

appreciation of real sensations" begins, the medico-legal investigation into the responsibility attaching to hallucination commences.

In the acceptance and application of these general principles we have a ready explanation for the phenomena these cases present: we discover the early existence of hallucinations; their general progress and strength, overcoming all efforts for their control; and, finally, reaching a point, at which the strongest distinction, and sense of right from wrong, was in danger of being overcome, at any moment, by the violence of disease.

---

ON FORCED ALIMENTATION. BY WILLIAM HAMILTON, M. D.,  
ASSISTANT PHYSICIAN TO WESTERN LUNATIC ASYLUM, VIRGINIA.

It will not be questioned that cases from time to time occur among the insane, in which professional duty and humanity alike require the forcible administration of nourishment and medicine. In such instances it has been the usual custom to resort to the introduction of the stomach-tube and the use of the pump—an operation which, besides being exceedingly disagreeable, and not altogether free from danger, occasionally proves ineffectual to save life. Such has been the aversion of medical men to it, that a less objectionable method has been anxiously sought, and many suggestions to overcome the difficulties that are urged in its use, have been recommended.

Acting upon a method advised, in cases of trismus, of introducing into the nostrils a tube to the posterior fauces, through which nourishment may be passed to a point beyond voluntary muscular control, an instrument was constructed, which was efficaciously employed on the 24th of June last. This has been exclusively used for this purpose since that time, and meets the approval of Doctor Stribling, the superintendent. It consists of an elastic tube, twenty-four inches long, the size of a catheter, at the open end of which a funnel is attached, and can be readily constructed by attaching together two catheters, if necessary. Near its end the tube is slightly curved. The curve is maintained by the introduction of a silver wire, two inches in length, one end being bent upon itself to preserve it in position, to prevent its impinging, at right angles, upon the posterior wall of the pharynx during the first stage of the process, and during the second, keeps the

tube from interference with the glottis. The tube being adjusted, the operator pours through it nutritious or medicated liquids, which are immediately, by automatic action, conveyed into the stomach. This operation is not disturbed, owing to the length and flexibility of the tube, by any considerable motion of the patient's head.

The nourishment usually administered is prepared by mingling two or three eggs, half an ounce of sugar, and the same quantity of oil of olives, with one pint of milk, or beef tea, and straining the mixture through a piece of coarse linen cloth. If a laxative effect is desired, molasses may be substituted for the sugar, or castor oil for the oil of olives: cod-liver oil, and various other medicinal substances, may be added as they are indicated. This preparation flows so readily through a small tube that, the whole may be administered in the space of a few minutes. This was administered three times a day, but always after placing an ordinary meal before the patient, and inviting him to partake of it. Of the cases in which it has been thought proper to resort to the method here described, those may be briefly noticed which more particularly illustrate its merits.

CASE I.—A single man, of middle age, was admitted to the Western Lunatic Asylum, June 6th, much exhausted, and survived but five weeks. During the last twenty days of his life he alleged that he was already a corpse, and, consequently, needing no food, he would take none. Both food and medicines were administered without inconvenience, as often as was deemed necessary, notwithstanding his extreme debility.

CASE II.—A young man, holding the delusion that all the food and drinks offered to him contained poison, was admitted in March last. During the two succeeding months he became so reduced by frequent fasts that, though the usual means were employed, it was thought proper to inform his friends that his life was in jeopardy. However, he had recovered a considerable degree of strength by eating more regularly, when, on the 21st of June, he announced that he would eat no more. He adhered so well to his resolution, that, between that day and the 6th of November, he voluntarily took food but twice. During this period nourishment and tonic medicines were administered by the new process, and not only was he sustained by it, but he increased in weight. Being a physician, he took considerable interest in the instrument, examining it minutely, and asking many questions about it. He willingly submitted to its use, and when he was reminded that he

could be more conveniently poisoned in this way than by drugging the dishes, he replied that, if he died by poison, the responsibility must rest upon those who forced it upon him; whereas, if he swallowed it voluntarily, he would regard himself as guilty of suicide. Since the 6th of November he has taken food more frequently, but he still depends partly upon the tube for his sustenance.

CASE III.—A married man, aged forty-eight, was admitted May 31st. He had been insane eighteen months, the cerebral disease having advanced, gradually, as the symptoms of pulmonary disease under which he labored disappeared. He now exhibited almost constant agitation and alarm, exclaiming that he was a ruined man, that his wife and children were starving, and that he was pursued by enemies. For weeks he had scarcely taken food oftener than once in forty-eight hours. From the fourth day after his admission he obstinately refused both food and water, and, notwithstanding the use of the stomach-tube, with the pump, he became, in a short time, so exhausted that upon his making a promise to eat at home, his removal was advised. He was re-admitted, with strength somewhat increased, on the 24th of July. From that day to the 11th of November, he swallowed nothing, voluntarily, being altogether sustained by the artificial means. At the end of this period, having gained strength and weight, and his mind having become more composed, he began to take his meals regularly.

CASE IV.—A male patient, long resident in the Asylum, of dangerous propensities and great obstinacy, having been removed, for good reasons, from one ward to another, resolved to enforce his restoration by threatening to starve himself. This manœuvre he had once before practiced with success; but now, finding that he received food thrice daily, whether he would or not, he yielded on the fourth day.

The experience which has thus been partly detailed has convinced us that this method possesses many advantages over any other, in several respects. Resistance being impossible, exhaustion from violent struggling is avoided. There is no danger of breaking the teeth, bruising the lips and tongue, tearing the mucous membrane, or injecting liquids into the larynx—all of which are either the usual or the possible results of the employment of other instruments. The introduction of the tube gives no pain, and its frequent repetition produces no noticeable irritation; some slight, uncomfortable sensations only are experienced at the first and second trials. We are convinced the operation is quite practicable in any condition of body or of mind, and as often as may be desirable.