

FIRES IN THEATRES

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Fires in Theatres by Eyre Massey Shaw

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EYRE MASSEY SHAW

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THEATRES**

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FIRES IN THEATRES.

BY

Sir EYRE M. *Marsay* SHAW,

LONDON FIRE BRIGADE.

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PREFACE.

THE subject of preventing the sudden destruction of theatres by fire is one which must necessarily force itself on the attention of all who inhabit crowded cities, and especially of those intrusted with the protection of helpless masses of persons on the occasion of such catastrophes; but the expediency of directing public attention to it may possibly be called into question, and on this point it may be well to say a short preliminary word.

It must be acknowledged that there are many people in the world who would rather not be made acquainted with the dangers that surround them, and whose natural nervousness is such that a warning against danger may sometimes have as serious an effect on them as the danger itself; and, if there is one class of men which, more than any other, has a constant opportunity of observing this kind of feeling, it probably is a fireman. If, therefore, no good were likely to result from giving a warning about theatres, it might be as well, at least for me, to refrain from doing so; but on the other hand it is to be said, that, if a fireman is silent, and no one else knows how to speak, or no one considers it his business to speak, or perhaps no one cares or dares to speak, a sense of insecurity, which may be often latent but is never altogether absent, may go on continually increasing until, at any moment, it may take the shape of panic, and cause disastrous consequences.

This point was carefully and anxiously considered before I ventured to publish the following remarks in the "Practical Magazine" a short time since; but the spirit in which my papers were received and commented on has, I think, fully justified the course, which, with great diffidence and not without a strong sense of responsibility, I felt it to be my duty to take.

The feeling of nervousness caused by a knowledge of risk is one wholly senseless and worthless; it can never by any possibility do good, and may do harm; but it exists, and has to be acknowledged, as it is here, and allowance must be made for it. This is all very well in its way; but, if a serious accident were to happen, and a man professing to have special knowledge were to come forward afterwards,

and say he could have pointed out means by which it would have been averted, and that he was prevented doing so by his fear of causing excitement in the minds of nervous persons, how would the world judge such a man? How would he judge himself?

I have carefully and laboriously studied the subject of protecting theatres from sudden destruction by fire; I think I know every source of danger that exists or can exist in such places, and I am strongly convinced that with proper construction, judicious management, and sound precautions, there would be no danger for the audience, and very little for the building, and this is my reason for writing on the subject.

I am quite aware that it is not my special business to interfere in such a matter as this, but I am not aware, nor do I believe that any one else is aware, whose business it is, or whether it is the business of any one; and, in this state of utter vagueness and ignorance, I think it better to say what I have to say, and to send it forth for what it is worth, than to withhold it now and have to state it afterwards, perhaps on the occasion of some great catastrophe.

I have never met a manager in this or any other country in which it has been my fate to travel, who did not impress me with a sense of his anxiety to do everything in his power for the safety of his audience, and I know of many efforts in this direction, and much expense incurred in making them; but I can recall to mind very few instances in which the arrangements have been really methodical or satisfactory, and our own country presents a humiliating example of the entire absence of any system or method whatever.

I trust that the recommendations and suggestions in the following pages may receive the attention which they appear to me to deserve, and I desire to repeat, in this case, what I have never lost an opportunity of stating for many years in connection with my business as a fireman, namely, my sincere conviction that it is cowardice and folly to shut our eyes to that which is uncertain or unsafe in such a matter as that now under consideration, and that true courage and prudence consist in acknowledging the existence of a great and serious danger, and taking just and reasonable measures to guard against it.



FIRES IN THEATRES.

THE singular immunity from loss of life which has of late years attended the destruction by fire of theatres and other places in which large numbers of people are congregated together should not be allowed to blind the judgment of thoughtful minds to the extreme probability, if not absolute certainty, that under different circumstances many persons might have perished.

The object of these pages is to indicate the principal points of safety and danger in such places, and to awaken general attention and interest to a subject of more or less personal concern to nearly all who live in civilized communities at some period or other of their lives.

In this country it is a good deal the custom to preach against what is called "panic legislation," and no doubt there is much to be said against it; but at the same time those who take a professional interest in matters involving expense in connection with the protection of life know well, that the only chance of any legislation at all in this direction is when the public mind has been startled by a catastrophe, and that, consequently, it is their duty to prepare for this beforehand by offering such sound advice as their experience can dictate, and giving it as much publicity as possible, being confident, that although in the hour of safety it may subject them to severe criticism, possibly to the charge of creating the very panic which they desire to avert, nevertheless, when a serious disaster happens, it will be considered reasonable and moderate; and, judging from analogous cases, it may be assumed that after a great catastrophe restrictions and regulations of a much more rigorous

kind than any here recommended would be imposed without the smallest hesitation.

