

Photographs by A. O. Pollard Jr.

Work-horse of the sea and all-time ship modellers' favourite—the tug—is the subject chosen by Ian Stair this month for his scale drawing and ship feature.

THE THAMES TUG HIBERNIA

FOR the first powered vessel in this series we have chosen a modern tug. This seems particularly appropriate as tugs are directly related to the earliest steam boats and are a deservedly popular subject for working models. A model tug $\frac{1}{4}$ in. to 1 ft., about 28 in. long, will have adequate displacement for radio control and yet be handy carrying around. For readers who wish to make a working model hull lines have been included in the drawing. These have been drawn parallel to the keel as this makes things easier for building a hull by the 'bread and butter' method. These hull lines are typical of the modern tug and are not the actual lines of the *Hibernia*. Although less often made for display, tugs are very effective both as full hull and waterline models.

When steam power was first applied to ships, engines and boilers were both large and inefficient. Enough fuel could not be carried for long sea voyages and as auxiliary power in sailing ships they took up far too much cargo space. The earliest steam boats were essentially river craft where distances were short and the sailing ship at a great disadvantage unless the wind was in the right quarter. One of the first practical steam ships was built as a tug to work barques on the Forth-Clyde Canal. This was Symington's *Charlotte Dundas*, which was abandoned due to the problem of erosion of the canal banks and not to any technical defects.

At this time large sailing ships coming into river ports were towed in, when necessary, by small rowing boats, a method slow and costly even with prevailing low wages. This must have been very hard work particu-

larly if overcoming an adverse wind as the resistance of masts, spars and rigging was considerable even with sails furled. Despite this the watermen opposed the advent of power in no uncertain manner, especially on the London river. However, resistance against progress is usually a losing battle and this proved no exception.

By the eighteen-twenties the first paddle tugs were operating on the Clyde and on the Thames by the mid-thirties. The tug *Monarch* of this period was immortalised by Turner in his famous painting 'The Fighting Temeraire', showing the Trafalgar veteran being towed to her final berth for breaking up. The *Monarch* was owned by John Rogers Watkins.

By the middle of the century tugs were getting larger and the engines more compact and efficient. This enabled them to proceed to the open sea to meet the incoming ships and to take on long towing jobs to Europe and the Mediterranean. A well known tug of this period was another Watkins ship, the *Anglia* of 1866. Famous for her three funnels, one forward and two abreast aft, and because of her voyage in 1878 to Alexandria to bring back Cleopatra's Needle encased in a special vessel.

The *Anglia's* return coincided with the beginning of the end for the paddle tug. The first screw tugs had appeared and by the First

World War they had almost completely supplanted the paddle tugs. The previous *Hibernia* was among the best known of the earlier screw tugs. Entering service in 1884 she took on several long tours, not only to Europe but as far as Alexandria and the Persian Gulf. As H.M.S. *Hibernia III* she saw service in the Dardanelles during the 1914-18 war. Rebuilt in 1923 she carried on working until 1961.

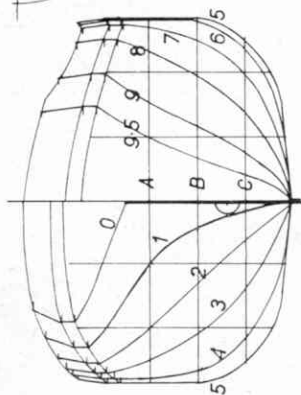
With the old *Hibernia* having such a distinguished career it is not surprising that William Watkins Ltd. revived the name for a new tug delivered during the following year. It is this handsome strong looking ship which is the subject of the accompanying drawing.

The *Hibernia* and her sister ship, the *Avenger*, owned by Elliot Steam Tugs Ltd., are quite similar in appearance to the earlier post war tugs but the addition of the fire fighting platform makes them look rather more powerful than their predecessors. Appearances are not deceptive in this case for at the time of their introduction into service they were the most powerful tugs engaged on harbour work on the Thames having 9 cylinder British Polar M49M diesel engines which develop 1,800 s.h.p. at 320 r.p.m.

