

Mazda House News

Published to give information on Mazda House matters and to stimulate Electric Lighting business



No. 8.

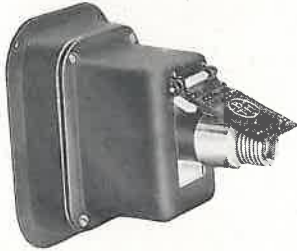
July-August.

1914.



B
T
H

Theatrical Apparatus



WALL POCKET

¶ The fact that B.T.H. Theatrical material is used in a large number of London Theatres, Music Halls, etc., speaks well for the quality of our apparatus.

¶ We ask all our readers who are interested in theatrical matters to send at once for the theatrical section of our list.

¶ So far as lamps are concerned, Mazdas are exclusively used in many more London Halls than any other make of lamp.



NUMBER INDICATOR.



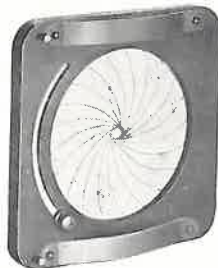
FLOOD LAMP



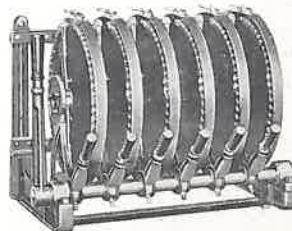
EXIT LIGHT



PERCH BOX



IRIS SHUTTER



METALLIC DIMMER



LENS LAMP



If it had not been

for the Mazda

**DRAWN
WIRE
PROCESS**

the types of lamps illustrated on this page would not have been available—

- (1) to the Public for greater economy in cost of light.
- (2) to Central Stations in their fight against other illuminants.
- (3) to Contractors in the extension of their business.
- (4) to Illuminating Engineers in their work for improved lighting.

We were well within the truth when we stated in 1911 that "the Mazda Drawn Wire filament will cause a revolution in lighting"—it has.

Use and recommend MAZDAS—the lamps which mean progress and profit for all concerned in electric lighting.

**The British Thomson-Houston Co.,
Ltd.,
Mazda House, 77, Upper Thames Street,
LONDON, E.C.**

Branches at Manchester, Birmingham, Leeds, Sheffield, Newcastle, Middlesbrough, Glasgow, Swansea, Cardiff and Dublin.



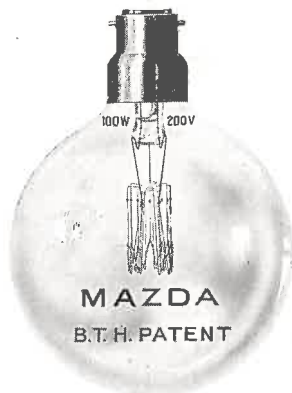
MAZDA LAMP
(regular type)
6 to 600 watts.



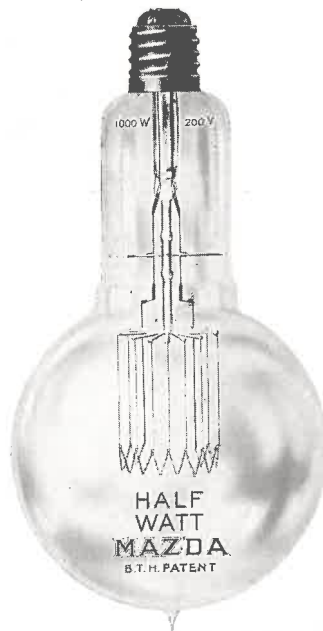
MAZDALITE TUBULAR LAMP. 10 to 100 watts.



**MAZDA AUTOMOBILE
HEADLIGHT.**
8 to 48 C.P.



MAZDA FOCUSING LAMP
(for Photographers, etc.)
40 to 100 watts.



MAZDA "HALF-WATT" LAMP.
100 to 1500 watts.



Holidays

We may be as gay and irresponsible as we please on holidays, but for all that, we cannot escape the philosophic basis which underlies all holiday making and recreation. Holidays are just medicine with a nice taste.

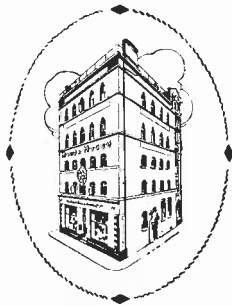
A holiday does not necessarily or generally mean rest and stagnation. Most men find holiday enjoyment and recreation in strenuously doing unaccustomed things.

Businesses, especially electrical businesses, need holidays of the latter kind. That is to say, they periodically need change and rejuvenation, they require the infusion of renewed energy and vigour—and these are the things that make up a holiday in the truest sense of the word.

When you have had your own holiday, give your business one. Don't give it a rest, but run it on new lines. Buy and sell things you have never bought and sold before (you will find some described on and between the covers of M.H.N.)

A certain railway advertises itself in the holiday season as "The road to health." For businesses in need of a holiday, we would recommend Mazda service in the same terms. Those who take the Mazda road will find on the way many new, joyous, and profitable things.





MAZDA HOUSE NEWS



*Published to give information on Mazda House matters
and to stimulate Electric Lighting business.*

No. 8.

JULY—AUGUST.

1914.

*Published by the British Thomson-Houston
Co., Ltd., 77 Upper Thames Street, E.C. All
communications should be addressed to the
Editor, "Mazda House News."*

The Time to Get Busy.

THERE is a tendency in commercial circles to regard the period from June to September as a suitable season for slumbrous inactivity—as a time when any expenditure of mental or physical energy in excess of the absolute requirements of routine is to be deprecated and avoided. It is certainly true that sales fall off in some businesses with the commencement of the holiday season, but in most cases this is due to a decrease in selling activity rather than to any decrease in the public's desire to buy.

