

## TABS

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### TABS

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#### New Theatres in Britain

This issue of TABS is at the same time larger and yet more restricted as to content than usual. It has, for some time now, seemed desirable to include all *new theatres in Britain* in one volume. This for two reasons; firstly because it would make a useful work of reference, and secondly because this would give new readers a chance to start level with the older ones. It cannot be claimed that every new theatre or hall used as a theatre is to be found herein, but at least all the well known ones are and these have been supplemented by some others which happen at one time and another to have appeared in the pages of TABS.

In an anthology such as this, inevitably the material is condensed when compared to the extended treatment normally accorded, but the ability to flip through rather than to embark on a detailed exploration should be valuable. Incidentally the veteran reader will find a number of items not previously included.

It is sad that plans cannot be to the same scale, but not only is this difficult due to the great variation in size, but both speed and cost of publication demand that we should do the minimum redrawing of material submitted to us. In the present issue there is the further complication of using existing blocks from page layouts which cover some ten years. However each page contains a scale and/or some prominent dimension to which sizes can be related.

Our main theme of auditorium and stage does not allow space for some examples of audience amenities in the shape of foyer, bars and restaurants. Another *should be* amenity is the exterior and our cover picture of the 1821 Nash facade to the Haymarket is intended as a reminder that some theatre buildings may remain to grace the civic scene for a long time indeed. All the talk of experiment and improvisation in theatre should not disguise the fact that the building, which houses it, is permanent.

#### THEATRE DESIGN IN BRITAIN

A short survey by Frederick Bentham

Leaving aside the "antique" theatre, using the word in its furniture sense as over one hundred years old, design in Britain can be summarised somewhat as follows: Prior to the First World War theatres were conceived as three tiers (ground floor and two balconies) with a fourth tier where larger capacities were required. The tiers were brought round to meet the proscenium by the inclusion of several boxes on the side walls. Such theatres usually have a good feel from the stage but provide a large number of poor seats from the audience point of view. The top tier, the gallery, not only gave a poor view but was literally for the poor. The best seats in the house for sight lines were in the "dress circle", but sometimes the stalls had a rather better than the usual inadequate rake, and in consequence the rear part qualified as a "good pit". The pit, like the gallery, had its own very basic entrances but was considered as ranking above it. Class and/or financial distinctions were maintained by a host of separate doors round the side.

Good examples of a four-tier house are the Theatre Royal, Drury Lane, with 2,226 seats and a 42 ft. 6 in. wide proscenium opening, and the New Theatre, St. Martin's Lane, with 958 seats and a 31 ft. 6 in. proscenium. The New Theatre was opened in 1903, but the present Drury Lane auditorium was in fact built in 1922 and is a very successful reminder that the bare wall school was not an absolute rule, between the wars. Both examples, although strict proscenium types, are in that form versatile taking drama, musical and ballet and in consequence they repay careful study. Drury Lane should also be compared with 2,110 seats of Covent Garden's Italian type opera auditorium where sight takes very much a second place to sound.

More typical of between the wars is the Saville, London (1,200 seats, 32 ft. pros.), by T. P. Bennett in 1931, who also did the larger but rather similar New Theatre Oxford (1,710 seats, 45 ft. pros.). In both we find adaptation of the two-tier cinema form of the time into a theatre by adding an upper circle. The walls become plain, but with a single box either side where an organ grille or some other decorative feature might otherwise be found. Several theatres are of this type and period, for example the Piccadilly, Cambridge, Adelphi, Phoenix and Savoy. It would be a mistake to consider that this deep cantilever tier form without the obstructing support columns of the shallow tier era was not born until the super cinema came along and needed it. The Kings Theatre, Hammersmith (1,566 seats, 32 ft. 6 in. pros.), built 1901, was an early example.\* The Carlton cinema, Haymarket (1929), was in fact designed originally as a theatre by Frank Verity to this three-tier format, and makes an interesting

<sup>\*</sup> Closed 1955 and later demolished. TABS, 23, ii.

comparison with his two-tier cinema design, the Plaza, Regent Street, nearby. The same architect's Scala (1,111 seats, 30 ft. 6 in. pros.) unintentionally shows how to make a reasonably large proscenium opening look small and the open staircase treatment of the auditorium side wall areas has curiosity value also!

The largest version of the three tier form surviving in London is the Dominion originally with 2,800 seats (50 ft. pros.). It has spent most of its life as a cinema but I well remember my view of Leslie Henson already distant from row ten of the 680-seater top tier when it opened in 1929. The 1,976-seater with 45 ft. pros. Coventry Theatre (1937), at one time known as the Hippodrome, provides

another large example, but this has remained a theatre.

The decoration of between-war theatres ranged from Komisarievsky at the Phoenix and Basil Ionides at the Savoy to the silver-grey plainness of the Saville and more particularly the Cambridge. Both these auditoriums provide object lessons in the shrinking effect when a richer more theatrical colour, especially crimson, has been applied later together with some decorative fittings to sparkle and glint. Both the Saville and Cambridge are now intimate by comparison with what they were. Concealed cove lighting of the thirties tended to melancholy and silver grey as a colour was too enlarging. Light coloured auditoriums are quite wrong therefore and incidentally all lighting there should be low in intensity. A brightly lit auditorium means even more stage lighting which by contrast must appear that much the brighter since it has often to represent daylight. Too light a decoration in the auditorium can also be a nuisance and it has been said of the RADA Vanburgh theatre (1954) that one cannot tell from the stage whether the house lights are on or off so light does it remain.

Post the Second World War when at last theatre building began again, another tier was dropped and now planning centres mainly on two tiers or if possible one. The Belgrade Theatre, Coventry, with 910 seats (two-tier) and a 34 ft. proscenium, set an important civic example of what could be done, and like all firsts provided some warnings as well. The most serious of these was the effect of economy in the stage area. Lack of money caused everything behind the proscenium to become miserably cramped and inadequate. There has to be a sense of proportion between expenditure on the front of the house and the backstage. Curiously in some recent projects the swing has been the other way. A large stage implying a lot of expensive scenery and staffing is matched to an auditorium of very limited capacity. Neither the professional tour nor the amateur musical would be happy under these circumstances. Seating capacity sufficient to ensure some reasonable return is essential even where subsidy is an agreed principle.

Also volume is necessary for music. The requirements of music and drama are difficult to reconcile. To keep to the amateur level only; N.O.D.A. think in terms of 1,000 seats, whereas 300 is more the B.D.L. mark. In providing for musical shows it would seem that the

end stage proscenium form required in order to establish the right relationship of orchestra to stage not only satisfies scenic needs but also throws in a bonus as to volume. This is because a third tier (second circle) can be added. The theatre at Limoges in Central France does this by raising the ceiling, lights and all, in four minutes by electric motors.\* In the low position the second circle front then becomes the ceiling cornice.

Whether mechanical means are used to cover up the space not in use or decorative lighting is so placed to act as a blinder, the extra balcony both allows for opera, where distance is not so important, and permits more audience to be crowded in on special occasions. At such times "any seat is better than no seat" becomes the attitude, whereas in normal times such extremes of seating are not tolerated. One can close the upper circle, adjust prices and avoid the half empty look for the rest of the year. Examples of this approach are to be found under Leeds and Newcastle on pages 32 and 41 of this issue.

Both in projects and in such theatres as have been built the chosen form in the main seems to be the proscenium stage (with scenery tower whenever funds permit) and a forestage/orchestra pit adaptable area in front. Except in one instance the Nuffield, Southampton where the idea of the proscenium as a hole in a barrier wall is stressed visually, the tendency is to play down the division between stage and auditorium. Very successful in this is Peter Moro's Playhouse, Nottingham where two lifts convert the orchestra pit area into forestages of greater or lesser extent. Most important is the way in which entrances to this area and Juliet balconies above can be made to appear or to vanish. For this the black wall faced with wood slats is responsible. This treatment gives a nice texture to the black so there is no sense of drabness, whatever. When lit up with the decorative bands of gold light for intervals the impression is theatrically exciting yet still of suitably low intensity.

