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The Old Dapto Smelting Works

J. P. O'Malley

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Description

J.P. O'Malley, (1968), The Old Dapto Smelting Works, Illawarra Historical Society, Wollongong, 17p. First edition 1950, second edition 1968. The first edition of this booklet, based on an address by the author to the Illawarra Historical Society, appeared in 1950 but requires bringing up-to-date at only a few points. The site of the smelting works is little changed since then. Part of the great pile of slag has been removed, but much still remains. "Lakeview", the former general office building, now the home of Mr. and Mrs. S. Fackender, is still in existence, but the manager's residence in Kanahooka Road, some distance to the west, has been demolished. The level crossings in Princes Highway have disappeared but part of the old railway track is still visible in Marshall Street, Dapto, and its earthworks can be seen in many places along the route. Repeated enquiries for Brother O'Malley's booklet since it has been out of print have determined the society to republish this interesting and valuable record of the first attempt industry on any large scale in Illawarra.

Publisher

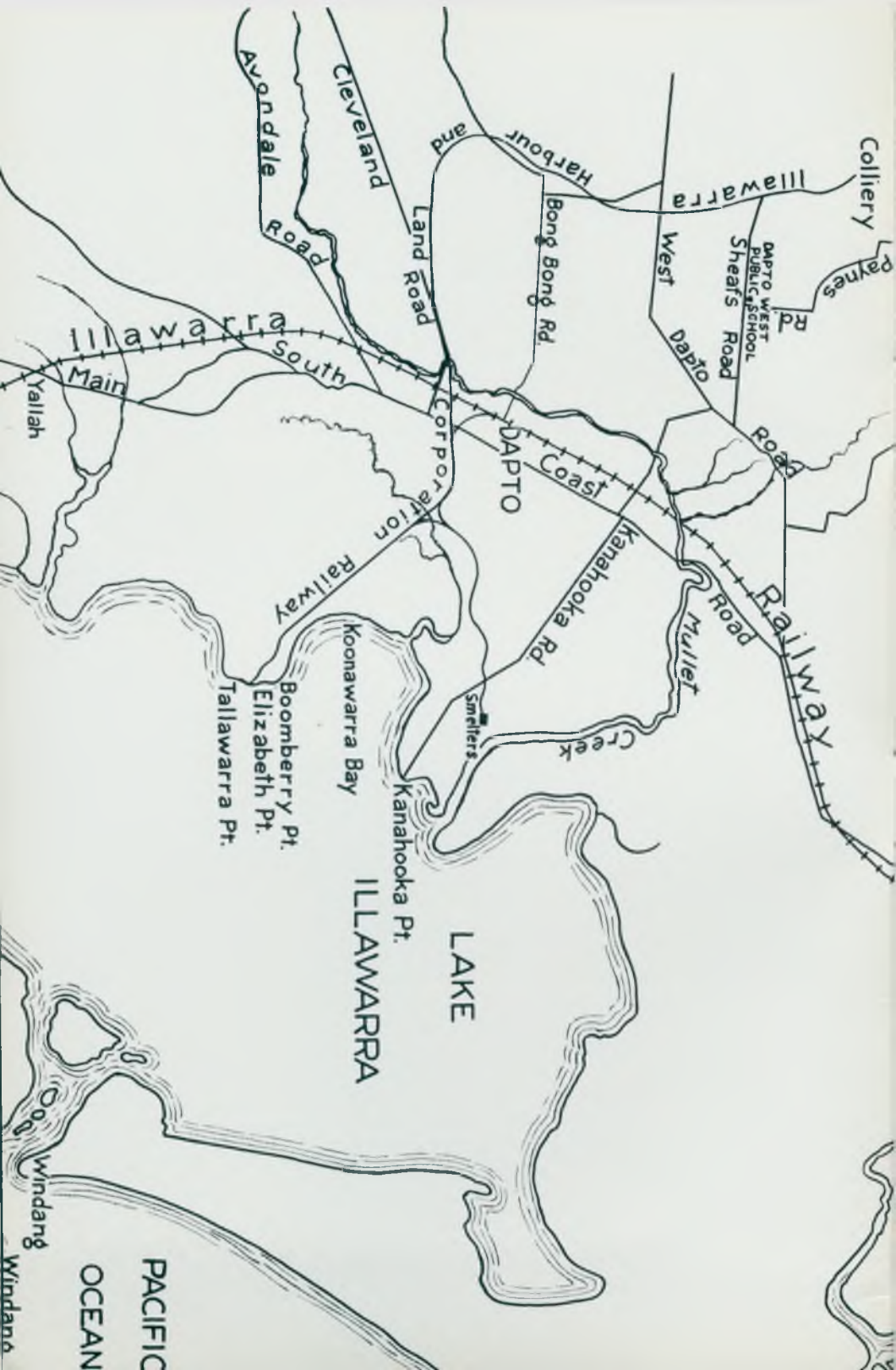
Illawarra Historical Society, Wollongong, 17p. Second edition 1968



The Old Dapto Smelting Works



An Address
given by
Rev. Bro.
J. P. O'Malley
to members
of the
Illawarra
Historical
Society



Colliery

Paynes

Illawarra

West Dapto

DAPTO WEST PUBLIC SCHOOL

Sheafs Road

Bong Bong Rd

Land road

Cleveland Road

Avondale Road

Illawarra Main Road

Yallah

Corporation

DAPTO Coast

Road

Kanahooka Rd

Mullet Creek

Railway

Railway

Koonawarra Bay

Boomerry Pt.
Elizabeth Pt.
Tallawarra Pt.

