# STREATHAM HILL THEATRE

**LIGHTING CONTROL**

1929-1962

# My Modern Tools:

**CONTROL INTERFACE**

**POWER DISTRIBUTION & DIMMERS**

**LANTERNS**

## PORTABLE TEAK DIMMER BOARD

Wired complete with 15 ampere Home Office pattern fuses, wood protecting cover. Bus bars with large main terminals and dividing fillet. 15 ampere quick break tumbler switches. 15 ampere flush two-pin sockets. Up to twelve universal voltage dimmers of any wattage from 100 to 1000. Pilot light switch and fuse. All internal wiring covered in with sheet metal back.

PRICE (6-way, 1000 watt) ... ... £ s. d. **24 0 0** Nett

Size : Width 3 ft. 3 in. Height 3 ft. 3 in. Depth 9 in.

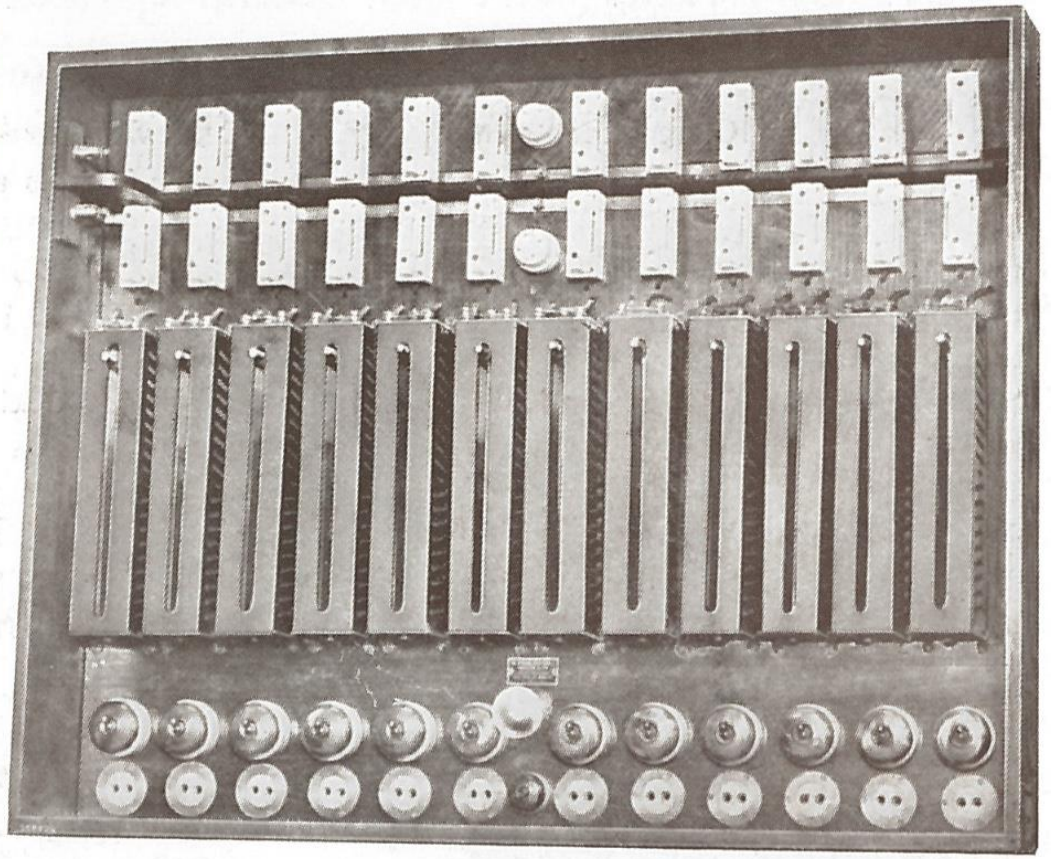
*Nett weight, 1½ cwt. (approx.).*

PRICE (12-way, 1000 watt) ... ... £ s. d. **48 0 0** Nett

Size : 6 ft. 6 in. 3 ft. 3 in. 9 in.

*Nett weight, 3 cwt. (approx.).*

*Prices for other sizes and wattages on application*



Strand Catalogue 1945

The Backstage Heritage Collection

# Two Palladium Light Consoles in V&A Collection

Fred Brown Collection

Alan Aston Collection

# DUSTY DUKE OF YORK'S GRAND MASTER

*“We had a big grand master and a separate board to work the front of house lights and I used to work the front lights. They are cued together, but it is all very physical and very manual.”*

**Colin Draper talks about working at Streatham Hill Theatre in 1955.**

British Library Theatre Archive Interview

Interviewer: Ewan Jeffrey, 8 December 2004

# But…

*‘Particularly interesting is the switchboard, which occupies about half the space usually occupied by such apparatus in a first-class theatre. A copy of the one in the **Roxy Theatre, New York**, it is claimed to be the finest yet installed in any English theatre. It is possible, by means of a few small switches, set on a prearranged plan, to control the entire lighting of a production throughout its run.’*

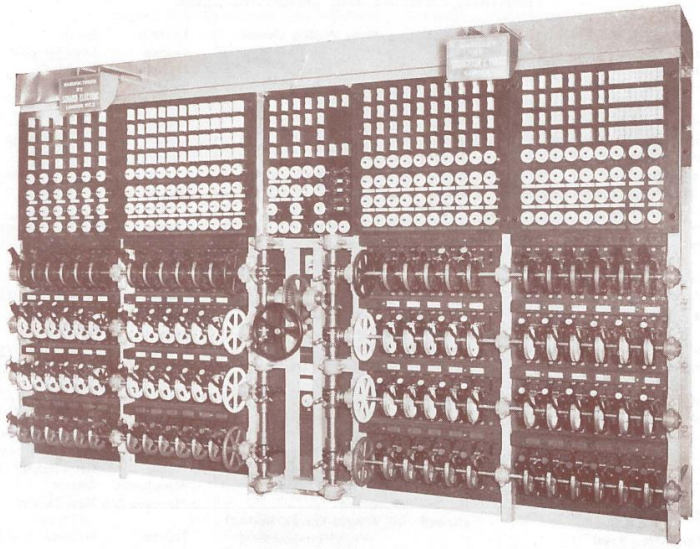
**Stage Newspaper, November 21st 1929 -** Arthur Lloyd Website

# And...



## STRAND CONTROL

### SOME TYPICAL DIMMER BOARD INSTALLATIONS



### *GRAND MASTER TYPE*

| | |
|---|---|
| Aberdeen | H.M. Opera House |
| Aberdeen | Tivoli |
| Belfast | Empire |
| Belfast | H.M. Opera House |
| Birmingham | Alexandra |
| Birmingham | Hippodrome |
| Birmingham | Repertory |
| Birmingham | Theatre Royal |
| Blackpool | North Pier |
| Blackpool | South Pier |
| Blackpool | Opera House |
| Bloemfontein | Witwatersrand University |
| Bradford | Alhambra |
| Brisbane | H.M. Theatre |
| Bristol | Hippodrome |
| Camden Town | Gaumont |
| Cape Town | Alhambra |
| Cardiff | Prince of Wales |
| Carlisle | Her Majesty's |
| Chelsea | Gaumont |
| Dublin | Royal |
| Edmonton | Regal |
| Finsbury Park | Empire |
| Glasgow | Alhambra |
| Glasgow | Royal |
| Greenwich | S.E. Gas Board |
| Hackney | Empire |
| Johannesburg | H.M. Theatre |
| Kilburn | State |
| Leeds | Grand |
| Leicester | Opera House |
| Lewisham | Gaumont |
| Liverpool | Empire |
| Liverpool | Royal Court |
| London | Ambassadors |
| London | B.B.C. Television Studios (2) |
| London | Duchess |
| London | Duke of York's |
| London | Fortune |
| London | Haymarket |
| London | Palace |
| London | Phoenix |
| London | Royal Academy of Dramatic Art |
| London | St. James |
| London | Vaudeville |
| London | Victoria Palace |
| London | Wimbledon |
| London | Winter Garden |
| London | Wyndhams |
| Manchester | Hippodrome |
| Morecambe | Winter Gardens |
| Newcastle | Empire |
| Newcastle | Royal |
| Northampton | New |
| Oldham | Repertory |
| Oxford | New |
| Portsmouth | Royal |
| Preston | Royal Hippodrome |
| Pretoria | Town Hall |
| Shepherds Bush | Empire |
| Southsea | King's |
| Tooting | Granada |
| Turin | Rex |
| Wood Green | Gaumont |

