

A practical Solution of the GREAT SOCIAL AND HUMANITARIAN PROBLEM

ESCAPE FROM BUILDINGS IN CASE OF FIRE

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In 1876, after the disastrous fire at the Brooklyn theatre, where not less than 246 human beings perished in the flames; a public meeting was convened at Quebec and the city authorities requested to have a report prepared on the existing means of escape from its public buildings in case of fire, with suggestions as to such additional facilities as might be advisable.

The author of this paper, at that time, visited and reported on some 93 buildings, comprising schools and other educational establishments, convents, asylums, hospitals, hotels, manufactories, theatres, churches, &c.; pointing out in each case the existing facilities for escape and recommending others of an indispensable nature.

But alas for the inconsistency of our human nature: when the report was ready, in little more than six weeks after it was ordered, the whole matter had been entirely forgotten and the committee never met again to read the report or take any action on it.

Since that date we have read of the destruction of a theatre at Vienna, where more than six hundred persons lost their lives. Again another theatre at Bordeaux, France; was the scene of human cremation. Convents and schools have contributed their hundreds to the yearly list of casualties by fire; the latest horror being that of the hotel at Buffalo.

Hardly a day elapses but what the newspapers chronicle some disaster of the kind which is no sooner read than forgotten, in our sheer heartlessness for the fate of our fellow beings.

These accidents are waxing more numerous than of old, due to the increasing consumption of light and resinous woods in the construction of buildings of all kinds; while in France where oak and other hard grained woods, as elm and the like, are almost exclusively employed, or have been for years, a disastrous fire is of the rarest occurrence.

The danger of fire seems to be enhanced also, now a days, by the varied modes of heating buildings by hot air and other furnaces, the pipes from which are allowed to be in absolute contact with the surrounding woodwork; and even electric light wires are suspected of doing mischief in many cases.

The remedy must not be costly, though sufficiently so to be effective and practical. It should not enhance the cost of any building by more than from 3 to 5 per cent of the total expenditure. Nor must it subject the inmates to any inconvenience, the proprietor to any yearly loss of rental, by taking up space which might be devoted to purposes of every day utility; for no man, woman or even child when old enough to know the difference, will ever consent to put up with daily and constant inconvenience of any kind, for the sake of an eventuality which, though it does happen every day in some part of the world or other; still, it may not happen, one is always led to hope.

Nor must the escape be any disfigurement to the structure; it must not in any, even the slightest manner, mar its appearance; for, as with the consideration of permanent inconvenience or loss of space, so would no permanent eye sore be tolerated, to guard against an event which may never occur.

The danger to inmates from fire, may no doubt be lessened by fire-proofing; that is by the introduction of none but brick partition walls instead of stud, iron joists in lieu of wood, with concrete filling in between them, iron frame work for the roof and other like precautions; but floors will continue to be made of wood, and doors and windows, cupboards, wardrobes, closets and the like; and even from the so called fire proof building, must there be some practical mode of exit in case of fire; as the amount of woodwork though so much less than in an unprotected building, must be always such as to cause intense heat, and such stifling smoke as to render escape possible by the ordinary stairways of the interior.

The means of escape must be close at hand, they must not have to be sought for by ascending to or descending from a separate flat or story, nor by groping in the dark and smoke through any long stretch of corridor. In a word the escape must be in reach of the very window of the room occupied by the inmate, or he must have no more to do, no farther to travel than merely cross the corridor to get at a window in the rear, from any of which exit must be easy and certain.

For years have I sought in vain, throughout all the scientific publications of the world, for any thing bordering on a really practical suggestion, an approach even to the solution of the problem of escape from fire.

Some of those which have been devised, such as interior wells and staircases, have only acted in a way to increase the danger, hasten the destruction of the building and render escape doubly impossible; by acting as flues and ventilators, creating such a draught and suction of the flames as to cause them to invade the whole building, every story of it simultaneously.