Kanahooka Pt.

ILLAWARRA

LAKE

PACIFIC OCEAN

Windang

Windang

PREFACE

The discovery of coal in the northern part of the Illawarra District by William Clark, the supercargo of the ill-fated "Sydney Cove," in May 1797 and the subsequent location, by Surgeon Geo. Bass and William Clark, of the coal seam at Coalcliff in August 1797, opened a chapter of industrial progress, in which our generation is now participating in an ever increasing field of endeavour.

With the coal resources abounding in Illawarra, it was but a natural consequence that an attempt would be made, sooner or later, to bring metallic ores to this district for treatment. It is somewhat surprising, therefore, that it took about a century for this to happen.

It is difficult for us, of this day and generation, to account for the site chosen for the Dapto Smelting Works—the western shore of Lake Illawarra! The advantages of the Port Kembla Harbour seem so superior — now. Until, of course, we reflect that the site of the gigantic "Tallawarra" electricity generating station, planned to produce an ultimate output of 150,000 Kilowatts, is but little removed from that old smelting works.

However, the following account of the rise and fall of a brave industrial venture is a story ably reconstructed by Bro. J. P. O'Malley and is the fruit of much patient research. He has succeeded in translating what to most of us, was a vague memory into a lasting and valuable record.

J. S. G. WORLAND,
President,

19th September, 1950.

Illawarra Historical Society.

FRONT COVER PICTURE:

Dapto Smelters in 1899 from the original in possession of Mrs. B. Fuller. The view is looking west. A copy of the picture is in the Wollongong City Library. It was reproduced in the "Sydney Mail" of 10/11/1900, page 1110.

The Forerunner

On the Prince's Highway, half a mile south of Dapto Railway Station, motorists constantly negotiate a level crossing, in fact two of them, without even dreaming that the main Illawarra line, which runs parallel to the highway, was in turn crossed at right angles by a line running due east to Lake Illawarra.

This was all half a century or more ago, for it was in 1890 that an Act of Parliament was passed authorizing the Illawarra Harbour and Land Corporation to begin projects near Dapto that would involve an outlay of many hundreds of thousands of pounds.

That this land company both owned and had an option over much land on the western shores of the lake is verified by the fact that there are many hundreds of acres assessed for rates by the Central Illawarra Shire in the name of the Company.

The Directors of this Corporation, all of whom were in Australia, were Edmund Barton, A. G. Friend, Ed. Noyes, H. S. Chipman, A. J. Liddell, Andrew, John and A. H. Armstrong and A. C. Chippendale.

The Dapto Smelters in the 1890's taken from near the present junction of Burrows Avenue and Edgeworth Avenue, looking north.

—Weber Photo.



The Harbour Project

Little does the casual traveller who crosses the bridge over Lake Illawarra at Windang know that some thousands of pounds were spent preparing the entrance to Lake Illawarra so that ocean going vessels could have access to a dredged channel into the lake. This led to Elizabeth Point slightly to the north of Tallawarra Point.

Even now the remains of a breakwater can be seen on the mainland side of Windang Island, while on the island itself are the sand-embedded truck-wheels and a few badly rusted rails, which carried rock from the quarry on the south-western side of the island, for the purpose of building the breakwater.

The scheme included a channel through the lake about four and a half miles long, 430 feet between the two breakwaters at the entrance 100 feet wide at the bottom end and 23 feet deep all along. The estimated cost was £175,000.

The First proposed Inner Harbour, with entrance from Brighton Beach.



The Illawarra Harbour and Land Corporation Railway

The original purpose of the harbour was to export coal from a colliery situated in Portion 225, Parish of Kembla, some half a mile west of the present West Dapto Public School and now known as Fleming's Mine.

Robert Amos secured the contract to build a railway "running generally southerly into Portion 60 then turning easterly, crossing Mullet Creek and railway line about half a mile south of Dapto Railway Station, thence easterly along south to Dapto, Parish of Calderwood, thence south-easterly to Lake Illawarra between Elizabeth and Tallawarra Points."

The length of the line was about 5½ miles. It was to be completed before December 13, 1895. It cost £42,000! However, a lull settled over these bright beginnings—or was it merely the backwash of the great depression of the 90's?

In 1893 it was reported that "the prospect of Lake Illawarra being converted into a harbour, which three years ago appeared so bright, seems now to have altogether vanished and the most sanguine adherents of the scheme have been obliged to abandon hope."●

Further signifying the death blow to the scheme, Patrick Osborne gave notice to all graziers of the district to pay agistment money to him or his agents and not to the Land Corporation.

*N.S.W. Land Department Records.

●Wollongong "Argus", August 16, 1893.

The Smelting Co. of Australia Ltd.

