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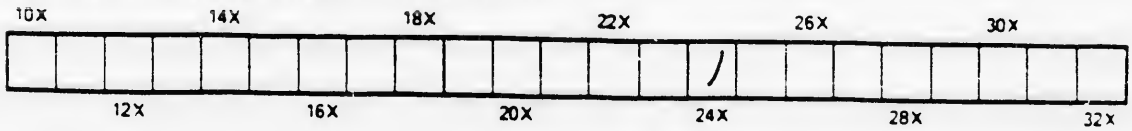

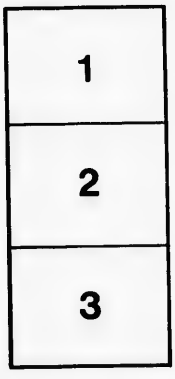

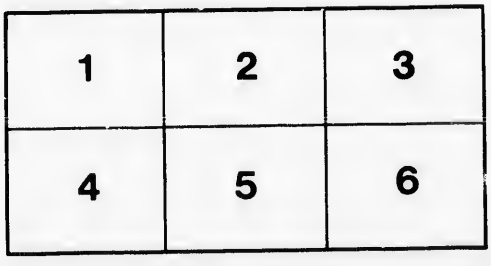

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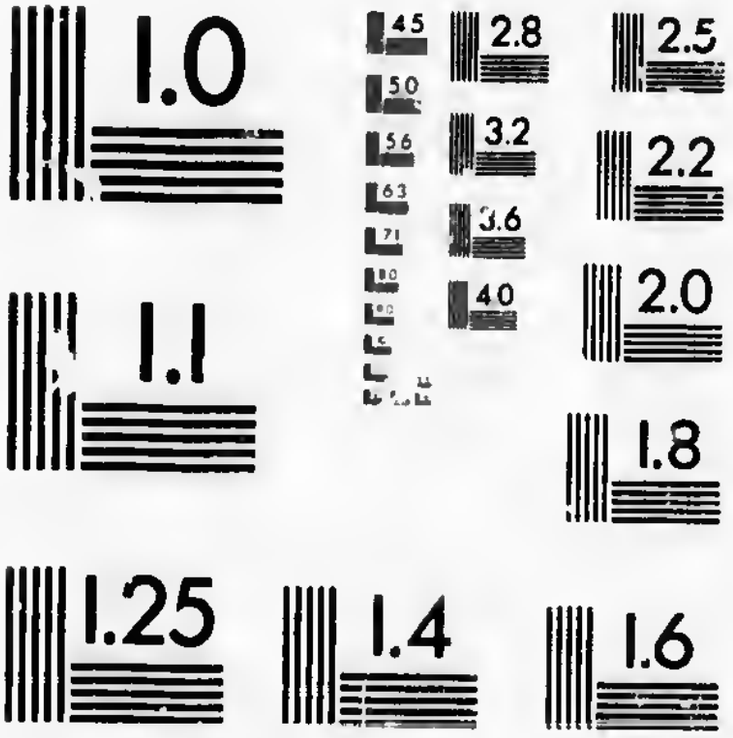

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STATISTICS

OF THE

UNIVERSITY LYING-IN HOSPITAL,

MONTREAL.

BY

ARCHIBALD HALL, M.D., E., L.R.C.S.E.

PHYSICIAN-ACCOUCHEUR TO THE SAME; PROFESSOR OF MIDWIFERY AND THE DISEASES OF WOMEN AND CHILDREN, UNIVERSITY OF M'GILL COLLEGE; PRESIDENT OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA; HONORARY FELLOW OF THE OBSTETRICAL SOCIETY OF LONDON; CONSULTING PHYSICIAN MONTREAL GENERAL HOSPITAL; ETC., ETC., ETC.

(From the British American Journal.)

Montreal:
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1860.

ART. VIII.—*Statistics of the University Lying-in Hospital, Montreal.* By ARCHIBALD HALL, M.D., Physician Accoucheur to the same; Professor of Midwifery, &c. University of McGill College; President of the College of Physicians and Surgeons of Lower Canada; Honorary Fellow of the Obstetrical Society of London, &c., &c.

