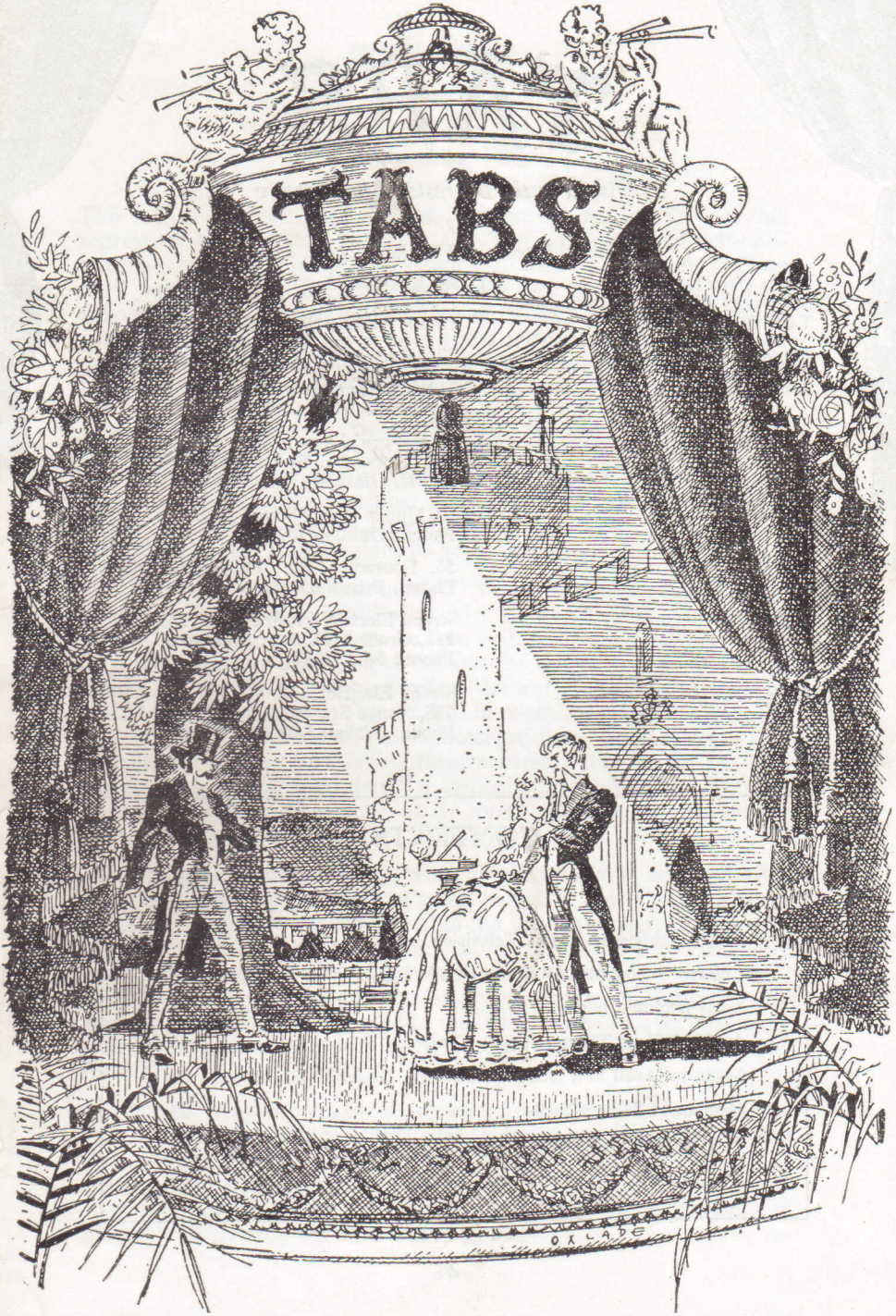

Volume 18, No. 1 April, 1960

TABS

Published in the interests of the Theatre

by

The Strand Electric and Engineering Co. Ltd.

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EDITORIAL

On Reaching Fifty

This is the fiftieth number of TABS. As there are but three a year this represents an achievement which calls for a modicum of self-congratulation. Started in 1937 by Hugh Cotterill, who remained editor until April 1957, it has always been the aim to provide a journal devoted to stage lighting rather than to the Strand Electric and one which would, unlike the latest detergent coupon, find a welcome on the mat. An occasional referendum ensures that our mailing list is up to date and that it consists of people who really want TABS.

The only thing the first number of TABS has in common with those of recent years is Oxlade's inspired cover design, though this was then somewhat out of focus due to our printing the issue ourselves on an off-set machine. There were but 9 pages (including 2 pages of Weekly Hire Charges) and wide margins and spacing generally enabled little content to go a long way.

A series called " Personalities " began with Mr. Applebee in issue No. 2 and terminated with Mr. Corry in issue No. 3. The latter's ambition was said to be " to sell a Light Console " which then seemed more uncertain of attainment than a trip to the moon is now. Articles were unsigned before the war, but two contributors, later to be known as P.C. and F.P.B. were represented from the first. In one early issue a fulsome description of the pedestrian new installation in the Wimbledon theatre came from the latter. Is it imagination, or can one detect a cynical touch breaking through? and the former was frequently to be found masquerading under the name of Busker.

Things got really moving when publication was resumed after the war. The average number of pages being 26, finally settling down to 32, the maximum we can do without a serious increase of postage. **To 32 pages we intend to be true, though there are times** when we **come dangerously near to three blank pages headed "**Memoranda " or " Notes " topped by a list of branches and agents. Indeed a distinguished author having failed to make the press date, we have been " saved " in this issue only by a timely reminder that this is our fiftieth.

By the way, we take this opportunity to remind our readers that contributions are welcome and to point out that the unifying link—stage lighting—can be slender indeed. Our concern is, of course, with the departments off-stage which, of course, explains why playwrights, actors and actresses appear in our pages only as people who provide the excuse for lighting !

Lighting Lectures

These are given in our Demonstration Theatre at 29 King Street, Covent Garden, admission by ticket sent free on application to Head Office.

Thursday, April 28th, 6.30 p.m.

" Colour Music "
Demonstrated on the Light Console by Frederick Bentham.

Thursday, May 12th, 6.30 p.m.

" Lighting the Scene "
The original production staged in the flesh.

It has been decided to stage another lecture at a later hour than that normally chosen. We often admire the fortitude of those who turn up at 6.30 p.m. and stay without food for two hours or more. Then there are those who scrape in at 7 p.m. with thirty golden minutes of wisdom gone. We shall therefore give the following lecture at 7.30 p.m. This will be staged live and cover the latest techniques.

Friday, May 27th, 7.30 p.m.

" Basic Stage Lighting, 1960 "
Talk and Demonstration by Frederick Bentham.

* * *

Mr. E. C. Birch now represents Strand Electric and Watts and Corry in the northern area formerly covered by Mr. P. Rose who, as previously announced, has transferred to the Toronto Branch. Many letters have been received expressing regret that Mr. Rose has departed, and appreciation of his valuable co-operation. We are pleased to say that his successor is, by training, experience, ability and inclination, fully qualified to give equal service.

Mr. Birch, like Mr. Rose, comes from a theatrical family. He has been working in and for the theatre for more than twenty years. At the age of sixteen he operated the switchboard at the Manchester Hippodrome. He spent several years at the Manchester Palace and was acting as Chief Electrician during a period when many new musical shows were staged, including spectacular pantomimes requiring the elaborate lighting effects always demanded by the master of such effects, Robert Nesbitt. Mr. Birch then spent a year at the Blackpool Ice Drome where he was responsible for the

operation and maintenance of a Strand Light Console. There followed a period of National Service with the R.A.F.

In 1948 Mr. Birch joined the staff of the Strand Electric Branch in Manchester where his experience has been widely varied in both Sales and Hire departments. He is thoroughly familiar with the practical lighting problems of the professional and amateur stages and has had valuable experience of the lighting practice and systems of lighting control in television studios. He is also well known for his work at the National and International Eisteddfodau in Wales.

As soon as possible he will live in the North-East, probably in Darlington. In the meantime he will continue to operate from Manchester.

* * *

STAGE LIGHTING ON B.B.C. TELEVISION

On Monday, March 7th last, the B.B.C. Children's magazine programme " Focus " dealt with " Stage Lighting " as one of a series of programmes on the subject of the theatre.

Mr. John Neville introduced Frederick Bentham as the expert and the latter proceeded to talk about the three main classes of lantern, floods, soft edge spots and hard edge profile spots. Mr. Bentham demonstrated the basic difference in the optical systems, using Patt. 123 and Patt. 23 die-cast lanterns, neatly cut in half—lens and all, specially made for the programme at our Vauxhall works. Similar lanterns were lit to show the nature of the beams of light and the results of spot lighting and floodlighting shown using a model on a stage.

