

ART. II.—*Statistics in Midwifery.* By JOHN GEORGE METCALF, M. D.,
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THE study of Midwifery, so far as the impressions of pupilage are remembered, led me to believe that I should more frequently meet with perplexing and dangerous cases in the practice of the obstetric art, than subsequent experience has verified. That alarming and fatal cases do sometimes occur, which put in requisition, to the full extent, the skill as well as the self-possession of the accoucheur, I readily grant; but that the exercise of these qualities is *very frequently* called for cannot be sustained, I am confident, by the testimony of any skilful practitioner.

The late Daniel Thurber, M. D., an eminent and respected physician of this town, in a conversation upon the subject, once told me that the great secret of success in the practice of midwifery very much depended upon *letting the patient alone*. Fresh as I then was from the books and the lecture-room, this was strange doctrine in my ears. What! little or nothing to do in attending a case of midwifery? If this were true, what was to become of all those varied and delicate manipulations by which I was to have the opportunity of exhibiting the great knowledge which I had gleaned from books? And when, if this were the case, and how was I to make an application of the manifold instruments described by Smellie, and Baudelocque, and Denman, and in the use of which I had perfected myself by actual experiment upon a machine made of leather and wood? This was contrary to all my preconceived notions of matters and things in this portion of the field of my future labours; and I take shame to myself that I was not so teachable upon this subject as the great experience and acknowledged skill of the doctor should have rendered me. A few years of practical acquaintance with the subject, however, induced me to yield an unreserved though tardy submission to the excellent precept of Dr. Thurber. And although it may as much astonish those who have just got through with the "*sweating operation*," before the professors or the censors, as it did me, yet, let

me assure my junior brethren, that the proposition is of sound, practical value, and worthy of all acceptance at their hands.

Many unfortunate labours have been made such, I am constrained to believe, by the criminal haste and impatience of the accoucheur. It requires, I am free to confess, no inconsiderable share of mental fortitude, many times, to resist the importunate intreaties of the patient for relief; she will submit to any operation; bear any amount of pain, and assume all the hazard, so that she can be speedily relieved of her troubles. Often, too, I am aware, the time hangs heavy upon us; the hands of the clock, as if in mockery of our anxiety, creep along at a snail's pace; we think of our other patients who have been expecting our visits for the last twenty-four or thirty-six hours; and, although the objurgation, "procul O! procul este profani," is found instinctively upon our lips, yet I dare not deny, that sometimes visions of quiet chambers and refreshing sleep contrasted with uncomfortable quarters and lengthened vigils, may not prompt us to an unseasonable interference with, as they seem to us, the tardy operations of nature. And did this interference always relieve the patient as well as the medical attendant, we should seldom be called to mourn over the disastrous result of our folly and impatience. That the efforts of nature in the act of parturition require assistance at proper times and seasons, and under appropriate circumstances, I have no doubt; but, in rendering this assistance, the comfort and safety of the patient is never to be compromised for the ease or the convenience of the physician.

The universal medical commonwealth, I am sensible, is somewhat divided in opinion in regard to the utility of the *numerical method of observation*. The great physician of La Pitié has his admirers and his opposers as well on this side of the Atlantic as in Europe. By one party, little if any merit is allowed to the system, and its distinguished author is reprobated as a false teacher in the great school of medicine; while, by the other, the system is regarded as the ne plus ultra of inductive philosophy, and its author as the Magnus Apollo of medical truth. The opposers of the numerical method object to its diffuse generalisations, and insist that its results are not to be taken as safe guides in the performance of our clinical duties. Still, they who object to it as a whole, are willing to acknowledge that the system possesses some merit. While they insist upon the importance of a more minute record of the symptoms of individual cases, they concede that there are many advantages resulting from a general consideration of a number of cases so arranged as that the aggregate results may be seen and appreciated at a single glance.

Although there may be found some seeming strength in the objections urged against the numerical method, when it is applied to the study of *disease*, the strength of those objections will be materially lessened when the method is applied to the study of the different stages of *parturition*. In parturition, which, strictly speaking, is a process of health, comparatively

but few circumstances are to be taken into the account in the prosecution of the study or its phenomena. In disease, on the other hand, beside the multitude of modifying considerations already well known and appreciated, the researches of modern physiology, together with the labours of the dissecting-room, are every day bringing to light new symptoms and new lesions; thus continually widening the field for analysis and induction, and consequently rendering it more difficult to deduce any valuable practical generalizations from the almost innumerable number of elementary data.

Not so with the subject of parturition. It is a long while since the knife, even of the transcendental anatomist, has revealed any thing of particular importance to aid us in the study of obstetrics; and the investigations of the physiologist, excepting, perhaps, on the subject of conception, have been narrowed down to an occasional inquiry concerning the nature and office of the umbilical vesicle, or a passing remark upon the spontaneous disruption of the symphysis pubis. Comparatively speaking, then, the phenomena of parturition are few and well settled; and it is to the study of various relations and combinations of these phenomena that we propose, in the present communications, to bring in aid the method of observation recommended and practised by one of the most indefatigable spirits of the present age.

