prolongation of the disease, and all the distress of a fistulous communication.

When the matter has been fairly evacuated, the diet must be generous, and a full share of wine or porter allowed.

ART. II.—*On Puerperal Convulsions*. By CHARLES HALPIN, M. D., Cavan, Licentiate of the King and Queen's College of Physicians, and of the Royal College of Surgeons, Ireland ; Corresponding Member of the Association, &c.

[Read at a Meeting of the Association, August 6, 1843.]

THERE is no branch of the medical profession so fraught with difficulties and dangers as midwifery. There is none so laborious in practice, so uncertain in its results, or so dangerous, not only to the lives of the individuals who come under our care but also to our own characters as medical practitioners. In the puerperal state more than any other, we meet with difficulties and complications which, from their urgent nature, will not permit us the benefit of a consultation, and which will call forth the exercise of the soundest judgment, and most prompt decision at a moment's warning.

Various and dangerous as the complications of the parturient state are, there is none that creates the same degree of alarm in the friends of the patient, or requires greater decision, or more matured judgment on the part of the medical attendant than puerperal convulsions. Sudden in its accession, frightful in its career, and destructive in its results, it behoves us to be ever watchful of its approach, and prompt and vigorous in our treatment of it.

A disease attended with symptoms so violent and alarming must have attracted attention at a very early period of the history of medicine. We find mention made of it by Celsus ; and *Ætius*, who wrote in the fourth or fifth century, describes it particularly ; from this period its nature has been investigated with the most unwearied diligence by the ablest practical men ; and

the universal confession of those best acquainted with the subject is, that so great is our ignorance of its physiology and pathology, that it still presents a vast field for inquiry ; and, as Dr. Collins, in his valuable treatise on Practical Midwifery, remarks, “ the extent of the experience of most individuals is not sufficient to enable them to draw satisfactory conclusions, therefore every contribution is beneficial.”

Deeply impressed with the truth of this remark, I feel it my duty on this occasion to present you with the result of my observations on this disease : and this urges itself on me more strongly, as within a short period I have been in attendance on a most critical and alarming case of this kind.

Puerperal convulsions have been divided by most authors into three species—epileptical, apoplectical, and hysterical : of these the epileptical is most frequently met with. Again, it is extremely useful for practical purposes to consider them as they occur at *three* different periods, viz. during the latter months of gestation ; during labour ; and after delivery.

An attack of convulsions may set in at a time, when from the favourable condition of the woman, both as regards her general health, and the relations of the various circumstances connected with the period of her gestation or labour, we have the least reason to expect such an occurrence at hand. Every thing may be progressing to our satisfaction, when suddenly, and without a moment's warning, a scream, or some stertorous or hissing sound from the woman attracts our attention. On turning round we find her in a state of insensibility ; if she has been standing or sitting previously, she has fallen to the ground. Her body becomes violently agitated ; the whole muscular system is forcibly and irregularly contracted ; the hands are firmly clenched ; the arms and limbs are flung wildly around, or rigidly extended ; frequently the heels coming in contact with some fixed point during those rigid extensions, the patient will force herself into an erect position, supported by the arms of those around her ; the head is drawn violently backward, and the neck twisted so,

that frequently the face, which appears swollen, is turned toward either shoulder ; the eye-balls are projected, they are either fixed with an appalling stare, or rolling wildly, appear ready to start from their sockets ; the cheeks and lips are red or livid ; the tongue is protruded from the mouth, which is filled with frothy mucs, frequently tinged with blood from the lacerated tongue. The vessels of the head and neck, particularly the veins, are swollen and turgid ; whilst the breathing, which is very imperfectly and laboriously carried on, is accompanied either by ster-tor, or a very peculiar hissing sound. The pulse may be either full, slow, and soft, or extremely rapid, frequently intermitting.

