

TABS

Published in the interests of the Theatre
by

The Strand Electric and Engineering Co. Ltd.

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EDITORIAL

Spring Lecture Programme

Demonstration Theatre, 29 King Street, W.C.2

The demonstrations with one exception begin at 6.30 p.m. (doors open 6.15 p.m.) and admission is free but by ticket available on receipt of **stamped addressed envelope to Head Office.**

Wednesday, January 18th at 6.30 p.m.

“ Lighting The Scene ”

Recorded lantern slide version with opportunity to ask questions afterwards.

Friday, February 10th at 6.30 p.m.

“ Stage Lighting 1961 ”

Talk with demonstrations by Frederick Bentham.

Thursday, 23rd February at 6.30 p.m.

“ Producers Use of Lighting ”

Lecture by P. Corry.

Tuesday, 28th March at 7 p.m.

“ Cue for Questions ”

A Brains Trust evening—see below.

Friday, 21st April at 6.30 p.m.

“ Colour Music ”

Frederick Bentham and Paul Weston.

“ Cue for Questions ”. The team will be Dr. Richard Southern, Mr. Percy Corry and two other well-known specialists to be chosen later. Thus the team will consist of an authority on theatre planning and stage scenery, a producer who is also an actor, and it is hoped that the remaining two members will be a protagonist of open staging and a professional lighting man. The names of the team will appear in *The Times Educational Supplement* in early March.

The question-master will be Frederick Bentham. Questions, which will of course not be shown to the team in advance, can be submitted up to 6.50 p.m. on the day itself. This meeting will begin at 7 p.m. (doors open 6.40 p.m.).

The “ Colour Music ” programme, played on the Light Console, will include the three “ Pictures from an Exhibition ”, items included for the first time last year. Mr. Bentham also *hopes* to find time to devise something fresh for this year. A novel item will be a solo for Sunspot Arc, a rhythm number played on this unusual instrument by Paul Weston.

We regret we can only give “ *Lighting the Scene* ” in its recorded version this season, and to those who are wondering what the difference is between “ *Stage Lighting 1960 Lecture* ” of the autumn and the “ *Stage Lighting 1961 Lecture* ” of the spring—the answer is “ no difference.”

Stage Lighting Paper
at the Illuminating Engineering Society

At the sessional meeting in London on Tuesday, November 8th last, the President, Dr. W. S. Stiles, F.R.S., introduced Frederick Bentham who is a fellow of the Society, to give his paper entitled "Twenty-five Years of Stage Lighting Equipment".* Characteristically Mr. Bentham dispensed both with the paper and notes and launched into a lecture illustrated by some 70 slides, many in colour. Simultaneous projection on twin screens was frequently used to make points of comparison. Mr. Bentham explained that the paper must be considered as one of a trilogy—the others dealing with "The Control of Stage Lighting by Switchboards" and "The Art of Painting the Stage with Light" respectively. The "Control" paper has in fact been presented at the I.E.E.† and the "Painting" paper has yet to be written.

The paper described the development of stage-lighting equipment in Britain during the past 25 years and indicated the forces which had been and were at work to produce this development. The effects of stage design and economics were considered. The great difference between British and German practice and the lesser difference between British and the United States practice, were outlined. The post-war influence of the New York theatre on lighting layouts in London's West End was described (without enthusiasm) and contrasted with the happy isolation which financial stringency had ensured to the amateur and little theatre movement.

In conclusion a demonstration was staged which illustrated the great difference between the light output commonly extracted from a 1,000 W. spot as a hard edge beam 25 years ago and that today. A difference in fact of 85 times the intensity. The demonstration also showed how a standard profile spotlight could be made to perform many functions by merely changing the objective lens and allowing the lantern to function efficiently. The demonstration lent force to the argument developed in the paper that rationalisation of stage-lighting lanterns could take place and the number of types be drastically reduced.‡

The lecture will be repeated, using, it is hoped, the same demonstration technique as in London to the Illuminating Engineering Society in Edinburgh on Wednesday, March 1st and in Glasgow on Thursday, March 2nd. Tabs readers interested should get in touch with Mr. Martin at: Stage Furnishings Limited, 346, Sauchiehall Street, Glasgow, C.2.

The discussion was opened by Mr. John Wyckham. Mr. William Lorraine, Mr. E. E. Faraday, Dr. J. W. Strange and Mr. L. G. Applebee were among those who took part.

* To be published in the I.E.S. transactions in due course.

† Bentham, F. P. "Electric Control of Stage and Television Lighting", I.E.E. Proceedings, Vol. 105, A, No. 20 (1958).

‡ See *Lighting for Entertainment 1961*—the new Strand catalogue.

Tabs Index

Your Editor has frequently lamented the absence of an index and expressed a hope to members of his department that someone would have a go. There have been no volunteers and just when all hope had vanished the TABS mail produced that very thing—a Subject-Index of Articles. The benefactor is Victor Thornton of Beckenham, a reader from the very beginning. Very few complete sets of TABS exist and, of course, an index covering the whole post-war period of a magazine (some 30 issues) is bound to be tantalising, especially to new readers. Absence of copies and references prior to the war, i.e. Vols. 1, 2 and 3 need not be regretted, they have only curiosity or sentimental value. Of the issues since then only very few remain in print and these will be deposited as complete sets in Toronto, Melbourne, Manchester and Head Office as a chain bible for reference.

Copies of the Index itself will be available free* and readers are reminded that binders of the do-it-yourself type with stiff board covers and the index are also available at 7/6.*

*Post free in Britain.



Lighting for Entertainment 1961

A new edition of the Strand Electric catalogue has just been published. This edition shows the new rationalised range of equipment. The aim has been to reduce the number of basic types of lighting unit and achieve the required lighting distribution by attachments or minor modifications to a versatile basic lantern. Reduction of types enables full tooling to be employed in the manufacture of those that remain, with consequent better finish and lower price. Copies of the catalogue can be obtained free and post free from Head Office and the branches.

STRATFORD-ON-AVON IN LONDON

The great event of 1960, albeit just in that year by the skin of its teeth, is the establishment of a London home for the Shakespeare Memorial Theatre Company. Apart from the artistic and theatrical implications, it brings a particular interest to TABS readers, namely an addition to the repertory type lighting layouts. Hitherto this type of layout has, as far as the London West End theatre was concerned, been limited to Covent Garden Opera, Sadler's Wells Opera, the Old Vic and the London Palladium. Of these geographically Sadler's Wells and the Old Vic are hardly the West End. All other theatres are rigged purely for the run in question, though fortunately more and more have adequate permanent control boards.

The Stratford Repertory system requires a semi-permanent layout capable of versatile performance with the minimum of change. In our April issue of TABS we hope to go into more detail, but meantime we publish opposite the switchboard schedule and a comparison with that published for the Savoy Theatre (TABS, Vol. 18, No. 1) will be of interest. The control console is the first system C.D. with two dimmer presets (ahead of the lighting in use) to be installed in a London theatre. Such consoles are common in television. The console also has the normal fourteen instantly adjustable "memories".

These allow lighting groups which take in any circuits anywhere on the control to be set up instantly for recall as often as required by touching one button. Such "memories" can be reset as differing groups during the progress of the show. In addition to these adjustable groups there are permanent groups such as the Front-of-House, Stage Dips (for interval setting), and so on. Selection of circuits manually is facilitated by the ready motion of the stop-keys. Using system C.D. there is no flicker in the stage lighting when set-



ting up for lighting cues. This applies whatever the type of cue. For example, there is no flicker at all when putting circuits independent of the blackout or master dimmer. A further feature of C.D. is the ability to carry out the coarser type of lighting cues without use of dimmer levers at all. Even where use of dimmer levers is required to give precise presetting, it will not normally be necessary to set dimmer levers for circuits to dim out. "Remainder-dim" automatically removes all dimmers not selected on the stop-keys.

