SOUTHERN

MEDICAL AND SURGICAL JOURNAL.

EDITED BY

PAUL F. EVE, M. D.,
AND
I. P. GARVIN, M. D.

Augusta, Ga.
JAMES McCafferty,
PRINTER AND PUBLISHER.

1847.
PART I.—ORIGINAL COMMUNICATIONS.

ARTICLE XXXIII.

Cases of Convulsions and other Nervous Affections, during Pregnancy, Parturition and the Puerperal state. By Joseph A. Eve, M. D., Prof. of Obstetrics, &c., &c., in the Medical College of Georgia.

Of all the diseases to which pregnant, parturient, or puerperal women are liable, there is none more frequent in its occurrence, more terrific in its invasion, or more truly dangerous in its results, than convulsions, and consequently none that requires to be met with more promptness and decision, or combatted with more boldness and energy; it is therefore of the very first importance that every practitioner, however young and inexperienced, should be thoroughly informed, that he may be prepared to meet such dangerous emergencies. His reliance must be on his own resources; for should he wait for the counsel or assistance of others, the favorable opportunity may be lost: then any efforts, however well directed, will not avail, and it will only remain for him to witness sufferings that he cannot relieve, and destruction that he cannot avert.

My object in the following pages is to give some details of my own practice and to make some comments thereon, with the hope of being able, in some degree, to benefit my younger professional brethren, and particularly to oblige the former pupils of our Medical College, who have kindly and frequently expressed a desire to have our views on certain subjects in a more permanent form, than oral instruction. We are induced the more readily to yield to their request, because we remember with gratitude their patient attention to our efforts to instruct them, and because we feel the same desire to serve them now, as before.
It is my design to avoid, as far as practicable, all theoretical discussion, to confine myself to details of my own practice, and to make such deductions as may be legitimately drawn from the facts. But it is not my intention to restrict myself to cases which properly come under the head of puerperal convulsions, for whilst some of these shall be omitted to prevent the unnecessary and tiresome repetition of cases in all respects identical, and some that were not seen until they were beyond the reach of medicine; other cases will be included, in which convulsions, although imminently threatened, were averted, and some other nervous affections which it is hoped will not be deemed altogether irrelevant or devoid of interest, as they may serve to throw some light on the subject under consideration. It may however be proper to remark that in all the cases omitted, the result was favorable, except in two, which occurred at a considerable distance in the country, in one of which the patient was moribund and in the other, in a desperate condition, before they were seen.

It would be much easier, and more in accordance with the course usually pursued, to present my views first, and then to refer to authorities and to adduce cases in support of the positions assumed; but an opposite procedure is preferred, not only because it is more in obedience with the dictates of the inductive philosophy, the most certain, rational and profitable method of investigating any subject; but because most of my opinions being the result of personal observation, it seems most in order to state the facts observed, and then the conclusions deduced from them.

The cases will generally be stated in the most concise manner; for whilst it may be proper to be sufficiently particular in some, to develop fully the plans and principles of treatment adopted, it will be tiresome to descend to the same minuteness in all.

After presenting a summary of cases, I will give my views of the nature and treatment of puerperal convulsions, and refer to those cases in confirmation of the opinions entertained.

The term Puerperal Convulsions shall be used, according to the application made by most obstetric authors, as comprising all cases of convulsions, occurring not only during parturition and the period immediately subsequent to it, but at any time during pregnancy.

Cases of puerperal convulsions may be divided into those which occur before the termination of the eighth month, those which occur any time after the eighth month or which anticipate labour, those which occur during labour, and those which take place after delivery.
Cases occurring before the termination of the eighth month.

Case I. Mrs. B. M., a lady of nervous temperament, small stature, but large head, highly intellectual and accomplished, subject to determination of blood to the head, long before marriage, from too close application to study, about 18 years of age, six months advanced in her second pregnancy, suffered during the night of the 18th April, 1843, with an intense headache, which continued to increase until daylight, when she was seized with a violent convulsion. On my arrival, one hour after, she had a second convulsion, she was immediately bled to the extent of making a decided impression on her pulse, her feet were placed in a hot mustard bath, cold water poured on her head from a height, and sinapisms applied to her extremities and along the course of the spine. She remained composed until 12 o'clock, M., when she had another convulsion, quite as severe as either of the preceding: she was again bled, and the warm pediluvia, cold dash to the head, sinapisms, &c., repeated, her hair was cut off and ice applied to her head during the intervals of pouring the cold water. About 6, P. M., she had another, but much less violent convulsion. A scruple of calomel was administered as soon as it could be swallowed, and its operation promoted by the sulphate of magnesia and purgative enemata.

This patient remained free from disease and comparatively comfortable until the morning of the 18th, when labour pains came on and she expelled a foetus evidently some days dead, the death doubtless caused by the convulsion. From this time she continued gradually to regain her health and strength.

The following year, this lady became pregnant again, and suffered exceedingly from various nervous affections, such as painful spasmodic seizures of the muscles of the arms, followed by a most distressing numbness of the hands and arms, partial paralysis of the tongue with an inability to articulate distinctly. Her sufferings at times were indescribably severe. Great apprehension was entertained that she would have convulsions, when parturition should come on, if not during gestation. But the most careful attention was given to her diet, to the state of her bowels and to exercise. She was induced to take a ride or walk every afternoon; she was bled once, took calomel two or three times, and saline laxatives whenever there was a tendency to constipation. Plethora of the sanguine system and too great accumulation of nervous excitability were thus prevented, and notwithstanding she suffered, so frequently and intensely during
pregnancy, she went her full time, and had a natural and rapid labour and a prosperous convalescence. Previous to the supervision of the convulsion, her face, hands and arms, feet and ankles were considerably swollen.

Case II. Mrs. R., a lady of sanguine temperament, of remarkably large and robust frame, inclining to obesity, about 30 years of age, six months advanced in gestation, had been for some days complaining of abdominal pains, resembling colic, for which she took the sulphate of morphine. On the morning of November 17th, 1840, she took a large portion without medical advice, in all probability a grain or more: not very long after taking this dose, she was seized with a violent convulsion, which soon resulted in profound coma.

My friend, Dr. Garvin, was also called to this patient. She was bled to a decided effect upon her pulse; cold water poured from a height upon her head; sinapisms applied to her spine and extremities; her feet placed in a hot mustard bath, and purgative enemata administered. In about two hours she recovered her speech and her senses so far as to understand and answer questions; she was threatened with a return of convulsions through that day and night, and did not have any recollection of what passed for forty-eight hours. She took a dose of calomel, the day she had the convulsion and for several days subsequent, her bowels were acted on by magnesia, salts, oil, &c. She was also bled again on the 18th. After this her health became good, but she felt no fecal movements. On the 15th December, about one month after the convulsion, labour pains came on and she expelled a foetus, from its appearance, some time dead. There was no recurrence, nor even a threatening of convulsions during labour.

Case III. Mrs. C., 19 years of age, of highly nervous temperament and slender frame, six months advanced in her first pregnancy, had become, contrary to her ordinary habit, very fleshy and plethoric. This lady had on the night of the 1st August, 1845, a most intense headache—her eyes had a peculiar wildness of expression and her countenance indicated extreme suffering;—she was bled immediately to the extent of thirty-two ounces, with prompt and decided relief: an active cathartic was prescribed the next day, and she continued tolerably comfortable, with however occasional spells of headache of milder grade, until the afternoon of the 7th, an interval of six days, when during the absence of her husband from home she had a convulsion; but as none except servants were present, her husband,
himself a physician, and myself, could not learn any thing satisfactory as to its nature and degree of violence, and were even left in doubt as to the fact of her having had a convulsion, as she had recovered from it before we saw her; we did not therefore adopt any very active plan of treatment. After waiting some time, there being no return, I left her in charge of her husband. Not long after my leaving the house, she had a violent convulsion. Dr. C. immediately took away not less than forty ounces of blood. Sinapisms were applied to her spine and extremities; cold water poured on her head from a height; her feet placed in a hot mustard bath, and as soon as she could swallow, a large dose of calomel was administered. She had only one more convulsion, and that much milder than the second. She continued in feeble health, without foetal movements, until the 26th, nineteen days after the convulsions, when parturient pains came on, and she expelled a foetus that presented transversely, and from its appearance, sometime dead; after this she regained good health. The following year she became pregnant, and passed happily through gestation and parturition.

Case IV. Mrs. S. G., a lady of decidedly sanguine temperament, very robust and plethoric, 34 years of age, the mother of eight children, six months advanced in pregnancy, after suffering pain and fulness of the head, on the 25th July, 1845, had a violent convulsion, which terminated in insensibility; her husband immediately opened a vein in her arm with his penknife, and took between thirty and forty ounces of blood: sinapisms, &c., were applied. She recovered her senses in forty-five minutes. A scruple of calomel was administered, to be followed in four hours by sulphate of magnesia.

The day after, she was quite comfortable, having had no return of convulsions. She was directed to live chiefly on vegetable diet; to obviate constipation, to which she was much disposed, by gentle laxatives when required, and to take exercise daily in the open air. By adopting this course, she passed happily through pregnancy and parturition, and gave birth to a fine healthy child. This lady had had convulsions in her last confinement, which will be subject of case 9th, coming under the head of Convulsions anticipating labour.

Case V. Mrs. S., a lady of nervous temperament, of very small and delicate stature, but more plethoric than usual, aged 20, married four years, had had several abortions about the second month, was now five months advanced in pregnancy. Abortion had been threatened, two weeks, by a sanguine discharge and intermittent pains.
Mrs. S. was detained in Augusta by her situation, having arrived here by rail-road on the 2d February, on her way to her residence some hundred miles distant. The night of the 12th she complained of severe pain in the abdomen, supposed to be colic, for which she took, without medical advice, a table-spoonful or two of brandy and twenty or thirty drops of laudanum. Early next morning, the 13th, she complained of intense headache, and at 8 o'clock, A. M., was seized with a violent convulsion. My first visit was in a half hour after the convulsion—intelligence was very imperfectly restored: her pulse was full and strong; I endeavored to anticipate another convulsion by a copious abstraction of blood; but it was too late;—twenty ounces were taken;—convulsions continued to occur at intervals of about a half hour, notwithstanding the vigorous employment of the most powerfully active means, practiced in the preceding cases, until she had seven, when the pulse becoming again more developed and tense, sixteen ounces more of blood were taken half-past 11 o'clock, A. M., after which the convulsions ceased,—her mind became much clearer, her countenance and expression much more natural, and she remained free from pain and comparatively comfortable, until about 12 o'clock at night, when labour came on, which she passed through without the slightest indication of convulsions. In this case, although miscarriage had evidently commenced a fortnight before the suprvention of the convulsions, (as was evinced by uterine pains and sanguine discharge,) the womb remained quiescent during the convulsions, and for twelve hours after, until her system had somewhat recovered from the shock occasioned by them, nor was there, as I have remarked, during the agitation of labour, which lasted eight hours, the slightest tendency to a return of convulsions.

Case VI. Mrs. D., a lady of nervous temperament, of large stature, but feeble health, about 32 years of age, had had one living child and several miscarriages, and was now six months advanced in pregnancy. On the morning of December 22d, 1842, had a convulsion, from which she recovered promptly. Neither the state of her head nor her pulse indicated the loss of blood. The usual remedies, with the exception of blood-letting, were employed, and in addition an emetic and antispasmodics, as aminacti, &c.; were administered. Convulsions continued to recur at irregular intervals until she had eight. In the evening, after a suspension of some hours, a ½ grain of the sulphate of morphine was administered with the view of preventing their recurrence during the night. The next morning she
was comfortable, but had no recollection of what had passed the day before. Dr. Dugas saw this patient in consultation after the second convulsion, and fully concurred in withholding the lancet, and pursuing the course above stated. This lady soon recovered her usual health, but did not perceive any motion of the fœtus, which however was not expelled until the 2d January, 1843, one month after, bearing the evidences of having been a long time dead.

This is the only case of convulsions either during pregnancy or parturition that I could regard as hysteric, the only one in which bloodletting has not been clearly indicated.

Case VII. Mrs. D., a lady of sanguine, nervous temperament, aged twenty years; health generally delicate, but at the time of attack more plethoric than usual; about 7 months advanced in pregnancy, about 7 o'clock P. M., Feb. 16th, 1842, had a violent convulsion followed by insensibility. As she resided at a distance of eight miles, several hours had elapsed before she was seen; she was still in profound coma. Bloodletting was carried to the fullest extent that prudence would justify—the most energetic application of cold to the head and sinapisms to the spine and extremities were repeatedly put in practice during the night. About daylight, she began to speak incoherently and unintelligibly at first, but soon recovered her senses. Her condition when I left her, was as comfortable and promising as could have been expected.

On the morning of the 20th, being called to her again, I found her labouring under intense pneumonia, caused by exposure to extreme cold in her reduced state, having been removed, contrary to my express orders, into a most uncomfortable room without a chimney, during a very inclement spell of weather. The recent abstraction of blood precluded all farther depletion: a blister was applied—emetic tartar, warm pediluvia, and all such means and appliances as her symptoms indicated and her condition admitted, were employed. She could not be regarded otherwise than in a desperate state.

On the 22nd, at 9 o'clock, A. M., the pneumonia had not abated, and labour had commenced. Before the expulsion of the fœtus, she began to sink. A forlorn hope was indulged that the system might rally when the uterus was relieved of its contents—the fœtus was promptly extracted by the crotchet and the placenta quickly removed; but in vain.

There was no renewal of the original disease—no convulsive movement distorted her dying face. As respects the convulsion, this
case may fairly be considered a recovery;—the premature delivery and death are justly attributable to the subsequent pneumonia.

Cases anticipating Labour.

These constitute a less numerous, but a more dangerous class of cases. According to my observation they occur generally during the ninth month and can very rarely be arrested until after delivery.

Case VIII. Mrs. W., of nervous temperament, and small, feeble stature, 16 years of age, 8 months advanced in her first pregnancy, contrary to her ordinary habit had become very fleshy and plethoric, March 4th, 1844, feeling very unwell, she had visited a friend a mile from home, in hope to be benefitted by the walk—in the evening she was too sick to return, and suffered all night from headache, which became intolerable in the morning, on which account I was called to her.

Before she could be bled, a violent convolution came on—she was bled as soon as practicable, to the extent of thirty-two ounces, and of making a decided impression on the pulse. Sensibility was partially restored in a short time. But another convolution ensued, another and another, in rapid succession, through the day, each one rendering the coma more and more profound. They continued to recur at longer intervals during the night, notwithstanding the employment of cold to her head, sinapisms to her spine and extremities, the administration of calomel and purgative enemata, and the abstraction of blood, carried to an extent far beyond what I have ever known in any other case. I bled her twice copiously, but as I was unavoidably detained away a considerable portion of the time by an obstetric case, she was visited in my absence by two of my professional friends, who judging, and perhaps correctly, from the violence and continuance of the convulsions, that she had not lost blood enough, each bled her once or twice more. Cups were also applied to the occiput and neck. The last general bleeding which was from the temporal artery, I was informed, exercised a decided influence over the convulsions as respects their frequency. In the afternoon, by examination per vaginam, the os tineæ was found beginning to dilate. Early in the night, the dilatation was still inconsiderable. At 8 A. M., next day, about 24 hours from the first convolution, the os tineæ being dilated, and the head resting on the perineum, the foetus was extracted by the forceps dead, as might reasonably be calculated on after so many convulsions. A very intelligent lady, who
was present all the time, counted forty-one convulsions, the greatest number I have ever known: it is possible, though not probable, that she may have made a mistake, but her veracity is unimpeachable. Although absent more than half the time, I witnessed a considerable number. After the removal of the foetus, there was no further convolution, but she continued extremely ill for many days, her pulse scarcely perceptible and innumerable frequent. Three days elapsed before she could speak at all, and five more her speech was wild and incoherent. It was not until the tenth day that she regained intelligence sufficient to realize her situation. After this her convalescence was as rapid as could have been expected; she was, however, for a year, more subject to headache than formerly. The following year, May 25th, she was confined again, having passed through pregnancy and parturition without the slightest indication of convulsions. Every care was taken during gestation to prevent sanguine plethora and an undue accumulation of nervous excitability by exercise, diet, and attention to the state of her bowels.

Case IX. Mrs. S. G., the subject of case 4, during the night of the 22d September, 1844, suffered intensely from headache, which increased in the morning, attended with dazzling and flashes of light. At breakfast, she said the butter-cup appeared like a ball of fire, and immediately was seized with a violent convolution. Her residence being some miles distant, nearly two hours passed before she was seen. I arrived in time to witness the third convolution—abstracted fifty ounces of blood immediately; directed sinapisms to spine and extremities; applied cold water to her head from a height; administered twenty-five grains of calomel, and prescribed warm mustard pediluvia, purgative enemata, &c. In about two hours, took away again from sixteen to twenty ounces of blood. After the second blood-letting, Drs. Hook and P. F. Eve arrived, and assisted me in the management of this case. In the afternoon the womb began to act. About sundown, the os tineæ being pretty well dilated, it was determined, in consultation, depletion having been carried as far as prudence would justify, to administer 3 iij. vin. ergot, and remove the foetus by the forceps. While placing the patient in a proper position for the introduction of the forceps, the tenth convolution came on, during which the foetus was expelled dead. Sometime during the night, while the attendants were changing her position, she had another convolution, making in all eleven. Seidlitz powders and salts were prescribed the next day to promote the operation of the calo-
mel. Intelligence was sufficiently restored to understand and answer questions; but she did not wake up to the reality of her situation until the fourth day, when she became very much excited at the thought of having given birth to her child, in a state of unconsciousness, and not knowing what had passed for several days; she, however, soon became composed, and possessing an excellent constitution rapidly regained her health and strength. The ensuing year this lady became pregnant, and when six months advanced, had another convulsion, which constitutes case 4th.

