

DUNDEE HARBOUR TRUST

CENTENARY

1830—1930

History and Development
of the Harbour of Dundee

COMPILED BY
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Clerk



HOUSE FLAG
DUNDEE HARBOUR TRUST

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CENTENARY

17th June 1830 ————— 17th June 1930

THE HARBOUR OF DUNDEE has played an important part in the growth and development of the City of Dundee, and of the large district served by the Port, and the Centenary of the Constitution of the Harbour Trust seems an appropriate time for presenting some facts and figures relative to the past history of the Harbour.

The Harbour of Dundee, which is situated on the North Side of the River Tay, at its broadest part, and distant about ten miles from the Sea, dates from very ancient times, and its history is linked up with that of the City and of the Nation.

The North Sea is swept by prevailing east winds for the greater part of the year, and the tiny craft of a few centuries ago had no refuge from Buchan Ness to St. Abb's Head except the Tay. The numerous small harbours on the coast were not available in stormy weather, the Firth of Forth, exposed to the fury of the east wind, was equally dangerous, while the Tay, protected by Tentsmuir Point on the South, and Buddon Ness on the North, and the Gaa Bank and the Abertay or Drumlay Bank, which form natural breakwaters, afforded a safe anchorage.

This fact doubtless led to the establishment of fishing settlements near Dundee, and from remains, consisting of urns of unburnt clay, stone coffins with human remains, etc., found at the Stannergate during the last hundred years, this seems to have been the case. Perhaps the most valuable of these archæological finds was the disclosure of a large shell bed or "Kitchen Midden," which was exposed during excavations carried out between the River and the Railway in 1878.

This deposit, which measured 100 feet by 60 feet, contained a large number of the shells of edible mollusca, mixed with burnt wood, pieces of bone artificially split, porpoise bones, deer horns, and stone implements, plainly showing that a colony of fishermen had resided at this spot. The date was probably long anterior to the Roman occupation of Scotland, since 12 cists or stone coffins of the latter era were discovered interred eight feet above the shell bed.

It can be shown by records within historic times that the locality was regularly used as a harbour of refuge. Wyntoun states that about 1040 the ships of Malcolm Canmore, when that monarch was pursuing Macbeth, entered the Tay to support his soldiers, and although no records of commerce exist regarding this period, it is certain that a river which was navigable for ships of war would afford equal facilities for those engaged in commercial enterprise.

It is remarkable that the earliest Charter to the Burgh of Dundee—viz., that given by William the Lion, and confirmed by Robert the Bruce—granted a free Harbour to the Burgesses, thus implying that a Harbour had been in existence before his time.

The first reference in documents to the existence of an actual Shipping Harbour is found in connection with the Abbey of Coupar.

Dundee was the Port at which all merchandise arriving in Scotland for the use of the Abbey was received, and on April 11th, 1225, Alexander II. granted a license for a vessel to the Abbot of Coupar,

“To export wool and other merchandise to Flanders under the charge of Robert of Pert and Friar Gilbert Faber.”

That Dundee was used as a Harbour for Import in the thirteenth century, is amply proved by numerous entries in the Exchequer Rolls.

In 1264 the wine which was brought to Scotland for use in the Castle of Forfar was landed at Dundee, and in the same year there was bought at the Fair of Dundee, for the King's use, cloth and fur, which must have been imported.

Though it is difficult to form an adequate idea of the extent of the trade at the port at this early time, the accounts of the Customs levied on exports furnish some data by which to form an estimate.

Thus in the accounts of the Customs for the year 1326-1327, the earliest document of the kind extant relating to Dundee, we find that

there were carried in 18 ships which sailed from Dundee, 68 lasts, 3 sacks, 9 stones of wool, 4203 woolfels, 7 lasts, 19 daces, and 3 hides. The Customs levied amounted to £240 4s 8d.

Among the imports of that year were various super tunics of grey cloth, and of coloured materials, several pieces of dyed fabrics for the King's use, and confections and pepper for the Royal Household.

Payment to Faskyn, a Merchant of Bruges, for various colours purchased for painting the King's Chambers in the Castle of Berwick goes to show that Dundee was preferred to Berwick as a trading port by Merchants on the Continent.

From this time records can be followed.

Thus in 1329—23 ships sailed, the Customs being £267 4s 6d.

In 1331—28 ships sailed, the Customs being £303 2s 8d.

In 1362—28 ships sailed, the Customs being £906 13s 6d.

In 1372—11 ships sailed, the Customs being £1050 14s 1d.

In 1383—12 ships sailed, the Customs being £902 2s 11d.

From the above it will be seen that the principal exports were wool, sheep skins, and hides, and this continued until the early part of the fifteenth century.

By this time Flemings had settled in small colonies in different parts of Scotland to teach the natives the art of weaving, and the result was that cloth became an export.

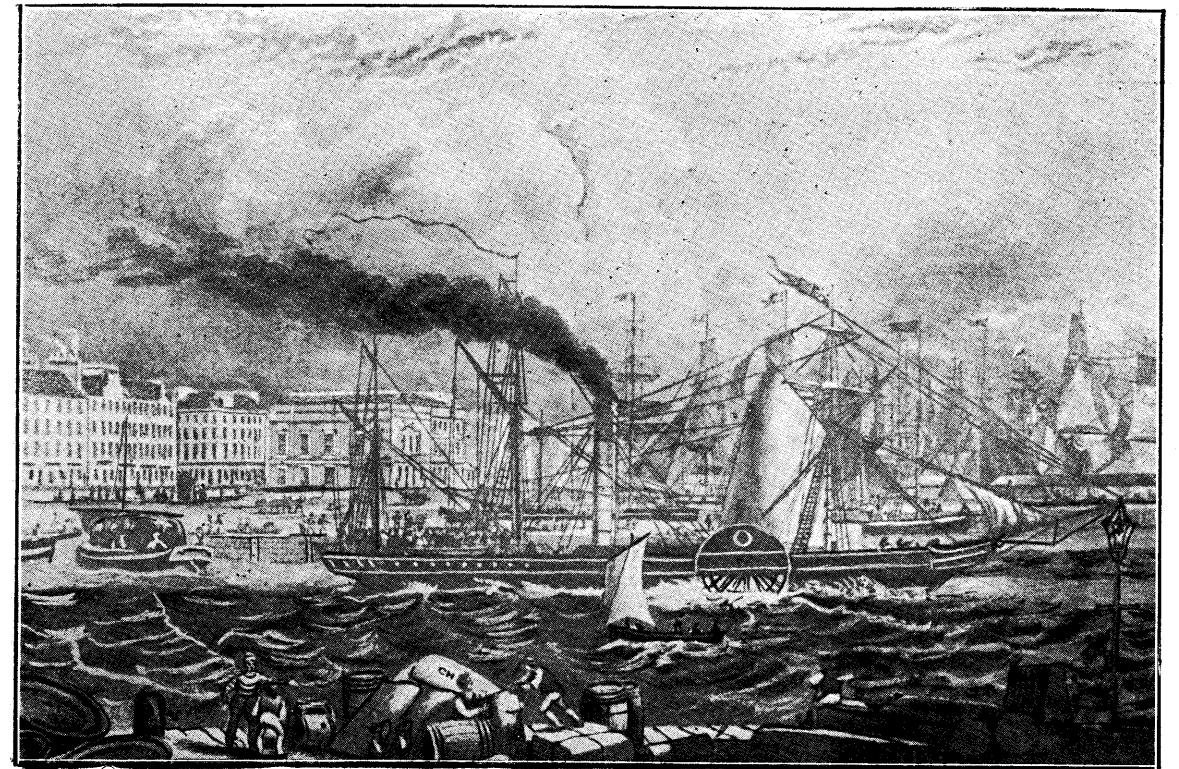
The first recorded Customs levied on cloth was in 1437, on a small quantity which, however, continued to increase, till in 1479 there was exported 205 score and 6 dozen ells of woollen cloth, realising £90 3s in Customs.

It is difficult to say when the first built harbours came into existence, but the reference in Robert the Bruce's Charter of 1329 to a “free harbour” existing at the time of Alexander III. shows that works of some kind had been erected in the thirteenth century.

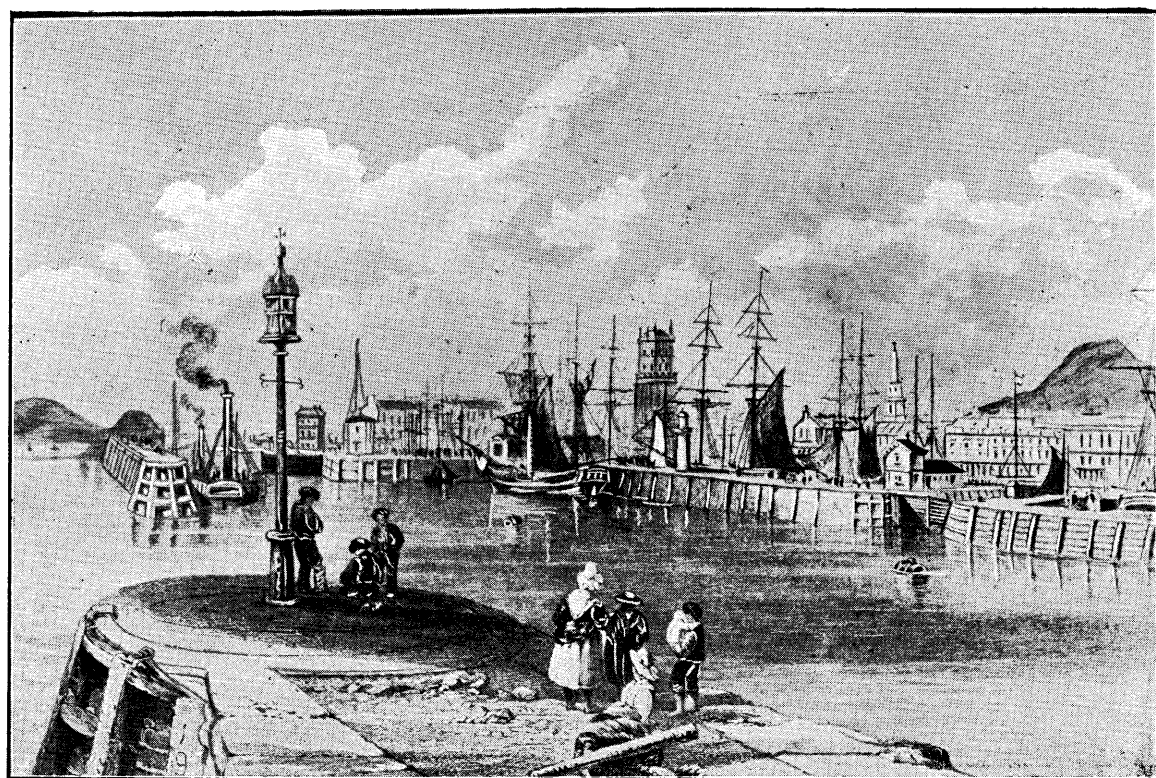
Further Crown Charters were conferred on the Town from time to time, and particularly in 1352, when a Charter was granted by David II., which ratified — “All the sundry Ancient Infeftments, Privileges,” etc., of which the Burgh was in use and possession, “and specially the Petty Customs, Ports, Piers, and Shore Dues, Privileges and Duties thereof.”



KING WILLIAM IV. DOCK
1825



EARL GREY DOCK
1835



TIDAL HARBOUR
1837

that the necessary repairs might be effected. This "towst" was renewed in 1607 for five years, and again in 1612 for a further period of 19 years.

The Charter of King Charles I., dated 14th September 1641, which was embodied in an Act of Parliament on 12th July 1661, granted to the Port of Dundee . . . "Petty Customs, Ports, Pier Dues, Privileges and Duties." . . . "With the Immunities, Privileges and Liberties of the Water of Tay, loading and unloading of ships and boats on whatever part of the said water they may think proper, on both sides thereof, from the the mouth of the rivulet, commonly called the Burnmouth of Innergowrie on the West, to the place which is called the Gaw of Barrie, on the East, on the North side of the said Water of Tay; and from the place where the Monastery of Balmerinloch was situated, on the West, to the sands which are called Drumla Sandis, on the East, on the South side of the said Water of Tay." The Harbour limits thus defined, are exactly the same as are set forth in the Dundee Harbour and Tay Ferries Consolidation Act, 1911, the principal Harbour Act now in force.

No documentary evidence is available as to the extent of the Harbour in 1651, but if Dr. Gumble, the biographer of General Monk, may be credited, he says that when Dundee was captured, there were 60 ships of all sizes taken in the Harbour. Assuming this to be correct, the shipping accommodation must have been rather extensive.

In 1658 the Harbour was again seriously injured by a violent storm, which, following the devastation wrought by General Monk and his army in 1651, reduced the town and impoverished its inhabitants. On an appeal for assistance, Parliament recommended that a collection be made in the Churches. This was done, but the response was meagre. In 1675 the Town Council found it necessary to reconstruct a great portion of the Harbour Works.

Towards the end of the eighteenth century repairs to the works were effected by the celebrated Engineer Smeaton, and, trade increasing, a considerable revenue was derived from the dues on vessels.

The controlling body (the Town Council) does not seem to have made a real effort to provide adequate facilities for shipping, but rather to have looked upon the Harbour as a source of revenue for

Town purposes, and it is on record that although, between Martinmas 1764 and July 1815, the Town Council collected Harbour Dues to the amount of £38,696, they only expended £9,468 on Piers, etc., and applied £29,228 for the general uses of the Burgh.

There was general dissatisfaction that the Harbour should be allowed to continue in a state of disrepair, and, to meet the resultant outcry, the Town Council, in 1810, in 1812, and in 1813, published notices of their intention to undertake the repair, but no definite action was taken. In 1814, however, the Town Council was obliged to promote a Bill. Merchants, Manufacturers, Shipowners, and others agreed to oppose this Bill, because the Town Council proposed to use part of the revenue for purposes not connected with the Harbour, and the proposed Commission did not commend itself to them. After negotiations, an Act was passed on 4th July 1815, which placed the Harbour under Commissioners for 21 years. The Commissioners were the Provost, four Bailies, the Dean of Guild, and one common Councillor, five members of the Guildry, three members of the Nine Incorporated Trades, four persons possessed of land in the County of Forfar, and the Boxmaster of the Masters and Seamen Fraternity in Dundee (Twenty in all).

No person was capable of being a Commissioner unless he was possessed of land or Burgh property in the County of Forfar, to the value of £50 Sterling annually, or a personal estate to the amount of £300 Sterling at the least.

In 1799 the Harbour of Dundee consisted of a small tidal basin, protected from storms by breakwaters of rubble, and there was, in addition, a small landing wharf. The enclosed water space was a scouring basin within the area now occupied by the Greenmarket, and the only relics of the old Harbour, and, of course, they have been considerably altered, are the Coal Wharf, which corresponds to the Pier running out into Earl Grey Dock from Dock Street, and the ancient Graving Dock, part of which can be seen in Exchange Street, in the form of cellars. The Seagate was then really "The Gate of the Sea."

The foundation stone of extensive works, designed by the famous Engineer Thomas Telford, was laid on 9th October 1815, but it was not until 24th December 1823, that the West Graving Dock was

ORDER OF PROCESSION

AT
LAYING THE FOUNDATION-STONE

OF THE

HARBOUR OF DUNDEE,

October 9, 1815.

THE Public Bodies are to assemble in their respective halls at nine o'clock in the morning, and proceed to the Meadows at eleven o'clock, where the order of procession is to be formed. At twelve o'clock noon, a signal-gun will be fired, and the Procession will move forward by Barrack Street, Overgate, Tay Street, Nethergate, High Street, and Castle Street, to the place where the first stone of the new works is to be laid. When the head of the Procession has reached its destination, the whole will halt, at the signal of another gun, and form a lane, through which the Provincial Grand Lodge will walk to the same place. Another gun will be the signal for the Procession to re-form and move forward. When the Public Bodies are all arrived on the ground, another gun will be the signal for laying the stone. Immediately after the ceremony has been performed, a royal salute will be fired.

Order of the Procession.

Band of the Seventy-Ninth Regiment of Foot.
The Fraternity of Masters and Seamen.
Three Town-Sergeants.
Lord Provost, supported by the Sheriff of the county.
The Magistrates and Council.
The Superintending Engineer, with the plan of the harbour.
The Clerk to the Commissioners, with the act of Parliament.
The Commissioners for erecting the harbour, accompanied by the Naval and Military Officers and County Gentlemen who may honour the Procession with their presence.
The Nine Trades, in their order of precedence.
The Three United Trades.
The Guildry Incorporation.
The Cooper Trade.
The Highland Society, preceded by their piper.
The Cordwainers Lodge.
The Hilltown Weaver's Lodge.
The Law Hill Encampment.
Solomon's Lodge of Gardeners.
Adam's Lodge of Gardeners.
Ancient Lodge of Gardeners.
Band of the Western Local Militia.
The Caledonian Lodge of Freemasons.
The Forfar and Kincardine Lodge of Freemasons.
The Thistle Lodge of Freemasons.
St David's Lodge of Freemasons.
The Ancient Lodge of Freemasons.
The Operative Lodge of Freemasons.
The Provincial Grand Lodge.
The Honourable WILLIAM MAULE, Provincial Grand Master, supported by the Grand Wardens.

After the royal salute, the procession, on a signal-gun being fired, will return in the reverse order, by Crichton Street, High Street, Murraygate, Wellgate, and Meadow Street, to the Meadows; from whence the Public Bodies will, by as many different roads as possible, proceed to their respective halls, and there dismiss.

The Corporations and Societies will walk four-deep; the Masons, three-deep.

If the day be wet, the procession will be formed in Tay Street and Nethergate; but will take the same route to the harbour as above prescribed, and will return to Tay Street and Nethergate by Crichton Street and Nethergate.

Sergeant-Major Small, of the Local Militia, will attend during the day, to form the order of procession of the Public Bodies.

The Guild-Hall being occupied by the Town-Council and Commissioners, the Guildry Incorporation will assemble in the South Church.

Printed by R. S. KINTOUL, Dundee.

publicly opened. On 24th November 1825, King William IV. Dock was opened in the presence of upwards of 20,000 spectators. The smack "Lord Kinnaird," a London trader, was the first vessel to be berthed within the Dock.

The tonnage of vessels entering the Port increased from 70,000 in 1815 to 165,000 in 1829, and the Harbour Revenues rose from £4,411 in 1815-1816 to £11,173 in 1828-1829, the rate of Shore Dues being levied at 75 per cent. of the Schedule Rates in both years.

Prior to 1815, the greatest quantity of flax and hemp imported in one year had been 3,000 tons, while in 1829 about 18,000 tons were brought into the Port.

Between 1815 and 1830 the sum of £162,800 was expended on the Harbour.

The following statement of shipping registered at the Port is interesting :—

Vessels belonging to Dundee.	Number.	Registered Tonnage.
In 1792	116	8,550
In 1824	165	17,945
In 1829	225	27,150
In 1833	284	35,473

An Act was passed in 1819 giving the Commissioners powers to carry out additional improvements, to borrow more money, and to revise the Schedule of Rates.

Under the Act of 1815, the Harbour was to revert to the Town in 1836, but, in August, 1829, the Harbour Commissioners came to the conclusion that a new Bill should be promoted, as the improvements effected had afforded such facilities as had enabled the Merchants and Manufacturers to treble the extent of their trade since 1815, and that, if the trade increased in the same ratio, additional extensions for shipping would be required. They agreed that "In preparing a Bill, the present Schedule of Shore Dues should be altered so as to abolish for ever the antiquated, anti-commercial and inquisitorial practice of levying higher rates of Shore Dues from Unfreemen than from Freemen—a practice, which, besides being unreasonable and improper, in itself had caused much trouble and some litigation in the collection of the Shore Dues."

The Town Council objected to the Bill, asserted that the Harbour and its ancient Dues were part of the Corporation Estate, protested against any of the Revenue of the Harbour being used for the promotion of the Bill, and presented a Bill of Suspension and Interdict. Traders and others voluntarily subscribed money to the amount of £1,816 15s 4d, and guaranteed this sum to the Commissioners for the purpose of meeting the expense of the Bill. The Commissioners brought the Bill before Parliament, and on 17th June 1830, the Royal Assent was given to the Act, which placed the Harbour under Trustees in perpetuity, the Constitution being—The Provost, four Bailies, the Dean of Guild, and one Common Councillor, from the Town Council, five Members of the Guildry, three persons from the Nine Incorporated Trades, one person from the Three United Trades, four persons possessed of landed property in the County of Forfar, and the Boxmaster of the Masters and Seamen Fraternity in Dundee (Twenty-one persons).

Prior to the 1830 Act, persons who were not Burgesses had to pay 50 per cent. above the Schedule Rates, and 50 per cent. above the Schedule was also charged in respect of vessels not registered at Dundee, but, under the new Act, there was no differentiation, and all were charged equally.

Under the Provisions of the Act, negotiations took place between the Town Council and the Harbour Trustees, and eventually £27,500 was agreed on as the purchase price of the Harbour. Bonds to this amount were granted to the Town Council, and the Council signed a Discharge and Renunciation, in favour of the Trustees, on 3rd November 1831. In 1838 the Trustees asked the Town Council to grant a Feudal Conveyance of the Port and Harbour, etc. After prolonged negotiations and legal action, the Town Council granted a disposition, dated 13th April 1841, in which the Council reserved the right to the Plack Dues, the Fish Customs, the Craig Pier or Craig Customs, the Town Clerk's Dues, and the Duty on Coal, which they had been in use to levy as Patrons of the Kirk Fabric Fund, and the Hospital of the Burgh. These Duties, Dues, and Customs, with the exception of the Duty on Coal, were discharged, in 1900, on payment of £14,000 by the Trustees to the Council.

About the time the Trust was constituted, great national and civic problems were being dealt with, and the trade of the country was beginning to recover from the effects of the Napoleonic Wars. During these Wars, large quantities of canvas and coarse bagging were made in Dundee and exported, and a considerable transport service was engaged in. On the termination of the Wars, the employment of transports ceased, and Merchants and Manufacturers saw that they must employ larger vessels for longer voyages, and seek more distant connections.

The advent of Steam Power had also brought about changes, and home industry was being superseded by the factory system.

Under changed conditions, the trade at the Harbour increased even more rapidly than before, and to cope with the increase, the Trustees decided on a scheme of Dock Extension.

A public demonstration, on the largest scale ever seen in Dundee, took place on 9th August 1832. It was called the "Reform Jubilee," and after assembling on the Magdalen Green, the people marched to the Docks and saw the Foundation Stone of the Earl Grey Dock laid. A silver plate was set into the stone to commemorate the occasion, and on the plate was an inscription which stated, among other things, that the Harbour and its revenues were now vested, for ever, in Trustees.

In November 1834 the Earl Grey Dock was opened, and thereafter the Harbour Works were gradually extended to the East. Steady progress continued to be made, and the work of embanking and filling in was carried on.

In 1824 a few bales of jute were sent from India to Mr Anderson, a Linen Manufacturer in Dundee, who made numerous experiments with it, but with little success. Mr Thomas Neish also made experiments with the new fibre, but he also failed to obtain the results desired. In 1835, however, a fine yarn, of pure jute, was produced, and thus was begun a new industry, which was destined to have far reaching effects on Dundee.

In 1838 the total quantity of raw jute imported was 1,136 tons, but the industry developed rapidly, and for many years it has been the staple trade of the City. The annual importation of jute is now about 1,200,000 bales (240,000 tons).

Other Harbour Acts were passed in 1836 and 1843, empowering the Trustees to construct new works, improve the accesses to the Harbour and provide new accesses, lay down rails, make Bye-laws, and borrow additional money, etc.

In 1840, the Secretary of Her Majesty's Customs, acquired ground on the South side of Dock Street, to be used as a site for a new Custom House. At the same time, the Trustees agreed to erect a Board Room and Offices immediately to the East thereof, and the Government and the Trustees made arrangements whereby the buildings of both parties should be built to plans of the same design and elevation, and the work of both should proceed simultaneously. In 1841 contracts were entered into, both contracts being placed with the same Contractor. On 9th June 1841 the foundation stone was laid, and there was deposited in the stone an inscribed plate, and also glass jars containing various gold, silver, and copper coins of the realm, lists of Harbour Trustees and other Public Bodies in Dundee, Minutes and other Records of the Trustees, and copies of various Publications. The inscription on the plate and the contents of the jars are set forth in detail in the Minutes of the Trustees.

This building of handsome design, with a portico in the Roman Doric style, was finished in 1843, and provided accommodation for the Customs and Excise and the Harbour Trustees.

In 1881 it was reported that it would be necessary to provide additional accommodation for the Harbour Treasurer's Department. An extension of the eastern part of the Trustees' portion of the building was agreed upon, and advantage was taken of this extension to provide a more suitable Board Room for the Trustees. This work was completed in 1884.

In 1844 Queen Victoria came to Dundee by sea. It was her intention to spend some time in the Highlands, particularly at Blair Castle, the residence of the Duke of Atholl, and she, with Prince Albert, and the Princess Royal, arrived on the evening of 10th September 1844, and the Royal Yacht, "Victoria and Albert," was anchored in the Queen's Roads. Early next morning the Royal Party landed, and were received by County and Town Notabilities. The party traversed the road along the Mid Quay (afterwards named



Reproduced from Original Etching
by GERSHOM CUMMING

Landing of Her Majesty Queen Victoria,
Prince Albert, and the Princess Royal,
11th September 1844.

