The receipt of the letter having been acknowledged with merely an official statement that "the Board would take the subject into their consideration," it was judged expedient to seek an interview by deputation, that the important subjects adverted to in the letter, with others relating to union surgeons, might be discussed, and that the opinion and proposed line of action of the Poor-Law Board being ascertained, the future course to be adopted by the Committee might be better defined.

Subsequently, a deputation, of which Dr. Hodgkin, Dr. Barnett, Mr. Liddle, and Mr. Lord, were members, attended at the Poor-Law Board, and had a long interview with Mr. Baines, the president, and Lord Ebrington, the secretary. The subject matters of complaint having been fully and clearly stated by the members of the deputation, the following is the Report which has been sent to us of the remarks which fell from the president and the two secretaries, Lord Ebrington and Mr. Nicholls, the last of whom was a former commissioner.

The PRESIDENT considered that he must in some degree have been misunderstood on the former interview, respecting the power of the Board, he was quite aware of that; and on many occasions it had been exercised favourably respecting the salaries of the medical officers; but with respect to cholera and other epidemics, the Poor-Law Board had not the power to lay down any prospective scale of remuneration for extraordinary services, but the power of granting a reasonable compensation on account of such services was vested in the guardians, and that whenever an increase was proposed, the Board had always much pleasure in confirming it. The general question of Poor-Law Medical Relief, with the scale of remuneration, was so beset with difficulties, owing to the discrepant interests of the parties concerned, that it appeared more and more difficult of adjustment the more it was looked into. The Board had no power to interfere, and order payment for such services as the Board of Health required, —the guardians had, however, by the proviso to art. 172 of the General Consolidated Order.

Mr. NICHOLLS feared that if medical relief were rendered gratuitous to all, it would be open to much abuse, and throw great responsibility on the relieving officer.

LORD EBRINGTON said, even now, where there is no fixed salary, a lax board of guardians and a lax relieving officer often place many more cases under the care of the union surgeon than the real poverty of the applicants render necessary.

It was stated that the *gravamen* of the complaints of the union surgeons rested upon the fact that there was not a fixed standard of payment for medical services.

Mr. BAINES inquired what plan the Committee proposed for that end?

It was replied that there was a very general opinion in the profession, and that it was assented to by the old Poor-Law Commission, that an average payment of 6s. per case throughout the country would be an adequate payment. The Committee had anxiously deliberated on this subject, and believed that the sum named was a tolerably accurate approximation to a fair standard of payment.

LORD EBRINGTON inquired by what means it was understood that the value of a case could be determined?

It was explained that the two elements in constituting the value of a case, were population and area.

A discussion afterwards took place upon the mode of striking a scale of payments upon the elements of population and area.

It was then asked whether the Board had it in contemplation to bring forward any measures of redress during the present Session of Parliament.

The PRESIDENT replied that he was not in a condition to make any pledge that he had.

It was then stated that it was very generally understood that the Poor-Law Board were preparing a Bill providing for a superannuation fund for union officers.

The PRESIDENT observed that it was true such a measure had been in progress, but that he had not yet seen it. It was not intended, however, to embrace the *medical officers* within its provisions.

LORD EBRINGTON stated the principle of the Bill was that of levying a per centage upon the salaries for the purposes of a fund, and was of the nature of an insurance, on the same principle as was acted on in the Treasury and other offices.

A hope was then expressed by the deputation that the Board would devise a means of enabling the medical officers to receive the advantages of such a fund if they should so wish, by admitting them to it as members, at their option.

Mr. NICHOLLS remarked, that this view had suggested itself to them, and promised that consideration should be given to the subject.

In reply to a question from Mr. Nicholls, as to the mode in

which salaries should be computed for unions, it was stated, that the basis of calculation being determined,—namely, population, and number of cases attended, (on an average of three years,)—it would be easy for the guardians, or an inspector, to affix the amount to be paid to the several district medical officers:—thus, in a metropolitan district, two-pence per head on the total population of an union (varying as to the amount of pauperism in its several districts) might be apportioned in the following manner:—Three halfpence per head to be paid to the medical officer of the more wealthy district; twopence-halfpenny to be paid to the medical officer of the more pauperized district.

The Poor-Law Board considered, that the readiness with which medical men sought the appointments presented a formidable difficulty to further burthening the rates in these times.

The PRESIDENT having incidentally made allusion to the Queen's Speech, in reference to sanitary improvements, he was asked if, in his opinion, a union of poor-law duties and sanitary obligations might not be carried out under the General Board of Health? The President begged to be excused expressing an opinion on this point. Much conversation having ensued on the subject generally, the President stated that he was not in a position to pledge himself to any particular course, observing, that great difficulties were in the way of a satisfactory adjustment of the question.

On the deputation retiring, and thanking the Board for the patient and lengthened audience granted, Lord Ebrington replied, that they felt obliged for the many valuable considerations and suggestions afforded by the deputation.

Correspondence.

"Audi alteram partem."

A FEW QUESTIONS—NOT FOR THE FELLOWSHIP.

