

TABS

Published in the interests of the Amateur Theatre
by

The Strand Electric and Engineering Co., Ltd.

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CONTENTS

	Page
Editorial	3
Dimmer Differences	5
A Stage Switchboard Survey	10
Shotover on Shaw	12
The Wine Growers' Festival	14
A Multi-purpose Stage	16
Lighting Control for Television Studios	18
Small Stage Settings	22
Subsidy—A Stimulus or Soporific?	25
A Pantomime Exhibition	27
The Date of Dimming	27

EDITORIAL

Forthcoming Lectures and Demonstrations in Head Office Theatre

Several of the lectures announced in our last issue are fully booked. A further two have therefore been arranged as follows:—

“The Producer’s Use of Light on the Stage.” } Wednesday, March 14th, 1956
Lecture by P. Corry.

“Basic Stage Lighting,” Demon- } Wednesday, May 2nd, 1956
stration and Talk. } (A repetition of March 7th.)
By F. P. Bentham.

A few seats are still available for the following :—

“Colour and Directional Light as } Tuesday, April 10th, 1956
applied to the Stage.” } ,, February 14th, ,,
Lecture by L. G. Applebee.

“Basic Stage Lighting,” Demon- } Wednesday, March 7th, 1956
stration and Talk. }
By F. P. Bentham.

Advanced Technical Lecture on } Thursday, January 19th, 1956
Controls. }
By F. P. Bentham.

The above will be at 6.30 p.m. on each day. Entrance to the theatre is at 29 King Street, W.C.2 from 6.15 p.m.

Those wishing to attend should apply in writing as early as possible to Head Office, 29 King Street, W.C.2, marking the letter “Demonstration.” Personal applications can also be made at the Hire Showroom, at the same address, and sales counter in 25 Floral Street, W.C.2, but should be confirmed in writing.

* * *

Gordon Craig and the B.D.L.

The Autumn number of *Drama* includes a message to the British Drama League from no less a person than Gordon Craig himself.

Referring to his own early days he writes “I was a lover of all

sorts of things ; that is the meaning of the word amateur." His message concludes :

"Now we theatre folk, amateurs as well as the others, cannot forget the buyers—for there they sit row upon row of them in front of us and we play to them. Exactly. But we need never play *down* to them, and we can be happy to know they would not like us to do so. For while we theatrical workers are amateurs, they, the spectators, are amateurs too."

Clearly Mr. Craig's remarks apply to all of us who may be concerned with the Theatre, whether amateur (within his own definition), professional, B.D.L. member or otherwise. It is for that reason that we reprint the above extract by permission of *Drama*.

* * *

New Uses for Gelatine?

In our last issue we described a new use for Cinemoid—the "translating of designs for stained glass windows into something like reality." Recently we received two letters by the same post which we fear may point to rather dangerous new uses for Stage Gelatine Colour Filters.

One was an order from a Northern Repertory Club for some "chocolate jelly" and the other an enquiry from a Southern Social Club for "stage gelinite."

The latter has a distinctly suspicious suggestion of something highly explosive, while the former—well personally we prefer to stick to Chocolate Turkish Delights. Apart from the flavour we think that "chocolate jelly" in sheets 22 in. long \times 17½ in. wide would be a little difficult to handle.

* * *

A Step in the Wrong Direction?

The review of Stage Switchboards which appears on page 10 of this issue gives an indication of the manner in which the number of dimmer ways used in professional theatres has increased every year. No doubt because it was outside the scope of his article the author gave no reason for such an increase, but it is, of course, largely if not wholly due to the increasing use of a number of directional lighting units in preference to the float and 4-batten technique. Localised lighting in fact, in preference to a flat even "wash." The trend is neither new nor secret. It is accepted in village halls and West End theatre alike. This makes it the more difficult to understand the viewpoint of those who in recent years have been advocating the use of fluorescent lighting for stages. Leaving matters of colour and efficiency out of it altogether, the fact remains that fluorescent lamps by their very shape constitute a comparatively uncontrollable source of light, and their use would appear to be quite contrary to the experience and practice of recent years.

DIMMER DIFFERENCES

In the following article the writer considers the relative merits of different types of dimmer.

The manner in which each may be built into a dimmer board, and the actual method of its operation at the control point will be dealt with in a later issue.

There are four main forms of dimmer used in stage lighting: (a) resistance, (b) transformer, (c) saturable reactor, and (d) electronic.

(a) Of the above **the resistance** is the cheapest and simplest to make, but being the oldest form of dimmer it is to-day considered by some as suspect. Two objections are commonly quoted; firstly that it wastes current, and secondly that it has a poor variable load performance. The first objection begins dubiously because the resistance dimmer, unlike most of its rivals, has no loss at all in the two most common positions of a dimmer, i.e. full-on and blackout.

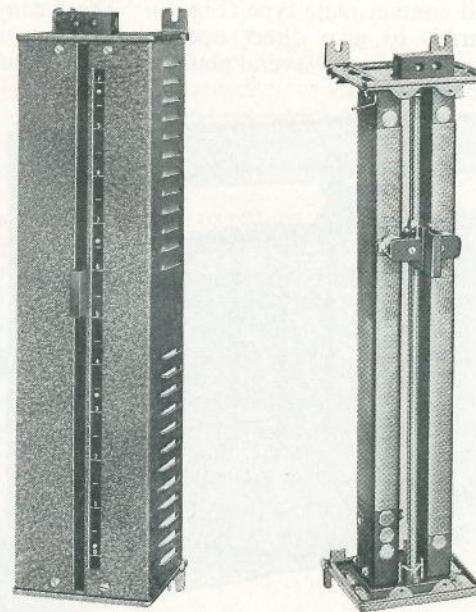


FIG. 1. Left, a slider dimmer and, right, the same with cover removed to show interior.

When considering check positions it is often overlooked that a little reduction in lamp volts produces a great reduction in lamp light. For example, a drop of 20% volts produces 52% light, thus at this common check position the loss in the dimmer is only 17.8% of the nominal watts of the lamp. At 25% light the dimmer will

account for 27% of the nominal lamp watts. At the bottom end of the dimmers a great deal of resistance is inserted to bring the light in gently from "out" and the position of maximum loss is reached. This is in fact 37% of the nominal lamp watts but as this represents 3.3% light only, a dimmer is seldom held in this position (see Fig. 3).

As regards the second criticism, that of variable load, a resistance dimmer can be wound to give a load variation of + or - one-third of its rating with complete control from full on to blackout. Thus three theatre resistance dimmers are available to give 3 Kw. to 1.5 Kw., 2 Kw. to 1 Kw., and 1 Kw. to 0.5 Kw. Of these, the last two are the most common. Of course the check position for 50% light will differ with the load on these variable load dimmers, but this does not matter so long as the dimmer is designed to take the light right down in a fade out, for required intensity is determined by eye and plotted as a handle position against a scale.

Resistance dimmers are constructed as sliders (Fig. 1) where avoidance of expense is the main target, or a more versatile form is the radial stud contact plate type (Fig. 2). These can be mounted "back-of-board" to give direct operation from a handle with interlocking and ganging of several plates, or to form clutch operated remote controlled banks.

