



TABS

September 1970 Vol. 28 No. 3



TABS

Published by
Rank Strand Electric Limited
29 King Street, Covent Garden,
London W.C.2

Editor: Frederick Bentham

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Design for Lighting

Jo Mielziner when addressing the A.B.T.T. recently in answer to a question said that he had always designed both scenery and lighting. Indeed, until ten years ago, he did the costumes as well. The reason he gave up the latter was the purely practical one of the difficulty of being in two places at once. Attending the fittings and the fittings-up, so to speak, at the same time. No doubt in part because, though this is difficult to believe, he is no longer as young as he used to be. He said he could not see how one could design one without the other. Mr. Mielziner went on to pay a great tribute to the work of our doyen of "lighting designers" and chairman of the now nine-year-old Society of British Theatre Lighting Designers, Joe Davis, who has lit over 400 shows. On the surface this presents an inconsistency since Joe, unlike Jo, has not been known to design or at any rate to claim a single piece of scenery, let alone a costume.

Something obviously needs clarification here—when is a designer a designer? We rushed to our *O.E.D.* to see what and what did we see? As sometimes happens, the dictionary is not exactly helpful. "To contrive, plan, purpose or intend" does not get us very far. Designer, "especially draughtsman who makes plans for manufacturers", gets us nearer the truth if we think of the large amount of equipment used by stage lighting designers, but hardly in the sense they, Mr. Mielziner or the dictionary intended.

Let us start on another tack. What is it makes lighting difficult to design? It is that it has quite literally no existence without the target. Light only becomes lighting when it hits something and in the theatre the main something to hit is scenery and costumes—preach what we like about the actors'

facial expression being all-important. Where these faces are and what they may be doing depends in turn on the director. So we see that a lighting designer is absolutely dependent on others. If this is so, is *designer* the right term for the lighting expert? A designer must surely be a man of destiny—a man able to impose *his* will, *his* message. Remember how the designer imposed his will on soup consumption in the last issue of TABS.*

It may well be that Charles Bristow has the right idea when he declares he is not a lighting *designer*, he is a lighting *consultant*. This, in spite of the fact he is treasurer to the S.B.T.L.D.

Let us not continue to be pedantic but admit that there have been and are some superb examples under a good director of collaboration between lighting expert, call him what you will, and the scene designer.

That, further, this strange admixture of the technical and the artistic attracts some as a career or means of expression with the same force that it repels others. How else to explain why so many scene designers willingly surrender lighting of their sets and their costumes to another? The lighting expert may be condemned to the life of an accompanist—no solo spot for him, but the career of the pianist Gerald Moore shows that a lifetime of artistic distinction is possible doing just that.

How to take up stage lighting? It is essentially something one graduates to from something else. Not, we hope, as Jo Mielziner put it when referring to the United States—"would-be designers take to lighting design when they find they

* Ends and Means, Vol. 28, No. 2, p. 39.

cannot draw." Joe Davis, Charlie Bristow and Bill Bundy, began as electricians, Richard Pilbrow and John Wyckham in the prompt corner, Michael Northen as a model maker, to quote the six founder members of the Society of British Theatre Lighting Designers. Therefore, the only advice we can give is that the way to become a successful lighting designer seems to be to go in for something else first. There is too much artistic inspiration and improvisation in the craft itself to make it a good discipline to train in.

The only advice we can offer? The editor cannot resist the temptation to use

Bonus over Broadway

The first sixteen pages in the May 1970 issue of USITT's **Theatre Design and Technology** are devoted to a novel proposition—the building of new theatres in the Broadway area. The fact that this is immediately followed in the same journal by an article with the headline "Visions in Space" should not put one off. This is no vision but a calculated way of financing new theatre building and it is happening now.

A formula has been found which entices hard-headed and efficiency-conditioned American business men to build into their new soaring skyscraper towers something more as a concession to public amenity than a view of the usual marble lined over-lit entrance hall. The new buildings are to have plazas and arcades and what interests us most—theatres. In 1961 an amendment was incorporated into the Zoning regulations giving a bonus for plazas and arcades at street level. Since then, we are told, "almost every large building in Manhattan's central business district has taken advantage of it. The increased income to the builder is justified by the public's gain

up this space by proclaiming his favourite thesis that too much equipment is used. Perhaps if the lighting man was his own scene designer (and his own director) the gospel of the few might make some headway. As it is the lighting designers resist the notion to a man and in America where there are a number—to a woman also.

This is just as well, because the advice on strategy recently tendered by a market research consultant is "Increase the number of lights being used for any production." More equipment forsooth! Where are they going to put the scenery and—we nearly forgot—the actors?

of open space in congested areas." The latest amendment adds a further bonus which "represents the New York City Planning Commission's response to the fact that the demand for new office space in midtown Manhattan has set off a construction boom against which the legitimate theatre cannot compete financially".

These bonuses are not expressed in money. The maximum theatre bonus of 20% is to be paid in space not dollars but in this area space rates as better than dollars. The formula appears to be, add half a dozen floors of office per theatre. It is a happy thought that each theatre seat equates with x square feet of stenographer or the stage area with y filing-cabinet-miles.

At last there is a reason to encourage office paperwork; for its production and storage can make all the difference to the amount of wing space available to the theatre productions in the regions below. Down with the micro film—up with xerography. Let there be lots and lots of large forms and reports with more and more copies in happy Manhattan where mankind can actually benefit from them at last.

Street Lighting in Southwark

Street lamps have been erected in London to supply a gallon of hot water for a half-penny on the "penny-in-the-slot" system; and for another penny to supply a compressed slab of cocoa or tea, compact with condensed milk and sugar. Thus for 1½d. you can have a cup of tea or cocoa in the street. The method of utilising the street lamps for this purpose is very ingenious. The large post of the lamp contains a tank holding thirty to fifty gallons of water, supplied from the mains under the street. A small quantity of water is carried through a spiral pipe round the lamp flame several times and then into a little boiler right at the top, which turns it into highly-heated steam, and the steam passing down again boils a gallon of water in a small tank, and then passing through its pipe runs through the large tank. In an ordinary kettle you cannot heat the water above boiling point (212°F) because the steam escapes; but

close the vessel completely and the heat rises far beyond boiling point. Consequently the steam in the little closed boilers of these street lamps becomes very highly heated and is able to raise the single gallon to boiling point. When the half-penny is paid, and the handle pulled, the gallon tank of boiling water is emptied and when the handle is closed the tank is refilled from the large tank, and down comes the superheated steam and boils it in about three minutes, and so on all day long. The first lamp of this kind was erected in Queen's Buildings, a block of model dwellings in Southwark, in April, 1898.

Would the promise of instant cocoa in this extract culled by Brian Legge from the "Sunlight Year Book" of 1899 have caused the village of "Let there be dark" in our last issue to reverse their decision? (Ed.)

Expanding Hire or Going West

To make room for further expansion of the Rank Strand Electric stage lighting equipment Hire department at Kennington the contents of the famous decorative fittings showroom (photo right) have been transferred to Goldhawk Road, Shepherd's Bush, in the West of London. There they will join the very much bigger, believe it or not, collection of the J.M.B. Hire Company—a member of Rank Strand Electric since 1965. This will now constitute the largest collection of electrical props in the country and perhaps anywhere else. All are housed under one roof or at least a series of roofs which adjoin one another, this being no St. Pancras train shed or stately pleasure dome measureless to man. The amalgamation of the two collections will be a great convenience for theatre, cinema and television designers and all those who have

occasion to dress a set. We hope to devote some space to the collection itself in our next issue.





RANKSTRANDELECTRICRUNDFAHRT

One fine Tuesday this July Covent Garden traffic was held up while two double-decker buses attempted an unfamiliar turn. As our cover picture shows these bore banners with a strange device. The expedition (Rundfahrt) began back in Ulm as part of the German theatre technicians' conference, the '37. Bühnentechnische Tagung'.



A chartered BAC 111 brought nearly a hundred delegates to Rank Strand in Covent Garden. The German visitors were plunged from cool weather over there into the hottest day of our year: Liquid restoratives were much in demand.



Visits, to see the 240-channel IDM instant dimmer memory system at work in the London Coliseum and "backstage" at the Royal Opera House, took place. In our own theatre there were demonstrations of other equipment including by request (yes, by request!) two houses of "Farbenmusik"—better known here as "Colour Music".

Projected Scenery at The Questors

Bob Anderson

The producer rang just after Christmas, explained he was doing *School for Scandal* in May and wanted to know if I thought he could use projected scenery.

"Fourteen scenes and they must look smart, nothing tatty—it's an all-pay show!"

I tried the old excuses.

"... too expensive; all you can get is a little picture. How can you work this into a set?—who's designing?"

"We wondered if you would like to, after all, if anyone can do it..."

Flattery! Usually I light but I'd recently said, "surely designing can't be so difficult?" Also, we had just bought two Patt. 252 2 kW projectors. Maybe if we hired another?

"How much money have we got?"

"The budget is £300 but of course I need £200 for costumes and wigs, then there is furniture hire and props—£50?"

It sounds a lot but what do our sets usually cost?

"Perhaps I could think about it. I'll have to find out if we can get screens and how much they cost and the slides. Do you really want photos? Perhaps abstract..."

"They've got to be real pictures exactly in period!"

This should not be too difficult. Ealing is surrounded by old houses. One of them must be right.

"I'll look at it and ring you. I'm working on the present show and then for the company doing *Iolanthe* the week after."

"I'm auditioning in mid-February; first reading is in March but I'll need a ground plan next week and a model so that I can block it out when I'm in Cyprus..."

"I'll ring you next week!"

This is roughly how I got the job. You will guess that Questors is short of designers.