(Showing temporary Triumphal Arch.)

TRUSTEES, OFFICIALS AND STAFFS, 1830

PLAN OF DUNDEE HARBOUR, 1793 and 1830

ROYAL ARCH

TABLET IN ROYAL ARCH

EAST STATION, HARBOUR CHAMBERS, AND
CUSTOM HOUSE, 1843

DUNDEE HARBOUR TRUST.

The following is a List of the Harbour Trustees as first constituted under the Dundee Harbour Act, 1830 :—

From the Town Council of Dundee:—

Provost Thomas Bell,
 Bailies John Calman,
 John Blair Miller,
 Alexander Balfour,
 James Soot,
 Dean of Guild William Hackney,
 Councillor John Sturrock.

From the County:—

The Hon. D. G. Hallyburton, M.P.
 Alexander M. Guthrie, Esq.,
 George Kinloch, Esq.,
 Adam Tait, Esq.

From the Guildry:—

William Lindsay, Esq.,
 George Clark, Esq.,
 John Morton, Esq.,
 Edward Baxter, Esq.,
 David Baxter, Esq.

From the Nine Incorporated Trades:—

James Chalmers, Esq.,
 Peter Kinmond, Esq.,
 James Small, Junr., Esq.

From the Fraternity of Masters and Seamen in Dundee:—

Alexander Martin, Esq., Boxmaster.

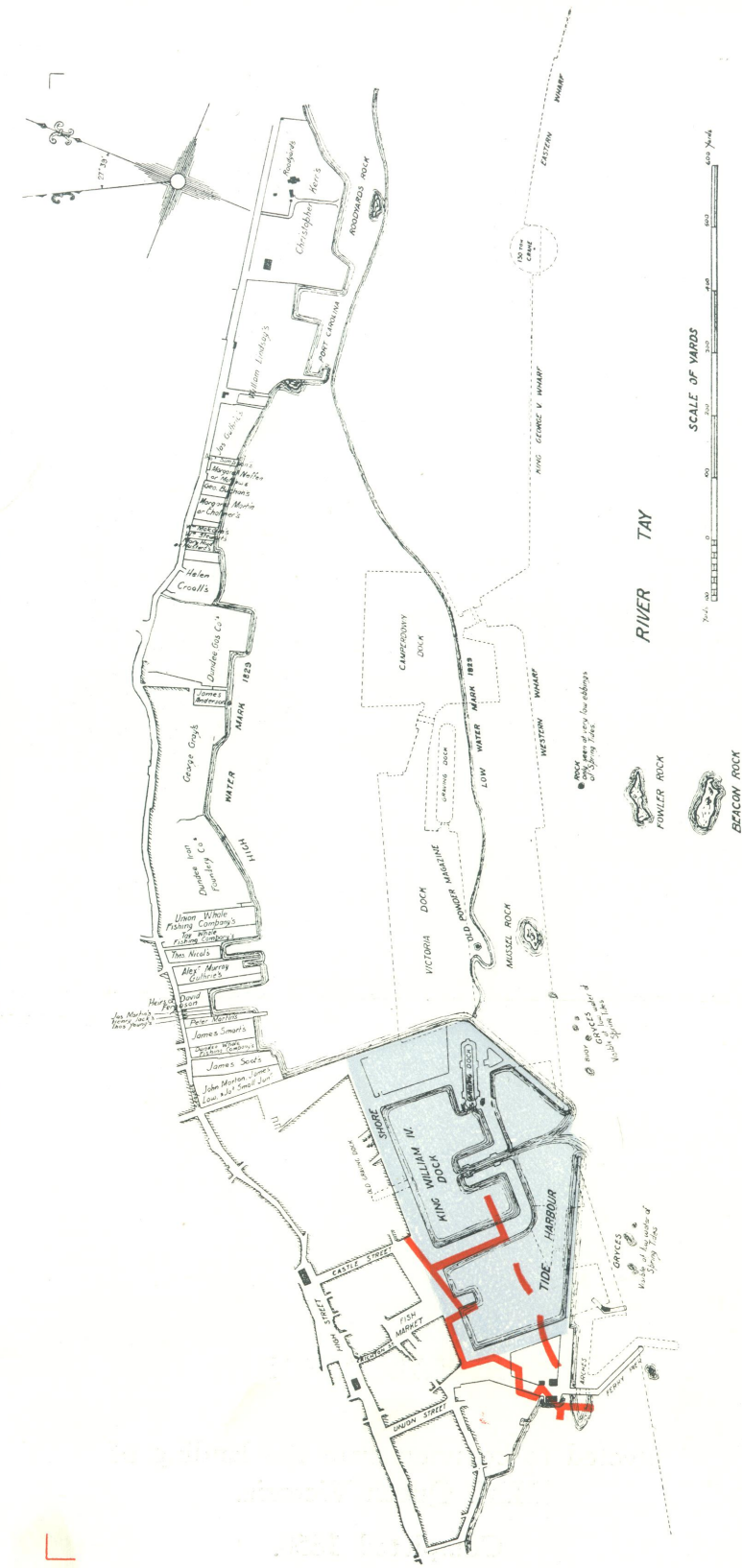
From the Three United Trades:—

Robert Scott, Esq.

Officials and Staffs.

James Saunders, Writer, Clerk to the Trustees.
 John Cairncross, Dundee Bank, Treasurer.
 Simon Robertson, Collector of Shore Dues.
 James Nicoll, Collector's Clerk.
 David Barnet, Andrew Watt, and James Barland—Assistants.
 Lieutenant Thomas Gray, R.N., Berthing-Master.
 William Wrongham, Assistant.
 Peter Young, Master of the Graving Dock.
 James Mills, Inspector of Weighing and Measuring Coals, etc.
 James Leslie, Resident Engineer, Harbour Works.
 Thomas Matthew, Clerk of Works.

PLAN OF DUNDEE HARBOUR, 1793 and 1830



Harbour as in 1793 — shewn in Red
 " " " 1830 — shewn in Blue
 " " " 1930 — shewn by Dotted Outline



Photo. by Geo. G. Ritchie

ROYAL ARCH

erected to commemorate the landing of
H.M. Queen Victoria.

Completed 1850.



Photo. by Watt & Sons

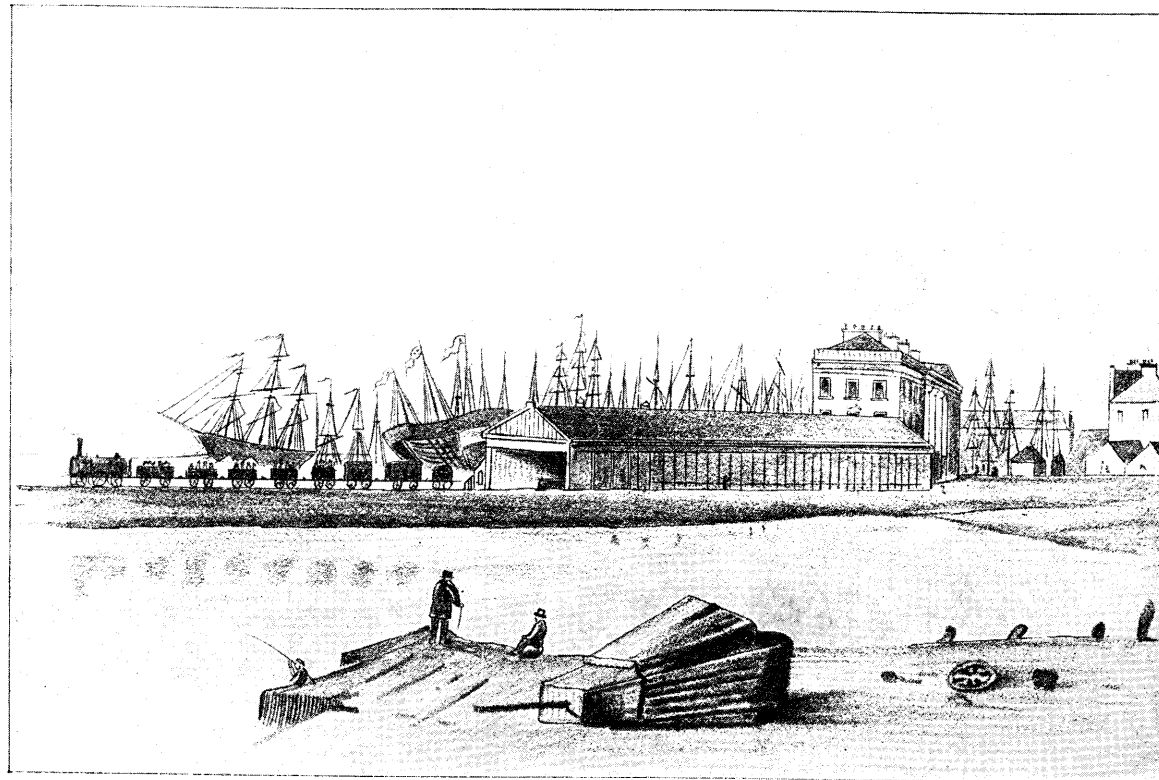
TABLET IN ROYAL ARCH

1844

THIS ARCH
 WAS ERECTED AT THE JOINT EXPENSE OF THE TRUSTEES OF THE HARBOUR OF DUNDEE
 THE RIGHT HONOURABLE WILLIAM LORD PANMURE OF BRECHIN AND HAVAR
 AND OTHER CONTRIBUTORS IN HONOUR AND TO COMMEMORATE THE LANDING
 OF HER MAJESTY QUEEN VICTORIA AT THE PORT OF DUNDEE
 EN ROUTE FOR BLAIR-ATHOLL ON THE 11TH SEPTEMBER 1844
 ALEX LAWSON ESQ BEING THEN PROVOST OF DUNDEE & CHAIRMAN OF THE TRUSTEES

MEMBERS OF THE BUILDING COMMITTEE	FROM THE SUBSCRIBERS
FROM THE HARBOUR TRUSTEES	MESS ^{RS} GEORGE DUNCAN LATE M.P.
PROVOST THOMAS	ALEXANDER CLAYHILLS
BAILIE WILLIAM CLARK	JAMES BROWN
MESS ^{RS} DAVID MILN	THOMAS NEISH
ALEXANDER LAWSON	WILLIAM COLLIER
THOMAS ADAMSON	DAVID MARTIN SENIOR
DAVID HEAR	DAVID REITH

M^R NEISH CONVENER AND CHAIRMAN OF THE JOINT COMMITTEE
 ARCHITECT JOHN T. ROCHEAD GLASGOW
 CONTRACTOR THOMAS HARVEY BUILDER HAMILTON
 SUPERINTENDENT CHARLES OWER C.E. ENGINEER OF THE HARBOUR



EAST STATION, HARBOUR CHAMBERS, AND
CUSTOM HOUSE, 1843

the Queen's Quay), and, passing under a triumphal arch erected on the North end of the Quay, drove through some of the principal streets. Great preparations had been made for the visit, and the Royal Party was accorded a most enthusiastic reception by the inhabitants of Dundee.

On 1st October, the Queen and Prince Albert left Blair Castle on their return journey, and passing through Dundee, embarked on the Royal Yacht.

A proposal that a permanent memorial of this memorable visit should be erected, met with general approval. The Harbour Trustees took up the matter, and expressed the opinion that it was consistent "with their public duty to erect or aid, by a contribution, in the erection of a Triumphal Arch on the Harbour Property, which, while it may serve to commemorate the loyalty and attachment to Her Most Gracious Majesty manifested by the entire body of inhabitants on the occasion of Her Majesty's landing at the Port of Dundee, will also contribute to the utility and becoming embellishment of the Harbour Works." The Trustees agreed to give the sum of £500 out of the Harbour Funds, besides bringing up, at their own expense, the foundations of the Arch to the level of the Quays, reserving to themselves, however, the sole power of fixing on the site for the building. They further declared "that voluntary subscriptions towards the cost thereof, will be accepted by the Trustees upon the express conditions only, that the said Arch shall be constructed according to a plan, working drawings, and specifications to be prepared by Mr Leslie, Harbour Engineer, and approved of by the Trustees; and that the said Arch shall, when built, be the property and under the control of the Harbour Trustees for the time, in the same manner as the other portions of the Harbour Works."

The Arch was completed in 1850, and cost about £3,000.

In 1848 the Harbour and Docks consisted of what are known as the Old or West Docks, the Patent Slip, and the Marine Parade, behind which were established all the Shipbuilding Yards. An Eastern Tidal Harbour had been built, and rough protection walls had been placed round Victoria Dock, which was then a shallow basin.

The Trustees obtained further borrowing powers under their Act of 1856, and in 1857 the work of constructing Camperdown Dock was begun. Soon after the contractors commenced operations, differences arose between them and the Trustees, and an acute stage was reached when, in October 1861, the east wall of the Dock fell in. A lawsuit followed, and ultimately the Trustees completed the work themselves. The Dock, which cost about £100,000, was opened on 20th July 1865.

The total tonnage at the Port increased from 262,111 in 1856, to 395,260 in 1866, and the importation of jute increased from 9,048 tons in 1855, to 48,141 tons in 1866. With this influx in traffic, and the prospect of a steady increase, the Trustees had to consider the provision of additional facilities. Plans were prepared by Mr Charles Ower, with a view to a new wet Dock and a new dry Dock to the East of Camperdown Dock, but ultimately a modified scheme was decided upon, and in 1869 an Act was passed, authorising the Trustees to construct a Tidal Basin and entrance to the Camperdown Dock; to extend and alter the River Walls; to construct a Sea Wall to the Stannergate; to construct a Graving Dock between Camperdown Dock and Victoria Dock; to deepen and complete Victoria Dock; to reclaim and use for Harbour purposes the ground lying to the South of the Railway, from Camperdown Dock to Stannergate Point, etc., etc. The Act also altered the representation on the Trust, which became constituted as follows:—The Provost, four Bailies, the Dean of Guild, and the Boxmaster of the Fraternity of Masters and Seamen in Dundee, became *ex-officio* members, and there were elected annually, one common Councillor by the Town Council, five Members by the Guildry Incorporation, three Members by the Nine Incorporated Trades, one Member by the Three United Trades, four Members by the Commissioners of Supply for the County of Forfar, three Members of the Chamber of Commerce, three Members by the Shipowners of Dundee, three Members by the Harbour Ratepayers, and two Members by the Municipal Electors. The Membership was thus increased from twenty-one to thirty-two.

Between 1872 and 1874 the Trustees purchased the rights of

1930

TRUSTEES AND OFFICIALS

HARBOUR CHAMBERS AND CUSTOM HOUSE

BOARD ROOM—HARBOUR CHAMBERS

CHAIRMAN, DEPUTY-CHAIRMAN AND
CONVENERS

DUNDEE HARBOUR TRUST.

The following is a List of the Harbour Trustees in office on 17th June 1930:—

B. L. Nairn, Esq., J.P., - - - - Chairman.
P. S. Brown, Esq., J.P., - - - - Deputy-Chairman.

Appointed by the Admiralty:—

Rear Admiral T. J. Hallett, R.N., C.B.E.

Elected by the Town Council of Dundee:—

Treasurer Frain, J.P.
Baillie Gillies, J.P.
Baillie Reid, M.B.E., D.L., J.P.
J. B. Archer, Esq., D.L., J.P.
A. A. Leslie, Esq., J.P.
John Crawford, Esq., J.P.
Douglas M. Christie, Esq.
William Dunn, Esq.

Elected by the Guildry, the Nine Incorporated Trades, and the Three United Trades:—

Sir William High, D.L., J.P.
William Foggie, Esq., J.P.

Elected by the County Council of Angus (Forfar):—

James Grant, Esq., J.P.
Joseph Murray, Esq., J.P.
Sir Herbert K. Ogilvy, Bart.
David Reid, Esq.

Elected by the Dundee Chamber of Commerce:—

D. H. Brakenridge, Esq.
P. S. Brown, Esq., J.P.
Col. P. S. Nicoll, C.B.E., D.L., J.P.
W. Moir Scott, Esq.
W. Ross Smith, Esq.
A. J. Stewart, Esq.

Elected by the Shipowners of Dundee:—

Robert T. Leitch, Esq., J.P.
Joseph J. Barrie, Esq., J.P.
Robert B. Graham, Esq.
Ralph C. Cowper, Esq., J.P.

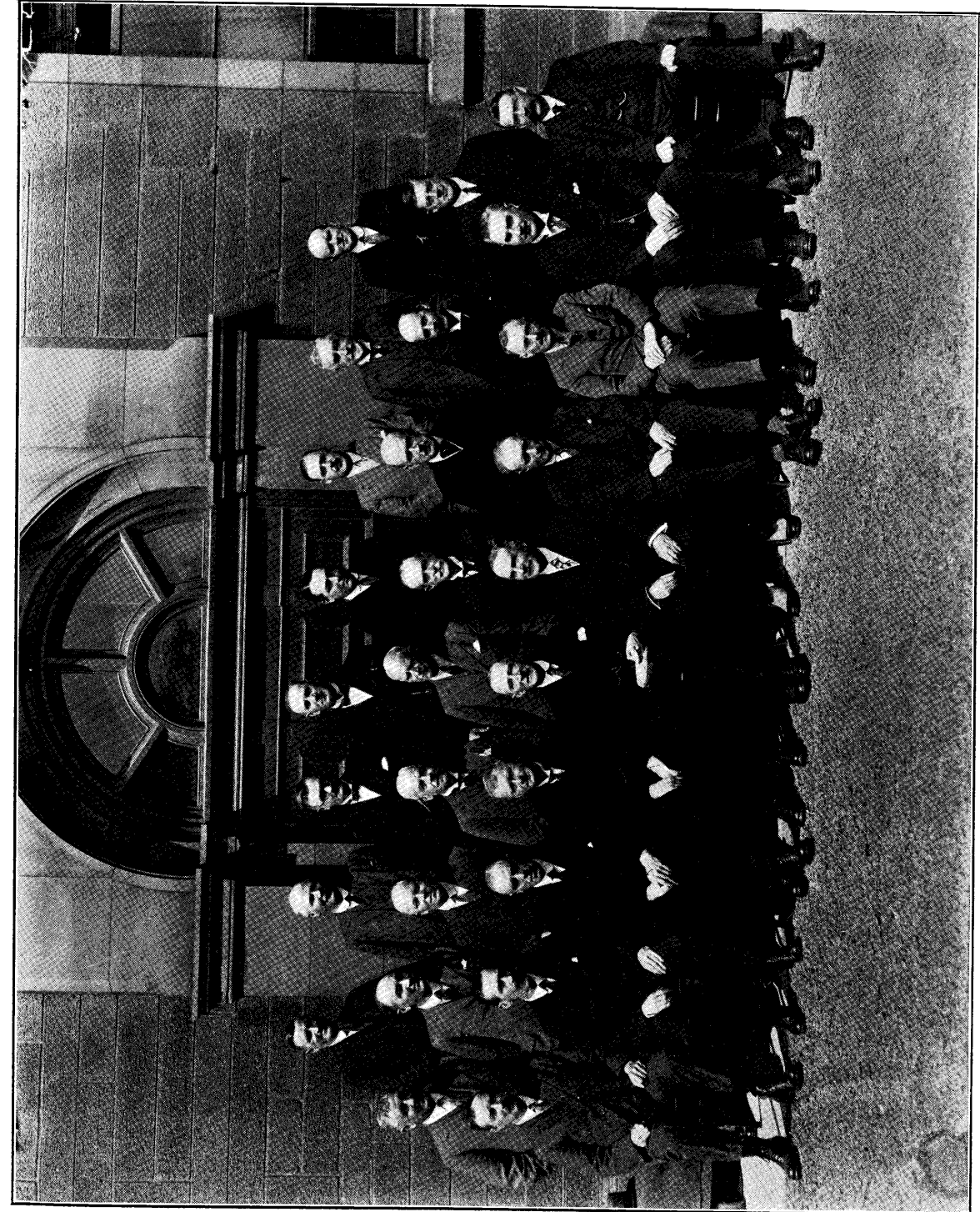
Elected by the Ratepayers of the Harbour of Dundee:—

B. L. Nairn, Esq., J.P.
H. Giles Walker, Esq., J.P.
J. L. Kidd, Esq.
James R. Lindsay, Esq., J.P.
T. L. Miller, Esq., J.P.
John B. Taylor, Esq., J.P.

Elected by the Dundee Municipal Electors:—

William McFarlane, Esq., J.P.
David Mudie, Esq., J.P.

Convener of Finance and Rights Committee - R. T. Leitch, Esq., J.P.
Convener of Works Committee - - - - - J. J. Barrie, Esq., J.P.
Convener of Tay Ferries Committee - - - - Sir William High, D.L., J.P.
Convener of Lighting and Buoying Committee - R. B. Graham, Esq.

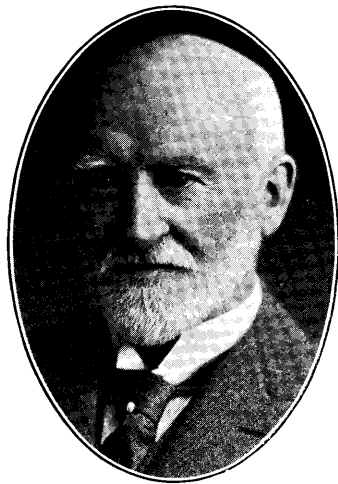


HARBOUR TRUSTEES AND OFFICIALS, 1930
Photo. by Watt & Sons
Back Row—W. Ross Smith, J. B. Archer, Wm. McFarlane, A. A. Leslie, W. Moir Scott, A. J. Stewart, Joseph Murray, Douglas M. Christie,
Middle Row—D. H. Brakenridge, David Mudie, Jas. R. Lindsay, T. L. Miller, H. Giles Walker, Treasurer Frain, Baillie Reid, Ralph C. Cowper, James Grant,
Front Row—Geo. G. Ritchie, J. Hannay Thompson, J. L. Kidd, R. T. Leitch, R. B. Nairn, Sir Wm. High, R. B. Graham, John D. Panton, Capt. W. F. Gregory, William Johnston.
 The following Trustees were unable to be present:—Rear-Admiral T. J. Hallett, Baillie Gillies, John Crawford, William Dunn, William Foggie,
 Sir Herbert K. Ogilvy, Bart., David Reid, P. S. Brown, Col. P. S. Nicoll, J. J. Barrie, J. B. Taylor.



R. T. LEITCH,
Convener of Finance and
Rights Committee.

Died 8th June 1930



P. S. BROWN,
Deputy-Chairman.



JOSEPH J. BARRIE,
Convener of
Works Committee



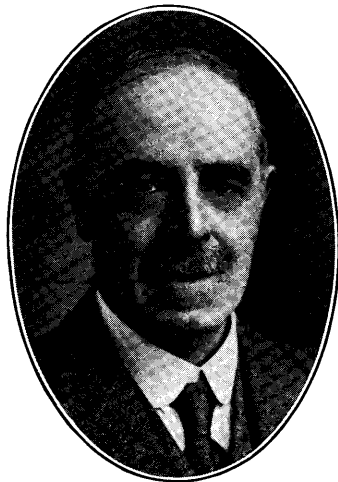
B. L. NAIRN,
Chairman.



Sir WM. HIGH,
Convener of
Tay Ferries Committee.