This convulsive seizure usually subsides in a few moments, and the patient may either recover from it quietly, as from a sleep ; or she will appear agitated and frightened, tossing restlessly from one side of the bed to the other ; or she may lie in profound coma for hours, or even days ; but perfect consciousness rarely returns for a considerable time after the subsidence of an attack. But however the fit terminates, the state of comparative calm that succeeds it, is very seldom of long duration ; another, and other fits most commonly follow each other at intervals more or less prolonged, attended by the same appalling symptoms. "And thus," says Dr. Ramsbotham, "do paroxysms and intervals alternate at nearly regular periods, until permanent relief is procured by means of art, or until the powers of the system are worn out by the numerous repetitions ;" or it may terminate at once in fatal apoplexy.

The *epileptic* species of convulsions occur fifty times for once that either of the other species are met with. It resembles epilepsy in the outward symptoms, but differs most considerably from it in most other particulars.

It must be obvious, that our first duty is to prevent, if possible, the occurrence of a state of disease so highly alarming and dangerous ; and there can be little doubt but that an attack might frequently be warded off by the timely interference of art,

had we any *decided* symptoms premonitory of its approach to guide us. All the authors that I have been able to consult have given long catalogues of premonitory symptoms; but there is not one that is *peculiar* to this disease: nor can even the grouping of the whole of them together be relied upon as a *certain* indication, that an attack is at hand.

The most prominent of those symptoms are, rigors; tremors; shudderings; crampy pains in the region of the stomach; flushings; tumidity of the face, hands and neck (Oslander); throbbing of the carotid arteries; giddiness: sense of weight in the head; ringing in the ears; headach, which is sometimes dreadful; severe and splitting pains in the head; dazzling appearances, or motes before the eyes; dimness of vision; drowsiness, vertigo. If the woman be in labour, there is pain in, and insupportable sickness of the stomach; and great drowsiness, even heavy sleep during labour pains. Now it is indisputable that most of those symptoms are observed in persons who have *never* been attacked with convulsions; yet, when they occur, especially the *splitting pain in the head*, with bright flashings before the eyes, we should be particularly watchful.

From what has been said of the symptoms which characterize a convulsive seizure, and also those premonitory of its approach, it would appear that the functions of the brain and nervous system are greatly deranged; and this condition is associated with, or the result of, an irritable state of the uterus, connected with pregnancy. Some of the more immediate causes appear to be eating indigestible or improper food, particularly shell-fish, as observed by Dr. Clarke and others; morbid secretions in the alimentary canal; a loaded state of the intestines; distention of the urinary bladder; tedious, long continued, and laborious labour; grief; anxiety and distress of mind; a sense of shame, and fear of detection in unmarried women. It has been observed by Smellie, Denmar Burns, Ramsbotham, Dewees, Copland, Collins, and many other writers on the subject, that several cases have occurred about th

same time, and that during a warm, electrical state of the atmosphere. I think I am borne out in saying, that an advanced stage of life in a first pregnancy has much to do with the occurrence of this disease. This may arise from tedious or laborious labour, consequent on a more unyielding state of the parts concerned in parturition. Dr. Collins gives thirty cases, of which six were over 28 years of age. Ramsbotham details twenty-six cases: three of these women were "middle aged," one was 34, one 39, and one 40 years old; of the remaining seventeen no mention is made of age. Surgeon Enright of Ennis, in a valuable communication on this subject, published in the *Medical Press*, No. 55, gives four cases: No. 1, 26 years, No. 2, 35 years, and No. 3 was 40 years old. Three were first pregnancies; no mention is made of the fourth. It is much to be regretted that the age of each patient is not stated in published cases. No case is perfect in which this important omission is made; were this attended to by writers on this disease we should be enabled to form such a set of tables as in all probability would throw much additional light on this important, but obscure subject. From what I have been able to glean from the sources I have consulted, I would say, that about one-fourth of the cases occur in women over 28 years of age. Denman and some others lay much stress on the pressure of the hard head of the foetus on the neck and mouth of the uterus, as being a most powerful exciting cause of puerperal convulsions. This may have some truth in it; and the opinion is strengthened by the fact, that in almost every case the *head* is the presenting part. Opposed to this is the fact, that we find many persons attacked in whom the os uteri is fully dilated, and in whom the external parts are soft and yielding, and well prepared for parturition.