As a matter of fact, the majority of people buy, or at any rate will buy, if properly appealed to, a great deal more at holiday times than at any other. Some people indulge in a veritable orgy of buying during the few weeks preceding their holidays. Of course the sale of certain commodities must inevitably fall in the summer, and we are afraid that electric lighting material comes within the category of things which do not flourish in the sunny days. But this admission involves no agreement with the *laissez-faire* policy adopted by a good many traders.

In the lighting business the summer and early autumn should be regarded as a period of preparation for the winter's work. And it is none too long. It is necessary, first of all, to decide upon the general policy for the coming season. Shall it embrace circularising, window displays, illuminating engineering, etc.? If so, to what extent?

There are lists of names to compile, letters to draft, advertising literature to requisition, or perhaps, in some cases, to write up and get printed. If the district is a suitable one for the promulgation of illuminating engineering and the principles of scientific lighting, it will be necessary to arrange for a small demonstrating room in which lamps and reflectors can be effectively shown.

Indeed, there are a thousand and one things to be done before the end of August when the lighting season commences. These things can't be done in a rush; they must be set about in an orderly and definite fashion upon the basis of plans thought out weeks or months beforehand. This work of preparation is

about the most difficult problem the electrical trader has to face; and since it is not *immediately* productive there is often a tendency to leave it undone. But a strenuous summer of preparation is going to make a tremendous difference to the winter sales.

In this connection we would like to draw the attention of readers to the facilities offered by Mazda service—which is the service we are



A "LIGHT" LOAD.

Nothing that could be said here would add to the impressiveness of the inscription on the side of the van, which states the actual rated candle-power of the lamps inside.

willing to render to all who buy, sell, or use Mazda drawn-wire lamps.

This service comprises the preparation of illuminating schemes, the supply of advertising literature, showcards, etc., the writing of form letters, and suggestions and advice relating to every phase of the electric lighting business. We know something of all these selling methods—enough, at any rate, to make them pay us well, and we have no doubt of our ability to help you in your plans for the coming winter.

Mazda service is entirely free. Will you take advantage of it this summer—at once in fact—and so make reasonably sure of increased profits in the dark days?

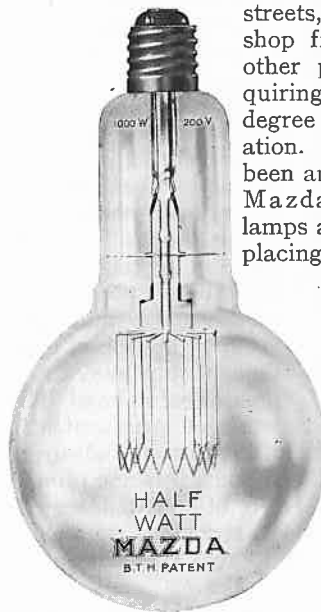


Mazda "Half-Watt" Electric Lamps.

NEW SIZES, NEW TYPES
AND NEW PRICES.



IN January of this year, the Mazda "Half-Watt" lamp was placed on the market. We pointed out then that this new lamp with its 100% gain in efficiency, as compared with the ordinary tungsten lamp, would effect a revolution in the lighting of streets, factories, shop fronts, and other places requiring a high degree of illumination. This prophecy has been amply justified, and Mazda "Half-Watt" lamps are everywhere replacing other forms of high candle power units.

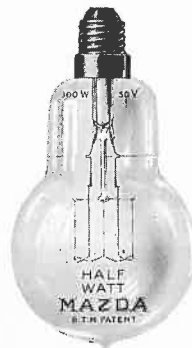


1000 watts (2000 c.p.) 200 volts.
One quarter full size.

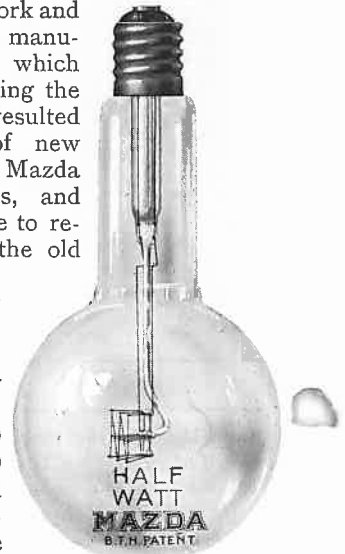
Hitherto "Half-Watt" lamps have only been available in the following sizes:—50-65 volts, 300 and 500 watts; 100-130 volts, 500, 1,000 and 1,500 watts; 200-255 volts, 1,000 and 1,500 watts. The

laboratory research work and the improvements in manufacturing methods which have taken place during the last six months have resulted in the production of new types and sizes of Mazda "Half-Watt" lamps, and have made it possible to reduce the prices of the old sizes. These developments may be briefly stated as follows:—

(1) The production of a new Projector Type Mazda "Half-Watt" lamp (100-130 volts, 300-1,500 watts) with a vertical or horizontal grid filament for use in projectors, stereopticons, and photographic enlarging lanterns.



100 watts (200 c.p.)
50 volts.
One quarter full size.



Projector Type.
500 watts (1000 c.p.) 100 volts.
Vertical Grid Filament.
One quarter full size.

(2) An extension in the range of standard "Half-Watt" lamps by the addition of the following new sizes:—50-65 volts, 100 and 200 watts (200 and 400 c.p.); 100-130 volts, 200 and 300 watts (400 and 600 c.p.); 200-255 volts, 500 watts (1,000 c.p.)

(3) A reduction in the prices of the original sizes.

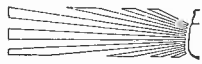
Full particulars of the new lamps and the reduced prices are given in our new price list, No. 10130, copies of which will be sent to any reader on request.

PRICES OF STANDARD "HALF-WATT" LAMPS.