Another Nottingham idea which is worth attention is the drum floating overhead for stage lighting in the auditorium. Because this is not the practical success it might have been it should not be dismissed. The problem of reconciling main ceiling height with the fact that the working stage opening seldom exceeds 16 ft. has usually been overcome in two ways. The first has been a vast and busy tympanum of angels and cupids or of civic arms or other decoration together with deep pelmets and proscenium borders; all of which are quite out of the question if the proscenium effect is to be minimised. The second way has been to slope the ceiling violently down from back of circle to proscenium. This unfortunately increases the apparent ceiling area to those in the circle. Indeed from up there the theatre may seem to be all ceiling! Such ceilings also lead to stage lighting difficulties, for the lights may be too far away if housed in slots up there; furthermore the ceiling turns at such an angle as to

<sup>\*</sup> TABS, 24, i, March 1966.

receive the scatter from the beams directed at the stage. Where the Nottingham drum fails is in not being wide enough in relation to the

stage.

An excellent example of the slot type of stage lighting position front of house appears at Worcester where it continues right across and in part down the side walls. Lighting slots are good as positions at Guildford but do not logically continue down the side wall. Instead, spotlights hang on brackets in the open, thereby suggesting an afterthought. Either lights should be concealed or they should not. In both cases they must be accessible and the Mermaid, London, shows some very difficult positions to get at over the seating. An open bar which can be used to hang lanterns on and at the same time act as a support for the access ladder appears on the side walls of the Phoenix, Leicester. Detailing of lighting slots is both important and difficult and the A.B.T.T. has spent some considerable time on this subject. The Royalty, London made the mistake of providing the main FOH position on the circle front. With a single circle this is too low.

Returning to the proscenium area it seems necessary that the framing effect should be minimised not only to lessen the sense of barrier, but also to avoid establishing the actor as an exact standard of scale relative to opening. This is particularly serious on small stages. Sometimes the forestage arrangements designed theoretically to lessen the picture frame effect manage only to provide a second frame. Thus there will be a frame within the larger frame or even a series of frames. In the photograph this appears to be the case at the Oxford Playhouse, but on site this effect is nowhere near so pronounced. Entrances and lighting positions can be opened up in this area and there are plenty of slots in the main ceiling for lighting. Altogether Oxford is a most interesting example of a reconstruction of an unsatisfactory cinema type theatre of the 1930s.

To get full value out of an adaptable forestage an orchestra lift is essential, and theatres such as Guildford where this has had to be omitted on account of cost are severely handicapped in the amount of work involved in putting it up and taking it down. At Coventry the forestage is fixed, which is just as well, as the stage itself is only 27 ft. deep from the setting line. At the Ashcroft, Croydon, an attempt has been made to make the forestage adaptable by having all the variants present at the same time. Proscenium frame, Georgian side doors, Juliet balconies, all are there, but the physical and visual result is to make productions on the stage itself more distant than they need be.

Some forestage examples exist where there are no actors' entrances other than through the proscenium opening itself. This happens at Southampton when both lifts are used and a raised stage  $28 \times 17$  ft., level with the main stage but in the stalls area, is presented. Although the intention under these circumstances is to present an Elizabethan form it must be very restricting on a thrust stage that deep not to be able to exit other than by walking back

upstage. This theatre also illustrates the difficulty in placing the seating to be both suitable for a thrust stage and for a picture frame stage—both forms in this theatre being extreme examples of their kind as the picture frame stage does not come into the soffit of the arch, whereas a 2 or 3 ft. apron in front of the house tabs is normal practice elsewhere. Thus while the side seats do make up for the removal of stalls when the lifts are raised, due to sight lines they remain to haunt the place as empties whenever the proscenium stage is in use. Any Elizabethan type of raised stage, arranged to be in close proximity to the audience as it in fact used to be in those daylight days, sets acute problems of glare if stage lighting is to be used in the manner of our time.

The rules for the stage itself have been definitively stated by Basil Dean as "... plenty of space and height, with walls at right angles to each other and free of all obstruction above and on and beneath the stage level." The Nottingham stage though reasonable in size suffers from the effect of designing for wagon scene changing machinery to suit a director who never ultimately used the place. Producers' specialities, revolves, wagons, lifts, lighting bridges, cycloramas should be production items of a demountable nature.

A scenic tower with flying grid still seems to have no substitute for full-scale professional work or where interchange of touring productions is envisaged. In the little theatre, however, the example of Middlesbrough is of interest where a large floor area for stage and wings into which scenery can be rolled or stacked was chosen in preference to a flying grid. Where a grid is built it must be sufficiently high, usually stated as two and a half times the working proscenium height. Guildford and Southampton grids are too low. Even where flying is not practiced there must be a framework over the stage from which curtain tracks, scenery and lighting can be suspended. Rehearsal space at least equivalent to the floor area of the acting area is also necessary but has seldom been achieved. Workshops and storage are very important, but conditions differ so much with the type of work to be done that it is impossible to be specific in a brief survey like this. Likewise dressing rooms can range upwards all the way from two large ones only.

As regards auditorium seating capacity; although thanks to the idea of subsidy the numbers specified are much less than they were, the problem has not been eased, because better sight lines are expected. Further the demands of more comfort plus sheer increase in physical size of people themselves puts up the spacing of rows. Divergence of opinion exists as to ideal seat spacing, some believing with Tyrone Guthrie that too great a back-to-back prevents an audience from feeling united. The back-to-back of 3 ft. 3 in. at the Mermaid is unusually large, and for this the non tip-up seating is partly responsible. A modern upholstered and becushioned seat has created misery at 2 ft. 6 in. where a more spartan form used to get away with it. As it is 2 ft. 8 in. at Nottingham is comfortable, 3 ft. would be luxury and possibly open up the opportunity to use

continental type seating with gangways only at the sides, at any rate in the smaller theatres.

So long as the capacity does not exceed about 500 there should be no difficulty in designing for an end stage with or without proscenium with all seats in one tier sharply stepped in relation to a low stage. The Mermaid (508 seats), the Phoenix, Leicester (275 seats), and the Hampstead Civic (160 seats), are examples of the single tier open end form and Pitlochry Festival, Scotland (502 seats), Civic Theatre, Rotherham (387 seats), and the Swan, Worcester (353 seats), of the proscenium version. When a single tier approach is used the width of the proscenium becomes very critical in respect of the total seats to be accommodated. In the open end stage this appears to have solved itself, but the question does arise, can there be this effect of great width and yet be wing space either side. Pitlochry shows how this can be done, at any rate in plan, the auditorium's side walls being angled to run in as a straight line which only terminates at the stage. This line is usually continued there as the scenic walls of the set. The width of 46 ft. at the proscenium opening is unusual as is its low height of 12 ft., yet the whole effect of seeing the show in this theatre is satisfactory. The fact that the audience look down at a low stage makes one less aware of the low-proscenium height than might be imagined. The partial revelation due to the tabs gradually withdrawing to the sides of this very wide opening is overcome by beginning scenes from a blackout.

The adjustment of the proscenium width at the Royalty, London (from 43 ft.–36 ft.) by moving the screen walls in front of the tabs is interesting, but at Worcester it is sad that the effectiveness of the same idea has been lessened by the positioning of the two gangways so as to isolate a few seats at the ends in each row and strain sight lines by pushing them hard over to the wall. In a small theatre of this sort regulations ought to have been relaxed to permit a complete seating block with side gangways only. The Crescent theatre, Birmingham, also has adjustable shutter sides to the proscenium which open completely to the full width of the theatre. In addition this theatre has a large turntable area to enable the stage floor and front stalls to change places and a transverse stage to be formed with the audience on either side. However, one half tends to look down and the other half to look up, and entrances for audience and actors then become intermingled.

Another small theatre in which the audience invade the stage is LAMDA in Kensington. Here the bulk of the audience sit in a fixed area with steeply stepped curved rows facing a normal proscenium stage but with a low floor. When opened up wide, movable stepped rostrums can carry the front rows onto the stage to embrace the acting area to a greater or lesser degree. This notion which works well at LAMDA has an unfortunate way of appearing in some projects in the shape of several hundreds of seats massed in the fixed area and the embrace part reduced to a token couple of rows put at each side of the stage. This is merely playing at it. The whole object of

getting the seating to encompass a greater area of the stage is to ensure that the bulk of members of the audience are nearer the actors.