No woman is safe from this disease: slight made women are not exempt from it, though it has been observed more frequently in those of a corpulent, robust, plethoric habit, with short thick necks. They rarely occur in those who have borne a child or children. In thirty cases, Dr. Collins states, twenty-nine were

first pregnancies. Dr. Ramsbotham is the only writer with whom I am acquainted that maintains an opposite opinion. The presentation is almost invariably natural. Dr. Collins states, that during the masterships of Drs. Clarke, Labatt, and himself in the Dublin Lying-in Hospital, a period of twenty-one years, and recording the parturition of 48,379 women, there was but one case of puerperal convulsions in which the presentation was preternatural.

It would naturally be expected that a disease so violent in its symptoms, so rapid in its career, and so destructive in its results, would leave indelible traces of its ravages upon and within those organs in which it had been running riot so furiously. In this expectation we are frequently disappointed, and post mortem examinations of those who have died of this disease have thrown little light on its pathology. The appearances of the brain are most frequently inadequate to account for the violence of the disease. *Occasionally* there is increased vascularity and turgescence of the vessels, with effusion of blood into the substance of the brain or into the ventricles; but in the greater number of cases that have been inspected no effusion of blood was observable in either situation. There may be serous effusion into the ventricles and between the coverings of the brain, particularly at its base, or in the theca of the spinal cord. This is usually very slight; rarely more abundant than in a healthy state of the organ; and even these appearances, slight as they are, are by no means constant, and the brain may present no appreciable trace of morbid action.

We rarely find any trace of lesion in the uterus or its appendages. Dr. Collins found the vagina lacerated in three cases out of five that proved fatal in his practice.

Puerperal convulsions may come on, 1st, during the latter months of gestation; 2ndly, during the progress of parturition; or 3rdly, after this process is accomplished. They are *always* fraught with danger to the mother; if before delivery is effected, the child also runs great risk of perishing. Whatever the pe-

riod of their occurrence may be, the general indications in the treatment are the same. Namely, to subdue the fit and prevent its return. In employing means for this purpose, we must be prompt, vigorous, and bold.

The first measure to be had recourse to in an attack of the epileptic variety of puerperal convulsions is to bleed the patient largely. All authors are agreed in the necessity for this. Bleeding, to be effectual in this disease, must be carried to a large extent: from twenty to forty ounces should be taken at the first bleeding, and repeated to half the quantity or more, should circumstances require it. Copious abstraction of blood in this disease is borne extremely well, and it is a powerful means in preventing inflammation of the peritoneum and uterus and its appendages, which is but too prone to spring up, where bleeding has been neglected or inefficiently performed. Dr. Ramsbotham recommends "free and copious loss of blood." Dr. Burns says, "We must not spare the lancet; frequently there is more danger from taking too small a quantity than from copious depletion." Dr. Blundell "once abstracted seventy ounces from a patient in the course of three or four hours, and she did not ultimately suffer from inanition." Dr. Dewees "bleeds until he abates the severity of the fits, or until he arrests their repetition. This might be effected sometimes by thirty or forty ounces suddenly drawn; but it may require upwards of 100 ounces in the course of a few hours."

Much depends on the *manner* in which this blood-letting is effected. It should be taken rapidly either from the jugular vein, from one or both arms, or from the temporal artery: the orifice in the vein should be large, to permit a free stream of blood to escape, so that a powerful and *sudden* effect may be produced on the system. Dr. Dewees lays it down—"that the shorter the time a given quantity of blood be drawn in, the greater will be the advantage resulting from it."

Again, bleeding should be had recourse to early. It is of the highest importance that we should lose no time in trying the

effect of less active measures, but proceed at once to bleed: this having been performed fully and boldly, we shall have time to consider what other means are most likely to be beneficial.