Volts.	Watts.	Approx. C.P.	Old Price, each.	New Price, each.
50-65	100	200	—	15/-
	200	400	—	20/-
	300	600	30/-	25/-
	500	1000	35/-	30/-
100-130	200	400	—	20/-
	300	600	—	25/-
	500	1000	35/-	30/-
	1000	2000	50/-	40/-
1500	3000	60/-	50/-	
200-255	500	1000	—	30/-
	1000	2000	50/-	40/-
	1500	3000	60/-	50/-

New sizes are shown in black type.

The range of sizes now extends from 100 watts (200 c.p.) to 1,500 watts (3,000 c.p.), and it is anticipated that the complete range now available, coupled with the reduced prices, will



materially promote the application and use of these excellent high efficiency units in *all* fields of lighting. The 100 and 200 watt sizes should have a tremendous influence in extending the use of Mazda "Half-Watt" lamps for interior lighting, especially in view of the fact that their dimensions are no greater than those of ordinary tungsten lamps of the same wattage and half the candle-power.

At the time of the original development of the "Half-Watt" lamp, full particulars appeared in the Press and in "Mazda House News," but it may be as well to refer briefly to the outstanding features of this new lamp which, in the words of one writer, "possesses just those characteristics of high efficiency, brilliancy, quality and volume of light which will enable the incandescent electric lamp to attain universality of application for the illumination of streets and areas of all sizes and all kinds, both exterior and interior."

Efficiency:—Approximately 0.5 watts per candle power of light—rather more than double the efficiency of the ordinary tungsten lamp.

Average Life:—800 to 1,000 hours.

Quality of Light:—Owing to the high temperature of the filament, the light is much whiter in colour than that of the ordinary tungsten lamp, and approximates very closely to daylight.

Intrinsic Brilliancy:—The intrinsic brilliancy of the Mazda "Half-Watt" lamp is eight times that of the ordinary tungsten lamp. For interior lighting this high intrinsic brilliancy renders it essential that Mazda "Half-Watt" lamps should be enclosed in suitable diffusing spheres or bowls, in order that the light may be agreeably diffused and effectively distributed. For this purpose Alabas and Veluria glassware and B.T.H. "Eye-Rest" fittings are recommended.

Gas-Filled Bulb:—The filament of the Mazda "Half-Watt" lamp—which is a continuous length of drawn tungsten wire, wound in a very close spiral—does not burn in a vacuum, but in a bulb filled with an inert gas, *i.e.*, a gas such as nitrogen, which is not chemically affected by the high temperature of the filament.

Perhaps the most obvious application of the larger sizes of Mazda "Half-Watt" lamps is for the lighting of streets, factories, and shop fronts, for which purpose they possess all the advantages of the arc lamp, but do not, like the latter, require trimming, adjusting or repairing, and will burn steadily under all conditions with a minimum of attention. A complete range of weatherproof fittings has been developed for

street, shop and factory lighting. Some of these are illustrated on page 4 of the new "Half-Watt" price list.

The 100 and 200 watt sizes are suitable for the illumination of shops, offices, theatres, churches, &c., and special semi-indirect and "Eye-Rest" indirect fittings have been designed to accommodate these low wattage lamps, as well as the other sizes ranging from 300 to 1,500 watts.

Write to us for full information regarding the new Mazda "Half-Watt" lamp developments mentioned above. You will need it for the coming season, because there is going to be a big demand for these new lamps.

The Sun's  Only Rival

How I was Conquered.

By a Vanquished Genie.

I'VE come a cropper! Pretty undignified language for a Genie, isn't it? I might have said, "Verily, I have descended even unto the dust," but what's the good? When a Genie can't even call his soul his own, he doesn't feel much like keeping up the conversational tone of the Arabian Nights. It was all very well in the old days when I roamed free and untrammelled over the earth and through the skies, amusing myself by such little tricks as setting the heavens blazing and the earth quaking with my thunder. I was free then. I hadn't met that other Genie who was the beginning of all my troubles—the Genie Science.



I shall never forget the fright I had when he first discovered me on that piece of amber, nor the shock when he again ran me to earth in the dry fur of a cat's tail. I tried to escape, but he clutched me, and he's never let me go since. Bit by bit he has wrested my secrets from me and solved the mystery of the Genie Electricity, which is my full style and title. And then he put me into harness. Oh, what a time I have had ever since! At the beck and call of everybody, I've worked and slaved, day and night, rushing along wires with messages, driving trains and trams,



ringing bells, the slave of every insignificant little human being who cared to press a button or pull a lever.

All this was bad enough, but the last straw was laid on when I had to start lighting houses and streets. This I *did* object to. There was something peculiarly undignified and painful to a self-respecting Genie in having to sit in a little glass bulb and do nothing but burn away. It wasn't nearly so amusing as burning other people's houses. I didn't like it, and I wasn't going to put up with it. For when it came to lighting, I knew a few tricks too many even for clever Mr. Science. I just played with



him. As fast as he drove me into a new little glass prison, I discovered a loophole of escape. No matter how he improved his bulbs,

I was always one too many for him. Sometimes I would burn unsteadily. At others I would give a dull light that was good for nothing. And then, perhaps, he'd invent a bulb which compelled me to give a fair light, so I would amuse myself by wearing out the lamp before its time. There was always some way in which I could annoy him.

And then came the day—it makes me short circuit to think of it—the great day when I found myself completely and hopelessly beaten by Science. I don't want to dwell on the harrowing details. It was very simple. I was just forced along the wire into a little glass bulb that looked very much like all the others. But what a different reception I met with when I got inside. There was no escape—no loophole for wasting power. I had to yield up every ounce of energy that was in me in soft, steady light. The Genie Science, whether by accident or design I neither know nor care, had hit upon a combination of metal and glass which compelled me to behave myself—and he called it the MAZDA Drawn Wire Lamp. The metal he



said was drawn tungsten wire—I wish it had been drawn *and quartered*.

