

Spanner in the wireworks

The 'Fringe' at this year's Edinburgh Festival was bigger and, some would say, better than ever before. But the hasty construction of auditoria in buildings which were never intended to house a theatre is not without its problems.

Generous spirits would describe what happened at the 'Wireworks' as a slight technical hitch. Those who don't mince their words, including our man at the Fringe, likened the incident to 'a complete and utter cock-up'.

The old Wireworks factory, just off the Royal Mile, is a popular venue because of its close proximity to the Festival box office. The group which hired it was planning to stage anything up to nine shows a day and thus a good deal of money was involved.

Preparations for the construction of the stage and seating seemed to be going well until the organisers made a discovery which sent painful distress signals in the direction of various wallets.

Their inspection revealed the balcony to be three feet higher than planned, with the result that none of the upstairs audience would be able to see much of the stage. 'The sight lines were hopeless,' said our man with his eye on the proceedings. 'The balcony was useless.'

And as if this wasn't bad enough, further inspection revealed that a number of the scaffold-poles supporting the upper tier were firmly planted through the middle of seats below, or, at any rate, where the seats were supposed to be.

Tearing their hair out with frustration were three dedicated technicians from Cambridge University who set to, working for three days and nights to modify the disastrous structure as best they could.

Not the least of their worries was the British Safety Council which together with the Festival Police, the Edinburgh Fire Brigade and the city's building control inspectors were breathing down the Fringe Festival's collective neck.

Some of their demands were mind-bending in their complexity. Floors, for example, must be able to support 83 lbs per square foot on fixed seating areas and 104 lbs per square foot on walkways and exit passageways. In the event of fire an audience making a bolt for it presumably exerts a heavier load on the aisles than it does in the stalls.

Needless to say the diligent safety inspectors, brandishing their fine tooth-combs, unearthed various irregularities in some of the temporary theatres. The Cambridge Footlights Revue lost 60 seats in St. Mary's Hall, St. Mary's Street, when it was deemed to be overcrowded.

Firemen weighed in by insisting that net curtain props in one production be squirted with an anti-inflammable spray. They even held a match to the curtains as a final test.

Edinburgh newspapers warned - 'Fringe is a Death Trap' and the Fringe retaliated with outraged cries of 'too strict, too strict'. But the regulations were satisfied and the shows went on.

Books

What was it really like

FREDERICK BENTHAM

Lighting in the Theatre, Gosta M. Bergman (Published by Almquist & Wiksell International, Stockholm, Sweden)

Theatre Lighting in the Age of Gas, Terence Rees. (Published by The Society for Theatre Research, 14 Woronzow Rd. NW8)

In the Theatre any nostalgia in respect of earlier performances must be haunted by the question 'What was it really like?' This even concerns shows seen in youth let alone those we missed and any praised with enthusiastic tone from all centuries but our own. Artistic interpretation is bound to differ but what concerns me here is the means used - the 'works' or what we call in our neat way the technological installation. In music we can find or recreate the sackbuts, viols, krumphorns, forte-pianos and all the rest and then listen to the resulting sound. But what of our equivalent in theatre - scenery and lighting? We have pictures of scenery but due to perspective drawing it may be difficult to disentangle what was backcloth and what was made up of wings or cut-cloths. In the case of lighting we usually don't have a clue and I think most people think they didn't have any in the sense we would apply the word to our stage. The extraordinary thing is that they were not content with just illumination, they did things with their primitive light sources - in other words there were lighting effects!

To aid us in our what-was-it-like quest we have two books, *Lighting in the Theatre* by Gosta M. Bergman and *Theatre Lighting in the Age of Gas* by Terence Rees. Gosta Bergman covers the whole period of artificial light in the theatre but all the real detail belongs to the early days of candles and oil. He arrives at gaslight on page 252 and on page 300 enters modern times with the darkening of the auditorium and endeavours to cover everything from then on in but ninety pages. Terence Rees concentrates on gaslighting with some introduction of candles and oil lamps and a chapter on 'The incandescent carbon-filament electric lamp' as an epilogue, so to speak.

I feel very strongly that the two books are complementary and that any reference library shelf labelled History would be incomplete without both. In spite of the comprehensive treatment gaslighting receives from Rees nevertheless Bergman has something to add. This arises from his different approach to lighting. He begins his book with illumination and talks of Luminance, the Candela, Dazzle, Shadow

and Photometry right at the start. He can therefore apply terms like 'luminous efficiency' to smokey sources of the kind from which we would congratulate ourselves if any light emerged at all!

The snuffless wick did not appear until 1820 and woe betide you if you did not wield your snuffers at regular and frequent intervals. Tests are quoted which show a reduction in light from tallow candles from 100 per cent to 39 per cent after 11 minutes and to 16 per cent after 29. In other words after half an hour the light had been checked down to one sixth - an involuntary twilight for Gods and Stalls alike. Tallow candle flux is given as 10 lumens while the carbon filament lamp of the 1880s gave 160. This would be poor when compared with any small lamp today but must have seemed very bright indeed. The gas sources used in theatre battens and floats were of the batwing family and not the incandescent mantle some of us remember from a brighter if gassy boyhood.

Smoke and smell was a feature of tallow but only the Court could afford wax. Not that modern man would find *any* candles easy to use in stage lighting as witness Cliff Dix's amusing account in *Tabs*¹ of an experiment in lighting Moliere in Hull entirely by this means. The point is made in Bergman's book that 'Theatre depended (until electricity) on the assistance of the living, flickering, mobile flame of light - a perpetually moving light'. Even the gas jet was not steady but in any case the effect of movement must have been aggravated by heat haze. Immense amounts of heat had to be got rid of and Terence Rees describes in detail fittings like the giant sun-burner in the auditorium dome whose heat could not only be 'directly carried off through a tube communicating with the open air' but which went on to ventilate the auditorium in the process. Unfortunately the displaced air had to be replaced and the draughts in the regions below can be readily imagined.

Both books are well illustrated and in the case of Rees there are detailed descriptions and specifications which make it almost a do-it-yourself handbook. Not only is the gas jet end - the burner, solo or in chorus - dealt with meticulously and the gasplate with the various means of connecting thereto but also the kind of duties and lighting plots you could be called upon to perform. However, be it ever so sophisticated for its time, it was all very primitive. Indeed even today the really important part, the lights, still lag sadly behind the control end. We can have everything with

¹*Tabs*, Vol. 31, No. 2, June 1973.