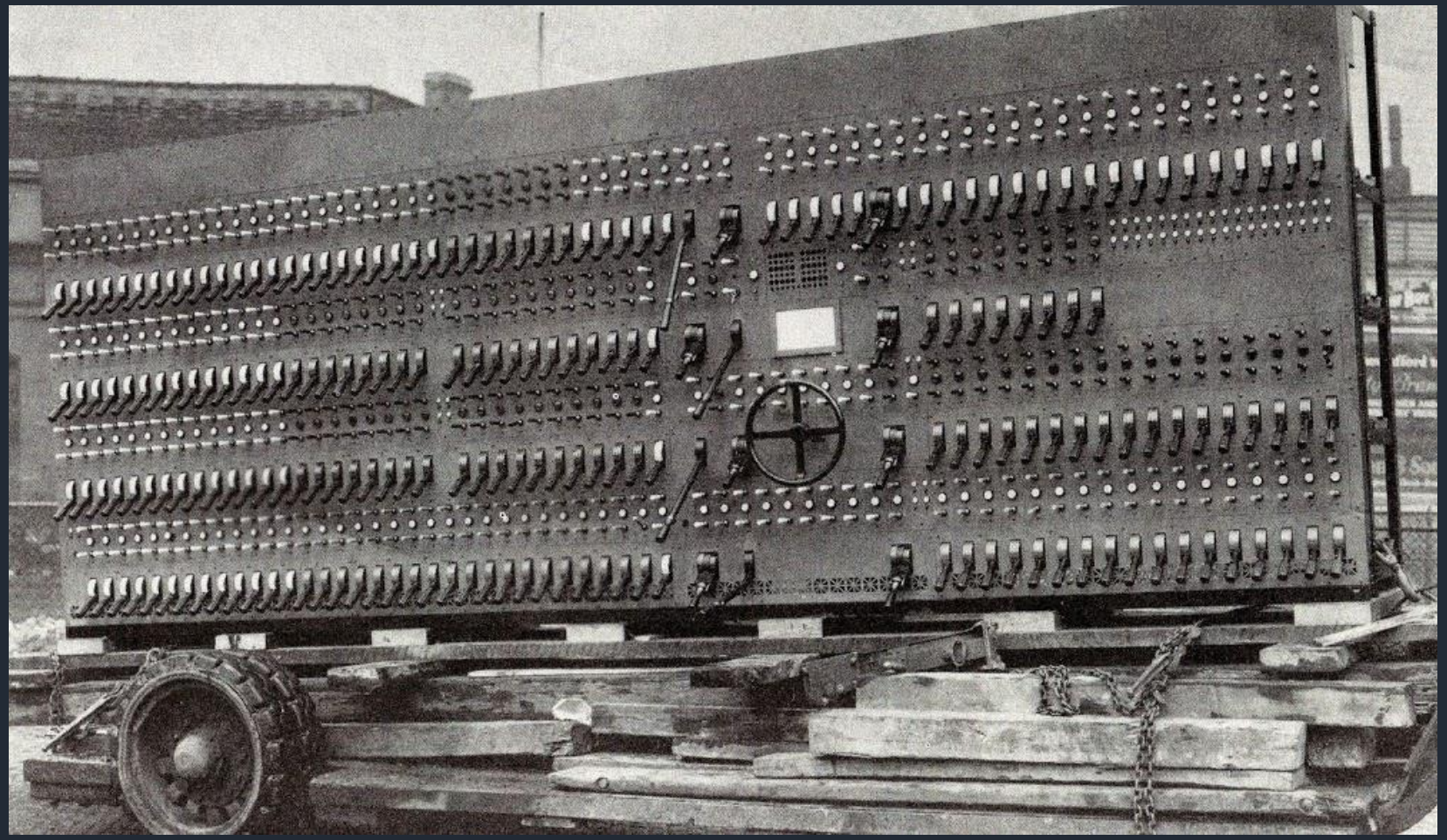
1/53

First recorded Grandmaster installation was the Alexandra Hall Halifax 1931 – Morgan (Stage Lighting Design in Britain, ET Press, 2005).

Strand Catalogue 1953

The Backstage Heritage Collection

# So:



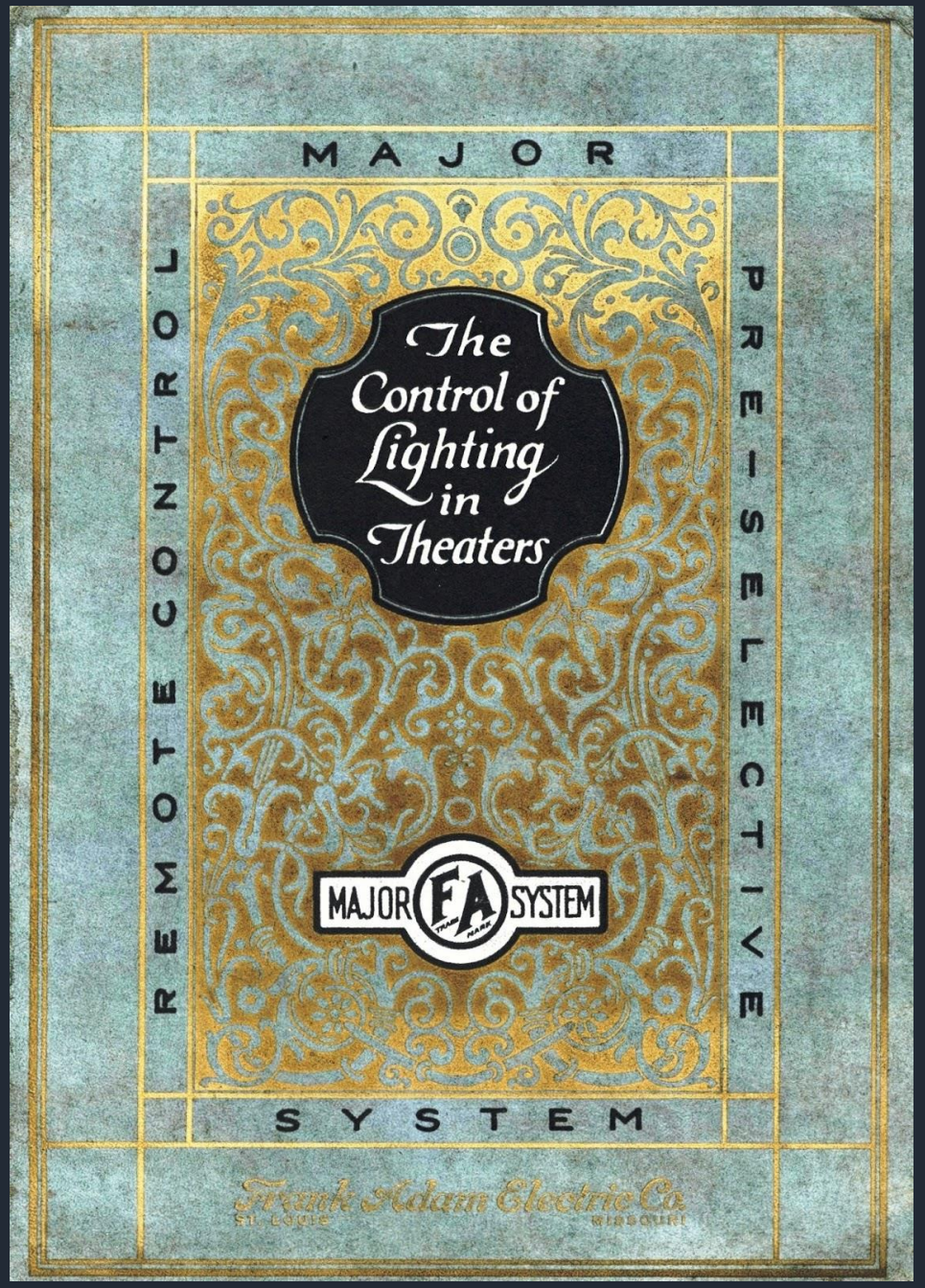
**The New York Roxy Hub Electric Co. Switchboard (1927) - claimed to be the largest in the world.**