During a Parliamentary Enquiry in 1895, following an application for an extension of time by the Illawarra Harbour and Land Corporation, Francis Jarvis, Manager of the Corporation, deposed that about £4000 had been spent at the entrance to the lake during a previous contract. Much of the capital, he continued, had been guaranteed, the financing being in the hands of Mr. T. A. De Wolfe* in London.

Andrew Armstrong, one of the Directors of the Corporation, stated that the original intention of the Company was to export coal, but a change of circumstances had widened its objects. Mr. De Wolfe, one of its leading Directors, had formed a Company which was about to spend £200,000 near the lake for the treatment of sulphides.

The people who had taken shares in the Smelting Co. were the wealthiest capitalists in London. They had guaranteed the Harbour and Land Corporation's Debentures and had undertaken to supply the necessary funds for Mr. Amos's railway contract. The guarantors were registered in London as the Camden Syndicate.

With substantial financial backing and these two major projects moving hand in hand, surely Dapto was entering an era of great industrial expansion.

The Prospectus of the Australian Smelting Co., issued in London on August 8, 1895, revealed that its Provisional Directors were:

Mr. Arthur Wilson, of Hull; Mr. J. Fowler, of Leeds; Mr. W. Savill, of the Shaw, Savill and Albion Shipping Co.; Mr. Keswich, of

*Died March, 1903, in London.

Mathison; Mr. Geo. Inglis, Mr. T. A. De Wolfe and Mr. John Howell, Managing Director, whose salary is stated at £400 per annum.

The Smelting Co's. assets were £500,000 in £1 shares. It acquired from the Camden Syndicate Ltd.—which was to receive £300,000, including £50,000 cash — the following properties:—

- (1) 300 acres of freehold, as a site for the works at Lake Illawarra.
- (2) The sole right to use in Illawarra the Marsh and Storer Patent No. 3458, for the treatment of sulphide ores—subject to a small royalty to the patentees.
- (3) The White Rock Silver Mine, Fairfield, New England; the Webb Silver Mine, Emmaville; the North Lewis Mine at Orange, and others in that vicinity.

Parliamentary Enquiry Continues

The Smelting Co's. first Managing Director—Mr. John Howell—declared that ores would be brought to the works by water wherever possible. To treat 200,000 tons, they would employ three to four hundred men at the works and indirectly four or five times that number in burning coke, mining coal and quarrying limestone and ironstone.

His Company would also be able to deal with refractory pyritic ores and expected to bring ore from New Zealand. He had commenced mining in America and he considered Australia a much greater mineral country than America. He could get coal delivered at the works at 4/6 a ton. The works would cost £200,000. In their operation, which would not be detrimental to health, he would prefer married men—with a view to permanency.

Mr. Robt. Amos concluded the evidence before the Enquiry by declaring his intention to pay good wages to attract the best men. Six shillings for a seven-hour shift (there were two) was the wage. When asked did he know that whenever works were started many more applied for employment than were needed.

“Yes,” replied Mr. Amos, “and half of them are not worth employing.”

“Was that the case at the lake?” “Yes, there are fifty or sixty Woolloomooloo larrikins camped there.

Broken Hill

Activity in Broken Hill became very marked about this time. The Chairman of the Broken Hill Proprietary Company's mine, in his 1895 half-yearly report, looked forward to the time when sulphide ores—on which the mine virtually depended—should be treated at a very moderate cost per ton. The Directors had numerous proposals for the purchase of their ores but they could not decide on anything until they actually knew what quantity of ore was on order. Even in London prior to this it was circulated that “The new Company (at Dapto) will treat the Broken Hill ores first.”

It must be remembered that lead was what Broken Hill was most interested in at this period, and so consignments of ore from the British Mine were soon on their way by rail and boat to Sydney, thence by rail to Dapto.

The Broken Hill Proprietary Mine sent more than ore to Dapto. It sent its Manager to be Dapto's first Managing Director.

The site chosen for the works was an elevated one, contiguous to Mullet Creek and about half a mile from its mouth. The more northerly of "The Twins"—two similar hills—was decapitated, thus providing a series of levels to which the ores would gravitate, in the various processes from bins to crushing and roasting plants, then to the blast furnaces before being sent to the refinery.

Over an acre of slag (in some places twenty feet deep) indicates the many millions of tons of ore treated in its decade of existence.

Revival of Harbour Project

In November, 1895, Mr. Cairns, the Manager of the new Railway Works at Dapto, despatched a few men to Shellharbour to start operations at once in connection with the Harbour Works.

About the same time a select Parliamentary Committee was delegated to journey to Dapto to report on the Lake Illawarra Harbour and Land Corporation projects. They came by special train with sleeping car attached. The party was headed by Mr. J. C. Nield, Hon. A. Kethel, M.L.C. and Messrs. Watson and McDonald (Labor Party). Mr. A. Armstrong, one of the mainsprings of the enterprise, was their guide, philosopher and friend.

At Kanahooka Point the Cliffords were waiting with two boats and a local party including Messrs. G. McPhail, T. Armstrong, A. B. Chippendall, E. R. Evans, W. S. Thompson, J. W. Musgrave, G. Lindsay (Horsley), G. Lindsay (Unanderra), John Lindsay, W. Beach.

Both parties went direct to the entrance of the lake where Mr. Henderson, Engineer of Harper and Harper, expounded the scheme.

