

the extraction of emetine from the deposit, either ether or benzine may be employed, and the after treatment of the solution is similar to that in which extract of ipecac was used. It is possible that petroleum benzine might be substituted for the above-named solvents. With regard to the precipitation of emetine from its hydrochlorate, the author states several interesting facts. When ammonia is added to a solution of this salt the whole of the alkaloid is not precipitated, whatever be the quantity or whatever be the state of solution as regards neutrality. An acid solution will, however, retain more than a neutral one, and the quantity retained is in proportion to its acidity. At first sight one is inclined to account for this by saying that emetine is soluble in the ammonia salt, but on more careful examination it appears likely that there is a genuine chemical union between these bodies, and that a double hydrochlorate of emetine and ammonia is formed. Several proofs are given in support of this opinion. It becomes interesting to inquire whether this combination is peculiar to this particular ammonium salt and to emetine. That other salts or alkaloids form similar combinations the author thinks probable, and, at all events, the subject forms the matter for interesting and perhaps fruitful researches. The second chapter or portion of M. Glenard's paper treats of the composition of emetine and its hydrochlorate. In regard to this he differs from Dumas and Lefort, and gives all the details of the analysis by which the ultimate compositive of these substances was determined. Into these particulars it will not be necessary for us to enter, but simply to state that the formula of emetine was determined to be  $C_{30}H_{22}NO_4$ ; that of the hydrochlorate,  $C_{30}H_{22}NO_4 \cdot HCl$ .

---

REMARKABLE TOLERANCE OF CALABAR BEAN.—A case is reported in the *Canada Medical & Surgical Journal*, for October, in which a patient suffering from traumatic tetanus, occasioned by a wound from a rusty nail, was treated with the alcoholic extract of calabar bean. As much as twenty-five grains was administered, hypodermically, and one hundred grains, by the mouth, during twenty-four hours. The case was a very serious one, tetanic spasms occurring, at first, every few minutes. The slightest touch or movement brought on a severe spasm. Dr. Drake cut down upon the left sciatic nerve, and grasping it with a strong pair of forceps, pulled it forcibly downwards. The immediate effect of this nerve stretching was remarkable. The muscular rigidity disappeared, the opisthotonos relaxed, the jaws could be opened and the patient was, for a time, without spasms. The hypodermic injection of physostigmatis was commenced, and apparently held the spasms in some degree in check. Dilation of the pupils generally indicated the coming on of spasm, but the pupils were kept well contracted and the man kept