[REPLY OF DR. AYRES.]

To the Editor of THE LANCET.

SIR,—In the number of your journal for January 26th, I observe a series of physiological questions, addressed to the profession, by Mr. Jackson, to which, I think, it will not be difficult to furnish replies, satisfactory, at once, to the writer, and exonerating the teachers of physiology, and the practitioners of medicine, from the reproaches of Mr. Jackson, and the celebrated theologian and philosopher, Pascal. It must be observed, *in limine*, that the so-called questions are not so much real questions as statements, put forward in the form of questions or arguments, after the Socratic method, and as such they must receive replies. To commence with Mr. Jackson's sixth and concluding question, to which all the preceding questions tend. He asks:—"What will succeeding generations of physiologists think of their predecessors, who, up to the middle of the nineteenth century, could even tolerate, much more teach, such opinions as that the digested food, and drink, pass from the alimentary tube into the lacteals, and through the mesenteric glands and thoracic duct into the left subclavian vein; and that it is the heart that propels the blood through the liver?" Here we have two assertions disguised as queries:—first, that the physiologists of the present day teach that all the digested food, and drink, enter the circulation through the lacteal system; and, secondly, that the heart does not propel the blood through the portal system of vessels.

Now, as regards the first of these assertions, that physiologists of the present day teach that all the digested food and drink are absorbed by the lacteals, and conveyed to the blood through the medium of the thoracic duct, I may remark, either that a long period has elapsed since Mr. Jackson attended lectures on physiology, or, that he has not consulted the recent handbooks and treatises on physiology, none of which, so far as I know, justify his astounding question. Be it known, then, to Mr. Jackson, who so unmercifully falls foul of the physiologists, that Majendie long ago proved, by experiments, that veins absorb; that watery and alcoholic fluids received into the stomach are taken up by the veins, and not by the absorbents; and, as the whole of the venous trunks of the stomach and intestines empty themselves into the portal vein, it is equally conclusive that such fluids pass through the portal, and not only the portal, but the pulmonic circulation, before they enter the general circulation? Other experiments, on the transmission of colouring matters, that of rhubarb, for example, were made in the earlier part of the present century—if my memory does not deceive me, by Sir Everard Home—have demonstrated, that while the colouring matter

could be readily detected in the urine, it could not be discovered in the chyle; whence it was argued, that some other passage must exist for these matters than the lacteals.

From the style of the sixth question we cannot but infer that the disguised assertions contained in question four must be placed to Mr. Jackson's account, as original ideas, taught by no physiologists, and now for the first time put forth for their benefit. It is really a pity to crush such ambitious strainings after originality; but my defence of the physiologists compels me to do so, by a short quotation from a work which Mr. Jackson will do well to study before perpetrating any more "questions." Simon, in his beautiful work on *Animal Chemistry*, (Sydenham Society's edition, vol. i. p. 206,) says: "It follows, from these remarks, that there is no constancy in the deviations of the blood of the vena portæ from arterial and venous blood. The reason of the mutability of the composition of this blood is easily accounted for, if we consider the relation that the ramifications of the vena portæ bear to the digestive organs and the absorbent power of the veins, as shown by the experiments of Majendie, Tiedemann, and Gmelin. The rapid removal of water from the stomach can, moreover, only be explained by the agency of the vena portæ. Hence it is evident, both from my own analyses and those of Schultz, that the blood which is conveyed to the liver by the vena portæ differs in well-fed and in fasting animals. When fluids, containing a smaller proportion of solid residue than ordinary blood, are absorbed by well-fed animals, we may naturally infer that the blood of the vena portæ will be more deficient in solid constituents than either arterial or venous blood. This view is confirmed by the observations of Schultz, excepting in the case of the horse that had been fed with oats shortly before its death, when a greater solid residue was left by this blood than by either the arterial or venous; in this instance, however, the residue was below the ordinary average of either venous or arterial blood. In fasting horses, the average is considerably below the average of ordinary blood."

Here we have a part, but not the whole theory, developed in question four: for Simon was far too cautious a physiologist to affirm that the "ten pounds" of digested food alluded to by Mr. Jackson are transmitted by the portal system. He, like the other physiologists deprecated by our questioner, yields to the veins and lacteals their distinct and peculiar functions; to the former the absorption of such fluids and solids as cannot be at once, and without change, converted into blood; to the latter, the absorption of those alimentary principles associated in the group of protein compounds, which require only change of form to be converted into the blood-constituents. Sugar, starch, gum, alcohol, fat, and other similar compounds (considered as the elements of respiration), which require to undergo destructive changes in the system, undoubtedly find their way into the portal system, while animal and vegetable albumen, fibrine, caseine, and their modifications,—which, as I before said, undergo change of form alone,—are chiefly, if not wholly, transmitted through the lacteals; and by the conjoint action of the portal system and the lacteals there is little doubt that even ten pounds of food, or, as Liebig says, in the original German of his "*Animal Chemistry*," half a calf may be digested, and its nutritive materials conveyed into the circulation.

