

3 and 4), arranged so that any pressure exerted by the people behind would force those in front not against other people, but only more quickly out of the building. The seats should always be fixed, and the rows should be a sufficient distance apart to enable persons to walk easily between. Then the corridors should be of even width throughout, perfectly smooth, and any change in direction should be made by curved surfaces. The sum of the widths of the openings into any corridor should not be greater than the width of the corridor itself, and the stream of people entering it through any opening should be prevented by barriers from interfering with the progress of those entering it through other openings, for the greatest danger existed in allowing a stream of people to enter a corridor at right angles to the stream of people already pressing along it. Slid-

of entertainment and public assembly, in order to be considered safe against the dangers arising from panic, must be designed in accordance with the principles here set forth and shown in the accompanying diagram."

It was decided to refer this resolution and the following to the consideration of the General Council:—"That the Architectural and Engineering Section of the Australasian Association for the Advancement of Science, recognising the urgent necessity for the planning of all buildings used as places of entertainment and for public gatherings in such a manner that the safety of the public may be ensured, wishes to bring before municipalities the principles upon which such works should be designed, as embodied in the foregoing resolutions, and would urge that a license be not granted to those buildings which do not fulfil the conditions

SUGGESTED METHOD OF FORMING EXITS TO AVOID PRESSURE

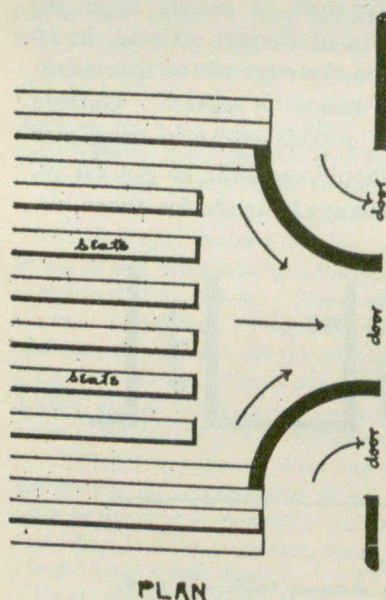


Fig. 3

CORRIDORS

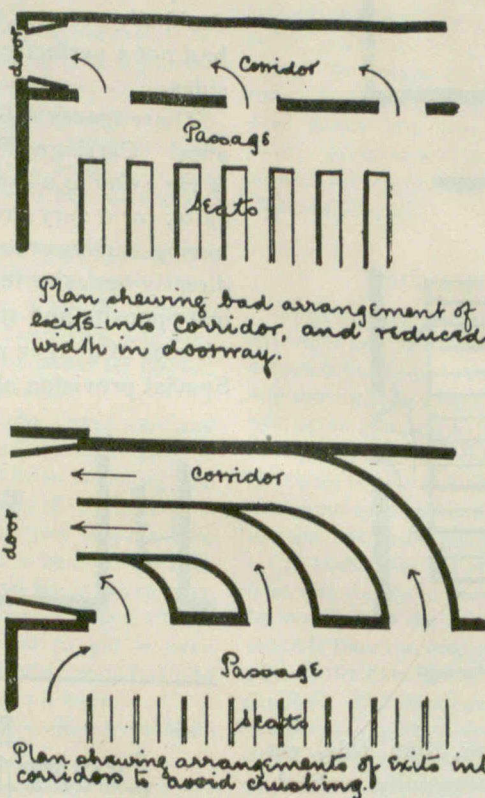
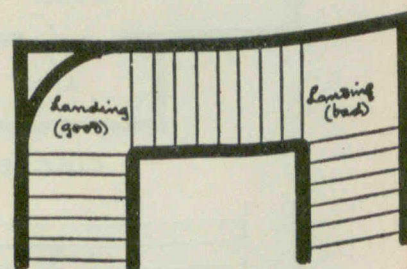


Fig. 4.

STAIRS



PLAN OF STAIRS

As recommended by London County Council - Straight stair flights and quarter landings.

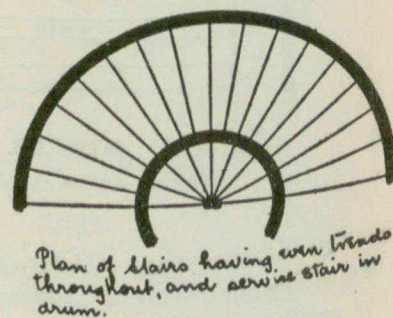


Fig. 5.

ing doors into corridors should never be permitted, but all doors should be hinged to open in such a way that the progress of a stream of people pressing outwards will not be impeded. Staircases should be of even width, and designed with curved surfaces as corridors according to the London County Council rules. The steps should be of equal width throughout, and the flights should be easy, of equal length, and contain no more than eight steps. His own experience led him to the conclusion that easy steps, built in a staircase of even curvature throughout, were much more safe (Fig. 5). Either form might be safely used, but irregular stairs of any kind should be strongly condemned. All stairs and corridors should be of fireproof material. For the walls, steps, floor and ceilings, events had proved it much more essential to safety to scientifically design the entrances and exits that insist on fireproof construction throughout. The lecturer also drew attention to the danger of loose chairs for sitting accommodation, as they impede the traffic in leaving a public place of entertainment. In conclusion he moved:—"That this section of the Australasian Association for the Advancement of Science is of opinion that places

stated, and that a copy of the above resolutions be forwarded to all Australasian municipalities."

THE NORMANDIN CEMENT BLOCK MACHINE.

The hollow cement building block is fast becoming a most popular building material. Every year sees a decided increase in the number of buildings erected in concrete, and the severe fires which we have experienced have done a great deal towards the development of concrete building construction, as it is well known that concrete is to a large extent fireproof.

The Cement Building Block Company, of Winnipeg, report having used and sold over 7,000 barrels of Portland Cement in seven months. They have had five block machines at work constantly in Winnipeg and established over thirty complete block yards through the West this year.

The demand for the Normandin block machine in Ontario has been so great that the Cement Building Block Company has opened a branch office at 42 Yonge Street Arcade, Toronto, where the machine may be seen at any time, also samples of the work done upon it. We are informed by Mr. J. A. Hunter, president of the company, that the Normandin machine is now in use by the United States Government, which should be a sufficient recommendation. The work is neat and of great variety of design and shape. The machine is easily operated by hand. They are made at Walkerville, Ontario, and Jackson, Michigan.