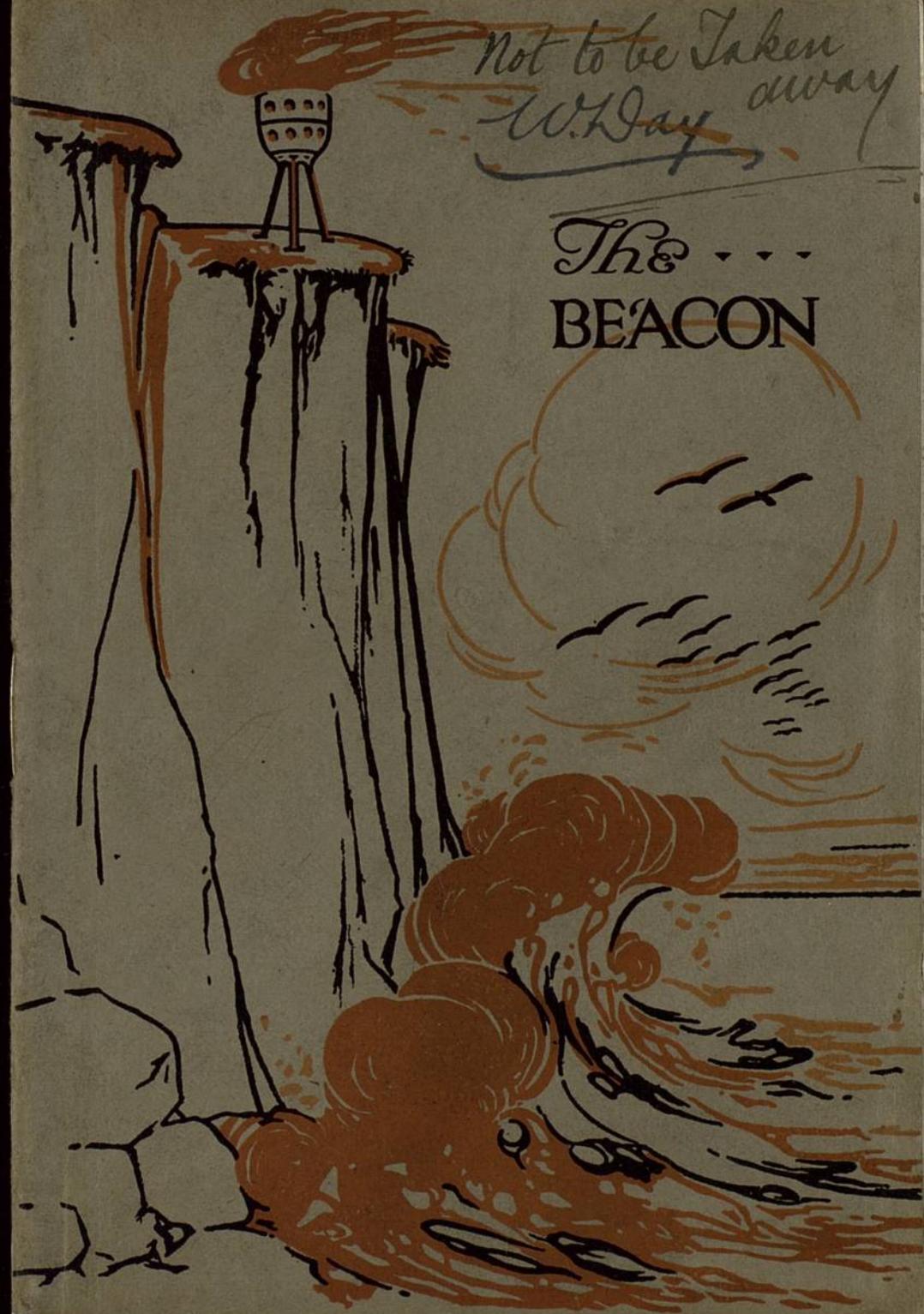


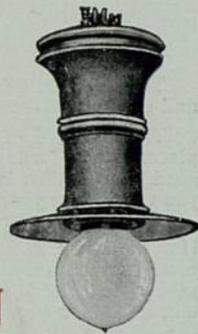
Not to be Taken
away
W. H. Day

The . . .
BEACON





LIGHT
Your Factories
... with ...



