

Hopper "Sumner."—The hull of this hopper was patched on the starboard side under counter with a $\frac{1}{4}$ in. steel plate 36 in. by 24 in. The angle-irons were renewed on two floor-plates under stokehold plating. A new stern-bush was fitted into stern-tube. The old main boiler was removed and replaced by a spare boiler taken out of the hopper "Heathcote," which had been repaired as follows: Two new shell-plates, 8 ft. by 4 ft. by $\frac{1}{2}$ in. steel, were fitted on the bottom; two new gusset-stays were fitted under combustion-chambers, 1 ft. 6 in. by 1 ft. 6 in. by $\frac{1}{2}$ in. steel, and a new plate, 7 ft. 2 in. by 2 ft. by $\frac{1}{2}$ in. steel, was fitted on back of combustion-chamber. The bottom and portion of each side of combustion-chamber were renewed, and also several screwed stays, five girder-stays, and eighteen longitudinal stays. All plain and stay tubes were renewed. Several other minor repairs were effected, and the boiler tested by hydraulic pressure.

S.s. "Talune."—The following are the principal repairs to the hull of this steamer. The thwart-ship gusset-stay in the after peak was re-riveted at both ends to the ship's framing. Nearly the whole of the forward stokehold bulkhead was renewed with riveted plates, varying from 1 ft. to 4 ft. from ballast-tank upwards, from side to side of ship right down into the side wells, to make the bulkhead watertight. Two new efficient planed watertight doors have been fitted and jointed to this bulkhead, and have vertical shafts to the main deck where they can be operated. Nearly the whole of the plating in the bottom of the starboard 'tween-deck side bunker was renewed. Most of the vertical stiffening angle-irons in upper part of forward and after stokehold casing were re-riveted. Large riveted patches were put on the after-hold side of engine-room bulkhead and on the bulkhead next after-peak. Several manhole-doors of the main and donkey boilers were slack in the holes, and these received attention. The auxiliary steam-pipes were tested by hydraulic pressure, and the engines received a general overhaul.

S.s. "Te Anau."—This vessel was laid up for some time, and important repairs have been made, chiefly to the hull at stokehold-tank. The top of this tank under the boilers was cut off, and sixteen new floor-plates were fitted under the boilers with 5 in. by 3 in. by $\frac{1}{2}$ in. double angles, and the fore and aft girders under the centre of each boiler were brought up to their original strength. Two tie-plates, 24 ft. by 1 ft. 2 in. by $\frac{1}{2}$ in., were fitted under the boiler-seats, of which four have been renewed and two repaired. All the scale was chipped off the tank, which has been cement-washed and filled with concrete as ballast instead of water. In the bunkers several new plates were fitted and others were sheathed, patched, and stiffened as required. New bottom manhole-doors were fitted to the starboard and port forward boilers. Some patches were put on the plates of the combustion-chambers. Three lengths of the main steam-pipe were found defective. These have now been repaired, and all the pipes have been tested by hydraulic pressure. The auxiliary steam-pipes were also tested. A new kedge-anchor was placed on board.

O.e.v. "Torea."—This vessel, constructed as an auxiliary scow, was launched from the yard of an Auckland shipbuilder on the 18th June, 1912. The principal dimensions of the vessel are: Gross tonnage, 50; register tonnage, 24; length, 69 ft.; breadth, 19 ft. 7 in.; depth, 5 ft. 4 in. The propelling machinery consists of two sets of four-cylinder oil-engines each of 30 B.H.P. The drawings and specifications for the vessel were submitted to the Department for approval, and a Surveyor of Ships supervised the construction of the vessel. The hull is built principally of kauri, and has two skins of diagonal planking.

S.s. "Tui."—The main engines of this vessel have been converted into tandem compound by replacing the old 8 in. cylinder with two new cylinders 6 $\frac{1}{2}$ in. and 12 in. diameter. The only parts of the old engine which now remain are the guides, crank-shaft, and bed-plate. The main steam-pipes were tested by hydraulic pressure. A new safety-valve and spring were fitted to the main boiler. The whole of the deck was renewed with 1 $\frac{1}{2}$ in. kauri.

S.s. "Wairoa," of Nelson.—This vessel was surveyed in May, 1912, and owing to the bad condition of the boiler, the pressure on which had to be reduced, a three months' certificate only was granted. When this certificate expired the vessel was laid up, and new engines and boiler were fitted. The engines were made in New Zealand, and have cylinders 10 in. and 20 in. diameter, with a stroke of 12 in. The boiler was made in Glasgow, and is 6 ft. in diameter and 7 ft. 6 in. in length. The hull has been refastened in places with copper bolts, and covered with Muntz-metal sheathing. A new hardwood stern-post and new rolling-chocks were fitted, and a portion of the deck was renewed. The tail-shaft was examined, and both the main and auxiliary steam-pipes were tested by hydraulic pressure.

S.s. "Wairua."—This twin-screw wooden steamer was launched at Auckland on the 10th February, 1913. Her registered dimensions are: Length, 120.7 ft.; breadth, 23 ft.; depth, 12.7 ft. Her gross tonnage is 285.9, and the register tonnage 175.4. The propelling-machinery consists of two sets of triple-expansion surface condensing engines with cylinders 8 in., 13 in., and 21 in. diameter by 16 in. stroke, supplied with steam at 180 lb. per square inch by a multitubular marine boiler 12 ft. in diameter and 10 ft. in length. The engines and boiler were made in Glasgow. The plans for the vessel were submitted and approved by the Department. The vessel is engaged carrying passengers in Kaipara Harbour.

S.s. "Waitangi."—During the year the following repairs to the hull and propelling machinery were made. Both propeller-shafts were renewed, the stern tubes and brackets were rebushed, and the palm of the port bracket at the bottom was refastened. The main steam-pipes were tested by hydraulic pressure. On the starboard side of hull two new plates were put in, and on the bottom three sheathing-plates were fitted. The plating of the bunkers has been renewed, and several defective reverse frames in various parts have been strengthened.

S.s. "Waitara."—This vessel, which has been laid up for some time, received a thorough overhaul. 16 ft. of the after end of the keel was renewed with 9 in. by 5 in. ironbark. On both sides aft new garboard-strakes were fitted with 20 ft. by 9 in. by 2 in. kauri. Six new planks were fitted on the starboard side and four on the port side. The stern was refastened, and 30 ft. of new covering-board