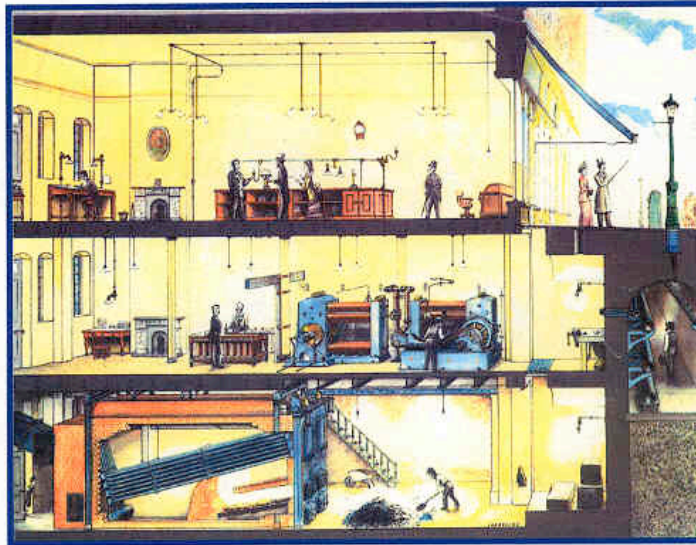




Poster for Tungram Light Bulbs, Budapest, Hungary, by Géza Faragó, c.1910
A Golden Age, Art and Society in Hungary 1896-1914, Gyöngyi Éri & Zsuzsa Jobbágyi, 1990



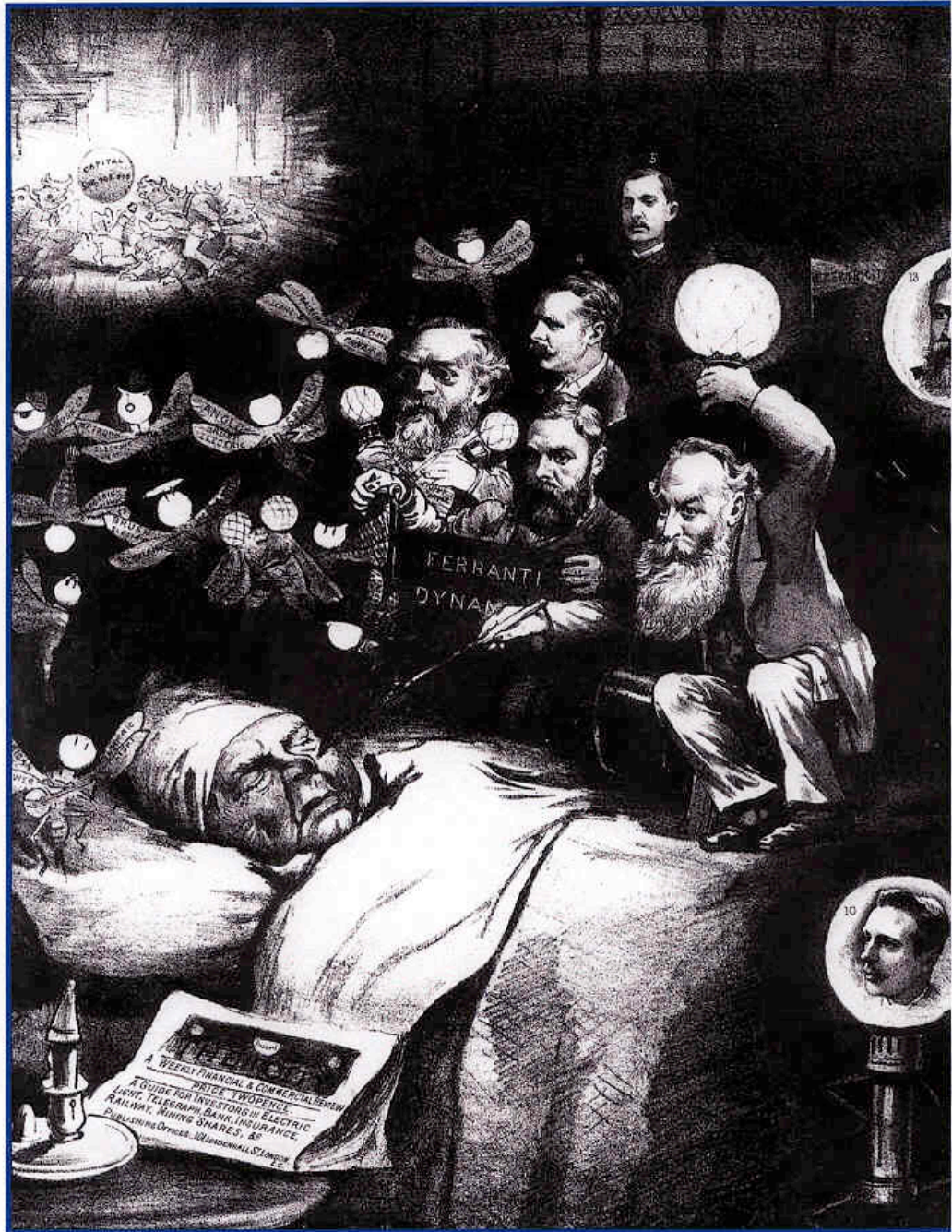
*Electric lighting power station at 57 High Holborn, London, 1882.
Edison Jumbo dynamos, Porter-Allen 125 hp steam engine and
Babcock & Wilcox water tube boilers. [Poster, Brian Roberts Collection]*