The general subject must, in the first instance, be divided into several distinct and separate branches, including the external approaches, the surroundings, the building, the inlets, the internal structural arrangements, the internal police arrangements, and the means of egress, whether these latter do or do not serve also as part or the whole of the inlets.

It is unnecessary to go into any more minute details than those here given concerning points which are common to buildings of all kinds, such as, for instance, approaches, structure, &c., &c., especially as any further information which may be required on these branches of the subject can be obtained in my book on "Fire Surveys."

It may be that in the view of those considering the subject for the first time it may seem to be out of place for a fireman to point out matters connected with police duty; but such a view would be most erroneous, and could only be held by those who suppose police duty to be nothing more than the mere waiting and watching and patrolling which constitute the principal duties of a street constable. To those who think of it in the larger sense, as including all matters connected with the safety of life and property, it will probably appear that the packing of large numbers of persons within circumscribed limits, whether for religion, instruction, politics, amusement, or any other purpose, is a subject which should properly occupy the attention of those in authority as a part of police duty in its real and comprehensive sense, including the arrangement, management, and protection of the inhabitants of a city or state. In the particular matter now under consideration there ought to be a perfect co-operation of all those engaged in police duties proper as above described, whether they be sworn constables of police, firemen, managers, door-keepers, attendants, or others, who have anything to do with the admission, arrangement, or departure of visitors.

The external street approaches should invariably be kept free and unobstructed, as they may at any moment be required for a rush of the audience, and such of the inlets as

also form the exits should be not less numerous than the internal divisions of the auditorium, according to prices.

Each inlet should be easy of entrance at its outside point, well lighted, free from small projections or obstructions likely to cause injury, quite free from steps at any point where a crush is likely to take place, and gradually narrowing to the width of the narrowest internal passages through which the visitors have to reach their seats. In long straight passages, where the pressure of a crowd might be likely to accumulate so as to become dangerous, perfect safety can be obtained by placing at intervals strong barriers running from alternate sides, and so arranged that not more than fifty or some such limited number of persons could press on each other at a time. Obstructions of this kind carefully placed will be found not to delay the entrance of visitors, but on the contrary to facilitate it by removing all necessity for crushing, and so allowing them to walk quickly to their seats instead of being pushed and hustled as is too commonly the case.

As to the surroundings, it is to be observed that the safety of a building is very seriously affected by its position with regard to those near it. On this account a theatre or any building in which large numbers of persons assemble should under no circumstances be completely surrounded by other buildings. The practice of entering and leaving such a place by a passage or set of passages through other buildings, and not direct from the street, is one so obviously dangerous in the extreme, that it must be a subject of wonder how it can ever have been permitted in any country making even the pretence of superintending the care of its inhabitants.

If a theatre be surrounded on several sides by other buildings, it should have no windows or other openings in the direction of those buildings, and care should be taken that it should be so constructed that it would be impossible for it to be affected by anything happening in them. The practice, for instance, of allowing the roof of a building to lean against a theatre wall with openings in it above the point of contact is one wholly inconsistent with the safety of the visitors of the theatre. No rule can be laid down

as to the distance to be allowed in towns, as so much depends on the nature and contents of the adjoining buildings, and the purposes for which they are used, but in any special case it requires but a very small exercise of intelligence to ascertain instantly by personal observation whether fire could be communicated or not.

In one country abroad thirteen feet is the minimum distance allowed between the walls of a theatre and those of the nearest buildings, and it is specially laid down that the intermediate space must be open.

Shops round theatres and forming part of the same block of buildings are always more or less objectionable, and even under the most favourable circumstances should on no account be permitted, unless the contents are safe from explosion, and the walls, ceilings, and roofs able to resist any fire which could happen in them. This can be done without the smallest difficulty, and consequently there can be no excuse for omitting to do it.

To sum up this part of the subject, it may be said that a theatre would be most safe if standing alone, that every house in its immediate vicinity adds to its danger, and that its risk is greatest when it is entirely surrounded by houses.

This, of course, has no reference to houses built under the same roof, or in the immediate vicinity, for the special purpose of providing suitable and sufficient means of entrance and exit for the audience.

The external walls of a theatre should be strong, solid, well bonded both in themselves and to each other, and able to resist very considerable shocks. They should also be supported on the inside by all internal walls which touch them. Numerous instances have shown that it is a great mistake to have a number of internal walls merely touching the external walls, and not bonded into them nor in any way contributing to the support of the structure.

In fact, structural weakness in any part of a theatre which has to contain a large number of the audience, whether moving or stationary, is dangerous in the extreme, and should be guarded against by all possible means.

There are certain internal divisions in a theatre which are necessary for the transaction of business, as, for instance,