P.S.—It is two years since I wrote the last sentence. When I found I was beaten, and was forced to yield an ideal light, I still thought there was one trick to play. I started to put my whole energy into wearing out the lamp. . . . I am still trying.

P.P.S.—Still later. I referred above to the last straw. It must have been the last but one, for the Genie Science has now invented a bulb (he calls it the Mazda "Half-Watt" lamp) which makes me give twice as much light as I did in the original Mazda lamp. I thought he had done his worst, but I was mistaken. He has exercised a fiendish ingenuity which places him outside the pale of decent Genieship. He has, in fact, rubbed it in. By the beard of the Prophet, were I free, I But there, what is the good of threatening? It will only make me hotter still—and I'm incandescent now.



A PRIZE-WINNING EXHIBIT.
This picture shows the Mazda lamp (with attendant maidens) which won a first prize for our Australian Agents at a local exhibition. A flirtatious old filament, what!

How Mazda Lamps are Advertised in The Antipodes.

A COMPETITION AND ITS RESULTS.

OUR Australian Agents were recently asked to take part in

a competition in connection with the commercial section of a large amusement park or exhibition. An important item of the competition was the offer of a prize for the best symbolically-dressed team representing a commercial article. The first prize was won by our Australian Agents, who organised a team of pretty girls dressed and accoutred to advertise Mazda drawn-wire lamps. The photograph reproduced above gives a very inadequate idea of the beauty of the Mazda Maidens and of the striking nature of the exhibit, which was brilliantly illuminated.

The Oriental appearance of the girls' dresses is supposed to indicate the Persian origin of the word Mazda, and while we will not vouch for the historical accuracy of the design, it cannot be denied that the *ensemble* is exceedingly attractive. The large Mazda lamp (which has, by some strange metamorphosis, acquired

legs) is made of wire netting, covered with calico to represent a completely frosted bulb. Each of the fair drivers wears a crown illuminated by miniature Mazda lamps, and the reins are also lighted in the same way.

Now for the results of this ingenious advertisement. As stated above, our Agents won the first prize, which in itself has a certain advertising value. In addition, the display was seen by thousands of visitors to the exhibition, many of whom will be influenced by the memory of these beautiful Mazda Maidens the next time they buy lamps. Last, but not least, our Agents were able to book an immediate order for 2,000 Mazda lamps for one of the exhibition stand proprietors who had witnessed the competition, and had been impressed by the symbolic representation of the Meaning and Service of Mazda. Incidentally he paid cash—an excellent trait in buyers.

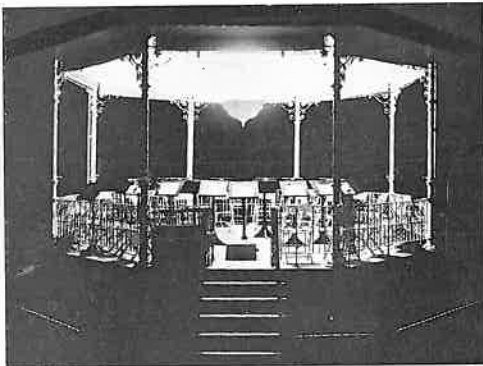
There is a moral for our readers in this story. It is too obvious to require elaboration, and all we need say is that we shall always be pleased to help you in your advertising and selling schemes—whether they relate to window displays, exhibits, demonstrations, or anything else that the wit of man can conceive and his hand execute.



Indirect Lighting in a Band Stand.

A HINT FOR SEASIDE CONTRACTORS.

THE usual method of lighting band-stands is to hang two or three bare lamps from the ceiling for the benefit of the musicians, while in order to attract the public, and also perhaps for the



Untouched night photograph of Coventry Band-stand showing excellent effect of "Eye-Rest" illumination.

purpose of distracting its thoughts from the music, the exterior of the band-stand is outlined with miniature electric lamps of various colours.

Everybody who has been to the seaside is familiar with this style of lighting, and has no doubt been amused by the generally unsuccessful attempts of the musicians to arrange their



Special Composition Bowl "Eye-Rest" fitting used in Coventry Band-stand. Note the City Arms on the near side of the bowl.

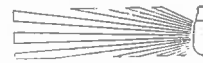
stands so that the music is not overcast by dark shadows. They do things better at Coventry, and those who go or are sent to that town will have the opportunity of seeing the first installation of B.T.H. 'Eye-Rest' lighting in a band-stand. The installation consists of a

single composition bowl "Eye-Rest" fitting, equipped with Mazda lamps and X-Ray reflectors, suspended from the centre of the white ceiling.

At night the appearance of the band-stand is at once attractive and restful; attractive, because the illumination is cheerfully brilliant, and restful, because there are no lamps in sight, and people can look at the band without injuring their eyes or spoiling their appreciation of the music.

From the musicians' point of view the main advantage of the "Eye-Rest" lighting is that they can read the music more easily than before, because no matter in what position the stands may be, it is impossible to cast a shadow on the score. In this connection it is interesting to know that the conductors and musicians of two of the bands which play in the Coventry Band-stand (the Black Watch and the King's Royal Rifles) have stated that the "Eye-Rest" lighting is far and away the finest artificial illumination they have yet experienced.

Seaside Municipal Authorities, and others who provide outdoor musical facilities at watering places, are hereby recommended to follow the example of Coventry in the matter of band-stand illumination, and so earn the gratitude of those who are paid pounds to play, and those who pay pennies to hear, the music. Seaside contractors are asked to draw the attention of their municipalities to this article.