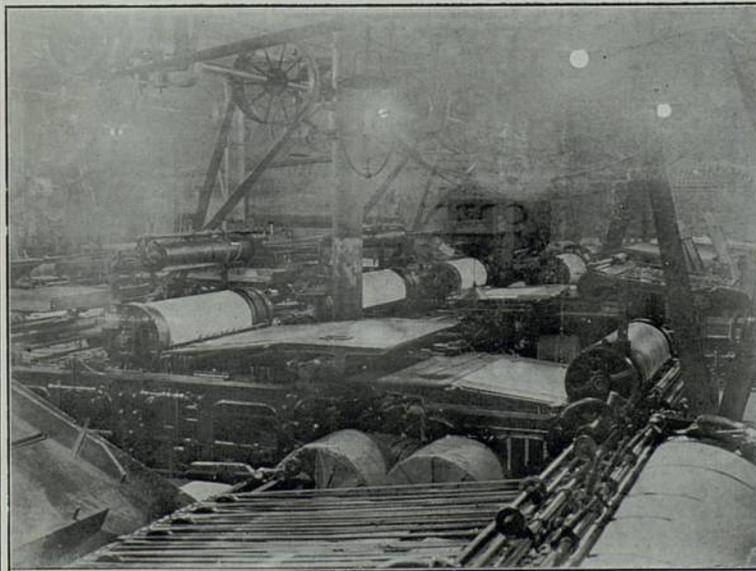
The British Jewel
of Arc Lamps,

THE CULINAN

— OR —

THE WHITE STAR.

IDEAL ARTIFICIAL LIGHTING OF INTERIORS.



NOTE THE DISUSED GAS BRACKETS.

NEARLY 200 WHITE STAR LAMPS HAVE ALSO REPLACED
METAL FILAMENT LAMPS IN THE LATEST SPECIAL FITTINGS

W. D.

8°

67

BR

IDEAL INTERIOR LIGHTING.

The object of this pamphlet is to bring forward the latest, most novel, and efficient method of general interior lighting.

The standard of illumination, both in private houses and in public places, is now far higher than it was only a few years ago, and what was good enough then is certainly not good enough now. This fact compels you to improve your lighting.

Now what is the most economical procedure? If you already have arc lamps, merely to increase the current through them will increase your costs tremendously in proportion to the gain in light. You will find that your expense for **CURRENT** is by far the heaviest item in your lighting bill, and, therefore, you must keep your total current as low as possible. When you ask local advice, unless you generate your own current, you have to remember that the man who sells you current wants to sell you as much as possible.

We live by selling the most efficient light giver and it is **CHEAP LIGHT** that you want. That we make good our claims our repeat orders show, and our prices, though not necessarily the lowest, have often proved far cheaper in the end.

For the lighting of large premises with plenty of head room or open spaces, the flame lamp is undoubtedly the ideal, but, as is often the case, the size of the shops and factories precludes the use of these large units, the choice must be between the metal filament lamp and the high efficiency enclosed lamp which we pioneered many years ago.

The makers of metal filament lamps will tell you that the enclosed lamp is dead—that is their wish—and they are to some extent right if you consider some of the inefficient, badly constructed lamps. But the **WHITE STAR LAMP** leads the metal filament in efficiency, effect, colour and total running costs.

CONSIDER THIS.

A 5-ampere **White Star Lamp** on a normal circuit gives 700 M.H.C.P. per lamp or 1,400 per pair of lamps. If the special Triple **White Star Lamps**, which are run 3 in series on 220-250 volts, be used, the M.H.C.P. per lamp is 600 and per circuit 1,800.

Against this the best metal filament lamps consume 1.2 watts per c.p. **WHEN THE LAMP IS NEW**, so that with these lamps 1,800 c.p. would consume at least 2 1-5th units per hour, as compared with 3 **White Star Lamps** consuming 1 1-10th units—a saving of no less than 50 per cent. At 3d. per unit this means that you will save per circuit, per 1,000 hours nearly £14, this saving being proportionately more or less according to the higher or lower cost of current.

Moreover, the efficiency of the metal filament lamp stated is the initial efficiency, and as is well known this has an ever decreasing value; whereas the **White Star Lamp** is always the same, so that the saving in practice is even more than shown.

You will also find, if you have not done so already, that the cost of replacements through broken filaments or worn-out lamps is very heavy and compares most unfavourably with the small cost of carbons and occasional globe replacements in the **White Star Lamp**. Also do not forget

3 IN SERIES ON 220 VOLTS.

that to get all the light you are paying for you must dust your lamps. In the **White Star Lamps**, when you do this you also trim them, but with the metal filament lamp it also has to be done, and this process often results in the breakage of the filament. There is actually very little difference between the cost of attention to either form of lighting as regards labour.

A further point in favour of the **White Star Lamp** is the colour and value of its light. The **White Star Lamp** gives a pure white light equal to the purest daylight, so that colours viewed in its light are seen in their true shades, which is of inestimable value to a large part of the manufacturing and purchasing community. The globe of the **White Star Lamp** is always filled with light, not merely having a belt of bright light with dark shadows as is the case with many lamps.

We have mentioned the principal advantages of the High Efficiency Enclosed lamps as compared with any other form of lighting, but their advantages depend to a large extent upon our getting the right lamp—**THE WHITE STAR**.

The correctness of our claims is instanced by the following, which is one of many similar opinions:—

August 6th, 1912.

Dear Sirs,—In reply to your enquiry, I have pleasure in stating that some time back your Mr. Gilbert suggested to me that he could effect a very considerable saving in our current consumption and give us a better light by the use of your high efficiency arc lamps.

