



1857-1957

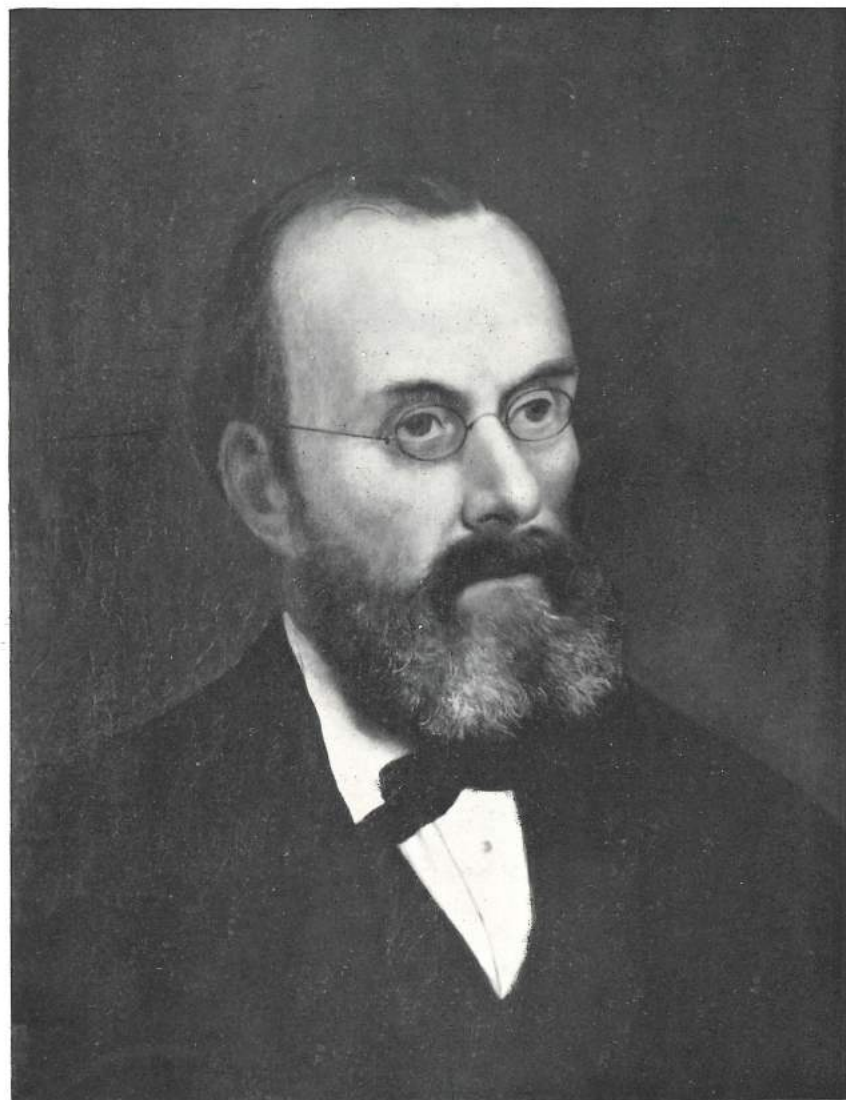
A HUNDRED YEARS SERVICE
TO INDUSTRY

HENRY SYKES LTD. LONDON

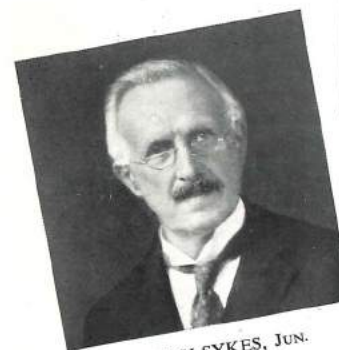
History & Activities of Henry Sykes Ltd.
1857—1957



Reproduction of Poster about 1880.



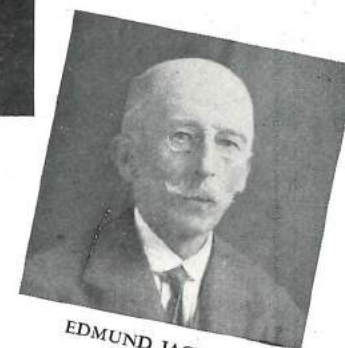
HENRY SYKES
BORN 1822 DIED 1879



HENRY SYKES, JUN.
1885—1944



MARGARET SYKES
BORN 1832 DIED 1911



EDMUND JACKSON
1887—1939



H. P. S. PAISH



C. R. MITCHINER
Chairman.



O. H. SYKES



W. A. BASTIN



F. H. EVANS
Secretary



R. W. WINTERBORNE

1957 BOARD



Front Cover of an early Catalogue.

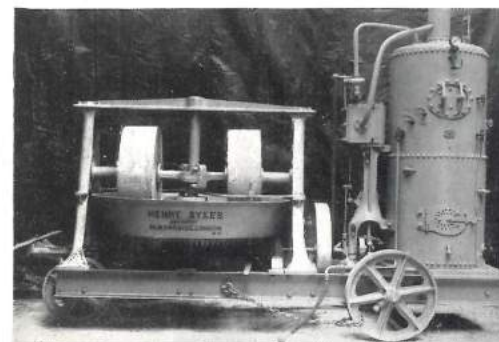
A hundred years of Energy and Enterprise . .

being a brief account of the

HISTORY AND ACTIVITIES OF HENRY SYKES LTD.

1857—1957

In the year 1857 Henry Sykes, then a man 35 years of age, came to London from Sheffield and established a small engineering business in Upper Thames Street. Here he made Portable Vertical Steam Engines, Mortar Mills, Friction Hoists and Pumps, and stocked Portable Engines and Boilers and Hoisting Tackle for letting out on hire, chiefly to Builders and Public Works Contractors.



Portable Mortar Mill.



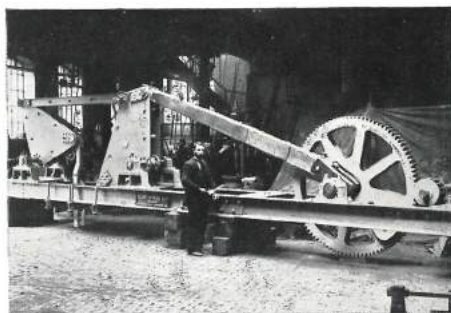
Portable Steam Engine.

A sidelight on his finances at this period may perhaps be glimpsed from a personal anecdote. One day in London he received a visit from the police who unwrapped from a silk handkerchief a gold watch and asked if it were his. It seems that in his younger days when flush of cash he had purchased from a Sheffield Watchmaker a high-class English lever watch and subsequently when he was hard up he had deposited it with a friend as security for a small loan. The friend's house was burgled and the watch stolen, but a year or two later the police made a lucky haul and found this watch among other stolen property. Watchmakers of repute used to engrave their name with a serial number inside their watches, and the police learned from the maker that the watch was sold to a Mr. Henry Sykes. Further investigation revealed that Henry Sykes had removed to London and the London police were notified with the results we know. The story is indeed a pleasing tribute to the efficiency of the force.

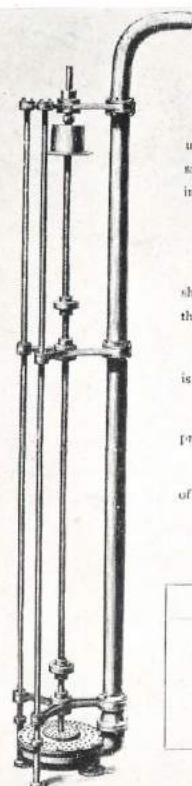
Before long Mr. Sykes moved to more commodious premises at 66, Bankside, S.E.1, leased from what was then the Phoenix Gas Light and Coke Coy. and later became the South Metropolitan Gas Coy. At that time and indeed until much later the roadway at Bankside was liable to be flooded by tidal water to a depth of nine

inches or more, and sometimes when you left the office in the dark at high tide you stepped into six inches of water over the pavement. It was necessary when an unusually high tide was expected to cover the pavement grating at No. 66 with sacking and clay to prevent the cellar getting filled, and it was not until after the disastrous high tide of Friday night 6th January, 1928, when people were drowned in their basement rooms, that riverside owners were required to raise the height of their river-wall and thus prevent further flooding. On the Saturday following the overflow special police were required to regulate the vehicles flocking to 66, Bankside, to collect any kind of available pump which could be made to serve.