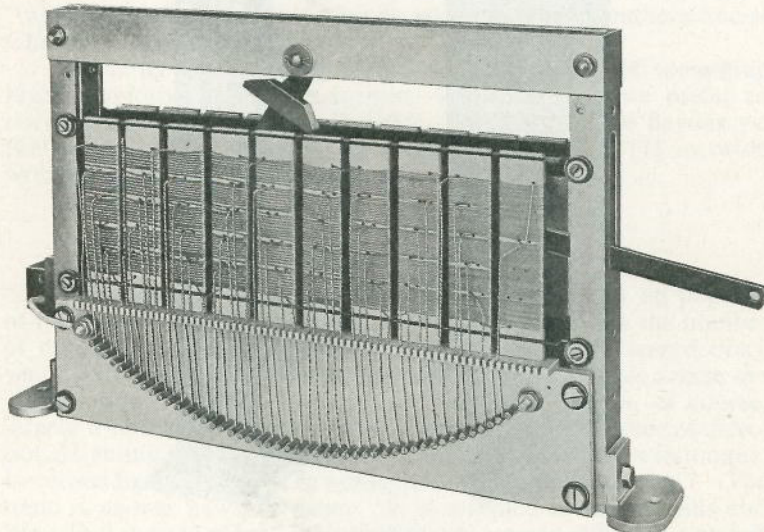


FIG. 2. A radial stud—contact plate type dimmer for back-of-board mounting and front-of-board operation by handles, or remotely operated magnetic clutches.

Another point which may commend this dimmer is that it in no way alters the electrical characteristics of the supply mains to which it is connected. Furthermore the resistance is the one type of dimmer to work on a D.C. supply.

(b) **The transformer**, or more properly, auto-transformer dimmer is in one form more or less interchangeable physically with the corresponding 2 Kw. resistance dimmer plate. It is, however, many times heavier in weight due to the iron core on which it is built. Its initial cost is also much greater. Fig. 4 shows a standard transformer for 2 Kw. at 200/240 or 100/125 volts, as operated by clutch on a remote controlled dimmer bank.

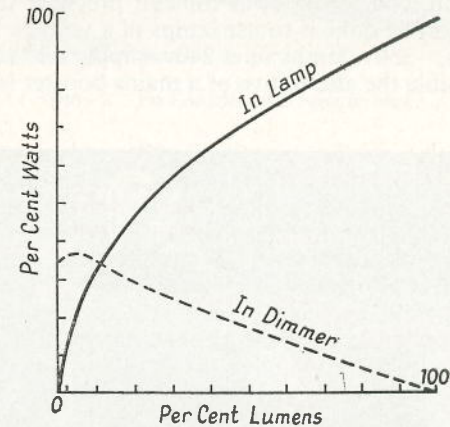


FIG. 3. Relation of light to watts absorbed in lamp and resistance dimmer.

Attempts have been made to reduce cost and weight per dimmer by combining several on one transformer winding. Some very successful models exist; but all fail, in the present writer's opinion, due to the difficulty of controlling contact wipers on a flat commutator other than by mechanical tracker wire, still the commonest practice on the continent of Europe. The Strand individual transformer dimmers require a simple radial action which can easily be operated from an electro-magnetic clutch and therefore mixed banks of transformers and resistances (to keep down the overall cost) are easily possible.

The principal advantage of the transformer is its ability to handle any load virtually from zero to its maximum rating. This it does relatively efficiently and any magnetising current which might represent a loss can be automatically cut out at the blackout end of travel.

(c) **The saturable reactor** dimmer is known variously as a "choke dimmer," a "transductor" or a "magnetic amplifier." In a general way these terms are interchangeable but strictly the magnetic amplifier has come to represent a more elaborate form of unit with a stage of control amplification beyond that of the basic unit and perhaps with some degree of feedback to allow the load to influence the saturating current. In this context saturation using electronic valves is deliberately excluded (see (d) below).

All the dimmers in this group, however elaborate, suffer from one great drawback in that when they are fully saturated and the light is "full on" a voltage drop is present across the reactor. This voltage drop varies with the load and is of the order of 5%, perhaps even as high as 10% (a light loss of 15% or 30%). Whereas the resistance dimmer only varies output with load at intermediate positions, the reactor will do this at the so-called "full on." Because of this variation, compensation is difficult precisely to achieve and the most that can be done is to use lamps of a voltage 10 volts lower than the mains. 230v. lamps on a 240v. supply and so on. Where this is not possible the alternative of a mains booster is an expensive complication.

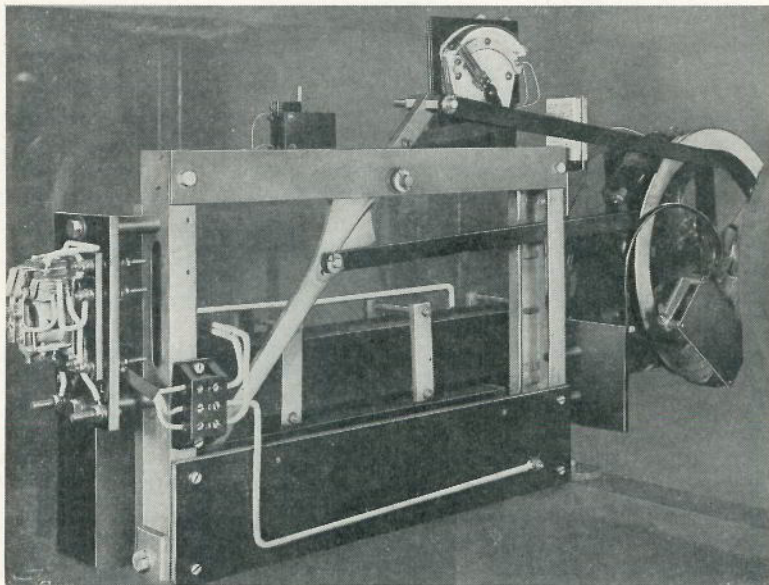


FIG. 4. A standard transformer dimmer for 2 kw. at 200/240 v. or 100/125 v.

The great advantage of the saturable reactor is that provided the minimum facilities are called for, it is the simplest and least expensive form of *remote* lighting control possible. Strand Electric have preferred to exploit this angle rather than build this dimmer with one complication and another into a form of control better achieved by other means.

(d) "Electronic dimmer" is a term which must be restricted to a system which uses thermionic valves. (There is a tendency to use the term for any up-to-date system regardless of what comprises it—"Electronic" being one of the magic words of the age.) There are two main types of electronic dimmer: the earlier merely used thyatron valves as an easily controlled source of saturating current

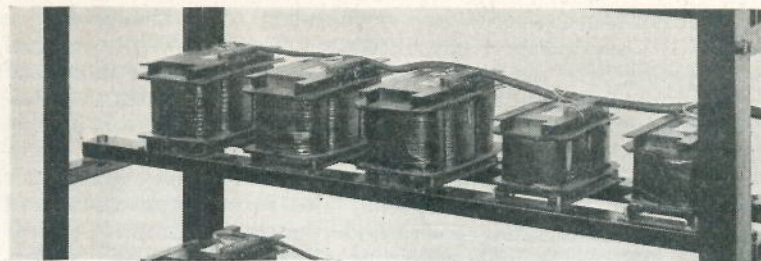


FIG. 5. Part of saturable reactor rack.

for a saturable reactor. The more recent form uses the thyatrons directly to feed current to the lighting lamps.