Before proceeding farther, however, I propose to say a few words upon the medical topography of the ordinary circle of my professional visits. That portion of Mendon (the north part) in which I reside, is situated upon a considerable rise of land, lying between West river in Uxbridge and Mill river in Milford. Its surface, for the most part, is undulating; being broken into ridges and hills, some of which rise to a considerable height, and two of which were occupied as stations in the trigonometrical survey of the state. The hills trend, generally, from N.W. to S.E., and the land falls moderately in the same direction. The soil, for the most part, is heavy and moist, being excellent for grass, hay and orcharding. There are no stagnant swamps, marshes, or ponds in the vicinity, and very little of meadow land is to be found in the whole township. The water is generally soft and very excellent to the taste, though a few wells are found where the water is hard. For the last nine years, during which time I have kept a register, the annual mean of the thermometer has varied from 45° to 39.5°, and the annual range from 99° to 109°. The prevailing winds are from the S.W. or N.W. For the last sixteen years there have been no prevailing diseases in this part of the town, if we except the influenza and some of the minor exanthemata.

Premising that the cases which are the subject of the succeeding remarks, all occurred prior to the year 1839, I now proceed with the analysis of 300 cases of labour and delivery, upon which I attended as the accoucheur.

I. The 300 cases of delivery gave birth to 302 children.

II. Of the duration of labour.

The following table gives the duration of labour in hours; thus 1 woman was delivered in 1 hour, and so on:—

Hours in Labour.	No. of Women.	Hours in Labour.	No. of Women.	Hours in Labour.	No. of Women.
1	1	17	4	40	2
2	1	18	8	42	1
3	1	19	1	47	1
4	7	20	7	48	1
5	3	21	1	50	1
6	25	22	1	56	3
7	5	23	3	60	3
8	15	24	56	65	1
9	1	25	1	66	1
10	8	27	1	67	1
11	4	28	2	69	1
12	85	29	1	72	1
13	5	30	7	85	1
14	3	32	1	90	1
15	6	33	1		
16	2	36	14		

The two most lengthy labours, those of 85 and 90 hours, were both cases of deformed pelvis, the sacro-pubic diameter being very greatly reduced. In one case, that of 85 hours, the child was expelled by the natural efforts, without the aid of art. The other was delivered by lessening the head and the aid of the blunt hook. As this was the only case of instrumental delivery, it will be seen that the use of instruments occurred only once in 300 cases. Whether this proportion be great or small, compared with the practice in this country, I have no authority for determining. The following table of the proportion of instrumental deliveries, which have occurred in several cities of Europe, is copied from a Practical Treatise on Midwifery, by Robert Collins, M. D., of Dublin, to which, as will be seen, I have added the proportion occurring in my own practice.

Dresden Lying-in Hospital, Dr. Carus,	1	in every 13
Geissen, Lying-in Hospital, Dr. Kitgen,	1	" 9
Berlin, La Charité, Dr. Kluge,	1	" 15
Cologne, Lying-in Hospital, Drs. Minden and Merrem,	1	" 12
Breslau, Midwifery, Prof. Andrée,	1	" 35
Heidelberg, Private Practice, Nægelé,	1	" 28
Magdeberg, Midwifery Institution, Dr. Voigtel,	1	" 5
Breslau, Royal Lying-in Hospital, Dr. Küstner,	1	" 36
Marburg, Lying-in Hospital, Dr. Siebold,	1	" 9
Vienna, Lying-in Hospital, Dr. Boer,	1	" 96
Paris, Maternité, Madame Boivin,	1	" 183
London, Private Practice, Dr. Merriman,	1	" 98
London, Westminster Dispensary, Dr. Bland,	1	" 158
London, do do Dr. A. B. Granville,	1	" 80
Dublin, Wellesley Dispensary, Drs. Cusack and Maunsell,	1	" 34
Dublin, New Lying-in Hospital, Dr. Beatty,	1	" 99
Dublin, Lying-in Hospital, Dr. Joseph Clarke,	1	" 162
Dublin, " " Dr. Collins,	1	" 114
Mendon, Private Practice, Dr. John George Metcalf,	1	" 300

III. Presentation.

The following table comprises all the different presentations; thus in 286 children the vertex presented, and so on:—

Presentation.	No. of Children.	Presentation.	No. of Children.
Vertex,	286	Breech,	3
Face,	1	Funis,	2
Face to pubis,	1	Placenta,	1
Both feet,	3	Not known,	4
Foot and knee,	1		

By the foregoing table, it will be seen that the natural presentations, allowing the four cases not known to have been preternatural, were 94.7 per cent. of the whole number, leaving only 5.3 per cent. for all presentations other than the vertex.

The *face presentation* occurred in a rapid labour, and gave no trouble in the delivery. There was nothing in the case worthy of note, save that I was sorely puzzled for a while to make out the presentation. The child's face was very livid, and did not assume its natural colour for some days.

