

REPORT  
OF THE  
OBSTETRIC COMMITTEE  
ON  
ANÆSTHESIA IN MIDWIFERY,  
AND THE  
SPECULUM UTERI.

By HENRY MILLER, M. D.

OF  
LOUISVILLE, KY.

---

REPRINTED, FOR PRIVATE DISTRIBUTION, FROM THE TRANSACTIONS OF  
THE KENTUCKY STATE MEDICAL SOCIETY,  
1852.

---

LOUISVILLE, KY.  
WEBB & LEVERING, MAIN STREET,  
1853.

# REPORT

OF THE

## COMMITTEE ON OBSTETRICS.

---

THE Committee on Obstetrics, instead of offering to the Society a résumé of the additions that have been made to our stock of knowledge in this important branch of medicine, within the last twelve months, beg to submit some reflections upon certain valuable discoveries and improvements of prior date, which, so far as they are informed, have been but partially adopted in this State. They refer especially to Anæsthesia in Midwifery, and the use of the speculum uteri in the diagnosis and treatment of the numerous, difficult and diversified diseases of the genital organs of females. The former they regard as a precious balm for the pain and anguish of childbirth; the latter, as a sure revealer of the arcana of the organs concerned, and a direct avenue of attack by which their diseases may be dislodged. Without the one, the physician must stop his ears to the most piercing cries extorted from human suffering; without the other, he is blind-folded and pursues a course of treatment necessarily empirical, or having, at best, no other than a theoretical basis.

The records of medicine prove that anæsthesia is an old idea in Surgery. Mandragora and other hypnotics were administered to obtund sensibility, and even abolish consciousness, as a preventive of the pain which would otherwise be suffered from the knife and cautery, in the various operations of Surgery. The

practice, however, did not obtain generally at any period in the history of Surgery, until the discovery of the anæsthetic properties of sulphuric ether, taken by the inhalation of its vapor. Prior to this discovery, there is no evidence that it ever entered into the imagination of any one to anæsthetize women in child-birth, to blunt or annul the pains incident to that condition. These seem to have been always regarded as natural and inevitable, and even after the discovery of the anæsthetic properties of ether, and the repeated demonstration of its safety and efficacy in surgical practice, some time elapsed before it was employed in Midwifery. Ether was first used by inhalation in Boston, Mass., in October, 1846, as a preventive of pain in surgical operations; and although it was exhibited almost daily by several distinguished surgeons, in public and private practice, and its lethean charms were the theme of general wonder, it was not employed in midwifery until the 19th of January, 1847, when Professor Simpson, of the University of Edinburgh, administered it in a case of difficult labor, the narrative of which it cannot be uninteresting to give in his own language:

“ The pelvis of the mother was greatly contracted in its conjugate diameter from the projection downward and forward of the promontory of the sacrum; the lumbar portion of the spine was distorted, and she walked very lamely. The present was her second confinement. Her first labor had been long and difficult; she began to suffer on a Monday, and after a protracted trial of the long forceps, was at last delivered by craniotomy late on the subsequent Thursday night. Even after the cranium had been fully broken down, a considerable time and much traction had been required to drag the diminished and mutilated head of the infant through the contracted brim of the pelvis; and she was long in recovering. Contrary to the urgent advice of her medical attendant, Mr. Figg, he was not made aware of her present or second pregnancy till she had arrived at nearly the end of the ninth month. It was thus too late to have recourse to the induction of premature labor, which had been strongly pressed upon her as the only means of saving her child, should she again fall in the family way. The pains of her second labor commenced in the forenoon of the 19th. I saw her, with Mr. Figg, at 5 o'clock in the afternoon, and again at seven. The os uteri was pretty well dilated, the liquor amnii