TEN MAZDA V



M.C. 1

THESE ten window cards (red, light and dark board. They measure who has seen these Mazda the most attractive things of electrical firm. High praise

Each card sums up 1 epigram which every light appreciate. The pictures a "text" in a most effective n

We shall be pleased to send if you will promise to exhibit the



M.C. 3



M.C. 4



M.C. 8



WINDOW CARDS.

Cards are printed in four colours (green, red, and black) on heavy paper 12 ins. by 8 ins. Everybody who uses Mazda window cards say they are the best of their kind ever issued by an advertiser, but deserved.

They explain the Mazda Philosophy in an easy way so every user can understand and appreciate them. They are arranged and illustrated in the most interesting manner.

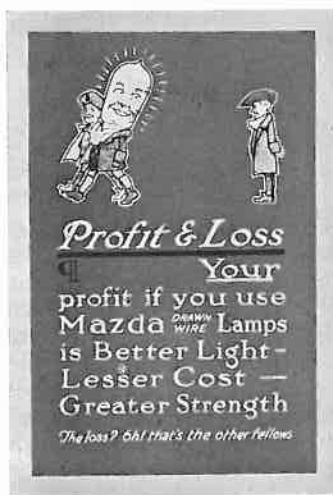
Choose any of these cards you care to select and place them prominently in your window.



M.C. 2



M.C. 5



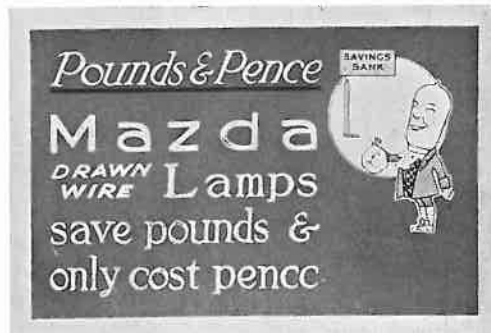
M.C. 6



M.C. 7



M.C. 9



M.C. 10

The Lighting of Stock Quotation Boards.



CERTAIN exchanges show the fluctuating prices of stocks by means of figures on an illuminated board.

Since these stock quotation boards are under the close and constant observation of brokers to whom accuracy is all important, it is essential that the illumination should be uniform over the entire surface of the board, so that figures and quotations at the bottom may be seen as easily as those at the top. The figures must also be visible from all parts of the room.

Certain brokers may have to watch the quotation board for several hours at a time, and it is therefore desirable that no lamp or reflector



Stock Quotation Board lighted by Mazda lamps in X-ray "Scoop" reflectors.

should be visible. To watch for an extended period the operation of a stock quotation board which is lighted by visible lamps is an extremely uncomfortable occupation, and one that is likely to result in eye-strain and nervous ailments amongst the unhappy brokers who have either to look or lose.

There is generally a waste of current in the lighting of quotation boards—a waste that can easily be eliminated by the careful selection and placing of the units. The accompanying illustration shows an installation which fulfils all the requirements of good lighting and at the same time is highly economical.

Mazda drawn wire lamps and X-ray "Scoop" direct lighting reflectors are used. Note with what distinctness the figures stand out, and how well the lower part of the board is illuminated. This is due to the remarkable reflective

powers of the X-ray "Scoops" which, although placed at a distance, project practically all of the light on to the surface of the board.

The question of concealing the lamps was simplified by the fact that the room has a

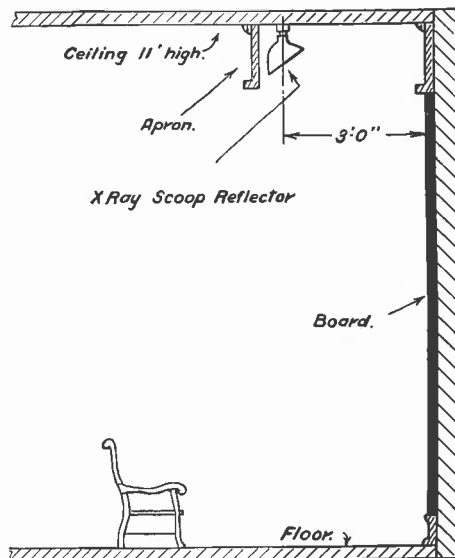
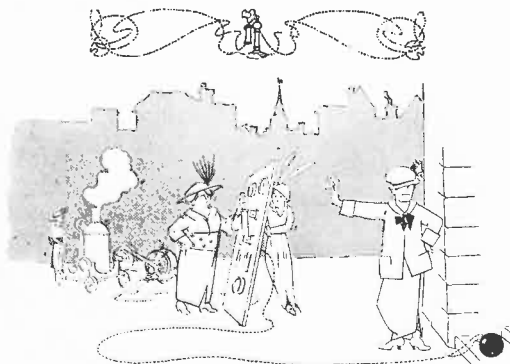


Diagram showing arrangement of X-ray units for Stock Quotation Board lighting.

beamed ceiling, and the addition of a false beam about 3 ft. in front of the board provided the necessary screen for the units, which are placed about 2 feet apart with the mouths of the reflectors pointing towards the board. By this means the lamps and reflectors are rendered absolutely invisible to those watching the board, and the false beam, which is finished in the same way as the surrounding woodwork, looks like a portion of the ceiling construction.



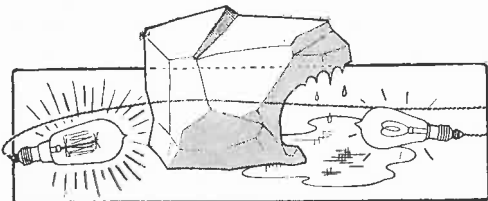
DOING IT ELECTRICALLY.

