

Their experiments were made on the insano. They find that papaverine exercises upon man a decided soporific action, and, at the same time, diminishes muscular activity. It reduces the frequency of the pulse in all cases, and its calming action is not preceded by a period of excitement. It never causes nausea, vertigo, headache, or constipation, but, on the contrary, tends to reduce these symptoms. It generally acts slowly, about four to seven hours after administration. It may be given subcutaneously in the form of hydrochlorate. Dr. Stark fully confirms these observations; he administers it in doses of 1 to 2 grains by hypodermic injection, and considers it to be constant and simple in its action. — *Pharm. Jour.*

#### Note upon Apomorphia and Chlorocodide.

Last May I read before the Clinical Society a short account of the therapeutical properties of apomorphia, a new base which had been discovered, the previous month, by Dr. Matthieson. In No. 112 of the "Proceedings of the Royal Society," there appeared two papers by Dr. Matthieson and Mr. Wright upon the chemistry of apomorphia. In this place I wish to add a few therapeutical facts, gained by subsequent experience.

Every trial has confirmed the statement that apomorphia is a most powerful emetic and contrastimulant. To the best of my knowledge, apomorphia has never been administered as an emetic dose (namely, 1-10 grain subcutaneously or  $\frac{1}{2}$  by the mouth) without producing speedy vomiting. On one occasion the vomiting occurred eighty seconds after the injection. But there is a drawback to the value of apomorphia used as an emetic, and that is the contrastimulant effect produced at the same time. Not that the latter effect always occurs, far from it; but sometimes it does occur to an extent such as to cause anxiety on the part of the person who has made the injection; the patient seems as if his muscular power were gone; the vascular system, however, does not appear to be depressed to an equal extent. The strength of the patient has nothing to do with the occurrence or not of the sedative effect; the strongest men sometimes suffer greatly, and the weakest sometimes escape. It is, perhaps, not surprising that an emetic of the activity of apomorphia should be depressing, and the more so since it is clearly an emetic which does not act by causing direct gastric irritation (sub-inflammation), but which acts as blows upon the head, foul sights or smells, or mere imaginations act. In some cases the production of a state of depression is even to be desired; emetics have often been used to that end.

As a contrastimulant, apomorphia does not possess any special advantage, except that the alimentary canal is not inflamed, as is the event when antimony and veratria are given. But my experiments in this direction are very few, and this chiefly on account of the costliness of the drug. Owing to difficulties in the preparation of apomorphia, the producer does not weigh more than a tenth part of the morphia employed in the manufacture. The present price of morphia being five-and-twenty shillings on ounce, the value of apomorphia comes to be something beside which aurum potabile fades into insignificance. This does not matter when single tenths of a grain are used to produce vomiting; the expense

arises when larger doses are frequently given by the mouth. Let us hope that the chemists will soon surmount these difficulties.

Apomorphia can be procured from codeia. An intermediate compound, chlorocodide, is formed.

Experiments show that the properties of chlorocodide and of codeia are identical, salivation and dilatation of the pupils being the symptoms most easily produced; larger doses causing extreme restlessness, and very large doses proving fatal after a state of mixed paralysis and spasm both tonic and clonic; consciousness being unaffected. The only property of chlorocodide that holds out any promise of being useful in medicine is the extreme bitterness of the base, almost equal to the bitterness of strychnia, while the dose of chlorocodide which is required to produce tetanus in the human being must be enormous (if we may argue from the cat) compared with the dose of strychnia required. A quarter of a grain of chlorocodide taken by the mouth causes an uncommon sense of tonic in the abdomen. Quina, which is so often given as a stomachic, is a much less intense bitter than chlorocodide, and tends to produce fullness and aching of the head which chlorocodide does not. — *Dr. S. J. Gee in Bartholomew's Hospital Reports.*

#### Therapeutic Uses of Thymic Acid.

Writing in the *Union Pharmaceutique*, M. le Dr. Paquet states that this acid, which is allied to carbolic acid, is a remedy of immense value to the surgeon. He describes its effects on healthy and morbid tissues, and draws the following definitive conclusions as to its uses.

