to the attention of our readers in this State, with the simple remark to those respectable practitioners who are obnoxious to the provisions of the proposed law, that a word to the wise is sufficient."

CAFFEINE AS AN ANTIDOTE TO THE POISONOUS NARCOTISM OF OPIUM.

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MONDAY, Oct. 10th, 1859, 8 o'clock, P.M.—We are called in haste to Mr. F. H. T., aged 24 years, who, it was said, had taken laudanum, and was in imminent danger from the effects of the drug. We found the patient in the clerk's office of one of the hotels of this city. He was lying on a sofa, with his head supported in the lap of a friend. His respiration was very slow, though not counted at the time—pulse full, but of nearly normal frequency—he was completely insensible—tongue and lips purple, and muscular system greatly relaxed. It was positively known that he had taken, in a fit of temporary depression, over *one ounce and a half of laudanum*, nearly an hour before the time of the present visit.

The condition of the patient was so alarming that we *began the treatment* by the pouring of cold water on the head till the stomach-pump could be applied—for, on attempting to introduce the tube into the œsophagus, respiration appeared to cease altogether—the entire muscular system was so completely relaxed that the tongue hung out of his mouth, and was pushed about by the end of the stomach-tube, in certain positions, folding back into the fauces, and apparently obstructing respiration. The attempt to use *emetics* was of course out of the question. The continued use of ice-water upon the head, and the occasional resort to artificial respiration, in a short time improved his condition a little—a very little—and we were willing to introduce the stomach-tube. This was effectually applied; large quantities of tepid water being repeatedly introduced into the stomach and again pumped out. Laudanum was detected both by its odor and color in the fluid first discharged from the stomach. At the end of an hour, his condition becoming apparently more urgent than before the use of the stomach-pump, he was taken from the clerk's office to a room on the second floor of the hotel, where he was undressed and placed in bed, and the application of ice-water to the head was resumed.

12 o'clock, midnight.—The condition of the patient was now decidedly worse than it had been at any previous time; the surface was cold, and purplish from imperfect aeration of the blood; the muscular system, if possible, more relaxed than ever; the respiration, fearfully slow, when counted, by the watch, was found to be *but four to the minute*. The intervals between the inspirations were now irregular, and each time we had to resort to shaking

and slapping the patient to provoke the automatic action of the respiratory muscles, and to raising him up suddenly to the sitting posture, for the same object. The tongue had to be constantly pressed forward with the fingers to prevent its falling back and obstructing the opening of the glottis. The imperfect and irregular action of the heart became now more alarming than ever. It was found that, in the reclining position, this symptom was more alarming than when the patient was placed in the sitting posture. Several times the intervals between the beats of the pulse led us to fear that the patient had expired, but, on elevating him, the action of the heart became more regular. He was now kept in the elevated position, and not allowed to recline, except for a moment at a time, for fear that he would die immediately. Ceaseless efforts were now necessary on the part of his attendants to provoke the respiratory movements. Surrounded by his friends, several of whom were remarkably self-possessed and indefatigable, not a moment was allowed to pass without some effort, as by shaking, compressing the chest, &c., to excite inspirations. No time was now to be lost—but our best efforts at exciting respiration began now to fail to have any effect, and it was evident that *artificial respiration* was now the only possible hope for the patient. This measure, under the circumstances, was a natural suggestion, but for reasons sufficiently apparent, it seemed impossible to carry it out in the present case; most of the ordinary means of effecting artificial respiration seemed to us impracticable, on account of the delay involved in their performance, and Dr. Marshall Hall's "Ready Method" involved the horizontal position, in which situation, it was clear to the minds of all present, the patient would die immediately.

Artificial Respiration in the Sitting Posture. 1 o'clock.—Under these circumstances, we devised a method of artificial respiration which was well adapted to the situation of the patient—indeed, the only one possible—and which we do not remember to have seen reported anywhere in the writings of any one on this subject.

The patient was supported in the sitting posture, by an assistant kneeling on the bed at his back and holding his head erect between his hands; two other assistants standing on each side of the patient now took charge of an arm each, holding the limb firmly at the elbow and upper part of the fore-arm; the tongue was now pressed down by the handle of a spoon, or the fingers introduced into the mouth; the assistants having charge of the arms were now directed to elevate these limbs simultaneously, carrying them above the head at an angle of about forty-five degrees, and dragging upon them so as to slightly lift the patient; the arms were then depressed and brought down close against the sides of the thorax so as to compress the chest.

