diate assimilation of nutritive matter; then vessels form, and the circulation carries the materials of nutrition to all the parts of the body; the secretions then take place. At the period of birth, digestion and respiration are added, and lastly, the animal functions are called into exercise; neither is the action of any organ isolated, those which are centres exerting an influence upon all those which are subordinate to them; there is not a single organ which, on being excited in an extraordinary manner, does not exercise a greater or less influence on the entire organism. According to this view, the susceptibility of the organism to be acted upon, when natural, may be regarded as the predisposing cause, and the stimuli, when natural, as the exciting causes of those actions constituting health; and a derangement in the susceptibility becomes a predisposing cause, and a change in the stimuli, or exciting causes, produce an effect upon the health which is termed disease. Disease, then, consists in the derangement of the organism and of the natural phenomena of life; hence the utility of studying the circumstances and agents which act in a useful or injurious manner upon the animal organism; and the art of preserving and restoring health by the well-directed use of external influences, or the science of medicine,

If the above view of life be correct, it necessarily follows that death may ensue, either from a failure of irritability, which is irrecoverable, or from a failure of the stimuli, which may be restored. Thus, death may be permanent or temporary, producing what is ordinarily termed suspended animation, in which, though there is no manifestation of life,* there still remains a susceptibility of it; sometimes death is only partial, as in gangrene; sometimes such a sudden and total exhaustion of this irritability takes place, as by electricity, certain poisons, &c., that the blood does not coagulate after death, neither do the muscles become rigid, nor do they contract under the strongest of known stimuli, such as galvanism, which can arise only from a sudden failure of that property, which, under the ordinary circumstances of death, is only very gradually abstracted from them.

Such, gentlemen, are the observations which I have thought proper to bring before you on the present occasion; imperfect and superficial though they be, I hope they will prove sufficient to stimulate those who are entering upon the medical profession, to pursue their studies with ardour; they have an extended field before them, the cultivation of which will amply repay them. It is the lot of few to arrive at eminence, but all may, by a proper use of the abilities with which they are endowed, arrive at a certain point, and thus preserve the intellectual chain as unbroken as that of the animal creation. I would beg the student to proceed with order and regularity in his studies, and not to be led off from one subject to another, made more inviting by its novelty, for this has caused many to regret the dissipation of great abilities in a boundless multiplicity of pursuits, and to lament the inaccuracies and deficiencies of their acquirements, by aiming at too much. We must recollect that we are endowed with mental and corporeal energies, and that our imaginations can conceive more than our minds or bodies can execute; we must no more gratify our minds with schemes

which our lives will fail in attempting to execute, than indulge our corporeal appetites with pleasures which impair our intellectual vigour. The uncertainty of our duration ought at once to set bounds to our designs, and add incitements to our industry; and when we find ourselves inclined either to immensity in our designs, or to sluggishness in our endeavours, we may either check or animate ourselves by recollecting, with the Father of Physic, "that art is long, and life short."

REPORT ON MIDWIFERY IN PRIVATE PRACTICE.

By EDWARD COPEMAN, Esq.

SURGEON, COLTISHALL.

IN the seventh volume of the Transactions of the Provincial Medical and Surgical Association is an interesting report on Midwifery, in private practice, by Mr. Rose of Swaffham, in which, after stating the result of his experience, he expresses a desire that others would furnish similar reports, or supply monographs of their private experience, as means of affording data, in conjunction with those from public institutions, for a more correct estimate of the value of female life; and also of imparting useful information to the junior members of the profession.

There can be little doubt that the science of midwifery ought to occupy a considerable portion of the attention of general practitioners, and particularly of those who are situated in rural districts; where frequently, in cases of emergency, the assistance of a professional friend cannot be procured without a delay that might prove fatal, and where, consequently, the medical attendant is obliged to rely upon his own resources, and is solely responsible for the safety of his patient. It is no argument to the contrary, to advance that a large majority of labours terminate perfectly well under unskilful hands; for, in proportion to the ease with which the many are conducted, so are the few attended with the greatest difficulties; and I cannot conceive a position requiring more self-possession, more knowledge of the subject, and skill in applying it, or more kind consideration for the welfare of the suffering patient, than that in which a surgeon is placed when called to the management of some of the worst cases occurring in this branch of the profession.