R. B. GRAHAM,
Convener of Lighting and
Buoying Committee.



J. L. KIDD,
Chairman of Pilotage Committee

KING WILLIAM IV. DOCK
WINDJAMMER "THOMASINA MACLELLAN"

VICTORIA DOCK

EAST GRAVING DOCK

CAMPERDOWN DOCK

FISH DOCK

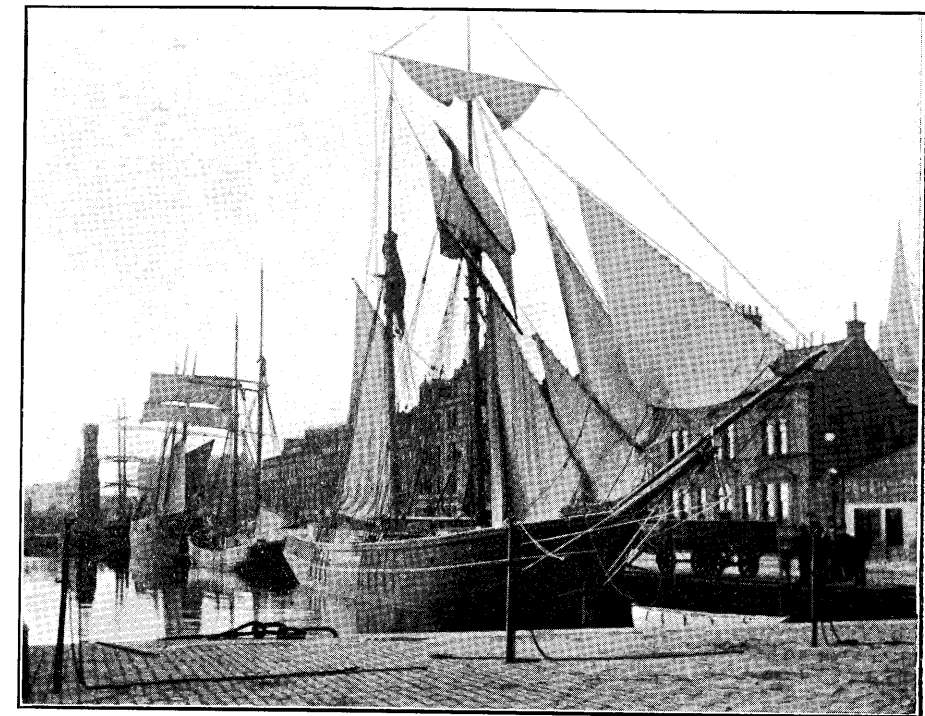


Photo. by Geo. G. Ritchie

Shipping in King William IV. Dock

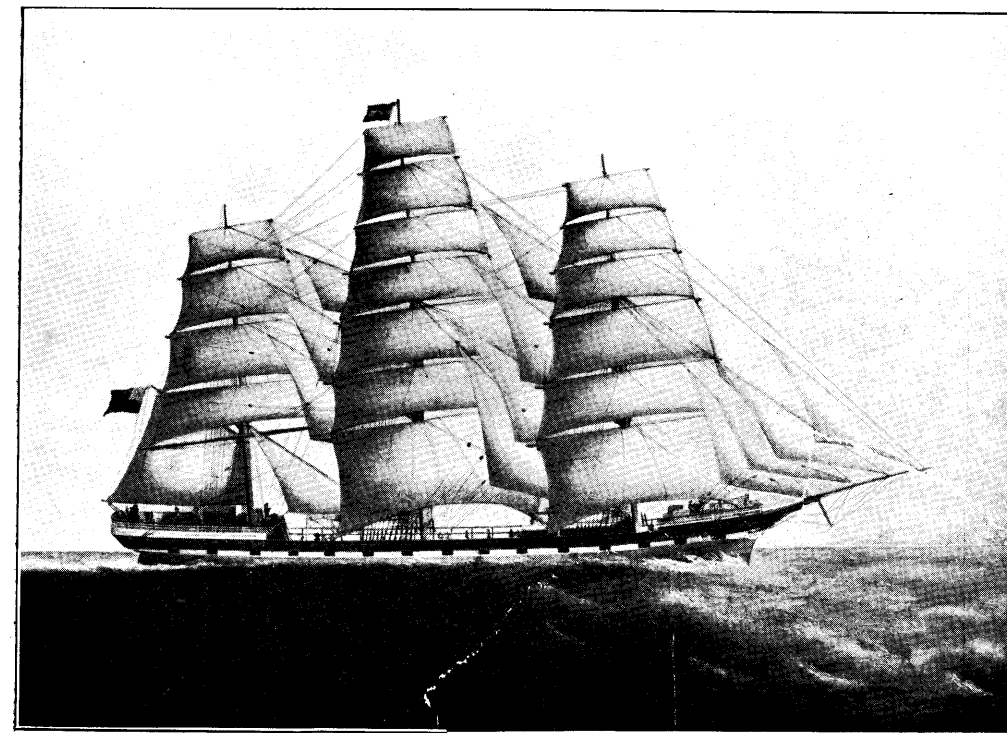
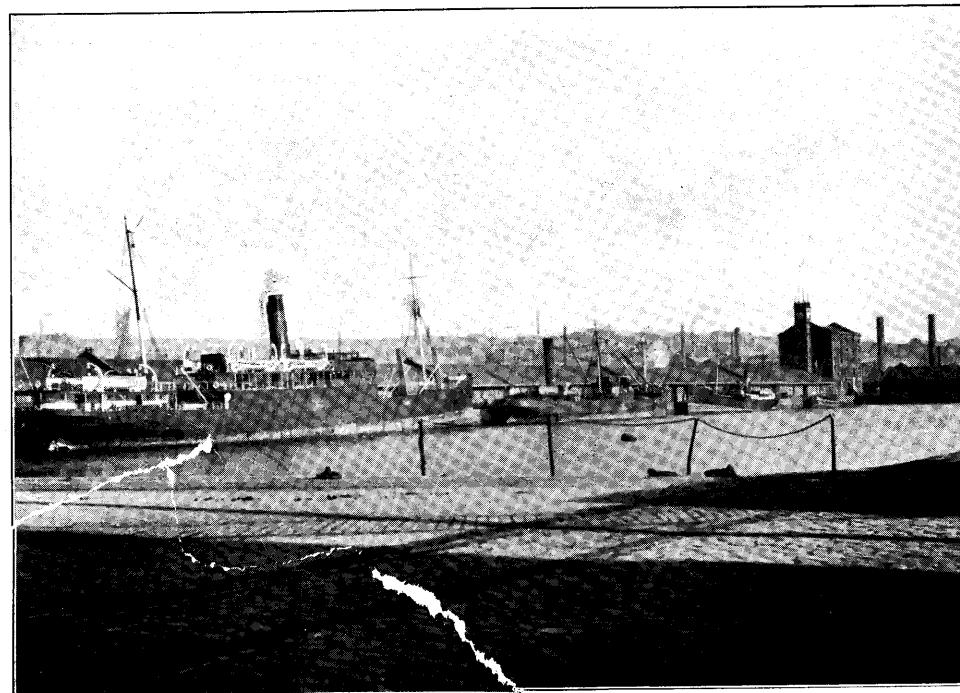


Photo. by Watt & Sons, from painting loaned by Mr J. Nicoll Phillips

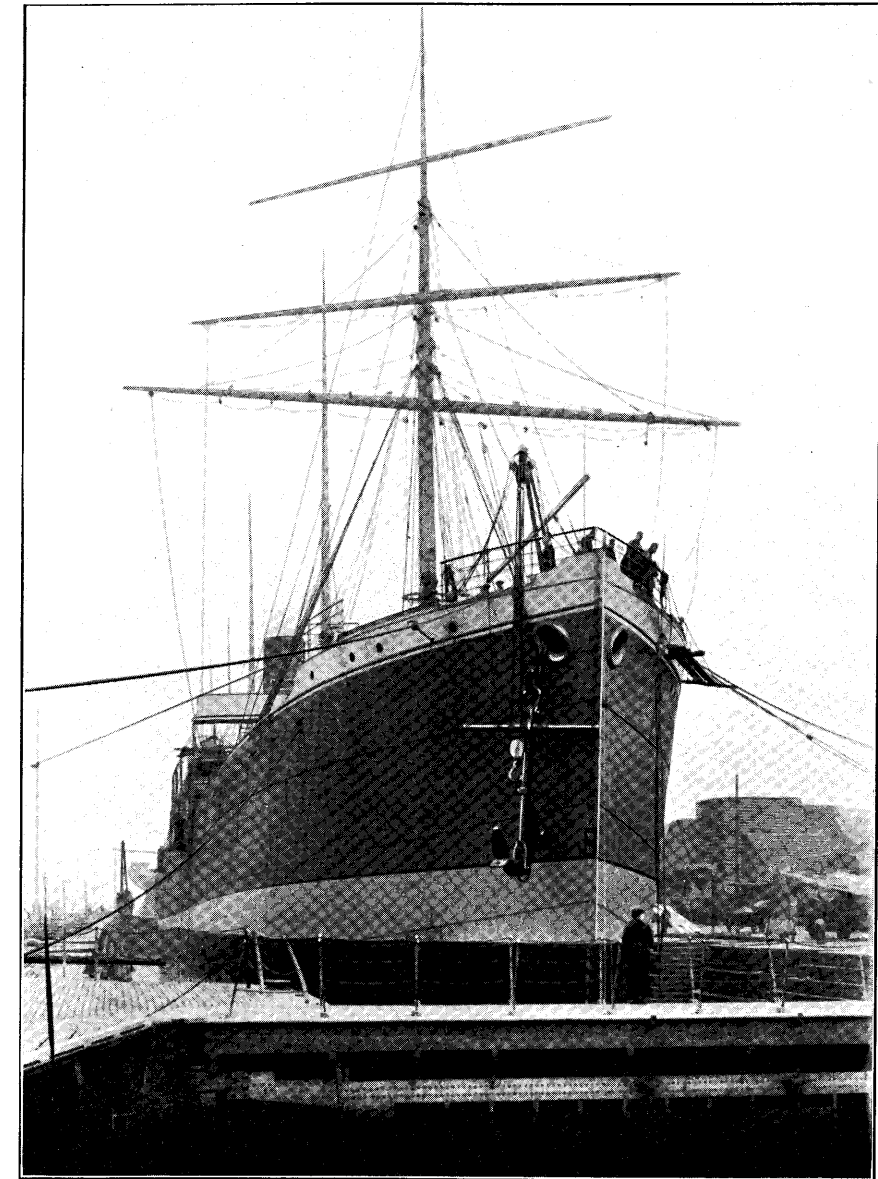
Windjammer "Thomasina Maclellan" with Jute for Dundee



Victoria Dock, looking West, with East Graving Dock on left



Victoria Dock and Warehouse, looking East



S.S. "Marwarri" (5687 Tons)
in East Graving Dock

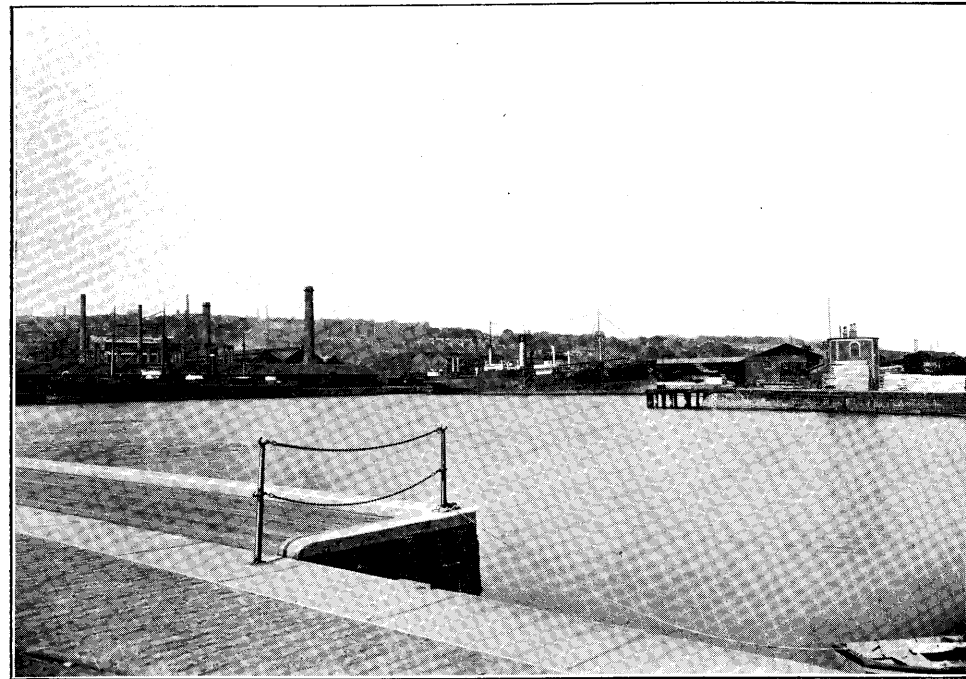


Photo. by Watt & Sons

Camperdown Dock

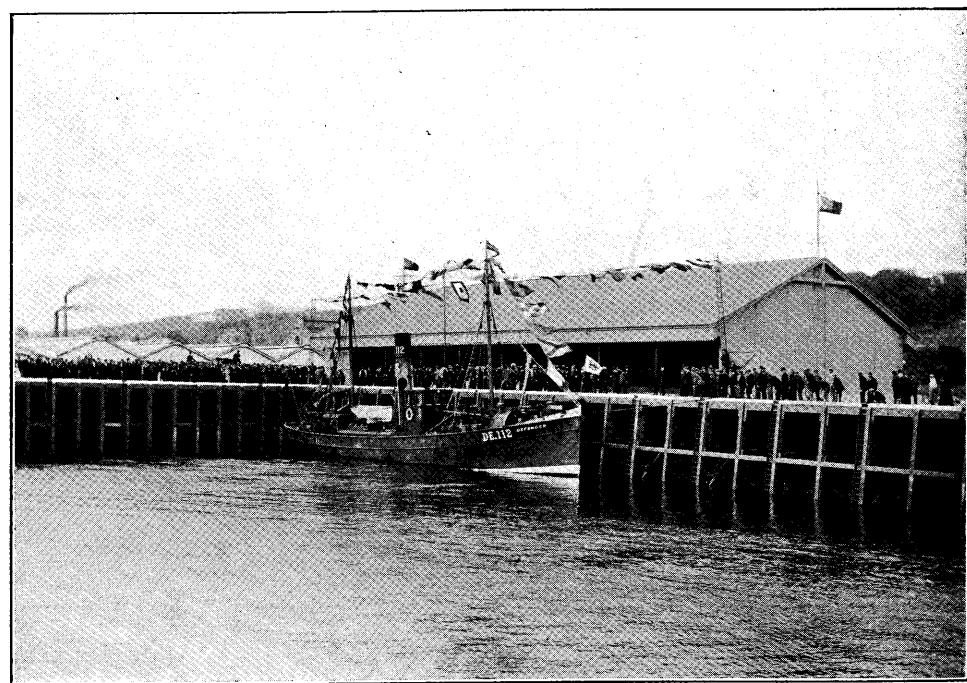


Photo. by A. & G. Taylor, London

Opening of Fish Dock, 1900

various proprietors to the foreshore, between East Dock Street and Stannergate Point, and reclamation works were proceeded with.

The ground thus made up has proved a most valuable asset, and now forms the site of the modern part of the Harbour. On it there have been constructed King George V. Wharf, the Eastern Wharf, the Fish Market, and the Quays of the Fish Dock; while large areas of the ground have been feued or leased, and are now occupied by the Caledon and Stannergate Shipyards, what is now the principal Electrical Station in the City, Tar Distillation Works, and premises used for various industrial purposes. Part of this ground was occupied as one of the most important Naval Air Stations during the War.

Victoria Dock was completed, and formally opened on 16th August 1875, and the "Strathearn," of the Thomson Line, was the first vessel to enter the Dock. The East Graving Dock, 500 feet in length, was also completed about the same time.

The Dundee Harbour Consolidation Act, 1875, did not change the constitution of the Trust, but gave the Trustees additional powers, the principal item being the transference of the Lighting and Buoying of the River, and the right to levy dues in connection therewith, from the Corporation of the Fraternity of Masters and Seamen in Dundee to the Trustees. These rights were held by the Fraternity, under an Act of the Privy Council of Scotland, dated 24th February 1687, and a Charter granted by His Majesty, King George the Third, written to the Seal and registered the 17th and Sealed the 19th days of September 1774, and the Trustees paid the Fraternity, for all their rights and powers, Lighthouses, Land, Buoys and Beacons, Gear, etc., £15,000, and, in addition, paid off the Mortgage Debts of the Fraternity, amounting to £4,060, a total of £19,060. Soon after taking over this service, the Trustees made improvements in the Lighthouse Buildings, constructed and placed the Lightship "Abertay" at the entrance to the River in 1877, and, in many places, substituted Buoys for what were merely make-shifts, thus marking more clearly the Navigable Channel. Within recent times many important alterations have been made in the Lighting and Buoying of the Tay, and a Marconi Wireless Telephone has been installed on the Lightship. Lighted Buoys now stretch, at

convenient intervals, from the Fairway to the Harbour, and every precaution has been taken to make the navigation of the River easy and safe.

For the better accommodation of traffic, a length of River Wharf had been constructed on the West Side of Camperdown Dock entrance, but this Wharf could only accommodate one vessel at a time. As the size of vessels increased, many of them had to be lightened before entering the Docks, and in 1885-1886 the Trustees extended the Western Wharf, bringing its length to 650 feet. In 1890-1891 this Wharf was further extended by a length of 300 feet.

In 1890 the Cattle Depot and Wharf, at the Stannergate, were built. For a time there was a large importation of cattle, and this trade promised to be most remunerative. In 1893, however, an Act was passed prohibiting the importation of foreign cattle, except for slaughter at the port of landing, and the traffic ceased. For a long period the premises were used for other purposes. Some years ago the embargo was withdrawn, the Depot was reconditioned, and shipments began to arrive. For various reasons, consignments of cattle ceased to come to the Port, and for a considerable time the Depot has not been used.

In November 1890, the whole question of Harbour extension was again brought forward by a report from the Harbourmaster, drawing attention to the serious detention of large steamers, with jute cargoes, for want of accommodation, and stating that, with a few exceptions, all the vessels had to be lightened before entering the Docks, as most of them drew about 23 feet of water. The Harbour Trustees took the matter up, and various schemes were considered. Ultimately, they decided to build a Wharf and erect Sheds to the Westward of the Cattle Depot, and the construction of the Eastern Wharf was proceeded with. These Wharves were designed by Mr David Cunningham, the Harbour Engineer.

The Fish Dock, the last Dock constructed at Dundee, was opened in 1900. It has a water area of $1\frac{5}{8}$ acres, with 705 lineal feet of quay space, and a depot, 162 feet long by 50 feet broad, fitted with every requisite and convenience for the Fishing Trade, has been erected on the quay-side. This Dock was designed by Mr George C. Buchanan, the Harbour Engineer.

Up to the year 1882 jute cargoes were discharged by means of small steam engines placed on the Quays. Owing to the inflammable nature of jute, and the consequent risk of fire, five-cwt. movable Hydraulic Jigger Hoists were installed in that year, and that system was extended to the Wharves as these were built. These Jiggers are admirably adapted for the work, and with them cargoes of jute are discharged with great expedition. As an instance of the rapid discharge obtained by vessels using the Port, and this even under War conditions, it may be stated that the s.s. "Mahanada," of Liverpool, 4,521 tons net register, which arrived from Calcutta, discharged during ordinary working hours between 23rd and 27th February 1915, 33,427 bales of jute and sundries, equal to 6,006 tons; while the s.s. "Knight Templar," of Liverpool, 4,601 tons net register, also from Calcutta, discharged during ordinary working hours between 8th and 16th March 1917, 50,667 bales of jute of 400 lbs. each, hemp, and sundries, equal to about 9,000 tons.

The largest cargo imported at Dundee Harbour was by the s.s. "Monarch," 7,353 tons gross, which consisted of 51,590 bales of jute and 228 bales of gunnies, i.e., Calcutta made jute cloth—the total weight being fully 9,000 tons.

The transition from sailing ships to steam ships was gradual, but none the less sure, and by the end of last century comparatively few sailing ships were coming to the Port. So long as weather conditions largely governed the time taken on a voyage from India to Dundee, the importation was spread over the greater part of the year, but the time came when all the jute was brought by steamers. With this type of vessel the time taken for the voyage was greatly reduced, and the jute import season was shortened to about six months each year. This seasonal trade makes it much more difficult to cope with the traffic, and this is accentuated by the arrival of a number of large vessels within the space of a few days. This necessitates the provision of extensive accommodation which is used part of the year only.

In 1903 the Trustees, on the recommendation of their Engineer, Mr J. Hannay Thompson, constructed a road and railway bridge behind the West Camperdown Wharf in reinforced concrete, on the Hennebique system, the bridge having a span of 28 feet by 40 feet

in width. This was the first reinforced concrete structure in Scotland.

The construction of the Eastern Wharf provided sufficient accommodation for a time. This Wharf, originally constructed of timber, was, for a length of about 960 feet, widened and reconstructed in reinforced concrete between 1903 and 1909, the work being carried out in three sections.

This was the first reinforced concrete Wharf built in Scotland, and the Trustees can, therefore, claim to be pioneers in the use of this form of construction, which is now universally used for all kinds of structures both on the land and in the sea.

Acts were passed in 1889, 1892, 1896, and 1900, giving the Trustees power to undertake new works, increase their borrowing powers, revise their Schedules of Rates, etc. The Dundee Harbour and Tay Ferries Consolidation Act, 1911, now the principal Act, gave further powers in the same direction, and brought about important changes in the Constitution. The Membership of the Trust is now composed of one Member nominated by the Admiralty and thirty-two Members elected as follows :—

Eight by the Corporation of Dundee ;

Two by the Guildry Incorporation of Dundee, the Nine Incorporated Trades of Dundee, and the Three United Trades of Dundee ;

Four by the County Council of the County of Forfar ;

Six by the Chamber of Commerce of Dundee ;

Four by the Shipowners ;

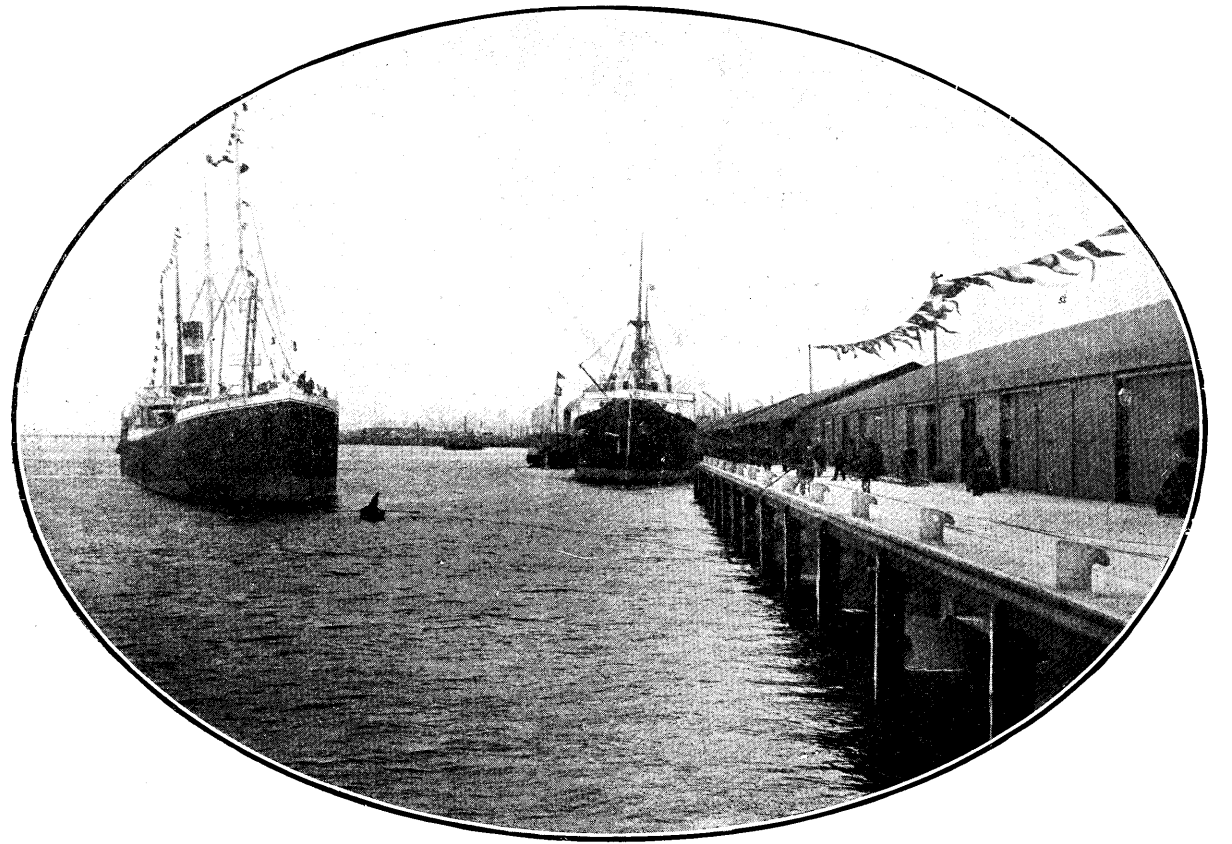
Six by the Harbour Ratepayers ; and

Two by the Municipal Electors.