The Goldsmiths' College theatre, a conversion of an existing building, shows another method of obtaining this audience embrace. In this case the stalls seats are removed and the floor raised on jacks to form a thrust stage. At the Questors, Ealing, the thrust stage is the principal form and the main seating is directed at it. End stage can be added in combination or as a strict proscenium only with seats in the centre area; but, as can be imagined, there are then poor seats at the sides and the centre ones are somewhat isolated.

Looking through the plans of this book it can be seen that some degree of variation is possible in most theatres, but where more drastic changes of form are required this can only be done in the case of the smaller enterprises. Even in the examples claimed as fully adaptable and just discussed the tendency is to choose one form and modify it with some degree of compromise, even makeshift, into the others. At the completely adaptable level, as in the case of St. Mary's, Twickenham, or the Studio, Cannon Hill, every form is a makeshift of rostrums re-arranged like blocks of bricks. This is right and proper in these experimental theatres which play an essential exploratory role. What is not so satisfactory is when there is loose talk of complete adaptability at full sized theatre level. This would entail a lot of expensive machinery and even then it can only move large inflexible chunks about as the Loeb theatre, Harvard in the United States has shown. When one considers the hard task presented by designing for just one form only to be really successful, especially when over 500 seats, the idea of the large automated completely adaptable theatre is seen for the philosopher's stone it really is.

A successful theatre is a subtle combination of elements and proportions every one of them taxing the architect's genius to the utmost. A line broken in the wrong place or placed at an unhappy angle and the feel of the auditorium may be that of a monumental wilderness—a mausoleum. This is on the aesthetic side. On the practical side there is a host of problems, acoustics, sight lines, lighting and ventilation, all of them tough even for one form.

Undoubtedly the most serious of these is access to lighting. In the case of St. Mary's, for example, it is far easier, granted the labour of the many students, to exchange the entire form in a matter of minutes whereas to change the lighting to match that form will take hours. At St. Mary's lanterns hang from a pipe grid to which access is only possible by ladder, yet in contrast the whole floor is trapped. In this instance the consultant architect came on the scene when the shell was nearing completion and height was not available for overhead lighting catwalks.

Why are forms other than the orthodox or the end stage demanded? The answer from the enthusiasts is that they develop a more

direct relation of an actor and audience.\* Seating capacity is greatly increased size for size. The actor ceases to be part of a picture to be looked at, and the embrace by the audience becomes essential both psychologically and physically because everyone must be brought

Inevitably this means a stage thrust out into the audience or even completely surrounded by them equally on all sides. This spells a complete change of focus. Such a theatre cannot be designed by an architect in vacuo, it must result from close collaboration with a director enthusiastic for the form. That the margins are narrow can be seen from the general admission that Stratford, Ontario, with 2,258 seats has a more "intimate" feel than at Chichester with nearly 900 seats less. At both these theatres the stage is raised relative to the seats and the same applies to Goldsmiths' College vet in the successful LAMDA and Questors examples it is at the lowest level. Indeed in the form of theatre known as "arena" in America and "in the round" over here, the stage must be at the lowest level or it will be impossible to light without glare in the eyes of the audience. The only definitive advice for both these encompassed forms that can be offered as yet is: keep the stage area small and do not allow actors and audience to use the same access to the auditorium. One must keep what John English calls the "Actors World" and the "Real World "close together but strictly separate. This last is good advice also for any stage, open or proscenium, and the recipe for success is almost as chancy. Pitlochry succeeds with an opening which is too wide and too low. The Mermaid London, Leicester and Hampstead succeed, yet they are but proscenium theatres shorn of all wing and fly space—facilities considered hitherto as absolutely essential. It is not as if they had abolished scenery, all three use lots of it. The truth is that the absence of wing space and or curtain may have not merit in itself but may have prevented some architectural mistake in appearance. Yet if it is the very wide open end effect that is the winner then we find that in an orthodox theatre this leads to excessive costs and over-large scenery. Perhaps the answer is the combination of stage and forestage. This can give both worlds. A reasonable practical scenic space fanning out into the wider, more open look. sometimes referred to as the space stage, when the forestage is used. But, beware the multiple frame and remember that the Old Vic, London, has made four separate attempts to get this right since it re-opened in 1950 and some may think it has not succeeded in this particular item vet.

The only sound advice is to visit as many theatres as possible before setting pencil to paper, but not those in Germany. The scale there is so different as only to mislead. There are now, as this

special issue of TABS shows, enough new theatres, and we have not

#### MULTI-PURPOSE HALL

All the buildings in this issue were designed to be theatres: halls built as multi-purpose, and concert halls which faute de mieux become multi-purpose, have been omitted. This is necessary to keep to a consistent story. The multi-purpose hall has nevertheless a part to play in theatre and a pamphlet\* on this subject has been published by the Theatres' Advisory Council. This preliminary guide was prepared for them by the A.B.T.T.

#### THEATRE COSTS

Where costs have been published in respect of theatres appearing in this issue these have been included. These are costs at the date (shown in brackets) of completion. Such costs, in consequence, do not represent a direct comparison; in any case the scale and types of building and their purpose differ so widely as to make comparison invalid. What the costs do show is that at such a cate and in such an area people were prepared and able to spend that amount of money on a theatre building.

The importance of each theatre must not be judged from the amount of space devoted to it. This issue is intended only to supplement in a convenient and condensed form items already dealt with in previous issues. However, in those instances where theatres have not before been described in Tabs a facing spread of two pages has been allocated provided suitable material was available. Due to lack of space only architects have been credited together with the theatre consultant when one has been employed.

Lastly, it must be stressed that inevitably each theatre is a mixture of things that came off and things that did not, in varying proportions. It is advisable therefore that the following plans should be subjected to careful analysis.

been able to cover them all, to justify a grand tour of Britain. Each of the architects illustrated herein has tried to solve this tough problem in the "climate" over here, using that word in every sense. In consequence each of these examples and the people using them have much to teach and help in the design of a theatre or stage, little or large, amateur or professional, orthodox or experimental. The clues are all there to be picked up and the drawings once formulated, the A.B.T.T. can then be consulted to have them checked for the technical "howlers" all of us are liable to make.

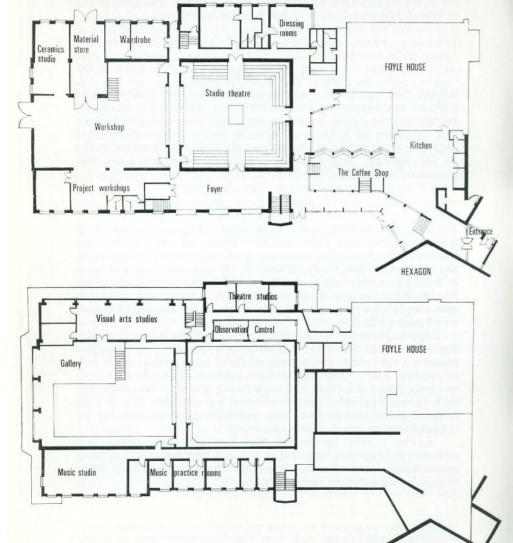
<sup>\*</sup> For an enthusiast's own words on this subject see Planning for New Forms of Theatre, by Stephen Joseph, published free by Strand Electric (enlarged and revised edition, 1966).

<sup>\*</sup> Planning the Multi-Purpose Hall: Some Theatrical Considerations, 2s, 6d, post free from Theatres' Advisory Council, 9 Fitzroy Square, W.1.

#### Birmingham, Cannon Hill, Studio (1965) Jackson and Edmonds.

Studio theatre for John English's Youth Enterprise. Prosc. like opening between theatre (45 ft. square) and workshop is 24 ft. wide. Adaptable by rostrums to several forms thereby varying seating from 200 to 300 in one tier. Lighting accessible from a gallery and overhead crawlways.

