- 22 Pyykkö I, Färkkilä M, Toivanen J, Korhonen O, Hyvärinen J. Transmission of vibration in the hand-arm system with special reference to changes in compression force and acceleration. *Scand J Work Environ Health* 1976;2:87-95.
- 23 Phalen GS. The carpal tunnel syndrome. *Clin Orthop* 1972; 83:29-40.
- 24 Falck B, Aarnio P. Left-sided carpal tunnel syndrome in butchers. *Scand J Work Environ Health* 1983;9:291-7.
- 25 Färkkilä M. Vibration induced injuries. *Br J Ind Med* 1986; 43:361-2.
- 26 Starck J. *Characteristics of vibration, hand grip force, and hearing loss in vibration syndrome.* (University of Kuopio, Natural Sciences, original reports 4/1984.) Kuopio: Emanuelson, 1984.
- 27 Johansson RS, Wallbo AB. Detection of tactile stimuli. Thresholds of afferent units related to psychophysical thresholds in the human hand. *J Physiol (London)* 1979; 297:405-22.
- 28 Johansson RS, Wallbo AB. Spatial properties of the population of mechanoreceptive units in the glabrous skin of the human hand. *Brain Res* 1980;184:353-66.
- 29 Aatola S, Starck J, Pyykkö I, Färkkilä M, Korhonen O. Vibration detection threshold of lumberjacks. In: *Proceedings of the international symposium on the protection of workers against vibration.* Niš, Yugoslavia. (Organization Committee of the Institute for Occupational Safety and Health Documentation.) Niš: Edward Kardellju, 1982:347-51.

Accepted 7 August 1989

Spittoons

Prevention of the spread of infection is of undoubted importance. Notices are frequently displayed commanding persons not to spit. The intention of these notices is admirable, but personal observation makes manifest to all that they do not effect their purpose. Even if the rising generation adopt better manners and do not acquire the habit of expectorating (of which we can at present see no obvious signs), the present generation possess the habit, which must be dealt with as an existing custom—an objectionable thing which may be ameliorated before it is abolished. Few persons unacquainted with industry can be aware of the danger to the public as well as to the workers themselves arising from spitting. When, however, we state that expectoration takes place into tea, dough troughs, fish, vegetables and other comestibles, as well as upon materials used for wearing apparel, the necessity for action becomes clearer.

The provision of spittoons or cuspidors is the only practical remedy. Working men are accustomed to their use in inn-parlours, and can be persuaded to use them. Spittoons should be placed in readily access-

ible positions—not on the floor where they are readily knocked over. They should be made of enamelled metal with long handles for convenience of removal. Every day they should be washed out with hot water and exposed to a jet of steam during five to ten minutes.

The provision of spittoons is of value for the control, not only of tubercular infection, but of the more frequent catarrhal infections. The main objection to dry sweeping of floors rests upon the presence there of dried sputa; if all spitting was into spittoons, floor dust would be come less infectious. While the provision and proper use of spittoons would go far to minimise the danger arising from spitting, a new custom would thereby be introduced. Workers, like others, are naturally conservative and might readily object, and a manager would be well advised to place the matter in the hands of the welfare committee of the works. If this committee decide in favour of spittoons, they will ensure that promiscuous spitting no longer takes place.

(From *The Health of the Industrial Worker* by E L Collis and M Green published by Churchill in 1921.)

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