From March 25, 1835, to March 31, 1839, the number of cases was 570, of which 253 were attended by my late partner, Mr. Taylor: and I regret that no register was kept of the latter, further than the names, dates of delivery, and results. Of the 317 cases attended by myself, there were 301 natural presentations, including thirteen with face to the pubes; and sixteen preternatural, viz. *three footling, six breech, one arm, three foot and funis, one breech and foot, one face, and one placenta.*

Sixteen children were stillborn; of these, *three* were premature births; *one* followed a case of placenta prævia; *one* a breech and foot presentation; *one* an arm presentation; *two* occurred in presentations of the funis and foot; *one* in a footling case, a first pregnancy in an elderly woman, where the soft parts were rigid and unyielding, and the labour very difficult; *one* from imperfect nutrition

in utero; *one* from defective organization; *three* from deformity of the pelvis, requiring instrumental delivery; *one* in a breech presentation, with small pelvis and unyielding soft parts; this woman had been married thirteen years, without having before been pregnant; *one* very large and partially decomposed; it weighed thirteen pounds, and measured as follows:—

Length, two feet three inches; width across shoulders, eight inches and three quarters; ditto, hips, seven inches and one-eighth; circumference of head, one foot one inch and a half; ditto, body, one foot three inches and a quarter; ditto, thigh, seven inches and a half.

In *forty-nine* cases of head presentation, the vectis was used. In *two* cases, convulsions occurred after labour. In *one* the placenta was partially retained, giving rise to fearful hæmorrhage; on the adherent portion of placenta being removed by the hand, the hæmorrhage ceased, and the woman quickly recovered.

There were *four* cases of twins, one of which occurred at the seventh month of pregnancy; both children were born alive, but died in less than twenty-four hours.

Presentations: one breech, and the other footling.

In the second case, both children were born before I arrived at the house, although the distance was only two miles, and no time was lost in obeying the summons. Presentations: one natural, one footling. In both these instances there were two separate placenta.

In the third case of twins, both children were born very quickly—one large placenta. Presentations natural.

The fourth case presents several points of interest, and I therefore insert the particulars more at length.

CASE I.—*Twins. Hæmorrhagia Lochialis.*—Mrs. G., aged 41 years; seventh pregnancy: sent for Mr. Taylor early on the morning of February 26, 1838, in consequence of a sudden gush of water from the vagina, which she expected would, as in former labours, soon be followed by the expulsion of the child. No pain followed, and at noon I relieved Mr. Taylor, and staid till seven o'clock P.M., but there was no pain, although the water passed away in no small quantity every time she coughed. No examination was made at this time. I was not summoned again till March 19, at seven o'clock in the morning. She told me she had lost a good deal of water at intervals since my last visit. She was in strong labour, and a fine male infant was very quickly born. In a quarter of an hour afterwards, pains came on again, accompanied with a large discharge of liq. amnii; the abdomen was but little diminished in size, and, on examining per vaginam, my finger came in contact with a large smooth body, which proved to be placenta. As soon as one edge of this was protruded through the os externum, I felt the head of another child passing rapidly through the pelvis, preventing the further expulsion of the placenta. As soon as the second child, a female, was born, I removed an immense placenta with facility; and almost immediately afterwards a second placenta, much smaller than the first, which was lying loose in the vagina. A smart hæmorrhage followed, but, by pressure through the parietes of the abdomen, the uterus

soon contracted to the size of an orange, and the flooding ceased. A bandage was applied round the abdomen, and I left the patient an hour afterwards in a very favourable condition.

