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ITS HISTORY, DEVELOPMENT
AND INDUSTRIAL RESOURCES

OFFICIAL HANDBOOK
(SECOND EDITION)
Issued under the Auspices of
THE GREENOCK CORPORATION

CONTENTS

Greenock's Rise to Importance and Prosperity 7
Modern Greenock .......................... 11
Public Services (Electricity, Water and Gas) 18—20

Local Industries—
Sugar Refining ...................................... 22
Shipbuilding and Engineering ......................... 26
Miscellaneous Trades .................................. 29
Technical Training .................................. 30
Chamber of Commerce .............................. 30
Banking Facilities in Greenock ...................... 30
Ferry Connexion with Helensburgh ................. 32
General Information ................................ 33
Notes on Local Firms .............................. 35
District Map ...................................... 41
Street Plan ...................................... 24—25

AND NINE ILLUSTRATIONS

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1930
GREENOCK
(Renfrewshire)

Greenock’s Rise to Importance and Prosperity

The history of Greenock’s development from a tiny fishing village of a few thatched cottages to a busy port and industrial centre, with wharves and factories and sugar refineries and ship-building yards, has something that seems typically Scottish about it: for it represents a combination, in proportions as nearly perfect as possible, of enterprise and caution. It is not a mushroom place which has sprung up in a night, as it were, because of some chance discovery of, say, mineral wealth which gave it a sudden and unforeseen commercial importance. It does not owe its growth and prosperity to some stroke of good luck, nor has its history been marked by wild commercial adventures which have afterwards burst and given the place a chequered sequence of alternate wealth and poverty. For a couple of centuries past it has been steadily forging ahead, always grasping the opportunity for new opening, yet always consolidating the present before stretching a hand into the future. Thus its development has been gradual, logical, well-considered, and of permanent value to its own people and to the wider world to which the ships and merchandise of Greenock go. It is just that, at the very outset of a brief account of Greenock’s progress, reference should be made to the enlightened leadership given by the chief land-owning family of the place through several generations. There have been times in the past, especially the more distant past, when the Lairds of Greenock had a longer vision and a greater confidence in the future of Greenock than had their tenants, and in more than one important step forward the landed proprietor has been a rather lonely figure and borne upon his shoulders the financial risk of an undertaking calculated to be of public benefit. But the lesson of history has been learned by the people of Greenock, and the spirit of careful enterprise and steady, constant progress is no longer the spirit of an individual but the corporate spirit of a flourishing town. But the present and future both have their roots deep into the past and it is to the family of Shaw and, in more recent times, to that of Shaw-Stewart that Greenock owes not a little of its present position and hopes for the future.

Ancient History

When we come to consider ancient history, it is necessary to go back as far as 1296 to find the first mention of Greenock in the name of a certain ‘Hugh de Grenok,’ who was among the Scottish barons made subject to the English King Edward I. A century later, during the reign of the Scottish King Robert III, we find Greenock divided between the two daughters and heiresses of Malcolm Galbraith. The marriages of these ladies established two baronies in Greenock—those of Shaw and Crawfurd. This dual ownership, each family having its own castle, continued until 1752, when John Shaw Stewart succeeded to both baronies on the death of his great-uncle, Sir John Shaw, and from then right down to modern times most of the land in Greenock has belonged to the Shaw-Stewart family.

Under the two ancient baronies the town was divided into Easter and Wester Greenock. The castle of Easter Greenock was a square tower standing about a mile east from the middle of the town. It is mentioned as being already a ruin in 1710. The castle of Wester Greenock occupied a site nearer
the heart of the town, now occupied by modern buildings. In ancient times Greenock had not even the dignity of being a parish, but was included in the parish of Innerkip. The inconvenience of this was felt when the chapels-of-ease in Greenock were closed at the Dissolution and the people had to walk six miles to the parish church at Innerkip. This must have placed a severe strain upon the church-going habits of the old Greenock folk, and, accordingly, in 1589, Sir John Shaw obtained Royal authority for the provision of a chapel for his Greenock tenantry. Two years later Greenock was formed into a separate parish and had its own parish church, the North Kirk which was the first place of worship erected here after the Reformation (it has recently been re-erected on Seafield, Esplanade).

At this period, and for some time later, Greenock was a small fishing village, consisting—would you believe it?—of one row of thatched cottages. This forms a striking comparison with the present population of about 90,000. King Charles the First conferred benefit on the place by granting it a weekly market and authorizing the holding of two fairs in every year. About this time, also, ships engaged in coastal trade, and even in ocean sailings, began to call at Greenock on their way into or out of the Clyde; and thus were laid the beginnings of the port of Greenock. The first charter of Greenock expressly denied permission to engage in foreign trade, which was the exclusive privilege of Royal burghs. The herring fishery was the staple industry of the few inhabitants and had its importance as an export trade. Cartsdyke, now part of Greenock, was then a separate place, and was able to boast of beating Greenock in the matter of port accommodation, for Cartsdyke had a quay before the end of the seventeenth century.

The Foundations of Progress

In the year 1700 Sir John Shaw made up his mind that Greenock was intended to play a larger part in British and world commerce than that of a small fishing village exporting herrings, and he went to the Scottish Parliament with a request for assistance from public funds for the building of a harbour at Greenock. This application did not succeed, but it gained its ultimate object by indirect means. It served to call definite attention to the possibilities of Greenock, based partly on the natural advantages of its position on the Clyde, and Greenock people came to see that there was something in Sir John’s idea, and that the project should not be dropped because of the Parliament’s failure to help. So they entered into an agreement whereby their landlord should undertake the initial financial risk of building a harbour and they would repay him by the levy of a tax of 1s. 4d. upon every sack of malt brewed into ale within the town. By the year 1740, the whole of the £5,600 entailed in the pier and harbour scheme, and about £700 over, was raised by this tax, and the remarkable success of the project provided Scottish wits with the chance of concocting some typical “Scotch” humour. One writer, for instance, has remarked that the speedy liquidation of the debt affords a proof either of the great trade carried on or of the extreme thirstiness of the inhabitants at the time. He might have added that it is not often that such a good port comes from mere ale!

A harbour scheme costing £5,600 was a big undertaking for those days and was a particularly ambitious enterprise for a place of the size Greenock was then. But the highest hopes for its success were more than justified. The scheme gained one advantage from outside circumstances, and that was that it was carried out at the time of the Union of Scotland with England, and the increased trade which came north as the result of this closer connexion of the two countries found Greenock making extensive preparations for dealing with it.
The Industrial Era Opens

Hardly any trace of the original harbour construction can now be seen. The subsequent development has been too rapid and extensive to allow of such relics of the past being preserved. The formation of the port and the constant presence of shipping in increasing volume naturally led to the foundation of new industries at Greenock. Shipbuilding was commenced towards the end of the eighteenth century, and in later times the building of life-boats and small ship's boats of all kinds has been developed as a special industry here side by side with the building of great ships up to the proportions of the ocean-going liners of the Allan, Cunard, and P. & O. companies. Rope and sail-making had been established as early as 1725, and the making of boilers and other machinery followed quickly in the wake of the application of steam power to ships. The year 1765 saw the opening of the first sugar refinery in Greenock, the pioneer of an industry which is now not only a staple industry of Greenock but has become the most important centre of its kind in Scotland. Other industries of a more or less special character which grew up in addition to the ordinary trades incidental to a growing town included brewing, tanning, hat-making, pottery and the making of glass bottles. It is interesting to recall the fact that Greenock was formerly a base for the sealing and whaling industry, but this has long since fallen out of existence. It is said that there has been no wailing about the loss of whaling because Greenock has spread its commercial nets to catch much bigger things than mere whales! Some local industries of more recent growth have included general engineering, manufacture of torpedoes, woollen and worsted weaving, oil refining, flax spinning and an aluminium factory.

It was in 1772 that the town of Greenock, having paid off the cost of the harbour, became formally its actual owners, and before long commenced the series of improvements and extensions which has continued down to the present time, and is likely to stretch far into the future as Greenock grows and prospers. A graving dock was opened in 1786. The pumping engine which served the old graving dock for over 100 years was removed, on the
abandonment of the dock at the beginning of the century, to the precincts of the local Museum in Kelly Street. It was the most improved type of its time, embodying the many new ideas which had emanated from the fertile brain of James Watt, and provides an interesting link with Watt and his industrial age.

The early 19th century saw the construction of several tidal harbours, and the East India Harbour and Graving Dock, the Victoria Harbour, and the Albert Harbour were all completed by 1862. The purchase of the Garvel Park Estate for harbour accommodation led to the construction of the Garvel Graving Dock and the James Watt Wet Dock. The latter was one of the most important dock schemes of its period, taking eight years to construct. Opened in 1886 it has an area of 2,000 feet by 400 feet, and a depth at high water of 32 feet.

The harbours and docks of Greenock cover more than 100 acres, and the railway systems have direct connexion with the waterside. The original harbours of Greenock, the West and Mid, had for long fallen short of modern requirements and were abandoned early in the present century.

**A Big Undertaking**

The modest venture, as it seems now, made by Sir John Shaw, in risking £5,600 on harbour construction, was far out-matched in the early part of the nineteenth century by the construction of waterworks involving an outlay of £52,000. The fact that these works were conceived on a large scale, and with an eye to the future as well as the then existing needs of the town, has counted for much in the subsequent development of Greenock. The scheme took the form of the formation of a great reservoir, and a number of smaller basins on the hills, which rise so pleasantly to the south of Greenock. Dams were constructed by which various streams and pools were made to feed the great reservoir, covering nearly 300 imperial acres of land. The designing and executing genius of these works was Mr. Robert Thom, and they represented an early triumph of Scottish engineering, which has won many and greater triumphs in many countries. The scheme involved the construction of a great aqueduct 64 miles long. On nearing the town the water was so dealt with as to provide driving power for several mills and factories. These included a cotton factory which appears to have loomed large in the estimation of the Greenock folk of the day, who saw in it yet another emblem of the town’s rise to commercial greatness. The foundation stone of this cotton mill was laid in 1838, and this seems to have been a notable local event.