The foregoing quotation and observations afford, I believe, a complete answer to questions one, two, four, six, and, by inference, also to question three, which, however, on account of the sneer contained in it, deserves separate notice. Where, asks Mr. Jackson, do the constituents of the pills, powders, draughts, &c., administered by the medical practitioners, go to? "Can it be true that the prescribers of pills and draughts in the middle of the nineteenth century are ignorant of what becomes of them after they are swallowed? Tell it not in Gath!" Now, Sir, although the medical practitioners of the nineteenth century are not ignorant of the channels by which the components of pills and draughts enter the system, they, including Mr. Jackson, are totally and entirely ignorant of what becomes of them; and I may safely aver, that if Mr. Jackson will, instead of rushing into type with questions which have been already answered by physiologists, set to work, and ascertain what really does become of the remedies administered, what changes they undergo, and what changes they effect, he will confer the greatest possible boon on the profession, and shall have a niche in the temple of medical science.

Having occupied—very unprofitably, I fear—so much space in the discussion of Mr. Jackson's first proposition, I will be brief with the second, which refers to the mode of propulsion of the blood in the portal circulation. The full exposition of

Mr. Jackson's views being contained in question five, he asks—"If the vessel which takes the blood to the lungs—the pulmonic afferent vessel,—and which consists of a heart and artery, and which terminates in the pulmonic capillaries—propels the blood through those capillaries; and if the vessel which takes the blood to the general system—the systemic afferent vessel, and which also consists of a heart and artery, and which terminates in the systemic capillaries,—propels the blood through the systemic capillaries,—why should not the vessel which takes the blood to the liver—the hepatic afferent vessel, and which consists of a spleen and vein, and which terminates in the hepatic capillaries—propel the blood through the hepatic capillaries?"

Nothing is more easy than to draw false analogies to place propositions in a parallel series which are not really parallel. The analogy between the spleen, the pulmonic, and the systemic hearts, fails in one important particular, the absence of muscular fibres, the agents of motion in the former, their presence in large numbers in the latter, the capsule of the spleen being well known to be possessed of elasticity alone. Again, the pulmonic and systemic hearts receive all the blood from the systemic and pulmonic capillaries, while the spleen is connected with only one of the venous trunks, which unite to form the vena portæ, and can for this cause only exert a trivial action on the contents of the other veins. As far as our knowledge at present extends, we have every reason to believe that the blood of the portal system is propelled by the same means as that of the systemic veins; but whether the propulsion is effected by the force of the heart alone, or assisted by the contractility (muscularity?) of the capillaries, is not satisfactorily determined.

I hope, in conclusion, that Mr. Jackson, to whom I am a perfect stranger, will take this reply to his questions in good part, and bear in mind, that when opinions are committed to the press they become public property, and obnoxious to public criticism.—I am, Sir, your obedient servant,

Wandsworth-road, Feb. 1850.

PHILIP B. AYRES, M.D. Lond.

To the Editor of THE LANCET.

SIR,—I have just perused, in *THE LANCET* of Jan. 26th, a paper by John Jackson, Esq., surgeon, entitled, "A Few Questions—not for the Fellowship." Now, as from the tenour of these queries the author appears rather ignorant of the present state of physiological science, and inclined to think much too disparagingly of the knowledge of the profession at large, I think it right to endeavour to enlighten him a little. The sum of his remarks may be briefly expressed. Does the whole of whatever is swallowed, food, drink, or medicine, find its way into the lacteals and thoracic duct, and if not, how is it disposed of? After propounding this, he ventures on a suggestion of his own, more distinguished, perhaps, for ingenuity than originality, to this effect—May not the gastro-intestinal bloodvessels perform the function of absorption? Now, if Mr. Jackson will take the trouble to peruse any standard modern work on physiology—say Kirke's, and Paget's, or Dr. Carpenter's—he will find the fact plainly stated, as proved from the results of experiments, that the bloodvessels of the alimentary canal are capable of absorbing, and do absorb, a very large amount of the ingesta. Water, most fluids, soluble saline matters, many odorous substances, and the active principles of many medicines, are probably, when swallowed, always absorbed by the bloodvessels. And this fact I believe to be generally known to the medical profession—at least, it has been taught in the schools, to my certain knowledge, for years. Therefore, Mr. Jackson will perceive that he has been in error, both in supposing his suggestion a new one, and in supposing that the majority of the profession are ignorant of one of the best established facts in physiology.

I remain, yours obediently,

H. J. WATERLAND, M.R.C.S. & L.A.C.

Kirton-Lindsey, Feb. 5, 1850.

QUESTIONS FOR THE COLLEGE COUNCIL.

To the Editor of THE LANCET.

SIR,—Your continued and strenuous endeavours to promote the interests of the present members of the College of Surgeons merit their warmest thanks. There is one class among the members, however, whose interests ought not to be overlooked, and whose claims require bringing forward whilst the proposed changes with regard to the fellowship are still in agitation.

You would much oblige me, and very many situated as I