not evacuated, the presenting head very high, mobile, and difficult to touch; and a pulsating loop of the umbilical cord was felt floating below it in the unruptured bag of membranes. From 5 to 9 o'clock the pains seemed only to push the circle of the os uteri further downwards, without increasing its dilatation, or making the head in any degree enter into the pelvic brim. Assisted by Dr. Zeigler, Dr. Keith, and Mr. Figg, I shortly after 9 o'clock made the patient inhale the ether vapor. As she afterwards informed us, she almost immediately came under the anodyne influence of the ether. But in consequence of doubts upon this point, its use was continued for nearly twenty minutes before I proceeded to turn the infant, as I had previously determined to do. A knee was easily seized, and the child's extremities and trunk readily drawn down; but extreme exertion was required in order to extract the head. At length it passed the contracted brim, with the anterior part of its right parietal bone deeply indented by pressure against the projecting promontory of the sacrum, and the whole cranium flattened and compressed laterally. The infant gasped several times, but full respiration could not be established. The transverse or bi-parietal measurement of its head, at the site of the indentation, was, in its compressed state, not more than  $2\frac{1}{4}$  inches. Hence we judged the conjugate diameter of the pelvic brim not to exceed this. The infant was large, and rather above the usual size. It weighed 8 lbs. On afterwards examining the head and removing the scalp, no fracture could be found at the seat of the indentation. The thin parietal bone had merely bent inward.

"On questioning the patient after her delivery, she declared that she was quite unconscious of pain during the whole period of the turning and extracting of the infant, or indeed from the first minute or two after she first commenced to breathe the ether.—The inhalation was discontinued towards the latter part of the operation, and her first recollection, on awakening, was "hearing," but not "feeling," the head of the infant "jerk" from her, to use her own expressions; and subsequently she became more roused by the noise caused by the preparation of a bath for the child. She quickly regained full consciousness, and talked with gratitude and wonderment of her delivery, and her insensibility to the pains of it. Next day I found her very well in all respects. I looked in upon her on the 24th, the 5th day after delivery, and was astonished to find her up and dressed, and she informed me that on the previous day she had walked out of her room to

visit her mother. Mr. Figg informs me that her further convalescence has been uninterruptedly good and rapid."\*

Here was the fulfillment, for the first time, of the hope, regarded doubtless as visionary when it was uttered, expressed by Dr. Rush, "that a medicine would be discovered that should suspend sensibility altogether, and leave irritability, or the powers of motion, unimpaired, and thereby destroy labor pains altogether."† In the midst of total unconsciousness, this woman was delivered of her burden, without any struggles or efforts of her own, and her couch of suffering and danger was converted into a valley of Berachah.‡ After having witnessed the salutary effects of etherization in this case, Dr. Simpson did not feel at liberty to withhold it from others, and accordingly he informs us that he has employed it, with few and rare exceptions, in every case of labor, natural or instrumental, which has since come under his care, with the most happy and gratifying results.

If it be inquired—why should so much praise be awarded to Dr. Simpson for the application of anæsthesia in midwifery? the answer is ready, and may be easily appreciated by putting ourselves, in idea, in his position.

It is true that great numbers had been etherized in this country, and also in Europe, to prepare them for various surgical operations, which would have been otherwise accompanied with pain, and the results were most satisfactory. But there is a wide difference between administering ether, by a few inhalations, to produce the anæsthetic state for a short time, and administering it repeatedly, with each recurrence of labor pain, so as to keep the patient under its potent spell for hours together. Though a single dose of it may be safely eliminated from the system, who, in the absence of experience, could be assured that, by its continued introduction, the blood might not become surcharged with it and the patient be overwhelmed?

---

\* *Anæsthesia in Surgery and Midwifery*, by J. Y. Simpson, M. D., F. R. S. E. American Edition—1849, p. 83.

† *Medical Inquiries and Observations*, Vol. IV: p. 376.

‡ *II Chronicles*, xx: 26.

