outbreak of diphtheria which occurred in their school from escape of sewer gas into their dormitories, and which prostrated five or six boys, being fatal in two instances. When I took them in hand they were removed from school, and the eldest was not well, but was already complaining of a little soreness in his throat. In about six days he showed two small but most unmistakable patches of diphtheritic false membrane on his fauces, though his temperature never rose above 100° F., his health and spirits scarcely flagged, and he was able to keep about and even walk the whole time, and in two or three days was quite well.

Thus from what I have seen I am certainly of opinion that if we have sufficient time to exhibit arsenic fairly during the incubative stage of scarlatina, and probably of diphtheria too, we may succeed in averting either disease, or failing that, of modifying both to such an extent that they are robbed of their terrors and reduced to mere trivial ailments. I have been in the habit of giving the ordinary liquor arsenicalis, B.P., for obvious reasons pushing it at first about three times a day in as large a dose as I could safely give according to the age of the child, and subsequently slightly reducing the dose. I have usually given with it fifteen minims to half a drachm of sulphurous acid with a little syrup of poppy. This makes a pleasant mixture, and children take it well; in fact, one has to caution parents against giving it too often. It produces no ill effects. Of course I generally see that the various functions are in good order, though I really believe this is quite secondary.

It appears to me that this plan of prophylactic treatment might be adopted in other diseases, and that even hydrophobia might possibly be averted if a person who was bitten could be treated with some such septicide for a fortnight. Much light might be thrown upon this subject by experiments on animals by inoculating several with the hydrophobic virus and subsequently treating a certain number as I suggest, watching the results. Should you think this letter worthy of publication, I should be glad if gentlemen who in any way adopt my suggestions would record the results.

I am, Sir, yours truly,

Finchley New-road, N.W. WALTER G. WALFORD, M.D.

THE SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—As an old life member of the London Society for the Relief of the Widows and Orphans of Medical Men, and as a member of the Kent Medical Benevolent Society, I ask your permission to reply to the letter of Mr. Charles Hawkins, published in THE LANCET of May 13th.

It appears to me that the adoption of his proposal to extend the benefits of the London Society to all medical men practising in England and Wales who might become members thereof, would not only be unwise, but also a breach of faith with those who joined the Society many years since on the express understanding that only members of the profession practising in London and its suburbs were eligible. Such an extension would probably bring in a large increase of applicants for relief without a corresponding increase to the income of the Society. I, therefore, hope that the directors will not entertain or accede to such an alteration of the rules. Moreover, it is unnecessary, because in many of the English counties societies of a similar character are in existence, and, consequently, any increase of members which the London Society might gain by an alteration of its constitution, would be at the expense of county societies having similar objects in view. For instance, the Kent Medical Benevolent Society has been in existence since 1787, and has done a vast amount of good in the way of relieving, not only distressed widows and orphans, but also medical practitioners who, through calamity and misfortune, have required assistance.

At the same time, I quite agree with Mr. Hawkins that it is much to be regretted that during the last few years the medical practitioners of London have not joined the Berners-street Society in larger numbers; and I hope that the effect of Mr. Hawkins's letter will be a large increase of members, not only of those who are likely at some future time to derive benefit from the Society, but also of those members of our profession who are in the enjoyment of wealth and affluence.

There must be but very few practitioners in the great metropolis who could not afford to subscribe two guineas a year to such an excellent Society.

I am, Sir, your obedient servant,

JOHN MARSHALL, L.R.C.P. Lond.

Dover, May 16th, 1882.

Hon. Surgeon to the Dover Hospital.

To the Editor of THE LANCET.

SIR,—I hope I shall not be trespassing too much on your space if I write my experience of the Society in question, and I have no doubt mine is that of many more country practitioners. Some years ago, when I found myself the father of a family of eight children with a poor hard-working practice producing an income of from £500 to £600 a year, I looked about me and bethought myself of the prospect staring my wife and children in the face, in case of my death; the prospect to me seemed to be simply that of starvation or the workhouse. I resolved immediately to ensure. I am now paying £12 a year for £500 at death, which will bring in £20 a year. This small yearly premium is too much to spare out of my income, and I may not be able to keep up the payments; but such is my case, and there are many thousand men in the same position, men who would gladly join the Society if they had the power. This power is withheld from them. I have written to the above Society, or one like it, for I am not quite sure to which Mr. Hawkins is alluding, and the answer I received was: "You are not eligible because you live out of London." This is my experience of what would be a society of immense use and benefit if its protection were extended to the poor medical men outside that wealthy metropolis, London.