It was at Bankside that the manufacture of Deep Well Pumps was begun, and these proved very successful and were widely used in the construction of public water supplies; a large number of the deep wells sunk about this time all over the country were dug with the aid of Sykes Deep Well Sinking Pumps. These outfits were expen-



Deep Well Pump.



SYKES' IMPROVED CAGE PUMPS.

An extensive experience in the application of Pumps for Contractors' use has led me to construct this new Pump, which has given general satisfaction, and has the greatest approval of Contractors of experience in Pumps for their works. Its advantages are as follows:

1. It will pump in a depth of 9 inches of water.
2. The framework is light and well adapted for sinking: the driving shaft being made from cast steel, makes this part lighter and stronger than from iron shafting.
3. The Pump cannot possibly choke: any matter which gets into it is at once discharged.
4. There are no valves to the Pump, and it does not require priming.
5. A decided increase in its discharge of water at a less expenditure of power over any Pump of similar character.

PRICES.

No.	No. of Gallons discharged per Minute.	Price for the first 20 feet.	Price of each additional 10 feet length afterwards.
1	250	£ 30	£ 8 0 0
2	400	42	9 0 0
3	600	52	10 10 0
4	1000	60	11 0 0
5	1700	80	13 0 0

HENRY SYKES, 66, BANKSIDE, LONDON, S.E.

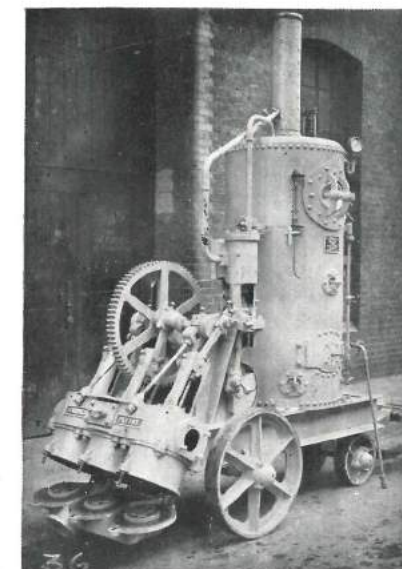
Any Engine, Pump, Hand or Steam Crane, Hoist, Winding Engine, Mortar Mill, or other Machinery in Stock may be had on HIRE.

sive and as no individual contractor could hope to keep such plant in anything like constant employment they were usually supplied on hire. Another and rather earlier Contractors' Pump which he manufactured was the "Cage" Pump. This was an early type of Centrifugal with a submerged body and vertical shaft having a pulley at the top for driving by belt from a portable engine. Nobody at that time dreamed that developments of Centrifugal Pumps would render Deep Well Sinking Pumps and Cage Pumps alike obsolete.

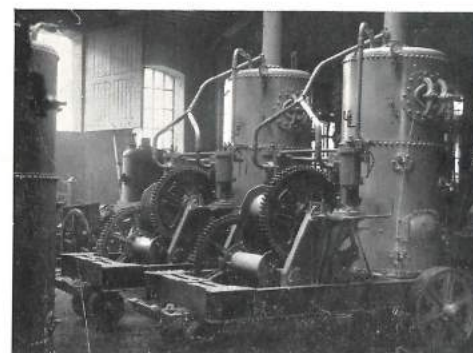
Page 23 of early catalogue showing Sykes' Improved Cage Pumps.

After the founder's death in 1879, the business for a few years was run by his widow Mrs. Margaret Sykes with the aid of a manager who proved none too satisfactory, and in 1885 her eldest son, Henry Sykes, jun., then eighteen years old, was put in charge. The boy, who had been educated in Switzerland and King's College, London, had been apprenticed to Siemens Bros. & Co., but his experience was of scant service to him in managing his father's business, and for a year or two he had a hard time; it was his native determination and sterling honesty of purpose which enabled him to win through.

About 1887 or 1888, a little much-needed capital was provided by his cousin Edmund Jackson who joined him at that time, remaining in the business until his death in 1939 at the age of 82 years. Mr. Jackson had been trained as an architect but had a natural flair for mechanical design, and the machines he invented were not only uniformly successful but were also pleasing to the eye. The well known Jackson's Clutch incorporated in the firm's Pile-driving Winches was his invention, as well as several very popular contractors' pumps still in active demand, among them being the Tripulse, a three-throw bucket pump the name of which, invented by him, was adopted for the Company's telegraphic address. The basic design of most of the Company's



Tripulse Three-throw Bucket Pump.



Early Type Double Barrel Portable Steam Winch.

present-day Winches and Hoists derives from him. The tough job these two young men had in holding the business together may be gauged when it is recorded that often after the day's work was nominally over and the gates were shut, they would be employed till late at night themselves overhauling some Portable Engine or other machine ordered out on hire.

The compiler of these notes did his first job for the firm in 1891, when by request he went to Menheniot, Cornwall, to investigate and report on the situation of a Portable Engine supplied on hire to a mining syndicate. He was not at that time an employee of the business and did not officially join the Company until nearly 15 years later, but he was always in close touch with the Company's affairs, and from time to time assisted in the office work. He found that the engine had been seized by the miners as security for their unpaid wages, which action proved under the Stannaries Act to be legal (the mine was in fact a silver-lead mine—lead with a small admixture of silver). The firm had to pay the miners' wages in order to regain possession of the engine besides defraying the cost of bringing it home. The syndicate was of course bankrupt.

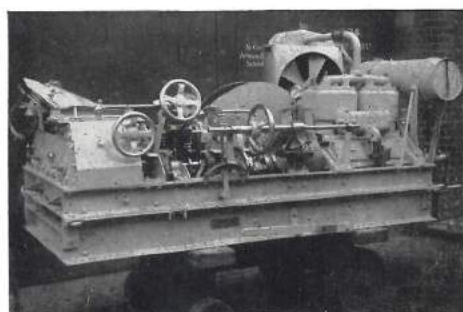
In those early days the pace of business was slower than it is now. There were no telephones and the fastest vehicle on the roads was a hansom cab. It was then not uncommon to encounter a Contractor who could neither read nor write but who had nevertheless secured some important contract. Such men usually had amazing memories and were often forceful and original characters, refreshing to meet and entertaining to do business with. It is remembered that one of this breed, a Yorkshireman with a sense of humour who was doing a difficult well-job in this neighbourhood, had his own names for those of us he came most in contact with. The General Manager (Mr. Mitchiner) was "Lord Kitchener", the then Secretary, who had the reputation of being a flinty bargainer, was "Shylock", while our Bankside foreman who had recently been promoted to outside representative travelling around in a pony-cart, was delightfully dubbed "The pilgrim in the pony-shay". And this brings a recollection that the pilgrim in the pony-shay once took part in a somewhat irregular incident. At the White City Exhibition at Shepherd's Bush in 1909 the Company supplied on hire to a French aeronaut in partnership with an English army officer a portable winding engine the function of which was to let up a captive balloon with passengers at 5s. per person to a height of about 1,000 feet and pull them down to earth again. This enterprise got into financial difficulties and the Exhibition authority refused to allow Henry Sykes Ltd. to remove their engine. The enclosure containing the engine was on the outskirts of the



Kite Balloon used in First World War.

Exhibition site, and in order to render the engine unusable it was arranged for the pilgrim in his pony-shay to draw up against the outside of the high corrugated iron fence, while inside, with the assistance of the engine driver (suitably prepared and rewarded of course), essential parts of the winding engine were removed and passed over the fence to the waiting trap. It was not long before discovery was made that the engine was useless, but nobody could throw any light on the mystery and the machine was soon after released.