The construction of the waterworks, while so successful in itself, led to a terrible calamity on the night of November 21st, 1835. As the result of heavy rains, Whinhill dam, which formed one of the reservoirs, burst its banks and flung three million cubic feet of water upon the unsuspecting town. The darkness of the night, combined with the total absence of warning, increased the terror of the event. About forty lives were lost, and property was destroyed on a very serious scale. As in other historic instances of the kind, there were some narrow escapes which can only be called miraculous. It is recorded that a man who volunteered to go in search of two children who had been left behind in a flooded house found them still fast asleep in their bed, which was floating about on the water. In the same year occurred another startling event, but one, fortunately, not so widespread in its consequences. This was the bursting of the boiler of the steamer *Earl Grey*, which was lying at the quay side. Six men lost their lives in this explosion.

**Modern Greenock**

Greenock to-day is a municipal burgh divided into eight wards represented by twenty-five Town Councillors, and returns one Member to Parliament. It extends for about four miles along the south bank of the Clyde, which is here widening out to its estuary. It is 23 miles from Glasgow.
by rail, although only 21 by river. The main portion of the town occupies the level stretch of ground alongside the great river, but the land takes to upward slopes a little distance behind and rises eventually to hills 800 feet high. A modern bus service connects the town with Port Glasgow on the east and Gourock in the west. A fine esplanade distinguishes the western side of the town.

Greenock contains many notable modern buildings. The fine Town Hall was erected in 1854. The Municipal Buildings (1881), marked by a tower 265 feet high, exhibit the style of the Italian Renaissance. One of the older public buildings is the Custom House, dated 1818. The name of James Watt, Greenock’s most famous son, is commemorated by the Watt Institution, in Union Street, which was founded by his son in 1837, and here is now accommodated the Watt Scientific Library, the gift of the great engineer himself to his native town, and a statue of Watt by Chantrey. The Greenock Library is housed in the same building. Adjoining the Watt Institution are the Museum and Lecture Hall, given by James McLean in 1876. These have become inadequate for the demands on their space through recent gifts and endowments. A scheme for extensions and improvements is well forward. This will give increased accommodation for exhibits and provide a separate Fine Art Gallery, more commodious and more in keeping with modern ideas. A propitious time is only awaited in order to start building operations. The School of Art, School of Navigation and Engineering, the Greenock Academy, the High School for Secondary Education and the Technical College (opened in 1900) are among the town’s educational establishments, in addition, of course, to the elementary schools. There is a general Infirmary and separate hospitals for eye cases, cholera and other infectious diseases. To meet the ever increasing demand on the Greenock Royal Infirmary, an auxiliary hospital has been erected on the outskirts of the town. Extensions have recently been made to the Eye Infirmary. Sir Gabriel Wood’s Mariners’ Asylum, a home for aged merchant seamen, is about 80 years old. It will be seen that Greenock has had some public-spirited men among its townsmen, and also that it has reflected the deep national interest in education which has gone so far to account for the fact that Scots, often of the most humble origin, are to be found in positions of importance and command in almost all parts of the world.

There are now several parish churches in Greenock. The oldest of them (the church already referred to on page 8) is the Gothic building erected in 1591, which now contains some stained-glass windows from the hand of the great artist and craftsman William Morris. The church was first built on the site occupied by the works of Harland & Wolff. (The remains of Burns’s “Highland Mary” now lie in Greenock Cemetery.) This was formerly the Parish Church of the western half of the town, but in consequence of re-arrangements of the place in later times now serves the north section. The west Parish Church, in Nelson Street, is about 90 years old, and has a graceful campanile. A spire marks the middle Parish Church, in Cathcart Square.

Sir Michael Shaw-Stewart gave two open spaces to Greenock—Wellington Park and Well Park, the latter being situated in the middle of the busy part of Greenock, which were followed by the Lady Octavia Park, Lady Alice Park and Battery Park. In the Well Park a very handsome War Memorial has been erected to commemorate the local men who gave their lives in the War. Chaste in design and graceful in form it is one of the finest monumental features of the town, and to enhance its attractiveness the Park has been laid out in suitable parterres and forms a delightful garden. In the Battery Park, recently re-formed, is situated the Corporation open air swimming pond. Lyle Road is a fine, broad drive leading out towards Gourock, constructed in 1879-80. The name of the ancient Abbey of St. Lawrence at Greenock is preserved in that of St. Lawrence’s Bay. Gas and Electricity Works for light and power are owned by the Corporation (see pages 16 to 20), as also a beautifully laid-out Cemetery.
CATHCART STREET AND MUNICIPAL BUILDINGS.
A City of Fine Public Buildings

Modern Greenock is distinguished by a number of particularly fine public buildings, which will come as a surprise, perhaps, to some visitors from South of the Tweed who are not already familiar with the way in which these things are done in Scotland. Contrary to a widespread popular belief, it is not above the Border, but below it, that efficiency and quality are commonly sacrificed to cheap-paring policy. The average Englishman grudges money spent on public works, and many towns of the size of Greenock are content to have "brick boxes with slate lids" serving as public buildings. Utility is regarded as the only motive worth consideration, and attempts to achieve fine architectural effect are discouraged as a waste of public money. But the far-seeing Scot knows better. He not only believes in doing things thoroughly as a general principle of life, but he knows that fine buildings make a city attractive to many different classes of people, and so help to bring trade into it.

This difference between the Northern and Southern outlooks is sharply thrown up by a tour of Greenock's public buildings. The Municipal Buildings, for instance, do not consist merely of four square walls and a roof. A great campanile rises above all surrounding buildings, creating an impression similar to that produced by Westminster Cathedral in London or the restored campanile of St. Mark's in Venice. Only a dull mind regards such a building as a mere mass of stone which costs a lot of money but serves no useful purpose. It is a symbol of the rise of Greenock and the pride of Greenock in the position it has gained, and it points ever upwards. Viewed from the river it rises above the house tops in a way rather like that of the spire of Antwerp Cathedral seen from the Scheldt.

Take as another example the Court House at Greenock and compare this with the forbidding, uninteresting buildings so often used for this purpose in English industrial towns. It is eminently characteristic of a well-defined national style of architecture, the style of which perhaps one of the best-known and most typical examples is Holyrood Palace, and which is derived, if we go back to origins, from the architecture of the old French chateaux. Greenock men who served in France during the War will perhaps find some memory of the old belfry at Douai and one or two other French buildings in the substantial turreted tower of the Court House, while the stepped gables at the ends of the building will recall some of the old Flemish houses of Ypres for those who were out in Belgium early enough to see them.

The Central Post Office

The Central Post Office is another notable member of Greenock's group of public buildings. Here the style of architecture owes something to classic influences in its columns and pediments and to Italian architecture in its round-headed upper windows, but the dormers which project from the roof might be almost matched in Amiens and other parts of France. This, then, is a building of composite design, but its varied parts are skilfully united, and there is no incongruity in the general effect.

Letter deliveries: 1st, 6.45 a.m.; 2nd, 9.15 a.m.; 3rd, 1.15 p.m.; 4th, 3.30 p.m. Latest hour of posting: For 1st delivery in London, 4.40 p.m.; for 2nd delivery in London, 8.45 p.m.

Despatches of Principal Mails

<table>
<thead>
<tr>
<th>Time</th>
<th>Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.15 p.m.</td>
<td>Perth and North of Scotland.</td>
</tr>
<tr>
<td>5.45 p.m.</td>
<td>Glasgow and Edinburgh.</td>
</tr>
<tr>
<td>6.30 p.m.</td>
<td>All Districts.</td>
</tr>
<tr>
<td>7.30 p.m.</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>8.45 p.m.</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>Sunday, 3.30 p.m.</td>
<td>&quot; &quot;</td>
</tr>
</tbody>
</table>

The present Post Office building was opened in 1899.
THE WATT MEMORIAL
(with statue of James Watt in the angle.)
The first Post Office in Greenock was opened in 1753 and was situated in William Street. It was removed to: Watt Place in 1829; Church Place in 1834; Custom House Buildings in 1876; Wallace Square in 1882; and Cathcart Street in 1899 (present Office).

In the Kip Valley lies the Gateside Hospital, and what an admirable ensemble the hospital buildings make when seen in semi-bird's-eye view from the higher ground near by! There has been some art here in choosing location as well as in the matter of architectural design. The auxiliary hospital before mentioned lies further west in the Valley.

The Watt Engineering School, built on the site of Watt's birth-place, is another building of distinction. The open right-angle at the corner, accommodating the statue of James Watt, gives freshness and originality to the design. The commonplace way of treating such a site would have been to raise a rectangular building running up to a solid corner in the usual way, and it was an inspiration on the part of the architect to cut a hollow angle into the corner and so break up the squareness of the building as well as providing an admirable niche for the piece of bronze.

Although Greenock had a Customhouse as long ago as 1708, the handsome building, which now houses Customs, Excise and other Government departments, was erected in 1818. It has a stately pillared portico, with pediment, in the Grecian Doric style, and forms an elegant architectural feature facing the river. Its main apartment, the Long Room, so well known to Greenock business men and foreign skippers for more than a century is imposing in appearance, with its 76 feet of length by 42 feet broad and a height of 26 feet.

As a final example may be noted Smithston Poorhouse and Asylum, built on a terrace formed also in the Kip Valley. This is of less importance than some of the other buildings mentioned from the standpoint of architectural design. It has no classic lines or towering campanile, but strikes one as a good building of some shapeliness and without any suggestion of severity or bareness.

