Summary

Industrial zinc stearate dust in suspension is acutely irritant when injected into the lungs of rats or the peritoneum of cavies.

No fibrosis has resulted from single injections into the lungs of rats or the peritoneum of cavies. Foreign-body granulomata were present for several weeks in the peritoneum but ultimately resolved.

I am grateful to Dr. A. I. G. McLaughlin, H.M. Medical Inspector of Factories, for drawing my attention to the report of Noro and Uotila, for trying to obtain further information from Dr. Noro, and for helping to obtain the sample of zinc stearate. The photomicrographs were taken by Mr. A. W. Collins, F.I.M.L.T.

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REFERENCES

- Committee on Accidents from Zinc Stearate Dusting Powders (1925). *J. Amer. med. Ass.*, **84**, 750.
 Murray, L. M. (1926). *Arch. Pediat.*, **43**, 193.
 Noro, L., and Uotila, U. (1954). Paper 239, XI Internat. Congr. Industr. Med., Naples, Sept. 1954, p. 116.
 Uotila, U., and Noro, L. (1957). *Folia med. (Napoli)*, **40**, 245.

Welfare at Wall's

The practice of preventive medicine to benefit not only the people initially concerned but also the thousands who eat Wall's ice cream, pies, and sausages is the key to the welfare and medical departments recently opened at Wall's factory at Godley, near Hyde, Cheshire.

The medical department, which is under the direction of Dr. Geoffrey Fletcher, has the usual consulting and treatment rooms, well designed and equipped, surgery, and x-ray room. Also, the building contains a bacteriological laboratory in which it is planned to add research in industrial medicine to the routine tests necessary in a food factory.

One of the most important tasks in the medical supervision of those handling food is to ensure care of the hands. By an intensive campaign workers are being trained to report even the most trivial cut or abrasion which is cleaned and one of the department's dressings put on in the surgery. Also, if a worker cuts her hand at home (a high proportion of the workers at Godley are women) the charge hand is trained to spot an unsuitable dressing and send the patient to the medical department to have it exchanged for an approved one. The medical officer has taken great pains to ensure that dressings are suitable for workers on wet and on dry processes, that they are of a pattern which can be securely fastened to the finger or hand, and are distinctive.

All new employees have a medical interview, and also those returning after an illness. In cooperation with family doctors certain treatments are continued during working hours, and cases of sudden illness at work are referred to them also.

A Human View of a Great Port

M. W. GOLDBLATT

It is characteristically Italian that even so apparently a workaday subject as the industrial medical problem of work in docks, including its physiopathological, clinical, and preventive aspects should be presented in this book* with covers showing a detail of Bordone's seventeenth-century picture of the port of Genoa in colour. This beautiful picture, which resembles a kind of aerial abstract of the conception one has of old Genoa, inevitably tells us that, even in those far-off days, a great port involved almost every working activity which man must undertake. The congestion of dwellings, storehouses, building and repair shops, administration and commercial buildings, guildhalls, loading and unloading quays, breakwaters, ships big and small, coming and going, landing stages, all combine to present to us a world, at once beautiful, vital, questing and, in every sense, bigger than man, its creator, himself. In this picture by Bordone we realize the time when the quest had to be undertaken in the hard way. If, today the way is different, mechanized, quick, massive, it nevertheless remains hard. In almost every field of activity embraced in the term dock work the call upon qualities of strength, judgment, expertise, courage, skilful cooperation, and responsibility is more insistent today than it was in those early days.

Dock work entails a peculiarly strong sense of responsibility. The loader in the hold knows he endangers the sailor if careless; the pump operator knows the life of the underwater man depends on him; the crane operator can maim a stacker; the port doctor knows he endangers the population if he is too facile in lowering the Yellow Jack; the industrial doctor knows he must be rigid in his standards of acceptance for work, more so indeed, than in most other industries; the loader on shore knows that careless handling of drums, kegs, and other containers may subject his opposite number at a port of call in dangers, toxic or dermatitic; the welder in dry dock knows that on the effectiveness of his weld depend the lives and property of many people. Like miners, dock workers have something different about them. In modern times some degree of travel has come within the means of most people in Britain, but even in Britain the dock worker gets to know more about foreign lands and peoples than do the generality of workers. In the great ports of Europe every tongue and every kind of face and dress are daily heard and seen, so that the dock worker inevitably acquires a cosmopolitan outlook and gets to know what happens in his field of work or interest abroad. There is a sense of importance and immediacy in the efforts of a dock worker which is different from that

* *Il Lavoro Portuale (Dock Work)*. By Francesco Molino and Damiano Zannini. (Pp. 319 + index; illustrated.) Milano: Edizione I.N.A.I.L. 1956.

experienced by other categories of workers. He experiences the satisfaction of completion, so much denied to other workers in this world of mass production, and does not ever become an automaton. The irregularities of his trade or craft are inherent in the nature of affairs at a port and like the mariner he has learnt to wait, especially nowadays when waiting and being called have become a much more comfortable and organized proceeding. He has, on the whole, an open-air life and as the years advance does not lose all the romance which, in his rough, perhaps coarse way, he has felt in his earlier days.