(1) Thymic acid deserves to hold a high place among the antiseptic preparations used in treating wounds. (2) In its concentrated form it is an excellent substitute for nitric acid and nitrate of silver. It is especially superior to phenic acid, because it has not got its extremely disagreeable odour. (3) In aqueous solution (1 in 1000), to which a few grammes (a gramme is equal to 15.4 grains) of alcohol have been added, it is extremely useful in furthering the cicatrization of wounds. It is especially serviceable in those cases in which tincture of iodyne is generally employed. — *Practitioner.*

#### Action of Veratrin.

A very careful investigation of the therapeutical properties of veratrin has recently been made by M. Pégaitaz, who has published his results in the *Deutsches Archiv für Klinik Medicin* for last month. He describes its effects both when taken internally and when subcutaneously injected; and finds them almost precisely the same, being as follows:—In the earlier stage, excitation; subsequently, depression. Then follow in succession, salivation, nausea, sensation of choking, vomiting, and usually diarrhoea. The voluntary movements become unsteady, the want of power displaying itself first in the posterior, and subsequently in the anterior limbs; accompanying this there appeared to be a certain degree of stiffness. There were coincidently exaltation of the reflex sensibility and diminution of the sensibility. The temperature, the number of the respiratory acts and of the beats of the heart, were all transiently diminished. Convulsions and tetanus finally set in; but careful examination failed to discover any indications of inflammatory mischief. Experiments made

with a view of testing its applicability as a remedy which might be used hypodermically, seem to have been unsatisfactory; showing that whilst it acts in this was similarly to its operation when given by the mouth, yet the injection produced very great pain. — *Lancet.*

#### Substitute for Chlorodyne.

Mr. Edward M'Inall, a pharmacist of Philadelphia, recommends the following as a substitute for the chlorodyne of J. Collis Brown.

Sulphate of morphia, gr. lxiv.  
Alcohol (ninety-five per cent.), f. oz. ij.  
Purified chloroform, f. oz. vj.  
Sulphuric acid, q. s.  
Extract of cannabis indica (Allen's), dr. ss.  
Eleo-resin of capsicum, gtt. xij.  
Hydrocyanic acid (Schole's), gtt. xvj.  
Shake together the sulphate of morphia, alcohol, and chloroform, then add the sulphuric acid, shake well until it becomes clear, then add the oleo-resin of capsicum, extract of cannabis, and hydrocyanic acid.

This forms a clear dark green liquid, possessing the acrid taste of capsicum, and the odour of chloroform. A drachm contains about a grain of the sulphate of morphia, and the dose is given at from fifteen to thirty drops (minims). — *New York Journal of Medicine.* — *Brailhaite's Retrospect.*

#### Apomorphia.

This base is procurable from codeia, which it resembles in chemical constitution. It is one of the most certain emetics known, one-tenth of a grain subcutaneously, or  $\frac{1}{2}$  grain by the mouth, being the dose required. The disadvantages of it is that it is a depressant in some cases, the patient seeming as if his muscular power were gone; the vascular system, however, does not appear to be depressed to an equal extent. — *Brailhaite's Retrospect.*

#### Coffee.

Brazil is the greatest producer of coffee. That known in the trade as Rio is a Brazilian product. Of the 713,000,000 pounds produced by the world per annum, Brazil furnishes 400,000,000, or more than half of the whole; Java 140,000,000, Ceylon 40,000,000, St. Domingo 40,000,000, Cuba and Porto Rico 25,000,000, Venezuela 25,000,000, Sumatra 25,000,000, all others, including the Mocha, 18,000,000. The United States is the greatest consumer. We use in the United States nearly one-third of all the coffee consumed in the world, using nearly seven times as much as Great Britain, with a population not very far from the same. Germany comes next.

#### The Atomistic Method of Administering Drugs.

This mode, which is part of the homœopathic practice, is being energetically advocated in the Royal Academy of Belgium, by M. le Dr. Burggrave. His arguments are not very persuasive, nor are the facts adduced numerous; but such as they are, our readers will find them in the *Bulletin de l'Académie Royale de Médecine de Belgique.* — *Practitioner.*

#### A Cure for Earache.

Tincture of digitalis has been recommended for this purpose. One or two drops are placed in the ear, the passage being then closed with a piece of cotton.