version, thirty hours after it had taken place. He observes, "Having reflected on the relaxing effects of ether on the tissues, I determined to give it a trial, and, accordingly, while the inhalation was gradually conducted by an assistant, I grasped the fundus uteri, and made gentle pressure. As the system became relaxed, the tumour gradually diminished. In thirty minutes, the vulva became perfectly flabby, and the tumour soft and compressible. I made firmer pressure, and it was reduced to the size of a hen's egg; the finger could circumscribe it. It remained from twenty to thirty minutes of this size, uncertain whether further ground could be gained, and then disappeared *per saltum*, with the peculiar feel of a receding hernial tumour." (*Canada Med. Jour.*, July 1852.)

The success attending the reduction of the uterus in these cases, in a state of anæsthesia, appears to have been of an unequivocal character, and such as to justify our having recourse to it in others, before deciding upon the impracticability of reducing the organ.

But, should such attempts fail, and the patient's life be endangered by hæmorrhages or other exhausting discharges, we have then to consider the propriety of removing the inverted portion of the uterus. For this purpose, two methods have been employed, viz., excision and ligature; but the results of neither, it must be added, have been of a very encouraging character. The dangers attending excision are so great, that we are told, with reference to a case in which it was successfully performed by Velpéau, that the jeopardy of the patient was such, that it will doubtless not be often repeated; and, with regard to ligature, although many successful cases are reported, there is yet a formidable array of others in which it has proved fatal. Under these circumstances, I was led to believe that the electric cautery might be more successfully employed for the extirpation of the organ; and in this opinion I was supported by Mr. Marshall, who, after visiting and examining the case, expressed himself favourably of the operation. Unfortunately, unforeseen difficulties arose in the preparation of the necessary instruments; and, before their completion, the patient had sunk under the influence of sudden and profuse losses of blood. As, however, these difficulties have now been overcome, I will, before concluding, describe the nature of the apparatus by which the operation was proposed to be performed.

The battery intended to be used was necessarily one of considerable power; and to its terminal poles a modification of Gooch's canula instrument for the removal of uterine polypi was to be affixed. As now completed, this consists of two rods, one of which is solid, the other hollow, and covered with a wave flax surface, coated with solution, to insulate the platinum wire or chain which passes through it. One end of this wire or chain, of proper thickness, is soldered to the extremity of the solid rod; the other, having passed through the interior of the tubular one, is attached to a rack and windlass, affixed to the lower part of it. In using the instrument, the two rods are introduced together parallel to each other, and, having reached the neck of the inverted portion of the uterus, are then separated, and passed round it, as in the ordinary operation for removing a polypus: their upper extremities are fixed together by means of a silver sliding rod, having rings at its superior extremity. The platinum wire having been now tightened by means of the rack and windlass, the two rods are respectively affixed to the poles of the battery; and the platinum wire being heated by closing the circuit of electricity, it is gradually tightened by turning the windlass until the division of the organ is accomplished.* I am unable to speak from experience of the practical working of this contrivance; but I am disposed to think that it, or some modification of it, may be usefully employed for the operation in question.

Reviewing, then, the chief circumstances of the case I have reported, I would more particularly wish to direct

attention to the importance of the following considerations:—

1st. A due appreciation of the circumstances under which inversion of the uterus is most liable to occur in connexion with parturition, viz., rapid labours on the one hand, and those attended with any difficulty in the extraction of the placenta on the other.

2nd. The necessity of immediately effecting the reposition of the organ. Should any difficulty arise, we may either have recourse to anæsthesia, or adopt the suggestion of Millot, of incising or dividing the cervix, so as to take off the constriction thereby exercised upon the fundus uteri.

3rd. In cases of chronic inversion, where serious symptoms arise, the possibility of effecting the reduction of the organ whilst the patient is in a state of anæsthesia.

4th. The futility of any local or constitutional treatment in arresting the hæmorrhages which occur in these cases, and consequently the expediency of attempting the removal of the inverted portion of the uterus where reduction is impossible, and where these evince a tendency to recurrence.

5th. The dangers attending removal of the uterus both by ligature and excision being considerable, the propriety of attempting its extirpation by means of the electric cautery, aided by the apparatus I have proposed, or some modification of it.

Chester Place, Hyde Park Gardens, July 1853.

STATISTICAL ACCOUNT OF OBSTETRIC CASES, IN PRIVATE COUNTRY PRACTICE.

By R. U. WEST, Esq.