We made experiments, and were so convinced of the correctness of his claims, that we decided to instal the lamps throughout.

So many "beneficial" schemes are put before us, which proved quite ineffectual, that it is gratifying to be able to state that we are now actually obtaining a better light, with a saving of over 30 per cent. in current consumed.

Yours faithfully,

CHAS. H. HIGGINS (Messrs. Jones & Higgins, Peckham).

(The above comparison was made with metal filament lamps in special cut glass reflectors, which were replaced by 180 **White Star Lamps**.)

We have been manufacturing every type of arc lamp for 15 years, so that an unrivalled experience, and, we hope, reputation, are ours. As English manufacturers we have the same fight with foreign competition as you may have, and therefore we feel sure that whenever you are buying you will ask where the lamps were made and put this question, "Can I get equal or better value in an English lamp as compared with a foreign lamp?" Our lamps are really cheap—not merely low priced and consisting of flimsy stampings and delicate clockwork—"Made in Germany"—but are strongly made with plenty of metal to stand rough usage.

The **White Star and Cullinan Lamps** are designed and made throughout by British labour, with British capital in Britain. For shop lighting where you want appearance, the **White Star Lamp** is the most handsome and novel lamp, while its longevity of burning 40-70 hours with one trim greatly appeals to the Works Manager, where the cost of trimming has to be seriously considered.

For drawing offices and similar places where freedom from shadow is required, an opalescent reflector is fitted below the lamp. This projects the light on to the white ceiling, whence it is again reflected and diffused, and also part of the light is allowed to diffuse through the opalescent reflector.

AN ECONOMY—ALSO A LUXURY.

EFFICIENCY—MAXIMUM & CONSTANT.

The Culinan Lamp is the British jewel of all lamps. It is a small lamp designed on somewhat more standard lines, and whilst not having the finish of the White Star Lamp, meets the need for a thoroughly robust lamp at an extremely low price. It is short, being only 18 inches over all, which is a great consideration where the head room is very limited. It burns from 20-40 hours. Where the colour of the light is not of great importance, the Culinan Lamp can be supplied to use a larger carbon, in which case the hours of burning can be increased up to 65.

Remember it pays to do your lighting well, and good lighting can only be obtained with the White Star and Culinan Lamps.

THE WHITE STAR LAMP AND ITS POINTS.

1. More light for less money.
2. Better quality—colour matching done with perfect safety.
3. Appearance attractive and unique; for shop lighting—an essential consideration.
4. Low running costs. No renewals as compared with metal filament lamps, and a saving of nearly £5 per lamp per 1,000 hours, with current at 3d. per unit.
5. No danger with machinery, and therefore greatly increased output.

PRICES

"WHITE STAR" LAMP.

Voltage.	Current.	Hours of Burning.	Length of Lamp.	Price with Plain Cover.	Price with Pol. Copper Cover, as illus.
Singly, 100-120	.. 3-6 amp.	.. 20-24	.. 28in.	.. £3 16 0	.. £4 9 4
2 in Series, 200-250	.. 3-6 "	.. 20-24	.. 28in.	.. 4 6 8	.. 5 0 0
Singly, 100-120	.. 3-6 "	.. 40-70	.. 28in.	.. 4 9 4	.. 5 2 8
2 in Series, 200-250	.. 3-6 "	.. 40-70	.. 28in.	.. 5 0 0	.. 5 13 4

3 in Series Lamps, on 220-250 volts, extra per circuit, £1 : 0 : 0

" " " Hours of Burning, 32-40.

Line Resistance or Choking Coil, per 100 volt circuit pressure, 5/-

Opalescent reflector fitted below lamp, extra, 7/6.

"CULINAN" LAMP.

Voltage.	Current.	Hours of Burning.	Length of Lamp.	Price, with Plain Cover.
Singly on 100-120	.. 2½-5 amp.	.. 20-65	.. 18in.	.. £2 4 0
" " 200-250	.. 2-3 "	.. 20-65	.. 18in.	.. 3 18 0
2 in Series, 200-250	.. 2½-5 "	.. 20-65	.. 18in.	.. 2 10 0

The above prices include necessary Line Resistance, for normal voltage.

3 in Series Lamps, on 220-250 volts, extra per circuit, £1 : 4 : 0

Extra for Ornamental Copper Cover, Bronzed and Relieved or Enamelled and Relieved, as illustrated, 8/-

Extra for Alternating Current Lamps, each 14/-

Opalescent Reflector fitted below lamp, extra, 6/-

ENGINEERING & ARC LAMPS, LTD.,

Mechanical & Electrical Engineers,

Sphere Engineering Works,
ST. ALBANS, Herts.

Telegrams: VOLTARCON.

Telephone: 258 ST. ALBANS.



AWARDED GOLD MEDAL

NO SHADOWS—NO GLARE.