Backstagefox1929.com

# Other American Control Manufactures:

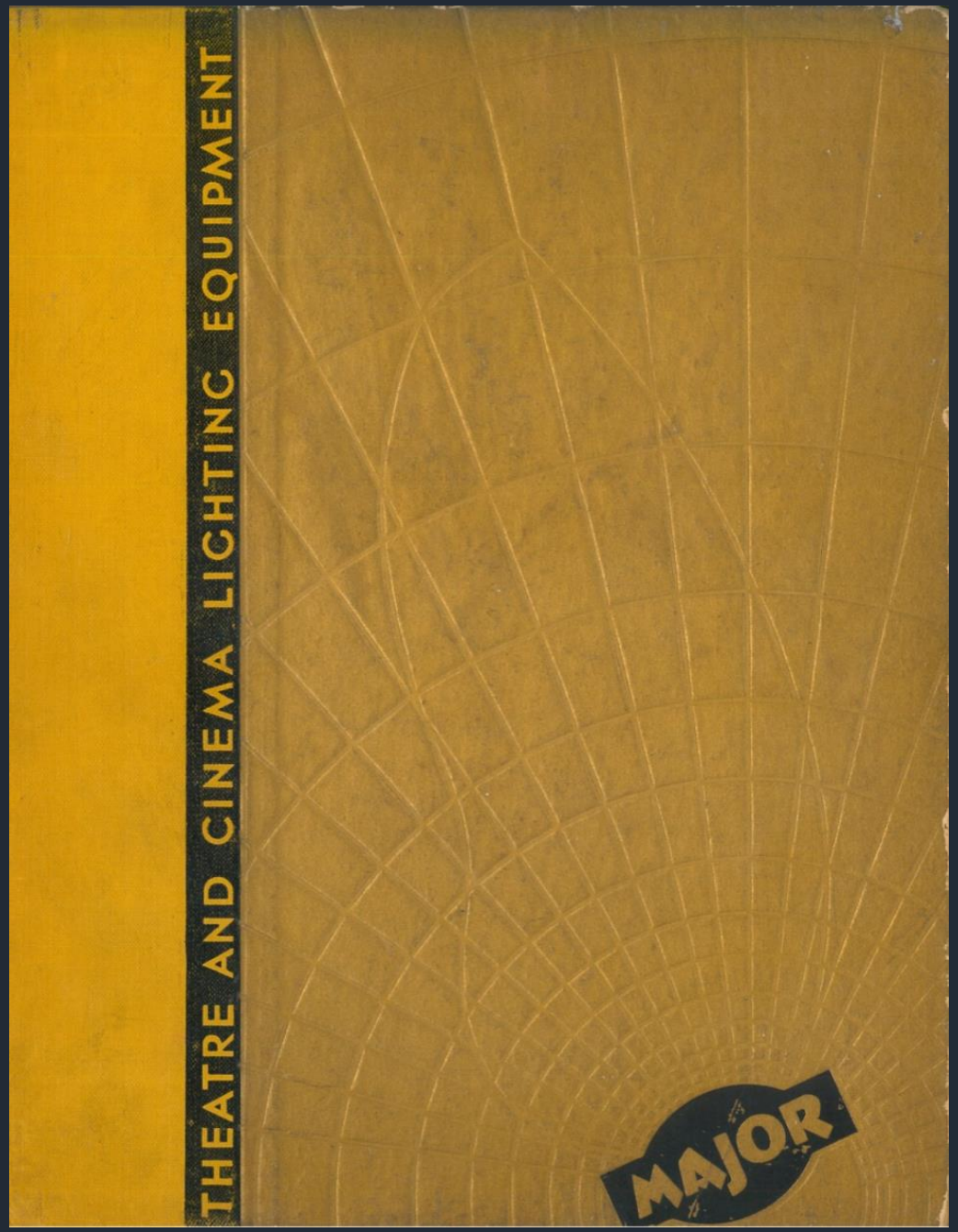
- Westinghouse Electric Co.
- Frank Adam Electric Co.

Frank Adam manufacture for Major Equipment Company…




**Major Catalogue 1922**
vintagetheatrecatalogs.com

Major Equipment Co.
also sold to the UK:




**Major Catalogue 1930s**
Jim Laws Collection.

# INTRODUCTION

IT is only in comparatively recent times that the potential value of light as something more than a mere illuminant has been appreciated in the theatre and cinema.

The days are gone when the traditional green halo followed the villain uncertainly about the stage, and instead we now find the lighting echoing the mood of the passage or scene being played, so subtly, that we are unaware that any change of lighting is taking place.

The realization that light could be of artistic and psychological value called for improvement in the existing methods of its control, and an invasion of the theatre by illuminating and electrical engineers followed. As so often happens, a lack of understanding and co-operation between those concerned resulted in nothing of real value being accomplished. The engineers from outside the theatre, in their ignorance of the circumstances, produced equipment which, though it probably represented the latest developments in electrical and illuminating engineering, was inadequate owing to its clumsiness and cost.

**The Major Equipment Co., Ltd.,** has co-operated with theatre engineers, illuminating and electrical engineers, and now offers what is considered to be the most up-to-date stage-lighting equipment in existence. It is now possible, by means of **MAJOR** lighting equipment and switchboards, to produce the most artistic results by the simplest mechanical means, and to repeat those results time after time without fail; and in the theatre, where every moment of rehearsal is precious and every mistake seen by a thousand eyes, the importance of this cannot be over-emphasized.

No effort has been spared to make this catalogue of interest to both architects and engineers, and, with this end in view, weights, dimensions, and in many cases blue prints, have been given. It is also hoped that this catalogue will be found fairly comprehensive, but we can always give information on any article not actually listed, and we invite your inquiries on any matter connected with lighting and switchboards, whether for theatre or any other type of work. We also place at your disposal the knowledge, experience, and services of our engineers, whether for experimental or routine work. **The Major Equipment Co., Ltd.,** has, between its various departments, a first-class system of co-operation which enables it without fail to supply the right article at the right place, at the right time, and, above all, at the right price.



## SOME MAJOR TYPE SWITCHBOARDS INSTALLED BY VARIOUS ELECTRICAL CONTRACTORS IN CINEMAS AND THEATRES

THE DUCHESS THEATRE
THE PARAMOUNT THEATRE, LEEDS
SADLER'S WELLS THEATRE
THE OLD KENT ROAD ASTORIA
THE PICCADILLY THEATRE
THE WHITEHALL THEATRE
THE ASTORIA CINEMA, BRIXTON
THE LIDO, ISLINGTON
THE BROADWAY CINEMA, STRATFORD
THE NEW MADAME TUSSAUD'S
THE REGAL CINEMA, MARBLE ARCH
THE RIALTO CINEMA, NORWOOD
THE ADELPHI CINEMA, SLOUGH
THE ALMA CINEMA, LUTON
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THE METROPOLE CINEMA, VICTORIA
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THE SAVOY CINEMA, TEDDINGTON
THE PARAMOUNT THEATRE, NEWCASTLE
THE TROCADERO, ELEPHANT & CASTLE
(Remote Controlled Dimmers)

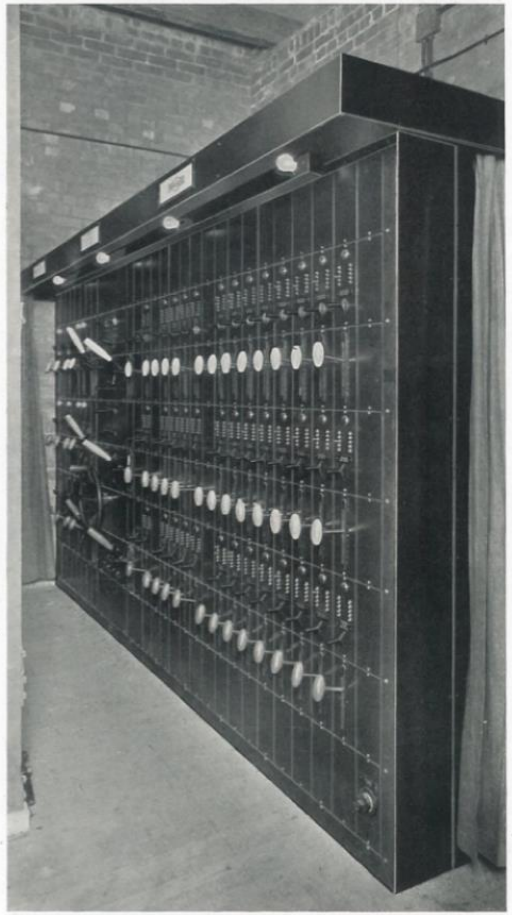
**Major Catalogue 1930s** Jim Laws Collection.

The TEN SCENE PRE-SET SWITCHBOARD:

# MAJOR STAGE SWITCHBOARDS

The illustration shows the MAJOR TEN SCENE PRE-SET SWITCHBOARD as installed at the Streatham Hill Theatre, Streatham Astoria, etc.

With this type of switchboard it is possible to pre-select the lighting for ten scenes in advance. In addition, special rehearsal switches are provided for small changes and also an extended control by means of which it is possible to operate the changes from remote positions.



The system ensures instantaneous highly flexible and absolutely dependable one - man control.

Major switchboards are designed as composite pieces of apparatus grouped in one compact and complete unit. Specially designed to meet the demands for ever - increasing capacity and flexibility of control for elaborate scenic effects.

