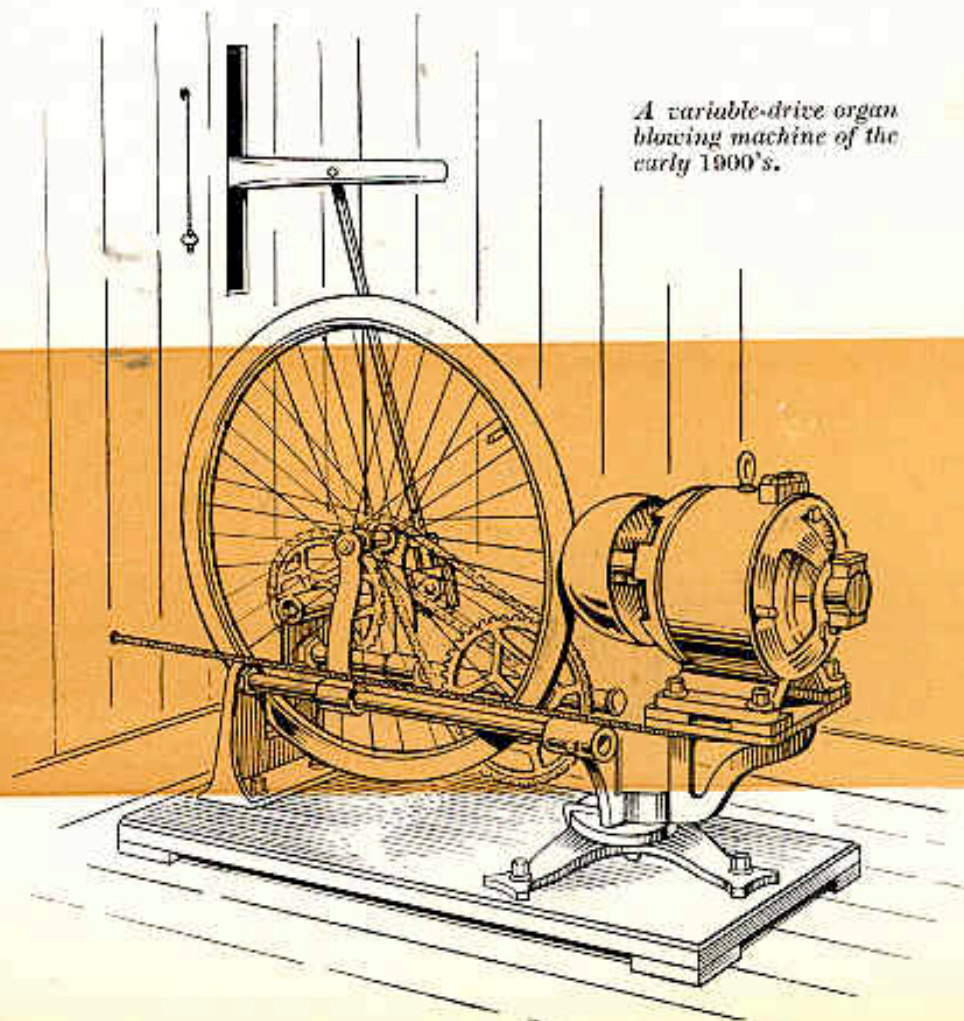


An admirably versatile piece of household equipment of about the same date was the combined table heater and toaster. Run off the lighting circuit, it could toast a slice of bread on both sides in a minute, keep a kettle on the boil, roast chestnuts, boil an egg, and maintain the bacon "at that temperature at which only it is fit to be eaten."