It is interesting to note that the use of our winding engine for this purpose had important consequences. When the First World War broke out in 1914 the Germans sprang a surprise on the British Command by using captive balloons of a special type from which an observer could report the position of our artillery and troop formations and direct the fire of their own guns. Hasty arrangements were made to supply our army with similar facilities and Henry Sykes Ltd., being by report the only firm with experience of captive balloon work, was called upon to supply out of stock all the portable winding gear they could lay their hands on. Subsequently we designed and built special rolling-friction winches of which we supplied a large number for "Kite Balloons".



Special Rolling-friction Winches for Kite Balloons.

Towards the end of the century the provision of private water supplies for country houses, farms, etc., became a notable feature of the firm's activities, and the design and manufacture of Borehole Pumps was commenced. Complete installations



Albion Annular Sail Windmill.

were undertaken, including boring the well and provision of the necessary gear and power to drive the pump. Henry Sykes, jun. was an enthusiastic exponent of "Use the power provided free by Nature" in the form of wind, and he designed and built the famous Albion Annular Steel Sail Windmills which achieved considerable success in driving small pumps. These mills on their graceful steel towers became a not uncommon sight in rural districts, especially in the southern counties of England, but also farther afield, while a few were exported. When in later days the petrol engine was introduced, its convenience and especially its independence of weather conditions soon rendered windmills (which of course can only work when wind is blowing) largely out of date, and their manufacture was discontinued—without regrets on the part of the Company but with some natural private reluctance on the part of their designer.

The business continued to prosper and expand, and in 1897 it was turned into a Private Limited Liability Company with an authorised capital of £20,000, the Directors being Mrs. Margaret Sykes, Henry Sykes (Chairman) and Edmund Jackson, and the shareholders practically all in the family. The present authorised capital is £150,000 but the Company remains a private one.

The premises at 66, Bankside had by this time become inadequate, and in 1899 a site (on the East side of Emerson Street where it joins Bankside) with river frontage and wharf was acquired and upon this a substantial new works was built. This building, known as Emerson Street Works, was erected on a "concrete raft" foundation. Incidentally trouble was encountered and the work held up by injunction for a time. An ancient sewer had been uncovered, not shown on any map and unsuspected by anybody,



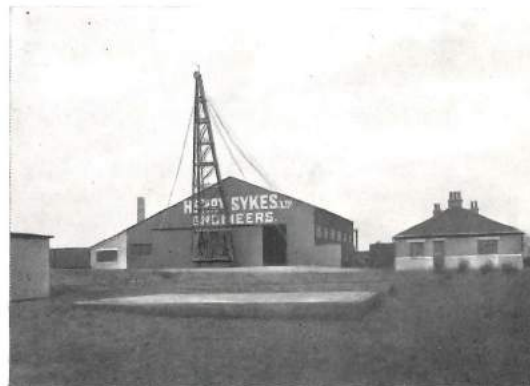
View looking from Bankside.

and it was not until the Authorities had satisfied themselves that this old sewer no longer performed any useful function that work was allowed to proceed.

These new works remained in full use until they were sold in 1920. 66, Bankside, however, with its offices, workshop and storage space, remained the Company's headquarters from which all business was conducted, and it continued in occupation long after the present building in Southwark Street was acquired in 1915. The first part of the present Southwark Street Works (East Shop) was erected under difficult war-time conditions in 1916, and three years later, in 1919, the second (West Shop) was built.

It had been realised for some time that the Emerson Street premises were not ideally designed for engineering production, and early in 1920 nearly seven acres of land at Alperton, Middlesex, adjoining the L.N.W. Railway main line, were purchased and works erected that same year. These works, known as Alperton Works, were run for a time under the title of The Woodfield Engineering Co. Ltd., a subsidiary of Henry Sykes Ltd. Mr. Woodfield had been foreman of the Bankside Works and later works manager at Southwark Street, but differences of opinion arose regarding the scope of the new works, and in a period of trade depression the Alperton Works were closed and eventually sold in 1930.

Meanwhile in order to prepare for new works to take the place of Alperton when trade should revive, Mr. Jackson had in 1928 purchased out of his own pocket some 5½ acres of land on the Greenwich marshes adjoining the Woolwich Road at Charlton, S.E.7, and in January, 1930, he sold the half of this land having access to Woolwich Road to Henry Sykes Ltd., for the price he paid for it. On this site the present Charlton Works and Offices were erected and occupied the same year, 1930. Since then extensions and additions have been made from time to time to meet the expanding business, and the present Charlton Works will stand comparison with any of similar capacity in the country.



Alperton Works, Middlesex.

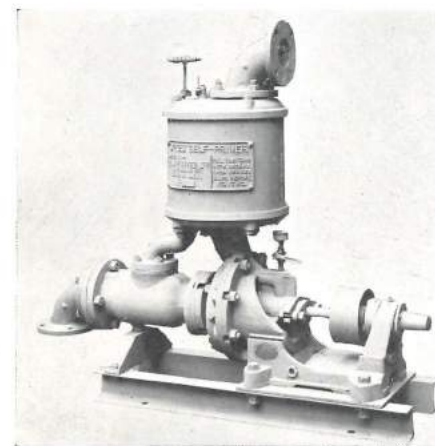


Charlton Works before Extension.

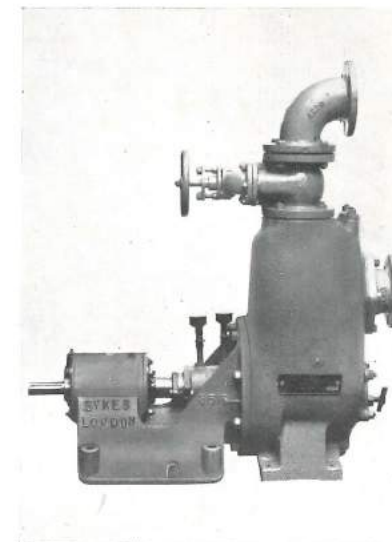


Charlton Works after Extension.

In addition to the Pile-driving machinery and plant for which the Company is so well known, the development in recent years of Self-priming Centrifugal Pumps has been a prime activity and outstanding success of the Company. Good design and careful attention to detail after exhaustive practical tests, combined with the high-class workmanship of which we are justly proud, have produced a pump which fully maintains the Company's reputation for providing first-class plant to be relied upon to do its work in a wholly satisfactory and money-earning manner.

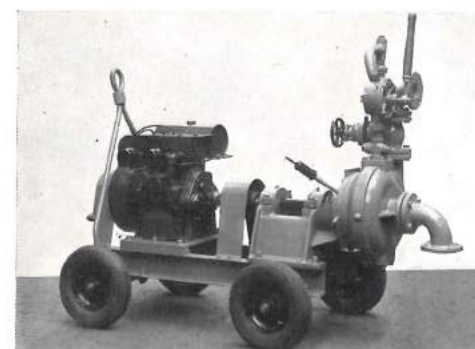


Early type of Self-priming Centrifugal Pump.



Latest type of Self-priming Centrifugal Pump.

We are continually being asked to supply plant to deal with some unique problem or for some unusual application, such as for instance a pump to pump plum-jam or herrings (the former was a success, the herrings we understand resented the treatment!). A cascade or a flood for Cinema Studio purposes is all in the day's work. Recently "one woman-power hand pumps" were asked for by an African administration. Amid the serious everyday contacts of business, difficult special problems and out of the



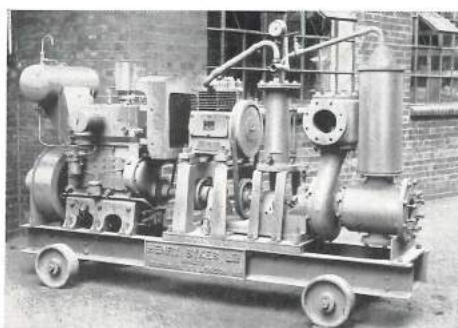
Type of Unchokeable Centrifugal Pump used for Pumping Herrings.



