## A HISTORY OF THE SHIPWRIGHT BRANCH

BY

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Now that the Shipwright Branch and the Marine Engineering Branch have finally been amalgamated, it is time all engineers were given an opportunity to acquaint themselves with the history of the Branch into which they are being integrated!

The Shipwright Officer has his origin in the ship's carpenter, whose duties in a sail of the line were to take upon himself the care and preservation of the ship's hull, masts, yards, bulkheads and cabins, and, in an engagement, to pass frequently up and down the hold with his crew. Here he had to be watchful against all leaks from shot under water, and have shot mats and plugs of wood ready to stop them, and likewise to fish or otherwise secure the masts and yards, and to keep the pumps in good order. He was head of his department, and was required to train the Carpenter's crew. His staff consisted of carpenter's mates, ordinary carpenters and raw hands who had to be trained. The term 'mate' in those days signified a considerably greater degree of skill than it does today, and it was the carpenter's mate who was the 17th Century version of the shipwright artificer.

The shore counterpart of the carpenter and his crew was the shipwright, who worked alongside the master shipwright, there being no division between the art and the craft. Master shipwrights were known to have been in Portsmouth in 1537 and in Deptford in 1572. They were incorporated under two charters (1605 and 1612) into the 'Master Shipwrights of England' and were allowed to practise their art and mysteries in all rivers, ports, harbours and roads of England and Wales.

The break between the art and craft began towards the end of the 18th Century, when the 'Society for the Improvement of Naval Architecture' was formed (1790). The founder members were a bookseller, a watchmaker, a university don and a naval officer. It was the efforts of this society which did much towards the establishment of a school where young shipbuilders could be instructed in the sciences which would be useful in their profession. A school on these lines was set up at Portsmouth and the first pupils entered in 1811. Thereafter came the two-stream apprentice entry, the pure craft apprentice and the design apprentice, the forerunner of the constructor. (The Royal Corps of Naval Constructors was formed in 1873.) The school for the design, or 'superior' apprentice, as he was called, had a chequered career, and was closed whenever an economy drive was called for, (it closed in 1832, re-opened 1846, closed 1853) but it finally stabilized at Greenwich in 1874 as the R.N. School of Naval Architecture and Marine Engineering. The Institute of Naval Architects was founded in 1860.

One of the superior apprentices trained from 1819 to 1826 in the first School of Naval Architecture was a Portsmouth Grammar School boy named Thomas Lloyd. After his training and some five years' employment on ship design, he was instructed to make a special study of steam. This he did to good effect, for in 1847 he became the first Chief Engineer of the Navy. He was still a civilian, and was responsible to the Comptroller of Steam Machinery, an executive Captain. Thus the Chief Naval Engineer Officer can, if he so desires, trace his lineage back without too many sharp bends, to a shipwright!

The beginning of the 19th Century saw the introduction of the title 'shipwright' for sea-going naval personnel and the first attempt at a naval apprentice tradesman. The Additional Regulations and Instructions for H.M. Service at Sea (amendments to Q.R. and A.I.s) for 1813 included the following extract:

## 'BOYS

## Shipwrights, Caulkers and Sailmakers

Having taken into consideration the disadvantages to which H.M. ships are occasionally liable from the insufficient numbers of Shipwrights, Caulkers and Sailmakers, more especially after action, or a severe gale of wind in which ships may have suffered, and viewing the benefit which would result to H.M. Service from the increasing number of those necessary artificers, some of the boys of each ship are to be placed under the several master workmen, to be instructed by them in the aforementioned trades. Under this system the boys are to be considered as serving in the situation of apprentices, and every care and attention is to be exerted for fitting them for the practice of their respective trades. As periods must occur in which there will not be employment in the duties above mentioned, they are at such times to be distributed under the superintendence of the Captains of the Tops, to watch with them, and diligently learn the duties of seamen for the purpose of forming them into a class of persons, technically termed 'Double Handed Men' who are extremely useful to H.M. ships'. Shades of General Naval Training!