In some of the principal shopping streets, too, may be noticed some good modern commercial premises substantially built in stone, while the church buildings of Greenock, ancient and modern, give their own quota of architectural variety to the town.

An Up-to-date Public Library

Among Greenock's useful institutions is a well-equipped Public Library, adjacent to the Municipal Buildings. The present building was purchased by the late Mr. Andrew Carnegie and gifted to the town for the purpose of housing the Public Library. The Library Acts were adopted in 1900, and in October, 1902, the Library was opened by Mr. and Mrs. Andrew Carnegie. On the main floor is situated the News Room, containing a fair representation of all the leading British daily and weekly newspapers. On the same floor is situated the Lending Department, containing over 45,000 volumes in every class of literature. This department of the Library is administered on the "Open Access" system, by which the public have free access to the shelves, giving them the opportunity of selecting their own books. This method of administration is much appreciated and greatly used by the public. For the main part the books are shelved on the most modern and approved steel book-stacks.

On the upper floor is housed the Reference Department, Ladies' Reading Room and Magazine Room. These departments are in constant use, and readers may be found there from every section of the community. There are also Board, Cataloguing, Staff, File and Librarian's Rooms.

There are two local newspapers—the Greenock Telegraph and the Greenock Herald. The former is an evening paper, established in 1883, its full name being the Greenock Telegraph and Clyde Shipping Gazette. The Greenock Herald and West Coast Courier is a weekly paper, founded in 1832.
Public Services

The Greenock Electricity Undertaking

Hunter Place Electric Power Station was opened in 1899 and electrical development took place so rapidly that by the year 1906 the capacity of the generating station was severely taxed. The Corporation, therefore, in consideration of the tremendous possibilities for electricity, decided to build a new generating station at Dellingburn Street.

When the Dellingburn Generating Station was opened in 1907, only low tension direct current at 250 and 500 volts was supplied. At a later date, however, in order to cope with the ever-increasing demand for power, particularly from the various shipbuilding yards, engine works, woollen mills, sugar refineries, etc., a high tension system of generation and distribution was introduced. The new system of three-phase 3,300 volts alternating current was more economical than the low tension system for transmitting large supplies of electricity considerable distances.

The industrial demand for electricity continued to increase, and the high tension system was extended accordingly. Eventually, Dellingburn became the sole generating station, and, since 1913, Hunter Place has been merely a sub-station for converting high pressure electricity to low pressure for special local requirements.

In the year 1914, the neighbouring industrial town of Port Glasgow decided to take a supply of electricity from Greenock. The transmission supply was 10,500 volts 3-phase alternating current, which, on reaching Port Glasgow, was converted to 250 volts direct current. All the principal shipbuilding yards and engineering works, also many of the shops and houses, have taken advantage of the electricity supply.

The electricity supply to Gourock was inaugurated in December, 1923, and has proved very successful. Although there are no industries of note in Gourock, electrical development has been rapid in connexion with shops and houses, some 90 per cent of the shops and 60 per cent of the houses having been connected to the supply.

For a number of years, the Electricity Commissioners had been urging the co-ordination and centralization of electricity supplies. A step was made in this direction in 1924 when Paisley commenced taking power from Greenock, the interconnecting transmission lines operating at a pressure of 22,000 volts.

The passing of the Electricity Act of 1926, and the setting up of what is now known as the Central Electricity Board, resulted in much more ambitious schemes being considered.

The intention of the Central Electricity Board is to close down all the small and inefficient generating stations, and to link together a number of generating stations selected because of their efficiency and geographical positions. These stations will eventually be interconnected by means of transmission lines operating at 132,000 volts.

The scheme in connexion with the centre of Scotland is progressing favourably, and the section interconnecting Greenock with Yoker (on the upper reaches of the River Clyde) has been in operation since December, 1929.

The foregoing describes, briefly, the history of the Electricity Department, and the changes in technique and application of electricity during the period under review.

ELECTRICAL PROGRESS IN GREENOCK

The following figures give an indication of the electrical progress which has been made since the opening of Hunter Place Power Station in 1899.

<table>
<thead>
<tr>
<th>Year Ending</th>
<th>Maximum Demand</th>
<th>Units Sold</th>
<th>No. of Consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>210 k.w.</td>
<td>157,681</td>
<td>165</td>
</tr>
<tr>
<td>1914</td>
<td>5,300 k.w.</td>
<td>10,246,656</td>
<td>1,576</td>
</tr>
<tr>
<td>1929</td>
<td>14,156 k.w.</td>
<td>24,562,155</td>
<td>8,659</td>
</tr>
</tbody>
</table>
GAS AND WATER SUPPLIES

The Electricity Department has always been conducted in a progressive manner, and no efforts have been spared to cope with the increasing demands for electricity. For a number of years the Department was chiefly concerned with the requirements of the industrial and business firms in the district. Recently, however, electricity was introduced into thousands of homes, and the demand for electricity and domestic electrical appliances is growing daily.

Hire and Hire Purchase Schemes are in operation which bring electricity and electrical appliances within the reach of everyone. The Electricity Showrooms give consumers an opportunity of inspecting the latest designs in lighting, heating, and cooking appliances, and also of having the uses of the various appliances explained and demonstrated.

The installing and wiring of electric motors and other power appliances is also undertaken.

The aim of the Electricity Department has always been to give Service and Satisfaction. (See pages ii of cover, 1 and 34.)

The Water Supply

The Greenock water supply is derived from Upland Moorland Gathering Grounds, and the water is collected and stored in nineteen reservoirs having a total storage capacity of 4,230,000,000 gallons.

In addition to the supply for domestic purposes, etc., a large supply of water is given for power purposes. This supply amounts to:

(a) Old Line of Falls.—1,200 cubic feet per minute for 12 hours per day and 310 days per annum.

(b) New Line of Falls.—1,066 cubic feet per minute for 13½ hours per day and 310 days per annum.

The following works are situated on the Lines of Falls, and have rights in the water thereof, viz.:

- Electricity Power Station  Greenock Corporation.
- Distillery  ...  Distillers Co. Ltd.
- Foundry  ...  ...  Rankin & Blackmore, Ltd.
- Chemical Works  ...  John Poynter, Son & Macdonalds.
- L M S Railway Co.
- Rope Work  ...  Gourock Ropework Co. Ltd.
- Sugar Refinery  ...  John Walker & Co. Ltd.
- Cereals Factory (disused)
- Rope Work  ...  A. Tough & Sons.
- Woollen Mill  ...  Fleming, Reid & Co. Ltd.
- Paper Mill  ...  Brown, Stewart & Co. Ltd.
- Foundry  ...  ...  Scotts’ Shipbuilding and Engineering Co. Ltd.
- Sugar Refinery  ...  Westburn Sugar Refineries Ltd.

The water for the domestic supply of the town is filtered at the Whinhill, Prospecthill and Overton, and the filters are situated at a sufficient elevation to maintain the supply by gravitation.

Owing to the extensive nature of the works a large supply of compensation water has to be provided. (See page 33.)

The Gas Supply

Coal Gas for illuminating purposes was first discovered and put to practical use by a Scottish engineer named William Murdoch, who resided at Redruth, Cornwall.

In the year 1792, as a result of experiments carried out by Murdoch, he was able to light his house by means of coal gas conveyed through pipes. This house is still in existence, and some years ago Messrs. Tangyes (of Birmingham),
to perpetuate his initiative, inserted in the wall a tablet which bears the following inscription:—

WILLIAM MURDOCH
Lived in this House
1782—1798
Made the First Locomotive here
and Tested it in 1794. Invented
Gas Lighting and Used it in
this House in 1792.

The next important development in the use of coal gas took place in the year 1802, when Murdoch, who had then entered the service of Messrs. Boulton & Watt, Soho Works, Birmingham, illuminated his employers’ premises by means of gas in celebration of the Peace of Amiens.

From these small beginnings the Gas Industry developed to the gigantic proportions we find to-day. Originally discovered as a medium for domestic illumination there are now over 300 methods of applying gas to industrial processes alone, and more than 3,000 trades use gas for various purposes.

The Greenock Gas Undertaking is Municipally owned and has been in existence since 1828, having maintained an uninterrupted supply of gas for over 100 years.

The Annual make of gas has increased steadily during this period and in the year 1928-29 reached the record figure of 669,248,000 cubic feet, or 2,743,916.8 Therms.

The sale of Residual Products is of importance to the undertaking as will be seen from the following figures: Coke, or dry smokeless fuel for domestic and industrial purposes, 8,500 tons. Tar for road making and chemical industries, 662,169 gallons. Liquid Ammonia and Sulphate of Ammonia for Carbonate and Fertilizer manufacture respectively, 458 tons.

Distribution is effected by means of mains which extend to a total length of 82,611 miles. The number of Ordinary Consumers is 8,744, and there are also 10,082 Prepayment Consumers. There are 18,407 Stoves (Cooking and Heating) on Loan Free.

Service Pipes are laid at the expense of the Gas Department from main pipes to the line of the frontage of property to the street.
Meters, Cookers, etc., are installed free of charge.

The Works and General Office are at Inchgreen, Greenock (telephone: Port Glasgow 40). Gas Service Department: 33 Crawford Street, Greenock (telephone: Greenock 1200) and the Showrooms, 30 West Blackhall Street, Greenock (telephone: Greenock 1200). (See pages 33, 40 and iv of cover.)

The Scenery Around Greenock

Notwithstanding the fact that Greenock is essentially an industrial town it has attractive natural features which cannot fail to impress and inspire the poet and the artist. Had that old-time Greenock schoolmaster who had to suppress his great gift of poesy been encouraged instead he might have sung of the beauties of the lakes and mountains to which Greenock is the open gateway. Some magnificent marine and mountain views are to be obtained from various points in the town.