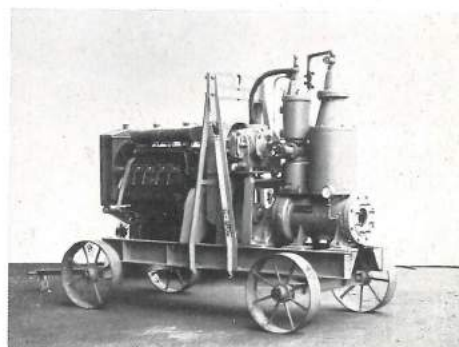
Type of Hand Pump used by African Women.

way incidents tend to keep the human element alive and it is the human element we strive to maintain with our customers, to mutual advantage we believe. We like to feel that a customer benefits at least as much as we do from a transaction, and as far as lies with us we see to it that he does so. We endeavour to follow up plant by visiting the site where it is working and making sure it is being used to best advantage and that it is running satisfactorily.

During the last 15 years a further most interesting activity has been the particularly successful development of Special Pumps and Equipment used in the modern De-watering system of drying out water-bearing ground before opening it by excavation for such work as sewer and pipe laying, foundations or similar excavations. Briefly described the system consists of sinking a number of specially designed and carefully made suction pipes fitted with a valve and fine wire gauze strainers, spaced at intervals adjacent to the ground to be opened. These special suction pipes are sunk into the ground by means of water at high pressure supplied by a pump for the purpose—the Jetting Pump—and are then all connected to a larger horizontal pipe leading to the De-watering pump. This De-watering pump is of very special design and upon its efficiency the success of the installation largely depends. Its function is to draw away



An Early De-watering Pump.

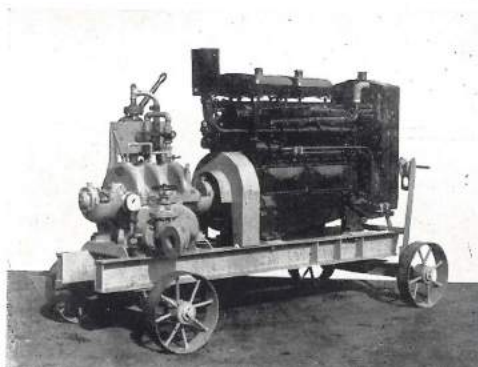


New Type De-watering Pump.

and dispose of all the water and its accompanying air which the suction pipes provide, and so gradually drain the site to be excavated, and keep it dry while the work proceeds. When the work is completed the De-watering pump is stopped and the tubes withdrawn ready to be used again, in the case of a long trench, on the next section.

The Sykes Patent "Jetwell"—the trade name for their De-watering suction pipes—has met with instant success and, used in combination with the Sykes Diesel-driven Jetting Pump and Sykes

Diesel-driven De-watering pump, has enabled Engineering Contractors to carry through expeditiously and safely, and at comparatively small cost, undertakings which formerly would have involved great expense and often risk.



Jetting Pump.



Jetwell.

The latest major development has been the introduction of the "Univac" Pump. This pump has been evolved by adapting the priming arrangements used on the De-watering pump to Unchokeable pumps (the sort used for sewage, herrings, plum-jam, etc.). The result has achieved great success, and many pumping problems previously considered as verging on the impossible have been satisfactorily dealt with.



General view of New Drawing Office.

The centenary year coincides with the completion of a major reconstruction of the Southwark Street premises. A new Drawing Office, together with other office accommodation, has been built over the top of the works. The East and West Shops are now one, and a new Canteen and Rest-room have been incorporated. Following this, the opportunity provided by the extra office accommodation has been taken to modernise the old offices. What was clean bright pitch pine in 1890, and which in 1956 was extremely dingy and depressing, has been removed. Clean light paintwork and glass has taken its place. The effect of bright and cheerful surroundings on those working in them is one of those imponderables which can have immense influence on the future well-being of any undertaking; just as the provision of the best possible equipment in the works is essential for success in the modern world.

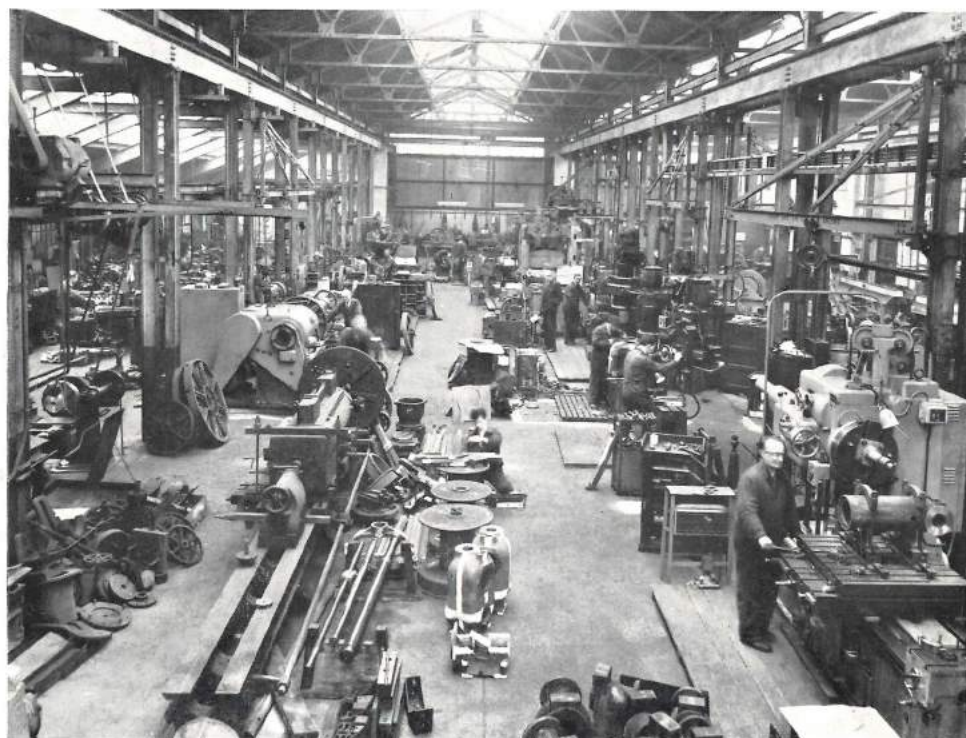
At Charlton development both of accommodation and equipment proceeds. Well housed and well equipped, Henry Sykes Ltd. enters its second century determined and in good spirits.



Sales Department.



Accounts Department.