(Tabs 23, iii)

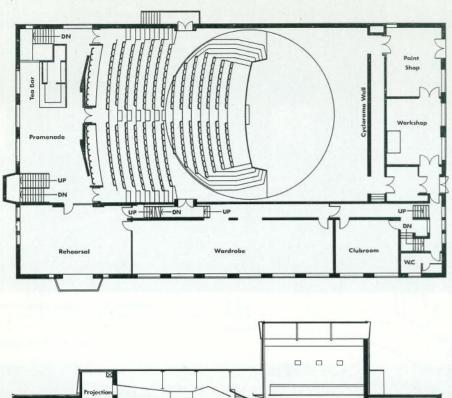


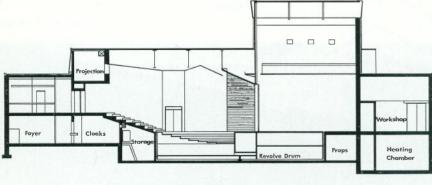


Cannon Hill, Studio, Birmingham.

Crescent, Birmingham.



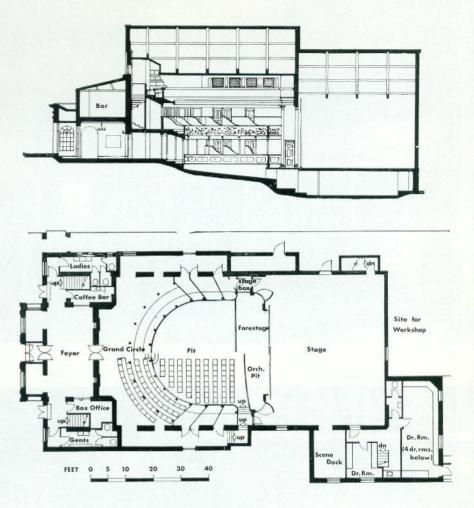




Birmingham, Crescent (1964) S. T. Walker and Partners (Graham Winteringham).

Amateur Theatre. End stage 55 ft. wide approx. with 33 ft. high grid over and movable pros. walls. Further adaptation by mounting front stalls and main stage area on turntable to enable them to be reversed. 288 seats in one tier. Cost £80,000.

(Tabs 22, iv)



Bury St. Edmunds, Theatre Royal Eighteenth century restored 1965. Consultant: Iain Mackintosh.

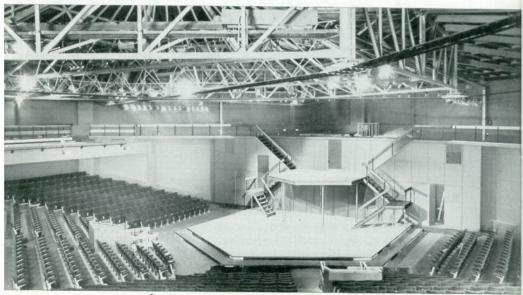
Professional/amateur theatre. 400 seats. 28 ft. pros. with orchestra/ forestage and Georgian door adaptability. With forestage the stage is 10 ft. deeper than the auditorium and the most distant spectator in the gallery is only 42 ft. from the stage.

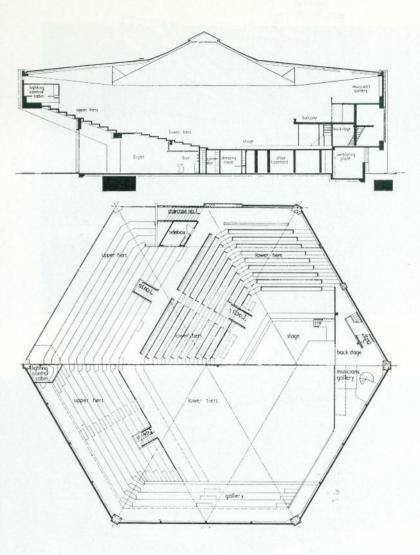
(TABS 23, ii)



Theatre Royal, Bury St. Edmunds.

Festival Theatre, Chichester.



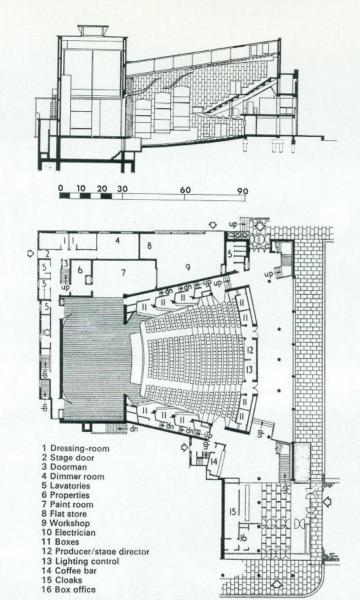


Chichester Festival (1962) Powell and Moya with Christopher Stevens.

Consultants: Peter Jay and Partners.

Professional theatre for a festival company. Open thrust stage 32 ft. wide by 39 ft. deep with 1,360 seats in one tier except for side galleries of three rows. Stage balcony structure removable to allow variation of setting. Cost £178,300.

(TABS 20, i, and 20, ii)



Coventry, Belgrade (1955) City of Coventry Architects Dept.

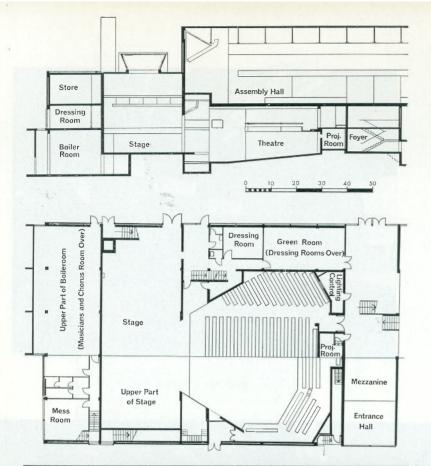
Civic theatre with resident professional company. 910 seats in two tiers. Pros. opening 35 ft. 7 in. Forestage permanent except for seven 5 ft. by 4 ft. sections which remove to make orchestra pit. Forestage to setting line 12 ft. and stage 27 ft. deep beyond. Cost £192,600.

(First Review)



Belgrade, Coventry.







Corby Civic Theatre (1965) Enrico de Pierro and Partners Amateur/Professional. 545 seats in two tiers. Pros. 26 ft. × 14 ft. Stage depth 29 ft. plus 5 ft. apron. Overall width 58 ft. Height to grid 28 ft. Situated under multi-purpose assembly hall seating 1,388 used for concerts, dances and wrestling. The foyers are also intended for exhibitions. (First Review)



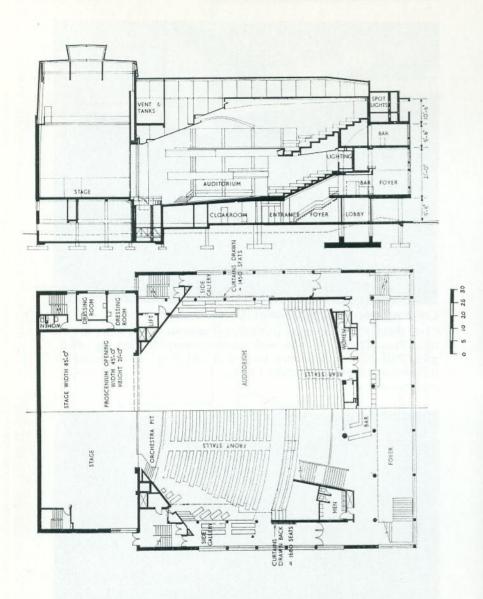
Croydon, Ashcroft (1962) Robert Atkinson and Partners.

Civic theatre with resident professional company. 740 seats in two tiers. Pros. 28 ft. 6 in. wide with partly convertible forestage. 48 ft. grid. Part of a civic centre known as the Fairfield Halls which includes a concert hall seating 1,950.

