

I have no particular grievance against any individual public vaccinator; but there is a way of talking about "free" vaccination which seems to imply that it is done gratis; whereas, on the contrary, in many districts the public vaccinators are well paid for the work; and not only so, but the expense of this payment has to be, in part, borne by the very men who suffer when the unscrupulous public vaccinator persuades patients to have the vaccination done "free," rather than allow them to pay the moderate fee of their usual medical attendant. On this point it would be interesting to have the return of fees paid to public vaccinators which your correspondent "General Practitioner" asked for in *THE LANCET* of Nov. 9th, p. 1300.

Nothing to my mind would be more desirable than universal vaccination and revaccination. But I cannot help thinking that this vaccination Utopia would be nearer of realisation if some change were made in the system of public vaccination. Every medical man should be allowed to claim his fees from the Guardians for the vaccination of his poorer patients, and if the Local Government Board are in earnest on the subject they should be prepared to supply lymph, not necessarily gratis, to any practitioner requiring it. Another alternative would be to appoint a number of public vaccinators *who should not be allowed to engage in private practice* in the neighbourhood in which they hold office. The first suggestion is, I think, the better; but either of these systems would obviate the feeling which must arise in the mind of many general practitioners, that the public vaccinator has it in his power to interfere with the patients of other medical men, for the advantage of his own practice.

It cannot be that the authorities do not trust the general practitioner as to his capability; for, though they do not define what is to be considered a satisfactory vaccination, they already accept his certificates for the vaccination of all those who are independent enough to wish to pay for themselves rather than be helped out of the Poor Rate. If the general practitioner were paid by the guardians he could be made to furnish data as to the number of insertions and result, and thus a uniform high standard would be secured; whereas now the general practitioner is left to form his own standard as to what is a satisfactory vaccination.

In conclusion, Sirs, I shall be glad to know if something should not be done to prevent the publication by an association of medical men of such an undignified, and, by implication, unjust, advertisement as the inclosed cutting.

In view of the fact that considerable misapprehension exists in regard to revaccination, the Organising Secretary of the Association of the Public Vaccinators for England and Wales writes to inform the public:—

1. That every person in England and Wales is entitled to demand revaccination at his own house, free of charge, at the hands of the public vaccinator of his district, provided that such person has not been vaccinated or revaccinated within 10 years preceding the date of his demand.

2. That the name and address of the public vaccinators for each district in England and Wales can be obtained from the clerk to the guardians and from the registrars of births and deaths.

3. That public vaccinators are the only medical men who are compelled to use the safeguards prescribed by the regulations of the Local Government Board, and that they are the only persons who can obtain the pure glycerinated calf lymph prepared in the laboratories of the Local Government Board, and that they are compelled to use that lymph in all cases of vaccination and revaccination in their own districts.

I am, Sirs, yours faithfully,  
Harrow, Nov. 9th, 1901. A. H. WILLIAMS, M.D. Edin.

To the Editors of *THE LANCET*.

SIRS,—Under the heading "Vaccination Facilities" there appears a letter in last Saturday's *Morning Post* from the Organising Secretary of the Association of Public Vaccinators. I should much like to ask this gentleman in reference to par No. 3 of his communication (1) whether he considers all glycerinated calf lymph, other than that obtained from the Local Government Board, to be open to objection; (2) whether by using the words, "That public vaccinators are the only medical men who are compelled to use the safeguards prescribed by the regulations of the Local Government Board" he wishes the public to infer that public vaccinators are the only medical men capable of properly performing vaccination; and (3) whether his letter is intended to benefit and enlighten the public or whether it is not, in reality, in the nature of a trades-union circular calculated to boom the public vaccinator at the expense of the private practitioner.

I am, Sirs, yours faithfully,  
ALFRED BALDOCK, M.B. Aberd.  
Barl's Court-road, South Kensington, Nov. 11th, 1901.

## EFFICIENT VACCINATION.

To the Editors of *THE LANCET*.

SIRS,—In connexion with the question of the efficacy of much of the glycerinated calf lymph that is being used for revaccinations at the present time it appears to me that there is another important element in the case to which your correspondents make no reference. When talking to people on the subject (and wherever one goes vaccination is a general topic of conversation just now) one has repeatedly heard the following statement: "I have been revaccinated and it did not take (or it took only slightly) and my doctor says I need not be done again because it shows I am not susceptible to small-pox." In view of the fact that much of the lymph being sold is inert or very feeble, as evidenced by patients developing typical vaccinia after a subsequent revaccination with another sample of lymph, practitioners ought not, I think, to tell their patients that they are insusceptible because they have been once revaccinated unsuccessfully with a lymph the potency of which is in many cases extremely doubtful. Should, unfortunately, our efforts to stamp out the disease this winter be unavailing and the epidemic of small-pox break out in earnest with the approach of the spring, as we may be led to expect, judging from the history of previous outbreaks, the value of vaccination and revaccination will be seriously called into question if many of the so-called "immune" persons—really inefficiently revaccinated and quite unprotected—should acquire the disease. Successful vaccination and revaccination are of such prime importance in connexion with the public health that the Local Government Board ought at once to take the matter in hand, and either supervise the manufacture of the lymph supplied by the various firms or make arrangements whereby practitioners other than public vaccinators may obtain a reliable lymph. At present it is only by going to the public vaccinators that the public are certain of being treated with a potent lymph, and only under those conditions is a negative result of any value at all; even then an unsuccessful revaccination should be repeated in the case of those persons who have not been vaccinated since infancy.