The Questors is an amateur theatre club with a membership of about 3,000 and owning its own adaptable theatre opened in 1964. A full description appears in

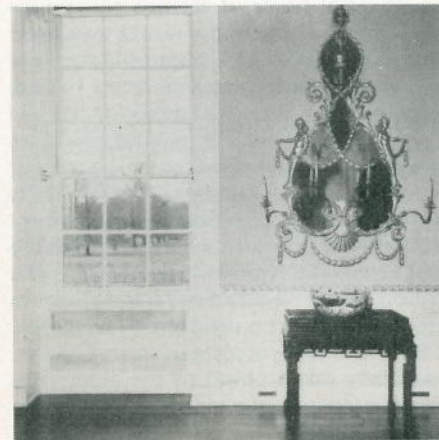
TABS, Vol. 22, No. 2. The stage is adaptable to proscenium, peninsular or island (round) stage forms. Permanent seating in the form of a horseshoe encloses the peninsular stage, the "natural" form, and extra seats are added for the proscenium or island forms. Capacity varies from 320 to over 450. The proscenium opening can be closed to 26 ft. or opened up to the full width of the theatre by removing screens. Lighting positions are virtually unrestricted from galleries around the perimeter and from four lighting bridges. Scaffold tube, fixed between handrails, is used to give further positions wherever required. There is no ceiling masking and all lanterns are in full view of the audience.

We had used projections before. Usually clouds and most of the range of other effects. This was why we had bought the Patt. 252s. Our only previous attempt at real scenic projection had been with a hired Patt. 152 onto the cyc. using coloured slides and a remote changer. It had been very successful for backgrounds for a visiting production of *Most Happy Fella* using the proscenium stage form but this was a far cry from the Questors tradition and peninsular stage we usually prefer. My problem was to provide sets for a comedy of manners with, according to the producer, precision, elegance, authenticity and maximum seating capacity all at the top of my priority list.

We settled several points that first week. We decided to use a 12 ft. forestage, three screens and back projection. A rough ground plan emerged and we agreed that the slides would be black and white and the floor glossy and painted black and white to match. There seemed to be very little left to do and for four weeks I lit other shows and the producer went away to Cyprus (on business) to block it out. This was a real piece of luck, as his subsequent doubts about the design had to be kept to himself and in due course his problems solved themselves.



Lady Sneerwell's: The photograph exaggerates the contrast between centre stage and the surrounding flats and entrances. To the eye these areas were mid grey and quite visible. The scene above was made up of three slides (see plan page 87) of which only the two shown below appear in our picture.



I must explain how the screen size was settled. Clearly we had to use our two Patt. 252s and hire the screens and a third projector if necessary. We found several firms who could supply the screens, and one kindly told us that a Patt. 252 would give a screen brightness of 25 ft. lamberts with an 8 ft. square picture. We borrowed a meter and found that under normal bright "comedy" lighting this figure would be just about right. So with 8 ft. by 8 ft. screens also available for hire at a reasonable price the choice was made. The final ground plan followed without too much trouble once we realised that the closet for the discovery scene in Act V could be squeezed into a 3 ft. return between two screens and still be just large enough to accommodate the actor. We were later able to borrow a screen for a demonstration to reassure the producer and everyone else. This had a further benefit in that we realised that the Dexion angle used for the temporary screen framework could also be used for the final set. This resulted in excellent rigidity and saved money, as we fortunately had large stocks of angle.

By early March the designs were complete and construction had begun. I then found that the difficult part was still to come—the photographs for the slides.

The play is written in fourteen scenes and the producer had decided to play these in the following settings:

Lady Sneerwell's. Act I i, II ii.

The Teazles'. Act II i, III i, V ii.

Outside the Teazles'. Act I ii, II iii.

Charles Surface's. Act III ii, III iii, IV ii.

Charles Surface's—a picture room. Act IV i.

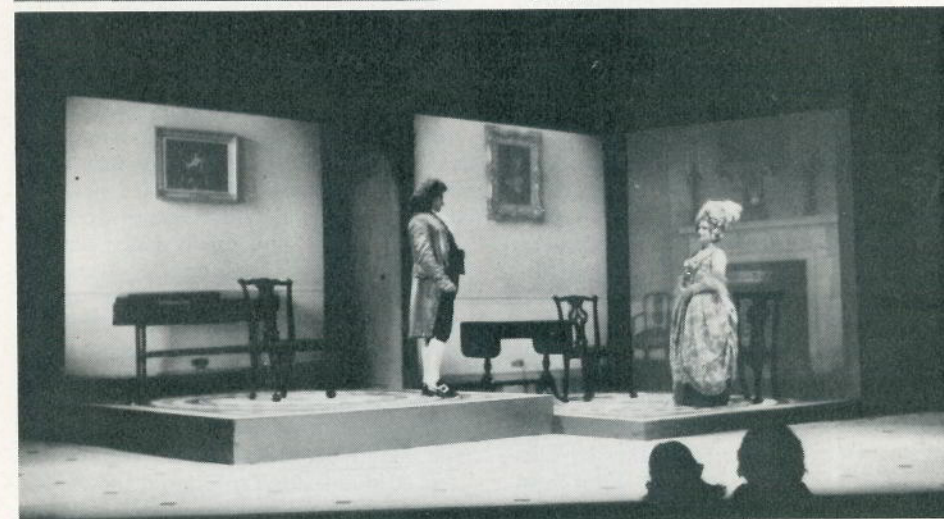
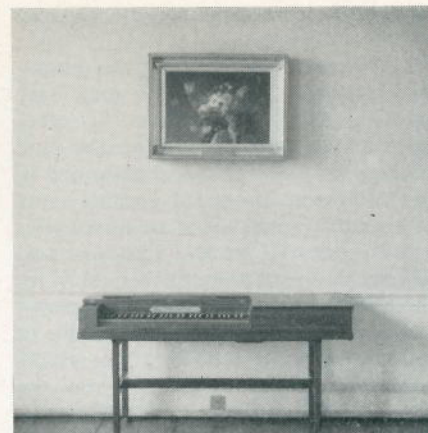
Joseph Surface's library. Act IV iii, V i, V iii.

This required eighteen slides for the three projectors and we also used a further set of three before the play opened—period engravings of street scenes—to give the audience a chance to see how everything worked and to dress the set. We did not use an act drop.

The period was to be 1777, the date of the first performance. The picture room was a special problem. The difficulty with the rest was to choose from a wealth of alterna-

tives. The choice involved finding material that was small enough to fit the screens without gross distortion of scale from a period when rich houses commonly had 20 ft. ceilings. The composition and contrast had to be right and there had to be no obvious anachronisms. The last point proved especially difficult. I tried to get away with some small electric sockets showing but the howl of glee from the cast and dismay from the producer when the slides were first seen led to a hurried scratching out as a lesser evil. The exterior was most troublesome. I almost despaired of finding a suitable house from the many Georgian squares and terraces in Mayfair and Bloomsbury that was in a reasonable state of preservation and did not have the owner's trade sign prominently displayed, or modern venetian blinds, or lamp posts, or parking meters or one of those blue plaques that tell you that R. B. Sheridan or some such celebrity once lived there. The "straight" interiors were photographed at Osterley House, designed and decorated by Robert Adam between 1760 and 1780 and now administered by the Victoria and Albert Museum. The V & A were very helpful, allowing us access outside normal hours and freedom to move furniture to improve composition.

The special scenes were easier in that their creation was less dependent on outside circumstance. The play suggests that Charles's house has been stripped of furniture to pay debts but, as it was clearly the ancestral home, it seemed permissible to assume that the walls would be carved panelling. The V & A photo library were able to supply an excellent print of oak panelling and this was used for all the Charles scenes. For the picture room we copied the panelling and pasted on cut-out photos of picture frames. The portraits themselves were taken from postcards from the National Portrait Gallery, reduced and fitted into the frames. Surprisingly, the resulting puzzling genealogy for the Surface family provoked no comment. The picture of Sir Oliver as a young man was, of course, a specially taken photo of the actor. The whole paste-up was re-photographed to make the slide.



The Teazles': These three slides were among the most successful. Sadly the fireplaces slide was used on the hired projector and the detail was lost. The electric sockets on the skirting showed up clearly and had to be blanked out. The picture of the scene shows the slides in use and a first attempt at hiding the sockets. As can be seen the fireplace slide was used reversed.

Naturally, I designed the lighting. I have always preached that the set designer should have strong views on the sort of lighting he requires and should help the lighting staff with its realisation. As the set I had produced incorporated most of the difficulties we usually ask designers to avoid, I could expect no way out.

The ground plan and projections posed two special and related problems. First, the screens had to be kept as dark as possible so that the slides would show clearly. This meant careful control of cut-off and hanging position. The producer had accepted at the start that the areas within 3 ft. of the screens might be impossible to light. But in rehearsal he nevertheless took little notice of this arrangement. To be fair, when he saw the result on stage he readily made the necessary alterations which, as he had hoped, proved less troublesome than I had predicted. The floor was painted white, or rather light grey with a dark grey pattern. This might seem the perfect way to ruin the projections and it undoubtedly lifted the black areas on the screens by several tones. But it also allowed the steep angle lighting necessary to cover the areas close to the screens by providing a generous bounce light, softening the shadows on the actors' faces in the way footlights used to do. Again, in compensation, the brightness of the floor made the projected blacks seem darker by contrast. Perhaps I was lucky, but for most seats and most scenes the light and dark greys on the floor closely matched the bright and dark areas on the screens without glare as I had wanted. Faces and costumes were loudly visible.