22. Complaints of not having slept so well as usual at night. Took half an ounce of castor-oil. Lochia subsiding.

23. Castor-oil operated six times freely; and after this the lochia resumed their full red colour, and flowed freely all night and day, so as to alarm the patient. In the evening I was summoned; the discharge had been profuse, and I found her faint and low-spirited. No pain in the head—no tenderness on pressure in the abdomen. No thirst—urine passing freely, and not high coloured. I enjoined perfect repose, free ventilation, and prescribed the following medicine:—

Infusion of roses, 5½ ounces; syrup of poppies, ½ ounce; dilute sulphuric acid, ½ ounce. One ounce every four hours.

24. Lochia subsiding and altering in colour. Slept well. No pain or fever. Able to take a little animal food.

25. I received a note to say my patient was finely, and all going on well.

I presume the great increase in the lochial discharge on the third day after labour was occasioned by the violent action of the castor oil, producing debility and relaxation in a uterus which had previously undergone a very unusual degree of distension.

From April 1, 1839, to March 31, 1841, the number of cases attended was 276; of which 265 were natural presentations, including *eight* with face to pubes. *Eleven* were preternatural, viz. *one* footling, *four* breech, *two* arm, *three* face, *one* elbow and edge of placenta.

Of the 276 cases, 151 of the children were males, and 126 females, one being a case of twins, both males.

There were *five* cases of accidental hæmorrhage. *Nineteen* in which the vectis was employed. *Fourteen* children were stillborn; of these, *nine* were premature births; *one* occurred in an arm presentation; *two* in breech presentations; and *two* in natural presentations.

It is worthy of remark that only two deaths occurred in 846 cases, and also that a large majority were natural presentations; circumstances probably attributable to the more healthy form and condition of persons residing in the country; less subjected as they are to the debilitating effects of impure air, intemperance, and want of cleanliness and ventilation, experienced by the lower classes of those inhabiting densely populated towns.

One of the fatal cases, attended by the late Mr. Taylor, was occasioned by profuse hæmorrhage after the birth of the child. The labour was very rapid, the child born before Mr. Taylor could be summoned, and the woman was *in articulo mortis* at the time he arrived at the house. She had twice before been in great danger from the same cause; but from having had proper assistance at hand, her life was saved, though with great difficulty.

Uterine hæmorrhage has not been frequent, and the few cases reported occurred chiefly after the expulsion of the child, either from partial retention of the placenta, or from inactivity of the uterus. It is sometimes, however, a very alarming accident, and, if uncontrolled, rapidly fatal. The fol-

lowing case is interesting, as showing how largely stimulants may occasionally be safely administered, and how much may be done for the security of the patient by a persevering employment of suitable means, even under circumstances of extreme danger.

CASE II.—Placenta presentation. Severe hæmorrhage.—Mrs. P., the mother of several children, was taken in labour on the 7th of March, 1836. Placenta presentation, with hæmorrhage at intervals for a fortnight before labour. Mr. Taylor turned the child, which was accomplished with difficulty, owing to the liquor amnii having escaped several days before. I arrived soon after the birth of the child. There had been considerable hæmorrhage, and the poor woman was in an extreme state of collapse; rolling from side to side, gasping, and occasionally calling out frightfully. Her pulse became imperceptible, her extremities cold, the surface deadly pale, and to all appearance she was lost. Indeed, Mr. Taylor was so convinced of it, that he soon left the house to avoid witnessing her death, and begged me to remain till all was over. She had had 100 drops of laudanum, and the attendants were actively employed in rubbing her limbs with flannel, and applying hartshorn to the nose. Fortunately she did not vomit, and I was enabled to pour down her throat brandy, chicken broth, and wine; all of which were in readiness in anticipation of such an occurrence. I also gave another dose of laudanum (100 drops) to quiet restlessness, and after a while her pulse could again be felt; but twice afterwards it became imperceptible, and all hope seemed to vanish. I still, however, persevered, and by remaining at her bedside from 4 P.M. till 6 o'clock the next morning, giving stimulants and broth every few minutes, she at last rallied, fell into a comfortable sleep, and awoke in a state which indicated that all danger of immediate death from collapse was over. In the course of the time mentioned she took 200 drops of laudanum, more than half a pint of brandy, five or six pints of chicken broth, and port and tent wine in no small quantity. No undue excitement followed; her recovery was very tedious, but perfect; and she is now in the enjoyment of excellent health. She has not been pregnant since.