SPECIFICATION AND PRICES ON APPLICATION

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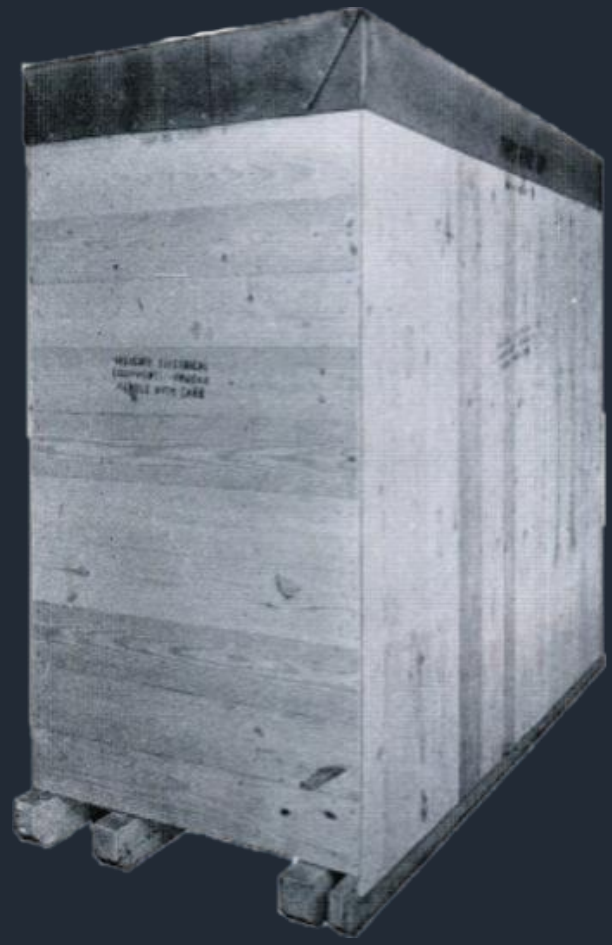
PAGE 40

**Major Catalogue 1930s**
Jim Laws Collection.

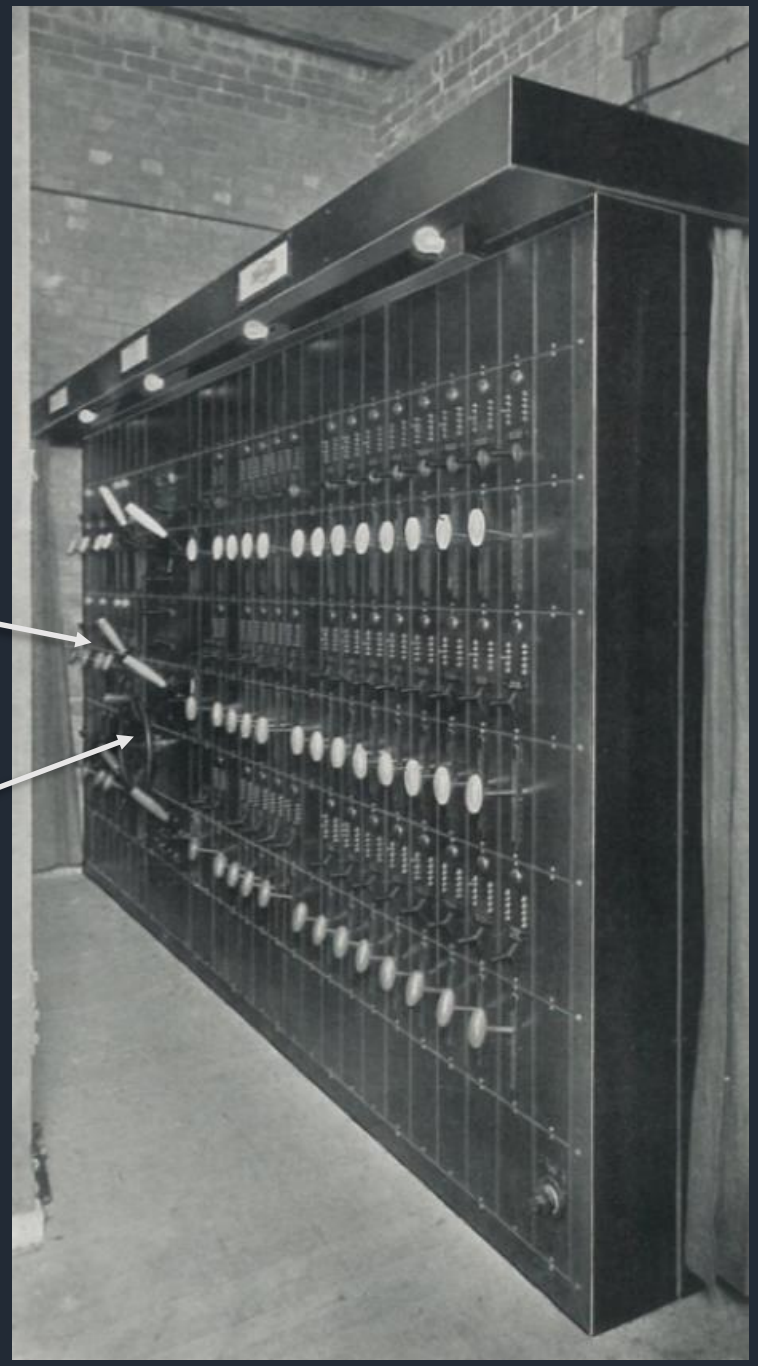


**Frank Adam Electric Co.**
**Packing Crate**
1952 Frank Adam Bulletin#802
Vintagetheatrecatalogs.com

# How it Works:
(Front End)

Group Master Handles

'Slow Motion' Wheel



Auditorium Control Side

Pilot Light

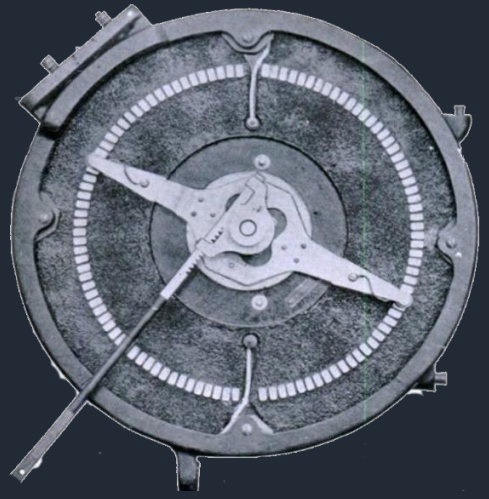
Preset Selector Switches

Rehearsal Override

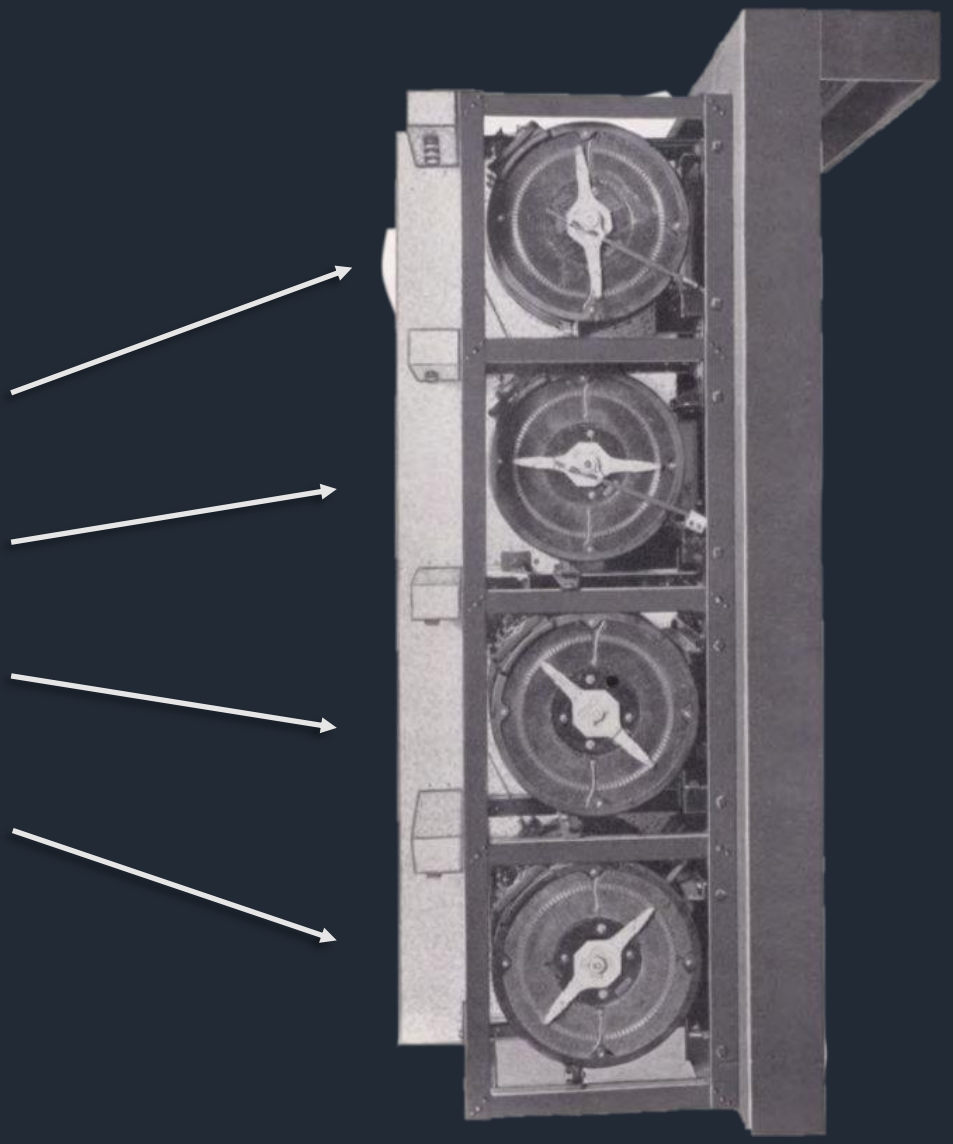
Dimmer Handle (Egg turns to lock onto group master)

