

50 YEARS
IN THE
SERVICE
OF
LIVERPOOL
1896-1946



A BROCHURE
TO COMMEMORATE THE COMPLETION
OF
50 YEARS
MUNICIPAL OWNERSHIP
OF THE
LIVERPOOL ELECTRICITY SUPPLY
UNDERTAKING.

SEPTEMBER, 1946

FOREWORD

IN the following pages my Committee have attempted to present an epitome of Liverpool's history throughout the centuries, a somewhat more detailed account of her recent past, with emphasis on the cultural, social and industrial aspects of community life, and finally, a note on the future aspirations and prospects of our City.

The event which has provided the occasion for this publication is the fiftieth anniversary of the acquisition by the Corporation of what is perhaps the greatest of its public services—the Electricity Supply Undertaking. Electricity in its many applications has so woven itself into the fabric of modern existence that there is hardly an activity of city life which is not dependent in some measure, on its ministering power—industry, transport, the home, the cinema, the hospital, even the church service, are beholden to this universal and silent servant. On the physical side it is the linch-pin of community life and the main hope of better things to come.

And so, as the pageant of history passes under review, and as we read of the achievements of science, the ever widening social activity of our corporate life, and the devastation of war, let us take courage and resolve that, whate'er befall, this great City and Port will be found ready and willing to play its full part in building anew that industrial and commercial leadership which has made Britain great, and Liverpool a household word wherever ships find anchorage.

We wish our City well.

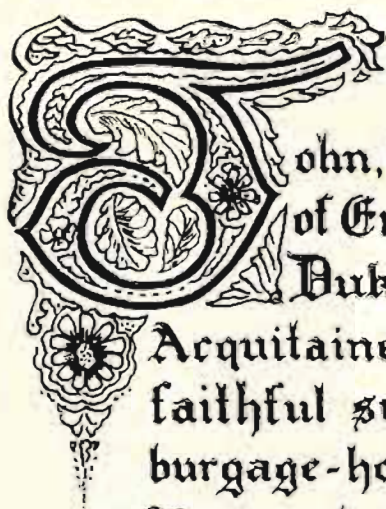
A handwritten signature in dark ink, appearing to read "Alexander Selous". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

Chairman.

Electric Power and Lighting Committee.

LIVERPOOL

THROUGH THE AGES



John, by the Grace of God, King
of England, Lord of Ireland,
Duke of Normandy and
Acquitaine, Count of Anjou, to all his
faithful subjects who wish to have
burgage-holdings in the township of
Liverpool, greeting. Know ye, that we
have granted to all our faithful subjects
who take burgage-holdings at Liverpool
that they shall enjoy within the Township
of Liverpool, all the liberties and free-
customs which any free borough upon the
sea hath within our land. Wherefore we
command that ye come thither unmolested
and under our protection to receive and
dwell in our burgage-holdings.
In witness whereof we send unto you
these our letters patent.

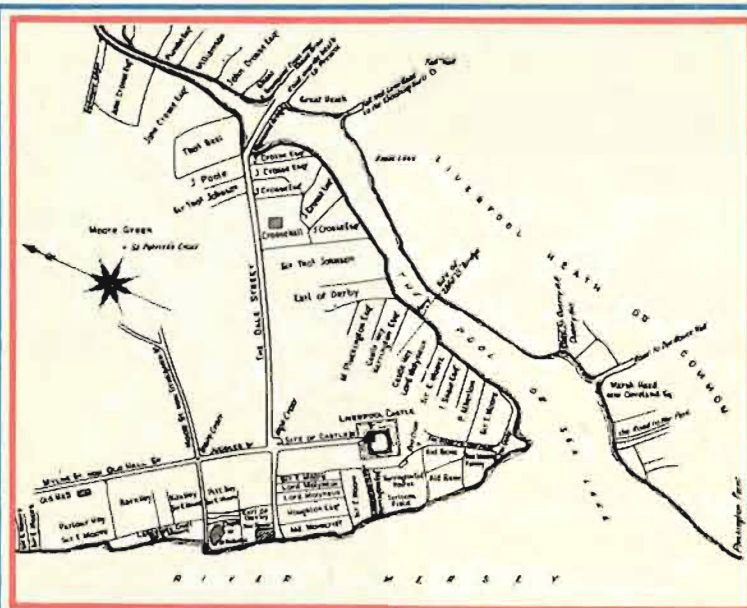
Witness.

Simon de Pateshill

at Winchester,
the 28th. day of August.
in the ninth year of our reign.

A.D.

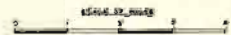
- 432 Tradition informs us that St. Patrick sailed for Ireland from the Banks of the Mersey.
- 916 The first edifice on Merseyside, Runcorn Castle.
- 1207 King John grants the first Charter to "Liverpul."
- 1237 Liverpool Castle built.
- 1272 Population 840.
- 1282 Woodside Ferry established.
- 1440 Lady Eleanor, Duchess of Gloucester, charged with witchcraft and imprisoned in Liverpool Castle.
- 1561 Population 690. Town comprised 138 cottages and 7 streets, namely :—Chapel-street, Bancke-street (now Water Street), Moor-street (now Tithebarn Street), Castle-street, Dale-street, Juggler-street and Mylne-street (now Oldhall Street).



LIVERPOOL
IN THE
17th CENTURY



LIVERPOOL
TODAY



- 1561 Mayor opened a Public Subscription to rebuild the Haven, which had been wrecked the previous year by a hurricane. 13/9d. was collected and work was started.
- 1567 Beer and ale sold at 1d. a quart.
- 1571 A decree stated that none of the Queen's lieges were to be frightened by "monstrous beasts" or "visions voyde or vayne" without licence from the Mayor.
- 1584 Levy collected for the use of Members of Parliament. The allowance when in London was 2/- per day.
- 1617 It was ordered "That if any person speak evil of the Mayor he shall lose his freedom."
- 1644 Liverpool besieged and captured by Prince Rupert in June, and recaptured by the Roundheads in November.
- 1647 Liverpool was made a free and independent Port and no longer subject to Chester Officers.



Sam. J. M. Brown

Courtesy of Liverpool Electric Cable Co., Ltd.

LIVERPOOL — THE WISHING GATE — 17th CENTURY
Now the site of Clarence Dock Generating
Station

1693 The earliest known Charts of the Rivers Mersey and Dee were published by Capt. Grenville Collins, R.N.

1709 First vessel sailed to Africa.

1710 An Act was passed to enable Sir Cleve Moore to supply the town with water from Bootle.

1729 The Mersey and Irwell Canal started ; being the first navigable canal in this country using locks.

1730 The roads were in such bad condition that there was only one carriage in the town and no stage coach came nearer than Warrington.

1760 The first stage coach from Liverpool started from the Golden Fleece, Dale Street, one of Liverpool's four Inns.

1785 The first mail coach started between Liverpool and London. During this year a severe frost lasted for 115 days.



Herdmans Pictorial Relics

CASTLE STREET IN 1786



Herdmans Pictorial Relics

LIME STREET IN 1797



Photo Elsam, Mann & Cooper

CASTLE STREET TODAY

1799 The Corporation Water Works established with 400 shares at £100 each. The subscription closed 5 hours after the books were opened.

1808 Corn Exchange opened.

1815 Steam Boat first used on the Mersey.

1830 Omnibuses started in Liverpool. The Liverpool, Manchester Railway opened on September 15th.
The Clarence Dock opened.

1838 Foundation Stone laid for St. Georges Hall.

1838 The first steamer left Liverpool for New York ; completed the outward passage in 19 days and the return in 14½ days.

1839 A hurricane lasting nearly 24 hours caused great damage and considerable loss of life in Liverpool.

1847 Electric Telegraph inaugurated at Exchange Building.

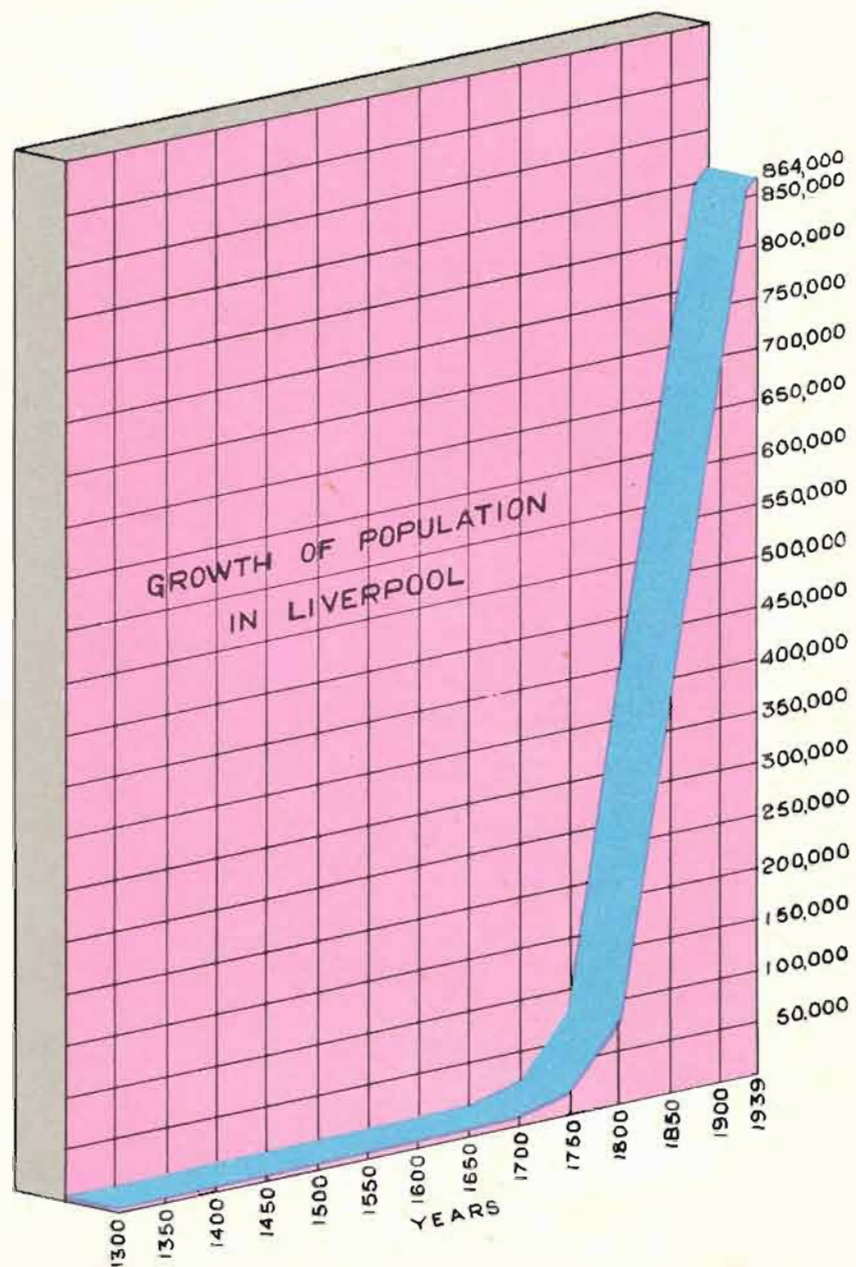
- 1850 Liverpool Chamber of Commerce established.
- 1852 First Assizes held at St. Georges Hall.
- 1858 Mersey Docks and Harbour Board met for first time.
Mr. Charles Turner elected Chairman.
- 1878 First Electric Arc Lamp installed.
- 1879 Steble Fountain erected.
Picton Reading Room built by Corporation at a cost of £20,000.
- 1881 Work started on construction of the Mersey Railway Tunnel,
which was formally opened in 1885.
- 1893 Electric Overhead Railway opened by the Marquess of Salisbury.
- 1896 Electricity Supply Undertaking purchased by Corporation.
- 1898 First Electric Trams.

- 1900 The last horse cars ceased running.
- 1904 Electric Railway opened between Liverpool and Southport.
- 1907 Cunard Liner "Lusitania" sailed on her maiden voyage to New York in September. In October she made the record crossing in 4 days 19 hours, 52 minutes, and the following month made the return voyage in 4 days, 18 hours, 40 minutes, an average speed of over 24 knots.
- 1915 Lusitania sunk by German submarine.
- 1924 Air Service opened between Liverpool and Belfast.
- 1925 H.R.H. Princess Mary inaugurated the sinking of the first shaft for the Mersey Road Tunnel.
- 1927 H.M. King George V. opened Gladstone Docks.
- 1933 Speke Airport opened by the Marquess of Londonderry.
- 1934 H.M. King George V. opened the Mersey Road Tunnel and the East Lancashire Road.



Courtesy of Mersey Docks and Harbour Board

AERIAL VIEW OF PIER HEAD AND LANDING STAGE



LIVERPOOL
YESTERDAY AND TODAY

LIVERPOOL CATHEDRAL

LIVERPOOL CATHEDRAL, though still uncompleted, is notable for its size and architectural beauty and for the fact that it is the first entirely new English Cathedral to be built on a new site since the Reformation. Rising above the wooded slopes of St. James's Cemetery, it stands on a high ridge which dominates the City and gives welcome and God-speed to ships entering and leaving the Port. The foundation stone was laid on July 19th, 1904 by His Majesty King Edward VII, and the Cathedral was consecrated in the presence of His Majesty King George V. exactly twenty years later. Religious services had been begun with the consecration of the Lady Chapel in 1910.

Something more than two-thirds of the Cathedral has now been finished, comprising Lady Chapel, Chapter House, Choir, and Great Nave under the single central tower, flanked by eastern and western Transepts. The lower or further Nave, to be the same length as the Choir, and the Radcliffe Library, still remain to be constructed, and the Tower has still to be roofed over.

At present the main entrance is on the left within the great porch under the Tower, reached from St. James Road. The visitor on entering will be immediately impressed by the vast height of the main building, the great width without pillars, and the length ; altogether it is said to be the greatest space in Gothic Architecture in the world. Details are rich, but are set off by the finely proportioned use of plain surfaces.

The Organ, which is in two portions—one on either side of the Choir—is the largest in the country and one of the largest in the world, and contains 145 speaking stops and nearly 10,000 separate pipes.

The Architect of the building is Sir Giles Gilbert Scott, R.A., O.M., and it is interesting to note that his design was selected, following a public competition, when he was still in his early twenties. With the approval of the Building Committee, who are mostly laymen, he has since then, revised, enlarged and improved his plans so that the building represents the growth of a master mind of our times.