I regret the Society decline to give assistance to a widow and her children so long as she is in receipt of £50 a year; for although such a sum may keep life in them, it cannot possibly educate five or six children. That rule might stand in case of a widow without children, but each child ought to have a claim—say £20 for each until it reaches the age of eighteen or nineteen. I believe, moreover, that the resources of the Society might be so developed as to make occasional "grants" or "loans," on proper security, to help the sons of medical men to qualify. Speaking in the name, if I may do so, of those hard-working and poorly paid medical men scattered through the agricultural districts of England and Wales, I say the existence of this Society is unknown. There is little doubt that if it were brought prominently before us and the public, and its doors were thrown open, it would immediately gain members and supporters, and its usefulness would be felt all over the land.

I am, Sir, yours truly,

Bromsgrove, May 16th, 1882.

RICHARD WOOD.

RESPIRATORS AND INHALERS.

To the Editor of THE LANCET.

SIR,—I regret to find that Dr. Hunter Mackenzie considers that I have not done him justice in the matter of his excellent respirator. I am glad that Dr. Mackenzie has written in reference to the subject, and I feel the greatest pleasure in giving him the entire credit due to him. Of course Dr. Mackenzie is well aware that though there is considerable novelty in the mode of employing these respirators, there is really very little novelty in the method of their construction. Such things have been made in London for the past thirty years. Sibson devised a similar arrangement as far back as 1848. Next year Dr. B. W. Richardson, in conjunction with Suow, produced many very various forms for the use of anæsthetics, all of them having valvular ingresses and egresses. Dr. Richardson was the first in 1849 to replace metallic by caoutchouc valves.

Five and twenty years ago Dr. Murphy, my old teacher of obstetrics, of University College, London, introduced a form of instrument having a chamber with cap, as well as in-and-out valves, curiously like Dr. H. Mackenzie's.

Dr. Mackenzie will remember that my paper dealt with inhalants more than with inhalers, and that I ventured to criticise the construction rather than the conception of his instrument. In the examples I had seen the orifices were too small, the valves so thin as to readily curl up, the cap-

holes too scanty, and the cloth padding prone to retain and then to convey infection. (Meyer and Meltzer's modification of the Mackenzie respirator in celluloid is even better in respect of cleanliness, especially since they have adopted my suggestion of discarding india-rubber and using exclusively non-absorbent and incorrodible materials. It is an elegant affair, but its price puts it out of the reach of the poor.) These four points I got Mr. Krohne to alter; but I lay claim to no originality whatever; I merely state that Messrs. Krohne and Sesemann now produce a very complete article at so low a cost as to be within the reach of the necessitous class.

I am sure we are all very grateful to Dr. Mackenzie for the valuable additions he has made to our knowledge of these matters. So far from desiring to palm his respirator off as my own, when I showed the improved form to members of the British Medical Association it bore as a label the words "Krohne's Mackenzie" only, my own name not appearing at all. I need scarcely say that I have authorised no firm to use my name as an advertising medium. I feel sure, Sir, with your love of what is fair and right, you will give this an early insertion, and oblige,

Yours obediently,

May 18th, 1882.

EDWARD BLAKE.

THE NEW REGULATION AT THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Will you allow me a short space to protest against the above regulation, as it affects the method of apprenticeship? With all the exceptions, &c., which, as you have pointed out, almost nullify its object, there is nothing save Rule 3, which I think will only help the ignorant, to exempt an apprentice from it.

I feel most strongly that men who have had a year or eighteen months in the country, with free accession to a workhouse or infirmary, ought certainly to be exempt from this regulation, and to illustrate this I will mention the case of a gentleman well known to me.

A. B. passed the First College in his second summer session, July, 1880, and intended to present himself for the final examination in July, 1881; domestic reasons delayed his final till November, 1881, when he passed, and has since taken the L.R.C.P. Lond., and is now earning his own livelihood. He had been apprenticed for a year in the country before he entered at the hospital. Now, according to this new regulation, he could not go in until the coming July, and a year or more of his life would be thrown away. Why, then, is no provision made? Doubtless the Council consider that our only knowledge is gained at the hospital, and ignore altogether the country practitioner, and look upon apprenticeship as a useless pastime. All I can say is that I always look back upon my apprenticeship as one of the most valuable periods of my professional career, during which I attained much sound practical knowledge, which is not to be gained at a hospital. As you say, a great amount of our time at the hospital is absorbed in attending these "grinds," which consist almost entirely of the college "tips" (we never hear of the "tips" at other examinations), with which we are primed even to within the last few moments of our examination, in the hope that "we may keep up the average of the hospital."

