

THE CHEMICAL NEWS.

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THE ADULTERATION BILL IN THE CITY.

WE are happy to be able to announce that the City Commissioners of Sewers have unanimously resolved to adopt the Act for preventing the Adulteration of Food and Drink. The resolution does them great credit, but the refusal would have been a greater disgrace. It is an extraordinary circumstance in legislation, and an example which we hope will never be followed, that an Act of Parliament for the prevention of fraud should be only permissive. What, we may ask, is the moral difference between the negotiation of a forged bill of exchange and the sale of a worthless for, and at the price of, a valuable article? And in what does the certain and serious injury to the body, which may result from the ingestion of a poisonous substance, differ from that which may be occasioned by a common assault? And what would be thought of an Act of Parliament which made the punishment or prevention of assault and forgery dependent on the will of a local board? It may be answered, that such an act would be sure to be adopted. But how, if the adoption depended on the will of many who might possibly profit by the non-adoption?

It may be thought invidious to continue this line of argument, and we willingly quit it for the more pleasant task of congratulating the public and profession on the resolution adopted. The object of the Act is not so much punishment as prevention, and this happily it is very easy to accomplish. The adulterator will now be in constant fear of detection and exposure, which, in the absence of a higher moral feeling, will probably deter him from continuing his nefarious practice. If not, it will be the fault of the public if the Act be not put in force against him; and beyond this it must be remembered that the common law still affords compensation for injury and fraud sustained in consequence of adulteration, but unfortunately very inadequate, because expensive and troublesome to obtain, and moreover uncertain.

We cannot conclude without a remark on the analyst selected. In this instance no better appointment could have been made than that of the medical officer to the City. Few chemists have had so much practice in the detection of adulterations as Dr. LETHEBY. He took a leading part in the analytical sanitary commission of the *Lancet*, whose discoveries led directly to the passing of the Act, and he is properly rewarded by an appointment under the Act. It has been generally supposed, however, that most of the posts would be filled by the medical officers for the districts, but this we conceive would

be a great mistake. Beyond three or four gentleman in the metropolitan districts, who are eminently qualified for the appointments, it is no disrespect to the majority, in the absence of further evidence to the contrary, to say that the posts would be much better filled by those who have devoted themselves exclusively to chemical pursuits. The simplest analysis is after all not an easy task to unpractised hands, and the detection of some adulterations requires no ordinary analytical skill.

As to the salaries it ought to be at once understood that the highest fee receivable under the Act is a very insufficient remuneration for more than the most cursory examination of a substance; and the amount of fees received would therefore be but a small reward for the labour and skill devoted in honestly carrying out the purposes of the Act.

SCIENTIFIC AND ANALYTICAL CHEMISTRY.

Notes on some of the Chemical Reactions of Corrosive Sublimate, by T. G. WORMLEY, M.D.

(Concluded from page 182.)

XI. Copper Test.—This test consists in introducing into the corrosive sublimate solution a small slip of clean copper foil, which will cause a decomposition of the mercury compound, with the deposition of metallic mercury upon the copper. The delicacy of the test is much improved by acidulating the mercury solution with hydrochloric acid, and also by heating the acidulated solution. In the following experiments a grain measure of the mercury solution was placed in a watch glass, and acidified with hydrochloric acid; the slip of copper being introduced into the solution, it was heated over a small flame of a spirit lamp.

1. $\frac{1}{100}$ th grain of corrosive sublimate will impart to the copper an immediate silvery lustre, which soon becomes grey, and then dark grey; this reaction takes place equally well without the hydrochloric acid, or heat. The copper should not be less than about $\frac{1}{2} \times \frac{1}{15}$ inch, otherwise some of the mercury will become detached. After allowing the copper to remain in the solution for several minutes, it is to be removed and carefully washed with a small stream of water from a wash-bottle, or with water containing a little ammonia; it is then gently pressed between folds of filtering paper until perfectly dry. It is now placed in a small and perfectly clean and dry reduction tube; heat being applied to the closed end, the mercury will volatilise and condense a little distance above the point heated, in the form of a mist-like deposit, very readily discernible by the naked eye. If the sublimate be examined with a low power of the microscope, it will be seen to consist of innumerable spherical globules, which are opaque by transmitted light, and present a very bright silvery lustre under inci-