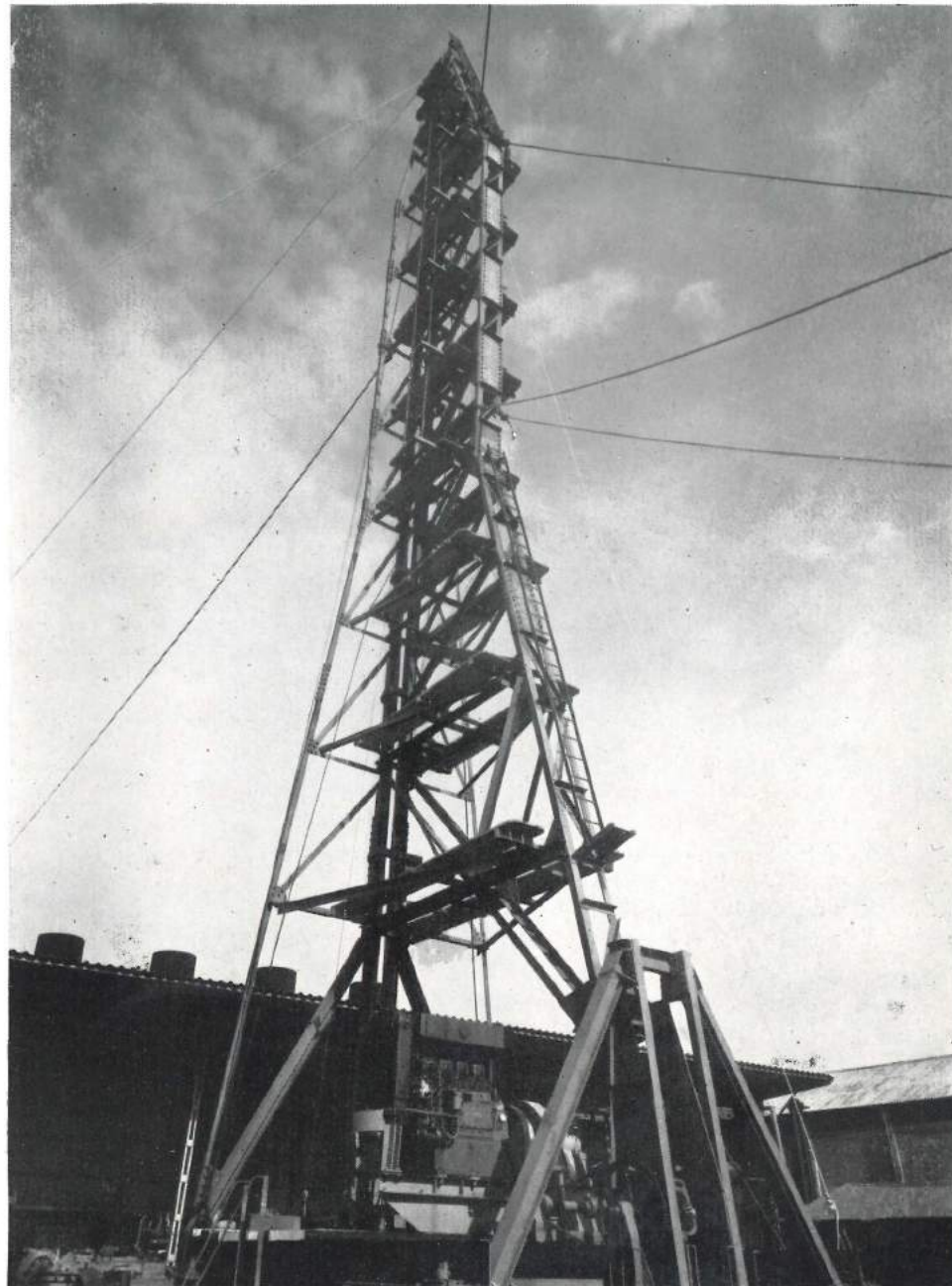
General view of Machine Shop, Charlton Works.



General view of Assembly Shop, Southwark Street Works.

PILE DRIVING PLANT

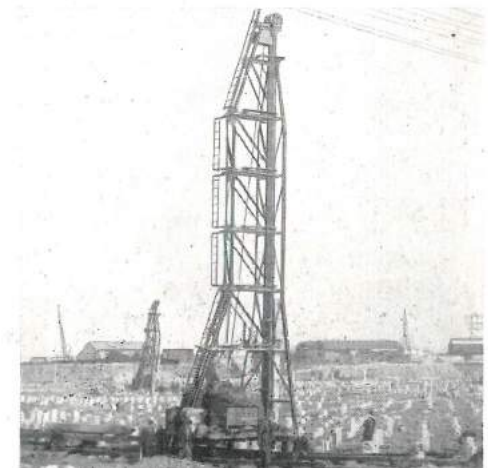
Starting shortly before the 1914-1918 War, the manufacture and hiring out of Pile Driving Plant became, during the inter-war period, the major activity of the firm. By the early 30's the amount of business being done was substantial. Mr. Mitchiner had become a considerable authority in pile driving matters and was generally recognised as such by the leading Civil Engineering Contractors.



The high spot during this period was the piling of the site of Ford's great motor works on the marshes of Dagenham in Essex. Sykes' Plant drove all (or very nearly all) the many tens of thousands of reinforced concrete piles on which the whole of this world-famous factory was built.

Although since that time other of the firm's products have increased relatively in importance, the manufacture of pile frames and their associated equipment has continued to grow. During the export drive of recent years they have been sent to many parts of the world in significant numbers, particularly to Hong Kong, the British East Indies, Thailand and Indonesia.

Since 1945 both the design and manufacture of pile frames have been rationalised on a standard range. This has enabled quick delivery and efficient service to be maintained during a period when difficulty in obtaining steel quickly would otherwise have made it almost impossible to obtain and fulfil orders.



HOISTS AND WINCHES

The Jackson's Patent Friction Clutch was the basis of all subsequent development of the firm's business in pile drivers. Patented in 1903, the clutch remains to-day substantially the same and it is generally recognised among contractors as the best clutch for operating drop hammers at high speed.

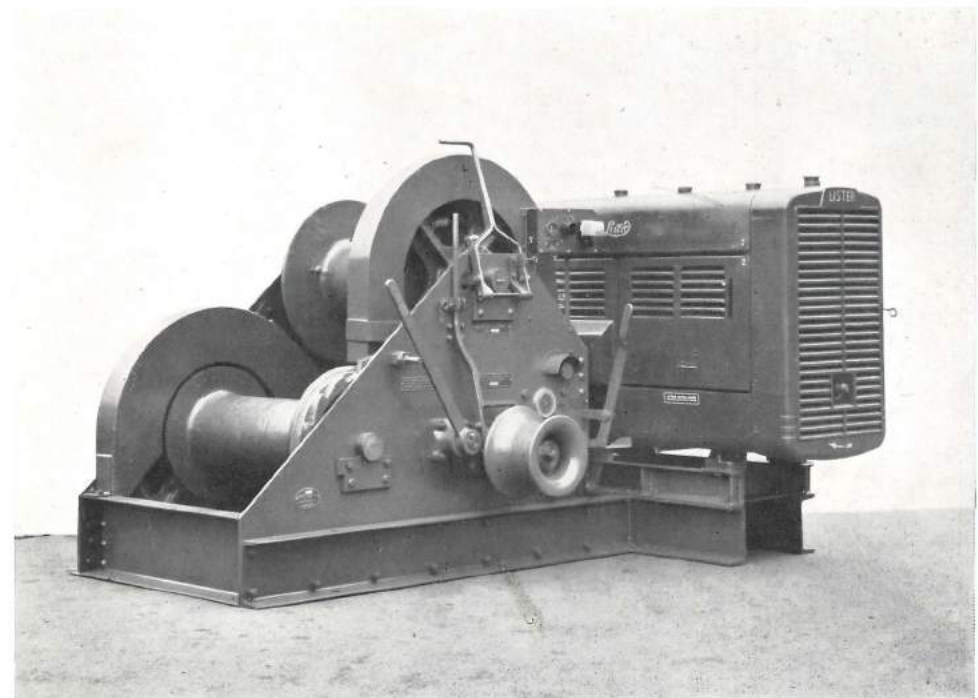
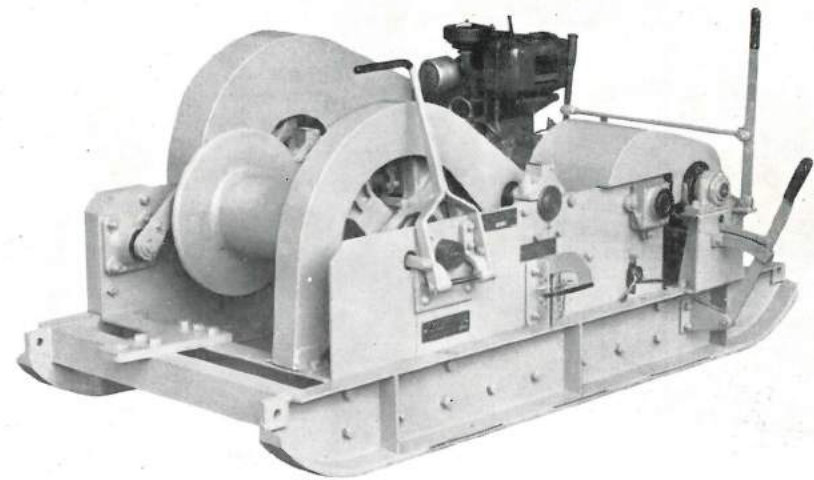
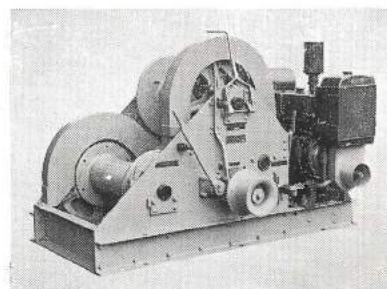
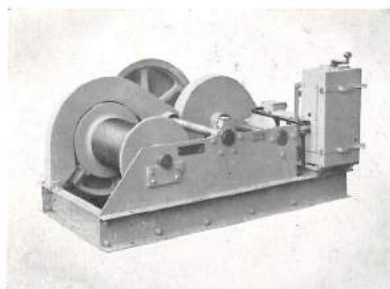
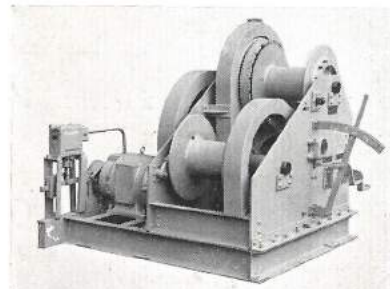
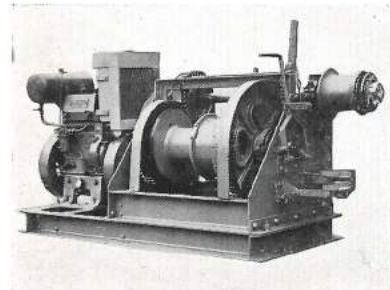
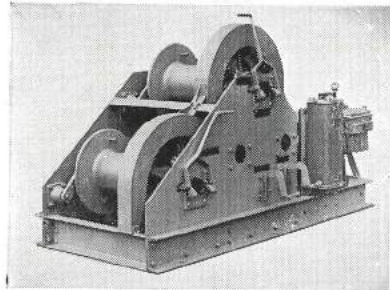
Except for the kite balloon winches which are mentioned early in this brochure and a few electrically driven machines, steam was paramount until the late 20's. Since that time winches driven by petrol and diesel engines have steadily almost eliminated steam. Many users regretted this tendency and while admitting the greater convenience afforded by the internal combustion engine, have missed the flexibility and smooth working which steam provides.

