

hyoscine, a secondary product of *hyoscyamine*. As in the experiments with *camellia*, the sphygmograph was used to record the impressions made on the pulse. In doses ranging from $\frac{1}{160}$ th to $\frac{1}{32}$ d grain, it was found to lessen the pulse 10 to 24 beats per minute; and, if we may depend on the accuracy of the sphygmographic tracings, to lower the arterial tension. It proved to be decidedly hypnotic in its action, and it produced no unpleasant after-effects—no headache, nausea, or other disturbance, except an unpleasant dryness of the fauces and disordered vision.

Therapeutically studied, Dr. Andrews came to the following conclusions:

"We report in all 22 cases in which *hyoscine* has been employed. Of these, 11 are of melancholia, 6 of acute mania, 1 of chronic and 1 of paroxysmal mania, 1 of mania with epilepsy, 1 of dementia, and 1 of acute chorea."

"The limits of the doses were from the $\frac{1}{160}$ th to $\frac{1}{32}$ d of a grain, in all of which I found it a perfectly safe remedy. It was given by the mouth in twenty of the cases, and in two by hypodermatic injection. . . The physiological effect of the drug was experienced in from fifteen minutes to two hours, but the average time was less than an hour. The pupils were dilated in most of the cases, but the disturbance of vision and the dryness of the fauces, or the inhibition of muscular movements, were only complained of in two cases mentioned, but in many of them there was such a degree of mental disturbance that the absence of complaint is of little value in arriving at a knowledge of the existence of those unpleasant effects. There was no nausea, and in the few cases in which it was given sufficiently long to produce the results, there was no disturbance of the appetite with the consequent loss of flesh, as is sometimes experienced in the continued use of *hyoscyamine*. There is also less disturbance of the vasomotor system than is found in the use of that alkaloid. It would seem from the experiments that it is a powerful sedative to both the cerebral and spinal systems, and from the success attending its use, and for the reasons stated above, it would seem justly entitled to a high position in the list of hypnotic remedies, and will, I think, surpass in favor the sister alkaloid of *hyoscyamine*."

THE THERAPEUTIC USE OF COCAINE.

The interest aroused by the discovery of the local anæsthesia induced by cocaine is but little abated, and communications on the subject continue to appear.

The effects of cocaine in the treatment of neuralgia, when injected in the neighborhood of the painful nerve, have not been universally admitted, but the evidence that its local action is effective is accumulating. In illustration of this point we quote a recent experience of Dr. MAX SCHNEIDER (*Centralblatt für die gesammte Therapie*, August, 1885, p. 363). A patient had had three attacks of neuralgia of the fifth, each one increasing in severity. The first seizure was cured by quinine; the second, after six months of persistent treatment, was finally arrested by morphine and iron; and the third, treated by localized injections of salicylate of cocaine, was relieved at once, and after eight injections on the sixth day there was no longer any pain—only some tenderness to pressure at the point of exit of the nerve, which was removed by three applications of galvanism. The first dose administered

was four decigrammes, equivalent to about six grains, and this gave complete relief, substituting a sense of comfort for the pain before experienced.

TOXIC SYMPTOMS FROM THE USE OF COCAINE.

The use of cocaine is not without ill results, and there is increasing evidence that unpleasant accidents sometimes occur. The writer has observed headache, vertigo, and faintness, after the local use of even small doses.

In a recent issue of the *Lancet* (Nov. 7, 1885) there is an editorial note calling attention to toxic symptoms observed by Knapp, Mayerhansen, of Freiburg, Reich, Bellyarminoff, of St. Petersburg, and others. In the case narrated by Mayerhansen, an abstract of which we find in the October issue of *Centralblatt für die gesammte Therapie*, p. 457, less than one per cent.—so diluted was the solution by a copious secretion of tears—caused, when instilled into the conjunctiva, headache, nausea, constriction of the throat, weakness of the tongue, impaired speech, and other severe symptoms, lasting twenty-four hours.

DR. SPEAR, Medical Inspector U. S. Navy (*The Medical Record*, Nov. 15, 1885), reports a case of cocaine poisoning, in which the symptoms simulated opium narcosis. There were the characteristic coma and insensibility, contracted pupils, feeble pulse, cyanosis, and cold perspiration. The amount taken was ten grains, but the patient had swallowed an unknown quantity of whiskey. Injections of atropine, strong coffee, flagellation, and walking, were the measures resorted to under the impression that the condition was due to opium.

HYPNOTICS.

In a series of lectures entitled "Conferenees de Thérapeutiques," DUJARDIN-BEAUMETZ has taken up various therapeutical subjects. In a recent lecture, which appears in the *Bulletin Générale de Thérapeutique*, for Oct. 30, 1885, he discourses on the "new hypnotics." We transcribe some of his observations.

Chloral appears to act on the heart, and, as has been affirmed by Gubler, it is a heart poison in large doses. In all febrile diseases of a congestive form, chloral is far superior to opium for the production of sleep; as in typhoid, pneumonia, and alcoholic delirium. On the contrary, this remedy is contraindicated in cardiac affections, especially in troubles of the aortic orifice; here opium is much better. Chloral is a most useful remedy in certain forms of intoxication, especially in poisoning by strychnine, in delirium tremens, and uræmic convulsions, but in these it is still inferior to *paraldehyde*.

The sleep caused by paraldehyde is analogous to that produced by chloral. It is usually calm, but in some instances the sleep is preceded by excitement. The assertion of Quinquand and Hénocque that it acts on the hæmoglobin, producing methæmoglobin, has been disproved by Hayem, who has shown that it does not affect the coloring matter of the blood. It is eliminated almost entirely by the lungs, but when large doses are given some portion escapes in the sweat.

One of the most interesting facts regarding the action of paraldehyde, is its antagonism to strychnine, which was first demonstrated by the Italian physi-