CASE III.—Puerperal peritonitis.—The other fatal case was that of a woman attended by my assistant, who, owing to a narrow pelvis, had previously experienced very severe labours, requiring instrumental delivery. In this instance nature was allowed a full trial of her powers, and, after much time and very powerful efforts, she accomplished her task. The pains had been so severe, and the muscular efforts so strong, that the abdomen "felt as if strained." This sensation never left her, and on the third day she was seized with pain in the abdomen, which soon became so severe that she could not bear the slightest pressure, and she had all the frightful symptoms of puerperal inflammation. She was bled largely soon after the attack, took calomel and opium, had fomentations to the abdomen, and the following day seemed much relieved: but in the night the pain returned with its former violence, and she was again bled from the arm. She became depressed soon after the second bleeding, the pulse was more frequent and weaker, she complained more of wanting relief from the bowels than of pain,

the abdomen became tumefied, and she quickly fell a victim to this dreadful disease.

In reviewing this case, I am strongly of opinion that it would have been safer to have delivered the woman sooner by means of the vectis, than to have allowed her to make such long-continued and powerful efforts without assistance; although interference was not demanded on the score of exhaustion, and the position of the head was good. When muscles are over-exerted they become tender and painful; and if the exertion be continued, they may be attacked by inflammation, or even be ruptured. I can readily conceive that in the above case the abdominal tissues were inflamed from the great exertion they had undergone, and that the inflammation might have been communicated to the serous lining and subjacent parts, showing itself in the intractable form of puerperal peritonitis. I also believe that bleeding was carried too far in the treatment, for the patient began to sink directly after the second bleeding, and never rallied again.

In a former labour, at which I was present, Mr. Taylor applied the vectis before the head was entirely clear of the uterus; and although a good deal of force was used, the delivery was accomplished with perfect safety both to mother and child.

The vectis, properly constructed as regards size, shape and strength, is a powerful, safe, and very useful instrument in midwifery; and is the only one that has been had recourse to in the cases comprised in this report. Any means that may, if cautiously, be safely employed with benefit to a person in suffering, ought to be as much recommended, as the caution that is required to make it safe; and I can truly assert that on no occasion have I found the vectis productive of mischief or inconvenience. On the contrary, it has sometimes happened that patients who have once experienced the benefit of it, have, in future labours, anxiously requested its application. The facility with which it may be introduced, and its simplicity as an instrument, give it a decided advantage over the forceps, provided it can be proved to be equally safe and efficient.

By passing the blade of the vectis into the vagina posteriorly, so that the convexity of its curve corresponds with the concavity of the sacrum, the instrument can easily be applied to any part of the head that may seem desirable; or to different parts in succession, should this be necessary during its passage through the pelvis. Care must of course be taken to keep the end of the vectis in close contact with the head, to avoid including any portion of the neck of the uterus in its grasp; should this at any time occur, slight traction would occasion pain, and demonstrate what had happened. When the head is high in the pelvis, and the concavity of the vectis well applied to the surface of the head, if the handle be slightly raised during traction, the instrument will be found an efficient hook, and there will be no occasion to endanger the soft parts of the mother, by using it as a lever.

When the head is low down against the perineum, the handle of the vectis must be more elevated, and two fingers of the left hand interposed between the shaft and the ramus of the ischium, as a fulcrum during extraction; or, which is much the better plan, the fore and middle fingers of the

right hand may be applied to the opposite side of the head, and the thumb of the same hand hooked round the shaft of the vectis, as near the head as possible, whilst the left hand is employed in drawing upon the handle in the direction of the outlet of the pelvis. Here the right hand supplies the place of a second blade, and maintains the curve of the vectis in close contact with the head.