ELECTRIC LIGHTING

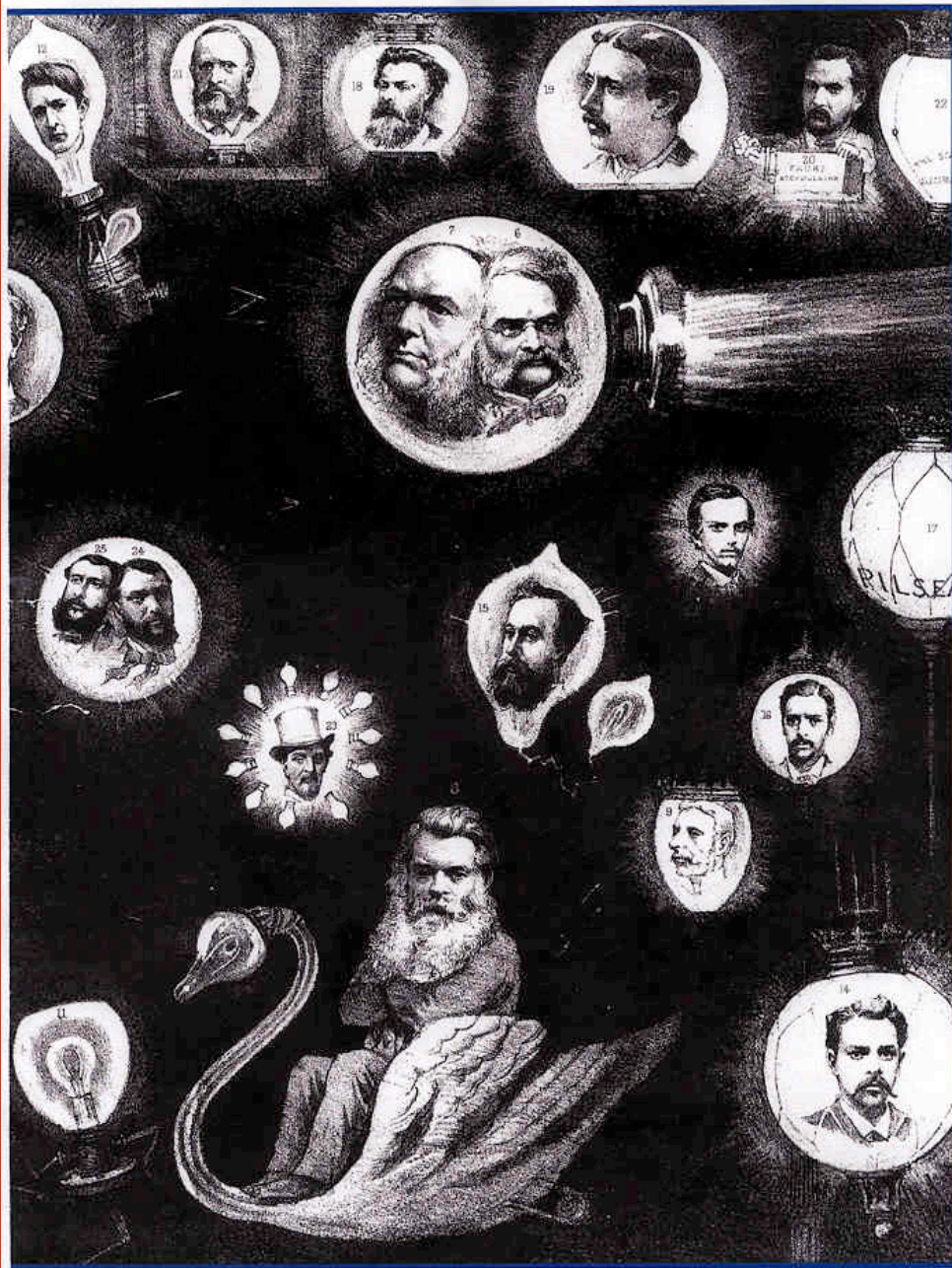
The first electric lights were arc lamps, pioneers in this field being Sir Humphry Davy (1802), Hare & Silliman in the USA (1822), Bunsen (1840) and the first English patent of de Moleyns (1841). Improvements were made by Thomas Wright (1845) and by W E Staite (1846) while on the Continent, Foucault claimed to have invented the first practical arc lamp. In 1876, Jablochhoff invented the superior "candle".

