables, and the mattresses on which half naked workmen quietly sleep. Suddenly the hour strikes; the call is beaten on the iron slabs which surround the furnace, the whistle of the foreman is heard, and thirty strong men rise up. The maneuvers begin with the activity and precision of an artillery movement. The furnaces are opened, the glowing pots are seized, drawn out and raised into the air by mechanical means: they pass like hanging globes of fire along the beams, then stop, and are lowered over the immense cast-iron table, placed with its roller before the open mouth of the annealing oven. The signal given, the pot is inclined quickly and the beautiful opal liquid, brilliant, transparent and unctious, falls and spreads over the table like ductile wax.



CASTING PLATE GLASS.

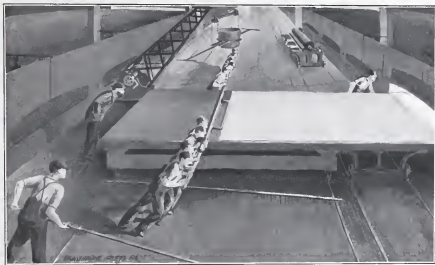
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ROLLING PLATE GLASS.

**A**ND now twenty workmen provided with suitable tools quickly push the glass into the oven, where it is annealed by slowly cooling. The workmen then return the emptied pot to the furnace and begin again, without disorder, without noise, without rest, until all the pots of the furnace have been cast. The pots are refilled ; the furnace reclosed, darkness again falls, and the continuous noise of the fire preparing fresh work is again the only sound heard.



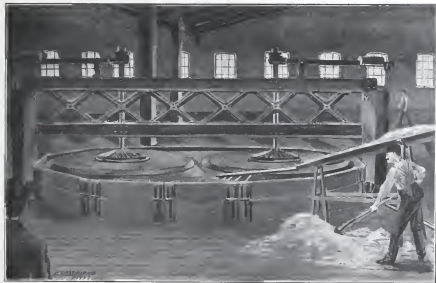
STORING THE HOT-ROLLED PLATE.

THE process of taking it out of the ovens is less dramatic than the casting. And yet it is striking to see twelve workmen, with no other help than leather straps, raise and carry this large, thin and fragile glass upon its edge, walking in step, like drilled soldiers, from the annealing oven to the racks, where it is now ready for the next process—the grinding and smoothing.



CARRYING ROUGH PLATE GLASS.

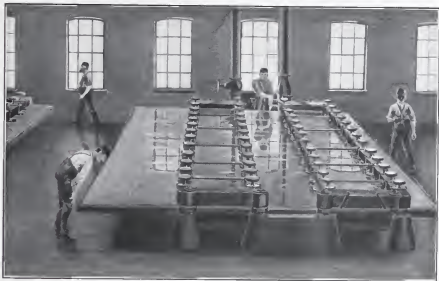
THE glass is now rough and opaque and must undergo the different processes of grinding and smoothing, to bring the surfaces to a perfect plane, and give it that satin-like finish, that is so necessary to its successful polishing. The grinding is done by the use of successive grades of sand, beginning with the very coarsest, and following grade by grade down to the very finest grain. The smoothing is then completed by following, in a similar manner, with emery carefully graded.



GRINDING THE ROUGH PLATE GLASS.

THE glass is still opaque and must be polished to make it transparent. The polishing is one of the most delicate processes in the manufacture, for as it has to transmit or reflect light, there must be no defect in it to disperse or obscure the rays.





POLISHING THE GROUND AND SMOOTH PLATE GLASS.

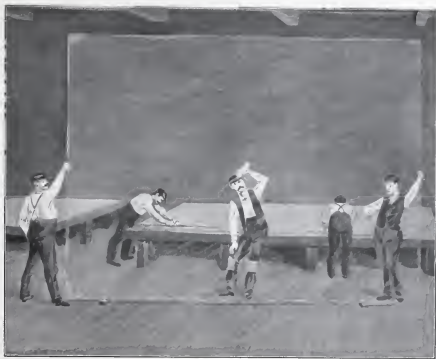
**B**Y this mechanical work the glass loses at least one-third of its weight. A glass works producing a million square feet of finished plate glass annually would make about six million pounds of rough plate, and this when finished would only weigh three million five hundred thousand pounds, showing a loss in actual glass of two million five hundred thousand pounds, which passes off in the debris to the river.



CARRYING THE FINISHED PLATE.

WHEN we add to this the fact that about one-half of the weight of the lime and soda originally used to produce this glass, released by heat, escapes into the atmosphere in the shape of carbonic and sulphuric acid, one may get some idea of the vast waste of material and the consequent cost of converting such homely substances as sand, soda and limestone into such a beautiful article as plate glass.

But right here comes the mistaken idea of the costliness of plate glass. Scarcely any article manufactured in this country has so greatly declined in price ; formerly it was looked upon as a great luxury, in which none but the wealthiest could indulge, but now, if it has not become a necessity, it has reached a point where any one who can build a home, however humble, can well afford to use plate glass in it, for there is nothing that so adorns the beauty of a home, gives equal delight to its possessor, or adds so much in value to it, at so slight a cost, as plate glass.