Well, Sir, the outcome of all this, so far as I am able to judge, is that it is not by altering the time of attendance at a hospital, but by a thorough investigation into and readjustment of the system of examining that the tone of the profession is to be raised.

It is a matter of constant occurrence at the College that men with a good sound knowledge of their work get "plucked," and, on the other hand, men with an amount of knowledge that almost amounts to *nil* get through, to the utter astonishment of their fellow-students and their teachers, who are some of them examiners.

If the examination were made more thorough and divested of the "tips," which baffle sound men and give a loophole to the ignorant, we should have far better men in the profession than we shall have by adding another year's time on to the professional course, already quite long enough, and often taxing to the utmost the pecuniary resources of talented men, who can now, by the method of apprenticeship, get

through in three years, and who would prove at a fair examination that they were more fit, both practically and theoretically, to follow their profession than many who have spent their four or five years at a hospital.

Now that I have my pen in my hand, perhaps I may be permitted to speak of another grievance at the College. I refer to the treatment we are subjected to at the hands of the minor officials. It is common to hear men say, "At the College of Physicians we are treated as gentlemen, at the College of Surgeons as pickpockets;" and, to end with, we are attacked by a clerk when we go up for our diplomas, and the weaker of us worried into buying photos of the examiners—for *his* benefit I presume.

I do not urge this against the Council, for I feel confident they only need to hear of it to make a thorough investigation into the matter; they cannot but remember that they once had to go through a similar ordeal, but one which I venture to think might be made almost pleasurable.

In conclusion, I must thank you for the space, and express the hope that the Council will think fit to make some provision for such cases as I have mentioned.

I am, Sir, yours truly,

April, 1882.

M.R.C.S.

PUTRID CALF LYMPH.

To the Editor of THE LANCET.

SIR,—In reference to Dr. Longhurst's letter in THE LANCET of May 6th, as to the special purity of calf vaccine lymph, permit me, as a warning to others, to record a fact, which I have hitherto failed to find stated in the English and foreign literature of vaccination.

On the 21st of May, 1881, after many previous satisfactory trials and purchases of a popular continental source of calf lymph, I received with others a capillary tube of vaccine calf lymph, which I kept carefully in a cool dark drawer till the 18th of July, 1881, or just two months, and upon blowing the calf lymph on to a clean glass microscope slide, I was forcibly struck by its powerfully putrid stench. Of course I did not vaccinate with this sad specimen, which after a very careful microscopic examination did not reveal any contamination by blood-cells.

Having already spent upwards of a year in carrying out original experiments with the view to produce artificial vaccine lymph free from all septic or noxious germs, I venture to hope that you will allow me later to state in your columns the results of my observations, for the criticism of your numerous scientific and practical readers.

I am, Sir, your obedient servant,

J. LAWRENCE HAMILTON, M.R.C.S.

Gloucester-terrace, Hyde-park, W., May 8th, 1882.

To the Editor of THE LANCET.

SIR,—In reply to Dr. Longhurst's letter it can be conscientiously asserted that a trace of blood, which sometimes can be detected in calf lymph, is perfectly harmless. Foot and mouth disease, like all the other infectious diseases, are so easily recognised, they are ushered in with so considerable a rise of temperature, that it is practically impossible that a calf thus affected might be used for production of lymph. Diseases, even wounds, in a calf, are, moreover, sufficient to interfere with the development of proper vesicles; this, and the use of the thermometer, afford sufficient safeguards against risks from animal diseases, and no case of accident has ever been known to occur therefrom.

The clamp, far from being the cause, is the best means not only to collect the lymph, but also to prevent the flow of blood during collection. When the clamp is properly applied to the base of the vesicle, a small drop of blood appears, which must be wiped off; the following lymph is usually quite clear, as it is separated by the clamp from the general circulation. The old practice of cutting off the whole vesicle is quite abandoned (the lymph must have contained a large amount of blood with it), while puncturing the vesicles is quite inefficient and useless, as no lymph can thus be made to flow.

I am, Sir, yours respectfully,

Maylebone-road, N.W., May 9th, 1882.

CH. RENNER, M.D.