

1934

TRANSACTIONS

National Safety Council

Incorporated

TWENTY-THIRD ANNUAL
SAFETY CONGRESS



Cleveland, Ohio

October 1 to October 5, 1934

The Cleveland, Carter and Statler Hotels

Copyright, 1935, National Safety Council, Inc.

NSC-75

PLAINTIFF'S EXHIBIT

A monthly inspection is made of the premises by the Safety Director in company with a representative of the insurance carriers. Also the department head joins. A report of findings and suggestions is directed to the management.

We have been making a study of how to prevent breaking dishes, the cost of which runs into astounding figures. Spoiling food by accidents is another large item. Foreign bodies found in foods by guests, resulting in public liability claims is another tremendous item. This can be minimized by the proper storage of ingredients and the protection of physical properties.

ADJOURNMENT

Marine Section

Marine Section

Officers 1934-35

- General Chairman*—E. W. FISKE, JR., Socony-Vacuum Oil Co., New York, N. Y.
Vice-Chairman (In Charge of Posters and Slides)—ROBERT F. HAND, Standard Shipping Co., New York, N. Y.
Vice-Chairman (In Charge of Publicity)—ARTHUR M. TOWE, Consulting Marine Engineer, New York, N. Y.
Vice-Chairman (For the Pacific Coast)—A. O. WOLL, General Petroleum Corp., of California, Terminal Island, Calif.
Secretary—JOHN S. HUNTER, The Atlantic Refining Co., Philadelphia, Pa.
News Letter Editor—HENRY BLACKSTONE, United States P. & I. Agency, Inc., San Francisco, Calif.
Engineering Committee Chairman—B. C. EDWARDS, Consulting Engineer, New York, N. Y.
Membership Committee Chairman—F. C. HOLDEN, JR., United States P. & I. Agency, Inc., New York, N. Y.
Program Committee Chairman—FRANK E. AMES, Lykes Bros. Ripley Steamship Co., New Orleans, La.
Statistics Committee Chairman—BENJAMIN H. SMIF, Travelers Insurance Company, New York, N. Y.
Stevedoring Committee Chairman—F. C. GREGORY, Waterfront Employers Union, San Francisco, Calif.
Members at Large—
 W. P. BIGGS, Navy Department Safety Engineer, Washington, D. C.
 C. F. BLACKTON, Erie Railroad Co., Jersey City, N. J.
 FRANK H. COGAN, The Delaware, Lackawanna and Western Railroad Co., Hoboken, N. J.
 F. P. FOISIE, Shipping Federation of the State of Washington, Seattle, Wash.
 J. M. GRISEN, Alabama Dry Dock & Shipbuilding Co., Mobile, Ala.
 Wm. GROUNDWATER, Union Oil Co. of Calif., Los Angeles, Calif.
 HENRY J. HEIDORN, Standard Shipping Company, New York, N. Y.
 WILLARD F. JONES, Gulf Refining Co., New York, N. Y.
 W. P. KAIN, Marine Surveyor, New York, N. Y.
 T. F. KAVANAGH, Grace Line, Inc., New York, N. Y.
 K. K. KELLY, Tide Water Oil Co., New York, N. Y.
 STEWART LEE, JR., New York Shipbuilding Corp., Camden, N. J.
 J. L. LUCKENBACH, American Bureau of Shipping, New York, N. Y.
 DANIEL J. MURPHY, Murphy, Cook & Co., Philadelphia, Pa.
 CARL E. PETERSEN, Newport News Shipbuilding and Dry Dock Co., New York, N. Y.
 BYRON O. PICKARD, Pacific American Steamship Assn., San Francisco, Calif.
 H. W. PROOM, Black Diamond Lines, New York, N. Y.
 J. K. ROBISON, Sinclair Navigation Co., New York, N. Y.
 J. C. ROHLFS, Standard Oil Company of California, San Francisco, Calif.
 ARTHUR R. SAVAGE, Peninsular & Occidental Steamship Co., Port Tampa, Fla.
 H. L. SEWARD, Yale University, New Haven, Conn.
 A. J. SMITH, Marine Office of America, New York, N. Y.
 Wm. E. STEWARDSON, Columbia Steamship Co., New York City.

What Safety Means in the Shipyard

By A. ALBERT GIESE

Staff Supervisor, Personnel Division, Newport News Shipbuilding & Drydock Co., Newport News, Va.

The shipbuilding industry is really making progress in its safety work. Records kept by six major shipyards, eight large repair yards, and ten Navy Yards prove this. Their combined accident frequency rate was reduced from 22.6 lost time accidents per million man-hours worked in 1931 to 10.6 in 1934. The severity rate came down from 2.40 in 1931 to 1.30 in 1934. These Yards, which probably will show well over one hundred million man-hours worked for the twelve months of the present year, had a combined frequency rate of 9.4 for the first four months of 1935. In the case of our own Yard at Newport News, the accident frequency rate has been gradually reduced from 24.0 in 1927 to 9.1 in 1934. The 10.6 frequency rate in 1934 for the group of shipyards just mentioned compares very favorably with 10.8 for the steel industry for the same year, with 31.9 for all construction work in the country during the same year, and 15.3 for all United States industries.