Mr. Bentham went on to demonstrate first a 12-way (HA.12) Junior Board with six slider dimmers, one of which had its cover removed to show how it worked. The need to be able to group up circuits and dimmers was stressed and shown first with a 24-way (JS/W24) bracket handle board and then with the 120-way CD console for the Savoy Theatre (described elsewhere in this issue). By cutting in film made in the dimmer room of the adjacent Riverside I Studio, viewers saw how clutch-operated dimmers worked from the miniature levers on the console. The programme ended with some common stage lighting changes faked for television by the Lighting Supervisor, using the Strand electronic control, with which the B.B.C. Riverside II Studio is equipped.

The programme was produced by Leonard Chase with Bryan Izzard as associate producer and provided us with an excellent opportunity to sample at first hand the care taken by the B.B.C. with their children's programmes.

CHILDREN'S THEATRE IN ABERDEEN

by Catherine Hollingworth

In "Tabs", September, 1959, page 20, there is a lament on the absence of children's theatres in Britain. There is just one—in Aberdeen. Miss Hollingworth is Superintendent of Speech Therapy and Speech Training and it is to her more than anyone else, we suspect, that the children of Aberdeen owe their good fortune.

When the Town Council of Aberdeen confirmed the appointment of a teacher of Speech and Drama in 1941 no one could then have foreseen the developments that were to take place in connection with this appointment. At that time Speech and Drama were still something of a frill, perhaps less so in England than in Scotland where there is still a great emphasis on academic education.

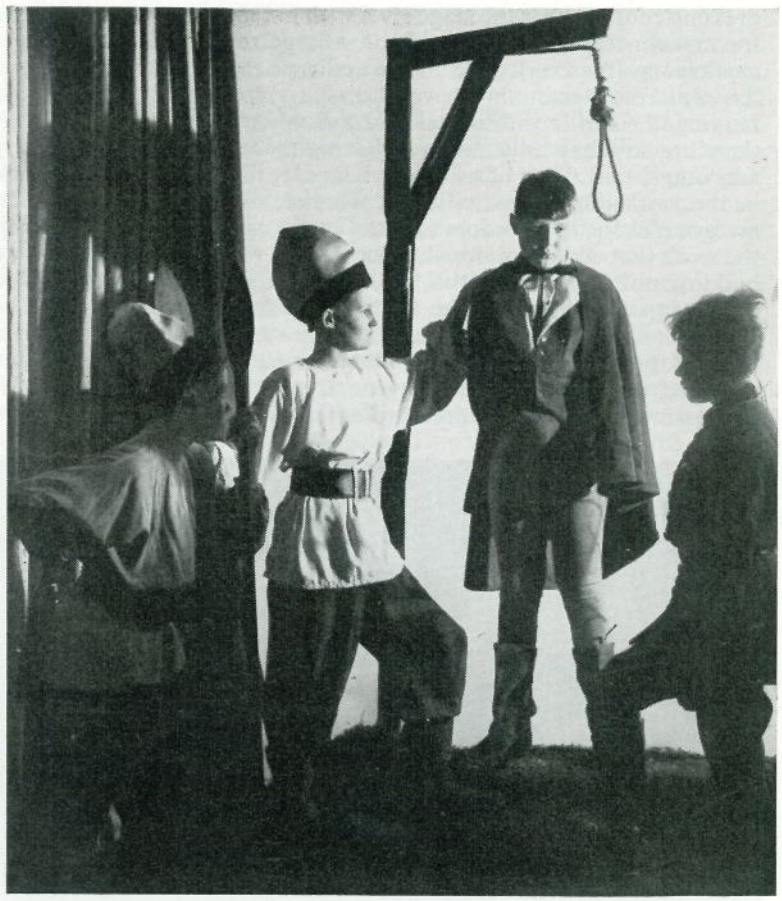
Criticism is frequently levelled against citizens who do not support the " living " theatre, but if people have never been introduced to this medium of entertainment how can this blame be justified if from their childhood upwards they have become conditioned to the cinema and television? It is not likely that they will be interested in something about which they are ignorant. They are satisfied with the form of entertainment with which they are familiar.

In 1942 a group of Aberdeen school teachers interested in the theatre co-operated with the specialist teacher of Speech and Drama, and the first step was taken towards presenting suitable plays of good quality for children in the 8–12 age group. This Children's Theatre Group was in a peculiarly strong position. They were employed by the local Education Committee; they worked in the schools; they were enthusiastic and, with the ability they had in acting and the direction from a person trained and experienced in dramatic work for children's audiences, they established the basis of what has now become an important part of education in the city. These teachers performed plays, mimes, etc., at different seasons of the year in various school theatres; and for the children the burning question became, " What's on next Saturday? " The Corporation of the City of Aberdeen, recognising the importance of this work made available the dining hall of the Trades College. This was not always convenient, but it was a place that could be called the " Children's Theatre " and on Saturdays it became the Mecca of hundreds of children.

During the years since 1941 the Department of Speech and Drama has increased from one solitary teacher to thirteen, who are under the direction of the Superintendent of Speech and Drama. With this professionally-trained staff it has been possible to consider the work of the Children's Theatre from a much wider aspect. Instead of depending on the good will and voluntary work of class teachers, a Children's Theatre Organisation was established in 1949.

The Annual Non-Competitive Festival of Poetry, Drama, Puppetry and Mime had been growing and expanding until this venture occupied the space of a week with approximately 2,500

children participating in items of great diversity; a guest commentator was invited to write confidential criticism to the responsible teachers and to speak encouragingly to the children. It was clear during the period of a Festival that there was much talent in acting and mime among the children, and it was resolved to select a small group of these children who showed talent and with them to rehearse and present dramatic material which would be suitable for the 8–12 age group. This step was taken in 1953. The children attended at the Children's Theatre on Saturday mornings. Instruction was given in mime and acting; rehearsals of plays were undertaken by specialist teachers from the Department of Speech and Drama, who worked



A scene from " The Tinder Box ", by Nicholas Stuart Gray, produced by the Aberdeen Children's Theatre in December, 1958. (Photo by courtesy Aberdeen Journals Ltd.)

on Saturday mornings, but who, therefore, had Monday mornings free; the Children's Theatre was therefore no longer a voluntary organisation—it was part of the programme undertaken by the Speech and Drama Department. The Education Committee of the Town Council were responsible for the supply of equipment and necessary incidental expenditure, and although the members of the audience paid only a nominal sum, namely 6*d.*, this money went to the City Chamberlain's Department.

In 1954, the Town Council purchased an old church hall, small and somewhat awkwardly shaped, but it was equipped and, after considerable thought, it was converted into a little theatre as convenient as possible for audience and actor. There are comfortable dressing rooms under the stage level with hot and cold water, mirrors for make-up and, on the first floor, a large room which serves as a cloakroom, (for every child in the audience must leave his coat and hat with the person in charge), and a refreshment room at the interval. This little theatre has disadvantages in being so small, but there are so many advantages in having the exclusive right of entry and usage, that those of us who rehearse with the children, or work in the workshop, or assist with costumes, or supply refreshments, are grateful for the freedom and the many opportunities to develop the work that could not possibly occur if we were still in a temporary building not our own. In this, the Central Children's Theatre, there is a group of children in the 10–15 age group who are enrolled as members after auditions are held and who must accept a very strict form of discipline in relation to attendance at rehearsals; behaviour at the refreshment break and in general must be sociably acceptable. Approximately thirty children are accepted for membership. There

An enchanted audience at the Mobile Children's Theatre performance of the " Storyteller ", by Brian Way. (Photo by courtesy of Aberdeen Journals Ltd.)

is a long waiting list. Parents and teachers have come to recognise the value that lies in this work from the point of view of the development of the child's personality and self-confidence. Three programmes are performed during the school year, each one running for approximately six performances. The audience consists of children from schools all over the town and the demand for tickets is so great that it can never be satisfied. Audience training is an important feature of this work and much could be said about this. In addition to this theatre there is now a second Children's Theatre Group working in one of the newly-developed housing areas; again the direction is in the hands of members of the staff of the Speech Training Department, although in this case there is a Parents' Committee who help with costumes and scenery.

With a staff of thirteen, each having had training in Drama and some of whom have been professional actors, it seemed logical to use this talent for the further advancement of the theatre; therefore in 1952 a semi-professional Mobile Children's Theatre was inaugurated. This meant that the teachers in the Department of Speech and Drama met together in school hours once a week and under the direction of the Superintendent of the Department they prepared a programme for presentation in schools. This proved most acceptable to head teachers, teachers and children until now it has become an established part of the work of the Department. Each year a programme is prepared for a different age group. Last year the audiences were in the Infant Departments; this year it is the turn of the Primary Schools. Children are invited to paint or draw their impressions of what they have seen or to write any comments about the programme. All performances are given in school hours and all children attend; there is no payment for admission. This work is part of the school day.