Early the next year (1896) another special train brought Admiral Bridges, who inspected the approaches to Lake Illawarra, which is described as "that magnificent sheet of water covering an area of fourteen square miles". The dredged channel would give ready access for ocean-going steamers to the immediate vicinity of the smelting works, the largest plant of its type in the Southern Hemisphere.

The Admiral's visit, the report adds, was directed more to an inspection of the approach to the new harbour with a view to their adequate protection from attack, than to the evident commercial importance of the site.

Rival Harbour Schemes

Ald. William Wiley, Mayor of Wollongong in the "eighties", launched the idea of a deep-water dock in Tom Thumb Lagoon with entrance at Brighton Beach. Sir Henry Parkes, member for Kiama, commended the plan.

The Government had brought out from England an eminent harbour-construction engineer—Sir John Coode—for advice regarding the Hunter and Clarence Rivers' bars.

After his visit to Wollongong, a Commission of nine was appointed comprising representatives of the Illawarra Steam Navigation Company, the Collieries, Municipality and Government. After data had been collected by Mr. Carl Weber, the plans of Mr. Coyle for excavating a harbour site north-west of Brighton Beach were approved.

Two breakwaters, one from Pulpit Rock—north of the Flagstaff Hill Lighthouse—the other from Fairy Creek, were to be constructed.

The estimated cost was £537,000. The Engineer, appointed at a salary of £750 per annum, was Mr. Chas. Good—a trainee of Sir John Coode.

Victorian contractors—McKenzie Bros.—lacked necessary heavy equipment. Bad weather further hampered their efforts and an adverse reply from the Government for a loan of £100,000 caused the Commission to close down.

In an attempt to improve the berthing facilities at the "T" jetty near Belmore Basin, Mr. Charles Hungerford's tender for extending the breakwater was accepted.

Meanwhile, agitation focussed attention on Bellambi and Port Kembla as rival sites for a deep seaport. Mr. Halligan—a Government engineer—decided on Port Kembla. Hungerford was awarded £11,000 for failure of contract.

It was at this juncture that the Port Kembla project—because of London influence—was temporarily waived in favour of the Lake Illawarra Harbour Scheme.

Strong opposition to the lake scheme was voiced by Mr. W. J. Wiseman, of Hillside, Wollongong. He opposed Parliament's handing over the whole of Lake Illawarra and all its foreshores to a "grasping syndicate."

Out of 21 fishermen, nineteen signed for the amended bill. Two thousand residents of the district signed a petition opposing the bill. "What became," Mr. Wiseman asked passionately, "of the principal movers of the scheme who were trying to wrench that grand sheet of water from those who had a perfect right to it? Echo answers, 'What!'"

Pressure was brought to bear on the Reid Government, whose Minister for Public Works was Mr. J. H. Young, by Mr. G. W. Gray, the founder of the Port Kembla Harbour League.

Mr. Archibald Campbell, M.L.A., was a free trader under the Reid Government. In the change over to Protectionist Policy under Sir Wm. J. Lyne, Mr. Campbell influenced the new Minister for Public Works, E. W. O'Sullivan, despite opposition from Newcastle, to set the Act in motion.

Opposed by J. C. Nield, a friend of the Lake Scheme, and Mr. Cann, member for Broken Hill, Capt. Charles, of Kiama, fought successfully in an all-night session to have the bill passed in 1898 whereby two breakwaters, 2800 feet and three-quarters of a mile respectively, would enclose 344 acres with a low-water depth of twenty-four feet.

The Act also provided for the purchase of 500 acres of the Wentworth Estate.

Progress at the Smelting Works

Besides the ore from Broken Hill and from their own mines in the New England and Orange districts, Cobar and Captain's Flat in N.S.W., Chillagoe and Mt. Morgan in Queensland, and Zeehan in Tasmania, all sent ores to Dapto. As early as 1893 a report from Goulburn noted that work would be resumed at the Carrington Mine "for flux, which will be in demand at the Illawarra Smelting Works". Marulan, Bredalbane, Mittagong and Carcoar are also mentioned as sending iron stone.

From an interesting letter to Mr. William Mintorn, Church Street, Wollongong, by a contemporary (Mr. W. E. Thomas—"One of the Old Gang" he styles himself), I extract the following:

"The main plant of the Smelting Works consisted of three blast furnaces, roasting plant, refinery, sulphuric acid plant, steam engines, blowing engines, pumps and a foundry. The lead concentrates were purchased from Broken Hill. Silver ores and gold were sent by sea to Sydney from Zeehan and Mt. Morgan respectively. I well remember that a large quantity of telluride ore from Western Australia was treated during my time at the works. Later the W.A. Associated and Horseshoe Companies had their own Assay Office at Brownsville.

"The products from the works were Dore bullion (gold and silver conglomerate), soft lead and a high-grade copper matte containing gold, silver and lead.

"The sulphuric acid plant which sent its output to Elliot and Co., was not long in operation."

