learn great dissatisfaction is felt and loudly expressed in the principal centres of population in Russia with the incompleteness of the preparations which have as yet been made for giving winter clothing and shelter to the forces of the Czar, notwithstanding that the necessity had been long foreseen, the winter preparations for the troops are very considerably in advance of those observed among the Turkish troops. Already, indeed, we have news, both from the Balkans and from Armenia, which show that the Turkish forces are rapidly drifting, in too many instances, into a condition similar to that from which they suffered so dreadfully, in common with our own soldiers, in the Crimea during the winter of 1854-55.

The appeal of the Evangelical church in St. Petersburg for help to send Christmas-boxes to the Russian army in Bulgaria, to which we referred a short time ago, has been amply responded to. The reverend pastor of the church, M. Dalton, announces that the Committee of the Evangelical ambulance dispatched on the afternoon of the 15th Dec. no less than 747 packages of Christmas gifts, weighing a little over thirty-five tons. The reverend gentleman observes that this is, perhaps, the largest assignment of Christmas-boxes ever made. Two deacons, three deaconesses, and M. Nicolas de Shubert, in charge, accompanied the gifts in order to superintend their distribution.

Two English medical men, serving with the army of Sofia, under the command of Mehemet Ali Pasha, have received the thanks of that general for their services under fire, and will probably be decorated.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE following has been sent us for publication:—

"DEAR SIR,—I have again to solicit your co-operation, and trust, by its means, to render our Association powerful in action, and worthy of the objects it has in view, namely: 1. The further adoption of the dispensary system in all large towns and rural districts where practicable. 2. The promotion of the interests generally of Poor-law medical officers; defending, if necessary, legally or otherwise, its members against oppression on the part of the authorities. 3. The continuance of agitation in favour of compulsory superannuation.

"The Council of the Association will feel obliged if members, having our interests at heart, will kindly signify to me their willingness to act as local secretaries. On receipt of their consent, a receipt book will be forwarded.

"Council meetings will be held at the Rooms of the Association, 3, Bolt-court, on the first Tuesday in every month (May and August excepted), at 7 P.M., and, for the convenience of provincial members, the time will be 3 P.M. in the months of March, June, September, and December.

"The annual general meeting will be held on the first Tuesday in May, at three P.M., at the Freemasons' Tavern, after which it is proposed to dine at six P.M.; tickets 7s. 6d., exclusive of wine.

"It has been resolved that a special meeting shall be held at Bath during the visit of the British Medical Association, to which all medical men are invited, whether in the Poor-law medical service or not.

"Our financial state continues in every way satisfactory.

"The annual subscription of 5s., constituting a member, is due on the 1st of January, 1878, and can be sent in stamps or Post-office order to me, at 3, Bolt-court, Fleet-street, E.C., the Post-office order to be made payable at Ludgate Circus Money Order Office.

"I remain, dear Sir, yours truly,

"J. WICKHAM BARNES, F.R.C.S.,

"3, Bolt-court, Fleet-street, Dec. 22nd, 1877."

"Hon. Sec.

SOUTH LONDON SCHOOL OF PHARMACY.—The annual dinner of this institution was held at the Horns Assembly Rooms on Friday evening, the 21st December—Dr. Muter in the chair. Dr. Julius Pollock presented the medals and certificates to the following successful competitors:—Senior Chemistry, Mr. Mortlock; Junior Chemistry, Mr. Heywood; Botany, Mr. Murdoch; Materia Medica, Mr. Hutton; Pharmacy, Mr. Mather.

Correspondence.

"Audi alteram partem."

SMALL-POX AND VACCINATION.

To the Editor of THE LANCET.

SIR,—Small-pox is once more assuming formidable proportions in the east-end of London. It is difficult, if not impossible, to doubt that deficient vaccination lies at the root of this and all other similar outbreaks, defect either in regard to the imperfection of the operation actually performed, or in inadvisability of the process as prescribed by law. It is useless to blink the fact that so long as one tittle of rational objection to compulsory vaccination is left for anti-vaccination partisans to stand on, evasion of the law will continue, to the vast detriment of the public, and the multiplication of misery and mortality in the case of children and persons of insufficient intelligence to avail themselves of the immunity provided by Jenner's discovery. It is useless to deny that vaccination by human lymph involves danger of scrofulous, syphilitic, and erysipelatos inoculation. The difficulty of securing with absolute certitude subjects for furnishing vaccine lymph free from constitutional taint is simply insuperable, and the sooner this fact—which few, rather, I would say, no scientific physiologists, no thoughtful medical practitioners of wide experience, contest—the sooner, I say, this fact is practically reckoned with, and the only effectual means taken to obviate it, the sooner animal vaccination will become feasible, nay popular, and whilst truly prophylactic against small-pox, will cease to give rise whether to such catastrophes as so lately occurred at Sheffield, or the almost equally disastrous fear thereof, as I have said in a letter the editor of the *Daily News* did me the honour to insert in Saturday's impression, 8th inst., in which you will find stated:—"Unless the Belgian Government and the heads of the medical profession in Belgium and America are judicially blind, or in conspiracy to impose on their own countrymen and the rest of Europe, the system they advocate and pursue is at least as effective as our own as a safeguard against the specific complaint of small-pox, whilst it affords the gratifying certitude to parents that the erysipelatos, scrofulous, or other forms of infection whatever can be communicated by the process."