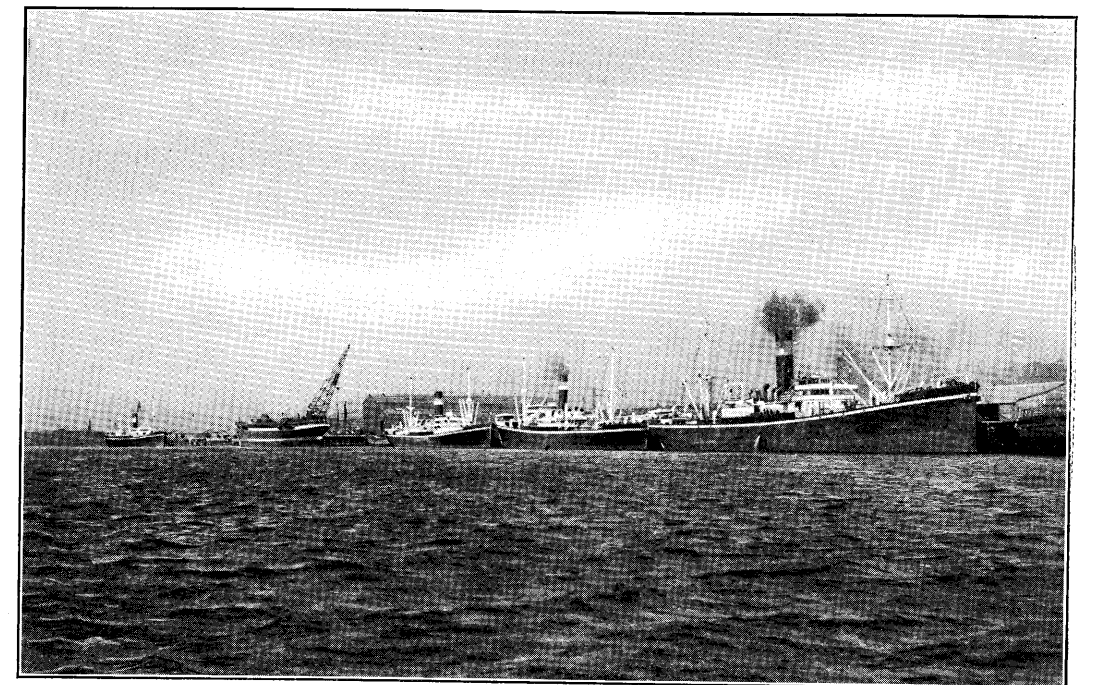
During the time the Harbour was under Commissioners, and from the passing of the Act of 1830, the Provost or the Lord Provost for the time being, was *ex-officio* Chairman of the Board, but the Act of 1911 made provision for the Trustees electing, each year, from among their number, a Chairman and a Deputy-Chairman.

The Dundee Harbour and Tay Ferries Order Confirmation Act, 1912, amended the qualification of Electors entitled to vote at the election of Trustees by the Shipowners, and subsequent Acts passed in 1917, 1919, and 1925 gave the Trustees powers to borrow additional monies, and to increase the Rates.

WHARVES



Opening of First Reinforced Concrete Section of Eastern Wharf, 1905



Vessels at Eastern Wharf

Photo. by Watt & Sons

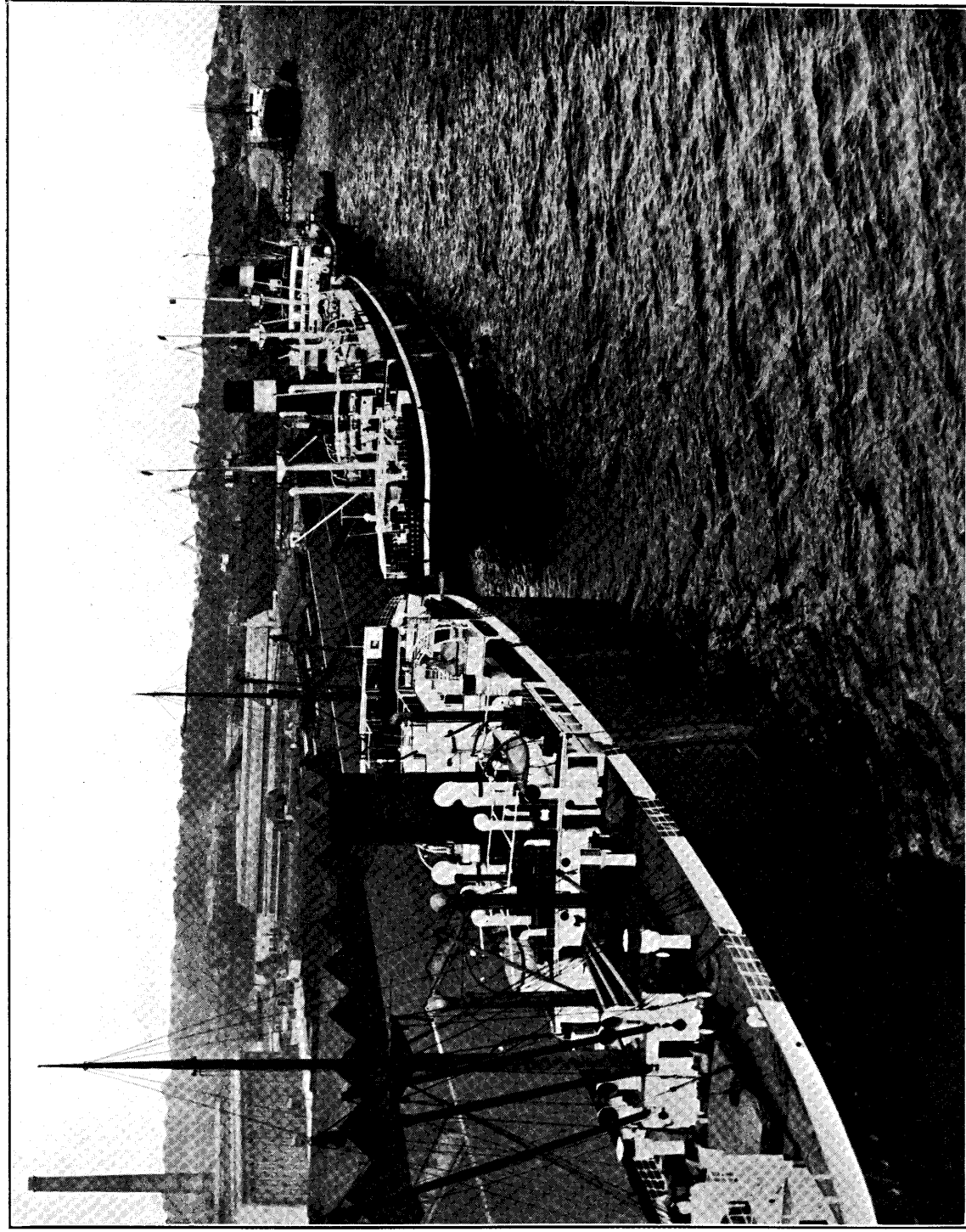


Photo. by D. C. Thomson & Co., Ltd.

East End of Harbour, shewing Transit Sheds and Warehouses

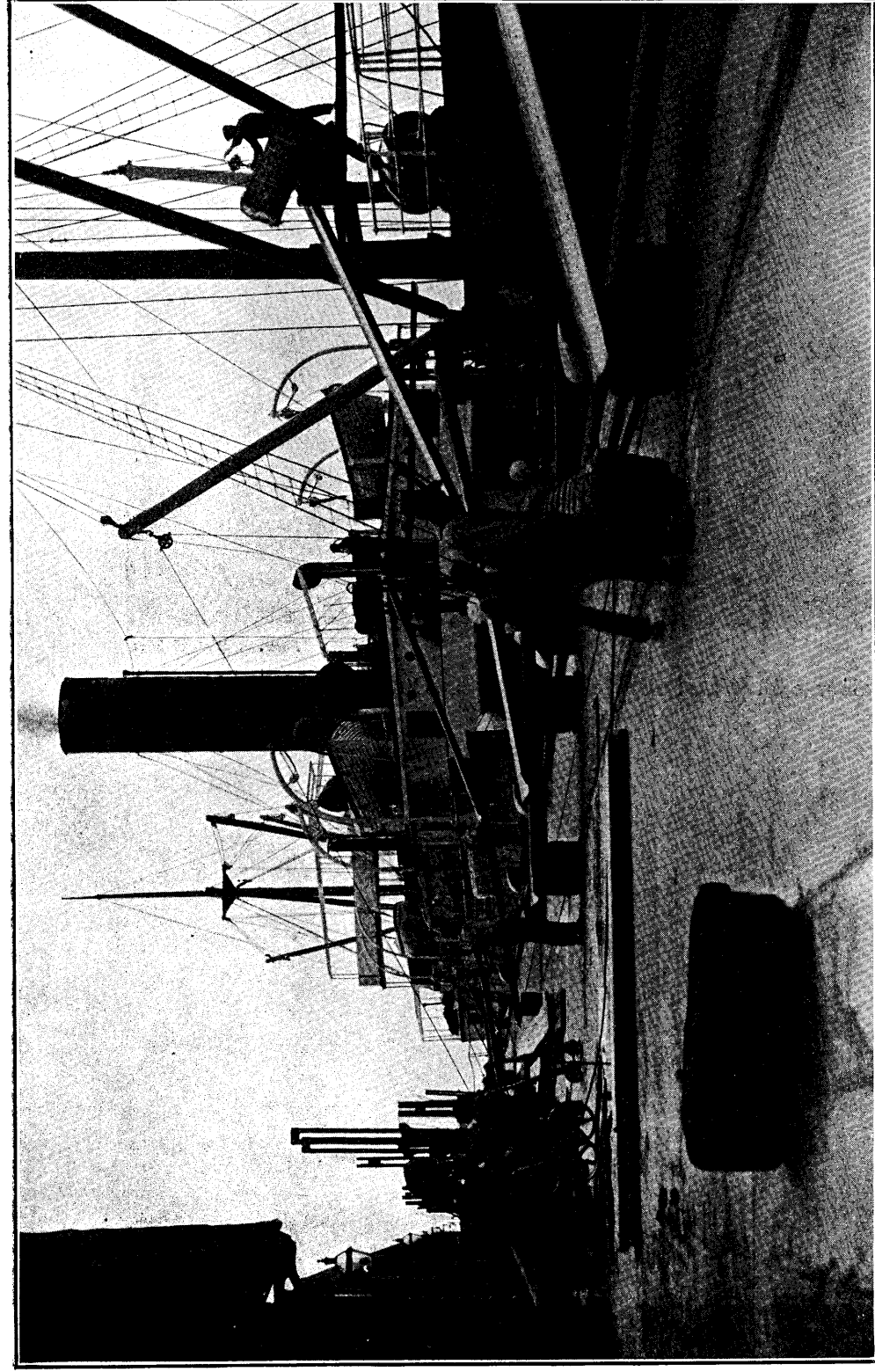


Photo. by Watt & Sons

Discharging Jute by Hydraulic Jiggers, Eastern Wharf

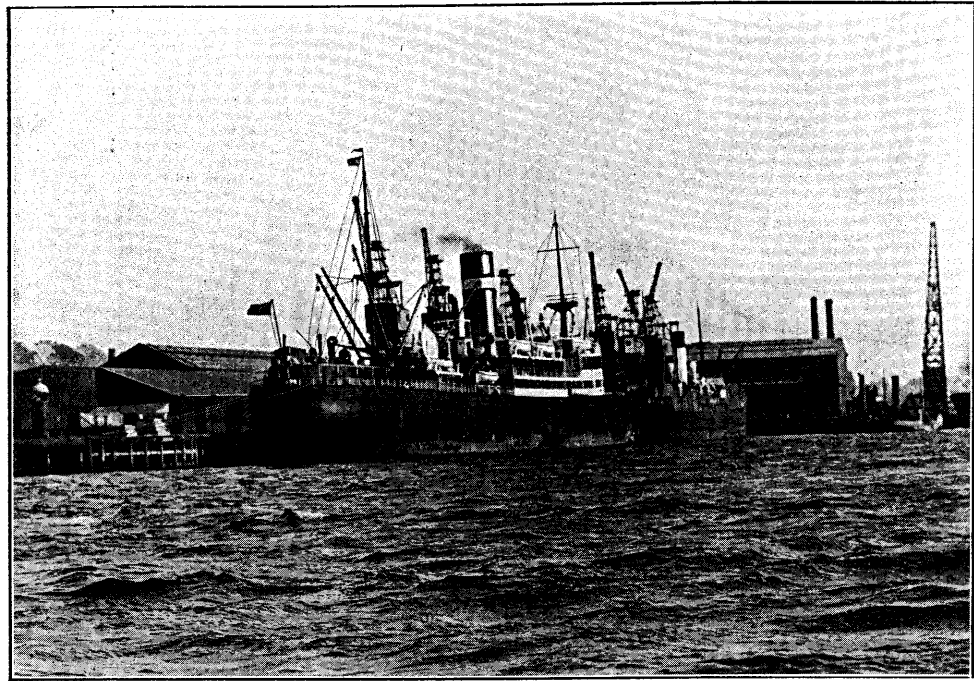


Photo. by Watt & Sons

King George V. Wharf and Caledon Fitting Out Jetty, looking East

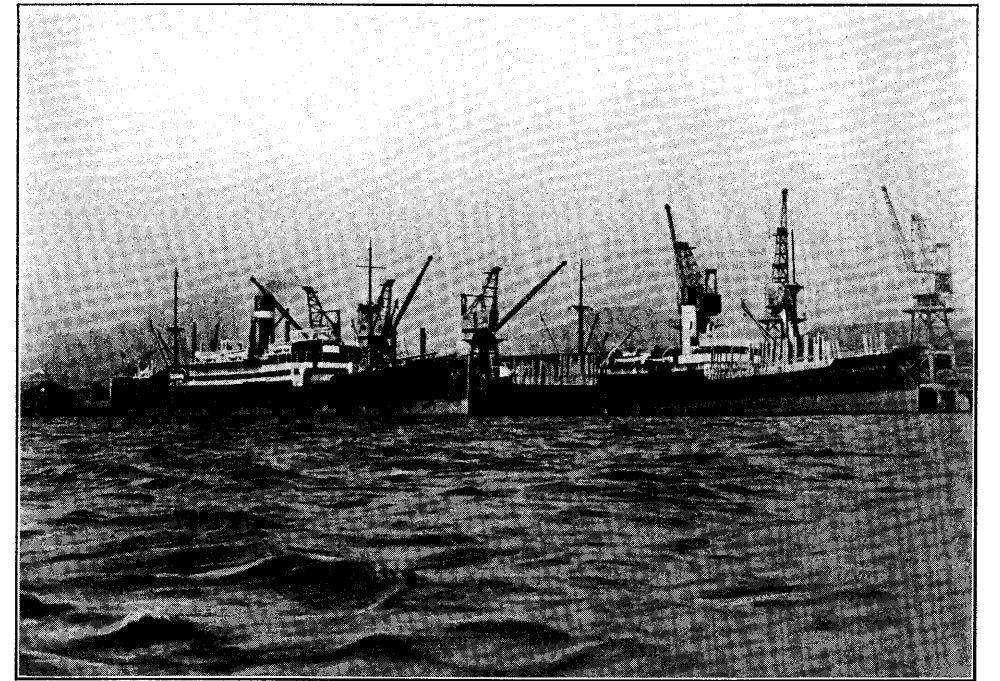


Photo. by Watt & Sons

King George V. Wharf from River

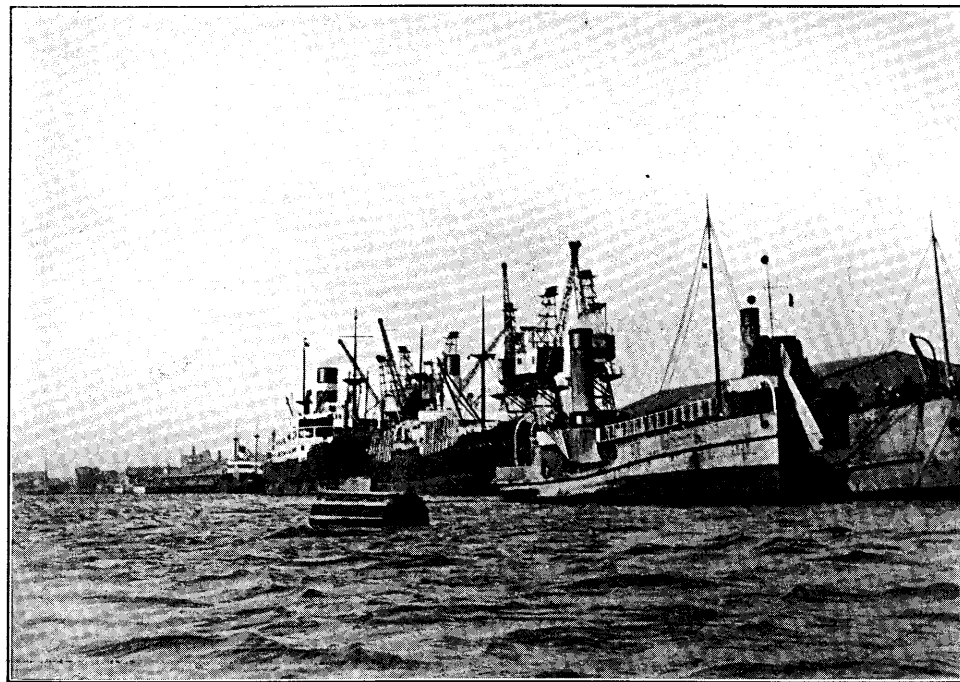


Photo. by Watt & Sons

King George V. Wharf and Western Wharf, looking West

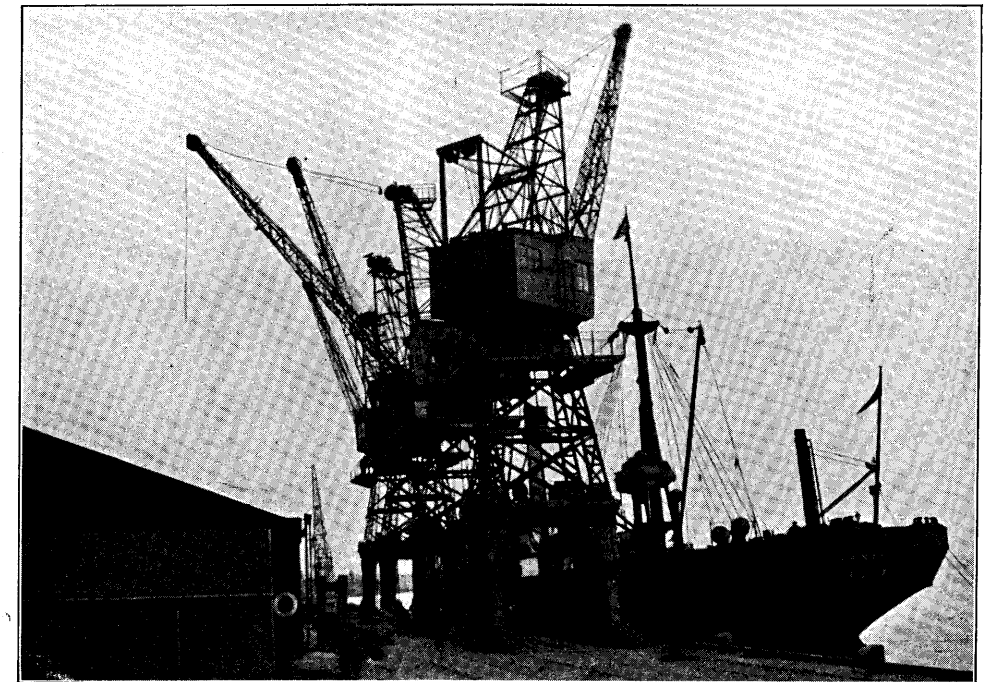


Photo. by J. H. H. Thompson, Jr.

Electric Cranes

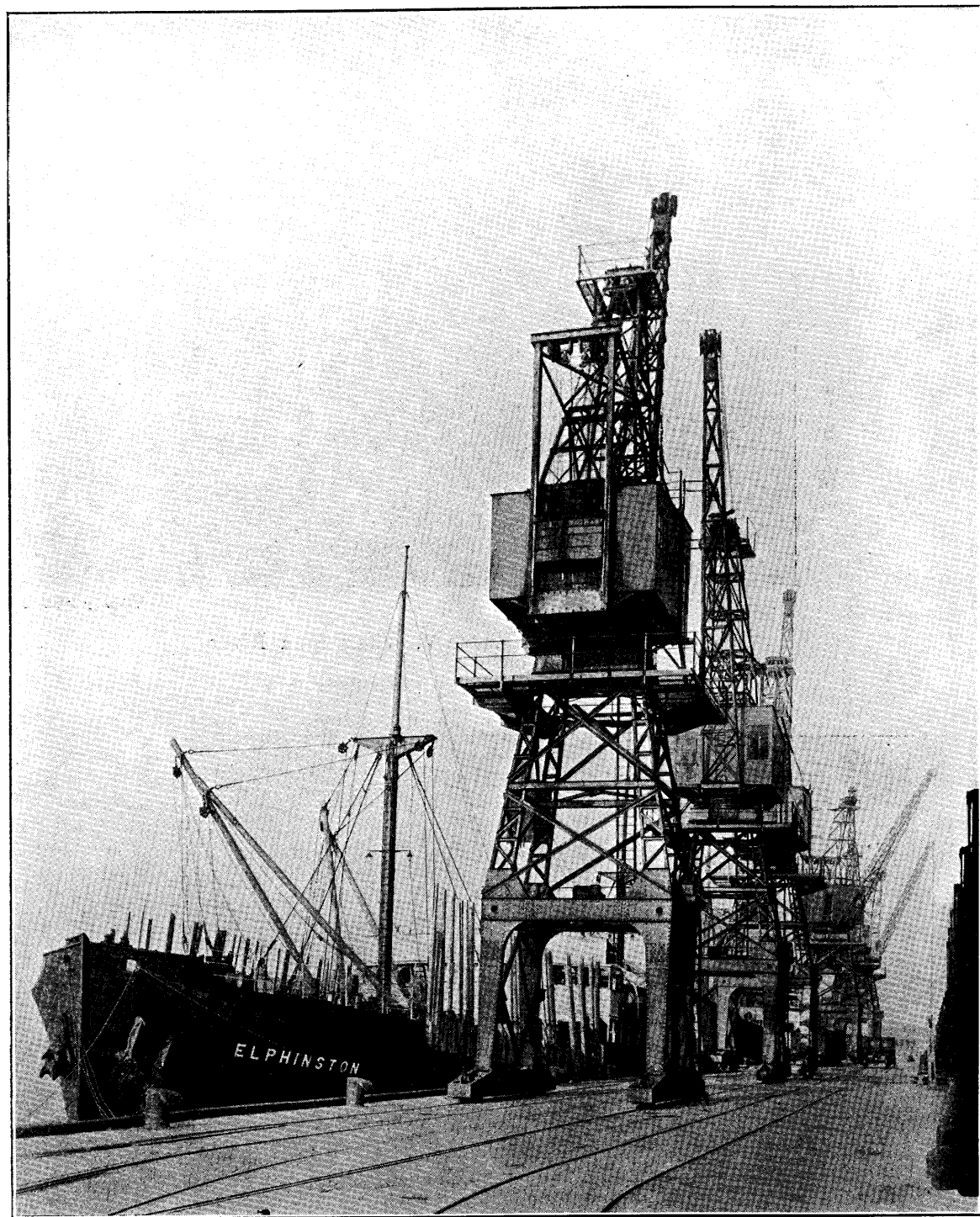
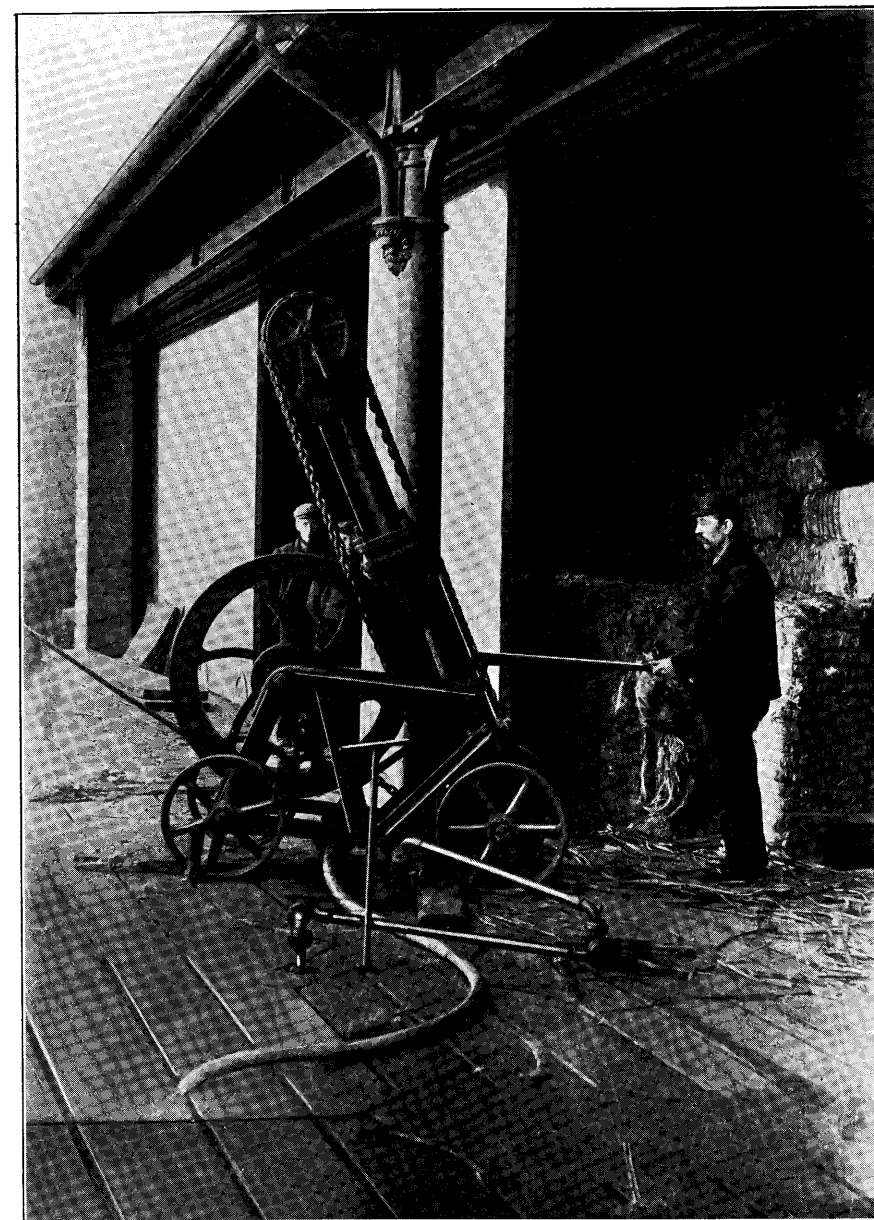


Photo. by Watt & Sons

King George V. Wharf and Electric Cranes



Hydraulic Jigger and Jute in Transit Shed

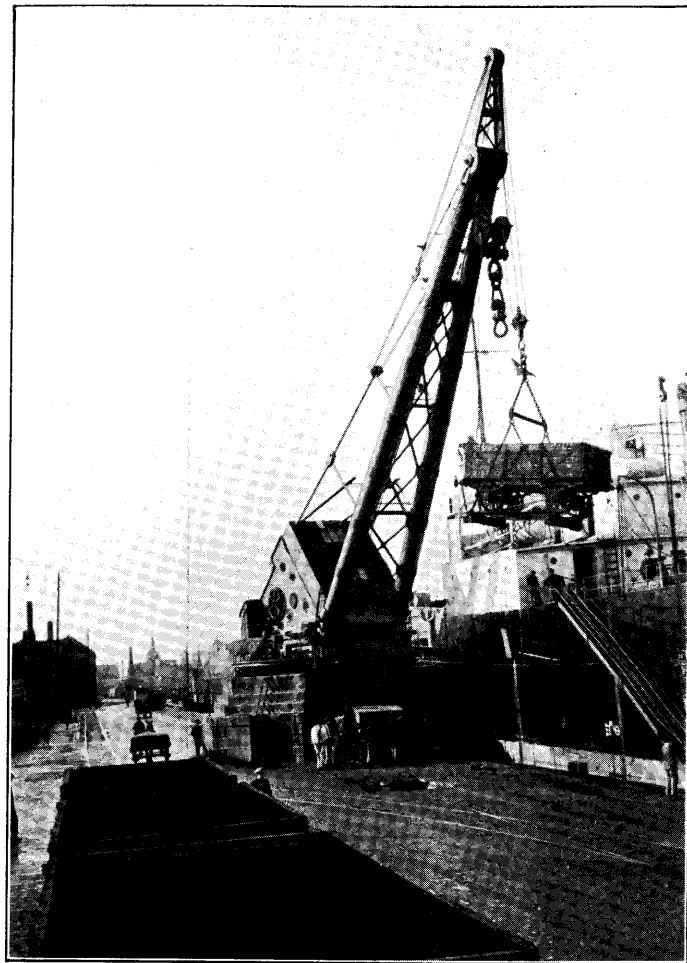


Photo. by J. H. H. Thompson, Jr.