HGM

CONTRACT

TELEPHONE
258 ST ALBANS.

LATE



HGM

CONTRACTORS TO THE ADMIRALTY, WAR OFFICE, INDIA OFFICE, G.P.O., L.C.C., &c.

TELEPHONE
258 ST ALBANS.

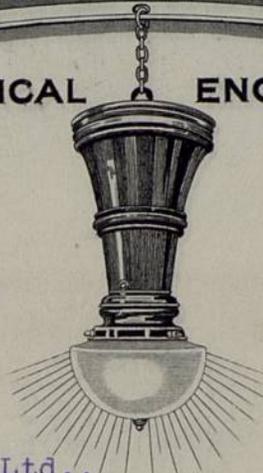
TELEGRAMS
VOLTARCON, ST. ALBANS.

ENGINEERING & ARC LAMPS, Ltd.,

LATE

THE GILBERT ARC LAMP COMPANY LTD

ELECTRICAL ENGINEERS



RAISING GEARS,
TRANSFORMERS.

SPHERE ENGINEERING WORKS
ST. ALBANS,
HERTS.

23rd September, 1912.

Messrs, Jury's Kine Supplies, Ltd.,
7a Upper St. Martin's Lane, W.C.

QUOTATION.

Beacon Flame Lamps suitable for running any number in series on direct or alternating current, complete with ornamental weather proof cover and wired opalescent globe and necessary line resistance.

- 1) Of our 11 to 13 hour Pattern, each £5. 5. 10.
- 2) Of our 16 to 18 " " " £6. 1. 0.
- 3) Of our 22 to 26 " " " £6.12. 6.
- 4) Of our 32 to 40 " " " £7. 5. 10.

Extra on the above for Self contained cut-out and substitutional Resistance, if required, each,..... 7s.6d.

The above prices are all subject to you to a special factors' discount of 7½%, and are strictly nett for cash in one month from despatch.

Delivery F.O.R. St. Albans,

Cases Extra but allowed for in full if returned to us carriage paid and in good condition within 21. days.

on & on behalf of
ENGINEERING & ARC LAMPS LTD.

Director.

CONTRACTORS TO THE ADMIRALTY, WAR OFFICE, INDIA OFFICE, G.P.O., L.C.C., &c.

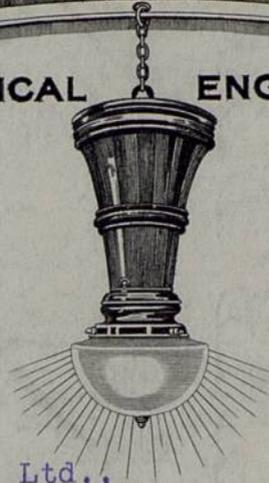
ST. ALBANS.

ENGINEERING & ARC LAMPS, Ltd.,

TELEGRAMS
VOLTARCON, ST. ALBANS.

THE GILBERT ARC LAMP COMPANY LTD.

ELECTRICAL ENGINEERS



RAISING GEARS,
TRANSFORMERS.

SPHERE ENGINEERING WORKS
ST. ALBANS,
HERTS.

23rd September, 1912.

Messrs, Jury's Kine Supplies, Ltd.,
7a Upper St. Martin's Lane, W.C.

PRICES FOR CARBON CONTRACT.

Carbons for Flame Arc Lamps, delivery direct ex Carbon Works,
Carriage free, and cases free.

Metal Cored Yellow Flame, best quality, 45% off list.

" " " " Second " 55% " "

Non-metal cored carbons, per 1000 feet.

Positive.

11 m/m	£3. 1. 0,
10 "	£2.16. 0.
9 "	£2.11. 3.
8 "	£2. 5. 3.
7 "	£1.19. 3

Negative.

10 m/m	£2. 9. 10.
9 "	£2. 5. 2.
8 "	£2. 0. 6.
7 "	£1. 3. 2.
6 "	£0.18. 5.

For delivery of the above carbons ex stock in not less than
1000 pairs, add 5%.

Smaller quantities add 10%.

For Engineering & Arc Lamps Ltd.

Jury's
Kine Supplies

Phone :—
ALBANS, 258.

Engineering & Arc Lamps, Ltd.

Telegrams :—
VOLTARCON,
ST. ALBANS.

September, 1912.



SURPLUS CARBONS FOR DISPOSAL.

FLAME CARBONS, METAL CORED.

Alternating Current, Yellow.

650 .. 10 m/m × 550 m/m No. 70.

Direct Current, Yellow.

Pairs.
510 .. 11 & 10 m/m × 500 m/m No. 104/105.
112 .. 11 & 10 m/m × 400 m/m No. 104/105.
300 .. 10 & 9 m/m × 400 m/m No. 104/105.
200 .. 9 & 8 m/m × 400 m/m No. 104/105.
250 .. 9 & 8 m/m × 12" No. 104/105.