The *face to the pubis presentation* occurred in a long and tedious labour. It was the first case to which I was called, after I came to this town, and was a miscarriage in the eighth month of utero-gestation, occasioned by the brutality of a drunken husband; complicated as it was with a prolapsus of the funis, and stranger as I was to the practice of midwifery, as well as to the people among whom I had located myself; this case, as may well be supposed, gave me no inconsiderable uneasiness. It, however, terminated well; the child, from the prolapsus of and pressure upon the umbilical cord, was lost, but the mother had a speedy recovery.

Of the *three presentations with both feet*, two were lost after the descent of the child as far as the head. In the first case I was not called until after a midwife had exhausted her skill if not her strength upon the delivery, and the child was found quite dead upon my arrival. The delivery was completed without any difficulty, and the patient soon recovered. The other occurred in the early part of my practice, and with a fair trial, except the absence of the uterine contractions, I did not succeed in accomplishing the labour until the child was dead. Perhaps, but for certain vague fears of a dislocated neck, or having a child born minus a head, I might have accomplished the delivery in season to have preserved the child. As it was, however, I was too late, and I could plainly distinguish those convulsive motions, described by authors, as preceding the death of the fœtus. The remaining case was delivered with but little aid, after a labour of twenty-four hours.

The case where *one foot and one knee presented*, being soon converted into a footling presentation, was got along with as far as the head, without difficulty. Here it was arrested, and for a while, resisted my utmost endeavours; but, with the fingers depressing the chin and the exercise of no in-

considerable degree of force, delivery was accomplished in season to preserve the life of the child.

The *breech presentations*, of which there were three, all did well. One of them was attended with the longest uterine contraction I ever witnessed. At its commencement, I was sitting below stairs in conversation with the husband, from whom I was summoned by one of the attendants. On entering the room, I found the patient in strong pain; and, on making an examination, I ascertained that the breech presented, and was rapidly passing through the superior strait of the pelvis. The uterine effort continued without the least intermission, until the delivery was wholly completed. Twenty-five minutes before this I was unable to make out the presentation. It was a fourth labour, and the whole process was accomplished in three hours. From its completion at 8 P. M., until 4 of the clock the next morning, the patient continued very faint; the syncope, at times, being quite alarming. There was a copious hemorrhage for the first hour or two, but I attributed the faintness more to the rapidity of the labour, and the suddenness of the delivery than to that circumstance, the patient being of a very full and plethoric habit. In all three of the cases no trouble was met with at the delivery of the head; with a finger in the mouth, and the chin depressed upon the breast, very little force was requisite to finish the labour.

In both cases where the *funis presented*, the child was dead some time before birth. One occurred in a case to which I was not called until some hours after the pulsation in the cord had ceased. The presentation was natural, the delivery was readily accomplished, and the child, which was a male, was found to be a very large one, weighing $11\frac{1}{2}$ pounds. It was the fourteenth child. The other case has already been referred to as the face to the pubis presentation, and was a miscarriage in the eighth month. The cord was found prolapsed at the first examination, and I was unable to reduce it behind the presenting part after repeated trials. Dr. Smellie says, "when the cuticle is detached, or nearly so, from the body of a newborn infant it is evidence that the child has been, *for some days*, dead." In this instance the umbilical arteries pulsated strongly for many hours after I was called, and continued to do so until within twelve hours of the birth of the child. The life of the child was also proved by the strong and sensible motions which could be plainly felt through the abdominal parietes; yet, when born, the cuticle was off in many places about the body, and one arm was almost entirely denuded.

The case of *presentation of the placenta* occurred in an abortion at five months. On coming at the residence of the patient, which was five miles distant, I was told that she had been flooding for some time and had become very faint. The attendants were very much alarmed and urged an immediate examination. On complying with their solicitations I found the vagina filled up with what I supposed to be a coagulum; but, a pain occurring at the moment, it was expelled and was found to be the placenta, completely

separated from the fœtus by the rupture of the umbilical cord. A succeeding examination brought on another uterine contraction, and the fœtus was soon afterwards expelled. Pressure upon the abdomen, together with the administration of diffusible stimuli and large doses of acetate of lead and opium, arrested the hæmorrhage. The patient continued extremely feeble for some days, and ultimately recovered after a tedious and protracted convalescence. This was the fourth time that abortion had occurred to the patient, having, in no one of her former pregnancies, arrived at the sixth month. She has since been delivered of a healthy child at the full time.

The cases of *presentation not ascertained*, were those to which I was not called in season, and of which the attendants could give no intelligible account on my arrival. Without being able to ascertain for a certainty, yet from the ease and rapidity of the labours, it is quite probable that these four cases should be classed with the presentations of the vertex. Supposing this to have been the case, we should have had then 290 presentations of the vertex out of 302 births, leaving but 12 preternatural presentations to make up the balance.

IV. *Sex.*

No. of Children.	Males. 165.	Females. 137.
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The table, as may be seen by inspection, gives 55 per cent. for males, and only 45 per cent. for females. Did this proportion hold good through the commonwealth it would give 403,047 males, and only 334,651 females, making a difference, in favour of the males, of 68,396.

But this ratio does not at all tally with the proportion between the two sexes as set down in the Sixth Census of the United States, taken in 1840. I there find the number of females set down at 372,366, and the males at 365,333, thus giving 7,033 more females than males.