Stage Control Side

# How it Works:
(Back End)

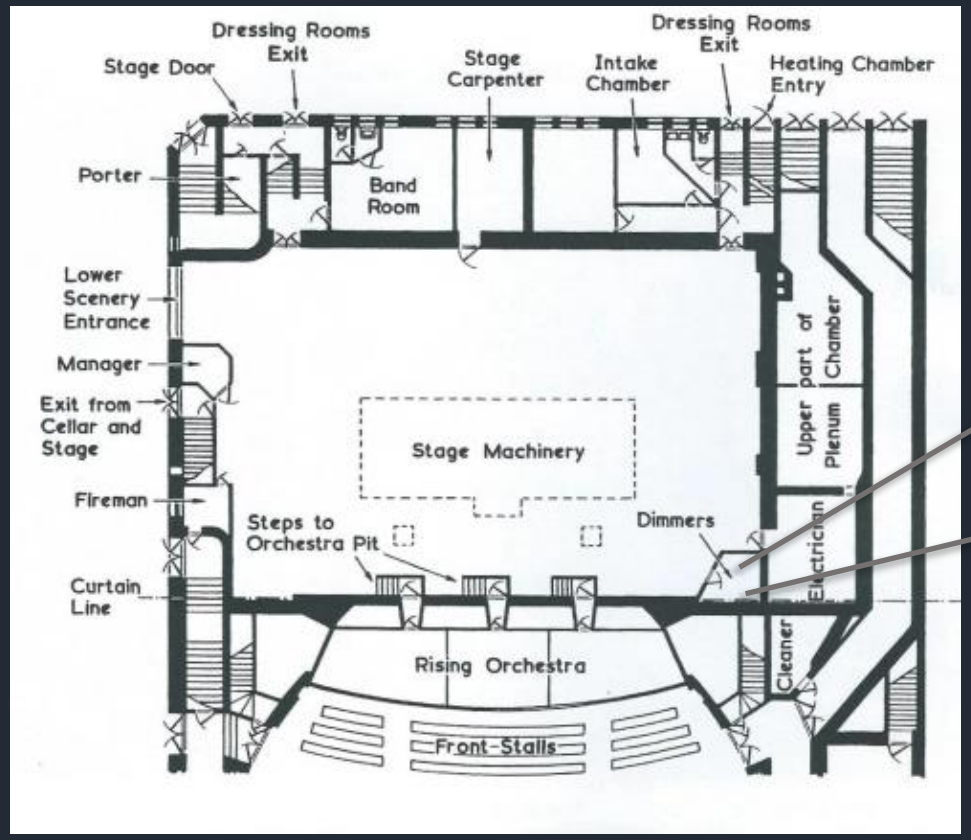


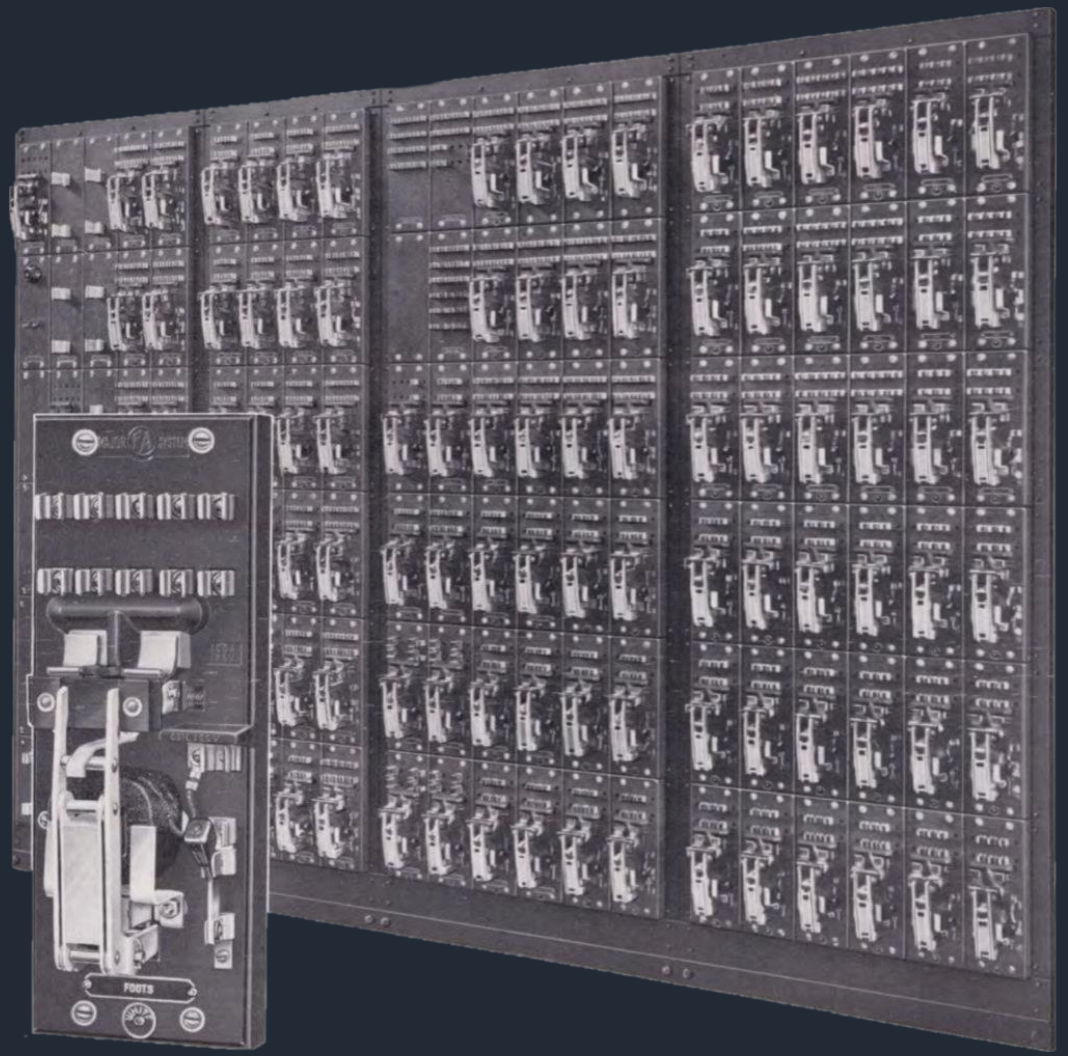
Resistance Dimmer Plates



FRANK ADAM SWITCHBOARD CATALOGUE 1928
- vintagetheatrecatalogs.com

# Sub-Stage ‘Dimmer’Room:



FRANK ADAM SWITCHBOARD CATALOGUE 1928

# The Deadly DBO:

*‘DBO means Dead Black Out and leaves the audience in no doubt that this is the end of the sketch. I was in charge of giving the electrician his cue to throw the switches. He was wearing thick rubber gloves as he prepared to throw two ancient mains levers. He took great pains to clear the way behind him which had me quite bewildered. We reached the end of the sketch and I gave him the cue. He threw the switches and there was an almighty flash. As my eyes gradually returned to their normal duty, I saw no sign of our electrician. A groan from the back wall attracted my attention and there he was in a crumpled heap. He picked himself up, staggered back to his switchboard and flashed the switches back on. He was not thrown quite so far this time.’*

Roy Castle, recalls working in the Victoria Theatre in Burnley, circa 1947.