To sum this up: there is a Department of Speech and Drama in Aberdeen. All schools administered by the Education Committee are visited regularly and lessons are given in the technique of Speech and the Speech arts, including Drama. On this Department rests the responsibility for two Children's Theatre Groups, one of which has its own little theatre with suitable equipment. In addition to the performances that are given by the children to the children there is the Mobile Theatre which visits schools on Wednesday afternoons and which presents suitable programmes for infants and primary schools or for the older age groups. From all this it is obvious that much is being done by the Education Committee of the City of Aberdeen to introduce the children in the schools to one of the greatest heritages which we as a nation possess—the Theatre. It is hoped that these children will be audiences of tomorrow and that they will make their voices heard in order that municipal authorities will supply the entertainment and the intellectual stimulus that only the " live " theatre can completely provide.

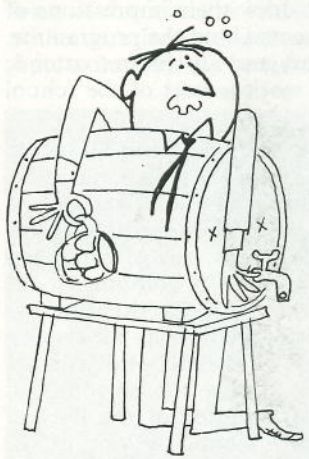
EARLY NIGHTS

by Charles Henry

Mr. Henry has been production manager for Moss Empires for very many years. He has probably produced more shows at the London Palladium than anyone else. That he is a remarkable personality is shown by the fact that he is the producer of the " Crazy Gang." Here is the first instalment of anecdotes from half a century in show business.

If I were asked what has been the greatest change in the theatre during my fifty odd years' connection with it, I would say, undoubtedly, lighting.

One of my earliest engagements was with a " Fit Up ". We not only *travelled* our own stage and proscenium front, but also lengths of barrel fitted with gas jets and reels of rubber hose. The mechanic in charge of the lighting was the Gasman as indeed he was. His job was to connect the gas battens and floats to the supply installed in the Assembly Rooms or Workmen's Halls, where we played. A check-down was a tricky affair achieved by slowly turning the main tap. If the Gasman was a bit shaky or had had *one-over-the-eight*, the jets would go right out and the play would be interrupted while a ghostly figure with a lighted taper crossed the stage. On the upstage side of the floats were two strands of wire, I never knew if they were to prevent the long skirts of the ladies from putting out the jets or to stop the skirts from catching fire—probably both.



" . . . a tricky affair turning the tap."

The regular theatres were installing electricity, although the light from these old carbon lamps was not very good. Front Limes were unheard of, but we did have Perches—a carbon arc over each of the *P.*, and *O.P.*, entrances, operated usually by an inexperienced nightman, who could produce a hiss and a splutter guaranteed to drown the best of dialogue; carbon arcs were also used for entrance lighting which, of course, had to be continuously trimmed, which meant a man on each of them. There were no 1,000-watt floods. These were a godsend when they came, but sometimes the electrician had bunch lights made up by installing six or eight lamps in an ordinary tin or enamel bowl.

I had an effect in the early days, produced by projecting shafts of red light on to a drop made in folds of black American cloth and when the drop was shaken into waves, the result was roaring, leaping flames. Spotlights were unknown, so the electrician went to

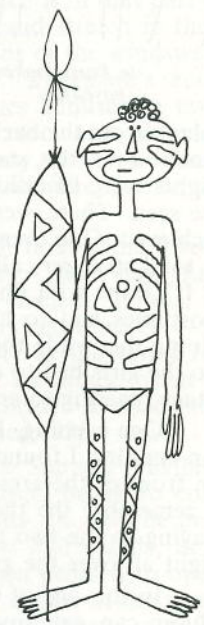
" . . . guaranteed to drown the best dialogue."

a breaker's yard and bought up about 20 old headlamps. We cut the backs out and put in a lamp, fixed them to poles and these were the forerunners of the booms of today. Unfortunately the fire authorities frowned on the use of the inflammable American cloth and it was taboo, so we substituted black Italian, but the reflection was not nearly so good. However, we kept both drops on the grid and, if the fireman was around when the scene came on, then the effect suffered because we used the Italian, at other times we used the original.

Dimmers were not by any means standard equipment and a check was achieved by switching off circuit by circuit. Coloured battens were very primitive lamps dipped in various coloured concoctions that soon burnt off.

My first experience of the modern colour change was at a North London theatre—I think it was the Dalston. Three battens—white, red and blue—were attached back-to-back like a three-pointed star and the centre shaft ran into sockets in the fly rail. The battens were linked by a bicycle chain affair and on to a winch and when a colour change was needed, the whole thing revolved so that as one batten faded out the other came in. Following the introduction of Front-of-House arcs (and the early ones were really not much good, hardly reaching the stage) the next step was Circle Spots followed by Automatic Change. Now we have Arenas, 2-kW Mirrors, and all kinds of lamps to satisfy the producer and confuse the Stage Manager's lighting plot.

In some cases Circle Spots meant scrapping Footlights. I remember the late Julian Wylie, and he was one of the best lighting men of his day, saying to me when he came to produce a pantomime at the London Hippodrome and found the floats had gone, " You can't light an exterior set without floats,



" . . . dipped in coloured concoctions."

as they represent the reflection of the sun as given off by the earth ".

One of my happiest memories was working with the late John Murray Anderson on *Bow Bells*. I think his general lighting and use of spots in the episodes of *The Young King* were a masterpiece.

I was the first to introduce luminous lighting into this country. I was in Paris looking for novelties and at one night spot a nude paraded wearing only several strands of pearls, the lights went out and all you saw were pearls. The pearls were actually beads filled with a luminous content and treated the same way as the hands of a watch. They were made by a firm named " Radiana " and I was anxious to know if materials could be treated in the same way. On my return I discussed it with my colleague—Gilbert Brown—who had been general manager for Horace Goldin, the illusionist and was versed in the arts of doing business with the French. So he set off for Paris with a few yards of webbing, to see if this could be treated. Experiments proved it could, so we had a quantity treated and used as part of a Harem costume over a stockinette base.

" . . . *in Paris looking for novelties.*"

We were producing *Rockets* at the Palladium at the time and we had a joy plank from the back of the stalls over the seats past the conductor and on to the stage. When the girls were paraded along this, lights were blacked out and only some shapely skeletons were to be seen. There were endless discussions as to how the effect was achieved. One evening I was watching at the back of the stalls and a total stranger called me aside and whispered to me confidentially, " It's done with Phosferine "—he probably meant phosphorus! The costumes had to have a good light bath at every show. We tried doing this while they were hung up, but the folds did not show up, so the girls had to dress and parade before two arc lamps under the stage, passing to and fro and turning.

One evening, I noticed that we had several half skeletons and, on enquiry, I found some of the girls had just been standing talking in front of the arcs and, of course, their costumes did not respond. I remember the then electrician—a real Cockney named Pitman—saying to the two arc men, " Now it's up to you to consecrate the light all over the girls ".

In this age of Consoles, Electronic Boards and Sunspots a producer can get any effects he wants quite easily, but it was much more fun in the old days when you had to find a way. Well, TV marches on.

SCHOOL STAGE
PRODUCTION & LIGHTING
2.30 p.m., Thursday, April 21st

This will be an afternoon demonstration specially for teaching staff given by P. Corry and Frederick Bentham in the Strand Electric Theatre, 29 King Street, Covent Garden, W.C.2. Admission is by ticket supplied free on application. Tea will be provided.

A NEW VILLAGE THEATRE

P. Corry

Holme-on-Spalding-Moor is a sizeable village some fifteen miles east of Selby, that ancient town whose toll bridge still produces substantial revenue and recurrent traffic jams. The name Spalding-Moor should not be allowed to provoke visions of villagers wandering about grim uplands " baht 'at," or of daughters of the vicarage writing best sellers as the wind howls an awesome obligato. There is no obvious moor in the vicinity of Holme, which is in that part of Yorkshire whose acres, though broad, are flat and stretch in their agricultural richness to horizons that give no hint of the windswept wolds or the lovely hills and dales beyond. Yorkshire's rural countryside has an infinite variety that provokes admiration even from the most determined wearer of the red rose, and gasps of surprise from those who are wont to think of any northern county as being exclusively occupied by dark satanic mills. They know not Yorkshire who only Headingley know.