Space will not permit of a description of the scenery in detail, but when it is remembered that from Corlic Hill—about 800 feet above sea-level—portions of the shires of Lanark, Dumbarton, Stirling, Argyle, Perth, Ayr, Bute, and the waters of Loch Lomond are to be seen, it will be evident to those who are by reading familiar with the geography of this part of Scotland that the views are of wide extent and beauty. Ailsa Craig can also be seen from another summit further west. Greenock has also most pleasant residential suburbs.

Gourrock is a close neighbour and a convenient resort for Greenock folk. This is a place of great charm and beauty and is known as the "Gate of the West," and is speedily reached, as already stated, from Greenock by the
CATHCART STREET LOOKING WEST, with the General Post Office on the right and the Mid Kirk in the distance.
bus service. From this charming little town of 5,000 people some of the most beautiful places in the West of Scotland are to be reached with facility by means of the excellent service of steamers that call at the Pier. From here, as also from Prince's Pier at Greenock, there are trips to the opposite shores of the beautiful Firth, and also to Loch Long, Loch Goil, the Holy Loch and Loch Fyne. Gourock is also a point at which tourists congregate whose object it is to visit the Western Highlands and Islands.

The Esplanade

Greenock, as already mentioned, has a fine esplanade, which forms one of the residential amenities of the place and offers relief from the busy industrial life of the port. It stretches away to the west from Prince's Pier to Fort Matilda, where the south shore of the Clyde begins to recede into Gourock Bay. The esplanade follows a gentle curve parallel with the course of the main road to Gourock, but hugs the waterside all the way. The passing of ships up and down the river gives a constantly varied interest to a "constitutional" along the Esplanade, while across the river one looks into Dumbartonshire and Argyshire, with the town of Helensburgh on the north bank facing Greenock, and Dumbarton Rock away on the east. Gare Loch opens out from the Clyde immediately to the west of Helensburgh, but is screened from view from the Greenock side by Roseneath Point. At the far end of the Esplanade the Clyde narrows down to less than half the width of the river as measured between Greenock and Helensburgh, but soon broadens out again beyond Gourock as it sweeps round towards Dunoon.

District Communication Facilities

The electric Tramway Service which obtained in the district for about 30 years was abandoned by the Greenock and Port Glasgow Tramways Company on 15th July, 1929, and modern omnibuses substituted. Omnibus services were instituted in 1925 for the upper reaches and outlying districts of the town. The Company now operating is known as Greenock Motor Services. The tramway fleet consisted of 43 double decked cars, but the present Motor Omnibus fleet numbers 100. The Omnibus Service covers a wider area than did the trams. The services in the upper reaches are maintained and also to Lunderston Bay on the firth past the Cloch Lighthouse. The Company in conjunction with the L.M.S Railway Company operate services between Greenock, Glasgow, Gourock and Largs. Special facilities are granted to workmen. Special terms are offered to excursion parties. The Manager is Mr. R. B. Herbert, and the district office is at Ladyburn, Greenock.

A Review of Greenock's Industries

Sugar Refining

Although Greenock is now the only Sugar Refining port in Scotland, the industry had been in operation many years earlier, in the neighbouring city of Glasgow. For when Glasgow was a place of some commercial importance Greenock was yet a small fishing village. In 1680, and for many years after, there were sugar works in Glasgow, but the first establishment of a sugar refinery in Greenock dates from the middle of the eighteenth century, when after a period of political unrest and industrial stagnation, trade and commerce began to assert themselves as important factors in a nation's progress and a country's prosperity.

The first refineries set up in Greenock were of modest dimensions and primitive style, and while the Greenock merchants provided the capital and commercial abilities, the practical working was largely in the hands of "boilers" from Holland and Germany. The beginning of the nineteenth
century saw considerable expansion of the Greenock sugar refining industry, and several new houses were erected, some of which are still extant, although much increased in size and practically renewed.

The introduction early in the century of Howard’s patent, which substituted boiling in vacuo, in steam-heated pans, for the crude open pans formerly in use, gave a great impetus to the refining trade, through its greater ease in working and its infinitely superior results. Another improvement which made for economy of time and labour was the substitution of centrifugal machines for drying purposes, as against the slow process of “baking” and simple percolation which produced the sugar loaf.

But as the sugar-refining trade of Glasgow rapidly declined, that of Greenock advanced by leaps and bounds, and was attended with a success which was reflected in the increased prosperity of the town.

It is noteworthy that three of the largest and most successful sugar-refining concerns of modern times had their origin in Greenock, whence they were transferred to Liverpool and London.

The last quarter of the nineteenth century saw great changes in the sugar trade of Greenock. The State Bounty system adopted by the Continental nations to encourage the indigenous growing of the sugar beetroot, and its export to other countries in the form of raw and refined sugar, had a most disastrous effect on the entire trade of the United Kingdom. Bristol and Leith were compelled to abandon the industry: many houses in London, on which enormous sums of money had been spent to bring them up-to-date, were forced to close their doors; and Greenock saw many sugar houses lying idle, and others working but intermittently. Raw beet sugar, subsidized by the Continental Exchequers, was rapidly outwitting the world’s markets the products of the tropical cane, and foreign refined sugar, with a State drawback, was being flooded into Great Britain, with the result that in Greenock, as elsewhere, docks and dockers were standing idle, and sugar houses were closing down and paying off their workers. The struggle was too unequal; the competition was too unfair; the object was too apparent, but the home Government remained passive. Of eleven refineries working in Greenock twenty years earlier more than one-half were compelled to abandon the struggle and permanently close their doors.

The general trade of Greenock, which had been so closely identified with sugar, was in a parlous state. The little raw sugar still imported was from the European continent, via Leith and Grangemouth, and there was naturally a great reduction in local harbour revenue. The harbours were empty, trade was at a standstill, workers were idle, and destitution prevailed. Not only among those directly engaged in sugar-refining operations, but with the many allied trades—cattlers, cooperers, coppersmiths, engineers, and all dependent upon the sugar industry.

The economic position was acute, the national outlook was grave, but at the end of the century wiser counsels prevailed with the powers that be, and the ratification of the Brussels Sugar Convention paved the way for a more hopeful prospect. Deprived of the artificial aids which gave the Continental growers and refineries an undue advantage, the native products—both Home and Colonial—again asserted themselves, and rapidly showed signs of resuscitation. The trade at the harbours again revived, and, temporarily assured of a fair field and no favour, the remaining refineries faced the situation with renewed confidence, and again proved that, under equal conditions, they feared no competition from their European rivals. The refineries which had not been dismantled were encouraged to renew and further improve their machinery, and increase their capacity and output. So that, although greatly reduced in numbers, these remaining are now able to turn out a greater quantity of refined sugar than in the most prosperous days of the nineteenth century.

From the national point of view the new era in the Sugar Trade owed much to the far-sighted policy of the Right Honourable Joseph Chamberlain, the then Secretary for the Colonies, while the local Member of Parliament
at the time, Sir Thomas Sutherland, was unremitting in his efforts to obtain justice for so important an industry of the town he represented.

The Great War, too, proved how futile was the policy of depending entirely for our supply of sugar—as of other commodities—on our rivals and enemies, but, fortunately, the abolition of the Continental bounties had stimulated the cultivation of sugar in Cuba and other cane-growing countries: so that, when the beet supply ceased, large quantities of Cuban sugar came direct to Greenock to be refined, the local refineries adapting their working to the needs and conveniences of the Government Commission, which, on the outbreak of war, had assumed control of the British Sugar Trade.

In the last sixty years there has been a remarkable increase of sugar consumption in Great Britain. In 1880 it was a little over 23 lbs. per head of population; twenty years later that had nearly doubled; and immediately before the War the enormous figure of 98 lbs. had been reached.

Even under war restrictions the consumption in 1919 was 75 lbs. per head. Under the abnormal conditions engendered by the War the output of the Greenock refineries was as great as ever, and, under normal conditions, with freedom of action and a regular supply, that can be further increased. If the high rate of consumption is to be maintained or exceeded the refining power of the country will fall far short of the nation's requirements. But, assured of a fair market and a free hand, the Greenock refiners are capable of rising to the occasion, and satisfactorily meeting any extra demand.

A progressive spirit and technical skill on the one hand, and transport facilities and natural advantages on the other, should combine to ensure for Greenock a renewal of the prestige she enjoyed in the past. Equipped with the most modern appliances the Greenock sugar-houses can turn out every
grade and variety of sugar and syrup, and recent experience has proved the
ability of the Greenock refiners to develop their resources to the full, and
maintain the reputation of their town as the centre of the Scottish Sugar
Trade.

In recent years the sugar trade of the Country, in keeping with modern
tendencies, has become more centralized and concentrated. The fewer
refineries now working are, however, turning out more than ever before.
In Greenock, although several of the old Sugar-houses have become derelict,
those still working have increased their output, so that the volume of business
is as large as ever and is more in direct contact with the trade of London
and Liverpool.

While Greenock has lost some of its prestige and independence as an
individual market it has gained by the benefit that accrues from that
combination of action and unanimity of policy which is so necessary in
industry, to combat competition and preclude overlapping.

Shipbuilding and Engineering

As the little fishing village, with its modest craft, developed into the
busy seaport with its mercantile marine, so the old Greenock, with its row of
thatched houses in the shadow of the Old West Kirk, or North Parish Church
now, has grown into the important commercial town of to-day, with its ship-
building yards famed the world over. The new harbour of Greenock, com-
pleted in the beginning of the eighteenth century, was the most formidable
undertaking of its kind, and paved the way for more important and perfect
harbour works throughout the country, and for an expansion of the local
shipping industry.