EXAMINING THE FINISHED PLATE FOR DEFECTS AND CUTTING PLATE GLASS.

## The Mirror

COLBERT, Minister of Finance to King Louis XIV., writing on the 2d of June, 1673, to the Count of Avaux, who had sent him from Venice the proffer of an Italian to go to France to manufacture large mirrors, said: "This might be injurious to other interests, and besides, there would be absolutely no sale for large mirrors in the Kingdom; there would be no one but the King who would have any use for them."

Two hundred years afterwards the most modest home could indulge in a mirror such as King Henri IV. presented to the King of England. It has left the palaces of Kings to enter into the homes of all the world.



"To hold as 'twere the Mirror up to Nature,"

—SHAKESPEARE.

### One Way

is to use common window glass, which is usually streaked, smoked and stained and full of minute air bubbles. Objects seen through it become deformed and distorted. When sunshine falls upon it, it has the appearance of the battered bottom of a tin pan. It never looks clean, no matter how carefully it is washed and dried.

### The Other Way

is to use plate glass, which glistens like a mirror from the outside in the sunshine and in the shadow reflects like one. Objects seen through it are clear, distinct and perfect. It has no imperfections, no air bubbles, no wavy effects. It is no trouble to clean, and when cleaned keeps clean a long time.





TWO  
WAYS  
OF LOOKING AT IT.

THE mission of this little booklet is to interest you in Plate Glass : to point out its merits and its beauty.

If you contemplate building a home, to convince you of the advantages that will justify you in using it instead of common window glass.

If you already have a home, and it is disfigured by common window glass, to show you how richly rewarded you will be through the increased comfort and enjoyment you will derive, as well as the value you will add to that home by substituting plate glass for this obsolete glass.

There is nothing but the Diamond so limpid as good plate glass.

PLATE GLASS keeps a house warmer in winter and cooler in summer.

It adds to the beauty both within and without.

It is a source of constant delight because so easily kept clean.

It gives additional value to your home far beyond any cost it may have been to you.

When you look through a plate glass window the view is clear, distinct and perfect. If you look at the plate glass window from the outside, in the shade it reflects like a mirror "the passing show"; or, if you are so fortunate as to have your home in the country, it mirrors the landscape like a framed picture—because plate glass is mirror glass.

WE can furnish you plate glass of any size or thickness.  
We can furnish it beveled, bent or silvered.  
Write to us for prices of any list of sizes you may  
require.

We have our own Warehouses in Pittsburgh, New York,  
Boston, Cincinnati, Detroit, Chicago, St. Louis and Minneapolis,  
where we keep large stocks constantly on hand.

Write to the nearest one, and you will get a prompt reply.

# The Pittsburgh Plate Glass Company,

## PITTSBURGH

Carnegie Building.

## NEW YORK

49-53 Lafayette Place.

## BOSTON

30 Sudbury St.

## CHICAGO

442-452 Wabash Ave.

## CINCINNATI

115-117 W. Front St.

## ST. LOUIS

Cor. 12th and St. Charles Sts.

## MINNEAPOLIS

124-128 N. 3d St.

## DETROIT

101-103 W. Ferry St.  
138-140 Jefferson Ave.

## PHILADELPHIA

1012-1018 Filbert St.

## **Plate Glass in a House**

Lifts its outside tone just as pictures and rugs and fine furniture lift its inside tone. Plate Glass does more. It helps the inside of the house as much as it helps the outside. It is in keeping with all the accessories that refinement calls for. It brings a refining influence of its own and helps every other feature of elegance in the house to be more elegant. It lets daylight into the rooms freed from every discordance—sublimated daylight, as it were.

Children are healthier, plants are healthier, the whole household is healthier and happier for these crystal-clear sheets in the windows.

No dollars are put into a house that count so much for real luxury and lasting delight as those that pay for Plate Glass.

Even when Plate Glass was double its present price there would have been real economy in its use. Any house making pretense to style would have had an easy market value much in excess of the added cost.

But now, with electric lights crowding gas, as gas not long ago was crowding lamps and candles; with new opportunities for house beautifying and embellishment springing up on every hand; with the spirit of the age calling for everything that will make the home and its surroundings more elegant and more artistic, *not* to make free use of Plate Glass in the windows is as absurd as it would be to cling to 8-cent wall paper because fresco and mural paintings are more expensive. It is more absurd, for Plate Glass brings light and life as well as beauty.

The cost of Plate Glass has been reduced very greatly in recent years. It is still more expensive, square foot for square foot, than sheet glass, but on even a house costing no more than \$1,500, it can be used with positive profit to the owner if he cares to sell—the extra outlay being more than offset by the increased beauty and market value of the house.

ON LAB & BROWNSHEDDY POINT, N. V.