THE following statistics may perhaps interest some of the readers of this Journal. They give the history of about nineteen years of a private midwifery practice. In arranging my materials, I have found considerable pleasure in looking back upon a vast number of troubles, doubts, anxieties, and difficulties. I hope that they will not be looked upon as interesting to myself alone. Without further preface I subjoin my statement.

NUMBER OF CASES.

2,083 labour produced 2,106 children, viz.: 1,060 boys and 1,046 girls. 364 cases were primiparous, or 1 in 5 $\frac{1}{2}$.

These 2,106 children were born with the following

PRESENTATIONS:

2,042 children presented some part of the head. Of these, 1,962 were expelled with the *occiput under the arch of the pubes*: In

3 cases where the head was so expelled, a *hand was down by the side of the head*.

3 were cases where the head was expelled with the *occiput turned to the left acetabulum*.

59 were cases where the *face or forehead came round to the symphysis pubis*, or 1 in about 35 $\frac{1}{2}$: In

49 of these cases the head was so expelled: In

1 case where the head was so expelled, a *hand was down by the side of the head*. In

1 case where the face had come round to the pubes, the pains forced the chin under the arch, and the *face disengaged itself first*. In

1 other case, feeling the nose arrested at the symphysis, I pulled at the orbits till the chin came under the arch, and the child was born with the face first.* In

* In both these instances the labour was completed almost immediately after the alteration of position. They were both conversions of the worst form of cranial position into the easiest form of face-position. Madame Boivin says: "Nous avons vu un exemple de cette manière de dégager la tête. Feu Béclet, professeur à la Faculté de Médecine, nous en a cité un cas semblable."—*Mémoires de l'Art des Accouchemens*, tom. i, page 230.

* The apparatus in question has been constructed by Mr. Coxeter, who will give any further information that may be required respecting it.

8 other cases, after the face had come round to the pubes, I rectified the position of the head by pressing the temple, and bringing the occiput to the arch of the pubes.

3 were cases where the head was expelled with the face turned to the acetabulum. In

2 cases, the ear remaining at the symphysis, with the anterior fontanelle presenting, I turned the head round till the occiput came to the arch.

10 children presented the face, or 1 in 210, in addition to the two cases of secondary face-position mentioned above. In

6 of these cases the labour was marvellously quick and easy, although in four out of those six the chin was at first turned backwards towards the sacro-iliac synchondrosis. In

4 only did there appear to be any increase of difficulty in the progress of the labour. In one of these, a primiparous case, the face was forced through the pelvis, with the lower jaw pressed back on the neck or chest. And in one, a hand presented with the face.

1 child presented the occiput, shoulder, and one hand.

2 presented the ear. In

1 of these cases the shoulder presented with the ear.

2,042 Total presentations of some part of the head.

56 children presented either the breech or the inferior extremities. Of these,

27 presented the breech; and

29 presented one or both inferior extremities. In

3 instances a knee was first felt. In

8 instances the breech was down as low as the feet. And in

1 instance a hand was felt just above the feet.

56 Total presentations of breech or inferior extremities, or 1 in 37½.

8 children presented one or both hands, in addition to the six cases above mentioned, where a hand was down by the side of the head or face. In these eight cases turning was performed. In

2 of them, a foot being felt just above the hand, turning was very easy. Thus,

8 was the whole number of strictly transverse presentations, exclusive of the two cases mentioned, where the shoulder was down with the side or back of the head—1 in 266½.

COMPLICATIONS.

9 labours were complicated with prolapsed funis. In

2 of these cases the children were born alive, the delivery being hastened with the vectis in one instance. In

2 the children were putrid. In

2 the placenta was near the os uteri, and the labour was attended with hæmorrhage. In

6 there was malposition of the child, viz.:—feet presentation in three cases; arm down in one case; hand with head in one case; breech presentation in one case.

32 were cases in which instruments were used; viz.:

22 vectis.

2 long forceps.

2 blunt hook.

6 craniotomy.

The vectis was used, once on account of hydrocephalic head; twice in one patient on account of an exostosis projecting into the pelvis; once to hasten the birth in a case of prolapsed funis; twice where the face had come round to the pubes; and once in a case of face presentation. The rest were cases of impaction from various causes, such as

unusual size of the child's head, and presentations of the anterior fontanelle, all terminating with the occiput under the arch of the pubes.

In all the cases in which either the vectis or forceps was used, the children were born alive, and, with two exceptions, were quite uninjured. In those two instances (both of them vectis cases), one of the children died two days after (a face to pubes case); the other survived only five hours, being the one which had presented the face.