In 1776 the number of vessels built at Greenock was 18, totalling 1,073
tons, the largest being of 77 tons burden. The great increase in foreign trade
ever demanded vessels of larger capacity, and, although America could produce
ships at less cost, the more enduring workmanship of the Greenock carpenters
gained the day, and, soon, vessels of 300 to 500 tons were being built.

About the middle of the last century there were seven ship-building
concerns in the town employing about 1,200 hands, and turning out between
6,000 and 7,000 tons annually. Many of Greenock’s enterprising shipowners
were also hardy mariners, and navigated their own vessels, so that they were
able to add their practical experience to the constructive skill of the builders.
Greenock was ever to the front in the building of ships of commerce as of
ships of war, and the products of the local yards were always famed for their
strength, symmetry and speed. Before steam had completely ousted sails
as the propelling power, and when naval architecture was not yet the highly
specialized science of to-day, the clipper ships—and yachts—of Greenock
build were the admiration of the maritime world for their graceful proportions
and weatherly qualities.

Iron foundries and forges, with their engineering activities were early
established in Greenock, and many vessels constructed at other ports were
engined at Greenock, including some R.N. frigates. The auspicious connexion
between Greenock engineers and the Royal Navy has been maintained
to this day. Every development in marine enterprise and improvement in
engine economy had immediate and adequate results in the products of the
Greenock yards. The mammoth battleship, the slim submarine, the palatial
liner and the utilitarian cargo boat have all been turned out in considerable
numbers at Greenock, and borne their share in the naval sphere, whether in
the peaceful pursuit of trade or the grim circumstance of war.

A Revolution in Ships

When the adaptation of iron to hull construction and the employment
of the screw propellor instead of the paddle wheel became general under the
new conditions, Greenock ships ably maintained the local reputation for
strength and efficiency.
The large engineering works of Greenock have ever kept pace with the shipbuilding industry in its march of progress. The changes in ship construction—if we except the enormous increase in size—have been small compared with the many and varied developments in the design of steam engines and generating plant. And that more particularly in the class of engine so extensively produced in Greenock—the marine type.

The purposes and tonnage of shipping are so diverse that the application of propelling power offers to the ingenious and expert engineer ample scope for the exercise of his technical skill and practical ability. In the training of engineers it was at one time the custom to spend some time afloat in actual contact with the working engines, and in many foreign ports—both east and west—Greenock engineers were as well known and esteemed as the engines they tended. This old custom, combined with sound practical experience in the workshops, has produced a class of craftsman which possesses not only knowledge but vision. So we find in the types of engines produced in the Greenock shops distinctive characteristics suitable for the purpose intended. Engines of the most varied nature, from the speedy mail boat to the sturdy tug, are constructed in the local works to satisfy the most fastidious in the matter of speed, power and compactness.

The geographical position and urban disposition of Greenock have in recent years prevented an expansion of existing yards to cope with the magnitude of modern shipbuilding demands. A congested area of the town has been absorbed for the purposes of shipyard extension. Old properties have been razed to the ground, narrow streets obliterated, and the old harbour and dock filled up to enable local enterprise to cope with increasing needs, and local workmanship to maintain its proud position in the van of maritime progress.

Boiler making and the manufacture of auxiliary engines—steering, pumping and hoisting—also figure conspicuously in the yearly output of engine power, which, in recent years, has attained enormous figures. But the scope of local engineering is not confined to purposes of the sea alone. Stationary engines and the manufacture of sugar machinery and appliances also play their part in the industrial energies of Greenock, and a considerable export trade to the East is carried on in this connexion.

In the past, as in the present, Greenock was ever to the fore in the many movements and reforms which revolutionized shipbuilding and marine engineering. With the widening of maritime interests and the healthy spirit of emulation there has been a great development of oversea trade which has necessitated constant advances in design and workmanship. With the march of science, the improvement of constructional material and the invention of new machinery, a policy of constant progress is absolutely necessary to maintain the ascendancy of British shipping throughout the world, because our mercantile marine is as necessary to the supremacy of the sea as the fighting forces of the Royal Navy. The shipbuilders and engineers of Greenock are, to-day, as well endowed as, and better equipped than, their predecessors to contribute to that ascendancy.

Any calls upon the engineering trade have been met by the responsive energies of local works, and the prestige and capacity of Greenock engineers was never higher.

While the memory of James Watt will ever be revered in Greenock the example of his inventive genius is manifest in the progressive spirit of his townsmen. The technological knowledge and scientific skill which so much influenced the career of Watt were never more fully appreciated as necessary to maintain the pre-eminence of our country in the markets, as well as the counsels of the world, than in Greenock to-day.

The expansion of the port and the development of its harbour works have been commensurate with the growth of its industries. Recent improvements in fitting-out facilities and increased deep-water berthing became necessary through the greater carrying capacity of modern vessels. Looking
to the spirit and energy of the past, we may anticipate further developments in the same direction when increasing needs demand them. Shipbuilding through various causes has suffered a slight diminution since the War; but the facilities are still present, and when the national capacity is more in line with the world’s needs an improvement in local conditions should result. The demands of the Admiralty, however, in ships and engines which were at one time prominent features of local output, are not likely to be recovered.

Engineering has increased in volume and is as important as ever. The constant demands for highly specialized machinery and the continual need of adopting new inventions and improvements have been fully met. The steady flow of work with more regular employment is characteristic of the up-to-date engine shops now in vogue.

The large number of vessels now engined at Greenock with its excellent harbour and crane facilities, provides a considerable revenue to the Greenock Harbour Trust. This is all the more satisfactory as there has been in recent years a falling off in the coasting trade—particularly with Ireland—which has caused a noticeable dullness at some of the harbours.

VICTOR C. MEYER.

STEVEDORES
Archibald S. Rodger, 42 Forsyth Street, Greenock.
Charles McKenzie, 6 Boyd Street, Greenock.
William C. Honeyman, 93 Hope Street, Glasgow.
Geo. Palmer & Son, Station Road, Grangemouth.
Duncan Berndt, 38 Brymner Street, Greenock.
Jas. Hunter McIntyre, East End Princes Dock, Glasgow.
William Cameron, 98 Victoria Cottages, Greenock.
Mrs. Margt. Fisher, 7 Ardgowan Street, Greenock.
Jas. A. McCallum, 223 Victoria Road, Glasgow, S.2.
Chas. Murray, 35 Nelson Street, Greenock.
Duncan Nicol, St. Leonards, Kilmacolm.
D. Henderson, 10 Sandringham Terrace, Greenock.
John Edgar, Glenista, Kilmarnock Road, Newton Mearns.
Robt. P. Shaw, 118 Manor Road, Dumbreck, Glasgow.
Alexander Colquhoun, Secretary, Greenock Porterage Co. Ltd., 27
Cathcart Street, Greenock.

Miscellaneous Trades
As befits a busy manufacturing town there are carried on within its confines several industries of greater variety than magnitude. In textiles, worsted and woollen manufactures have for long been successfully conducted, and paper-making and rope-spinning are also actively pursued. The manufacture of chemicals—including animal charcoal, which is an important agent in sugar refining—is also carried on.

Cask and case-making, and wood-working for ship and house purposes have their place in the town’s activities, while boat-building in connexion with new shipping is busily prosecuted. Several trades, cognate to the staple industries, are extensively practised, such as copper, brass and other metal work.

The distribution of machinery and material for shipbuilding on the lower reaches of the Clyde is largely carried on from Greenock, and, in addition to the import of raw sugar, a large trade in refined sugar is done coastwise, providing considerable traffic at the harbours. In more recent times a large Royal Naval Torpedo Factory was established at Fort Matilda. Both before and during the War an extensive manufacture of submarine projectiles was carried on, employing much labour and material. Much of the skilled labour was transferred from the Government works, at Woolwich, and made a large increase to the population of the district.

V. C. M.
Technical Training

The year 1812 saw the launch of the Comet on the Clyde, near Greenock, and the beginning of the most momentous changes and developments in the realm of shipbuilding and engineering. And no less remarkable than the advance in scientific practice has been the advance in technical training.

The first two steamboats built at Greenock in 1816 were fitted with double engines by Boulton & Watt, of Soho, and the same year James Watt, the great inventor, founded the "Scientific Library of Greenock," in the hope that it might render his townsmen as eminent for their knowledge as they were for their enterprise. It was ever the aim of James Watt to stimulate in others that research and invention which had so influenced himself, and to awaken an interest in scientific study that would lead to practical results.

While his Scientific Library is still extant it is appropriate that one of the memorials in his native town should take the form of a School for Technical Education. There had for long been a project to erect some permanent and practical memorial of James Watt in the town of his birth and associated with his life and work. The aim was local, but the appeal was international, and, largely through the munificence of the late Mr. Andrew Carnegie, the present building was erected on the site of the inventor's birthplace.

The James Watt Memorial Engineering and Navigation School, wherein are housed some relics of the eminent engineer, provides opportunity for the artizan or draughtsman to study the science of his craft along with its practical application.

Under the control of the Education Authority, and admirably conducted, this technical school has classes for Naval Architecture, Ship Construction, Engineering and Navigation. The youth of Greenock have, therefore, every opportunity of perfecting themselves in those branches of knowledge which, while owing so much to James Watt, have contributed so materially to the prosperity of the town of his birth.

V. C. M.

Chamber of Commerce

The Chamber of Commerce and Manufactures of Greenock was incorporated by Royal Charter in 1818, and has therefore been for more than one hundred years intimately associated with the trade and industry of the town.

Composed largely of the local manufacturers and traders, it has ever been on the side of commercial enterprise and industrial progress, and has actively striven for the protection and improvement of the town's commercial interests. With these objects it has been instrumental in redressing many grievances, advocating many reforms, and generally maintaining a close touch with Parliamentary and Government movements which concern the business life and work of Greenock.

