

CORRESPONDENCE

SIR,

I have read Mr. W. C. Robertson's article on Electric Shock which appeared in your July 1949 issue and thought the following remarks may be of interest.

2. A few weeks ago the night porter was found dead in the lounge of one of our better-known London clubs. He had one hand on the switch on the handle of a vacuum cleaner and the other grasping a metal standard lamp ; the latter was earthed with a 3-pin plug.

3. The casualty was due to the earthing of the non-current-carrying metal in the standard. There was no fault in the standard lamp and only one, a loose connection, at the switch on the vacuum cleaner.

4. I strongly disagree with the statement on page 128 of the article that "a good earth connection to portable tools is a complete defence against shock" and I consider that the earthing of non-current-carrying metal in electrical equipment situated in a well-carpeted room is a distinct source of danger and renders that room almost as dangerous as a bathroom and for the same reasons.

5. In the above case the practice of earthing the non-current-carrying metal parts of the lamp, far from being a prevention against shock, was in fact the direct cause of death.

Yours faithfully,

(Sgd.) A. R. ALSTON,

Commander R.N. (Retd.)

SIR,

For some considerable time we were troubled by a cloud appearing at varying intervals in the ship's heating steam drain system. In spite of repeated efforts, the source of contamination was not traced. One day, however, the ship's heating system became severely contaminated with oil fuel, and this manifested itself by making the soup in the galley unfit for consumption—even human.

The ship's heating system is supplied from the closed exhaust range. All possible connections between the closed exhaust range and the oil fuel system were therefore examined, and the trouble was traced to the oily water separator fitted in connection with the oil fuel sullage system. This separator is fitted with a steam heating element which is supplied from the closed exhaust range and discharges through an open-ended pipe inside the separator. When the separator is in use, the oily water is at about 10 lb/sq. in. and, when the closed exhaust pressure fell below this, oily water was forced into the closed exhaust range, and thence, through the heating steam range, to the galley, where another open-ended pipe is led from the heating steam range into the soup boiler. At the time, the separator was unduly full of oil.

To prevent a re-appearance of this poltergeist, a non-return valve was fitted in the steam supply to confine him to the separator. There he lay in wait until an inexperienced watchkeeper allowed him to discharge a considerable quantity of separated oil through the overboard discharge from the separator, through which separated water only should be discharged. This oil lay under the ship confined by bilge keels and docking keels, and found its way into evaporator, turbo-generator, condenser and 50-ton pump inlets. Young seamen under training were later surprised to find themselves scrubbing the quarterdeck with oil. The separator is not now in use.

Soup trouble was experienced in H.M.S. *Bonaventure* (Clan liner) in 1944, but in that case it was due to a leaky oil tank heating system.

(Sgd.) G. H. VENABLES,

Commander (E), R.N.,

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