The blunt hook was used in two cases of impacted breech. In one of them the child weighed thirteen pounds and a half. Both children were born alive.

In two of the cases in which craniotomy was practised, I had the advice and assistance of other practitioners. In the other four cases I used my own judgment. In all of them the vectis and forceps were first tried in vain.

In all the cases in which instruments were used, the mothers recovered without the occurrence of a single unfavourable symptom.

48 labours were complicated with hæmorrhage.

21 of them were cases in which considerable hæmorrhage preceded and accompanied the labour. In

7 of these cases the placenta was felt over or near the os uteri.

In these 21 hæmorrhagic cases all the children survived, with the exception of three where the placenta had presented, one in the other cases, and three which were decomposed before birth.

9 were cases in which considerable hæmorrhage followed the birth of the child, in consequence of retained placenta.

3 labours were attended with hæmorrhage both before and after the delivery of the placenta. And

15 labours were complicated with hæmorrhage after the removal of the placenta.

2 cases occurred of secondary hæmorrhage, one at the end of a week, the other thirteen days after delivery.

In all the instances in which hæmorrhage occurred, the mothers recovered. The proportion of hæmorrhagic cases is 1 in about 43 cases.

34 cases occurred in which the placenta was retained or adherent, requiring the introduction of the hand,—1 in 61.

7 examples occurred of knots on the funis, two of them being very complicated.

4 cases were met with, in which the coccyx was projecting and ankylosed, three of them being in one patient. In all of them the bone gave way at last with an audible snap.

9 cases were noticed in which there was disease of the placenta. And in

1 case, the funis divided into its vessels before its insertion into the placenta.

23 labours, or 1 in 90, were cases of twins. One of them was a case in which the children were united at the sternum, constituting the form of monstrosity denominated by Geoffroy St. Hilaire, "Sternopage".*

Malpositions are much more frequently met with in twin cases than in single births: thus, my practice has furnished the following

PRESENTATIONS IN TWIN CASES.

9 cases—first child, vertex; second, breech or feet.

1 case—first child, vertex; second, face to pubes.

1 case—first child, vertex; second, face to pubes with a hand down.

3 cases—first child, vertex; second, hand presentation.

1 case—first child, feet; second, face to pubes.

1 case—first child, breech; second, feet.

1 case—both feet (in the monstrosity case.)

1 case—first child, face to pubes; second, vertex.

5 cases only in which both children presented naturally.

* *Anomalies de l'Organisation*, tom. iii, page 93.

MATERNAL DISEASES.

12 mothers were suffering from different diseases at the time of labour, viz. :—

- 1 from scarlatina.
- 1 from fever.
- 1 from peritonitis.
- 1 from chronic bronchitis.
- 1 from pneumonia.
- 2 from chronic abscess under the fascia of the thigh. Both these cases occurred in the same patient in two consecutive confinements.
- 1 from cholera.
- 1 from excessive cedema.
- 2 from measles. In one case the child was born with the eruption.
- 1 from chronic gastritis.
- 1 from umbilical hernia.

13

88 cases of puerperal and other diseases arose within the month.

- 22 cases of peritonitis, puerperal fever, or hysteritis.
- 14 cases of intestinal fever or irritation.
- 6 cases of phlegmasia dolens.
- 6 cases of mania. Three times in one patient.
- 2 cases of intermittent fever.
- 1 case of intermittent pain with fever.
- 1 case of "hysteralgia" (Burns).
- 5 cases of ephemeral fever.
- 6 cases of diarrhoea with quick pulse.
- 1 case of pleurisy.
- 2 cases of rheumatic fever.
- 3 cases of convulsions.
- 5 cases of retention of urine without other disease. Three of these cases required the catheter.
- 1 case of pneumonia.
- 13 cases of inflammation and suppuration of mamma, with severe constitutional disturbance and fever.
- 2 cases of hysteria.

88

MATERNAL DEATHS.

16 mothers died either from puerperal diseases, or from other diseases arising during pregnancy. Of these—

- 10 died of diseases strictly puerperal; viz. :—
 - 2 of mania: 1 on the fourteenth day, primiparous; 1 on the eighteenth day; this was the third attack with the same patient.
 - 4 of peritonitis: 2 on the tenth day; 2 on the seventh day.*
 - 2 of intestinal fever: 1 on the thirteenth day; 1 on the thirtieth day.
 - 2 of phlegmasia dolens: 1 on the thirty-sixth day, from gangrene of both legs; and 1 on the tenth day from metastasis.
- 6 mothers died within the month from diseases arising during pregnancy, most of them inducing premature labour, viz. :—
 - 1 of scarlatina, commencing three days before the labour. Labour at full time. Death on eighth day of lying-in. Child living.
 - 1 of peritonitis, commencing eight days before delivery. Labour premature. Death on the sixth day of lying-in. Child living.
 - 1 of pneumonia, preceded by cynanche tonsillaris, inducing premature labour in seventh month. Death three hours after. Child still-born.
 - 1 of chronic bronchitis, existing long before delivery. Labour premature. Child living.
 - 1 of cholera, beginning two days before delivery. Labour premature. Death two hours after. Child still-born.

