

GENERAL HARBOUR REGULATIONS

For the year ended 31st March, 1948, 327 accidents were reported under Regulation 103 of the General Harbour Regulations. These accidents were suffered by persons engaged in the loading and unloading and repair of ships, and 3 of the accidents were fatal. The number of accidents for the previous year ended 31st March, 1947, was 348, of which 5 were fatal.

Of the 3 fatal accidents reported during 1947-48, one was caused by the slipping of a watersider on a ship's deck and falling heavily on his head; another death resulted from the victim being crushed by a power pole which, when being unloaded, fell out of control, due to a defective winch clutch slipping out of engagement; and the third accident, one of an unusual character, occurred on Bluff Harbour tug "Awarua," and it encompassed the death of a workman employed on board making repairs. The victim in the latter case incorrectly connected the cable of an electric grinder and thereby received an electric shock. As a result of the shock he overbalanced and fell down the engine-room, sustaining fatal injuries.

The following is an analysis of the accidents, and their causes:—

Handling goods	108
Persons slipping or falling	47
Persons struck by swinging or falling loads	105
Persons stepping on or striking fixed objects	19
Contact with power-driven machinery
Failure of gear	18
Not otherwise classified	30
Total	327

Cargo gear of ships registered in New Zealand has been maintained in a safe condition throughout the year and no serious accident arising from the failure of an important component of any New Zealand ship's cargo gear has been reported.

It is observed, however, that the general condition of the cargo gear of some ships registered at overseas ports and trading to New Zealand has been below the pre-war standard. In one case two steel cargo derricks, originally $\frac{3}{8}$ inch thick, had corroded completely through over a small area. One derrick collapsed when lifting a load of about 15 cwt., although it had been certified as sound for 5 tons a few months previously at a United Kingdom port. The temporary deterioration of the standard of maintenance can be attributed to the vast arrears of repairs and replacements which confront and hamper British shipping and, indeed, all branches of the British transport system during these early post-war years. Cargo gear fitted to British ships built for the New Zealand trade since 1945 is excellent, and the now generally adopted electric winches ensure silent and safe operation, and the reduction in the noise level of cargo-working definitely reduces industrial fatigue. Attention has also been given in some new ships to providing shelter for winch-drivers and safer and more convenient types of hatch-covers.

Chains used for cargo gear, and particularly chain slings, are subject to shock loading. For many years it has been the accepted practice the world over to require such chains to be made of wrought iron with forge-welded links. During the past decade or so chains made of mild steel with electric-resistance butt-welded links have been used for general purposes. Experience with this mild-steel chain is not yet extensive in New Zealand, but no unfavourable reports have come to hand of the small quantity for which provisional approval has been given by the Department. The reliability of mild-steel chain depends upon the percentages of carbon, sulphur, and phosphorus content of the steel being controlled strictly within the maxima specified. Due to the scarcity both of wrought iron and skilled chain-smiths, it is probable that hand-welded wrought-iron chains will be gradually superseded by machine-made electrically welded mild-steel