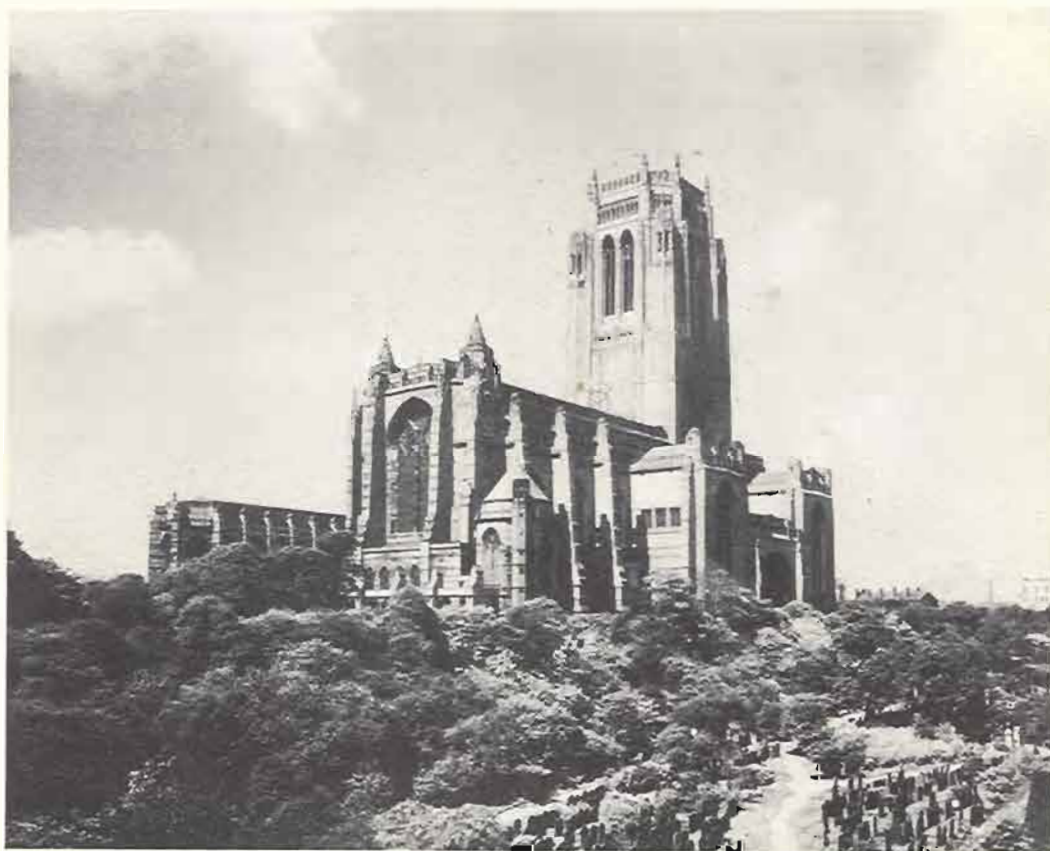


Photo Elham, Mann & Cooper

LIVERPOOL CATHEDRAL

THE PHILHARMONIC HALL

THIS great asset to Liverpool's cultural life stands at the corner of Myrtle Street and Hope Street on the same site as the original structure which was destroyed by fire in 1933.

The new building, designed upon modernistic lines by Mr. H. J. Rowse, F.R.I.B.A., a Liverpool Architect, is one of the most striking pieces of architecture in the City. Designed to seat 1,760 persons, it is filled to capacity at the weekly concerts provided by the Liverpool Philharmonic Orchestra under the batons of many famous Conductors.



Photo Stewart Bale

Courtesy of Liverpool Philharmonic Society, Ltd.

INTERIOR OF THE PHILHARMONIC HALL

EDUCATION

The University.

THE UNIVERSITY of Liverpool, whose charter dates from 1903, although the University College of Liverpool began in 1881, comprises the Faculties of Arts, Science, Medicine, Law and Engineering.



Photo Stewart Bale

THE UNIVERSITY

In the Faculty of Arts are included the School of Social Sciences and Administration and various institutes, such as the Institute of Archæ-

ology. The Faculty of Medicine includes Schools of Dental Surgery, Hygiene, Tropical Medicine and Veterinary Science. Connected with the University are the Liverpool Observatory and Tidal Institute and the Port Erin Marine Biological Station. The University primarily serves the needs of West Lancashire, Cheshire and North Wales, but its students include many from other parts of Britain and from countries all over the world.

The Education Committee.

Newly constituted under the provisions of the Education Act of 1944, the Education Committee includes, in addition to members of the City Council, individuals familiar with all aspects of educational conditions prevailing in Liverpool, and others who are representative of the commerce, industries and professions of the City.

The total of 164 Primary Schools includes 85 County Schools, and there are 92,350 children on roll in the 319 Departments of these Primary Schools.

Secondary education will be provided for all children at the age of 11 years according to their aptitude and ability, admissions being made on the results of a Common Entrance Examination in conjunction with the child's records in a Primary School.

No tuition fees are now payable.

The Committee maintains 14 Secondary Grammar Schools for the benefit of such children, and there are 7,650 children now in attendance at these schools.

In addition there are 62 Departments, attended by 17,368 children, which are recognised as Secondary Modern Schools, and there are four Secondary Technical Schools with 1,380 pupils in attendance.

There are also Direct Grant Secondary Schools attended by 2,356 children. Fees are still payable at these schools, but remissions are made in accordance with an Income Scale approved by the Ministry of Education.

Arrangements are available to facilitate entrance to courses of training at Liverpool University, other Universities and Institutions.

Technical, artistic and commercial education are provided at the City Technical College, the City School of Art and the City College of Commerce.

Subsidiary functions of the Committee include the maintenance of health of the scholars carried out through the School Health Service, the provision of meals, and provisions relating to the general welfare of children.

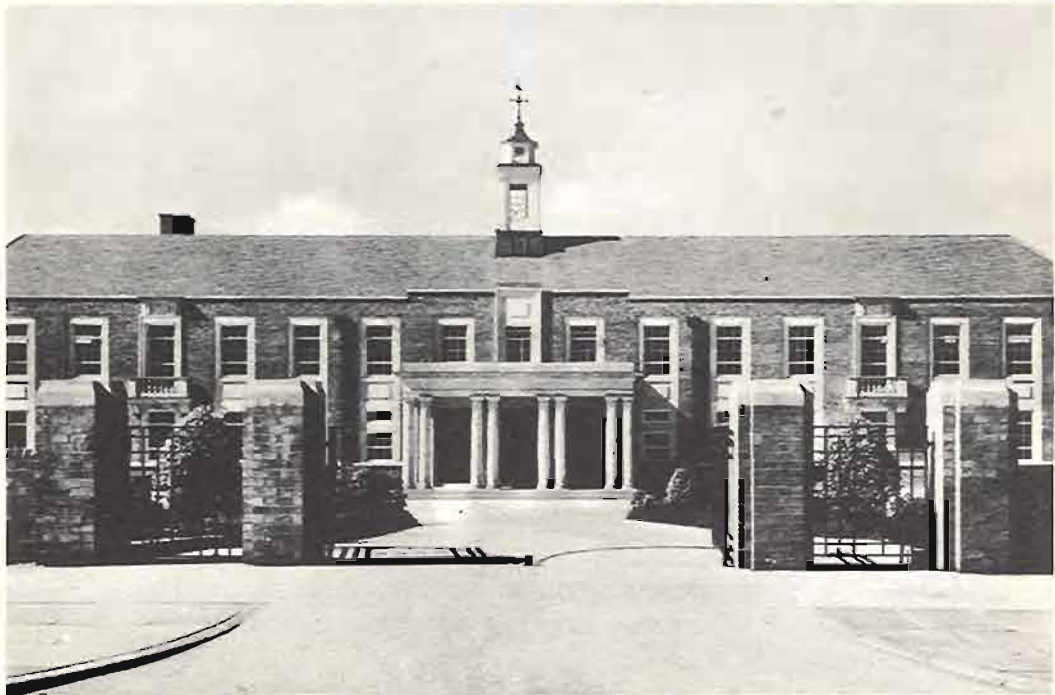


Photo Leonard Card

HOLT HIGH SCHOOL

THE PUBLIC HEALTH SERVICE

LIVERPOOL CORPORATION was the first Local Authority in England to appoint a Medical Officer of Health. This was in 1847. Whilst the safeguarding of the health of the community by preventive methods is still the primary function of the public health department, its sphere has widened and activities increased with the passing of the years.

The Local Government Act, 1929, transferred to the Corporation a number of hospitals and institutions which have now been equipped with the most modern appliances for the treatment of surgical, medical and maternity cases, with bed accommodation for 10,000 patients.



THE ADMINISTRATIVE BLOCK, WALTON HOSPITAL
(The Largest Hospital in England)



Photo Palatine Studios

CONSULTATION IN A CHILD WELFARE CLINIC

A comprehensive Maternity and Child Welfare Service which includes ante-natal and child welfare clinics and milk centres situated in various parts of the City provides medical supervision and advice for mother and child. Health Visitors visit the homes of the people to advise on the health and care of mothers and young children. Under the Midwives Act, 1936 a service of full-time salaried midwives has been provided.

The Tuberculosis Service affords not only clinical or sanatorium treatment where necessary, but now has a mass radiography unit, and pays monetary allowances and arranges for the rehabilitation of patients in suitable cases.

The supervision of food supplies by the systematic inspection of milk, meat and food of all kinds, is another duty undertaken by Inspectors employed by the Public Health Department.

The Port Health branch is responsible for the detection and isolation of infectious diseases occurring on board incoming ships, and for the examination of imported foodstuffs.



Photo Palatine Studios

WOOLFALL HEATH HOUSING ESTATE



Photo Palatine Studios

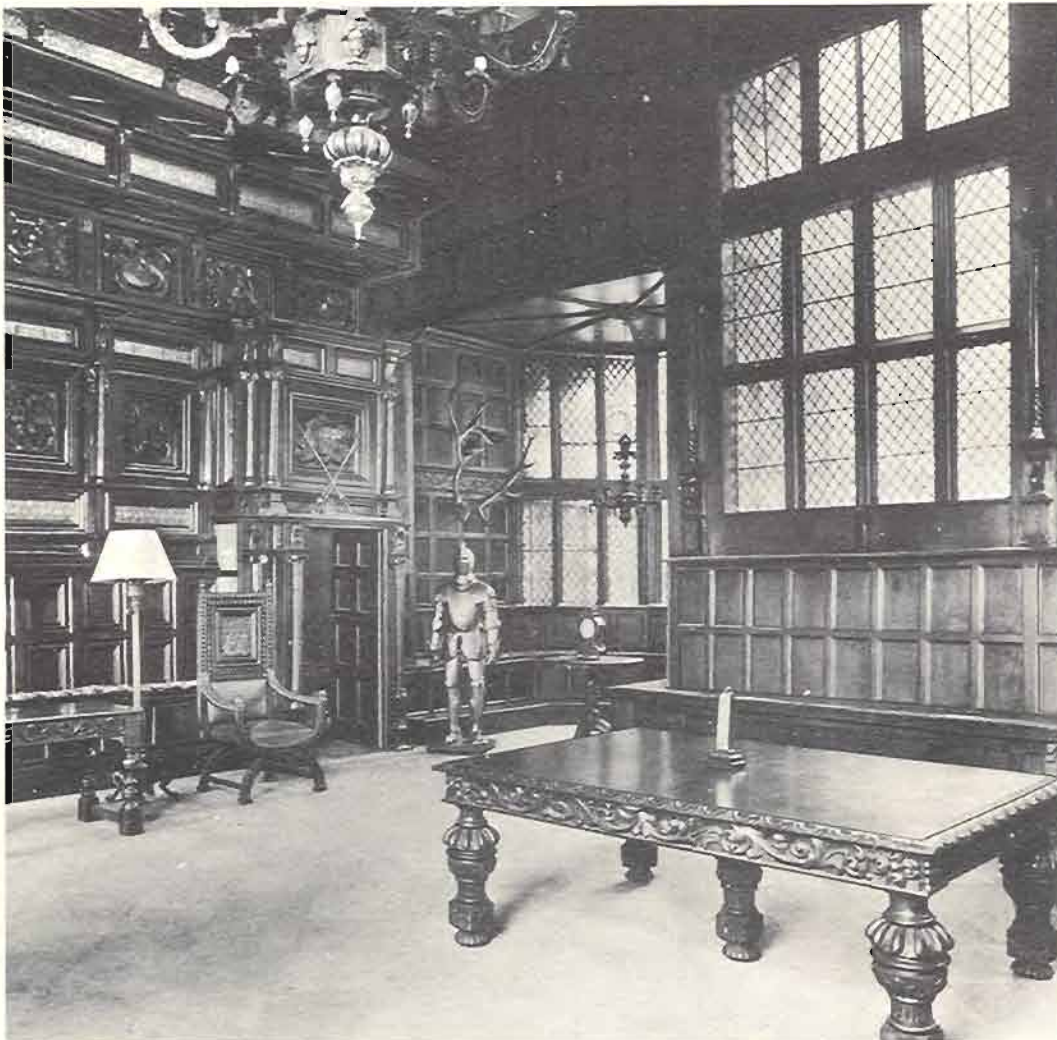
MYRTLE GARDENS, CENTRE COURT

HOUSING

THE CITY OF LIVERPOOL was one of the pioneers among local Authorities in dealing with the problem of the adequate housing of the people, and one of the first Housing Acts passed was the Liverpool Sanitary Amendment Act of 1864. Between that date and the end of the 1914-1918 War, the Corporation had caused the closing or demolition of many thousands of grossly insanitary cellars and houses and had erected 2,800 flats and 82 cottages in the central districts of the City.

During the twenty year inter-war period, 1919-1939, under the six principal Housing Acts, 5,847 flats, 31,745 houses and 283 shops were built, whilst during the war years 504 flats and 1,088 houses were completed.


At the present time contracts for 553 flats and 781 houses are in progress (some of the houses have been completed) as a commencement of the post-war housing programme, which in the course of 23 years will involve over 90,000 dwellings. An allocation of 3,500 of the Government provided temporary houses is also in progress, of which about 500 have been completed.