90-Ton Crane Loading Coal

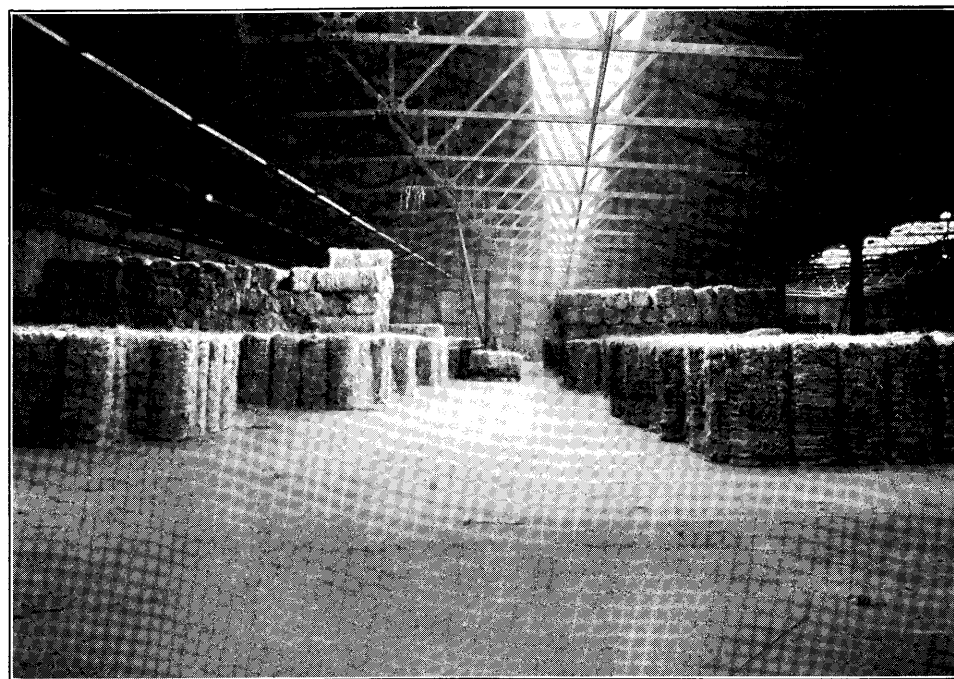


Photo. by J. H. H. Thompson, Jr.

Jute in Transit Shed

Owing to the increasing size of vessels, and a greater volume of traffic, the Trustees had to defer the completion of the reconstruction of the Eastern Wharf, and, instead, to concentrate on the provision of additional Wharfage and Shed Accommodation.

Late in 1911 the River front was very carefully inspected, with a view to ascertaining the best position for new works, and eventually it was decided to construct a new Wharf immediately to the East of Camperdown Lockway.

Reports and Plans were submitted from time to time by Mr J. Hannay Thompson, the General Manager and Engineer, and after many meetings, the Trustees decided to construct the Wharf in reinforced concrete, on the Hennebique system, and entered into contracts for a Wharf about 630 feet in length, with Shed Accommodation and Road, Rail, and other facilities. Work was commenced in 1913, and completed at the end of 1915, although considerable delay had been caused by War conditions. The s.s. "Glendun," the first steamer to use the Wharf, was berthed on 13th January 1916.

The Great War brought about the stoppage of all new works, and prices were prohibitive for some years after the cessation of hostilities, so that it was not until 1924 that the Trustees were in a position to proceed with the second section of the Wharf. Operations began in April of that year, and the second section, about 255 feet in length, was completed in 1926.

Adjoining the Wharf there are three sheds, 300 feet, 240 feet, and 299 feet in length respectively, and all 180 feet in width. One of the sheds is fitted out with Overhead Electric Travelling Cranes, while along the whole length of the Wharf there are Railways and Electric Capstans for the haulage of Waggon. On the Wharf there are Electric Travelling Cranes of five-tons and three-tons lifting capacity, all fitted with grabs for coaling purposes. The total cost of the Wharf and Equipment was about £225,000.

In 1927, His Majesty the King graciously consented to the Wharf being named the "King George V. Wharf."

More than once the Trustees, in order to relieve unemployment, have proceeded with extension works sooner than they otherwise would have done, and keeping to that practice, they have, under the Government Scheme for the Relief of Unemployment, entered upon another extension of the King George V. Wharf. A further length

of about 560 feet will be constructed, with Shed Accommodation, adequate Roadways, Rails, Electric Cranes, and other facilities, at an estimated cost of about £235,000.

The existing Wharf and spacious Sheds have already won high praise from experts, and when the whole scheme is completed it will be one of the finest Wharves in the Kingdom.

The King George V. Wharf was constructed by the Yorkshire Hennebique Contracting Co., Ltd., of Dundee and Leeds, who have also secured the contract for the final extension.

At the Docks there are Cranes of various types (the largest having a lifting capacity of 90 tons) and other appliances, and the Harbour is admirably served with Railways.

The Town and the Harbour of Dundee were linked up with Railway systems at an earlier date than were many Ports of greater size, and serving a much larger population. The Dundee and Newtyle Line (one of the first railways in the country), was opened in 1830, and soon after its completion a connection was made to the Docks from the Station in Ward Road. The Dundee and Arbroath Railway was opened in 1838, with a Station at Carolina Port. In 1840 the work of embanking had been completed, and the line brought to a point just opposite Trades Lane. The Dundee and Perth Railway was constructed in 1846. On the opening of the first Tay Bridge in 1878, the North British Railway Company was able to carry traffic between Dundee and the South by a direct line, instead of by the Ferry between Broughty Ferry and Tayport; and by the Dundee and Arbroath Joint Line Act, 1879, the Company was enabled to construct a Tunnel under Dock Street, and so connect its system with the Arbroath Line.

Railway Lines were laid along the Quays of King William IV. and Earl Grey Docks, and these were gradually extended, keeping pace with the growth of the Harbour. Every part of the Harbour was linked up, and by special arrangements, certain tenants were provided with private sidings into their premises. There are now about 14 miles of Railways belonging to the Trustees, and these are worked by the Railway Companies, under an Agreement.

For several years prior to the War, Dundee was an important Naval Base and Air Station, but owing to the reduction of armaments, the Base and Air Station have been taken away, and the ground

space and buildings used for Harbour and industrial purposes.

The principal Electricity Station for Dundee is situated on the Harbour Estate, and this ensures a ready and sufficient supply of current for all purposes.

The manufacture of Jute Cloth is the staple industry of the City, and the raw material for this trade, Flax, and Timber form the principal imports. In addition to these specialities, there is a large general trade done at the Harbour. Among the other principal items imported are Flour, Sugar, Grain, Esparto Grass, Cement, Iron, Building Materials, Bleaching Materials, Chemical Manures, Seeds for Crushing, and Agricultural Feeding Stuffs; while the exports—chiefly Coastwise and to countries on the Continent—include Raw Jute, Jute Cloth, Bags and Sacks, Yarn, Linen Goods, Machinery, Whisky, Preserves, Paper, Potatoes, Linoleum, etc. There are regular sailings to New York.

Unfortunately, Dundee has hitherto been mainly an Import Harbour, although every facility is provided for the export trade, and the Trustees are ready to foster this side of traffic.

Until a few years ago the Arctic Whaling and Sealing Industry was a business of particular interest to Dundee. There was, at one time, a large fleet of vessels, which sailed yearly from Dundee to prosecute the Greenland Seal and Davis Straits Whale Fishings, but owing to unremunerative voyages, and the growth of the Antarctic Whale Fishing, this business was given up some time ago.

It is not possible to trace the beginning of the Shipbuilding Industry in Dundee, but it is quite evident it has been carried on for a very long period. The following is an extract from "A Statistical Account of the Parish and Town of Dundee, in the year 1792," by Robert Small, D.D.:—"Shipbuilding is supposed to be executed here with great advantage and ingenuity. In it two Masters are employed, with 31 journeymen and apprentices, and six are employed by two persons who build boats."

When the West Docks were constructed and Dock Street formed, a Shipbuilding Yard and a Private Graving Dock had to be closed. Shipyards were opened near the Patent Slip, and to the South of Victoria Dock, and between 1850 and 1860 there were seven or eight Yards. Although the names of some of the Shipbuilders of that time are almost forgotten, the names of others, particularly those of

Messrs Stephen, Brown & Simpson, Gourlay, Thompson, and Pearce, are still familiar to those who have had a fairly long acquaintance with shipping.

Messrs Stephen and the Dundee Shipbuilding Company Ltd. for many years specialised in the building of wooden vessels for the Whale and Seal Fishing. Some of the ships built at Dundee have been used by expeditionary parties in the exploration of the Arctic and the Antarctic, the most notable being the "Discovery," which was built in 1901 by the Dundee Shipbuilding Company Ltd., for the Antarctic Expedition led by Captain Scott.

As the size of vessels increased, the majority of the Shipbuilders moved further East in order to obtain greater length of slipways.

About sixty years ago Messrs Gourlay Bros. & Co. Ltd., and Mr W. B. Thompson were building what were then considered large vessels, and keeping abreast with the times, they extended their shipyards, when necessary, in order to cope with the ever-increasing size of ships.

Messrs Gourlay gave up their Shipyard and closed their Engineering Works about 20 years ago.

In the year 1896 Mr W. B. Thompson sold his Shipyard, Boilershop, and Engine Works to Mr P. S. Brown and Mr James Tawse, who then formed the Caledon Shipbuilding & Engineering Co. Ltd., and they appointed Mr W. B. Thompson and Mr Grant Barclay as Joint Managing Directors. Mr P. S. Brown became the first Chairman of the Company, and still holds that position.

In 1917 a large area of ground at the Harbour became available for industrial purposes, and the Caledon Company took advantage of this opportunity, and leased about 20 acres, which they used as the site for what is now known as the Stannergate Shipyard. This enterprise enabled the Company to plan and lay out their new Shipyard, which is conceived on the most up-to-date lines, and now holds a very high place among the principal shipbuilding concerns in the United Kingdom.

The vessels built by this firm have been famous for their reliability, and the Company continues to build vessels of the very highest type.

Amongst the principal Companies for whom they have constructed vessels are:—Messrs Alfred Holt & Co., Liverpool; The Leyland Line, of Liverpool; and N. V. Stoomvaart Maatschappij "Nederland," whose vessels are acknowledged to be amongst the highest class cargo freighters afloat. They have constructed Passenger Vessels for the Booth Line, of Liverpool; and the entire fleet of the Yeoward Line, of Liverpool, who carry on an extensive passenger and fruit trade with the Canaries.

They have also built 29 first-class cargo and passenger vessels for the Clyde Shipping Company of Glasgow, and in recent years have built many first-class oil tankers.

In addition to larger types of vessels, the Caledon Company have continued to build smaller vessels of very special types, and recent examples are the well-known Wallasey Ferry Steamers, the Tay Ferries Steamers, and Paddle Steamers for the Southern Railway Company.

The products of this Company are also well known in the Far East.

Recently the Caledon Company extended their Stannergate Shipyard, in order to concentrate all their building in the one place, and they have been able to give up to the Harbour Trustees a large portion of the old Caledon Yard, including the slipways, to enable them to extend the King George V. Wharf, but they still retain the Boiler and other Shops, and the fitting-out Jetty, on which they have erected a large electric crane, capable of lifting up to 150 tons.

In addition to the Shipyards, the Caledon Company owns extensive Engineering Works in the City, known as the Lilybank Engineering Works, and the engines constructed there are noted for their excellence.

Although the Caledon Company is now the only Shipbuilding concern on the River Tay, they continue to keep the River in the forefront of the World's Shipbuilding.

Dundee Harbour is still capable of great extension, and the Harbour Trustees will take advantage of every opportunity to further extend their estate and facilities.

WHALER "BALAENA"

EXPEDITIONARY SHIP "DISCOVERY"

AERIAL VIEWS OF HARBOUR

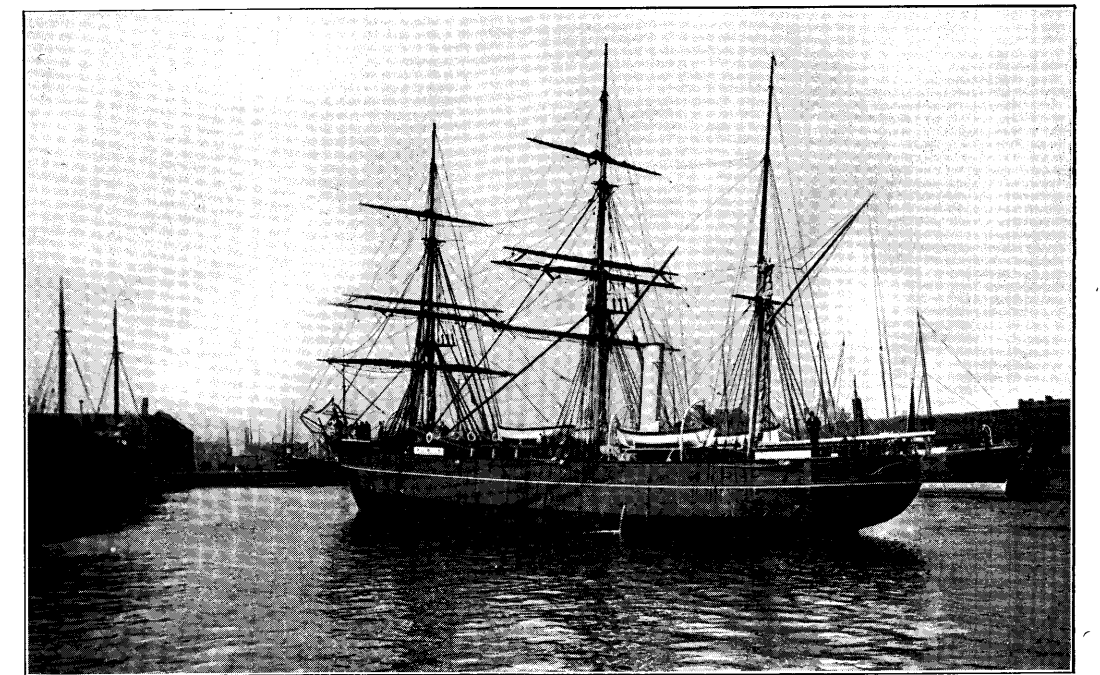
TORPEDO BOATS AND SUBMARINES

ANCHORAGE IN RIVER



Photo. by Watt & Sons, from picture loaned by Capt. J. W. Murray, former Master of the vessel

Whaler "Balaena"



S.S. "Discovery"

Photo. by George Worrall

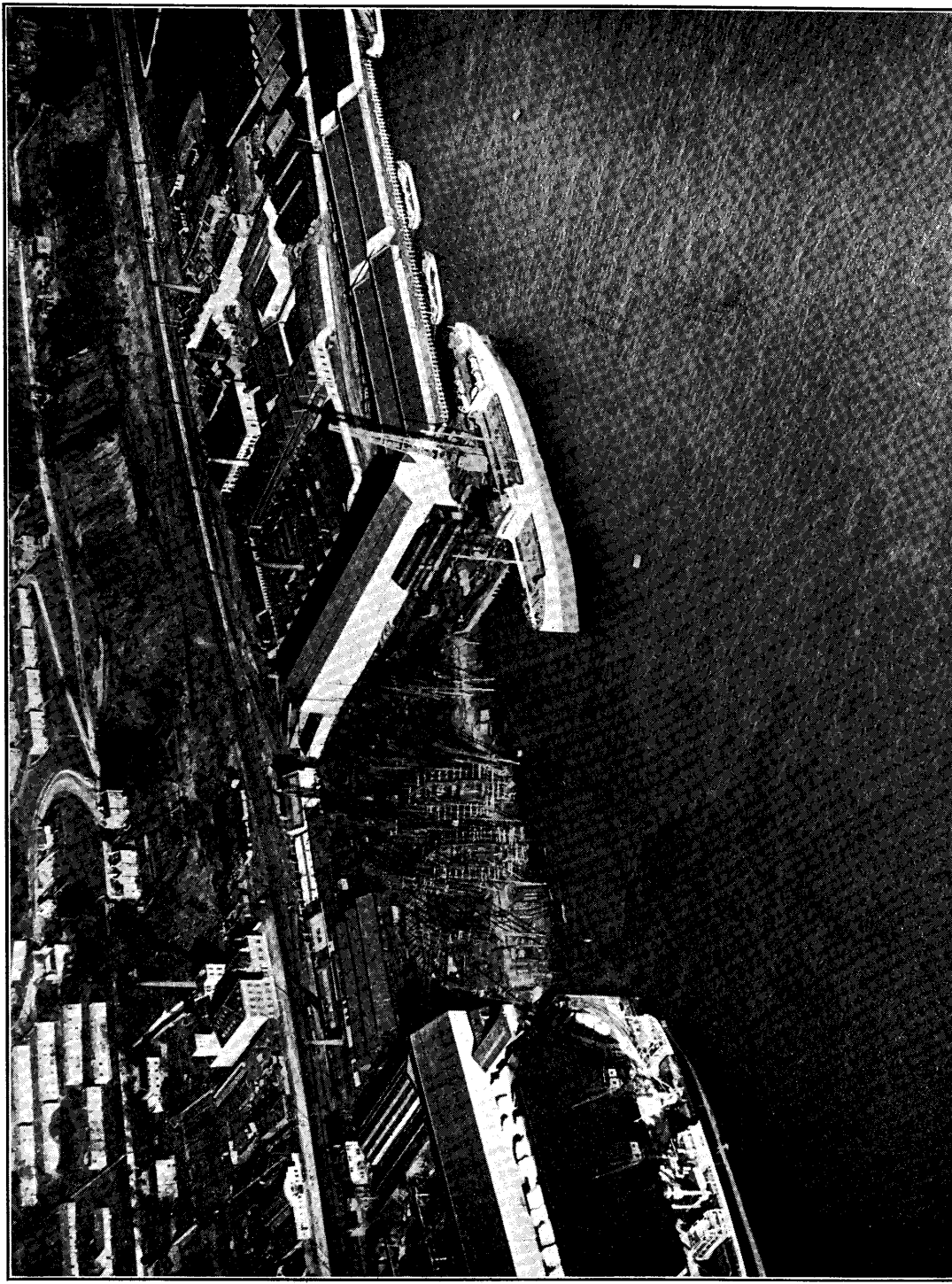


Photo. by Aerofilms, Ltd.

East End of King George V. Wharf
Caledon Shipyard (disused) acquired for Extension of King George V. Wharf and Contingent Works
Caledon Firing Out Jetty and Crane—West End of Eastern Wharf

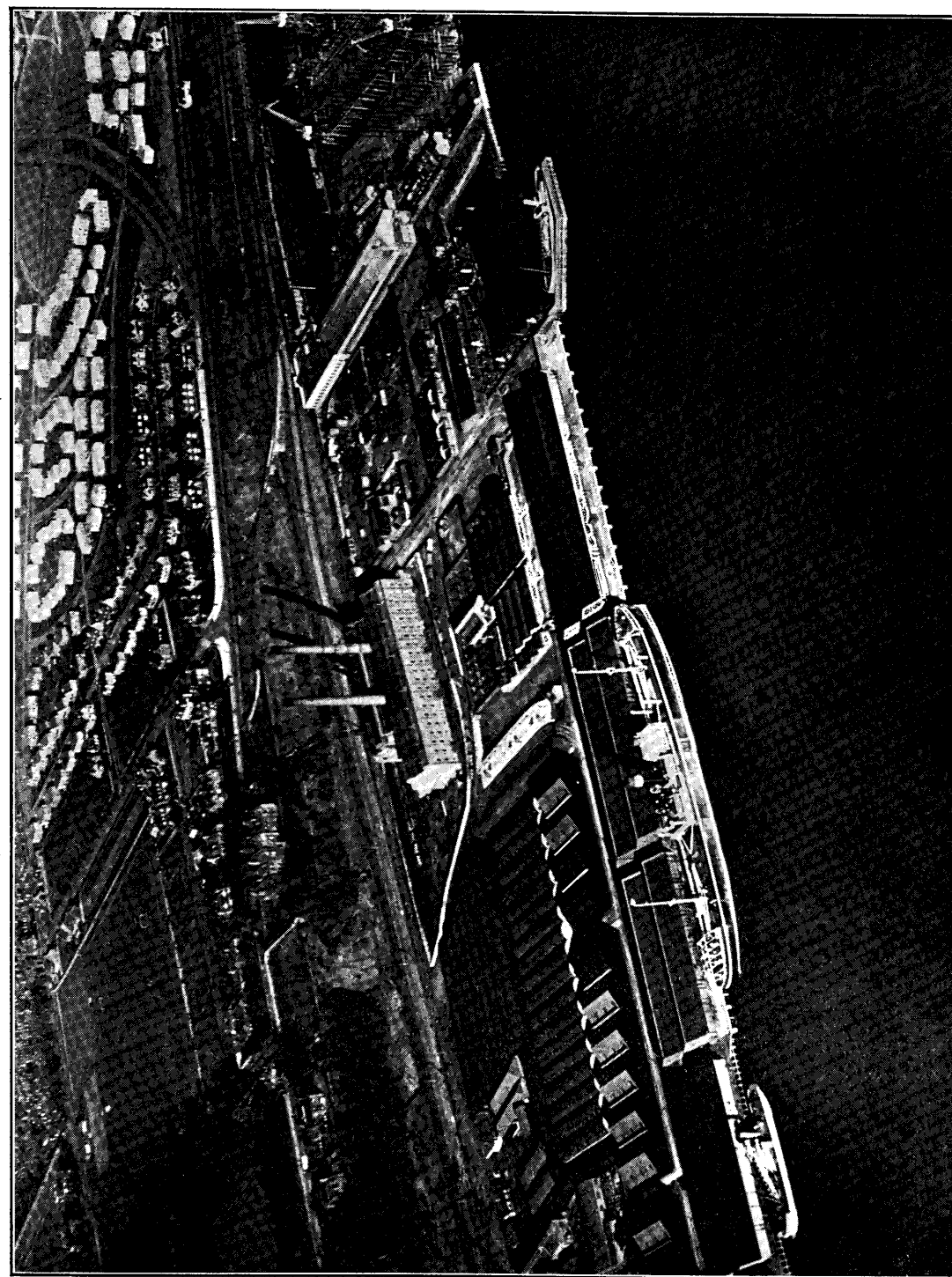
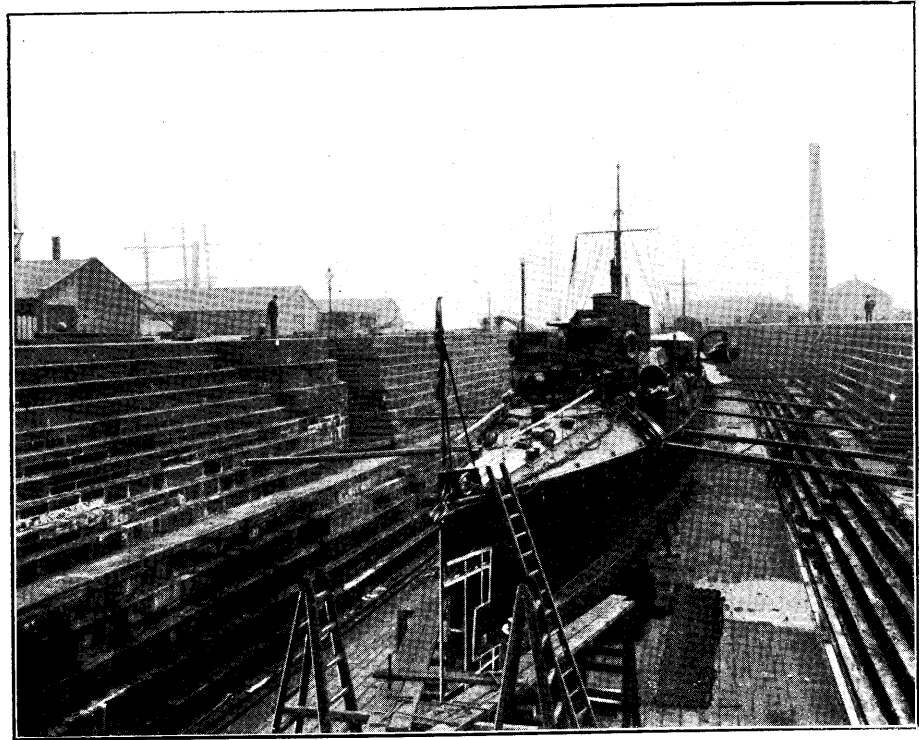


