fellowships, publication of scientific papers, and library services, the comments of the President of the College deal with the matter so far as the College itself is concerned. In case misunderstanding should arise as regards any question of gifts to individual practitioners, pharmaceutical firms which are members of the Association of the British Pharmaceutical Industry are bound by the Code of Marketing Practice, established after consultation with the British Medical Association, which lays down that:

"In general, gifts are unnecessary and undesirable. When considered appropriate, any gift must be of little monetary value and directly relevant to the practice of medicine or pharmacy."

The Association is always ready to investigate alleged breaches of this Code.—I am, etc.,

G. E. YATES,
Director, Association of the British
Pharmaceutical Industry.
London S.W.7.

Antiseptics and Dried Organisms

SIR,—The work of Professor Ronald Hare and his colleagues (February 23, p. 496) in designing a more efficient and rapid method of evaluating disinfectants for use in hospital environmental sanitation will meet with very wide approval.

In this and in other fields the deficiencies of the Rideal-Walker test have been long appreciated. Where, as was pointed out in the article, bacterial contamination is protected by a film of organic matter, and also, one might add, in crevices and on rough irregular surfaces, it is most apparent that some test must be devised to mimic the natural state as much as possible.

For two years the National Health Institute, Wellington, has been working on this problem and has taken a "mock up" of hospital and environment two stages further. We intend to publish the results in more detail in due course.

Briefly, we have used glass slides of a given area and of a standard pattern of roughened surface ("pinhead" or "pacific"), coated them with an overnight culture of either *Staphylococcus aureus*, phage type 80/81, *Salmonella choleraesuis*, or *Pseudomonas aeruginosa*, and equal parts of sterilized milk to afford fat and protein contamination. After drying for two hours in the 37° C. incubator these have been immersed in the disinfectant under test, then washed under a stream of sterilized tap-water while held by sterile toothed forceps and dropped into a recovery medium recommended by Davis.¹ After overnight incubation the broth is "spotted out" on blood agar and growths confirmed as being those of the test organism. We had employed solid media, but later rejected them as being less reliable than the broth.

We would in the main confirm the results of your contributors, but found the milk film with all, but 2% phenol and 1 in 40 "sudol" prolonged the time necessary for action of the disinfectants. Sudol, as stated, was most effective, but in view of the work by Foster² we would not agree it was to be used at a concentration of 1 in 100 or less.

On the other hand, some of the more modern formulations, notably among them the surfactants, showed very inferior bactericidal powers in this test despite Rideal-Walker coefficients of fantastic proportions.

Writers upon disinfectant testing have suggested that only a test performed under conditions as near as

possible approaching its use and with a range of test organisms is of value in assessment. To our minds these simpler tests within the range of the smaller laboratory are an effective answer to this problem.—I am, etc.,

National Health Institute,
Wellington, New Zealand.

H. T. KNIGHTS.

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- ¹ Davis, J. G., *J. appl. Bact.*, 1960, **23**, 318.
- ² Foster, W. D., *Lancet*, 1960, **1**, 670.

Umbilical Hernia in Pregnancy

SIR,—On page 1586 of the *British Medical Journal* of December 15, 1962, in "Medical Memoranda" Dr. S. W. Thomson stresses how common is umbilical hernia in many African races (Davis¹ puts the incidence at over 80% in Negro children in America as compared with 1 to 10% in white children) and how rarely they give rise to complications or require surgery. Perhaps you would find it worth while to record a further rare complication—namely, when the umbilicus breaks down.

The illustration is of a young woman of Sukumaland (southern shores of Lake Victoria area) whose ventral hernia contained a gravid uterus. Towards term the skin at the apex of the evaginated umbilicus became thinned and finally tore as the result of increased intra-abdominal pressure due to bearing down efforts in a normal labour. Since the peritoneum was adherent to the skin at this point it, too, tore. The resulting hole into the abdominal cavity became plugged by omentum (which can be seen protruding in the illustration). A mild peritonitis developed in this protrusion, so closure was advised. In order to prevent the same thing happening again a double-breasted waistcoat-type operation was done. The cosmetic and functional result was satisfactory as judged by Western standards, but the young lady was disappointed to find she had lost what she regarded as a normal and attractive part of her anatomy.

Large umbilical hernias with divarication of the recti are of course also often seen in European multiparae, and their presence greatly facilitates control of the fundus in the third stage. Another advantage of these hernias is that their thin walls can be easily invaginated and the abdominal viscera palpated with almost equal facility as at laparotomy.

On Ukerewe Island in Lake Victoria over 90% of infants have umbilical hernias, and probably three-quarters of them close spontaneously by 8 years of age. The adult or acquired type of umbilical hernia is rare, and strangulation in one was never encountered during a three-year sojourn. Many very large inguinal hernias were also encountered, but strangulation in them is of course quite common. I would therefore tend to