Recently, however, the introduction of fluid flywheels into the larger diesel engine driven pile driving winches is doing much to meet this criticism.

As long ago as 1930 Sykes' winches were being made for operating drop hammers weighing up to 6 tons. Until recently this was the maximum size of hammer likely to be asked for by Civil Engineers. There is to-day, however, a tendency towards heavier hammers and Henry Sykes Ltd., by a carefully thought out and comprehensive policy of re-equipment, are now in a position to deal with a demand for larger machines.

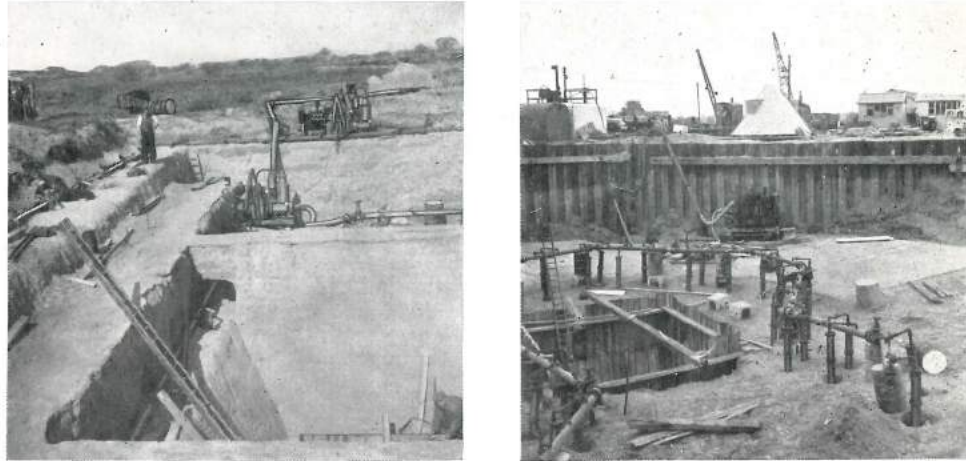
It would be wrong to give the impression that Sykes' winches are used only for pile driving with drop hammers. Well borers have long found them excellent for their requirements and steel erectors appreciate the very close control that can be exercised by the driver.

In 1938 and 1939 a large number of winches were ordered for the erection of steel masts at points on the East and South Coasts. The matter was of great urgency and was surrounded by an air of mystery. We were to learn a year or two later that they were the Radar installations that contributed so much to this country's survival.

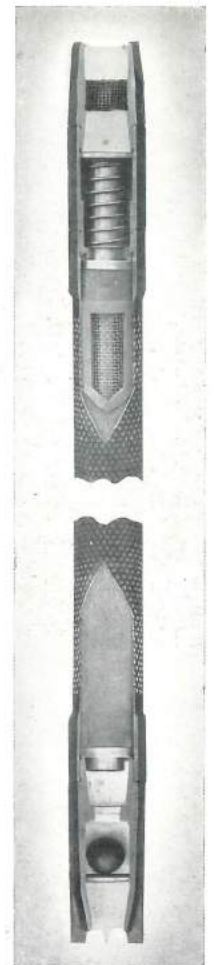
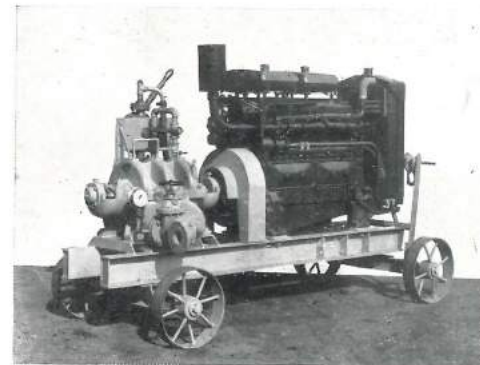
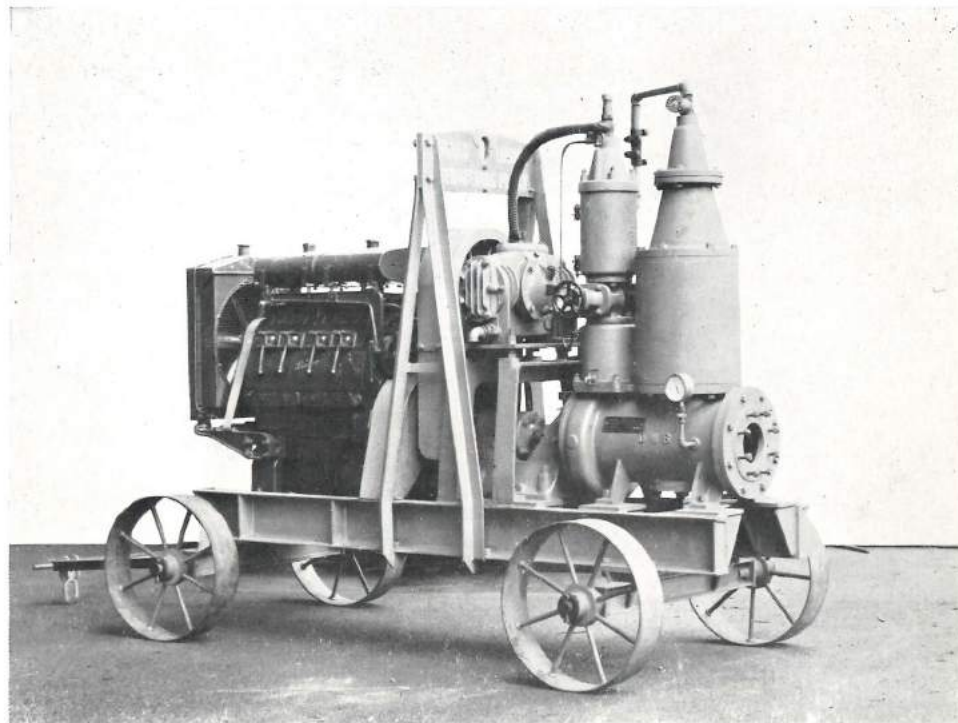


DE-WATERING PLANT

Excavation in water-bearing ground used to be a very troublesome business. Where running sand was encountered, it could be most costly and even dangerous. Steel sheet piling or close timbering were usually effective, but not always; sometimes resort had to be made to such expedients as freezing the ground or turning it into solid rock by injecting it with chemicals.