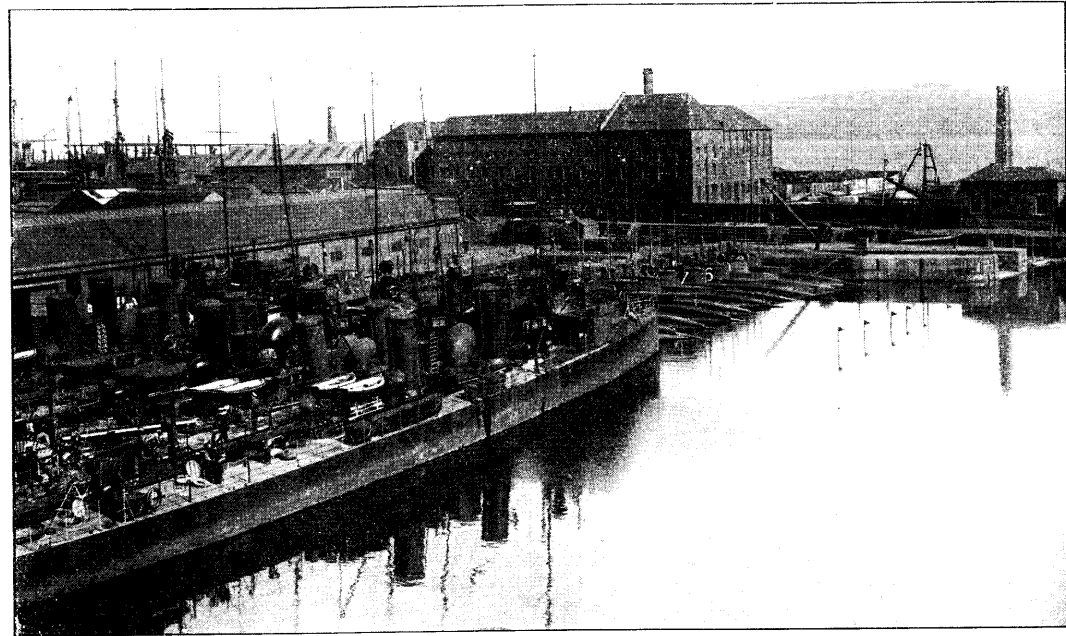
Photo. by Aerofilms, Ltd.

Eastern Wharf, Sheds and Warehouses—Cattle Depot—Electricity Station
Fish Dock and Market—West End of Stannergate Shipyard



Destroyer in East Graving Dock

Photo. by George Worrall



H.M. Destroyers and Submarines in King William IV. Dock

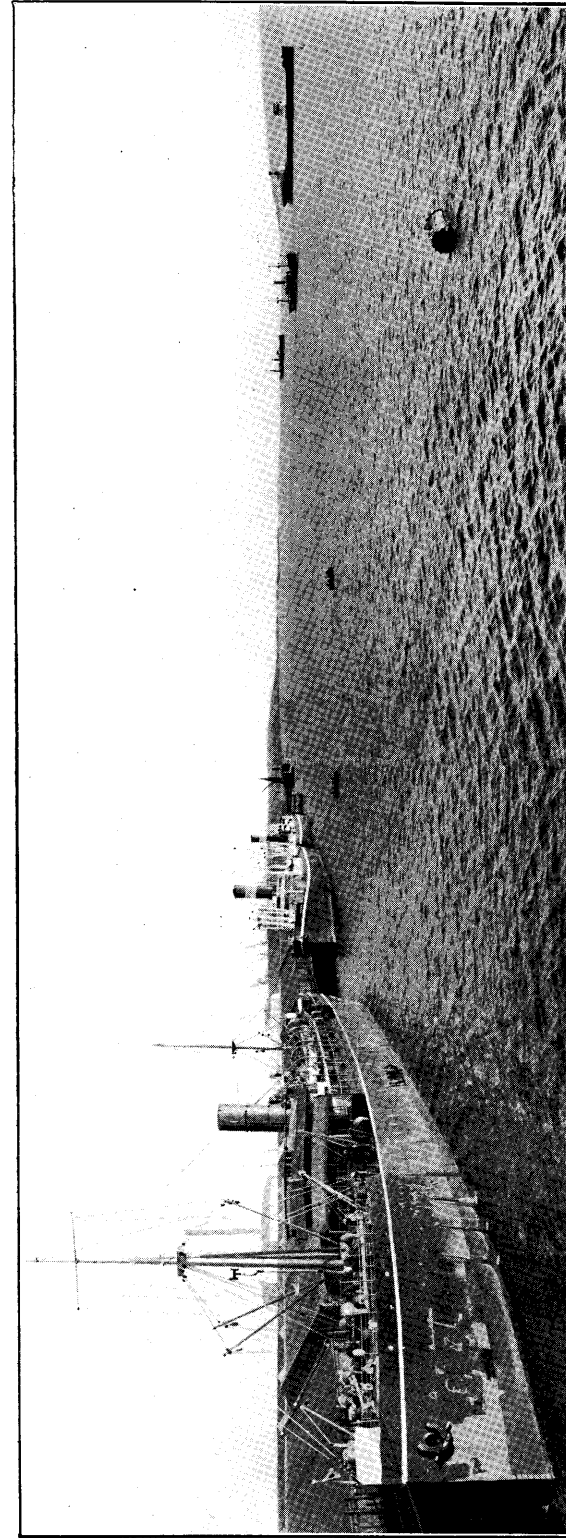


Photo. by D. C. Thomson & Co., Ltd.

View of Anchorage in River, looking Seaward

TAY FERRIES

TAY FERRIES.

The Ferries between Newport, Woodhaven, and Balmerino on the South side, and Dundee on the North side of the River Tay, were from ancient times used as parts of lines of communication between the Capital of Scotland and the Northern parts of the Kingdom. The Ferries were under the control and management of the Justices of Peace and Commissioners of Supply of the Counties of Forfar and Fife, under the Acts of the Scottish Parliament, 1617, c.8.; 1669, c.16.; and 1686, c.8.

About 1815 these Ferries were worked by 25 sail boats, the boat owners being licensed by Lord Douglas, who had by his titles a right to the passage of "the water of Tay at Dundee, commonly called the Ferry-boat Duty at Dundee."

A melancholy accident occurred on Sunday, 28th May 1815, whereby the pinnace "Nelson," one of the Ferry Boats, was upset, and nineteen persons were drowned. The "Nelson," with 25 passengers, many of whom were going to Kilmany Church to hear Dr. Chalmers preach his farewell sermon, before he left for Glasgow, left Craig Pier when a gale was blowing. When near the Fife shore, the helmsman left his post to take in a reef, the boat swung round, was caught in the gale, heeled over, and shipped so much water that she sank immediately. This accident directed public attention to the working of the Ferries, and in 1817 the Counties of Fife and Forfar appointed a Joint-Committee to consider the state of the Ferries, and to concert measures for improvement.

Mr Robert Stevenson, C.E., was asked by the Joint-Committee to Report on the Ferries, and he suggested that the Piers at Newport and Dundee should have the first attention, and be improved, and that the matter of subsidiary piers and landing places at Woodhaven, etc., should be delayed until it was seen how the Steamboats, which were then coming into use, would work at the Ferries. In the meantime, the controlling body reduced the number of boats from 25 to 8, but, notwithstanding, maintained a good and regular service.

There was then no convenient means of transporting cattle, horses, or carriages across the River, and this could only be done at

certain times of the tide, and in fine weather. This state of matters obtained until 1821, when a double or twin steam vessel named the "Union" began to ply between Dundee and Newport and Dundee and Woodhaven. Great inconvenience was felt in making the passage to Woodhaven, chiefly by reason of the sandbanks, and frequent complaints having been made as to this, the Trustees directed in July 1822 that the steamer should call at Newport only.

Mr Stevenson's report was the basis of the 1819 Act, which *inter alia* provided that not only the Justices of Peace and Commissioners of Supply of Fife and Forfar, but also the Chief Baron of the Exchequer, the Lord President, the Lord Justice Clerk, the Lord Chief Commissioner of the Jury Court, the Lord Advocate, the Solicitor General, the Commander of the Forces in North Britain, the Sheriffs of Forfar and Fife, and the Provost of Dundee, as well as five gentlemen to be chosen by persons who should subscribe £50 or upwards for the purpose of the Act, were to be constituted Trustees of the Ferries, Lord Douglas being paid £13 10s per annum for his rights of Ferry-boat Duty at Dundee.

The revenue of the Trustees being insufficient to maintain the two lines of Ferry, and to execute the works prescribed by the Parliamentary plans furnished by Mr Stevenson, Mr Thomas Telford, C.E., was asked to report as to a sole landing place on the Fife side of the Tay. He submitted two reports, recommending in both a "Pier in the vicinity of Newport," and estimated the cost at about £6,500. A Bill to carry out the improvements recommended by Mr Telford, and to borrow additional money, was passed in 1822.

No sooner did the new Act come into operation than the Ferry Trustees began the construction of the new pier at Newport, and discontinued the Woodhaven Ferry.

A second twin steamer, the "George IV.," was put on the service in 1823, and this vessel was fitted with reversing gear, invented by Mr James Carmichael, of Dundee.

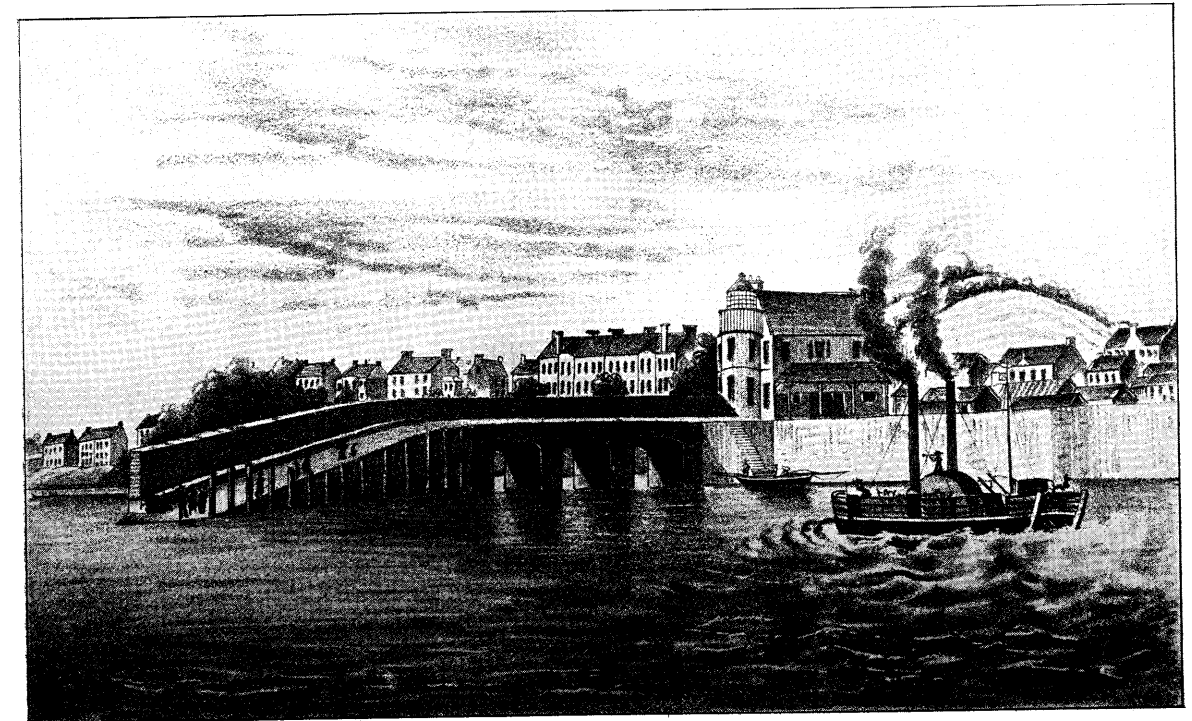
The twin steamers had two separate hulls, with a huge paddle wheel which revolved between them.

The Act of 1819 authorised the Trustees to borrow £20,000, and this amount was promised, but the subscribers, finding that the undertaking was not likely to be profitable, subscribed only £7,000.

To carry on the undertaking, the Trustees overdrew their Account with the Dundee Banking Company. The Act of 1822 authorised the Trustees to borrow £25,000, being £5,000 additional. In 1823 the Act, 4, George IV., c.88, was passed, authorising the Exchequer Loan Commissioners to advance to the Ferry Trustees any sum not exceeding £25,000. Thereafter, the Trustees borrowed from the Public Works Loan Commissioners a sum of £18,000, and subsequently a further sum of £7,000, making altogether the £25,000 authorised to be borrowed. The Interest on the Mortgages in favour of the Exchequer Loan Commissioners was paid by the Trustees up to and including the year 1839, but afterwards fell into arrears. In consequence, the Exchequer Loan Commissioners took possession of the Ferries, under their Mortgages, in 1842. In 1843 the Commissioners passed a Bill which was declared to continue in force for 31 years.

In July 1845, the Edinburgh and Northern Railway Company was incorporated for the purpose of making a railway through Fife to Newport, and at the same time the Scottish Central Railway Company was incorporated for the purpose of making a railway from Perth, by Stirling, to join the Edinburgh and Glasgow Railway. Neither Company had the power to purchase or acquire the Tay Ferries, but both Companies, immediately on incorporation, endeavoured to do this. Three months later the Dundee Banking Company, acting on instructions, purchased the Ferries from the Exchequer Loan Commissioners for £27,500, but it was not until 1860, fifteen years afterwards, that the Scottish Central Railway Company, although all along the real purchasers, took the formal title out of the Dundee Bank. In 1865 the Scottish Central Railway Company amalgamated with the Caledonian Railway Company, and in 1870 the Caledonian Railway Company promoted a Bill in Parliament for vesting in them the Ferries, then under their management, and for continuing the term of the Acts relating thereto. This Bill was opposed by the Harbour Trustees, and failed to pass.

In December 1872, an agreement (Schedule A. of "the Dundee Harbour and Tay Ferries Act, 1873") was entered into between the Dundee Harbour Trustees and the Caledonian Railway Company, and in terms of that agreement, a Bill was promoted and passed in



Craig Pier, Dundee, 1824

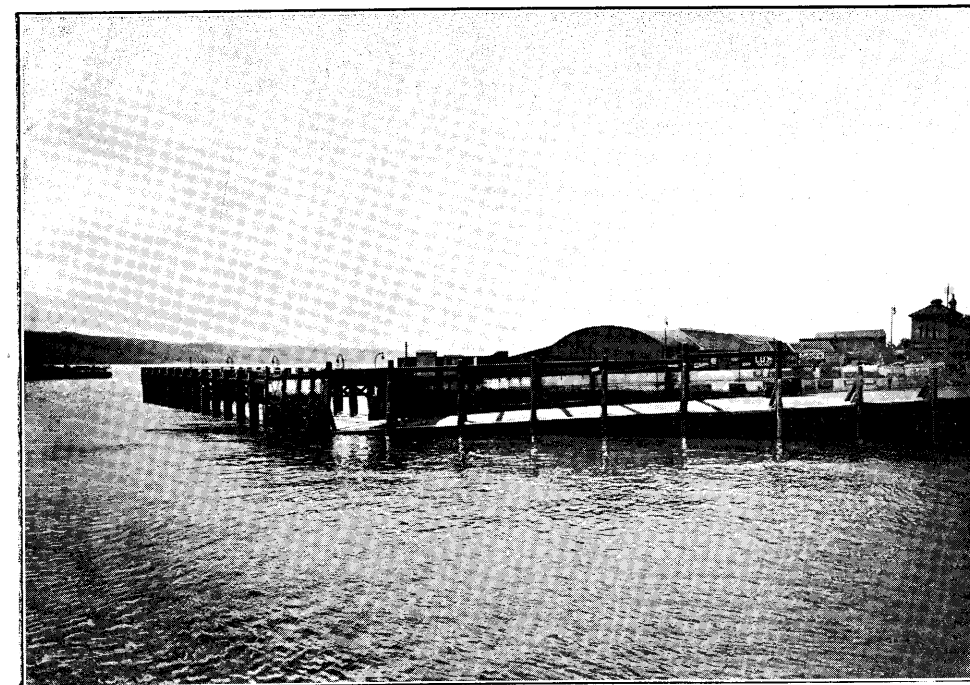
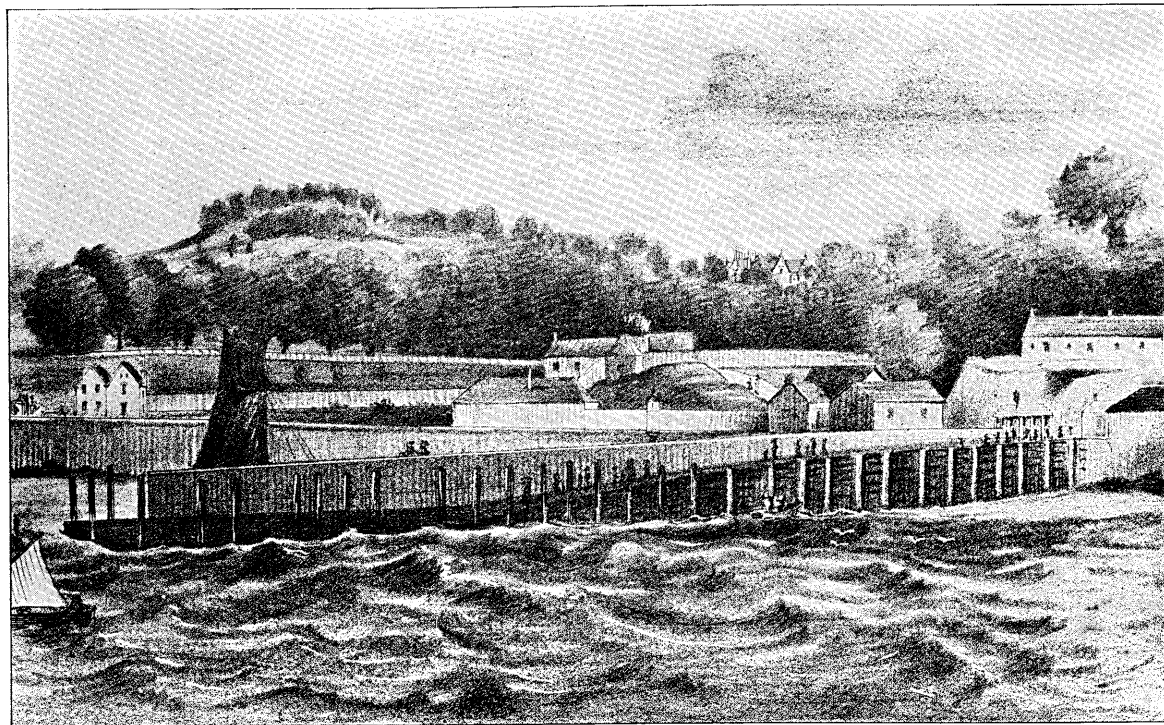
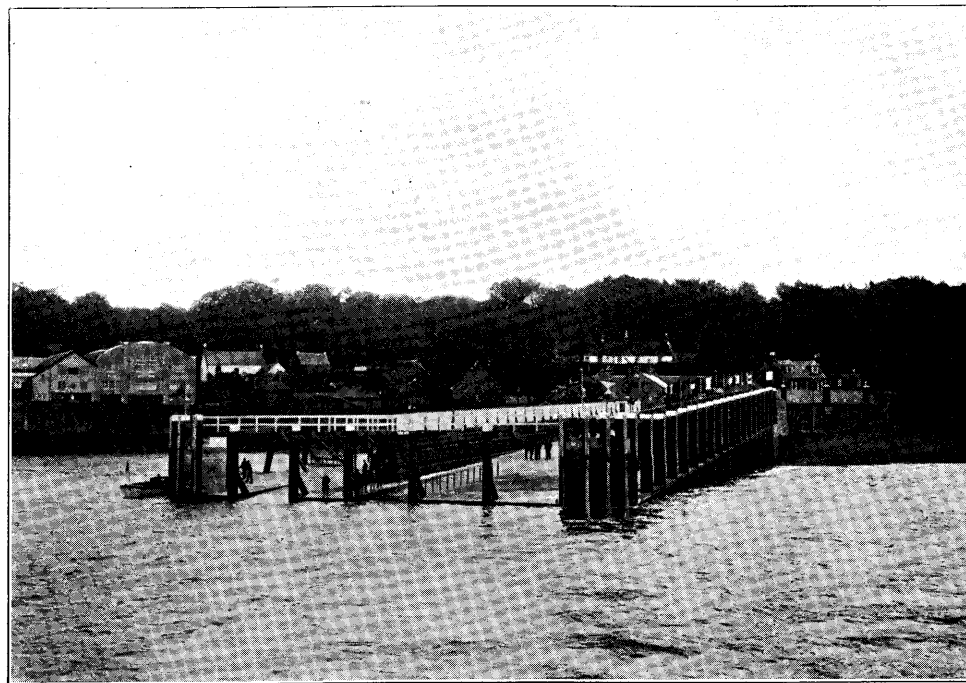


Photo. by Watt & Sons

Craig Pier, Dundee, 1930



Newport Pier, 1824



Newport Pier, 1930

Photo. by J. H. H. Thompson, Jr.

1873, whereby the Tay Ferries were transferred to and vested in the Trustees of the Harbour of Dundee, the Trustees paying the Caledonian Railway Company the sum of £20,000 for their whole rights, interests, and property in the Tay Ferries.

The Tay Ferries Act, 1873, came into force on 11th November 1873. By it, the Harbour Trustees took possession of the right of Ferries and passages across the Tay Ferries between Newport and Woodhaven and Dundee, "and the right of Ferry and right of Ferry Harbours and landing places at Dundee, Newport, and Woodhaven respectively, and the right of Ferry along the coast between Ferry-Port-on-Craig and Balmerino on the South, and from Broughty Castle to Invergowrie Burn on the North (exclusive of Ferry-Port-on-Craig, Broughty Castle, and Balmerino), and the power of regulating, and the jurisdiction over all Ferries along the said lines of coast on both sides of the River Tay (exclusive of Ferry-Port-on-Craig and Broughty Castle), and also over Balmerino, with the whole powers and privileges necessary or appertaining thereto, with the Harbours, Piers, Jetties, Landing Places, Houses, Buildings, Lands, Roads, Accesses, and other Works and Conveniences constructed or acquired by or vested in the Tay Ferry Trustees, or in the Caledonian Railway Company or their predecessors as Mortgagees or Creditors in Possession, under the provisions of the Tay Ferries Acts."

On taking over the Tay Ferries, the Trustees set about improving the service. Improvements were effected at Craig Pier and Newport Pier, and a new steamer was built.