By a comparison, however, of the census of 1830 with that of 1840, I find that the disproportion of females has been considerably lessened for the last ten years. The census of 1830 gives 13,989 more females than males, while that of 1840 brings down the excess of females to 7,033; thus making a difference in favour of the males of 6,956 between the two periods of the enumeration. Whether this difference is to be accounted for by an actual gain in the number of males born, or whether our young men have, at last, found out that their own New England (taunted though she may be, by our brethren of the sunny South, with exporting nothing but ice and granite) is to be preferred to the pine barrens of Carolina, or the lithographic cities of the West, are questions which yet remain to be settled.

V. Hours of Delivery.

Hours of Delivery.	No. of Children.	Hours of Delivery.	No. of Children.	Hours of Delivery.	No. of Children.
12 N.	2	8 A. M.	10	4 P. M.	22
1 A. M.	19	9 A. M.	7	5 P. M.	14
2 A. M.	17	10 A. M.	15	6 P. M.	15
3 A. M.	18	11 A. M.	12	7 P. M.	9
4 A. M.	10	12 M.	16	8 P. M.	12
5 A. M.	19	1 P. M.	6	9 P. M.	10
6 A. M.	12	2 P. M.	13	10 P. M.	15
7 A. M.	10	3 P. M.	7	11 P. M.	13

For the better understanding of the table I will say that it is to be read thus; 2 children were born at midnight; 19 at 1 A. M., and so on. It is not intended to be understood that the children were born exactly at the hour under which they are set down, but that they were born nearer to it than any other.

It is a popular notion, for what reason I know not, that many more children are born in the night than in the day time. An examination of the foregoing table, so far as the number of cases under examination may be allowed to prove the falsity of the supposition, will point to a different conclusion. It will be seen that 151 labours were completed between 12 o'clock at night and 12 o'clock at mid-day, being just one half of the whole number of children born; consequently just as many (151) children were born between mid-day and mid-night. It will be further seen that from 6 o'clock P. M. to 6 o'clock A. M. 155 children were born, and from 6 o'clock A. M. to 6 o'clock P. M. 147 children were born; thus distributing the births pretty equally between the forenoon and the afternoon as well as between the day and the night.

VI. Number of Pregnancies.

No of Pregnancies.	No of Women	No of Pregnancies.	No of Women
1	72	7	9
2	54	8	5
3	52	9	0
4	40	10	2
5	38	14	2
6	26	0	0

Thus, with 72 women, it was the first pregnancy, and so on. The terms, "number of pregnancies," used in this connection, are intended to comprise abortions and miscarriages as well as when the child was carried to the full time. It is probable that this table may not be strictly correct, as in the early part of my practice I was not so particular in my inquiries touching the subject of abortions; and besides, the desire, so generally evinced, to keep such accidents secret, may have sometimes stood in the way to a true and correct answer when the interrogatory was not forgotten.

The want of the age of the mother, I am aware, will render the foregoing table of, comparatively, little practical value. That deficiency, in my note book, I have supplied since the year 1839, when these tables were arranged;

and, should I find leisure or inclination, at some future day, to make further report of the obstetrical cases which have fallen under my observation, the present desideratum will be found in its proper place. As a matter of curiosity it may be noted that the whole number of women (300) had given birth to 993 children; that the *first* pregnancies occurred as often as *once* in every 13 cases; the *second* in every 18; the *third* in every 19; the *fourth* in every 25; the *fifth* in every 26; the *sixth* in every 38; the *seventh* in every 110; the *eighth* in every 198; and the *tenth* and *fourteenth*, each, once in every 496 cases.

VII. Weight of Children.

Weight	No. of Children.	No. Males.	No. Females.
2 lbs.	3	2	1
3	1	1	0
3½	1	0	1
4	1	1	0
4¼	1	0	1
4½	1	1	0
5½	5	2	3
6	2	1	1
6¼	1	0	1
6½	11	4	7
6¾	8	5	3
7	30	13	17
7¼	15	4	11
7½	28	14	14
7¾	9	3	6
8	40	17	23
8¼	11	6	5
8½	28	16	12
8¾	12	6	6
9	28	20	8
9¼	12	8	4
9½	17	15	2
9¾	6	3	3
10	15	10	5
10¼	2	1	1
10½	5	5	0
10¾	4	2	2
11	3	3	0
11½	2	2	0

The foregoing table is to be read thus; three children weighing two pounds each, of whom two were males and one a female, and so on. The children which weighed two, three and three and a half pounds, were abortions, at what months I am not able to state. The child weighing four pounds, I was told by the mother, was the largest of all her children at birth, she being then the mother of six. Although all small at birth and rather below the ordinary size at puberty, yet this family, without exception, by the time they arrive at adult age, exceed in stature most of their neighbours. The mother is below the medium standard, while the father is tall, muscular and robust. The two children, one a female and the other a male, weighing respectively four and a quarter and four and a half pounds, were born at the

full period, of healthy mothers, and both did well, although puny and feeble for the first few weeks.

The mean weight of the whole number of children is eight pounds two ounces; of the males eight pounds six ounces; and of the females seven pounds twelve ounces.

