ART. XII.

1. *Etherization; with Surgical Remarks*. By JOHN C. WARREN, M.D., Professor of Anatomy and Surgery in the University at Cambridge (New England).—*Boston*, 1848. 12mo, pp. 96.
2. *The Advantages of Ether and Chloroform in Operative Surgery. An Address delivered to the Hunterian Society*, Feb. 9, 1848. By T. B. CURLING, Lecturer on Surgery at the London Hospital, &c.
3. *Chloroform in the Practice of Midwifery. Read at the Harveian Society*, Feb. 5, 1848. By EDWARD W. MURPHY, A.M. M.D., Professor of Midwifery, University College, London.

WE have various reasons for still deferring our intended general summary of the physiological and therapeutic effects of anæsthetic agents; the chief among these being the desire to let their applications be more fully and extensively tested than has yet been done. At first announced as a means of escaping pain in operative surgery, and then employed by the accoucheur with the same end, they have been used in a great variety of cases, on which they were not at first supposed to have any beneficial influence. Thus, in the reduction of herniæ and dislocations, they have been found to have a most favorable influence in relaxing the muscles, and in preventing that spasmodic contraction which is one of the greatest difficulties of the process. In various spasmodic disorders of the nervous system, in delirium tremens, and even in the delirium of typhoid fever, they have been proved more efficient sedatives than any other remedy known. And in obstetric practice, their calming influence in states of excitement so furious as to render it difficult (if not impossible) to put in practice the requisite measures for the relief of the patient, has been no less remarkable. The rapidity with which the use of chloroform has made its way into almost every department of practice, as well abroad as in the country of its first introduction for these purposes, renders it quite unnecessary for us to endeavour to promote its use by any additional recommendation; and we prefer to reserve ourselves for such a calm inquiry into the whole subject, as may be best conducted when it has attained a fuller development. In the meantime, however, we would direct the attention of our readers to the three short productions whose titles are given above; all of which are worthy of their special attention, as emanating from practitioners of large experience and of philosophical habits of thought, and as conveying the matured results of their observations on the question at issue.

It seems from Dr. Warren's preface, that the use of ethereal inhalation has made slower progress on the other side of the Atlantic—the country of its first introduction—than in the Old World; a circumstance that seems rather unaccountable, when the go-ahead tendency of our cousins of the Union is borne in mind. At the time of the publication of his treatise, we presume that he had not become cognisant of the virtues of chloroform; as no reference is made to the introduction of this agent. His general conclusions are decidedly favorable to the use of ether in most severe operations. He considers that the shock to the nervous system is greatly diminished by its employment; so that, independently of the absence of suffering, a positive good is obtained. He affirms, too,

that surgical operations may be performed under the influence of ether, which could not be effected without; and that its use has increased the proportion of successful operations, by encouraging patients to submit earlier to surgical treatment.

In the elegant Address of Mr. Curling, several points are raised, which we deem especially worthy of attention; more particularly the advantages of anæsthetic agents, not merely as diminishing the pain and shock of the operation itself, but also as removing that extreme dread with which many sufferers regard operations,—a state which, as every surgeon knows, is most unfavorable to their successful issue, and which frequently prevents recourse being had to them at the only time when they could be really effectual. Mr. Curling considers that the results of statistical inquiries on the mortality following severe operations, are so favorable as fully to warrant the surgeon in persisting in the use of chloroform and ether, notwithstanding the unfortunate demonstrations which have been recently given of their possibly-fatal consequences. If these statistical results should be borne out by further experience, we shall have no hesitation in saying, that no surgeon will be justified in the non-employment of a means so important to the safety of his patient. He would much more reasonably refrain altogether from performing an operation which is fatal in *two* cases out of every *five*, than from administering an anæsthetic, which diminishes the mortality of the operation itself by *one* in every *five*, whilst it poisons *one* (we will say) in *ten thousand*. We use the term “poisons,” because we do not think it right to disguise our opinion that in the Newcastle case, death resulted from the direct influence of the chloroform, in spite of the very ingenious special pleading of Dr. Simpson. We deem it best to look the possibility well in the face, and to regard it in the same light as many other contingencies for which the practitioner must be prepared, in the use of therapeutic means of almost any description. If we are to be restrained from the employment of a remedy, or from the performance of a trifling operation, because it is remotely possible that it may give rise to serious consequences, then we must give up all reliance on medicines or on surgical skill, and leave our patients, literally and completely, to the curative powers of Nature. All our practice is a balance of *probabilities*; and all that we can aim at is, to do the greatest possible amount of good, with the least possible chance of evil.