The writer well remembers that such a train of reflection passed through his own mind, when, after the discovery of etherization and its successful use in Surgery, in the city of Boston, he was considering the feasibility of its introduction into Obstetric practice, and his doubts and misgivings unfortunately deterred him from the experiment. Again—previous to the teachings of experience, who could know but that pains and parturient contractions of the womb are correlatives, and so indissolubly linked together that the abrogation of the former would draw after it the annihilation of the latter! And in point of fact this apprehension contributed to determine the writer against the trial of ether upon his obstetric patients. In this allusion to the difficulties and perplexities that beset the path of the obstetrician, when first meditating upon the use of ether, nothing has been said of the religious objection,—the apparent sanctity of pain, considered as a penal infliction, and the sacrilegiousness of the attempt to abolish it. In sooth, at the first blush, it does look like an impious effort to put asunder what God hath joined together; and etherization has been vehemently assailed on this ground by those whom the late Dr. Chalmers happily termed “small theologians.”

The first obstetric case in this country, in which etherization was practiced, was a natural labor under the management of Dr. N. C. Keep, of Boston, 7th April, 1847, reported in the Boston Medical and Surgical Journal, April 14th, 1847, in the following communication to the editor:

*Boston, April 10, 1847.*

“*Dear Sir:*—On the 7th instant I administered the vapor of ether in a case of natural labor. The patient was in good health, and in labor of her third child. Five and a half hours having elapsed from the commencement of labor, her pains, which had been light, but regular, becoming severe, the vapor of ether was inhaled by the *nose* and exhaled by the mouth. The patient had no difficulty in taking the vapor in this manner from the reservoir, without any valvular apparatus.

“In the course of twenty minutes, four pains had occurred without suffering; the vapor of ether being administered between each pain. Consciousness was unimpaired, and labor not retard-

ed. Inhalation was then suspended, that a comparison might be made between the effective force of the throes with and without the vapor of ether. No material difference was detected; but the distress of the patient was great. Inhalation was resumed; but the progress of the labor was so rapid, that time could not be found for sufficient inhalation to bring the system *perfectly* under its influence: still the sufferings of the last moments were greatly mitigated. From the commencement of the inhalation to the close of the labor, thirty minutes. Number of inhalations, five. No unpleasant symptoms occurred, and the result was highly satisfactory.

Yours, &c.,

N. C. KEEP.

Dr. Walter Channing, Professor of Midwifery and Medical Jurisprudence in the University at Cambridge, early and warmly espoused etherization in midwifery, and was the first to apply it in America, in Boston, in a case of *instrumental* labor, on the 5th of May, 1847. He subsequently used chloroform and ether in a considerable number of cases of natural, preternatural, and instrumental deliveries, and embodied the results of his own observations and those of many professional friends in and around Boston, in a volume, entitled "Etherization in Childbirth," which must endure as a monument of his zeal and industry in the cause of science and humanity.

Etherization in midwifery was first practiced in Louisville, and so far as is known to the Committee, in Kentucky, by the writer of this report, on the 20th February, 1848. Here as elsewhere it had been used in surgery before it was used in midwifery. The case referred to was a first labor, the patient being considerably advanced in years previous to her marriage. The presentation was natural, but owing to the inefficiency of the pains and the resistance of the soft parts it became necessary to resort to the forceps for her delivery. After the extraction of the child, which was alive and did well, there was difficulty with the afterbirth, and it became necessary to introduce the hand into the uterus to detach and remove it. Her sufferings being unusually severe, chloroform was administered for four or five hours before instruments were used, and she was so fully under its influence, at the time of delivery, as to be totally unconscious, either of the ex-

traction of the child or placenta, nor did she awake until ten or fifteen minutes afterwards. No accidents occurred in the puerperal state, and her convalescence was, in every respect, satisfactory.

In bringing the subject of anæsthesia in midwifery before the Society, it is not so much the intention of the Committee to discuss formally its merits, as to urge its more general adoption by the members, and arouse them to greater efforts to diffuse its benefits within their respective spheres. The safety and advantages of the practice have been so clearly exhibited by Simpson, Channing and others, and the objections alleged against it by prejudice, ignorance, or timidity, have been, again and again, so triumphantly refuted, that it would be a work of supererogation to go over the field of controversy at this time. The Committee may, nevertheless, be pardoned for submitting a few observations on the mode of administering anæsthetics, and the benefits accruing from their administration, in ordinary and extraordinary cases of midwifery.

