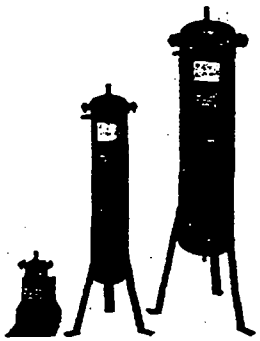
BULLARD



SILICOSIS

Authorities recognize the harmful effects of certain breathed dusts, prominent among which is silica.

The practical solution is the Bullard Compressed Air Purifier when used in conjunction with a hose mask.

This purifier thoroughly removes dust, fumes, oil and water from compressed air. It is completely trouble-proof, requiring no attention other than occasional replacement of filters. The purifier may be placed in the compressed air line without mechanical difficulty.

Any Bullard office or distributor will gladly send our bulletin describing the Bullard Compressed Air Purifier.

E. D. BULLARD COMPANY

225 Bluxth Street, San Francisco
1220 South Olive Street, Los Angeles
1230 Tabernacle Avenue, Salt Lake City
1 Main Street, Houston
215 S. Leavitt Street, Chicago

Bullard products are distributed by

Safety First Supply Company, Brady Bldg., Pittsburgh

W. E. Wilson Corporation, 225 Varick St., New York

W. P. and R. S. Mars Company, 224 West Michigan St., Duluth

Safety Clothing Company, 2304 Payne Ave., Cleveland

C. H. Dickson Co., 2825 East Grand Blvd., Detroit

Safety Service Company, 108 So. Quincy St., Green Bay, Wis.

Direct Sales Company, 108 President Bank Building, Miami, Miami.

C. D. Center Co., Charleston Bank Bldg., Chattanooga, Tenn.

L. A. Steel Co., 2826 Sarosota St., Pittsburgh, Pa.

From Head to Foot

(Continued from page 18)

hampered by air hose. The only available protection under these conditions is a respirator with a filtering medium of fiber or tissue. Only those types which have been demonstrated to possess the necessary filtering medium to give sufficient protection against fine dusts should be selected."

From the foregoing general information it would seem that the major developments in industrial protective clothing relate to the protection of the respiratory organs. These developments have, no doubt, been given unusual impetus in recent years by occupational disease claims, especially concerning silicosis. New types of protective equipment against dust in industry are being developed, along with better procedures for the observation of such work and the enforced use of protective equipment.

In addition to new types of clothing and equipment, management and workers are cooperating with the manufacturers of safety equipment in developing the use of new materials and improved design. These include new composition materials for protective headgear and other devices to protect various parts of the body; air insulated protective suits for jobs involving extreme heat; air fountain respirators for dusty work where only marginal protection is necessary; increased use of special chrometanned leather for resistance to heat; development of special metal alloys for the mechanical parts of protective equipment, and improved design in eye protective devices.

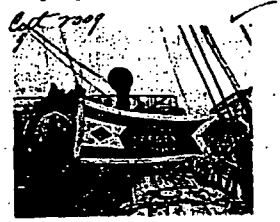
From our contact with industrial concerns as well as the manufacturers of safety clothing and equipment, it would seem that there are no needs for protective clothing which are not being taken care of, to some degree at least. The development of safety clothing to its present degree of refinement has been possible because of cooperation by all persons concerned.

The safety engineer can keep informed of developments in his field by referring to the available publications on accident prevention work. On this point a consultant in protective devices recently said to us, "Unfortunately, it seems to me that industry has not taken advantage of these excellent publications. This point has been brought home very forcibly during some of the recent silicosis suits where employers have been caught at a decided disadvantage when the plaintiff was able to prove, by referring to government publications dated twenty years back, wherein certain manufacturing operations were described as hazardous and means of combating these hazards suggested. We personally know that in most instances manufacturers were not aware of the existence of these publications."

Reference might be made here to the availability of practical information from such sources as U. S. Department of Labor, *U. S. Public Health Service*, U. S. Bureau of Mines, National Safety Council, state departments of labor, American Standards Association, insurance companies, and consulting organizations. The advancement of public and private means for the collection and dissemination of such information is, undoubtedly one of the trends of present day accident prevention work.