The advantage of the direct electronic dimmer is the variable load facility easily controlled without moving parts from a remote point. Theoretically simple, it is nevertheless a fact that whether the Strand Electric three-valve system or the two-valve system used by others is employed, the result is an initially expensive set of equipment. With over 2,000 electronic dimmers behind us we have to admit that their use does not follow automatically. The valves employ heavy filament currents which have to be flowing continuously to be "at the ready" even when the light is switched off, and this plus the constant volts drop across each valve (even though easily compensated for) gives the dimmer a poor electrical efficiency. Even if it were possible, switching valves on and off is not to be encouraged, as switching heaters tends to reduce life.

The electronic dimmer is operated by varying the grid control of the valve from the remote desk. The response is immediate and if a slow change is required the lever is moved slowly; or if a sudden change then the grid may be switched. No further circuit black-out contactors or relays are necessary.

The valve acts as a voltage regulator and therefore the dimming characteristics are unaffected by the size of the load. The permanent volts drop across the valve (about 10v.) is compensated for

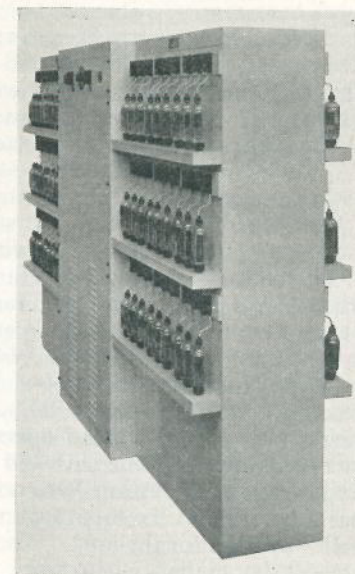


FIG. 6. Part of an electronic dimmer bank.

by a booster transformer on two-valve systems, or on the three-valve system by using the three phases to each circuit. With two valves each lighting circuit is fed with a form of A.C. and the individual areas of the stage have to be balanced in the normal way. A three-valve lighting circuit is fed with a form of D.C. and no balancing problems arise.

The prime advantage of electronic dimmers is undoubtedly their ability to dim variable loads; they also form a convenient and effective way of dimming hot cathode fluorescent lamps. Against this are the questionable efficiency already touched on and a further disadvantage that a set of levers has to be set aside to maintain the "lighting in use." A duplicate set must be provided for presetting.

All dimmers, whatever their type, have no merit outside their possible combination into a dimmer board. Consideration in this connection will have to be the subject of further articles.

F.P.B.

* * *

A STAGE SWITCHBOARD SURVEY

For the purposes of measuring distances therefrom, Charing Cross has for long been regarded as the centre of London. A review of the dimmer boards in 41 theatres within a radius of one mile of Charing Cross was recently undertaken and the following are some of the figures which were collected.

Of a total number of 3,634 dimmer ways (an overall average within the area of 89 per theatre), 2,043 were direct operated and 1,591 (about 44% of the total) were remotely controlled.

The number of theatres with remote control was only 10 out of 41, so it will be understood (and, indeed, was only to be expected) that the average number of dimmers per remote control board was higher than that for direct operated ones. The average figures were in fact 159 for the former and 64 for the latter.

The above figures show little change since 1952. In the theatres concerned four switchboards were replaced in the last three years, one by another hand-operated board (48 ways), and the others by remote control (one with 134 ways and two with 152 ways each). The theatres in question were not London's largest, which no doubt has a bearing on the fact that in each case the number of ways was below average for the area. There is no evidence to suggest that the present day tendency is to work with fewer circuits than in the past. On the other hand, looking over the whole theatrical field the opposite would, in fact, appear to be the case.

Before World War II Covent Garden Opera House was the only remote control in this country and no doubt the availability of alternative types of remote control and increased facilities on each has accounted for the increasing popularity of British remote control throughout the world, for the increase is not confined to the London area, nor, indeed, to England.

A number of boards installed in recent years in leading provincial theatres in Britain have for the first time been remote controlled type. More than half the dimmer boards exported at the present time to Europe, for example, are remote control and there is at least one Continental project under consideration which involves 400 ways.

It should perhaps be pointed out that for the purposes of this article remote control covers such systems as Console, Choke, Electronic or the new PR type described in our last issue. All these have an electrical as distinct from a mechanical link between dimmers and controls. The tracker wire form of remote control which has enjoyed wide use on the Continent in the past has never really found favour in England where it may be considered as having been obsolete for many years. The remote control boards which are being exported from Britain to-day are all of the electrical link types. The same is, of course, true of remotely controlled boards currently being installed in Britain.

It is unlikely that the area covered by the survey above will, for a year or two at least, render figures which will vary from our recent findings to an extent that would indicate a pronounced swing as to the average number of dimmer ways per theatre or in the ratio of the types of control employed. Many of the switchboards in the area have been replaced in recent years but there are to-day seven, the average age of which is 26 years. (Incidentally, the average number of dimmer ways on these old boards is 53, or if one excludes two "specials" of 90 odd dimmer ways each, the average is 37.) From the commercial point of view one of the objections to manufacturing non-consumable articles is the fact that the better they are made the longer they will last and the less frequently they require replacement!

As the result of bringing more and more circuits under the control of a pair of hands for purely operational—that is, for theatrical—reasons, modern controls show a saving of man-power, and therefore of hard cash. It remains to be seen, therefore, when those managements still operating equipment which is for that reason economically obsolete (though not yet actually, perhaps, technically unsafe) will re-equip. If nothing else, the fact that they did not have to do so long ago bears testimony to the quality and robustness of the goods installed in the first place.

C.

* * *

SHOTOVER ON SHAW

Shotover is the rather curious old sea captain who wanders in and out of "Heartbreak House," administering rude shocks to the rest of the rather curious characters in this rather curious play. Shaw said in 1919 "Heartbreak House is not merely the name of the play. It is cultured, leisured Europe before the war," by which he means the first of the wars to end war. Shaw claims that the play is a fantasia in the Russian manner, and the resemblance to Tchekov is as faithful as one could expect any truly Shavian work to be.

This part was recently played by our contributor, P.C., who therefore claims to know what old Shotover thought of his collaborator, old Shaw.

I was very fond of G. B. S., and I like to think I was one of his favourite "phantom" folk. We thought the same language. Many of us, whom you people talk of as Shaw's characters, were just as amused as he was when you said, as you still do, that we were all his puppets. Sheer nonsense, of course. You simply cannot recognise the peculiar relationship that exists between an author and those who go to meet him on the frontier of fantasy. Many authors have tried to enlighten you. Pirandello gave you a hint or two. But, as Shaw used to say, "Ye are a dull folk, and instruction is wasted on you." We are just as "real" as you. I don't mean the "you" that you expose to each other in your world: I mean the persons you actually are when you are quite alone, stripped of all your petty pretences, your insincerities and your "nice" behaviour: creatures who are curious mixtures of saint and sinner, poet and peasant, animal and aesthete: human beings in a stage of development somewhere between bestiality and beatitude, muddling along towards self-destruction, fatuously complacent in the blind belief that you are progressing towards perfection.

We are not handicapped by the physical bodies that you misuse so abominably: we are not afflicted by the bodily instincts and appetites that get you into such awful trouble when they come into conflict with your spiritual and intellectual aspirations. But we do exist. The boundary of our country is as far as thought can reach. We commune only with those who have the power to penetrate our twilight. G. B. S. had that power in full measure. What he presented to you were not always what we thought to be our real selves, but he had an uncanny flair for presenting the essential truth of our characters, and for making us react to the reality of human experience and problems in a way that defied all the artificial conventions of social behaviour.

