

SURVEY OF SHIPS FOR SEAWORTHINESS.

Fifty-five surveys for seaworthiness were made during the year. As usual, a large proportion of the vessels were damaged in collision and through stranding. There were seven instances where fire was the cause of trouble. One case deserves special attention as showing the necessity for great care being exercised in the engine-room of an oil-engine vessel. An attempt was being made to start the auxiliary engine of the o.e.v. "Kiritona" when it back-fired. An explosion occurred, due, it is supposed, to the ignition of petrol-vapour which had accumulated in the engine-room. One of the engineers was severely burnt. Unfortunately, he had one of his fingers bound with a rag which had become saturated with benzine, and his arms and hands were severely injured. The fire was put out with a fire-extinguisher. A survey of the vessel has been made, and the electric wiring has been renewed. Repairs have been made to the carburettor on the auxiliary engine, and all air-inlets to carburettors have been covered with gauze wire. New belting for the dynamo and pumps has been provided.

The s.s. "Westmoreland," of London, which was also surveyed for seaworthiness, was found to have sustained considerable damage. On leaving the Bluff Harbour on the 21st May last the vessel struck on some rocks. She began to make water in the bilges, but the pumps were able to keep it down, and she proceeded on her voyage to Port Chalmers. There she was placed in dock and the following repairs effected to the vessel's bottom: Ten plates on the port side were removed, faired and repaired and replaced, and four were faired in place. On the starboard side eighteen plates were removed, faired and repaired and then replaced, and seven plates were faired in place. Four keel-plates were removed, faired, and replaced. About 30 ft. of starboard bilge-keel were removed, faired, and replaced. The floors on the starboard side were cut out, faired and replaced, or renewed where required. On the port side eleven floors were similarly treated. The joints were fitted with double butt straps, double-riveted. Repairs were also made to some frames on both sides; forty-four on the starboard side and twenty-five on the port side were cut out and either straightened or renewed. All joints were electrically welded.

SURVEY OF GOVERNMENT VESSELS.

There were fifteen Government vessels surveyed during the year. Their names are as follows: s.s. "Ben Lomond," s.s. "Earnslaw," s.s. "Hauraki," s.s. "Hinemoa," o.e.v. "Huia," o.e.v. "Iriini," s.s. "Janie Seddon," o.e.v. "Manurere," o.e.v. "Mororo," p.s. "Mountaineer," o.e.v. "Patiti," o.e.v. "P.W.D.," o.e.v. "Reremoana," s.s. "Tawera," and s.s. "Tutanekai."

The "Tutanekai" was overhauled in September last. Two plain tubes were renewed in the port main boiler, and one stay-tube and one plain tube were renewed in the starboard main boiler. The main and auxiliary steam-pipes have been tested to 340 lb. per square inch hydrostatic pressure. A new piston-valve cover has been cast and fitted to the high-pressure cylinder. The steering-engine has been overhauled and repaired. The steerage accommodation has been taken out of the vessel and the space converted into sleeping-quarters for the firemen and sailors. Mess-room accommodation forward of the sleeping-quarters has also been provided. A bathroom with hot and cold showers and with washing-basins has been fitted up, and new sanitary conveniences also have been provided. This vessel has been engaged on certain special services during the year and on work for Government Departments.

The "Hinemoa" has been overhauled during the year, and, considering her age, is in good condition. She has been employed on her usual work of taking oil, gas, coal, stores, and provisions to lighthouses, and in shifting lightkeepers and their families from one station to another when transfers have been made. She has also carried on the work of overhauling, cleaning, and painting coastal and harbour buoys and beacons. The whole of the work, much of which is of a very risky nature, has been carried out in a very satisfactory manner.

S.s. "Amokura": This vessel is still being used as a training-ship for boys, but she has not been to sea during the past season, as when she was stripped for some repairs it was found that her condition was such that it would cost a large sum of money to carry out the work necessary to put her in a good seaworthy condition, and if it had been done, owing to her age further repairs would no doubt be required in the near future. Under these circumstances it was decided to endeavour to obtain another vessel, and the Imperial Government was asked whether it could let the Dominion have one. The request was agreed to, and Captain Hooper is at present in England in connection with the selection of a suitable vessel.

There has been no difficulty in getting sufficient boys during the year, and there are still a few applicants waiting for admission when there are vacancies for them. The usual technical-school classes in connection with the ship were carried on during the winter, and as the vessel did not go to sea during the summer the classes were continued in a modified form during that season. The general behaviour of the boys has been good. There has been no difficulty in obtaining employment for them in other ships on completion of their training on the "Amokura." Appended is a return of the boys who have served in the vessel during the year.

S.s. "Rama": This vessel was lent to the Commonwealth Government for service connected with the war, and has since been sold to the Chatham Islands Fishing Company (Limited).

ADDITIONAL STEAMERS AND AUXILIARY-POWERED VESSELS SURVEYED FOR THE FIRST TIME.

The number of vessels surveyed for the first time during the year is fifty-four. Of this number only two are steamships.

SURVEY OF SAILING-VESSELS.

The sailing-vessels surveyed this year number fifty-four. The following are notes of the repairs made to some of them:—