Filament lamps were envisaged and made by a series of inventors from 1820 onwards. Some were moderately successful but their life was extremely short. In Newcastle, the chemist Joseph Wilson Swan, carried out lighting experiments from about 1847, but he was relatively unsuccessful until the availability of a high quality vacuum pump, and there is some evidence that he produced a working filament lamp by 1879. Meanwhile, Thomas Alva Edison and his team of researchers applied themselves to the problem of producing a practical incandescent filament lamp and in 1879 they were successful. A patent war was averted when Edison and Swan formed a joint company to promote the electric light in Great Britain. Another British lighting pioneer was Colonel R E Crompton who earned a worldwide reputation.

However, the early success achieved by Edison was that he developed a complete system of electricity generation and transmission, but he believed in direct current and eventually lost out to the superior alternating current systems developed by Nikola Tesla and the Westinghouse Company.



The coming of the electric light

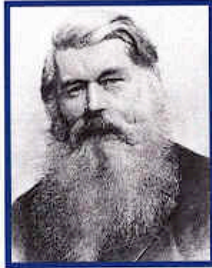




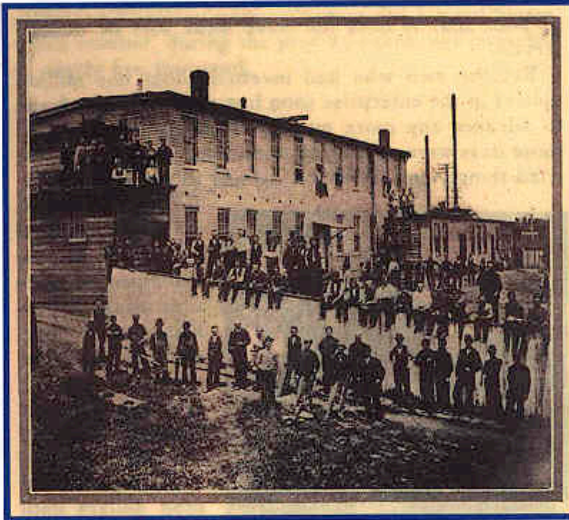
Paul Jablochhoff, 1847-94
[EPRI Journal, Mar. 1979]



Employees at Swan's lamp factory, Benwell, Newcastle, 1881
[Joseph Swan 1828-1914, Diane Clouth, c.1979]



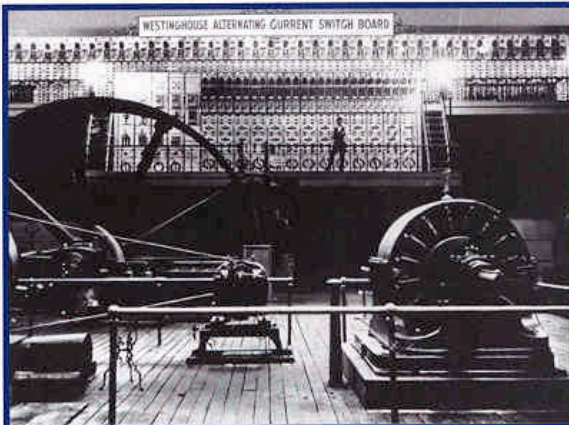
Sir Joseph Wilson Swan
FRS, 1828-1914
[Electric Lamps, 1979]