On the working of the first few years there was a small surplus, but the cost of bringing buildings and plant into a proper state of repair, and the acquisition of a new steamer, increased the debt, and consequently the Capital Charges. The opening of the Tay Bridge for railway traffic had a detrimental effect on the revenue, and soon there were annual deficits. The Trustees obtained power in their Act of 1889 to transfer to and make chargeable against the Harbour undertaking, other than the Tay Ferries, the £20,000 originally paid for the Ferries. Despite this relief, there were further deficits, which were met by the Harbour, and it was not until Motor Traffic had developed that the revenue became sufficient to meet the expenditure.

With the growth of the new traffic, there came a need for further facilities, and in 1913-14 the Trustees extended the Craig Pier at a cost of £4,200.

To relieve congestion of traffic at Newport Pier, the Trustees, in 1926, entered upon extensive works. The Pier was widened and extended, and the accommodation for passengers greatly improved, at a cost of about £25,000. The Pier was formally opened for traffic in September 1928.

In 1910 a new steamer, the "Newport," was procured, and in 1924 another vessel, the "William High"—now the "Sir William High"—was built. By that time the Ferries had become more prosperous, and had begun to pay off the accrued deficiency which amounted to about £17,000. By 1927 the whole of the money advanced by the Harbour, to meet deficiencies, had been paid back.

Vehicular traffic developed so rapidly that it was considered advisable to procure another steamer, and the P.S. "B. L. Nairn" was constructed, at a cost of £26,000, and put on the passage on 7th June 1929. This vessel is longer and broader than any of the other vessels belonging to the Tay Ferries, and can carry more and heavier vehicles.

These three steamers, specially constructed to suit the requirements of the Ferries, are the only vessels now used, all the other steamers having been disposed of.

Formerly, one vessel was sufficient to cope with the ordinary traffic, the second boat being in use on Saturdays and holidays only. Now it is necessary to have two vessels on the passage every day, the number of daily sailings has been increased, and there is now a half-hourly service from morning till night, all the year round.

The Ferries are not worked for profit, but for the convenience of the public, and the rates charged compare very favourably with those of Ferries elsewhere. Road transport is increasing, and every day large quantities of goods are carried from the North to the South side of the Tay, and *vice versa*. Haulage contractors have found that by using the Ferry, instead of sending their vehicles by Perth, the saving in time and running costs more than compensates them for the charges made, and this traffic, particularly, is rapidly increasing.

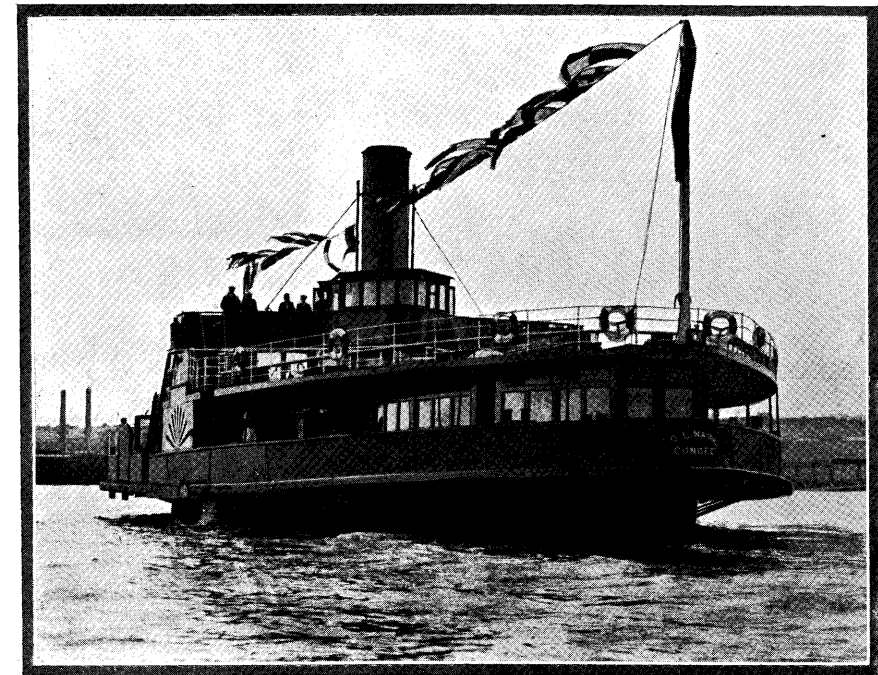
At the moment, the affairs of the undertaking, financially and otherwise, are in a highly satisfactory state.

On four occasions—in 1907, 1908, 1909, and 1910—Her Majesty Queen Alexandra, when travelling from Balmoral to Norway and Denmark, favoured Dundee as her port of embarkation. Arriving at the Tay Bridge Station, she crossed to the Craig Pier, where a pinnace was waiting to convey her to the Royal Yacht, which was moored in the River. On the first three visits, grandstands were erected, and these were filled with spectators, as were all the points of vantage in the vicinity of the Pier, and the Queen was accorded a most enthusiastic reception. On the last occasion, Queen Alexandra was in mourning for King Edward VII., and the proceedings were strictly private, only the Lord Provost and the Conveners and Officials of the Harbour Trust being permitted to attend at the Craig Pier. Many people had gathered on the streets, and on the River Front, but at the request of those in charge of the arrangements, no demonstration was made.



Photo. by Valentine & Sons, Ltd.

Embarkation at Craig Pier of Queen Alexandra for Denmark, 1908



Tay Ferries Steamer "B. L. Nairn"

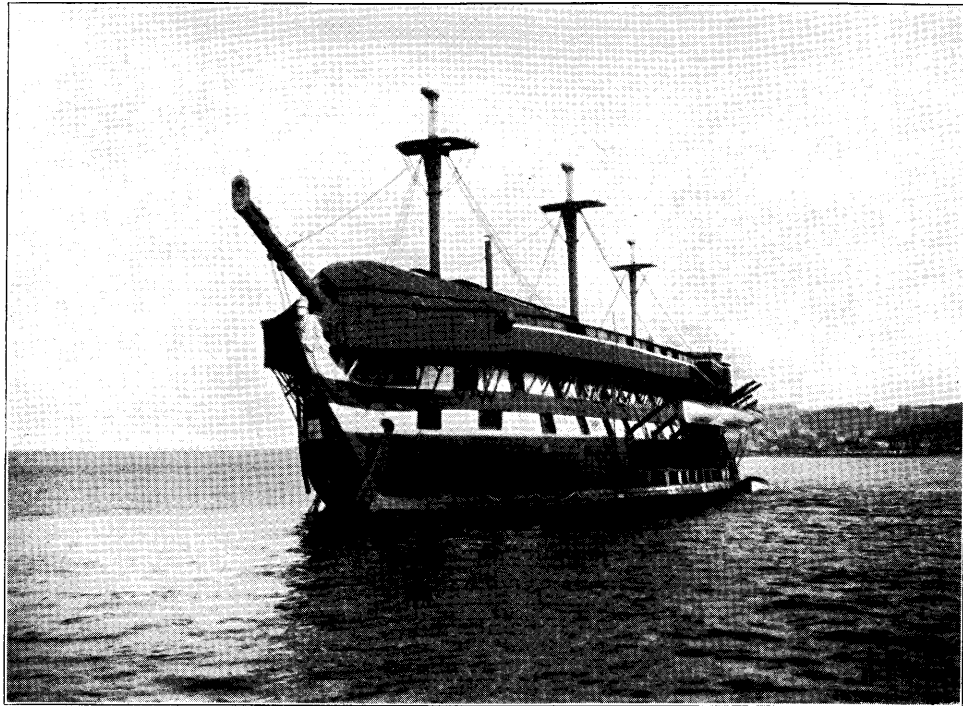


Photo. by J. H. H. Thompson, Jr.

"Mars" Training Ship in River Tay—1869-1929

PILOTAGE

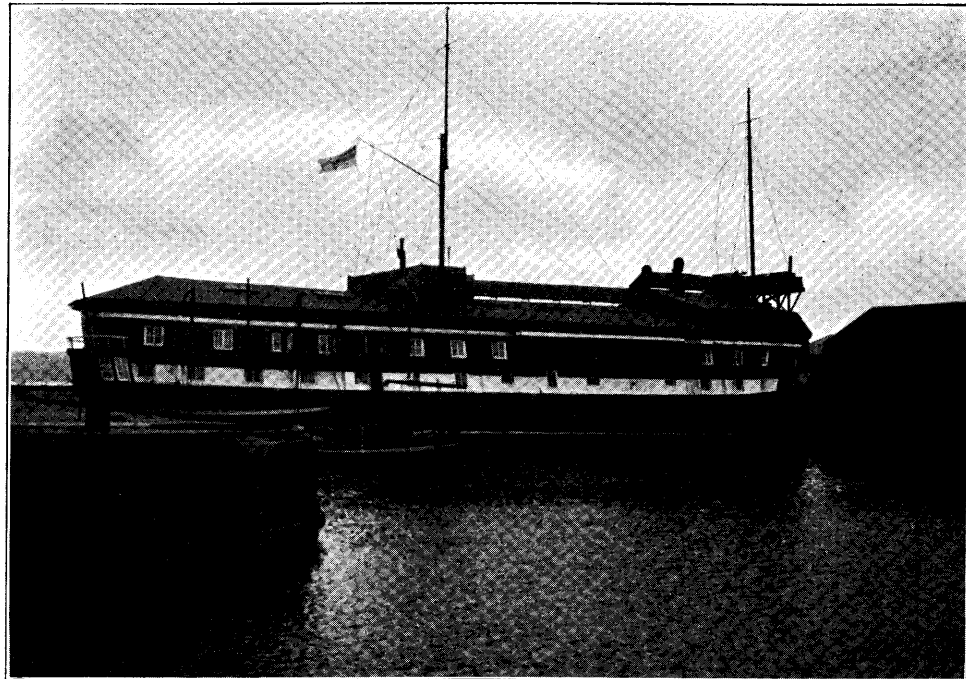


Photo. by J. H. H. Thompson, Jr.

R.N.V.R. Training Ship "Unicorn" in Earl Grey Dock

PILOTAGE.

Pilotage for the Port and Harbour of Dundee is under the jurisdiction of the Trustees of the Harbour of Dundee, and has been so since the Harbour was placed in perpetuity under the Trustees, but was not compulsory until 1920.

Under Section XXV. of the Dundee Harbour Act, 1830, the Trustees were "authorised to licence, appoint, and regulate a sufficient number of persons, who shall be certified by the Fraternity of Masters and Seamen of Dundee to be fully qualified, as Pilots for the said Harbour, and also for conducting vessels out of and into the River Tay, and to fix the Rates of Pilotage to be paid to the said Pilots, and to remove and displace them at pleasure." The Harbour Act of 1843 continued these powers, and the Trustees were further empowered to appoint a Pilotmaster, and to licence Pilot Vessels. The Pilot Vessels were, however, to be under the control, regulation, and management of the Seamen's Fraternity.

A Pilotmaster, who also acted as Superintendent of the Lighting and Buoying of the River, was appointed, and this arrangement continued until 1890. On the resignation of the Pilotmaster in that year, the Lighting and Buoying work was transferred to the Harbour Engineer's Department, and, with the consent of the Trustees, the Harbourmaster was appointed Pilotmaster. This arrangement still holds good.

For many years the Pilots acted independently of each other, but frequently this state of matters was found to be most unsatisfactory, and from time to time the question of improving the service was considered by the Harbour Trustees and the Fraternity of Masters and Seamen in Dundee.

In 1850 £670 was publicly subscribed, a Pilot Cutter and necessary boats and appliances were purchased, and a Joint-Committee of the Harbour Trustees and the Fraternity of Masters and Seamen was appointed to manage the undertaking. The licences then in force were withdrawn, and licences were then only granted

to men who agreed to devote their whole time to the pilotage of the River and Harbour.

Under the arrangements then made, a certain number of Pilots were kept on board the Cutter at the entrance to the River Tay, and were thus available for service at all times, unless in very stormy weather. As a consequence, the service was greatly improved.

In 1859 the Pilotage Committee was able, under terms of an agreement, to repay the whole of the subscriptions obtained for the Cutter and equipment.

In 1862 public subscriptions were again obtained for the provision of an additional Pilot Cutter and equipment, under conditions similar to those which obtained when the first Cutter was subscribed for. In due course the money lent was repaid, and the Pilot Cutters and all the gear and equipment became the property of the Pilotage Undertaking.

By the Dundee Harbour Consolidation Act, 1875, the Lighting and Buoying of the River and Firth of Tay was transferred from the Seamen's Fraternity to the Trustees, and the Trustees were authorised to licence and appoint Pilots and provide or licence vessels, and that without reference to the Fraternity. In other words, the Pilotage Service was placed wholly under the control of the Trustees.

The Consolidation Act of 1911 continued these powers, and, in addition, made provision for the creation of a Superannuation Fund for the Pilots.

The Pilotage Act, 1913, came into force on 1st April of that year, its purpose being to consolidate the Acts relating to Pilotage, to modernise the working of Pilotage undertakings, and as far as possible, make these uniform. Power was given to the Board of Trade to hold local inquiries, to make re-arrangement of Pilotage Districts, make Pilotage compulsory or non-compulsory in any District, and to make Orders accordingly.

The Harbour Trustees immediately raised the question of the revision of their Bye-Laws, and invited the Board of Trade to hold an Inquiry at Dundee, but the War intervened, and it was not until November, 1919, that two Board of Trade Commissioners came to

Dundee and held an Inquiry. All interests were represented, and agents and others were heard by the Commissioners.

As a result of this Inquiry, the Dundee Pilotage Order was prepared by the Board of Trade and confirmed by the "Pilotage Orders Confirmation (No. 3) Act, 1920," dated 9th August 1920. Sections I., II., and III., of this Order read as follows:—

- (1) The limits of the Dundee Pilotage District, hereinafter referred to as "the Pilotage District," shall be the waters of the Sea and River Tay, bounded seawards by a line drawn at a radius of three miles from the Tay Fairway Buoy, and landwards, by a line drawn from Craig Pier on the North side of the River Tay to Newport Pier on the South side, including all Tidal Harbours, Docks, and Locks leading thereto or therefrom.
- (2) The Pilotage Authority of the Pilotage District (hereinafter referred to as "the Authority") shall be the Dundee Harbour Trustees as constituted by the Dundee Harbour and Tay Ferries Acts, 1911 and 1912 (hereinafter referred to as "the Acts of 1911 and 1912").
- (3) Pilotage shall be compulsory within the Pilotage District.

Prior to the passing of this Order the Trustees had co-opted one of the Pilots as a Member of the Pilotage Committee, but the Order fixed the Membership of the Pilotage Committee at twelve, of which number, three have to be Trustees entitled to vote as Shipowners, and three have to be elected by the Licenced Pilots, "from among persons who either are, or have been, Licenced Pilots for the District."

New Bye-Laws were enacted and confirmed by the Board of Trade in September 1921.

More liberal provision was made for the Superannuation of Pilots, and for allowances to Widows and Children, and Bye-Laws for the Pilots' Benefit Fund were enacted and confirmed in 1923.

The Pilotage Rates were reduced from time to time, and the Bye-Laws were revised and amended in 1926.

Soon after the outbreak of War in 1914, all the lights in the River were extinguished, and in November 1914 a steamer was chartered for the service.

In May 1915 the steamer was given up, and the sailing Cutters were again used until January 1918, when the Admiralty provided a steam Drifter for the service, and exacted a special charge from shipping to cover expenses, and this vessel remained until January 1919.

Steam ships having been found most satisfactory, proposals were submitted for the acquisition of a Steam Cutter, but action was deferred until the result of the Board of Trade Inquiry was known. With compulsory Pilotage within the District in view, the Trustees felt they could safely undertake additional financial responsibility, and in 1920 purchased a steamer. The working of the service with this vessel proved so satisfactory that another steamer was secured in 1922.

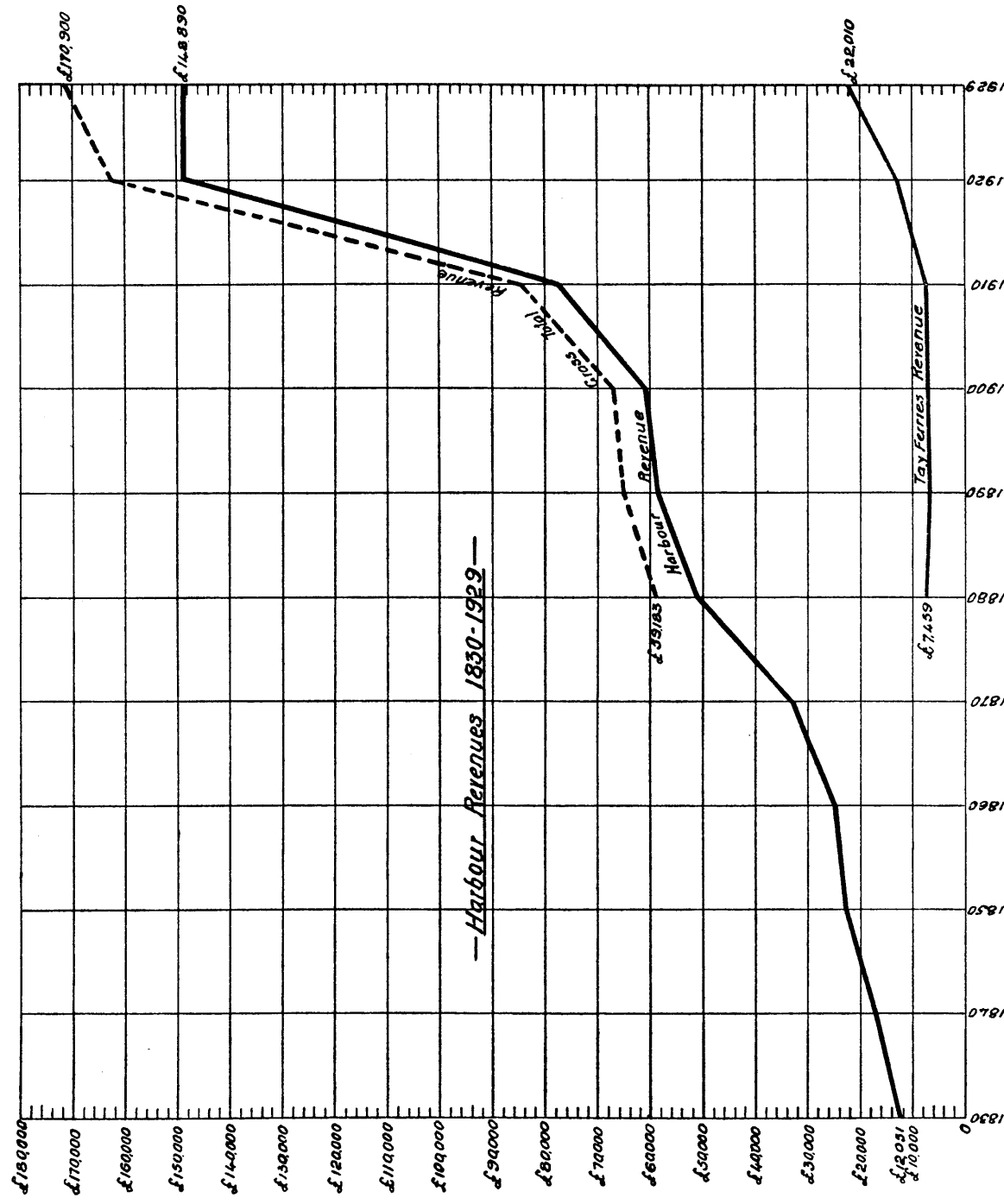
The Pilotage Undertaking has always been separate from the Harbour Undertaking; separate accounts are kept, and no part of the revenue is applied for Harbour purposes.

By permission of the Trustees, Harbour Officials are allowed to accept office under the Pilotage Authority, but such appointments are made by the Authority, and all salaries are paid out of the Pilotage revenue.

Every effort is being made to improve the service and to maintain it in a high state of efficiency.

HARBOUR REVENUES — 1830 to 1929.

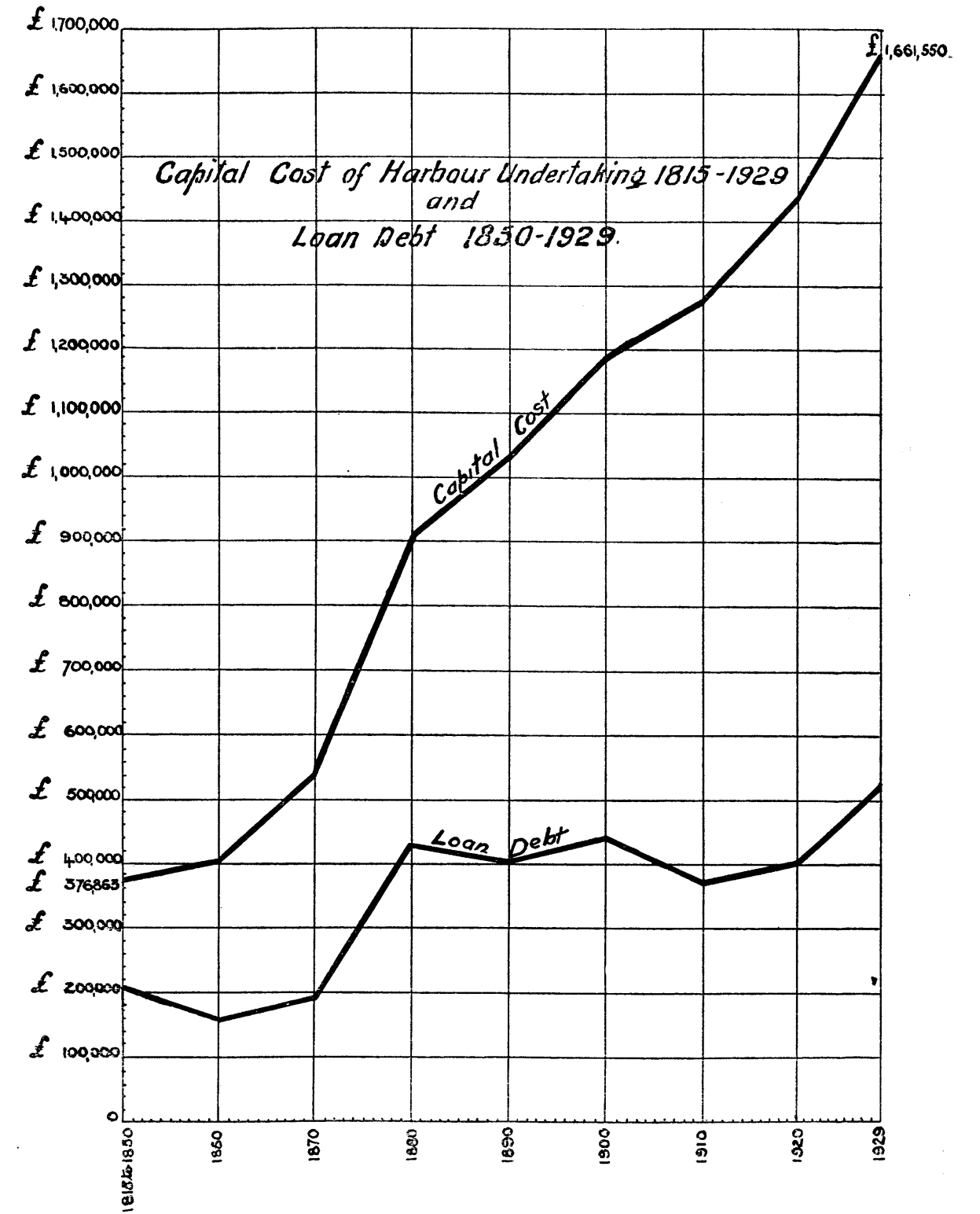
Tay Ferries Undertaking.				Harbour Undertaking.			
	Interest on Funds.	Ordinary Revenue.	Total.	Interest on Funds.	Ordinary Revenue.	Total.	Gross Total.
1830	...	...	...	...	£12,051	£12,051	£12,051
1840	...	...	...	...	£17,066	£17,066	£17,066
1850	...	...	...	...	£22,894	£22,894	£22,894
1860	...	...	...	...	£24,677	£24,677	£24,677
1870	...	...	...	...	£33,476	£33,476	£33,476
1880	£82	£7,377	£7,459	£13	£51,711	£51,724	£59,183
1890	£335	£6,061	£6,396	£175	£58,441	£58,616	£65,012
1900	£210	£6,884	£7,094	£513	£60,230	£60,743	£67,837
1910	£205	£7,352	£7,557	£840	£76,202	£77,042	£84,599
1920	£204	£13,339	£13,543	£1,810	£147,243	£149,053	£162,596
1929	£723	£21,287	£22,010	£3,510	£145,380	£148,890	£170,900



CAPITAL EXPENDITURE.