FLAME CARBONS, NOT-METAL CORED.

Large Core, Yellow.

300 .. 8 m/m × 12" Siemens.
610 .. 7 m/m × 12" Siemens.
450 .. 8 m/m × 25" Ship.
4000 .. 9 m/m × 18" Ship.
750 .. 7 m/m × 18" Conradty.

Small Core, Yellow.

800 .. 10 m/m × 25" Conradty.
2650 .. 9 m/m × 18" Conradty.
300 .. 10 m/m × 12" Conradty.
1980 .. 6 m/m × 12" Conradty.
170 .. 6 m/m × 12" Siemens.
300 .. 10 m/m × 20" Siemens.
246 .. 11 m/m × 20" Siemens.
250 .. 7 m/m × 20" Siemens.
250 .. 6 m/m × 20" Siemens.
222 .. 7 m/m × 12" Siemens.
600 .. 10 m/m × 25" Ship.
800 .. 8.2 m/m × 16" Ship.
810 .. 8 m/m × 16" Ship.
1800 .. 7 m/m × 16" Ship.
4500 .. 7.2 m/m × 18" Ship.
1500 .. 7.2 m/m × 16" Ship.
940 .. 6 m/m × 16" Ship.

Small Core, White.

400 .. 10 m/m × 25" Ship.
400 .. 9.2 m/m × 25" Ship.
350 .. 10 m/m × 25" Conradty.

FLAME CARBONS, COPPERED.

Large Core, Yellow.

7000 .. 10 m/m × 16" Ship.
150 .. 9 m/m × 16" Ship.
250 .. 8 m/m × 16" Ship.
250 .. 7 m/m × 16" Ship.

Small Core, Yellow.

920 .. 10 m/m × 16" Conradty.
180 .. 9 m/m × 16" Conradty.
850 .. 10 m/m × 16" Ship.
27510 .. 7 m/m × 16" Ship.
1110 .. 6 m/m × 16" Ship.

CARBONS FOR VERTICAL FLAME LAMPS.

Yellow Flame.

175 .. 18 m/m & 14 m/m × 12" Siemens.
250 .. 13 m/m & 10 m/m × 18" Siemens.
1000 .. 13 m/m & 10 m/m × 12" Siemens.

Yellow Flame.

200 .. 13 m/m & 10 m/m × 18" Conradty.
270 .. 13 m/m & 10 m/m × 12" Conradty.

CARBONS FOR ENCLOSED LAMPS.

Ship Make.

		5500 .. 13 m/m × 10" Small Cored.
		590 .. 10 m/m × 10" Small Cored.
		1100 .. 8 m/m × 10" Small Cored.
		1300 .. 8 m/m × 13" Small Cored.
		1400 .. 8 m/m × 10" Cored.
		200 .. 11 m/m × 12" Cored.
		1500 .. 10 m/m × 16" Cored.
		1700 .. 11 m/m × 20" Cored.
		90 .. 6 m/m × 8" Cored.
		4600 .. 12 m/m × 10 ¹ / ₂ " Solid.
		6500 .. 8 m/m × 13 ¹ / ₂ " Solid.
		780 .. 8 m/m × 10 ¹ / ₂ " Solid.
		60 .. 6 m/m × 8 ¹ / ₂ " Solid.
		338 .. 10 m/m × 14" Solid.

Henrion Make.

740 .. 8 m/m × 10¹/₂" Cored.
1170 .. 7 m/m × 9" Solid.
880 .. 6 m/m × 9" Solid.

Siemen's Make.

800 .. 8 m/m × 10¹/₂" Cored.
500 .. 10 m/m × 9" Cored.
500 .. 10 m/m × 9" Solid.
650 .. 10 m/m × 16" Cored.
250 .. 10 m/m × 20" Cored.

CARBONS FOR OPEN TYPE LAMPS.

Cored.

25 .. 20 m/m × 18"
930 .. 20 m/m × 12"
850 .. 20 m/m × 9"
75 .. 18 m/m × 9"
450 .. 16 m/m × 18"
430 .. 16 m/m × 9"
120 .. 15 m/m × 18"
300 .. 15 m/m × 9"
800 .. 13 m/m × 12"

Solid.

100 .. 14 m/m × 18"
80 .. 14¹/₂ m/m × 12"
650 .. 13 m/m × 12"
320 .. 12 m/m × 10"
900 .. 12 m/m × 9"
1480 .. 10 m/m × 12"
80 .. 13 m/m × 18"
900 .. 9 m/m × 11"
200 .. 9 m/m × 9"

4. Low running costs. No renewals as compared with metal filament lamps, and a saving of nearly £5 per lamp per 1,000 hours, with current at 3d. per unit.
5. No danger with machinery, and therefore greatly increased output.

PRICES

"WHITE STAR" LAMP.