Courtesy of Liverpool Daily Post

BANQUETING HALL, SPEKE HALL

SPEKE HALL

HEN THE CORPORATION purchased the Speke Estate in 1929 the historic Speke Hall and grounds were excluded. They have since been given to the National Trust and re-leased to the Corporation for 99 years.

This beautiful example of fifteenth century architecture in black and white is one of the finest in the country. It is open for inspection by the public, subject to a permit being obtained from the City Engineer and Surveyor.



Photo Elsom, Mann & Cooper

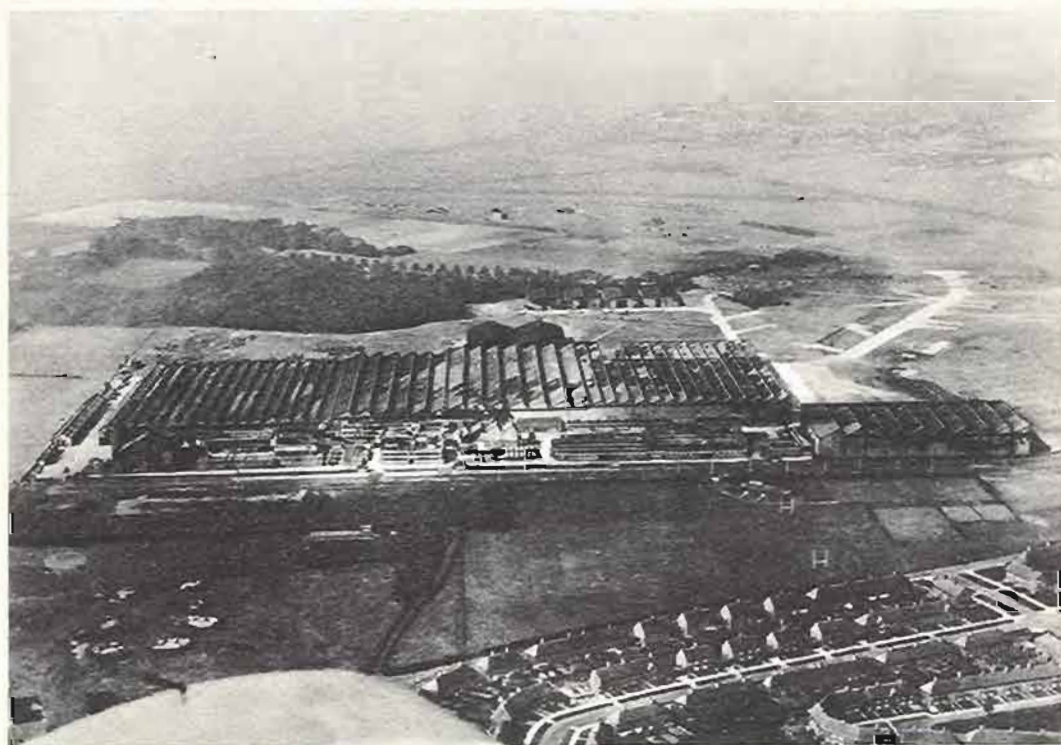
SPEKE HALL

CORPORATION INDUSTRIAL ESTATES

BETWEEN 1925 and 1928 the Corporation acquired some 300 acres of land at Long Lane, Fazakerley, in the vicinity of the East Lancashire Road, which became known as the Fazakerley Industrial Estate. More than 50% of the area has since been developed, eleven factories providing employment there for more than 17,000 persons. This purchase was followed in 1929 by the acquisition of the township of Speke, where 341 acres were set aside for industrial development. 67% of this area has since provided the sites of 28 factories, employing 13,000 persons, so that the two estates together already provide employment for a population equal to that of a fair sized county borough. These results were not achieved without diligent effort. Realising that the mere offer of the sale of land on 99 year leases would not attract industry, the Corporation obtained powers under the Liverpool Corporation Act 1936 to lay out and develop the Fazakerley and Speke Areas and to erect factories for sale or lease on suitable terms. **It was further empowered to grant building leases up to 999 years, and to advance money on mortgage for the erection of factory buildings up to two-thirds of the market value, the advances to be repaid within a period not exceeding thirty years.** The confidence placed by the Corporation in its Fazakerley and Speke ventures has been amply justified by the industrial enterprises which have been attracted. Encouraged by this success, negotiations

were commenced for the establishment of a further modern trading estate in the immediate vicinity of the East Lancashire Road, and there is no doubt that, but for the advent of the war, this would now have been in an advanced stage of development.

In addition, the Corporation has agreed to take a 99 years' lease of the Royal Ordnance Factory at Kirkby. This huge undertaking has a site area of about 750 acres with 1,000 buildings of varying sizes. Many of the buildings have already been leased to industrial firms from various parts of the country, some of whom are now in occupation, and negotiations are proceeding with other applicants.



Courtesy of Liverpool Daily Post

DUNLOP RUBBER CO.'S FACTORY, SPEKE INDUSTRIAL ESTATE

LIVERPOOL DOCKS

LIVERPOOL became a free and independent Port about the middle of the 17th century.

The sea trade of the Port was growing and in the year 1648 Liverpool received as much as 30 tons of tobacco in one ship, which must have been a large quantity in those days, even though it was 50 years since Sir Walter Raleigh had introduced tobacco into England after one of his famous voyages.

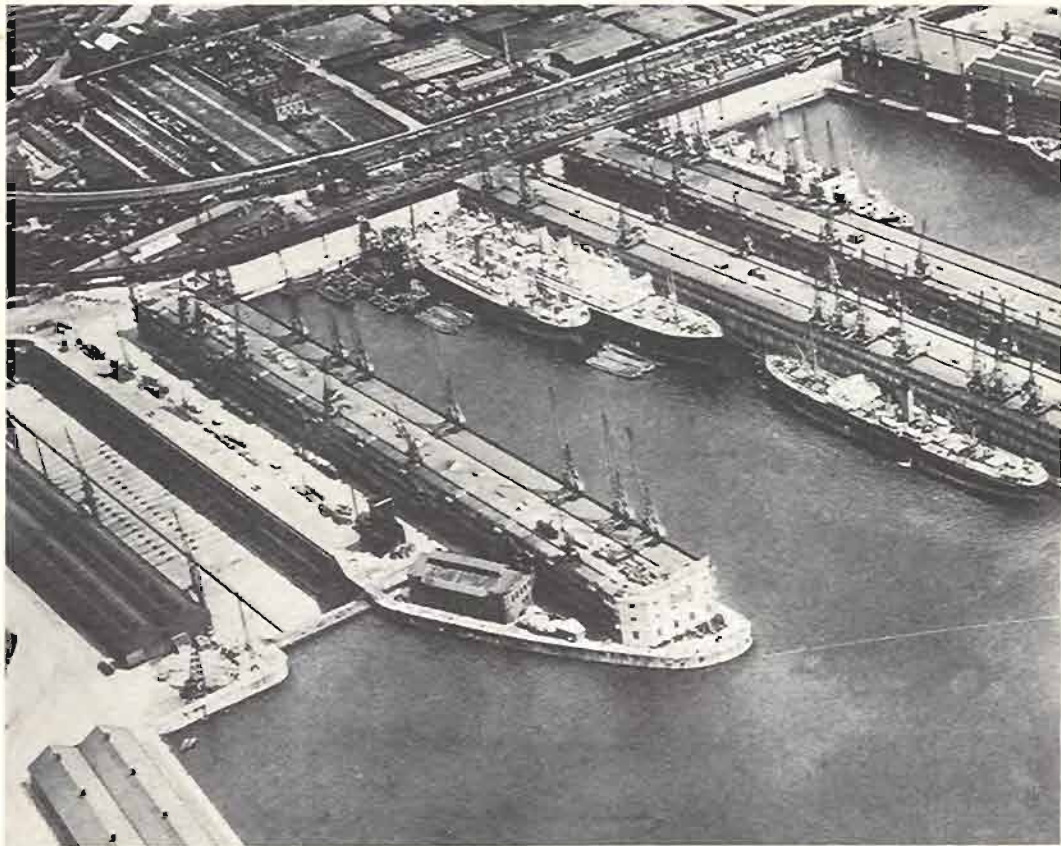
In the reign of Queen Anne it was decided to build a closed dock, and in 1715 "The Old Dock", which was the first enclosed commercial dock ever built and had a water area of only three acres, was opened for trade. The Port now has a total of 87 docks.

The Mersey Docks and Harbour Board, formed in 1858, is the Authority which controls the working of the Port. Liverpool is the first export Port of the United Kingdom and is the second for imports. It is indeed so much the leading Port of shipment that the value of its exports in produce and manufactures of the United Kingdom is more than those of London, Hull, Manchester and Bristol combined.

A short comparison of the Port today as against the year 1858 may be interesting. The water area, then 192 acres has increased to 658, and the frontage of the quays from $18\frac{1}{2}$ miles to over 40 miles. Formerly there were no railways on the Dock Estate, whilst now there are over 130 miles. The dock warehouse accommodation previously amounted to 1,200 tons, but now affords storage for 500,000 tons of miscellaneous cargoes. Peace-time cargoes passing through the docks annually

approximate to a total of 15,000,000 tons, and during the 71 months of the Second World War over 75,000,000 tons of cargo were handled at the Port. The tonnage of vessels entering and leaving the Docks has increased from 4,005,016 in 1858 to 44,195,510 in 1938.

The first electric Overhead Railway in the World traverses the docks from end to end, a distance of nearly seven miles. At the northern extremity is Seaforth with its long stretch of sands, where Gladstone played when a boy. The southern end of the railway brings one close to the famous Sefton Park.



Courtesy of Mersey Docks and Harbour Board

THE GLADSTONE DOCK SYSTEM

THE MERSEY TUNNEL

THE MERSEY TUNNEL for vehicular traffic, connecting Liverpool with Birkenhead, ranks as one of the most important engineering achievements of this country during recent years. The question of improving the means of communication between Liverpool and the sister communities on the Cheshire side of the River had been under consideration for not far short of a century, and at various times high level and other types of bridge had been proposed, but it was not until 1925 that the project was actually tackled and after nine years work the Tunnel was opened in 1934.

The Main Tunnel commences in Liverpool at the Old Haymarket, "Kingsway," and falls on a 1 in 30 gradient to 260 yards beyond the river wall. From this point it continues at a gradual uphill gradient of 1 in 300 for 560 yards and it again rises at 1 in 30 and emerges at Kings Square, Birkenhead, leading on to the main road to Chester and the South. There are branch tunnels on both the Liverpool and Birkenhead sides to give more ready access to and from the docks.

The main tunnel is 2.13 miles in length. There is provision for four lanes of traffic and the total width of the roadway is 36'0" between the kerbs.

The Tunnel is ventilated by a system of very large fans. Fifteen fans are normally working and are driven by electric motors with a total H.P. of 2570.

The traffic through the Tunnel has already reached a total of 415,000 vehicles a month.

The Tunnel was opened to traffic on 18th July, 1934, when H.M. the late King George V. accompanied by H.M. Queen Mary performed the Opening Ceremony.



Photo Stewart Bale

Courtesy of Mersey Tunnel Joint Committee

MAIN ENTRANCE TO MERSEY TUNNEL,
KINGSWAY, LIVERPOOL

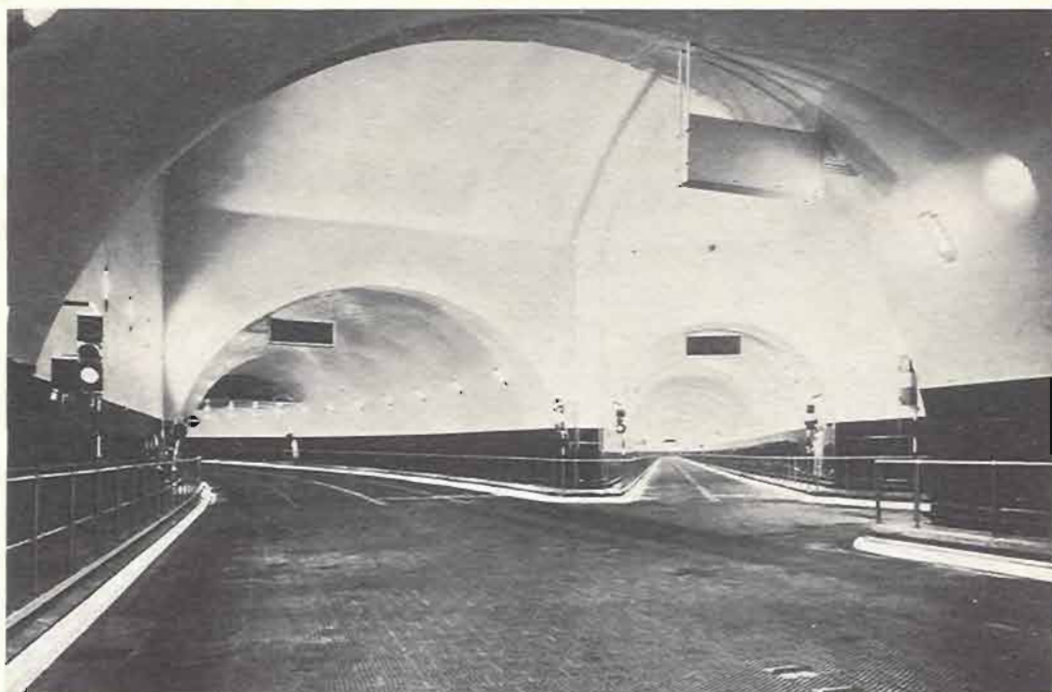


Photo Stewart Bale

THE MERSEY TUNNEL
A JUNCTION OF MAIN AND BRANCH TUNNELS

Courtesy of Mersey Tunnel Joint Committee



LIVERPOOL AIRPORT
THE ADMINISTRATION BUILDING

Courtesy of Liverpool Daily Post

LIVERPOOL AIRPORT

AT A VERY EARLY STAGE in the history of civil aviation the City of Liverpool recognised the necessity of planning to meet the future requirements of air transport, and in 1928 arranged the purchase of the land known as SPEKE ESTATE, an area approximating to 2,219 acres, having a water frontage of some three miles. The plans for the development of this Estate made provision for an up-to-date Airport of about 418 acres splendidly situated on the bank of the Mersey.