---

FIRST—THE MODE OF USING ANÆSTHETICS.

---

Several chemical liquids, of a volatile nature, have been ascertained by experiment to possess anæsthetic properties,—such as sulphuric ether, perchloride of formyle or chloroform, chloride of hydrocarbon, nitrate of ethyle, bisulphuret of carbon, &c.—Agreeing in the common property of producing, more or less perfectly, the anæsthetic state, each of these agents is imbued with properties peculiar to itself, rendering it, more or less, suitable for the particular use in question. After many experiments upon himself and others, Dr. Simpson was induced to give the preference to chloroform over all its congeners. Chloroform is preferable to sulphuric ether,—the only one of the list that can be put in competition with it,—in several respects: it is more portable, a small quantity sufficing to produce the effect; it is less exciting and more agreeable to inhale; and its action is more rapid and complete, and generally more persistent.



Chloroform is the only agent which has been used by the writer, and he has had no reason to be dissatisfied with it, or inducement to try others. In its exhibition, he has never used anything but a lady's handkerchief, folded the size of his hand, and held in its palm, rendered hollow by flexing the fingers. The handkerchief is sprinkled with chloroform, either by pouring or shaking the vial containing it while the handkerchief is held on its mouth. Perhaps a drachm may be required for its first wetting, and it is then held, in the hollow of the hand, over the nose and mouth, in pretty close approximation. The patient must be encouraged to inhale it until she is quieted, or until slight snoring indicates that she has fallen into a state resembling natural sleep, when the handkerchief must be removed and folded in the hand, to prevent, as much as possible, the evaporation of the chloroform. During or immediately previous to each returning pain, the handkerchief is to be held to the nose and mouth, and must be sprinkled afresh with the chloroform, from time to time. When distention of the perineum gives warning of the advent of the child, to relieve the more excruciating pains which are then endured, the patient should be made to inhale more freely until a greater degree of insensibility is induced than had existed previously. Until this period, it is not essential that the inhalations be pushed to the extent of producing complete insensibility. It may be, and frequently is used by the writer as a *benumber* of pains at first, and is more liberally exhibited toward the conclusion, so as to annul the anguish and avert the shock which would otherwise be endured by the patient. The accoucheur need not, and indeed cannot himself administer the chloroform throughout the labor, without neglecting his indispensable duties, especially toward its termination. The writer's practice is, having commenced the administration and observed its effects, to commit the handkerchief and chloroform vial to any female friend, who may chance to be present, and direct by signals its further use.

## SECONDLY—THE BENEFITS OF ANÆSTHETICS.

*First: In ordinary Labor, as an Anodyne.*

Whatever doubts may have existed formerly, the experience of our own times has demonstrated that pain is not an essential component of parturition in the human species, any more than in the inferior animals. There are, truly, mechanical impediments peculiar to woman, incident to her erect position, and imposed as a tribute for her superior rank in the scale of being. But to surmount these, she is benevolently provided with a muscular apparatus, superior in point of strength to what belongs to any of the inferior creatures; and, in obeying the requisition made upon it, when the fœtus is to be expelled, this apparatus may be exerted, to the utmost of its capabilities, without the accompaniment of pain. There is no more curious phenomenon (curious, because we are so accustomed to witness suffering in travail,) than that which we now often see in the lying-in chamber, a woman in the strong throes of childbirth, straining every auxiliary muscle in aid of the powerfully contracting uterus, while the breath is held and the big drops of sweat stand on her brow, and yet she feels no pain, even though consciousness may remain. The motor nervous power is unimpaired, while the sensory is temporarily paralyzed.