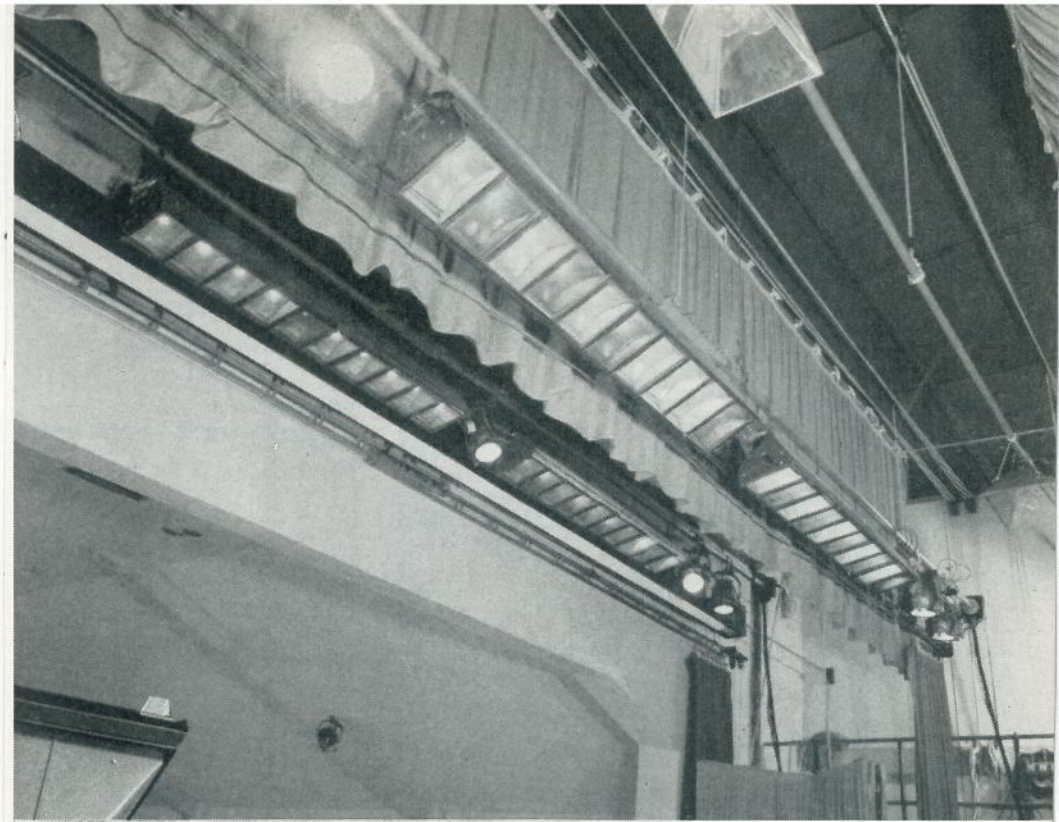
Holme is no upstart community: its church links some fifteen hundred parishioners with the fifteenth century. The village hall that has now been discarded was not quite so ancient. It was, in fact, a wooden structure that did its national service in the 1914–18 war. Since 1920 it has served Holme vicariously as the venue for its whist-drives, dances, parties, concerts and meetings, when it wasn't being the village cinema, or the village theatre in which the Holme Players have staged their productions since 1935.

In 1933, the village schoolmaster, the late Samson Feather, who had been the founder of the Village Institute, began to convince the members that a new hall was a necessity. In 1943 he persuaded them to buy the site on which the new hall stands, at a cost of £800, exhausting their savings. It was then decided to open a Building Fund and to consider the conflicting claims in the planning for the new hall's multi-purposes. The Holme Players, mindful of the restrictions and handicaps they had suffered, laid insistent

claim to a stage that should have adequate depth, height and wing space. Their founder and producer, Miles Hutchinson (also the village doctor), critically studied all the published arguments on the subject and in 1952 produced his own scale plans of the stage he wanted. As Dr. Hutchinson was also the treasurer of the Village Institute he had to perform a Jekyll and Hyde act in the negotiations between Players and Village. It was decided that the Players could have whatever sort of stage they wanted, provided they paid the cost of it, a responsibility they nobly undertook. When all the various committees and groups with special claims had argued their vested interests, and had ultimately accepted the inevitable compromises, it was possible in 1954 to approach the architect, Colin Rowntree, F.R.I.B.A., of York, with details of what was wanted. Not surprisingly, he spread dismay among the Holme enthusiasts when he totted up the estimates, which had soared to the impossible total of something like £15,000, instead of the £9,000 they had regarded as a target.

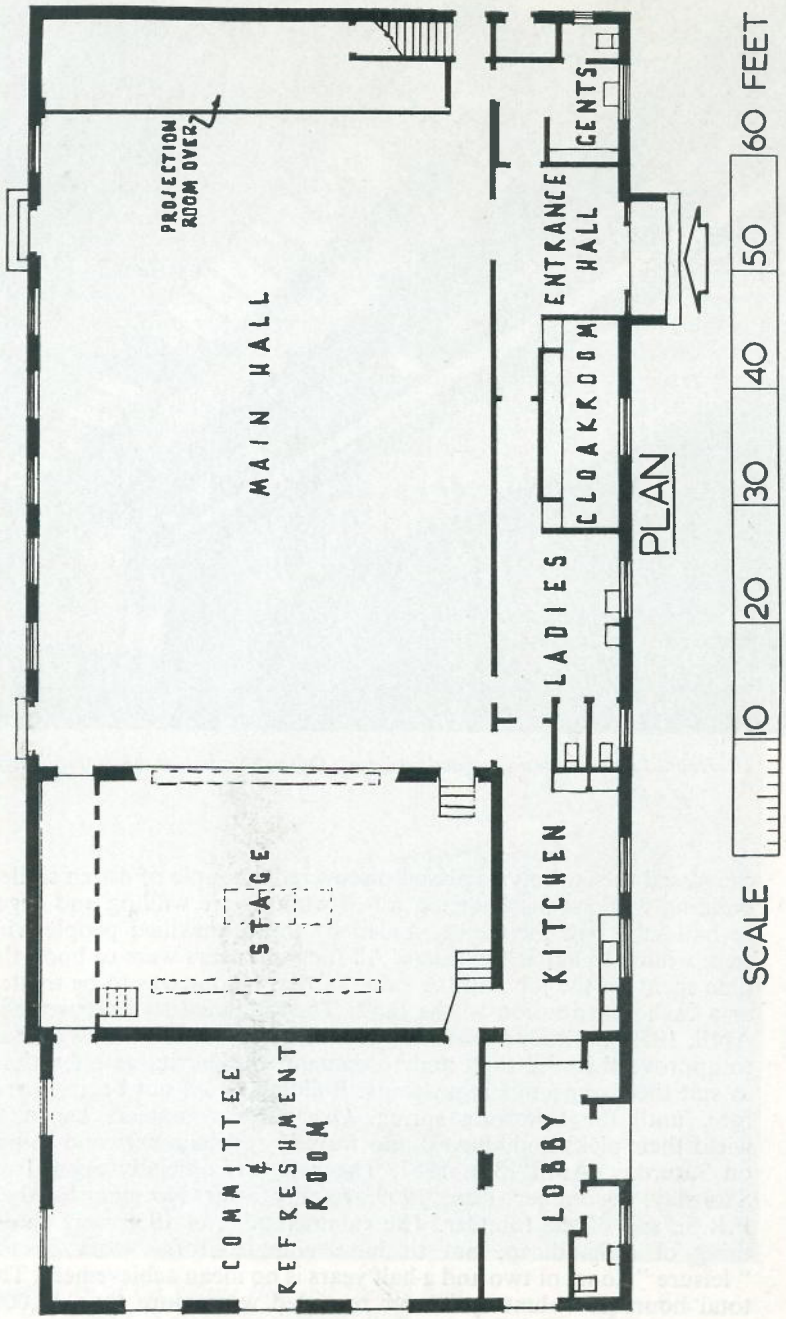
There were anxious sessions in which attempts were made to cut down the requirements and to reduce the cost by at least a third. Quite naturally, the result failed to satisfy anybody. When hopes of the new hall were receding rapidly, the indomitable doctor

Auditorium of the Village Hall and Theatre built by the villagers of Holme-on-Spalding-Moor.

