H.—15.

repaired. All boat-falls were renewed, and also the life-lines outside. A new provision-tank was fitted in No. 2 boat. Six months after her annual survey this vessel ran ashore during a dense fog. She was again placed on the slipway, and it was found necessary to carry out the following repairs: One floor-plate in the forepeak tank was cut out, straightened, and reriveted, and several loose rivets in the vicinity of the tank were renewed. In the port bunker and vicinity one plate, a portion of one floor-plate, and several loose rivets were renewed, and the frames were cut out, straightened, and

reriveted. In the starboard bunker two frames were reintorced with angie-pieces.

S.s. "Blenheim."—At the annual survey of this wooden vessel 16 ft. of the main keelson under the main boiler was renewed, and the scarfs were fastened with six 1 in. bolts. Approximately 16 ft. of the port sister-keelson were strengthened with 8 in. by 8 in. hardwood backing-pieces bolted through it and the floors. All butts and seams on the outside of the hull were hardened up where required. The boiler-chairs were renewed. A length of 20 ft. of steering-chain was renewed, and the chains were annealed. All the steering-chain fair-lead shears and pins on the after deck and bridge deck were renewed. The low-pressure cylinder was trued up. Four holding-down bolts in the main engine-bed were renewed. A new stern-post and after deadwood were fitted to No. 2 lifeboat, and the buoyancy-tanks were tested and repaired. The midship portion of the bridge deck around the fiddley and under the steering-engine was renewed. The margin-plank and the next plank to it on the port side, and three planks on the port side of the after end of the fore deck, were renewed.

*Dredge No. 121.—This vessel has been surveyed twice during the year. Patches have been fitted

on the forepart of the ladder-well and on the port bow. About 1,700 square feet of the deck was sheathed with $\frac{3}{8}$ in. plating, and about 300 ft. of angle-framing was renewed at various places. Three bunker hatch-coamings were renewed. Several frames under the engine were reinforced. The rudder-pintles were built up with the oxy-acetylene process, and new bushes were fitted to the gudgeons. The propeller-shafts were lined up. A new length of main steam-pipe on the starboard side, and a new expansion bend for the main steam-pipe, were fitted. All the pipes were tested by hydraulic pressure.

Seven new planks were fitted to the vessel's D boat.

O.e.v. "Hairini."—This wooden vessel was placed on the slip for her annual survey, and the shaft-tunnel was removed and a new heel and deadwood fitted. 20 ft. of the keel, four planks on either side of the keel, and the stern-post were renewed. A new intermediate shaft of steel, a new propeller-shaft of tobin bronze, a new stern-tube with stuffing-box complete, new stern bearings, and a

new exhaust-pipe were fitted.

O.e.v. "Hobsonville."—All the hull-sheathing was stripped off this vessel and all the worm-eaten planking was cut out of the bottom and deadwood, and about 600 ft. of new planking has been put in. The deadwood and rudder were repaired, and the deadwood was refastened with $\frac{3}{4}$ in., $\frac{7}{8}$ in., and 1 in. through bolts. The hull was caulked all over, payed, tarred, chunamed, felted, and sheathed up to the water-line with 6 in. by 1 in. totara sheathing. Several new deck-planks were fitted. Water-ballast tanks made of totara were built into the ship. The engines were thoroughly overhauled; all piston-rings and pins in the reversing-gear were renewed. The propeller-shaft was straightened, and a new liner and stem-bush were fitted. A new benzine-tank was made, and tested by hydraulic pressure. The rudder was repaired. Thirty fathoms of new stud-link chain cable was placed on board the vessel. New running-gear was rove forward, and all rigging lanyards were taken adrift, tarred, and set up again. A new boat was placed on board the vessel.

S.s. "Jean Gordon."—This wooden vessel, which was previously named "Traveller," has been thoroughly overhauled. The engines and boiler were removed to enable this to be done. All wormeaten portions of the hull were cut out. A new keelson was fitted for nearly the whole length of the vessel; ten new floors were also fitted. The hull outside was stripped, and caulked, felted, and sheathed with totara from the keel to the water-line. The keel was coppered and then sheathed

with totara. A new propeller-shaft was fitted.

S.s. "John Anderson."—This vessel received an extensive overhaul. Ten new hull-plates were put in on the port side and six on the starboard side. New tie-plates were fitted, 11 ft. 6 in. long, at the starboard side of the engine and boiler house. The bottom plating of the engine and boiler house was cut out and new plates were fitted. A new skylight, 2 ft. wider than the previous one, has been erected over the engine-space. Several gusset-plates and angle-bars in the bunkers were renewed. The bulkhead at the after end of the forehold has been repaired. A new house for the accommodation of passengers was erected abaft the after hatchway. The compartment over the stern-tube was made into a tank. A bilge injection-valve and pipes were fitted. The steering-chains were renewed. The vessel's hull, boiler, machinery, and equipment are now in good order.

S.s. "Mawhera" (Dredge).—A number of sheathing-patches were fitted to this vessel's hull, as follows: Two to A and B strakes on both bows; two to both sides of the bucket-well in way of the chafing-strips; two on the sides at the centre of the well; two to the bottom strake in the bucket-well; and one to the top strake in the starboard side of the well forward. The plates were from 5 ft. to 12 ft. in length by 3 ft. to 4 ft. in width and $\frac{3}{8}$ in. thick. Approximately 200 defective rivets were renewed in the forward end of the bucket-well. Both propeller-shafts were drawn, and both bushes were filled with Fenton's metal. The rudder-pintles in both rudders were renewed. A piece of the combustion-chamber of the starboard boiler was cut out, and a new piece was welded in by the acetone welding-process. All the wasted plates in the back ends of both boilers were built up

by the same process. Two new stays were also fitted to the boilers, and all defective rivets were renewed.

T.s.s." Moeraki."—The following repairs were made to the hull of this vessel: Fourteen reverse bars were riveted on each side to the hull-frames in way of No. 3 'tween-deck reverse bunker. Twelve sections of hull-framing on the starboard side were cut out and renewed, and eleven on the port side in way of the 'tween-deck side bunkers. Reverse angle-bars were fitted over the butts. Six reverse bars were fitted to the frames in way of the 'tween-deck side bunkers. Forty-eight test-