

vaccination, particularly by enabling us to keep reliable lymph by us for indefinite periods, and thus provide against the scarcity which used to prevail previous to its introduction. I began to use it in the year 1848 at the Royal Dispensary and Vaccine Institution. A year or two later it was adopted at the New Town Dispensary, and it has been in constant use at both dispensaries ever since. At our institution since 1849 we have vaccinated upwards of 5000 infants exclusively under the use of the tube method, and with the entire approval of the managers and medical officers. Ten years is a long period, and has afforded time for a large induction of cases, and for putting the method thoroughly to the test of observation and experience. With me it has been one long experiment, carried on at no small expense of time and labour; the labour, however, greatly lightened by the extreme facility and expedition with which all the manipulations connected with the use of the tubes are performed. The institution has never once borrowed from the National Vaccine Establishment or from any other quarter; but its lymph has been renewed times without number from its own stock, scarcely ever from tubes which had been kept for less than three days (for we vaccinate only twice a week).

Indeed, I was for several years in the constant habit, for the sake of testing the method to the utmost, of purposely selecting old lymph which had been sealed up, not for hours or days, but for months and years—some of it, I may add, exposed on purpose, for months together, to a temperature of 90° Fahr.; and what has been the result? It is this: I find that it does not signify how long the lymph is kept; whether for two hours or for two or more years, it makes no material difference. My chance of success in vaccinating—that is, of producing perfectly normal vaccine vesicles—is the same, or nearly the same, in every case. It is not perceptibly affected by the length of time the lymph has been kept, and I have, in consequence, found it impossible to run short of vaccine matter, while, at the same time, I have distributed it largely both at home and abroad.

But I may still be asked, "Is the method safe? Granting that you have proved that the lymph retains its activity for years when preserved in this way, does it not acquire deleterious properties? Is it safe to keep it more than twelve or eighteen hours in a capillary tube, and then to vaccinate with it?" For these are the questions which the instructions raise, or rather which they take for granted to have been long ago decided in the negative to every one's satisfaction. I reply, that all my experience has gone to prove that it is quite as safe to vaccinate with old fluid lymph which has been hermetically sealed up, as with fresh lymph transferred directly from arm to arm. But I must not trespass further upon your space, and shall therefore conclude with hoping that what I have said may interest some of your readers, and lead them to inquire into the claims of a method which, while it is, beyond doubt, the easiest and least troublesome of all the methods at present in use, has such evidence as I have indicated to produce in favour of its being second to none in point of safety and efficiency.

I am, Sir, yours, &c.,

WILLIAM HUSBAND, M.D.

Royal Dispensary and Vaccine Institution,
Edinburgh, April, 1859.

ON PARTIAL AMPUTATION OF THE HAND.

To the Editor of THE LANCET.

SIR,—I am induced to forward the following history of a case which was successfully treated at the Southern Hospital, Liverpool, in 1856, as the issue fully corroborates the remarks made by Messrs. Burgess and Home in your recent numbers.

A. B.—, aged twelve, rivet boy at Horfall's foundry, was admitted an in-patient, having caught his hand in some machinery. Upon examination, I found severe laceration of all the soft parts, with comminuted fractures of the three metacarpal bones, a compound comminuted fracture of the index finger, and the pisiform and cuneiform bones hanging. I consulted with my friend Mr. Stephen Walmsley, who chanced to be present, and we decided to endeavour to save the thumb and the metacarpal bone of the index finger. Accordingly, I removed the three inner metacarpal bones at their carpal articulations, together with the pisiform and cuneiform bones, getting a very imperfect flap from the integument of the back of the hand. The wound was dressed with the ordinary water-dressing. The whole of the soft parts sloughed, exposing the joints, &c. Symptoms of tetanus appeared, but were fortunately subdued. The parts took on a healthy action, and the wound healed by granulation. The operation was performed without

the aid of chloroform, by the lad's desire, who sustained a conversation during the time.

I have had opportunities of seeing this patient many times since, and he possesses good use of the wrist and remaining portion of the hand. Many of my professional friends to whom the case was shown condemned my treatment,—the result, I think, shows with what injustice.

I am, Sir, your obedient servant,

E. C. GARLAND, M.R.C.S., &c.,
Formerly Senior House-Surgeon to the Southern
Hospital, Liverpool.

Yeovil, May, 1859.

THE APPREHENDED INVASION: MEDICAL RIFLE VOLUNTEERS.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me space for a very few words? I suppose the most easy-going will scarcely assert, at the present time, that it is quite impossible or improbable that our coasts may be threatened by an invading force. The risk may be small, but the interests threatened are immense; and I can see no wisdom, but the reverse, in persuading ourselves that all apprehension is groundless. Timely fear is the best preventive of fruitless panic. I would gladly think that we have an ample force of regular *British* soldiers to meet all hostile comers. But if this be not so, I am so Quixotic as to feel shame at the idea of sitting at home tamely while the security and honour of my country is in the least degree imperilled. As a professional man, with a wife and children, it is not much that I can do, and it is not much that I would ask others to do. But this, it seems to me, we might do, and should do without delay. Let all who, in case of actual danger, would be willing to strike in defence of their homes, enrol their names as volunteers, undertake to provide their arms, and to acquire some degree of skill in the use of them. Let the Government appoint officers to each regiment of volunteers, and let some rendezvous be fixed on for assembling on occasion of any sudden peril. This, and a little drilling, might surely be done without any serious interruption to our ordinary avocations; and I believe the good effects of it would be very great. We should feel for ourselves that we had risen for awhile above our selfish competitions, and that we were banded together in a noble and righteous cause. We should show other nations that we were not afraid to look our dangers in the face, and that we had not degenerated into a mere money-getting population. We should strengthen the hands of our rulers, and at the same time show them by our energy that we expected the like from them. I am glad that my *alma mater* has taken the initiative in this matter, and I trust the metropolis, and every other place, will follow the brave example.

I remain, Sir, yours very respectfully,

May, 1859.

M.B. CANTAB.

P.S.—I have written the above as a medical man to medical men: it applies, of course, equally to all of every calling.

ANOTHER SUBSTITUTE FOR COD-LIVER OIL.

To the Editor of THE LANCET.

SIR,—Some little time since my attention was drawn to this subject. Finding that so many persons objected to take cod-liver oil, in consequence of its disagreeable taste, and its causing a disrelish for food, I considered that, perhaps, some other oil might have the same good effects without the drawbacks above named.

When in Devonshire, some years since, I found that the labouring class on that part of the coast chiefly lived on the *pilcher fish*, and as they appeared to thrive upon it, also that the pilcher contains a good quantity of oil, I determined to try its effects in the treatment of disease. This I have done with very good results. I applied to Messrs. Perrins and Barnitt, of Conduit-street, Regent-street, London, to procure me some of the pilcher oil. They obtained the fish, and extracted the oil, adding, by my wish, the iodide of iron, in proportion of two grains to each fluid ounce. I have given this medicated oil in all cases in which the cod-liver oil had been ordered, besides several other cases, such as hysteria, &c., and have found it most useful. It is not so disagreeable to take, does not rise, and I consider it feeds and gives general tone to the system much more than cod-liver oil. It is very easy of digestion, consequently the patient gains strength. In consumption, the night perspirations subside under its use; but in some of my lady patients I have been obliged to lay it aside