I hope very soon to see the use of animal vaccine universally adopted in private practice by my medical brethren. Its use is already extending; but I do not scruple to insist in the strongest terms that it is the duty of the Government, in enforcing animal vaccination, to consult the safety of those who willingly submit to its prescription, and to cut the ground from all recalcitrants by immediately adopting vaccination by pure animal lymph, for the absolute safety and superior efficacy of which we have the word, not of private speculators or a few men of science, but of the Belgian Government and the whole medical faculty of that country, with Dr. Warlomont at its head.

I have the honour to remain, Sir, yours, &c.,

THOMAS WILSON, L.R.C.P. Edin., &c.,

Medical Officer of Health to the Alton Union, &c.

December 19th, 1877.

RABIES AND HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—The importance of the questions raised by Sir William Gull in his letter to THE LANCET of Nov. 17th must be my apology for troubling you with a few remarks on the subject referred to by him. I need hardly state that the position I have the honour to occupy affords me exceptional opportunities for informing myself of the nature and extent of prevailing animal diseases, and although abundant testimony to the wide-spread existence of rabies has been forthcoming during the past two years, it may not be uninteresting to add that during that period over twenty cases of rabies have come under my own personal observation. I mention this not merely to indicate the prevalence of rabies, but that my remarks on certain points may have the

weight of authority which at the present time is so much to be desired. It need not be insisted on that, with our present means, the existence of a poison in the saliva of the rabid dog is no more capable of actual demonstration than are the morbid elements which pervade the virus of other contagious disorders. If, however, a large clinical experience, combined with experimental observation, are to be relied upon, then to me the poison of rabies is a reality. The clinical history of almost every case that has come under my notice, no less than the success which on two occasions has attended the inoculation of dogs with the virus of rabid animals, leads me to this conclusion. Moreover, if we except such rare instances of protracted incubation as are referred to by Sir William Gull, Morgagni, and a few others, the history of hydrophobia in its general outline appears to differ only in the slightest degree from some other contagious disorders, in regard to which we acknowledge the existence of a poison as if it had been physically demonstrated. Although the period of incubation of rabies and hydrophobia varies within the widest limits, it must not be forgotten that the period of latency in other infectious disorders is sometimes remarkably protracted. Thus Fleming, in his "Sanitary Science," speaking of contagious lung disease of cattle, says: "Some observations would even go to prove that a period of nine to ten months may elapse before the disease shows itself." If it be true (as the observations of Sir William Gull seem to imply) that the bitten part forms the matrix in which the poison is retained during its seemingly passive condition, how shall we account for the inactive state of the contagium of pleuropneumonia, a disease which is necessarily the result of infection, and one in which no wound is concerned? Are we to conclude that the disease-producing particles, whose custom (if I may say so) is to pass into the circulation, do on occasions overcome the natural physical and physiological forces, and abide for various long periods in the tissue of the membrane on which they may chance to fall. So far as I am capable of forming a judgment, such an inference cannot be sustained. The ground is too hypothetical, and must yield to the obvious contradiction which the history of inoculable diseases affords. Assuming the contagion of vaccinia and other infectious diseases to be regulated by the same laws which govern the action of the virus of rabies, then, on the hypothesis put forth, we should expect, when vaccination is performed and fails to produce its known effects, that the virus would remain in the part operated on until the necessary condition of system arises by which its activity is developed. On the contrary, it will be admitted that the lymph employed on an insusceptible person exhibits no such stationary condition. Moreover, from all we know of organic matter, living or dead, it is most difficult to conceive the possibility of a protracted resting state in a living organism which in itself is in a state of activity.