The Airport is six miles by road from the centre of the City, and by car or bus the time taken for the journey is 20 minutes. Apart from the ordinary bus, tram and train services, the Corporation has provided special transport, so that each scheduled air liner is met and passengers are enabled to reach the centre of the City in the shortest possible time. A similar special service operates for outgoing air liners.

Prior to the recent war, Air Services were in operation from Speke to London, Glasgow, Carlisle, Belfast, Dublin, Manchester, Blackpool, Isle of Man, Torquay, Brighton, Isle of Wight, Plymouth, Bristol, Leeds, Cardiff, Southampton, etc. A service was also in operation between Amsterdam and Speke via Doncaster.

Many services which were discontinued during the war are now coming into operation and it is hoped that in the near future a comprehensive service will again be available.

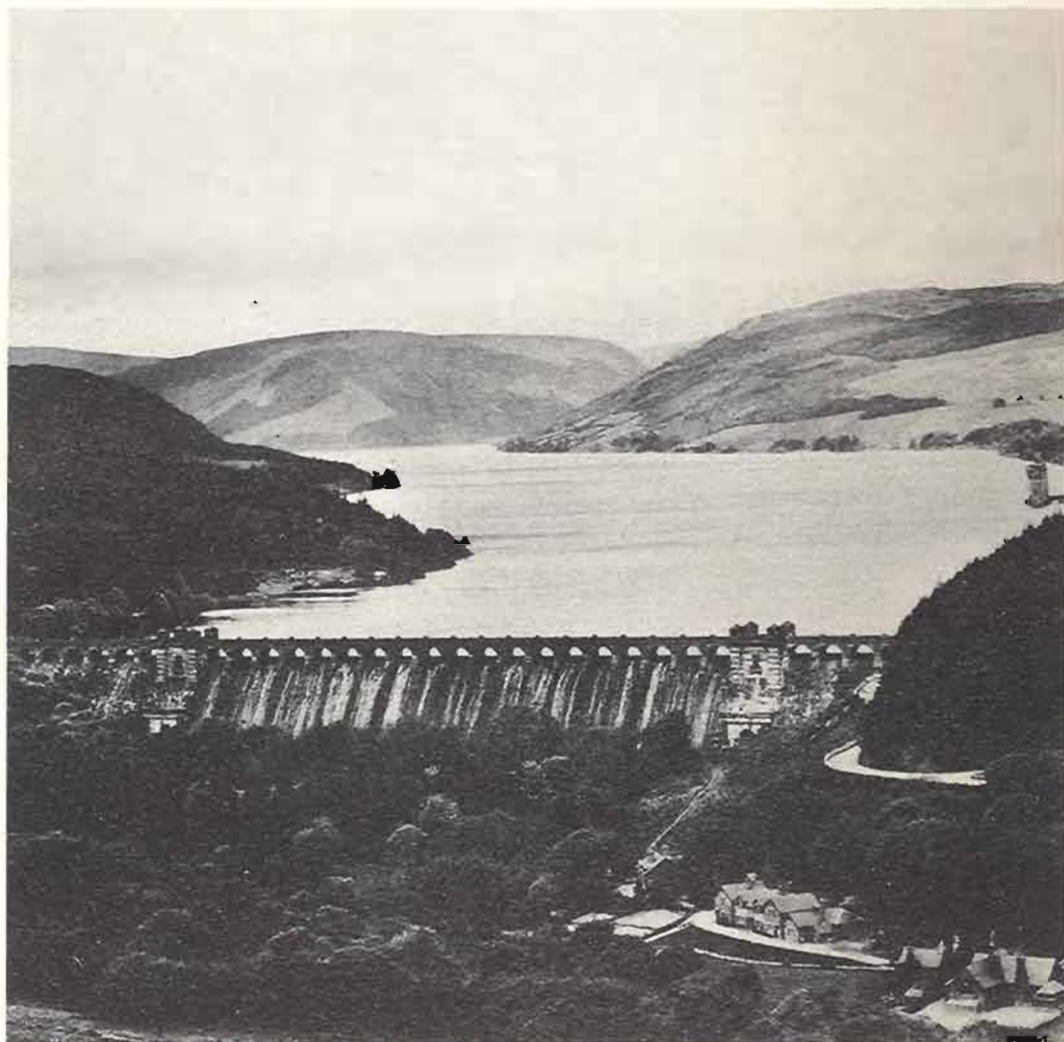


Photo Stewart Bale

GENERAL VIEW OF LAKE VYRNWY FROM THE SOUTH EAST

WATER SUPPLY

LIVERPOOL has two unsurpassed gravitational sources of supply ; one in the Rivington Watershed and the other in Lake Vyrnwy, North Wales, and the surrounding gathering ground.

The Vyrnwy scheme, on which work was commenced in 1881, was designed to provide the city with thirty-nine million gallons per day, but when fully developed will be capable of yielding nearly forty-eight million gallons per day. Up to the present, three of the four 42 inch projected pipe lines have been laid.

The great masonry dam at Llanwddyn, by which the upper waters of the River Vyrnwy, a tributary of the Severn, are impounded, is 1,172 feet long, 144 feet high, and has a maximum thickness at the base of 127 feet. The lake thus formed is about five miles long, nearly three-quarters of a mile broad, and its greatest depth is 84 feet.

The extent of the Vyrnwy catchment area is 23,291 acres, and that of Rivington 9,710 acres. Lake Vyrnwy's storage capacity is 13,125 million gallons, whilst at Rivington 4,101 million gallons can be stored.



Photo Harper & Taylor

ENCLOSED CENTRAL TRAM TRACKS

PASSENGER TRANSPORT

THE LIVERPOOL CORPORATION purchased the horse tramway and omnibus system in 1897 from the Liverpool United Tramways and Omnibus Company.

The tramway lines at that time comprised about 67 miles of single track and 38,409,084 passengers were carried per annum.

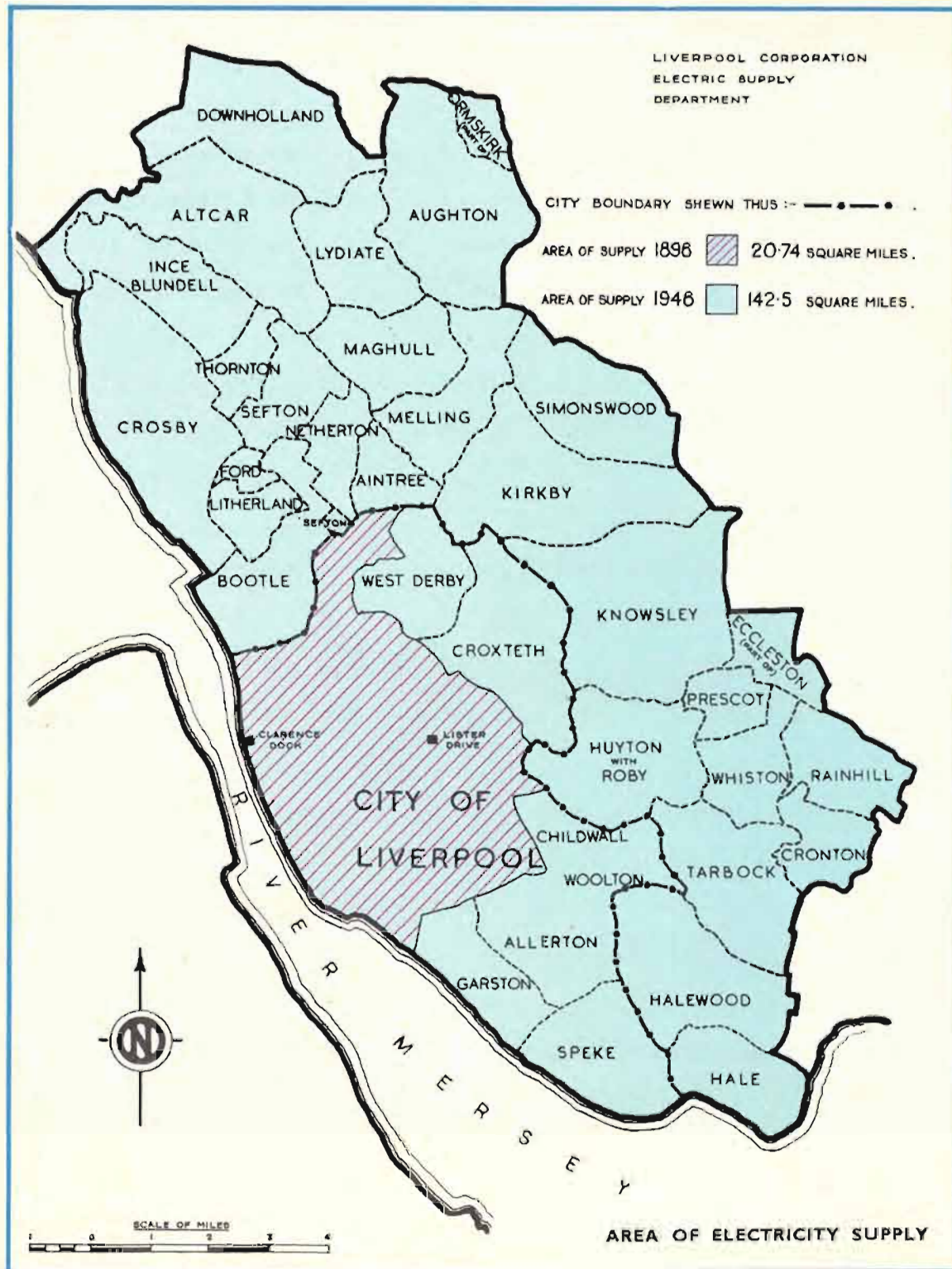
The Corporation decided to electrify the system and the first section was completed and opened for traffic in November 1898, the first section of the electrified system being $6\frac{1}{4}$ miles long. The total length of tramway track at present operated is 191 miles.

The majority of the tramcar routes radiate in fanlike formation from a central point at the Pier Head.

The Department owns a finely equipped up-to-date Engineering Works at Edge Lane where tramcars are built and maintained.

Twenty-eight miles of enclosed tramway tracks are operated. These are generally situated in the centre of wide arterial roads and have greatly speeded up the tramway traffic and relieved congestion in the roadways. An extensive fleet of motor omnibuses is also operated principally for connecting the outside districts.

The number of passengers carried on the Tramway system for the year ended 31st March, 1946 was 259,396,772 and the number of tramcar miles operated was 18,508,272.



THE ELECTRICITY UNDERTAKING

THE HISTORY of electricity supply in Liverpool commenced in 1878 when a sample arc lamp was exhibited opposite St. Nicholas Church, Pier Head, and as a result of which the British Electric Light Company was awarded a contract to light certain streets, including Lime Street and London Road. The result was not very successful, and the Company withdrew from the contract in 1882. In January 1882 Messrs. Holmes & Vaudrey commenced business in Liverpool as Civil Engineers, and one year later formed the Liverpool Electric Supply Co. Ltd., with a nominal capital of £10,000. The Company manufactured fittings, fitted up installations, supplied electricity and hired machinery. The time was ripe for the exploitation of this new form of lighting, and the Company was immediately successful, paying 5% dividend on the first year's trading. It is difficult to estimate what the price per unit was, as trading was done at £2. 5s. 0d. per lamp per annum.

The Company, which had been supplying electricity without statutory powers, applied in 1885 to the Board of Trade for a provisional order, and in 1887 they obtained a licence to supply electricity in the central portion of the City.

As the years passed the business extended, until in 1895 the Company had established generating stations at Highfield Street, Paradise Street, Oldham Place and Lark Lane.



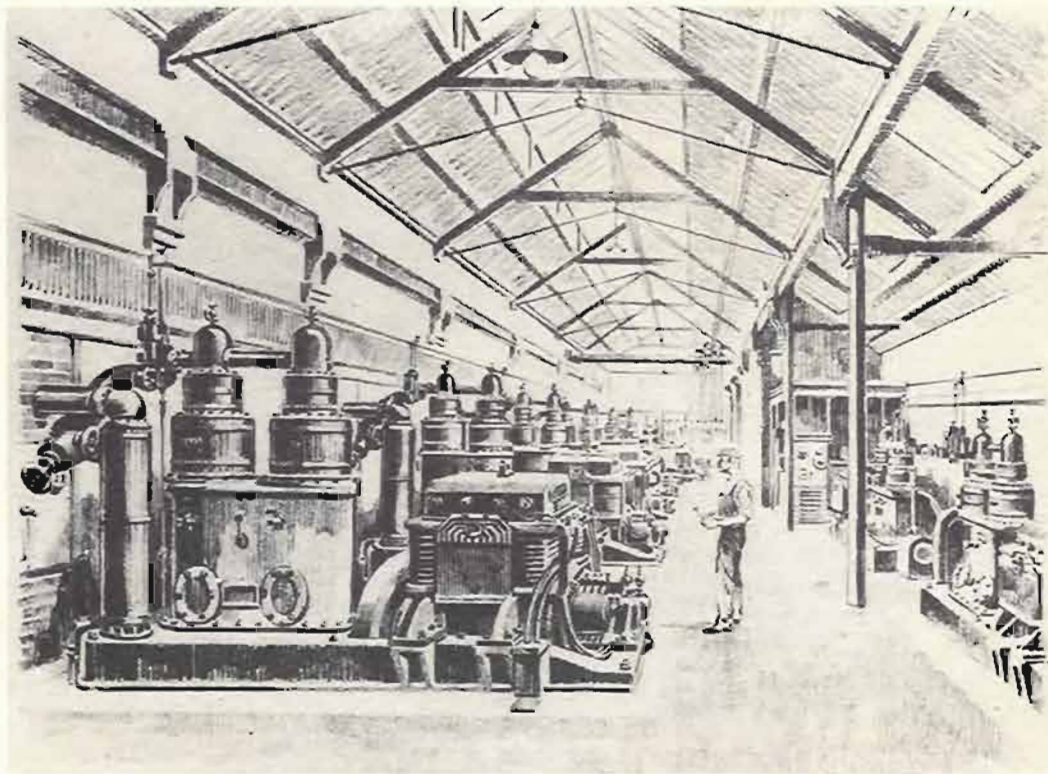
Mr. ARTHUR BROMLEY HOLMES.
City Electrical Engineer
from 1896 to 1913.