Now and Then, An Autobiography. London: Macmillan General Books, 1995

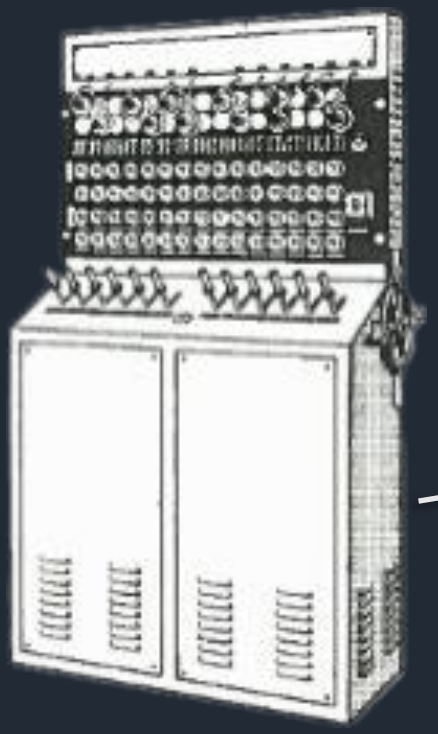
# Disaster Strikes…

# Rebuilding & The Other Control:

*“We had a big grand master and a separate board to work the front of house lights and I used to work the front lights.”*
Working At Streatham Hill in 1955

Strand Electric
Quotation Drawing 1950
Reworked from 1948 Drawing for Windsor Theatre Birmingham

# Sunset Dimmers:



1958 Strand Pricelist



## STRAND DIMMERS

### "SUNSET" DIMMERS, TYPES A, A1 and B (Element Pattern)

These dimmers employ the element principle used on the "STRAND" plate dimmers, but are made up in a rectangular form without the aluminium casing. This, while retaining the majority of the advantages of the plate type, effects considerable reduction in cost of construction. This unit is altogether superior electrically and mechanically to the "open coil" type usually used. The "Sunset" element dimmer is fitted as standard to the switchboards illustrated on the following pages.

**FRAME.**—Wrought iron, suitably arranged for switchboard mounting, for removal from either back or front of board. Also suitable for banking for motor drive.

**PANELS.**—Natural grade "Sindanyo" of ample size to prevent warping.

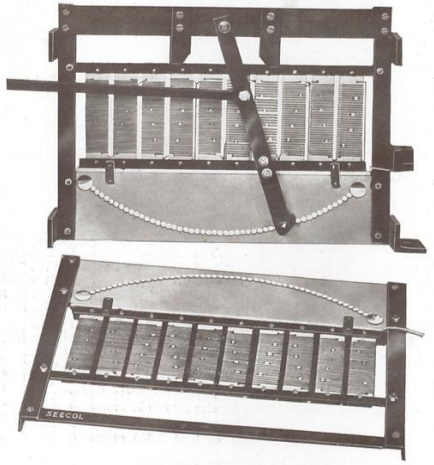
**TERMINALS AND STUDS.**—Brass studs throughout of ample size, fitted with special collets for connecting elements.

**ELEMENTS.**—Natural grade "Sindanyo" wound with best quality nickel-copper alloy wire. Wire is non-corrosive, and is unaffected by atmospheric conditions, and also has a negligible temperature coefficient.

**BRUSH.**—Anti-friction carbon of ample section to carry current required without voltage drop.

**INSULATION.**—Panels, Elements, Brush, and other live parts are insulated from frame with bakelite bushings and washers. All insulation is impregnated with bakelite varnish to prevent damp creeping in at these points. The insulation resistance of an individual dimmer is not less than 20 megohms, measured with a 500 volt testing set.

**GENERAL.**—All dimmers have a definite "off" position. Dimmers are made with 80 or 100 steps of resistance, and windings are graded to give flickerless dimming from "full on" to "off" when used with a load of its rated capacity. Dimmers for dip plugs can be arranged to give a load variation of + or — 33⅓ per cent.




*Sunset Element Type Dimmer dismantled showing brush arm and contacts*

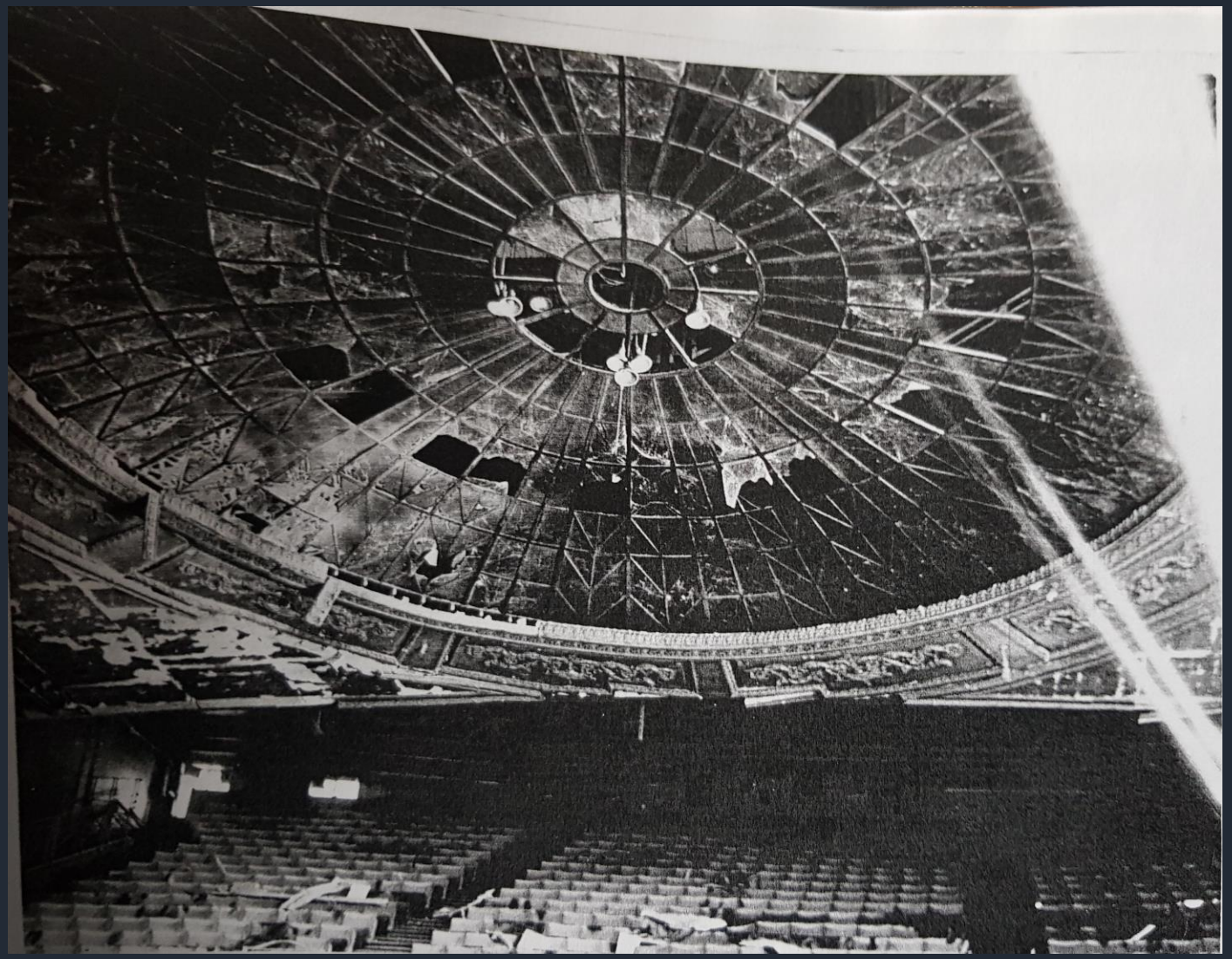
Telephone: Temple Bar 7464 (6 lines).
STRAND ELECTRIC AND ENGINEERING CO., LTD.
FLORAL STREET, COVENT GARDEN, W.C.2
Telegraphic Address: Spotlite, Rand, London.

Strand 1945 Catalogue

The Backstage Heritage Collection

# A New Ceiling…

**Pre-war:**
*The roof of the auditorium has a high glass Dome 50 ft. in diameter, which is flooded with light from its interior. All lighting in the front of the House is on the concealed system.*
Stage Newspaper, November 21st 1929
From Streatham's Arthur Lloyd Page.