* One of these cases occurred with a woman who had been forty-eight hours under the care of a midwife with arm presentation, before I was sent for. The other was with a primipara, after a rather sharp labour. All the other deaths occurred with women who had had particularly easy labours.

1 of chronic gastritis, with vomitings and diarrhoea during latter months of pregnancy. Labour at full time. Death on the twenty-seventh day of lying-in. Child living.*

Therefore, the proportion of deaths from all causes would be one in 130 nearly; of deaths from diseases strictly puerperal, one in about 208 cases. But can we, from such data as I have here given, arrive at any knowledge of the average danger of death to lying-in women? If a correct average of the number of times each woman is confined can be made out, by comparing the number of cases in one's practice with the number of primiparae, we have only to take the number of deaths and the number of primiparae, and we shall arrive at a result. There were 364 primiparae among my 2083 cases, and 10 puerperal deaths. I would conclude, therefore, that one lying-in woman in about 36 may probably die of some puerperal malady; that is, always supposing that my statistics give anything like an average.

DISEASES, MALFORMATIONS, MONSTROSITIES, OR OTHER CONGENITAL PECULIARITIES IN THE FETUS.

- 1 hydrocephalus, uncomplicated; lived two or three years.
- 1 hydrocephalus, with spina bifida; lived three days.
- 1 lobes of ears wanting.
- 1 eyes diseased through apparent want of power to close the lids. Eyes burst, and child died at the end of about six weeks.
- 4 well marked cases of the peculiar swelling of the scalp, in some respects analogous to spina bifida, and called by German writers, *kopfblutgeschwulst*.
- 1 palate wanting.
- 2 double harelip.
- 1 ascites; lived a few days. There was redundancy of liquor amnii in the case.
- 1 united, or "Siamese twins"; the sternopage of Geoffroy St. Hilaire. Still-born.†
- 1 spina bifida, uncomplicated at birth, but followed by hydrocephalus and club feet. Child lived six months.
- 1 a swelling of the nature of spina bifida on the sacrum. Child died of hydrocephalus when about a year old.
- 1 large hernia into sheath of funis; the opening through the abdominal parietes being as large as a crown-piece. I returned the intestines into the abdomen, and put on a bandage. The child survived, and is now living (aged five years), with a dense membrane filling up the original opening.‡ A little more, and the sheath of the funis would have burst, so that the case would have been one of eventration.
- 1 an exencephale,§ with eventration of all the abdominal viscera. The placenta was enormously hypertrophied. Still born.
- 1 inverted feet.
- 1 the cerebellum was contained in a bag of integuments hanging down the back. There was an opening through the centre of the occipital bone as large as a two shilling piece. The child lived five weeks. A case of partial notencephale (St. Hilaire.)||
- 1 born covered with the eruption of measles, with which the mother was affected at the birth.
- 1 supplementary little finger.
- 1 born with a tooth.

STILL-BORN CHILDREN.

Of 2,106 children,
74, or 1 in 28½ nearly, were still-born, from various causes.
Of these,

* When this patient died, she had been about three weeks under the care of another medical man.

† I published an account of this case in the *Edinburgh Med. and Surg. Journal* for October 1847.

‡ A remark made by an old nurse who was present at the birth of this child amused me excessively. She had been with me also at the birth of one of the spina bifida cases a short time before in the same village. She said: "Well! I don't know what's going to come to all the bairns. Not long ago, one was born without a back; and now here's one come without a belly!"

§ A monster with the brain uncovered by the skull, and with cleft spine; so named by St. Hilaire. *Anomalies de l'Organisation*, tom. ii, page 311.

|| *Anomalies de l'Organisation*, tom. ii, page 294.

40 were decomposed at birth; 33 being premature, and 7 at the full time. I observed that, with one of the premature cases, there was *ramollissement* of the placenta; the heart was beating, though the cuticle was peeling off, as with putrid fœtuses. With one there was hypertrophy of the placenta; with one there was a kind of fatty degeneration of the funis, partially obliterating the vessels; and with one there was scirrhus of the placenta. With one of the decomposed children at the full period, I observed great redundancy of the liquor amnii; another was the first of twins. The proportion of decomposed children was 1 in 52 births.