It occasionally happens that after a labour has been going on well for some time, and the head has arrived at the perineum, uterine action ceases, and the head remains in the same position, nearly born, for a considerable time; there is no mechanical impediment, the pelvis is sufficiently large, the soft parts unresisting; nothing but pain is wanted to complete the process. If the vectis be now introduced and slight traction be made upon the head, the chances are that uterine action will be immediately excited, and the head expelled without further trouble. It appears as if the movement of the head gives the required stimulus to the organs of expulsion, and causes them to resume their natural action; in the same way as the pressure of fæces against the sphincter excites the desire to discharge them. Also, when uterine action is rendered feeble by the collection of a large quantity of liq. amnii behind the head, the introduction of the vectis allows it to escape, and all goes on well.

CASE IV.—Inertia uteri.—Summoned to Mrs. U., on the 3rd of June, 1838, at ten o'clock P.M., in labour with her first child. Had a slight show at eight o'clock, but no symptom of labour previously to that time; pains strong and regular; os uteri dilated to size of half-a-crown; natural presentation; could not distinguish the membranes, nor could I ascertain from the attendants that any water had escaped. At about one next morning the head had passed into the pelvis, and was nearly uncovered by os uteri; no membranes protruding; pains diminishing in force and frequency. At five A.M., head quite free of the uterus, and not covered by the membranes; complains of weariness, but had very little pain since two o'clock. Ten A.M., head resting on the perineum, but not dilating it; pains very slight, and making no impression upon the child. Twelve o'clock at noon, same state; patient faint; took a little brandy and water; slight friction over the abdomen caused uneasiness. Four P.M., same state; no impression made upon the head during a pain. Five P.M., as the pains did not improve, and the patient was again faint, I applied the vectis, and with the greatest ease extracted the head; the body of the child was soon expelled by the natural efforts, as was also the placenta about ten minutes afterwards. For a day or two the labia were swollen and tender, from the long-continued pressure of the head, but the patient soon recovered.

For the purpose of exciting uterine contractions in circumstances such as I have referred to, the ergot of rye has been used and recommended, but I have never had occasion to employ it, neither have I ever seen it employed. The simple means above described has, in my own experience, always answered the purpose, and there are so many objections to the use of ergot, that I am but little disposed to make trial of it.

Dr. Houston* remarks, that "Ergot has caused several fatal demonstrations, and from what he has

* North American Med. and Surg. Journal, January, 1839.

seen and heard, that more children have perished by the injudicious use of ergot during the few years which followed its introduction into the practice of this country, than have been sacrificed by the unwarrantable use of the crotchet for a century past." "In the works which I have read in reference to this medicine, I have been struck at finding so little allusion made to its bad effects upon the child, very few instances being recorded of its fatal effects. Out of eight cases in which I used ergot, I lost three children, and I satisfied myself, before its administration, that the children were not only alive, but apparently strong and healthy; but as soon as the action of the medicine commenced, these impressions gradually became less sensible to me and the mother." "Could the action of this medicine be in any way regulated by the accoucheur, I am satisfied that, to a great extent, it would supersede the use of instruments; but until that can be accomplished, it has that great disadvantage, and will always require to be given with extreme caution."†

Mr. Rose of Swaffham‡ used ergot in ten cases, in four of which it failed of its purpose.

M. Chavasse of Birmingham says, that ergot is calculated, when given without care and discrimination, not only to defeat the purpose for which it was administered, but to destroy the vitality of the child in utero; and that at other times, even when given under the guidance of judgment and discretion, it will occasion hourglass contraction, and retention of the placenta.§

Mr. Robertson of King's College considers cases of hæmorrhage from the uterus alone fitted for the use of ergot.||

A gentleman whom I met professionally in a case of retained placenta, remarked to me that a medical friend of his, who had been much in the habit of using ergot, was frequently meeting with such cases, and had several times summoned him to aid him in extracting the placenta.