VIII. *Deliveries in the different months.*

Months	No. Deliveries.	Months	No. Deliveries
January	24	July	27
February	27	August	22
March	33	Sept.	31
April	17	Oct.	22
May	27	Nov.	27
June	21	Dec.	22

By comparison of the seasons it will be perceived that the births were distributed quite equally between the four; spring furnishing 77; summer 70; autumn 80, and winter 73. Of the individual months, March furnished the greatest number, being 33; while the succeeding month, April, furnished the least number, being only 17. Whether the universal custom of changing the yearly residence in the month of April has any connection with the paucity of births in that month, is a question, the decision of which I must abandon to gentlemen deeper in the mysteries of political economy than myself.

IX. *Circumstances not classified.*

Births completed without rupture of the membranes	-	-	-	-	2
Still-born	-	-	-	-	7
Abortions	-	-	-	-	5
Miscarriage	-	-	-	-	1
Twin cases	-	-	-	-	2
Children deformed	-	-	-	-	2
Pelves deformed	-	-	-	-	2
Spina bifida	-	-	-	-	1
Illegitimate	-	-	-	-	3
Puerperal Fever	-	-	-	-	2
Mortification	-	-	-	-	1
Convulsions	-	-	-	-	2
Retained placenta	-	-	-	-	1
Perineum ruptured during labour	-	-	-	-	1
Ergot given before the birth of the child	-	-	-	-	2
Ergot given after the birth of the child	-	-	-	-	3
Venesection during labour	-	-	-	-	2

There were *two* cases where the membranes were not ruptured until after the delivery of the child. In both cases the membranes were unusually strong; in one very remarkably so. In one case the delivery was accomplished eight or ten minutes before my arrival; but in both the membranes were ruptured and the children saved.

The late Dr. Thurber (the same gentleman to whom I have never before referred in this communication) once related to me a case of this kind, which,

from its infrequent occurrence, and as a curiosity in obstetric practice, is here inserted. I shall use the Doctor's own language in the narration. "I was called," said he, "in haste, to visit a woman at the alms-house in Bellingham, said to have been taken in labour while on the road, and who had been removed to the house by the overseers. On my arrival I was told that the patient had been delivered by the natural pains, but had given birth to a false conception or a monster, and which I was desired to determine. The attendant who was holding the product of delivery, folded in a sheet, declared it must be a monster, for she had felt strong motions in the mass, she was certain, for some minutes after the delivery; and besides all this, to make the matter of the monster more sure, the lady who had officiated as the sage femme averred that there was no navel-string to be found. On examination, judge of my surprise when I found, in the lap of the woman, the whole ovum, placenta and all; with the membranes still entire and the child floating in the liquor amnii. Had I been certain the child was past recovery I should have preserved the whole as an anatomical specimen; having doubts, however, I immediately ruptured the membranes and released the child from its prison house; but notwithstanding long-continued and persevering efforts for that purpose the little one could not be resuscitated."

Of the *seven still-born children* (not including the abortions) four were natural presentations and had been, apparently, some time dead. One was with the face to the pubis and two were footlings. Nothing worthy of record took place during their delivery.

Of the *five cases of abortion*, two were illegitimate. In one of the cases the placenta, after a dangerous hæmorrhage, was delivered before the fœtus; and in all, the flooding was more severe than in ordinary cases at the full time. The case where the placenta presented has already been commented on, and some further notice of the cases of illegitimacy will be found in another place before the close of the present communication.

The *single case of miscarriage*, occurred in the eighth month of gestation. It was a case where there was a prolapsus of the funis, with the face to the pubis, and has been already referred to under the head of presentations. By *miscarriage* I understand the occurrence of labour *after the sixth and before the close of the ninth month*; while the occurrence of labour at any time previous to the *close of the sixth month* is termed an abortion.

Of the *twin cases there were but two*, thus furnishing but *one* case to every 150 labours. This proportion is much smaller than obtains in the countries of Europe. From authentic records we learn that in France, the proportion of twins is *one* in every 95 births; in Germany, *one* in 80; in England *one* in 92; in Scotland *one* in 95; and in Ireland *one* in 62.

Of the cases under present consideration the first was a short labour, and the second child was born within five minutes of the first. The first child was a natural presentation; the second, presented footling; they were both

females. In the second case the children were born, the second after an interval of six hours from the first. The first was born within thirty minutes from the time when the mother woke from a sound sleep, and before even the nearest neighbour, who lived only across the road, could get up (it being night) and dress herself. The patient not dreaming that she was to be delivered of another child, for the present, at least, began to congratulate herself that she should do very well and cheat the Doctor out of his fee beside. It was not long, however, before she began to be afflicted with severe after-pains, and which continuing to increase in severity, and the after-birth not coming away in a reasonable time, induced her and her friends to believe that something or other was not quite right, and that it was best to send for the physician after all. I was accordingly summoned to attend, and, on my arrival, found the patient in strong and convulsive throes. I immediately sat down, and making an examination, found the vertex of another child presenting. A few pains accomplished the delivery. The children were, one a male the other a female, and, with the mother, did well. Of the first pair one died in a few weeks of hooping-cough, which was then prevalent in the neighbourhood. In both these cases there were two placentas, and, in both, they were not delivered until after the expulsion of the second child.