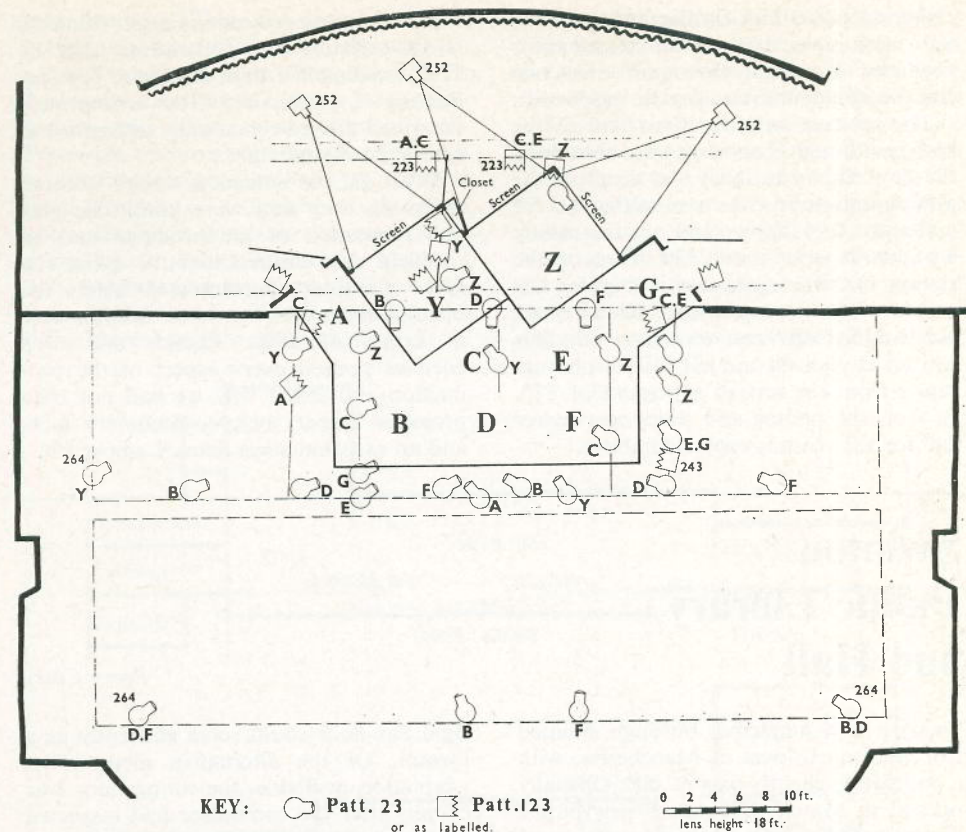
The second lighting problem was to isolate separate areas in the way that seems so easy to producers but which often causes great difficulty for the lighting department. The areas were the two square platforms, required separately, together or in conjunction with the down stage area and, less of a problem, the down stage area complete or biased left or right. We never expected anything approaching total isolation, of course. The aim was to de-emphasise areas when not in use. With reservations this was achieved. The sketch

plan opposite shows the rig and explains the approach.

What went wrong? First, the photography was not as easy as I may have suggested. A late start due to other responsibilities on the part of the club photographer followed by troubles due to faulty equipment produced nothing more than a totally useless set of negatives after the first visit to Osterley. This was two weeks before the first night. We had to re-photograph and this time had to employ a professional photographer. He was able to take the photos the following Wednesday and deliver the finished slides on the Friday evening, just in time for the lighting rehearsal and first dress rehearsal. This put us back on schedule. The results this time were excellent.

During rehearsal one slide cracked but only needed a new cover glass. We had one spare slide for each scene but these were not needed. The slide gates jammed twice during performance, causing the new picture to be about a foot out of position. The projectors were briefly faded out for each change—5 seconds on average—so the mistake was only visible to the operator and to everyone else when the new scene came up. Despite careful alignment the design of the hired gates made this error very difficult to avoid. If we do this again it would be worth buying this item and modifying the fixing to remove the risk. A modification to prevent the picture jiggling when the previous slide is changed would also be very welcome.

The screens were pale blue plastic which gave a pleasant fresh look to the slides. Surprisingly, the "hot spot" was golden yellow. When we first saw this we feared it would be distracting. Seen with the slides, however, it gave a golden splash of sunlight and although each seat saw it in a different part of the picture, the result was uniformly pleasing. Another unexpected effect that might have been disconcerting in another play was the slight but obvious flapping of the screens when actors moved quickly past. The screen tension and rigidity of the framework could hardly have been improved, so the answer seems to be to remove the cause—the actor, or



The drawing is a fair copy of the rigging plan as supplied to the lighting crew. The large letters A-G, Y and Z identify areas about 8 ft. diameter each lit by a set of lanterns. Smaller letters by the lanterns show the required aiming point. Un-lettered lanterns were used for special effects. Areas Y and Z are platforms 12 in. and 6 in. high respectively. Most lanterns are mounted on the upper or lower rail of the permanent lighting bridges but scaffold tubes were used to give precise positions for the more critical lamps. The backing lights were hung about 12 ft. above the floor, again using scaffold poles. Special Dexion frames were made for the Patt. 252s screwed to the floor for maximum rigidity. The lens height was 5 ft. above floor level square on to the centre of the screens. Each lettered space was lit from within 60° to the line of sight of any member of the audience who sit in horseshoe shaped tiers around the fore-stage. Back lights were used wherever possible. 500 watt Patt. 23 profiles and Patt. 123 Fresnels were used in most cases at angles of

elevation not much above 45°. The extra lights closer to the screens were necessarily steeper. Where possible, angles likely to cause reflected light from the floor onto the screens were avoided. The light bounced from the floor was, nevertheless, very useful, softening shadows under chins and in eye sockets. No naturalistic effects were attempted, although a 2 kW Patt. 243 Fresnel was used in the exterior scene to give a dominant direction to the sunlight. No colours were used. Dimmers were mainly at 8 or 9 except in the Charles Surface interiors where levels of 6 or 7 gave a yellow lamp-light quality. Nearly all the Patt. 23s had diffuser glasses and all Fresnel spotlights had barndoors fitted. The 48-channel 2-preset system L.C. control was used to give six groups used in various permutations as the different areas were needed. Only a small amount of re-setting between scenes proved necessary. The projectors were faded out for each scene change leaving the general stage lights on. New balances were introduced with the start of the following scene.

rather to move him farther away. It was also noticeable that the hired projector produced less light than our own two and we could find no way to improve it.

The set cost well over its share of the budget although economies elsewhere saved the day. This was solely the result of the photography crisis. As a rough guide, the materials for floor and flats—mostly hardboard—cost about £20. Hire of the screens for two weeks was just under £20 and hire of the projector and three lenses about £15. Paint cost less than £5. This was all as planned and left £10 for photography from the revised allocation of £70. In fact, the photos and slides cost nearer £40 for the reasons explained above.

Swinton Public Library and Hall

Swinton is a municipal borough situated five miles north-west of Manchester, with a population slightly over 40,000. Officially opened in March 1970 was a new public library building, part of the sort of central development now becoming a familiar expression of town planning all over the country, with all the usual ubiquitous retail traders occupying most of a spacious two-tier precinct, complete with fountain and liberal car-parking spaces.

The third floor of the library building consists of an interesting multi-purpose hall with ancillary accommodation, augmented by a smaller suite on a section of the second floor. The uses of the facilities are very varied, with primary emphasis on dancing, cabaret and banquets, for which a flat floor is an essential need. Use as a theatre, mainly by local amateur groups, was initially stated to be secondary but none the less important. Fortunately, members of the Council were convinced, after inspecting several new public halls, that it was necessary to avoid the common mistake of assuming that a hall with a

When we use projections again I think it would certainly be worth risking 12 ft. by 12 ft. screens if a dark floor and low key lighting is permissible. The arrangement described proved remarkably insensitive to spill and reflected light.

What did our audiences think? Without exception they were very kind. The play and reputation of the producer and an excellent cast ensured that the entire six-night run sold out completely before the opening night and box office takings were in excess of £900. Friends and even enemies praised every aspect of the production and asked why we had not tried projected scenery before. Beginner's luck, and an excellent stage team. I enjoyed it.

Percy Corry

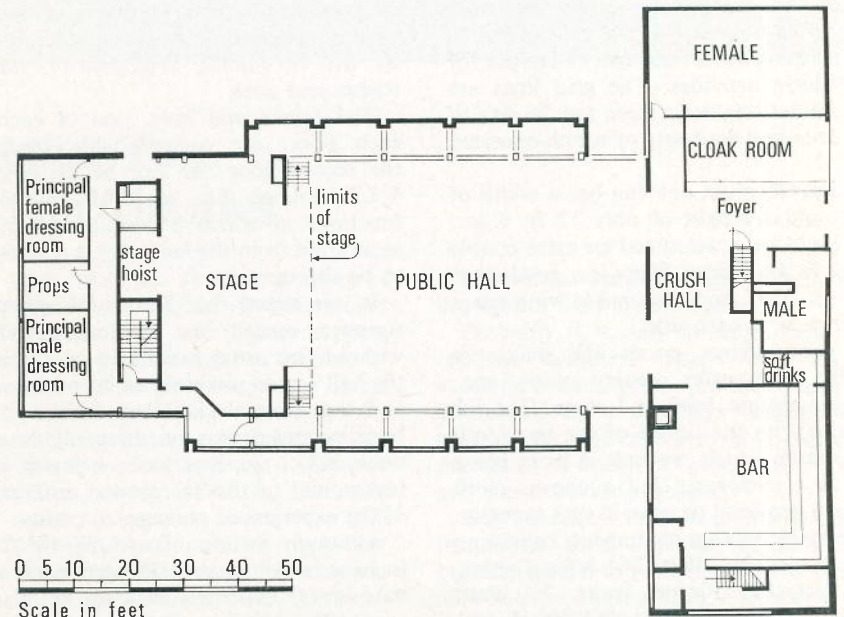
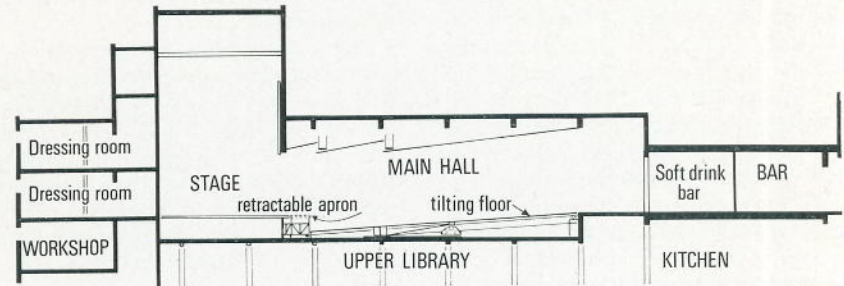
rigid flat floor could serve efficiently as a theatre. Of the alternative methods of adaptation available, the tilting floor was chosen after the committee had inspected the one by Hall Stage Equipment installed in the Mitchell Memorial Hall in Hanley, in constant use for many years.