Edison's first lamp factory, 1881
[Edison's Electric Light, National Electric Light Assoc, 1929]



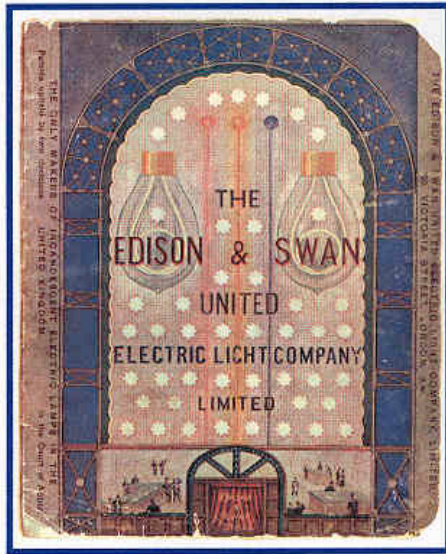
Thomas Alva Edison
1847-1931



Westinghouse alternating current lighting switchboard, Columbian Exposition, Chicago, 1893 [Tesla: Master of Lightning]



Nikola Tesla, 1856-1943
[Tesla: Master of Lightning,
M Cheney & R Uih, 1999]



Edison & Swan catalogue, c.1883.
 [Electric lamps –100 years on, Thorn, 1979]



Early advertisement for Philips lamps.
 [Insight, Philips, Summer, 1991]



Osram AZO, lithograph, c.1910.
 [The Modern Poster, 1988]



Vertex electric light bulbs, Finland, 1912.
 [Posters in History, Max Gallo, 1972]



AEG wire lamp, lithograph, c.1915.

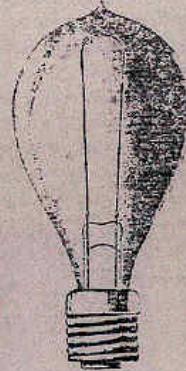
CASSELL'S Electric Lamps MAGAZINE

GENERAL ELECTRIC COMPANY,

44 BROAD ST., NEW YORK CITY. 620 ATLANTIC AVE., BOSTON, MASS.

THE EDISON INCANDESCENT LAMP

IS THE ONLY
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INCANDESCENT LAMP
MADE.

The right of the
to an injunction
has been
by
U. S. Circuit

Edison Company
against infringers
determined
the
Court of Appeals.

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See decision of U. S. Court of Appeals in case of Edison Electric Light Company vs. United States Electric Light Company, decided October 4th, 1892.

See decision U. S. Circuit Court of Appeals, December 15, 1892, in case of Edison Electric Light Co. and Edison General Electric Co. against Sawyer-Mann Electric Co.

Copies of these decisions will be sent on application.

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620 Atlantic Ave., Boston, Mass.

173 and 175 Adams Street, Chicago, Ill.

264 West Fourth Street, Cincinnati, O.

Gould Building, Atlanta, Ga.

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44 Broad Street, New York.

309 Arch Street, Philadelphia, Pa.

1333 F Street, N. W., Washington, D. C.

401-407 Sibley Street, St. Paul, Minn.

Masonic Temple, Denver, Colo.

Early advertisement of General Electric Company asserting their Patent Rights to the Edison Lamp, 1890s.
[EPRI Journal, USA, March 1979]

The London Electric Supply Corporation Limited,

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ELECTRIC LIGHTING.

HIGH PRESSURE SYSTEM vs. LOW PRESSURE SYSTEM.

The Corporation supplies Electrical Energy on the High Pressure System by Meter.