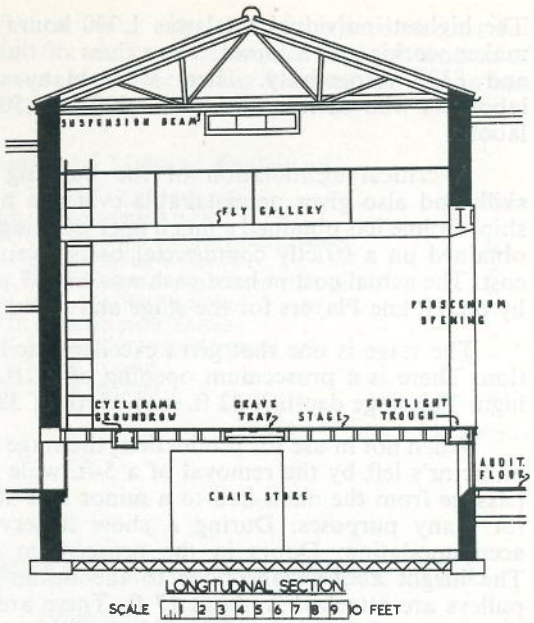


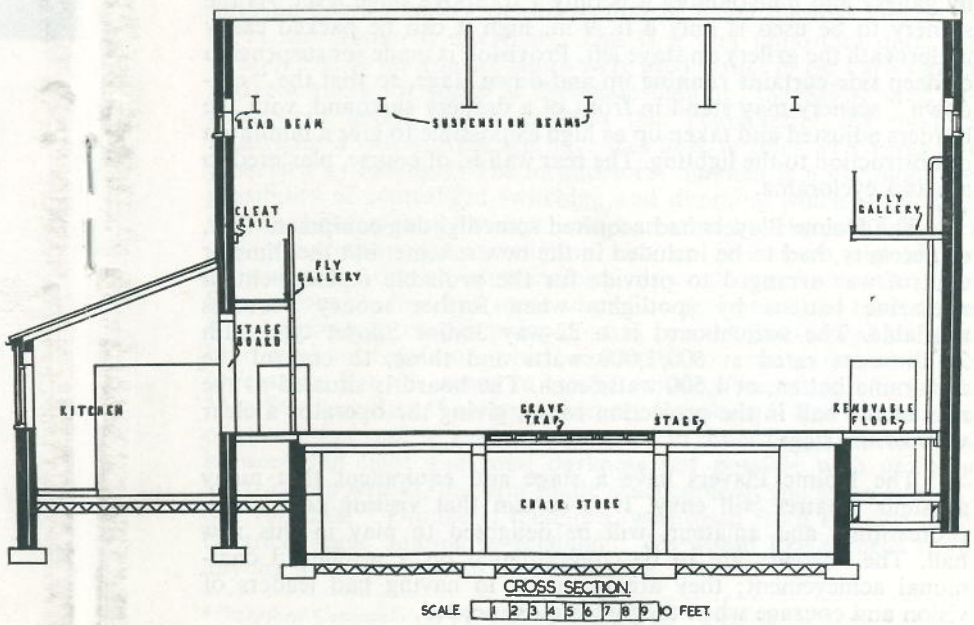
The Holme Players have a stage and equipment that many amateur theatres will envy.

canvassed the entire village and discovered a couple of dozen skilled building workers in residence, all of whom were willling and eager to build the hall themselves, aided by those unskilled people who were willing to act as labourers. All the volunteers were to book the time spent on the job and the value of that labour was to be treated as a cash contribution to the fund. They planned to start work in April, 1956, but they reckoned without all the authorities who had to approve this and that, and to demand the inevitable alterations to suit their respective regulations. Building could not begin, therefore, until the following spring. Over fifty volunteers began to wield their picks and shovels and trowels and hammers and things on Saturday, April 13th, 1957. The hall was officially opened on Saturday, December 12th, 1959, by Professor Norman Feather, F.R.S., son of the founder. The summer rains of 1958 were something of a handicap, but to have completed the work in the " leisure " hours of two and a half years is no mean achievement. The total hours of voluntary labour recorded were more than 16,000.



Plan and Section of Stage Arrangements at Holme-on-Spalding-Moor





The highest individual total was 1,900 hours credited to a cabinet maker working as a joiner. The values of those totals were £3,200 and £380 respectively. There were many other craftsmen and labourers who each contributed 1,000 to 1,500 hours of voluntary labour.

A critical examination of the building reveals considerable skill, and also gives unmistakable evidence of pride of craftsmanship. Holme has obtained a much finer building than could have been obtained on a strictly commercial basis, even at the full estimated cost. The actual cost in hard cash was £7,877 plus £2,575 subscribed by the Holme Players for the stage and its equipment.

The stage is one that gives excellent facilities for play production. There is a proscenium opening of 22 ft. wide and 10ft. 3 in. high. The stage depth is 22 ft. and width of 38 ft.

When not in use for production, the stage floor width is reduced on actor's left by the removal of a 5-ft. wide section, which allows passage from the main hall to a minor hall at the rear that is used for many purposes. During a show it serves as dressing room accommodation. Doors in the proscenium wall were inevitable. The height above stage floor to the beams to which suspension pulleys are attached is about 17 ft. There are two fly-galleries, the one on actor's left being 5 ft. wide, and is used mainly for storage; it is 10 ft. above stage level. The one on actor's right is the actual fly gallery and unavoidably it is only 7 ft. above stage level. As the scenery to be used is only 8 ft. 9 in. high it can be packed easily underneath the gallery on stage left. Provision is made for suspension of deep side-curtains running up and down stage, so that the " cut-down " scenery may stand in front of a drapery surround, with the borders adjusted and taken up as high as possible to give a minimum of obstruction to the lighting. The rear wall is, of course, plastered to act as a cyclorama.

The Holme Players had acquired some lighting equipment that, of necessity, had to be included in the new scheme, but the dimmer control was arranged to provide for the probable replacement of magazine battens by spotlights when further money becomes available. The switchboard is a 32-way Junior Sunset type with 29 dimmers rated at 500/1,000 watts and three, to control the cyclorama batten, at 1,500 watts each. The board is situated at the rear of the hall in the projection room, giving the operator a clear view of the stage.

The Holme Players have a stage and equipment that many amateur theatres will envy. It is certain that visiting companies, professional and amateur, will be delighted to play in this new hall. The villagers are to be congratulated on a wonderful communal achievement; they are fortunate in having had leaders of vision and courage when they were most needed.

Yorkshiremen like to assert that " if ever tha does owt for nowt, tha mun do it for tha sen ": we salute the men and women of this Holme on the elusive Moor for having bettered the instruction to such good effect.

Schedule of Lighting Equipment

F. O. H. Spots	4 × Patt. 23 (2 at each side)	4 circuits
Footlights	18 ft. compartment type	2 ,,
No. 1 Bar	2 × 6 ft. sections compartment Batten	2 ,,
	5 × Patt. 123/500 W spots	5 ,,
No. 2 Bar	2 × 6 ft. sections compartment Batten	2 ,,
	4 × Patt. 123/500 W spots	4 ,,
Cyc. Batten	18 ft. compartment Batten	3 ,,
,, Footlight	3 × 6 ft. sections compartment type	4 ,,
Dips	4 × 2-way in pairs	4 ,,
Fly Plugs	2 × 2-way in pairs	2 ,,
	Total	32 circuits

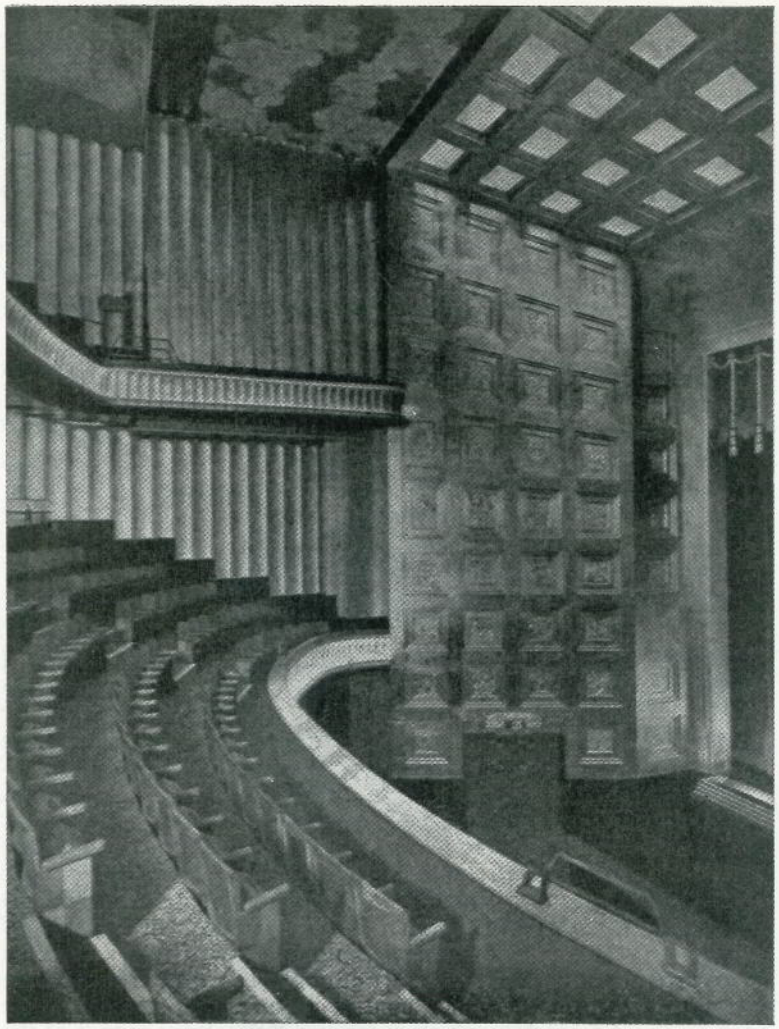
* * *

MADE TO DWELL IN A DUNGEON CELL

Frederick Bentham

In 1881 the Savoy Theatre, London, achieved with the Gilbert and Sullivan opera *Patience* the distinction of being the first theatre to be lit *throughout* by electricity. This is a very important date, for although some electric arc lamps were used earlier in the Paris Opera and elsewhere for some of the stage lighting, the Savoy used incandescent lamps and it is these that characterize the modern theatre installation. Arcs can have had little to offer which was not possessed by limelight. The incandescent filament lamp brought the possibility of centralized switching and dimming which is peculiar to stage lighting (and has now been borrowed by television lighting) and which turns the installation into an instrument capable of artistic expression. Unfortunately, although we know that the Savoy from the first had some sort of control board, its exact form is not known to us. Dimming control is sometimes stated to have been by shunt regulators which controlled the voltage output of the generators, but this seems to conflict with a *Times* report to which Miss St. Clare Byrne* makes reference, describing " how a resistance of *open spiral coils of iron wire* was used in order to get graduations between full light and total darkness not possible with *ordinary* electrical apparatus, but now made practicable by the Swan lamps." She remarks, " Dimmers, therefore, were used from the first with electrical stage lighting in England." We would like to hear from anyone with information on this subject.