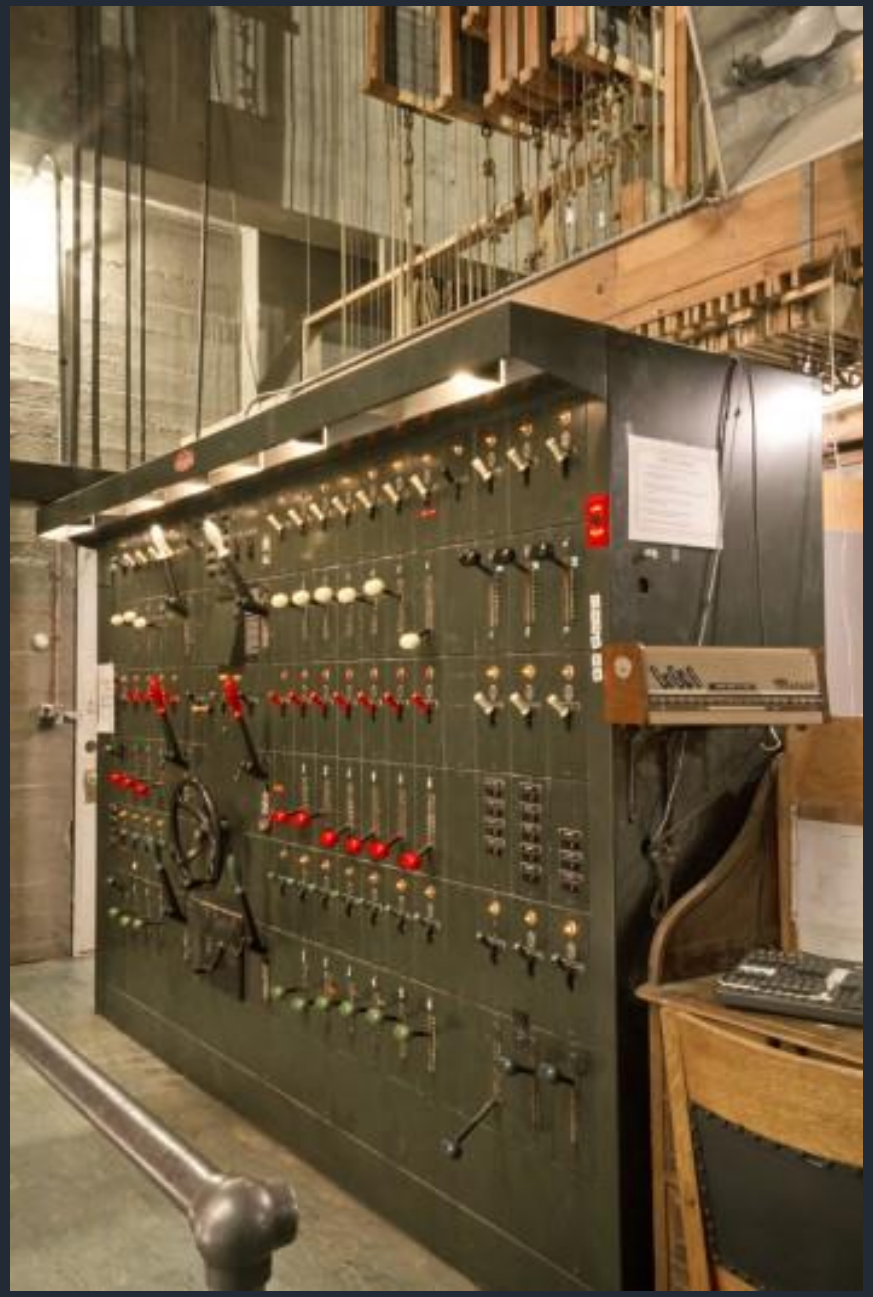
# What Happened to the Major?

- Bomb Damage SR, Control on Perch SL:
  - Survived the War & was used until the theatre closed.
  - Referred to as a ‘Grandmaster’ as a generic term – i.e. Hoover.
  - Strand Bracket Control added for new house-lighting.

- Replaced:
  - With a Strand Grandmaster – last installation in 1955.
  - With a Major Grandmaster.
  - But why two controls?

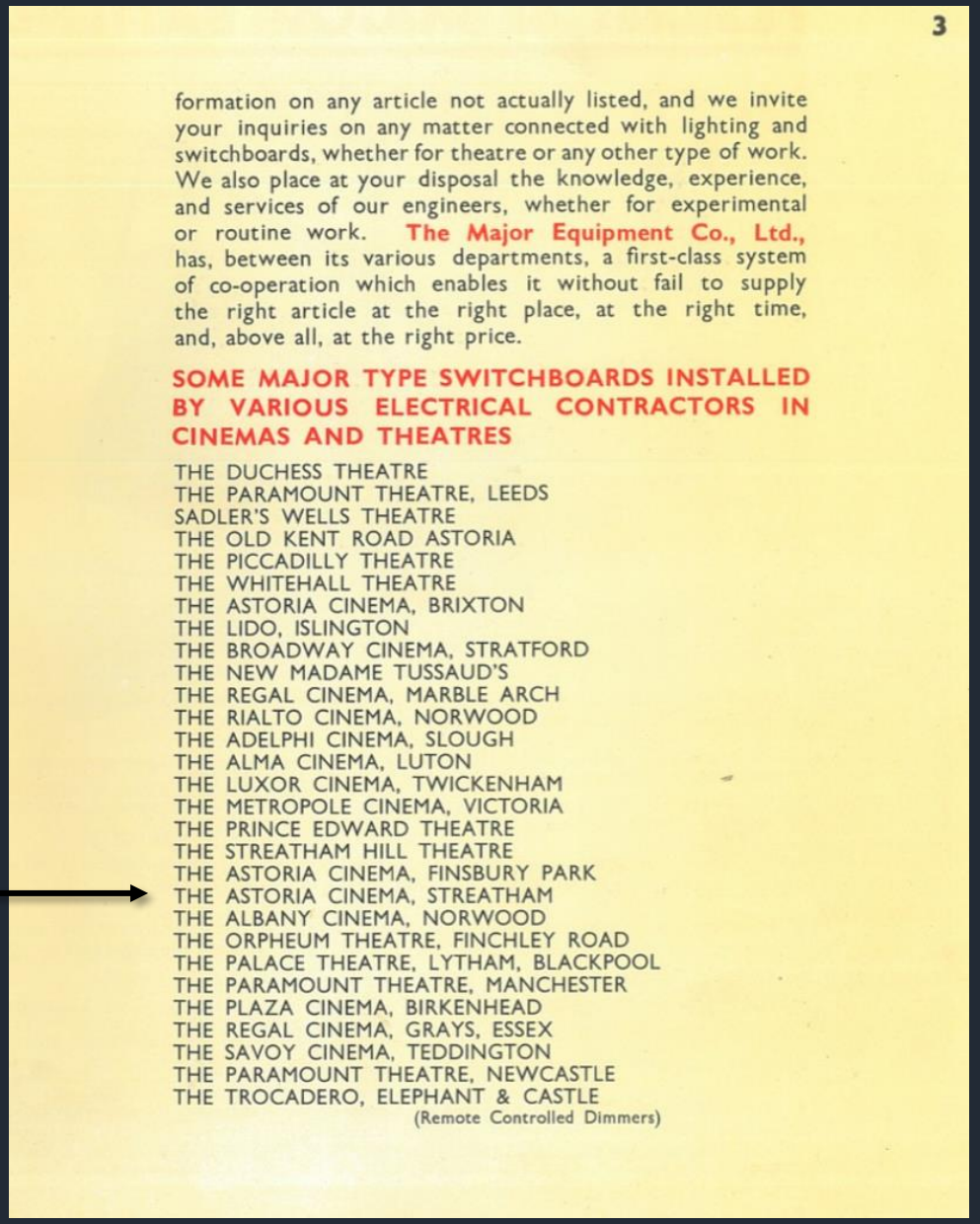
# Distant Friends…

**Alhambra Theater – Masonic Temple**
**Santa Fe – New Mexico**



# Close Relations…

Sister control at
The Streatham Astoria
Last seen in the late ‘70s by
Roger Fox of the ABTT