Mr. Thomas's letter concludes with a list of the Company's officers. The Managing Director was John Howell, a well-known figure in the mining world at the time, with headquarters at 56 Margaret Street, Sydney. Mr. G. H. Blakemore, his son-in-law, was Assistant Manager. The Chief Metallurgist was C. W. Burrows; Chief Engineer, E. J. Siddeley (still alive), and the Chief Chemist and Assayer, A. J. Dixon.

A summary of Mr. Blakemore's career from "The Chemical, Engineering and Mining Review" (1941) is as follows:

"Mr. George H. Blakemore died in Sydney on March 22, aged 72. In 1888 he was Chief Assayer on the Sulphuric Corporation's mine in Broken Hill and after two and a half years joined the British Broken Hill Company as Metallurgist in charge of the blast furnaces. After a similar period he became Assistant Metallurgist in the blast furnace plant of the Broken Hill Proprietary Company Limited. In 1895 the late Mr. Blakemore supervised the erection of the plant of the Smelting Company of Australia at Dapto, N.S.W., and remained in charge until 1898, subsequently taking control of a group of gold mines in the Gundagai district which were operated by Howell Consolidated Gold Mining Ltd. In 1900 he managed the Einasleigh copper mine in Queensland and in the following year returned to N.S.W. as Mine Manager—later General Manager—of the great Cobar copper mine. He was associated with the C.S.A. mines and became Manager of the Occidental—both in the Cobar district. In later years he was engaged in a consulting practice in Sydney, becoming Chairman of Directors of Takuapa Valley Tin Dredging N.L. in Siam."

It is surprising to note that the coal mine owned by the Company at West Dapto, though connected by rail with both the lake and Smelting Works, did not provide any fuel for the latter.

Professor David is quoted as stating that there is no marketable coal south of Kembla.

The coke used was that of the Australian Coke Company whose works were near the junction of the Prince's Highway and the Mt. Kembla railway. (Coal was obtained for coking from the Corrimal-Balgownie Collieries). These works have since been dismantled and re-erected at Corrimal. Coke also came from the Federal and Mt. Pleasant Companies.



The Plant

Tenders were called for half a million bricks. In the same paper William Atkinson calls for tenders for the erection of a hotel at Dapto.

In the annual report of the Engineering Association of New South Wales in 1897 reference is made to the Dapto Smelting Works. It refers to three large floors each capable of holding 4000 tons of ore. Two copper blast furnaces were being erected. The blast furnace flue was 960 feet long, 10 feet high, 8 feet wide with walls $1\frac{1}{4}$ feet thick. This led to the 160 feet stack built with 221,000 Hurstville bricks. The stack for the roasting furnaces was 180 feet high.

Telephonic communication had been installed as was also electric light—the works being the first in Australia to enjoy the latter amenity.

The bricks for the flue were "sandstock" of inferior quality and made on the bank of Mullet Creek. Small openings at intervals along the base of the flue-wall gave access to the interior from the floor of which a thick deposit containing valuable minerals would be raked periodically. This process was regarded by the men as being extremely dangerous owing to the overpowering heat and fumes.

In "Notes on a Trip to Dapto Smelting Works", written by Mr. C. H. Bertie for the Australian Technical Journal of April 22, 1899, there is an account of the visit of forty students of the Mining Metallurgy, Assaying and Chemistry classes. Escorted by Mr. A. E. Weinburg, successor as Manager to Mr. Blakemore, and Mr. Dixon their tour of inspection included assay offices, crushing appliances, roasting furnaces, engine rooms, smelting furnaces, refinery and sulphuric acid plant. The ores were principally Broken Hill concentrates (containing silver, lead and zinc) and copper ores.

On arrival the ore was classified into oxides and sulphide, the latter requiring roasting. The zinc was extracted by sulphuric acid. There were two copper blast furnaces each of 60 tons capacity.

A dam was built on the west side of the works from which water was pumped up a concrete cylindrical tank, almost opposite the general office, for reticulation where required. Mr. Hamilton Simpson records an incident when a mullet pumped up was retrieved from some part of the cooling plant and placed by a lad named Bushby on the lunch of George Courtney (2nd Engineer). Immediate dismissal was followed by an interview with the lad's father, who succeeded in having him reinstated.

A report reassured the authorities that the discharge into the lake would be just hot water to which some varieties of fish were very partial. Thus the primitive industry of fishing would not be disturbed while there would be a possibility of the prawn being obtained in a ready cooked state.

Employees

The supply of ore to be treated was the factor controlling the number of employees at any given time. At the best period the payroll listed between four and five hundred men. Mr. William Hore, the then licensee of the Lake Illawarra Hotel at Brownsville, affirms that half the population lived in tents. A camp of fifty was in the clump of swamp oaks just north of the works. The monthly ground rent was one shilling per tent. A four-roomed house built from Lilyvale hardwood then cost £200. House rent was 7/- weekly, boots (McMurtrie's best 5/- a pair and beef $2\frac{1}{2}$ per pound.

There was no award wage then but evidently Unions had made a beginning because the Central Illawarra Labour Union (Smelting Co. employees) submitted a claim to the Manager, Mr. W. L. Hoyt, for a wage increase from 6/6 per day to 7/-. Mr. Hoyt told them he might see about the rise but requested that they wait till December (it was August) because the profits were not at the time sufficient to justify a general advance.