* " *Oxford Companion to the Theatre* " *article on* " *Lighting the Stage* ".

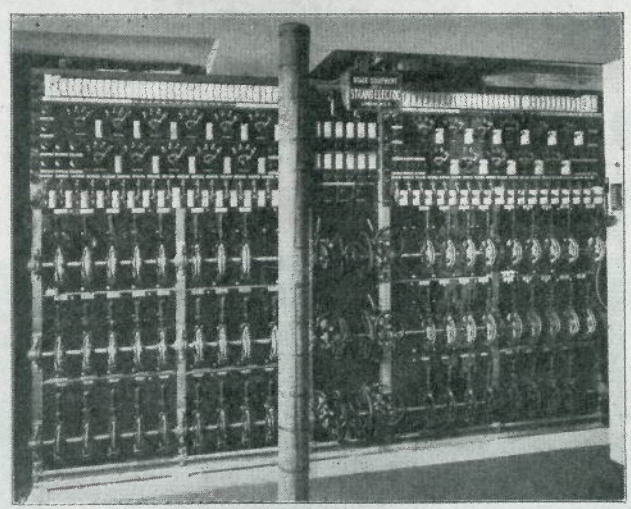


The auditorium of the Savoy designed by Basil Ionides.

In 1929 the Savoy Theatre was very largely reconstructed (Easton and Robertson architects, decoration by Basil Ionides) and the present auditorium created quite a sensation as the writer remembers at the time. It was *modern* and much featured in the architectural press, but it avoided the trap into which the Cambridge fell later, of being bare and austere and bleak. (Now corrected to a large extent in the latter Theatre by re-decoration.) Of all the auditoriums of the 1930's the Savoy seems to date the least. The entire electrical installation was carried out by Strand Electric and a new stage board was put in. This board is about to be replaced by a modern C.D. installation. The 1929 Strand Board is quite a curiosity with some liquid pots for variable load circuits and Dutch resistance dimmers to most circuits. The amalgamation with Mansel and Ogan took place shortly after and from then on Strand made their own resistance dimmers.

What is particularly intriguing on the 1929 Savoy board is the roundabout means used to make circuits optionally independent of their masters (commonly provided for nowadays by two-way and off switches to each circuit). Circuits were fed by red, white, amber and blue masters, but certain of them could be switched over by four-way live front selector switches to any of the four masters. The photograph and contemporary caption (below) are reproduced from *The Illuminating Engineer* (the journal of the I.E.S. later to become *Light and Lighting*) of January 1930.

The Stage Lighting of the Savoy Theatre



WE reproduce above a view of the special stage switchboard installed at the Savoy Theatre, which was described by Mr. Applebee at the meeting of the Illuminating Engineering Society on December 10th, and which represents a distinct advance in this type of apparatus.

Some details of the stage lighting, as given by Mr. Applebee, may also be of interest. In addition to the ordinary four-colour standard footlight and batten lighting, a complete set of "Sunray" cyclorama lighting has been installed on a counterweighted bridge over the proscenium arch, whilst numerous "Secco" 1,000-watt "spot" lanterns have been placed on the No. 1 batten on each proscenium, whilst wiring has been taken to many points in the auditorium, such as the front of the upper circle, so that spot lanterns can be placed there if required. Each of these lantern points has been fitted with a 1,000-watt "Sunset" dimmer, and the switching is so arranged that by means of a selector switch it can be transferred to any colour master.

Description of the old 1929 stage switchboard at the Savoy from "The Illuminating Engineer" of January, 1930.

TABS readers who are interested in the earlier history of stage lighting are referred to Miss St. Clare Byrne's article. An equally fascinating history, but of the early application of electricity generally, is given in *The History of Electric Wiring* by John Mellanby (MacDonald, London).

The 52 dimmer ways of 1929 are being replaced by 120 resistances and transformers remotely controlled from a standard Strand C.D. console.

There is only one sorrow and that is that the Console " is made to dwell in a dungeon cell upon a spot that is always barred ". From this cell—the old switchboard room—any view of the stage is completely barred and one must hope that the operator deprived of a view of proceedings on stage will not find himself during rehearsals playing like " the billiard sharp whose doom is extremely hard " and who, in the words of the *Mikado*,

> . . . plays extravagant matches
> In fitless finger stalls
> On a cloth untrue
> With a twisted cue
> And elliptical billiard balls.

The new Strand C.D. Console Control now being installed at the Savoy Theatre.

Dimmer Schedule on the new Strand Control due to be installed in the Savoy Theatre this year.

Dimmer Ref. No.	*Circuit Name*	*DIMMERS Number of*	*Rating*
	Front of House Master		
1– 4	Upper Circle end Left	4	1/2 kW
5–14	Upper Circle Centre	10	1/2 kW
15–18	Upper Circle end Right	4	1/2 kW
19–20	Circle Effects	4	1/2 kW
21–24	Pros. spots L.	4	0·5/1 kW
25–28	Pros. spots R.	4	0·5/1 kW
29	Float spot L.	1	0·5/1 kW
30	Float spot R	1	0·5/1 kW
	Spot Bar and Perch Master		
31–42	Spot Bar 1–12	12	0·5/1 kW
43–44	Perch L.	2	0·5/1 kW
45–46	Perch R.	2	0·5/1 kW
	Floats and Battens Master		
47–50	Floats (4 colour magazine)	4	900/1,800 W (*with " Ends-off " switches*)
51–54	Batt. 1 ,, ,, ,,	4	1/2 kW
55–58	Batt. 2 ,, ,, ,,	4	1/2 kW
59–62	Batt. 3 ,, ,, ,,	4	1/2 kW
63–66	Batt. 4 ,, ,, ,,	4	1/2 kW
	Fly Dips Master		
67–72	Flys Down Left	6	two kVA T four 1/2 kW
73–78	Flys Mid Left	6	two 2 kVA T four 1/2 kW
79–84	Flys Up Left	6	1/2 kW
85–90	Flys Back Left	6	two 2 kVA T four 1/2 kW
91–96	Flys Down Right	6	two 2 kVA T four 1/2 kW
	Dips Master		
97–100	Dips Down Left	4	two 2 kVA T two 1/2 kW
101–104	Dips Mid Left	4	two 2 kVA T two 1/2 kW
105–108	Dips Up Left	4	two 2 kVA T two 1/2 kW
109–112	Dips Down Right	4	two 2 kVA T two 1/2 kW
113–116	Dips Mid Right	4	two 2 kVA T two 1/2 kW
117–120	Dips Up Right	4	two 2 kVA T two 1/2 kW

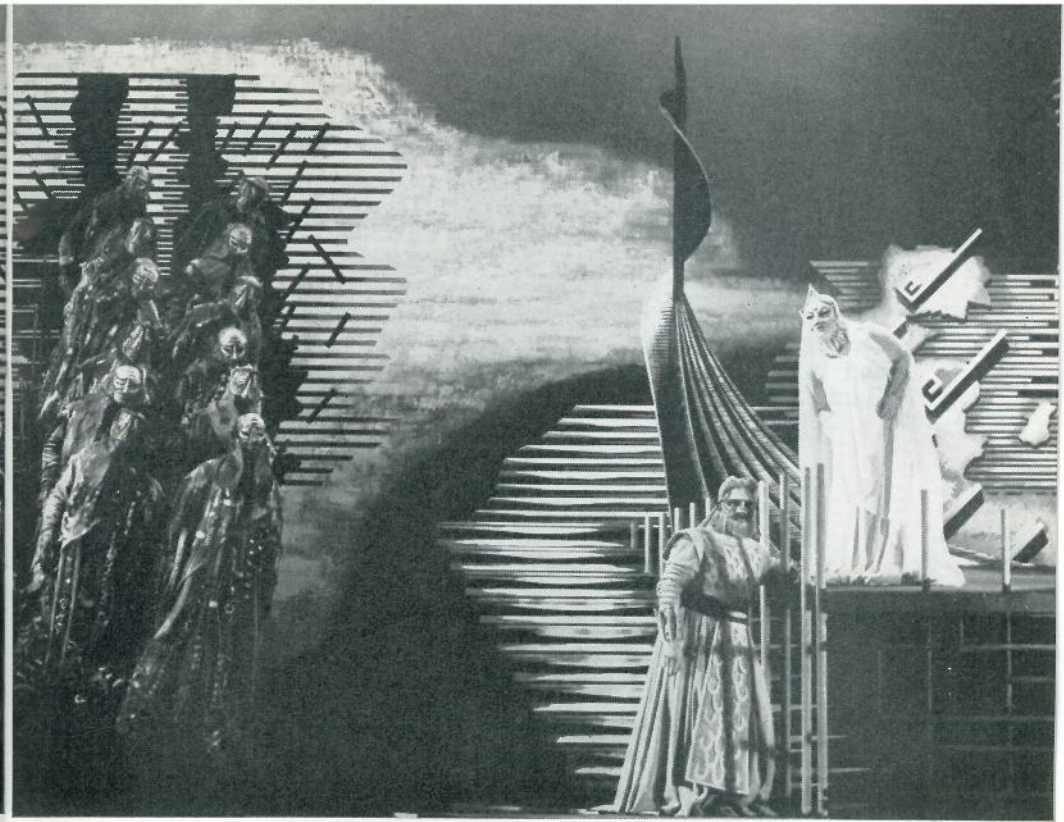
T = *2 kW infinitely variable load transformer.*

Dimmers shown as 1/2 kW or 0·5/1 kW are variable load between these figures.