Burns says, "It has been observed that children born after the exhibition of ergot very often are dead, and in that case are blanched and bloodless; but fortunately this effect on the child is by no means invariable, though I must acknowledge it is frequent, especially if the uterine action do not expel the child soon after it is excited by the ergot."¶

The ergot is, however, considered by several eminent practitioners to be a very valuable assistant in midwifery, and, from their testimony in its favour, I cannot doubt its having proved serviceable. But when I consider the remarks above quoted, proving its occasional inefficiency, its frequent prejudicial effects upon the child, its uncontrollable action, its tendency to produce hourglass contraction; and that "it must only be given where the sole cause of delay is a torpid or feeble state of uterine action," I am inclined to the belief that, except in cases of hæmorrhage after labour, the vectis will answer the desired end fully as well, and deserves the preference, from its employment being unattended with evil consequences to mother or child.

I have found the vectis available in all cases of

† Paterson on Ergot. Edinburgh Medical and Surgical Journal, Jan. 1840, p. 142.

‡ Provincial Medical and Surgical Transactions, vol. vii.

§ Ibid. vol. iv.

|| Medical Gazette, No. 634, p. 682.

¶ Principles of Midwifery, by John Burns, M.D., p. 415.

head presentation, where instrumental aid has been required; and the late Mr. Taylor, in an extensive and successful midwifery practice, embracing a period of twenty years, used no other instrument for the delivery of the head, when it could be accomplished without perforation. In cases of face presentation, with the chin towards the pubes, it is perhaps the only instrument that will draw down the occiput, and bring it into a natural position.

I have met with only two cases of puerperal convulsions, both of which occurred after labour. The subject of one of these cases was a young unmarried woman of a full habit, strong and robust; and the disease was speedily removed by a full venesection. The following are the particulars of the other:—

CASE V.—Puerperal convulsions.—Mrs. C., æt. 28 years, of lax fibre, very delicate, and threatened with phthisis, was delivered quickly, and almost without pain, on the 17th of November, 1836. Placenta expelled by natural effort, and uterus well contracted. About six hours afterwards, I was summoned on account of her having had two “stoppages.” Found her dozing, slight flush on the cheeks, pulse slightly accelerated; was told she had been twice very much convulsed, but not knowing from the description what was the nature of the attack, I gave her a draught, æther and laudanum. After taking this she was sick; the lochial discharge made its appearance, and she passed urine freely. At 9 P.M. I received a message to say she was dying; and indeed, when I saw her, I thought such was the case. Since my last visit, she had experienced two more convulsions affecting the whole body, and she was now insensible, with stertorous breathing, frothing at the mouth and nostrils, countenance livid, no pulse at the wrist. I immediately summoned Mr. Taylor, and in the mean time occupied myself with applying hartshorn, sponging the head with warm vinegar and water, &c., and happily succeeded in rousing the circulation, so as to be able to feel the pulse. Mr. Taylor had no doubt the patient was beyond recovery; but as the pulse kept rising, we agreed as a last resource to try bleeding, and took away twenty-four ounces of blood. The bleeding acted like magic; the face regained its natural colour, the breathing became easier, the secretion from the mouth and nose, which had been abundant, ceased, and the circulation improved; but still she remained insensible. Mustard poultices to the feet and legs, and a large blister to the nape of the neck; vinegar and water to the head constantly. Nothing could be given by the mouth. At two o'clock next morning she was slightly convulsed in the face and arm, and as the pulse had risen, I again bled to the amount of sixteen or eighteen ounces. After this, she became sensible of the action of the sinapisms, and occasionally drew up her limbs as if in pain, but soon sank again into a state of stupor. Occasional grating of the teeth, and attempts to turn in bed.—Pulse 136, 10 o'clock A.M. Breathing natural; Pulse 120, regular. Still in a deep sleep, but could be made to answer a few questions. Blister drawn well. Swallowed a little fluid. Adhib. enema purgans.