We cannot refuse ourselves the pleasure of quoting Mr. Curling’s concluding remarks:

“To those who esteem medicine for its true ends, but who know practically its imperfections and deficiencies, there is something very hopeful and cheering in every real advance in professional knowledge, and in the discovery of any new power for conquering disease. Not only do we recognise a present means of lessening our failures and disappointments, but we look on each accession as in itself suggestive,—as bearing the germs of further progress and greater triumphs. Now, it is in this light,—as containing the elements of fresh successes, and as stimulating the energies of all inquiring minds, that in closing this address, I would ask you to regard the discovery that I have this day dwelt upon. We know not yet the full value and extent of our gain; and we may cherish the hope, that by pursuing science in the enlightened spirit of that great man whose name our society has proudly adopted, greater achievements are still in store; that pain and disease will yield still further to our efforts; and that man, notwithstanding

ing the inevitable doom, may be preserved longer, freer from misery and care, fresher and healthier in body and mind, better fitted to fulfil his mission here,—to serve the purposes of the Creator, to acknowledge His wisdom and power, and to enjoy and extol His beautiful and wondrous works.” (p. 36.)

The following are Professor Murphy’s conclusions regarding the applicability of chloroform in obstetric practice:

“1. It does not interfere with the action of the uterus, unless it be given in very large doses, which is never necessary.

“2. It causes a greater relaxation in the passages and perinæum; the mucous secretion from the vagina is also increased.

“3. It subdues the nervous irritation caused by severe pain, and restores nervous energy.

“4. It secures the patient perfect repose for some hours after her delivery.—These three last effects consequently render an operation much easier to perform, and the recovery of the patient afterwards much more favorable.” (p. 19.)

In *natural labour*, Professor Murphy would not carry the inhalation to the extent of absolute unconsciousness, but would only give sufficient to produce the dreamy state in which the pains are but little felt;—the *first* degree of Dr. Snow’s classification. He would generally reserve its use until near the conclusion of the second stage of labour. But *when an operation is required*, he would desire to have the full effect of the chloroform in the *second* degree, that is, in which the unconsciousness is nearly or quite complete, but the pulse not brought down. The *third* degree, in which the pulse falls and the respiration becomes stertorous, he would always avoid. He does not distinctly state whether he would administer chloroform in every case of ordinary labour, provided that the patient desired it; or whether he would restrict its use (in non-instrumental labours) to cases in which, from the duration or severity of the suffering, or from the constitutional state of the patient, or from both considerations combined, it is desirable to avoid the *shock* which the process of parturition involves, and which may occasion pernicious results of various kinds. But he agrees with Professor Simpson in the statement, that the recoveries after delivery under the influence of chloroform have been remarkably rapid and complete. And, like Mr. Curling, he notices the importance of anæsthetic agents in removing those apprehensions of the patient, which are likely to have a much more injurious influence on the parturient process, than on the course and results of a surgical operation.

“Again, the obstetric physician is conversant with the effect of mental anxiety—of mere apprehension, on the action of the uterus. Cases frequently come under his notice, in which the pains of labour are interrupted, become irregular and feeble, and labour is consequently greatly protracted, because his patient has not fortitude to meet the trial she is exposed to; but let the severity of these pains be removed, or let sleep be induced, and the uterus at once returns to its regular action, labour rapidly proceeds, and delivery is completed in one tenth, perhaps, of the time it would otherwise occupy.” (p. 4.)

Surely the accoucheur is not only fully justified in the careful and discriminating employment of chloroform; but, with such testimony in favour of its beneficial influence, he is highly blameworthy if he withholds it, in cases in which the induction of anæsthesia appears likely to be decidedly beneficial. There are some people, however, whose prepossessions no amount of evidence will remove.