THIS SYSTEM, when properly arranged and controlled, as it is by this Corporation, is equally as safe as the Low pressure system, besides which it has the great advantage of giving an

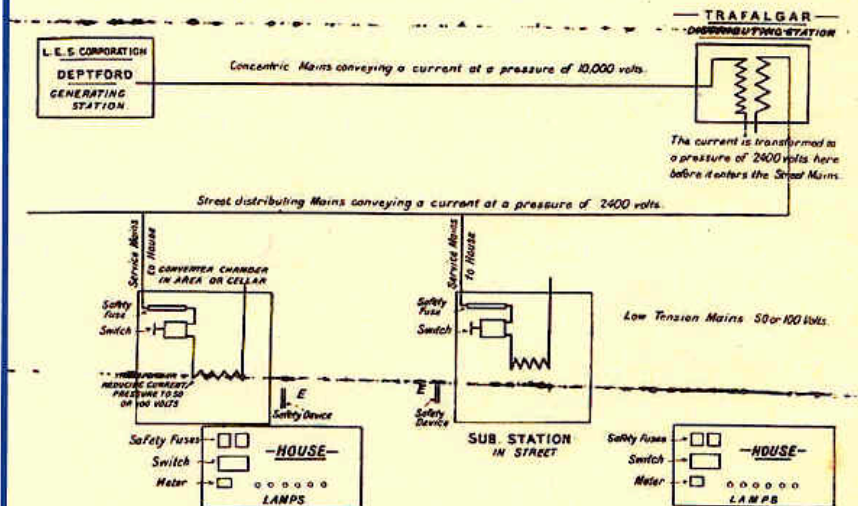
EQUAL AND REGULAR LIGHT

throughout the whole of the premises, however distant the farthest lamp may be from the point of supply.

An idea appears to exist that the High pressure system is more dangerous than the Low pressure system. This is erroneous. The following is the opinion of Mr. W. H. PASKOX, F.R.S., the Engineer-in-Chief and Electrician to the General Post Office, as expressed by him in his address as President for the year, at the Meeting of the Institution of Electrical Engineers, held on Thursday, the 26th January, 1893.

"The prejudice against High pressure is still strong. It is thought to be unsafe, but time and experience will eradicate this impression as they ultimately eradicate every fallacy."

The following is a diagram of the system and connections.



It will be seen that the High pressure at the point of entering the Consumer's premises is Reduced to a pressure of 50 or 100 volts, which is similar to the pressure of the Low or Continuous Current system.

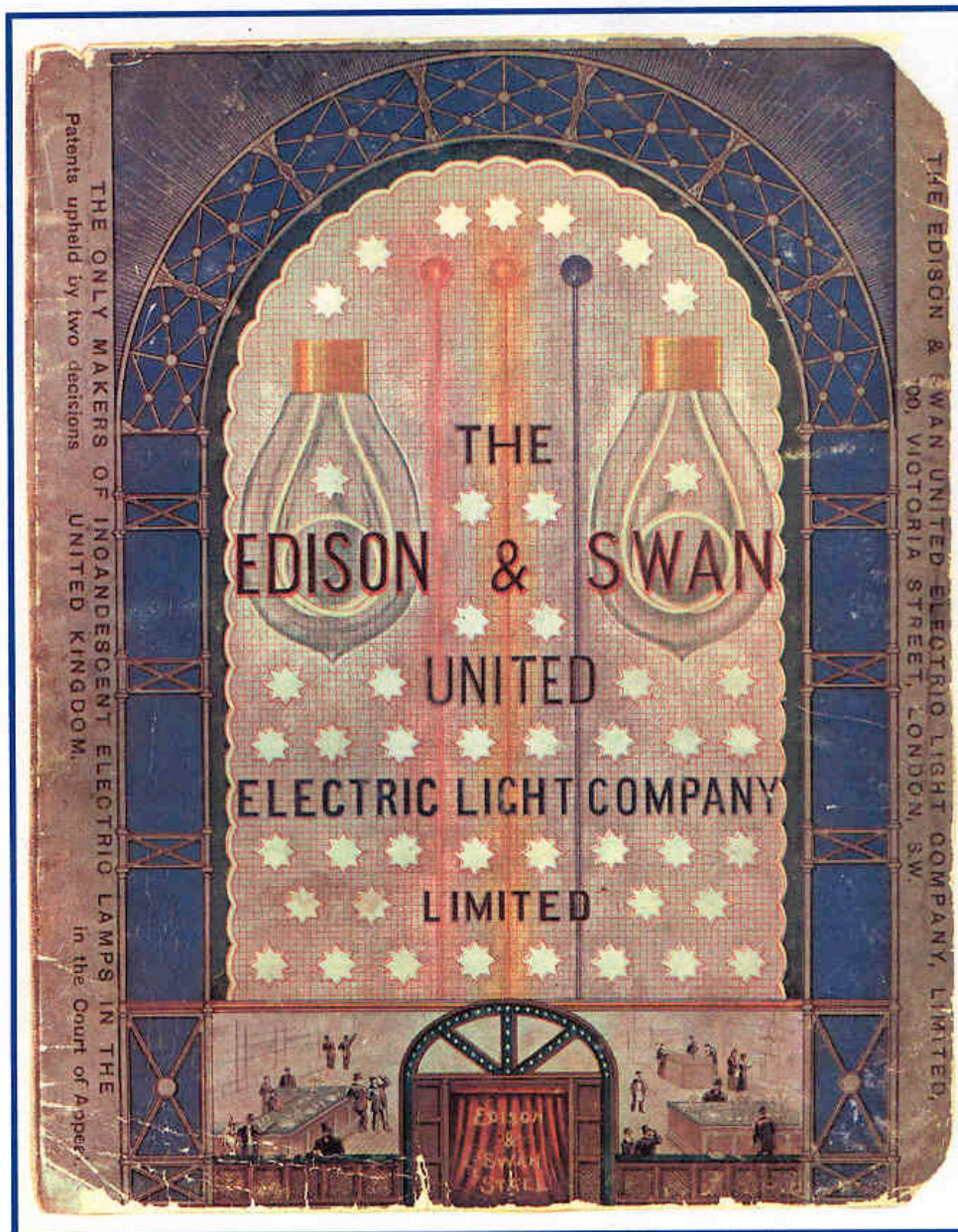
At no point are the High pressure supply wires in contact with the Low pressure service wires.

