BRICKWORK AND STONE FACING.

We have received a request to name some application which would protect stone facing from the effect of the acid in the brick backing on the stone. There is perhaps some misunderstanding as to the real nature of the difficulty in such a case. As a rule the exudations from brickwork are alkaline, not acid. These alkaline salts (chlorides and sulphates of soda, lime and magnesia) are hygroscopic, and, therefore, keep the brickwork perpetually damp unless it is exposed to rains, which dissolve the salts and wash them away. If the brickwork is faced with limestone before these alkaline salts have been removed, the salts would probably find their way to the stone and cause exfoliation. If the exudations are really acid, the best treatment would probably be to apply limewash. The lime would neutralize the acid; but we have never heard of such a case. Any treatment (such as steeping the stone in silicate of soda) which would protect the stone from atmospheric acids would also protect it from acid exudations from brickwork. But if it is really protection from alkaline hygroscopic salts that is required, in that case no treatment save that of allowing the brickwork to become seasoned before placing the stone in position would be entirely satisfactory.—THE BUILDER.

All the difficulties between the master and journeymen plumbers of Kingston have been satisfactorily adjusted.

The Fibre Asphalt Company has recently been organized in Guelph, Ont., to manufacture asphalt roofing material.

NOTES.

No permits for the erection of water tanks on the roofs of buildings will in future be granted in Baltimore unless such tanks are supported by solid brick walls.

An investigation was recently made by the Geological Survey of Canada into the properties of mineral pigments used in the manufacture of paint. Some new tints of value to decorators are said to have been discovered.

Since the recent great fire in Baltimore, building workmen are forbidden to smoke in new buildings under construction. The destruction of important buildings in Baltimore and Washington are assigned to carelessness of employees in this direction.

Construction and repair shops have been established at Winnipeg by the Canadian Otis Elevator Co. This step has been deemed necessary by the rapid growth of the company's business in that city. The new shops will employ about twenty men.

F. J. Lennox, architect, has suggested as a means of reducing the fire risk in Toronto that the council compel all electric wires in the business district to be placed in iron insulated conduits, also that all important mercantile buildings be equipped with water curtains.

It is said to be the intention of the British Fire Prevention Committee to establish a branch in Canada. Negotiations for this purpose, which have been proceeding for some time past, are said to be nearly completed. The Committee have drawn attention to the exaggerated and incorrect reports relating to the Toronto fire. There were no buildings in any of the blocks of a character that would be modernly described as fire-resisting or "fireproof," nor any tall buildings of the American type. The peculiar feature of the building arrangements of the blocks destroyed was that most of the party-walls ran from north to south, thus enabling the fire to have a clean sweep through most of the structures involved.

NOTES.

The Chicago Metallic Sash Company are looking for a suitable site in Canada on which to build a factory.

"Every man is the architect of his own fortunes." "Yes. That's why the cost so often exceeds the estimate."—*Life.*

A contributor observes that it does not appear to be sufficiently appreciated that good brickwork cannot be done in cement-mortar with fine joints, which is not plastic and will not squeeze out and flow to fill vacuities like common mortar.

The deflection of reinforced concrete beams before cracking is about ten times that of a beam without reinforcement, and the strength of a beam reinforced with steel rods whose cross-section constitutes two per cent. of the total section of the beam is from four to five times that of a main concrete beam.

Sir Oliver Lodge in a recent paper expressed the opinion that lightning conductors of iron are quite as efficient as copper. The intensity of action with copper is, he feels, more likely than iron to set up sideflash, which, in the case of protected buildings, is believed to have been the cause of most lightning accidents.

The problem of renewing the air of a room without cold or warm draughts is said to have been solved at the Salle des Fetes of the Artistic Union Club, Paris, which has a capacity for air of about 3,600 cubic metres. The pure air from outside descends by a shaft into an adjoining room, where it is drawn out by a ventilator, and after passing over hot plates, enters the Salle des Fetes by apertures near the ceiling. At the same time the vitiated air of the Salle escapes by gratings in the floor into a flue, from which a ventilator discharges it outside.