Case X. Dec. 31st, 1846, called to visit Mrs. R., a lady of nervous lymphatic temperament, aged 30 years, eight months advanced in her third pregnancy, much more fleshy and plethoric than usual, found her suffering from a violent headache which had existed several days. Notwithstanding the intense cephalalgia and the manifest signs of great plethora, her pulse was rather feeble and below eighty per minute. The depressed state of the pulse, doubtless, depended on the condition of the nervous system. She was bled at 3 o'clock, P. M., to thirty-two ounces, with immediate relief to her head; during the flow the pulse became more developed. A dose of calcined magnesia and warm sinapized pediluvia were prescribed.

At 6, P. M., three hours after the bleeding, she had, from the description of those present, a violent convulsion. A half hour after, I found her in a state more like natural sleep than coma, from which she was aroused by the puncture of the lancet, made for a second abstraction of blood, which did not exceed twenty ounces. Intelligence was apparently restored, but she had scarcely any recollection of what had passed that whole day, even before she had the convulsion. She was so blind, that evening and the next day, Jan. 1st, that she could not discern the light of a candle held near her eyes, except for a short time, immediately after pouring cold water on her head, which was repeated hourly for a considerable time, twenty-four to thirty-six hours, and afterwards at longer intervals. Her bowels were acted on by calomel, magnesia, salts, &c., but such was their torpor that immense doses were required. Her sight gradually improved through the 2d and 3d, and by the 4th, was perfectly restored; her pulse also became natural and her system apparently free from all morbid action. During the night of the 4th labour came on, and early the morning of the 5th, she was safely delivered of a living child, small and feeble at first, but it has survived and grown rapidly. During labour, there was not the slightest disturbance of the brain or nervous system.
This case might be said not to come properly under the head of convulsions, anticipating labour, inasmuch as there was an interval of four days between the convulsion and the labour; but it is confidently believed that the labour was induced prematurely by the convulsion, and that, had this patient not been most opportunely bled, a short time before and almost immediately after it, there would have been a repetition of the convulsions, which would have ushered in labour during their continuance, to the almost certain destruction of the child, and great peril of the mother. This is, at least, the only case I have known of a convulsion in the ninth month without a repetition, and without the induction of labour; the convulsions continuing to recur with irresistible pertinacity until delivery has been effected, and sometime afterward.

Case XI. Nancy, a negro woman, the property of Dr. J. B. Walker. Early in the morning of September, 23d, 1845, this patient was found in a convulsion: it was not known when they commenced or how many she had had. Dr. P. F. Eve, soon after being called, found on examination that labour had commenced. It was impossible to determine which had precedence, the convulsions or the labour; but as the os tineæ was very little dilated and rigid, it is most likely the convulsions had occurred first. She was seven or eight months pregnant. The Doctor bled her as freely as her pulse and the state of the system demanded, and applied sinapisms extensively to her spine and extremities.

A consultation was held at 12, M. Turning was impracticable, even if deemed expedient. Emetic tartar, in divided portions, was prescribed with the hope of promoting dilatation as well as of arresting the convulsions. Farther bleeding was inadmissible. Her bowels had been operated on during the forenoon by oil, taken the day before.

At 3, P. M., her symptoms becoming more alarming, although the dilatation was very little, if at all, increased, it was determined, if possible, to deliver by the crotchet. Through courtesy, the delivery was kindly committed to me. It was rendered very difficult by the mobility of the head, the unsteadiness of the patient and the want of dilatation of the os tineæ, and farther embarrassed by the protrusion through it of the arm and umbilical cord. It occupied about twenty-five minutes, no convulsion occurring during its performance, and only one more, some hours afterwards.

After the delivery, 5ij. wine of ergot was administered to promote
uterine contraction and prevent hemorrhage. At 8, P. M., we found her in a state of great jactitation, pulse feeble and frequent; she could drink, and articulate a few words. Fifty drops of laudanum were given, and in two hours twenty-five more.

Sept. 24th—8, A. M. She had slept some during the night, appeared much better, was tranquil, pulse 80 per minute; large blisters on her thighs having failed to draw last night, were reapplied and drew well; appeared better all day. At 8, P. M., she was more restless, and her pulse increased in frequency. Five grains of calomel and a half grain of opium, every three hours.

25th—8, A. M. Patient was worse; breathing hurried, pulse more frequent: gave the calomel alone, and applied blisters to arms and neck. She became constantly worse through this day and the following night, and died about daylight the next morning.

Permission could not be obtained to make a post mortem examination. This patient had had convulsions in a confinement some years before, and her health appeared to be feeble at the time of the last attack.

**Convulsions during Parturition.**

**Case XII.** Mrs. W., a lady of nervous temperament and delicate frame, 17 years of age, had taken little or no exercise for some months past, and become more than usually plethoric. At 10, P. M., Dec. 1846, labour commenced so gently that, although a primipara, assistance was not called for some hours. The labour progressed as favorably as could have been reasonably desired. At daylight, the os tinae was fully dilated, the head resting on the perineum. She complained of some headache, but not sufficient to excite alarm, especially as the pulse was under eighty per minute and soft and the labour was so far and so well advanced. Bloodletting did not appear to be indicated. When a speedy and happy termination was expected, she was seized with a convulsion. A vein was immediately opened;—my friend, Dr. P. F. Eve, entered the room in time to conduct the bleeding whilst I attended to the delivery. The employment of the forceps was considered and declined, as it was believed that the delivery would be accomplished without instrumental aid, in as short a time and with much less hazard to mother and offspring. The child was born alive, in from twenty to thirty minutes. During the delivery of the placenta, which was hastened by the introduction of the hand, as it was deemed expedient to disburden the womb
thoroughly of its contents as soon as possible, she had another convulsion. Between one and two hours after the second, she had a third convulsion. A pint more of blood was taken, and 25 drops of laudanum given, after which she slept naturally; when she awoke, a scruple of calomel was given, to be followed by salts, in four hours. Cold water to her head, sinapisms, &c., were also employed, as in other cases.

Her convalescence was prompt and satisfactory. This is the only instance in which convulsions have occurred during labour, in a case in my hands. I have seen cases under the management of midwives, said to have supervened during labour, but nothing very certain could be learned of their previous history.

Convulsions after Parturition.

Case XIII. Mrs. G., temperament not well marked, about 28 years of age, primipara, had been for some months subject to an affection of the head, attended with temporary loss of speech, confusion of thought and sense of numbness on one side, for which I was consulted about two months previous to labour. She was advised to confine herself to a light diet, to take as much exercise in the open air as she could without inducing pain, and to use gentle laxatives whenever the state of her bowels required them; it was also advised that she should be bled promptly if she should have another attack. She had only one slight and very transient return, for which she was not bled.

At 7 o'clock A. M., 20th May, 1845, labour which had commenced about midnight moderately, and progressed slowly, became very severe, attended with headache, which excited considerable apprehension in my mind, as she had complained so much of her head during gestation. She would have been bled for this headache; but her pulse did not warrant it, and I feared it might so depress the energies of her system as to retard labour. Cloths dipped in cold water and ice were applied to her head. At 10 A. M., she gave birth to a large and healthy child. The danger I hoped was now passed. Ice was ordered to be kept to her head as long as she had any headache, which after vomiting had become very much relieved. At 1 P. M., she had a convulsion and was thought to be flooding, but upon examination, there was not much, if any, more than the natural quantity of lochial discharge, which was very thin, exhibiting very little, if any, coagula.

She was first visited by Dr. Cross, who cupped over the epigastri-
On Purpura Hemorrhagica.

By I. P. Garvin, M. D., Professor of Materia Medica, &c., in the Medical College of Georgia.

Hemorrhage, whether from accidental or other causes, is generally alarming, and demands prompt relief. This remark applies with peculiar force to those hemorrhages which depend upon a depraved state of the system, as the nature of the depravation is usually obscure, and the treatment uncertain. Among such diseases, probably the most alarming and intractable, yet fortunately the most rare, is
hemorrhagic form of Purpura. So rare indeed is this affection, that many old practitioners have never met with a case. From this cause, and from the obscurity which prevails as to the true nature of morbid changes in the blood, but little progress has yet been made in determining the most judicious treatment. Having met with four cases of this disease, we have determined to give the results of our observation, in the hope that they would prove not unacceptable to the readers of the Journal, though they should suggest nothing novel either in its pathology or treatment.

The term Purpura is generally confined to "an efflorescence of small distinct purple specks and patches, attended with general debility, but not always with fever." Under this name some writers include every variety of petechial eruption and spontaneous ecchymoses. We design however only to notice that form which is unattended with fever or other acute disorder.

This disease has not been noticed by any of the ancient writers. Riverius is said to have been the first to allude to it, which he did in a publication made in 1674. Very little attention was directed to it until the latter part of the last century, since which time it has been accurately described by Willan, Bateman and others. Beyond a mere description, however, very little progress has been made, and at this day its true nature is involved in as much obscurity, and its treatment is nearly as uncertain as it was half a century ago.

The description of this affection by Bateman is highly accurate, so much so indeed, that we cannot do better than to quote it entire. "In purpura Simplex (the form of the disease in which hemorrhage is wanting) there is an appearance of petechiae without much disorder of the constitution, except languor and loss of the muscular strength, with a pale or sallow complexion, and often with pain in the limbs. The petechiae are most numerous on the breast, and on the inside of the arms and legs, and are of various sizes, from the most minute point, to that of a flea-bite, and commonly circular. They may be distinguished from recent flea-bites, partly by their more livid or purple color, and partly because in the latter there is a distinct central puncture, the redness around which disappears on pressure. There is no itching nor other sensation attending the petechiae. Purpura hemorrhagia is considerably more severe; the petechiae are often of a larger size and are interspersed with vibices and ecchymoses, or livid stripes and patches, resembling the marks left by the strokes of a whip or by violent bruises. They commonly appear first on the legs,
and at uncertain periods afterwards, on the thighs, arms, and trunk of the body; the hands being more rarely spotted with them, and the face generally free. They are usually of a bright red color when they first appear, but soon become purple and livid; and when about to disappear, they change to a brown or yellow hue; so that as new eruptions arise, and the absorption of the old ones slowly proceeds, this variety of color is commonly seen in the different spots at the same time. The cuticle over them appears smooth and shining, but is not sensibly elevated; in a few cases, however, the cuticle has been seen raised into a sort of vesicle, containing black blood. This more frequently happens in the spots which appear on the tongue, gums, palate, and inside of the cheeks and lips, when the cuticle is extremely thin, and breaks from the slightest force, discharging the effused blood. The gentlest pressure on the skin, even such as is applied in feeling the pulse, will often produce a purple blotch, like that which is left after a severe bruise.

The same state of habit which gives rise to these effusions under the cuticle produces likewise copious discharges of blood, especially from the internal parts which are defended by delicate coverings. These hemorrhages are often very profuse, and not easily restrained, and therefore sometimes prove suddenly fatal. But in other cases they are less copious; sometimes returning every day at stated periods, sometimes less frequently, and at irregular intervals; and sometimes there is a slow and almost incessant oozing of the blood. The bleeding occurs from the gums, nostrils, throat, inside of the cheeks, tongue and lips, and sometimes from the lining membrane of the eyelids, the urethra, and the external ear; and also from the internal cavities of the lungs, stomach, bowels, uterus, kidneys and bladder.79

The disease sometimes appears without any marked premonitory derangement, the hemorrhage manifesting itself before the patient is aware of the existence of the petechial efflorescence. Such was the case in two of the instances which have come under our notice. In most cases, however, the disease has been preceded by much languor and debility, and pain in the limbs, with considerable derangement of the general health. There is a form of the disease known as Purpura Febrilis, a case of which we have never seen, in which the pulse is frequent and the skin dry and hot, but in the form of which we are speaking, the pulse is generally feeble and somewhat frequent and vibratory. Pains or some uneasiness are often felt in various parts of the body, particularly in those parts from which the hemorrhage
is about to occur. The appetite is not much impaired, but the bowels are almost always in a torpid condition.

The duration of the disease is exceedingly uncertain. It has been known to continue for months, and even years. In one of our cases it disappeared in ten or twelve days—in another it continued for three weeks; but a relapse was several times threatened, during the course of the succeeding year. In another case, hemorrhage occurred but twice, and the petechiae and ecchymoses disappeared in about a fortnight. In the fourth case the patient succumbed on the sixth day.

Autopsic examinations have been made of subjects who have fallen victims to this disease, but they have shed but little, if any light upon its nature. No lesions have been found which could satisfactorily explain the phenomena of the disease. Petechial spots were found on the surface of all the internal organs, some of which evinced considerable vascular turgescence. It has been suggested that the disease may result from tenuity of the blood—from dilatation of the mouths of the superficial extremities of the minute arteries—from increased impetus of the blood rupturing vessels which were healthy—from obstructions in healthy vessels, without increased impetus—and from a combination of two or more of these causes acting simultaneously or successively. Parry supposed that it was produced by “over distention of certain blood-vessels, arising probably from their relative want of tone, or the due contraction of their muscular fibres.” Plumb believes that it originates from “tenderness of the coats of the minute vessels which give way from the ordinary impetus of the blood. “That this tenderness is the result of deficient nourishment in the superficial vessels,” he says, “is equally clear; and it may fairly be suspected that such deficiency is consequent on congestion in the hepatic and gastric circulation.” McIntosh thinks that the disease is possibly owing to general functional derangement of many organs which at last produces changes upon the blood; and that it may probably be owing to disease primarily seated in the lungs. We think there can exist no reasonable doubt that the most striking and uniform morbid change is that presented by the blood, from whatever cause this change may result. Although some cases have been reported in which blood drawn by the lancet coagulated strongly and exhibited a sизy appearance, in a large majority of instances, the blood has evinced great fluidity, and when it did coagulate, it was in “a soft, tremulous mass.” In Dr. Gardiner’s case, “the blood
first drawn coagulated imperfectly, and on the following day resem- 
bled a tremulous jelly with a greenish surface interspersed with 
brownish spots. What was discharged afterwards, was more like 
turbid lymph, or a fluid in which some reddish coloring matter was 
suspended." We have no hesitation in expressing the opinion that 
the disease depends upon a depraved state of the blood, caused proba-
ably by functional derangement of the organs of assimilation. In 
some of the cases which we have seen, such a state of these organs 
evidently existed, and in every case, the blood was remarkably thin.

Purpura most frequently manifests itself in females and persons 
who have not attained the age of puberty, but no age is entirely 
exempt from its attacks. It is most frequently observed in persons 
of a delicate habit—employed in sedentary occupations, in crowded 
places, and nourished with a bad diet, or exposed to the action of 
fatigue or other depressing causes. It is said sometimes to occur as 
a sequel to other diseases, as measles, small-pox, &c. It must not, 
however, be concealed, that it occasionally attacks persons who have 
not been subjected to the action of any of the causes just mention-
ed, and who are apparently in tolerable health.

There is usually very little, if any difficulty in forming a correct 
diagnosis. The existence of the red or purple spots, which do not 
disappear under pressure, together with the occurrence of hemorrhage, 
give the complaint very marked characteristics.

Some diversity of opinion prevails as to the best mode of treating 
Purpura, originating from the frequent failures of every plan which 
has been proposed. Bleeding has been recommended by Parry, and 
some others. Doubtless a few cases have occurred in which this 
remedy was employed with advantage, or at least without obvious 
injury, but that it is at all admissible in most cases, we do not believe. 
The derangement in the general system which usually exists, and 
the anemic condition which soon supervenes, forbid the employment 
of the lancet. A case may occasionally occur, in which the health 
of the subject is but slightly impaired, and there have as yet been no 
profuse hemorrhages, when venesection would not prove hurtful, but 
its employment should be restricted to such cases, and even then it 
must be used with great caution. A medical friend has just men-
tioned to us the case of a gentleman laboring under Purpura, who 
was bled for a catarrhal affection by a medical man, under whose 
charge he was accidentally placed, and the consequences were fatal. 
In our objections to the lancet in this disease, we believe that we
are fully sustained by most practitioners who have treated the disease.

Among the remedies which enjoy the most reputation, are active cathartics, frequently repeated. We have used them with decided benefit, but we think reliance should not be placed upon them to the exclusion of other remedies. Rayer, and many others, employ calomel combined with jalap, whilst others give a preference to castor oil in union with the oil of turpentine. This last article has attracted considerable attention, and enjoys some reputation as a purgative in this disease. In the case of a child of seven years of age, the only case ever seen by Eberle, he found benefit from small doses of turpentine together with the nitrate of silver, twenty drops of the former to a quarter of a grain of the latter, every six hours.

The use of the mineral acids will be found of great advantage, particularly the sulphuric, which is among the best hemostatics that we are acquainted with. In one case, a comparatively mild one it is true, we effected a cure with the diluted sulphuric acid, aided by frequent laxatives.

Some of the best remedies have, in our opinion, been too much overlooked: we allude to chalybeates. Tonics we are aware have been fully tested, without any satisfactory result, and their use is generally condemned; but the preparations of iron are not merely tonics; they obviously effect changes in the blood, and to these changes we attribute their efficacy in this, as in some other diseases. We have treated two cases successfully with these remedies. In one very alarming case, the precipitated carbonate of iron was given in as large and often repeated doses as the stomach would bear, followed by frequent cathartics. Under this treatment, marks of amendment were soon visible, and the patient soon recovered. Several slight relapses which afterwards occurred, were promptly arrested by the iron alone. We have great faith in its efficacy. The cases in which we would expect the least from it, are those which occur in subjects in good health, and presenting some vascular fulness.