This Corporation supplies current to H.R.H. THE PRINCE OF WALES, at Marlborough House, a large number of the Nobility, Clubs, Hotels, Theatres, &c., &c., where a good and continuous light is the first consideration.

SPECIAL TERMS ARE QUOTED TO LARGE CONSUMERS AND TO THOSE USING THE LIGHT FOR UNUSUALLY LONG HOURS.

[P.T.O.]

Electric Lighting: Leaflet of The London Electricity Supply Corporation Limited, 3 Adelphi Terrace, London WC, 1893.

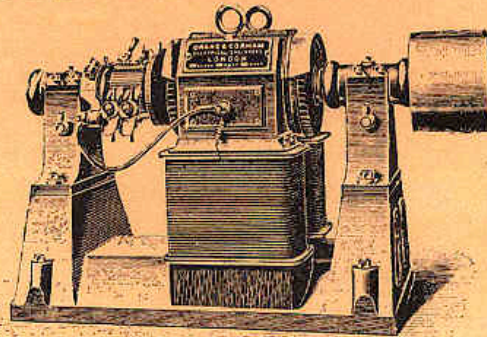


*Catalogue of The Edison & Swan United Electric Light Company, Victoria Street, London (founded 1883).
[Electric Lamps - 100 Years On, Cyril Phillips, Thorn Lighting, 1979]*

SEND FOR
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ON
ELECTRIC LIGHTING APPARATUS

Price 2s. 6d., which will be credited to clients.

CONTENTS: Initial Outlay—Working Costs—Relative Costs of Working Steam, Gas, and Oil Engines, &c.



Lighting.—“ * * * The earlier part of the book is occupied with the requisites for Country House and other isolated installations, in which class of work the firm has a long and wide experience. * * * There is more in the catalogue than is covered by the title, for electric fans, telephones, and farm machinery with or without attendant electric motors, to say nothing of pumps and cream separators, take up many pages. It all adds, however, to the completeness of the book. * * * The catalogue must have cost a good deal to produce, for the illustrations are many and good, the paper is superfine, and the cover is built to last.”

Electrical Review.—“ * * * Very useful, well printed, and fully illustrated.”