The early and persistent action of the Chamber was largely instrumental in the abolition of Foreign Sugar Bounties, with its beneficial results to the British Sugar Trade. It has always been well served by its directors, and its deliberations have ever been characterised by judgment and energy. Age has not withered its influence nor abated its interest, and, as it still fully represents the mercantile and industrial concerns of the town, its work in the many reconstruction problems which are now before the country is bound to be of moment to the town and its trade.

V. C. M.

Banking Facilities in Greenock

As befits a busy commercial town, the banking needs of the community are adequately supplied. All the Scottish Banks, most of which are associated with English concerns, have Agencies in the town. The Branches and
By courtesy of
John G. Kincaid & Co. Ltd.,
Engineers, Greenock.

DIESEL MACHINERY READY FOR
LIFTING ON BOARD NEW VESSEL
AT JAMES WATT DOCK.

By courtesy of
John G. Kincaid & Co. Ltd.,
Engineers, Greenock.

MOTOR VESSELS BEING ENGINED
BY MESSRS. KINCAID & CO. AT
JAMES WATT DOCK CRANE.
Agents are as under:

Bank of Scotland ... ... ... ... ... ... Robert J. Gourlay.
" " West-end Branch ... ... ... ... ... ... William Morrison.
British Linen Bank ... ... ... ... ... ... ... ... ... ... ... W. T. Rodger.
Clydesdale Bank Ltd. ... ... ... ... ... ... ... ... ... ... ... A. R. Stewart.
" " East-end ... ... ... ... ... ... ... ... ... ... ... D. T. Balmano.
Commercial Bank of Scotland Ltd. ... ... ... ... ... ... ... William Paton.
" " West-end ... ... ... ... ... ... ... ... ... ... ... Arthur Murray.
" Newton Street ... ... ... ... ... ... ... ... ... ... ... John Cameron.
National Bank of Scotland Ltd. ... ... ... ... ... ... ... ... ... ... ... R. Davie.
" North of Scotland Bank Ltd. ... ... ... ... ... ... ... ... ... ... ... T. B. Rowan and C. P. McNeil.
Royal Bank of Scotland ... ... ... ... ... ... ... ... ... ... ... John Young.
" West-end ... ... ... ... ... ... ... ... ... ... ... W. J. Simpson.
Union Bank of Scotland Ltd. ... ... ... ... ... ... ... ... ... ... ... A. D. Cook.
" West-end Branch ... ... ... ... ... ... ... ... ... ... ... William Holmes, Cashier.

Greenock Provident Bank

One of the oldest and most prosperous institutions in Greenock, and one which is a direct reflection of the trade and industry of the town, is the Greenock Provident Bank. Founded in 1815, it took 102 years of steady progress for the total funds to reach £1,000,000; but the operations of the last 12 years have doubled that figure and the Bank's funds are now over £2,000,000. That this large sum reflects the savings of the people is evident from the fact that the accounts number more than 39,000, a very large proportion of the total population of Greenock and district. The handsome Head Office and branch banks are commodious and well suited for their purpose.

Ferry Connexion with Helensburgh

A passenger steamer owned by the London & North Eastern Railway Co. maintains a ferry service between Greenock, on the south bank, and Craigendoran and Helensburgh on the north bank of the Clyde. The service, in operation on week-days only, takes the form of four journeys each day. The service during July and August is usually similar, with the addition of a "Saturdays only" sailing from Helensburgh at 6.12 p.m. and Craigendoran 6.25 p.m., with a return sailing from Greenock at 6.45 p.m. Some of the sailings from Greenock also serve the Gareloch as far as Garelochhead. Cargo is not conveyed to or from Greenock on Saturdays. The rates for the conveyance between Greenock and Helensburgh of motor-cars, motor-cycles and bicycles are as follows:

Motor-cars not exceeding 10 cwts. ... ... ... ... ... ... ... ... ... 12/6
" 15 cwts. ... ... ... ... ... ... ... ... ... ... ... 20/-
" exceeding 15 cwts., but not exceeding 25 cwts. ... ... ... ... ... ... 25/-
" exceeding 25 cwts. ... ... ... ... ... ... ... ... ... ... ... 30/-
Motor-cycles ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... 2/-
" with Sidecars ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... 4/-
Motor-cars and motor-cycles with sidecars are only carried when the tide is suitable (i.e., when the deck of the steamer is level, or nearly so, with the quay).
Bicycles ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... 9d.
USEFUL FACTS AND FIGURES

General Information

**Accommodation:** Hotels—Tontine (R.S.A.C., A.A.); Wheatyshead; Western; Ritchie's Temperance; and The Royal.

**Area of Burgh:** 3,170 acres.

**Clubs:** Greenock Burns Club (Mother club); Renfrewshire Musical Festival; Ardgowan Club; Highland Society; Camera; Musical; Greenock Cricket Club; Greenock Golf Club; Royal West of Scotland Amateur Boat Club.


**Early Closing Day:** Wednesday.

**Electors:** Parliamentary (1930), 43,735; Local Government (1930), 35,708.

**Market Day:** Tuesday.

**Motor Repairers, Agents, etc.:** Duncan Angus, 56 Roxburgh Street; William Boyce, 80 Roxburgh Street; W. H. Coghill, 21 Trafalgar Street; William Dunlop, 16 Duncan Street; A. Gibson, 11 Kilblain Street; Greenock Motor Services, Ladyburn; Hamilton Bros., 21 Cathcart Street; Alexander Hanna, 1 Kelly Street; G. B. Laird, 44 Campbell Street; Lang’s Garage, 50 Union Street; David C. Leslie, 54 Kelly Street; J. D. McGregor & Co., 24 West Blackhall Street; Thomas M’Kim, 4 George Square; John Robertson, 40 Cathcart Street; John Robertson, 36a Union Street; Alex. Service, 14 Robertson Street; Webster’s Garage, 29 Forsyth Street; West Renfrew Motors Ltd., 28-30 Brougham Street; P. B. Wright & Son, 43 West Blackhall Street; R. W. Robson, 4 Prospecthill Street.

**Population:** 81,123 (1921 census).

**Public Parking Places:** No official parking places, but exception is not taken to cars parked on vacant ground at Dalrymple Street, Hunter Place and Wallace Place.

**PUBLIC SERVICES**

**Water Rates:** Domestic water rate, 1/3 per £; public water rate, 3d. per £.

*Filtered Water.* Quantity used per quarter of year. Rate per 1,000 gallons of consumpt in each separate work or premises—

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<td>2,000,000 to 3,000,000</td>
<td>2,000,000 at</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Remainder at</td>
<td>...</td>
<td>...</td>
<td>9d.</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>3,000,000 to 4,000,000</td>
<td>3,000,000 at</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Remainder at</td>
<td>...</td>
<td>...</td>
<td>8d.</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>4,000,000 to 5,000,000</td>
<td>4,000,000 at</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Remainder at</td>
<td>...</td>
<td>...</td>
<td>7d.</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>5,000,000 to 6,000,000</td>
<td>4,000,000 at</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Remainder at</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>6,000,000 upwards</td>
<td>6,000,000 at</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Remainder at</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
</tbody>
</table>

*Unfiltered Water.* Quantity used per quarter of year. Rate per 1,000 gallons of consumpt in each separate work or premises:

First 6,000,000 gallons at | ... | ... | 3d. per 1,000 gallons
Remainder at | ... | ... | 2d. per 1,000 gallons

**Gas:** Scale of Charges for year 1929-30: *Prepayment Consumers*—7-75d. per therm (equivalent to 2/7-775d. per 1,000 cubic feet). *Public Street Lighting*—7-0d. per therm, less 10 per cent discount. *Harbour Lighting*—7-0d. per therm.

33
**Sliding Scale of Charges for Domestic and Industrial Purposes**—The undernoted rates for domestic and industrial purposes are charged when the consumption per quarter is for quantities:—

<table>
<thead>
<tr>
<th>Scale</th>
<th>Therms</th>
<th>Cubic Feet</th>
<th>Price per Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A 1</td>
<td>41</td>
<td>10,000</td>
<td>7/25d. 2/5 725</td>
</tr>
<tr>
<td>2.</td>
<td>Over 82</td>
<td>20,000</td>
<td>7/00d. 2/4 7</td>
</tr>
<tr>
<td>3.</td>
<td>82 and</td>
<td>50,000</td>
<td>6/75d. 2/3 675</td>
</tr>
<tr>
<td>4.</td>
<td>205</td>
<td>100,000</td>
<td>6/50d. 2/2 65</td>
</tr>
<tr>
<td>5.</td>
<td>410</td>
<td>250,000</td>
<td>6/25d. 2/1 625</td>
</tr>
<tr>
<td>6.</td>
<td>1,025</td>
<td>500,000</td>
<td>6/00d. 2/0 6</td>
</tr>
<tr>
<td>7.</td>
<td>2,050</td>
<td>1,000,000</td>
<td>5/50d. 1/10 55</td>
</tr>
<tr>
<td>8.</td>
<td>4,100</td>
<td>2,000,000</td>
<td>5/00d. 1/8 5</td>
</tr>
<tr>
<td>9.</td>
<td>8,200</td>
<td>3,000,000</td>
<td>4/75d. 1/7 475</td>
</tr>
<tr>
<td>10.</td>
<td>12,300</td>
<td></td>
<td>4/25d. 1/5 425</td>
</tr>
</tbody>
</table>

The above rates apply only to gas consumed in one and the same premises, and when registered through approved meters.

When comparing the price of gas in Greenock with the price elsewhere the amount and nature of the public service included should always be considered. For example, in Greenock free cooking appliances, free meters, and a highly popular free maintenance service are provided. In many towns an additional charge is made for these services.