Dimmer Schedule for new Strand Control at the Aldwych Theatre

Dimmer Ref. No.	Circuit Name	DIMMERS	
		Number of	Rating
Front of House Master			
1	Dome Left	1	1 kW
2-6	Balcony Wall Left	5	0.5/1 kW
7-10	Circle End Left	4	{ two 1/2 kW two 0.5/1 kW
11-12	Circle Effect Left	2	0.5/1 kW
13-21	Upper Circle	9	0.5/1 kW
22	Dome Right	1	1 kW
23-27	Balcony Wall Right	5	0.5/1 kW
28-31	Circle End Right	4	{ two 1/2 kW two 0.5/1 kW
32-33	Circle Effect Right	2	0.5/1 kW
Float, Batten, Cyclorama Master			
34-36	Float	3	1/2 kW
37-39	Batt. 1	3	1/2 kW
40-42	Batt. 2	3	1/2 kW
43-45	Batt. 3	3	1/2 kW
46-53	Cyc. Top	8	1.5/3 kW
54	Effect	1	1/2 kW
Bar Master			
55-66	Bar 1	12	1 kW
67-72	Bar 2	6	1/2 kW
73-80	Bar 3	8	1/2 kW
81-84	Bar 4	4	1/2 kW
Perches, Dips Flys Master			
85-90	Perch Left	6	0.5/1 kW
91-93	Dip Down Left	3	1/2 kW
94-96	Dip Up Left	3	{ two 2 kVA T one 1/2 kW
97-99	Fly Down Left	3	{ one 2 kVA T two 1/2 kW
100-102	Fly Up Left	3	{ one 2 kVA T two 1/2 kW
103-108	Perch Right	6	0.5/1 kW
109-111	Dip Down Right	3	1/2 kW
112-114	Dip Up Right	3	{ two 2 kVA T one 1/2 kW
115-117	Fly Down Right	3	{ one 2 kVA T two 1/2 kW
118-120	Fly Up Right	3	{ one 2 kVA T two 1/2 kW

T = 2 kW infinitely variable load transformer

Dimmers shown 0.5/1 kW, 1/2 kW or 1.5/3 kW are variable between these figures.



Dillington House, Somerset, since 1950 a College for Adult Education.

DILLINGTON HOUSE THEATRE

by Harvey Sheppard

The Dillington Theatre stands in the middle of a spacious Somerset park with fine old trees. The park is primarily a setting for the manor, Dillington House, dating from the 16th century, which is surrounded by "formal and pleasure grounds", to use the terms of the eighteenth century lease. Dillington House was adapted to serve the use of succeeding owners, of whom one was Lord North, Prime Minister to King George III, and it owes its final appearance in 1837 to the architect Sir James Pennethorne, who, as Nash's assistant, was responsible for much of the building of London and the planning of its parks in the 19th century. Dillington House is a manor of architectural distinction built in the honey coloured Ham Hill stone once quarried in the district.

Every country house had servants and horses during its history, and we find there was stabling for thirty horses at Dillington at the end of the 18th century. It is due to the Mews, rebuilt in 1875, that the theatre exists. The Mews consist of a quadrangular set of buildings constructed in Ham Hill stone, enclosing an open, spacious courtyard. Two sides of the building originally housed the horses, with three large coach houses on the third side, and grooms rooms and offices on the fourth. The entrance to the courtyard is by a lofty arch with a pedimented portico. The general impression given by the Mews is of an imposing front, pleasing substantial construction, and attractively coloured stone.

The unexpected existence of a theatre in the country springs from the use made of Dillington House as a College for Adult

Education. In 1950, the Somerset Education Committee occupied the house to run all kinds of educational courses with a residential basis of varying duration; for the most part, there are midweek and weekend courses. Eighty courses take place annually, and they are attended by 3,000 students with 300 visiting lecturers. With the additional residential accommodation provided in the Mews, fifty residents can be housed. The courses are very varied. For general members of the public, the courses include drama, music, painting and modern languages; for specialised groups, the subjects cover teaching method, business management and the work of a number of organisations with an educational purpose.

As soon as the College was opened, the need was apparent for additional public rooms to the lecture room and library, which restricted the attendance to fifty. Also, some courses required equipment and practical work which could not be fitted in the lecture room: for example, the annual drama course taken by the Bristol Old Vic Theatre School brought stage lighting and curtains, for a temporary stage, which were installed in two rooms in the Mews converted from stables. These two rooms were only makeshift and when conferences of seventy or more were taking place, it was obvious that the expanding work of the College required a more ambitious plan for the block as a whole. The first step was taking possession of the entire Mews; the second was transferring the auditorium of the proposed theatre into the three large coach houses, taking away the intervening walls and turning a large part of one of the two practical rooms into the stage itself. This suggestion of the Somerset County Architect transformed the scheme from a moderately sized conference room into a well-proportioned little theatre with a greater seating capacity for 240 persons. Outside the acting area, the stage was extended to include a bay to take the concert grand piano when it is not in use. Adjoining the stage, dressing rooms and washing facilities have been provided.

In the auditorium, a predominant feature is the series of three double coach doors opening into the courtyard. Behind these doors, glass partitions have been fitted with sliding doors giving the maximum of light and ventilation; but the coach doors have been retained as they characterise the appearance of the Mews, and they give, when closed, insulation against light when the auditorium must be in darkness, and protection against the cold in winter. The heating of the Mews is by oil and thermostatically controlled. The wood floor of the auditorium is level in order that the space can be used for a number of purposes required by the College courses. A considerable search took place before the chairs were chosen; it was thought that the seats must be reasonably comfortable. The tip-up seats are fitted with an ingenious and simple method of locking the chairs together. Although the floor is not raked, the staggered seats have proved satisfactory for the audience, and there are raised steps for the seats at the back of the hall. The auditorium is intimate in size; it might have been a private music room in a house such as the

Accademia Chigiana in Siena. Every consideration was given to the acoustics of the theatre: for example, a canopy was erected immediately above the proscenium opening to prevent the sound passing between the ceiling and the roof. At one time, it had been hoped to control the stage lighting from a gallery above the ceiling; unfortunately, the angle of light projection was too acute to cover the stage satisfactorily. The decoration of the auditorium is attractive in colour: a deep yellow ceiling, pale grey walls, a violet proscenium opening, and petunia red proscenium curtains. The chairs are upholstered in blue, and, as the windows are irregularly placed on the wall facing the coach doors, the curtains match the pale grey walls.

Although a double doored entrance through one of the coach doors, giving direct access to the theatre, is provided, a more circuitous and unconventional way is often used for performances. A door under cover of the Mews archway leads through part of the original stables with two loose boxes retained, a small hall, and to the cloak rooms, foyer and to the auditorium. This method of entry has been adopted primarily to ensure a regular one-way flow of the



The Mews or Stable block at Dillington House in which three large coach houses provide a theatre auditorium with a seating capacity of 240.



Little remains to suggest its coach house origins in this view of the auditorium and proscenium at Dillington House. The old coach doors can be seen through the glass partition on the left.

audience and to insulate the auditorium from disturbance. The passage through the cloak rooms, provided with coat hangers, has proved successful in avoiding conflicting lines of traffic, and the members of the public know where the foyer is situated for the interval.