6 craniotomy.

3 primiparous footling cases—delivery of head difficult.

5 from prolapsed funis. Of these, one was a case of arm presentation, in which the arm had been long down before turning was performed; one was a case of feet presentation, in which the edge of the placenta presented with great hæmorrhage; one was a case where the arm was down by the side of the head; one was a case of feet presentation, in which the pulsation had ceased in the funis when I first examined, the liquor amnii having been evacuated some hours with the funis down; and the fifth occurred in a case of vertex presentation, which, as it proceeded with great rapidity, I left to nature.

3 under placenta prævia (inclusive of one of the prolapsed funis cases mentioned above).

6 from the labour being unusually severe and protracted.

1 apparently caused by ergot, labour easy.

2 the monstrous twins.

2 ovum expelled entire in seventh month.

1 exencephale.

1 a midwife's case of arm presentation.

1 premature, placenta diseased.

1 premature, cause not manifest.

2 premature; mothers moribund, one from pneumonia, one from cholera.

1 premature, labour preceded by hæmorrhage.

The liability to recurrence in the same patient of any particular kind of obstetric disease or irregularity, is unquestionably of practical interest. A private country practice offers, I think, especial advantages to any one disposed to pay attention to such a subject; for, the number of practitioners being necessarily limited, and in some districts the practice being almost monopolised by a single individual, patients have scarcely the opportunity, even if they had the inclination, of changing their medical advisers. But, even with these advantages, it is, for obvious reasons, not possible to furnish from any practice a perfect list of such cases. The first set of patients have, for the most part, been attended in previous confinements by predecessors in the practice; and the obstetric history of a great many, in the latter years, can have only just commenced. In my own case, these causes have been doubly in operation; for having, after nearly sixteen years' practice in a village distant seven miles, removed to this place about three years and a half ago, I have, of course, added many altogether new patients to my list, while I do not retain more than half of my old practice. Nevertheless, I subjoin the following particulars, such as they are:—

Face to Pubes. Three times in succession with one woman out of ten labours; twice with one out of four labours; twice with one out of nine labours; twice with one out of five labours.

Presentation of Breech or Feet. Twice with one woman in four labours; twice with one in five labours; twice with one in five labours; three times with one in five labours; twice with one (the two last) in six labours.

Funis prolapsed. Twice with one woman in four labours; the first time with arm presentation, the second with vertex.

Peritonitis. Three times with one woman in five labours; twice with one woman in four labours.

Hæmorrhage post partum. Twice with one woman, in the last two of six labours.

Adherent Placenta. Six times with one woman in eight labours; three times with one in six labours; three times with one (the three last) in seven labours; twice with one in three labours; twice with one in six labours.

Still-born Putrid Children. Four times with one woman in five labours; three times with one in ten labours; twice with one in two labours; twice with one (the first and last) in six labours; twice with one in two labours; twice with one in three labours.

Mania. Three times with one woman in four labours, proving fatal on the last occasion.

Dysuria. Twice with one woman in three labours; twice with one woman in three labours.

Chronic Abscess under the Fascia of the Thigh. Twice in succession with one woman in four labours. This is rather a strange kind of case to be connected with pregnancy. The woman had recovered from the first abscess.

Anchylosed projecting Coccyx. Three times with one woman (the last three) of ten labours.

A particular kind of rigidity of the os uteri will occur repeatedly with some parturient women. I think I have observed two distinct kinds of rigidity. In one, the os is *thin*; it is met with most frequently in primiparous patients, and the head often presses the expanded cervix down into the pelvis so tightly, that it requires a practised hand to distinguish, at the first touch, the cervix from the head itself. I do not think this variety of rigidity is liable to recur with subsequent labours; in fact, it is seldom met with in any but primiparæ; at any rate, such has been my experience. In the other, the most troublesome and tiresome kind, the os uteri is *very thick*, and sometimes oval in form,—it is like an unexpanded or undeveloped cervix; the labour is excessively tedious and hard, and for many hours there will be unavailing suffering. This kind of rigidity seldom occurs with primiparæ, but will recur again and again with women who have borne one or more children; their previous labours, and now and then an intermediate one, being often remarkably quick and easy. Scarcely anything but patience will avail with such cases; but I fancy I have observed good effects from the application of belladonna ointment—the “pommade dilatoire” of Professor Chaussier, from enemata, and from chloroform. I subjoin a few examples of recurring cases of this exceedingly unpleasant complication:—

Os uteri thick and rigid—labour very hard and tedious.