The Township of Dapto

Settled in 1817, the "Exmouth" grant of 1300 acres was made to Captain Richard Brooks. Of more immediate interest because of its proximity to the Smelting Works was George Brown's grant of 300 acres in 1833 known as "Mullet Creek Farm". From the Ship Inn Hotel in Wollongong he moved in 1834 to the Dapto locality now called Brownsville, becoming famous as an inn-keeper, road-builder, flour-miller and farmer.

Actually West Dapto was more closely settled than its immediate neighbours.

Mr. James Jervis, A.S.T.C., Fellow of the Royal Australian Historical Society, quotes a correspondent as having written in 1879:

"Dapto is the most straggling village in Illawarra. The traveller scarcely knows when he enters it, is never sure whether he is in it, and is equally uncertain when he leaves it."

About the time of the commencement of the Smelting Works there was considerable contention between Albion Park and Shellharbour as to where the local seat of justice would be.

However, a new contender entered the field as may be judged by the following report:

"It is Dapto that is leading just now. But the secret is where to buy land—Dapto or Tallawarra. A beautiful town is being marked off at Tallawarra Point where the city surpassing Newcastle will be. Steamers will come right up to the Smelting Works with its staff of hundreds of workmen."

In a Council notice in 1895 concerning street alignments and crossings it was recommended that a bye-law should be brought in because buildings were going up in Dapto "and in all probability there will soon be a town there".

PUBLIC BODIES.—In Dapto itself there were numerous activities which took up the attention of many of the works' employees. The gambling instinct, strong in every Australian, found an outlet on the live-hare course and racecourse, both of which were between the old Brownsville Hotel and the Smelting Works. Its Agricultural Society held its first show in 1857.

The Dapto Enterprise Band had Mr. J. O'Connell as drum-major. There also existed the Dapto Dramatic Society, sometimes referred to as the Shakespearean Dramatic Society, and finally a Bicycle Club.

Brownsville was a busy centre during this period, warranting a court house and police station.

CHURCHES.—In a small wooden Roman Catholic school chapel erected in 1839 in West Dapto, Rev. J. Rigney celebrated Mass periodically.

St. Luke's Anglican Church was built in 1845 and was visited by Rev. Devenish Mears, of Wollongong. The Osborne Memorial Church was opened in 1882.

A Wesleyan Chapel was built in 1848 and in 1851 the Presbyterians erected a school, also used as a place of worship.

LAKE EXCURSIONS.—Regattas on Lake Illawarra had evidently produced results when one calls to mind oarsmen of the calibre of Thomas Clifford and William Beach, the latter in 1885 winning the world's sculling championship.

In 1893 Mr. Grant advertised trips around the lake in his steam launch, "Ada", the fare being 1/-. Passengers could board the launch on Sundays and Wednesdays at Kanahooka Point.

The Misses E. and P. Osborne, of Cliff Road, Wollongong, were present at a well patronised lake picnic in 1906 when Mr. and Mrs. Hayward were host and hostess. Mr. Hayward was Secretary at the works.

There is record, too, of a fishermen's picnic to Gooseberry Island for the purpose of entertaining Mr. F. Farrell, M.P.

The first fisherman on the lake was Thomas Barron, who settled on Koonawarra Creek in 1824. He salted the fish and sent them by boat to Sydney. One, Jarrett, found that smoking them was more advantageous.

Giant figtrees, with dates of visits in the 40's cut into them, and clumps of gooseberries, added further interest to Gooseberry Island.

Smelting Works Staff

In May, 1902, the local Press recorded changes in the staff at the works.

Mr. P. S. Morse, Manager; Mr. Hayward, Secretary; Mr. Burrows, Metallurgist; Mr. Siddeley, Chief Engineer, and Mr. C. Jackson, Travelling Representative, all severed their connection with the Company.

"It would appear to be the intention of our American cousins, who are now said to control the concern, to make an entire sweep of the principal officers."

Mr. Morse, quiet and efficient, became Manager of Cockle Creek Smelting Company. His successor at Dapto was Mr. W. L. Hoyt, who came via Auckland in the "Sierra". Mr. A. E. Weinberg had then become General Manager of the New Chillagoe Mine and Railway Company. Mr. Hayward had gone to South Africa to take charge of one of the Rand mines. Mr. Jackson's ability as an ore buyer was undoubted. The constant supply of ores after his departure was not always forthcoming.

Each of the officers resigning was tendered a farewell presentation by the staff.

Output From the Works

One of Mr. Morse's last managerial reports affirmed that fifty to eighty trucks arrived each day. There were frequently two to three hundred trucks on the same siding.

The monthly shipments from the Smelting Works for the first half of 1902 were as follows: 3501 ozs. of gold, 52,883 of silver, 564 tons of lead, 26 tons of copper. For the second half of that year the output of gold and silver nearly doubled. £10,000 profit was recorded for 1902.

The report of the Commissioner for Railways for 1903 declared Dapto the most valuable station on the Illawarra line, its goods traffic totalling £22,000. Wollongong had only half that total, though in passengers the latter recorded 27,000 to Dapto's 11,000.