Astringents, internal as well as external, are in frequent requisition for the hemorrhages which take place. We have employed the acetate of lead and other articles of established reputation as astringents, without their usual marked effects; still, when hemorrhages occur, we are compelled to resort to these remedies.

It may be laid down as a general rule, that the hemorrhages which accompany Purpura, are to be arrested by the same means that we
would employ to arrest such discharges from the same sources under other circumstances—internal astringents, &c., when the hemorrhage is from some inaccessible source, and cold, styptics, compression, &c. when these can be efficiently applied.

We have met with a few cases of the Purpura simplex. It always yielded quite readily to the use of laxatives, together with a free use of the diluted sulphuric acid.

PART II.—REVIEWS AND EXTRACTS.
ARTICLE XXXV.

Proceedings of the National Medical Conventions held in New York May, 1846, and in Philadelphia May, 1847.

There is no profession entitled to a higher place in the estimation of mankind, than that of Medicine. Among the contributors to science, the votaries of learning, and the enlightened philanthropists of every age, physicians have occupied a prominent place. For many ages, with Theology and the Law, Medicine was known as one of the learned professions. But whatever may have been its former rank or its present claims, it must be obvious to the most superficial observation, that it has undergone a gradual decadence, and at this time, in our own country at least, it has fallen from its high estate, and is looked upon by many, even of the intelligent, as a mere art which any dolt may easily acquire. Medical men have long seen and deplored this state of things, and have at length united in an effort to rescue their profession from the reproach which has fallen upon it. In the proceedings of the National Medical Conventions, which embodied a large amount of talent and respectability, we have before us the causes which in their view have brought about the present order of things, and the remedies which they propose for their removal. From these proceedings it is to be inferred that the Convention suppose the evils complained of, to arise principally from three causes: first, from the want of a suitable preliminary education among those who apply themselves to the study of Medicine; second, from the lowness of the standard of strictly medical acquirements, which is generally adopted by the Colleges; and third, from the failure on the part of these institutions, to require from those who seek their honors, a full conformity to that low standard.
That each of the causes enumerated contribute to lower the profession of Medicine cannot for a moment be doubted, although some diversity of opinion may prevail as to the part which each performs. Our own opinion is, that the want of a proper preliminary education is the most efficient of those enumerated in degrading the profession. When we speak of a proper preliminary education, we wish to be understood as going far beyond the recommendations of the Convention. "A good English education, a knowledge of Natural Philosophy and the elementary Mathematical Sciences, including Geometry and Algebra, and such an acquaintance, at least, with the Latin and Greek languages as will enable them to appreciate the technical language of Medicine, and read and write prescriptions," will do much to facilitate the acquisition of Medical Science, but it will not prove of very essential service in elevating one whose knowledge is thus limited, in the estimation of the intelligent and cultivated men of the land. We admit that with this, or with even something less, a man of good mind, and untiring perseverance, may become a useful and safe practitioner, but the people at large have no means of estimating his fitness to exercise the functions of his profession, but by his general intelligence, and acquaintance with those branches of knowledge with which well educated men are familiar. If his knowledge goes not beyond what is strictly professional, they will suppose him ignorant in that, or as is too frequently the case, they will deem Medicine itself as a mere art which requires neither learning nor intelligence for its successful application. This test is the only one which the unprofessional can apply, and we hesitate not to say that a man of general learning will do more to render the profession honorable in the public estimation, than one much superior in medical skill, but deficient in every other species of knowledge. How can a man of cultivated intellect respect either the physician or his occupation who betrays a gross ignorance of the very rudiments of school-boy learning. We may lengthen the collegiate course—add new branches of science to the curriculum, and adopt the most stringent measures to secure a more thorough instruction in the Medical Sciences, but the profession will never be respected as it should be, until the great body of physicians is composed of well educated men. In view, therefore, of these reasons, we would advocate a high standard of preliminary education as a requisite for the degree of Doctor of Medicine. It has been objected that such a course would induce great numbers of young men to engage in the practice without the degree. Be it so. The public
would learn the difference between these, and the thoroughly educa-
ted physician. Moreover, many young men of proper ambition, 
would be induced to acquire the requisite education even by their own 
unaided efforts, who now are contented to remain ignorant because 
ignorance upon these subjects is common. We do not agree with 
the Convention, however, in their recommendation that practitioners 
should not receive pupils into their offices, and the Colleges should 
not matriculate such as have not attained the standard of prelimina-
ry education they have prescribed. Many young men, we have 
known several such, could carry on their scientific and literary stu-
dies at the same time. It is quite a common occurrence in France, 
for young men engaged in the study of Medicine to devote a portion 
of each day to lectures, and other instruction in those departments of 
knowledge, without which they would not be eligible to the honors of 
the Medical profession. It will be sufficient, and indeed all that is 
practicable to require conformity to the prescribed standard, of those 
who seek the honors of the Colleges. We cannot make every prac-
titioner a man of general learning, but we can require all to be such, 
who are honored with the Doctorate.

That the standard of medical education is too low, is a fact which 
no one is disposed to deny. It is certainly lower than in the most 
enlightened countries in Europe, and as a consequence a large por-
tion of our medical practitioners are inferior to their foreign cotempo-
raries in the extent, and minuteness of their scientific knowledge. It 
is equally true, and indeed what might have been reasonably expected, 
that a large portion of those who are thus imperfectly educated, make 
no sufficient effort to supply the defect, and fail to keep pace with the 
improvements of the age. We therefore heartily concur in the sen-
timent that, "it is indispensable that the standard of medical educa-
tion should be elevated." It may not in so considerable a degree 
increase the respectability of the profession, as would a high standard 
of preliminary education, but it would render it more worthy of public 
confidence. We believe, however, that the defect in the present 
ystem of medical education does not consist solely in a lack of in-
struction, but that the shortness of the period into which the whole 
amount of instruction is crowded, also exert a prejudicial influence. 
The report upon this subject justly remarks, "the shortness of the 
time devoted to the delivery of Lectures, we believe to be an evil of 
no small magnitude. It is next to an impossibility that the strongest 
intellect can receive, and well digest some half a dozen or more dis-
courses a day, embracing subjects which have oftentimes little or no immediate connection with each other. The mind becomes wearied with the multiplicity of its occupations, and the thoughts of to-day are forgotten in the constantly recurring duties of the morrow. A proper allotment of time cannot be given to that deep reflection which the importance of the subject demands, and without which no solid advancement can be made." For these reasons we approve of the extension of the course of Lectures, not only because new subjects may be taught, but because fewer lectures will occupy the attention of the student daily.

The Convention has not advised the introduction of new branches of science into the curriculum, if we except Medical Jurisprudence, which is now a distinct professorship in some few Colleges, and to some extent incidentally taught in all. There are doubtless some collateral sciences, instruction in which would add much value to the collegiate course, yet, under present circumstances, we think the Convention did well, in not requiring such branches to be taught.

Clinical instruction is also deemed by the Convention to be an indispensable element in a proper medical education. Of course they do not refer to that kind of clinical instruction to be derived from a case placed once or twice a week in a large amphitheatre, and surrounded by several hundred young men, many of whom are unavoidably at such a distance, as to be unable to distinguish the color of the patient's eyes. Such clinical instruction is a mere farce. In view of the fact, that in many of our cities, the hospitals and alms-houses are not under the direction of the Faculties of the Colleges, the Convention has not urged it as a prerequisite to graduation.

On the subject of dissection, the Convention says, "to enter into an argument to prove its absolute necessity, not only to the surgeon, but to the physician, would be a work of supererogation," and it is therefore very properly recommended that it be required of candidates for the degree, that they shall have steadily devoted three months to dissecting. It certainly speaks but little for the state of medical education in this country, that of the twenty colleges who reported their rules to the Convention, THIRTEEN do not require candidates to have dissected at all. We are pleased to say that the Medical College of Georgia is not among this number.

In relation to the influence which a failure on the part of the colleges to exact a full conformity to their own standards, exerts upon the character of the profession, and the remedy for the removal of
this evil, the Convention has expressed no opinion, but has referred the whole subject to the American Medical Association. But the two reports of the committee on the question of separating the business of teaching and licensing, doubtless embody the views of a large portion of that body. These reports alledge that the active competition of the Medical Colleges, and the desire to swell the number of their pupils, naturally produces a relaxation of their rules, and a consequent depreciation of the degree. To remedy this evil, it has been proposed to unite with the Faculties of the Colleges, medical gentlemen unconnected with any institution, and let a board thus constituted decide upon the application of candidates. This plan we deem objectionable. Whilst we admit that man is fallible, and that the promptings of interest, or friendship, may cause him sometimes to forget or disregard the responsibilities of his position, it is equally true that the same proclivity to evil may induce these new examiners to err upon the other side, and let professional rivalry or personal ill will influence their decisions. The experiment of requiring candidates for graduation to submit to an examination by persons unconnected with the faculty, we believe was made some years since in Charleston, but it did not succeed, and was soon abandoned. There seems to be quite an anxiety on the part of many members of the profession, to take from the colleges the power of conferring degrees, or in their own mode of expressing their idea, to separate the business of teaching from licensing. Whether the colleges will consent to any such arrangement, remains to be seen; but we believe that they will not. If an applicant complies with their regulations, and they are satisfied with his proficiency, it is their right, nay, more, it is their duty, to give him a testimonial to that effect. What is a Diploma, more than this? It is not a license, properly speaking—it is only so in States where some special enactment has made it such. A diploma from the Medical College of Georgia, cannot confer a right to practice medicine in any State of the Union except that in which it has been granted, unless the Legislatures of such State choose to make such diploma a license. If it is believed that the colleges graduate men who are not qualified to practice physic, let the proper authority in each State create boards of examiners, and require every one who desires to practice, to submit himself to their examination, whether he has a diploma or not, To such a plan, no College, we presume, would object.

Upon the whole, we are much pleased with the recommendations
of the Convention, and we doubt not that so much of them as is practicable, will eventually be carried out. We say eventually, because moderate as are the reforms proposed, they cannot be effected at once, but will require time and concert of action for their successful introduction. But that these changes will rescue the profession from its present position, and place it where it should be, we do not believe, although they will effect some good. In our country there is a deep-rooted prejudice against all privileges, and every science and art must make its way unaided by legislative enactments. The law gives no encouragement—it confers no privileges upon him who devotes every energy to improve the science of Medicine, but recognizes every empiric and ignorant pretender, as much as the man of science. Under such discouragements few are found to struggle for a high order of attainment, and many a young man who sat out with lofty aspirations and resolves, has yielded to their influence and settled down into indolence and indifference. We need expect no change in this respect. The evil is incident to our institutions. We may recommend what we please: every man who desires to do so, may enter upon the practice of Medicine, and the mass of the community will recognize him as a physician. In the Medical Colleges of the country the power alone resides to elevate the professional character. Let them impart fuller instruction, and establish a high standard of preliminary and medical education, to which every applicant for their honors shall be required strictly to conform, and though the medical profession will still continue to be incumbered with ignorant pretenders, the intelligent part of the community will soon rank them as they deserve, and will require as a prerequisite to their confidence, the possession of a Diploma from some respectable Medical Institution.

G.

Code of Medical Ethics, adopted at the late Meeting of the National Medical Convention.

CHAPTER I.

OF THE DUTIES OF PHYSICIANS TO THEIR PATIENTS AND OF THE OBLIGATIONS OF PATIENTS TO THEIR PHYSICIANS.

ART. I.—DUTIES OF PHYSICIANS TO THEIR PATIENTS.

§ 1. A Physician should not only be ever ready to obey the calls of the sick, but his mind ought also to be imbued with the greatness of his mission, and the responsibility he habitually incurs in its dis-
charge. Those obligations are the more deep and enduring, because there is no tribunal other than his own conscience, to adjudge penalties for carelessness or neglect. Physicians should, therefore, minister to the sick with due impressions of the importance of their office; reflecting that the ease, the health, and the lives of those committed to their charge, depend on their skill, attention and fidelity. They should study, also, in their deportment, so to unite tenderness with firmness, and condescension with authority, as to inspire the minds of their patients with gratitude, respect and confidence.

§ 2. Every case committed to the charge of a physician should be treated with attention, steadiness and humanity. Reasonable indulgence should be granted to the mental imbecility and caprices of the sick. Secrecy and delicacy, when required by peculiar circumstances, should be strictly observed; and the familiar and confidential intercourse to which physicians are admitted in their professional visits, should be used with discretion, and with the most scrupulous regard to fidelity and honor. The obligation of secrecy extends beyond the period of professional services; none of the privacies of personal and domestic life, no infirmity of disposition or flaw of character observed during professional attendance, should ever be divulged by him except when he is imperatively required to do so. The force and necessity of this obligation are indeed so great, that professional men have, under certain circumstances, been protected in their observance of secrecy, by courts of justice.

§ 3. Frequent visits to the sick are in general requisite, since they enable the physician to arrive at a more perfect knowledge of the disease,—to meet promptly every change which may occur, and also tend to preserve the confidence of the patient. But unnecessary visits are to be avoided, as they give useless anxiety to the patient, tend to diminish the authority of the physician, and render him liable to be suspected of interested motives.

§ 4. A physician should not be forward to make gloomy prognostications, because they savour of empiricism, by magnifying the importance of his services in the treatment or cure of the disease. But he should not fail, on proper occasions, to give to the friends of the patient timely notice of danger, when it really occurs; and even to the patient himself, if absolutely necessary. This office, however, is so peculiarly alarming when executed by him, that it ought to be declined whenever it can be assigned to any other person of sufficient judgment and delicacy. For, the physician should be the minister of hope and comfort to the sick; that, by such cordials to the drooping spirit, he may smooth the bed of death, revive expiring life, and counteract the depressing influence of those maladies which often disturb the tranquillity of the most resigned, in their last moments. The life of a sick person can be shortened not only by the acts, but also by the words or the manner of a physician. It is, therefore, a sacred duty to regard himself carefully in this respect, and to avoid all things which have a tendency to discourage the patient and to depress his spirits.
§ 5. A physician ought not to abandon a patient because a case is deemed incurable; for his attendance may continue to be highly useful to the patient, and comforting to the relatives around him, even in the last period of a fatal malady, by alleviating pain and other symptoms, and by soothing mental anguish. 'To decline attendance, under such circumstances, would be sacrificing to fanciful delicacy and mistaken liberality, that moral duty, which is independent of, and far superior to all pecuniary consideration.

§ 6. Consultations should be promoted in difficult or protracted cases, as they give rise to confidence, energy, and more enlarged views in practice.

§ 7. The opportunity which a physician not unfrequently enjoys of promoting and strengthening the good resolutions of his patients, suffering under the consequences of vicious conduct, ought never to be neglected. His counsels, or even remonstrances, will give satisfaction, not offence, if they be proffered with politeness, and evince a genuine love of virtue, accompanied by a sincere interest in the welfare of the person to whom they are addressed.

Art. II.—Obligations of Patients to their Physicians.

§ 1. The members of the medical profession, upon whom are enjoined the performance of so many important and arduous duties towards the community, and who are required to make so many sacrifices of comfort, ease, and health, for the welfare of those who avail themselves of their services, certainly have a right to expect and require, that their patients should entertain a just sense of the duties which they owe to their medical attendants.

§ 2. The first duty of a patient is, to select as his medical adviser one who has received a regular professional education. In no trade or occupation, do mankind rely on the skill of an untaught artist; and in medicine, confessedly the most difficult and intricate of the sciences, the world ought not to suppose that knowledge is intuitive.

§ 3. Patients should prefer a physician, whose habits of life are regular, and who is not devoted to company, pleasure, or to any pursuit incompatible with his professional obligations. A patient should also, confide the care of himself and family, as much as possible, to one physician, for a medical man who has become acquainted with the peculiarities of constitution, habits, and predispositions, of those he attends, is more likely to be successful in his treatment, than one who does not possess that knowledge.

A patient who has thus selected his physician, should always apply for advice in what may appear to him trivial cases, for the most fatal results often supervene on the slightest accidents. It is of still more importance that he should apply for assistance in the forming stage of violent diseases; it is to a neglect of this precept that medicine owes much of the uncertainty and imperfection with which it has been reproached.

§ 4. Patients should faithfully and unreservedly communicate to
their physician the supposed cause of their disease. This is the more important, as many diseases of a mental origin simulate those depending on external causes, and yet are only to be cured by ministering to the mind diseased. A patient should never be afraid of thus making his physician his friend and adviser; he should always bear in mind that a medical man is under the strongest obligations of secrecy. Even the female sex should never allow feelings of shame or delicacy to prevent their disclosing the seat, symptoms and causes of complaints peculiar to them. However commendable a modest reserve may be in the common occurrences of life, its strict observance in medicine is often attended with the most serious consequences, and a patient may sink under a painful and loathsome disease, which might have been readily prevented had timely intimation been given to the physician.

5. A patient should never weary his physician with a tedious detail of events or matters not appertaining to his disease. Even as relates to his actual symptoms, he will convey much more real information by giving clear answers to interrogatories, than by the most minute account of his own framing. Neither should he obtrude the details of his business nor the history of his family concerns.

6. The obedience of a patient to the prescriptions of his physician should be prompt and implicit. He should never permit his own crude opinions as to their fitness, to influence his attention to them. A failure in one particular may render an otherwise judicious treatment dangerous, and even fatal. This remark is equally applicable to diet, drink, and exercise. As patients become convalescent they are very apt to suppose that the rules prescribed for them may be disregarded, and the consequence but too often, is a relapse. Patients should never allow themselves to be persuaded to take any medicine whatever, that may be recommended to them by the self-constituted doctors and doctresses, who are so frequently met with, and who pretend to possess infallible remedies for the cure of every disease. However simple some of their prescriptions may appear to be, it often happens that they are productive of much mischief, and in all cases they are injurious, by contravening the plan of treatment adopted by the physician.