Because of the third-floor siting of the hall at Swinton and the library's need of space underneath, the depth available below floor level was less than the 8 ft. 6 in. initially demanded for the tilting mechanism, the re-design of which involved rather tricky adjustments to the maximum of 4 ft. 6 in. available. In the event, the compromise between the mechanical ideal and the physical possibility has achieved satisfactory operation. This fact should not encourage others to ignore the desirable. Anybody who wishes to consider the installation of this type of floor should consult the manufacturers of the tilting mechanism in the very early planning stage so that, if at all possible, the required depth can be made available.

The floor of the Swinton hall rises and

falls about 3 ft. There is a gap of 4 ft. 6 in. between the front of the fixed stage and the edge of the tilting floor. When the floor is horizontal a retractable apron joins auditorium and stage at a common level. When the apron is retracted, the removed top is fitted at the low level to create a front gangway. The height of the stage above the front gangway was also determined by structural limitations: at about 3 ft. this height is less than ideal for anything but a tiered auditorium and as the tilting floor has an overall length of 51 ft.

the desirable rake of 1 in 10 was impossible. The height of stage above basic level dictates the possible range of tilt and even if the desirable maximum stage height of 3 ft. 6 in. is adopted, the required rake of 1 in 10 is only possible if the tilting floor is restricted to a length of something like 35 ft. In that event any additional seating at the rear should be fixed to permanent or retractable tiers. The alternative methods of dealing with such a problem should have detailed consideration in the earliest planning stages to prevent compromises



Swinton Public Library and Hall. The section shows the floor which can fall 3 feet at the front to provide raked seating for stage shows.

Architects: Leach Rhodes and Walker. Tilting floor: Hall Stage Equipment Ltd. Retractable apron: Rank Strand Electric.

dictated by avoidable structural limitations. In the case of Swinton, compromise with the ideal was not avoidable but what has been provided is certainly far better than the alternative of a rigid flat floor.

In such schemes the planning of entrances and exits may involve nice problems of adjustment to the varying levels. In this case, normal entry and exit are at horizontal floor level at the rear of the hall. Emergency exits to a back-stage staircase require the fitting of portable steps to give access from the front gangway to stage level when the auditorium floor is raked.

Although the changes of floor level can be effected quickly by the electrically controlled mechanism, the work that cannot be mechanised is the fixing of 500 seats to floor frames adjusted to the tilt. Almost always, plausible adaptability has its unavoidable time-consuming snags.

It will be noted from the longitudinal section that there is a fly-tower, an unusual luxury for a multi-purpose hall. For a limited theatrical usage this may seem to be an extravagance but it is understood that the grid has proved to be very useful in making the frequent changes of lay-out for non-theatre activities. The grid lines are not counterweighted: there are 26 sets of rope-lines and four sets of winch-operated lines.

The proscenium opening has a width of 31 ft. and a height of only 12 ft. 6 in.: one would have welcomed an extra couple of feet in the height. There is a good stage depth of 25 ft. and reasonable wing space of 9 ft. 6 in. at each side.

A commodious goods lift makes it possible to transfer scenery props, etc., between ground level and stage. The lift entrance is in the centre of the back wall of the stage which prevents it from being used as a cyclorama but a canvas cloth has been provided to serve in that capacity.

The stage lighting equipment, consisting altogether of 2 × Patt. 264 bifocal spots, 35 × Patt. 123 Fresnel spots, 7 × Patt. 23 profile spots, 2 × Patt. 265 400 W CSI lamp follow spots, cyc. batten and ground-row plus sundry portable lanterns, controlled by a J.P. 40-3 preset system, is very adequate for any production likely to be

staged. For ballroom lighting the Patt. 265 follow spots are augmented by seven Patt. 123 Fresnels with motor-driven colour wheels. The alcoves at each side of the auditorium, used by the sitters-out at dances, etc., can be lit in a variety of colours: not altogether surprisingly, therefore, for pop publicity the hall is billed as the Rainbow Room. It is more formally known as the Lancastrian Hall (which might have suggested Red Rose Room). Between the lighting control room and the manager's office at the rear, both with window view of the hall, there is a room intended ultimately for film projectors.

Dressing room accommodation and back-stage facilities generally are limited but adequate for small visiting companies. So far the stage has not been used by professional companies, theatrical companies that is, but there have been several successful amateur productions.

When the stage, apron and auditorium floors are all at the common level, the platforms necessary for dance bands, mannequins or whatever, are created in such positions as may best suit the purpose by use of folding rostrums of various shapes and sizes.

The foyers and bars, one of each on each floor, are commendably spacious: the second-floor bar can be an effective V.I.P. lounge for mayoral and other functions at which a certain amount of separation from the *hoi polloi* is considered to be appropriate.

It was stated that before the untypical summer ousted the prolonged winter without the usual assistance of a spring, the hall was in use every night of the week and that even during the summer it has been occupied two or three nights each week, which appears to be a pretty good testimonial to the energy and enthusiasm of the experienced manager in charge.

Although Swinton could hardly claim to have a Community Theatre, what they have caters extremely well for the varied usage. The frequency with which the hall will be used as a theatre must depend largely on the attitude of the local citizenry. Whenever the need is demonstrated, the facilities are there.



Another Tale of Two Theatres

Frederick Bentham

How does one go about providing a theatre building is a question often posed nowadays. The plays and players happen, indeed may be a happening, but the place—the theatre—is no longer just a street corner or a hillside. Was it ever, by choice anyway? Were there complaints about “multi-purpose temples” in theatre’s Bacchanalian origins. Did an inn yard really make an inspiring theatre for Will Shakespeare? According to Frances Yates* the Globe was far from being just that but rather an interpretation of Vitruvian principles by Burbage. Then, if I remember aright, there is the question ventilated, if it is the right word, in Hotson† as to whether the actors’ “tiring house” was under the stage. This must have provoked the actors

of the time to complaints about the lack of daylight in their dressing rooms.

Probably it is only directors and non-resident designers who have enjoyed eccentric buildings to produce plays in. Stimulated by a few days’ struggle they pass on leaving others to cope with the mundane business of keeping the place going as a working theatre.

New theatres have had the spotlight turned on them with an R.I.B.A. best building award to Roderick Ham’s Thordike Theatre, Leatherhead. A similar award went to Peter Moro for his Nottingham

* Theatre of the World, by Frances A. Yates. Routledge & Kegan Paul Ltd.

† Shakespeare’s Wooden O, by Leslie Hotson. Rupert Hart-Davis.

Playhouse in 1964. It has to be admitted that R.I.B.A. awards of architectural merit have not often been handed out to theatres, and before these I can only remember that proudly proclaimed by a small plaque on the front of the Shepherd's Bush Pavilion (now an Odeon), "London Architecture Medal 1923 R.I.B.A." Now physically split into Bingo and Wide Screen Cinema we have to turn to my own eyewitness memories* or better still to a contemporary account† of that theatre by Clough Williams-Ellis the well known architect and writer.

"Rearing its enormous bulk on the western end of Shepherd's Bush Green within hail of the plaster coquetries of what was once the White City (whence too many of our cinemas have drawn their inspiration), the Pavilion dominates the neighbourhood with an authority not to be denied. The cliff of sheer brick work crowned by its black vault of asphalt proclaims a great hall; its entrance set in a sturdy tower is sufficiently welcoming to suggest a place of entertainment. The building well illustrates the value of contrast and concentration—the flank of the hall impressing by its stark austerity—the entrance tower attracting by coming a little forward to greet us with an acceptable offering of admirably restrained 'features' in gleaming Portland stone. One is certainly predisposed to buy a ticket and pass within if only to discover whether the promise of Roman magnificence made without is maintained.

"As a matter of fact it is, which is not only good architecture but again good business—for mere curiosity will bring the passer-by in at once, whilst the luxury of sitting in a noble and satisfying building may make of him a regular patron. With a few more such examples of enlightened enterprise before us, we should begin to revise our estimates of the intelligence behind the Cinema industry—though just lately 'the management' at the Pavilion have made a sad mess of Mr. Verity's fine work by plastering it with enormous advertisements of a more than usually disfiguring kind."

* TABS, Vol. 22, No. 1.

† The Pleasures of Architecture, by C. and A. Williams-Ellis. (1924 Jonathan Cape).

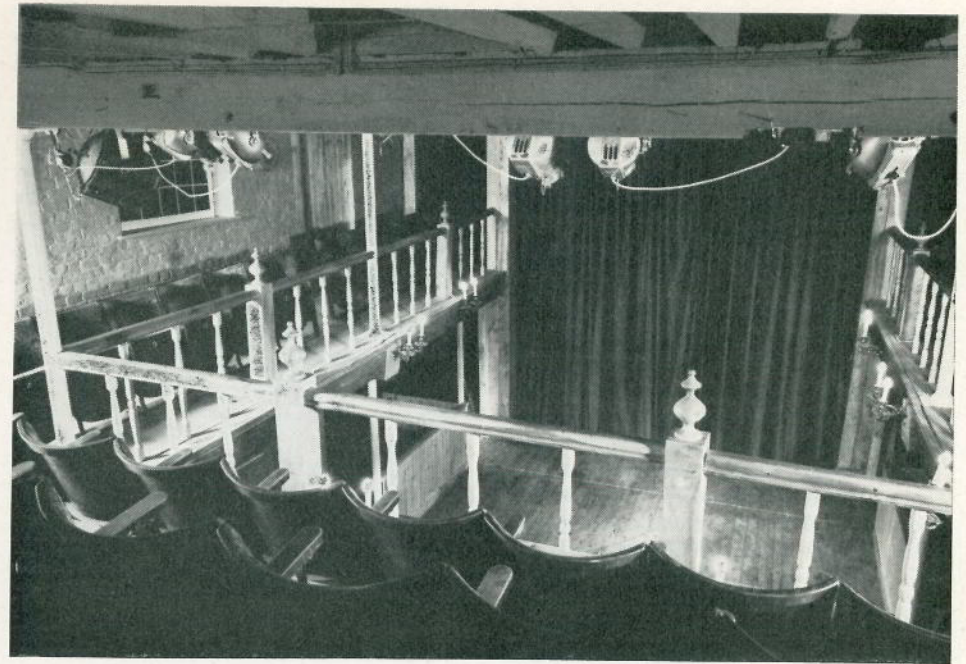
The Shepherd's Bush Pavilion was in fact a cinema, but it is customary in the Rank Organisation to refer to their many cinemas as "theatres". And why not, since the *O.E.D.* defines it as a place for viewing. In point of fact the cinema theatres of that size and of those days used to present no mean part of their shows live upon the stage.