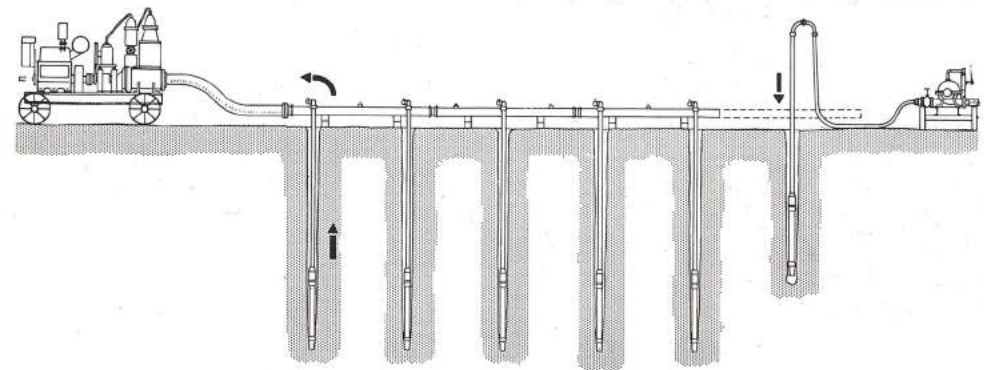


If the water can be removed from the ground before excavation commences, then the difficulties are eliminated. Water-bearing ground in which the water level has been lowered is particularly resistant to movement, and excavation can proceed with little or no need for support of the sides.



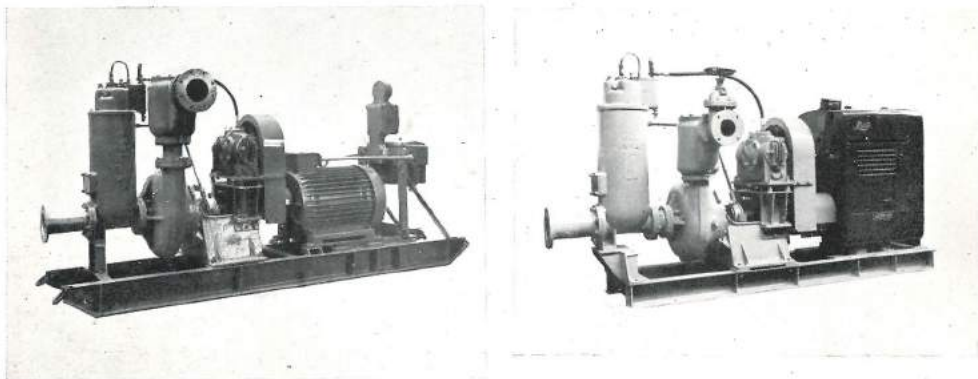
Our special contribution to this important development in civil engineering has been in producing for sale and hire really robust plant which is simple to operate. This has brought it into favour and it is rapidly becoming a part of the standard equipment of every Civil Engineering Contractor.

This is not the place to give a detailed description, and it is not intended that this should perform the duty of a catalogue, but if the accompanying illustrations are sufficient to whet any reader's further interest, a fully descriptive leaflet is readily available.

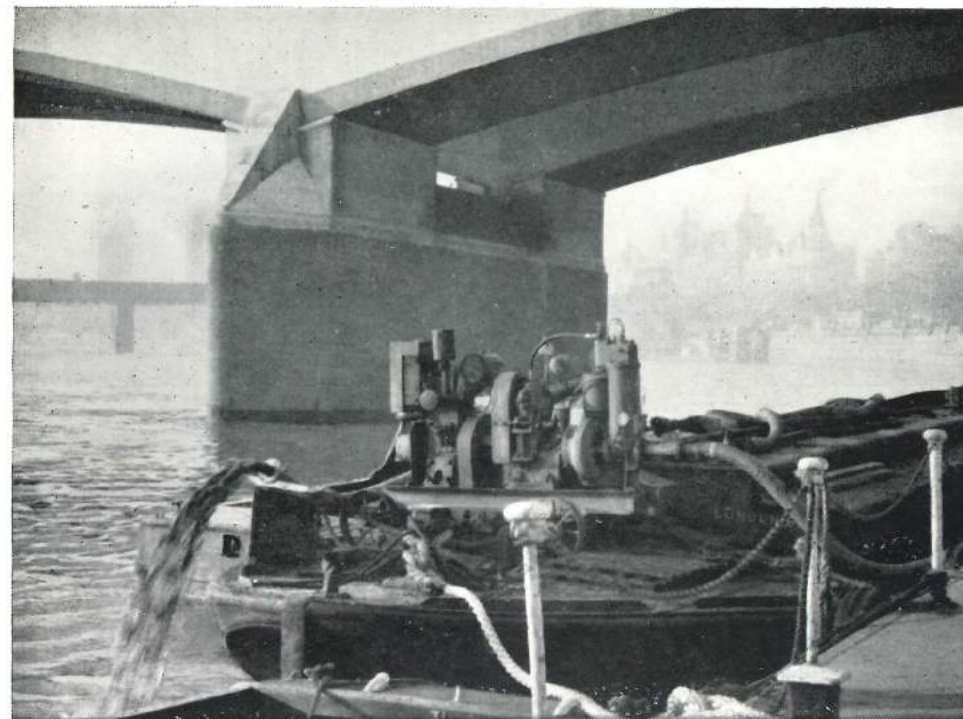


"UNIVAC" SELF-PRIMING UNCHOKEABLE PUMPS

A self-priming pump that can deal with large solids and thick slurries has long been a goal to be achieved by manufacturers of pumps. For many years the demand for such a pump has been evident, but the response that our efforts in this direction during the last three years have produced is beyond all expectation.



Not only have our long-standing customers in civil engineering given it a most encouraging welcome, but it is finding new fields to conquer. The National Coal Board are using these pumps not only in the disposal of waste from coal washing plants, but also for applications underground.

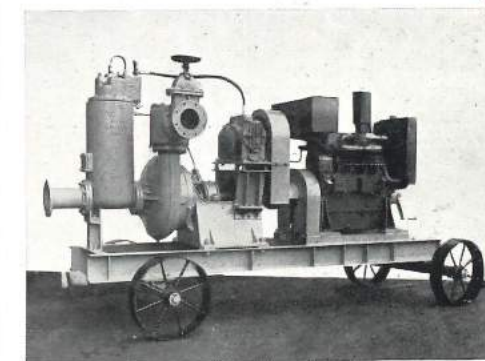


In the sinking of one particular drift at a coalmine where large quantities of water containing highly abrasive sand were encountered, the contractors affirm that the work could not have been carried out had not "Univac" Pumps been available.

Other highly successful applications include sewage installations both temporary and permanent, and the pumping of slurries containing a very low moisture content at cement works and china clay workings.

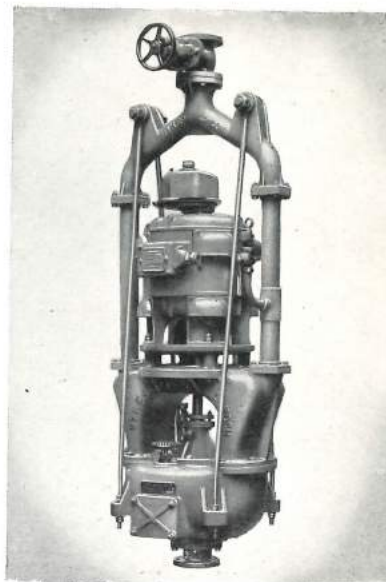
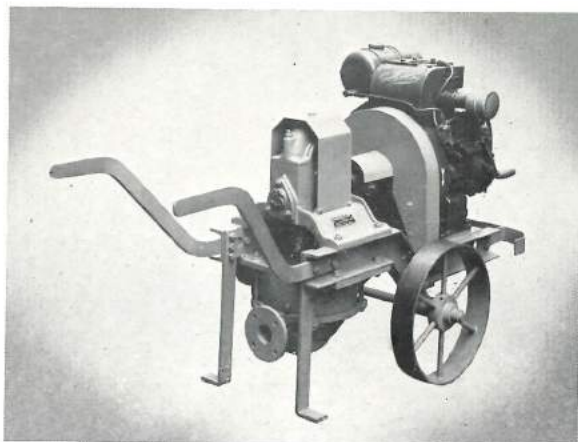
In suction dredging the remarkable performance of the pump is allowing scope for an entirely new technique.