The effect of these movements was the following:—At each at-

tempt at lifting the body by the arms in this way, forcible *traction outwards* was made on the walls of the chest, through the pectorales major and minor muscles, the serrati and parts of the two latissimi dorsi muscles—giving rise to expansion of the walls of the thorax; the air was thus caused to enter forcibly into the lungs, and thus *inspiration* was completed. The arms were then brought steadily down, and pressed against the sides of the thorax and abdomen—compressing them and expelling the air forcibly from the lungs and effecting *expiration*.

Under the use of the artificial respiration, the appearance of the patient was much improved. The color was restored to the face, the lips became redder, and the countenance more natural, though the relaxation of the muscular system was by no means lessened; if the head was left unsupported for an instant, it fell forwards as suddenly and forcibly as that of a dead man. The artificial movements were continued for more than an hour, and though the color of the patient was improved and the heart's action became normal, still when they were omitted, there was found no improvement in the natural respiration, these being still *but four times in a minute*, as before artificial respiration was applied.

We now felt the necessity of adopting some means of introducing a stimulant or anti-narcotic agent into the system. *Strong coffee* naturally presented itself to our mind, but the only preparation we could obtain at that time was a rather weak infusion left from the supper at the hotel. It was clearly impossible for the patient to *swallow* anything, and we did not think it advisable to run the risk of introducing the stomach-tube in his present condition; we therefore called for a syringe, but the weakness of the coffee caused us to hesitate about using it, when, fortunately, the idea of *caffeine* occurred to us, and we sent immediately for that preparation. The artificial respiration was then energetically resumed, in order to prepare the patient for being placed in the horizontal position. A small quantity of the caffeine was rubbed upon the tongue and to the inner surface of each cheek. The patient was then laid upon his side, and an *injection of the coffee, with a large quantity (afterwards ascertained to be twenty grains) of the caffeine dissolved in it was administered by the rectum*, with a common syringe. The patient was then immediately raised again to the sitting posture, and the artificial respiration resumed.

In less than *half an hour*, we perceived that occasionally, between the artificial movements, the patient would effect a *natural inspiration*; these became more frequent, and soon rose to eight in the minute. He was then laid down, and the artificial respiration omitted. The assistants, however, were directed still to remain on the bed, and to retain their hold on his arms, that they might resume their efforts at any moment. An hour had not elapsed from the administration of the injection, when the patient, to the astonishment of all present, *forcibly jerked his left arm from*

the assistant ! (which was the first action of the voluntary muscles he had performed), and immediately began to twist himself in bed, and told those about him, angrily, "to let him alone !"

From this time he did not again sink into the comatose state, and the relaxation of the muscular system did not return. The respiration became more and more natural, but he remained drowsy, and efforts were continued, occasionally, to prevent his remaining too long asleep.

The condition of the patient during the remainder of the night (from 2 o'clock till day-light), was very peculiar; his eyes were heavy, he seemed greatly inclined to sleep, and occasionally would snore a little, but yet he appeared quite cognizant of everything going on around him, and of all the remarks made by his attendants; he had great repugnance to being held or touched. During the earlier part of the narcotism, one of his friends, a young man, tried the expedient of tickling him on the ribs and lower part of the abdomen, with the hope of arousing him: then, the tickling had no effect whatever, but now it seemed to produce the most painful annoyance, and vexed him beyond all control. The measure was advised, nevertheless, to keep him from falling asleep. He would lay apparently asleep, but before the hand could reach the surface, he seemed to be aware of the intention, and would select the offender from the whole crowd of his attendants, and aim the most angry blows at him with great accuracy; and, finally, on one occasion, before he could be restrained, he jumped out of bed and followed him to the head of the stairs, threatening to shoot him if he thus annoyed him again.

We left him at day-light. His drowsiness at that time was not very marked.

10th.—We called at the hotel at 10 o'clock, A.M., to see Mr. T., and were informed that he had "gone home to his own residence, nearly a mile distant, at the lower part of the city."

12 o'clock, M.—We were called in haste to see our patient. Found him in a most excited condition; he seemed somewhat alarmed, his face was flushed, his eyes presenting an unusual brightness; he complained of headache, great restlessness, and the surface was covered with a profuse perspiration; the pulse was full, quick and frequent. He stated that he had had an alarming attack of a nervous character, which he referred to irregularity and palpitation in the action of the heart.* This had subsided, however, after taking a stimulant, and his condition was such as just described. Prescribed the application of cold water to the head, and that he remain quiet at home till his excitement had subsided. He rapidly recovered, and was well in a few days.
—*Southern Med. and Surg. Journal.*

* We would here state that we would not advise the administration of the caffeine in such large quantity, viz., twenty grains, as we used in the above case. Did the occasion occur again, we should use repeated doses of five or ten grains, till the desired effect was produced.