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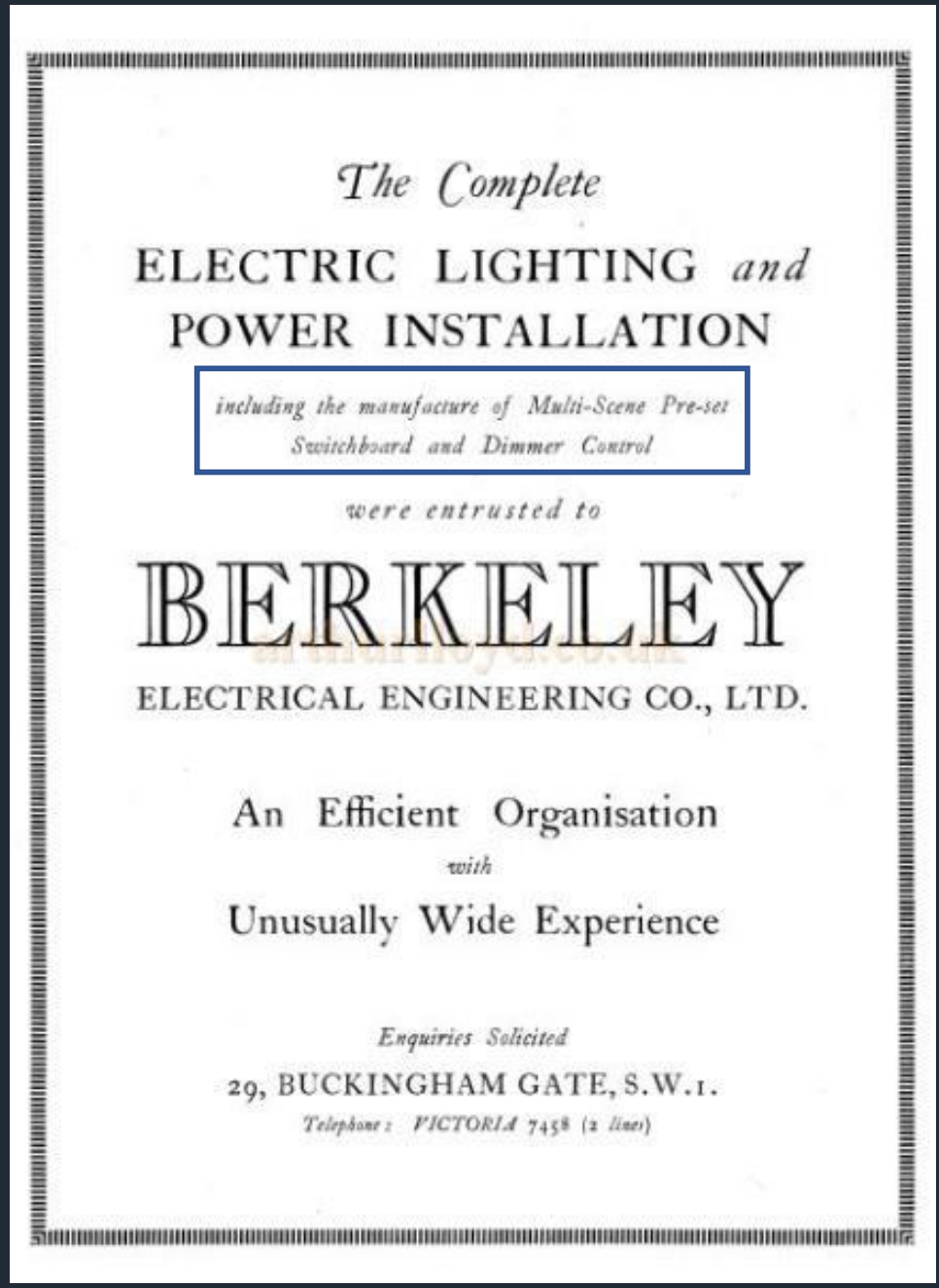
(Remote Controlled Dimmers)

# Berkeley Electrical to Brixton…

*“Do you know about the old Berkeley Lighting Control at the Brixton Academy?”*
Olly Welsh - Production Electrician

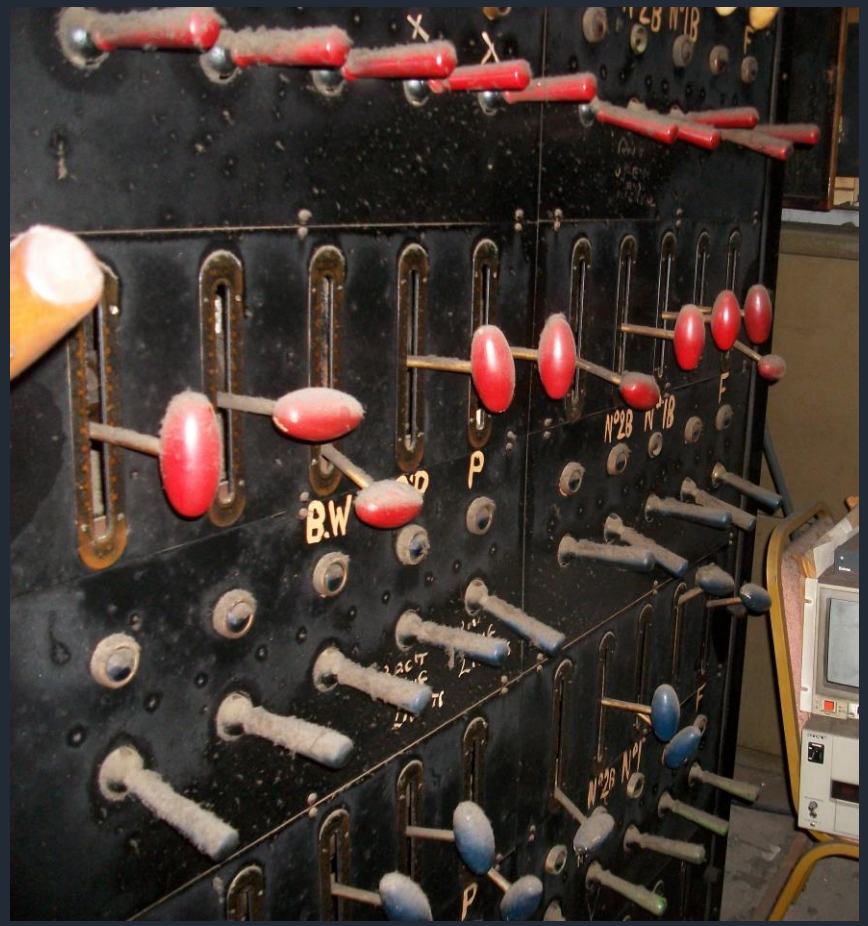


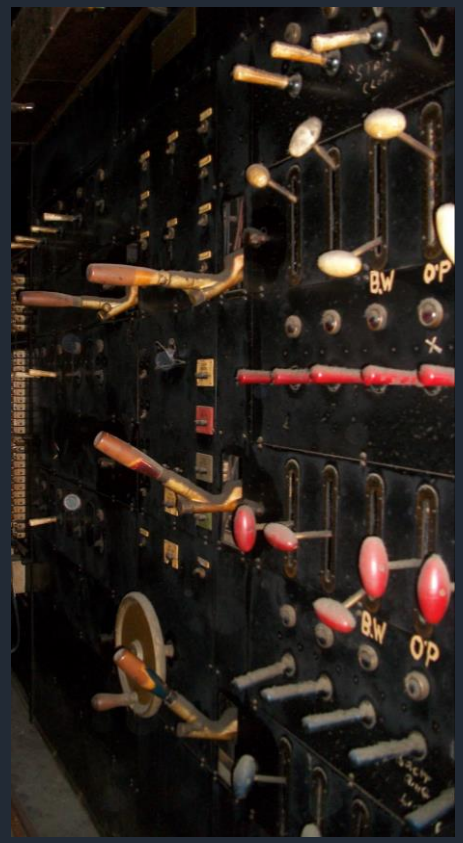

Streatham Hill Theatre
Opening Night Brochure 1929
Arthurlloyd.co.uk

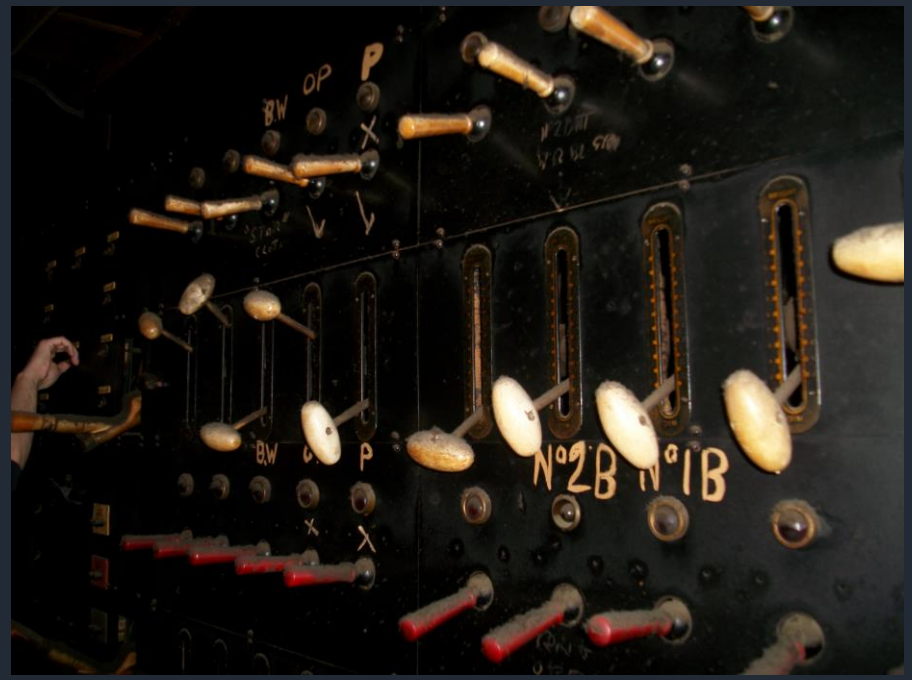
# Brixton Astoria:

## Also Opened 1929

Photos Courtesy of Roger Fox / ABTT





# Many Thanks to:

David Harvey

Jim Laws

Roger Fox