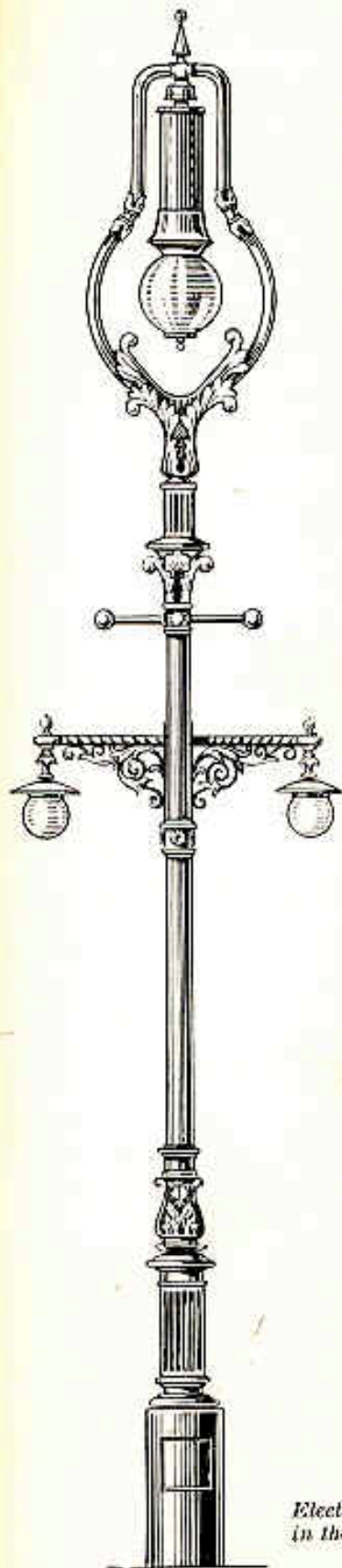
There is an old world charm about electric curling iron heaters and shaving pots and an "electric bath" which, it was claimed, could produce perspiration "more quickly than any other agent and without any inconvenience." Recommended for the treatment of rheumatism, gout, sciatica, and the common cold, the bath sold at from £25 to £28 10s. 0d. according to the wood used for the cabinet in which the patient chose to incarcerate himself.

Side by side with the installation of the electric light in the landed gentry's residences went the sale of a variety of electrically powered implements for use on estate and farm. These, including circular saws, planing and wood turning machines, chaff cutters, corn crushers, horse clippers, and cream separators, were on show at the Olympia in 1905.

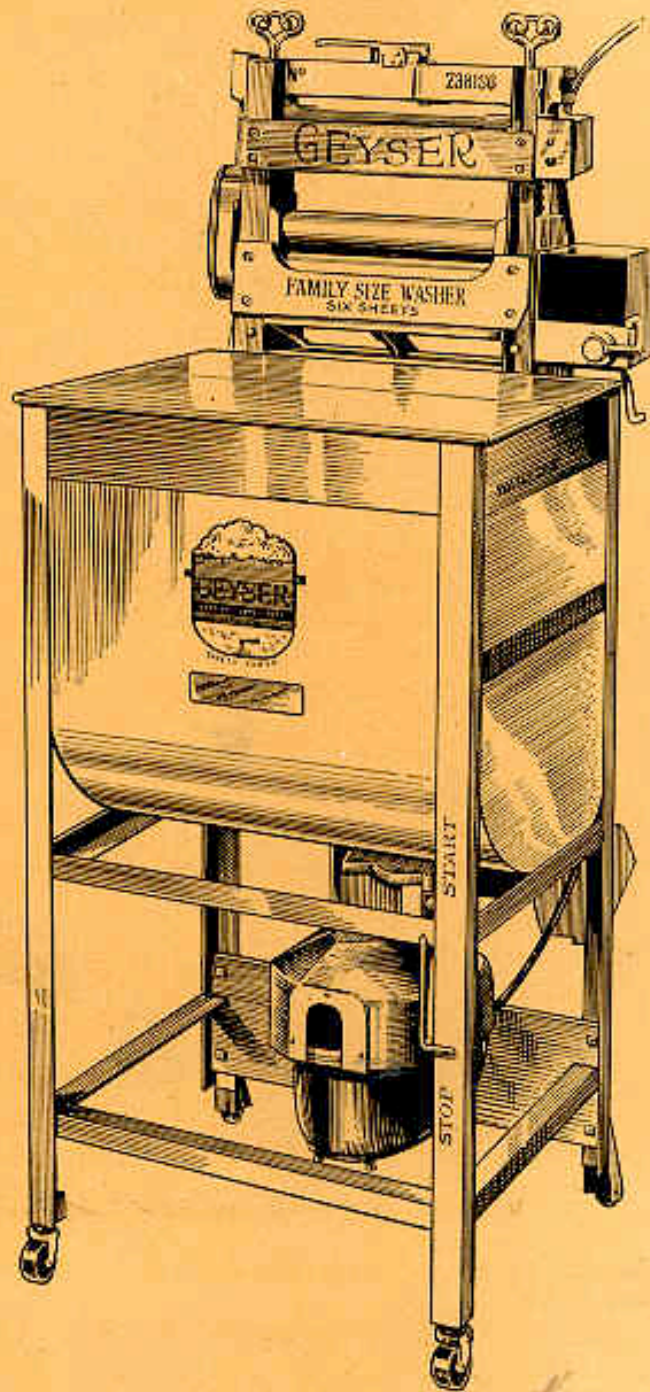
Another of the Company's early enterprises was the sale of fire fighting equipment. This ranged from the modest chemical extinguisher to a petrol driven fire engine capable of discharging 500 gallons of water a minute and projecting a jet to heights of up to