(TABS 21, i)



21



Eastbourne, Congress (1963) B. & N. Westwood, Piet and Partners. Civic multi-purpose hall theatre. 1,678 seats in two tiers. Large area of main floor raked with stepped terrace beyond and balcony over. Pros. 45 ft. adjustable to 37 ft. and 52 ft. grid. (First Review)



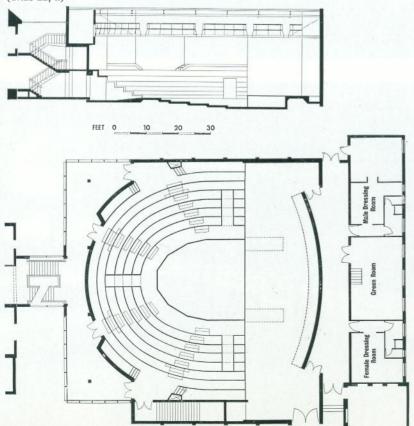
Congress, Eastbourne.

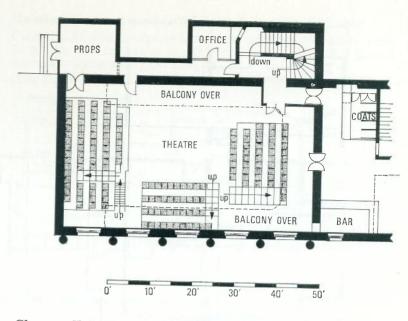




**Ealing, London, Questors (1964)** W. S. Hattrell and Partners (Norman Branson ARIBA)

Amateur theatre. 350 seats in permanent horseshoe enclosing thrust stage 27 ft. by 25 ft. Open end stage beyond with permanent cyclorama. Adaptable in varying degrees to arena, end, and pros. stage. Lighting from open bridges and peripheral gallery. Cost £65,500. (Tabs 22, ii)

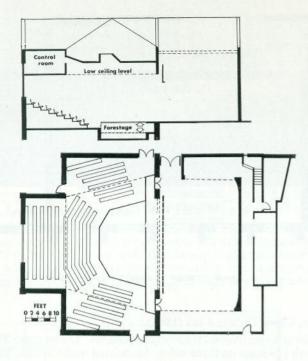




#### Glasgow, Close Theatre Club (1965).

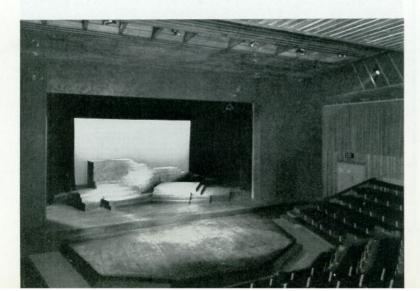
Professional experimental theatre (conversion). Thrust stage 24 ft. by 20 ft. with 149 seats on three sides. Associated with Citizens Theatre. (TABS 24, i)





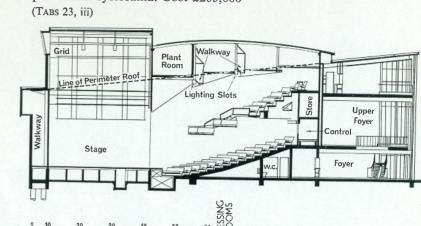
Goldsmiths' College London University (1964) Enthoven and Mock.
Theatre Consultant: Lawrence Hayes.

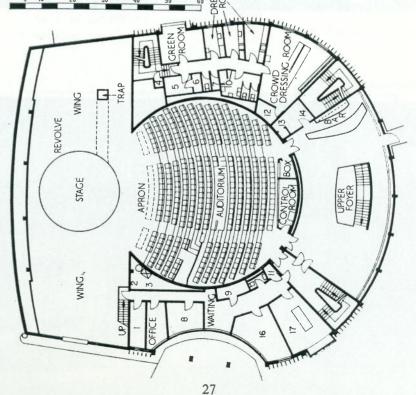
University theatre. Conversion of a chapel. 260 fixed seats with further 60 added when thrust stage 14 ft. 6 in. deep is lowered hydraulically to floor level. Pros. 30 ft. Permanent cyclorama. (Tabs 22, ii)



#### Guildford, Yvonne Arnaud (1965) Scott, Brownrigg and Turner.

Civic theatre with professional resident company. 574 seats. Pros. 37 ft. wide with removable forestage/orchestra. Grid 39 ft. high and permanent cyclorama. Cost £263,000







Yvonne Arnaud, Guildford.

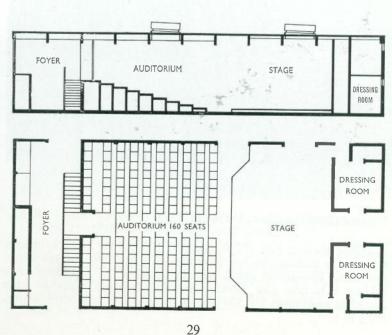
Civic, Hampstead.

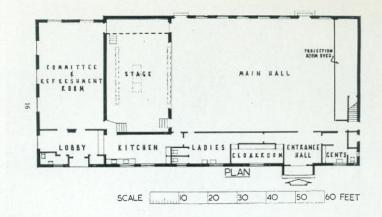




Hampstead, Civic (1963) Ian Fraser Associates (A.D. Gough, ARIBA) Professional theatre club. 160 seats in one tier. Open end stage but house tabs can be used. Prefabricated timber building 69 ft. 8 in. long by 31 ft. 8 in. wide and 19 ft. 6 in. high internally. Separate scene store. Cost £16,000.

(TABS 21, i)







Holme on Spalding Moor, Yorkshire (1959) Colin Rowntree, FRIBA. Consultants: Miles Hutchinson and Percy Corry.

A village theatre. Pros. 22 ft. wide by 10 ft. 3 in. high. Built as a theatre the auditorium has nevertheless a flat floor to suit other activities. This defect could now be lessened by including some folding bleachers (see Leeds Grammar School). Cost in cash including equipment £10,500 plus 16,000 hours of voluntary labour. (TABS 18, i)

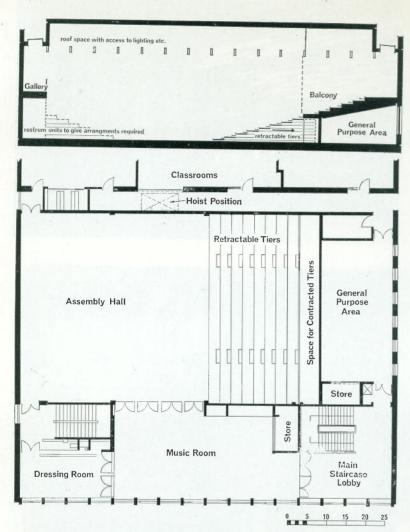




Jeannetta Cochrane, London (1965) LCC Architects Department.

Art School Training theatre licensed for public performances. Pros. 28 ft. wide  $\times$  16 ft. high with 45 ft. grid and 35 counterweight sets. Apron to setting line 6 ft. and stage 27 ft. deep and 54 ft. wide beyond. Scenery workshops are contiguous with stage and adjoin Central School of Arts and Design, of which it is part. (Tabs 23, ii)

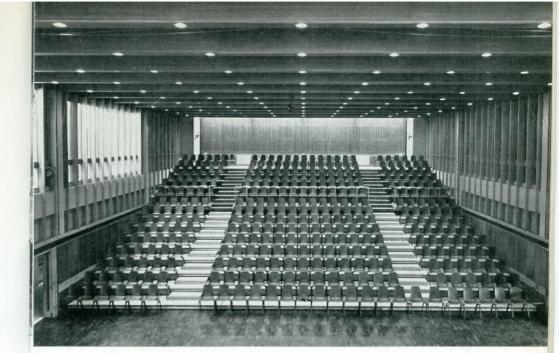
31



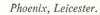
Leeds, Grammar School (1965) G. Alan Burnett and Partners.

Consultant: Stephen Joseph.

School Hall. 1,000 standing or 600 seated. Adaptable to end staging by pulling out bleacher type tiers (light risers) with stackable non-tip-up seats to join balcony (dark risers) as one continuous tier for 350 seats. Hall floor itself becomes the stage and is 50 ft. wide. With balcony curtained off rostrums can be set up to provide for other forms such as thrust, transverse or centre stage. The large music room in the plan becomes the foyer for performances. (TABS 23, iii)



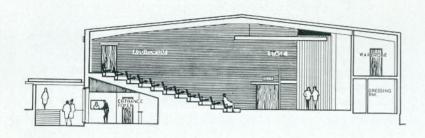
Grammar School, Leeds.