Voltage.	Current.	Hours Burning.	Length of Lamp.	Price with Plain Cover.	Price with Pol. Copper Cover, as illus.
Singly, 100-120	..3-6 amp.	.. 20-24 ..	28in. ..	£3 16 0 ..	£4 9 4
2 in Series, 200-250	..3-6 ..	.. 20-24 ..	28in. ...	4 6 8 ..	5 0 0
Singly, 100-120	..3-6 ..	.. 40-70 ..	28in. ..	4 9 4 ..	5 2 8
2 in Series, 200-250	..3-6 ..	.. 40-70 ..	28in. ...	5 0 0 ..	5 13 4

3 in Series Lamps, on 220-250 volts, extra per circuit, £1 : 0 : 0
 " " " Hours of Burning, 32-40.
 Line Resistance or Choking Coil, per 100 volt circuit pressure, 5/-
 Opalescent reflector fitted below lamp, extra, 7/6.

"CULINAN" LAMP.

Voltage.	Current.	Hours of Burning.	Length of Lamp.	Price, with Plain Cover.
Singly on 100-120	.. 2½-5 amp. ..	.. 20-65 ..	.. 18in. ..	£2 4 0
" " 200-250	.. 2-3 ..	.. 20-65 ..	.. 18in. ..	3 18 0
2 in Series, 200-250	.. 2½-5 ..	.. 20-65 ..	.. 18in. ..	2 10 0

The above prices include necessary Line Resistance, for normal voltage.
 3 in Series Lamps, on 220-250 volts, extra per circuit, £1 : 4 : 0
 Extra for Ornamental Copper Cover, Bronzed and Relieved or Enamelled and Relieved, as illustrated, 8/-
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 Opalescent Reflector fitted below lamp, extra, 6/-

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AWARDED GOLD MEDAL

NO SHADOWS—NO GLARE.

The Beacon.



IN olden times the Beacon was used to tell the news of great events, the light being placed in a position of the utmost prominence.

In those days, the lighting of streets was unknown, and lights in habitations were only of the most primitive character.

It has been written that "to-day there is more light, but the days are no longer."

True. But by the use of the British-made "BEACON" FLAME LAMP, the nights are *brighter* lighted.

Brighter, indeed, than some days.

To-day, the "BEACON" FLAME LAMP occupies the place of prominence, as did the Beacon of old.

You must have the "BEACON" FLAME LAMP in your most prominent place.

This little book will tell you why.

20 per cent. saving in current cost.



The British made Lamp with the Guarantee.

THE "BEACON" FLAME ARC LAMP is entirely British, being of British design, manufactured with British capital, by British labour, at the Company's works, Chingford, Essex, and St. Albans, Herts.

Our experience has shown us that we can guarantee this lamp for three years without any risk whatever.

Construction.

NO CLOCKWORK.—Most Flame Lamps made under Continental patents are constructed with complicated internal clockwork mechanism!! In the "BEACON" FLAME LAMP there is *no clockwork*—one stamped steel wheel—but a perfect and sensitive feed. The mechanism is entirely enclosed from the fumes.

NOTHING TO CLEAN.—The lamp is easy to trim. Deposit-free Globe and Cover. CARBONS are not metal cored.

CANDLE POWER.—The "BEACON" LAMP burns a single pair of carbons, not in contact with any temperature-lowering stop. This ensures efficiency and highest candle power. The perfect feed affords absolute steadiness.

For prices, see page 12.

Cheapest lamp for the user. Ensures repeat orders.

Appearance.

A ROW OF "BEACON" FLAME LAMPS will be an ornament to your premises in the day-time, and their brilliance will excel at night.



How we save you money.

CARBONS.—We save you anything up to ten shillings per lamp per 1000 hours. We do not supply you with a cheap lamp now, and charge high prices for carbons for ever after.

We supply **CHEAP CARBONS.**

CURRENT.—Consumption, 20 per cent. less. For the same cost we can run **FIVE** of our lamps where four are otherwise run, our mechanism being so perfect that no damping resistance is necessary. When an extra lamp is not required, we give you **MORE LIGHT**, or the same light with **LESS CURRENT.**

REPAIRS.—No repairs or renewals requiring the attention of a skilled electrician. Think what this saves, when you are offered a so-called cheap Lamp.

For prices, see page 12.

Your Light Doubled.



"Sunrae" Flame Lamps.

THE NON-STOP STOP LAMP.

JUST SO, the "Sunrae" Lamp is a non-stop Stop Lamp. First of all, it never stops; secondly, it has a stop, but not a metal stop which requires replacement.

Its simplicity equals that of a stop lamp, but this lamp is much shorter in length for the same hours of burning.

The feed is automatic and continuous.

The "Sunrae" Flame Lamp is made under the Davy Patents, at the Company's works, at St. Albans, Herts.

It has been very largely used for the following reasons: Its appearance is exceedingly attractive; its construction is very simple and mechanical; it has only one working part; its carbon cost is very low, special expensive or metal-cored carbons not being required.