**Electricity. Scale of Charges:**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Lighting</th>
<th>Power</th>
<th>Heating</th>
<th>Special Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flat Rate</td>
<td>per annum per kilowatt</td>
<td>per annum per kilowatt</td>
<td>per week</td>
</tr>
<tr>
<td>W1</td>
<td>$18</td>
<td>$16</td>
<td>$14</td>
<td>1/-</td>
</tr>
<tr>
<td></td>
<td>$12</td>
<td>$12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For users up to one kilowatt
1 kilowatt—5 kilowatts
5 kilowatts—10 kilowatts
For users above 10 kilowatts

**Ordinary**

X1

Per Unit

For the first 250 units per quarter $3 1d.
From 250 units to 1,000 units per quarter $3.
From 1,000 units to 5,000 units per quarter $2 1d.
Above 5,000 units per quarter $2 1d.

2

**Annual Charge**

$9 15s. 0d. per annum per kilowatt of maximum demand, plus 8d. per unit for all energy used.

**Y**

Flat Rate

1/-

**Z**

Pro-Rata Rate:—For offices, shops, etc., where lighting and heating not separately metered according to special agreement.

"All Electric" House Rate:

Size of House | Fixed charge per week |
--------------|-----------------------|
2 Apartments  | 1/-                   |
3 do.        | 1/3                   |
4 do.        | 1/7                   |
5 do.        | 2/1                   |
6 do.        | 2/8                   |
7 do.        | 3/3                   |
8 do.        | 3/10                  |
9 do.        | 4/7                   |
10 do.       | 5/4                   |
11 do.       | 6/5                   |
12 do.       | 7/5                   |

plus 3d. per unit for the first 1,000 units per quarter. All over 1,000 units per quarter, 3d. per unit.

34
USEFUL FACTS AND FIGURES

Pro-Rata Rate:—For Dwelling Houses.

Units estimated as Normal Lighting

Size of House. Consumption and charged at 5½d. per unit.

2 Apartments ... ... ... ... 70
3 do. ... ... ... ... 105
4 do. ... ... ... ... 140
5 do. ... ... ... ... 180

All units over the above amounts charged at 1½d. per unit.

Special Water-Heating Rate during restricted hours (10 p.m.—6 a.m.), Flat Rate ... ... ... ½d.

Special supplies to large power users on sliding scale—1·6d. to 8d. per unit with coal clause.

BRIEF NOTES ON SOME LOCAL FIRMS ADVERTISING IN THIS HANDBOOK

BLAKE, BARCLAY & CO. LTD., Sugar Refinery Engineers, Victoria Works, Macdougall Street, Greenock.

Established in 1888, this firm are to-day one of the largest designers and erectors of complete sugar refining plants in the world.

Complete sugar refineries are designed, equipped and erected. Many of the largest sugar refineries in Great Britain, Australasia, Canada, China and Japan have been installed by this firm, some of them having capacities exceeding 5,000 tons per week. Plans and estimates to suit all requirements in any part of the world are submitted on application. A speciality is made of accessory machinery and fittings for sugar refineries including Blowups and Continuous Melters; Bag Filters; Charcoal Cisterns and Kilns; Vacuum Pans; Crystallizers; Granulators, etc. Also Conveying and Elevating Machinery; Drying Plant, etc. (For advertisement see page 3)

JOHN WALKER & COMPANY (SUGAR REFINERS) LIMITED, 5 Princes Street, Greenock.

This firm was established in 1849 by John Walker and James Speirs, and incorporated as a private limited company in 1928.

The refinery covers several acres of land, and the employees number about 350. The output consists of all grades of Sugar, Golden Syrup, Refined Table Treacle and Cane Molasses. The business is home, foreign and colonial in its operation.

Walkers’ are Contractors to H.M. Government.

Address of registered offices—36 Mark Lane, London, E.C.3. Glasgow office—41 Virginia Street. (For advertisement see page 4)

A BRIEF HISTORY OF SCOTTS’ SHIPBUILDING & ENGINEERING CO. LTD.

The firm now known as Scotts’ Shipbuilding and Engineering Co. Ltd. was founded in 1711 by John Scott, who built herring busses and small craft, his yard being at the mouth of the West Burn on the site now occupied by Harland & Wolff’s yard. For a number of years the output was almost entirely confined to fishing and coastal vessels but with the opening of the Greenland whale fisheries in 1752, a development in the size of ships began.

In 1765 the firm built a large square rigged ship for Hull owners, this being the first vessel for owners out of Scotland. With the building of a dry dock and basin in 1767 a period of great activity commenced. In 1791 and again in 1794 the largest ships built in Scotland were the product of Scotts’. At the beginning of the nineteenth century, much of the work
done was for the West India trade, but although the number of ships built was large, the total tonnage was small, the vessels seldom being more than 600 tons.

When the monopoly of the East India Company was annulled in 1814, a great expansion in ocean trade followed and the Scotts were among the first to turn out fast clippers for the Indo-China trade.

Their most famous ship of this type was the "Lord of the Isles," completed in 1856, noted for its record passages.

When the era of the steamship opened, the firm was early in the field. Greenock Foundry had been acquired in 1790 and marine engine building commenced in 1825, the first set being for a ship named "Trinacria."

The first building contract for the Admiralty entered into was in 1803 when the sloop "Prince of Wales" was constructed.

Engines for warships were first made in 1838-9, when the machinery for the Royal Dockyard-built "Hecla" and "Hecate" was supplied. The first steam frigate built on the Clyde was H.M.S. "Greenock" in 1849. This was the largest iron warship of her day and the first to be fitted by the Scotts' with the screw propeller.

Steamers were built for many well-known mercantile firms in their early days. The P. & O. Co. had several steamers built by Scotts' for their Mediterranean and Eastern trade. Contracts were made with the Royal West India Mail Co., in 1841, the Holt Lines in 1855, when they traded to the West Indies, and for Holt's China steamers in 1865. The early Holt liners, built and engined by Scotts', starting from Liverpool made Mauritius their first stop, a run of 8,500 miles under steam the whole way, a feat until then considered impossible. This early connexion with the China trade has lasted to the present day, the firm seldom being without a vessel building for the eastern services.

In modern times the progressive policy of the firm is suggested by the fact that they built the first Dreadnought Battleship and the first Submarine vessel constructed on the Clyde; also the first ocean liner to be propelled by geared turbines and the first steam-driven submarine. Previous to and during the War, they contributed warships of practically every type required for the British Naval Service.

Since the War Messrs. Scotts' have built the first ship in which the new "Elastic Limit" steel is used for the hull and also the largest Diesel-electric Tanker built in this country.

At the present time all types of marine engines are constructed, steam reciprocating engines and boilers, steam turbines and gearing, and Diesel oil engines of both two-stroke and four-stroke types.

(For advertisement see page 2)

GEORGE BROWN & COMPANY, Ship Builders, Garvel Shipyard, Greenock.

This firm was commenced in 1900 by Mr. George Brown, as a Shipbuilding and Repairing establishment. They build the smaller special type of vessels, and up to 5,000 tons, deadweight cargo carriers. Of the many vessels built, a very good proportion have been repeat orders from owners who were well-satisfied with their previous ones.

The Yard is well situated alongside the James Watt Dock, and has good accommodation for dealing with the work. On several occasions extensions have been made, and its equipment improved. The machinery is up-to-date, and capable of dealing with a large output.

In repairs, also, this firm have done much valuable work, and they are always ready to carry out a good job in the shortest possible time.

(See advertisement on page 46)
NOTES ON LOCAL FIRMS

JOHN G. KINCAID & CO., LIMITED, Marine Engineers and Boilermakers, East Hamilton Street and Arthur Street, Greenock.

This firm was established in 1868 under the name of Hastie, Kincaid & Donald, and was incorporated in 1906 as a limited liability company under the style of John G. Kincaid & Co. Limited.

The present Directors are: Mr. James S. Kincaid (Chairman and Managing Director), Mr. Randal G. Kincaid, Mr. Alexander Storrar, Sir Alfred H. Read, Mr. Robert Greer, Mr. George E. Carter and Mr. Alexander Paterson.

Within recent years the works of Messrs. Kincaid have been considerably extended, and their East Hamilton Street Works are specially laid out for the construction of Diesel Machinery on the Burmeister & Wain-Harland & Wolff principle. In their Arthur Street Works, which were formerly the Engine and Boiler Works belonging to Messrs. Caird & Co. Limited, Steam Reciprocating Engines and Boilers are constructed.

With their large premises and most efficient plant the firm are able to construct machinery and boilers for passenger and cargo steamers of the largest sizes and powers.

(For advertisement see page 43)

THOMAS BLACK & SONS (GREENOCK) LTD.

In the year 1863 when this business was started, Greenock was a busy town with its harbours overcrowded with ships of every nationality jostling with those registered at the port. The firm found ample scope in supplying the needs of these ships in sails, canvas, ropes, and the many articles from needles to anchors, required in a ship's equipment. But, as a result of the great changes following on the invention of our illustrious townsman, James Watt, the sailing ship with all its halo of romance, gradually gave place to the steamsip. Although considerable diminution has thus resulted in the shipping side of the business ample facilities and stocks to meet the needs of ships and yachts are always on hand. The old-established sailmaking business of Ferguson & Co. (1854) has been acquired, and the high tradition of that firm for yacht work is fully maintained. About thirty years ago the firm started Tent and Marquee making. Now the name of Black's, Greenock, Tentmakers, is known, and has its products scattered in almost every part of the world, civilized and uncivilized.

To carry on this large and expanding business, skilled and enthusiastic workers are accommodated in well-equipped workshops. Besides the head-quarters workshops and stores in Greenock, the firm has offices and stocks in Glasgow and London. Besides making tents, marquees and tarpaulins, the firm carry a very large equipment of hiring stock.

(For advertisement see page 48)

THOMAS BOAG & CO., LTD., Sack Manufacturers and Merchants,
St. Andrew Street, Greenock.