On the question of pathology, those who are clinically familiar with the occurrence of tetanus in the dog, and have studied it side by side with rabies, know how broad and well-defined are the lines of distinction between the two affections. A glance at the leading features is sufficient to place aside every consideration in regard to their identity. In tetanus the standing posture is usually maintained, and the animal has no desire to move. The body is more or less curved in one direction or another, and characteristically rigid. The gait is stilty, and a painful whine is emitted with each movement of the frame. No disposition to bite exists at any period of the disease. There is an entire absence of choreic movements and paralysis. Pharyngeal irritation, as ordinarily shown by hawking and sickness, has no existence, nor is there any evidence of mental disturbance. In rabies the posture is changed from time to time, and there is wandering and restlessness. The direction of the body is unaltered, the gait is loose and unsteady, and paralysis sooner or later ensues. There is frequent snapping at real or imaginary objects, and often a resolute destructiveness. Dysorexia is strongly marked. Hawking, vomiting, and other signs of pharyngeal irritation are invariably present, and frequently during the attack a shrill howl is heard, which is followed by a suppressed croaking bark. In dumb madness the depending lower jaw and inability to close the mouth contrast strongly with the closed condition of the mouth in tetanus.

With regard to the effects of local treatment it is much

to be regretted, on the part of the public, and equally so on the part of the Government, that after the loss of so many lives, such ruin of homes, and destitution, any doubt should be allowed to exist in respect to its advantages. For years past this country has been overrun with truant and useless curs, and human life has thus been sacrificed to a neglect of Governmental duty and to morbid sentiment. It is not too much to say that a solution of the question is quite within the reach of experimental inquiry. The inoculation of a comparatively few dogs, and the removal or cauterisation of the bitten part at different intervals after the operation would dispose of all doubt in this matter, and probably settle at once the question as to the period which elapses between the infliction of the wound and the absorption of the virus. It may possibly be objected that the extirpation and cauterisation of the inoculated part in the dog would afford little information as to the effect of the same operations on man; but the most that can be claimed for such an objection is that it is obstructive, and should not, therefore, be interposed. I will here place on record an instance where the application of caustic to the bitten part appears to have had the effect of destroying the poison. The attendant in the dog infirmary at the Royal Veterinary College was bitten by a rabid dog eighteen months ago, and a wound the size of a shilling was inflicted on the fleshy part of the cheek. Ten minutes afterwards it was freely cauterised with nitrate of silver, and up to the present time the man has continued in perfect health.

I am, yours truly,

J. WORTLEY AXE,

Professor of Pathology and Morbid Anatomy.

Royal Veterinary College, Nov. 30th, 1877.

THE CLIMATE OF VICTORIA (AUSTRALIA) FOR PHTHISIS.

To the Editor of THE LANCET.

SIR,—It would, perhaps, have been well if the writer of the remarks on the climate of Victoria, in THE LANCET of Aug. 18th last, in adducing his own case in proof, had given particulars of his illness; whether, for instance, he had had any symptom of phthisis beyond once expectorating half-a-pint of blood, for then could we have formed an opinion of the extent of the curative value of his change of residence and mode of life, as well as of the element of climatic influence. The effect produced by the latter would appear to have been sudden; and, even if alone due to climatic influence, as the tenor of the letter implies, it would not follow that equally quick and effective results should attend others affected by phthisis with more marked symptoms. However extended the study of climatology may have been to lead to so prompt a conclusion after a few months' observation of a particular locality, there is at least one defect apparent in the method of statement that ought to be brought under notice. In comparing Melbourne with Victoria, or both with England or Scotland, total populations are taken without analysis of ages, &c. Now, phthisis being a malady most incident to particular ages, if one community consist of a very large proportion of young children under phthisical ages as compared with the other, the elements of fairly calculating or comparing are at once disturbed, and every conclusion vitiated. The writer would appear unaware of the fact that at the last census of 1871 there were in Victoria, in a total population of about 800,000, 49,000 fewer between twenty and thirty-five years of age than at the former census. Before the fact was ascertained the apparent decrease in deaths from phthisis attracted attention; but I told people to wait for an explanation, that in due time came with the revelation of the census tables. As long as facts of this kind are ignored, all argument must be inconsequential.

Yours, &c.,

South Yarra, Nov. 1st, 1877.

WILLIAM THOMSON.

THE ASPIRATOR.

To the Editor of THE LANCET.

SIR,—I often see this instrument alluded to in THE LANCET. From the description given to me I presume it is the same instrument I wrote to Professor Simpson (of Edinburgh) about, sixteen or seventeen years since. If it is I