The building of ships, particularly large ocean going merchant vessels and warships, presents practically every accident hazard imaginable in modern industry. Safe working conditions are frequently complicated by the necessity for several trades to work at the same time in small congested spaces where each is subject to the occupational hazards created by the others. The extensive use of stages and scaffolds offers numerous opportunities for accidents.

The industry comprises, in the ultimate analysis, about twenty distinct trades, which, if broken into their component parts, would represent about one hundred separate, distinct kinds of jobs done by men with their hands. Repair work on ships in dry dock and afloat is especially hazardous. Here the work is inherently hazardous yet it must be expedited, whether below deck, on deck, or overhead, and in all kinds of weather.

Extensive use of electric welding in ship construction offers certain hazards which must be met. Injuries to eyes from electric flashes and inhalation of noxious gases are the principal dangers here.

There is comparatively little opportunity for standardization in shipbuilding, nor can safety work in a shipyard be standardized except in few instances. Where working conditions change from day to day, the accident hazards vary with the work.

Mechanical devices are used to protect workmen wherever they can be applied effectively; however, their application and usefulness in a large shipyard is limited. Guards can be used on certain types of machine equipment and are, if used faithfully, very satisfactory. Guard rails find a wide variety of uses both in the shops and on the ships. Because they are usually of a very temporary nature, guard rails installed on ships under construction must not have too much dependence placed on them.

The safety device of greatest single value in a shipyard is probably the goggle. Our experience as regards eye injuries has been steadily improving during the past five years. In 1930 there was an improvement of 15 per cent over 1929; 1931 improved 20 per cent over 1930; 1932 improved 5 per cent over 1931; the 1933 record was 14 per cent better than that of 1932; and in 1934 we showed an improvement of 9 per cent over 1933.

It would be difficult to enumerate all the safety devices which have some use in a shipyard. The use of standard and special safety equipment has its place in our safety program; so does the wide display of safety posters and bulletins. But if we were to stop here it is doubtful that our accident frequency would ever be much under the 24.0 index we experienced in 1927.

The formation of safe habits by workmen is, to our certain knowledge, the surest way to reduce accidents in a shipyard. We find that job training, whether in the skilled, semi-skilled or unskilled classes, is a prerequisite to real safety. In our own case the training of skilled workers is a function of the Training Department. The training of semi-skilled workers is the dual responsibility of the Training

department and the supervisory staffs of the several Yard departments. The responsibility for carefully selecting replacements belongs to the Employment department.

Regardless of how an individual finds his way to a given job, the final responsibility for his safety while on that job is placed on his immediate supervisor. Full time safety inspectors and plant watchmen are helpful in detecting unsafe conditions and practices, but their presence and duties do not in any way lessen the responsibility of the supervisors where the safety of workmen is concerned. Of first and equal importance in a shipyard safety program, we do not hesitate to place, selection and training of personnel, and fixing of responsibility for preventing accidents upon supervisors immediately in charge of the work.

No one familiar with shipbuilding would admit the possibility of completely eliminating accidental injuries in a shipyard. It just isn't that kind of work. In our Yard the term "accident" covers everything from pin scratches to fatalities. We have a rigid rule, that employees injured in any way while at work must report at once to our Medical Department for treatment.

Medical attention is provided for all employees injured while at work. A fully equipped clinic and competent medical staff is maintained on the Shipyard premises. Our Medical Department has been certified by the American College of Surgeons as complying with the standards of that body for medical service in industry. This department can be described as a small emergency hospital and a first-aid station. The main clinic contains a large dressing room, an X-ray room and dark room, an operating room, a small three bed ward, a physiotherapy treatment room, a dressing room for screened cases, doctors' offices, an examination room, a waiting room, and a supply room. Removed from the main clinic and near the building ways we have a fully equipped first-aid station, provided primarily to save the time of employees working at a distance from the main clinic, and to encourage the reporting of the most minor injuries.

All applicants for employment are sent to the main clinic for a thorough medical examination before they are allowed to go to work. Temporary defects are often found which must be corrected before they can be employed. Complete records are kept of all accident cases and all pre-employment examinations. These histories permit an efficient follow-up system in cases where patients must return for retreatments and are very valuable for statistical purposes.

The staff of our Medical Department consists of two part-time surgeons, five registered white female nurses, a stenographer, and two colored orderlies. The fact that less than 2 per cent of all injuries occurring in our Yard result in the injured employee losing time from work must be credited largely to this group and the fine services they render.

The Essentials of Safety Co-operation in the Marine Industry

By CAPTAIN HENRY BLACKSTONE

Safety Engineer, United States P. & I. Agency, Inc., San Francisco

The improvement in the mechanical details of ships has far surpassed the improvement in the ability of the officers and crew to handle them. We cannot turn over the full responsibility for accident prevention to a safety engineer. Every officer in the fleet and every stevedore foreman must be the "safety engineer" for his own particular group of men. The best accident prevention plan that an enlightened management can conceive can be "messed up" by a supervisor, be he licensed officer or gang boss on the dock.

The management may set up definite accident prevention policies, put them in writing, post them on bulletin boards or distribute them in circular form. But if the officers do not live up to the letter and the spirit of these policies more harm than good can result. The men are quick to follow example and if they know a policy of the management is being disregarded by their superior, they will have no respect for either the superior or the management and co-operation goes by the board.

The Marine industry needs a common plan for accident prevention. This plan