*A variable-drive organ blowing machine of the early 1900's.*



*Electric light  
in the streets.*



*Twin action washing machine  
with powered wringer, circa, 1919.*

150 feet. The services of an expert, qualified to form and instruct private fire brigades, were also at the disposal of clients.

Financial depression and a sense of insecurity are the last things one associates with the Edwardian aristocracy but afflicted with them they were and one of their reactions, it seems, was to cut down on unnecessary trimmings, such as electricity, and buy motor cars instead. So far as Drake and Gorham were concerned, though, this, thanks to the far-sightedness of one of the founders, turned out to be a case of gaining on the swings; Mr. Drake had noted the trend as early as 1906 and very soon the Company was operating a successful "Motor Car Department" which held agency agreements for several well-known makes.

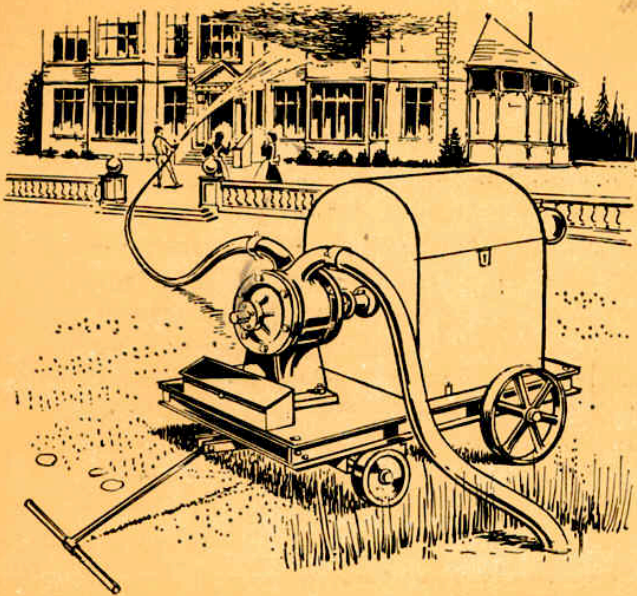
Both the founders were themselves pioneer motorists and the excursion into this market may have grown out of their noticing how many clients sought their advice on the purchase of a horse-less carriage. In 1908 the company published a pamphlet entitled "The Choice of a Car" and four years later the after-sales service featured two free inspections during the first twelve months after purchase.

Before leaving the subject of the internal combustion engine it is worth recording that what might well be the first reference to car mileage appearing on an expense account is to be found in the minute of a directors' meeting held in 1905. It states that "where the Managing Directors use their cars while engaged in the Company's business they shall receive expenses that would otherwise have been incurred."