Our attention should next be directed to the state of the bowels, and we should administer some purgative medicine that will unload the alimentary canal, clearing away any crudities or morbid matter that may be contained in it. This may be done with a dose of calomel, from ten to fifteen grains, given alone, or combined with jalap, camphor, or croton oil. If the patient cannot swallow freely between the fits, this may be mixed with a little treacle or butter, and laid on the tongue with the handle of a spoon. When the patient can swallow, the common purgative dose of senna and salts, given in sufficient quantity, will be found to answer extremely well. Should these purgatives prove slow in their effect, we should assist them by throwing a stimulating enema, containing turpentine, or tincture of jalap, or foetid tincture into the rectum.

Pouring cold water on the head has been strongly recommended. Denman sprinkled it on the head with a bunch of feathers; others recommend dashing it forcibly on the head, face, and breast. Copland speaks highly of "the effusion of a stream of cold water, with the use of injections of turpentine, sometimes containing camphor, valerian, &c." Whatever mode we adopt, provided we are not sparing in our application of it, cold applied to the head will be found a most powerful auxiliary; it is always within our reach, and, after a full bleeding, it can be used without interfering with other and more important remedies.

These means will very frequently succeed in staying the progress of this frightful disease, and the woman may go on to her full time, and be delivered without a further recurrence of them: or if they come on during the progress of labour, she may be delivered by natural efforts: but unfortunately we are not always successful, and the convulsive seizures will continue unmitigated in violence—unabated in frequency.

This disease being so manifestly depending on the condition of the uterus, we must next consider on the propriety of delivery. This is a measure most desirable to accomplish in all cases occurring during the progress of labour, as we find that after the expulsion of the ovum by natural efforts, or its extraction by art, the convulsions most frequently cease of themselves. But this is a point that requires great judgment to direct; for whilst there are many cases that seem to invite assistance, there are others that forbid it, and in which injudicious manual interference with the uterus would be followed by the most disastrous consequences.

This is a point on which there appears to be great difference of opinion amongst practitioners. A long list of names might be adduced that are opposed to delivery; whilst again, the advocates for it are equally numerous and respectable. "And yet," as Copland observes, "this difference is more in words than in intention." There appears to be an entire agreement between them, that should the fits continue notwithstanding the active employment of the means enumerated, the woman should be delivered as early as the *state of the parts* will admit its being done *without violence*; that is to say, when the external parts and vagina are soft and well prepared, and the os uteri dilated to the full extent, or so soft and yielding to the gentle pressure of the fingers as to be easily dilated. Under these circumstances we may proceed to deliver with safety. The method to be preferred must be regulated, in a great measure, by the stage of labour present; in other words, by the situation of the fœtal head. If the head has not yet got into the pelvis, we may pass the hand cautiously and gently through the os uteri, and seize one or both feet of the child, and proceed to deliver as in footling cases. In this way its life may be saved. If the head is fairly in the pelvis, the forceps should be tried, and delivery accelerated: and lastly, where neither turning, nor the forceps, or vectis, are advisable, the head should be lessened with the derforator, and either the child extracted immediately, or the

completion of the delivery may be postponed for some time, in order to permit the uterine action to compress the broken up head, when it may be accomplished with greater ease and safety. Where the child is dead in utero, and where the head can be easily reached, I would prefer lessening it, to either the application of the forceps, or *turning*, which latter, according to Dr. Collins's experience and researches, is followed by bad consequences, as five have died out of every seven on whom it has been practised.

In determining this point, the life or death of the *fœtus*, the stethoscope will be found of immense importance.

These are the circumstances under which delivery has been advised. On the other hand, it is strongly deprecated by all who have studied the subject where the *os uteri* is not dilated ; or where, from its rigidity, it would require force to dilate it. Where this rigidity of the *os uteri*, or the unyielding state of the external parts is such that delivery cannot be attempted, then we must be patient and watchful. Here we are advised to rupture the membranes, and permit the escape of the liquor amnii, a measure that relieves the great distention of the uterus, and by which efficient labour pains are frequently induced.