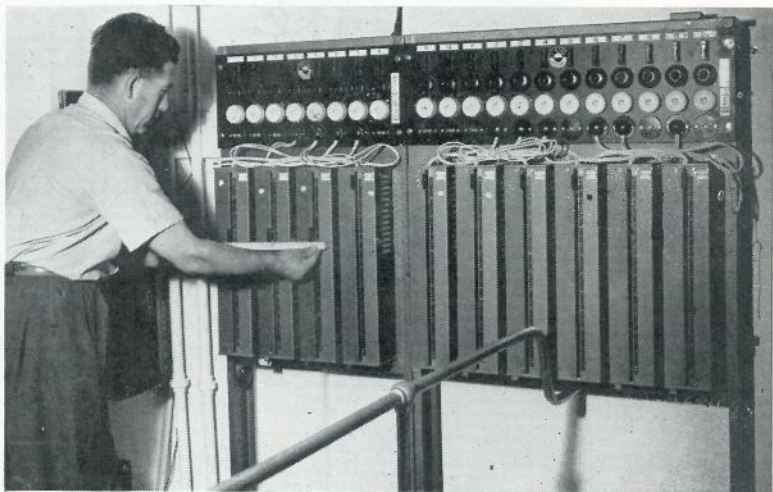
The foyer, difficult in appearance before conversion, is now very agreeable in two shades of light grey, a midnight blue ceiling, and yellow curtains. It is provided with a small kitchen for the serving of refreshments, and there is ample notice board space which is placed at the disposal of the Somerset societies promoting plays, music and art exhibitions. The tiled courtyard is used as an extension of the foyer and it is furnished, when required, with tables and chairs. Additional accommodation in the Mews provides a room 40 ft. by 18 ft. which can be used either for extending the number of dinners, served in the College itself, or for additional space for back stage needs.

The theatre is in use continually for conferences and courses. As it was only completed at the beginning of April of this year, there is still scope for the increasing number of functions to be arranged. The Governing Body of Dillington House are promoting a number of

recitals by artists of international repute: for instance, Shura Cherkassky, Julius Katchen, Peter Pears and Julian Bream. A series of professional and amateur performances include an opera, lecture recitals, films, and orchestral and instrumental concerts of county organisations. Art exhibitions are being presented in the auditorium.

The measurements of the stage are proscenium opening 20 ft. and height 10 ft., the stage depth 25 ft., stage width 38 ft. The tabs are in black velvet. There is a cyclorama wall. The initial lighting equipment, planned by the County Architect in conjunction with the Principal of the Bristol Old Vic Theatre School, and made by **Strand Electric, consists of a 20-way Junior flexible board with ten dimmers and a master black-out, situated stage right of the proscenium opening, six 500-watt spots, two 500 floods and two ground rows with three colour circuits. There are no footlights. The F.O.H. lighting is controlled by a master dimmer.**

A great attribute of the Dillington Theatre is its "magic of surprise". It is unexpected in its pastoral site, and the building, although attractive in itself, does not at first glance suggest an auditorium and stage. The interior of the theatre has given already delight to hundreds of people. The most unusual factor, however, remains that a County Council should have decided to present a theatre as a centre of cultural life to its inhabitants. The theatre has come into being through the confidence in the success of ten years of the County Education Committee's College for Adult Education; at the same time, it is an enlightened step to take and it is to be hoped that other local authorities will follow the example of Somerset.



The Strand 20-way Junior Flexible switchboard at Dillington House Theatre

COLOURED LIGHT IN THE THEATRE

by Frederick Bentham

It is customary to say "owing to public demand" repeated or retained, etc. Of no series of articles is this more true than those on colour. My favourite subject "Lighting Control" is completely eclipsed—obviously digested in private by a silent minority of readers, if read at all. Not so with "colour". A vast public awaits every word and rushes to put into effect any suggestion of mine provided it involves the use of colour filters in the more lurid hues. What I think I say with my fondness to overstate a case is: "Don't use colour at all, or, if you must, then only the pale tints." What my readers appear to think I say is: "Use the three primary colour mixing (red, green and blue) at the slightest excuse."

So fed up did I become at being quoted as the protagonist of "three-colour mixing" that I have only with immense difficulty been persuaded by the Editor to take up the pen on this subject once again. It is with surprise that one finds on investigation that the last of the series of eight articles appeared in TABS as long ago as April, 1949. In fact, this series of articles under the initials of F. P. B. had the undoubted honour of being both the first article in and the first series in TABS when it started up with Vol. 4 No. 1 after the war. No wonder our readers tended to overestimate the importance of colour.

I am very fond of the stuff; do not let me lead you to believe otherwise. Indeed, do I not invite audiences to take it more or less neat as Colour Music! A fact that has caused one learned body to create a special class of member—"Decorative Colour Worker"—a class which after twenty-four years still consists of myself alone. Nevertheless, it is my belief that preoccupation with colour is the root cause of far more bad lighting than good.

It is preoccupation with colour that led to stages being equipped for years with magazine compartment batters, floods and floats in three or four colours complete with dimmers irrespective of the needs for other equipment. From this we are fortunately now nearly emancipated in spite of the attempts by lamp manufacturers to push us into using fluorescent tubes whose only merit is the "efficient" production of colours we seldom require on the stage. It is a fact that "green" is the most efficient fluorescent tube.

Although one need not use this flooding equipment, except perhaps for a cyclorama, the danger lies in that its installation may have run away with money that should have been spent on spotlights. Not that spotlights automatically put things right. Far from it, they open the way to colour-puddles. Some reckon themselves a failure if they cannot think up a different colour for every spotlight on the

stage. This is not beyond the wit of man as there are on average a dozen or so spots on an amateur stage and there are 60 "Cinemoid" colours to choose from.

Of course the professionals are harder put to avoid duplication when colouring up their 200 or so spotlights. However, with judicious doubling of colours plus the importation of a simply *indispensable* colour in gelatine from New York they do their best.

I cannot help thinking that the key lies in emulation of the Cardinal who was said to have the extraordinary ability to keep silent in a dozen languages which he spoke fluently. I must hasten here to point out that I do not intend to lead a crusade to reduce the number of "Cinemoid" colours. Inspiration and fitness for the show can only come from a range the larger the better, but what one must avoid is the use of the whole range simultaneously. It is interesting to reflect if one adopted the commercial test—"does it sell?"—"is it popular?"—to reduce variants then the "Cinemoid" range would consist of the following colours:

The Dozen Most Popular "Cinemoid" Colours

No. 17 Steel . 6.55%	No. 3 Straw 3.44%
„ 6 Red . 5.88%	„ 19 Blue . 2.94%
„ 18 Blue . 4.58%	„ 7 Pink . 2.84%
„ 32 Blue . 4.56%	„ 40 Blue . 2.52%
„ 4 Amber . 3.64%	„ 41 Blue . 2.49%
„ 36 Lavender 3.48%	„ 1 Yellow 2.44%

The figures behind each colour show the percentage it forms of the total "Cinemoid" sold. Thus 52 Gold, one of the very best of tints for acting area spots and floods, would not find itself among the first twelve. On the other hand No. 17 Steel Blue is the most popular of all colours with No. 6 Red, of all things, as runner up. Where does all this red go? It has not been recommended for fire effects for at least ten years. Surely it is not used on its own very much and why choose it as a colour for mixture?