The rank of Carpenter was to remain in the Navy for many years to come. They were Warrant Officers, and very conscious of the fact. At a meeting of Carpenters at Portsmouth in 1827, with 36 officers in the rank present, a unanimous resolution was passed, that it was 'derogatory to the position of Warrant Officers who have been indentured in His Majesty's Dockyards, to have the charge of the engine men and their stores of coal, oil, etc., and the chairman was requested to respectfully lay the matter before the port Admiral'. The short sighted policy of these officers appears to have been adopted by the Admiralty to the disadvantage of the Branch, who were at the time the superior mechanical officers in the Service.

In 1853 the continuous service engagement scheme was introduced into the Navy. The terms of the engagement were for ten years from the age of 18. One third of the Carpenter's crew were required to be shipwrights, and were to be granted an additional 2d. per day. This is the real establishment of the shipwright as a naval rate, although the term appeared in the boy's scheme of 1813. The pay scale per day was 2s. 8d. for the carpenter's mate, 1s. 10d. for the shipwright, and 1s. 8d. for the seamen of the carpenter's crew. Direct entry carpenter's mates and shipwrights were required to pass an examination conducted by a Foreman of Shipwrights in the dockyard where the ship fitted out. This close association with the dockyards is a feature which runs through the history of the Branch.

It was about this time that the Branch began to feel the wind of change. Steam driven capital ships, built of iron, had appeared (H.M.S. Warrior, 9,000 tons, 1860). The engineers were not only established, they were increasing. The Carpenters heartily disliked the early engineers, but that did not matter much because so did everyone else. In openly venting their distaste, however, they perhaps missed a golden opportunity. As the only other technical experts on board, responsible for the hull, pumps, and practically all equipment except the guns, sails and rigging, they should have embraced the engineers, and saved their descendants some traumatic experiences!

In 1903 boy shipwrights were introduced. They were borne on ship's books, but were not victualled and were allowed to wear civilian clothes. They trained in the dockyards alongside civilian apprentices and, initially, attendance at the Dockyard School was not compulsory, although leading shipwrights were required to understand the first four rules of arithmetic. The syllabus of instruction included all the arts of ship and boat construction, fitting out, and the joiner, blacksmith, plumber, painter and shipfitter trades. They were rated shipwrights and discharged to sea as soon after the age of eighteen as they had completed four years' training and had been found on examination fit for the rate. At the end of twelve years' service from the age of eighteen facilities were reserved for those who wished to take up employment as civilian shipwrights in H.M. Dockyards. In 1912 the boy shipwrights were compelled to attend the Dockyard School for three years.

In 1918 there was an investigation into the structure of all branches, and the outcome for the Carpenter branch was the five-class system of shipwright, providing the Chief Shipwright, the 1st, 2nd, 3rd and 4th class shipwrights, all chief petty officers, and the 5th class shipwright who was a leading hand but wore brass buttons. The officers of the Carpenter branch were re-named Shipwright Officers, Warrant and Commissioned Shipwrights, etc. In 1925 the 5th class shipwright shipped black buttons and the 4th class reverted to

Petty Officer status.

Training of shipwrights continued in the dockyards until the end of 1947. In 1948, in the interests of uniformity, the title of shipwright was amplified to shipwright artificer. This was the end of the shipwright's distinction badge, and brought the shipwright artificer apprentice into line, and into a common artificer training establishment. The first shipwright artificer apprentices commenced training in H.M.S. Fisgard in 1948 and followed through into H.M.S. Caledonia in 1949. The last shipwright artificer apprentice will enter H.M.S. Caledonia in September, 1969. In the near future the rank of Shipwright Officer and Shipwright Artificer will disappear from the Royal Navy for ever. Let us hope that their successors, the Marine Engineering Artificers, will remember that they spring from a long line of talented craftsmen, and will maintain their spirit, ability and tradition.