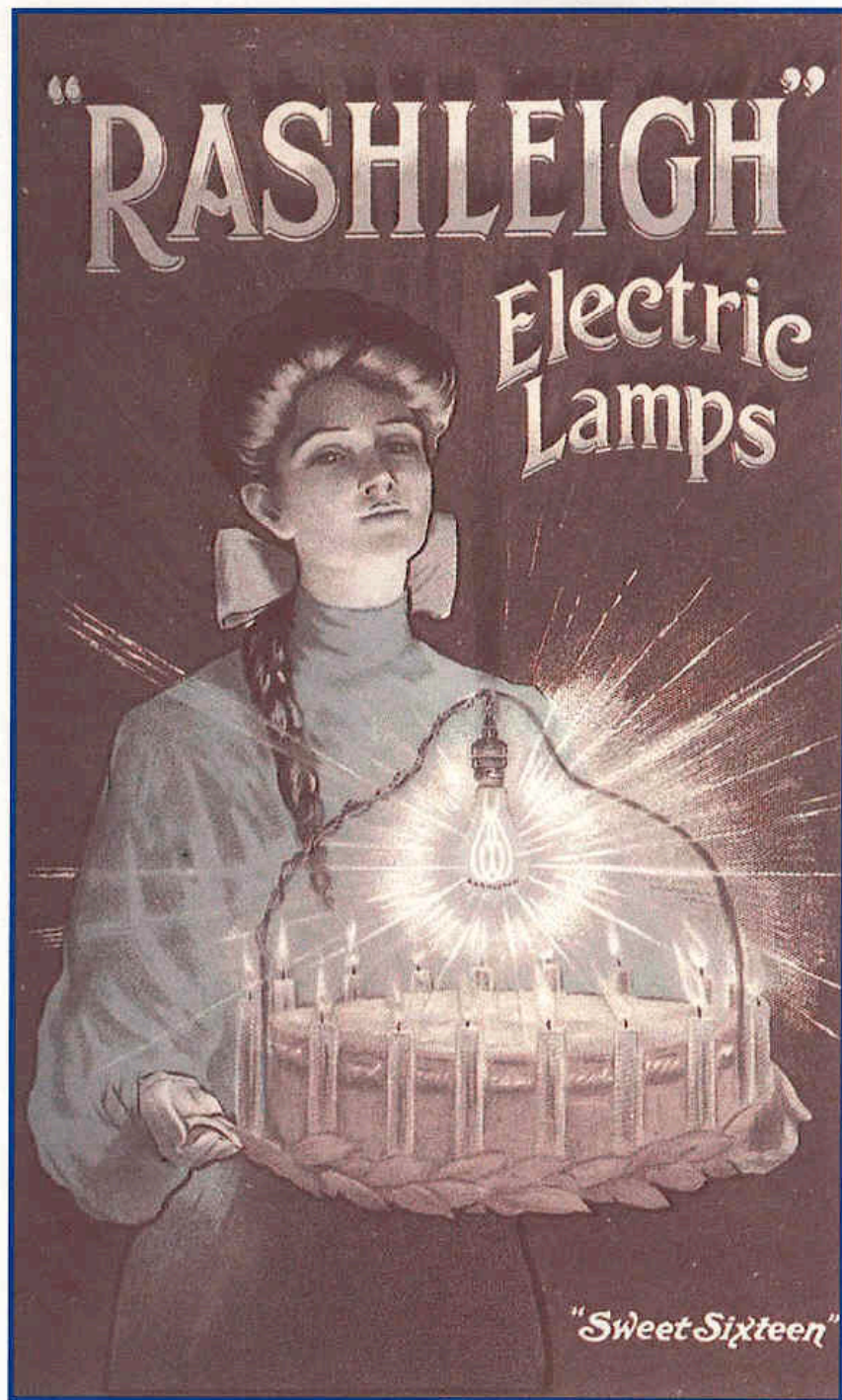
Electrician.—“ * * * At the start some useful notes are provided on the subject of initial outlay involved in the installation of the electric light in country houses, and the working costs. Messrs Drake and Gorham's long experience in this special class gives additional value to their views on these matters. * * * To those contemplating putting down electric plants this catalogue will prove of particular service, as all the information is of a special character.”

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66 VICTORIA ST., WESTMINSTER, LONDON S.W.

Telegrams: "Accumulator, London," Telephones: 71 & 393, Westminster.

Also at 47, Spring Gardens, Manchester; 50, Wellington Street, Glasgow and Westminster Chambers, East Parade, Leeds.

Early advertisement for Electric Lighting Apparatus, Drake & Gorham Ltd, Victoria Street, London. The Company was founded in 1886 by Bernard Drake and John Marshall Gorham and pioneered the electric lighting of country houses, notably Chatsworth in Derbyshire. [Drake & Gorham, Some Account of the First 75 Years, 1961]



Rashleigh electric lamps c.1900 [Victorian Design Source Book, Noël Riley, 1989]



Advertisement celebrating Philips centenary [Insight cover, Philips, Summer, 1991]