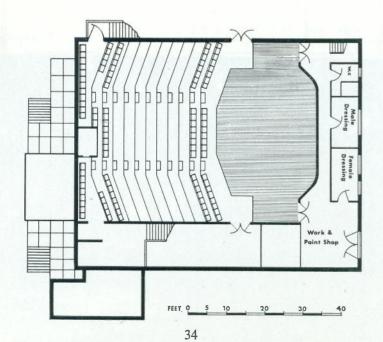




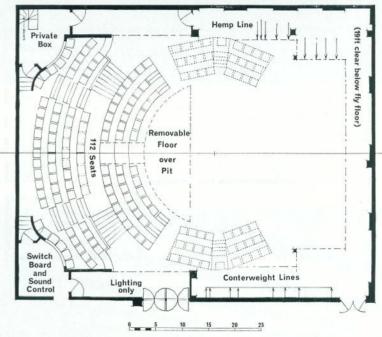
Leicester, Phoenix (1963) City of Leicester Architects Dept.

Civic theatre for resident professional company. 275 seats in one tier. Open end stage 47 ft. wide. Centre projection 32 ft. and 27 ft. deep. Standard steel frame warehouse-type building. Cost £29,180. (Tabs 21, iii, and 23, i)





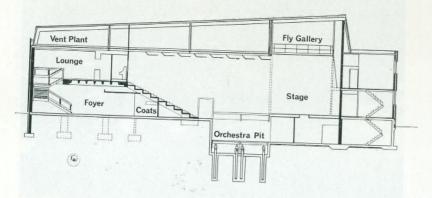


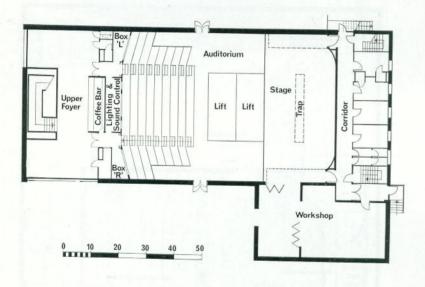


LAMDA London (1963) Humphreys and Hurst.

Consultant: Michael Warre with John Terry.

Training theatre. 150 seats in permanent curved terrace (18 in. risers) facing 43 ft. 6 in. wide open pros. stage at the lowest level with 42 ft. grid over. Adaptable to various forms of arena by addition of movable extra seating rostrums placed on the stage. FOH lighting from gallery and ceiling slot. Cost £44,500.





Manchester University (1965) The Building Partnership (G. Grenfell Baines, FRIBA, in conjunction with H. Thomas, LRIBA).

Consultant: Richard Southern.

University theatre for professionals and amateurs Open end stage 52 ft. 6 in. wide but with house tabs. Two thrust lifts to form seating, orchestra, or Elizabethan stage. Seats 300 approx. in one tier for the principal forms.

(First Review)



Manchester University.

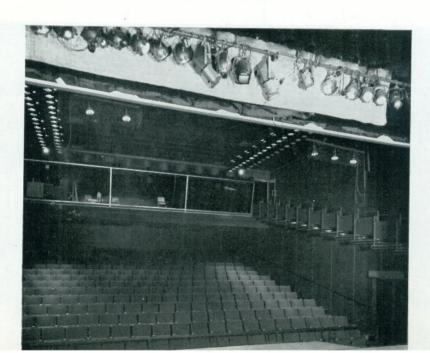


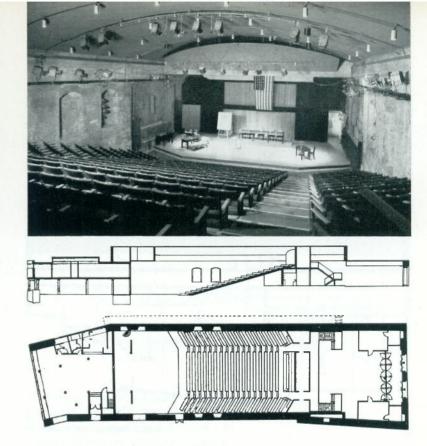


#### May Fair, London (1963) George Beech ARIBA.

Commercial theatre as part of the hotel. 310 seats in one tier. Pros. opening between columns 24 ft. 5in. Overall opening, 38 ft. 8 in. wide. Stage, 39 ft. 8in. wide  $\times$  24 ft. deep. Grid 34 ft. 8 in. high with 27 counterweight sets.

(TABS 21, ii)



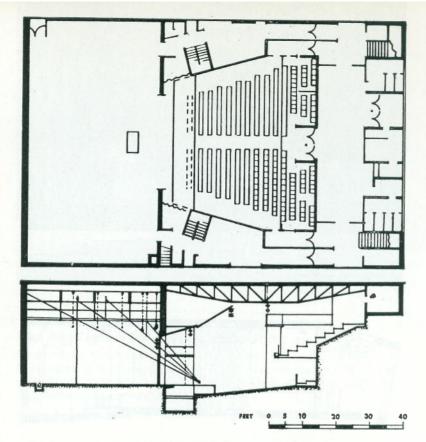


#### Mermaid, London (1959) Elidir Davies, FRIBA.

Professional theatre. 508 non-tip-up seats at 3 ft. 3 in. back to back. Open end stage 39 ft. wide entered from up-stage only. Suspension grid (no flying) over stage.

(TABS 17, ii)





Middlesbrough, Little (1958) Henry Elder and Enrico de Pierro. Consultant: Percy Corry.

Amateur theatre. 512 seats in two tiers. Pros. 26 ft. wide by 14 ft. high. Removable forestage/orchestra pit. No fly tower but large stage area 70 ft. wide by 40 ft. deep. Cost £50,000.

(TABS 16, i and 23, ii)





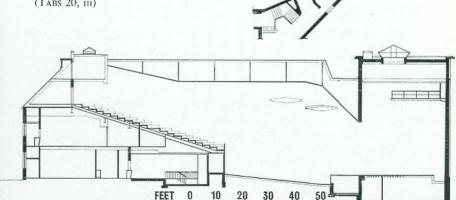
People's Theatre, Newcastle

Plan of stage area and front part of auditorium (right). Section through theatre (below).

Newcastle, People's Theatre (1962) Chackett, Birks, Dick and Mackellar.

Amateur theatre. Conversion of cinema. 900 seats reducible to 600 by screening off half the balcony. 34 ft. pros. Removable forestage/orchestra pit. Permanent curved cyclorama wall. 35 ft. grid.

(Tabs 20, iii)

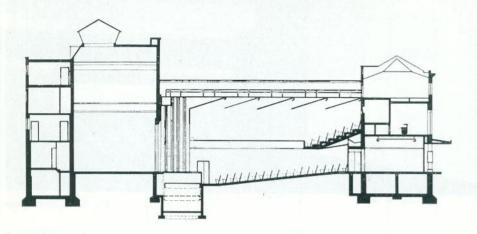


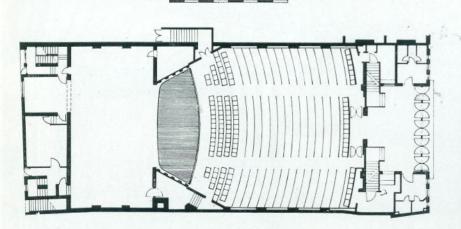
41

Oxford, Playhouse (1964) Fred Rowntree and Son (Martin Card). Consultant: John Wyckham.

University theatre for professionals and amateurs. 849 seats in two tiers. 28 ft. pros. with orchestra/forestage lift. Entrances and Juliet balconies in proscenium framing. 37 ft. grid.

(TABS 22, ii)

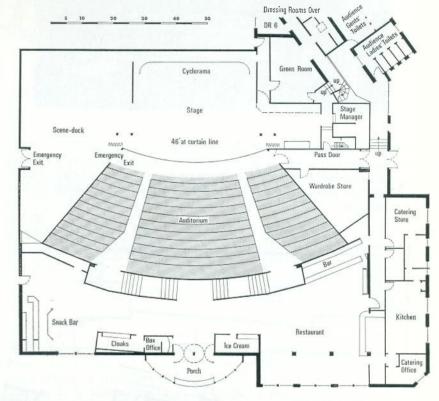




Pitlochry Festival (1951). Designed by John Stewart and Kenneth Ireland.