Two cases of deformity only occurred in the whole number under consideration: being in the proportion of *one* to every 150. In the first case the deformity consisted in the addition of two fingers and two toes, one to each hand and each foot. These were afterwards amputated and the subject reduced to the usual complement of members. The second case was one which very much excited my curiosity, at the time, from the fact that the exact species of deformity was foretold by the mother, before her accouchement. She declared that the child's hands would be articulated to the arm at the elbow, the fore-arm being absent, and that the fingers would be found pointing to the shoulder. She gave as a reason for this that, during her pregnancy, a little brother who had died of dysentery, kept his hands in continual motion about his mouth, for a day or two before his death, having the fore-arm constantly bent upon the humerus. The event of the birth verified her prediction to the letter. In this case also the funis could not have been more than eight inches in length, as it was with great difficulty I could apply the ligatures.

I have witnessed only *two cases of deformed pelves*. They both consisted in the undue shortness of the sacro-pubic diameter. In one case the child was born alive, by the natural efforts, after a tedious labour of 85 hours. It had convulsions for two or three days, after delivery, but finally recovered. In the other, after a labour of 90 hours, delivery was effected by lessening the head and the use of the blunt hook. This patient had a very rapid recovery. It was a natural presentation, and within the first twenty hours the head was firmly locked in the bony strait and the vertex was presenting at the os externum. Notwithstanding the pains were strong and regular for

many hours after this, yet no progress was made in the delivery. After the uterine efforts began to give way the ergot was repeatedly tried, but with no perceptible advantage. The strength and spirits of the mother were admirably sustained. Finding no progress was being made, I now proposed the calling in of counsel. Dr. Bucklin of Hopkington, an experienced and skilful physician, was called. After an examination of the case and a due consideration of the circumstances attending it, it was concluded to make further trial of the ergot. It was accordingly administered, and soon displayed its specific effect; producing severe and long-continued convulsive throes, but all to no avail. The child could not be made to advance though the dose was again repeated. Through all this time, (and the labour had now lasted almost 90 hours,) the patient held out remarkably well. For the last 24 hours she had got some considerable sleep, there was only occasional nausea; no arterial excitement was present; there was no abdominal tenderness, and the external organs of generation, although somewhat swollen, were free from heat or soreness. The mother had felt no motion of the child for the last 36 hours, and, despairing of seeing the labour accomplished by the uterine efforts, we now decided upon an attempt at artificial delivery. The forceps were first used, and although they could be well applied, yet the child could not be moved. A trial with the lever succeeded no better. The head was now opened with the scissors, the brain evacuated, and, with the hook fixed in the margin of the foramen magnum, the delivery was speedily accomplished.

Of the 300 cases there was but *one of spina bifida*. The child survived but a short time, and no liberty for a post-mortem examination could be procured. There was a tumour, of the size of half an orange, upon the dorsal vertebræ, and which evidently communicated with the canal of the spinal column. The forehead was low and retreating, and the expression of the face was decidedly fatuous. The birth was declared, by the mother, to have been premature, though the size and appearance of the child did not seem to support her opinion.

Two of the *three illegitimate children* were abortions. The one born at full time was without the ordinary circle of my professional rides. I was sent for, as I afterwards learned, because, being a stranger to the parties concerned, it was thought the lady would be relieved from the disagreeable necessity of listening to certain impertinent questions usually put on such occasions, touching the paternity of the child, &c. Of the abortions, the mother of one of the children was far gone with pulmonary consumption; and, as she told me, had drunk freely of tansy tea for some days before the occurrence of labour. Her paramour, as she averred, had also offered to procure some "pothecary medicine" to expedite the process, if she would take it, but this she declined. In the other case of abortion nothing worthy of note took place during the delivery or afterwards.

Of the *two cases of puerperal fever* only one was at all severe. In

this, the febrile incursion made its appearance on the third day, and was attended by the usual symptoms of that dangerous disease; rigors, long continued; head-ache; acceleration of the pulse; diminished secretion of milk; abdominal tenderness; cessation of the lochial discharge, &c. A vigorous, antiphlogistic treatment and regimen was pursued, and the patient ultimately recovered. She was bled twice and freely, and repeatedly purged with jalap and calomel, and salts and senna. The child was transferred to the bottle; but, at the end of three months, the lacteal secretion returned, the breasts became full and distended, and the child soon deserted the artificial nipple of her bottle for the more natural one of the mother. The other case was slight; a single bleeding, with a dose or two of sulphate of magnesia, completed the cure in a few days.