The ineffectiveness of Suffragette bombs has been made the subject of considerable ridicule. Electrically ignited bombs would be more up-to-date and a great deal more certain in operation. Our artist depicts above the kind of scene we may expect in the near future.

How to Sell Mazda Lamps in Hot Weather.

AFTER all the temperature argument is a very useful one in the hot weather, when trying to sell Mazda lamps to carbon lamp users.

It is true that people do not use so much artificial light in the summer as in the winter, and for that reason may not care to spend money in buying new lamps. But if they use carbon lamps, as a great many still do, you have a very good sales argument in the present hot weather (it was hot when this was written; it may be freezing when you read it). Everybody is



Here is a suggestion for a window display to demonstrate the relative heat radiation from a Mazda and a Carbon lamp.

made uncomfortable by excessive heat, especially at night time, and most people will jump at the opportunity of reducing the temperature of their rooms by even the smallest amount.

The heat radiation from the ordinary carbon lamp is by no means negligible, and can easily be felt by anybody sitting near it; whereas practically no heat is radiated by the Mazda lamp. Use this argument, which is easily demonstratable, with carbon lamp users in your district.

They may have intended to change over to Mazdas at the beginning of the winter in order to get more light for less money. Show them that by making the change *now* they will get more light *and less heat* for less money.

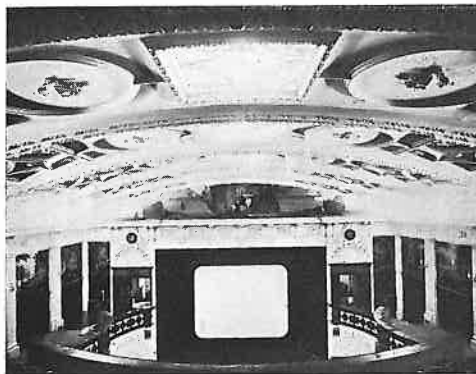
The Sun's Only Rival

The Lighting of Cinema House, Sheffield.

FIVE DIFFERENT SYSTEMS.

THE lighting of this theatre is particularly interesting, because it represents a very clever and harmonious combination of a number of different lighting systems. The installation scheme was prepared by our Illuminating Engineers

along lines suggested by Mr. Ravenscroft, the Managing Director of the theatre. We also supplied the Mazda drawn wire lamps and all fittings and other lighting equipment. - In arranging the illumination of this theatre, the two chief considerations were that it should



DOME AND CORNICE LIGHTING.

The auditorium of Cinema House is lighted partly by Mazda lamps in X-ray reflectors fixed in the ceiling domes, and partly by Mazdalite tubular lamps in cornice reflectors.

be entirely comfortable and restful, and that it should serve to show up the architectural and decorative details of the interior. These requirements have been admirably fulfilled.

The auditorium is lighted by B.T.H. trough reflectors, containing Mazdalite tubular lamps, concealed in the cornice. The light is projected on to the curved ceiling and from there reflected downwards into the auditorium.

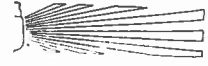
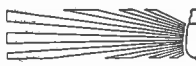
This cornice lighting is supplemented in a



ALABAS SEMI-INDIRECT LIGHTING.

Mazda lamps in Alabas (formerly Alba) glass bowls are used with excellent effect in the vestibule.

rather novel way. There are six domes in the roof of the auditorium, and each of these domes is covered on the under side by beautifully tinted amber glass. Above the glass, around the bottom edge of each dome, is arranged a row of upturned X-ray reflectors



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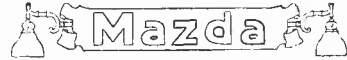
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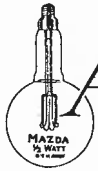
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Mazda "Half-Watt" Lamps in Leeds City Square.



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Considering that the Mazda "Half-Watt" lamp was only placed on the market in January last the extent of its present vogue, as evidenced by the number seen in London and provincial streets, is simply amazing. It is not merely that the Mazda "Half-Watt" lamp is supplanting ordinary high candle-power tungsten lamps; but arc lamps and high pressure gas lamps are also feeling the competition of the new lamp, which possesses all their advantages of economy and size without their need for constant attention and renewal of carbons and mantles.

As everybody knows, the Mazda "Half-Watt" lamp has an efficiency of approximately 0.5 watts per candle, which is higher than that of the ordinary arc lamp. The "Half-Watt" lamp, however, has no mechanism or parts which need renewal, and because of this it is a great deal more economical in actual operation than the arc lamp.

Add to this the fact that the "Half-Watt" lamp is more susceptible to artistic treatment, can be equipped with scientific reflectors, and is altogether more convenient and adaptable than the arc lamp, and we obtain the explanation of the phenomenon described above as "amazing."

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The statuary in Leeds City Square is of a different and more interesting kind, consisting as it does of a number of female figures, scantily vested and in some cases entirely unclothed, surrounding an equestrian statue of the Black Prince. The Mazda "Half-Watt" lamps have to serve a double purpose, viz., to illuminate the street adequately, and also to light the statuary in an appropriate manner.

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figures at present available relating to the average intensity of the illumination, but from all accounts, the inhabitants are delighted and entirely satisfied with the installation, which is considered a great improvement on the previous one.

So far as economy of operation is concerned, the Mazda "Half-Watt" lamps only consume two-thirds as much energy as the arc lamps, and of course they will cost considerably less than the latter for repairs and attention.

A night photograph of Leeds City Square, taken entirely by the light of the Mazda "Half-Watt" lamps, shows that the illumination is not only intense, but is also

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Mazda Meridian Lamps.

FOR DOWNWARD LIGHTING.

MAZDA "Meridian" lamps have been specially designed to give a downward distribution of light without the use of ordinary reflectors.