If, then, pain be not essential, we are strongly tempted to suspect that it is *unnatural*, and when we consider that among many families of our race, there is almost a complete exemption from it, our suspicion is converted into assurance. When it may be truly predicated of any physiological function, that it is unnaturally performed, it must be concluded that the organs concerned in it are in a morbid condition, and this was a doctrine held and promulgated by Dr. Rush, which anæsthesia has contributed not a little to confirm. "The philosophers," wrote Dr. Rush, "in describing the humble origin of man, say that he is formed '*inter sterous et urinam.*' The divines say that he is 'conceived in sin, and shapen in iniquity.' I believe it to be equally true,

and alike humiliating, that he is conceived and brought forth in disease." This disease, according to the wise and benevolent author, appears in pregnancy and parturition. In pregnancy, there is inflammation of the uterus, evinced by all the usual phenomena of that morbid state, in other parts of the body, such as swelling and enlargement, hemorrhage, a full, quick and tense or frequent pulse, sizzly blood, and the formation of a membrane upon the internal surface of the uterus, similar to that which is formed upon other inflamed mucous surfaces. "Parturition," he continues, "is a higher grade of disease than that which takes place in pregnancy," consisting of "convulsive or clonic spasms in the uterus, supervening its inflammation, and accompanied with chills, heat, thirst, a quick full, tense, or a frequent and depressed pulse, and great pain."

For this disease of pregnancy and parturition, the great remedy of Dr. Rush was blood-letting, and perhaps his partiality for the lancet gave too much depth and intensity to the coloring of the picture which he has drawn of the pregnant and parturient states. After all due abatement, however, it must be allowed, by the candid inquirer, that in the actual condition of civilized society, much more suffering and danger await women, at such junctures, than in other conditions more simple and natural. We are not going to sing the praises of barbarism,—for we do not believe that mankind were intended by nature to live by the chase, and sleep in wigwams,—but it cannot be doubted that the habits of females, in highly civilized countries,—their luxurious living, their modes of dress, their neglect of exercise, and erroneous mental and moral culture,—tend to unduly exalt the nervous system, while the muscular is depressed and enervated. Hence, with not a few of them, pregnancy is but an interminable train of anomalous maladies, and parturition an enfeebled struggle, in which sensibility displays its usurped ascendancy over muscular contraction.

To allay this morbid sensibility,—to assuage the pain and anguish which are its product,—is surely a task that the obstetrician cannot deem unworthy of his best exertions. If it be esteemed,

upon the authority of Lord Bacon, "the office of a physician, not only to restore health, but to mitigate pain and dolors," he will find no fairer field for the exercise of this enviable prerogative, for there are no "dolors" that are at all comparable to those of morbid parturition; and, in the qualified sense which has been explained, nearly every case with which we are concerned is of this nature.

But the benefits resulting from anæsthetics in Midwifery are not confined to the alleviation or annulment of pain. There is nothing established by more indubitable evidence than the greater freedom from the aches and ills of childbed, enjoyed by those who have been subjected to their influence. They complain of little or no weariness or soreness, and make better and more rapid recoveries. The writer was early struck, in a remarkable manner, with this fact, as he thinks every observant practitioner must be who uses chloroform, before his attention was particularly drawn to the testimony of others. This testimony it is needless to quote in detail; it may be found, in great abundance, in nearly all the narratives of cases, and in all the communications that have been written on the subject. What adds greatly to its credibility is the further fact that, in most instances, it is the spontaneous declaration of the patients,—their unprompted and grateful tribute,—who, if they have borne children before, under the old régime of strong cries and groans, wonder to find themselves so much more comfortable—so much more like themselves in their best estate.

---

*Secondly: The benefits of Anæsthetics in extraordinary Labor.*

---

If it be thus safe and salutary to administer chloroform in ordinary labor, we should expect still greater benefits from its use in extraordinary labor, involving, as it does, increased suffering and danger. The pain attendant upon natural parturition is perhaps as great as that which is endured in most surgical operations, while there can be no doubt that in some cases of preterna-