OEDIPUS

AT

SADLERS WELLS



The first London stage production of Stravinsky's "Oedipus Rex" by the Sadlers Wells Opera. (Photo courtesy Sadlers Wells Theatre.)

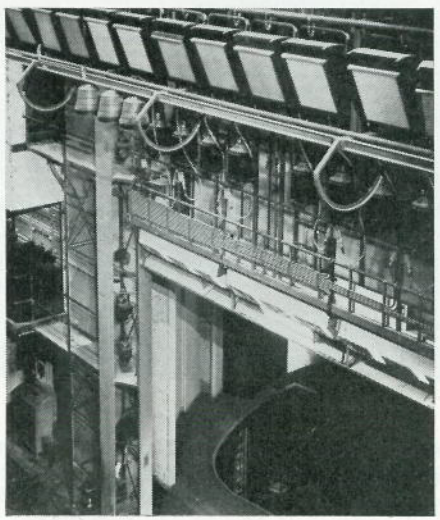
The production by Michael St. Denis of Stravinsky's opera *Oedipus* at Sadlers Wells has created a big sensation. Certainly as far as the present writer is concerned the opera is an experience not likely to be forgotten. As the photograph shows, the setting is most striking, and in fact the masked figures ranged in tiers on the left never leave their positions. What the photograph cannot show is the extraordinary effective colouring—colouring achieved largely by lighting.

This brings us to the real aim of this article, which is to point out that the lighting of this production was in its own way quite a sensation and revolution. The production represents the first time pole-operated lanterns have been used on the stage and one cannot help thinking that the mixture of *Oedipus*, a pole and new lighting must have some symbolism somewhere. The No. 1 bar at Sadlers Wells has been re-equipped with 12 Patt. 243, 1 kW 10-in. diameter Fresnel Spots. These spots are fitted with the Polestar attachment which was designed specifically for television, and the Strand 2 kW Patt. 243, with Polestar attachment has been specified by the B.B.C. for their new studios in the Television Centre, White City, London. The attachment was designed for television where rigging is a constant problem. Every production is different from its predecessor

and successor and a large amount of the equipment in a studio is concerned with providing means to rig the combinations of lanterns required very easily. However, final adjustment of focus, pan and tilt has hitherto only been achieved with difficulty, using the methods already familiar to those who work in theatres. For television this is not good enough and much time was wasted. With the new Polestar attachment it is possible to lock a lightweight pole on to the lantern and, from the floor, adjust the tilt, pan and focus. When the lantern has been set the pole is unlocked and taken along to the next. At the same time the barndoors on the front of the lantern are made to rotate very easily by means of a prod from the pole, and their four flaps adjusted in the same manner. Thus the beam can be focussed and shaped to suit the lighting requirement of the moment.

We had thought that the use of pole attachments would end there, and that they had nothing to offer the theatre, but Sadlers Wells have proved this to be untrue. The great difficulty in the theatre is that the lanterns hang much higher—24 ft. at Sadlers Wells. A second difficulty is that whereas the television studio is light, a theatre beyond the spotbar is dark and it is not easy to see the point of attachment for the pole. This has been overcome by giving

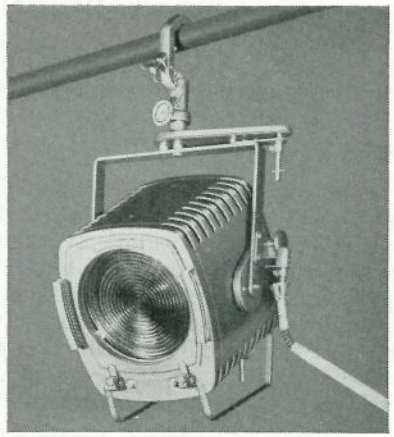
the pole its own internal light, but there would still remain the difficulty of using a pole over 24 ft. long. It may well be that this is not a serious problem because it is only the smaller theatres that require the pole method of operation. The continual resetting of lanterns in the proscenium position is a peculiarity of opera work in the main. It would be handy to have this pole attachment for rehearsals in other theatres, but of course those theatres settle down for a run. In an opera house the production is bound to be different each day and in consequence the lanterns must be reset. In Germany and in the only theatre approaching the German scale—Covent Garden Opera House—this is overcome by building lighting bridges



Example of lighting tower and bridge used in the German theatre.

just upstage to the proscenium as was described in an article in Vol. 16, No. 2 issue of TABS, and just as a reminder a photograph is included here. Using these bridges operators can set the lanterns, change the colours and so on with the greatest of ease. However, one would think twice before embarking on the bridge technique in a theatre of the size of Sadlers Wells, it would clutter up very valuable down-stage space. It is in this type of theatre that the Polestar comes into its own, because it enables one to achieve from the floor of the stage precisely what would normally require a bridge.

Lanterns can be set for each production exactly as necessary. The procedure can be to lower in the spotbar, colour up, fit the barndoors and rough point them in the correct directions. The bar is then raised to its dead, and then subsequent adjustment is done by means of the pole from the stage floor. *Oedipus* represents a par-



The Patt. 243 with Polestar attachment giving in situ *adjustment of pan tilt and focus.*

ticularly good example of this usage because it is paired with *Bluebeard's Castle* and the lanterns are entirely reset by means of the pole in the interval between the two operas. It is an extraordinary experience to be on stage during the interval and see the scenery put into position and the lanterns carefully and accurately focussed on the correct areas by means of the pole.

An attempt is being made to provide facilities for dropping the colours in and out, but it would seem that the colour problem is not so serious as the focussing because in a large number of stage sets it is possible to drop the bar in and change the colours and put the barndoors on and so on. It is focussing and setting the lanterns which is impossible to do other than in the raised position. Incidentally, the use of the new Patt. 243 for *Oedipus* also shows the versatility of this lantern. It is used variously as a full flood of 55°, spotted down to a near parallel beam to stimulate a Pageant and even set, in one instance, to give a rectangular beam of light hitherto only expected of a Mirror Spot. The rectangular beam is provided by the barndoor attachment.

The prime reason for a barndoor is not to shape the beam so that the lantern apes a Mirror Spot, though, as can be seen, this can be useful on occasions. It is there to intercept the slight ghost light when this is objectionable. There are four doors and the whole thing pivots so that this task is rendered easy. One effect of using fewer and brighter lanterns of this type is to give cleaner and more decisive lighting and this particularly seems to suit the *Oedipus* production. It may well be that we are due for a change of lighting fashion and that the present West End set with its masses and masses of Baby Mirror Spots will be replaced by much fewer of the new Fresnel Spots. For the truth is that although the Baby Mirror Spot is capable of a very sharp edge beam, it seldom seems to be required to fulfil this purpose in present West End lighting.

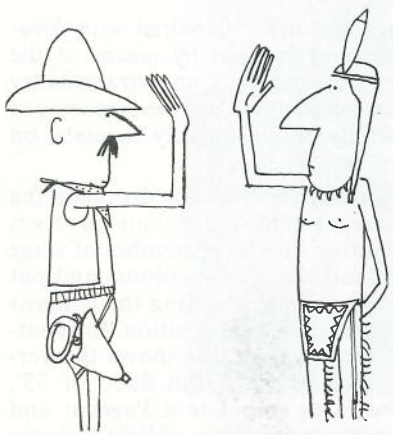
TO A BEGINNER

by B. E. Bear

" The difficulty is not to write, but to write what you mean, not to affect your reader, but to affect him precisely as you wish."
—R. L. S.

So is it with lighting for the theatre. Knowing and using lighting equipment and its associated gear can be likened to knowing and writing a language. A very limited vocabulary will get you by, but the greater the range known and the ability to choose each constituent for a purpose will make the result more expressive.

Thoughtful considered use of lanterns " sans colour " in such a way will give shape and significance to what you light, for light and shade alone set the form of the picture. Colour then comes in like great writing to heighten the statement.



" . . . a very limited vocabulary."

