

A REPUTED ANTI-OPIMUM PLANT.

WILLIAM KIRKBY, M.SC., F.C.S., F.L.S.

TOWARDS the close of 1906 considerable interest was aroused in the discovery of an alleged cure for the opium habit. It was said at first* that a Chinese resident at Kuala Lumpur, the capital of Selangor, had received from China specimens of an anti-opium plant, which, it was subsequently found, also grew freely in a wild state in Selangor. A quantity of the new remedy was collected, the leaves dried in the sun and finely chopped, roasted, and then infused when the specific was ready for use. As the result of the operations of an Anti-Opium Society, which was formed at Kuala Lumpur, it was stated that, within a few weeks prior to December, 1906, 14,000 persons had been cured of the opium habit by means of the new drug. In the same month (December, 1906) Mr. L. Wray, Director of Museums, Federated Malay States, gave† a somewhat different account of what was evidently the same drug as that already alluded to. The abstract of his paper as it appears in the *Pharmaceutical Journal* is as follows: "A party of Chinese wood-cutters working in the jungle near Seremban ran out of tea, and to supply its place took the leaves of a jungle climber, dried them, and made an infusion in the ordinary way. This, however, was not successful, as it made the men ill with bowel complaint. The leaves were then roasted, and a fair substitute for tea was obtained, which had no ill-effects. Then for some reason *tengko*—i.e., opium dross, or the refuse of opium after being smoked—was mixed with it, and the men continued drinking the mixture for a week or more in place of tea. After this time it was found that all desire for opium-smoking had been lost. Friends of the men were told of the discovery, so the news was spread, and others were induced to try the remedy."

* *Pharmaceutical Journal*, Series No. 4, xxiii. 621, 1906.

† *Journal of the Federated Malay States Museums*, December, 1906, through *Pharmaceutical Journal*, Series No. 4, xxiv. 453, 1907.

The drug is prepared by the natives by gathering the leaves and twigs of the plant, chopping them into pieces from 1 inch to 1½ inches in length, drying for three or more days, and then winnowing the leaves from the woody parts. These two portions are kept separate, as it is found desirable not to roast the leaves and thin twigs so much as the more woody portions. The leaves and heavy twigs, having been roasted separately on iron plates over a charcoal fire, are mixed together. A decoction of the roasted material is prepared by boiling from 8 to 10 ounces of it with 4 gallons of water for 3 hours in a loosely covered vessel. After the liquor has been strained it is ready for serving out to the patients. Mr. Wray says the decoction is very liable to go bad. In administering the remedy, "whatever the amount of opium a man habitually smokes, that amount is to be mixed with the decoction. The average opium-smoker takes from 2 to 3 *chi* (116 to 175 grains) of *chandoo* (opium as prepared for the use of smokers by the Chinese) per day, although as much as 875 grains is stated to be the allowance of a particular smoker. . . . If a man has been in the habit of smoking 2 *chi* of *chandoo* per day, then 2 reputed quart bottles, *a* and *b*, each containing approximately 25 ounces of the decoction, are taken, and into one, *a*, is put 2 *chi* of burnt *chandoo*, roasted in the same way as it would be if prepared for smoking. Then a Chinese teacup, holding about 3 fluid ounces, is half filled from bottle *a*, and taken by the patient, and half a teacupful from bottle *b* is put into bottle *a*. This is repeated each time a dose is taken, until bottle *b* is finished. The dose is to be taken as many times a day as the patient has been in the habit of smoking, usually three or four times, until the two bottles are finished, when the man should be cured of all wish to smoke. If not, the treatment is repeated, but with a smaller initial proportion of burnt opium in the bottle, the amount being again decreased if a third course is necessary. Generally three courses are required."

With the help of specimens which Mr. Christopher, of Penang, and Mr. Wray, of Perak, sent to Mr. E. M. Holmes, F.L.S., of the Pharmaceutical Society's Museum,* the plant has been identified as *Combretum sundaicum*, Miq., belonging to the natural order *Combretaceæ*, which is chiefly remarkable for the astringent plants found among its members. It is a woody climber, growing abundantly on the plains near Kuala Lumpur. The leaves have a faintly bitter and slightly acrid taste.

In order to ascertain if the drug contained any constituent

* *Pharmaceutical Journal*, Series No. 4, xxiv. 77, 1907.

which might be considered the cause of the anti-opium effect produced on taking the decoction, Mr. E. F. Harrison, B.Sc., has made an examination of the stuff in the raw and roasted states.* His results are largely of a negative character. The experiments were made not only upon the two kinds of drug, but also with the decoctions of them both. No alkaloid was found ; there was a trace of a glucoside ; indications of two resins, and a quantity of tannin. As far as one dare judge from a chemical examination of the material, there seems to be nothing to account for the extraordinary effects which are said to have been produced, except that the astringent substances in the plant may assist in allaying the looseness of the bowels which usually accompanies the attempt to diminish the doses of opium when trying to break the opium habit.

Mr. Wray specially mentions the addition to the decoction of a proportion of opium, which, if the directions are carried out, is taken by the patient in regularly diminishing quantities. This is a procedure which is now recognised as essential in the treatment of morphomaniacs, and, if carried out in conjunction with the administration of some substance which will control the intestinal and stomachic troubles which may arise, there is no reason for scepticism as to a possible cure. In order to test the drug in a scientific manner in this country, a firm of pharmacutists are now preparing a pharmaceutical preparation of the drug, which has been prepared with the aid of glycerin, and should greatly facilitate accurate administration. But, unless there is carried out at the same time a system of daily diminishing doses of opium under efficient control, one will not be surprised to learn that the drug will follow the other anti-opium remedies which have preceded it.

* *Pharmaceutical Journal*, Series No. 4, xxv. 52, 1907.