1. The second, fourth, sixth, and seventh of 7 labours.
2. The second and third of 4 labours.
3. The second, third, fourth, and fifth of 7 labours.
4. The second, third, fifth, sixth, seventh, and eighth of 8 labours.
5. The last four of 5 labours.

And there would seem to be great capriciousness in the recurrence of this affection, for the excepted labours were all particularly easy and quick; in one or two of them there having been literally “no time to fetch the doctor”. No. 5, in the above list, had peritonitis, requiring bleeding and much anxious attendance after the first and two last of her bad labours; and after the second of them, she had very severe afterpains, with deficient lochial discharge, but without abdominal tenderness or acceleration of pulse. No. 2 has had two very severe confinements since I left her neighbourhood, I suspect from the same cause; and yet her first (primiparous) confinement was very easy, and her fourth ridiculously so.

The list given above includes none but such cases as came under my own observation. I am enabled to add, from information derived from the patients themselves, and from other sources, the following facts.

The patient who had retained placenta on the occasion of the three last of seven labours attended by myself, had had

the same complication with her three first children under the care of my predecessor; thus suffering from the same cause six times in ten labours altogether.

One of the patients, who had *dysuria* twice under my care, has since suffered from the same malady under the care of another medical man.

A patient whom I attended a few years ago with *puerperal convulsions*, has since died of that disease under the care of another medical man; having had convulsions twice in four labours.

A woman, whom I delivered a few months since of a *still-born* decomposed child, which presented footling, had had four children previously; all still-born, all premature, all decomposed, and all footling.

One practical inference to be drawn from these facts must be, that when once a patient has had certain obstetric irregularities, she is liable to them again. And a second may be, that the proportion of individual women liable to certain obstetric irregularities is less than would appear from merely taking the proportion of such cases singly to the whole number of labours. Let us take, for example, the cases of adherent or retained placenta. I have registered thirty-four such cases. But it would be incorrect to assume from that fact that thirty-four women out of the whole number attended had suffered from that complication; for when we look at the table of cases just given, we find that sixteen of those cases were divided among only five patients, so that no more than twenty-three women were the subjects of adherent or retained placenta.

I have never attempted in my register to make any distinction between *quick* and *lingering*, or between *easy* and *hard* labours. In the first place, we are called in at all stages of labour; and it is impossible to arrive at any certain knowledge of the commencement of the process from the report of the patient herself, as women sometimes fancy themselves in labour many hours before there is any effect on the os uteri. And in the second place, no line can be drawn between *easy* and *hard* labours; because the two kinds run into one another by imperceptible gradations, and because some labours, which have commenced with rigid os uteri, will frequently, all at once, after hours of unavailing suffering, proceed with extraordinary rapidity; so that an accoucheur, arriving just at that moment, would certainly class as *easy* a labour which, if he had to his misfortune been sent for earlier, would as certainly have been classed as *hard*. Therefore, because we do not see all the labours in all their stages, I take it to be impossible to arrive at anything like a satisfactory division of labours into either quick and lingering, or easy and hard.

My statistics may to some persons seem incomplete in another respect. I have not given the different *cranial positions*. When I commenced my register, I did not consider myself competent to decide on points respecting which writers say there is so much difficulty;* and though, after some experience, I found little or no difficulty in distinguishing the fontanelles in the great majority of cases, I continued my register as I had begun it, marking no particulars but such as I have here given. I have, however, for the last three or four years been taking some pains with the *veraxa questio* of cranial positions; and during the last year and a half I have registered the following particulars, adopting a classification of my own.

Of 235 children born in my practice since January 1, 1852, 222 presented the cranium. Of 57 of these, I was unable to ascertain the original position, either through putridity of the child, the too advanced stage of the labour, or because I was not present when child was born. Of the remaining 165 children,

106 presented the cranium in the first position, *i. e.*, with

the occiput coming round to the arch of the pubes from the left side;

49 presented the cranium in the second position, *i. e.*, with the occiput coming round to the arch of the pubes from the right side;

6 presented the cranium in the third position, *i. e.*, with the face or forehead coming to the symphysis pubis from the left side;

4 presented the cranium in the fourth position, *i. e.*, with the face or forehead coming round to the symphysis pubis from the right side.

In five of these ten face to pubes cases I rectified the position, after the face had come round.