In August, 1902, the Smelting Company of Australia resolved to go into voluntary liquidation with the view to being purchased by the Smelting and Refining Co. of Aus. Ltd., whose legal adviser in Australia was Sir E. H. Wittenoom, K.C.M.G., Perth, W.A.

Legal Actions

In September, 1902, in England, Mr. Justice Bingham awarded the Smelting Company £1500 in an action for breach of contract against Great Boulder Perseverance Gold Mining Company, Kalgoorlie, regarding failure to fulfil an order for 10,400 tons of pyritic concentrates and telluride ores.

Hugh Douglas versus the Smelting Co. for the sum of £200 accident damages read thus:

"I was engaged taking matte out of the pans. Matte is a metallic conglomerate run out of the furnaces into the pots. With drills and a hammer. I and three others were engaged extracting the matte. Mr. Wright, the shift boss, used the hammer in question—the head of which came off and struck me on the shoulder." etc., etc.

After discussion, His Honour, Judge Rogers, returned a non-suit verdict.

What was considered by contemporaries the most notable lawsuit—a conspiracy case—occurred in Mr. Weinberg's regime.

A quantity of ore supplied by Messrs. Mooney and Axan from Yalwal, near Nowra, on being assayed, proved to contain a high percentage of gold. It was alleged that two employees, both of whom worked in the assay house, had "salted" the samples of ore by adding a quantity of gold.

Brownsville Court re-echoed with the thundering of Mr. Andrew Lysaght. Messrs. Shand and Owen are also spoken of in the case.

It was stated that after a certain date the accused began to dress particularly well. One of their ladies at a ball led the fashions. Things were looking up.

Burrows, the Metallurgist, became interested. Expeditions were made to the slag dumps. Further assaying went on.

Meanwhile, one pleaded guilty and was sentenced to eighteen months' goal. The other pleaded not guilty, was acquitted and further sued the management—unsuccessfully, however—for £500 damages.

Just about this time a further sensation occurred when a party of men from the Smelting Works took possession of a "plant" of bags of telluride ore which had been discovered in a swamp on the west side of the railway. These telluride ores were very valuable and it was while they were being treated, the alleged robberies of gold took place.

Rosy Prospects

Under W. L. Hoyt's management, F. Palmer became Secretary and ore-buyer, with E. J. Rogers as Superintendent of Works. In 1903 new crushing equipment had been received and the erection of a cokeworks was contemplated.

Regular consignments of ore from Associated and Horseshoe Companies of W.A. had been coming for some years. They ceased when West Australian companies built their own smelters.

A final effort to make permanent supplies of ore available was attempted by entering into a contract with Consolidated Nickel Co., of France, to supply nickel ore from their extensive fields in New Caledonia. The Rothschilds of London, now became the controlling power behind the Smelting Co.

At the time, New Caledonia produced more than half the world's supply of nickel ore yielding 7 per cent nickel. Prior to this most of the ore was taken to Glasgow. Such a distance implying that ore contains 93 per cent refuse, travelled 14,000 miles to have 7 per cent. extracted. The advantages of the Smelting Co's. proximity were obvious.

The lake harbour project had been by no means abandoned—on paper. Mr. A. A. Blow, the Consulting Engineer, who was sent at this time from America, said that a harbour near, the works would become the pride of Australia, with ten thousand people living in the neighbourhood. Ships would come in with ore and go out with coal. He also significantly mentioned the fact that it was 8 miles from the smelters to Port Kembla.

Motor cars were evidently rarities at this period as we learn that "Mr. Blow now does his tours in a motor car".

There were 350 men at the works then, and with the nickel plant in production a further 200 would be needed. The sulphuric acid plant was also to be set going.

However, the rosy picture of Illawarra's industrial picture in the immediate future took on a lowering aspect.

The plant for treating the nickel, with its 190 feet stack, never went into operation. The profits from the nickel smelting were to have been equally divided. In the meantime the New Caledonian Company decided to erect its own smelters.

The Deathblow

In the South Coast Times of March 4, 1905, appears the following ominous message:

"The works are to be closed down." Then the reason followed:

"The present management took charge three years ago. For two years all went well and big profits were pocketed by the Company's shareholders. The past year marks a heavy loss. Ore from W.A.—a profitable investment—had ceased. German competitors had cut off Broken Hill lead. Cockle Creek had secured one big contract before Dapto."

That same month Dalgety and Co. was pressing for £32,000. The value of ore and products, including expenditure on Webb's Mine, was estimated at £41,750.

A London reference to the finances of the Smelting and Refining Company revealed that for the two years following Octobr, 1902, a profit of £4368 was showing, but for the following year a loss of £15,388 had been incurred.

In 1903, £900,000 worth of bullion had been shipped; the next year just one third of that.

Transfer of Smelters to Port Kembla

In February, 1906, Mr. A. E. Savage, a representative of the reconstructed Smelting and Refining Company, now called the Australian Smelting Corporation, came to Dapto to superintend the transfer of the Dapto Smelting Works to Port Kembla.

The Registrar General's Department set this new Corporation on its books on December 28, 1905—having for its object the "smelting, refining, reducing, crushing, purifying, amalgamating and dealing with ores." The nominal capital was £350,000. The subscribers were: A. C. Wiseheart, Conveyancer; Alex Lundie, Clerk; E. T. Simpson, Solicitor; Ernest Wood, Accountant; W. C. McLeod, Clerk; C. L. Doherty, Solicitor; and F. J. McDonald, Clerk—all of Sydney.

