Correspondence.

GUN DEAFNESS.

TO THE EDITOR OF THE "JOURNAL OF THE ROYAL ARMY MEDICAL CORPS."

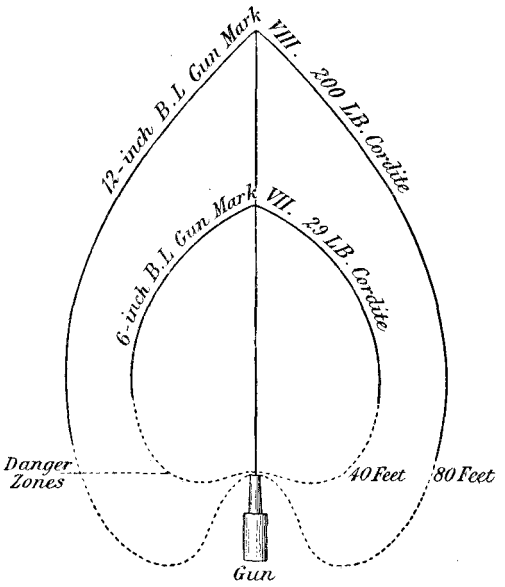
DEAR SIR,—As one whose duties call for frequent attendances at gun-practice, I wish to state, in response to Lieutenant-Colonel Fletcher's letter in the last issue of the Journal, that my attention was first drawn to a substance known as modelling clay as an ear stopping for mitigating the effect of heavy gun-firing on the membrana tympani, by the Chief Inspector in Gunnery, R.A., at this Station (Plymouth). The latter, who was given the clay pellets by a naval lieutenant, reports favourably of its use, and I believe it is extensively employed in the Navy and much liked. Following out this idea, I have recently experimented with a somewhat analogous preparation known as Harbutt's Plasticine, used for modelling purposes in schools, &c. It is sold in different size packets, or a pound can be had for 1s. 6d.

The Agents are Chapman and Hall, Ltd., 11, Henrietta Street, Covent Garden, W.C. The chief advantages that I claim for this substance are: that it is composed of perfectly harmless materials, has highly antiseptic properties, is easily moulded to shape required, and does not dry or shrink, being unaffected by heat, cold or water. Moreover, it is free from the objections noted with reference to the use of wool or "waste," being perfectly clean, and not causing subsequent irritation to the auditory apparatus.

Concerning the prevailing idea against taking up a position in direct line in rear of the gun, this is owing to the possibility of an accident in which the breech might be blown out, or the shell explode unexpectedly, as sometimes happens after a miss-fire; but when the gun itself bursts, such as occurred last summer at Stadden, the safety zone is not easily defined, inasmuch as on that occasion a boy who was standing 150 yards away sustained a compound fracture of the arm as a result of being struck with a fragment of gun metal, whilst one of the Volunteers who was serving the gun got knocked over and became partially paralysed from the shock, and had subsequently to be invalided.

As to the enforcing of measures of a precautionary nature against gun-deafness, so far, no rules on the subject have been promulgated by the Army medical authorities; but that this is a matter of increasing importance goes without saying, and is bound sooner or later to come to the front. I have, however, been able to obtain from the Royal Garrison Artillery orders a diagram showing the curves of safety, which cannot fail to prove interesting to anyone engaged in attendance at gun practice. From this it will be seen that, taking, for example, a 6-inch B.L.

gun, Mark VII., the danger zone corresponds to the dotted line within 40 feet of either side of the muzzle of the gun, and that of the 12-inch B.L., Mark VIII., extending to 80 feet, following the direction of the dotted line, the guns of intermediate calibre showing a danger zone of about 10 feet extra for each inch. In action it is necessary to bear these figures in mind when taking up positions, to ensure that the guns are not ranged too close to each other. Although the 12-Pounder Q.F. gun is of much smaller calibre than those mentioned, I think the effect on the tympanum far more trying, and owing to the greater celerity required in the loading of this class of ordnance accidents are more likely to occur, especially in the manipulation of the breech.



With reference to keeping the mouth slightly open, there are good physiological grounds for this precaution, which were brought home to my mind when attending gun practice some time ago. The firing took place close to a large wooden shed, used as a Royal Artillery store, the walls of the structure being formed of heavy planks partially overlapping each other. On this occasion the usual procedure of throwing open all doors and windows was omitted or forgotten, with the result that, after a few rounds, a portion of the side wall was burst open, causing a large rent, due to the concussion or "blast" of the firing. It is, therefore, obviously wise to maintain the "open door."

There can be no doubt that artillerymen—especially the Royal Garrison

Artillery—suffer more from ear troubles and deafness than other branches of the Service, and it is quite a common practice to have men attend at the Medical Inspection Room for the purpose of having their ears syringed. No doubt the firing has some special effect either in breaking up the wax in the ear or in its secretion; be this as it may, I find that by dropping in some slightly warmed almond oil over-night and syringing with warm soap and water on the following morning, the desired relief is generally obtained and no further trouble experienced for the time being.

In an interesting discourse, given, I think, by Mr. Cantlie, some months ago, at the United Service Institute, on the subject of gun-deafness, a preparation composed of animal wool and moulder's clay was advocated as an ear-plug during gun-firing, and is worth a trial; but from its antiseptic properties, and the facility with which it can be moulded into the external meatus, I do not think any protection yet devised superior or equal to Plasticine, a report on the more extended use of which I shall look forward to seeing in future issues of this Journal.

I am, &c.,

P. G. IEVERS,
Major, R.A.M.C. (R.).

Fort Stamford, Plymouth,
April 10th, 1907.

N.B.—Since writing the above, I distributed Plasticine in pellets amongst a number of men for trial during gun-firing, and found that it proved highly successful in each instance, although experimenting only on those who had previously suffered more or less from gun-deafness.—P. G. I.

PREVENTIVE MEDICINE IN THE ARMY.

TO THE EDITOR OF THE "JOURNAL OF THE ROYAL ARMY MEDICAL CORPS."

SIR,—I have read with interest the letter of Major S. F. Green on the above subject, which appeared in your issue of March last. As a military Sanitary Officer I would like to say a word on the subject.

While entirely in agreement with Major Green's contention that the Sanitary Officer reports to the Principal Medical Officer normally, still in a large area cases must frequently arise when it is necessary to take immediate action on the spot, and to report to the Principal Medical Officer afterwards. Outbreaks of infectious disease, for example, refuse to be restrained by the bonds of red tape, and in such emergencies the military Sanitary Officer must go direct to the General Officer Commanding, or other executive officer on the spot, who can at once transport, segregate, or isolate, as the occasion requires. The fact is, that in a large area the duties of the military Sanitary Officer are those of a Medical Officer of Health, and most of his outside work is done in