At this stage the price of electricity was $7\frac{1}{2}$ d. per unit for lighting, 5d. per unit for power, the share capital of the Company was £250,000, and dividend paid was $5\frac{1}{2}\%$.

On May 28th, 1895 an agreement was made between the Company and the Corporation for the purchase of the electric supply undertaking for £400,000. Thus the shareholders received £8 for each £5 share, and the Company distributed the Reserve and Renewals Fund of £18,000.

In retrospect it might be thought that as part of the plant and works was twelve years old, and as the £250,000 share capital represented its undepreciated cost, the Company was generously treated in the transaction. It is certain that it was not ungenerously treated, but as the subsequent record will show, the Corporation came into possession of an asset which under its active development policy has proved of very great value to the citizens.

After parliamentary sanction had been obtained the agreement to purchase was finally completed, and the purchase price paid on 1st July, 1896.



ORIGINAL GENERATING PLANT AT HIGHFIELD STREET STATION

Most of the Company's staff was taken over under the terms of the agreement, and Mr. A. Bromley Holmes became the Corporation's first City Electrical Engineer.

The first Corporation Lighting Committee was :—

Alderman The Rt. Hon. Sir Arthur Bower Forwood, Bart., M.P. *Chairman*
Councillor Charles Petrie *Deputy Chairman*

ALDERMEN

Francis Joseph McAdam Jeremiah Miles
Hugh McCubbin Frederick Smith
Wm. Humphrey Williams

COUNCILLORS

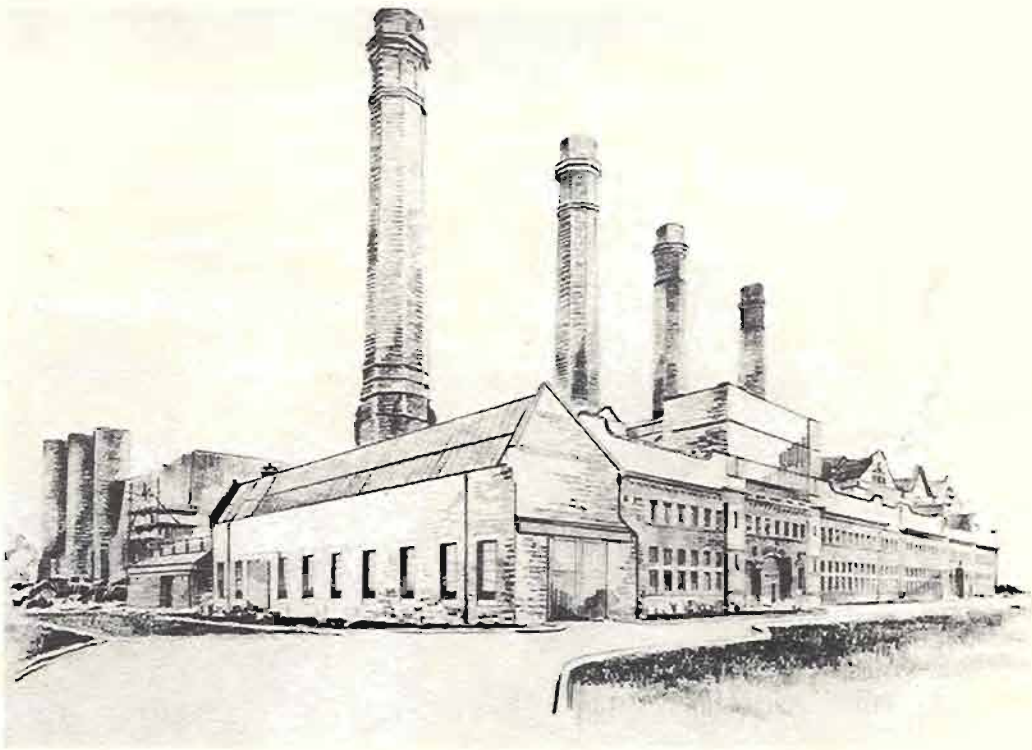
John S. Harwood Banner James Barclay Light
Joseph Bennett Colton Thomas Binley Neale
Richard Dart William Oulton
Francis Henderson Robt. E. W. Stephenson
Saml. Wasse Higginbottom Isaac Turner
John Thomas Wood

The following are the succeeding Chairmen of the Electric Power and Lighting Committee.

1897 — 1899	Councillor Charles Petrie
1899 — 1901	Councillor Samuel Wasse Higginbottom
1901 — 1906	Councillor Richard Dart
1906 — 1913	Alderman Sir Charles Petrie
1913 — 1915	Alderman Frederick Smith
1915 — 1920	Councillor Edward Russell-Taylor
1920 — 1939	Alderman Frank C. Wilson
1939 — 1946	Alderman Alexander Critchley

The area of supply in 1896 was confined to 21 square miles served by the small generating stations at Highfield Street, Paradise Street, Oldham Place and Lark Lane, having a total installed generating capacity of 3,000 kilowatts.

To meet the rapidly increasing demand it was necessary to prepare plans for the construction of larger stations.



LISTER DRIVE GENERATING STATION

Two such stations were erected, one at Pumpfields and one at Lister Drive, the building operations being commenced in 1899 and 1900 respectively.

These stations increased the generating capacity to 19,800 kilowatts.



COMMENCING DEMOLITION WORK, APRIL, 1929
ON THE SITE FOR
CLARENCE DOCK GENERATING STATION

In 1937 and 1938 two further similar sets were added and in 1940, under Government direction, a War Emergency Extension was commenced, No. 5 Turbo Alternator, again of 50,000 kilowatts capacity, being installed at Clarence Dock and available for operation by the end of 1942.

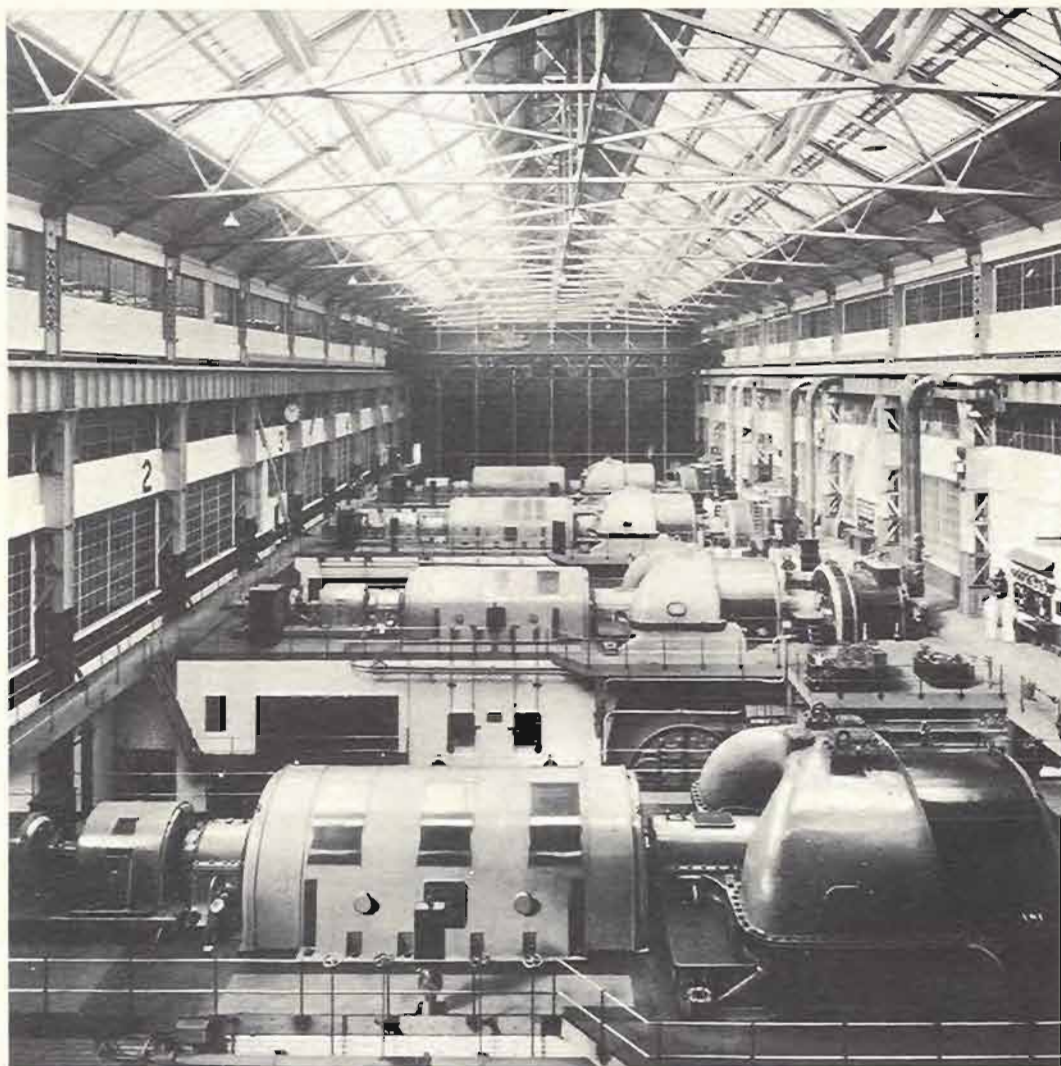


Photo Stewart Bale

CLARENCE DOCK GENERATING STATION,
THE TURBINE HOUSE

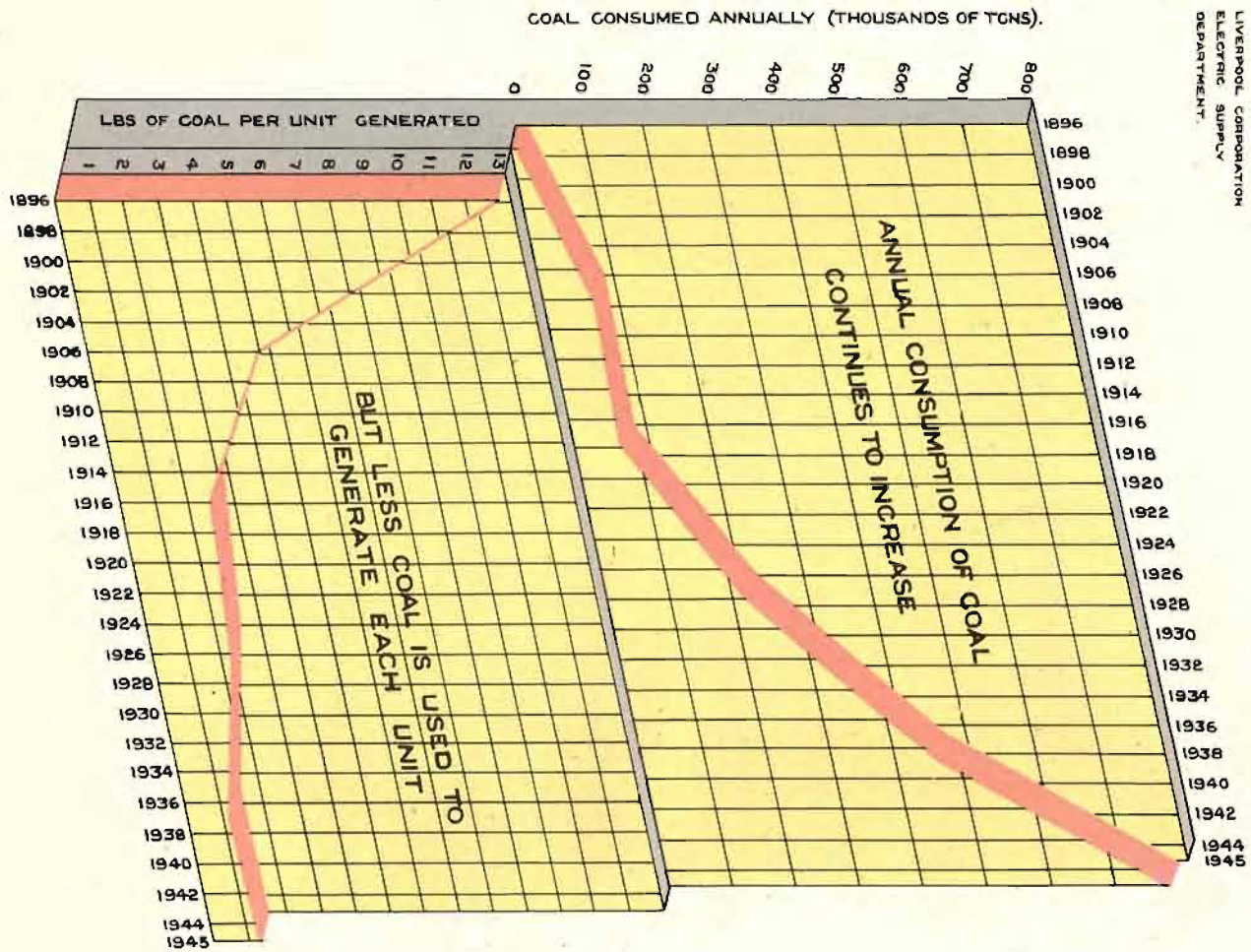




Photo AEROFILMS



Photo PALATINE STUDIOS



Photo STEWART BALE

↑
AERIAL VIEW OF
STATION
↑
COAL STORE
←
SIDINGS
CLARENCE DOCK
GENERATING
STATION
↑
BOILER AND
CONTROL PANEL
↓
BOILER FEED
PUMPS
↓
CONTROL ROOM