We must never be idle spectators: it is expected that we shall still be employing some remedy. Accordingly we find that a great variety have been recommended, as leeches to the temples and behind the ears ; blisters to the head and neck, and calves of the legs ; anti-spasmodics, as musk, valerian, camphor, *fœtid gum*, &c. ; warm baths, opium, and TARTAR EMETIC. I believe the Profession is indebted to Dr. Collins for the introduction of this remedy into practice in these cases: he has found it eminently useful. I have had an opportunity of seeing its merits fully tried by him in the Dublin Lying-in Hospital, and am convinced of its great power in controlling the violence and checking the recurrence of the convulsive seizures. He says:

“ In every severe instance of convulsions, after *bleeding*

freely, acting briskly on the bowels with calomel and jalap, I endeavoured to bring her under the influence of *tartar emetic*, so as to nauseate effectually, without vomiting. With this view a table spoonful of the following mixture was given every half hour :

℞. Aquæ pulegii ℥ij.
Tartaris emetici, gr. viii.
Tincturæ opii, gtt. xxx.
Syrupi simplicis ℥ii. ʒi.

The quantity of the emetic tartar was increased or diminished according to the urgency of the symptoms and the strength of the patient."

This is a remedy of the highest value in those slow, tedious cases, where the rigidity of the os uteri prevents the introduction of the hand into the womb, and delivery cannot be accelerated.

In cases of this kind, an ointment composed of extract of belladonna and lard, has been applied to the mouth of the womb by Chaussier. Van Swieten advised an incision through the unyielding margin of the os uteri, and several modern writers consider it perfectly justifiable after the other means usually employed had been tried without success. I believe, from what I have seen of the effects of tartar emetic, that if it be steadily administered, as advised by Dr. Collins, we shall never be driven to the extremity of making an incision through the mouth of the uterus.

Dr. Collins speaks highly of the use of *opium*, which is condemned by most writers on Midwifery: "He has found it *highly beneficial* in those cases where the fits *continue after delivery*." I have exhibited it in one case of this kind with most salutary effects.

The following case of this disease, still further complicated with twins, illustrates the circumstances under which delivery is loudly called for, and in which it may be effected with safety; I have reserved it for this place, as it further shows the state in which *opium* may be administered with advantage.

On the 21st of last March I was sent for to the house of a gentleman, on whose wife, then in her confinement, I was in attendance, to see C——— L———. She was a woman of full habit, 28 years of age, married ten months; she was in labour of her first child. She had had slight labour pains for the last two days, with dribbling away of the waters. She was very large; the belly very pendulous to the left side. On examination, I found the external parts soft, moist, and yielding; the os uteri dilated; the presentation natural; the head partly in the pelvis. The labour pains, occurring at intervals of about ten minutes, were very trifling, and did not seem to act on the *foetus* at all. She was troubled with constant vomiting, or gulping up mouthfulls of yellow, bilious matter; the action of the abdominal muscles appeared to urge the head forward, but on the cessation of the vomiting, it receded again. Pulse 76; bowels freely acted on by medicine during the night. Made water freely. With the assistance of the stethoscope I ascertained that she was pregnant of twins.

As there was nothing here that required interference, I directed that she should be kept quiet, as efficient labour would, in all probability, soon set in. After a short time I was sent for to return to the lady I had left, she having had an accession of febrile symptoms that alarmed her friends. Having enjoined that she should be kept in a state of perfect quietude, I left her, and returned in an hour, when I found the household in a state of terror and alarm, crowded into the woman's room, all endeavouring in vain to hold her down on the floor, where she lay in violent convulsions. She had been in this state for about ten minutes. I instantly opened a vein in her arm, and bled her to forty ounces; this abated the violence of the fit, but consciousness did not return.