The standard Mazda lamp has a vertical filament and, as a consequence, most of the light is projected horizontally unless re-directed by suitable reflectors such as Veluria, X-ray, Mazdalux, etc., etc. In ordinary conditions the standard Mazda lamp,



MAZDA "MERIDIAN" LAMP.

equipped with some form of scientific reflector, provides the most satisfactory combination.



End view of filament.

Occasionally, however, it may be desired to produce a concentrated downward illumination without using an ordinary large reflector, and it is this requirement which the Mazda Meridian lamp has been designed to fulfil. The filament of the Meridian lamp is of drawn tungsten wire, wound in a very close spiral, and mounted at right angles to the vertical axis of the lamp. The spiral formation of the filament enables it to be arranged very compactly, which is also a considerable advantage when a concentrated light distribution is required.

Mazda Meridian lamps can, if desired, be supplied with close fitting opal reflectors attached by a brass screw ring. These reflectors take up very little more room than the bare lamp, and from that point of view may be considered as a part of the lamp.

The Mazda Meridian lamp, which is made in three sizes—30, 40, and 60 watts, for 100-130 and 200-260 volts, is suitable for use in all conditions where an intense illumination is required over a small area, as in the lighting of desks, machine tools, shop windows, billiard tables, etc., etc.

In future Alba Glassware will be known as "Alabas." The glass by any other name would light as well.

Costly Current.

AN ingenious statistician has taken the trouble to work out the cost per kilowatt of energy used in the ordinary pocket flash lamp. Taking the useful life of a 2-volt dry cell as about 4 hours with a lamp consuming 0.3 amperes, we find that its total output is 2.4 watt-hours. The dry cell costs 6d., so that in order to produce a unit of energy 416½ cells will be required at a cost of £10 8s. 3d.

Just think of it! Ten pounds eight shillings and threepence for one unit of electrical energy! Rockefeller would shudder at the price.

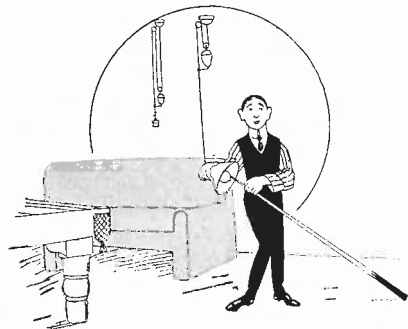
However, pocket flash lamps are very useful at times, in spite of their high cost. But be sure that you use Mazda flashlight lamps, because they are three times as efficient as the carbon variety, and if you have to pay £10 8s. 3d. per unit for electricity, you might just as well get as many candle-power as possible for your expenditure. That's only common sense, isn't it?

The Sun's  Only Rival

Please Note.



To improve our telephone facilities we have had two additional lines installed in the telephone exchange at Mazda House, 77, Upper Thames Street, E.C. The No. has also been changed. In future please ring up Central 10434 (5 lines) and your orders or enquiries will receive *immediate* and courteous attention.



SILLY ASS!

LAMP HOLDERS For All Conditions



Pull Chain.
A 162-33/- per doz.



Aluminium Batten.
A 196-16/6 per doz.



Rotary Key Switch.
A 151-12/- per doz.



WE show in our Catalogue and *carry in stock* a large variety of lamp holders of every kind, finish, price and quality. A few representative types are illustrated on this page. When you are next in the market for this material, remember that our prices are lowest, and our quality highest, and send your order to the nearest B.T.H. Office.



Push Bar.
A 157-15/6 per doz.



Light Gauge.
A 56-4/9 per doz.



Heavy Gauge English.
A 97-7/9 per doz.



Goliath Edison Screw.
A 299-3/- each.



Right Angle.
A 213-5/- per doz.



Medium Gauge,
Insulated Dome.
A 71-4/6 per doz.



Edison Screw.
All China.
A 268-16/6 per doz.



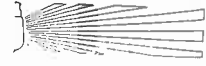
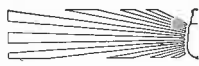
Goliath Edison Screw.
A 298-2/9 each.



Goliath Edison Screw.
A 308-2/6 each.



Edison Screw.
Home Office. Insulated.
A 264-28/6 per doz.



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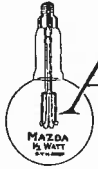
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Insulating and Jointing Material

You need this material on every wiring job you carry out. Do you get it from us? B.T.H. Insulating and Jointing Material is the best there is, and it is no dearer than the second or third

best. Everything you require for Insulation and Jointing Work can be obtained from us. We list $\frac{1}{2}$ in., $\frac{3}{4}$ in., and 1 in. Adhesive Tapes at from 1/4 per lb. up, and supply Rubber Tapes, Pure Linen Tapes, Varnished Cloth, Soldering Materials, Compounds, Micanite and Paraffin Wax, India Rubber Solution, Enamels, etc., at competitive prices.



Rubber Solution.

**SEND US
YOUR ORDERS.**



B.T.H. Tapes.

HALF-WATT LANTERNS

for
OUTSIDE LIGHTING

¶ Type A lantern is a vitreous enamelled fitting with internal reflector plate and opalescent ventilated globe, and either with or without external reflector. This is our original Weatherproof "Half-Watt" Lantern. Two new sizes have been developed to accommodate the new 100 and 200 watt lamps.

¶ Angle lantern (B) is intended specially for shop front lighting, and consists of an upper bell shaped casing and a white enamelled angle reflector, the mouth of which has a glass covering.

¶ Lanterns D and E, although less expensive than type A, are well made and finished, and are extremely simple in construction. Openings in the bottom of the globe and the top of the casing ensure adequate ventilation by allowing a current of air to flow through the lantern. These lanterns are vitreous enamelled, and are provided with insulated suspension rings.

**Write for full particulars
and prices.**



Type E.