One might suspect that tradition is at work to support the old staggers, but two colours, No. 40 and 41, are post-war and of these the No. 41 is quite recent. It is not surprising that blues should be so popular as they are virtually the only colours which are a "must". Except for the odd fire, a stage could be completely white at a push, with blues as the only change just to represent night. Incidentally, in *Galileo* at the Mermaid even the night scenes were lit entirely in white as was no doubt the case in the original Brecht production. Due possibly to the restricted range of glass filters the German theatre appeared to use very few colours—white light with a little amber and some blue being the mainstay. Even the cyclorama could be catered for by the weak mixtures provided by fluorescent lamps.

Since then "Cinemoid" has become popular in that country and I hope to include an analysis of German colour popularity in my next article.

One must remember that the figures used are for total sales and cannot be broken down into pure theatre and no doubt it is the other theatre which takes a lot of the more exotic colours—No. 6 Red?

Altogether, the first twelve colours form just over 45% of the "Cinemoid" sold. Now let us look at the reverse:

The Dozen Least Popular "Cinemoid" Colours

No. 44 Blue . 0.31%	No. 8 Pink . 0.85%
„ 55 Chocolate 0.41%	„ 25 Purple 0.94%
„ 56 Chocolate 0.56%	„ 43 Blue . 0.94%
„ 12 Pink . 0.68%	„ 38 Green 0.98%
„ 49 Blue . 0.70%	„ 60 Grey . 1.0%
„ 34 Amber . 0.73%	„ 9 Pink . 1.04%

None of these is surprising; one can think of a host of reasons for unpopularity, but popularity is more difficult to explain—why does No. 1 Yellow come in the first twelve and why is straw so popular? By now the reader will be wondering where No. 52 Pale Gold comes as this is one of the present writer's favourites. In fact the tints so highly recommended by the various pundits—No. 51 Gold tint, 52 Pale Gold, 53 Pale Salmon and 54 Pale Rose all achieve near enough *average* sales at 1.74, 1.92, 1.42 and 1.4 per cent respectively. Figures can be deceptive and one must remind oneself that whereas there are only two reds there are many competitors for a general lighting tint. Incidentally, No. 36 Lavender is the most popular *tint*, as distinct from *saturated hue*, ever. Though why this cold and aloof pink tint should be so popular I cannot see. When originally introduced as "Surprise Pink", the only pale colours were No. 3 or 17 and the lightest pink was No. 7, and it was not difficult to understand its impact—all the rage. But today, 29 years later? The two strong greens 39 and 24 are both as popular as 52. Where does all this green go? Does it join the red and either 19 or 32 blue for three primary colour mixing? Can it be that this system still lingers on with all its inefficiency.

The above analysis of colour demand was provoked by a rash statement from a representative of the cinema exhibitors recently that twelve colours were adequate, and behind this is the implication that sixty is a very extravagant provision.

I do not believe a limited range to be satisfactory and, indeed, intend to introduce still more colours. I say this knowing full well that no one can identify a single colour as such. What do I mean by this? Simply that it is impossible to recognise a colour by itself projected on a white wall. Whether the colour be named as 40, 18, 45, 2×17 or 2×40 is the result of a wild guess, in which only the laws of chance operate. Indeed I have known experts to be even further

out. Only when colours are shown side by side can they be distinguished for their qualities. To know what quality a 45 blue has, it must be compared with all the other blues and white.

Tests have time and time again shown this inability to recognise solo colour. If, then, one can only do this with all the other blues present, why bother about subtle selection when in fact only one or two blues or pinks or whatever are in question for a particular production. This I find difficult to answer, I think one answer is that an artist needs one starting point for his colour composition—however simple. The fact that only he attends the moment when the colour was chosen is not of importance to the audience who were not. He must start with an emotional experience (however slight) of rightness on which he builds. It may well be that he alone knows, because he once compared it, that he is using 45 for moonlight because it is bluer and more kind in mood than the slightly green 17 which nevertheless would be appropriate to him in some other play. The process is similar to selection of colour for decoration at home. Several colour cards are compared to get, say, just the grey that appeals. When put on the wall, maybe it is not quite right, and a drop of tint is added to the second coat and all is well. To the visitor it is just a grey—to the man who chose it, it is *the* grey. One thing to ensure in decoration is that the decorative scheme has some white in it as a standard of comparison for colour, and I feel this is necessary also in lighting.

When several colours have to be displayed at once in decoration the question of clashes occurs. I never felt one could be dogmatic on this, and the use of colour in decoration in recent years has made one even less inclined to lay down the law. Just as one comes to accept musical intervals as fresh and exciting which at one time sounded excruciating, so also in colour.

Freedom to use colour in light regardless is only paralleled by the freedom to use colour in floral display. Having said this I must add that I feel that the light of differing sources not only does not blend but cannot be made to do so.

If we use tungsten lamps, fluorescent lamps and arcs for various parts of the stage they never blend whatever we do to them. I can only express the difference in quality—"full" "thin" and "hard" respectively. No matter what their colour in origin or the filter correction added fluorescent lamps provide "thin light" or "thin colour". This effect may come from the line spectra which backs up the fluorescent spectrum. That the arc should be hard is not surprising and no flooding can remove this. An arc may therefore be very suitable when one wants to detach an artist from his background as in music hall but it will never be satisfactory if one attempts to blend the light to boost the general level of stage lighting.

AMATEUR STAGE MANAGEMENT

by P. Corry

It is seldom realised that one of the most arduous and responsible jobs in the theatre is that of the stage manager: it is often not realised by the one who takes on the job. As a result it is the exception rather than the rule, for the amateur stage manager to discharge the responsibilities in full. This does not imply any lack of conscientious endeavour, or deliberate dodging the column. It usually results from a lack of expert guidance.

The operative word is "manager". He should be an organiser primarily and must not allow himself to be so concerned with detail that he is unable to exercise overall supervision.

The stage manager is responsible to the producer for the co-ordination of the work of all the technicians and for the control of all performances. He should be appointed as soon as possible after the selection of the play and its producer. Having studied the play in advance, he should discuss with the producer the broad details of the settings, furnishings, properties, costume and lighting. He should get a clear idea of the requirements and should be prepared to do everything possible to meet those requirements. Physical and practical limitations will almost certainly dictate some modification of what the producer would like to have, and it is very necessary that the latter should be convinced at the onset that the alternatives proposed are, in fact, unavoidable.

Obviously the stage manager must be thoroughly familiar with the stage and its equipment. He must know what scenery is available or what can be made or hired. The early discussions between producer and scene designer should be attended by the stage manager, who must be able to comment intelligently on the practical possibilities of translating the intended design into terms of the flats, backcloths, properties and furnishings, which can be made available and can be handled satisfactorily. He will be responsible for the supply to the producer of a scale plan showing the lay-out for each set, and indicating the units of scenery and furnishing that make up the set. This plan will probably be provided by the scene designer, if one is appointed, but it is the responsibility of the stage manager to see that the producer receives it. The plan should be supplied before rehearsals begin. In this respect some stage managers in the amateur theatre are very remiss. The setting gradually evolves from whatever flats can be extracted from the store-room, and are put together to



"..... a lack of expert guidance"

form a very approximate suggestion of what is required. It should be realised that the visual presentation requires careful planning, and if that planning is done effectively, wasted time and effort will be avoided and the result will be much more satisfactory.

In many amateur groups the stage manager has to do so much of the actual work of constructing and painting the sets that he is not able to supervise all the people for whom he is really responsible. As a result, it is quite customary for those who are responsible for costumes, properties, lighting, sound effects and the like, to work independently, with conflicting ideas of what is really required. With a complicated show, the consequent chaos at dress rehearsal is not surprising. All too frequently the producer is expected to co-ordinate the activities of the stage technicians. In the professional theatre there is usually a stage director who acts as the intermediary between the producer and the resident stage manager. Some amateur theatres adopt a similar procedure, but, in the absence of a stage director, it is the stage manager who should provide the liaison.