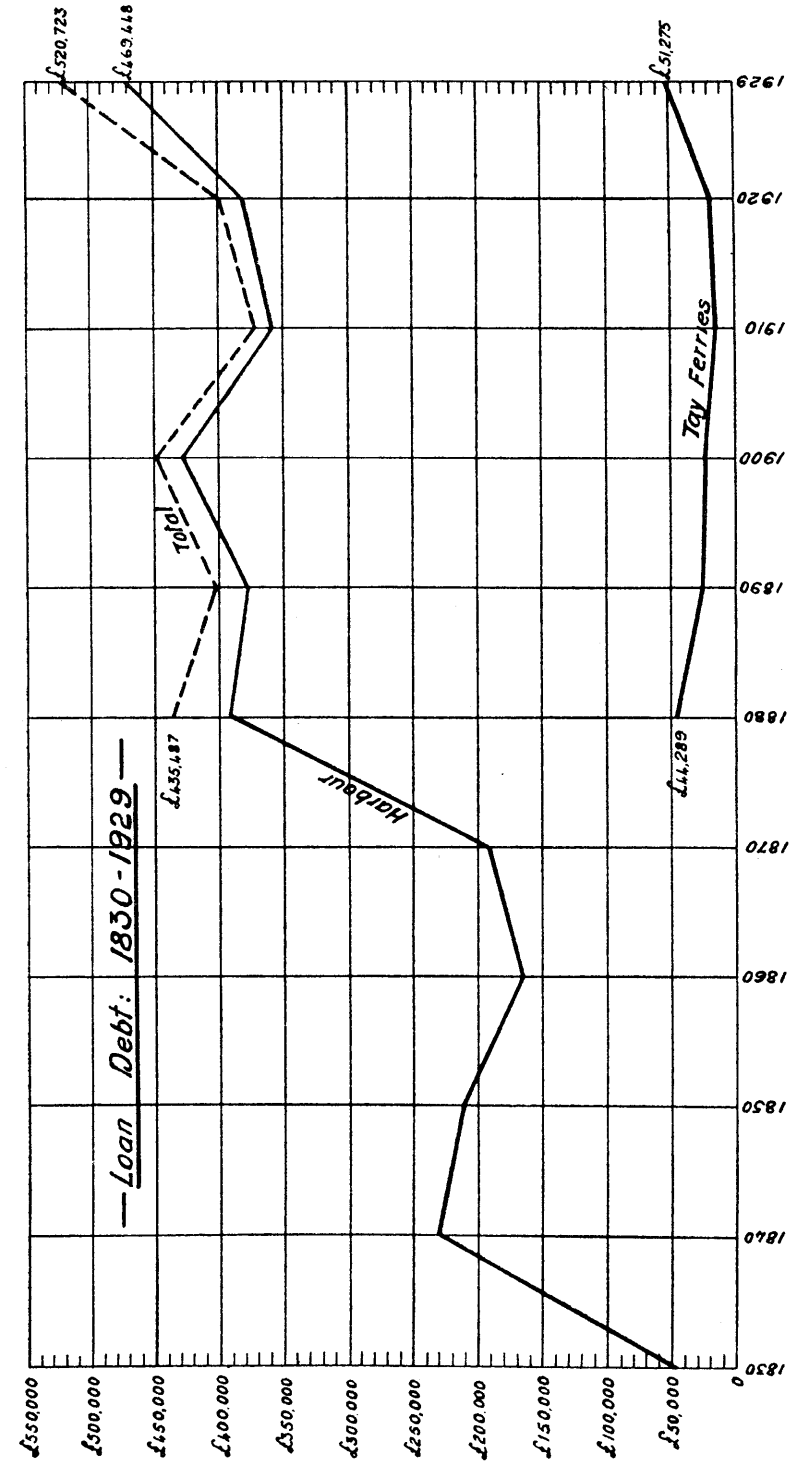
Expended 1815-1929.

		Expended.		Gross Amount
		Tay Ferries.	Harbour.	Expended.
1815 to 31st May	1850	-	—	£376,863
1850	Do. 1860	-	—	26,445
1860	Do. 1870	-	—	135,431
1870	Do. 1880	-	£42,764	327,408
1880	Do. 1890	-	2,485	117,063
1890	Do. 1900	-	633	156,303
1900	Do. 1910	-	41	88,751
1910	Do. 1920	-	4,412	158,711
1920	Do. 1929	-	64,252	159,988
		£114,587	£1,546,963	£1,661,550



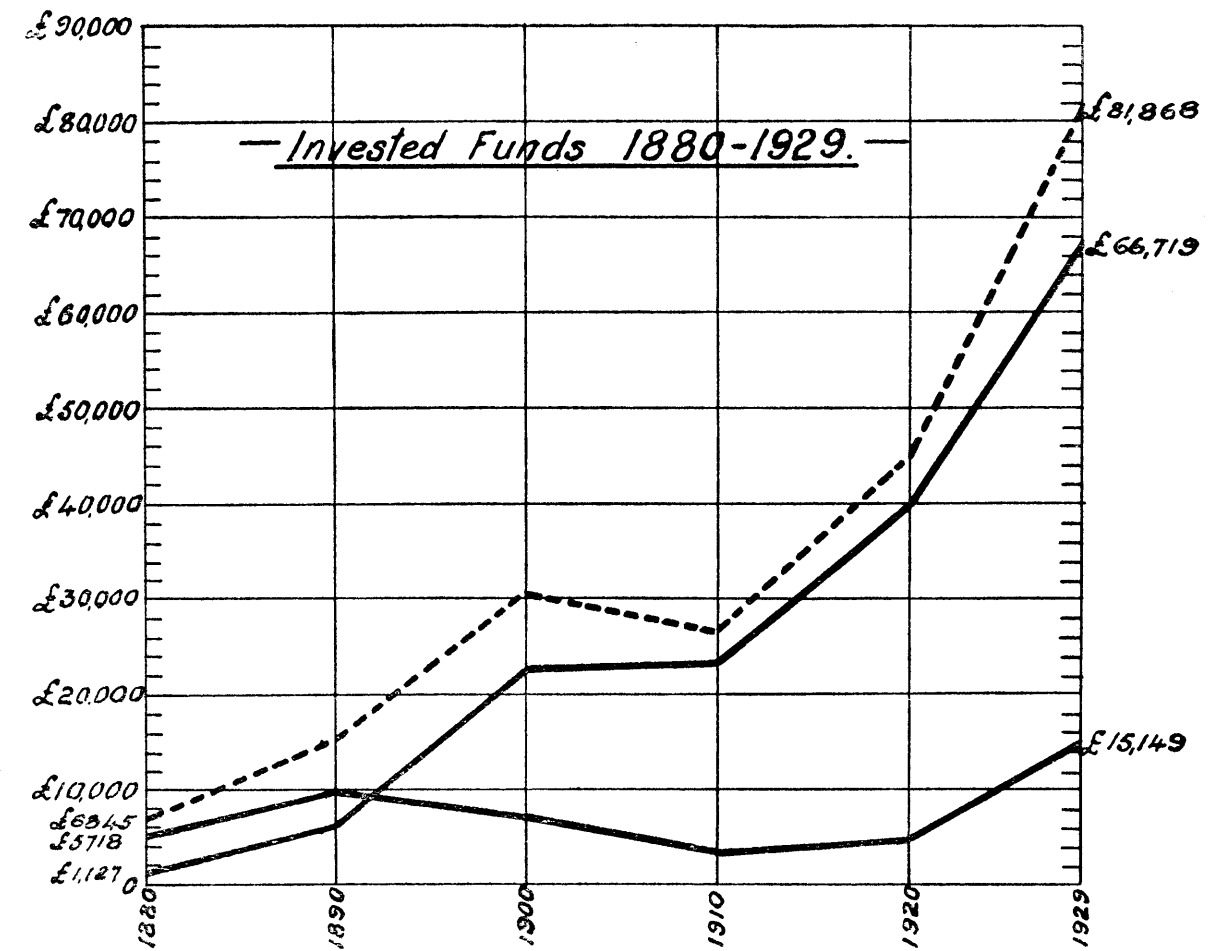
LOAN DEBT.

	Tay Ferries.	Harbour.	Total.
1830	-	£49,950	£49,950
1840	-	£230,194	£230,194
1850	-	£210,330	£210,330
1860	-	£164,063	£164,063
1870	-	£190,233	£190,233
1880	£44,289	£391,198	£435,487
1890	£24,769	£376,884	£401,653
1900	£20,645	£427,659	£448,304
1910	£14,696	£356,692	£371,388
1920	£19,697	£380,236	£399,933
1929	£51,275	£469,448	£520,723



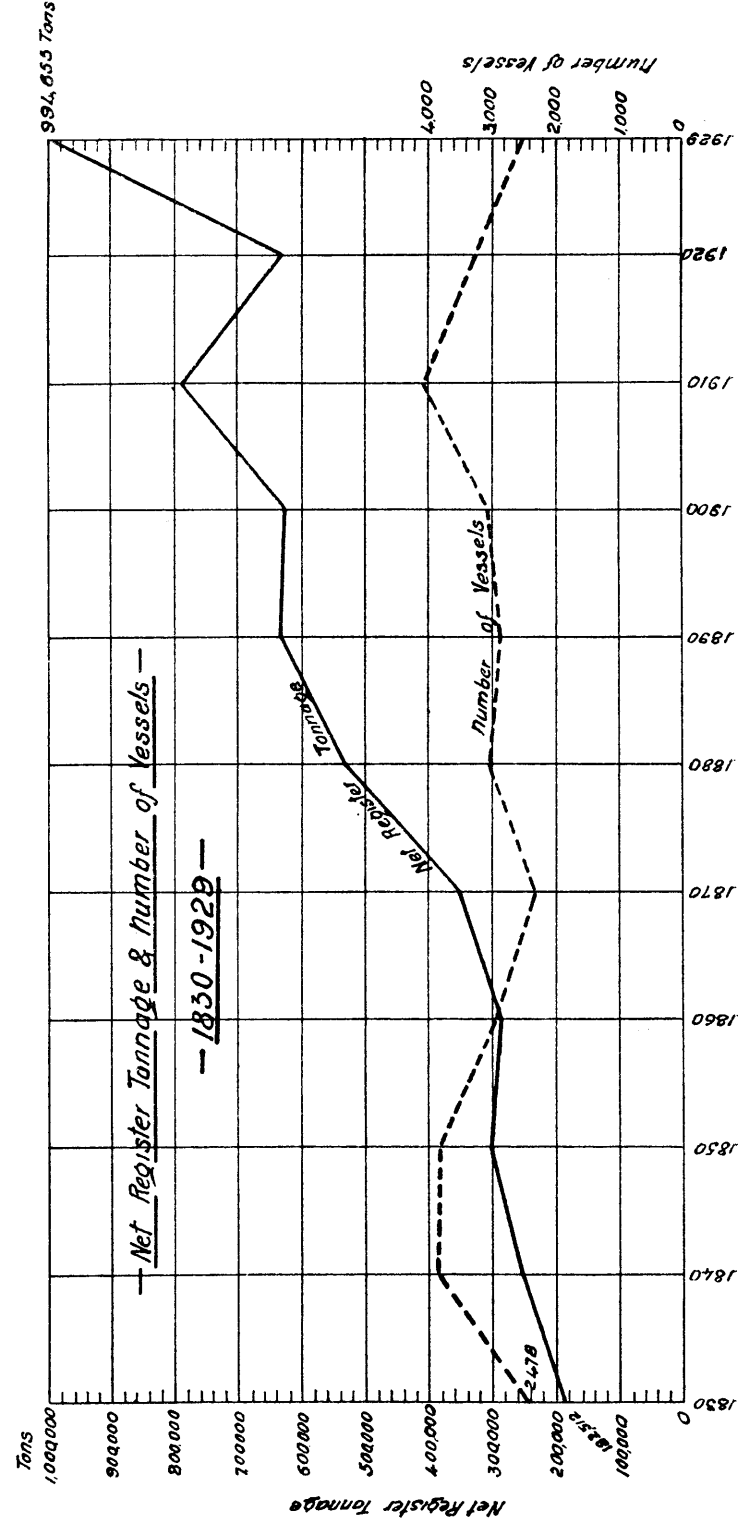
INVESTED FUNDS

	Tay Ferries.	Harbour.	Total.
1880	£5,718	£1,127	£6,845
1890	£9,565	£6,076	£15,641
1900	£7,730	£22,402	£30,132
1910	£3,324	£23,311	£26,635
1920	£4,747	£39,951	£44,698
1929	£15,149	£66,719	£81,868



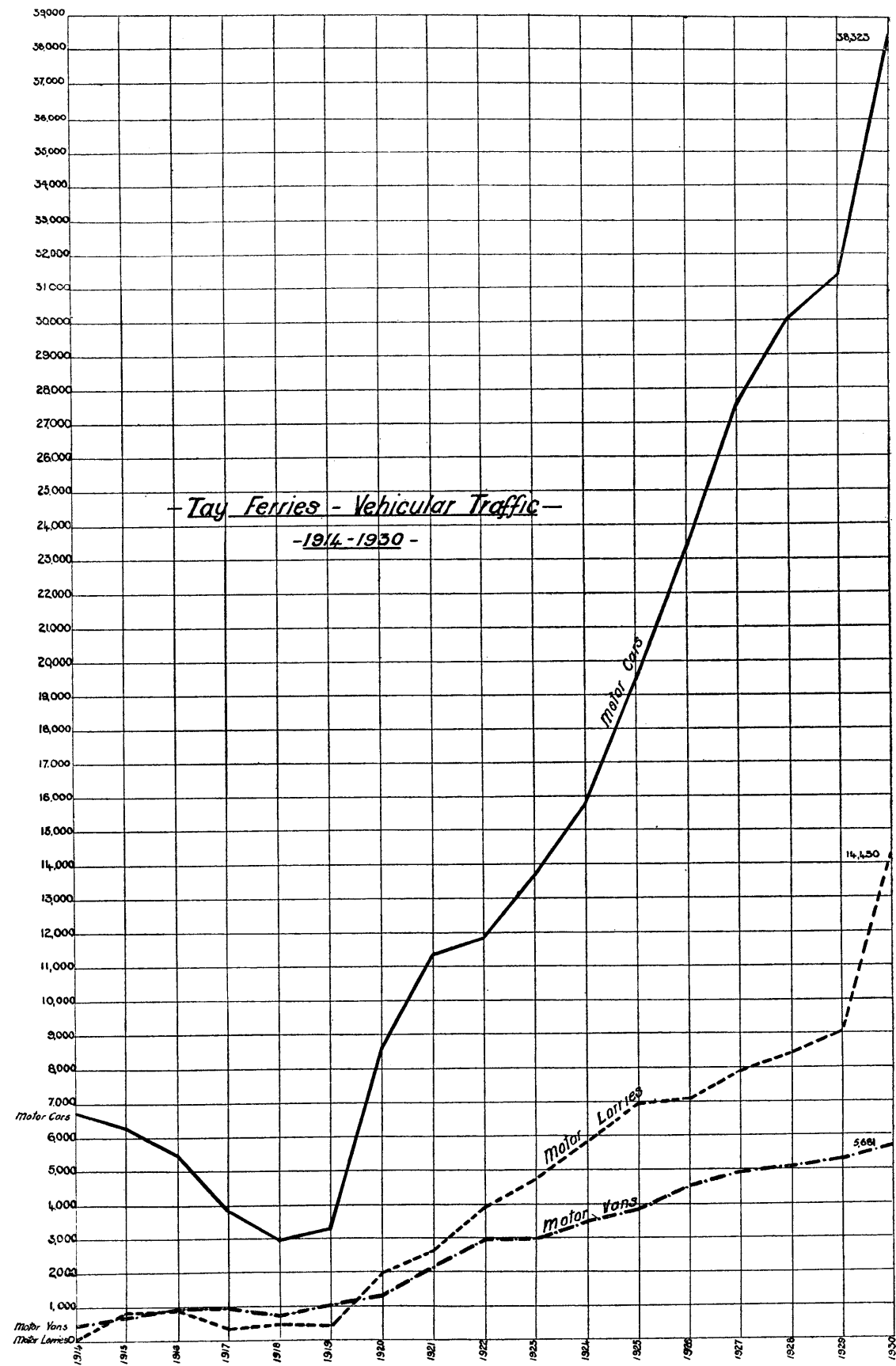
NUMBER AND TONNAGE OF VESSELS

	Number.	Net Register Tonnages.
1830	2,478	182,512
1840	3,850	255,074
1850	3,815	299,048
1860	2,940	280,891
1870	2,380	357,225
1880	3,016	531,946
1890	2,844	630,491
1900	3,070	621,042
1910	4,085	786,405
1920	3,221	638,659
1929	2,531	994,655



STATEMENT OF MOTOR TRAFFIC CARRIED ON TAY FERRIES STEAMERS.
1914—1930.

Year Ended 31st May.	Motor Cars.	Motor Vans.	Motor Lorries.	Charabancs.	Motor Cycles.	Motor Cycles & Sidecars.
1914	-	455	61	6	2,427	1,499
1915	-	648	824	15	3,135	1,513
1916	-	959	900	2	2,333	1,606
1917	-	946	389	2	1,552	1,131
1918	-	731	443	-	1,023	954
1919	-	1,049	407	-	803	1,066
1920	-	1,309	1,979	29	3,904	3,768
1921	-	2,143	2,655	108	5,727	4,244
1922	-	2,944	3,970	46	5,369	3,952
1923	-	2,987	4,710	89	5,226	3,822
1924	-	3,255	5,819	105	5,290	3,449
1925	-	3,809	6,955	121	5,847	3,540
1926	-	4,524	7,025	150	7,099	3,397
1927	-	4,915	7,879	227	9,021	3,124
1928	-	5,054	8,393	222	8,049	2,632
1929	-	5,292	9,017	302	8,399	2,127
1930	-	5,681	14,430	252	8,083	1,902



PRINCIPAL OFFICIALS AND STAFFS, 1930

LIST OF CHAIRMEN, 1830 to 1930

PRINCIPAL OFFICIALS, 1830 to 1930

PRINCIPAL OFFICIALS, 1930.

General Manager and Engineer.

J. HANNAY THOMPSON, O.B.E., M.I.C.E., M.Sc., J.P.

Clerk.

GEORGE G. RITCHIE.

Treasurer.

JOHN D. PANTON, C.A.

Harbourmaster.

CAPTAIN W. F. GREGORY.

Superintendent of Tay Ferries.

WILLIAM JOHNSTON.

LIST OF STAFFS.

General Manager and Engineer's Department.

JAS. R. DOUGLASS, M.B.E., M. Inst. C.E., Assistant Harbour Engineer.

John H. Hannay Thompson, B.Sc., A.M. Inst. C.E.; James A. Sturrock, James K. Simpson, Alex. Smith, Junr., Assistant Engineers.

R. N. H. Phillips, J. H. Murray, H. H. Maxwell, Apprentice Engineers.

George Murray, General Foreman; John Barr, Dredging Superintendent; Peter G. Speed, Superintendent of Masons and Roads; James Yeaman, Traffic Superintendent; Alexander Williams, Assistant General Foreman; William M. Scott, Storekeeper; George L. Crockett, Chief Clerk; Wilfrid L. Driscall, Frank Fraser, and Beryl L. Donn, Clerks; Claude Copeland, Messenger.

William Meldrum, James Chapman, John McDonald, Thomas McKenzie, John B. Gall, Masters of Steamers and Dredgers.

Clerk's Department.

William D. Keay and Margaret J. Allan, Clerks; Alexander Low, Messenger and Caretaker.

Treasurer's Department.

Archibald H. Rea, Head Clerk; Thomas B. Simpson, Head Import Clerk; Harry Watson, Head Export Clerk; George Kiddie, Cashier; Walter J. Smith, James Herd, Robert J. Greig, James B. Lamont, Sydney J. Campbell, Leanus J. Duff, Jean Stratton, Bella Crighton, Robina Kiddie, Doris F. Russell, Clerks.

Harbourmaster's Department.

James Moncrieff, Clerk; James Hutton, E. Herd, William Rattray, Dockmasters; Alfred Herd, Piermaster.

Tay Ferries' Department.

David Langlands, John Ormond, David Mitchell, Ernest Henderson, James Johnston, Clerks; James McBain, Charles W. May, Frederick Craig, James Collins, Masters of Steamers; David Patrick, Piermaster.

Surveyor of Cargoes.

Captain John Cumming.



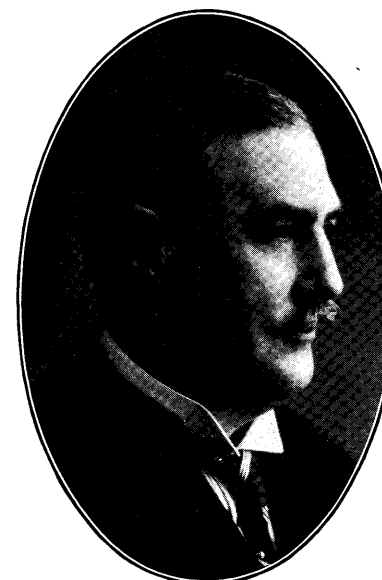
J. D. PANTON
Treasurer



GEO. G. RITCHIE
Clerk



J. HANNAY THOMPSON
General Manager and Engineer



Capt. W. F. GREGORY
Harbour-Master



WM. JOHNSTON
Superintendent Tay Ferries

LIST OF CHAIRMEN
OF THE TRUSTEES OF THE HARBOUR OF DUNDEE
1830—1930.

1830	-	-	-	Provost	THOMAS BELL.
1831	-	-	-	„	ROBERT JOBSON.
1831-33	-	-	-	„	WILLIAM LINDSAY.
1833-39	-	-	-	„	ALEXANDER KAY.
1839-41	-	-	-	„	WILLIAM HACKNEY.
1841	-	-	-	„	WILLIAM JOHNSTONE.
1841-44	-	-	-	„	ALEXANDER LAWSON.
1844-47	-	-	-	„	JAMES BROWN.
1847-53	-	-	-	„	PATRICK HUNTER THOMS.
1853-56	-	-	-	„	GEORGE ROUGH.
1856-58	-	-	-	„	JOHN EWAN.
1858	-	-	-	„	DAVID ROLLO.
1858-61	-	-	-	„	DAVID JOBSON.
1861-67	-	-	-	„	CHARLES PARKER.
1867-69	-	-	-	„	WILLIAM HAY.
1869-72	-	-	-	„	JAMES YEAMAN.
1872-75	-	-	-	„	JAMES COX.
1875-78	-	-	-	„	WILLIAM ROBERTSON.
1878-81	-	-	-	„	WILLIAM BROWNLEE.
1881-84	-	-	-	„	ALEXANDER HAY MONCUR.
1884-87	-	-	-	„	HUGH BALLINGALL.
1887-90	-	-	-	„	WILLIAM HUNTER.
1890-93	-	-	-	Lord Provost	ALEXANDER MATHEWSON.
1893-96	-	-	-	„	„ Sir JAMES LOW, Bart.
1896-99	-	-	-	„	„ HENRY McGRADY.
1899-1902	-	-	-	„	„ WILLIAM HUNTER.
1902-05	-	-	-	„	„ CHARLES BARRIE.
1905-08	-	-	-	„	„ WILLIAM LONGAIR.
1908-11	-	-	-	„	„ Sir JAMES URQUHART, LL.D.
1911-12	-	-	-	-	HENRY McGRADY, Esq., D.L., J.P.
1912-13	-	-	-	-	J. C. BUIST, Esq., LL.D., J.P.
1913-14	-	-	-	-	ANDREW LEITCH, Esq., J.P.
1914-20	-	-	-	-	J. C. BUIST, Esq., LL.D., J.P.
1920-26	-	-	-	-	THOMAS B. TAYLOR, Esq., J.P.
1926 to date	-	-	-	-	B. L. NAIRN, Esq., J.P.

PRINCIPAL OFFICIALS, 1830—1930.

HARBOUR ENGINEERS.

1832-1846 - - JAMES LESLIE, M. Inst. C.E.
1846-1869 - - CHARLES OWER, M. Inst. C.E.
1869-1896 - - DAVID CUNNINGHAM, M. Inst. C.E.
1896-1901 - - GEORGE C. BUCHANAN, M. Inst. C.E.
1901-1909 - - J. HANNAY THOMPSON, M. Inst. C.E.

GENERAL MANAGER AND ENGINEER.

1909 to date - - J. HANNAY THOMPSON, M. Inst. C.E.

CLERKS TO TRUST.

1830-1837 - - JAMES SAUNDERS.
1838-1865 - - GEORGE MILNE.
1865-1866 - - DAVID REITH,
1866-1881 - - WILLIAM THOMS.
1881-1900 - - ALEXANDER E. GRAY.
1900-1927 - - JOHN MALLOCH.
1928 to date - - GEORGE G. RITCHIE.

TREASURERS.

1830-1856 - - JOHN CAIRNCROSS.
1856-1858 - - SIMON ROBERTSON.
1858-1864 - - WILLIAM CLIREHUGH.
1864-1908 - - JAMES WATSON.
1909 to date - - JOHN D. PANTON, C.A.

HARBOUR-MASTERS.

1830-1836 - - LIEUTENANT THOMAS GRAY, R.N.
1836-1846 - - LIEUTENANT J. N. SMART, R.N.
1846-1871 - - CAPTAIN JOHN JACK.
1871-1883 - - CAPTAIN WILLIAM ROBERTSON.
1883-1920 - - CAPTAIN CHARLES YULE.
1920 to date - - CAPTAIN W. F. GREGORY.

SUPERINTENDENTS OF TAY FERRIES.

1873-1898 - - CAPTAIN JOHN METHVEN.
1898-1921 - - CAPTAIN JAMES YOUNG.
1921 to date - - WILLIAM JOHNSTON.

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