My last "Two Theatre Tale" presented two new purpose-built theatres albeit of a contrasting nature.* This time we are to examine two conversions. The second, the Vaudeville, is a re-furbishing of a theatre which has been in existence some time and the first is a conversion of a building, a watermill, which has been there for a hundred years or more. Actually there have been many watermills on that site in Bagnor, Berkshire, but fire has disposed of them from time to time—rather like it used to do with theatres.

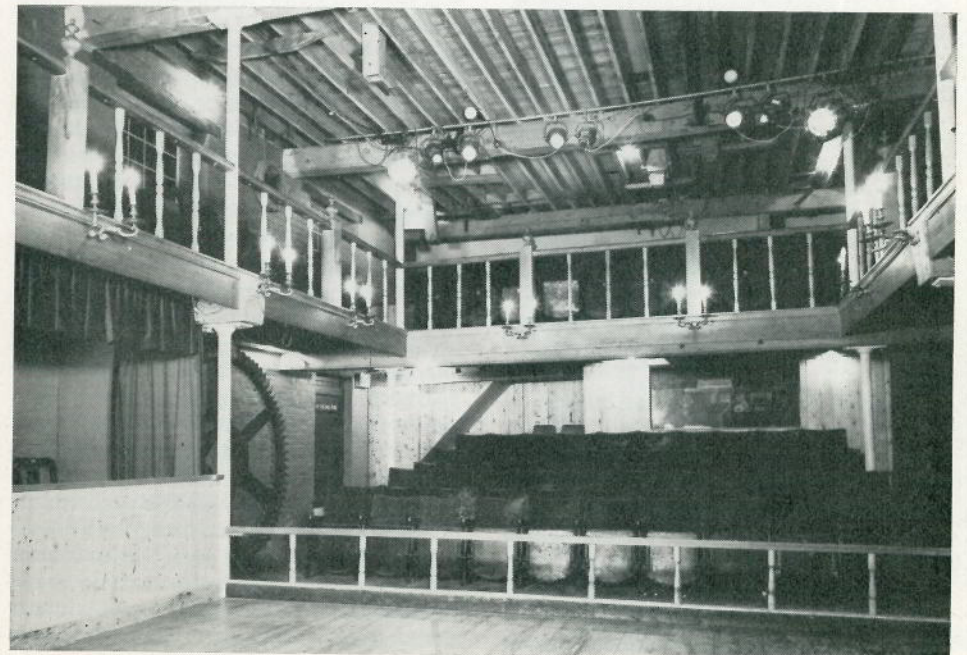
Bagnor is a village in the heart of the English countryside, the kind of place that might refuse, but hasn't, the gift of a street lamp. Gentle rolling hills do not have very far to roll to reach Salisbury Plain in one direction and Oxford in the other. Watermills prior to the age of steam provided most of the power in England (over 5,000 were recorded in the Domesday Book). It is a mistake to visualise them purely as a means of grinding corn. This particular one drove quite an amount of machinery and was used for flax. This kind of mill, unlike a windmill, being an elongated factory on three floors presents a suitable ground plan to form a theatre though removal of flooring and beams has been necessary. The various structural alterations have been expertly and tastefully done by David Gollins the administrator himself.

The beautifully clear millstream rushes through the theatre and the floodlit wheel is a marvellous interval attraction as is the garden outside where the millstream sweeps round the building. Glyndebourne on a

* TABS, Vol. 27, No. 4.



The Watermill Theatre, Bagnor, Berkshire. Designed by David Gollins.



small-scale comes to mind: as there, a visit provides an unforgettable experience. The Glyndebourn image develops to the point almost of parody when it is discovered that the Watermill theatre has its own "Organ Room". There in the bar-cum-restaurant enthroned upon a dais is a fine piece of organ-builder's gothic. Pipes of spotted metal in a castellated structure which was once, we imagine, finished in methodist oak. This organ is much smaller than the Glyndebourn one but it can be played—it is no hollow shell, its innards have not had to be sacrificed to allow extra wing space to the stage.

The restaurant and bar which is accommodated in an extension to the house and its out-buildings, forms an essential part of the outing, both cold buffet before and hot and cold supper being served. The mill itself is entirely given up to the theatre—the space being equally divided between auditorium and stage. There are 113 seats of which 45 are in the balcony. The general impression is of a Georgian theatre, and one is very much reminded of Richmond, Yorkshire, though in that case there are more seats. Strictly speaking, however, the plan at the Watermill is peculiar to itself. A deep forestage with real stage boxes alongside and a shallow stage at the rear. For the production of *The Dance of Death* the two areas were treated as one with a standing set and no house tabs. For the Music Hall programme the tabs are added, though of course the major part of the stage is forward of them. A particularly effective permanent feature, whatever the play, is a low balustrade across the front of the stage and a generous "moat" between this and the first row. There is very intimate contact but the "real" and the "theatrical" areas do not mix.

The up-stage area behind the house tabs does enjoy considerable flying height as both floors overhead have been removed there and the "grid" is just below the roof itself. Forward of this the top floor houses the dressing rooms, literally the only place to put them in order to extract every inch at ground level for auditorium and stage. The effect up there is strange, perversely evocative of below decks in the Roman galley in

the film *Ben Hur*. There is a raised walkway the length of the roof with steps down to the lightly partitioned dressing rooms in the eaves either side.

As so often is the case with my articles nowadays the stage lighting has been left to the last. In fact the lighting fits in very well here, being a mixture of Patt. 23 profile spots and Patt. 123 Fresnels all hanging neatly in view without any discourtesy to their surroundings. All, that is, except for two enormous pageant lanterns, out of my past, which had no right to be front of house anyway. Even if they had, there are times when efficiency must give way to amenity. The lighting and sound controls are in a room front of house uniquely graced by the protruding sawn-off axle of the water wheel.

So much for a conversion to a theatre in a building never intended as such. My second theatre is a true theatre—the Vaudeville—which has just been re-furnished and equipped by Peter Saunders as his London headquarters.

There has been a Vaudeville on the present site in the Strand since 1870, but the theatre most of us know is the Robert Atkinson interior reconstruction which opened on February 23rd, 1926, with Archie de Bear's revue *RSVP*. To refresh the memory the contemporary photograph alongside comes from the *Architects' Journal* of March 19th, 1926. Architects of any repute in those days—perhaps not yet Bauhoused—were nevertheless trying to rid themselves of many of the Victorian and Edwardian trappings. Certainly graining and imitation marbling were frowned upon and only turned up in the Clark & Fenn fibrous plaster palaces which were the cinemas of the day. If marble was required at least it should be marble and the era, which some banks and great commercial companies have not grown out of—the travertine age began. It was left to Oliver Bernard a one-time scene designer to turn marble gay with his marble murals and other décor for J. Lyons at the Tottenham Court Road Corner House in 1930—which alas exists no more.

In 1970 it is another stage designer, Peter Rice, who has turned the Vaudeville



Vaudeville Theatre—1926.

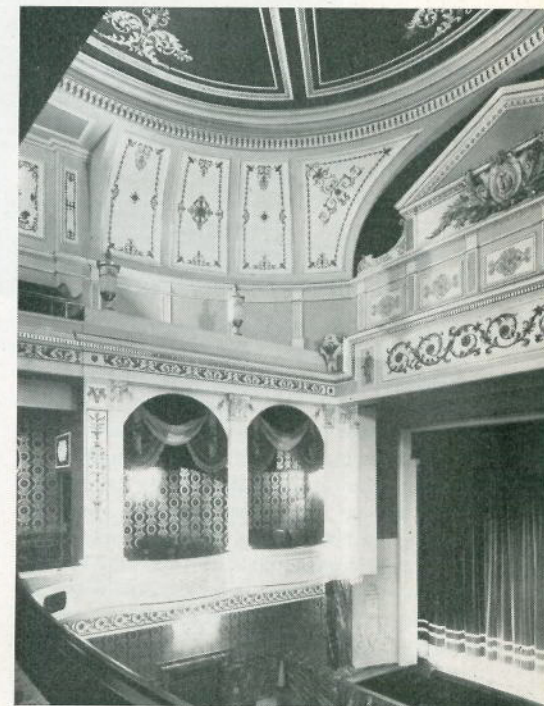
modern by putting back the clock to way beyond Atkinson, and all that. The more stern beliefs of the twenties resulted in a wan effect, and Peter Rice has not put the richness and theatricality it had back into the décor but rather endowed it with qualities it ought to have had but did not have at its 1926 re-birth. In the thirties it would have become even more wan and certainly more severe as the then much praised Cambridge theatre of 1930 shows in spite of subsequent redecoration there. What the Cambridge and the Saville (1931) lacked, was something to *pick out*. At the Vaudeville the classical Greek, Robert Adam or whatever it was, provides much opportunity for picking out, or "cutting in" I think decorators call it, and no opportunity has been missed. The result is rich and theatrical. The auditorium has put on its best but does not stand aloof, it is I suppose in today's mode "a fun machine for sitting in". This last remark is very useful as I had been wondering how to mention, to throw away, the fact that we Rank Strand Electric had supplied the seats, and very comfortable they appear to be. The entire house has been re-seated,

and if the upper circle has the traditional type of seat back, this is because steeply stepped as it is a thick padding would have reduced the back to back clearance to misery. That would not have been the way to comfort.

We also, how strange it is to write these words, re-carpeted the theatre as well. The new electrical installation is—as might be expected—ours. Only the house tabs have escaped the package. There they are, the old ones, looking nevertheless very smart, their colour changed to deep green, not by dyeing but by dressing them with green light from two Fresnels concealed in the ends of the circle front. These are angled so that the richness of the folds is stressed, flattering not flattening lighting.

