THE ANALYST.

WATER ANALYSIS.

WE have before drawn attention to the question of the analysis of water by public analysts. There is no doubt that water ought in the ordinary course to form a fairly remunerative part of an analyst's practice, and that the office of public analyst should secure for a competent man an increase in the number of samples of water submitted to him. But we regret to have to point out once more that a number of Public Analysts appear to be analysing waters as if they were included under the Sale of Food and Drugs Act. We thought some time ago it was enough merely to draw attention to the second section of that Act; that section enacts that the term "food shall include every article used for food or drink by man OTHER THAN DRUGS OR WATER." There are no other words in the Act which in any way qualify or limit the definition here given, and it is perfectly clear that all public analysts are entitled to charge for samples of water as if they were independent or private samples instead of analysing them as part of their official duties as public analysts. Some few may consider that this is a matter which concerns themselves only, but it does not appear so to us. On the contrary it is tolerably notorious that because in some districts samples of water are taken as if they were samples of food, analysts in other districts are expected to do work which the Act never intended to be given to them at unremunerative rates. We do trust that in future we shall not hear of any samples of water being analysed except for separate fees on a fair scale.

SOCIETY OF PUBLIC ANALYSTS.

As the Meeting of this Society is held on the day we go to press we are compelled to hold over our Report of the Meeting until our next number, but we publish one or two papers which are to be read before the Society on that occasion.

THE AMENDMENT OF THE SALE OF FOOD AND DRUGS ACT.

BY A. WYNTER BLYTH.

Read before the Society of Public Analysts, on the 20th March, 1878.

IN this short paper I am going to strictly confine my remarks to a proposition or suggestion substituting a peculiar system of reference from one analyst to another, instead of the present Court of Appeal in Somerset House. That the present system is in the highest degree unsatisfactory, not alone food analysts but the general public are quite united in agreeing, and without attempting to prove what requires no proof, I may shortly state that in nine cases out of ten it is, as has been frequently pointed out, a reference from a higher to a lower authority. If, for example, Dr. Dupré, whose experience in the analysis of wine must be very great, should certify to the sophistication of a given sample, his decision is liable to be reversed by chemists, who have never by publication, or in any other manner, proved that they possess any special practice in, or knowledge of, that particular subject. Such a case would be somewhat analagous to the

decision of a judge, versed in criminal law, being referred to a solicitor in Government pay. If, however, experience had in any way justified the objectionable clause in the Sale of Food and Drugs Act, the anomaly, though still existing, would not have been worth notice; but experience more and more serves to strengthen the suspicions that secret methods infallibly excite, and the vague reticence and inconsistency of the Government certificates confuse the magistracy, perplex the analyst, and provoke at once the gratitude and contempt of the guilty tradesman. Opinions may differ as to the necessity of appeal at all, although there can be no difference as to the undesirability of continuing the present system.

Allowing, however, that in the nearly 16,000 analyses of food which appear to be made yearly a few mistakes are possible, it may be freely conceded that any suggestion which would protect a really honest trader from the accident of a false accusation on the one hand, and on the other support the food analyst in the conscientious discharge of what is often an unpleasant duty, should be considered.

The aim of appeal is the protection of the innocent, not the double conviction of the fraudulent; and it is self-evident that the best protection of the former is to take every precaution that the accusation is well founded, and to render it almost impossible for any analyst, even should it happen that he is hopelessly unfit for his post, to give an untrue certificate, for it must be remembered that in the case of an accusation, subsequently shown to be unfounded, the injury lies in the accusation itself, and cannot be wiped away from record or memory; nor can you ensure that each living soul, who has heard or read the original charge, shall also hear or read the subsequent justification, and even if that could be done, how often it happens that the former is spirited and sharp, the latter dull.

My proposal is this:—

The analysis of all adulterated samples, by two independent analysts, the local analyst and a referee.

No charge heard, or summons granted unless supported by a joint certificate.

This scheme is neither wild nor visionary. It would require a system of referees, which might follow the registration divisions, viz., one or more for the Midland Counties, one or more for the Northern, for the South Western, &c., &c., the Metropolis and certain large towns being, of course, treated separately. The referees would naturally be appointed from the Society of Food Analysts, or at all events no referee who had not paid attention to the subject could be considered a desirable appointment.

The details of the system would be something like the following:—There would be, say referees, A, B, C, D, for the Northern, Midland, South Western, and Eastern Counties, and taking the district A there would be analysts d, e, f. Either of the latter receives from their inspectors a certain number of samples; a few of these are found adulterated. The local analyst immediately forwards to A his sample, stating, if necessary, the processes he has employed and his conclusions. He also sends notice to the person who submitted to him the sample requesting him to forward his sample to the referee. If the conclusions of the latter are pretty well identical with the former, the referee merely countersigns the certificate; if he differs entirely, a certificate would be merely given that there is a difference of opinion with regard to the sample in question, and then, of course, no action could be taken.

If the referees A, B, C, D, are themselves in practice as food analysts, A's samples

would go to B, B's to C, and C's to D, or otherwise as the Local Government Board might direct.

The expense of the double analysis should, in every instance, where a conviction is obtained, be deemed part of the costs—the few cases in which a difference of opinion would exist, would have to be paid by Government.

There should be no jealousy with regard to the appointment of the referees; they would probably be selected by the Local Government Board; and there should, on the part of the referees, be no assumption of superiority or precedence over their brother analysts.

The only real objection to the scheme that I see is the possible protection and perpetuation of incompetence, as we all know several so-called analysts have disappeared, having been compelled to resign their posts, and one can readily see that a competent referee would protect a very ignorant man from the ordeal of cross-examination in a public court.

This is not, however, an insuperable difficulty, for I apprehend that all the certificates, both of conviction and of difference, could be transmitted to the Local Government Board, and that thus an analyst, unfit for his post, would be quickly discovered and dismissed.

We can, on very few questions, hold the same opinions, but should a majority of the food analysts agree with me as to the desirability and expediency of this scheme, I trust they will lose no time in trying to get it embodied in any amended act.