

# The Great Steam Crane

by Roderick Stewart

**Many of the more dramatic changes to Dundee during the post-war period took place around the docks. Dundee's sea-port was established around an extensive system of docks and the post-war period saw great activity. Ships arrived with jute for the mills, the Caledon was still building ships, the 'Fifies' were a main transport link, the RNVR was active onboard HMS Unicorn and even the Festival of Britain came to Dundee by sea - in the form of the converted aircraft carrier 'Campania'.**

...but the incoming Tay Road Bridge was to take priority. Despite proposals for the bridge to link directly into the Kingsway ring road, it was decided it should strike right into the heart of the City: this meant wholesale change at the landfall.

Earl Grey Dock, King William IV Dock and the Tidal Harbour were all ruthlessly filled in to be replaced by a concrete swirl of approach roads for the new bridge. Dock edge copestones were simply toppled into the basins, giving some romantics the illusory hope of a future re-instatement - which did indeed very nearly come to pass during the present waterfront redevelopment when HMS Unicorn was offered a location next to RRS Discovery. Sadly this opportunity to bring Dundee's two great historic ships back together has passed.

The gloriously Victorian confection of Dundee West Station was demolished and the line of the platforms which, in the early 1960s, had seen Dundee's last steam engines simmering as they waited to haul passenger trains to the west, is now marked by a multi-carriageway sector of the inner ring road.

HMS Unicorn herself was displaced from Earl Grey Dock, her home of 90 years, and made a dramatic 'escape' to sea when Admiralty advice was that she could not be moved and should be broken up.

One dramatic dockside landmark did survive, however, almost to the end of the period covered: the Steam Crane.

▼ Earl Grey Dock, King William IV Dock and the Tidal Harbour were all filled in.







▲ The 90 ton Steam Crane rears its jib to the sky. © University of Dundee - Archive Services.

This vast, iron triangle presided grandly over Victoria Dock and survived these cataclysmic changes, though only by a decade or so. It had been built in 1874 by James Taylor & Co of Birkenhead and was rated to lift an impressive 90 tons, which compares surprisingly favourably with the much later (1917) Rosyth 250 ton hammerhead crane. The new Goliath Crane installed at Rosyth for assembling the new Aircraft Carriers a century and a quarter later is rated for 1,000 tons. Dundee's crane was powerful for its day.

It was a very contemporary design, comparable to the Forth Bridge, with strong riveted tubes in compression balanced by slender tension members. The rotating jib structure and steam winding engine was mounted on an immense stone base.

Despite the crane's immensely solid victorian construction, time took its toll and by 1971 its safe working load had been reduced to 45 tons, its maintenance had become uneconomic and its demolition was recommended by the Harbour Board engineer. The Harbour Board Chairman recommended a stay of execution and the crane was allowed to linger on a few more years; its final time 'in steam' was to unload German military vehicles from their transport vessels for a NATO exercise.



Victoria Dock from the air circa 1966. The Steam Crane dominates the background with HMS Montrose and HMS Unicorn alongside on the south wall.



The recommendation to demolish was repeated in 1973, just a year short of the Crane's centenary, with the engineer giving the added inducement that the material from its base could be used to contribute towards the infill of the south bay of Camperdown Dock to create more land for oil-related work.

The Harbour Board minutes give an interesting insight into priorities, showing how little value was placed on either heritage or the water space. (see right)

So, in its 99th year, the old Steam Crane was demolished. Just a few more years and the story could have ended quite differently, as public realisation of vanishing industrial monuments led to the concept of industrial archaeology and the consequent preservation movement.

## 12 March 1973 45 Ton Steam Crane at Victoria Dock

*The General Manager & Engineer reported as follows:*

*I refer to Article 294 of Minutes of the Meeting of the General Committee on 23rd February 1971, in which I recommended that offers be invited for the demolition and removal of the 45 ton crane. The Committee agreed to the Chairman's request that the implementation of the proposals be delayed.*

*Since a contract has been let for the infilling of part of Camperdown Dock and it appeared expedient to use the masonry/concrete base of the crane as filling material, tenders for the demolition and removal of the crane were invited.*

*Three offers were received, the lowest of which is an offer from Charles Brand (Dundee) Limited, in the sum of £3,400 less a credit of £150 for the metal crane structure. I estimate that the masonry/concrete from the base will provide fill to a value of about £550 so to demolish the crane at this time, would cost around £2,700.*

*I would recommend that the offer from Charles Brand (Dundee) Limited should be accepted as soon as possible so that the heavy material may be tipped into Camperdown Dock.*

*The Committee concurred and recommend accordingly.*



1972 A year before its demise, the Steam Crane watches over the re-berthing of HMS Unicorn following her dry-docking for a hull inspection.