Having apprized her husband of the great danger she was in, and also of the necessity for delivering her instantly, I replaced her in bed, lessened the head of the first child, and extracted it. I then introduced my hand into the uterus, and

seizing both feet of the second child, turned it, and delivered it alive: there being then no uterine action to expel the placenta, I introduced my hand a second time, and brought them away. A tight binder, with folded napkins placed over the uterus, was next put on. The crying of the child roused her, and she spoke collectedly for some minutes, expressing great relief and comfort. Suddenly the fit returned: she screamed in a frightful manner for about a minute, and then became most violently agitated. I took the ribbon from her arm, and allowed thirty ounces of blood to escape rapidly. Cold water was dashed forcibly over her head, face, and chest. This fit lasted but six minutes, and was followed by a state of great excitement and agitation. This state of excitement continuing, at the end of an hour I gave her a large glass of Port wine, with sixty drops of laudanum. She became composed, and slept for four hours very tranquilly. The wine, with thirty drops of laudanum, was repeated, and she slept comfortably until the next morning.

In this case the attack was brought on by the improper conduct of the midwife, who, contrary to my injunctions, immediately on my leaving the house, took the patient out of bed, and was exercising her, by walking her through the room on her knees. She was thus employed when the fit seized her.

The violence of the convulsions; the presence of *twins* in the uterus; the *inefficiency* of the labour pains to expel the contents of the uterus; but above all, the *perfect preparedness* of all the parts, demanded that delivery should be immediately accomplished. There was little difficulty in turning and extracting the second child. The recovery of this woman was slow, but complete. She is now perfectly well, as is her child. She was not aware of having had a second child for three months after her confinement.

It has been asserted on high authority, that when puerperal convulsions come on after delivery, or where they continue after this is accomplished, they are more fatal than when they occur either before labour or during its progress. Dr. Collins dis-

sents from this opinion, and adduces cases to support his view. When they continue after parturition, if the patient has been previously bled, he seldom advises a repetition of it, but depends on the free use of tart. antimonii, with opium, which almost invariably subdue the fits. Where bleeding has not been performed, he commences with a full bleeding, and then exhibits the tart emetic mixture.

Puerperal convulsions also occur in the latter months of gestation. They may be preceded by the symptoms already detailed, or may come on without any previous warning. Whenever we have reason to suspect their approach we should abstract blood from the system, and purge the patient briskly. Most usually the bowels will be found constipated,—difficult to act upon,—therefore we must give such cathartics as will empty the alimentary canal effectually. The same treatment must be adhered to until the disease is subdued. We must not be officious in our examinations, as irritating the parts frequently aggravates all the bad symptoms. Still must we be very watchful of our patient, as labour may come on suddenly, and children have been expelled and lost, through neglect of proper precaution, which might otherwise have been saved; and more than one mother has lost her life for want of that watchful attention which she at all times stands in need of, but in this disease more than any other that I am acquainted with.

These cases will frequently terminate favourably, without manual assistance in delivery.

On the 18th January, 1831, I was called to see Anne Byrne, aged 26 years. Reported to have come to her full time in her first pregnancy. For the last two days she complained of being light-headed, with slight pain in her forehead. At twelve o'clock this day she took some tea, which, she said, "rose in her head like spirits;" then turning round, she fell on the floor in a faint, in which state she remained upwards of half an hour. At four o'clock she was seized with a violent fit of convulsions, requiring four or five persons to hold her down in bed. This fit

lasted twenty minutes, and was succeeded by coma. The fits returned at regular intervals of twenty minutes, she remaining comatose in the intervals. I first saw her at nine o'clock, P. M. She had had twelve fits. Pulse 100, full, labouring. Had no evacuation from her bowels for the last four or five days. Pupils natural. Iris acts well on the application of light; breathing laborious rather than stertorous; action of the foetal heart strong, 138 in a minute; os uteri not dilated in the least. To be bled to twenty-four ounces. Head to be shaved, and refrigerated with vinegar and water. A strong purging bolus to be given immediately, and an enema to be administered every hour until the bowels are freely purged.