G. B. S. was an ardent preacher, of course, and we couldn't prevent him from putting his gospel into our mouths. In fact, when

we were under his spell we actually shared his sincerity and zeal. Those of you who glibly assert that he always wrote with tongue in cheek, are either unable to understand his language or you are trying to dodge the discomfort of his penetrating truths and his religious fervour. Many of you were horrified by his denunciation of what he called "Crosstianity" and his summary dismissal of exclusive religions. His own religion was universal: he preached not to the established churches of worldly empires, but to the spiritual empire of the whole human race. His was no sabbatarian religion: it provoked his opinions of love, marriage, politics, poverty, prostitution, military greatness, revenge, democracy, monarchy, martyrdom, evolution, and all the other aspects of communal life to which you habitually apply your tribal taboos. To him, the theatre was a church . . . the church in which you laugh. He always tried to make you laugh, and usually succeeded. You applaud his irrepressible sense of fun but miss the purpose of his evangelism. He joked and preached to make you think for yourselves, and cared little or nothing for your approval or disapproval. He despised blind Shavian idolatry as much as he derided Bardolatry—that gushing of sentimental nonsense about Shakespeare, or Marlowe, or whoever it was who wrote the only other plays that Shaw acknowledged to be as great or greater than his own. He preached to show you what he saw as the way, the truth and the light, in the hope that you might cease to be deluded, as you are so often, by the humbug and hypocrisy of your short-sighted acquisitive materialism. His great personal friend and vigorous public antagonist, G. K. Chesterton, likened Shaw to Jesus Christ. Their ideals for human behaviour were equally hard to achieve and equally misrepresented and misunderstood.

Those of you who try to impersonate us on the stage have undertaken no easy task; and you are least successful when you underestimate Shaw's skill as a dramatist, or are overawed by his genius. You cannot translate the vivid characters he has presented if you stand on holy ground in stockinged feet, and you will be theatrically impotent with a tongue in your cheek. You must accept the fact that we are real, vital creatures whose breath of life has derived from a unique and lovable man who, had he not been blessed with an infinite capacity to laugh at people's follies, would have suffered unbearable heartbreak and despair. You may not succeed in presenting us exactly as Shaw intended you should; but if you have tried, with understanding and sincerity, then even to have failed will have been a rich experience.

P.C.

THE WINE GROWERS' FESTIVAL

1955

VEVEY, SWITZERLAND

This festival owes its origin to small local fetes of winegrowers which used to be held every year. As time passed persons of other associated interests joined in until the magnitude of performances increased beyond the point when it was possible to stage annual productions. From 1819, therefore, it has been customary to hold the spectacle approximately every 25 years.

The festival owes its development to centuries-old tradition as well as to the enthusiasm of the entire population from which are drawn singers, dancers and so on, and who give much of their spare time to the presentation.

It has been the practice since 1833 to erect in the Market Square at Vevey a large open-air arena for the pageantry. This year of 1955 saw the erection of a colossal temporary auditorium constructed of steel scaffolding and wood (Fig. 1).

Some indication of the scale of the affair can be gauged from the following data:—

Seating Capacity, 17,000

<i>Performers</i>			
Soloists	6	Children	950
Singers	450	Supers	3,500
Musicians	120	Horses, Cattle, etc.	300

Each performance occupied $3\frac{1}{4}$ hours and the Festival lasted 14 days.

The direction of the pageant was entrusted to M. Maurice Lehmann, the Managing Director of the Opera and The Opera Comique, Paris. The musicians included the Band of the Republican Guard from Paris with a Ballet Company and Soloists of international repute.

The lighting of this vast area was a problem, particularly as the amount of electric current available was limited. It was undertaken by Mr. W. Eichenberger, 27 Ceresstrasse, Zurich, who is the agent for Strand Electric in Switzerland. The units employed were:

- 3 Sunspot arc lanterns
- 23 Pattern 93 1,000watt Elipsoidal Spots
- 31 Pageant Lanterns
- 10 Pattern 502 Floodlights

and a host of other types of small projectors, etc.

To cope with this undertaking some of the apparatus had to be flown out from England. Fig. 2 shows the effect at night.

L.G.A.

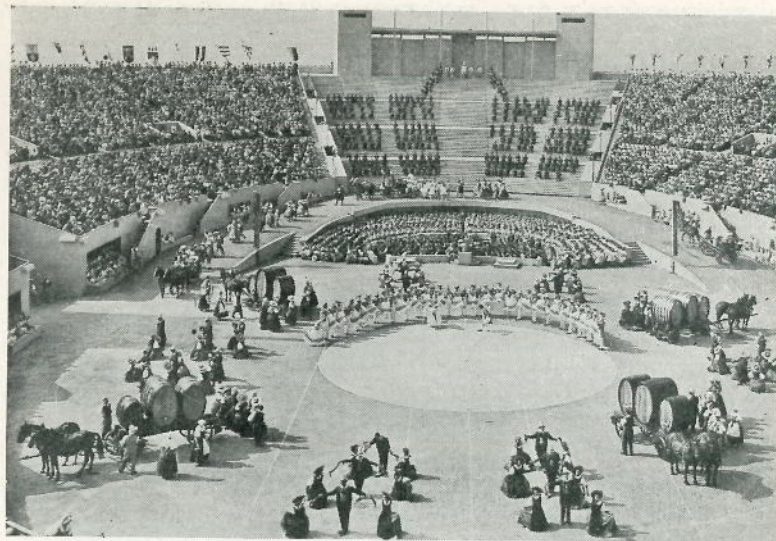
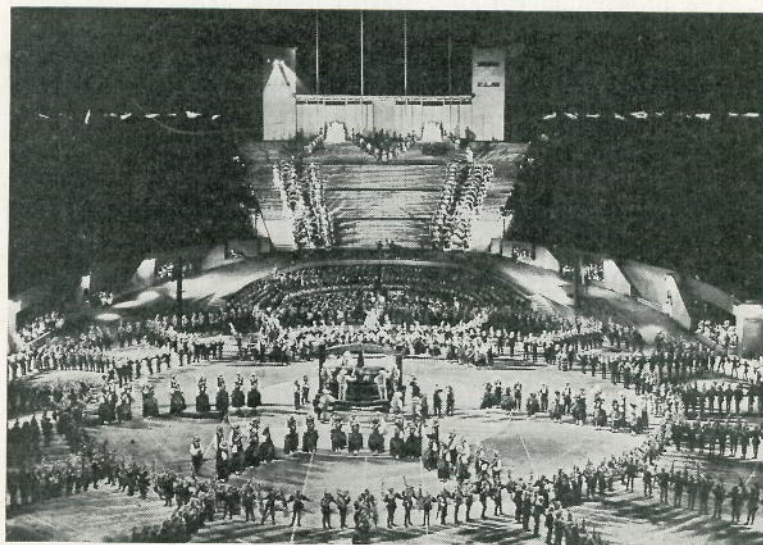


FIG. 1. The arena constructed for the Wine Growers' Festival held at Vevey, Switzerland, 1955. The seating capacity is for 17,000 persons and the central arena stage accommodates over 5,000 performers, musicians and singers; and some 300 animals.
FIG. 2 (below). The Vevey arena as it appeared at night during performances.



A MULTI-PURPOSE STAGE

Architects are constantly faced with the problem of providing, for the multi-purpose hall, a stage that will be suitable for its varied uses. A stage that is adequate for dramatic or musical productions is often unnecessarily large for its other uses, and when a compromise solution is attempted it is one that invariably fails to satisfy anybody.