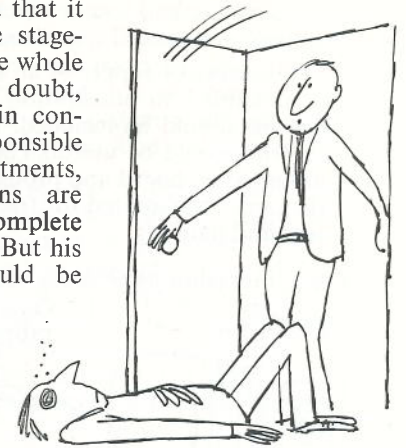
“ approximate suggestion of what is required ”

If necessary, and it is usually desirable, one or more assistant stage managers should be appointed and should be given specific responsibilities.

At each rehearsal the stage manager or an assistant who has been given the responsibility, should be in attendance. He should arrive before the rehearsal begins and should set the rehearsal floor ready for the particular scene to be rehearsed. The setting should be spaced as nearly as possible to conform with what will actually or is likely to be on the stage for the performance. If possible, the floor should be chalked to indicate the limits of the acting area and the

positions of any important feature that cannot be clearly indicated by three-dimensional objects. It should be clear to the actors which way doors and windows will open. If important properties are used in a scene, such as glasses, bottles, tea-cups, tea-pots, etc., the actors should be provided with articles which can be used for rehearsal. It helps the actors enormously if they have actual objects to handle. The stage manager or the A.S.M. appointed should be present at each rehearsal and should provide a simulation of the “noises off” and any other effects he will have to provide. He should be able, if the producer is absent, to take the rehearsal, and no doubt he will be required, at times, to stand in for some absent actor and to read his lines.

In practice it will be found that it is not really necessary for the stage-manager to be present during the whole of every rehearsal. He could, no doubt, be better employed, at times, in conferring with those who are responsible for the various technical departments, making sure that preparations are progressing and that there is a complete understanding of requirements. But his attendances at rehearsals should be frequent and regular, so that he may be aware of the whole pattern of production and of the significance of the contributions to be made by his staff.



“ clear which way doors will open ”

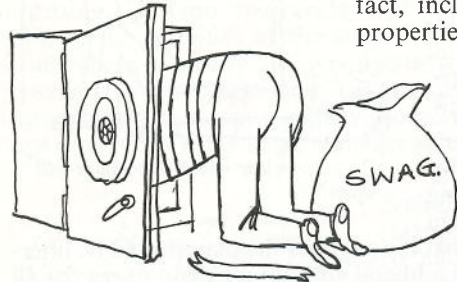
One of the stage manager's first jobs should be to make his copy of the play into a working script. As this should contain copious notes it is desirable that the pages of the play should be interleaved with plain paper, with a liberal addition of plain pages for all the general details that should be recorded. To make such notes in the margins of the printed pages is rather sloppy and can be confusing. The stage-manager's book will be required for constant reference during rehearsals and performances, and the notes should be boldly arranged for easy scanning. As the wear and tear is likely to be considerable it would be an advantage for the book to be given stiff covers and to ensure that the pages lie flat when open.

The working copy, when complete should include all the following details:

- Names, addresses and telephone numbers of producer, designer and all stage staff.
- Scale plan of stage showing positions of all sets of suspension lines and any special features.
- Scale plan of each stage setting giving dimensions and details of each flat, groundrow, cloth, border, etc., to be used.
- List of scenery units to be used in each set.
- List of properties to be used in each set.
- List of hand properties, i.e. those for which the actors are responsible, to be used in each set.
- List of costumes required.
- List of lighting equipment required.
- Copy of lighting plot.
- List of music and sound effects, with details of any records to be used.

Copy of music and sound effects plot.
Details of any special requirements.

NOTE: The sources of supply of all items should be shown. When it is possible, an illustration of the scenery and costume designs should be included. Photostat copies of the original sketches could be useful. The sketches themselves should be mounted on board and protected with a transparent cover, as they may be required for frequent reference during construction and painting.



“.....He could be better employed”

The acting editions of plays supplied by some publishers do, in fact, include lighting plots, lists of properties, furniture, etc., but it must be borne in mind that these are given for general guidance and should not be accepted as being the exact requirements for any particular production. On a small stage it will probably be necessary to cut down the amount of furniture required, and the producer's interpretation may involve various other alterations. The list written in the working script must be the one that applies exactly to the particular production. The interleaved blanks opposite to the printed dialogue would contain notes of all action that must be taken by stage staff during the course of the performance, and of the warnings to be given to actors whose entrances are approaching. It should be remembered that it is the duty of the stage manager to be quite certain that an actor who is due to make an entrance is, in fact, ready to do so. At the end of each scene extra blanks should be inserted for details of action to be taken during the scene change. A thumb index can be invaluable in securing quick reference to scenes and essential notes.

After the opening, each cue should appear, as nearly as possible, opposite to the printed dialogue concerned. Although a cue may be the actual speech printed opposite, it is better to write in the essential portion of the cue speech. All notes should be as large and clear as possible, bearing in mind that the script must be followed in subdued lighting.

The working script should record all cues for lighting, sound effects, etc. Some stage managers prefer to signal each cue to the operators concerned. Others leave the operators to pick up their own cues but check each operation. Either method is permissible if it works efficiently. Some stage managers, with a regrettable disregard

of their responsibility, leave the operators to their own devices, and hope for the best. It is important that, after the dress rehearsal, the stage manager should confer with the operators and make certain that their cue sheets are accurate and that the cues are correctly noted in his own working script. Any system of signalling must be clearly explained and understood by everybody concerned.

Unless he delegates the job to one of the A.S.Ms., the stage manager should follow his script from rise to fall of curtain. He should not arrange for cue signals to be given by the prompter. The latter has a very exacting job, requiring constant concentration, and should not be given the added responsibility of anticipating and giving cues to technicians and making sure that actors have responded to their calls. Those are responsibilities of the stage manager. He should be constantly checking to make sure that each cue is correctly carried out and properly timed. Any failure should be noted and discussed later with the person at fault.

There is an unfortunate tendency in amateur groups for stage staffs to be recruited from too restricted a field. The result is that most staffs are overworked and their enthusiasm wanes when they find they have little or no time for other leisure activities. Stage staff organisers should cast their nets widely. They should not wait for volunteers to join them, but should induce people to take a share in this very interesting work. The actors, in particular, should be encouraged to become members of the stage crew for a production in which they are not acting. Actors who wish to become producers should realise that they need practical experience of setting and lighting the stage, if they are to be efficient producers, and they should have sufficient stage staff experience to make them competent enough to act as stage managers.



“.....signal cue to the operators concerned”

The stage manager must organise the back-stage work so that each member of the crew is properly employed. This is particularly important during the preparatory period when the scenery and properties are being constructed and when the scenes are being set up and dressed. The work should be divided so that each individual worker has a useful job to do. Otherwise he will resent the waste of his time and will lose interest. The stage manager must also ensure that his staff have adequate time for rehearsing their scene changes

and the effects they have to provide. This means that all the preliminary work should be completed in good time, and that there have been stage staff rehearsals before the actual dress rehearsals. Of course this may be difficult or impossible if the production is staged in hired premises which, perhaps, cannot be entered until the day of the dress rehearsal. In such circumstances the need for careful planning of every detail is of even greater importance. Exact measurements, with details of scenery and fixings for equipment should be shown on the prepared plans. The stage manager should then be able to direct the setting-up with the confident knowledge that all the bits and pieces will go together as planned. Only too often the initial planning is too perfunctory and he arrives in a state of insecurely-based hopefulness which quickly dissipates into apprehension and despair. Precious time is wasted and tempers are frayed.



