

ing about .0036 c. in., if divided into particles one-two thousand five-hundredths of an inch in diameter, would only come in contact with an absorbing surface of 9 sq. in., a very small proportion of the whole absorbing surface of the lungs.

The advantages of volatilization of the drug for inhalation over atomization is therefore apparent; and since absorption of such drugs takes place by inhalation, without interfering with nutrition, and since such interference occurs when they are given by the stomach, this method should be chosen for the administration of volatile drugs.

I have followed this practice for one year, and the results are quite up to my expectations. Among my cases I have one of tuberculosis, in which there were night sweats, much emaciation, cough, and copious expectoration. Bacilli were found in the sputa. One year ago she weighed 85 lbs., now she weighs 120 lbs. and has no evident signs of the disease. The instrument I find best adapted for this purpose is the Perfection Volatilizer.

## Selections.

### HEAD-NODDING AND HEAD-JERKING IN CHILDREN COMMONLY ASSOCIATED WITH NYSTAGMUS.

—Hadden, in the *Lancet*, discusses twelve cases of this affection. Full notes of five cases are given. This affection is usually confused in the text-books with a special variety of epilepsy. The author does not deny the possibility of an alliance with the latter disease. The cases are characterized by nodding or lateral movements of the head, either singly or associated with one another, or with movements of rotation. These movements may be almost constant or may occur more especially during efforts at fixation, or during excitement, always ceasing during sleep and when lying down. In most cases there is nystagmus of one or both, vertical, horizontal, or rotatory, often occurring simultaneously with the onset of the head symptoms, but sometimes preceding or following them. The nystagmus is much more rapid than the head movements, and has an independent rhythm; it is aggravated by fixation or by forcibly restraining the head, and may even be induced, when previously absent, by these means.

*Case 1.*—Nodding of head, with occasional lateral movement; vertical nystagmus of eye-balls and eyelids; attacks of unconsciousness, with deviation of eyes; throwing back of the head an early symptom. The patient was a female, æt. 7 months. The mother gave an account of a severe fright when six months pregnant. Family history was good; mother had had no miscarriages. The patient was the sixth child, and none of them had had convulsions. Labor was normal; though healthy when born, the mother said that the child used to throw back her head and look through the half-closed eyes. The eyes began to move at the age of six weeks, and the head movements came on when the child was two months old. There was no history of injury. The general condition of the child was excellent. For ten weeks there had been a yellowish discharge from the ears. There was no rickets. During the attacks it was observed that the eyes deviated strongly to the left, and downward, the head also turning in the same direction. An examination revealed pupils active to light; ocular excursions good; convergence also good. Ophthalmoscopically, both fundi normal. The child was treated with bromide of potassium and other drugs symptomatically. There was improvement in some symptoms during the year and a quarter that she was under observation.

*Case 2.*—Head-jerking, chiefly from side to side; horizontal nystagmus; attacks of unconsciousness with deviation of eyes; throwing back of the head to look at objects. The patient was a male, æt. 10 months. There was no history of neurosis in the family. Three months previously he fell, striking the back of his head, but the injury was probably trivial. The child had never suffered from convulsions and was not the subject of rickets. There was horizontal nystagmus of both eyes, constant in the left, exaggerated on extreme conjugate to left side, and least of all on conjugate deviation to right. Ophthalmoscopically, the fundi were healthy. During sleep the movements of the head and eyes ceased. The child recovered fully in about six months from the beginning of treatment, and remained well as long as a year and nine months after the first visit. The treatment consisted of bromide of potassium, and later iodide of potassium.