This is the best type of stop lamp. No replacements, nor the attendance of a skilled man, are required.

The lamps are largely used for Shop Lighting, Works Lighting, Railway Yard Lighting, Street Lighting, Harbour and Docks Lighting.

For prices, see page 12.

No Stops to Replace.

"White Star" Lamp.



THE enclosed lamp is dead! Long live the "White Star" Lamp. The wish was father to the thought; not our wish, but that of the makers of metal filament lamps. They can compete with bad enclosed lamps, which require attention; but not with lamps which last for years, require no repairs, and halve your current bill.

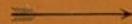
Your current bill is the largest item in your lighting expenditure (save when you have to replace metal filament lamps). Reduce it by having our "White Star," and avoid expensive replacements.

The "White Star" Lamp gives a white light, which does not distort colours; it is a colour-matching light, which metal filament lamps are not. High-class shops insist on having them. They will be an ornament to your premises. Look at this.

For prices, see page 12.

24 hours burning. The lamp for hiring out.

The
"WHITE
STAR"
Lamp.



The
"WHITE
STAR"
Lamp.



Light Humour.

Don't hide your light under a bushel—especially if it's a "BEACON."

A bright light for a dark night—the "BEACON."

If you can't expect to tell the time from the pawn ticket on a watch, how can you expect to get the best light from a poor lamp?—You want a "BEACON."

More light on the subject—a "BEACON."

The Daylight Saving Bill will *save* light, but the "BEACON" LAMP *gives more*.

Refrain from "saying things" about your present lamps—get "BEACONS."

What? No line resistance !!!!!

Light Humour.

"Early to bed, and early to rise," aint no good unless you advertise—yourself by means of the "BEACON" LAMP.

Don't judge a cigar by the label on the box, nor an arc lamp by its price.

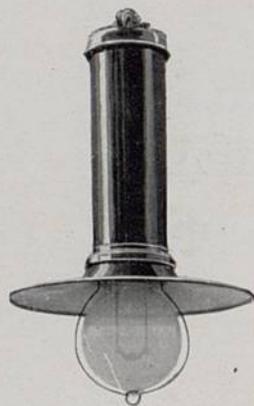
It's light you want—the "BEACON."

If you're looking for trouble, don't buy a "BEACON."

Cheap, foreign lamps are the beer—"BEACON" LAMPS the champagne—of light.

The bright "star" of the lamp firmament—the "BEACON."

You want light—ours is cheapest.



"Gilbert" Enclosed Lamps.

THESE LAMPS are too well known to require description. There are thousands of them in use all over the world. For durability and hours of burning they are recognised as the best. Our repeat orders prove this. They never wear out.

The Standard Rod Feed Lamp is the leading lamp on the market. It is shunt- and series-controlled, and so perfectly adjusted and powerfully controlled that any lamp is interchangeable with any other lamp intended for the same current, without re-testing.



"Cullinan" Lamps.

THIS LAMP is compact and hand-some, with series-control only. It is eminently suitable for Shop Lighting, and its appearance will appeal to you.

Also largely used for Works Lighting, where a short lamp is required.

For prices, see page 12.

We supply suitable cheap carbons.

"Davy" Enclosed Lamps.

THIS LAMP has been on the market for many years, has been greatly improved in efficiency in the last few months, and is the prettiest lamp obtainable. It was the pioneer of single enclosed efficient lamps.

Thousands of them are in use for Shop Lighting, both inside and outside, and also for Workshop Lighting and other purposes. All parts have been perfected as the result of many years' experience.

The lamps are of the shuntless pattern, fully covered by patents, and are of simple and mechanical construction.

The lamp is very low in price, and is a great favourite.

Suitable for either alternating or continuous current.

	Voltage.	Current.	Hours.	Length of Lamp.	Price.
Singly on 100-120	...	3 -9 amp.	...	60-90 ... 28in.	... £4 15 0
2 in Series, 200-250	...	3 -9 "	...	60-90 ... 28in.	... 4 15 0
Singly on 200-250	...	2½-4 "	...	50-70 ... 28in.	... 5 5 0

The above prices include Line Resistance or Choking Coil, for normal voltage.

For prices, ask for "Davy" Lamp Catalogue.

One-tenth penny per lamp per hour.





Our Methods.

THERE'S no bad beer, but some is better than others.

Apply this to arc lamps (with reservations).

Why reservations ?

Why don't we send out an expert every time we supply a circuit of lamps ?

Because we detect any defects in manufacture before the lamps are sent out.

We test our lamps under actual working conditions, voltage, current, and periodicity.

Every lamp, after being erected, is carefully gone through by a skilled staff, so that, when the lamp reaches our test room, it is free from any mechanical defect. It is then tested under actual working conditions, adjusted with its own line resistance and choking coil, and if there is the

Lowest Running Costs

Our Methods

—continued.

slightest defect, it is rejected. No lamp leaves our premises unless it is in perfect order, mechanically and electrically.