A patient should, if possible, avoid even the friendly visits of a physician who is not attending him,—and when he does receive them, he should never converse on the subject of his disease, as an observation may be made, without any intention of interference, which may destroy his confidence in the course he is pursuing, and induce him to neglect the directions prescribed to him. A patient should never send for a consulting physician without the express consent of his own medical attendant. It is of great importance that physicians should act in concert; for although their modes of treatment may be attended with equal success when employed singly, yet conjointly they are very likely to be productive of disastrous results.
§ 8. When a patient wishes to dismiss his physician, justice and common courtesy require that he should declare his reasons for so doing.

§ 9. Patients should always, when practicable, send for their physician in the morning, before his usual hour of going out; for, by being early aware of the visits he has to pay during the day, the physician is able to apportion his time in such a manner as to prevent an interference of engagements. Patients should also avoid calling on their medical adviser unnecessarily during the hours devoted to meals or sleep. They should always be in readiness to receive the visits of their physician, as the detention of a few minutes is often of serious inconvenience to him.

§ 10. A patient should, after his recovery, entertain a just and enduring sense of the value of the services rendered him by his physician; for these are of such a character, that no mere pecuniary acknowledgment can repay or cancel them.

CHAPTER II.

OF THE DUTIES OF PHYSICIANS TO EACH OTHER, AND TO THE PROFESSION AT LARGE.

Art. I.—Duties for the support of professional character.

§ 1. Every individual, on entering the profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honour, to exalt its standing, and to extend the bounds of its usefulness. He should therefore observe strictly, such laws as are instituted for the government of its members;—should avoid all contumelious and sarcastic remarks relative to the faculty, as a body; and while, by unwearied diligence, he resorts to every honourable means of enriching the science, he should entertain a due respect for his seniors, who have, by their labours, brought it to the elevated condition in which he finds it.

§ 2. There is no profession, from the members of which greater purity of character, and a higher standard of moral excellence are required, than the medical; and to attain such eminence, is a duty every physician owes alike to his profession, and to his patients. It is due to the latter, as without it he cannot command their respect and confidence, and to both, because no scientific attainments can compensate for the want of correct moral principles. It is also incumbent upon the faculty to be temperate in all things, for the practice of physic requires the unremitting exercise of a clear and vigorous understanding; and, on emergencies for which no professional man should be unprepared, a steady hand, an acute eye, and an unclouded head may be essential to the well-being, and even to the life, of a fellow creature.

§ 3. It is derogatory to the dignity of the profession, to resort to
public advertisements or private cards or handbills, inviting the attention of individuals afflicted with particular diseases—publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints or suffer such publications to be made;—to invite laymen to be present at operations,—to boast of cures and remedies,—to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.

§ 4. Equally derogatory to professional character is it, for a physician to hold a patent for any surgical instrument, or medicine; or to dispense a secret nostrum, whether it be the composition or exclusive property of himself, or of others. For, if such nostrum be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and, if mystery alone give it value and importance, such craft implies either disgraceful ignorance, or fraudulent avarice. It is also reprehensible for physicians to give certificates attesting the efficacy of patent or secret medicines, or in any way to promote the use of them.

Art. II.—Professional services of physicians to each other.

§ 1. All practitioners of medicine, their wives, and their children, while under the paternal care, are entitled to the gratuitous services of any one or more of the faculty residing near them, whose assistance may be desired. A physician afflicted with disease is usually an incompetent judge of his own case; and the natural anxiety and solicitude which he experiences at the sickness of a wife, a child, or any one who by the ties of consanguinity is rendered peculiarly dear to him, tend to obscure his judgment, and produce timidity and irresolution in his practice. Under such circumstances, medical men peculiarly dependent upon each other, and kind offices and professional aid should always be cheerfully and gratuitously afforded. Visits ought not, however, to be obtruded officiously; as such unasked civility may give rise to embarrassment, or interfere with that choice, on which confidence depends. But, if a distant member of the faculty, whose circumstances are affluent, request attendance, and an honorarium be offered, it should not be declined; for no pecuniary obligation ought to be imposed, which the party receiving it would wish not to incur.

Art. III.—Of the duties of physicians as respects vicarious offices.

§ 1. The affairs of life, the pursuit of health, and the various accidents and contingencies to which a medical man is peculiarly exposed, sometimes require him temporarily to withdraw from his duties to his patients, and to request some of his professional brethren to officiate for him. Compliance with this request is an act of courtesy, which should always be performed with the utmost consideration for the interest and character of the family physician, and when exer-
cised for a short period, all the pecuniary obligations for such service should be awarded to him. But if a member of the profession neglect his business in quest of pleasure and amusement, he cannot be considered as entitled to the advantages of the frequent and long-continued exercise of this fraternal courtesy, without awarding to the physician who officiates the fees arising from the discharge of his professional duties.

In obstetrical and important surgical cases, which give rise to unusual fatigue, anxiety and responsibility, it is just that the fees accruing therefrom should be awarded to the physician who officiates.

Art. IV.—Of the duties of physicians in regard to Consultations.

§ 1. A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honours of his profession. Nevertheless, as in consultation the good of the patient is the sole object in view, and this is often dependent on personal confidence, no intelligent regular practitioner, who has a license to practice from some medical board of known and acknowledged respectability, recognized by this association, and who is in good moral and professional standing in the place in which he resides, should be fastidiously excluded from fellowship, or his aid refused in consultation when it is requested by the patient. But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry.

§ 2. In consultations no rivalry or jealousy should be indulged; candour, probity, and all due respect should be exercised towards the physician having charge of the case.

§ 3. In consultations the attending physician should be the first to propose the necessary questions to the sick; after which the consulting physician should have the opportunity to make such farther inquiries of the patient as may be necessary to satisfy him of the true character of the case. Both physicians should then retire to a private place for deliberation; and the one first in attendance should communicate the directions agreed upon to the patient or his friends, as well as any opinions which it may be thought proper to express. But no statement or discussion of it should take place before the patient or his friends, except in the presence of all the faculty attending, and by their common consent; and no opinions or prognostications should be delivered, which are not the result of previous deliberation and concurrence.

§ 4. In consultations, the physician in attendance should deliver his opinion first; and when there are several consulting, they should deliver their opinions in the order in which they have been called in. No decision, however, should restrain the attending physician from making such variations in the mode of treatment, as any subsequent
unexpected change in the character of the case may demand. But such variations and the reasons for it ought to be carefully detailed at the next meeting in consultation. The same privilege belongs also to the consulting physician if he is sent for in an emergency, when the regular attendant is out of the way, and similar explanations must be made by him, at the next consultation.

§ 5. The utmost punctuality should be observed in the visits of physicians when they are to hold consultations together, and this is generally practicable, for society has been considerate enough to allow the plea of a professional engagement to take precedence of all others, and to be an ample reason for the relinquishment of any present occupation. But as professional engagements may sometimes interfere, and delay one of the parties, the physician who first arrives should wait for his associate a reasonable period, after which the consultation should be considered as postponed to a new appointment. If it be the attending physician who is present, he will of course see the patient and prescribe; but if it be the consulting one, he should retire, except in case of emergency, or when he has been called from a considerable distance, in which latter case he may examine the patient, and give his opinion in writing and under seal, to be delivered to his associate.

§ 6. In consultations, theoretical discussions should be avoided, as occasioning perplexity and loss of time. For there may be much diversity of opinion concerning speculative points, with perfect agreement in those modes of practice which are founded, not on hypothesis, but on experience and observation.

§ 7. All discussions in consultation should be held as secret and confidential. Neither by words nor manner should any of the parties to a consultation assert or insinuate, that any part of the treatment pursued did not receive his assent. The responsibility must be equally divided between the medical attendants,—they must equally share the credit of success as well as the blame of failure.

§ 8. Should an irreconcilable diversity of opinion occur when several physicians are called upon to consult together, the opinion of the majority should be considered as decisive; but if the numbers be equal on each side, then the decision should rest with the attending physician. It may, moreover, sometimes happen, that two physicians cannot agree in their views of the nature of a case, and the treatment to be pursued. This is a circumstance much to be deplored, and should always be avoided, if possible, by mutual concessions, as far as they can be justified by a conscientious regard for the dictates of judgment. But in the event of its occurrence, a third physician should, if practicable, be called to act as umpire, and if circumstances prevent the adoption of this course, it must be left to the patient to select the physician in whom he is most willing to confide. But as every physician relies upon the rectitude of his judgment, he should, when left in the minority, politely and consistently retire from any further deliberation in the consultation, or participation in the management of the case.
§ 9. As circumstances sometimes occur to render a special consultation desirable, when the continued attendance of two physicians might be objectionable to the patient, the member of the faculty whose assistance is required in such cases, should sedulously guard against all future unsolicited attendance. As such consultation require an extraordinary portion both of time and attention, at least a double honorarium may be reasonably expected.

§ 10. A physician who is called upon to consult, should observe the most honorable and scrupulous regard for the character and standing of the practitioner in attendance: the practice of the latter, if necessary, should be justified as far as it can be, consistently with a conscientious regard for truth, and no hint or insinuation should be thrown out, which could impair the confidence reposed in him, or affect his reputation. The consulting physician should also carefully refrain from any of those extraordinary attentions or assiduities, which are too often practiced by the dishonest for the base purpose of gaining applause, or ingratiating themselves into the favour of families and individuals.

Art. V.—Duties of physicians in cases of interference.

§ 1. Medicine is a liberal profession, and those admitted into its ranks should found their expectations of practice upon the extent of their qualifications, not on intrigue or artifice.

§ 2. A physician, in his intercourse with a patient under the care of another practitioner, should observe the strictest caution and reserve. No meddling inquiries should be made; no disingenuous hints given relative to the nature and treatment of his disorder; nor any course of conduct pursued that may directly tend to diminish the trust reposed in the physician employed.

§ 3. The same circumspection and reserve should be observed, when, from motives of business or friendship, a physician is prompted to visit an individual who is under the direction of another practitioner. Indeed, such visits should be avoided, except under peculiar circumstances, and when they are made, no particular inquiries should be instituted relative to the nature of the disease, or the remedies employed, but the topics of conversation should be as foreign to the case as circumstances will admit.

§ 4. A physician ought not to take charge of, or prescribe for a patient who has recently been under the care of another member of the faculty in the same illness, except in cases of sudden emergency, or in consultation with the physician previously in attendance, or when the latter has relinquished the case or been regularly notified that his services are no longer desired. Under such circumstances no unjust and illiberal insinuations should be thrown out in relation to the conduct or practice previously pursued, which should be justified as far as candour, and regard for truth and probity will permit; for it often happens, that patients become dissatisfied when they do not experience immediate relief, and, as many diseases are naturally
protracted, the want of success, in the first stage of treatment, affords no evidence of a lack of professional knowledge and skill.

§ 5. When a physician is called to an urgent case, because the family attendant is not at hand, he ought, unless his assistance in consultation be desired, to resign the care of the patient to the latter immediately on his arrival.

§ 6. It often happens, in cases of sudden illness, or of recent accidents and injuries, owing to the alarm and anxiety of friends, that a number of physicians are simultaneously sent for. Under these circumstances, courtesy should assign the patient to the first who arrives, who should select from those present, any additional assistance that he may deem necessary. In all such cases, however, the practitioner who officiates, should request the family physician, if there be one, to be called, and, unless his further attendance be requested, should resign the case to the latter on his arrival.

§ 7. When a physician is called to the patient of another practitioner, in consequence of the sickness or absence of the latter, he ought, on the return or recovery of the regular attendant, and with the consent of the patient, to surrender the case.

§ 8. A physician, when visiting a sick person in the country, may be desired to see a neighbouring patient who is under the regular direction of another physician, in consequence of some sudden change or aggravation of symptoms. The conduct to be pursued on such an occasion is to give advice adapted to present circumstances; to interfere no farther than is absolutely necessary with the general plan of treatment; to assume no future direction, unless it be expressly desired; and, in this last case, to request an immediate consultation with the practitioner previously employed.

§ 9. A wealthy physician should not give advice gratis to the affluent; because his doing so is an injury to his professional brethren. The office of a physician can never be supported as an exclusively benificent one; and it is defrauding, in some degree, the common funds for its support, when fees are dispensed with, which might justly be claimed.

§ 10. When a physician who has been engaged to attend a case of midwifery is absent, and another is sent for, if delivery is accomplished during the attendance of the latter, he is entitled to the fee, but should resign the patient to the practitioner first engaged.

ART. VI.—Of differences between Physicians.

§ 1. Diversity of opinion, and opposition of interest, may, in the medical, as in other professions, sometimes occasion controversy and even contention. Whenever such cases unfortunately occur, and cannot be immediately terminated, they should be referred to the arbitration of a sufficient number of physicians, or a court-medical.

As peculiar reserve must be maintained by physicians towards the public, in regard to professional matters, and as there exist numerous points in medical ethics and etiquette through which the feelings of
medical men may be painfully assailed in their intercourse with each other, and which cannot be understood or appreciated by general society, neither the subject matter of such differences nor the adjudication of the arbitrators should be made public, as publicity in a case of this nature may be personally injurious to the individuals concerned, and can hardly fail to bring discredit on the faculty.

ART. VII.—Of Pecuniary Acknowledgments.

§ 1. Some general rules should be adopted by the faculty, in every town or district, relative to pecuniary acknowledgments from their patients; and it should be deemed a point of honour to adhere to these rules with as much uniformity as varying circumstances will admit.

CHAPTER III.

OF THE DUTIES OF THE PROFESSION TO THE PUBLIC, AND OF THE OBLIGATIONS OF THE PUBLIC TO THE PROFESSION.

ART. I.—Duties of the profession to the public.

§ 1. As good citizens, it is the duty of physicians to be ever vigilant for the welfare of the community, and to bear their part in sustaining its institutions and burdens: they should also be ever ready to give counsel to the public in relation to matters especially appertaining to their profession, as on subjects of medical police, public hygiene, and legal medicine. It is their province to enlighten the public in regard to quarantine regulations,—the location, arrangement, and dietaries of hospitals, asylums, schools, prisons, and similar institutions,—in relation to the medical police of towns, as drainage, ventilations, &c., and in regard to measures for the prevention of epidemic and contagious diseases; and when pestilence prevails, it is their duty to face the danger, and to continue their labours for the alleviation of the suffering, even at the jeopardy of their own lives.

§ 2. Medical men should also be always ready, when called on by the legally constituted authorities, to enlighten coroners’ inquests and courts of justice, on subjects strictly medical,—such as involve questions relating to sanity, legitimacy, murder by poisons or other violent means, and in regard to the various other subjects embraced in the science of Medical Jurisprudence. But in these cases, and especially where they are required to make a post-mortem examination, it is just, in consequence of the time, labour and skill required, and the responsibility and risk they incur, that the public should award them a proper honorarium.

§ 3. There is no profession, by the members of which, eleemosynary services are more liberally dispensed, than the medical, but justice requires that some limits should be placed to the performance of such good offices. Poverty, professional brotherhood, and certain public duties referred to in section 1 of this chapter, should always be recognized as presenting valid claims for gratuitous services; but
neither institutions endowed by the public or by rich individuals, societies for mutual benefit, for the insurance of lives or for analogous purposes, nor any profession or occupation, can be admitted to possess such privilege. Nor can it be justly expected of physicians to furnish certificates of inability to serve on juries, to perform militia duty, or to testify to the state of health of persons wishing to insure their lives, obtain pensions, or the like, without a pecuniary acknowledgment. But to individuals in indigent circumstances, such professional services should always be cheerfully and freely accorded.

§ 4. It is the duty of physicians, who are frequent witnesses of the enormities committed by quackery, and the injury to health and even destruction of life caused by the use of quack medicines, to enlighten the public on these subjects, to expose the injuries sustained by the unwary from the devices and pretensions of artful empirics and imposters. Physicians ought to use all the influence which they may possess, as professors in Colleges of Pharmacy, and by exercising their option in regard to the shops to which their prescriptions shall be sent, to discourage druggists and apothecaries from vending quack or secret medicines, or from being in any way engaged in their manufacture and sale.

ART. II.—Obligations of the public to physicians.

§ 1. The benefits accruing to the public directly and indirectly from the active and unwearied beneficence of the profession, are so numerous and important, that physicians are justly entitled to the utmost consideration and respect from the community. The public ought likewise to entertain a just appreciation of medical qualifications;—to make a proper discrimination between true science and the assumptions of ignorance and empiricism,—to afford every encouragement and facility for the acquisition of medical education,—and no longer to allow the statute books to exhibit the anomaly of exacting knowledge from physicians, under liability to heavy penalties, and of making them obnoxious to punishment for resorting to the only means of obtaining it.

Note.—The committee on presenting this code, stated that justice required some explanatory remarks should accompany it. The members of the Convention, would not fail to recognize in parts of it, expressions with which they were familiar. On examining a great number of codes of ethics adopted by different societies in the United States, it was found that they were all based on that by Dr. Percival, and that the phrases of this writer were preserved, to a considerable extent, in all of them. Believing that language which had been so often examined and adopted, must possess the greatest of merits for such a document as the present, clearness and precision, and having no ambition for the honors of authorship, the Committee which prepared this code have followed a similar course, and have carefully preserved the words of Percival wherever they convey the precepts it is wished to inculcate. A few of the sections are in the words of the late Dr. Rush, and one or two sentences are from other writers. But in all cases, wherever it was thought that the language could be made more explicit by changing a word, or even a part of a sentence, this has been unhappily done; and thus there are but few sections which have not undergone some modification; while, for the language of many, and for the arrangement of the whole, the Committee must be held exclusively responsible.
On the Employment of Ether by Inhalation in Obstetric Practice; with Cases and Observations. By PROTHEROE SMITH, M. D., Member of the Royal College of Physicians; Assistant Teacher of Midwifery at St. Bartholomew's Hospital.—(Lancet.)