6 P.M. Bowels twice relieved. Gradually gaining more sensibility, and knows her attendants when roused. Surface warm. Pulse 100, soft

and regular. Gave her five grains of calomel, and repeated the mustard poultices.

19. Slept well; bowels relieved; sensibility quite restored. Repeat calomel, gr. v.

This patient soon recovered, but had no recollection of the severe attack she had undergone, and said she should not have known that she had been unusually ill since her confinement, unless her husband had told her about it.

She has been confined twice since, without any recurrence of convulsions.

In this case the good effects of bleeding were remarkable, although the feeble constitution of the patient seemed to contraindicate the propriety of abstracting blood even in small quantity.

CASE VI.—Retained placenta.—On the 29th of June, 1840, I was summoned to attend a lady under the following circumstances. She had an objection to employing a surgeon in her confinements, and had several times passed through them safely without other assistance than that of her nurse. Upon the present occasion she pursued the same plan, had as usual a quick natural labour, and was delivered of a fine female infant early in the morning. After the birth of the child, the patient was aware of a much greater loss of blood than usual, and the placenta did not, as heretofore, pass away. After a time the hæmorrhage ceased, and feeling assured all would soon be right, she still refused assistance. Her nurse, however, became somewhat alarmed, and, five hours after the birth of the child, succeeded in persuading her mistress to send for me. I found a large quantity of blood in the bed, and the patient pale and faint, but not at all frightened. On examination I immediately felt the placenta, and expected it was lying loose in the vagina, and that it could easily be drawn away; but failing in my attempts to remove it, I introduced my hand, and found the os uteri firmly contracted upon it, one portion being retained in the uterus, and the other in the vagina. Hæmorrhage had in this way fortunately been interrupted; and by gently insinuating my fingers, one at a time, through the tight ring formed by the os uteri, I was enabled to dilate it, and then removed the placenta without further difficulty, the uterus contracting upon my hand as I withdrew it. No untoward symptoms followed, save a tedious restoration of strength, from too great loss of blood.

CASE VII.—Retained placenta.—On the 4th of October, 1840, Mrs. L. was taken in labour, in the sixth month of pregnancy. I found the arm and side presenting, but easily brought down the feet and effected delivery. The placenta was retained, and I was obliged to introduce my hand; this was no easy matter, the vagina having been so little dilated by the small fœtus. Os uteri firmly contracted upon the umbilical cord, and the whole placenta within the uterus. It was with no little difficulty that I was enabled to introduce my finger into the uterus by the side of the cord, but after a time I accomplished it, and gradually dilated the os uteri, so as to allow of the passage of the placenta through it. The patient soon recovered.

The former of these two cases proves that the uterus may be artificially dilated several hours after delivery, without necessarily occasioning bad consequences, should circumstances render it expedient to resort to such a proceeding. The hæ-

morrhage was stopped, and perhaps a valuable life preserved, by the uterus contracting upon the placenta and holding it as a plug.

In the latter case the os uteri closed upon the cord before the placenta was separated from the surface of the uterus, and no hæmorrhage occurred.

These were cases of irregular action of the uterus after the birth of the child. Were they what are called hour-glass contractions? If so, the term is badly applied; for the stricture was caused by the os uteri, and not by the central fibres of the uterus forming it into the shape of an hour-glass. I should be inclined to doubt the existence of hour-glass contraction, were it not for the weighty authority of some who have described it; and should rather imagine the first cavity of the hour-glass to be the vagina, lengthened and enlarged by distension; the central narrow portion the contracted os uteri; and the upper cavity the uterus.

