THE GLASS AGE ARRIVES

By JANE FUNSTON

The development of a building material that combines the light-transmitting qualities of glass with the insulating values of a solid masonry wall shows conclusively that the glass age has arrived. Modern in their insulating value, glass blocks can be used in a wide range of building styles. They can be used as small decorative panels or as entire walls of glass. They are well suited for use with other decorative materials. Furthermore, glass blocks decorate both the inside and outside walls at the same time.

Better lighting has proved itself an important factor in increasing sales and improving production efficiency. Better lighting adds to safety and provides eye-comfort.

Modern industries, whether building new plants or modernizing existing ones, are looking for every possible means of improving their competitive positions through better and more uniform products, lower operating costs, greater comfort for employees, and better plant appearance. Glass block construction is an important aid in realizing each of these aims. The functional advantages of glass blocks, plus their trim appearance, are important to modern industry. A recent survey showed that in industry, 72% of the plants have problems which can be solved in part or in whole by the use of glass blocks.

In the commercial field, anything that will increase sales and patronage is certain to be of interest. That's why so much glass block construction is already being used in stores, hotels, theaters, and office buildings all over the country. The unique and attractive effects, particularly with lighting, that can be obtained with glass block construction, are sure to catch the eye of prospects and increase sales. Appearance is not all, for with air-conditioning booming in the commercial field, glass blocks serve an important functional purpose.

Factories that are well kept and efficient looking rate better with the public—and rate better with employees, too. Attractive, well-lighted stores get the business that dull, unattractive stores lose. Homes that have the extra smartness of glass blocks please clients and sell better. People like a cheerful, clean-looking building—whether they live there, work there, or come there to buy.

Glass blocks are being more widely accepted in schools and hospitals daily. Young eyes need good light for long hours of study. But large areas of ordinary windows lose a large amount of heat in some climates—gain too much in others. Large panels of glass blocks can solve this problem. Pleasant daylight, adequately diffused, can flood the classroom, yet temperature can be controlled. Many schools are using the blocks to get light and privacy in locker rooms and gymnasiums. There are many advantages of glass blocks in hospitals. Bright and cheerful appearance, privacy, ease of cleaning, reduction of noises, cutting off bad views are all important to modern hospital management. Hospitals must keep an eye open for anything that will make patients more comfortable, present a pleasing front to visitors, assist operating efficiency, and reduce operating costs.

If there is any one time when people like smart appearance, it is probably when they step out to a hotel or restaurant. Glass blocks require little decoration, serving alone as an interesting and pleasant background. Dirt cannot filter through them. The blocks will also keep out offensive gases. Rain easily washes the outside surfaces of the blocks, and the inside is easily washed down. It is just a simple sweep of one smooth glass-and-cement area.

Food manufacturers are alert to every opportunity to guarantee cleanliness and preservation of their products. This is important for greater sales and important for

The stairway of a modern home is beautified by the use of glass blocks.

Courtesy of The Pittsburgh Plate Glass Co.
The interior of an operating room showing the intensity of the light through the glass walls.

Courtesy of The Pittsburgh Plate Glass Co.

government inspection, too. All food plants need plenty of light for cleanliness and efficient operation. With glass blocks, they can have both light, and also these other factors which are so important to them.

In dairies, everything must be spic and span, must be easy to clean, and must stay clean longer. High humidity here causes much condensation of acid-bearing solutions, and consequently corrosion of ordinary sash. Meat packing houses need light but too, they need low temperatures in many parts of the plant. Here the insulation values of glass blocks are vitally important for control of temperatures. In candy manufacturing, temperature and humidity must be controlled if production trouble and wastage are to be kept at a minimum. Everything must be just right for uniformity of production, or a candy's reputation and sales will suffer. The great number of these plants now being air-conditioned is a sure sign of glass block's insulation values. Bakeries, beverage plants, canneries, grain mills —these and other food manufacturers have similar problems. Hardly a food plant exists where the combined light-transmitting, insulation, and cleanliness values of glass blocks are not important. That's why they are being so widely employed both in new food plants and modernization.

In the modern textile plants, tiny threads are spun and woven at a terrific pace. A slight change in temperature can contract or expand precise mechanism and affect tension, a slight change in humidity can spoil the workability of the threads with troublesome and costly results. Many plants humidify the air where the spinning is done. This results in condensation in cold climates, a difficulty which usually can be overcome with the use of glass blocks. In dye houses, where extremely high humidity results from washing, dying, and bleaching, the condensation of acid moisture has no effect on glass blocks. Dirt infiltration endangers the salability of fine fabrics and must be avoided. For these reasons many textile plants are air-conditioned. And in these plants in particular, glass blocks will find wide use.

Good printing requires good lighting. That is one reason for so many printing plants having large window areas. But these large window areas are costly. Proper and constant humidity and temperature are necessary for maintenance of uniform tension in big presses; to prevent delays and costs due to paper breaks or paper shrinkage. Ink flows more uniformly and is absorbed more uniformly when the humidity is just right. This combined demand for more light and control of atmospheric conditions produces a great field for use of glass blocks in the printing industry.

Chemicals, drugs, leather, paper, petroleum, and rubber, the manufacture of these and other products of the process industries require rigid control of production. Although they may vary in degree of importance it will be found that temperature control, elimination of dirt infiltration and high maintenance are problems which plant management in this field would gladly be freed. Window structures that are susceptible to acid atmosphere must be avoided.

The field for glass blocks in the building industry is almost as unlimited as the imagination. However, in some industries and some types of commercial establishments the advantages of this new material are more important at present than in others. With thousands of homes being built each year, and with many more needing modernization, it can be expected that glass blocks will be used increasingly in new and rebuilt homes. A recent survey shows that 77% of present home owners and prospective owners know where they would like to use glass blocks in new construction or modernization. Prospects for new homes or home remodeling want the values that glass blocks offer them. Architects and builders appreciate the interesting new designs made possible with the blocks. Glass blocks add sales value to the speculative house, and help architects and builders sell plans for contract-built homes. So, expect to see more and more glass blocks used in the homes of the future.

"Air conditioning" is much more than cooling — it includes warming and humidifying, also. A unit "conditioner" draws in air near the floor—or over a register—and filters, moistens, and distributes it. One small motor operates the pump and fan.

Not a comic strip invention, but a real aid for candy makers and other large users of nut meats has just been announced. A saw punctures the English walnut, a jet fills the shell with explosive gas, and a flame explodes the bomb. Result is said to be 80 per cent perfect half kernels. For quiet evenings at home the crackers are still useful.