Somewhat paradoxically perhaps the Company's entry as selling agents into the electrically propelled vehicle market was not until 1913. It was well timed, however, for the shortage of horses resulting from the outbreak of war in the following year created a considerable demand for these vehicles, particularly from local authorities, who used them a good deal for refuse collection. In 1916 it was reported that the Edison batteries with which they were equipped could be used for over 60,000 miles without renewal, and by the end of the war the only difficulty connected with electrical transport, so far as the Company was concerned, was to satisfy the demand.

Inevitably, the war meant a temporary halt in country-house installations but work at munition factories, Service camps and other undertakings connected with the war effort more than made up for this loss. One exceptionally large contract was for the provision of a complete generating station for the United Alkali Company. It contained three turbo-generating sets of 1,000 kW each and one of 250 kW. In 1917 the "Girder" fitting for lighting machine tools was invented by a member of the staff and was still in production in 1948; the same year the Company was appointed sole concessionaires for Wilkins unloading gear for lorries, a device used on a considerable scale in France.

The post-1918 era opened auspiciously with a move to new, more roomy headquarters in Grosvenor Gardens.



*Early private fire-fighting machine.*

The financial omens were promising too, for in 1919 the balance sheet showed results greatly exceeding those of any year since the formation of the Company.

Although arrears of country house work interrupted by the outbreak of war had to be caught up with, this type of installation, always remembered with affection by the founders and those employees who had worked for them from the start, had already ceased to be one of the Company's major commitments. The scale of domestic architecture (with the exception of blocks of flats) was shrinking; commercial and industrial buildings, on the other hand, were getting larger and larger, and it was with the provision of electrical installations for projects of this kind that the name Drake and Gorham now became chiefly associated. And with the name went the reputation for supplying nothing but the best in materials and workmanship which had been earned in the days when the partners introduced "the electric light" into the country's stately homes.

*The Bank of England.*



An order, in 1926, for the complete electrical installation at the rebuilt head office of the Bank of England in Threadneedle Street might have been designed expressly to prove a claim to produce work able to stand the test of time. The Directors of the Bank desired to have an installation that would last for over a century, and to meet this requirement all the wiring embedded in the structure was enclosed in heavy gauge screwed copper conduit and all outlet and switch boxes were manufactured from Admiralty gun metal. This installation also included one of the earliest Floor Box Systems, enabling connections to lighting, bell and telephone service at intervals of two and a half feet over all office floors.



*A view of  
Dolphin  
Square flats  
in London.*

Drake & Gorham, incidentally, installed the first generating plant at the Bank of England as early as 1888 and Mr. Bernard Drake acted as the Bank's consulting engineer for 25 years.

Complete electrical installations at Lloyd's Bank's new head office and at Martins Bank's main London office were also provided during this period. Other highlights of the late 1920s were installations for the Masonic Peace Memorial building in Great Queen Street; for the British Broadcasting Corporation (including the main cabling and other services at the Brookmans Park, Daventry and Droitwich transmitting stations), and at two of London's leading stores.

Mr. Bernard Drake died suddenly in 1931 at the age of 73 and his son Mr. R. H. M. Drake, then 33 years of age, became Chairman and Joint Managing Director. Mr. W. Parker was later appointed Co-Managing Director with him and whilst adhering strictly to the principles of high quality and first class workmanship they introduced many innovations which led to the rapid growth and greatly increased prosperity which the Company now enjoys.

In the 1930s came the heyday of the super cinema and many of these luxurious dream palaces could have included "electricity by Drake and Gorham" among their credit titles. The company also played a part in a newly arrived form of live entertainment, carrying

out the whole of the elaborate installation at Harringay, one of the first ice hockey rinks to be built in this country.

The building of mammoth blocks of luxury flats was also a feature of this period and one of the most impressive undertakings carried out in this field was at Dolphin Square, which could then claim to be the largest single block in Europe.

In tune with the sombre note on which the decade closed was work carried out for the Admiralty, including generating sets, over-head transmission, and special wiring in subterranean oil storage caves at Lyness and Invergordon.

During the second World War the company undertook a great deal of specialised and often highly secret work on behalf of the Air Ministry. Installations were also provided at several large Army camps and at a variety of factories producing materials necessary for the war effort.