A stage recently designed by Watts & Corry Ltd. (in association with Hall Stage Equipment Ltd.), may be truly described as functional. It is thoroughly flexible and is variable in size to suit the varying purposes. Although the stage can best be planned for incorporation in the structure of a new building, it can be adapted to existing halls and it is interesting to note the details of an actual installation in the existing assembly hall of the Brookdale Social Club at Bramhall, in Cheshire. This hall is 60 ft. long, 40 ft. wide and is 17 ft. high. The complete stage is 40 ft. wide and 20 ft. deep: it is 3 ft. 6 in. high. The height remains constant but the width can be reduced to 30 ft. or to 15 ft. The depth can be reduced to 10 ft. or to 5 ft., the latter being the depth of a permanent platform. It is possible, therefore, to have a stage floor area of varying sizes, including :—

40 ft. × 20 ft.	40 ft. × 10 ft.	40 ft. × 5 ft.
30 ft. × 20 ft.	30 ft. × 10 ft.	30 ft. × 5 ft.
15 ft. × 20 ft.	15 ft. × 10 ft.	

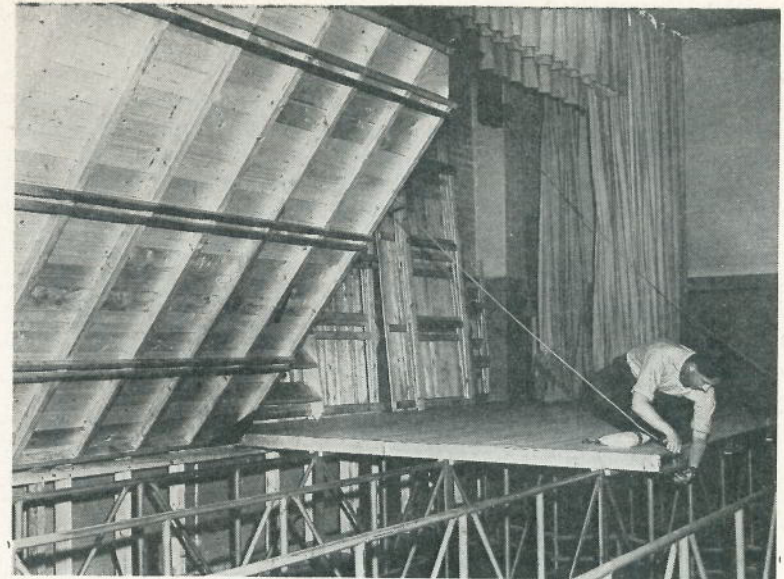
These variations are appropriate to this particular hall but can be adjusted, in design, to suit other halls with other sizes and purposes.

The proscenium curtains, stage curtains, borders and stage lighting equipment are suspended at ceiling level and can be retracted partially or completely to the end wall.

The stage understructure, when fully retracted, fits beneath a 5-ft. platform. The floor of the hall is otherwise entirely free of obstruction.

For meetings, social events, lectures, etc., the 5 ft. deep platform is adequate. If a dance band is to be accommodated the 15 ft. × 10 ft. stage would normally suffice. Concerts might require a greater width, say 30 ft. × 10 ft. Dramatic and operatic performances demand the full stage of 40 ft. × 20 ft. The "picture frame" proscenium can be at the front of the stage or retracted to form an apron, if desired. If the curtains are fully retracted, an open stage can be available for productions in the Elizabethan manner, with the equivalent of a tiring room at the rear. This open stage is also ideal for orchestral and choral concerts, for which a proscenium is a disadvantage acoustically.

A separate raised platform has been erected for the stage switchboard, which is permanently wired to plug-sockets. The flexible cables from the sockets to the lighting apparatus are long enough to permit the equipment to move forward or backwards to



[Photo courtesy Manchester Evening News.]

The rear portion of the multi-purpose stage being lowered into position with the under-structure fully extended.

required positions. It is hoped at a later date to transfer the switchboard to a control room at the rear of the auditorium, which is the desirable position.

The erection and dismantling do not demand skill or entail the handling of heavy weights. Six persons, after a brief demonstration, were able to make the full stage ready for use in fifteen minutes. Two or three people could achieve the same result in a proportionately longer period. The operations could be carried out very easily by students of senior-school ages. When the stage, draperies and lighting are fully retracted, with the main tabs closed, the hall has the appearance of having a stage beyond the end wall. There are none of the storage problems which so frequently cause difficulties when a portable stage is not in use and available storage space is restricted, as it usually is. At the Brookdale Club the new stage replaced a home-made portable fit-up, whose sections were of formidable bulk and weight: the erection required the expenditure of much sweat and tears by a dozen men who toiled laboriously for long hours. These men have now ceased to regard the five-day week as a doubtful blessing which enabled them to work far harder for nothing than they ever did for remuneration. The new stage provides all the pleasures of constructional achievement with the minimum of effort.

LIGHTING CONTROL FOR TELEVISION STUDIOS

All the principal television studios recently constructed or under construction are installing equipment to make certain of proper control of the all-important lighting. It is not surprising that the technique which puts the whole of the stage lighting in our largest theatres, such as Drury Lane, Coliseum, Palladium or Stratford-on-Avon under the control of one man, should have been adapted to the service of television.

We of Strand Electric are not new to television since it was our switch and dimmer boards which operated the lighting in both studios at Alexandra Palace when the world's first regular high definition T.V. service was inaugurated by B.B.C. in 1936. These boards are still in use.

Although there have been many developments in T.V. since then, it is only in the last year or so, with the starting of Commercial Television and recent B.B.C. ventures, that close control of lighting

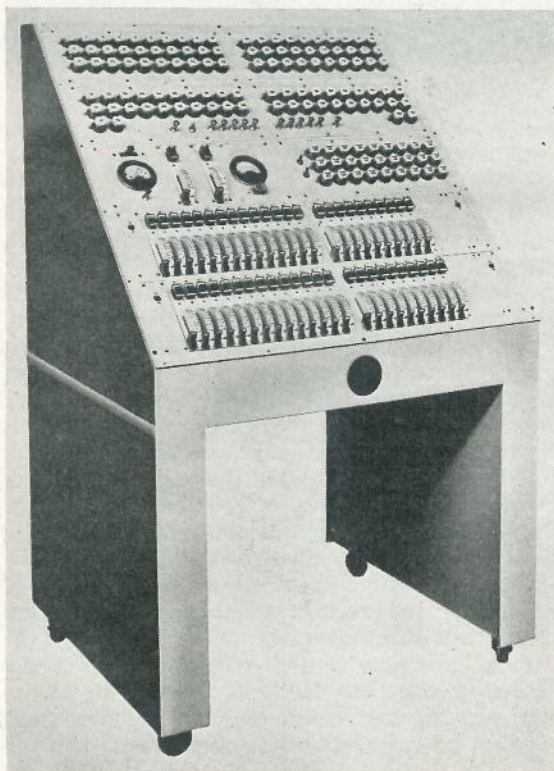


FIG. 1. A Strand remote control TV lighting desk with "patching" and presetting facilities (Wembley).

