

can be laid on their flat side on top of or in a bed of sand. These can be taken up and renewed as they become foul. If the bricks are dispensed with, the water entering from the conductor should fall on a slab of rock to prevent the sand from being stirred or washed through the coal below.

A cistern built as described will last for ages, and be a source of comfort to the householder.—J. A. Reep, in the Clay Worker.

### WIRED GLASS.

Some tests were recently made to determine the fire-resisting qualities of wired glass—glass containing in its texture woven wire netting—an American invention. The information is given in a report to the Philadelphia Fire Underwriters' Association, and the results of the trials showed that glass of this kind is capable of withstanding a high temperature, very much higher, than ordinary glass, without melting or losing its continuity, even when suddenly drenched in a heated state in cold water.

The conclusions drawn from the tests, and given in the reports, are as follows:—

1. Wired glass can safely be used in skylights, and in such situations will withstand a severe fire, and not give way when water is thrown on it. A wooden framing for skylight, covered with tin, all seams lock-jointed and concealed-nailed, is superior in fire-resisting quality to iron framing.

2. Wired glass in wooden sash, covered with tin, all seams lock-jointed and concealed-nailed, can safely be used for windows toward an external exposure.

3. Wired glass can safely be used in fire doors to elevator shafts and stairway towers, where it is necessary to light said shafts.

4. In office buildings, hotels, &c., where it is undesired to have elevator shaft entirely enclosed and dark, wired glass permanently built into a brick or terracotta shaft, or arranged in a wood metal-covered frame, can safely be used.

5. Wired-glass plates, securely fastened

in standard fire shutters, can safely be used towards an external exposure. In this case the fact that a possible fire in a building, all windows of which are protected by fire shutters, can much more readily be detected from the outside through the wired glass, is of importance.

The capability of the wired glass to withstand a temperature beyond the melting point of glass appears to be attributable to the fact that the network of wire in the glass acts as a good conductor of heat, and thereby prevents the accumulation of sufficient heat to melt the glass; and although it may thereby be softened and rendered pliable, the

network of wire prevents the glass from giving way by reason of its own weight when softened by the heat.

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