

Owing to the large amount of carbolic acid held in solution by the absolute alcohol and the ease with which the alcohol evaporates crystals of carbolic readily separate out and render the fluid not only difficult of transport but also awkward to work with. It is certainly a delicate test for albumin, but not so delicate as salicyl-sulphonic acid, Millard's reagent or Tanret's solution. Great delicacy is not, however, an advantage in clinical work and, as I have pointed out, is a serious objection to salicyl-sulphonic acid as a routine test. The precipitate produced by carbolic acid and alcohol in albuminous urine is not easily seen, especially where it is faint, owing to the tendency of the urine and the reagent to mix. Further, the milkiness produced by the emulsification of the phenol by the water of the urine is a serious drawback. Nucleo-proteids give a well-marked reaction and this, unless Dr. Colquhoun has excluded it, may perhaps account for the albumin in small quantities which he has found in such a large proportion of his patients. Although filtration will remove the obvious "mucous" cloud it does not remove the nucleo-proteids.

While allowing that Dr. Colquhoun's method of estimating the relative delicacy of his test has the claim of simplicity I think that in using egg albumen and from it drawing inferences as to the reaction of the albumin found in urine he is making an assumption for which at present there is no justification. In fact, as Dr. Colquhoun himself mentions, in coagulating temperature and its reaction with ether egg albumen differs from the albumin of serum, and in view of these facts we cannot assume that their reactions with other reagents are the same. It therefore seems to me that in spite of the greater difficulty and complexity of the method with care a more truly accurate estimation can be made by examining albuminous urines and then separating out and weighing the albumin. Urine is such a highly complex and variable fluid that inferences drawn by comparison from artificial solutions are, I think, to be avoided as far as possible until we know much more than at present of the nature and properties of its constituents.

I am, Sirs, yours faithfully,

P. J. CAMMIDGE.

St. Bartholomew's Hospital, E.C., May 15th, 1899.

#### *To the Editors of THE LANCET.*

SIRS,—I beg to make a correction in my paper and also to add an amendment. The word "saturated" escaped my scrutiny. As a matter of fact the solution which I have used for the last six months consisted of about five parts of saturated solution of carbolic acid in absolute alcohol to three parts of absolute alcohol. The test as I described it is a slow one and perhaps confusing to those who have not experimented on solutions of albumin. An immediate result is obtained by warming the fluid to be tested to about 70° C. and then pouring the carbolic solution to the amount of about one cubic centimetre on the surface from a pipette so that it penetrates the albuminous fluid to some depth before rising. The warming may be continued so as to avoid all milkiness from separation of carbolic acid. A pearly milkiness due to albumin at once appears and is quite diagnostic. The test is quite as delicate as I described it and is worth mastering.

I am, Sirs, yours faithfully,

May 15th, 1899.

WALTER COLQUHOUN.

### THE CENTENARY OF THE CHARTER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

#### *To the Editors of THE LANCET.*

SIRS,—It is sincerely to be hoped that your appeal to the Council of the College to make some recognition of the Members a part of the centenary celebration will meet with a response. As you say, nothing could be more fitting than such a step at the present time and it cannot be "beyond the wit of man" to devise a plan by means of which the Members may be accorded a share of representation without interfering with the just rights of the Fellows. The scheme of the Members put forward two or three years ago was rejected by the Fellows and Council; let the latter now try their hand and their proposals will be received with respect by all. There is nothing whatever irreconcilable in the attitude of those Members who have taken up this question. They consider that their claim is a just one in view of the

constitution of the College, but they are quite willing to accept any reasonable proposals and to leave the settlement of details to the Council.

I am, Sirs, yours faithfully,

May 16th, 1899.

W. G. DICKINSON.

### THE FEES OF MEDICAL WITNESSES.

#### *To the Editors of THE LANCET.*

SIRS,—It is satisfactory to find from the leading article in THE LANCET of May 6th that attention is at last being called to the inadequate fees paid to medical witnesses in criminal courts. The members of no other learned profession would consent to leave their work and possibly travel many miles for the sum of a guinea a day, second-class return railway fare, and 2s. 6d. a night. I have occasionally to go to an assize town 50 miles away and have been detained there for a week or more. The fees earned have not paid my expenses. My patients have been left in charge of a locum-tenent to whom I have to pay three guineas a week. Irrespectively of operation cases, the total loss on the week's work has been about six guineas. Since this arrangement affects so slight a proportion of the people of this country it is doubtless deemed a small thing by the Government, but it is a very real hardship and heavy burden on a class of men whose services in the detection of crime are of value to the State. It is deeply to be deplored that the Home Secretary does not see his way to help us, more particularly as the amount of increase in the fees would be so small a sum in the aggregate. Surely two guineas a day is the very least that ought to be offered for the exclusive service of an expert who often makes more than twice that amount at home. I sincerely trust that you will kindly continue to help us in the matter.

I am, Sirs, yours faithfully,

May 17th, 1899.

PSEUDONYM.

### MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

#### *The Never-ending Sewage Difficulty.*

THE adjourned Local Government Board inquiry into the bacterial sewage purification scheme of the Manchester Corporation was closed on May 1st, and the next day the Commissioners, Major-General Crozier and Dr. Theodore Thomson, paid a visit of inspection to the works at Davyhulme and the corporation land at Carrington and Flixton. The application of the corporation was for sanction to borrow £160,000 to cover the estimated cost of the scheme. This inquiry occupied two days in January, when the evidence of experts with regard to the bacterial scheme was given, and it was then adjourned to enable details to be prepared and further experiments made at the Davyhulme works. Though the scheme is of immense consequence to Manchester, the interest it excites is not merely local, but widespread, and it is said that authorities throughout the country are watching its progress in the hope of benefiting by her costly experience. Dr. Percy Frankland and Mr. W. H. Perkin, jun., Professor of Organic Chemistry at Owens College, both said that the experiments continued to be highly satisfactory and that there could be no question that the scheme was capable of producing a satisfactory effluent. Mr. Gilbert J. Fowler, the resident chemist at the works, gave elaborate detailed evidence as to the weekly results of the experiments with the bacteria beds. He said that the effluent at its worst improved the quality of the water of the Ship Canal. At present, however, that might easily happen. Dr. Thomson said that Mr. Fowler was to be congratulated on the amount of labour involved in the preparation of his evidence—"the work contained in the documents and tables upon which it was based was really monumental." The report will be anxiously awaited. The summons against the corporation for penalties for fouling the Irwell and Mersey was again adjourned by Mr. Yates at the Strangeways County Court from May 4th to 30th. At the last meeting of the City Council Sir Bosdin Leech, chairman of the Rivers Committee, spoke of the difficulties arising from the pouring into the drains of noxious fluids from various manufactories "at irregular intervals in large quantities, sometimes acid, sometimes alkaline, and often charged with chemical or other matter that came down without warning and necessitated an immediate change of