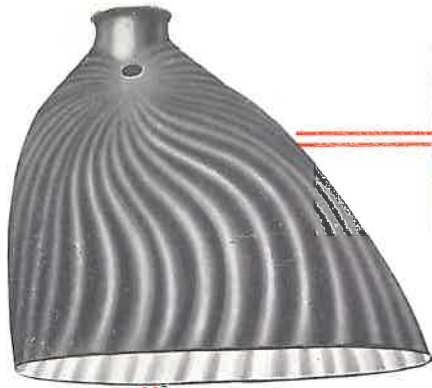
Type D.



Type A.



Type B.



Cat. No. S 5508
Price 25/6

Specially designed for Shop Window Lighting

The next time you are asked to give a scheme and estimate for the lighting of shop windows, specify "X-Ray" Reflectors - and get the order.

"X-RAY" REFLECTORS for Direct Lighting

Their reflective powers are really astonishing, and better still—they retain their brilliance, as moisture can't get at the silver to tarnish it.

The glass shells are moulded with spiral and vertical corrugations (to prevent striation), then the pure silver is fired on and finally backed with a special elastic paint which preserves it from the effects of climatic changes, etc.

Our Illuminating Engineers' Dept. will be pleased to assist you freely in the next shop lighting job you have.



Cat. No. S 5506. Price 6/9.



F 7376-84
2½" to 10" 2/- to 10/- each.



F 7062 3½" 13/- per doz.
F 7063 4" 17/6 "
F 7064 5" 31/6 "



F 7068 3½" 13/- per doz.
F 7069 4" 17/6 "
F 7070 5" 31/6 "

Ornamental Galleries and Ceiling Plates

Here are a few selected items from our extensive range of galleries and ceiling plates. The galleries are made up to 10" in diameter to take the larger sizes of Veluria and other glassware. All galleries and ceiling plates can be supplied in the following finishes: Polished Brass, Steel Bronze, Oxydized Copper, Bronze Relieved, and Oxydized Silver. The prices given are for Polished Brass or Steel Bronze. The prices of other finishes will be sent on request.

Ask for complete list.



F 7374 2½" 2/3 each.
F 7375 3½" 3/- "

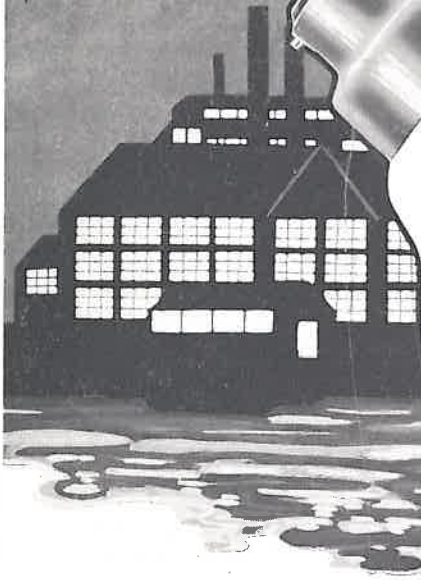


F 7065 3½" 12/- per doz.
F 7066 4" 14/- "
F 7067 5" 27/- "



F 7071 3½" 12/- per doz.
F 7087 4" 14/- "
F 7088 5" 27/- "

Prepare for the dark days



Efficient Factory Lighting
pays for itself in increased
output and decreased costs.

Mazda

Drawn Wire LAMPS

fitted with Mazdalux Metal Reflectors, ensure light on the work and not in the eyes of the workers.

This means freedom from eyestrain—lessens the risk of accident to life and limb and maintains a 'daylight' quality of work during the darker hours.

Discuss this matter of lighting with our Illuminating Engineers, whose advice is freely at your service.

THE BRITISH THOMSON-HOUSTON Co., LIMITED.

(For addresses, see under.)

WHERE TO SEND YOUR ORDERS

TOWN	POSTAL ADDRESS ☼	TELEPHONE	TELEGRAMS	AREA
London	Mazda House, 77 Upper Thames Street, E.C.	Central 10434 (5 lines)	Mazdalux, London	South and West of England— i.e., South of a line drawn from Ipswich to Bristol
Birmingham	Daimler House, Paradise Street	Midland 2401 and 2402	Asteroidal, Birmingham	Leicester, Stafford, Warwick, Hereford, Northants, Huntingdon, Bedford, Cambridge, Norfolk, Suffolk, Worcester, Shropshire
Manchester	National Buildings, St. Mary's Parsonage	Central 6636 (3 lines)	Asteroidal, Manchester	Lancashire, Isle of Man, Cheshire and North Wales to Aberystwyth
Newcastle	Collingwood Buildings	2342 and 2343	Asteroidal, Newcastle	Northumberland, Cumberland, part of Westmorland, Durham, and North Yorkshire
Middlesbro'	Prudential Chambers, Albert Road	814	Asteroidal, Middlesbro'	Sub. Office to Newcastle—same territory
Sheffield	8 East Parade	Central 4669	Asteroidal, Sheffield	Yorkshire (South of Thirk), Derbyshire, Lincolnshire, and Nottinghamshire
Leeds	Standard Buildings, City Square	Central 3244	Asteroidal, Leeds	Sub. Office to Sheffield—same territory
Glasgow	91 Wellington Street	Central 4840 and 4841	Asteroidal, Glasgow	Whole of Scotland
Cardiff	Royal Chambers, Park Place	4392	Asteroidal, Cardiff	Monmouth and East half of Glamorgan
Swansea	Castle Buildings	Central 123	Asteroidal, Swansea	Cardigan, Pembroke, Carmar- then and West half of Glamorgan
Dublin	25 Suffolk Street	1557	Asteroidal, Dublin	Whole of Ireland

☼ Of course, address "The British Thomson-Houston Co." in each case.