Photo ELSAM, MANN & COOPER

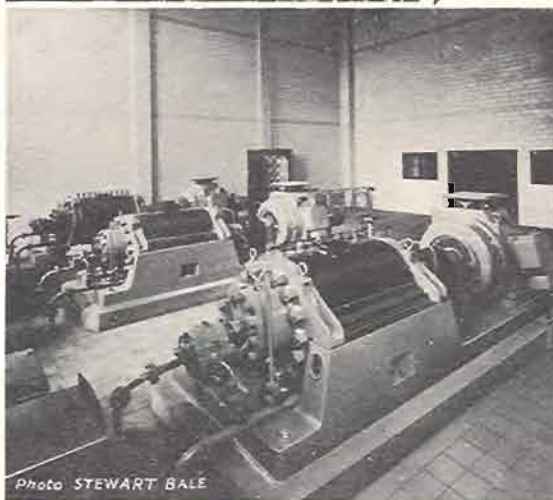
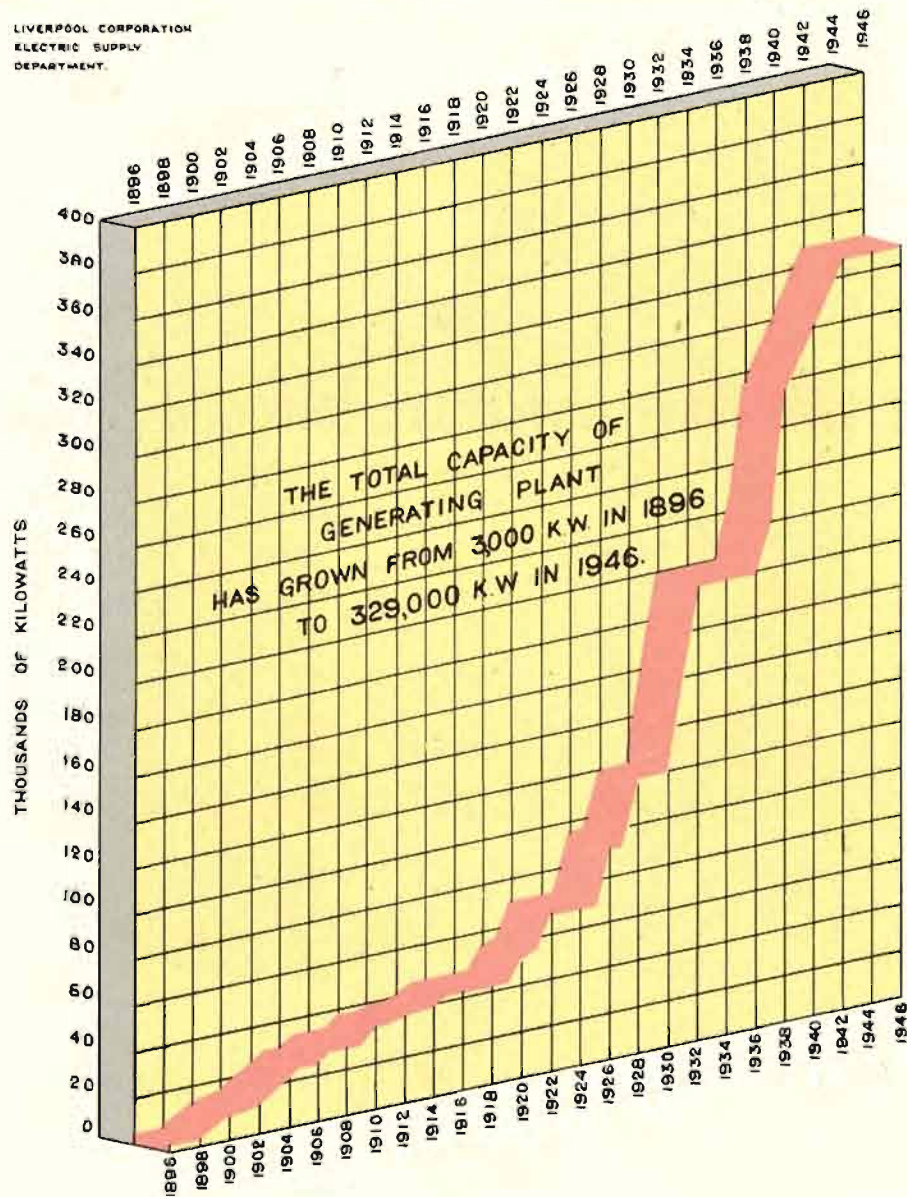



Photo STEWART BALE



Photo STEWART BALE

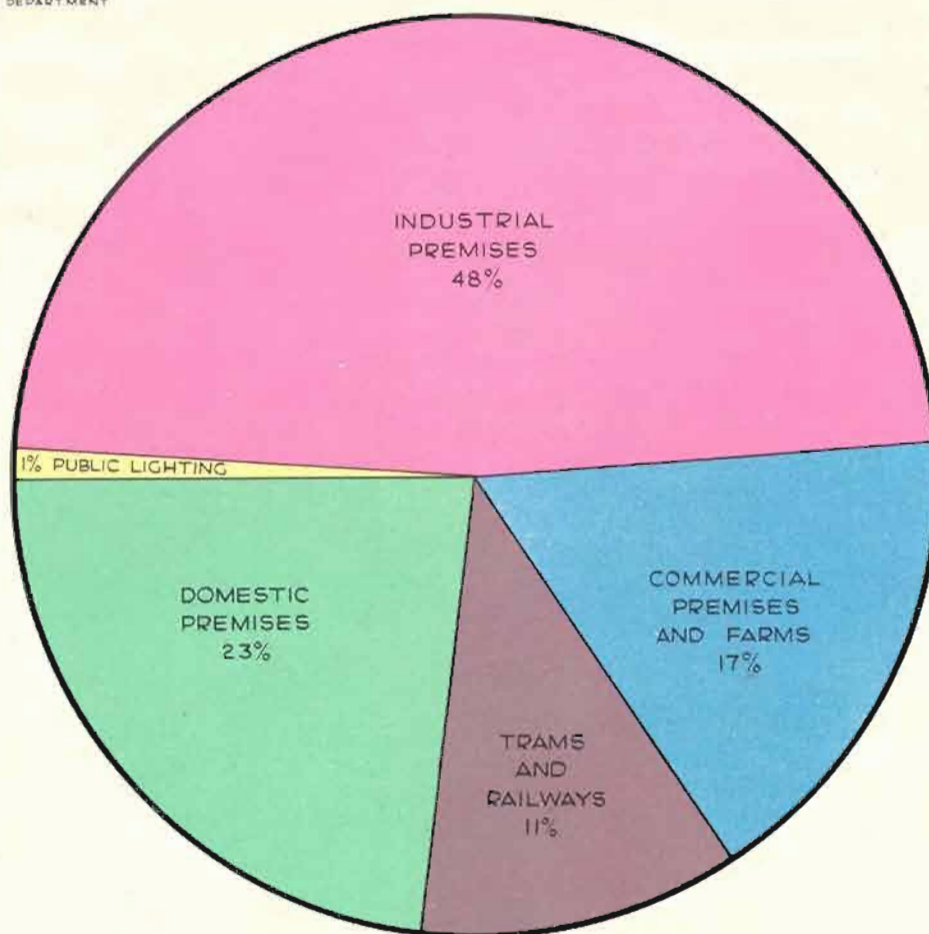
LIVERPOOL CORPORATION
ELECTRIC SUPPLY
DEPARTMENT.



1896 LARGEST UNIT —  — 150 K.W.
(200 H.P.)

1946 LARGEST UNIT —  — 50,000 K.W.
(67,000 H.P.)

LIVERPOOL CORPORATION
ELECTRIC SUPPLY
DEPARTMENT



HOW THE OUTPUT
IS USED

The distribution of electricity from the two generating stations to the supply terminals on the premises of 200,000 consumers involves an intricate network of high and low voltage cables, overhead lines and substations.

The main transmission is effected at 33,000 volts, secondary transmission at 11,000 and 6,000 volts, whilst the final distribution to the consumers premises is carried out at 400 volts for power and 230 volts for domestic supplies.

Substations are provided to house the plant and switchgear necessary to transform the high voltage power into a voltage which is safe and suitable for general use.



Photo Stewart Bale

A SUBURBAN SUB-STATION

There are now over 500 substations on the Liverpool system, ranging from the main centres, some of which are located on the sites of former generating stations, to small pole type substations in the rural area beyond the City boundary.

The total area of supply is 142 square miles.

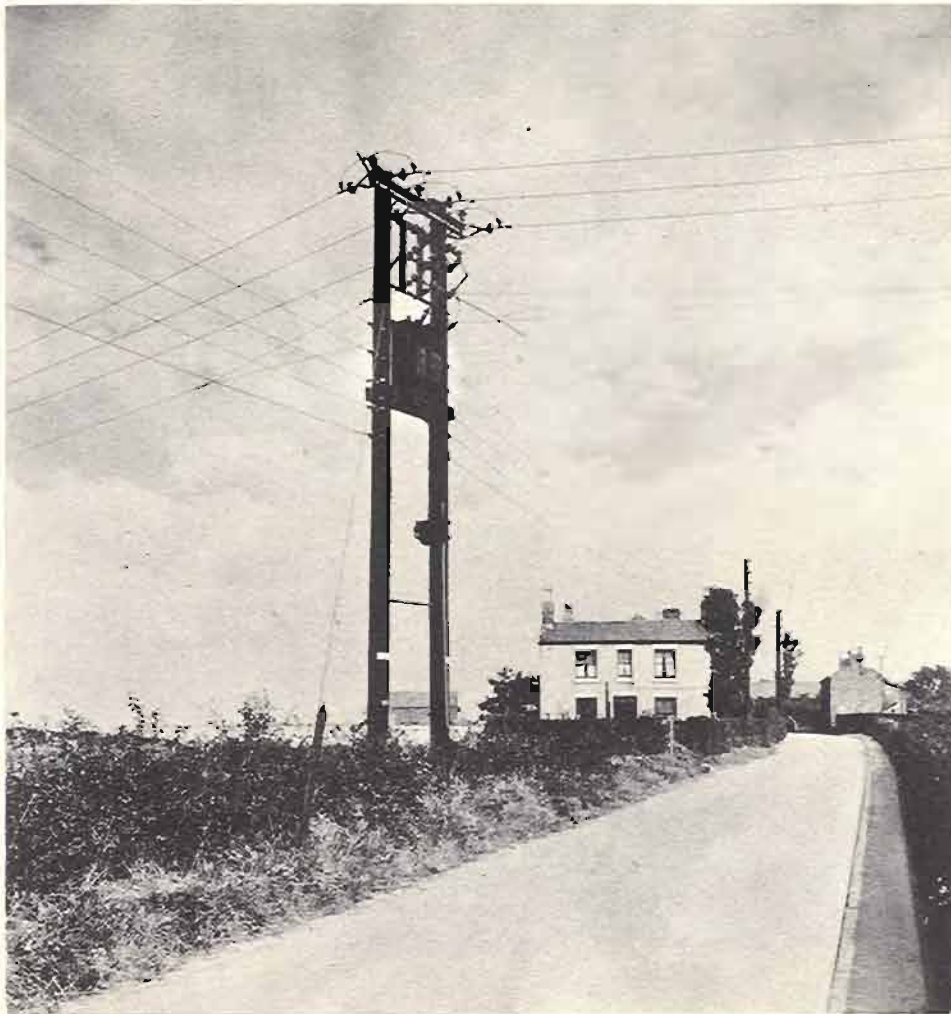


Photo Stewart Bale

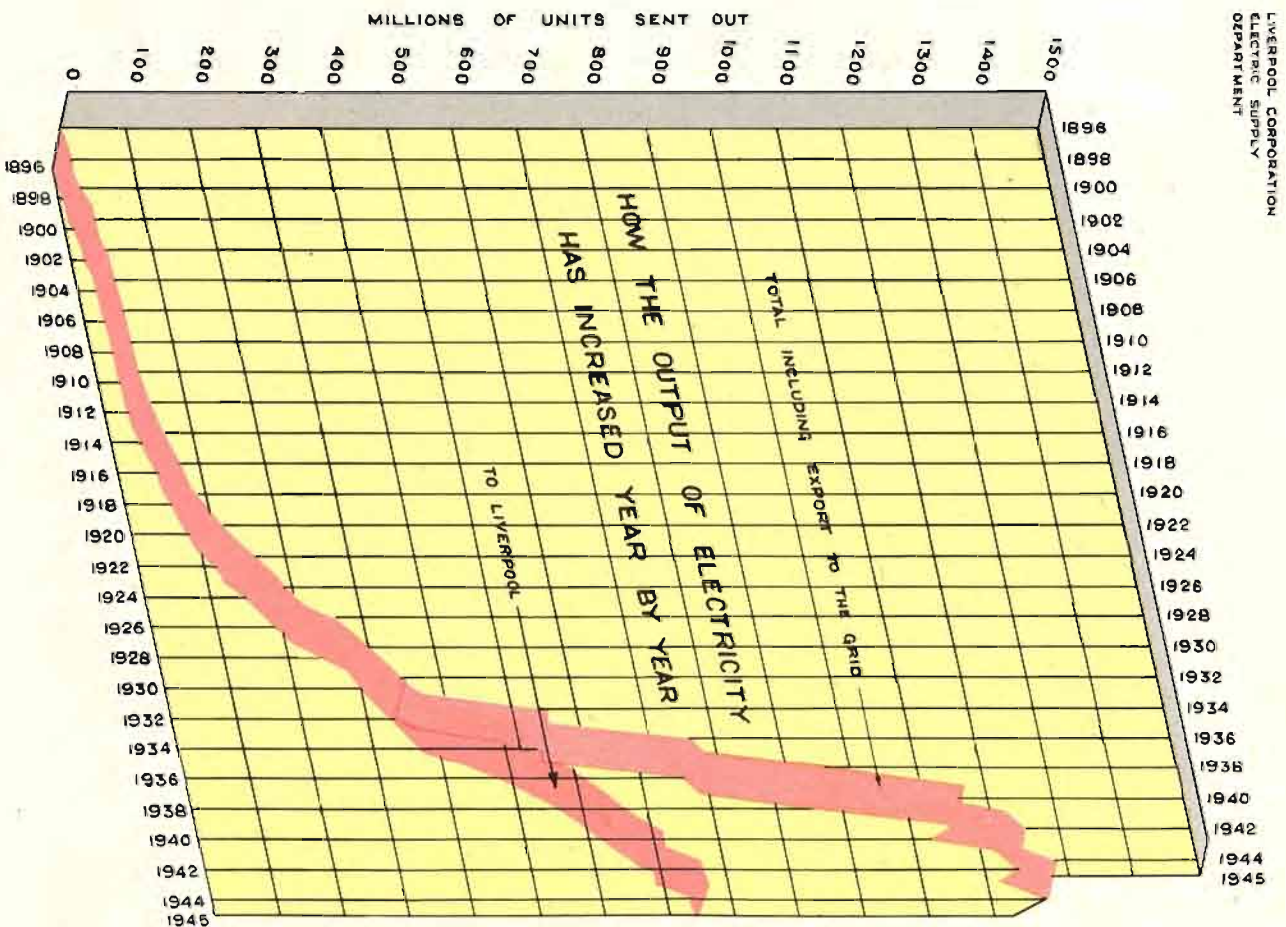
POLE TRANSFORMER IN RURAL AREA

In the early days of public electricity supply direct current was used almost exclusively, and some of the old cables laid down in 1888 are still in service. The use of alternating current was adopted in 1903 and for many years past all new extensions have been on the A.C. system, which was rapidly replacing the D.C. system before the outbreak of war in 1939. As a result of enemy action the D.C. system was still further reduced and before many years have passed it will have disappeared entirely except for special purposes.