In 1945 it was realised that the company must be reorganised to allow the maximum expansion and the manufacturing activities were transferred from the parent company to a subsidiary incorporated under the name of G.M. Engineering (Acton) Limited. This company, after a change of name and location, became Ottermill Switchgear Limited in 1954 with its headquarters at Ottery St. Mary in Devonshire. During the same year the contracting staff played an important role in the drive to rehouse people whose homes had been destroyed by bombing, and were responsible for the installations in many thousands of small prefabricated buildings.

A very different project undertaken the same year was the complete rewiring and relighting of Canterbury Cathedral; some three years later the company was responsible for renewing their 1905 installation at Lambeth Palace, the official residence of the Archbishop of Canterbury.

In 1948 work began on long-term projects for the Steel Company of Wales. Still in progress and costing to date over one-and-a-half million pounds, it has consisted of heavy power cabling, lighting, heating, small power and instrumentation installations. Two years later an equally long-term project was undertaken on behalf of British Nylon Spinners Limited.

In 1951 another reorganisation took place and Drake and Gorham Limited became solely a holding company; Drake and Gorham (Contractors) Limited being formed as a subsidiary alongside G.M. Engineering and Drake & Gorham (Wholesale). This latter company was closed down in 1957 to concentrate the company's resources in the engineering field.

At home the 1950s and early 1960s have been great years for building projects of all kinds and the Company has taken full advantage of this and has been successful in obtaining a considerable portion of the electrical content. The work has been too varied and too extensive to mention all of it, but a few examples of electrical installations handled by Drake & Gorham (Contractors) are the

Bank of London and South America, Queen Victoria Street; the Bank of England offices at New Change; the new head office building for Barclays Bank; the mechanised foundry at Fords, Dagenham; the Cancer Research Buildings; the Royal College of Surgeons; the B.B.C. extension; the B.O.A.C. headquarters building at Victoria; the head office of the Esso Petroleum Company and a number of installations for I.C.I., Ferodo, Unilever and other well known companies.

In contrast to these essentially modern undertakings was some particularly interesting work done at Gloucester Cathedral in 1956. A new and successful system of lighting, known as "designed appearance lighting" was installed, replacing the original installation carried out by the company almost fifty years before.

Between 1953 and the present time the Company has also been responsible for the main cabling at the Central Electricity Board's power stations at Roosecote, Skelton Grange, Wakefield, Agecroft, Fleetwood, and at High Marnham which at the time the contract was awarded was to be the largest power station in Europe.

From the time of its formation the Company has been active overseas and over the past twelve years an impressive amount of work has been done in two of the newly independent African states, Ghana and Nigeria. The largest installation in Ghana was at the Accra University. It included a power station equipped with three 1,020 kW. and two 382 kW. 11 kV. diesel generating sets.

University buildings, department stores, cinemas, flats, offices, and a hospital—these are only examples selected at random of new buildings in Nigeria where installations have been completed by the company.

In 1952 work began on some interesting projects, connected with plant for the manufacture of precast building materials, in Kuwait. Other major installations have been completed in South America and the Middle East, and the company is at present operating a branch in the Rhodesias.

Finally, this account of work either completed or in progress can be concluded with a look into the Atomic future—the award of the lighting and small power contracts for the nuclear power station now under construction at Trawsfynydd.