I am, Sirs, yours faithfully,  
DAVID NABARRO, M.D. Lond., D.P.H.

University College, London, Nov. 11th, 1901.

To the Editors of *THE LANCET*.

SIRS,—I am desired by the Executive Committee of the Jenner Society to forward to you the inclosed copy of a resolution recently passed by them with the hope that in view of the great importance of the subject to which it refers you will be able to find room for it in your columns.

I am, Sirs, yours faithfully,  
FRANCIS T. BOND, M.D. Lond.,  
Honorary Secretary.

Gloucester, Nov. 5th, 1901.

[INCLOSURE.]

At a meeting of the Executive Committee of the Jenner Society, held at Gloucester, Nov. 1st, 1901, it was resolved unanimously: That it is desirable in the interests of the public health as well as for the fuller appreciation of the truth concerning vaccination, that in every outbreak of small-pox the authority responsible for the isolation of infected persons should at as early a date as possible, and from time to time during the outbreak, issue for the information and assurance of the public returns of all cases of small-pox under their observation, in a form showing the vaccinal condition of all persons attacked who are alleged to have been vaccinated, in regard to (1) their ages; (2) the time when vaccination was done; (3) the evidence, so far as may be discoverable from scars or other sources, of the character of their vaccination; (4) the type of the attack; and (5) its result (so soon as this can be done).

To the Editors of *THE LANCET*.

SIRS,—The protective influence of vaccination is one of those questions which can only be settled by experiment; talking and writing, discussions on platforms and in newspapers, will never settle it. When Jenner told Hunter he thought he had discovered a protection from small-pox Hunter said, "Don't think—try." Tell an unscientific audience that if the surrounding air were removed a sovereign and a feather would fall to the ground in the same space of time or that water is composed of two volumes of hydrogen and one of oxygen and they will not believe you, but if you remove the air and decompose and recombine the water by two experiments and show your audience that your assertions are true they will see and believe. Also, if it were permissible, I could show them by

an experiment that vaccination protects from small-pox. I would take 20 children, 10 unvaccinated and 10 efficiently vaccinated, place them in some hospital ward, and inoculate all of them with matter taken from a small-pox patient; then they would see that all the unvaccinated and none of the vaccinated took the disease. The experiment would be conclusive and *cadit quæstio*. Mr. Marson tells us that in 30 years no nurse or servant at the Small-pox Hospital has taken small-pox, he having taken care always to revaccinate them on their admission; and further, that when a large number of workpeople were employed for several months about the hospital, most of whom consented to be revaccinated, two only were attacked by small-pox and these were amongst the few who were not revaccinated. Anti-vaccinationists alone fail to see in these facts a proof of the protective power of vaccination. Possibly, if half the nurses had been anti-vaccinationists and unvaccinated, if all of these had been attacked and many of them had died whilst all the vaccinated escaped, they might be convinced; but it is more probable they would ignore all the facts and fall back on their stock arguments based on statistics. Now, statistics are only valuable when compiled with the greatest possible care, and in the matter of vaccination this care has not been exercised. When we bear in mind that in the early days of vaccination, when postmen, grooms, and others were often the operators, vaccinations in thousands of cases were mere shams; that, more recently, lymph was taken from the arm upon little ivory points and kept for weeks and months before it was used, by which time the lymph was as dry, hard, and inert as a naked ivory point; that even now some vaccinations are so inefficient that they leave only one or two imperfect marks, instead of the three, four, or five characteristic ones required by our experts, it is evident that if statistics include persons thus really and truly unvaccinated as vaccinated all arguments based upon and conclusions drawn from such statistics are utterly worthless. What we contend is that efficient vaccination and revaccination confer immunity from small-pox, and we challenge anti-vaccinationists to prove that it does not.—I am, Sirs, yours faithfully,

D. HOOPER, B.A., M.B., M.R.C.P. Lond.

Trinity-square, S.E., Nov. 9th, 1901.