Such diverse industries as canned food, steel manufacture and atomic energy are finding the characteristics of these pumps to be of special value.



Able to deal with almost any pumping problem and capable of operating the ground water lowering installations described on pages 20 and 21, they now form a large and increasing proportion of our own stock available for hire.

PUMPS



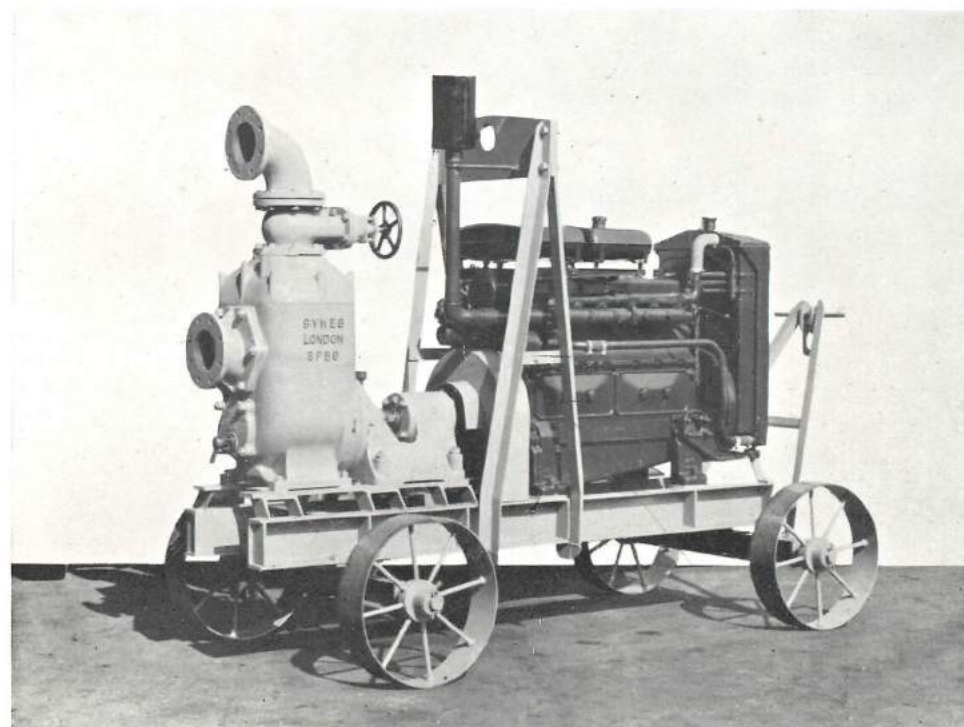
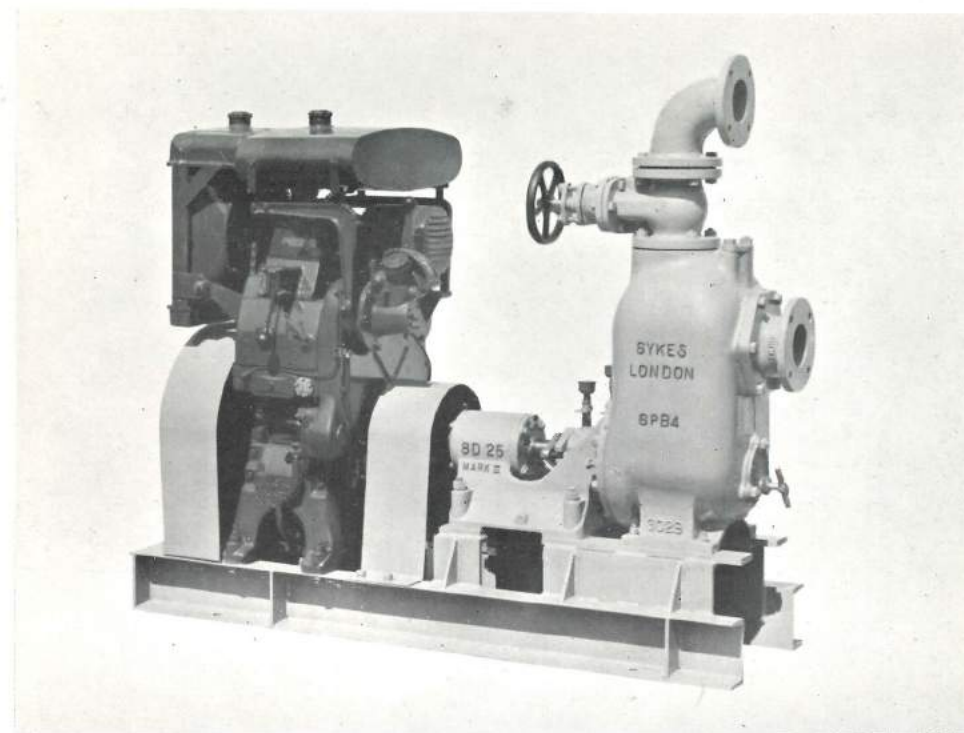
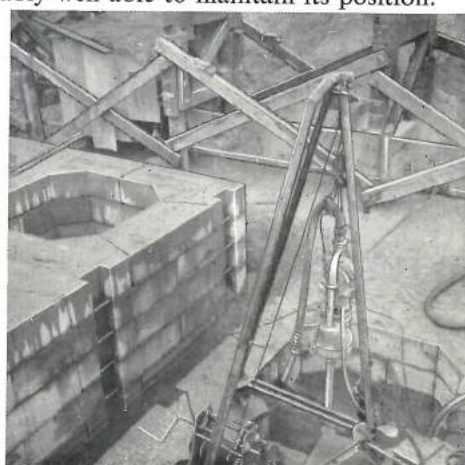
When considering the activities of Henry Sykes Ltd. during the last 100 years, it becomes clear that pumps have had the most continuously successful history.

Probably more than in any other item of contractors' plant do knowledge and experience play a paramount role. This knowledge and experience have been passed down and added to from generation to generation. They are attributes neither quickly gained nor quickly lost.

The range of pumping plant provided for sale and hire is now very wide. The commonly used items are made in considerable batches with the most modern equipment at competitive prices. By a policy of standardisation of component parts, able to be assembled into a large range of pumps for widely varying duties and by buying other firms' manufactures and adapting them to special needs, a business of great strength and flexibility has evolved in which hire and sale are complementary and mutually assist each other.

Since the 1939/45 War, considerable numbers of pumps have been exported to many parts of the world and especially to Australia, West Africa and Persia.

Although competition is particularly severe among manufacturers of portable pumps, it is a field in which this firm is probably well able to maintain its position.



LONG SERVICE

The following are now in the employment of the Company and
have completed 25 years' service.

Name	Entered Service	Name	Entered Service
A. D. Bird ...	1900	W. Carney ...	1921
G. H. Marshall ...	1900	G. F. Marsh ...	1923
H. Goodchild ...	1901	H. G. Goodchild ...	1923
C. R. Mitchiner ...	1906	G. A. Batt ...	1924
G. E. Moore ...	1913	G. A. Chandler ...	1924
A. G. Avent ...	1913	W. A. Bastin ...	1925
G. S. Bew ...	1914	H. L. Dagwell ...	1925
R. W. Winterborne ...	1915	G. Parnell ...	1925
A. Puddick ...	1915	G. T. Brogan ...	1928
H. W. Collins ...	1919	F. Ellis ...	1928
F. H. Evans ...	1920	T. E. J. Clark ...	1929
A. A. Cromarty ...	1920	H. P. S. Paish ...	1930
T. Turner ...	1920	A. E. H. Harrild ...	1930
H. G. Clark ...	1921	A. Wheatley ...	1931