Professional theatre for a festival company. 502 seats in one tier. Pros. 46 ft. wide by 12 ft. high. Form of theatre governed by shape of original tent now replaced by structure of varying degrees of permanence.

(TABS 23, iv)

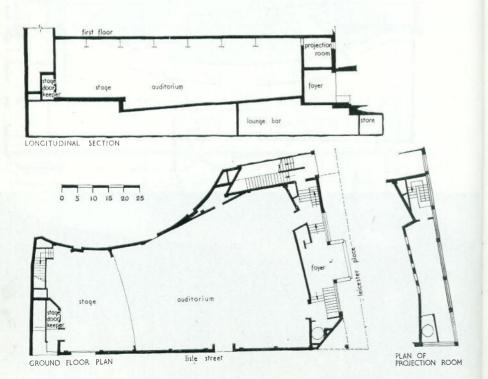


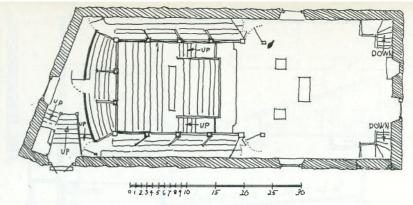


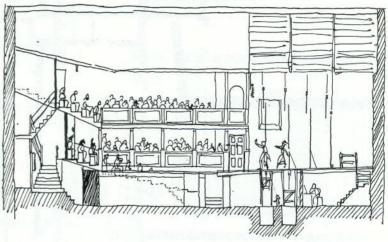


#### Prince Charles, London (1963). Carl Fisher and Associates.

Commercial theatre now a cinema. 420 seats in one rake. Pros. 30 ft. wide. Extremely cramped site. Stage without wings and height over. Dressing rooms and other areas in basement under the stage itself. (Tabs 21, i)

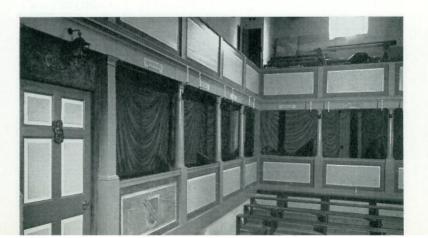


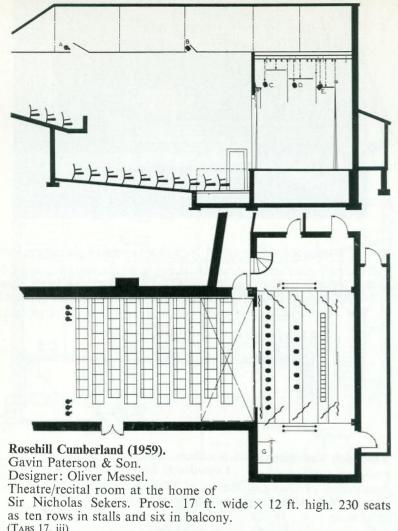




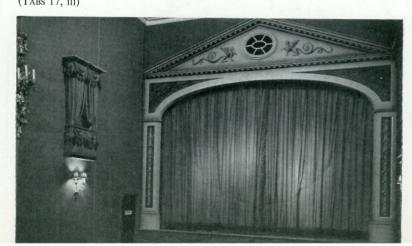
Richmond, Yorkshire (1962) Needham, Thorpe and White. Consultant: Richard Southern.

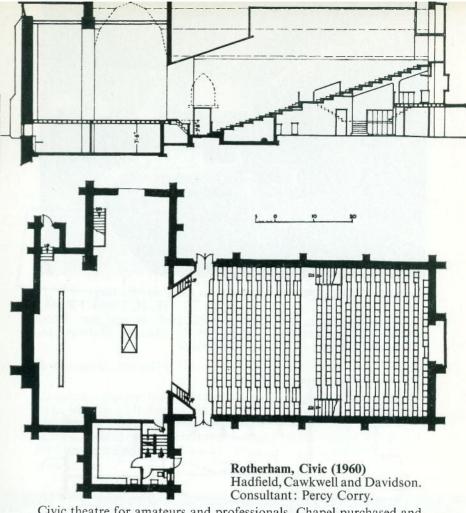
Restoration of Georgian theatre of 1788. Auditorium 26 ft. 8 in. long by 24 ft. wide. Stage one inch deeper. Pros. 17 ft. wide. (Tabs 20, ii)





(TABS 17, iii)





Civic theatre for amateurs and professionals. Chapel purchased and converted. 387 seats in one tier. Pros. 26 ft. wide by 14 ft. high. (24 ft. 6 in. to RSJs above stage). Removable forestage/orchestra pit. Cost £40,000.

(Tabs 23, ii)



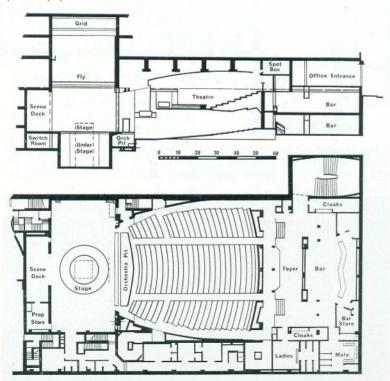


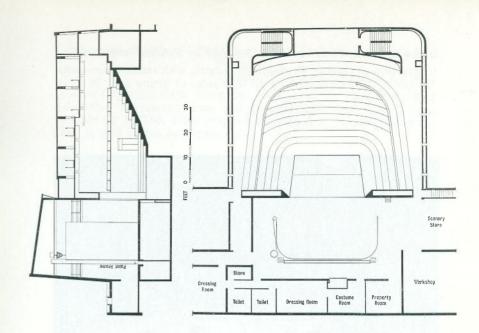
Royalty, London (1960) Lewis Solomon Kaye and Partners.

(E. H. Tietjen FRIBA)

Commercial theatre now a cinema 997 seats in two fiers Press

Commercial theatre now a cinema. 997 seats in two tiers. Pros. opening variable between 43 ft. and 36 ft. Orchestra lift/forestage. 52 ft. grid. Forms part of large office block. (Tabs 18, ii)





#### Southampton, Nuffield (1964) Sir Basil Spence and Partners. Consultant: Richard Southern.

University theatre for professionals and amateurs. Pros. opening 30 ft. wide by 15 ft. high. Grid 32 ft. Two lifts to form extra seating, orchestra or Elizabethan stage (access via pros. opening itself only). Seats 420–500 approx. in one tier, for both picture frame and thrust forms with terrace sides. Cost £150,000.

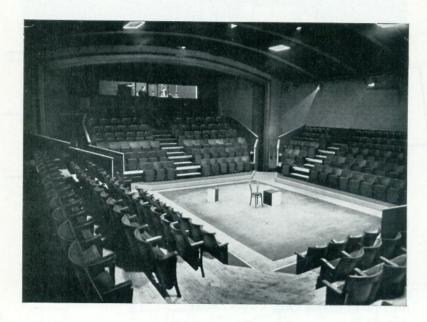
(Tabs 22, ii)

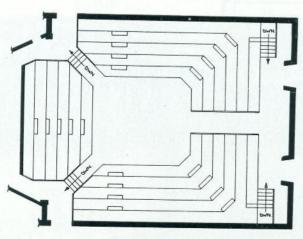


Stoke-on-Trent, Victoria (1962) Designed by Stephen Joseph.

Conversion of cinema. Professional theatre, with resident company. 345 seats "in-the-round" on all four sides of acting area 24 ft. by 22 ft.

(Tabs 20, ii)





Consultant: Norman Branson, ARIBA.