In natural labour, it has often struck me that more power has been attributed to the uterus in the act of child-birth, than accords strictly with the real nature of the process; for although the uterus is undoubtedly the principal agent, it is not so much by its own force of contraction, as by its power of exciting and regulating the action of the assistant muscles, particularly in the latter stages of labour, that the expulsion of the fœtus is accomplished. During a pain, the uterus contracts and presses the child downwards against the soft parts in the pelvis; this creates a desire for the expulsion of the offending body; and all the muscles which can assist in producing that effect are brought into action: when the uterus ceases to act, the others are quiet also. This mechanism obtains, even after the child has escaped from the cavity of the uterus. In presentations, where the body and limbs are born before the head, the latter, being quite out of the cavity of the uterus, may perhaps rest against the perineum for some time, and during several pains; still the pains intermit and are dependent on the action of the uterus, although the expulsion of the head is effected by the assistant muscles. The uterus gives the command, and they obey; the uterus, by its contraction, is the exciting cause, and the other muscles, acting as it were by sympathy, are the immediate cause of the expulsion of the head. In further illustration of this, I may mention the following case:—A woman had been in strong labour more than thirty-six hours. Pelvis small; face presentation, and head firmly impacted high up in the pelvis. After very great difficulty, delivery was effected by means of the vectis. Hæmorrhage followed; the patient was faint and exhausted; the uterus had not power to contract. I introduced my hand, and found the uterus dilated and flabby, the placenta adherent in chief of its extent; but as the hæmorrhage continued, I gently separated the placenta, by passing my hand edgewise between it and the uterus, placed the back of my hand against the uterine vessels, and drew the placenta into the vagina with my other hand by means of the funis. The uterus feebly and slowly contracted, the hæmorrhage ceased; but before the contraction was sufficiently strong and perfect to make it safe for me to withdraw my hand, the placenta, during a pain, was expelled from the vagina by the side of my arm. I had here an opportunity of feeling

the slight contraction of the uterus, and the consecutive effort of the assistant muscles, powerful enough to force out the placenta by the side of my arm. The patient experienced a speedy recovery, in spite of the dangers she had encountered.

September, 20, 1841.

CASES OF ARTIFICIAL ANUS, TERMINATING SPEEDILY IN RECOVERY.

By GEORGE MALLETT, Esq.

SURGEON, BOLTON.

THE following cases of artificial, or, perhaps I should rather call them, factitious anus, one of them the result of imperfectly reduced hernia, and the other the consequence of a severe accident,—are, I think, worthy of being placed on record, as indicating to what a great extent the natural powers are capable of restoring injured parts to their normal condition.

CASE I.—R. T., aged thirty years, a servant man, when attempting to get upon a coach going at its usual speed, was thrown upon his back, between the fore and hind wheels, the latter of which grazing the scrotum, passed over the pubis near its junction with the ramus of the right ischium. I saw him about an hour after the accident; his countenance was pale and sunken, pulse feeble and slow; the scrotum was swelled and much blackened. On the right side, about two inches from the symphysis pubis, there was a circular swelling about two inches in diameter, which appeared to be caused by extravasated blood; the swelling in the scrotum evidently arose from the same cause. The skin was slightly grazed along the tract of the wheel, but there was no wound. The man was able to move his thigh in any direction, but the act of moving it caused much pain, and it was unable to sustain the whole weight of the body. He was ordered to bed, and an evaporating lotion constantly applied. Four hours afterwards, the swelling and pain increasing, the pulse also being stronger, twelve leeches were applied, and some aperient medicine given. In a short time he passed some urine, and his bowels were evacuated three times, but the dejections consisted only of liquid blood. On the following morning, May 4th, the pulse was 96, and still rather feeble; skin moist, and the injured parts presenting much the same appearance as on the previous evening. Half an ounce of castor oil was given, which, during the day, produced several natural but relaxed motions. In the evening the swelling much increased, extending nearly as high as the umbilicus, and now, upon being handled, it crackled as if air had been effused into the cellular tissue. The pulse had increased both in frequency and fulness, being 110, and there was a considerable degree of abdominal tenderness; twelve ounces of blood were taken, with great relief.

5. The swelling had extended as high as the epigastric region, and the scrotum was enormously distended, and contained air. The tongue was white and dry; pulse 110, and full; ten ounces of blood were again abstracted, when slight faintness came on. During the course of the day he suffered severe and intermitting abdominal pain,