*Artist's impression of a modern atomic power station.*

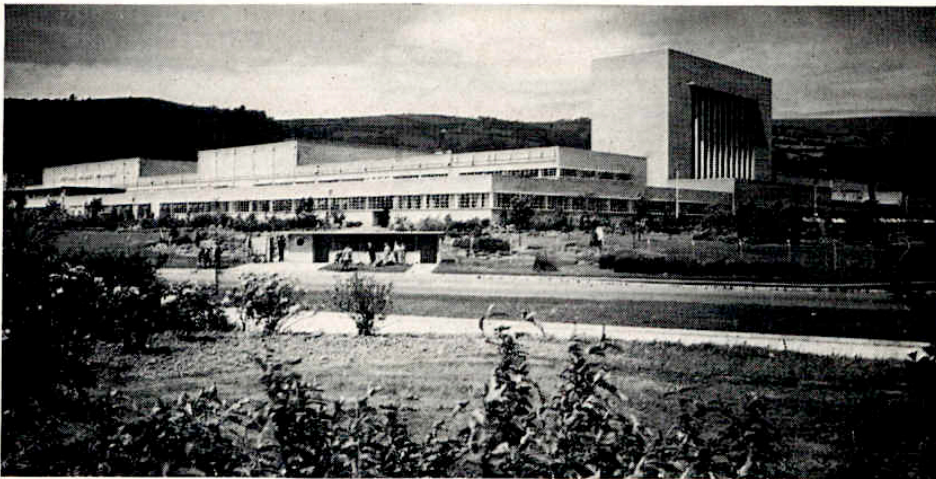


# OTTERMILL SWITCHGEAR

ALTHOUGH young in name Ottermill Switchgear Limited is in fact a direct descendant of the early workshop opened by the partners in London to produce switches and gear, not then available in the open market, for their own lighting installations. Because of the high quality of the articles manufactured this facet of the business also flourished.

In the early 1930s the production included high tension switch-board equipment and although this was discontinued in 1935 some of this gear may still be in use today.

Large quantities of equipment were also made for Totalisators Limited for use in their installations at many of the best known greyhound racing tracks, such as those at Wembley, Harringay,



*The factory of British Nylon Spinners Limited at Pontypool, Wales, equipped with Ottermill Switchgear Ltd. equipment.*

and White City. This experience in engineering to very fine limits was later especially useful when switchgear came to be manufactured in Devon.

During the last war the Company's works at Acton were employed almost entirely on Government orders of a specialised nature for the Air Ministry and the Admiralty. In the last weeks of the war design work began on a new range of switchgear for use in time of peace.

In 1945 (see Page 16) the manufacturing side of the business was transferred to a subsidiary company, G.M. Engineering (Acton) Limited, the name being derived from the special flush fronted switch (the so-called G.M. Switch) designed for the installation in Glyn Mills Bank and developed between 1935 and 1939.



# LIMITED



*The Jamaica Broadcasting Corporation building in the West Indies, also equipped with Ottermill products.*

Immediately after the war the parent company acquired a factory at Ottery St. Mary, in Devon, intending to manufacture substantial quantities of a water heater known as "The Densacone." Owing, however, to Government restrictions on electricity consumption and the increase of Purchase Tax to 100 per cent in 1948 there was an almost complete cessation of demand in the home market, and in April 1949 the manufacture of Bus-Bar Trunking was transferred to the Ottery factory to replace water heater production.

In 1950 severe shortage of space at Acton led to the remainder of the business being transferred, and from that time large additions have been made to the Ottery factory in order to cope with the ever increasing demand for the products manufactured there.



*Ottermill rising main equipment is installed in the new building of the South African Permanent Building Society in Johannesburg.*



*At Harringay Arena the installation was carried out by Drake & Gorham Ltd.  
Main switchgear was constructed at the Acton factory.*

In 1954, having no further connection with Acton, the name was changed to Ottermill Switchgear. It is an entirely separate organisation, its only link with Drake & Gorham (Contractors) Limited being that both companies use the same capital source.

Ottermill Switchgear products are manufactured under licence in India, Australia and South Africa.

Since its formation there has been a significant growth of the activities of this company, a very tangible proof of the inherent quality of its products, and although space does not permit a long list of work carried out it is interesting to note that Ottermill products are to be found in the following places: The dome of St. Paul's Cathedral, the Bank of England, the first floating oil-drilling rig to be constructed in the U.K., most of the South African gold mines, cotton mills in Sudan, India and Pakistan. No less than eleven universities and twenty hospitals in Great Britain, London Airport, the factories of three major motor car producers. The Downing Street and Treasury reconstruction, Buckfast Abbey and hundreds of other important buildings and plants covering every major industry in the country.