with baize-covered tables for the students to sit at and read, and on the tables are fixed glass cases containing bones on which the attachment of muscles is clearly displayed. For the study of physiology an excellent laboratory and convenient lecture-room are provided, and by a simple arrangement of the partition between these they can be thrown into one, so as to make the whole of the side light available for microscopic work. The laboratory is supplied with an excellent collection of physiological apparatus, part of it being purchased by means of a donation from Dr. Henry Muirhead, the rest being the property of the lecturer. The chemistry department consists of a well-lighted and admirably fitted up lecture-room, the table having been specially constructed so as to give the lecturer a free supply of gas and water. Adjoining this is a laboratory capable of accommodating about forty students; it is quite a model of what such an establishment should be, the arrangements for gas, water, light, and test appliances being the best that could be devised. A new feature (as compared with other medical schools in this country) is a toxicological laboratory for teaching the testing of poisons. Much thought has been expended by the lecturer on medical jurisprudence in the arrangement of this department, and there is no doubt it will prove of much use as an aid to the study of an important branch of medical education. Near this is a room, at present unoccupied, but intended for a surgical museum and work-room in connexion with the surgery lectureship. A large and comfortable lecture-room for the other classes is situated on the ground floor, and lighted by an ingenious arrangement of roof and wall light, so as to secure a steady light without glare. Private rooms for the lecturers have been provided, and a private lavatory supplied with hot and cold water. One of the features of the school is a students' room, with lavatory attached; here, in the intervals of the classes, the students may smoke, read, or chat. It will no doubt be much appreciated by those for whose comfort it is intended. These buildings were formally opened and inaugurated on Wednesday evening, Nov. 1st, by a brilliant conversation, which was very well attended by the medical profession in Glasgow and neighbourhood.

Correspondence.

"Audi alteram partem."

THE OPPOSITION OF THE SCOTTISH UNIVERSITIES TO MEDICAL LEGISLATION.

To the Editor of THE LANCET.

SIR,—Will you kindly publish the following letter of Dr. Gairdner's, in reference to his attitude towards proposals for legislation for the creation of three conjoint boards, in place of the nineteen existing bodies in Schedule A of the Medical Act.

Yours truly,

Highbury, December, 1882.

J. G. GLOVER.

"Dear Dr. Glover,—In the only detailed report I have seen of the recent deputation from the British Medical Association to Lord Carlingford and Mr. Mundella (*Scotsman*, Nov. 23rd), I find you referring to my name along with that of Professor Turner, and it would almost appear as if our supposed assent to the principle of a joint board was to be made a starting-point for the further assumption that the opinion of Scotland, or of the Scottish universities, might be reckoned upon in future as favourable to some modification of that principle. Were it not for this suggestion, which appears both in your own remarks and in the leading article in THE LANCET of to-day, I might be content to leave Professor Turner's opinion to be read in his separate memorandum (F) subjoined to the report of the Royal Commission, and my own in my evidence, which you will find not at all in accordance with the views you attribute to me, see especially Nos. 4759–62, 4765–68, 4770–86. It is not my object at present to argue the matter; but as Lord Carlingford and Mr. Mundella, as well as others, may have been misled, I will ask you to secure the insertion of this letter, along with any report that may appear in THE LANCET of the proceedings of the deputation.

"I am, Sir, yours, &c.,

"W. T. GAIRDNER.

"Nov. 25th, 1882."

* * The subject of Dr. Gairdner's letter is noticed in another column.—ED. L.

"PICRIC ACID AND SUGAR TESTING."

To the Editor of THE LANCET.

SIR,—It would be a waste of my time and of your space to discuss the question whether my discovery or Dr. Pavy's criticism bears the impress of having been the more "hastily communicated." Upon this comparatively unimportant question the following reply to Dr. Pavy's letter may perhaps assist your readers to form their own judgment.

Dr. Pavy's statement of his belief that it "would be an absolute misfortune for a more sensitive test than the cupric test to be introduced into general use," would have appeared to me quite unintelligible if I had not lately had the benefit of a few minutes' conversation with him, during which he expressed his fear that a test so sensitive as to reveal the presence of sugar in normal urine would cause practitioners to mistake a physiological condition for diabetes. But surely the true way to obviate so serious an error is not to endeavour to keep the profession in ignorance of the easily demonstrated fact that sugar is a normal constituent of the urine; but to make it generally known, and to supply them with the simplest and surest means of verifying it for themselves. But, says Dr. Pavy, the alkaline sulphides cause the same reaction as grape sugar with picric acid and potash. Granted.

The question, then, is, Are alkaline sulphides always, or often, present in normal urine? There is no known test for sugar which may not give a similar reaction with some other material than sugar. Dr. Pavy, in his treatise on Diabetes (p. 16) states that chloroform, uric acid, and cellulose may cause a precipitate of suboxide in Fehling's cupric solution. To be forewarned of these possible fallacies is to be fore-armed against them. But Dr. Pavy, in his letter, goes on to state that "sulphides of ammonium and potassium are capable of being generated by boiling urine with potash." This, so far as regards normal urine, I am told by much better chemists than myself, is an improbability, and cannot be accepted on the mere *ipse dixit* even of so great an authority as Dr. Pavy. He further states "that a sulphide is actually produced by the action of potash upon healthy urine is shown by the well-known fallacy that Moore's or the liquor potassæ test is open to from the presence of a little lead." I confess that this statement surprises me not a little. It has often happened to me in boiling albuminous urine with liquor potassæ to find the liquid darkened, and a subsequent precipitate of sulphide of lead, the sulphur being a constituent part of the albumen and the lead an impurity of the potash; but I have never observed this change to occur in healthy urine; and since reading Dr. Pavy's letter I have repeated the experiment on normal urine with a negative result, while adding a solution of lead to the mixture.¹

I have also repeated Dr. Pavy's experiment, which consists in forming an alkaline sulphide by boiling white wool with caustic potash. The liquid gives the same colour as grape sugar with picric acid. The addition of equal parts of this solution to healthy urine caused no appreciable change in the reaction with picric acid and potash. Then the question arises if a sulphide exists in the urine in a state to cause the reaction with picric acid, and so to interfere with the test for sugar, can the sulphide be detected by any other test? Obviously it can. On adding a few drops of the above-mentioned white wool product to healthy urine, and boiling with the addition of a minute quantity of lead solution, the mixture was soon blackened by the resulting plumbic sulphide. Again, on adding a few drops of Fehling's cupric solution to the mixture of the sulphide from white wool with normal urine, there was an abundant precipitate of cupric sulphide. The conclusion, then, is that normal urine contains no sulphides, nor any material convertible into sulphides by boiling with caustic potash, and that if from any exceptional condition sulphides are present, they may readily be detected and separated by well-known and very simple methods.

In testing for sugar in albuminous urine, the albumen may readily be removed by boiling and subsequent filtration before applying the picric acid and potash test. That this pre-

¹ Dr. Wm. Roberts says: "It was never found that liquor potassæ containing lead produced a dark-brown colouration with non-albuminous urines, provided, of course, that they were sugar free" (*A Practical Treatise on Urinary and Renal Diseases*, 2nd edition, p. 178).