One of the purposes for which D.C. is eminently suitable is for electric traction and a large supply for this purpose is provided for the Corporation Tramway system and for the Liverpool Overhead Railway in addition to supplies which are provided in bulk to the L.M.S. Wirral lines and the Southport line as well as to the Mersey Railway.

In a city of the character of Liverpool it will be obvious that electricity is used for a very wide variety of purposes and the main industries associated with the activities of the port, such as the Mersey Docks and Harbour Board and the various milling and seed crushing firms, are among the largest users.

Engineering firms are also prominent users, and recently new industries have been attracted to the area, notably at Speke and on the Kirkby Trading estate.



It is for the purpose of supplying the domestic load in the residential districts however, that the greatest lengths of low voltage cables are required and the following figures may give some idea of the amount of work done in this direction.

The total length of high voltage underground cables and overhead lines is 508 miles. The corresponding length of low voltage underground cables and overhead lines is 1,385 miles. The combined length of these cables and lines, when placed end to end, would connect Liverpool with Istanbul.

It may not generally be realised that the capital value sunk in the distribution system of an electricity supply undertaking usually exceeds the cost of the generating stations. In Liverpool, out of a total capital expenditure of approximately £15,000,000 for the undertaking, the distribution system accounts for no less than £8,700,000.

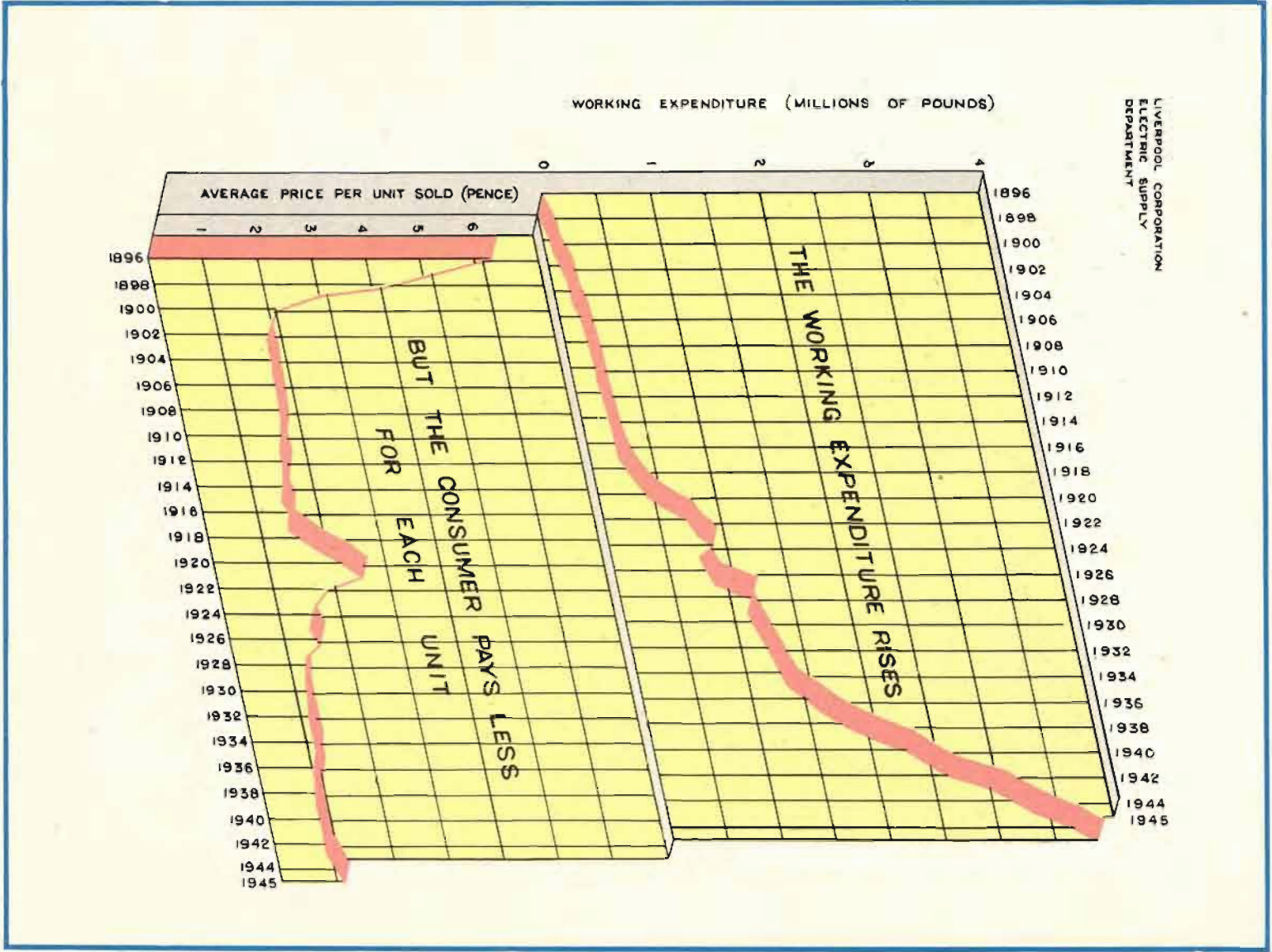
One of the earliest uses of electricity was for street lighting, and this has been developed gradually, until in 1939 there were more than 20,000 lamps lighted by this means in the supply area.



Photo Hobbs, Offen & Co.

AN EXAMPLE OF SODIUM LIGHTING,
EAST LANCASHIRE ROAD

The value of street lighting was forcibly demonstrated by contrast under the "Black-out" and "dim-out" conditions of war time, and whilst it has not yet been possible to make full restoration, it is hoped that before long there will be an up-to-date system of street lighting under centralised control.



The " Grid " lines of the Central Electricity Board operating at 132,000 volts are used for the transmission of power on a wholesale scale and for the interconnection of main generating stations. A high proportion of the output of the Clarence Dock Generating Station is transmitted over these lines to supply other towns in Lancashire and Cheshire and even further afield.

The accurate measurement of the energy consumed, involving as it does the testing and installation of nearly a quarter of a million meters, is an important part of the activity of the Department, and an extended meter test room has been recently opened at Lister Drive.

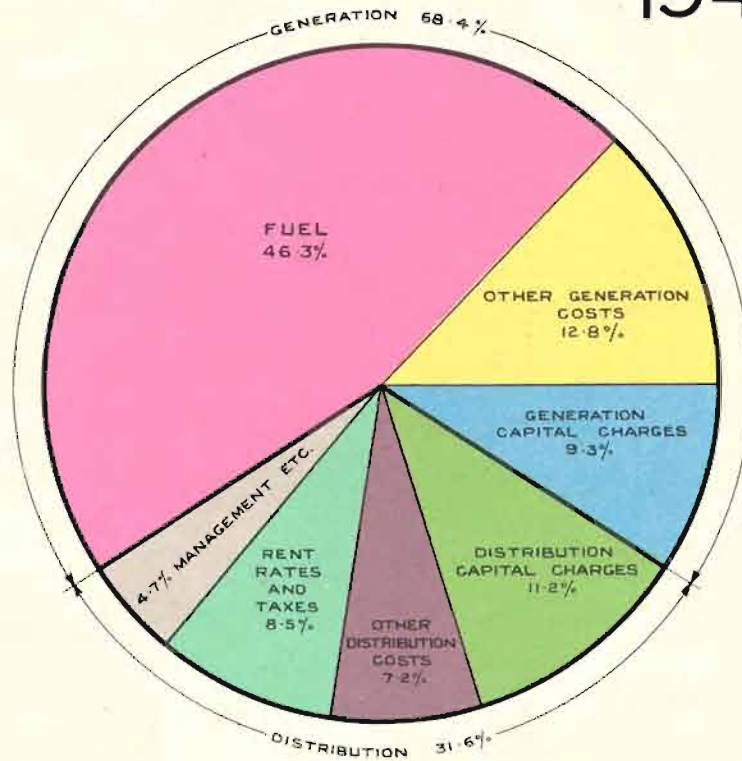
Up-to-date workshops are also provided for the repair of cookers and other appliances and for the assembly of the switchboards which control consumers' installations.

CITY ELECTRICAL ENGINEER.
J. ECCLES, ESQ., B.Sc.,
M.Inst.C.E., M.I.E.E., M.I.Mech.E.

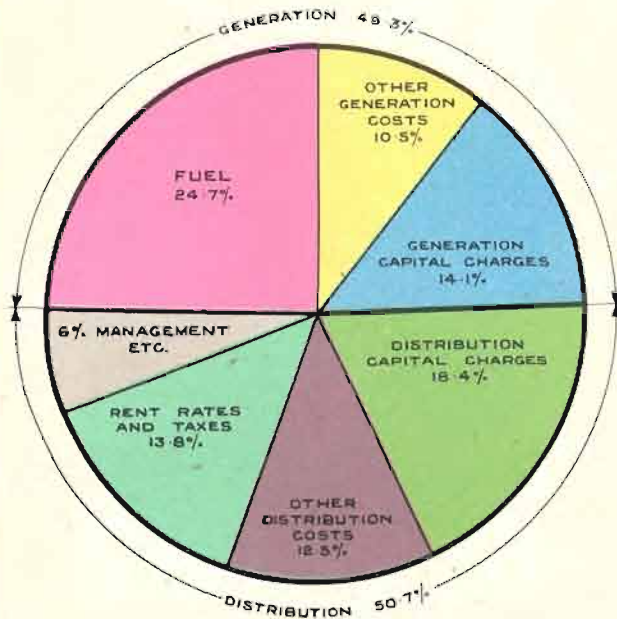


LIVERPOOL CORPORATION
ELECTRIC SUPPLY
DEPARTMENT

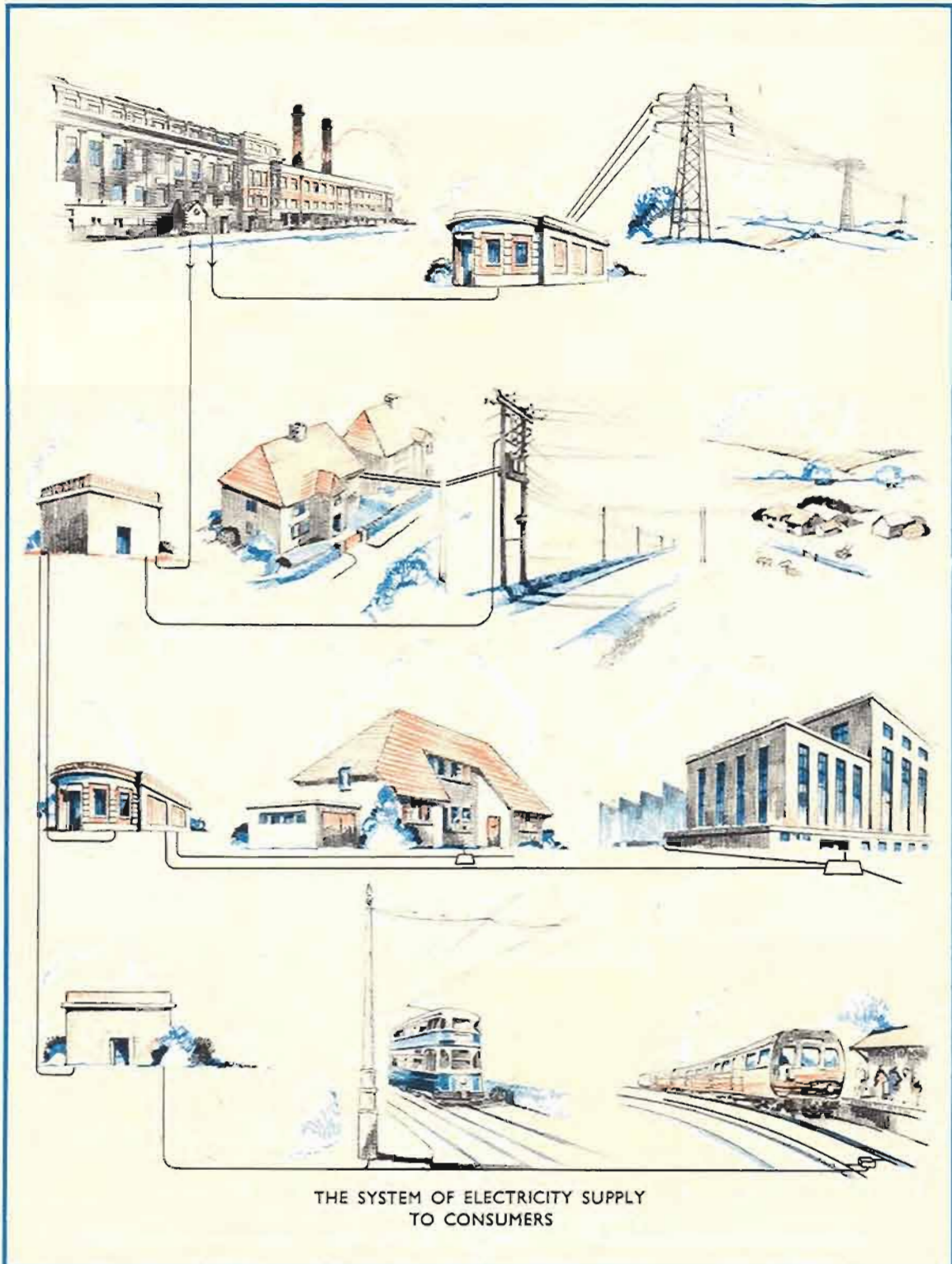
1945.



1939



THE COSTS
ANALYSED.