Peter Saunders was concerned over the sight lines with the then existing Vaudeville seating layout. This was particularly worrying in the front stalls area, and the solution

Vaudeville Theatre—1970. The side spot position can be seen on the right.





Vaudeville Theatre—1970. Showing spot positions on upper circle and at ends of dress circle.

adopted was not the obvious one of staggering the chairs in entire rows as this would have left ragged ends which would not have looked well in a straight-sided rectangular hall and would have been contrary to regulations anyway. Variable widths of chairs have therefore been used.

Proper concealment for the many F.O.H. spots now needed has been built-in as part of the circle front and up the walls the stage side of the stage boxes. Previously these spots hung up in the disgusting utility cages the L.C.C. used to insist on and Strand

Electric used to supply once upon a time without even a twinge of conscience. Someone ought to ensure preservation of one of these for the chamber of horrors in the equipment section of the theatre museum when one day such a thing is established.

A wily move on the part of Peter Saunders was the appointment of Joe Davis as consultant so that no member of the S.B.T.L.D. will have the temerity or need to ask for more F.O.H. positions in future. To dangle extra pipes would be *lèse-majesté* and no doubt suitably

punished. Finding a position for the lighting control was difficult and what may be termed a perch position, but isn't, has been adopted. It is on the prompt side in the thickness of the proscenium.

The control area is part of the stage fire risk but the operator looks from the auditorium side of the tabs through a window with a quick-release fire shutter. His other view upstage or backstage is that normal to a perch—good if there is not any scenery. The control itself is a 100-channel 3-preset system LP of which a large number have been installed and which could be said to have become the common model for theatres of this size and time. The levers are internally illuminated in two colours so that grouping does not require space consuming supplementary switches.

A counterweight system has been put in (47 ft. grid) and an orchestra-cum-forestage lift. The theatre's pros. opening is 24 ft. wide which will cause raised eyebrows among those who glibly talk about a 30-, 40- or 50-foot nowadays. While the healthy exercise may do the actors good—large stages are not good for the pocket. This theatre should certainly cause people planning purpose-built amateur theatres to think twice about the pros. width. Remember the Vaudeville was the home of *Salad Days*, not just a straight house.

The consultant for the stage equipment was Ian Dow. In fact the technical part was in the hands of Messrs. Davis, Dow and Watson in their role as Theatre Sound & Lighting Ltd., which firm also supplied the sound installation.

With a glance at the dressing rooms to find that they now have showers and small refrigerators so ice cubes are no longer a problem, we return to the air-conditioned auditorium. The Vaudeville now joins the all too few theatres in our country where comfort is not just an act of God and the amount of community.

This is no place to try to describe the colour scheme except to say that there is a lot of plaster-based green marbling about. The rest can be gathered from our photographs although in black and white. A particularly troublesome area in this kind of theatre is that known as the rear stalls—

the pit of long ago. The ceiling begins low at the front edge of the dress circle and then shoots up to form a void, impossible to decorate satisfactorily. By draping the walls from ceiling to floor in deep green and placing silk shaded twin brackets at intervals on them the rear stalls are most elegantly ambience (if there is such a verb), and the acoustics also benefit.

There lingers on, though not featured, a survival from the past—the moulded flambeaux globes. A strange device but much delighted in once upon a time. Lovingly modelled and painstakingly reproduced in moulded frosted glass these are supposed to represent flames. Because they never achieved the slightest semblance of realism people came to accept them like canned tomato soup or baked beans—as something existing of itself. Thus one finds these imitation flames hanging down, “burning” sideways, doing everything but the one thing one would expect of a flame, burning upwards.

Before the show the Vaudeville now goes on display. There is not the casual effect of a railway station in which people buy their tickets to await the arrival of the train on the stage. A platform probably untidy with heaps of assorted luggage, the odd hen-coop or two or some scenery whose purpose is not clear. The Vaudeville is dressed overall for an occasion. The house tabs glow with golden footlights. They do not creep up in a half-hearted way. Fifteen minutes before curtain rise a real live pianist rises in a spotlight on the orchestra lift instead of the usual strangled gramophone record. How I do like footlights—on house tabs, and should the show use the orchestra lift as a forestage then they can vanish.

Vaudeville Theatre, London Stage Lighting Circuits

Upper Circle	18	
Dress Circle	2	
Pros. Booms	8	<i>Control</i>
Flys	39	3-preset LP
Dips	18	6 × 5 kW dimmers
Patch	12	94 × 2 kW dimmers
Foots	3	200 kW 240 volts

Lighting on a Shoestring

by Trevor Faulkner

Some years ago, Strand issued a booklet on this very subject; this brief article may help those who still have such a problem.*

To form a contrast to the near luxury school and university theatres seen in TABS in recent months, it may be interesting to those readers who still have to work on a shoestring, to see details of the Mary Kingsley Theatre in Sierra Leone.

later date. The interior has a thrust stage with the audience on three sides—almost a modern version of Shakespeare's Globe Theatre. It has a small gallery at the back of the stage and the intimate actor/audience relationship as necessary today as it was in Shakespeare's time. Because of the very hot climate in Sierra Leone, the theatre has louvre windows on three sides to allow



Mary Kingsley Theatre of African Studies, Sierra Leone.

The Mary Kingsley Theatre of African Studies is set up high above Freetown in the College of Fourah Bay. This building, which was opened some two years ago, was built originally as a lecture theatre with the possibility in mind of including drama at a

* Stage Lighting on a Shoestring, by Percy Corry, was last reprinted in 1960 and now belongs to history.—ED.

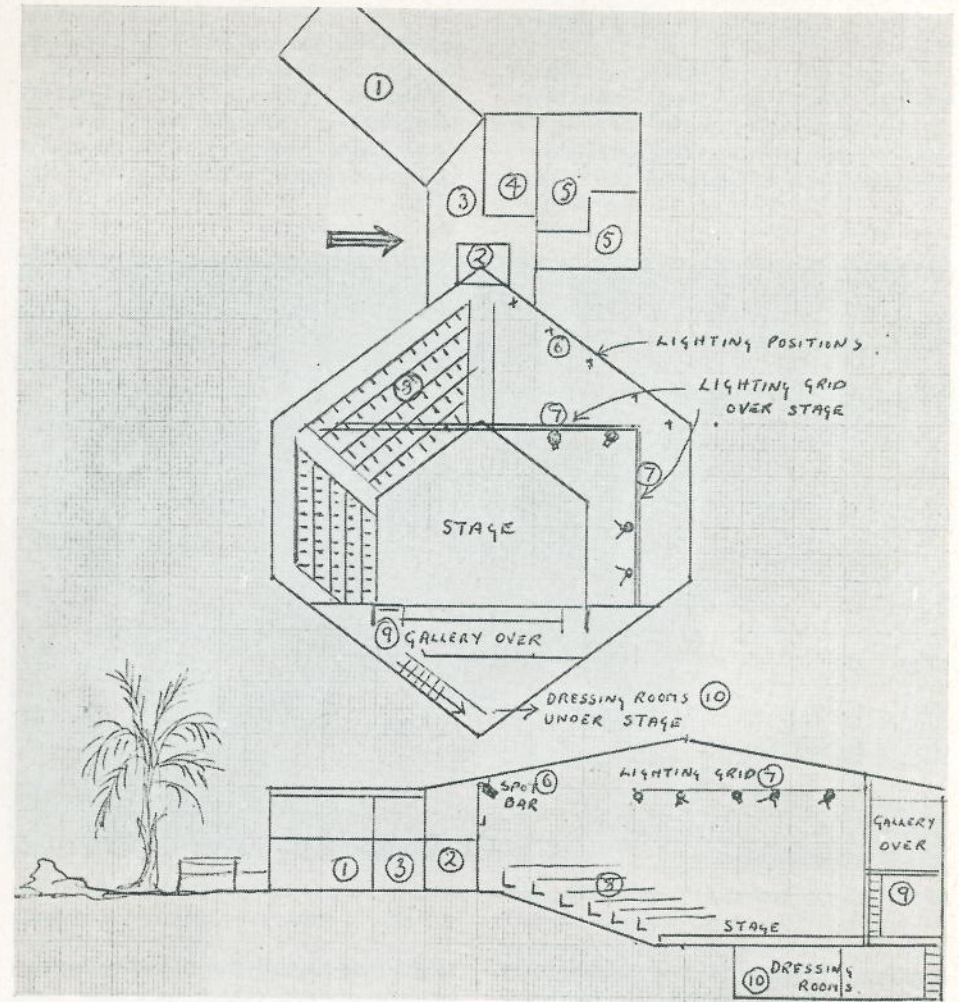
the air to circulate, this being assisted by six large fans. Luckily there was foresight enough to have these controlled by a variable resistance, so that during the actual performance the noise can be reduced to a minimum.

The theatre is used mostly during the daytime, and until I was approached with a view to equipping it in a modest way with

lighting equipment, they had been relying on one big sunspot—and the inevitable sunset dimmer at the end of the day!

The budget for this (part one of the

installation) was to be in the region of £250, a sum in our country which can be spent on even a modest school hall without comment but in Sierra Leone every penny



Mary Kingsley Theatre of African Studies, Sierra Leone.

- | | |
|-------------------------|-----------------------------------|
| 1. Bookshop and Offices | 6. Spot Bar |
| 2. Control Room | 7. Lighting Grid |
| 3. Main Entrance | 8. Auditorium Seating approx. 250 |
| 4. Bar | 9. Backstage and Gallery over |
| 5. Toilet | 10. Dressing Rooms |

had to be spent to good purpose. As the theatre has a thrust stage some 28 ft. across by 28 ft. in depth, with an audience on three sides, it was no mean task to work out a simple but effective way of lighting the stage with so small an amount of money available.

One problem was to install an efficient spotlight which would have flexible beam control and be able to throw 40 ft. to the stage without any great loss of intensity, especially when a Cinemoid colour was

now was to provide a control board.

It goes without saying that a Thyristor control with presets would have been preferred for this type of set-up, but money at this stage for this type of control was not available. This being so, we fell back on the very reliable standby, and used Junior 8s and a patch board panel.