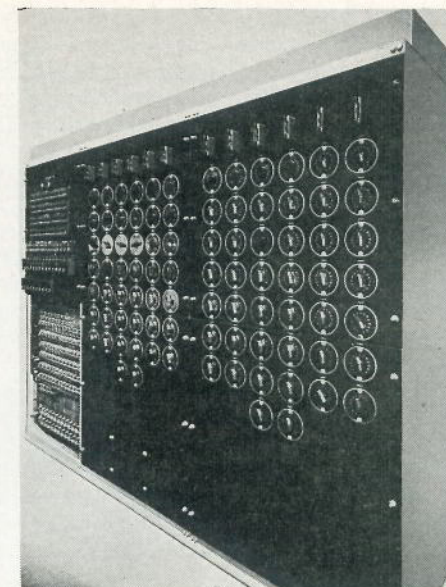


FIG. 2. A "patching" panel used in conjunction with the desk in Fig. 1. By means of rotary switches, circuits may be connected to dimmers as required.

for T.V. has become recognised as being of first importance on this side of the Atlantic. Experience on a vast scale has shown the Americans the need to have every facility to set and balance the lighting; not only to improve picture quality, but to cut down waste of time and labour.

Using their Theatre experience, the Strand Electric Research Dept. have been able to step into the breach, as it were, and have designed various forms of control, now coming into service which are equal to, if not superior to, anything of the kind in the world. After all, since the war, electric remote control has come to be more extensively used in the theatre in this country than anywhere else.

Considering for the moment one group only—Associated Rediffusion—all studios are fitted with compact remote control panels requiring one man only to switch and dim all the 150 or so circuits in each particular studio. These control facilities have been assembled as compact desks, one form of which (Strand, System B) is shown in Fig. 1. Into these control desks a degree of automation has been incorporated which allows the switchboard to "memorise" instantly various combinations of lighting each of which can subsequently be brought into use at the touch of a single button.

Dimmers have been included on all schemes, the proportion in relation to the number of switched circuits depending on the studio size, layout and type of production likely to be met. Some studios provide one circuit to each dimmer; others a ratio of 2 to 1 or even

4 to 1. "Patching" (the connecting to circuits) of these dimmers, as required, is carried out by cord and jack method or by the selector switch system (Fig. 2) which actually indicates at the control desk dimmer lever the circuits patched to it at that time.

The dimmers being used by Strand Electric for T.V. are auto-transformer, resistance, electronic, or saturable reactor (choke) depending on the particular circumstances. The method of pre-setting commonly used for the first two is electro-mechanical. The dimmers are servo-controlled clutch-operated from a common shaft with a wide range of speed variation available at the control desk (2 to 45 secs. dimmer travel or slower by impulse). The result provides a high degree of flexibility with, however, the precise repetition of lighting intensities so important in balancing the T.V. picture.

Fig. 1 shows one of the Strand control desks used for Studios 1, 2 and 4 at Wembley; Fig. 2 a selector switch patching panel for dimmers used in conjunction with Fig. 1; Fig. 3 part of a motorised bank of transformer dimmers servo-controlled and clutch operated.

A different system is employed where it is desired to use a large number of dimmers. Fig. 4 shows part of the control for system C which allows each control channel to have a dimmer and some 200

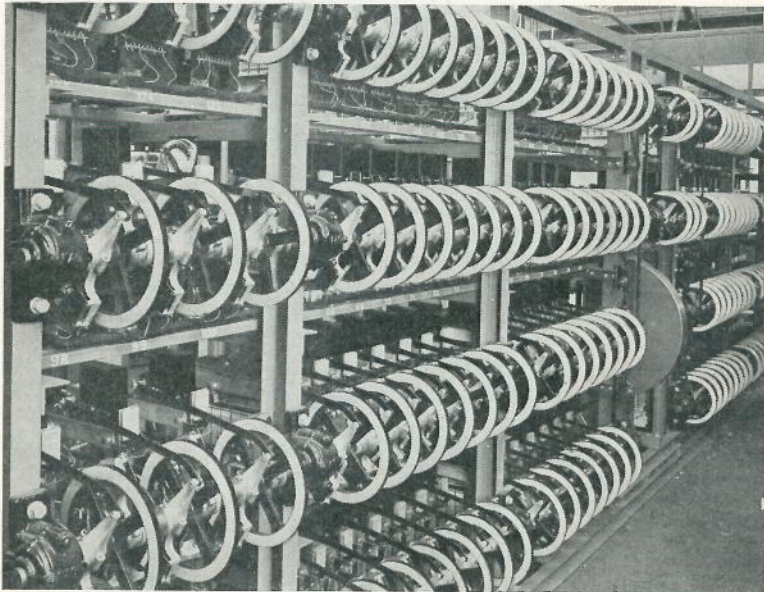


FIG. 3. Part of the remote motorised bank of servo-controlled clutch operated dimmers worked by the desk in Fig. 1.

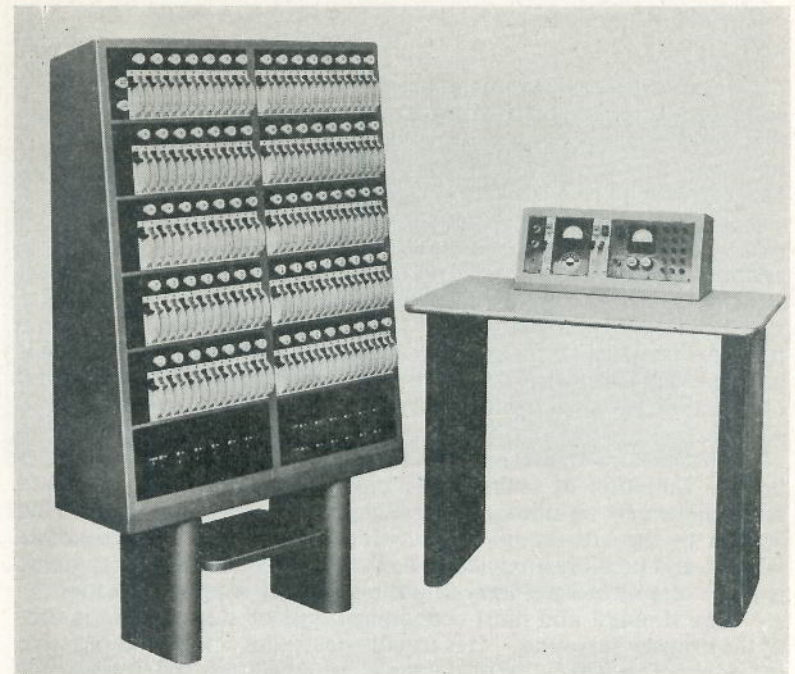


FIG. 4. Part of a control system (Television House) which allows each control channel to have a dimmer. Some 200 can be accommodated using 2 wing pieces only 3 ft. wide.

channels can be accommodated using two wing pieces only 3 ft. wide. As before, dimmer pre-setting and a degree of automation in the shape of "memory" is incorporated. The centre table allows the seated operator plenty of space for his plotting and his ancillary controls. This form of control may also, as with the well-known Strand Light Console, delegate certain jobs such as dimmer speed to the operator's feet.

The particular installation shown in Fig. 4 is that for Television House, the headquarters of Commercial Television in London.

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North Eastern Representative

Mr. P. Rose whose appointment to provide closer contact with N.E. England was announced in our last issue will be moving at the beginning of December to "Whitegates," 5, Elmfield Road, Hurworth-on-Tees, Nr. Darlington.