“..... a state of insecurely based hopefulness”

night, he can afford to be. But he must know and not merely hope.

A good stage-manager is a pearl beyond price. He should be treasured as such.

Second only to a practical ability to organise the work of the stage technicians, is the gift of tactful management of a staff of assorted sexes and varying competence, doing a difficult job in obscurity for the fun of it. Actors and producers have no monopoly of “temperament”. The stage manager must avoid the “fantastic tricks” that “brief authority” induces. He must lead his staff, and manage them without being “bossy”. During the inevitable flaps at the dress rehearsals he must be imperturbable and cheerful; if he *knows* it will be right on the

THEATRE PHOTOGRAPHY

by John Vickers, F.I.B.P.

It has always been my opinion that the aim of a photographer in the theatre should be to re-create an impression of an actual performance of the show, however, he sets out to achieve this. Generally speaking, this will not be obtained by merely taking snapshots from the auditorium—except, perhaps, in relatively close-up pictures taken in a cabaret or circus—and, although the devotees of the “available light” school may persuade themselves that it brings some magical kind of “truth” when we omit to modify the position and lighting of our subjects, I regret that I cannot agree with them. This is not to assert that happy accidents are to be despised. Every alert photographer can show examples from his best work which were not entirely the result of prior planning and intention. He should always be receptive to the fortuitous circumstance which will make a good visual. An extra portion of spontaneity is often gained in this way; and most of us are opportunists . . . at least in the creative part of our work; and it is the same in the Theatre itself . . . but, in both worlds, very little should ever be left deliberately to chance.

Illusion

In a stage performance, even the seeming accidentals are carefully rehearsed; and it is the magic of the Theatre that an *illusion* of spontaneity is created by the artists and craftsmen who contribute, under a skilled director, to a kind of group personality which overrides personal hates and loves, and divergent private ideas upon interpretation of rôles or of the play. This does not destroy the individuality of the members of the company. In fact, by clarifying their common intention during early rehearsals, a good director creates a feeling of security in the minds of his artists which opens the way for a greater freedom of expression in the subtler aspects of their interpretations than would usually occur if each were to assert an unmodified personal expression. From this, we photographers can learn much. In fact it would be no exaggeration for me to say that, purely technical matters aside, I learned almost all of my job as a professional photographer from the Theatre; and, in particular, from the actors themselves.

Lighting Contrast

Whenever we creatively photograph *anything*—even an inanimate object, a sculpture or a detergent-pack—it is our job to make it look more like itself than it would in a purely factual record-photograph. For many reasons, this requires us to interfere in some way with the circumstances in which we find most of our subjects. The most prominent reasons are in the great difference between human sight, with its continually varying focus and adaptation to brightness and

colour, and the camera, with its inherent limitation of being able to focus and adapt to only one set of conditions at a time. In the Cinema the technicians cheat heavily in order to give us the illusion of reality; but we, in still images, must make some kind of *translation* of the moving world, in which it is not uncommon for the brightness-ratio in any one scene to be 1,000 to 1; in which a horizon, middle-distance and closer objects all appear to be simultaneously sharp. Our printing papers cannot normally give us a greater brightness-ratio, from highlight to shadow, than 50 to 1; and our image, frozen for ever as it was made, may reveal unfortunate things which escape attention in real life. It is particularly noticeable in snapshots of a play taken from the auditorium that a grouping of actors which felt quite natural—even excitingly in tune with the atmosphere of the play as one saw the performance—looks disappointingly empty, lacking in composition, in the photograph. In addition, unless the stage lighting was **very flat and unimaginative**, the shadows will be very harsh and this may introduce a spurious “drama” to the photograph alien to the nature of many plays.

Shooting at a Rehearsal

For these reasons, I would advise any photographer who *insists* upon taking his pictures during the action of a play—or who was unable to persuade the director to set aside time for a proper “photo-call”—to choose a dress rehearsal for his operations, so that he may dodge about the front stalls to find useful angles from which to shoot, modifying the composition of each picture by moving the camera, and to arrange, if possible, for one or two extra floodlamps to be stood on either side of the centre aisle of the auditorium in positions where they will not appear in any of his long-shots. Quite often the director will permit the “floats” to be brought up in brilliance during such a rehearsal, especially for the photographer. If they are already full up, in the lighting-script, colour-gelatines may be removed for the occasion. However it is achieved, for an average “light” play, the ratio of illumination, measured with a photo-electric meter, highlight-to-shadow, should be about 6 to 1, or less, for black-and-white films of the HP.3 and Tri-X type. For colour the brightness ratio should be even less, about 3 to 1, and, if any kind of fidelity of colour-rendering is important, the colour-temperature should be watched very carefully. The brightness-range may increase by a point or so in the case of more dramatic kinds of play, and the “living newspaper” type of production and certain rather “snappy” cabarets and musicals may keep their atmosphere in pictures taken with very much higher contrasts.

The Photo-Plot

I have taken the problem of the 35-mm. camera first, because Dramatic Societies frequently find difficulty in arranging a proper “photo-call” at which the photographer will be given full opportunity to rearrange groupings and lighting. Close to production date it may

be necessary to spend every hour at which the entire company is able to be present upon the rehearsing of last-minute changes or difficulties which only presented themselves when the sets and costumes were ready. But there is little doubt that the best results will be possible only if the photographer is given time to make his pictures, with the full attention of the artists. He should have seen rehearsals in advance, so that he may select the scenes which form key-points in the story of the play, eliminating those which, on editing, prove to be redundant or less important than others occurring later in the action. It is rarely possible to tell the story adequately in less than twelve shots, unless it is a three- or four-character script, with few or no changes of setting and costume. But only in the case of a nationally important production should it be necessary to take more than about thirty different pictures. If each shot is to be arranged, briefly rehearsed, and lighted with movable lamps, only a very expert photographer, with one or more trained assistants, would be able to take more than about twelve pictures per hour. So the photographer should cut his “photo-plot” according to the time which he will be given. Nothing is more upsetting than a sudden panic, halfway through a photo-call, and a decision to eliminate pictures on the spur of the moment. It is far better to agree upon the shots to be taken with the director and any other interested parties, such as the Press Officer and sponsor, before the call. Then the text lines which mark the chosen points in the play can be written-out for the A.S.M. to hold whilst calling actors for each scene. In this way, time is not wasted and disputes based upon policy or egotism can be behind one.

