

it may be considered safe to employ ether generally as a means of preventing the pain otherwise inseparable from physical lesion. The suffused eye, livid lips, and stertorous breathing, accompanied, first, by convulsive struggles, and next by a sudden cessation of all motion, are often indicative of the effects of the vapour; and these were not altogether absent in the present instance; still I felt myself justified in employing it from the published accounts of many successful cases, and the sanction of my colleagues, and numerous friends around me. In prosecuting the operation, there was nothing peculiar to attract my attention, or to lead me to consider the patient's physical condition different from that of those on whom I had before operated, until I had reached the bladder, when I can but attribute the difficulty in seizing the stone to the apparently collapsed state of that viscus which had fallen in folds over the calculus, and so prevented its being grasped by the forceps. I must not, however, omit to mention the fact that the patient expressed no signs of suffering during the operation. Thus far therefore it may be said the ether fulfilled its intended offices; but I think another question is involved—viz., whether the artificial means thus employed may not produce very serious depressing effects on the nervous system, depriving a patient of that reactive power so necessary to the reparative process. Has not a patient, after the administration of ether, a double shock to overcome—that produced by the vapour superadded to that of the operation itself? Does not the history of the post-mortem examination bear out the suspicion of the depressing influence of this inhalation?—positively, from the still fluid state of the blood (although the body was not opened for sixty-seven hours after death) and from the flaccid state of the heart; negatively, from the fact that the inspection detected no indications of violence done to the parts that could explain the rapid dissolution which ensued, and that there was no evidence of nature having made the slightest effort towards local reparation. Pain is doubtless our great safeguard under ordinary circumstances; but for it we should be hourly falling into danger; and I am inclined to believe that pain should be considered as a healthy indication, and an essential concomitant with surgical operations, and that it is amply compensated by the effects it produces on the system as the natural incentive to reparative action.

I trust that the publication of this unsuccessful case may lead to the publicity of many others which have occurred, so that the profession may not be led away by the erroneous supposition that the prevention of pain is so vital a desideratum in operative surgery.

[Operators have hitherto fallen into the error of looking only to one side of the question. The profession is indebted to Mr. Nunn for placing on so strong a light the danger which may occasionally arise from the use of ether vapour. We have hitherto had a run of successful cases: it is now time that our correspondents should pause in their records of successful cases, and look to the possible danger.—*Medical Gazette.*]

*Tetanus from a fall without external injury—Temporary relief from the inhalation of ether—Death on the fourth day after the accident.*—The following case was read by Dr. THOMAS BRADY:—Michael Gaynor, a strong healthy man, æt. 26, a skinner by trade, but employed for some weeks in sweeping the streets, when returning from work on the evening of the 6th of February, during the late severe frost, slipped, and fell with considerable violence on the broad of his back. Though much stunned by the fall, he did not lose his consciousness, was able to rise without assistance and to walk home, a distance of half a mile; he mentioned the accident to his family, but treated it as a mere trifle, and appeared as well as usual throughout the evening. The following morning he complained of feeling stiff and sore all over the body, and said he was unable to go to work, or to leave his bed; he, however, got up during the day, and even dined heartily, though complaining frequently of increasing stiffness, especially about the throat and neck. After passing a restless and uneasy night he at length fell asleep towards morning, but soon awoke in a fright, crying out that his jaws were closing, and begging for a spoon to keep his mouth open. From this time the symptoms continued to increase with fearful rapidity; the jaws became more closely approximated; the muscles of the neck more stiff and painful; the head was retracted; the painful rigidity extended over all the muscles of the back, and he began to suffer from most excruciating pain in the epigastrium, and extending from this point all

round the body, so that this day and the succeeding night were passed in one continued agony, aggravated from time to time by frightful paroxysms of spasm, in which he shrank with anguish. In this state he was admitted into Cork-street Hospital on the following day. The trismus and opisthotonos had by this time attained a great degree of intensity, though a knife or the handle of a spoon could be still introduced between the teeth; the abdomen presented to the eye the appearance of great fulness and tension, and felt as hard as a board; the pectoral muscles were rigid and swollen, forming by their prominence a deep furrow in the line of the sternum; the muscles of the extremities were not affected then, but the spasms subsequently attacked the calves of the legs. The pulse was small, hard, and frequent; the action of the heart weak; and the respiration feeble and languid; the bowels had been freely evacuated two days previously. Deglutition was difficult and very distressing, producing generally an attack of the paroxysms of spasm; but he spoke distinctly, and was able to give a detailed account of the accident and of the progress of the symptoms. Being unable to rest on his back, or to sit up for an instant, he lay upon his side constantly moaning and complaining, except when roused by a paroxysm of the spasms, when he writhed about and shrieked with pain.

Dr. Eustace, under whose care he was placed, conceiving that this distressing state of suffering might be at least alleviated by the inhalation of ether, proceeded to employ it, assisted by Surgeon Trant. In consequence of the retracted and painful state of the patient's neck and back, and his inability to sit up, some difficulty was experienced in getting him into a position in which he could inhale freely, and at his own suggestion he was placed partially resting on his knees and hands, and supported in that posture. When he had inhaled for about a minute and a half, his eyelids were observed to drop suddenly, and his face to assume an expression of repose, upon which the mouth-piece was withdrawn; and being asked how he felt, he said he was relieved; the mouth-piece was then reapplied, and he continued to inhale for one minute more, when those who were sustaining him, feeling him sink down, let him go, and he fell on his back on the bed, the spasmodic tension of the muscles of the back being so much relaxed as to admit of his lying in that position. No inconvenience whatever attended the inhalation; it did not even produce cough, or any irritation about the larynx. He lay thus in an apparently calm sleep for about four minutes, during which the affected muscles, if not completely, were very much relaxed, and he exhibited no feeling of pain even when the limbs were pinched. On recovering from this state, he exclaimed—"Where am I!" and being questioned as to how he felt, he said he had a "delightful dream," and proceeded with surprising volubility to describe what he had seen in it; he continued to talk in this way for a quarter of an hour, when stopping suddenly, he cried out the "cramps" were returning; a spasmodic attack soon followed, after which he remained in the same state as before the inhalation. Doubts had from the first been entertained by some present as to the propriety of employing the inhalation at all, in consequence of the intense state of spasm of the muscles of the throat and neck, and as its influence seemed so transient, it was now urged that it would be better to adopt more energetic treatment. To these suggestions Dr. Eustace yielded; a blister was applied along the spine, and the vesicated part dressed with mercurial ointment, a drachm and a half of the same ointment was rubbed into each axilla, and calomel and opium in the form of bolus, as he could not swallow pills, were given every third hour. No impressions, however, appeared to be made on the disease by these measures; on the contrary, after some time, the paroxysms of spasm began to occur more frequently, returning every ten or fifteen minutes. Throughout the night they continued not only more frequent, but more severe and prolonged, so that on one or two occasions he was supposed to be dying. During these attacks profuse exhausting sweatings bedewed his entire body. At eleven o'clock the following morning he was lying as usual crouched upon his side, looking languid, worn, and exhausted; his pulse was small, feeble, and rapid; the action of the heart was imperceptible by auscultation, and the bronchial tubes were loaded with mucous secretion; mercurial sætor of the breath existed, and he was expectorating, or hawking up from time to time dark-coloured viscid sputa. It was at this time evident that if he did not die otherwise, he would be asphyxiated before many hours. Yet his mental faculties did not seem in the slightest degree impaired, and when not suffering