Teacher training college. Main area  $70 \times 40$  ft. by 18 ft. 6 in. high. Adaptable to many forms using some 124 rostrums. Seating variable up to 250. Fully trapped floor in 4 ft. squares but fixed lighting grid access by ladder only. (Tabs 21, i)

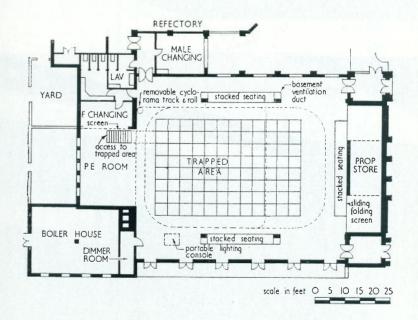
roof space with ventilation trunking

carwalk —

Cyclorama lighting a scenery grid —

PEROOM lockable traps—

removable supports





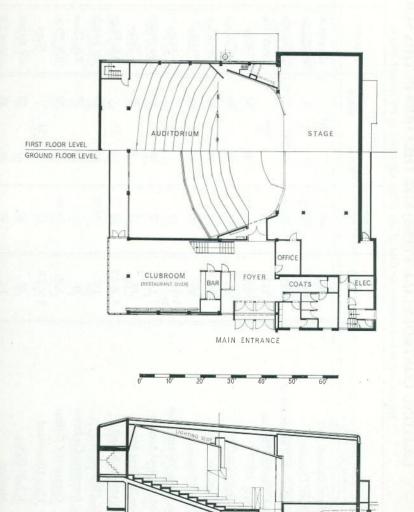
St. Mary's, Twickenham. Swan, Worcester.



#### Worcester, Swan (1965) Henry Gorst, ARIBA.

Amateur/professional theatre. Pros. opening variable between 24 ft. and 36 ft. wide. Convertible orchestra/forestage but no pros. entrances. Good example of F.O.H. lighting slot. Seats 353 in one tier. Cost £60,000 plus donations in kind.

(TABS 24, i)



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## LIGHTING CONTROLS (ALL TYPES) FOR THEATRES IN THIS SURVEY Figures in brackets indicate the limit of any future expansion on the present system

		DIMMER	CIRCUITS	TS			
	SYSTEM	CHANNELS	F.O.H.	STAGE	PATCHING	PRESETS	GROUP
Birmingham, Cannon Hill	JP	40	40†		c/o switch	3	1
Birmingham, Crescent	TC	48(72)	. 72		Cord/Jack	2	3
Bury St. Edmunds, Theatre Royal	TC	48(72)	15(20)	33(52)	c/o switch	2	3
Chichester, Festival Theatre	IC	72	100		Cord/Jack	2	3
Corby, Civic	SR	36(54)	20	34	None	-	3
Coventry, Belgrade	PR	09	18	48	c/o switch	*	3
Croydon, Ashcroft	PR	96	28	96	c/o switch	*	3
Eastbourne, Congress	PR	72	18	54	None	2*	3
Glasgow, Close Theatre Club	HA	12	24		None		I
Guildford, Yvonne Arnaud	TC	72	26	62	c/o switch	2	3
Holme-on-Spalding Moor	JS	32	4	28	None	1	1
Leeds, Grammar School	$3 \times J.8$ .	24	74		B.S. Plugs	1	1
Leciester, Phoenix	TC	48(72)	44	20	c/o switch	2	3
London, Jeannetta Cochrane	JP	09	20	50	B.S. Plugs	3	1
Goldsmiths' College	S.R.	24(36)	28	30	B.S. Plugs	1	3
Civic Hampstead	$3 \times J.8$ .	24	24		None	1	1
L.A.M.D.A.	JP	.09	25	52	c/o switch	3	1
Mayfair	rc	48	36	48	c/o switch	2	3

Mermaid	SR	54	114	89	Cord/Jack	1	n
Prince Charles	TC	72	24	48	None	2	3
Questors	rc	48(72)	48(72)		None	2	3
Royalty	8	120	30	06	None	*	14
Manchester, University	TC	72	34	38	None	2	3
Middlesbrough, Little Theatre	SR	54	20	09	Cord/Jack	1	3
Newcastle-on-Tyne, People's	LC	48(72)	26	46	B.S. Plugs	2	3
Nottingham, Playhouse	CD	100	40	09	None	2*	14
Oxford, Playhouse	TC	72	54	50	c/o switch	2	3
Pitlochry, Festival Theatre	JS and Slider	51	12	39	None	T	1
Richmond, Yorks.	IC	24	4	25	Cord/Jack	7	3
Rosehill,	Sf	32	10	22	None		1
Rotherham, Civic Theatre	SR	36	9	30	None	0	3
Southampton, Nuffield	PR .	72	32	52	c/o switch	2*	3
Stoke-on-Trent, Victoria	PS.8.	16	78		B. S. Plugs	1	1
Twickenham, St. Mary's	SR	24	48		c/o switch	1	3
Worcester, Swan	JP	40(60)	24	36	c/o switch	3	1
						2012	

<sup>\*</sup>Electro-mechanical servo-system.  $^*$ Electro-mechanisty of  $\alpha$  B, of outlets for every dimmer.  $^*$ Each circuit feeds a double socket outlet and there are two sets, A & B, of outlets for every dimmer.

# LIGHTING CONTROLS (PRESET ONLY) FOR OTHER THEATRES IN BRITAIN

Figures in brackets indicate the limit of any future expansion on the present system.

		DIMMER	CIRCUITS	CITTS			
	SYSTEM	CHANNELS	F.O.H.	STAGE	PATCHING	PRESETS	GROUPS
Blackpool, A.B.C.	CD	120	48	72	None	2*	14
Grand	田	96	10	98	None	2	2
Royal Pavilion	щ	96	12	84	None	2	2
Birmingham, Alexandra	CD	120	36	90	c/o switch	2**	14
Bournemouth, Pavilion	田	108	24	84	None	7	2
Bradford, Institute of Technology	rc	72	16	64	B.S. Plugs	2	· m
Bristol, Theatre Royal	PR	72	20	52	None	2*	3
Cheltenham, Everyman	CC	48	18	4	B.S. Plugs	2	3
Croydon, Fairfield Hall	PR	72	72	6)	None	2*	3
Edinburgh, Kings	闰	96	∞	88	None	2	7
Glasgow, Kings	田	96	19	77	None	7	2
Glyndebourne, Festival Opera	CRD	120	48	140	Cord/Jack	4	3
Liverpool, Playhouse	PR	72	18	58	B.S. Plugs	2*	8
London, Adelphi	CD	150	25	185	Remote	*	20
Aldwych	9	120	33	87	None	*	14
Apollo	C	120	30	90	None	2*	14
Cambridge	G	120	22	86	None	*	14
Comedy	CD	120	26	94	None	*	14
Garrick	SR/P	66	27	72	None	2	3
Lyric	CD	120	30	06	None	*	14
New	PR	134	22	112	None	7*	2
Old Vic	Special	140	89	108	Remote	3	6
Palace	8	120	24	96	None	*	14
Palladium	CAE	240	98	178	c/o switch	2	40

41 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	
**************************************	* 0 % 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
None Cord/Jack None None None Remote Remote None None None None None None None Non	None None None None B.S. Plugs
96 276 276 94 118 90 150 160 170 96 96 98	47 52 58 60 70
25 26 26 27 26 27 28 30 30 43 30 43 30 43 43 43 44 45 46 47 47 47 47 47 47 47 47 47 47 47 47 47	
120 240 240 120 120 130 130 144 120 120 120 120 120 120 120 120 120 120	63 72 72 73 48 100
9989 m 939 x x 9 8 x 9 3 m x 3 m 9 x x	PR LC LC LC
Piccadilly Queens Royal Opera House Sadler's Wells Saville Savoy Scala Shaftesbury Shaftesbury Shell Centre St. Martins Strand Westminster Whitehall Wyndham's Vanburgh (RADA) Manchester, Opera House Sheffield, Playhouse Southend, Cliffs Pavilion Stratford-on-Avon, Royal Shakespeare Sunderland, Empire Torquay, Princess	Weymouth, Favinon Wimbledon, School of Art Windsor, Theatre Royal Yarmouth, A.B.C. York, Rowntree Theatre Royal

<sup>\*</sup>Electro-mechanical servo-system
Drury Lane (216), London Coliseum (216), Her Majesty's Theatre (152), Talk of the Town (120), Royal Festival Hall (84), Palace Manchester (108), have large remote controls, as the number of channels in brackets shows, but as these are Strand Light Consoles they cannot be regarded as preset systems.

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