The power of the vapour of ether, when inhaled, to diminish, or even to destroy sensation, and consequently pain, has been placed beyond doubt by the results of hundreds of surgical operations. Its safety in surgical cases may also be considered as established, especially when the administration of the ether is conducted with attention to the precautions indicated by experience. We may, I think, fairly consider that the instances in which ether will be administered before surgical operations, will be the rule—those in which it will be omitted, the exceptions. We may also, expect its use to be general in dislocations, hernia, spasmodic strictures, &c. In the first two of these cases, it acts in a twofold manner:—1st, it relieves the pain; and 2ndly, it relaxes the muscles, whose contraction opposes reduction. We shall see that in midwifery, also it possesses the latter advantage, by its action upon the perineal muscles.

Ether has been but little employed in painful medical cases; and yet it has already been proved to give instant ease from the agony of neuralgia, and from the horrible dyspnœa of spasmodic asthma. A case of colica pictorum, which had resisted the usual means for three days, was cured by ether. A case of puerperal mania was immediately and permanently relieved; and several cases of dysmenorrhœa have been recorded, in which this agent has acted like magic. Probably, many spasmodic diseases will be benefitted by inhalation of ether; and we may confidently expect many forms of intractable hysterical pains to yield to it. In a few cases published by M. Piorry, which appeared unfavorably affected by it, the ether was probably impure. It is not my intention, however, to discuss the effects of ether in medical and surgical practice.

But though the diseases, as hysteria and dysmenorrhœa, which are commonly regarded as belonging peculiarly to the obstetric practitioner, will probably derive very great benefit from the ethereal treatment, I would proceed to the inquiry, whether its exhibition will ever be habitually employed in daily obstetric practice.

To answer this question, we may examine—1st, the á priori physiological probabilities; and 2ndly, the results of the cases in which ether has been tried.

Labour is a complex process, in which every part of the nervous system is concerned. Now ether affects, in succession, every portion of the nervous system, unless we except the ganglionic.

In labour, the brain is in action, as is proved by the presence of thought and special sensation; so, also, the pons Varolii (or whatever the seat of pain may be) is also active—as are the cerebellum, the medulla spinalis, the medulla oblongata, and the ganglionic system. But though all these portions of the nervous system are concerned
in ordinary labour, they are not all necessarily, or, as it appears to me, advantageously so.

It is proved beyond a doubt, by cases of paraplegia, that the patient may be sensible, and yet feel no pain, though the uterus contract regularly. The same absence of pain is seen in puerperal convulsions, in which unconsciousness is superadded: and in some cases of paraplegia, even the reflex actions of the abdominal muscles have been wanting, so that labour has been terminated by the efforts of the uterus alone. Cases have occurred in which the patient has been unconsciously delivered, without accident or apparent delay, when in a state of extreme intoxication.

Thus, then, of the usual nervous concomitants of labour, consciousness, pain, and spinal reflex action, may be wanting, and yet parturition proceed uninterruptedly.

But though they may be absent, can they be artificially abolished without danger? Can this be accomplished by ether—and if so, is it justifiable on Christian principles? as I have frequently been asked.

I will answer the last question before entering upon the consideration of the others; because, if we have reason to believe that an attempt to relieve the pains of labour would be in opposition to the will of God, all discussion of the other questions must at once be abandoned.

I think it is obvious that the same principle which would lead us to view any attempt to remove the dreadful and dreaded pains of labour, as opposed to the Divine will, would induce us to neglect every means of relieving human suffering. Though from different motives we should, like the Turks, passively bear evils easily removable, as disease and suffering are alike dependent on the event which elicited the decree—"In sorrow thou shalt bring forth." In fact, precisely the same objections have successively been made to most of the great discoveries and improvements in medicine. Some may remember that one of the great arguments against vaccination—and in the last century, against inoculation—was, that the practice was a presumptuous contravention of the Divine will. With far more reason might the objection be urged to the practice of inducing premature labour, and still more strongly against that of destroying in utero a living fetus. And yet it is now universally admitted, that to risk the life of the mother by refraining from these operations is not only unjustifiable, but highly criminal. Certainly, then, if it is justifiable to attempt the relief of pain, it is especially imperative upon us to do so in the most intense of all pain.

I am induced to offer these observations in the hope that they may satisfy the scruples of those who have opposed the employment of ether in ordinary cases of labour, from a feeling that its use is not justifiable on Christian principles. Time has often hallowed what science and advancing knowledge have proved to be but the offspring of habit and prejudice; and in support of this assertion, I would quote a recent publication of Dr. Simpson, in which he says, "The
idea of its inevitable necessity makes both the profession and our patients look upon the amount and intensity of pain encountered in common cases of natural labour as far less worthy of consideration than they in reality are."

These observations, will, I trust, be deemed conclusive on this part of my subject. Pathology then, has proved that parturition will proceed without material interruption or injury by the ganglionic nervous influence. I do not enter into the question, whether the uterus is exclusively under the control of the ganglionic system. It is sufficient that it is very largely so.

Ether will first derange, and then temporarily suspend, in succession, consciousness, special sensation, common sensation, pain, (which is certainly something different from common sensation—i.e., tact,) power of muscular combinations, spinal reflex actions, and respiration.* It is doubtful whether it will not, in some cases at least increase ganglionic nervous power.† It is certain however, that if the medulla oblongata is completely etherized, and consequently, the movements of respiration stopped, the action of the heart is speedily arrested also, and life becomes extinct.‡

The chief authorities for enabling us to decide the question of the safety of ether from the actual results of its exhibitions are, Professor Simpson, and Baron Dubois; and both maintain that they have observed no bad effect on either the mother or child. M. Dubois distinctly "states that none of the women who inhaled ether experienced any bad effects attributable to ether."§ These gentlemen differ, however, in reference to the probability that ether will become universally, or even generally applicable to ordinary midwifery practice. The Baron states his "profound conviction that ether will be applicable to but a limited number of peculiar cases," whilst the Professor entertains much more sanguine views. As yet, general experience favours the opinion of the latter.

The pain of labour (incomparably the greatest which human nature is called upon to bear) must, I think, be viewed as an unmixed evil. I will not quote the descriptions given by eminent accoucheurs of the agony and anguish of the final throes; they are universally acknowledged, as are also the bad effects of intense pain. Pain acts injuriously in several modes. Thus, its severity is very greatly dreaded, and the depression caused by the anticipation of its inevitable occurrence, preying for months upon the spirits, has been known to produce very injurious effects.

The hope that ether will substitute tranquil dreams for the dreaded suffering would obviate this evil. Again: pain is one of the greatest elements in the shock of labour. It is probable that all parts of the nervous system share in this shock. Now, if the effects of ether can be so regulated as to be confined to the brain and spinal marrow,
there would be left only those portions of the shock which are seated in the medulla oblongata and ganglionic system. I think we should not be justified in refusing the abolition of part, because we cannot destroy the whole of any evil. Again: do we not know the exact proportion in which the various parts of the nervous system share the shock; we only know that pain is a large element of it.

To the question, how far should we carry our etherization, I would answer, in ordinary cases of labour, merely till the cerebrum and pons Varolii are under its influence, as shown by the suspension of intellect, and of the perception of pain;* but in cases requiring extraordinary manipulation or operations, we ought to bring the cerebellum and medulla spinalis into temporary narcotism, to prevent as far as possible, the violent muscular movements which, when the control of the will is suspended, might be productive of mischief. Consciousness is certainly no advantage to the obstetrician; for the patient can do little or nothing to assist him, and frequently may do much harm by her involuntary efforts to bear down, and by her restlessness, which latter often greatly debilitates and exhausts her.

It is obvious, assuming the power of ether to produce these effects, that unless we can regulate the dose, or other circumstances which modify its effects, so as to limit the action to the cerebrum, pons Varolii, cerebellum, and medulla spinalis, ether would be a dangerous agent. Fortunately there is no reason to doubt that, with proper apparatus, and common observation of the symptoms induced, we may invariably prevent the medulla oblongata from being involved.

Though causing the patient to breathe atmospheric air, ether pure, or mixed with the ethereal vapour, has hitherto been sufficient to check any approach to stertor or coma, and also to relieve such conditions when induced, I have observed, with much pleasure, that Mr. Hooper has adapted to his inhaling apparatus an appendage for administering oxygen. This will be a most valuable adjunct in cases where there exists an unusual degree of susceptibility to the effect of ether on the medulla oblongata.

Complete insensibility to pain exists only when the pons Varolii or seat of pain is narcotized; and M. Longet states (in a paper quoted in the last number of the British Foreign and Medical Review) that no operation should be attempted until this effect is produced.

On the patient awaking from the state of etherization, the nervous functions return in the same order that they were suspended. This explains the fact of many patients being perfectly sensible, and holding rational conversations, but being the whole of the time unconscious of pain.

The following observations by Dr. Simpson will serve to explain my reasons for venturing to enrol myself amongst the advocates of the new remedial agent:—

He says,—"A careful collection of cautious and accurate observa-
tions will no doubt be required before the inhalation of sulphuric ether

* British and Foreign Medical Review, April, 1817, p. 571.
is adopted to any great extent in the practice of midwifery. It will be necessary to ascertain its precise effects both upon the action of the uterus and the assistant abdominal muscles; its influence, if any, upon the child; whether it gives a tendency to hemorrhage or other complications; the contra-indications peculiar to its use; the most certain modes of exhibiting it; the length of time it may be employed, &c."

In the hope that some of these desiderata may be supplied, I now beg to lay before the profession the following interesting cases of instrumental labour which have occurred in my practice within the last few days, and in which I have employed ether by inhalation:

Case 1.—On the afternoon of Sunday, 28th ult., I was summoned by Mr. Alder Fisher, to a lady on whom he had been in attendance all day. The expediency of being prepared to employ ether by inhalation, should it be deemed advisable, having been suggested, I gladly availed myself, as on previous occasions, of the valuable services of Mr. Tracy, of St. Bartholomew's Hospital, who has not only invented an ingenious and simple apparatus for administering this agent, but has successfully applied it in several hundreds of surgical cases. On our arrival at the residence of the patient (about four p.m.), we found her in strong labour with her first child. We were informed that her age was forty, and that she had been married eleven months. She is a woman of spare habit and lax fibre: apparently well formed and about five feet three inches in height. From the age of fourteen, at which the catamenia first appeared, she has always been "regular;" and although not of a robust frame, has enjoyed uninterrupted good health; her last menstruation was in the end of June. I learned from Mr. Fisher, that premonitory labour pains had commenced at half-past twelve a.m., and had gradually increased, both in severity and frequency, until three a.m., when they recurred regularly every twenty minutes. At five a.m., the intervals became shorter, the uterine contractions coming on every ten or fifteen minutes, and the suffering they occasioned, even at this early period of labour, was very considerable. When first seen by Mr. Fisher, at eight a.m., although the os uteri was only dilated to the extent of half-a-crown, the head, still in the uterus, rested on the perineum. At four p.m., the pains which had been frequent and energetic since eight a.m., were now both strong and expulsive, recurring every four or five minutes, and the patient complained greatly of her sufferings. Having been informed of the benefit resulting from the employment of ether by inhalation, she was very urgent for its immediate adoption. The bowels had been well acted upon during the day; the tongue was moist and clean; and she was perspiring profusely. On a vaginal examination, the passage was found to be cool and well lubricated; the os uteri dilated to the size of the rim of a tea-cup; and the child presenting in the first cranial position. The head rested on the floor of the pelvis, and forcibly pressed, during each pain, against
the covering tuberosities of the ischia, the distance between which was barely four inches. The membranes were entire and distended with liquor amnii; they protruded through the opening os, the margins of which were rapidly yielding; the uterine structure was soft and dilatable. Being satisfied that there existed no abnormal applications to forbid the inhalation of ether, its exhibition was commenced by Mr. Tracy, at a quarter-past four p.m., immediately after the spontaneous rupture of the membranes. At this time a pain was coming on, which proved to be very violent, and was attended with considerable straining, and some retching. The ether in three minutes, produced insensibility to suffering, although the pains continued as strong as previously to its application, and recurred regularly every three minutes. The patient occasionally gave rational answers to questions, and stated that she had scarcely been conscious of any pain since the administration of the etherial vapour; her friends who were present could hardly credit her report, as no difference in the violence of their efforts, or in the character and severity of the uterine contractions could be remarked.

The following notes of the farther progress of the case were taken on the spot:—At half-past four p.m., the uterine contractions have recurred at intervals of three minutes only, though the patient has remained perfectly narcotized for the last quarter of an hour. During these pains, which were very powerful, the legs were at times forcibly extended, and the right arm raised, and all the usual straining exclamations during expiration, continued as before. On placing my hands upon the abdomen, I became sensible of the powerful contraction, not only of the uterus, but also of the abdominal muscles. The os was now fully dilated.—Forty-three minutes past four p.m.: Since the escape of the waters, she has had pains every two or three minutes, and her cries are loud, sharp, and expressive of severe explosive efforts. In the intervals of pain, the child’s head rests on the perineum, (producing a distension of its right side, and of the corresponding labium pudendi,) and is closely embraced by the bony outlet. The pains are of short duration. Pulse 84, soft and compressible; skin freely perspiring. Fifty-three minutes past four p.m.: During the last fifteen minutes, the inhalation has been discontinued, and there has been an intermission of uterine contractions for four minutes. In reply to inquiries, she again says she has felt scarcely any thing since the ether has been employed.—Thirteen minutes past five p.m.: For the last twenty minutes the ether has been administered only during uterine action, the intervals between which have been only two or three minutes. She occasionally cries out as if in slight pain, but when interrogated, states she is “perfectly easy and comfortable.”—Fifty minutes past five p.m.: The pains have continued every three minutes, but have produced no apparent effect on the head, which is firmly fixed at the outlet; the amount of straining effort, the peculiar cry, and the expression of the face, seem to betoken great suffering during her pains, but she again asserts that she
is "easy." The ether was now again suspended for ten minutes, when she had three uterine contractions, and became sensible to pain.—Half-past six r. m.: Under the influence of the ether, in the last half hour she has had twelve pains, and has been wholly unconscious of them. The head is still fixed at the outlet. Forty-five minutes past six r. m.: During the last ten minutes the ether has not been employed, and the pains have been precisely of the same character as when she was inhaling; she also states that they are productive of much agony. As the head had made no advance, and had been firmly impacted for half an hour, the cranial bones overlapping considerably, I determined after ascertaining by the stethoscope that the child was alive to apply the short forceps. This was accomplished at seven r. m., after emptying the bladder, and again narcotizing the patient. It was evident, from the extent to which the handles of the forceps were separated, that the head was a very large one, and that it would require considerable compression, as well as traction, to bring it through the dis-proportioned outlet. To accomplish this with safety to the mother, and with a prospect of saving the life of the child, I made my efforts at intervals of two or three minutes, during which I relaxed my grasp of the head, and held the handles of the forceps loosely, in order that the brain might recover from the effects of the severe pressure to which it was subjected during traction. By these means the head was delivered in fifty-five minutes from the first application of the instrument, and at fifty-five minutes past seven r. m., a living male child was born. After the introduction of the forceps, some difficulty was experienced in consequence of the forcible extension of the patient's legs, and the constant disposition to straighten the body during the strong expulsive efforts. With the assistance of Mr. Fisher and another gentleman the pelvis was held in a favorable position; the right leg was separated from the other, and fixed on the abdomen, so as to admit the handles of the instrument between the thighs. By these means, and by occupying a position in front of the patient, I could easily employ traction in the direction of the outlet with my right hand, whilst with the left I supported the perineum. The placenta quickly followed, and at eight r. m., the uterus was felt, firmly contracted, through the abdominal walls; a bandage was immediately applied round the abdomen and pelvis, and the ether, which, during the whole period of the operation had effected complete narcotism, was discontinued.—Five minutes past eight r. m.: Consciousness is restored; she expresses a hope that she shall soon be delivered, adding that she is very comfortable. She says she feels as if just awoke from a painful dream. When informed of the termination of her labour she burst into an hysterical laugh, and exclaimed, "It is a dream! It must be a dream! Oh what a good thing it is that I had the ether!" She also observed she had not been sensible of the circumstances attending her delivery.—Quarter past eight r. m.: Appears somewhat exhausted, and her face being still flushed, it is ordered to be bathed.
Employment of Ether in Obstetric Practice. [September,

in cold water. From this period she became rapidly restored to her usual state of mind and sensibility. Farinaceous nourishment and perfect quiet are enjoined.

The child weighed eight pounds and a half; it is twenty-two inches and a half in length. The dimensions of the head are as follows:—round the head and face, in the direction of the oblique or occipito-frontal diameter, sixteen inches; around the forehead and occiput, in the longitudinal or fronto-occipital diameter, fifteen inches: from one parietal protuberance to the other, across the vertex, six inches.

It is worthy of observation, that neither the character nor the frequency of the pains was affected by the use of the ether; that all the efforts of the abdominal and other muscles which aid in expulsion, and also the characteristic cries, continued unaltered; that though consciousness remained, excepting during the last hour, in which the forceps were employed, she was wholly insensible to pain, except when the ether was suspended for a time; that with the exception of this rest, she continued under its influence for three hours and three quarters, without experiencing the least injurious result; and that she inhaled, in all, eight ounces and a half of pure ether.