Contractors, think what this means to you. You have merely to erect the lamps—no adjustment is required—connect them up (right way round please), and the thing is done.

Consumer, you do not have anybody fiddling about on your premises.

We have sent many thousands of lamps away which have never been touched after leaving the works, and the repeat orders prove the correctness of our methods.

If you ask us to send to inspect the lamps, we charge extra. We do all our inspecting at our works. We test all lamps mechanically to see if there is any friction or defect.

Our methods are more costly to us, but you are the gainer.

Three Years' Guarantee.



COMPLETE CATALOGUES ON APPLICATION.

"BEACON" FLAME LAMP.

Made in four sizes. More in preparation.

Cat. No.	Current.	Hours.	Length of Carbons.	Length of Lamp.	Price, Lamp complete.
1103 ...	4½-12 amp. ...	11-13 ...	18in. ...	33-36in. ...	£7 0 0
1106 ...	6-12 ,, ...	16-18 ...	25in. ...	42-44in. ...	8 4 0
1109A ...	4½-12 ,, ...	22-26 ...	18in. ...	34-37in. ...	9 0 0
1109B ...	6-12 ,, ...	32-36 ...	25in. ...	44-46in. ...	10 0 0

For 3 Lamps in series and upwards, self-contained cut-out and compensating Resistance are recommended at an extra charge of 10/- per Lamp.
Line Resistance, for normal voltage, 15/- per circuit.

"SUNRAE" FLAME LAMP.

	Current.	Hours.	Length of Carbons.	Length of Lamp.	Price.
C & E ...	6-12 amp. ...	8-12 ...	12in. ...	24-27in. ...	£5 10 0
A & B ...	6-12 ,, ...	16-22 ...	18in. ...	32-34in. ...	6 15 0
35 Hours ...	6-12 ,, ...	30-40 ...	25in. ...	40-42in. ...	8 0 0

The above prices include Line Resistance or Choking Coil, for normal voltage.

"WHITE STAR" LAMP.

Voltage.	Current.	Hours Burning.	Length of Lamp.	Price with Plain Cover.	Price with Pol. Copper Cover.
Singly, 100-120	...3-6 amp. ...	20-24 ...	28in. ...	£3 16 0 ...	£4 9 4
2 in Series, 200-250	...3-6 ,, ...	20-24 ...	28in. ...	4 6 8 ...	5 0 0
Singly, 100-120	...3-6 ,, ...	55-70 ...	28in. ...	4 9 4 ...	5 2 8
2 in Series, 200-250	...3-6 ,, ...	55-70 ...	28in. ...	5 0 0 ...	5 13 4

3 in Series Lamps, on 220-250 volts, extra per circuit, £1 : 0 : 0
Hours of Burning, 32-40.
Line Resistance or Choking Coil, per 100 volt circuit pressure, 5/-

"GILBERT" ENCLOSED LAMPS.

Voltage.	Type.	Current.	Hours of Burning.	Length of Lamp.	Price.
Singly on 100-120	Carbon Feed	2½-8 ...	60-100 ...	25in. ...	£3 8 0
	Rod	3-9 ...	100-150 ...	31in. ...	4 4 0
Series on 200 and upwards	Carbon Feed	2½-8 ...	60-100 ...	25in. ...	3 17 4
	Rod	3-9 ...	100-150 ...	31in. ...	4 14 8

These prices include self-contained Line Resistance ; External Resistance, 5/- extra per 100 volts circuit pressure.

"CULLINAN" LAMP.

Voltage.	Current.	Hours of Burning.	Length of Lamp.	Price, with Plain Cover.
Singly on 100-120 ...	2½-5 amp. ...	20-65 ...	18in. ...	£2 4 0
" 200-250 ...	2-3 ,, ...	20-65 ...	18in. ...	3 18 0
2 in Series, 200-250 ...	2½-5 ,, ...	20-65 ...	18in. ...	2 10 0

The above prices include necessary Line Resistance, for normal voltage.

3 in Series Lamps, on 220-250 volts, extra per circuit, £1 : 4 : 0
Extra for Ornamental Copper Cover, Bronzed and Relieved or Enamelled and Relieved, 8/-
Extra for Alternating Current Lamps, each 14/-

ENGINEERING & ARC LAMPS LIMITED,

CHINGFORD, ESSEX.

'Phone, 59 Telegrams: "Gilberts."

ST. ALBANS, HERTS.

'Phone, 258 Telegrams: "Volfarcon."

Telephone: 258 ST. ALBANS. Telegrams: VOLTARCON

**Sphere Engineering Works,
St. Albans, Herts.**

May, 1912.

Owing to the increased cost of raw material and the generally increased cost of manufacture, we beg to inform you that our list prices of Arc Lamps, Spare Parts, and Accessories are increased by 10%.

Yours faithfully,
ENGINEERING & ARC LAMPS, Limited.

**The
Cheapest
Light
in the
World**



The BEACON