

The MOTORBOAT

For all interested in large and small Pleasure Motor Craft and Commercial Motor Vessels for Coastal Service and Inland Waterways.

MOTOR VESSELS FOR CUSTOMS SERVICE.

Two Cruisers with Single and Twin Screw Machinery Respectively.

Two sea-going motor cruisers, designed for H.M. Customs service, have been built recently by Vosper and Co., of Portsmouth. The two vessels, of which illustrations accompany this description, are similar in every respect, except that in one of them, the "Albatross," twin-screw machinery is employed, while in the other, the "Osprey," a single engine is installed. All the motors are of the 30 h.p. four-cylinder Kelvin type.

The cruisers are 45 ft. in length, with a beam of

10 ft., and a depth of 5 ft. 7 ins. from the underside of the deck to the hull amidships. The maximum draught aft is 5 ft.

The boats are of substantial design and scantlings, and each has a straight stem with a rounded fore-foot, and a transom stern.

The keel, stem, sternpost and timbers, are of oak, with planking 1½-in. pitch-pine, and 1½-in. spruce decks. An interesting feature is the provision of three water-tight bulkheads of steel, ¼-in. plates



45-ft. vessel built by Vospers for the Customs service.

being utilized, and steel angle frames. Two of these are at the forward and after-end of the engine-room respectively, while the third is situated at the fore-end of the forward cabin. In this latter bulkhead there is a manhole door for access to the fore-peak.

The forward deck is raised and runs aft to the steering shelter. Two skylights and a companion-hatchway are provided for the forward cabin, and deck fittings include a strong mooring post, hand winch, mast tabernacle, and a 6-in. cowl ventilator. The handrails and stanchions on the foredeck, in addition to the bulwarks, are given a "tumble home," to allow of the vessel rolling without damage when alongside a larger vessel.

The fresh-water tank of 40-gallon capacity is situated forward in the wheel shelter. This shelter is provided with seven drop windows, and fitted with a compass and binnacle, teak steering wheel, engine telegraphs, and voice pipe.

Unusual Cabin Accommodation.

The forward cabin is arranged in a most interesting and unusual manner. It is lined throughout in match-boarding, and is divided by a longitudinal bulkhead running from the after bulkhead to the companion ladder. The two compartments thus formed are screened at the fore-end by a repp curtain, and are each provided with a folding table and corner cupboard. Seats are fitted with horsehair cushions covered in pegamoid.

Forward of the port compartment there is a small section partitioned off for the galley stove, which is a No. 2 Skipper cooking stove. The stove-pipe is led up through the deck alongside the companion-hatch. This compartment is lined throughout with asbestos and sheet-iron.

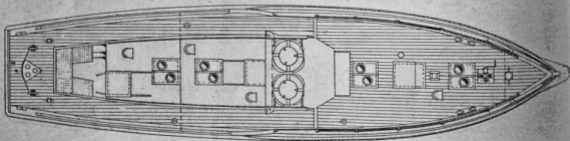
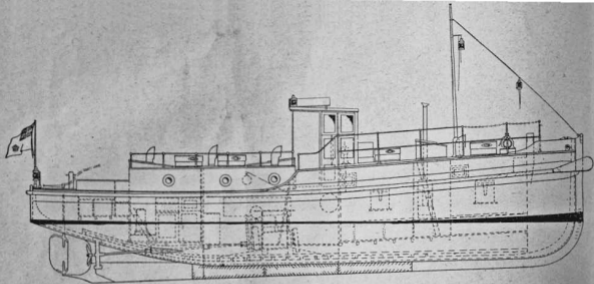
The forward end of this cabin is fitted out in similar style, divided by a longitudinal bulkhead so that four separate cabins are provided. Each side again has a folding table and a corner cupboard. A chain locker runs across the fore-end and a lamp rack is provided on the steel bulkhead.

The after cabin is finished in teak throughout and has access from the cockpit by a short teak ladder. Across the forward end is a cushioned bench having a cushioned backrest. The space under deck on the port side is fitted with shelves, cupboards and drawers, and a large hinged table lies down over the cupboard when not in use.

A small oil heating-stove is fixed in the corner of the cabin on the port side, while from the starboard side a swinging wash-basin is provided. When not in use the basin swings in under the side deck. Repp curtains are fitted to the portlights, and the skylight is arranged to open. There is one 8-in. cowl ventilator fitted on the port side.

The short cockpit is provided with benches around and steps on the port side. All the benches are fitted with gratings, while the floor is caulked and painted.





Plans of one of the new Customs boats, with a view taken on trials.

with marine glue. A plate rudder is fitted, carried at the heel in a strong steel bracket securely fixed to the sternpost and keel. The stock is carried in gunmetal bearings, the lower one being provided with a stuffing-box and gland.

A built-up steel quadrant carries the control wires which are guided round gunmetal steering-sheaves. Three brass deck pumps are fitted, one to each compartment, and two oak mooring posts are located on the after-deck in suitable positions. The boat is protected by two elm rubbers, between which is fitted an 11-in. rope fender, the stem being surmounted by a large rope padding fender. Cast-iron ballast is bolted to the sides of the keel.

Machinery Room.

Access to the engine-room is effected through a sliding hatch arranged amidships, and down a steel ladder hinged at one side, to give access to the forward part of the engine-room under the steering shelter. Fuel is carried in cylindrical tanks situated under the deck at the sides, each having a capacity of 60 gallons.

Four port lights and two 6-in. cowl ventilators provide ample ventilation, while the skylight hinges bodily upwards and provides a safety exit in case of fire. Pyrene extinguishers are arranged inside the coaming, as are also the engine-room telegraph dials. Lockers are provided on the after bulkhead, an engineer's seat being provided between them.

As previously mentioned, in one case, the machinery comprises a 30 h.p. four-cylinder Kelvin engine, and in the other a twin-screw outfit of the same type. They are provided with a Kelvin quick-starting device and are of standard design. The exhaust pipes are led overboard at each side of the ship, just above the water-line.

On trials, these craft proved to be splendid sea boats, the speed attained on Stokes Bay in heavy weather being $8\frac{1}{2}$ knots for the twin-screw vessel, and $6\frac{1}{2}$ knots for the single-screw boat. The finish of both craft is standard War Department finish, comprising black hulls with a red ribbon above the rubber, and buff upper structure. The wheel-house is grained teak colour inside and out.