Notwithstanding the advanced age of the patient, and the disproportion between her pelvis and the child's head, delivery was effected within twenty-hours from the time premonitory labour pains commenced, and with perfect safety to both mother and child.

In referring to the rigid condition of the extreme muscles of the trunk and inferior extremities, I would direct attention to the position of the operator and the patient, as well calculated to overcome the difficulties created by these circumstances in instrumental labour. The result of this case also shews the importance of observing attentively the space between the blades of the forceps during compression, as with little practice it will enable the accoucheur to determine with accuracy the diameter of the child's head, and its relative proportion to the passages of the mother; and thus he will be better able to decide the important question of delivery by means of the forceps or perforator. From a conviction that the life of a child may sometimes be sacrificed by forcibly tying the handles of the forceps together, and by thus keeping up uninterrupted pressure on the head during the operation, I now usually adopt the plan mentioned in this case, by which the head is free from compression, save only during the efforts of traction.

It is to Professor Naegele, of Heidelberg, that we are indebted for having first pointed out the true mechanism of parturition, and for showing that the head of the child passes through and emerges from the pelvis obliquely. Dr. Rigby observes, in his "System of Midwifery," that in the first cranial position, the right parietal protuberance lies, in the early stage of labour, lowest and deepest in the pelvis; whilst the superior and posterior quarter of this bone is the part which first comes under the public arch and enters the external passages. I am not, however, aware that any one has observed a
Employment of Ether in Obstetric Practice.

fact of some practical interest, in reference to this subject, which I have long known, and which I have alluded to in the above notes—viz., that in the first cranial position the right side of the perineum and corresponding labium pudendi are chiefly subjected to pressure during the distention of the soft parts, and therefore principally demand the support which may be necessary to save the perineum from the accident, and vice versa when the head passes in the second position. From my own observations, I am induced to believe that future experience will prove, that as the first cranial position is the most common, so rupture of the perineum usually occurs on the right side of its raphé, and that this accident may most effectually be prevented by acting on the suggestions I have here ventured to make.

March 29th.—Eleven A. M.: Has passed a comfortable and tranquil night, and has slept without dreaming—a very uncommon occurrence with her; the lochia are natural in quantity, &c.; pulse 70, soft and regular; tongue clean; is very cheerful, and entirely free from ailment, with the exception of inability to evacuate the bladder; a pint of healthy urine was accordingly drawn off by the catheter. She observed this morning that she had a most vivid recollection of severe suffering previously to the inhalation of the ether, and also a slight impression of having felt some pain during the intervals of its exhibition, which entirely ceased after a few inspirations; that with these exceptions, she was not at all aware of the birth of the child, or of any circumstance attending her confinement; and that it was not until after her face and temples had been bathed with cold water that perfect consciousness was restored, when she felt as though she had awakened from some strange and painful dream, the subject of which she could not call to memory.—Eleven P. M.: Has passed her urine spontaneously; is doing well in every respect. The child is healthy, and takes the breast readily.

30th—Noon: Has had a good night; the milk is increasing; and with the exception of feeling rather stiff, she is perfectly well.

April 19th.—Both mother and child continue perfectly well, and since the delivery no medical aid, beyond the passage of the catheter on one occasion, has been required.

Case 2.—April 1st, 1847. Mrs. ———, aged thirty-three; married ten years and a half; has had six children, of which the last was born in February, 1846; is a robust looking woman, with florid complexion; states that her general health is good, and that, with the exception of slight chronic cough, she has been free from ailments during the term of utero-gestation; says her family is of a consumptive and rheumatic tendency, her mother having died at forty, and a brother at twenty, of phthisis; has always been "regular" from the age of sixteen, except when pregnant or nursing. Her first five labours were ordinary in their character; the fifth lasted forty-eight hours, and was attended with great suffering; and the sixth and last, five hours: in each the child was a female. In the last, the head was arrested at the brim for some time, and in consequence my assistance
was called for; but as the labour terminated before my arrival, I did not make any examination. She last menstruated at the end of June. The bowels have been freely opened, and the bladder has been lately relieved. Premonitory symptoms of labour commenced on Sunday, 28th ult., recurring about every two hours. On the following day, 29th, they abated in frequency and power; but became more urgent on Tuesday, 30th, towards evening, with intervals of only half-an-hour. The pains were felt chiefly in the groin and hypogastrium. On Wednesday morning, 31st ult., she had an interval of rest until about eight o'clock, when a strong pain ruptured the membranes, and what she described as a "good deal of water" escaped. From this time the pains recurred about every half hour, until six A. M. of the following day, when they became slack. Mr. Orford, who attended this patient, first visited at eight P. M. of the 31st ult. The os uteri was then soft and dilatable, but not at all dilated. An enema was given, which emptied the rectum. He visited her again at half past twelve o'clock, when the dilatation of the os uteri was nearly complete. The pains having been very powerful and frequent, without any effect on the head of the child, Mr. Oxford gave tincture of opium, half a drachm, at five A. M. During the early period of labour, he could not detect the true position of the head in consequence of its high situation in the pelvis. Mr. Campion, who was called to the patient, first saw her at 6 A. M., when the head was resting on the pelvic brim, and was moveable; and as the symptoms at that time were those of arrest, he administered three doses of ergot at half-past six, seven, and half-past seven A. M. successively. This treatment had the effect of increasing the strength and frequency of the pains; but without producing any advance of the head, which became firmly fixed in the brim.

The above history was given to me on my arrival at ten A. M. On making a vaginal examination, I found the passages cool and well lubricated; the head resting on the brim, and firmly fixed during a pain; slightly moveable in the intervals. A very large caput succedaneum, and an evident malformation of the pelvis, rendering it difficult to diagnosis the true position of the child. On carefully examining, however, I ascertained that it occupied the first cranial position, the posterior fontanelle being turned in the direction of the left foramen ovale.

The pelvis, in this case, formed a remarkable example of that condition so faithfully described by Professor Neagele, of Heidelberg, under the appellation of "pelvis oblique ovato." In this instance the pelvis was twisted, so that the symphysis was inclined to the right, and the secum to the left. The left side of the pelvis was flattened, as though driven inward, and the left linea ilio-pectinea presented almost a straight line from the sacro-iliac synchondrosis to the posterior margin of the foramen ovale. From this point, the body of the pubic bone abruptly inclined backwards, so as to present a distinct ridge of the size of a finger. This ridge was formed by the angle,
perpendicular surface, and inner margin of the ramus, and projected backwards so as to contract the conjugate diameter of the brim. This projection at first conveyed to the touch the impression that it was a considerable exostosis; but on further investigation, the true nature of the malformation was detected. Anteriorly, I could feel a narrow rim of the uterus, (the remains of the anterior lip,) and by introducing two fingers this rim could be traced backwards, encircling the head of the child, and pressed between the projection of bone and the brim of the pelvis. The pains were coming on every three or four minutes; but were not at all powerful, lasting from a quarter to three quarters of a minute. It having been ascertained by the stethoscope that the child was alive, I determined to administer ether by inhalation. The patient was very urgent to be relieved from her sufferings, which were beginning to tell upon her strength and nervous system. At a quarter to eleven A.M., the ether was accordingly administered by Messrs. Campion and Oxford. At first it induced slight cough, which entirely disappeared in about five minutes. At the end of the first eight minutes during which she continued to inhale, but not uninterruptedly, she became conscious of a pain—the ether having been very imperfectly taken, from her frequent efforts to talk and to interrupt the process of inhalation. In ten minutes she was quite reconciled to its use; but owing to its imperfect exhibition, she became rather inebriated than narcotized. In this state she continued until a quarter to twelve, uterine contractions recurring every three or four minutes, but unattended by any efforts on the part of the abdominal muscles. From this time the ether produced more effect, and she became unconscious of her pains, though they were much increased in power, and were aided by distinct action of the assistant abdominal muscles. These were felt to contract forcibly under the hand. She was at times very loquacious. At every vaginal examination the "pains" became more frequent, returning every minute, and were much increased in intensity.—fifty-five minutes past eleven: Is completely narcotized; the hand drops powerless when lifted up; the eye is turned up under the superior lid; her face is flushed; pulse 92, soft and smaller; skin profusely perspiring. The narrow rim of the cervix uteri can no longer be felt; the head is firmly impacted in the upper strait; the bones of the cranium overlapping.

Having determined on employing the long forceps, from the impression that, notwithstanding the great deformity, there was room to bring the head through the contracted brim by cautious traction, having previously introduced the catheter, I accordingly applied this instrument at a quarter to twelve. For about half an hour, my repeated, but interrupted, efforts to extract were apparently unavailing; but in a few minutes afterwards, the head slipped suddenly over the projection before described, and fairly occupied the true pelvis. During this process, I passed two fingers of my left hand—one on each side of the projection, so as to guard it effectually from undue pres-
sure during traction. A few more efforts brought the head through the os externum, when the child cried loudly. The body quickly followed, and the placenta was thrown off by the same pain that expelled the child. The uterus contracted well, and there was very little hemorrhage. The ether, which had been employed with but little interruption for two hours, was discontinued immediately after the birth of the child; and the patient recovered her consciousness in two or three minutes. Though apparently aware of the presence of pain in the early part of the process, she expressed herself very grateful for the use of the ether, and stated that she was entirely ignorant of the birth of the child, and of the means which had been adopted for its accomplishment. The pains instantly ceased on the expulsion of the secundines, but were immediately induced on the introduction of my finger, after the completion of the labour, in order to ascertain with more accuracy the true state of the pelvic deformity. So powerful were the expulsive efforts thus induced, that the uterus was forcibly driven down to the outlet; but these after-pains suddenly ceased with the withdrawal of the finger, and a state of perfect repose followed. The child is a very large and vigorous boy; the head presented a perfect cast of the deformed pelvis of the mother; it is very oblong—perfectly flattened on its left side from the lambdoidal suture to the temporal ridge of the frontal bone; whilst the opposite side describes a hemispherical, or rather semi-oval, figure, elongated by a very large caput succedaneum, which occupies the superior posterior angle of the right parietal bone.

April 2nd.—Has passed a tranquil night. Both child and mother are in every respect well. She states that she has no recollection of any circumstance from the time the ether was first administered, until the escape of the placenta from the vagina, of which she was conscious, though she felt no pain. She is most profuse in her grateful acknowledgements of the blessing of the ether, which she hopes will be employed again, should she become pregnant.

6th.—Is sitting up in bed, and observes that she has suffered less after this confinement than in any previous one—in fact, that she has experienced no exhaustion, and, to use her own expression, "never felt so well in her life." The unusually healthy condition she attributes to the use of the ether. Her cough is almost gone, and everything is going on favourably. The child is vigorous, and takes the breast eagerly; and its head has recovered from the misshapen state in which it was born.

Case 3.—Mrs. H—, aged twenty-four; primipara; of delicate appearance, and weakly constitution. From the age of fifteen years and a half, when menstruation first occurred, her health suffered from the sedentary nature of her occupation—that of dress-making. But from the period of her marriage, twelve months since, she has relinquished her business; and has enjoyed better health, though she has occasionally experienced pain in her chest, and has had at times black mucous expectoration. Her last menstruation was in July,
1846. Labour commenced at ten p.m. on the 14th of April. She was first visited by Mr. Oxford, at seven a.m., on the 15th, when the os was dilated to the size of a crown piece; and the pains were slight, and recurred at long intervals. The bowels having been constipated for some days, an enema was administered. At ten a.m., the uterine efforts were powerful and frequent, and the os fully dilated. The child was presenting in the first cranial position. The membranes ruptured during a pain at noon, at which time the head had not entered the true pelvis. The uterine contractions then became very forcible, and the intervals short, until two p.m., when the head descended to the outlet, where it remained stationary. At half-past three p.m., Mr. Oxford gave her half a drachm of the ergot, the uterus having been in a state of inertia for an hour and a half. From this time until eight p.m., notwithstanding very frequent and expulsive efforts, the head made no advance. Mr. Campion having seen the case at this juncture, concurred with Mr. Oxford in the necessity for instrumental assistance, and my attendance was accordingly requested. On my arrival, I found the patient much exhausted, and very desirous to be relieved of her pain by the agency of ether. For nearly four hours the head had been firmly impacted at the outlet, the transverse diameter of which did not exceed three inches and a half. The cranial bones were overlapping to a considerable extent, and the caput secedaneum was very large. Having satisfied myself of the healthy condition of the thoracic viscera, and that the child was alive, the use of the short forceps and the inhalation of ether appeared to me to be clearly indicated. After the bladder had been emptied, the ether was administered by Messrs. Campion and Oxford at ten minutes to nine p.m. In three minutes, she became perfectly narcotized, when I introduced the forceps and extracted the head in twelve minutes afterwards. The body of the child followed in five minutes more, and the placenta was expelled by natural efforts in about ten minutes afterwards.

When I first visited this patient, I found that her pains were recurring every two or three minutes; but when she became under the influence of ether, their force and frequency were evidently augmented; the abdominal muscles, as well as the uterus, contracted powerfully, and each effort was attended by the cries peculiar to the last stage of labour. During the period of etherization, the breathing at first was stertorous for a few moments, and the thighs and legs were forcibly flexed, and drawn towards the abdomen. Having adopted the mode of operation proposed in Case 1, the extraction was accomplished with great ease. The head of the child (a male) was much flattened by the action of the forceps, and was still-born, but the usual means for restoring animation were successful before the separation of the funis. The maternal surface of the placenta, which was very large, presented a beautiful net-work of white, thread-like lines, apparently calcareous; this diseased condition of the placental cotyledons appeared to have exerted no injurious influence on
Employment of Ether in Obstetric Practice. [September,

the child, or to have impeded the separation of the after-birth. I much regret that, owing to some misunderstanding, the placenta was destroyed. It is worthy of remark, that the perinæum presented no obstacle to the passage of the head, being perfectly relaxed, and yielding readily to its pressure. In both this and the first case, the usual rigidity of the soft parts was entirely wanting, and I think we may venture to attribute this condition to the influence of the ether. Indeed, in both instances, and more particularly in Case 1, where the patient was a primipara, and forty years of age, this favorable condition was sensibly effected in the narcotized state. The uterus contracted firmly after the completion of parturition, and the loss of blood was trivial.

On restoration to consciousness, which was expedited by bathing the face with vinegar and water, she observed that she had been asleep, but yet was strangely impressed with the conviction that she had been "travelling very far on a railroad;" she was totally ignorant of all which had occurred during her state of narcotism. She expressed the hope that her labour would soon be terminated, and when I intimated to her that it was already accomplished, she replied, "Oh I wont believe that!" nor could she be convinced of the fact, until her infant, a fine, squalling boy, was called upon to witness to its truth.

Eleven p.m.: Is quiet and comfortable; says she only feels weak; lochia and urine have been passed freely; the child has taken the breast; she has asked for something to eat; she has had some after-pains.

April 16th.—Both mother and child are well; the former has passed a tranquil night. Towards evening the after-pains became troublesome, but disappeared after the expulsion of a few coagula.

17th.—The mother and child are going on well in all respects.

During traction on the head, which was in the first position, the bulging of the right side of the perinæum and labium pudendi, as mentioned in Case 1, was very evident to Mr. Campion, whose office it was to support the soft parts. In this case, it is remarkable that the legs were flexed, as extension of the lower extremities has been usually observed under the influence of ether.

The result of the foregoing cases will, I think, bear out Mr. Dubois's summary—viz:

1. Ether prevents pain during obstetric operations.
2. It may momentarily suspend the natural contractions, but
3. It does not suspend them, nor the contraction of the abdominal muscles, when energetically set up.
4. It appears to lessen the natural resistance of the perinæal muscles.
5. It does not appear to exert any bad influence on the life or health of the child.
6. It does not prevent or retard the subsequent contraction of the uterus.
To these conclusions, I would add—
1. That ether produces freedom from pain during natural labours, as well as during obstetric operations.
2. That it is very probable that the momentary suspension of uterine action, which sometimes occurs when ether has been administered in the earlier stages of labour, may be caused by the novelty, not unmixed with fear, of the inhalation, just as the arrival of the accoucheur will often temporarily suspend the contractions.*
3. That it will be a most powerful agent in preventing rupture of the perinæum, especially in primipara advanced in life; firstly, by producing relaxation of the perinæal muscles; and secondly, by rendering the woman incapable of sudden movements, during the support of the soft parts, under the intolerable pain when the head is emerging from the os externum.
4. There is no evidence to show that the ether has any bad influence on the mother. If it has, the proof remains to be adduced.

Thus, then, I agree with Professor Simpson in anticipating great advantages from the use of ether, not only in cases requiring manipulations or operations, but also in natural cases; and the chief advantages which I think we are entitled to expect are—
1. The saving of suffering—perhaps the greatest borne by human beings, and in no way contributing to the happy termination of the case. Possibly as a drawback from this advantage, we may admit that an experienced practitioner may occasionally pinch or bruise the maternal soft parts, from the inability of the patient to give any warning by her complaint.‡
2. The saving of a considerable portion of the shock, or that portion of it dependent upon the brain, which always occurs, and which can certainly not be looked upon in any light but that of an evil, and which is sufficient, in some cases, to destroy life.
3. The obtaining sleep, or at least quiet, during the progress of the case.
4. The more speedy relaxation of the os uteri and perinæal muscles.
5. During operations, the very great advantage of having the patient lying perfectly still.
6. The removal of the dread which many patients entertain during the whole of their pregnancy, and which, by its depressing effects, may prove injurious.