Trophies Awarded to Seventeen Ships

SAFETY trophies have been awarded to 17 ships operated by Lykes Bros.—Ripley Steamship Company for having completed the allotted number of



voyages during 1933 without a disabling injury to any member of the crew.

The body of the flag, shown in the accompanying illustration, is green with a six-inch white border and the miniature white house flag with a blue diamond and white letter "L" is shown in the body of the flag at the left side.

When flown at the mast head the combination of colors makes the pennant most attractive, and the men of these vessels feel considerable pride in displaying this trophy in American and foreign ports.

(Continued from page 36)

tal effects of new substances introduced into plant processes. In cooperation with other departments he should investigate the extent of the hazards and devise measures of control.

2. *Routine examination of applicants.* Procedure should include a detailed history of the applicant's previous illnesses and accidents classified under (a) diseases of childhood, (b) general infectious diseases, (c) respiratory diseases, (d) venereal diseases, (e) accidents and resulting physical defects. A detailed history of previous occupations is very important. Merely stating the type of industry has slight value. The exact duties performed in each occupation and the probable length of exposure to hazardous substances should be noted.

If the applicant has been or will be exposed to dusts which induce lung diseases, an X-ray picture of the chest is important. This part of the examination may be referred to an expert roentgenologist as its value depends upon the type of pictures taken and the experience of the reader who interprets them. The examining physician also may need additional information obtained by laboratory analysis of blood, sputum and urine.

3. Rating and placement of applicants. In cooperation with the personnel department the applicant should be rated and placed, not only on training and past experience but also on physical and mental ability. The record of his examination should be the confidential property of the medical department.

4. Periodical physical examinations. The frequency of periodical physical examinations must depend upon individual circumstances as determined by the supervising physician. Where examinations are made for the first time, employees should be given ample explanation of their benefits and assurance that their jobs are secure.

5. Provision for the disabled. Employees who develop disabilities during employment should be reassigned to occupations which will not aggravate the disability, or they should be provided for in other ways.

Many concrete examples might be cited of results obtained through dust control measures and competent supervision of workers. One which strikingly illustrates the value of such measures is the experience of the South African gold mines. During the years 1918-20 the production rate for silicosis for those who had 10 years underground service amounted to about 10 per cent. The highest rate for those having 16 years service amounted to 14.5 per cent. During the years 1920-23 the production rate for those who had 10 years of service dropped to 5 per cent and during the year 1931-32 the rate dropped to a fraction over 1 per cent. The highest rate during the 1920-23 period amounted to a little over 7 per cent with 16 years' service and in the period 1931-32 the highest rate was about 4½ per cent after 18 years of service. This experience can be duplicated wherever preventive measures are effectively applied.

A Dressy **SAFETOE** in Great Demand

Carried in stock in sizes D 5 to 12. Price $3.50

We carry a complete line of Safetoe shoes in stock to meet practically every requirement. Write for special illustrated Safety Shoe catalog.

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Manufacturers of every kind and type of shoe worn in America, including the famous Buster Brown shoes for boys and girls, and Brownbilt Trend Straight shoes for men and women.

Stock No. H 112-2 "Blue Ribbon" Men's Black Elk Safetoe Blucher is a very popular safety shoe — because of its style lines and generally dressy appearance, and because it comes in D width to give more comfortable fit to narrower feet. Has sturdy, heavy, single oak sole, *Steel Box toe* and wear-proof lining. Welt construction.

STRENGTH *and* **SAFETY** *without bulky weight*

Examine the jaws on this new lighter, thinner, stronger Crestoloy Wrenches—long and slenderly trimmed for quick, effortless action.

Crestoloy Wrenches are nearly one-third thinner than the conventional adjustable wrench yet actually more than twice as strong. They are SAFE because they will not spring, break or slip.

Available in 4 to 12-inch sizes at prices little higher than for ordinary wrenches. Ask your Supply House or write for Crescent catalog of safe, fully-guaranteed tools.

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