#### To the Editors of THE LANCET.

SIRS,—As supplementary to, and confirmatory of, Mrs. E. Garrett Anderson's letter in THE LANCET of Nov. 9th (p. 1299), may I be allowed to draw the attention of your readers to a correspondence which has been going on in the *Times* with regard to the gross injustice under which the public generally and the medical profession labour owing to the National Vaccine Establishment refusing absolutely to supply calf vaccine to medical men for private vaccinations, so that the lymph from which these vaccinations are performed has to be obtained from outside sources about which nothing is known as to preparation, source, stock, purity, or quality, and this notwithstanding that the establishment is kept up by Imperial funds and for national purposes. Why should this lymph, about which at least we do know something, be reserved and supplied gratis only to that already well-paid monopolist, the public vaccinator? If "efficient" vaccination is a prophylactic against the ravages of small-pox, surely the largest factor in that efficiency is the purity and energy of the vaccine; the person, the mode, and the area being but minor factors compared with this, the essential agent of the process on which the subsequent immunity depends. I venture to say that if a medical practitioner were questioned by his patient as to the source of his lymph in most cases his knowledge would only extend to the agent or druggist from whom he obtained it. Would this be considered really satisfactory by the patient if he knew or cared about inquiring what was being inserted into him? In years gone by we knew something of the strain of babies and their parents from whom we used to vaccinate from arm to arm; are we not sinking further into the mire of ignorance by the way in which we are driven by the supineness or inertia of the nation's vaccine authorities to use the lymph as at present supplied? Again, are we not playing into the hands of the anti-vaccinationists and forging a weapon wherewith they may thrash us? Those who saw the correspondence will notice that one correspondent made the excuse that the principles of the administration of vaccination remain the same as 30 or more years ago, though material change has taken place in the practice; if so, then the sooner the organisation of the administration is brought

up to date the better, for at present there is an anomaly amounting to a scandal, or, as the *Times* puts it, a comedy which might easily be converted into a tragedy.

I am, Sirs, yours faithfully,  
R. B.

Nov. 9th, 1901.

### SCARLET FEVER, SMALL-POX, AND VACCINATION.

To the Editors of THE LANCET.

SIRS,—The invasion of small-pox calls for a careful survey of the forces available to meet it. I do not presume to enter upon the discussion of these forces in detail. I wish, however, to invite attention to one or two questions relating to the infective characters of scarlatina and small-pox and the action of vaccination which appear to have been overlooked.

As to the propagation of scarlatina.—In the *Medical Gazette*, 1850–51, I published a paper "On the Occurrence of a Muco-purulent Discharge in Scarlatina, and on the Importance of this Symptom in Relation to Forensic Medicine." The argument of this paper was based upon a case of scarlatina in a girl, aged about 16 years, which I had seen at the Hôtel-Dieu when a student under Chomel. After the decline of the eruptive stage, and when apparently convalescent, there occurred a muco-purulent discharge from the vagina similar to that which not uncommonly flows from the nares as one of the sequelæ of scarlatina. I afterwards saw a child, 11 years old, who was recovering from scarlatina. It was observed for the first time that she had a discharge from the vagina, and suspicion arose that she had been abused by a lad in the neighbourhood. Dr. Tweedie told me that his attention had never been directed to such an occurrence, and that when a purulent discharge from the vagina was noticed in scarlatinal patients he concluded it to be blennorrhagia.

In 1851 I published in the *Medical Gazette* a paper "On the Occurrence of a Muco-purulent Discharge from the Vagina as a Consequence of Small-pox," and I pointed out that leucorrhœa so arising may be the foundation of persistent leucorrhœa and lead to confirmed inflammation and hypertrophy of the cervix uteri. The etiological error and the disease may be avoided, and the disease be readily subdued if detected early. It is interesting evidence of the action of the zymotic poison throughout the system. I insisted on the expediency of making strict investigation into the state of the vaginal canal, especially at the period of the decline of the febrile symptoms. In order to fix attention upon the origin of leucorrhœa from zymotic disease I proposed to distinguish them by the terms "scarlatinal leucorrhœa" and "variola leucorrhœa." I am not able to determine to what extent these forms of leucorrhœa have been recognised. But there is reason to think that they have not received the attention they deserve from pathological, therapeutical, or medico-legal aspects. It is not mentioned in Quain's Dictionary. But Graves, Scanzoni, and others have since confirmed my observations. A striking example of this oversight may be seen in the report of the Fever Hospital Committee of the Royal College of Physicians in 1900. In discussing the infectivity of mucous discharges, "otorrhœa" and "rhinorrhœa" are mentioned, but no mention is made of the discharges from the vagina or other mucous canals. To this committee which undoubtedly represents the knowledge of the profession in general, the variola and scarlatinal leucorrhœas are but hidden constituents of what I have called "occult leucorrhœa."

How long does the infective property of these vaginal discharges last?—I am not able to answer this question, but it may be assumed that it lasts quite as long as that of the skin and perhaps longer. And without reckoning direct contact with the poison at its seat in the vagina, the deposit of the poison on linen, clothes, and w.c.'s, and other modes of diffusion, must be admitted as probable modes of infection.

How to avoid or minimise this danger?—I have always advocated the use of warm baths, simple or charged with small additions of iodide or carbolic acid. In very persistent cases a small plug of sponge or lint impregnated with a weak solution of iodine may be introduced into the vagina. As the infective poison may be absorbed from the vagina so may the antitoxin.

I think it useful to add a caution as to vaccination. I have seen serious illness follow upon vaccination in adult women. In young healthy children the vaccine matter works its simple course, but in some subjects, especially those in whom some morbid process is at work,