The *case of mortification* occurred in a young woman, four weeks after confinement with her second child. For the first week succeeding her accouchement no untoward symptom was developed, and all things seemed to promise a speedy recovery. Soon after this, however, she began to fall off and a mild degree of irritative fever supervened. The tongue became red and sore; she had continued headache; bowels close at first, though they soon became and continued loose until the close; skin, after the second or third day, constantly moist and clammy; no appetite; great and constant irritability of the whole muscular system, and very great dejection of the mental powers. Although aided by experienced and competent counsel, no impression was made upon the disease; all our curative efforts were of no avail, and the patient rapidly sunk. During the third week from her confinement, mortification made its appearance upon the calf of the left leg. When first discovered the lividity was about the size of a half dime. This continued to increase, assuming an oval shape, until her death, when it was nearly the size of the palm of the hand. For the last two or three days the patient was affected, for the most of the time, with a low, muttering delirium.

There were *two cases of epileptic convulsions*; one very severe and one slight. The slight case recovered after a single small bleeding and a draught of valerian. In the other the epileptic incursion took place a short time before the birth of the child, and the delivery was accomplished during a convulsion. The placenta was soon brought away and the patient removed to another bed. From this time, the convulsions continued rapidly to increase in frequency and strength for the first forty-eight hours; after which there was a gradual abatement. From the very first attack there was an entire loss of consciousness for the first *four days*; and during a considerable portion of this time, it was with great difficulty the patient could be kept upon the bed by two or three attendants. The treatment consisted in active depletion, accomplished by the lancet, purgatives and enemas. My notes of this case, which were very full and complete, have been mislaid or lost, or I would give the symptoms and treatment more in detail. The before-men-

tioned remedies, together with the adoption of the antiphlogistic regimen, however, constituted the basis of the medical prescription, and under which the patient recovered.

It was not until the morning of the fifth day from her accouchement that the patient showed the least sign of returning consciousness; and never shall I forget the smile of recognition which lighted up a countenance, once more beaming with intelligence, as I paid my morning visit to her bedside. I found she had no recollection of a single occurrence from the first attack until the present morning. The last thing she remembered was an intense and rending pain in the head; which, without doubt, took place just before the epileptic attack. During all this time she did not speak a single word or make a solitary, intelligent sign. On asking her now if she knew that she had become a mother, she answered me, with a smile, "I suppose I have, for I have just heard the cry of an infant in the other room; but I remember nothing since last night, when you was sitting by the side of the bed."

This patient, I afterwards learned, had been attacked with slight fits of epilepsy or hysteria during her pregnancy, but the exact nature of which I was unable to learn, she living at the time, in a distant part of the country. Her recovery was rather slow, but finally became firm and permanent.

The *case of a retained placenta* occurred in a fourteenth labour, and had happened to the patient in two or three prior deliveries. At the present time an alarming hæmorrhage soon came on, after the birth of the child, and the patient presently became faint. Finding the pains trifling, the hæmorrhage continuing, and the means used to prevent it unavailing, I carefully, and without much trouble, introduced the hand into the uterus; and, grasping the partially detached placenta, which I found at the fundus, it was soon safely delivered, the womb contracting slowly as the hand was withdrawn. Nausea and vomiting, attended with severe after-pains, soon followed and continued, with occasional intermissions, for five or six hours. The patient, however, was soon convalescent, and recovered her strength in the usual time.

The *case of rupture of the perineum*, took place in a fifth labour, and with a child of moderate size. The patient lay upon her back upon the middle of the bed, with the knees drawn up and close together. Just as the head was passing the os externum, during a violent pain, she threw her feet suddenly and violently down, and thus, crowding the head backward upon the perineum, it was ruptured. The rupture extended as far as the anus, but the sphincter was uninjured. It gave her some trouble for a few days, but after that I heard no more of it. I have met with one other rupture of the perineum, which occurred in a previous labour and under the management of another physician. The sphincter ani was completely divided and the rupture extended an inch up the rectum. On inquiry, I found she had never been able to command the fecal discharge, when any looseness of the bowels prevails, since the time of the injury.

With regard to the *use of ergot*, I have given it but *twice before the birth of the child*. In both the head was pressing upon the external organs; the parts were well dilated, and the uterine pains were nearly if not quite absent. One of the cases was complicated with a deformed pelvis, and the ergot was repeated more than once before the trial was abandoned. In both the specific effects of the medicine was soon produced, and in one the labour was soon completed. In the other the most violent contractions failed to accomplish the delivery, and, after ineffectual attempts to bring the child with the lever and forceps, craniotomy was resorted to.

I was once in attendance upon a long and tedious case of midwifery, when the uterine contractions were, at last, almost wholly suspended. The period of the labour, the low descent of the head, together with the dilatability of the external organs, made it a case where the use of the ergot was fully justified. The proposal was made to the patient, that a trial should be made with it; but she obstinately refused, alleging, that she had suffered from its administration in a former labour. But after waiting for another hour, and no return of the pains appearing, she very reluctantly consented to submit to its exhibition. On examining my medicine, however, I found I had none with me; and, as I was some way from home, I concluded to let a strong dose of black tea, seasoned with a little tincture of cinnamon, pass with my patient, for the so much dreaded decoction of ergot; trusting to the effect upon the imagination, for the hoped for result. The potion was administered with due gravity of face, and taking out my watch, I predicted that the pains would be produced in the course of twenty-five or thirty minutes at farthest. The attendants were directed to get in readiness for the reception of the new comer; while I sat down very deliberately, making what display I could with the ligatures and scissors, to await the operation of the prescription. True to the prediction, after the lapse of a little more than twenty minutes, the hitherto suspended, or scarcely perceptible contractions of the uterus began to increase, and, in the course of fifteen minutes more, were strong as I could wish. A few striving pains finished the delivery.