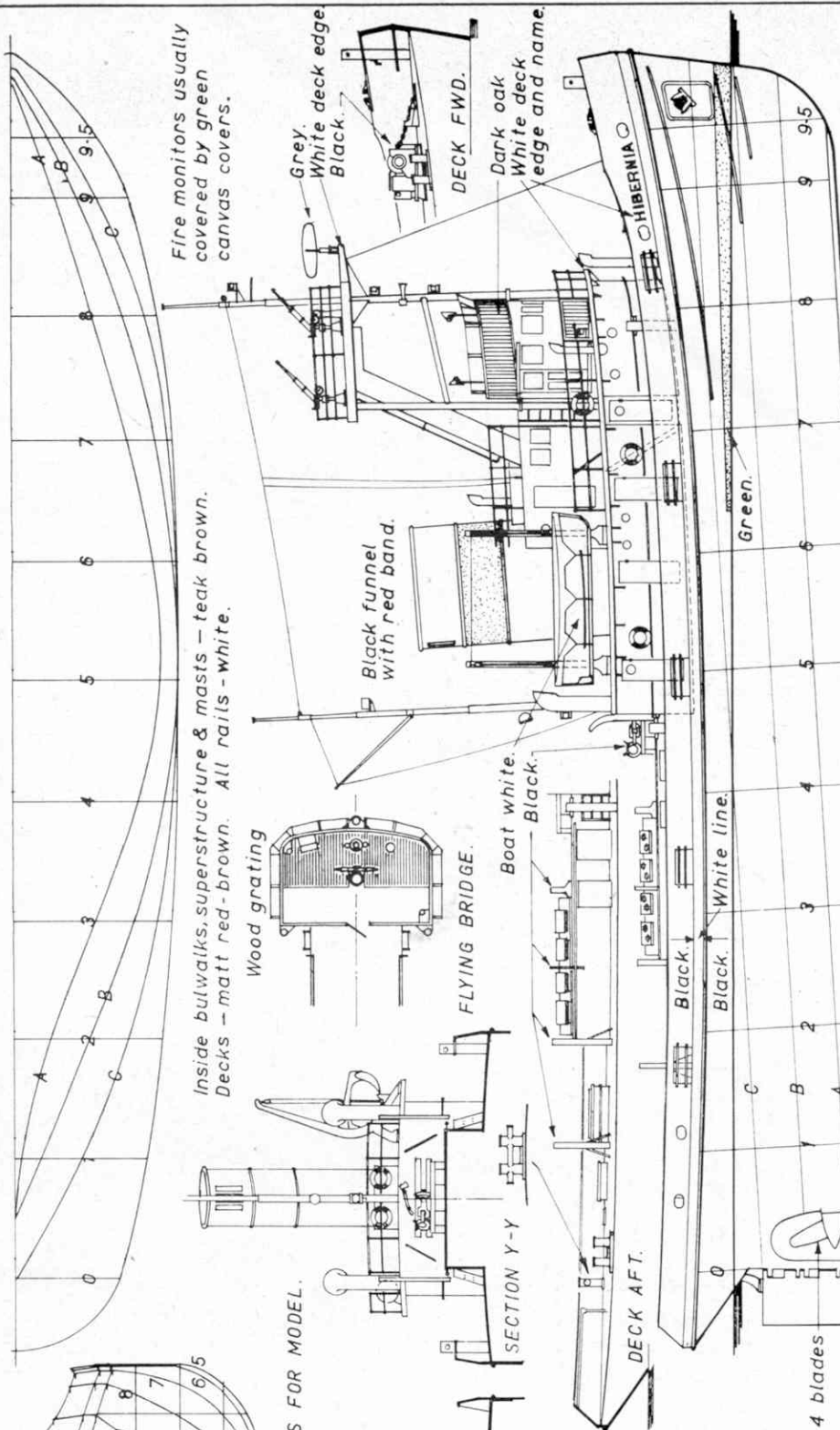
This greater power is required to manage the larger tankers now in use and it is this increasing tanker trade which accounts for the fire fighting equipment. Oil fires spread rapidly and there is no time to send for a special fire float if the fire is to be brought under control. Therefore, the attendant tugs are well placed to perform this duty.

SHIPLANS

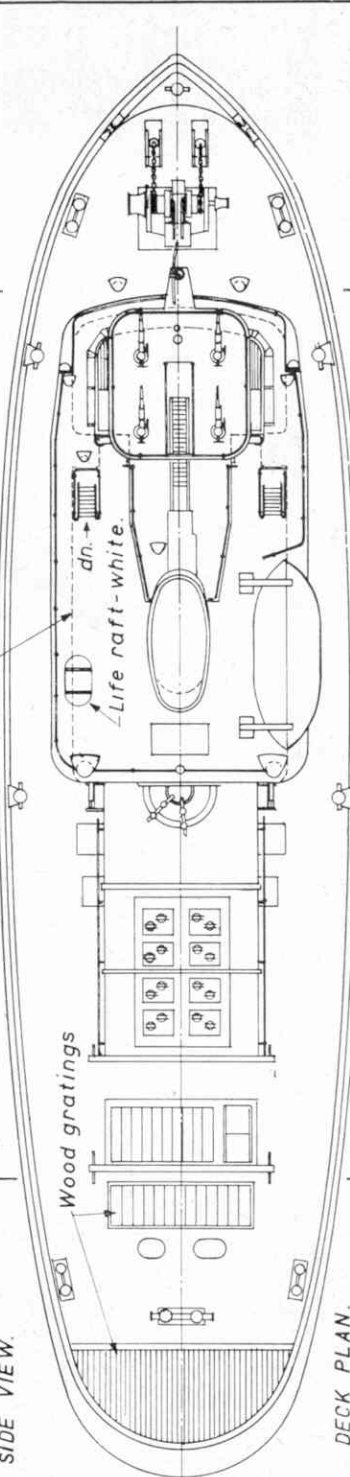
NO. 3



SECTIONS AND HULL LINES FOR MODEL.



SIDE VIEW.



DECK PLAN.

THAMES TUG. HIBERNIA.
 Owners William Watkins Ltd.
 Sister ship. AVENGER
 Owners Elliott Steam Tugs Ltd.
 Drg. by Ian R. Stair. 1966.

Scale

feet.