The frequent occurrence of cases where the anterior fontanelle was felt, in an early stage, near the pubes, the occiput eventually coming quite round to the arch with the greatest facility, by degrees induced me first to search for an explanation in the works of obstetric authors, and secondly, when I could find nowhere any satisfactory explanation, but, on the contrary, the most discordant opinions among different writers, to study the subject for myself in my own practice. I have noted that among the 165 cases of cranial presentation above referred to:—

26 well-marked cases were observed where the anterior fontanelle was felt at first to the *left side* of the pubes. And

13 well-marked cases were observed where the anterior fontanelle was felt at first to the *right side* of the pubes.

All these cases terminated naturally and easily with the occiput under the arch. I have, therefore, classed them among the cases of the second and third positions respectively.

I consider that a classification of cranial positions, on any other principle than that of the four positions I have adopted for my own use, is fanciful and theoretical; because scarcely any two writers can be found to agree who make such an attempt. Between Ritgen, for example, who gives nine positions of the vertex,* and Nägele, who insists on forcing all cases into a sort of Procrustean arrangement of two positions only, I find a whole host of writers who give variously from eight to four positions, and who all differ from one another still further with respect to both the arrangement, and the relative frequency of those positions. And certainly of all subjects on which doctors differ, this would seem to be the most hopeless; for in the last published authority I have consulted, I find the writer dismissing the subject in a footnote, acknowledging himself staggered but not convinced by the arguments and assertions of Nägele.†

In making my observations on the progress of labour in cranial presentations, I have noticed one point which I have not found any writer refer to. Books tell us that when the head passes down the pelvis with the occiput to the left side, the right ear having been nearest the pubes, the right shoulder will come to the arch of the pubes when the trunk is expelled, and conversely. And that such is considered to be *invariably* the case, we have a proof towards the end of the footnote, in Dr. Ramsbotham's work already referred to; where he suggests that, when there remains any doubt as to the original position of the foetal head in the pelvis, we may decide on that position by observing how the trunk passes.‡ But, of course, if the trunk in coming to the outlet does not *invariably* follow the rule given, we cannot depend on the test proposed. Now, I noticed that in the 165 cases of cranial presentation, in which I distinctly made out to which side of the pelvis the occiput lay originally, having also in many of them verified my diagnosis by the presence of the

* Nägele says, after making one of his dogmatic assertions in opposition to other writers: "Wer aber dieser Aeusserung wegen sich zu entrichten reyn mühte, der mügte doch erwägen, für wie schwierig die Diagnose der Kopflagen von den grössten Meistern ausgegeben worden." And then he goes on to say that Roederer, speaking of face to pubes cases asserted, "nequit penitus cognosci, antequam caput est natum." And also that Smellie had freely acknowledged he had been mistaken.—Nägele, *Die Lehre vom Mechanismus der Geburt*, p. 40.

* Busch and Moser, after describing eight positions contended for by Ritgen, adds: "In einem Falle nimmt er sogar noch eine Lage zwischen der fünften und sechsten Stellung an."—*Handbuch der Geburtshilfe*, b. iii, p. 327.

† *Principles and Practice of Obstetric Medicine*, etc., by F. H. Ramsbotham, M.D. Third edition. 1851. pp. 185-188.

‡ "By attending, therefore, to the mode in which the trunk passes, we may inform ourselves of the position which the child held in utero, and of the original direction of the foetal face."—Vide note in Ramsbotham's *Obstetric Medicine*, p. 188. Third edition.

caput succedaneum, which is always found on the side which has been next the pubes, the shoulders were reversed no fewer than sixteen times; that is, where the right ear had been next the pubes, the left shoulder came to the arch, and conversely. Nägele, indeed, says that sometimes with roomy pelvis he has observed the shoulders entirely expelled with their greatest breadth in the transverse diameter,* that is, without either shoulder coming to the arch; but he alludes to no other deviation from the rule usually laid down. In my cases, the head twisted round soon after its expulsion, and the wrong shoulder came distinctly to the arch, not only in easy cases, but in some very hard ones. I need only mention one where I could not be deceived. In the early part of the labour I had felt the anterior fontanelle near the left acetabulum. The labour went on very slowly, though the pains were severe. The anterior fontanelle approached nearer the pubes. Thinking the labour was likely to be very protracted, I applied the long forceps, and with some trouble brought away the head. Just before expulsion, I felt the anterior fontanelle under the arch close to the left side of the symphysis. I found after birth the marks of the forceps, one on the right temple in front of the ear, the other on the side of the neck under and rather behind the left ear. My diagnosis was thus confirmed, by finding that the left side of the head had been the lowest, and consequently next the pubes in the first stage. But even in this case the right shoulder came to the pubes, and it required considerable traction to draw away the trunk, the child being a very large one. As I have been somewhat curious on this point, I have always been particularly careful after the birth of the head to allow the shoulders to take their own direction.