SMALL STAGE SETTINGS

In an article in the last issue of TABS, in which were discussed some of the problems of the amateur scene-designer, it was agreed that slavish imitation of settings designed on a larger scale is bad practice. Scaling down rarely solves the problem satisfactorily. Most frequently it destroys credibility. Any setting must be designed for a particular production on a particular stage; or, if the play must be performed on several stages, it should be capable of adaptation to each stage. There is little uniformity in the constructional details of stages in general and there is a bewildering variety of amateur theatre stages, few of which are free from some peculiar obstructive inconvenience. An ingenious designer will minimise the inconvenience and may be able to make a virtue of the obstruction by allowing it to dictate a significant feature of the setting.

The theatre artist must not strive laboriously to present a faithful imitation of reality. He must strive, rather, to stimulate his audience, by significant suggestion, to imagine the reality. This applies to the artistry of either vision or sound. An audience is willing, and possibly anxious, to be thus stimulated, but the stimulus is more often lost by clumsy imitation than by simple suggestion.

The simplest and most economical type of stage setting is that of the drapery surround. It is usually neutral in colour and negative in form. The neutrality of colour is an advantage but it need not lack positive form. The conventional set of stage curtains supplied to the multi-purpose hall consists of side leg curtains, probably on swivel-arms, and a set of rear trailer curtains on a track which enables them to be opened and closed. The more fortunate people also have an intermediate set of trailer curtains and possibly a few spare leg curtains. If made with generous fullness and arranged to hang in graceful folds, curtains can provide an unobtrusive background to settings whose dominant features will be the furniture, properties and costumes. If the fullness is skimped and the folds are irregular and untidy, the background ceases to be negative and then becomes a positive irritant. It can become a positive contribution to the décor if the curtains are draped and arranged with a sense of design. Entrances need not be mere gaps. The curtains, if looped and allowed to fall in sweeping curves, can create an effect of palatial opulence, more convincing than the pseudo-realism of a scaled-down palace set, particularly if the lighting is designed to add delicate contrast of tints across the folds. If curtain settings are to be used for a variety of productions and purposes, a light or medium grey material will be the most suitable. A good quality Bolton twill is serviceable and can be made to appear attractive in colour and texture by effective lighting.

Draperies can be used quite effectively for exterior settings, in conjunction with a cyclorama with ground-rows, or even with a



[Illustration by courtesy of Stockport Garrick Society

FIG. 1. *This reproduction from a coloured drawing shows the sense of spaciousness which may be obtained on a small stage using cut-down scenery. The proscenium opening was 22 ft. wide and there was a depth of only 10 ft. from the front of the stage to the steps. The setting was for "Venus Observed."*

painted back-cloth. Provided the background is well designed and properly lit, the neutral wings are no detraction.

It is usually desirable to avoid lighting the side curtains at all emphatically. The concentration of light should be firstly on the acting area and secondly, on the background, in which case the spilled light would be adequate for the side curtains, which should be inconspicuous.

Multi-purpose stage draperies should not be of very bright or very dark colours. The former become too intrusive and the latter absorb an excessive proportion of the light and create the need for strong contrasts in furnishing and costume. An auxiliary set of black curtains can be extremely useful for special purposes. Velour is the best material, as black fabrics without a pile are likely to appear drab and lifeless. The slight sheen on black velour adds richness to the texture.

When cut-down scenery is used, standing in front of a drapery surround, black velour curtains and borders are ideal. The borders should be as high as possible above the proscenium opening and used merely to mask the stage roof and any suspended equipment. This method was dealt with in the previous article and was illustrated by drawings. It is worth repeating, for emphasis, that the use of flats which are, say, 8 ft. high, on a stage with a proscenium which is 12 ft. high, can be much more theatrically realistic than the 13 ft. or 14 ft. flats which would be normally used in a scaled-down setting.

The settings are more convincing and add a sense of spaciousness which is destroyed by taller flats on a small stage.

The use of scenery units with draperies can also be very much more satisfying than some of the imitations of full-scale settings. If the trailer curtains are made as individual leg-curtains, which can be fastened together by means of press-studs, it is possible to insert doors, windows, arches, etc., to create settings that are simpler and economical to make and easy to change, thus delivering the small-stage society from the bondage of the play with the single set. The units should be painted to blend with the draperies, which does not mean that all contrast should be avoided. Draperies and units can differ in colour but they must be complementary to each other. To **set an urban kitchen or suburban parlour on a small stage** is comparatively simple with conventional scenery flats, but it is difficult to suggest, by such means, a room in Buckingham Palace. Yet, with drapery and unit treatment, it is quite simple. A single unit, consisting of wide, substantial-looking double-doors, fixed in a massive looking ornamental architrave, will at once suggest the necessary grandeur. Obviously, the doors must be fitted in deep reveals and must close with a convincing click. The door handles must look impressive. The whole effect can be ruined by incongruous brass knobs. And, of course, the furniture and properties must be suitable; but this necessity is equally important with a complete setting of scenery flats.

The design of a drapery setting, or one with scenery units, requires just as much thought and care as the design of a painted scenery setting. Unfortunately, so many societies accept their limitations as handicaps, instead of realising that the use of different materials provides other opportunities, and that there is a rewarding virtue in making the most of those opportunities.

P.C.

* * *

Full Details, Please

There has of late been an increasing tendency on the part of purchasers of electric lamps to credit the Strand Electric with clairvoyance in addition to their other attributes and failings. As well as the class of lamp, the wattage, and the voltage must always be stated on orders, and *also the type of lamp cap* required. A number of Projector Lamps, for example, are available with either screw type or pre-focus caps. Again, certain lanterns (for example our Pattern 45 Baby Spotlight) which used to be fitted with screw type lampholders, are now fitted with pre-focus type holders, and it is therefore not necessarily adequate to quote the pattern number of the lantern for which the lamp is required. All lamp orders should state class of lamp, wattage, voltage, and type of cap required.

Thus : 250w. 230v. class B projector with E.S. cap.

SUBSIDY—A STIMULUS OR SOPORIFIC?

WHERE LIES THE FUTURE OF DRAMA IN BRITAIN?

Britain, states the tenth annual report of the Arts Council, with a total expenditure from public funds towards maintaining Music, Opera and Drama of 4*d.* per head per annum (3*d.* from Parliament through the Arts Council and 1*d.* from local authorities), is among the most parsimonious of all civilised nations when it comes to the preservation of its arts. "Nevertheless" the report points out, "and paradoxically enough, the country could injure the Arts by suddenly deciding to spend too much upon them. It is at least conceivable that, for reasons such as civic pride or the economic need to keep the building trade fully employed, the country might embark on an unrealistic programme of theatre and concert hall construction. Nothing could do the Arts a greater injury than such a wholesale policy of inflation."

"A hundred Civic Theatres manned by second-rate professional actors would not create a renaissance of drama in Britain, but 30 exemplary theatres manned by first rate actors eventually would." Though the audience for the arts is a hundred times the size it was in 1930, the report continues, **no new theatre has been built in London during the past 25 years.** During that time two small theatres were built in England and at least 120 theatres have closed. (About 50 of these closures **were last year.**—*Editor.*) "**The fewer theatres for the time being the better; the better, that is to say, for building a strong network of repertory theatres in Britain.** For in a selected number of well based, well manned and well equipped playhouses, the living art of drama is more likely to be sustained than it is at present—distributed in penny packets, its precarious establishments committed to the suicidal policy of weekly 'Rep.,' or sent forth on vain if adventurous mobile missions to play Shakespeare on improvised stages in village halls."