This was of course only part of my assignment in the three weeks spent in Sierra Leone. Having seen that the equipment was properly installed, the local



Mary Kingsley Theatre of African Studies, Sierra Leone.

employed. I chose the Patt. 264 bi-focal spotlight as the use of both the hard and soft-edge masking is a great help when marrying a few spotlights over such a large three-sided stage area.

To marry in with the Patt. 264 from the back of the auditorium the Patt. 123 Fresnel spotlight was chosen, complete with barn doors for the grid over the stage. This, with a few Patt. 23 spotlights for profile and gobo work completed the first stage of this installation. All that remained

technicians needed the necessary instructions in its use. There were also some design students who needed help with forms of stage setting other than a box set. Using natural resources we designed a touring set which, together with a revolving stage, completed a piece of scenic design apparently unseen before in the history of Freetown. It was a 16 ft. revolve and the all-important main bearing was made up by the local blacksmith.

The Tale of a Switchboard

by the Editor

A lot of thought has gone into the creation of ideal switchboards. The fact that over the years the ideal has never really been achieved is due to lack of appropriate technology rather than lack of thought. A lot of today's great thoughts in lighting control are the same as the great thoughts of the 1930s as the present writer can personally attest or for all he knows those of the 1920s, or before that, as others even more ancient can attest. The need for dimmer memory to avoid the labour of plotting was perfectly apparent when drawing up the design of the Light Console in 1933 but the means in practical engineering and economic terms made it a hopeless proposition. Presetting of any kind was a difficult and expensive complication in those far-off days. Even a simple thing like a compact lightweight variable load dimmer which everyone knew they wanted had to wait until 1964 to begin to become a practical proposition.

The arrival of the thyristor released the advantages of presetting and variable load control to a wide range of users. To have three presets suddenly meant spending less money than to have the simplest previous form of remote control, system SR—a single set of levers operating very heavy and load dependent saturable reactors. The result was the introduction in 1965 of Strand Electric's complete range of standard preset controls—systems JP (Junior Preset), SP (Standard Preset) and LP (Luminous Preset). Many hundreds of these along with many, many thousands of the corresponding JTM dimmers have made their way in the world. Thought has since tended to be directed at the even more sophisticated control systems with the dimmer memory which became possible.

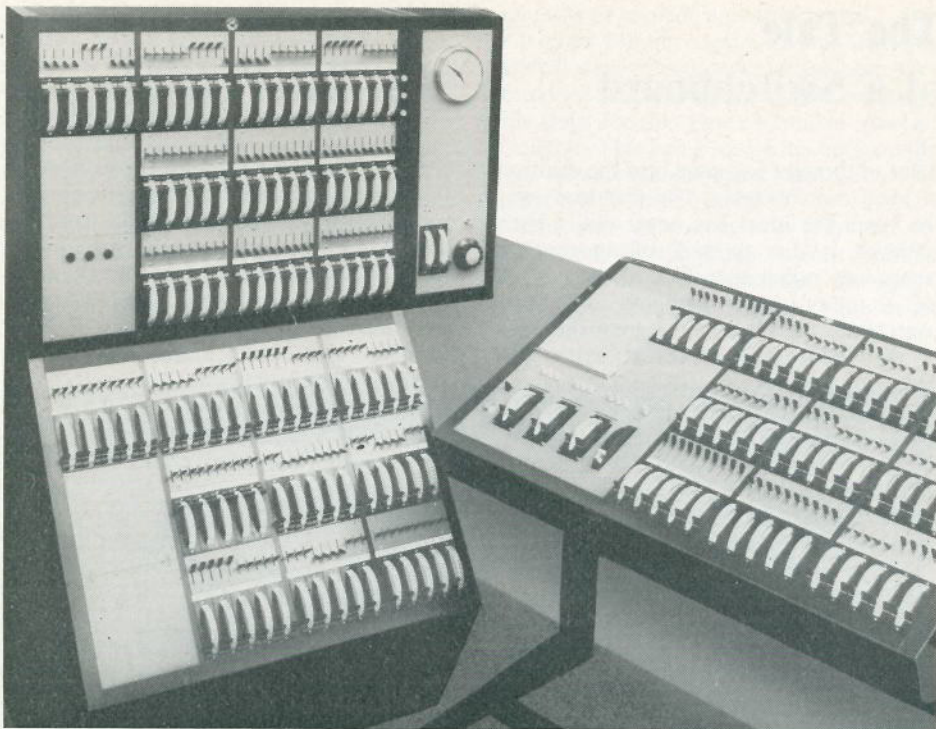
It is perfectly true that there is a de luxe market where money is no longer the real consideration but it is still a fact that cost is the real factor in the vast majority of installations. It is also a fact of life that

types of switchboard conform to a series of plateaux separated by steep steps where money is concerned. The climb from the one to the other cannot be lightly undertaken. The claims of being able to afford more dimmer circuits on a junior control may have to be weighed against a lesser number but with more sophisticated facilities to operate them. The result can be seen in an extreme form in the United States where often a mere thirty dimmers will be endowed with a Century Strand C-core multi-preset or a C-card platen type control. The effectiveness of the whole being limited by over-reliance on load patching.

In Britain we have always considered a large number of dimmers to be essential and in consequence there are a number of medium-sized stages with below-medium-sized financial resources which require 80 or 100 dimmer channels but where the budget cannot allow the kind of control facility this number really demands. As with us human beings so too with theatres, the amount of cash is by no means equally bestowed and certainly does not necessarily equate with need.

To close the gap the type SP Standard preset has had to be extended rather over its limit for first-class work to 80 channels—to take in a theatre like the Thorndike or the Collegiate Theatre at University College, London, but in any case should 100 channels be required then the big jump to the luminous lever system—LP—has had to be essayed.

While there are a number of 100- or even 120-channel System LP controls about there is obviously a need for something better than the standard preset system SP to help bridge the financial gap when needs must. To this problem Francis Reid, who in 1964 designed the control he would himself use in Glyndebourne, has bent his mind as a lighting designer and an operator. The result is to be marketed as



System Threeset: 100-channel 3-preset 9 groups; two presets on the wing unit and one preset with all masters on the desk.

“Threeset”. This kind of title I do not like and Francis Reid to do him justice does not either but it should not be allowed to put anyone off.

Just as a cook enjoys a good meal, which he or she has had nothing to do with the preparation of, so it was enjoyable to try out this control. It seems a good solution to the problem.

There are, of course, three presets, i.e. three dimmer levers per channel, but instead of the single three-position switch per channel of System SP giving group A or B or A + B (Common) there is a switch per preset. Further, the centre position is no longer A + B but a further group with its own master. Groups A, B and C on each of the three presets make nine “finger operated” linear masters. Why trouble to write “finger operated” for there can be few who have not followed the teaching that the fingers are an operator’s

greatest asset. It is worth making the point once more because though lots of levers can be finger operated, necessity and/or ignorance often mounts them so that they cannot be so used.

Essential to the real use of dimmer levers is that they should lie under the fingers. The hands then resemble those of a pianist and the fingers used singly and together achieve the desired result in a manner which allows the operator to feel relaxed but in full control. What has to be done resembles only the action of the pianist in the expression “caressing the keys”. One can achieve amazingly slow and smooth movement manually by using the dimmer scale as a rest and travelling the dimmer lever with another finger. The operator should not need to carry the whole mid-air weight of the forearm on two clutching fingers.

In the new switchboard under consideration the masters and one preset of

dimmer levers are housed in desk form while the other two presets are formed as a wing unit. Thus the tendency would be to contrive that the important work including the actual “playing” of the levers would be performed on the desk while the wing is used for presetting, even calling in a second operator to set the switches and levers there.

It is necessary to go on to say that the notion of a second operator has always been an anathema to me, yet there are some who still consider it proper and usual. To me it suggests rough riding the switchboard. A lighting plot should use, to the full certainly when necessary, *use* the control, not fight it. A good operator enjoys being extended by the challenge of the plot—so long as he gets it down properly and has time to practise its more complicated moves.

One of the problems of switchboard design is access to the desk components for installation and maintenance. The solution devised by Francis Reid and the designer Mike Day has been to make the whole desk-top pivot near the front in its stand instead of hinging the individual panels as in other Rank Strand Electric controls.

The Key to St. Peters

St. Peters College, situated in Saltley, a suburb of Birmingham, is a College of Education administered by the Church of England. Drama forms part of the curriculum, and is a vigorous department in charge of John Pick.

The college buildings are by no means new although the hall has the appearance of being more recent than the main block due to reconstruction internally after it ceased to function as the gymnasium. It is a flat floored hall with the usual type of college or school stage at one end and with a balcony at the other. The auditorium is 32 ft. wide and 65 ft. long from front of stage to the line of the balcony which is 12 ft. deep. The ceiling is 19 ft. from the floor. The proscenium stage is 22 ft. deep, 32 ft. wide with a proscenium

The whole top part can be turned over for access to the back. Not only does this provide comfortable working for examination and maintenance but it provides a bonus for the operator who can then adjust the angle of the lever surface exactly to suit himself. The stage lighting control station of a theatre tends to generate an amount of auxiliary equipment, controls for the house lights and some special lighting to improve the appearance of the curtain. There is the inevitable sound communications system and there are some who like a clock. These should be near but not within the regular format of the actual stage lighting controls. It would be like coming upon the telephone dial in the middle of a piano keyboard. A separate unit (shown overhanging in the photograph) can be bolted on to house such accessories.