But, of course, considerable numbers of port workers pass the working day inside ships, where, in hot countries or seasons, the low specific heat of the metallic hull soon induces extremely uncomfortable temperatures. Moreover, as is emphasized by Molfino and Zannini a great deal of work on ships in port is carried out in confined, cramped spaces so that any advantages of sea breezes are entirely lost, especially when other operations are going on which require services such as steam power, heat, furnaces, and so on. Such jobs as descaling boilers, repair of pumps while boilers are going and others mentioned by the present authors all involve extremely trying conditions of temperature and humidity. They quote the observations of Bottner, which they have confirmed, in which two hours at 40° C. with 50% relative humidity led to losses of weight of $\frac{1}{3}$ to 2 kg. and of 1.2 to 11 g. NaCl in the perspiration. The manner in which workmen in time acquire resistance to such conditions is something of a puzzle and the known inborn tolerance of negro workers is variously attributed to better peripheral circulation, better development of sweat glands, and the secretion of more volatile sweat.

That accidents in docks should be frequent is inevitable. The crude figures for men in Britain were 32 fatal and 6,473 non-fatal in 1954, 48 fatal and 7,188 non-fatal in 1955. The authors give figures from official sources; these may be tabulated thus:

ACCIDENTS IN THE PORT OF GENOA
PER 1,000 MAN-YEARS

	Docks			Industry in General	Trans- port and Storage	Lost Time in Dock Accidents	
	Full- time Workers	Casual Workers	Fatal			11-20 Days	6-10 Days
1952	125(359)*	263(371)	1	121.4	107.7	40%	26%
1953	157(446)	379(428)	1	—	—	—	—

*Total accidents in brackets.

From our memory of the activities in Genoa, these figures seem not unsatisfactory, and indeed Molfino, while not complacent, feels that there has been an immense improvement attributable, in part, to the 1932 Convention (given *in extenso* in the text) and the regulations of the Port of Genoa (also appended in full) for the prevention of accidents. From that aspect which most impressed Ramazzini, the effects of lifting and carrying heavy loads (Cap 35, "De mortis artificum diatriba" not Cap 34 as given by the authors) with resulting fatigue, strain and ultimately pulmonary, muscular, joint, and vertebral troubles, the present-day dock worker is, on the whole, liberated; for muscular effort there are substituted use of small muscles in movements which demand judgment, agility, precision rather than strength, combined with sensitivity, quick perception and reaction following rapidly selective volition rather than labour; cerebration rather than muscular effort. Nevertheless, the authors point out, strain and fatigue appear even today in workers who are insufficiently trained or have lost confidence. Neurasthenic symptoms can readily arise in crane workers as a result of the maintained strain of responsibility for work in which inaccuracy or even slight fatigue can result in disaster.

In a discussion of the pneumoconiosis of coal unloaders, the authors give their analysis of 341 cases from the insurance records of workers in the port of Genoa who had been examined clinically and radiologically. While recognizing that this is a very small sample, the authors draw attention to the high incidence of suspected active pulmonary tuberculosis (3.8%) and appear to incline somewhat to the view of Castellino that anthracosis and tuberculosis may be associated as an occupational hazard, especially after 20 or more years in this work. It might have been more rewarding if the authors had waited for more data.

There are in this well-produced volume, simple, clear discussions of the problems of the diver and caisson worker and detailed data of decompression times, consideration of the hazards of welding (conclusions here are perhaps less optimistic than those reached in Britain), descriptions of many operations in the docks with many photographs which in some measure bring the dock worker's life to our minds. Guidance on preventive measures occupies nearly one-quarter of the volume and especially interesting are those on selection of workers for special kinds of work.

The book is well documented and very easy to read. Indeed, if a foreigner may presume to say so, scientific or medical Italian is singularly uninspiring and does not evoke the pleasure which is traditionally associated with this beautiful language.