ELECTRIC POWER AND LIGHTING COMMITTEE

1945 — 46

Alderman Alexander Critchley, *Chairman*
Councillor Aled O. Roberts, *Deputy Chairman*

ALDERMEN

Ada M. Burton	Rev. H. D. Longbottom
Mary M. Eills	G. M. Platt
R. J. Hall	J. G. Reece

COUNCILLORS

V. H. Cove	P. O'Brien
H. Evans	S. Part
J. Granby	H. W. Stacey
A. B. Hoer	R. W. Stewart
T. Hogan	J. E. Thompson
J. Johnstone	E. T. White
H. Lees	C. W. Wingrove

Representing the Corporation of Bootle :—

Alderman R. O. Jones and Councillors P. Mahon,
T. A. Patrick and J. Spence

CITY ELECTRICAL ENGINEER

J. Eccles, B.Sc., M.Inst.C.E., M.I.E.E., M.I.Mech.E.

TOWN CLERK

W. H. Baines, C.B.E., LL.M.



CHAIRMAN.
Alderman Alexander Critchley.



DEPUTY CHAIRMAN.
Councillor Aled O. Roberts.



Photo Stewart Bale

THE COMMITTEE IN SESSION.
17th June, 1946

Left to Right:

CHAIRMAN'S TABLE

Mr. Baird. Mr. Stirrup. Ald. Critchley (Chairman). Mr. Eccles (City Electrical Engineer).
Councillor Roberts (Deputy Chairman). Mr. McMinn
In Front: Mr. Kellett

FRONT ROW

Mr. Smith (Deputy City Lighting Engineer). Councillors White, Evans, Hogan, Part,
Lees, Wingrove, Ald. Graham Reece

BACK ROW

Councillors Granby, Hoer, Stacey, Mahon, Ald. Longbottom, Councillor Stewart,
Ald. Miss Eills, Councillors Cove, Johnstone, Patrick, Spence, Mr. Roberts (City Analyst)

LIVERPOOL
TODAY AND TOMORROW



THE LORD MAYOR
ALDERMAN LUKE HOGAN, M.B.E., J.P.



ALDERMAN A. E. SHENNAN, J.P., M.A.
Chairman of the Finance and
General Purposes Committee



COUNCILLOR J. BRADDOCK
Deputy Chairman of the Finance and
General Purposes Committee



THE TOWN CLERK
W. H. BAINES, ESQ., C.B.E., LL.M.



THE CITY TREASURER
JOHN AINSWORTH, ESQ.,
M.B.E., F.S.A.A., F.I.M.T.A.

24. Jan 1941

GB 5082 b

Nur für den Dienstgebrauch

Bild Nr. 1060 R 36

Aufnahme vom 4. 9. 40

Liverpool-Waterloo

Hauptkraftwerk am Clarence-Hafen

Länge (westl. Greenw.): 3° 00' 00" Breite: 53° 25' 00"
 Mißweisung: - 12° 19' (Mitte 1940) Zielhöhe über NN 5 m

Maßstab etwa 1:19200

Genst. 5. Abt. November 1940

Karte 1:100 000

GB/E 12

1:100 000 0 500 1000 1500 m



(A) GB 5082 Kraftwerk am Clarence-Hafen

(B) GB 5282 Gaswerk ostw. Nelson-Hafen

(C) GB 5041 Kraftwerk Wallasey mit Gaswerk

(D) GB 5683 Großmühle und Getreidespeicher am West Float

(E) GB 5681 " " " " East Float

(F) GB 5687 Viehställe, Schlacht- u. Kühlhäuser am Viehumschlaghafen

THE LUFTWAFFE INTERVENED

This City and Port, which during the past seven momentous years has been the main terminus of our Western lifeline, has not unnaturally received a commensurate share of enemy attention. The illustration opposite, which is a reproduction of a map captured in N.W. Germany, shows the thoroughness of the Luftwaffe's preparations. Clarence Hafen (Clarence Dock) was evidently singled out for special attention. The dates shown are also of interest when one recalls the eight consecutive nights of intensive bombing in May 1941, resulting in great structural damage and the loss of many lives.



Grainger Smith

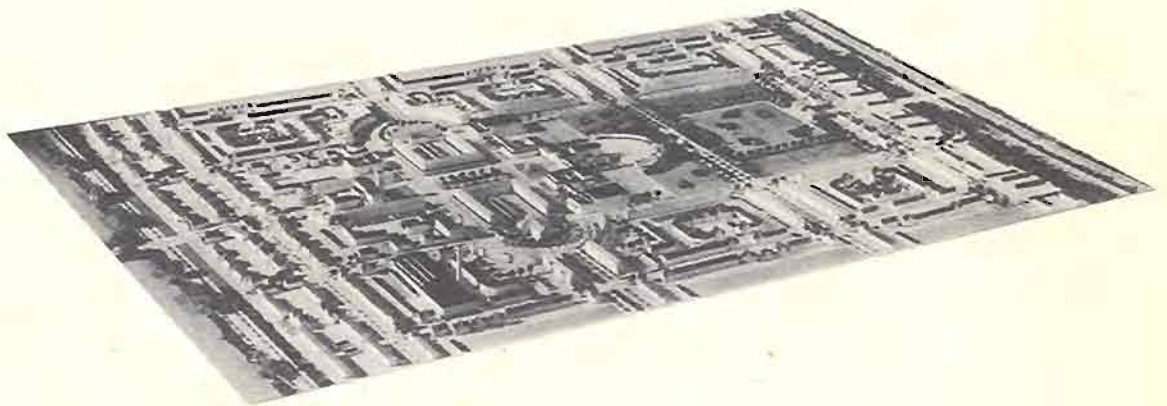
Courtesy of The Walker Art Gallery

LIVERPOOL BURNS.
AN IMPRESSION OF THE ENEMY RAID MAY 3rd, 1941

Notwithstanding this, and many other setbacks, the work went on. The troops passed to their transit camps, the food and equipment to their distribution centres. The might of right was built up, and the day of Victory assured.

The war is over, but its consequences remain. All around is evidence of physical destruction, we have poured out our blood and our treasure, and the aftermath of unsettlement, suspicion and discord hangs like a dark cloud over the world.

It serves no useful purpose however to reflect unduly on past vicissitudes, except to derive inspiration from the fortitude of our people.



MODEL OF SPEKE TOWN CENTRE

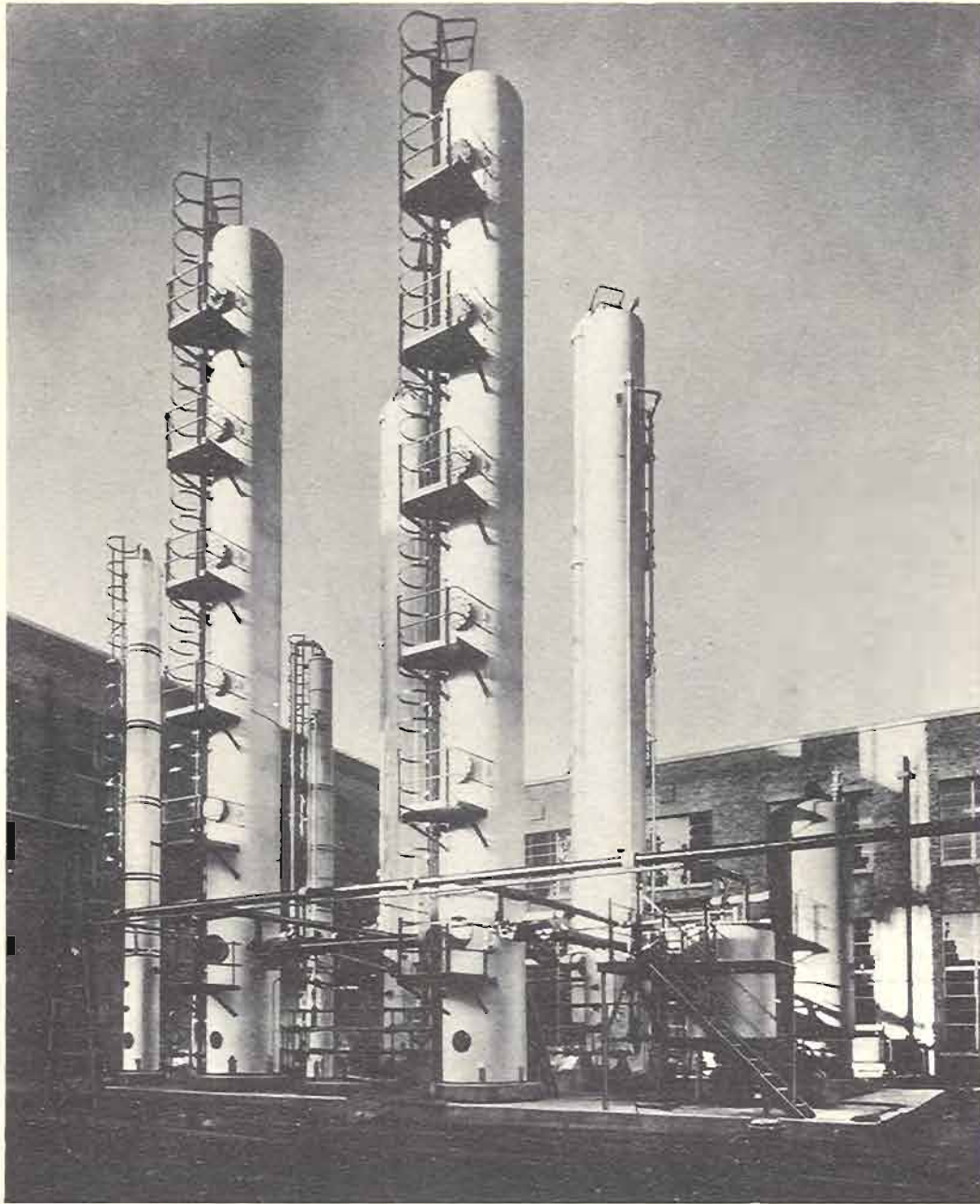


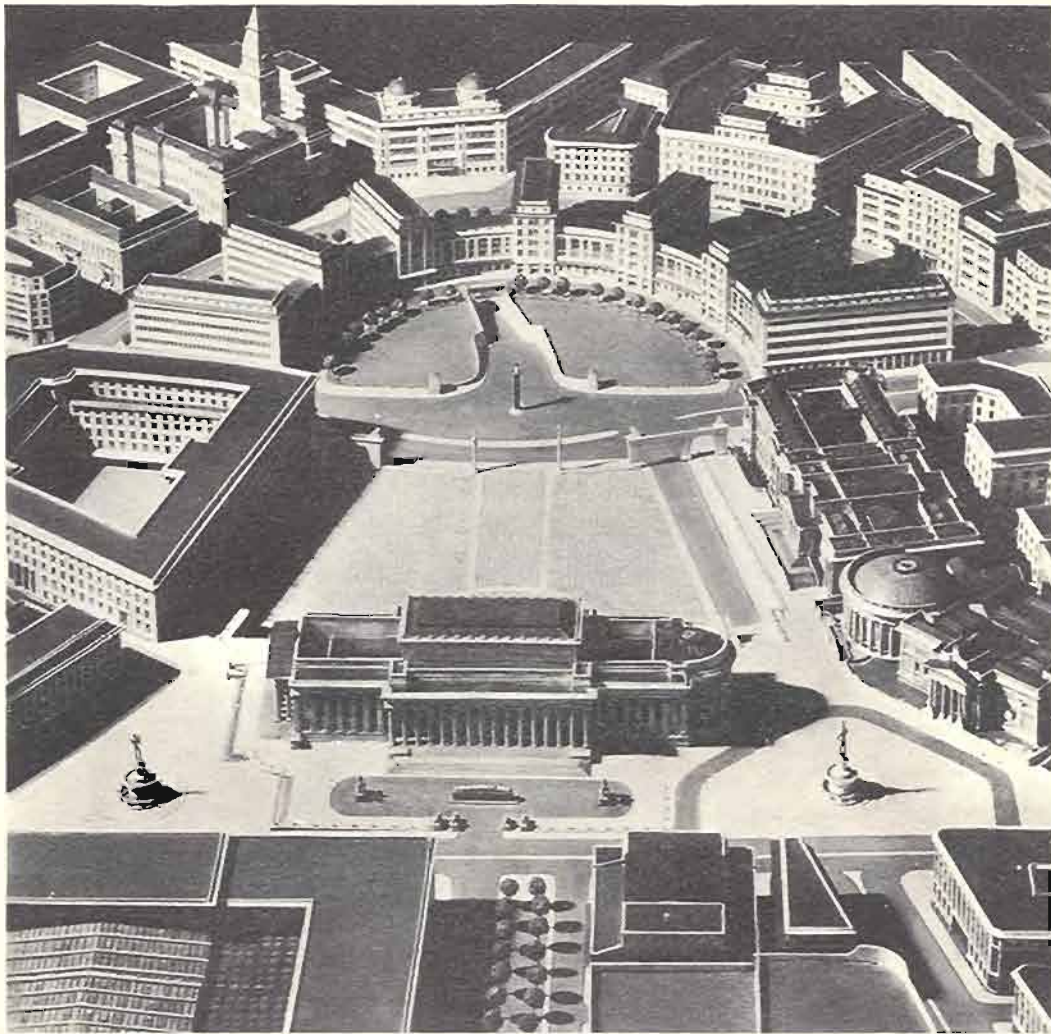
Photo Stewart Bale

Courtesy of The Distillers Co. Ltd.

AIR SCRUBBERS AT THE PENICILLIN FACTORY

Today is a time for action and a forward outlook. The road may be hard and the going heavy, but once again we can and will succeed. It is in this spirit that the Corporation and citizens are addressing themselves to the social and industrial problems of the future. New Housing Estates are being planned and constructed to accommodate the overspill from the densely populated and war damaged areas. Industrial Estates have been mapped out, and new factories are coming into production monthly. The greatest of all scientific curative agents is produced within our boundaries in Europe's largest Penicillin factory. Advantage is being taken in the war damage reconstruction programme to re-plan the centre of the City. The Public Utility Services are second to none—power, water and transport are readily available on every site at low cost. Access to anywhere by land, sea or air travel is unsurpassed, and the will to assist manufacturers and merchants to obtain sites and do business is equalled only by the facilities which we have to offer.

Liverpool looks into the future with confidence



SUGGESTED RECONSTRUCTION OF CITY CENTRE, SHOWING ST. GEORGE'S HALL
AND KINGSWAY ENTRANCE TO MERSEY TUNNEL

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