As I have given a hard case where the shoulders were reversed, I may as well add from my notes, written at the time, an example of an easy one, where the same phenomenon was observed. This case was one which occurred before January 1852, and is not included among the sixteen already referred to.

"No. 1846, December 13th, 1851. Anterior fontanelle felt near pubes, very close to it. Head quite disposed to descend, after rupture of the membranes with well dilated os uteri. Thinking this a case for spontaneous rectification, I contented myself with keeping a finger gently applied during the pains to the fontanelle, that I might accurately observe the changes. The sagittal suture was directed obliquely backwards, and the posterior fontanelle was felt distinctly near the sacrum, the anterior fontanelle being inclined slightly to the left side. Very rapidly, during one pain the head revolved, the anterior fontanelle passed upwards and to the left side of the pelvis, the posterior descended and passed round to the right side of the pelvis, and thence to the arch of the pubes with about two more pains, when it was expelled in the natural position. But the head continued to revolve, and the right shoulder passed under the pubic arch instead of the left, and thus the shoulders were expelled with the face turned to the right side of the mother, and the occiput to the left; although, as before said, in passing through the pelvis, the occiput was turned to the right side, and the face to the left". (Note in Register.)

In a future paper, I hope to be able to give the results of my observations on those interesting cases, in which, as in the one just quoted, the anterior fontanelle is felt in the first stage near the pubes. I think they can be satisfactorily explained.

Alford, Lincolnshire, July 25th, 1853.

* "Dass die Schultern mit ihrer grössten Breite im Querdurchmesser durch den Beckenausgang dringen."—*Die Lehre vom Mechanismus der Geburt*, p. 13.

CASE OF IMPERFORATE ANUS, WITH ABSENCE OF THE RECTUM.

By HENRY DAYMAN, Esq., Surgeon.

(Read before the Medical Society of Southampton.)

On the 7th of March, 1853, I delivered Mrs. M., aged 36, of a fine healthy male child. On the 10th, I discovered that the infant was the subject of that peculiar arrest of development to which the term "imperforate anus" has been given. In the present instance, however, the anus was perfect; and within the apparently natural orifice there was a mucous surface, ending about three-fourths of an inch up, in a shut sac. Now, although the prognosis under this peculiar condition is confessedly unfavourable and the prospect from surgical interference most uninviting, yet, in this case it became at once evident that something must be done to relieve the pent up meconium. Accordingly I consulted with my friend Mr. Spear, of Eling, on the best plan of proceeding; and we arranged to meet the following day and perforate the sac, with the view of establishing a communication between the gut above and the imperfect rectum.

Mr. Spear and myself met on the next day, the 11th, having delayed our meeting several hours to allow the child to be baptized. Our services were not required for the living; the child had died a few hours before our arrival at the house.

A *post mortem* examination was at once obtained; and, with the assistance of Mr. Spear, I had the opportunity of making a thorough and elaborate investigation of the parts involved in this singular malformation.

The child was large and well formed, of natural colour everywhere, except over the abdomen, which was black, tense, and swollen, and its walls appeared so attenuated that one might almost imagine the convolutions of the intestines were visible through the parietes. On opening the abdomen, one immense object presented itself, which seemed to obscure every other. This was the descending colon, distended with meconium, and closed at its distal end, so that it rested on the bladder anteriorly, and on the iliac fossæ and lumbar vertebræ at the sides and behind. No portion of the colon was below the brim of the pelvis; but from it descended to the anal pouch a fibrous cord, which, on closer examination, appeared to be made up of condensed bands of pelvic fascia. I carefully removed the colon, together with the entire contents of the pelvis; and of these I subsequently made a minute dissection, with a view to discover whether any other, and what structures were implicated.

1. The divided sacrum.
2. The divided os pubis.
3. The colon distended, and ending in a shut sac.
4. The bladder.
5. The fibrous band between the colon and anal pouch.
6. The anal pouch.
7. The levator ani on the right side, which has been divided low down to show the extremity of the pouch 6.
8. The sphincter ani.

The only peculiarity which I could find was the total absence of the rectum. The fibrous cord which I have mentioned was decidedly not a tube, but was capable throughout its entire length of being split up into fibrous threads