Long Shots

For full-stage pictures, the appropriate production lighting for the scene will very occasionally be just right for a monochrome photograph. But this is unusual. One may *start* with the stage lighting and then ask for floats and front-of-house spots to be brought up sufficiently to compensate for the tonal compression of the photographic process. Too much frontal light may over-flatten the scene and destroy the atmosphere and cast unwanted shadows upon the sky-cloth . . . and, speaking of skies, for daylight settings it is extremely difficult to get sufficient light upon the cyclorama or sky-cloth, if the downstage illumination is very great. In black-and-white work, if extra floodlighting of the sky cannot be supplied from ground-rows and/or top batten—usually with the colour-media removed—then it may be advisable to keep the acting area illumination down to, say, 3/4 on the dimmers, and to take care that local movable lamps do not cast unwanted shadows upon the backing. I have often used a number of small floodlamps, with spring-clamp supports, judiciously placed along the back of the most upstage ground-row to flatten out dark areas or to create a sunset “hot-spot” on the backing. Photoflood lamps are quite suitable for this as they give a lot of light for their current consumption. Even with



TAMBURLANE THE GREAT (*Old Vic*). Long shot in which the producer's lighting was extremely dark and dramatic. In these shots the stage lighting was used, with increased general light from the floats and No. 1 batten plus four 500 watt spotlights, two each side, to catch the sides of the actors from the wings. Two 1000 watt diffused floods from the front of house brought up the shadows to produce a final result similar to the performance itself. (Exposure $\frac{1}{4}$ second at f.11. Kodak P.1200 plate.)

colourfilm, the excess blueness of their light may be useful in day scenes.

Mid Shots

Closer groups, taken from the front-stalls, from a Box or even from the edge of the stage, become more interesting to the photographer because, although even a full-stage shot may require him to modify groupings to yield a good composition, it is when he approaches more closely that the differences between groupings in movement and those of "stills" become evident. In the play itself, the actors will usually be too far apart for satisfactory compositions in "mid-shots". We must first get them to make a "tighter" version of the same grouping, then, without allowing one actor to mask another, to light this appropriately. The fixed lamps of the stage may occasionally help us; but it is valuable to have two good spotlights on adjustable stands, with one or more diffused floodlamps which may be moved close to the camera for relief of the shadows. A good general rule, when the atmosphere of the scene permits this, is that the **spotlighting of a group should be "crossed"**. This means that the actors on the left side of a group are lit from the right-hand spotlight which will be directed into the group at about 45° from the axis of the camera lens. Similarly, those on the opposite side will be lit from the

left-hand spot. It is a sound basic set-up which assistants may be taught to apply and which it is easy to modify for more subtle effects. The spotlights themselves will normally be about 6 ft. above the stage-level, directed downwards to evenly cover the picture area, avoiding shadows from one actor upon another. Firelight, moonlight and other special effects will require an obvious departure from such a pattern. This is where the photographer must use intelligence. Since he must probably get his group arranged, lit and shot in a very short space of time (if only to avoid boring the actors, whose expressions and gestures will lose life) he must be quick to recognise what is to be done.



ROGER LIVESEY and URSULA JEANS. A double close-up, lit as described in the text with back-lighting upon the wall behind them. (8 inch lens; Kodak P.1200 plate; exposure 1/10th sec. at f.11.)

Shooting

Approximate lighting having been arranged, the actors are given the key-line and asked to "run into it" from a slightly earlier moment in the script, finishing upon the chosen line. When this happens, the photographer watches for a possibly better moment upon which to arrest the action and he may quickly readjust any lighting which requires it for that particular move. He then asks for it once more, with the full emotion of the scene, and as they reach the moment he makes his short camera-exposure. It will be seen that, with all the dodging about which he must do for each group, a camera tripod is essential, even if his lens and film permit an exposure short enough to make a tripod unnecessary. One cannot adjust high-set spotlights with a camera dangling from one's neck.

Close-ups

When the camera comes even closer to the actors, more freedom in lighting will usually exist. It would take too much space to give more than a few hints upon the lighting and posing of single or double portraits. Precisely where the shadows of the nose fall matters very much—crossed frontal lighting looks terrible, as this gives double shadows—and the most tricky problem, in my experience, with ordinary open floods as “fill-in” lighting, is adjusting the tonal relationship between shadow and highlight, so that the shadows have detail and modelling whilst no secondary shadow is created by the “fill-in” lighting.

A double-profile of two people looking at each other presents a nice challenge which may be met readily. Each actor is asked to look at the downstage eye of the other, to bring their heads and eyes slightly more towards the camera than would be so in life. One spotlight catches the left-hand actor's face from slightly upstage of the other actor, on the right; and in similar fashion, from the opposite side, the right-hand subject is lit from the left. The spots are somewhat higher than the tops of the heads, and sufficient frontal, diffused lighting, close to the camera, is brought in to suit the mood of the scene. Each actor's hair is therefore nicely back-lit and an interesting edge-light or frontal light falls upon both faces. Although this would not often occur in Nature, it is surprisingly natural in feeling within the conventions of the Theatre.

* * *

ARE YOUR MIRROR SPOTS EFFICIENT?

Users of Patt. 23 in its various forms are normally very well pleased with the efficiency. Often they are quite eulogistic and it is always interesting, therefore, to receive complaints from people who find the lantern does not appear to justify the claims made for it. On investigation it invariably transpires that some curious mistake has been made. For the benefit of those who may not be getting maximum results we give details of some of the faults discovered.

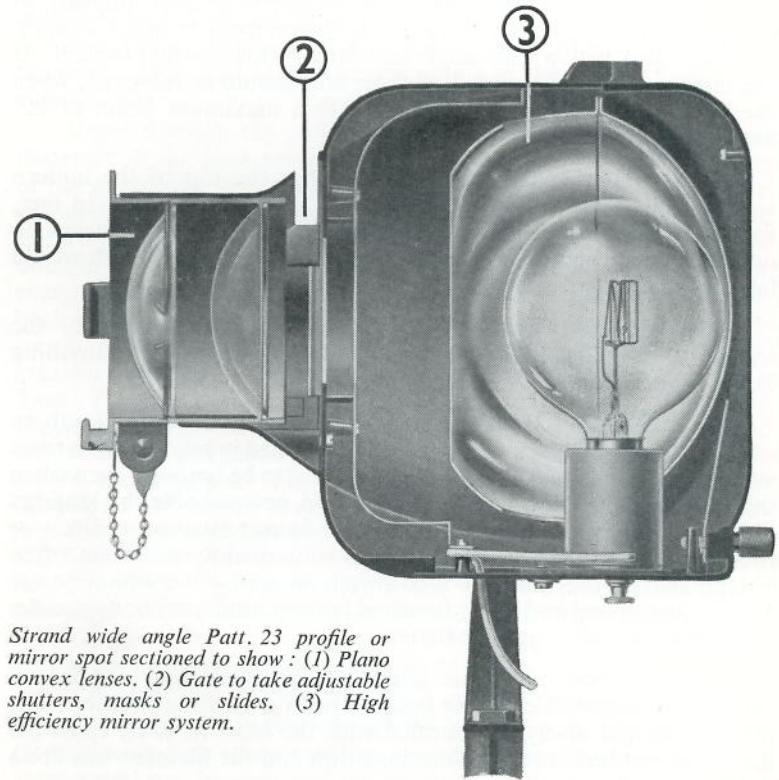
1. Any lantern fails to give its best performance if lens, lamp, mirror and colour filter are generously coated with dust. This is a depressingly frequent fault. All lanterns should be thoroughly cleaned at least before the beginning of a new season. The conscientious stage manager will see that they are cleaned much more frequently.

2. The standard Patt. 23 has a plano-convex lens, which means that the lens has a flat (plano) side and a curved (convex) one. The flat side should be the one nearer to the lamp, but it was found in one instance that an electrician responsible for the initial installation had reversed the lens unwittingly. The users had failed to find the fault and merely complained.

One might think it unnecessary to mention that the lens should be at the front of the lens tube, but cases have occurred where the lens has actually been fitted at the rear of the tube.

The wide-angle pattern has two plano-convex lenses, one at the front and one at the rear of the lens tube. Each lens should have its flat side nearer to the lamp.