Commenting on the position of subsidised repertory theatres, the report states "at the Old Vic 33 $\frac{1}{3}$ % of the seats are priced at an average of 2/3*d.* One distinguished provincial repertory theatre offers 37% of its seats at an average of 2/5*d.*; and another offers 23% at 2/6*d.* As the cheaper seats are usually all taken while the dearer seats are not, the bulk of the audience at any performance may well be paying these low figures of admission." The Arts Council contends in fact that the public is not paying the prices it **probably could quite well afford for the various forms of subsidised entertainment.** But what of all those other theatres up and down the country which presumably tried to charge more, being unsubsidised, and which have disappeared in recent years. If they had been able to make ends meet would they not be with us today?

Let us be honest and admit that a number of these Theatres will not be missed for the quality of their productions. In too large a number of revue/variety/leg-shows, the doubtful jokes have been

about as thinly veiled as were the limbs of *les girls*. And after cutting out the smut and sex there was often little left. Could it be held, therefore, that a proportion at any rate of these Theatres closed owing to the poorness of the quality of their shows, that is to say that the public would not, rather than could not, support them?

And what of the Amateur Theatre? It must be reported with regret that a large proportion of the editorial columns of those Newsletters, Bulletins and Magazines which reach us from amateur groups, guilds and so on, are devoted to tales of woe. The tales may vary somewhat in detail but the woe remains ubiquitous. Apathy appears to be the universal complaint. No one will buy or sell tickets for performances. No one will attend general meetings. No one will volunteer to go on Committees if it involves doing a hand's turn of work. No one will accept any responsibility. And so inevitably more and more of those jobs which must be done, if the organisation is to continue in being, find their way into the hands of the faithful few, and if in the course of time even they become autocratic, or worse still perhaps, apathetic too, who can blame them.

On the other hand it would seem that more amateur stages are being built, equipped or re-equipped at the present time than perhaps ever in the past. It is also encouraging to learn that recently a County College of Further Education had to cancel a course on Film Appreciation owing to lack of support and the course in Amateur Play Production which has been substituted has been booked out. It appears there are still a host of people who are interested in the fun and games of Play Production but it certainly seems as though too few of them are prepared to shoulder the responsibility and sometimes drudgery of the administrative work which is necessary in any individual society or group thereof. Is this love in idleness a by-product of the Welfare State? Is the subsidising of the professional arts to be accompanied by a suicide of the amateur? That would be a complete negation of the terms of reference of the Arts Council which exists surely to increase understanding, enjoyment and practice of all the Arts.

G.M.

* * *

Colour Wheel for Patt. 23 Baby Mirror Spotlight

In our April issue we illustrated and described a motor-driven colour wheel for the medium and wide angle versions of the Pattern 23 Baby Mirror Spot. A hand-operated colour wheel is now also available. This has five apertures and by means of a special device the wheel may be left free to rotate on its spindle, or may be locked so that any desired colour aperture is retained in front of the lens. The price is £3 18s. 0d. The casting carrying the wheel and its spindle simply slides into the front runners of Pattern 23 or Pattern 23W. This accessory is not suitable for use with the Narrow Angle Pattern 23/N Mirror Spot.

THE HISTORY OF PANTOMIME

On January 9th, 1956, Gwladys Stanley Laidler will open an exhibition at the Central Library, Manchester. This exhibition will be open to the public each week-day, from 9 a.m. to 8 p.m. (5 p.m. Saturdays), until February 4th, 1956.

The exhibition is organised by the Society for Theatre Research and is intended to illustrate the development of pantomime. This development will be illustrated by means of models, designs, play bills, programmes, costumes, properties, etc. Although the emphasis must inevitably be on the professional theatre's pantomimes there will be exhibits to illustrate amateur productions also. Included in the latter will be exhibits connected with the appearance in pantomime of Her Majesty the Queen, who, as Princess Elizabeth, performed with Princess Margaret in the Royal pantomimes at Windsor. Regular readers of TABS will recollect that in 1948 we had the privilege of being allowed to publish an article by the late Hubert Tanner, the producer of the Royal Pantomimes, together with a photograph of the Princesses in pantomime costume.

There will be an inaugural dinner at the Grand Hotel on Sunday, January 8th, 1956, which will be attended by pantomime producers and artistes, past and present, and other well known theatre personalities.

The exhibition will stimulate the interest of all who are concerned with the well-being of the theatre and in the preservation of those traditions that have helped to establish pantomime as part of the folk-lore of this country. Pantomime is not only essentially British but is essentially "theatre," even when the stage is expanded to an ice-covered arena!

Further details may be obtained from the Chairman of the North-West Group of the Society for Theatre Research, Mr. P. Corry, 305, Oldham Road, Manchester, 10. Admission to the Exhibition is free. Tickets for the Inaugural Dinner on January 8th, 1956, will cost 21/- and early application is desirable as the demand is likely to be in excess of the accommodation available. Dress will be informal.

* * *

THE DATE OF DIMMING

In a lecture entitled "Macready—Man of the Theatre" given during the summer before The Society for Theatre Research, Professor Alan Downer stated, we understand, that in a production of Werther, Macready made use of the "then unusual trick of dimming the lights."

This statement is interesting because one would have assumed that as soon as gas lighting became available on the stage, dimming would have been used immediately. Macready had seasons under

his own management at Covent Garden from 1837 to 1839 and at Drury Lane from 1841 to 1843. Drury Lane, however, had gas lighting in use on the stage since September 6th, 1817. *The Times* newspaper of the very same day wrote of the new gas installation as follows:—

“A very considerable improvement, we think, will be found in the introduction of gas-lights on the sides of the stage, on which there are 12 perpendicular lines of lamps, each containing 18, and before the proscenium a row of 80. The advantage anticipated from these lights consists mainly in the facility with which they can be instantly arranged so as to produce more or less of illumination, according to the particular description of the scene.”

In the foregoing description the word “anticipated” is worthy of notice. At the time of writing, *The Times* would not have seen the first night of the first production using gas, though may well have attended a rehearsal and seen dimming being carried out. If Professor Downer is correct in stating that Macready’s use of dimming was somewhat of a novelty it would seem that *The Times* envisaged a use to which gas lighting might be put which escaped the notice of the managements of this and other theatres for some time to come.

* * *

Marking the Colours

(*This announcement also appeared in our issue Vol. 13, No. 1.*)

It is a time-honoured custom back-stage to mark in chalk on each colour frame, the number of the colour medium it contains, when it is necessary for colours to be changed between scenes. This has helped a quick selection of the correct colour—a necessary precaution if the person responsible for the change is not able to identify the standard filters visually in the often unhelpful conditions back-stage. It leads to unfortunate error when an old chalk-mark is not substituted by a new one, as can easily happen in the chaos of a lighting rehearsal if the producer decides to change the colours originally selected.

An alternative, less liable to error, is to mark the colour filter itself. It is possible to do this by use of a “Chinagraph” crayon pencil, which is also useful for marking sheets of Cinemoid and Gelatine held in stock.

They can be marked at leisure, with the aid of a colour chart (supplied free on request) and can thereafter be easily selected during the heat of the battle, when mistakes cause frustrating delays and exhibitions of temperament.

These special pencils are offered free of charge to TABS readers ordering Cinemoid or Gelatine, provided that their order so requests. These pencils cannot be sent separately through the post. They are only available provided that they can be wrapped up with an order for colour mediums.