This well-known firm is engaged in the manufacture and distribution of Jute Sacks and Bags of every description. They have important Branches and Warehouses at Aberdeen, Glasgow, Liverpool and Bristol.

Besides catering for the home trade, they are large shippers to all parts of the world, and have special facilities for the handling of export business. Employment is given to quite a large number of female workers both here and at the various branch establishments.

(For advertisement see page 3 of cover)

THE ALUMINIUM CASTINGS COMPANY LIMITED, Ingleston Foundry, Greenock.

This business was originally started in August, 1901, and was carried on as a private firm until it was incorporated as a limited company in December, 1906.
P. MacCallum & Sons
LIMITED

Iron, Steel, Tinplate, Metal and
General Merchants. Ship Owners.
Stockholders and Buying Agents.
Freight Contractors and Specialists for
the Transport of Heavy & Bulky Machinery
by Specially Constructed Steamers.

BARS, IRON & STEEL
FERRO CONCRETE BARS
FORGINGS
HOOPS, INGOTS, SLABS, BLOOMS
PLATES (Ship and Boiler)
" (Tin, Terne and Lead-coated)
PIG IRON
RAILS
RIVETS
SECTIONS
SHEETS (Plain)
" (Galvanized and Corrugated)
ANCHORS
BOILERS
CHAINS

ENQUIRIES INVITED

STOCKYARD: Cathcart Street, Greenock.

54/56 Rue End & 1/3 Cathcart Street
GREENOCK

CABLES: MacCALLUM, GREENOCK.
Telephones: Greenock 401 & 402; Central Glasgow 14.
Codes: Scott's, ABC (5th Edition), Watkin's, Bentley's, Marconi.
NOTES ON LOCAL FIRMS

The manufacture of Cast Pure Aluminium Cooking Utensils was started on a small scale at the opening of the works, and under the registered trademark "Solar" the articles are now known all over the world.

The Company also do a considerable business in Aluminium Castings for shipping, motor car and general engineering work.

(For advertisement see page 42)

JOHN DRUMMOND & SONS LTD., Greenock.

This business was established in 1876 by Mr. John Drummond, and was for some time entirely devoted to the Cooperage Industry. Some years later the business of Packing Case Making and Sawmilling was added to the firm's activities, and later still that of Tin Box making and Tin-printing. The firm was the first in Scotland to enter the Tin-printing trade, and this department has been considerably developed in recent years. In all branches of the business up to date machinery is used, and many specialities in packages produced.

The Cooperage Works are situated in Dellingburn Street and the Packing Case and Tin Box Works in Rue End Street.

The firm specializes in the production of decorated and plain tin boxes stamped, and packed in the flat for Export, and ready for putting together, also the necessary plant for assembling these boxes.

The Directors of the firm are the founder, Mr. John Drummond, and his sons Provost John Drummond Jr., and Neil Drummond.

(For advertisement see page 45)

MACFARLAN, SHEARER & CO., Greenock.

This well-known firm of Millers, Grain, Fertilizer & General Agricultural Merchants was established over seventy years ago. An extensive business is maintained in Scotland generally, particularly in West and Central Scotland and the West Highlands.

They are the sole manufacturers of the "Topkrop" Compound Fertilizers and of the well-known "Tooktook" Poultry Foods.

Their mills and stores are well equipped and quick dispatch is ensured by their close proximity to the docks and the firm’s own private siding connected with the main railway line. The firm imports Fertilizers and is seeking markets overseas for their Compounds.

They are the European Agents for the Collis Products Co., of Iowa, U.S.A., and they do a large business in Pure Dried Buttermilk both in the U.K. and on the Continent.

(For advertisement see page 47)

BURROW'S R.A.C. COUNTY ROAD MAP
and Gazetteer

A UNIQUE SERIES. An entirely new invention with every object of interest in the County at a glance

A Series of 24 Books, 1/6 each number
Send for List Double Numbers 2/- net each

The Spectator says—"An excellent idea, superbly executed, and will come as a boon to the Motorist, for they give him exactly what he wants to know and nothing else."

Of all Booksellers
ED. J. BURROW & CO. LTD., IMPERIAL HOUSE, CHELTEMHAM and Central House, 43, 45, 47 Kingsway, London, W.C.2

39
A satisfactory hot water apparatus is the chief factor in promoting household efficiency, and hot water may be used at a moment's notice by the use of a gas water heater.

For heating, gas fires possess many advantages. They are clean, convenient, healthy and economical, and they can be called into action immediately.

To the kitchen, gas cookers will bring economy and banish stuffiness in winter and undue heat in summer, while the problem of refuse destruction has been solved by the aid of the gas undertakings, in two perfectly cleanly as well as economical methods:

(1) By means of a small stove heated by gas coke serving also a hot water service.

(2) By a gas incinerator where both cooking and water heating are done by gas.

Gas has indisputably demonstrated its superiority by reason of its cleanliness, convenience, economy and labour saving.
As supplied to Leading Caterers and Shipping Firms

Ask your store to show you some of the various designs

Manufacturers of ALUMINIUM CASTINGS

AND

CAST ALUMINIUM WARE

The ALUMINIUM CASTINGS Co. Ltd.
INGLESTON FOUNDRY GREENOCK
DIESEL ENGINES
on
BURMEISTER & WAIN SYSTEM
Under Licence from
Harland & Wolff Ltd.

STEAM TURBINES

RECIPROCATING ENGINES

MARINE BOILERS

Speciality:
MARINE DIESEL MACHINERY
ALSO STEAM ENGINES
AND BOILERS for EXPORT

Telegrams:
"Kincaid, Greenock, Scotland."

Codes:
Engineering Telegraph. Bentley's.
James Lamont & Co. Ltd.

Dock Breast, Greenock and Castle Yard, Port Glasgow

Engineers, Boilermakers: and Ship Repairers:

Private Dry Docks and Patent Slipways
John Drummond & Sons
LIMITED

COOPERS, VAT BUILDERS and
PACKING CASE MAKERS.
TINPLATE PRINTERS and
—— TIN BOX MAKERS ——

Departments

COOPERAGE. Vats built for all purposes, also shooked
for Export. Casks, etc., New and Second-hand,
for all trades.

PACKING CASE, Wooden cases, etc., for Home
and Export trade, plain and tin or zinc lined.
Box shooks for Export.

TIN. Decorated and plain Tin Boxes and Canisters
of every description. Lever-top Tins for Syrup,
Soap, Jam, etc., a speciality. Show Cards,
printed on Tin, in all sizes.

Exporters of complete Fittings, decorated, stamped and
ready for making into Tin Boxes and Canisters. Machines,
etc., necessary for putting parts together also supplied.

52 Rue End Street, Greenock

Telephones: 139 & 1093. Telegrams: "Vats, Greenock."

Glasgow Office: 87 Union Street
Telephone: Central 6073.
GEO. BROWN & CO.

Shipbuilders and Repairers - Greenock

THE

Austin MAGAZINE

THE MOTORING JOURNAL of MAGAZINE STANDARD

is Published at 4d. each month
and should be read by every Motorist,
whether an Austin Owner or not. Contribu-
tors include many of the leading figures
in the Automobile world.

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FREE SPECIMEN COPY

sent on application to the Publishers:

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and Central House, 43-45-47 Kingsway, London, W.C.2
Macfarlan, Shearer & Co.

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of FERTILISERS,
FEEDING MEALS & GRAINS

Sole Proprietors:
"Topkrop" Compound Fertilisers
and
"Tooktook" Chick & Poultry Foods

Sole European Agents for
"Collis" Pure Dried Buttermilk
for Chicks, Poultry, Pigs, Calves,
etc.

Export enquiries specially invited
for all kinds of Fertilisers and
Compound Fertilisers for any Crop.

ROYAL CLOSE, BOGLE STREET
GREENOCK

Telegraphic Address: "Macfarlan Greenock"
Code: ABG 6th Edition
Telephone: 232 & 233
THE ROMANY TENT

Thomas Black & Sons [GREENOCK] Ltd

Directors:
Thomas Black
D. Crawford Black
T. Stuart Black

Telegraphic Address:
"Satisfaction, Greenock."

Works and Registered Office:

25 Cathcart Street, Greenock

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GLASGOW OFFICE: ROYAL EXCHANGE SQUARE

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Tents and Canvas Goods
suitable for all climates

LARGE HIRING STOCK

Proprietors of the Old
Established Business of

Ferguson & Co.
Established 1884

Makers of

YACHT and SHIPS’

SAILS
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LONDON  GLASGOW
LIVERPOOL  ABERDEEN
MIDDLESBRO'  DUNDEE
BRISTOL  BELFAST

THOS. BOAG & CO.
GREENOCK

New & Secondhand SACKS
Dundee & Calcutta

HESSIANS • CANVAS
TWINES
Home & Export

CODES:
ABC (4th, 5th & 6th Ed.). ACME. BENTLEYS. MARCONI
INTERNATIONAL, WESTERN UNION & PRIVATE.
With the Compliments of

ED. J. BURROW & CO LTD

PUBLISHERS & PRINTERS

CHELTENHAM & KINGSWAY LONDON
Gas for

Industrial Purposes.

Do scientific methods of fuel utilisation pay? Undoubtedly they do, in every direction. A factory in war time does not increase its annual consumption of gas from 4 million to 14 million cubic feet—another from 3 million to 15 million—a third from 1 million to 40 million—unless there is profit in it for the individual.

At the same time the nation benefits when gas is used instead of coal by the decreased drain on its not inexhaustible reserves, and by the production of dyes, drugs, explosives, fertilisers and other valuable substances lost when crude coal is consumed.

Enquiries invited at

Greenock Corporation
Gas Department

Telephone:
Distribution Department: Greenock 1200.
Gas Works General Office: Port Glasgow 40.