dentinal tubules were frequently infected from the pulp cavity. While probably any organisms in the mouth could infect pulp, those most usually associated with dentinal infections seemed to be comparatively few in numbernamely, diphtheroids, cocci, and spirochætes.

3. Cementum.-Infection of the cementum was frequent, and three routes could be distinguished—(a) from the pulp cavity and tubules; (b) through the periodontal membrane; and (c) from surface caries. There was evidence that cementum could be infected from a living but infected periodontal membrane. No section showing actual invasion of the cementum by bacteria from the dentinal tubules had been obtained, but one showed its near approach. Another showed surface caries of the cementum, with a thick growth of bacteria on the surrounding cement surface. This layer of bacteria was always found on the denuded roots in pyorrhœal pockets, and explained the difficulty of treating pyorrhœa without thorough cleaning of all such denuded roots.

4. Gums.-In chronic cases bacteria were invariably present in the gums; the most frequent were diphtheroids, streptococci, and staphylococci. In one instance a heavy infection with a sporing bacillus was observed; the gum showed chronic fibrous thickening; there was no pocketing by destruction of the alveolar dental membrane, but only by swelling of the gum, nor was there any ulceration; apparently the bacteria gained entrance through a merely inflamed surface. A section from the gum flap overlying an erupting wisdom tooth in a man of 48 showed dental sepsis at its earliest moment-namely, just as the gum uncovered the tooth and left the crypts open to infection. Here a pure diphtheroid infection was to be seen running up the lymphatics.

5. Granulomata.—Sections of granulomata from the spaces of teeth invariably showed the presence of micro-organisms.

6. Bone.-Sections through the jaws with teeth in situ from cases of advanced pyorrhœa showed heavy infections of the bone, a striking fact being the presence of organisms within the Haversian systems. In several such cases the same organisms (diphtheroids and cocci) were demonstrated in the stomach wall, but the total number of cases examined was not yet large enough to allow it to be stated that the condition was invariably present.

The authors held that the result of their investigation was to establish the immense importance of the mouth as a potential source of disease, but as the research was incomplete they did not presume to draw definite conclusions. They called attention to the striking fact that in all chronic cases any indication of phagocytosis was absent.

ARMY NURSES' PAY.

In the House of Commons on June 5th, Mr. Rendall asked the Secretary of State for War why it was that whilst all ranks in the Armies of Occupation have increased pay, the Nursing Sisters had received no increase whatever, although many had been abroad for years, and some had recently been transferred from Salonika to Batum; whether he was aware that the Sisters who asked to go to Batum have been compelled to pay their messing bills for the whole journey of 6s. a day, although many could ill afford it; and whether he was now prepared to treat the Sisters and nurses working for the Armies of Occupation as fairly in the matter of pay as he had treated all other ranks?

Mr. Forster replied that the Army of Occupation bonus was strictly limited to commissioned officers and enlisted men. Its extension to the Nursing Stafi would be a departure from this rule, but was under consideration. He promised to inquire into the question of the messing charges, and to communicate with Mr. Rendall in due course.

KING'S BIRTHDAY HONOURS.

A very large number of nurses have been mentioned in dispatches for services in Egypt, Mesopotamia, South Africa, British Salonika Force, and Ítaly.

The Royal Red Cross.

The King has been pleased to award the Royal Red Cross to the following ladies of the Nursing Services in recognition of their valuable services with the Armies in France and Flanders :-

Bar to the Royal Red Cross

Miss M. Alexander, R.R.C., Sister-in-Charge, Civil Hpl. Res.; Miss G. M. Allen, R.R.C., A./Matron O.A.I.M.N.S.; Miss A. I. Baird, R.R.C., Sister-in-Charge, Q.A.I.M.N.S.R.; Miss M. C. Laing, R.R.C., Sister-in-Charge, T.F.N.S; Miss L. E. MacKay, R.R.C., A./Principal Matron, Q.A.I.M. N.S.; Miss F. J. Minns, R.R.C., A./Principal Matron, O.A.I.M.N.S. Miss M. L. Bannie, R.R.C., A./Principal Matron, Matron, C. Miss M. L. Rannie, R.R.C., A./Principal Matton, Grandra, Matton, O.A.I.M.N.S.; Miss U. E. Russell-Lee, R.R.C., Sister-in-Charge, Q.A.I.M.N.S.R.; Miss E. O. Scho-field, R.R.C., Sister-in-Charge, Civil Hpl. Res.; Miss A. I.. Walker, R.R.C., A./Matron, Q.A.I.M.N.S.

CANADIAN ARMY MEDICAL CORPS.

Miss E. M. Wilson, R.R.C., Matron.

NEW ZEALAND ARMY NURSING SERVICE.

Miss E. G. Brooke, R.R.C., Matron.

The Royal Red Cross.

FIRST CLASS.

Miss G. A. Aitchison, Sister, O.A.I.M.N.S. (Ret.); Miss M. Ashlin-Thomas, A.R.R.C., Matron, B.R.C.S.;