In all the cases published, the relief has been great and immediate. In none has there been any untoward event—no hemorrhage, no convulsions, no collapse, which could fairly be chargeable upon the

* I observed this to occur in Mr. Skey's case of Caesarian operation, at which I assisted, the fatal termination of which was the combined result of peritonitis and previous shock.
† Dr. Simpson, who was the first to employ this agent in midwifery practice, has used it with perfect safety and success in forty or fifty cases, in some of which the etherization was kept up for hours.
‡ Let it be remembered, however, that two of Baron Dubois' cases, which terminated fatally from metro-peritonitis, were forceps cases; but puerperal fever was present in the wards of La Maternité.
ether. Baron Dubois distinctly says, that he could trace no bad
effects in his five cases to the ether; and my own experience con-
fects this account. He bases his opinion, that ether will never be
habitually employed in ordinary cases, upon two main grounds; 1st,
the small number of cases which he had to refer to; and 2nd, the
impossibility or probable danger of keeping a woman etherized for
several hours. Both these grounds have been removed; the latter
especially, by the result of Dr. Simpson’s cases and my own; and
it is very doubtful if the Baron would not at this time greatly modify
his opinion.

A point which may become of great interest and importance is,
whether other agents cannot be combined with the ether; for in-
stance, laudanum where the pains are dangerously violent; or tinc-
ture of ergot where they are insufficient. In one of Dr. Simpson’s
cases, the patient inhaled a volatile solution of ergot. The pains,
which had previously been languid, almost immediately became
strongly expulsive, and the child was born in a quarter of an hour.
The woman had been in labour from forty to fifty hours.

In conclusion, I would state it as my opinion, that with perfectly
pure ether, carefully administered by skilful persons, and with good
apparatus, and especially by one containing an appendage with a
supply of oxygen, the operation not being commenced until efficient
etherization is produced, the employment of ether is not only justifica-
table, but promises to be instrumental in materially diminishing the
dangers of operative midwifery. Probably, in natural cases it will
be both sufficient and safer to carry the etherization only to the
second stage, in which partial consciousness remains, but sensation
is abolished; and towards the end, when the pains are ordinarily
intolerable, to induce perfect narcotism. From the results which I
have already obtained, it is my intention to continue the use of this
valuable agent, and I do not hesitate to state my belief, that future
experience will fully confirm my present opinion.

John-street, Bedford-row, April, 1847.

PART III.—MONTHLY PERISCOPE.

Are the movements of the Heart dependent upon the Brain and
Spinal Marrow? By Dr. Julius Budge.—We translate from the
Gaz. Méd. de Paris, the following condensation of an article inserted
in the Archiv. fur Physiologische Heilkunde, by Dr. Budge.

In the first chapter the author notices all the theories that have
ever been advanced in relation to the movements of the heart.
These movements have been attributed—

1st. To the fire and innate heat of the blood; to the dilatation of
the blood by heat (Hippocrates, Descartes, Sylvius.)

2d. To the power of the parenchyma of the heart; to muscular
irritability (Galen, partly by Senac, Haller, Winter, Passavant.)
3d. To the nervous influence (Borelli), and 1st to the influence of the cerebellum (Willis); 2d to the soul (Stahl and his school, Potterfields, R. Whytt, Sauvages); 3d to the medulla spinalis (Legallos); 4th to the medulla oblongata (Budge); 5th to the ganglia (Lancisi, Bichat, Reil, Brachet, Volkman).

In the second part of his work, the celebrated physiologist gives a detailed description of the heart and of the cardiac nerves of the frog; in the third part he analyses the influences of the brain and spinal marrow upon the muscles of voluntary motion, the influence of air and blood upon the heart, and finally the influence exerted by the brain and spinal marrow upon the motions of the heart. Dr. Budge relates numerous experiments made upon frogs, and arrives at the end of his lengthy work to the following conclusions:

1st. The medulla oblongata is the central organ of the heart’s action, inasmuch as it presides over the irritability of the voluntary muscles.

2d. The medulla oblongata is also the central organ of the reflex movements of the heart, but its influence is not very marked, because,

3d. The movements of the heart partake very slightly of any of the reflex actions of other parts of the body, and are principally mere movements of irritation.

4th. The ganglia of the sympathetic nerve are not the central organs of the heart’s action, neither produce nor keep up its rhythm, but they seem to destroy the influence of volition and of reflex action.

5th. The brain of the frog evinces no direct influence upon the motions of the heart, but a marked indirect one.

Effect of Various Substances injected into the Arteries. Read before the Academy of Sciences (Paris) by M. Flourens. (Translated from the Gaz. Med. de Paris, June, 1847.)—I have already made known the effects of Ether injected into the arteries. Its effects when injected and when inhaled are opposite. When inhaled, it destroys sensibility before motion, whereas when injected, the destruction of motion precedes that of sensibility. In my former experiments I had employed only sulphuric Ether; but I have since obtained similar results with acetic Ether, oxalic ether, alcohol, sulphuric acid and ammonia. I have successively injected into the arteries of different dogs acetic ether, oxalic ether, rectified alcohol, diluted sulphuric acid, ammonia diluted with water, and in every instance motility has been impaired, frequently completely suspended, whilst sensibility was perfect. I will now relate one of the experiments: 3 decigrammes of ammonia in 4 grammes of water, were injected towards the heart into the crural artery of a dog. The motility of the posterior extremities was instantly paralyzed. The sciatic nerve was exposed and pinched, when the animal cried aloud, but without moving the limbs; there were only very slight contractions of the muscular fibrils.
The experiments made with the acetic and oxalic ethers, alcohol and sulph. acid furnished results similar to the above-mentioned, viz., sudden loss of motion in the posterior extremities and sometimes total annihilation of fibrillary contraction, with unimpaired sensibility.

The injection of a gramme and a half of spirits of Turpentine in the right crural artery of a dog, forced towards the heart, produced a different effect. There was loss of motion and retention of sensibility, but the paralyzed muscles instead of being relaxed and flaccid as in the other cases, were now in a state of violent tetanic rigidity. The injection of a gramme of nitric ether was followed by immediate death.

Having found substances which when injected into the arteries abolish motion but not sensibility, I sought for some that would destroy sensibility without affecting mobility. The powdered root of Belladonna produced fully the desired effect, although the extract of Bellad. seemed inert. 3 decigrammes of pulv. Bellad. root suspended in 19 grammes of water thrown towards the heart into the right crural artery of a dog, produced immediately complete paralysis of motion in the posterior extremities. Thus far the result is the same as in the other cases. It is necessary to mark the distinction between the general motion of the limb which is abolished in all and the contraction of the isolated muscular fibrils which persists in some of the experiments. In this case the nerve being exposed and pinched excites the fibrillary contractions, but is utterly insensible. It is pinched, lacerated, cut, and torn away without eliciting from the animal any indication of sensibility.

The powder of Hemlock, of Valerian, of pepper, of Spanish tobacco, &c., yielded results similar to that of Belladonna. The fact that the powder alone of Belladonna would produce the effects, led me to try other powders more or less inert. The powder of oak bark, of liquorice, &c., were tried with the same results as powdered Bellad., Hemlock, pepper, &c. M. F. concludes by observing that there are no experiments in physiology more astonishing; yet they are true.

On the Cretinism of large cities, its cause and analogy with that of the Alps. By Dr. Behrend. (Translated.)—The study of authors and the daily observations of Dr. Behrend, of Berlin, have led him to admit:

1st. That there exists a cretinism of large, populous and crowded cities as well as a cretinism of the Alps.

2d. That the cretinism of cities exists in the contracted dwellings located in deep, narrow, and obscure lanes, as it does in the ravines and narrow valleys of the Alps.

2d. That the cretinism of cities differs very little from that of the Alps; its progress is perhaps more rapid, and it more frequently ends in marasmus.

4th. That its causes are a confined, cold, humid atmosphere, saturated with pernicious agents; the absence of solar light; insufficient
heat; nourishment of a bad quality, and not containing sufficient
animal matter; solitude and deficient intellectual culture; unclean-
liness and privation of other comforts.
5th. All these circumstances pervert the act of hematoses, produce
a scrofulous, rachitic, anemic, and chlorotic diathesis, and blunt the
energies of life.
6th. Cretinism is therefore a scrofulous, rachitic diathesis, compli-
cated with chlorosis and stupidity of the intellect and senses.—[Gaz.
Méd. de Paris, from Journal fur Kinderkrankheiten.

Strychnine in Intermittent fever. By Daniel Brainard, M. D.,
Prof. of Surgery in the Rush Medical College. (Ind. and Ill. Med.
and Surg. Journal.)—From the 20th of February to the 1st of April,
the strychnine was prescribed in 83 cases of intermittent fever.
Of those it had no influence over, - - - 14 cases
It arrested the paroxysms for one week, in - - - 3 "
For two weeks, in - - - - 6 "
It arrested it permanently, or to May 1st, in - - - 60 "
Of the above, two cases had taken quinine without the smallest
effect, but were relieved by the strychnine. Nearly all, and probably
every one, had taken quinine from time to time with only temporary
relief. All were old cases in which there had been from two to
twenty returns of the disease in twelve months. The mode of ad-
ministration is as follows: One-eighth of a grain is given thrice a
day, after meals, in the form of powder or pill, until one grain is
taken. If the pills are used, they should be recently made and not
allowed to become dry and hard. There is an advantage in giving
it after meals, as it then becomes mixed with the contents of the
stomach, and is less likely to produce unpleasant effects. In but three
of these cases referred to were there any such effects—in these,
symptoms of nausea and vertigo occurred.
From the facts here stated, we are justified in concluding that in a
very large number of cases of ancient agues, attended with debility,
and unaccompanied by local inflammation, the strychnia is very
nearly equal to the quinine in arresting the paroxysms, and much
superior to it in removing that state of debility and derangement of
the secretions which we believe constitutes the first and persisting
pathological state of the disease.

Hydriodate of Potass in Hydrocephalus.—Dr. Mead, in the Indi-
ana and Illinois Med. and Surg. Journal, relates some cases of this
disease, successfully treated with the hydriodate of potass. Calomel
was also freely administered between the doses of the hydriodate.
The most marked effects in all the cases were diuresis, dribbling of
saliva, and generally the rapid disappearance of the convulsions and
the insensibility. "The conditions of the Brain," says Dr. M., "in
which I have mostly used this agent, are Hydrocephalus and Hyper-
emia. For the former, I consider it as much of a specific as any
thing in medicine can be."
A new method of Excising Bones, the periosteum being allowed to remain and the bone being reproduced.—The "Gazette Médicale de Paris," (3d June, 1847,) contains a notice of the very interesting discovery of "le chevalier Bernardin Larghi," surgeon-in-chief to the "hôpital de Vercel," of a substitute for the method usually adopted in the excision of bones. We condense this article instead of translating it literally.

The desire to dispense as much as possible with the amputation of limbs has led modern surgeons to resort not unfrequently to the extraction of portions of bones and even of joints; but although less objectionable than amputation, such operations are always serious and not devoid of danger. They moreover frequently leave considerable deformity. The periosteum, like the bark of plants, constitutes the matrix of the bone which it encloses and nourishes. Yet by the operation as at present practiced, the surgeon removes not only the bone, but also the periosteum, whereas M. Larghi thinks that reflection should dictate the preservation of the matrix, by which alone a new bony deposit may be secured. M. L. censures the servile disposition of surgeons to imitate rather than to examine for themselves, and denies the validity of the reason given for the removal of the periosteum, viz: that it is usually found partaking of the disease of the bone. According to him, in neither of the cases of exsection hitherto performed is there any evidence that the periosteum was diseased: it was merely hypertrophied, and this hypertrophy so far from being a morbid condition requiring its removal, was on the contrary a physiological state, destined to the preservation or rather to the reproduction of a new bone. When a bone is affected, it would seem that nature takes care to increase the thickness and energy of the periosteum, whose secretion becoming more abundant tends to separate it from the diseased bone and ultimately to substitute for it a new bone. The periosteum in such cases becomes hypertrophied like the uterus, in order to minister to the development of the embryo it contains. Now, since no one has ever thought, in difficult parturition, of removing both the product and the uterus, let the matrix of bones no longer be "barbarously" destroyed; but on the contrary let the effects of nature for the expulsion and regeneration of the bone be seconded. If a fungus or cancer invade the periosteum as well as the bone, the conduct of the surgeon will of course be different. In such a case he will think neither of removing the bone without nor with the periosteum, nor indeed even of amputation, for the disease will certainly be reproduced, and art is unavailing.

M. Larghi proceeds to animadvert upon the unsparing injury inflicted upon the muscles in effecting the exsection of bones in the usual manner, and insists upon the importance of leaving them as much as possible in a state of integrity. By destroying the muscles, and bloodvessels adjacent to the portion of bone removed, the operation is made more serious and any process of reparation
effectually prevented. If a portion of the humerus, for example, be removed, and with it the periosteum and the muscular attachments, the motor powers of the arm are seriously impaired; yet this seems to have been overlooked by surgeons. The object being the removal of the bone and the preservation of the periosteum, this should be injured as little as possible. It should be slit open only so far as may be necessary to permit the extraction of the bone. If the portion of bone to be removed be short, it will suffice to make a longitudinal incision of the periosteum over the bone, taking special care to penetrate through the intermuscular space so as not to injure the muscles themselves. The edges of the incised periosteum are then to be separated, (which is facilitated by the gelatinous deposit usually found between it and the bone,) and the membrane carefully detached from the entire circumference of the bone. A flexible needle can be carried under and around the bone with a bit of tape, which being drawn along the bone at the same time that the muscles attached to the periosteum instinctively contract and elevate it, renders the separation easily accomplished. The preservation of the muscular attachments is therefore important. If there is any difficulty in thus effecting the separation, a little tepid water may be injected with advantage. The separation being complete, the exsection is effected in the usual way.

If the portion of bone to be removed be long it should be cut off at each end, the periosteum having been previously separated at these points, as above stated. By seizing one end of the bone with a pair of forceps it can then be readily drawn out of its envelop. In this manner a considerable length of bone may be extracted by making but a small incision down to each end, and consequently preserving the integrity of the intervening skin and soft parts. If the bone were already deprived of its periosteum, or if this membrane were partially affected, the exsection should be practised at this point, and the bone removed in one or more fragments as might be necessary. If the bone be unequally enlarged so as to present a knotty surface, it will be necessary to lay open the periosteum in its entire length, and after the removal of the bone to approximate its edges. This was done by M. L. in 1845, for the extraction of portions of the 7th, 8th and 9th ribs, with success. He also removed in this way the entire humerus from another patient, who recovered and retained the motion of the limb. In a third case he removed a portion of the right ilium, and restored the use of the leg which had been affected. The inferior portion of the ulna was also removed without injury to the movements of the wrist; and frequently the first phalangeal bone of the toe.

M. L. furnishes at length his reasons in favor of this method of operating in cases involving the ribs. The process he details is essentially such as above recited, and therefore need not be repeated here.

The Editor of the Gazette Médicale claims for M. Blandin the credit of having once removed a considerable portion of the clavicle, which was reproduced, the periosteum having been left. He does
not however furnish the date of the operation. An operation similar to that of Blandin was successfully performed by Prof. P. F. Eve, during the last winter.

M. Kun's New Instrument for the Diagnosis of Tumours.—M Kun, Professor of Physiology in Strasbourg, presented to the Medical Society of that city, an instrument, the application of which is likely to produce the most beneficial results in the diagnosis of various kinds of tumor. It consists of an exploring needle, having at its extremity a small depression with cutting edges. On plunging this instrument into a tumour to any depth, we can extract a minute portion of the tissue of which its various layers are composed. In this manner a microscopic examination of the tumor can be practised on the living subject, and its nature ascertained before having recourse to an operation. We have proved the utility of this method of diagnosis on three occasions, and even conscientious practitioners renounce an operation previously determined on, when the cancerous nature of the tumor has been demonstrated by the microscope.—[N. Y. Journ. of Med., from L'Union Medicale.

On the preparation of the Iodide of Mercurial Chloride.—A skilful chemist, M. Boutigny, has been led accidentally to the composition of a new mercurial medicament, which seems already to have produced very advantageous effects in certain scrofulous affections.

For this preparation:—B. Iodine (2at.) — — — — 1579,5.

Proto-chloride of mercury (4at) 5918,5.

The calomel is pulverised, introduced into a matrass and heated gently, shaking it until it begins to sublimate; the iodine is then added in small quantities, and the combination takes place with some sound and without any sensible loss of iodine. If, on the contrary, the iodine were added to the calomel before the latter was introduced into the matrass, a considerable portion of the iodine would be volatilised, and the compound thus obtained would be of unknown proportions and consequently of uncertain effect. The preceding preparation is employed externally by friction in the form of an ointment, or internally, in pills. The following is another formula, which contains two instead of four proportions of calomel:

Iodine (2at.) — — — — — — 1579,5
Proto-chloride of mercury (2at.) — — 2974,5

The mode of preparation is the same. This combination is intended to be run into cylinders, like the nitrate of silver, and we think that these cylinders will be employed with great success to deterge scrofulous ulcers, certain syphilitic chancres, &c.

The proportions given above may be altered, so as to diminish the quantity of iodine, if deemed advisable; but if the proportion of iodine were greater than that indicated in the second formula, a portion of the iodine would remain free and thus destroy the stability of the combination, a stability so necessary in order to secure a product which shall always be identical.
As to the name given by M. Boutigny to this product, iodide of mercurial chloride and bi-iodide of mercurial chloride, it is intended only to indicate the fact that it results from the direct action of iodine upon the mercurial chloride.

The two following formulas are recommended by M. Boutigny to the attention of physicians:

**Ointment of the Iodide of Mercurial Chloride or anti-Scrofulous Ointment.**

R. Iodide of Mercurial Chloride in powder, 75 centigrammes.

Fresh Lard, - - - - 60 grammes.