19th. Two o'clock, A. M. Coma continues; fits very violent; recur every half hour; bowels not acted on; pulse strong, 90. Bled to sixteen ounces, and applied a blister over the entire head and neck.

Twelve o'clock, noon. Pulse 76, softer; fits not so severe; coma continues; foetal heart beats 140; no labour. Cannot take fluids; any attempt to make her swallow brings on the fit with great severity. No evacuation from the bowels. A cathartic bolus was now given, and injections, with turpentine, thrown up every hour.

Three o'clock, as before. At eleven P. M., while I stood by her bed, she recovered from the comatose state in which she had been for thirty-one hours. She was perfectly unconscious of what had happened. Said she had no pain any where. The bolus and injections were continued.

20th. Passed fæces involuntarily four times during the night. No return of the fits. "Her tongue," she says, "feels flat;" is moist and white. Pulse 78.

21st. Continues better. From this time she continued to improve. On the morning of the 25th. labour set in, and she was safely delivered of a male child; the breech presenting.

This case is interesting in several points. The presentation was preternatural,—a very unusual occurrence. Profound coma

continued for thirty-one hours, and the labour, which did not set in until the eighth day after the first convulsive seizure, was accomplished without difficulty, and by the natural efforts. The woman's recovery was perfect.

From the foregoing observations I conceive the following conclusions to be fairly deducible :

1. Puerperal convulsions occur most frequently in first pregnancies ; the ratio being six in seven.
2. Amongst the predisposing causes, the age of the patient seems to have much influence. In one-fourth of the recorded cases the women were above 28 years old.
3. There is no decided premonitory symptom invariably present.
4. The presentation is almost invariably natural.
5. They are always attended with danger both to the mother and child. One-fourth of the mothers and two-thirds of the children perish.
6. In the treatment of this disease, copious blood-letting, early resorted to, and rapidly effected, is a measure of the first importance.
7. Active purgatives should be administered, either by the mouth or in injections, until the stomach and bowels are thoroughly cleansed of offensive matter.
8. Should those measures fail in controlling the disease, the uterus should be emptied of its contents as early as the state of the parts will admit of its being done *without violence*.
9. The natural efforts are frequently sufficient to effect the delivery.
10. Where interference is required, the forceps or vectis are to be preferred in many cases to turning, or the perforator, as
11. With the perforator the children are necessarily destroyed, and
12. Turning the child is attended with great danger to the

mother, as five out of seven of those on whom it has been practised have died. (Collins.)

13. The pathological appearances are frequently insufficient to account for the violence of the symptoms that characterize this disease.

ART. III.—*Cases, with Observations, on certain Malignant Cutaneous Diseases of the Extremities and the Trunk of the Body.** By L. BYRON, M. D., Surgeon of the County of Meath Infirmary, &c. &c.

CANCER, sarcoma, and fungus are the malignant diseases which usually assail the extremities and the trunk of the body. Various and contradictory opinions prevail with respect to each of those, not alone in different countries, but also amongst different writers of celebrity in the same nation.

It is much to be regretted that hitherto no fixed rules have been established, having for their bases what is known practically on these subjects, by which means good service would be done towards dispelling the illusions of those, who in the application of therapeutic agents affirm too much or too little.

An individual, Mr. Travers, to whom the medical profession is deeply indebted for many useful contributions, attempted, but, it must be confessed, failed in accomplishing a full practical history of malignant diseases. Few, perhaps, possessed a larger field of observation, or a higher order of talent, than he did; but he seemed to have mistaken the period for such an effort, and he undertook too much. What was beyond the reach of an individual, however, may, nay, it is confidently hoped, will be accomplished by the combined exertions of many.

* The term "malignant" is here used as signifying the power of a morbid growth at once to assimilate different tissues to its own substance; to produce similar diseases in distant parts, and to reappear after destruction.