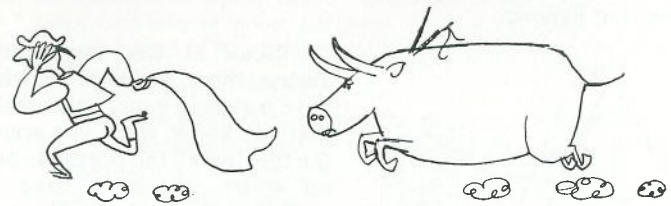
Neither vocabulary nor grammar will of themselves produce great writing nor will knowledge of the physical effects of colour grant to you the key to its use artistically. This will come only from a well-developed sense of colour —well developed by continual study of cause and effect in nature, in painting and in the theatre.

Just as each written word must do a job, so must each lantern—quantity alone will achieve nothing but a swamping chaos and indicates slipshod thinking. In the same way the lantern, like the word, must be the one for the job. Pursuing the parallel you will find that complicated lighting plots, like complicated sentences, are not the aim. It should be no source of pride to claim sixty cues in one act even though it may be technically exciting to achieve the expertise. In production lighting, the fewer cues you plot the better your lighting is likely to be and the more certain in operation. A lighting designer is responsible *to* the production, not *for* the production. He must so light the actors and the scene that the imagined situation becomes credible; that is not real, but believable.

Changes are then necessary only to suggest some change in the situation or possibly to express a change in mood.

What is your vocabulary? It is essentially knowing intimately all the lanterns available to you. Knowing, that is, what the shape of

the beam is and to what extent it can be varied in size. From this springs the knowledge of what it will cover at any distance. Linked with this is knowing how bright it is, especially in comparison with other lanterns. Practical experience alone teaches how much to expect the light to fall off with distance and how, when possible, to compensate for this. Size and weight of the lantern are important as



" A well-developed sense of colour."

these govern where it can be placed. So also is knowledge of the characteristics of the lamp for life and permissible angle of tilt either of which can condition its use in certain positions.

So much for the dictionary. How do you draw upon it to light a show? You want to affect your audience exactly as you wish, that we have agreed. Not surprisingly therefore you must know what you want to do.

There will be many limiting factors—of equipment available, of current and of money to spend. The first effect of any of these is to condition your thinking, even in some cases to the extent of settling for " full up " of all you have. That seems to me why you should still think out what you would like the stage to look like. Only when this is clear do you relate it to what you can do.

" . . . suggest some change in the situation."

Then it is that even limitations can help by forcing you to think more deeply of the problem.

Your first aim must be to light the actors so that their movements and expressions can be seen —and seen by all the audience. Although the actor uses primarily his voice, you will find that unless he can be seen he is unlikely to be heard. Sound broadcasts are not comparable to the theatre when a large number of people has to hear and see at the same time and to relate the voice to one person of many on the stage. Gestures, movements and facial expressions are important in so far as they are part of the actor's interpretation

and, even if the scene is set at night, will still need to be seen. Here, though, intrudes another part of your problem. The audience must believe that it is a night scene.

To relate the lighting needed to set a scene and that necessary to enable the actor to play his part is the crux of your problem and this will be solved only if you have the *actors present when finally setting your lighting*.

"... *the subject of an ultimatum.*"

Since at this stage time is always short, you will be wise to have watched many rehearsals so that you know, when you arrive in the theatre, all the positions on the set where you must have light available for the actor. The end of the dress rehearsal is not the time to have to reset spots or to look for more equipment.

Even if all your dawns and storms and table lamps have been perfectly controlled, one dark corner by the mantelpiece will cause all the good things to be forgotten and will be the subject of an ultimatum. Perhaps it can be quickly cured by altering a spot position, but often this then requires another to be moved, and so on, until all your plot is affected. Above all, the fact that there was one dark corner will have half the cast suspecting and looking for others.

* * *

"Encore"

There have been many attempts since the war to provide a professional journal devoted to the theatre, but alas these, like so many theatres, have failed, not through lack of support but through lack of financial support, costs being what they are. A realistic policy in relation to format has enabled *Encore* to celebrate, somewhat late, the publication of its twenty-first number. With sympathetic feelings towards this achievement, the Editor of TABS was able to prevail on the manager of our Demonstration theatre to loan it as the venue for a party. We salute our contemporary and express the hope that they too will have the pleasure of attaining their fiftieth issue in due time. *Encore* is published at 25, Howland Street, London, W.1.

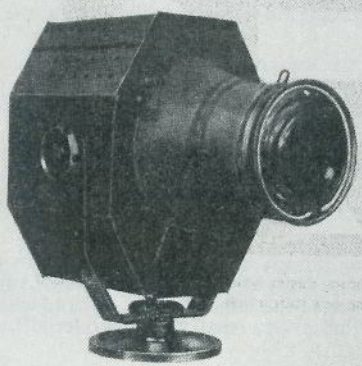
A New Lantern

An intention of this Magazine is, as mentioned in the editorial, to explain new developments in our equipment and also to point out new uses for equipment already known. This information will of course act as a supplement to our catalogue.

Amongst recent innovations, the Pattern 73 Mirror Spot has deservedly found its place, and in the London Theatre is now regarded as almost an essential for Front-of-House lighting.

Most people have found when using ordinary focus lanterns for Front-of-House work, that difficulties arise because the spot projected is circular, whilst the proscenium is square. Like its converse the square peg in the round hole, it was difficult to fit.

Now, however, with this new lantern which uses a 1,000 watt Class A.1 Tubular or B.1 Round Bulb



PATTERN 73 MIRROR SPOTLIGHT, 1000 Watt

This lantern employs optical principles never before applied to stage spotlights, and has an intensity of over double that obtained from a standard spotlight of the same size and wattage. Masking, to spot irregular objects on the stage hitherto impossible, can now be easily accomplished.

PAGE THREE

We reproduce here a page from the first (1937) number of TABS. Apart from its curiosity value it is of interest to note that the Mirror Spot technique was then quite novel. The photograph is in fact of the first ever Patt. 73, which lantern was to lead to the Patt. 53 and 93, even the Sunspot and the most phenomenal seller of the lot—the Patt. 23 Baby Mirror Spot.

LIGHTING THE MODEL THEATRE

Build Your Own Model Theatre.
By Anthony Noble, illustrated by Diana Tall. *Stanley Paul.* **9/6.**

Model theatre seems inevitably to invoke dewy-eyed reminiscences of "*penny plain tuppence coloured*", Pollocks toy theatres. As a youth I was intolerant of those who played toy theatres and regarded my own passion—my own model theatre—as something apart. So in the event it proved. My model theatre was as far removed from toy theatres as fine-scale model railways are from toy trains, however good the latter and some are very good indeed. My model theatre backed up by experience in amateur lighting and scenery enabled me to join the Strand Electric from the GEC at 21 with a wealth of ideas and a critical, trained eye. Perhaps the twenty-eight years that have followed have been an unconscious battle to make possible on the large scale of a real theatre the effects and facilities I had come to expect in my model theatre. My work in Colour Music certainly had its origin in the fact that the lighting soon outstripped the acting potential of my model theatre as a means of expression. If something *serious* had to be said then lighting variations on a suitable setting to music could say it much better than words backed up by frozen figures pushed on and off. This technique only satisfied the annual pantomime and figures eventually vanished for good, except where necessary to give scale to a setting. In those days I gave the scenes titles in much the same way as a painter. An example has just come into my mind; one set built around a flight of steps was called " High Treason " and the lighting variations to the solemn half of Liszt's *2nd Hungarian Rhapsody* did the rest. (I wonder what music I would choose today!)

The point I wish to make is that the lighting equipment was capable of really serious work, so much so that it was this item which gave the theatre life and set me on my career.

Serious model theatres take various forms and I well remember a wonderful stage construction (by a contemporary of mine, now a well-known designer) partly of Meccano with rising and falling stage floor on lifts, etc., in the manner common in the German Theatre.

It is Mr. Noble's approach to the serious model theatre instead of the over sentimentalised toy theatre which warms me to his book. Some of his constructional detail strikes me as obvious, showing the same tendency as in certain American publications to regard the reader as a complete noodle. Probably I am not a fair judge as I have always been intolerant of detail instruction and like to be shown the target rather than the method. To people to whom construction does not come naturally, Mr. Noble's method will be ideal. He may well inspire the growth of a new hobby, model theatres to follow model aeroplanes and all the rest.

By the way, a word on lighting. Strand do not and do not want to make model stage lighting. Sporadic attempts by ourselves in 1936 followed by others have failed. The whole tendency, due to the large amount of hand work which springs from small demand, is to find a very small object produced for a very large price!

Mr. Noble gives instructions how to make spots and floods and I would endorse his remarks here with the warning, *Do not allow scale to put you in a straitjacket.* I would advise the type of units and positioning that gives the best effect in the model theatre. Later one may transfer the intent, but not the exact method, to the production on a real stage. What a model theatre gives is an insight into the potentialities and a feel for lighting. Handling lighting only in the odd moments when a full-sized stage is available will cramp one's outlook.

FREDERICK BENTHAM.

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