tural labor the agony is [both greater and more protracted than in any of the operations of Surgery. We refer more especially to delivery by turning in shoulder presentations, when the uterus is emptied of its waters and is molded to the fetus,—leaving but little space for the hand, and disputing every inch of ground, by the indomitable contraction of its fibres. In such a condition, the patient is not only exposed to excruciating pain, but to the risk of laceration of the womb, or destruction of the child. The imprisonment of the placenta by the hour-glass contraction offers another formidable difficulty, the surmounting of which subjects the woman to cruel torture and no slight danger. We see not how a humane practitioner can justify himself in withholding chloroform in such cases, even if it were not otherwise beneficial than as an anodyne and oblivious antidote of the pain which his ministrations must otherwise inflict. The appeal is, however, not to his sympathy alone. There are valid grounds for the belief that chloroform, in such cases, is not only a pain-annulling but a life-saving medicament. Dr. Channing has collected the statistics of 51 cases of instrumental, preternatural and complicated labor, treated with ether or chloroform, among which were nine cases of presentation of the shoulder,—all the mothers recovered, and six of the children were born alive,—which is more favorable, we think, than the general results of such cases. There were 24 cases of instrumental delivery, viz:—20 forceps and 4 craniotomy; all the mothers recovered, and 15 of the children were born alive, which is also greater success, we think, than generally attends the employment of instruments in Obstetric Surgery.

We do not allege that the statistics of Dr. Channing prove absolutely that chloroform has diminished the mortality of obstetric operations; but they serve, at least, to strengthen the faith, which reasoning is calculated to beget. What is there in manual and instrumental delivery, that enhances its danger more than the additional pain and shock which must be endured? And to neutralize this pain, to foil this shock, must increase the chances of recovery, by counteracting one of the elements of destruction.

Pain is depressing in its influence upon the vital energies, and in its greatest intensity may even extinguish life.

We do not doubt that when the subject shall be fairly investigated by treating a sufficiently large number of difficult cases in Midwifery, similar in kind and circumstances, with and without etherization, a large balance of maternal and foetal life will be found in favor of etherization. This prediction is justified by the statistical evidence collected by Dr. Simpson, which proves undeniably that the mortality of one of the most formidable operations in Surgery, viz: amputation of the thigh, has been remarkably diminished by etherization. He gives, in tabular form, the results of this operation in several extensive Hospitals, from which it appears that the lowest mortality was 36 per cent., or 46 deaths in 127 cases, in the Glasgow Hospital, wherein ether was not employed; while the same operation upon 145 patients, in an etherized state, but in other respects, under similar circumstances, was fatal in only 37 cases, or 25 per cent.—being a saving of 11 lives in every 100 amputations! This furnishes a strong argument from analogy in favor of the saving efficacy of etherization in Midwifery operations; for between these and surgical there is no difference.

We may advance a step further, and venture to predict that chloroform, administered in natural parturition, may sensibly curtail it of the mortality incident to it independently of any operative procedures on the part of the accoucheur; so that of an equal number of cases of natural labor, treated with and without chloroform, fewer of the former will die in childbirth than of the latter. The more fortunate issue of the etherized cases will be mainly attributable to the annulment of pain, which is a pernicious ingredient in the process of parturition; but we would not perhaps greatly err if we were to consider every parturition to be a natural surgical operation, and, therefore, as likely to be benefited by chloroform as the surgical operations of man's device. In the natural operation the dislodgement of the foetus is effected by the enormous and forced dilatation of the os uteri, vagina and vulva, and the application of a powerful *vis a*

*tergo*, instead of a tractor, which an accoucheur would employ. After the operation is over, the uterus is in a state, which has been compared by Cruveilhier, (*Anat. Path. du corps hum.*, livr. XIII,) to a wound or the stump of a limb after amputation. Where the placenta and membranes had been attached, the mucous membrane is no longer found, or is only seen in the cervix, and about the orifices of the tubes; every where else, the muscular tissue appears naked. Upon that portion of the uterine surface, which corresponded to the placenta, may be seen large venous orifices, plugged by coagula, resembling the orifices of the veins of the stump after amputation,—the simile is Cruveilhier's, not ours. Here, then, is an extensive solution of continuity, which needs to be repaired, and the process instituted by nature for that purpose, is accompanied by more or less fever, having many points of resemblance to that which follows other wounds, and hence denominated by Cruveilhier traumatic fever.