The first Directors were William Clarke and William Radcliffe; the office of the Company was at Messrs. Minter, Simpson and Co., Solicitors, Norwich Chambers, Hunter Street, Sydney.

Interviewed in May, 1948, at his home in Lane Cove, Sydney, Mr. A. E. Savage, aged 83, gave as his reason for the ultimate closing of the works the facts that (a) the shareholders ceased to contribute, (b) the port in the lake was impracticable, (c) trade was not promising.

His Company was the second to attempt to establish works at Port Kembla—the first being the Mt. Lyell Coke Co.—built for its mines in Tasmania.

Mr. Jack Guest, of West Wollongong, was an engineer in both the Dapto Smelting Works and the Mt. Lyell Coke Co.

The Premier of New South Wales visited Port Kembla in June, 1907, and was driven from the breakwater to the Smelting Corporation's site—part of the present Metal Manufacturers' area. Here they were received by Mr. Savage—the Superintendent—who escorted them on their tour of inspection. The motive power would be largely electric, whereby only one quarter of the manpower would be needed. Mr. Savage informed the Premier that his Company intended to have tramway communication from the works to both Wollongong and Unanderra.

The pay for the men came from Dapto to Port Kembla under escort every alternative Monday.

Tenders were called for the construction of a railway embankment containing 40,000 cubic yards at Port Kembla Smelting Co's. works and for 4000 hard-wood sleepers. This constructional work on the new site, including a brick stack, cost £30,000.

Coup De Grace

In October, 1907, with dramatic suddenness, the construction work stopped. Residences which had been partly erected—some had been shifted from Dapto—were left in that state. Professional and clerical staffs were discharged—all this, with so little announcement, that the business people of the district feared losses through unsettled accounts prior to the en masse exodus.

The Board of the Smelting Corporation met in Melbourne on November 1, 1907. The Company went into voluntary liquidation in June, 1909.

One shareholder asserted in a London Court that he had lost £10,000; another, £5000. The Company's £1 shares at peak times had reached £2. Their lowest ebb was 9d.

In the Legislative Assembly of New South Wales the Illawarra Harbour and Land Corporation in October, 1907, presented a petition concerning £10,000 lodged with the State Treasurer and subject to forfeiture.

Inter alia it was stated:

The sum of £42,000 had been spent in railway construction, £3500 on harbour surveys, £25,000 on coal properties to give soundness to the undertaking, and that the sale of debentures in London was rendered impossible through rival State harbour schemes.

Two of the stacks of the Dapto Smelting Works were dismantled in 1907, along with the plant, Mr. Stoyles buying a quantity of material. One of the steam engines had done service in David Bros.' Foundry, Wollongong, while a lathe and a drill are still used by Mr. A. Simpson in Denison Street, Wollongong.

On the site of the works, Mr. P. J. G. Webb has transferred the general office into a comfortable dwelling, aptly named "Lakeview". Three peach trees thrive in the roofless assay rooms and one goodly-sized concrete tank sunk some four feet below ground level is now a tennis court. The old power house is still there, too, and the most notable landmark of all—particularly from the air—an acre of slag.

Water fowl find undisturbed haunts along Mullet Creek's meandering course where once the chug of the works' pump was the predominant sound; and way to the north-east, Flagstaff Hill hides the progress of half a century in the field of the heavy industries which Dapto heralded.



Note to Second Edition

The first edition of this booklet, based on an address by the author to the Illawarra Historical Society, appeared in 1950 but requires bringing up-to-date at only a few points. The site of the smelting works is little changed since then. Part of the great pile of slag has been removed, but much still remains. "Lakeview", the former general office building, now the home of Mr. and Mrs. S. Fackender, is still in existence, but the manager's residence in Kanahooka Road, some distance to the west, has been demolished. The level crossings in Princes Highway have disappeared but part of the old railway track is still visible in Marshall Street, Dapto, and its earthworks can be seen in many places along the route.

Repeated enquiries for Brother O'Malley's booklet since it has been out of print have determined the society to republish this interesting and valuable record of the first attempt at secondary industry on any large scale in Illawarra.

The Society's thanks are due to Mr. W. A. Bayley, F. R. A. H. S. (Hon. Research Officer) for the time, effort and skill which he has given to superintending the republication.

W. G. McDONALD,
President,

19th July, 1968.

Illawarra Historical Society.

PICTURES — PAGE 9:

TOP: Dapto Smelters — looking north.

CENTRE: Dapto Smelters — looking north-east. The railway bridge crossing Kanahooka Road is seen on the extreme right.

LOWER: Dapto Smelters — looking north-east, showing Lake Illawarra and Gooseberry Island. The manager's house is seen in the foreground.

Articles and further pictures of the Dapto Smelters may be found in the "Illustrated Sydney News" of 30/8/1890 and the "Sydney Mail" of 5/6/1897 (Pages 1187-9), 10/11/1900 whilst brief facts are in "Town and Country Journal" of 9/1/1907 (Page 23) and 13/1/1909 (Page 20).

