

and behind the posterior pillar of the right fauces. A piece of membrane stained and examined for bacteria showed the presence of streptococci and other bacteria. A swab cultivation after 24 hours' incubation showed the presence of spirilla, large fusiform bacilli, small faintly stained bacilli, a few tetrads, and streptococci. The combined clinical and bacteriological evidence at this date appeared to indicate a case of Vincent's angina. In view, however, of the definite typical false membrane diphtheria antitoxin (2000 units) was administered. Pure iodoform and undiluted tincture of iodine B.P. were applied to the patches and a mixture of the perchlorides of iron and mercury was administered. On the 16th the following note was made: "Membranous formation still continues. The subjacent tissue, which at first was merely congested, has later become ulcerated and bleeding occurs on removal of the false membrane." A further swab cultivation showed numerous long streptococci but no diphtheria bacilli. From this date onward improvement gradually set in, the membranous formation (which was removed two or three times a day) becoming thinner, until finally it appeared to be nothing but the exudation from healing granulations.

Apart from the very definite false membrane of considerable extent the clinical signs were in my opinion against a diagnosis of diphtheria. This opinion was sustained by no fewer than five or six carefully made *negative* swab cultivations and by the clinical course of the case. The temperature did not at any time fall below normal. The case emphasises the importance of bacteriological confirmation of a provisional diagnosis of diphtheria, if such diagnosis is based on membranous formation alone. It further emphasises the importance of reserving an opinion until all the evidence available has been obtained. The reservation of diagnosis should, however, not interfere with the prompt administration of a small dose of diphtheria antitoxin, which should be administered without delay in every doubtful case without waiting for bacteriological evidence. It is unnecessary, I hope, to add that all necessary precautions were taken in the way of isolation and antiseptic applications throughout the case, for even if not a case of diphtheria such a throat is probably of an infective nature. Amongst precautionary measures for the prevention of spread in cases of infectious diseases, in addition to the efficient isolation of the patient I always advise the daily methodical use of an antiseptic gargle (preferably a solution of permanganate of potash) on the part of others living in the same house or who have otherwise been exposed to infection.

As to the etiology of the above case there was a history of dust having been blown into the mouth a day or two before onset. This dust probably carried in deleterious bacteria, such as streptococci, &c. The organisms cultivated from the false membrane were probably saprophytic bacteria which had found a suitable nidus for development in the false membrane. An important diagnostic point is the course of the temperature. In true diphtheria this soon becomes, and for a long time remains, subnormal. In the present case the temperature was never subnormal.

Southend-on-Sea.

#### FRACTURE OF THE EXTERNAL CONDYLE OF THE HUMERUS.

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FRACTURE of the external condyle of the humerus is so uncommon an accident that it may be well to put a case on record.

On July 28th a stoker on H.M.S. *Exmouth* caught his right elbow under the cross-head of a hydraulic engine. So violent was the blow that his arm bent the rim of a cast-brass lubricating cup. On examination he was found to have a lacerated wound on each side of the elbow. From the inner wound the finger passed through lacerated tissues down to the front of the humerus. Within the outer wound the muscles were slightly lacerated, the skin was partially separated even where not ruptured, and about an inch of the external condyle and supracondylar ridge was found lying free. No arteries bled. The loose piece of bone was fixed by a suture through its adherent soft parts. The wounds were drained and sutured (one deep silkworm-gut suture of relaxation, the others catgut continuous), and the

elbow was put up in cotton wadding with elastic bandage over all. The drain was removed from the inner wound on the second and from the outer on the third day. The after-history was uneventful. The wound is now under cyanide gauze and collodion.

H.M.S. *Exmouth*.

### Reviews and Notices of Books.

*Traité d'Hygiène*. Publié en fascicules sous la direction de M. BROUARDEL et M. MOSNY. *Hygiène Navale* Par les Drs. DUCHATEAU, JAN, et PLANTÉ. (A *Treatise on Hygiene*, published in parts under the direction of M. BROUARDEL and M. MOSNY.—Part 10, *Naval Hygiene*, by Dr. DUCHATEAU, Dr. JAN, and Dr. PLANTÉ.) One volume in octavo, 356 pages, with 36 illustrations in the text and three coloured plates. Paris: J. B. Baillière and Son. Price 7 francs 50 centimes or in boards 9 francs.

IN this great work on hygiene the aim of the editors, the late Professor P. Brouardel and Dr. E. Mosny, is to formulate the contemporary hygienic knowledge of the world in as complete and perfect a manner as possible. It would be difficult to find two men better equipped for the task. Their names alone are an ample guarantee for the thoroughness of the work but they have, moreover, been successful in securing the collaboration of such well-known authorities as M. Chantemesse, M. Netter, M. Widal, M. Wurtz, M. Dupré, M. Thoinot, and M. Courtois-Suffit of the Faculty of Paris; M. Courmont and M. Lesieur of Lyons; M. Rouget and M. Dopter of Val-de-Grâce; M. de Launay and M. Leclerc de Puligny, engineers; M. Ogier; M. Bonjean; M. L. Martin, chief medical officer of the Pasteur Institute; M. Calmette, director of the Pasteur Institute at Lille; and M. A. J. Martin, inspector of Parisian sanitation. It is proposed to complete the work in 20 parts, and so far five parts have been published dealing respectively with Atmosphere and Climate, Soil and Water, Individual Hygiene, Alimentary Hygiene, and Naval Hygiene. The last-named fascicule, as it is termed, which has just been submitted to us for review, stands tenth on the list and is divided into two sections. The authors of the first section, which treats of the navy and occupies about two-thirds of the volume, are Dr. Jan and Dr. Planté, both senior officers on the active list. For the second section, which occupies the remaining third and is devoted to the mercantile marine, Dr. A. Duchateau, who like his colleagues belongs to the navy, is responsible.

The French navy, in common with the other first-class navies of the world, has undergone such a complete transformation during the last few years, not only as regards ironclads and cruisers but also in connexion with the still progressive development of torpedo vessels and submarines, that the best attention has been devoted to attending to the sanitary details of the new constructions. No war vessel is now projected in which the requirements of hygiene can be said to be unduly disregarded. Of course, everything must yield to expediency. A war vessel is not a pleasure yacht; before everything it must be as good a fighting machine as possible; but in many ways that formerly were overlooked the health, and consequently the efficiency, of the fighters can now be safeguarded without interfering with power. From the point of view of the pure combatant hygiene should by no means be a negligible quantity. In the first subsection of their section Dr. Jan and Dr. Planté deal with war vessels; the internal arrangements of the several types, their habitableness, ventilation, warming, lighting, and water distribution. In the second subsection the mode of life of a modern sailor belonging to the navy is exhaustively reviewed as regards recruitment, duty, general and personal hygiene, and food. The third subsection treats of pathology and prophylaxis in peace time as well as