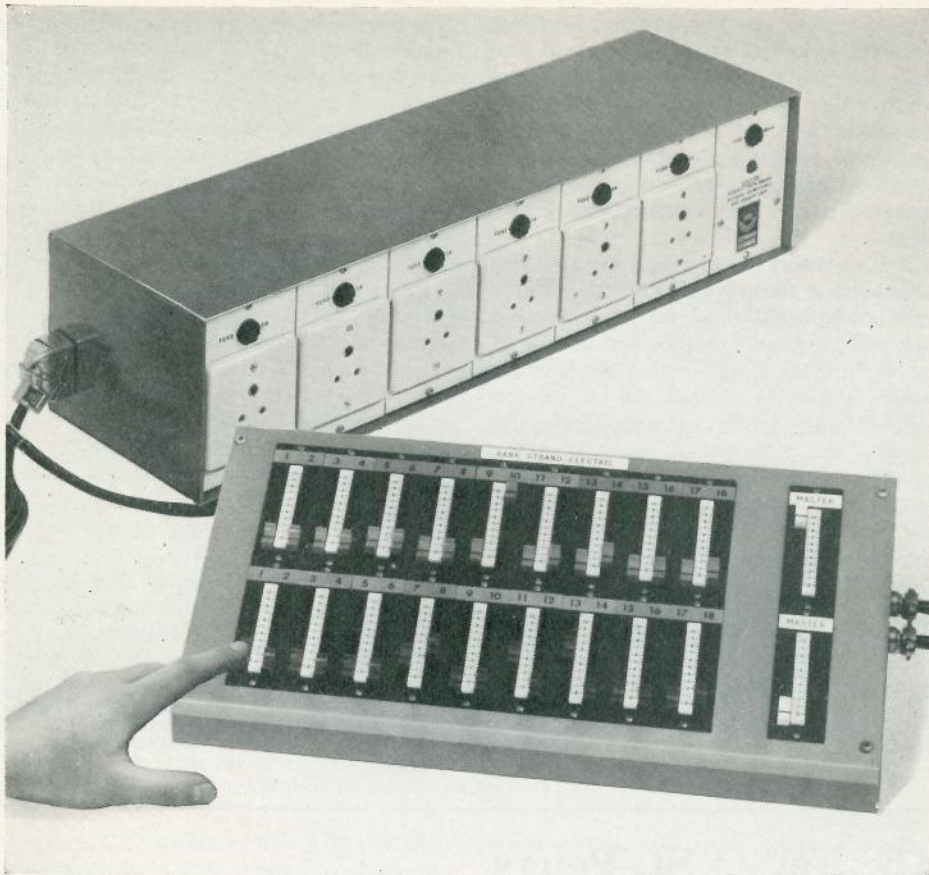
By the time this issue of TABS is published the first “Threeset” control in the photograph will have received its baptism in the famous Edinburgh Assembly Hall, with the Festival productions by Prospect Theatre Company of *Much Ado About Nothing* and *Boswell’s Life of Johnson*.

F. W. Martin

opening of 20 ft. by 10 ft. The stage is 4 ft. above the auditorium floor.

In view of the increasing numbers of drama spaces or areas now being constructed Mr. Pick wished to utilise the auditorium as a drama space and at the same time retain the proscenium stage so that practical work and instruction could be carried out in both forms. The available money was unfortunately restricted but remote control of lighting was considered essential with dimmer presetting. Due to the cash situation Mr. Pick had leanings towards a type Ten/20 portable board* which could be used either on stage or on the balcony. The fact that a Ten/20 has a built-in patch panel was an attraction in

* 20 circuits one 4 kW and nine 2 kW thyristor dimmers 2-preset.



The new 18-channel 2-preset Mini T desk with one of the six-dimmer Thyristor packs as used at St. Peters College.

that, when used on stage the existing circuits could be plugged into it and when used on the balcony the circuits for arena staging could be used. Upon investigation on site, however, it was found that the main feed on the balcony was too small and the cost of running a new main was prohibitive. It was therefore necessary to give some more thought to the problem.

The next idea was to use a S.P.30/2 two-preset remote control with the dimmer racks on the stage and the desk on the balcony. However, money would not run to this, so another solution had to be found. However, it was at this time, Rank Strand Electric introduced the

miniature range of remote control known as the Mini-T.

Everything to do with the Mini-T is small, including the all-important price. Instead of the usual floor standing racks the variable load 1,000-watt thyristor dimmers are contained in neat packs, half a dozen at a time. A six-dimmer "rack" is only 25 in. wide by 7½ in. deep by 6¼ in. high. There is a 5-amp 3-pin socket outlet to each dimmer for the load and a separate multi-core plug-in flex enables the control desk to be connected. Larger installations are made up by adding further six-dimmer packs which either stand on each other or are decentralised where more

convenient—a local power plug to each often being all that is necessary.

There are three sizes of Mini-T control, all small enough to make the word "desk" rather a misnomer. The 12-channel is only 15 in. wide by 10⅝ in. back to front by 4¼ in. high at the back. The operating lever panel sloping down to 1½ in. at the front. The 18-channel "desk" is 4½ in. wider and both this and the 12-channel are two-preset. One set of levers being adequate for the 6-channel only model which helps make an inexpensive beginning, later to be built up as need arises and funds permit.

At St. Peters it is the 18-channel Mini-T equipment that does just what is wanted. There is plenty of room on the existing switchboard platform to mount the three six-dimmer packs and the socket outlets on each meet the requirement that proscenium stage or arena circuits or any combination should be plugged in and controlled from the desk. The latter can then be situated in the balcony or for instructional purposes on the stage or in the auditorium. By means of the flexible control cables, the desk can be easily moved around plugged into the dimmers and the system is thus operational once more.

The resultant control is fully up to modern standards and enables the switchboard operator to carry out the lighting changes easily, smoothly and as rapidly or as slowly as desired and does not impose too many restrictions on the lighting designer.

The Mini-T desk although simple in operation offers considerable scope to the

operator, for each circuit has a linear type fader unit, with a clear scale and finger tip operation. These are arranged in two presets, red and green, one preset being below the other and each preset has a linear master fader enabling smooth fades to be carried out from one lighting state to another. Whilst it is unfortunate that it was not possible for St. Peters to install larger equipment the 18-channel Mini-T will enable the students to carry out good basic lighting, and this type of control will be found in increasing numbers by them when they eventually go on to schools and colleges themselves to teach.

Suspension of lanterns in the hall presented no difficulties for the original architect had luckily designed the ceiling in such a way that there are a series of transverse concrete beams 13 ft. apart and longitudinal beams 8 ft. apart. The ceiling is therefore coffered in five rectangles along the hall and five across the hall. These beams form a convenient anchorage for a grid of 1⅞ in. o.d. steel barrel from which any lanterns can be suspended. There are five longitudinal barrels running the full length of the hall, three of which are suspended from the beams and two from the walls on each side. This forms the basis of the grid which can now easily be improved by the addition of cross barrels, curtain tracks and so forth.

The original scheme called for 30 circuits, the socket outlets being located in convenient positions in the grid but this part at present has had to be modified. However, it is envisaged that it will be completed when funds are available.

Book Review

"*Dictionnaire des Arts du Spectacle*" by Cecile Giteau (Published Dunod—Paris. Price 88f.) It is in the eccentric tradition of TABS to ask me to review the "*Dictionnaire des Arts du Spectacle*" which is a French-English-German dictionary of a sort, and I have only the barest smattering of French and less of German. But this is an eccentric book. The translations are not in alphabetical order, but split into Sec-

tions such as Circus, Cinema, Theatre, Radio, Television, Puppetry, Danse and most fascinating of subjects Documentology. Each of the Sections is split into a number of fairly arbitrary sub-sections and even the order within these sub-sections is not alphabetical. To be fair, there is a trilingual index at the back in alphabetical order which enables the reader to find by cross reference a required item. That is he

can find it if it has been included. The selection of items for translation is somewhat idiosyncratic and certainly readers of TABS looking for translations of lighting terms will be disappointed. In the Cinema Section there are 4 lighting items in a total of 414; in Television 10 in 332, and while about 100 of 1148 terms selected for the Theatre do relate to lighting, lighting supplies and lighting supports, the terms selected are, in many cases, odd and sometimes inaccurate. For example, "autotransformateur" is translated as "autowound AC transformer dimmer" rather than "autotransformer". In many instances, the translation is in very Gallic English, an example of this being "Telefilm" translated as "Specially Film for Television".

Although the French Expert Member of the

C.I.E. Committee on Stage and Studio Lighting is listed as a collaborator, the terms and translations chosen do not agree with the C.I.E. International Vocabulary. The editor of TABS will not be upset to learn that the term "luminaire" does not appear once, though "lantern" does occur in a few instances.

The book includes a Glossary which is a series of definitions which are in French only.

I must conclude that this Dictionary, while of some value to the French reader, particularly one interested in Documentology, has limited value for the English student. This rather harsh conclusion is unfortunate for the book is well produced and is obviously the result of a phenomenal amount of arduous research.

K. R. ACKERMAN

Correspondence

Squaring the Circle

Sir,

I was much interested in the further reference in the latest issue of TABS to the need to keep down the size of the acting area in theatre-in-the-round.

In the proscenium theatre one is apt to assess the size of the stage by reference to the single dimension of the proscenium opening, qualified only by whether the stage has also a good, adequate or inadequate depth. In the case of theatre-in-the-round (and this is also true, incidentally, of thrust stage) the whole of the stage area can be used at any time as it is not dictated by sight lines and the stage area must, therefore, be measured entirely in terms of square feet.

Take for instance the various dimensions referred to in your note. The size of the stage at the Scarborough Theatre was 12 ft. by 16 ft. = 192 sq. ft. The "reasonable dimensions" suggested by Stephen Joseph are 18 ft. by 21 ft., which is 378 sq. ft. or twice the size of the Scarborough Theatre. The Victoria

Theatre, Stoke-on-Trent, measurements at 26 ft. by 22 ft. are 572 sq. ft., which is no less than three times the size of the Scarborough Theatre, which is a heck of a big difference!

When, at the Questors Theatre, we first started doing production in-the-round, in the Stanislavsky Room, the stage area was 12ft. by 18 ft. or 216 sq. ft. This, which incidentally was modelled on the Pembroke Theatre at Croydon, seemed at times a little cramped only I think because the acting area was measured almost up to the knees of the front row of the audience!

Of course the size and dimensions of the acting area for theatre-in-the-round must be related in some degree to the size of the auditorium, as it is a matter partly of proportions as well as absolute size.

Incidentally, while I am writing, why are so many so-called "theatres-in-the-round" not in-the-round at all, but in-the-square?

Yours faithfully,

ALFRED EMMET

The Questors Theatre, Ealing