**Pills of the Iodide of Mercurial Chloride.**

R. Iodide of Mercurial Ointment, pulverized, 25 centigrammes.

Gum Arabic, - - - - 1 gramme.

Crumb of bread, - - - - 9 grammes.

Orange flower water, - - - q. s.

Make 100 pills.

Doctor Rochard has published in the *Union Médicale* some remarkable cases of scrofulous affections cured by the salt of M. Boutigny. He states that the energy of this salt is extreme, and that he has thought proper to use it only externally in the form of ointment. He recommends 15 grains of the salt to 3 v. of lard. The quantity of this ointment to be employed must depend upon the degree of sensibility which varies much in different persons, but generally he uses at each friction a portion equal to the volume of a small pea. In general one friction per day will be sufficient, to be repeated for two or three successive days, and renewed afterwards at intervals of from eight to fifteen days, according to the effect produced. Great caution is necessary to avoid accidents. It is important to spread the ointment lightly, and not to persist in its use if, as sometimes happens, there should supervene pain, redness and signs of a too intense reaction. He employs it sometimes as a local, sometimes as a general remedy, and at other times endeavors to combine both modes of action, by exerting the friction alternately, directly upon the engorgements and ulcers, or upon the internal surface of the thighs, upon the back, the chest, &c. These general frictions have the effect of improving the entire organism, by increasing the activity of nutrition and assimilation. He begins almost always with them in invertebrate diseases of a grave and hereditary character. The local effect is soon manifested; the portion of the skin upon which the ointment is applied begins to turn red, becomes the seat of itching and afterwards of smarting sensations, and finally of a true inflammatory tension; but this tension has but a short duration. It begins about an hour after the application of the ointment and disappears completely, with the smarting and redness, in the course of two or three hours. The epidermis scales off as occurs after erysipelas, and the skin then becomes very smooth and soft. In a greater degree of intensity it would produce vesication and even cauterisation. Upon ulcers there
is formed a small scab which is detached in the course of a few days, and leaves exposed a vermilion surface, instead of the violet and livid surface which previously existed. Unless the suppuration be very abundant, it is better to leave the parts naked than to dress them.

The general or constitutional modifications are less prompt, but can be gradually perceived in the increased activity of all the functions.—[Translated from the Bulletin de Therapeutique.

MEDICAL INTELLIGENCE.

At a meeting of the President and Vice-Presidents of the American Medical Association held on May 8th, 1847, the following Standing Committees were appointed in pursuance of the order of the Association:


"Committee on Medical Sciences.—Dr. S. Henry Dickson, S. C., Chairman; Drs. J. P. Jersey, S. C.; Robert Bridges, Philada.; J. W. Francis, N. Y.; Wm. T. Wragg, S. C.; Wm. Power, Balt.; T. Romeyn Beck, N. Y.


"Committee on Obstetrics.—Dr. Harvey Lindsley, D. C. Chairman; Drs. G. C. M. Roberts, Balt.; J. Riley, D. C.; R. W. Haxall, Richmond, Va.; W. Channing, Boston; C. R. Gilman, N. Y.; S. Annan, Lexington, Ky.

"Committee on Medical Literature.—Dr. Oliver Wendell Holmes, Bost., Chairman; Drs. E. Hale, Boston; G. C. Shattuck, Jr., Boston; D. Drake, Louisville, Ky.; John Bell, Phila.; Austin Flint, Buffalo; W. Selden, Norfolk, Va.

"Committee on Medical Education.—Dr. Alexander H. Stevens, N. Y., Chairman; Drs. Amos Twitchell, Keene, N. H.; B. R. Wellford, Fredericksburg, Va.; Arnold Naudain, Phila.; R. D. Arnold, Savannah; F. Campbell Stewart, N. Y.; L. P. Bush, Wilmington, Del.


Some dissatisfaction has been expressed, that a number of gentlemen have been appointed to places in the various committees, who are not members of the Association. The New-York Journal of Medicine says:—"In regard to the 'Standing Committees' appointed in pursuance of the order of the Association, by the President, it strikes us as somewhat remarkable that seven at least of the gentlemen appointed, are not members of the Association, while many who have distinguished claims to such a distinction, have been entirely passed by. For example, the committee on 'Practical Medicine' embraces four gentlemen of this city, only one of whom is a member of this Association, and the same of
other committees. We doubt not those physicians, thus honored, will see the propriety of declining to serve, until they belong to the body, on whose committees they have been chosen, probably through inadvertence; and we have no doubt that the worthy President, when he is made aware of the dissatisfaction to which such irregularity inevitably gives rise, will speedily correct the error into which he has fallen. But few of the numerous Colleges represented in Convention, are honored by a place on any of the committees, while one school in this city furnishes chairmen for two committees. ‘Honors divided’ should be the motto in an Association, which assumes the title of National." Our Charleston friends seem to have been in high favor, for of the three gentlemen who represented the Profession in Charleston, one has been made a Vice-President, and the others are placed on an important committee, whilst a distinguished Professor of the same city, not a member of the Convention, has been placed at the head of the same committee.

<table>
<thead>
<tr>
<th>Country</th>
<th>Total number of Cases</th>
<th>Of which Americans</th>
<th>Other Foreigners and unknown</th>
<th>Mexicans</th>
<th>Soldiers</th>
<th>9 m. Dep. and all others</th>
<th>Other Foreigners and unknown</th>
<th>Mexicans</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Americans</td>
<td>113</td>
<td>93</td>
<td>4</td>
<td>1</td>
<td>44</td>
<td>4</td>
<td>42</td>
<td>92</td>
</tr>
<tr>
<td>Other Americans</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>1</td>
<td>41</td>
<td>6</td>
<td>1</td>
<td>41</td>
</tr>
<tr>
<td>Mexicans</td>
<td>57</td>
<td>37</td>
<td>6</td>
<td>3</td>
<td>14</td>
<td>11</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Soldiers</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Other Foreigners</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mexicans</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Average daily mortality</td>
<td>9.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
On Medical Reform.—Medical Reformation appears to be engaging the attention of the profession in Canada, as well as in our country. It may not be uninteresting to our readers to see what steps are taken on the subject by our neighbors; we therefore copy from the British American Journal of Medical and Physical Science, a few of the clauses of a bill entitled “An act to incorporate the members of the Medical Profession in Lower Canada and to regulate the Study and Practice of Physic and Surgery therein”:

“And be it enacted, That from and after the passing of this Act, no person shall practise Physic, or Surgery, Midwifery, or shall vend any drugs, medicines, or patent medicines by retail, or shall act as a Chemist or Druggist, in Lower Canada, unless he be a person duly licensed so to practise, or so to vend drugs and medicines or patent medicines, or to act as a Chemist and Druggist, either before or after the passing of this Act, under a penalty of

for each day on which any person shall so practise, or shall act as a Chemist or Druggist, or sell any drugs, medicines or patent medicines contrary to the provisions of this Act: And such penalty shall be recoverable on the oath of any two credible witnesses, before any Justice of the Peace for the District in which the offence shall have been committed, and in default of the payment of such penalty on conviction, the offender may be committed to the Common Gaol of the District, until the same be paid: Provided always, that nothing herein contained shall extend to prevent any person duly licensed to practise Physic, Surgery, or Man-Midwifery in Upper Canada, from practising the same in Lower Canada, according to the provisions of the Act hereinbefore cited.

“To cause every member of the profession now practising or who may hereafter practise in Lower Canada, to enregister his name, age, place of residence, nativity, the date of his license and the place where he obtained it, in the books of the College.

“To appoint a Committee in each District for the purpose of occasionally inspecting druggist establishments and other places where drugs, medicines or patent medicines are sold, to ascertain that poisons are carefully labelled and kept apart, and that the drugs or medicines generally are of pure quality.

“And be it enacted, That the qualification to be required by the Board of Governors from a person about to commence the study of Medicine in this Province, shall be: A good moral character, and a competent knowledge of Latin, History, Geography, Mathematics and Natural Philosophy;—and that from and after the end of the year one thousand eight hundred and fifty, a general knowledge of the French and English languages shall also be indispensable.

“And be it enacted, That the qualifications to be required from a candidate for examination to obtain a certificate for a license to practise shall consist in his not being less than twenty-one years of age; that he has followed his studies uninterruptedly during a period of not less than four years under the care of one or more general practitioners duly licensed; and that during the said four years he shall have attended at some University, College, or Incorporated School of Medicine within Her Majesty's Dominions not less than six months' Courses of General Anatomy and Physiology—of Practical Anatomy—of Surgery—of Practice of Medicine—of Midwifery—of Chemistry—and of Materia Medica and Pharmacy,—one six months' Course of the Institutes of Medicine,—one three months' Course of Medical Jurisprudence,—and one three months' Course of Botany, if obtainable in Lower Canada; also, that he shall have attended the general practice of an Hospital in which are contained not less than fifty beds under the charge of not less than two Physicians or Surgeons for a period not less than one year, or two periods of not less than six months each; and that he shall also have attended two three months' or one six months' Course of Clinical Medicine, and the same of Clinical Surgery.

“And be it enacted, That the qualifications to be enacted from a person intending to study to become a druggist shall be: the possession of a competent knowledge of Latin, with a liberal French or English education; his being at least sixteen years of age, and of good moral character.
"And be it enacted, That the qualifications to be exacted from a candidate for a certificate to obtain a license to sell drugs or medicines shall be: his being not less than twenty-one years of age; his having attended not less than two six months' Courses of Chemistry—two six months' Courses of Materia Medica and Pharmacy—one three months' Course of Medical Jurisprudence—and one three months' Course of Botany, if obtainable in Lower Canada; and moreover, that he shall have been uninterruptedly engaged in the compounding and dispensing of drugs and medicines during a period of not less than four years under the superintendence and care of some duly licensed general practitioner or druggist.

"Provided always, and be it enacted, That nothing in this Act contained shall be construed to prevent or prohibit any competent female from practising midwifery in Lower Canada, such female proving her competency before any two members of the College of Physicians and Surgeons and obtaining their certificate to that effect.

"And be it enacted, That any person vending spurious or adulterated drugs or medicines, or neglecting to correctly label the poisons in his shop and to have them carefully set apart in some place especially devoted to that purpose, or vending any poison without prescription or license of a duly licensed medical practitioner or the certificate of a clergymen recommending the purchaser for the purchase of the same,—shall, on conviction thereof before one Justice of the Peace, upon the oath of any one of the Committee to be appointed by the Governors of the said College for the especial purpose of inspecting druggist establishments and other places where drugs or medicines are sold, incur a penalty not exceeding for the first offence, and a penalty not exceeding for each and every subsequent offence, and may be committed to the Common Gaol until such penalty be paid."

_Mortality in New Orleans._—From the 16th of April to the 26th of June, being nine weeks, there occurred 1019 deaths, 756 whites and 263 blacks. Of the deaths 334 were children under ten years. Among the most common causes of death we find Apoplexy 22; Consumption 107; Convulsions 24; Diarrhoea 50; Dysentery 80; Fevers 39, Typhoid Fever 51; Typhus Fever 49.

_Mortality in Prisons._—In the Pennsylvania, where solitary confinement has been long practiced, 1 prisoner in 23 has died yearly; whilst at Charlestown, where the prisoners are allowed to mix together, only 1 in 84 has died during the same period.

_Buffalo University._—At the first Commencement of this Institution held in the city of Buffalo, N. Y., on 16th June, the degree of M. D. was conferred upon seventeen approved applicants. This fact demonstrates that this infant institution enjoys the public confidence in a high degree. Our able and accomplished friends, Drs. Flint and Lee, are members of the Faculty of the University.

_Resignation of Professor Hare._—Robert Hare, M. D., who for many years has occupied the Chair of Chemistry in the University of Pennsylvania, has resigned his professorship. In accepting his resignation the Trustees have adopted a complimentary resolution expressive of their sense of the eminent services which he has rendered to Science, and to the University.

_University of New-York._—We learn from the Charleston Courier, that the vacancy in the Faculty of this University, occasioned by the death of Dr. Revere, has been filled by the election of Prof. Dickson of Charleston, who has accepted
the appointment, and resigned his professorship in the Medical College of the State of South Carolina.

Obituary.—At Berlin, aged 55, Prof. Wagner, of that University. On the 4th May, at Tottenham, England, John Ramsbotham, M. D., in the 80th year of his age. In London, on the 3d May, John Read, the inventor of the Stomach Pump.


<table>
<thead>
<tr>
<th>Date</th>
<th>Sun Rise THER.</th>
<th>4, P. M. THER.</th>
<th>Wind</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>67</td>
<td>29 63-100</td>
<td>82 29 73-100</td>
<td>N. E.</td>
<td>Cloudy.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 77-100</td>
<td>71 &quot; 81-100</td>
<td>N. E.</td>
<td>Rain, 60-100 of an inch.</td>
</tr>
<tr>
<td>69</td>
<td>&quot; 87-100</td>
<td>73 &quot; 66-100</td>
<td>N. E.</td>
<td>Cloudy.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 85-100</td>
<td>82 &quot; 83-100</td>
<td>N. W.</td>
<td>Cloudy.</td>
</tr>
<tr>
<td>64</td>
<td>&quot; 83-100</td>
<td>81 &quot; 81-100</td>
<td>E.</td>
<td>Cloudy.</td>
</tr>
<tr>
<td>64</td>
<td>&quot; 83-100</td>
<td>83 &quot; 85-100</td>
<td>S. E.</td>
<td>Cloudy—sprinkle.</td>
</tr>
<tr>
<td>63</td>
<td>&quot; 82-100</td>
<td>80 &quot; 73-100</td>
<td>N. W.</td>
<td>Cloudy—sprinkle.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 73-100</td>
<td>89 &quot; 63-100</td>
<td>N. E.</td>
<td>Storm—rain 2 inches 5-100.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 66-100</td>
<td>78 &quot; 63-100</td>
<td>S.</td>
<td>Cloudy—sprinkle.</td>
</tr>
<tr>
<td>63</td>
<td>&quot; 63-100</td>
<td>73 &quot; 74-100</td>
<td>S.</td>
<td>Rain, 1 inch 70-100.</td>
</tr>
<tr>
<td>63</td>
<td>&quot; 83-100</td>
<td>82 &quot; 87-100</td>
<td>S. W.</td>
<td>Cloudy—sprinkle.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 90-100</td>
<td>81 &quot; 87-100</td>
<td>W.</td>
<td>Fair—some clouds.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 82-100</td>
<td>86 &quot; 86-100</td>
<td>S. W.</td>
<td>Fair.</td>
</tr>
<tr>
<td>67</td>
<td>&quot; 75-100</td>
<td>88 &quot; 75-100</td>
<td>S. E.</td>
<td>Fair—some clouds.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 85-100</td>
<td>85 &quot; 84-100</td>
<td>N. E.</td>
<td>Cloudy—sprinkle.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 93-100</td>
<td>76 &quot; 93-100</td>
<td>N. E.</td>
<td>Rain, 54-100 of an inch.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 98-100</td>
<td>76 &quot; 30-2-100</td>
<td>S. E.</td>
<td>Rain, 1 inch 45-100.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 30 5-100</td>
<td>80 &quot; 29 98-100</td>
<td>S. E.</td>
<td>Cloudy—shower at 3, p. m.</td>
</tr>
<tr>
<td>70</td>
<td>&quot; 30 4-100</td>
<td>72 &quot; 96-100</td>
<td>S. W.</td>
<td>Cloudy—sprinkle.</td>
</tr>
<tr>
<td>71</td>
<td>&quot; 29 96-100</td>
<td>81 &quot; 94-100</td>
<td>S. E.</td>
<td>Cloudy—sprinkle at 11, A. M.</td>
</tr>
<tr>
<td>69</td>
<td>&quot; 94-100</td>
<td>78 &quot; 93-100</td>
<td>S. E.</td>
<td>Rain, 68-100 of an inch.</td>
</tr>
<tr>
<td>70</td>
<td>&quot; 98-100</td>
<td>73 &quot; 98-100</td>
<td>S. W.</td>
<td>Rain.</td>
</tr>
<tr>
<td>67</td>
<td>&quot; 30 2-100</td>
<td>82 &quot; 96-100</td>
<td>S. W.</td>
<td>Cloudy.</td>
</tr>
<tr>
<td>73</td>
<td>&quot; 29 97-100</td>
<td>82 &quot; 96-100</td>
<td>S.</td>
<td>Fair.</td>
</tr>
<tr>
<td>70</td>
<td>&quot; 87-100</td>
<td>84 &quot; 77-100</td>
<td>S. W.</td>
<td>Fair.</td>
</tr>
<tr>
<td>71</td>
<td>&quot; 73-100</td>
<td>80 &quot; 67-100</td>
<td>N. W.</td>
<td>Fair—some clouds.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 73-100</td>
<td>75 &quot; 77-100</td>
<td>N. W.</td>
<td>Fair—some clouds.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 73-100</td>
<td>70 &quot; 77-100</td>
<td>N. E.</td>
<td>Fair.</td>
</tr>
<tr>
<td>64</td>
<td>&quot; 77-100</td>
<td>83 &quot; 73-100</td>
<td>W.</td>
<td>Fair.</td>
</tr>
<tr>
<td>70</td>
<td>&quot; 73-100</td>
<td>70 &quot; 73-100</td>
<td>N. E.</td>
<td>Rain, 2 inches 26-100.</td>
</tr>
</tbody>
</table>

10 Fair days. Quantity of Rain 9 inches and 28-100. Wind East of N. and S. 15 days. West of do. 12 days.