THE CHEMICAL NEWS.

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PROPOSED TOXICOLOGICAL COMMISSION.

TOXICOLOGICAL science has of late years made great advances, and as far as inorganic poisons are concerned, it may almost be regarded as perfect. By a few experiments with trustworthy reagents in the hands of a competent and conscientious chemist, the presence in the body of the smallest quantity of a mineral poison which can destroy life or even affect health, is easily and distinctly demonstrated beyond the possibility of a doubt. It is otherwise, however, with the organic poisons. Although some of these are easily recognised, there are many which we have at present no means of identifying, and we lately saw in the Poplar case the prisoner acquitted, merely for the want of this positive identification. With regard to this particular case, we may remark, that a substance possessing all the physical characters of the matter which Dr. Letheby extracted from the stomach of the deceased, and capable of producing all the symptoms of which she complained, may be extracted from the shell of the cashew nuts which are commonly sold about the streets of London. It was introduced into medicine a few years ago as a vesicatory, under the name of *Cardole*, but it is little known to the medical profession. The acrid properties of the nutshell, however, are well known to children who have blistered their mouths in extracting the kernels. Cardole, as usually prepared, though proving fatal to small animals, does not kill them so rapidly as the matter Dr. Letheby obtained from the stomach of the victim in the Poplar case; but it is likely that the means by which the doctor separated the poison may have procured it in a purer and more concentrated form. The subject certainly deserves further investigation, for here is a dangerous poison within the reach of any one who is acquainted with its properties, and wicked enough to make use of them.

We have made these observations partly with the view of introducing the following suggestion made in the last number of our valued contemporary, *Chambers's Journal*, a suggestion well deserving the attention of the public and the Government:—

"The recent poisoning cases, though no longer exciting public attention, are not forgotten among those by whom it is most to be desired they should be remembered — namely, men of science; for if it be true that the poisoner's skill has outrun the means of detection, so much the more need is there that chemistry should make a step in advance. This step, however, can only be made after a series of experiments of a highly refined character have been carried out; such as will enable the chemist in his laboratory to detect the subtlest cases. Results of this importance, involving a considerable amount of expense and labour, are beyond what we commonly expect ftom spontaneous individual research; and the subject is felt to be one which should be taken in hand by government. Let the proper authorities appoint a commission of two or three of our most competent chemists to work out a more perfect method of analysis than that at present in use, and pay them sufficiently, and there is good reason to believe that the result would be accomplished. Seeing that the public at large would be benefited by the result, there seems nothing unreasonable in looking to the public purse for payment; yet, taught by experience, no one is solicitous to bring the question forward, seeing how prone some feeble-minded members of parliament are to get up and oppose any scientific grant, especially one for the purpose of testing the effects of poison on animals, by the remark, at which the House is sure to laugh, that 'We don't want the public money wasted in poisoning dogs and cats.' It is only at times, and by a struggle, that the thousand pounds set down in the estimates for the encouragement of science does actually get voted; and yet the appropriation of that sum has hitherto rendered singular service to the mechanical, astronomical, and physical and chemical sciences. The poison-question is, however, of that importance that we trust it will not be allowed to slumber; and we make these remarks in the hope that it will be kept awake. We recommend it as a proper one for discussion to the CHEMICAL NEWS, a periodical which is to be supported by chemists in all parts of the realm."

Our toxicologists are real detectives, and the suggestion ought to be carried out merely as a matter of police. What is wanted is a general scheme for a complete examination of any suspected matters *for all known poisons*, and we are confident that we have Toxicologists who could supply us with this, if they had any inducement to devote the time and labour which would be required for the preliminary researches. There can be no doubt that the best preventative of crime is certainty of detection; and nothing would do so much to stop poisoning as the knowledge that the poison is sure to be discovered.

SCIENTIFIC AND ANALYTICAL CHEMISTRY.

Method of separating Phosphoric Acid from Bases, and principally from Alumina and Iron, by M. SCHULZE.

THE following method has been adopted by the author for the estimation of phosphoric acids in soils. We take about 50 grammes (770 grains) of the earth, and ignite it destroy the organic matters, and then dissolve it in hydrochloric acid. The filtered liquor is nearly neutralised by dilute ammonia, care being taken not to reach the point when the precipitate of oxide of iron becomes permanent. The solution ought now to amount to about a pint and a half. We now add 35 or 45 drops of perchloride of antimony, and set it aside for 12 or 24 hours. During this time there is deposited a yellowish-white flocculent precipitate which contains all the phosphoric acid, but is principally composed of antimonic acid, carrying with it some oxide of iron and alumina; it contains besides a quantity of ammonia, in proportion to that of the phosphoric acid. The precipitate, well washed with distilled water, is boiled with soda ley containing a certain amount of silicate. After boiling, the liquid is filtered; the oxide of antimony, changed into antimoniate of soda, remains on the filter with the alumina and oxide of iron. The filtered alkaline so-