OCTOBER MEETING:
The History and Development of the Inner Harbour, Port Kembla, by Mr. F. M. Mathews, B.E., F.S.T.C., M.I.E.

Since the opening of Mt. Keira Colliery in 1854, coal has been shipped from the shore of what is now known as Port Kembla.

In the 1880's the Mayor of Wollongong launched the idea of a deep water dock in Tom Thumb Lagoon, with entrance from Brighton Beach. This proposal was not adopted.

A later plan provided for two breakwaters, one from Pulpit Rock, the other from Fairy Creek, enclosing a harbour to the north-west of Brighton Beach.

In the meantime Port Kembla had been chosen for development as a deep-sea port, but this was held up due to agitation in favour of the Lake Illawarra Harbour Scheme, which included a channel through the Lake to a point north of the present Tallawarra Power House. The scheme was abandoned due to lack of finance.

In 1896 a design for a harbour at Port Kembla was prepared by Mr. Darley, then Engineer-in-Chief of the Department of Public Works. Preliminary work began in 1900. Two private jetties, one owned by the Southern Coal Company, the other by the Mt. Kembla Company, were resumed by the Crown.

The scheme was revised in 1912 to give a greater enclosed area. The breakwaters now enclose an area of approximately 340 acres, with an entrance 1,300 ft. wide and minimum depth of 20 ft.

A new phase was established by the end of World War I, with the handling of ores, concentrates, etc., and the increase in the coal export trade, and this, in 1916, led to a proposal for an inner harbour in Tom Thumb Lagoon, generally in the position now to be occupied. For a number of reasons this project, too, was not proceeded with.

The third phase of port development was brought about by the transfer from Lithgow of Australian Iron & Steel, beginning in 1926. As a result the emphasis is now on the import of raw materials and the export of manufactured products.

Port Kembla provides a safe harbour under most conditions, but heavy weather from the south or east causes a troublesome surge in the port. This condition and the large industrial development of the area, made it necessary to consider once more the construction of additional harbour facilities.

In 1951 the construction of an inner harbour in the Tom Thumb Lagoon area was recommended, and, after protracted discussion, a Bill was introduced into the State Parliament and was assented to on 29th November, 1955, as the Inner Harbour Act No. 43, 1955.

This Act empowered the Minister for Public Works to build an inner harbour with approx. 2,500 ft. of wharfage and permitted the Commissioner for Railways to construct rail access from Coniston marshalling yards to the port boundary.

The cost of the work was estimated at £5,250,000.

The harbour was to be dredged to a depth of 32 feet with an entrance channel 350 feet in width.
The Inner Harbour will be an all-weather port and, with wharves designed to absorb wave energy, little trouble should be experienced even with severe conditions outside.

In 1957, following the discovery of a large outcrop of rock, considerable changes in the shape of the harbour were proposed. This proposal was amended to the final shape as now agreed upon.

The original depth of 32 feet of water has been increased for a portion of the harbour to 36 feet, allowing for the possible use of bulk carrying vessels of up to 50,000 tons deadweight capacity.

The design of the wharf to be constructed by A.I. & S. consists of a solid wharf face with 6 ft. diameter pipes let into the face in the tidal zone spaced at 18 ft. centres. These pipes are 48 ft. long at an inclination of 1 in 24 with a blank end. At the Company’s berths the depth of water will be 38 ft.

For the unloading of bulk cargoes from ships berthed at the Company’s wharves, two unloaders are being installed initially. These will have grab buckets with a capacity of 15 tons and a combined unloading rate of up to 1,500 tons per hour. The ore or other material unloaded can be handled by rail vehicles, onto a conveyor belt for handling to a screening station or into an ore trough whence the material can be handled into stock by a large ore bridge with grab capacity of 18 tons, for later recovery and use.

The completion date for the first section of the Inner Harbour is March, 1960.

In making acknowledgment of the help received in preparing this talk, I wish particularly to mention Captain Christy, Harbourmaster; Mr. Kennett and Mr. Bond, of A.I. & S., and Australian Iron & Steel for making facilities available.