When the lantern is used for projecting a cloud or similar effect, both the lenses are used, but placed differently. The lens which is nearer to the lamp has its flat side to the lamp, but the front lens has the flat side facing outwards, so that the curved surfaces of both lenses are facing each other.



Strand wide angle Patt. 23 profile or mirror spot sectioned to show: (1) Plano convex lenses. (2) Gate to take adjustable shutters, masks or slides. (3) High efficiency mirror system.

A circular diaphragm is always fitted in the rear lens position, whether the rear lens is fitted or not. Its flange should be in contact with the flat side of the rear lens when two lenses are fitted. The rear lens and diaphragm are retained by the same wire ring.

3. Almost unbelievably, it has been found on occasion that some misguided individual had inserted the mask *in front of the lens*,

in the colour-frame runners, instead of in the gate between the lamp and the lens. Equally unbelievably, those who had used the lantern had not discovered the reason why the light it gave was so poor.

4. It is not uncommon for the lantern to be used without any mask being inserted. Four masks, with apertures of different diameters, are supplied with each lantern. The one with the largest aperture gives a beam angle of 22° when the standard lens is properly focussed. Without a mask it is possible to obtain a much wider spread, but one of inferior light, and the colour filters will quickly deteriorate. If the wider spread is necessary, the wide-angle lens should be used. If a wide-angle lens is used, the amount of light available is spread over a greater area and is of less intensity in consequence. Yet it is not unknown for some users to insert a small-aperture mask with a wide-angle lens fitted. This is rather foolish. If the smaller spread is required, the rear lens should be removed, when the lantern will again be standard, with a maximum beam of 22° and a greater intensity.

5. Although it could be assumed that the top of the lantern is easily distinguished from the bottom, some people do, in fact, fix the lantern upside down and seem surprised that the lamps do not last. These people, obviously, do not use a mask, which would fall out.

Another fault, which is not altogether uncommon, is for the lantern to be so fixed that it is actually on its side, which is anything but a good idea.

6. The base of the lantern is fitted with an adjusting knob to ensure that the lamp may be correctly positioned in relation to mirrors and lens. It is quite usual for this adjustment to be ignored, even when the light is not as good as it could be. In new schools the lanterns are usually installed by contractors who do not attempt to direct or focus the beams, but the people who subsequently use them often assume that all they must do is to switch on, and will continue to use a badly positioned and badly focussed lantern until somebody decides that the light really could be better.

7. Unless the pre-focus lamp has been wrongly capped, it should not be possible for the lamp to be in the wrong position. The filament should always be parallel with the lens. In some cases the lamp had not been rotated after insertion and the filament was at an angle.

All Strand Electric spot lanterns are designed to be as fool-proof as possible, but they are intended to provide the maximum flexibility. The user is expected to realise that flexibility may be obtained only by knowing the variations that are possible. It is, of course, to their advantage if they would **read the instruction card issued with each lantern when it is sold.**

INTERNATIONALES THEATER-INSTITUT (ITI) COLLOQUIUM IN BERLIN

21st-25th November, 1960

The colloquium was organised by the German section in Berlin under the presidency of Carl Ebert. It was a joint conference with the Union International des Architectes (UIA) and the International Music Council (IMC). Delegates came from a large number of countries, including America. Papers on a wide range of subjects were given, often at great length, by speakers from Germany, Austria, France, United States, Italy, Belgium and Scandinavia, but not from Great Britain. The British delegates who managed to seize an opportunity to join in the discussion were Sean Kenny, Peter Moro and Frederick Bentham. They had to make their points in the all too limited discussion time.

Right through the colloquium the gulf that separates the vast theatres* of the host country Germany (and Austria) from the rest of the world was all too apparent. Nearly all the material presented was completely out of financial reach for Britain. Mechanical solutions to the problem of a theatre adjustable to suit a variety of production styles often reached a point when one wondered if it were cheaper to build two or three theatres instead of one. A great drawback was the way in which time was monopolised by speakers who simply could not be brief and to the point. This trend inflicted the greatest hardship in the case of stage lighting—the main concern of TABS. The meeting on this subject, which shared a day with Stage Machinery, Sight Lines, and Acoustics, was opened by a commendably brief and pungent contribution from Joel Ruben (USA) to make a basis for discussion. However, M. Leblanc (France), whose paper followed after lunch, reverted to the long descriptive dissertation favoured by so many speakers. Furthermore, the papers on Acoustics and Sight Lines then intervened and by the time a few minutes was found for Stage Lighting discussion Mr. Ruben's points had vanished into the haze. Frederick Bentham (Strand Electric) managed to obtain the floor for the last five minutes of a long day and what he said to the punch drunk audience was more or less as follows:

“Due to the climate, a theatre, whether orthodox or experimental, would be almost certain to have a roof and this meant (fortunately) that stage lighting was all important. Without it the stage could not be seen and the audience might just as well stay at home and listen on the radio. Lighting was more than mere illumination and to make its dramatic contribution there must be many spotlights—a large number of which must be positioned out in the auditorium. It was customary for a war to develop between architect and lighting engineer over the positioning of these spotlights—they were an affront to his decor. Architects were warned that the

* See “TABS” Vol. 16, No. 2, Page 7.

lighting engineer would win in the end because when the management took over the building and had to run it as a theatre, the missing spotlights would have to hang from ugly makeshift pipes and brackets.

"Stage lighting equipment manufacturers should do their best to help the architect by making the spotlights as small and neat as possible. He had been disturbed by the large size of most spotlights used in the German theatre. There was no merit in a 5 kW lamp used with an old-fashioned simple lens (focus lamp) optical system, a principle dating from the days of the limelight. Use of modern optical systems provided much smaller lanterns which made really efficient use of the light and thus lower wattage lamps could be used. This not only meant economy of space (important—particularly in the auditorium), but also economy in expenditure on dimmers and wiring. It seemed that all models of lanterns (55 basic types) going back to the 1920s or earlier were listed in German catalogues—a living museum. Thus the traditional types were enabled to survive alongside the new. In England we discontinued manufacture the moment a lantern was outdated by a new. We refused to supply a 5 kW spotlight where 1 or 2 kW would give the same, probably a better, result.

"Tradition in the theatre extended even more to the switch-board, which was considered to be the province of engineers and electricians. The ultimate as an engineering solution was said to be a control in which punched card or some similar device provided a complete lighting memory. Although as an engineer he had been associated with the production of probably the best of such systems extant (because it recalls automatically both the lighting effect and the state of the control levers), nevertheless as an artist he disliked the device. Lighting, if it was to play its part in the theatre, particularly the experimental theatre—the theatre with little or no scenery—must be a vital thing in the hands of an artist. Only thus could the dramatic on the one hand and on the other the subtle be fully expressed. It was impossible to imagine the great pictures of the past or even of today being painted by artists through an intermediary. Though one must admit the theatre of the 'long-run' made this difficult, nevertheless, if only for his training the lighting artist must experience direct contact with his lighting, using his own fingers on the controls. To do this the controls must form a desk all of whose facilities, dimmer presetting, grouping, switching, etc., were accessible to a man who remained seated. There was no difficulty in doing this for up to 240 dimmers or so.* This was the way to escape the tyranny of the division of lighting into cues. In the meantime, the lighting changes common today could of course be carried out on the same control by electricians in the normal way. A further advantage of a truly compact control desk (exact floor area, with operator's chair, 6 ft. × 6 ft.) was the ease with which it could be housed in a small room or box in the auditorium with a good view of the stage."

*Such a control appears on page 6 of this issue of "Tabs"—EDITOR.