Now, whether these pains were the consequence of the recollection, by the patient, of the trial of the ergot in a previous labour, assisted by the mental associations connected with its operation; or whether their occurrence was simply a fortuitous coincidence, are questions I will not pretend to decide. I will only say, that I was relieved soon after the dose of tea and cinnamon was taken, from a state of much anxiety and suspense; glad to see the case favourably terminated for any reason.

The ergot given in three cases after the birth of the child, was for uterine hæmorrhage; and in all three, the hæmorrhage was soon measurably checked. I, however, more generally use the liquor cupri sulphatis of the American Pharmacopœia, or the acetate of lead and opium.

Venesection was practised during labour in only two cases, and in both, with the happiest results. In both cases the os uteri, as well as the external

organs, were rigid and unyielding, although the pains were strong and frequently recurrent. Both subjects were full and plethoric habits, and robust constitutions; and in both, the venesection was carried to the extent of decidedly affecting the system. Dilatation of the mouth of the womb soon followed, and delivery was speedily accomplished.

Having now concluded the recital of such observations, of a practical nature, as have occurred to me in recapitulating the preceding tabular statements, I propose to trespass no farther upon the indulgence of the reader at this time, than to close this paper with a few general remarks upon the *practice* of midwifery.

In the practice of this branch of our profession, the physician is sometimes placed in situations peculiarly adapted, not only to try his patience, but to call for the prompt and fearless exercise of some of the most important of his professional duties;—duties, the merits or demerits of which, are only judged of by the success or failure which follows their discharge; without the remotest reference to the propriety of their adoption, or the skill with which they have been performed. Like the political rebel, the doctor is deified or damned, solely by the triumphant or disastrous issue of the case. No matter if he has displayed the most consummate skill; no matter if his duty has been performed at the most opportune moment; no matter, if from the beginning, he has given an unfavourable prognosis; if he fails to accomplish what is, at present, beyond the reach of art, he is at once condemned, without benefit of clergy. And if the desired period ever arrives, it will only be after years of unheeded and unrequited toil, that he can retrieve his character as an accoucheur.

But, notwithstanding the manifold hazards of professional shipwreck, we should discharge our duties faithfully and fearlessly; disregarding alike every selfish suggestion, and every slavish fear which would lead us to hesitate or doubt. Situations will sometimes occur in the practice of midwifery, where, from the urgency of the symptoms, we are precluded from the aid of counsel, or even a reference to the library; and here the physician must depend entirely upon himself. Here he will learn how necessary it is to acquire that decision of character and concentration of thought, which, in the hour of danger, will secure him an honourable retreat, if not a glorious victory.

Never be deterred from doing whatever you believe important for the relief of the patient, by the fears, or indecision, or clamour of the attendants. Take counsel of your own judgment, and bide the issue. Having made up your mind that the efforts of nature are incompetent to the performance of the task, and that your interference has become necessary, never go to work with hesitation or precipitancy. Be calm, cool, and deliberate in every step of your operations. Never betray, by any ambiguous expressions, doubts of the necessity or the propriety of whatever you propose to do. Be careful also, that the eye or the hand does not contradict the professions of the

tongue. Make no unnecessary display of your tools, if you must use them, either to impress the patient with the importance of the operation, or raise the wonder of the attendants. In difficult cases, if the urgency of the symptoms does not prevent, avail yourself of the benefit of counsel, and never be obstinate if the patient or her friends anticipate you in its recommendation. I am satisfied that your acquiescence in her suggestions, on this point, will beget in your patient a stronger confidence than your opposition to them.

Do not interfere with the operation of the natural machinery of parturition; so long as there is a reasonable prospect, it will accomplish the process without your help. A physician of much experience in the obstetric art, once remarked, in my presence, that he believed many children were lost in those cases where ergot was given to expedite the labour. If this be the case, we should then be wary of its employment. We should never use it barely because we have a lengthy labour, and desire to have it completed. We should wait, unless the condition of the mother demands its administration; or the head is so low that we are *sure* a few pains will finish the delivery.

Physicians are sometimes applied to for the procurement of abortions, but such solicitations should always be resisted; unless, indeed, the condition of the mother should justify our interference. Such instances, however, are very infrequent, and should only be determined on after consultation.

Finally, be not discouraged that business and confidence come slow. Deserve them, and you will be sure, sooner or later, to find your reward. Study to be affable and condescending to all; remembering that it is your duty to sympathize, in an especial manner, with the sick and afflicted, as well as to cure their diseases. Despair not when you see the pedlar of some wonderful specific, carrying the town in which you live by storm. Envy not the arrogant quack, who, by the help of some contemptible trick of professional legerdemain, often builds up a character in a single night, for the reason, that nature has accomplished her purposes in spite of his blunders. Remember "the race is not always to the swift, nor the battle to the strong," and be comforted.

MENDON, *April*, 1843.