The importance of Statistics is now acknowledged in the different Medical Sciences, and they have been happily brought to bear upon the settlement of many disputed points. But in none is their influence of such moment as in Midwifery, as they have established with a degree of precision which cannot be questioned, many highly important principles, if they can be so called, which lie at the foundation of its science and practice, and it is here, far more than in Medicine or Surgery, that their great influence must be chiefly confessed. Nature always operates by laws which we are enabled to appreciate only by this means, while at the same time, we become enabled by the same means to estimate the slightest deviation from them. The greater the amount of statistical information, therefore, which can be brought to bear upon certain given points, the more surely will these become established as principles or laws, and it is with the view of contributing to the mass of information which we already possess, on many interesting subjects connected with midwifery, that I throw the following results into the common fund; but, before entering directly upon the more immediate subject of this paper, it may be well to premise a few remarks on the history of the Institution, whose operation has furnished them, by way of shewing its advantages as a means of studying obstetrics practically.

The first Lying-in-Hospital established in Montreal, was founded by the late Dr. MacNider, in the year 1841, and went into very successful operation. In consequence, however, of a refusal to allow the students of the University access to it on account of the practical advantages which it was thought capable of affording, (Dr. MacNider at that time being a lecturer on midwifery in the Montreal School of Medicine,) it was deemed proper about a couple of years afterwards by the Professors in the University of McGill College, to found one in connection with the University, and to place its professional control in the hands of the Professor of Midwifery, intimately associating it with the chair.

The practical advantages thus accruing to the students at the University by this arrangement are obvious. Shortly after the decease of Dr. MacNider, an event which took place in the year 1846, his Hospital was closed and has not since been re-opened.

At the present moment there are two Lying-in-Hospitals in Montreal. One is the Hopital de St. Pelagie, a Roman Catholic Institution, admitting Protestants, however. It is under the economic management of the Sisters of St. Pelagie, and the professional charge of Dr. Trudelle, the present Lecturer on Midwifery in the Montreal School of Medicine. It admits a considerable number of patients during the year, and the students of that school have, as I have understood, access to it. The other is the University Lying-in-Hospital, which was opened in November, 1843, as well for charitable purposes, as for the instruction of the students in the Faculty of Medicine of McGill College in practical midwifery, an object which it has carried out as successfully as its opportunities permitted. For the first ten years of its existence, the Hospital was under the able superintendence of the late much lamented Dr. McCulloch, then the Professor of Midwifery in the University, and since that gentleman's decease by Asiatic Cholera during the last visitation of that epidemic in 1854, it has been under the charge of the present Professor of that branch; the other members of the Medical Faculty of the University, having always constituted a Board of consulting Physicians. It is supported partly by voluntary subscription, and partly by an annual Legislative grant, increased during the last two or three years to £75 per annum. The amount received from the former source is very limited, but in consequence of strictness in collecting from pay patients and the extremely prudent economic management of its matron and resident midwife, Mrs. Hope, who is thoroughly instructed in midwifery, and has received the license of the College of Physicians and Surgeons, the Hospital has not only a sufficiency to meet its annual expenditure, but has been enabled to liquidate a considerable debt, which oppressed it a few years ago. A kind benefactress, the late Mrs. Maria A. Monk, bequeathed to it at her decease in 1853, the generous amount of £262 10s., which was immediately invested in Bank stock, and having been increased from time to time as circumstances allowed, the Hospital has now, to its credit, the sum of £500, which is reserved as a fund for the erection of a suitable building at a future day. The premises which it now occupies are by no means adapted to the purposes to which they are applied, but no better can at present be obtained. The Hospital is, however, conveniently situated, being close to the lecture rooms and the Montreal General Hospital, and of easy access to the students.

A minute record is kept of every case. As soon as a patient enters, the following particulars are noted in regard to her—the date of admission,—her name, —her age—and the country of her birth; and, when the accouchement has been completed, the following additional details are recorded,—the kind of labour—the nature of the presenting part—the duration of the labour—the time before the delivery at which the membranes ruptured—the sex of the infant,—its length and its weight,—the weight of the Placenta,—the length of the umbilical cord, the number of days since the last catamenial period—the condition in

which the child was born, whether living, still, or dead,—whether the case is a first, second or third, &c. gestation, and lastly the date of her discharge from the Hospital, and after a categorical reply to all these questions, any peculiarities in the labour are finally detailed under an appropriate heading. All these particulars are entered by the student in attendance on the case, immediately after the termination of the accouchement, so that in time a truly valuable amount of statistical information will be obtainable. The Hospital has now been in operation sixteen years, and it is the results which during that time have accumulated, which furnish the groundwork of this paper.*

It appears that during this period of time 1968 women have been admitted as patients, being an annual average of about 123. Of these five were cases of Abortion, which require to be deducted from our calculations. It is necessary to remark that the total number given includes a list of 747 cases of which a very minute portion only of their details has been preserved, viz.: their admission and confinement. I will only use these in a general way. Every endeavour has been made to discover where these records are, but without avail. It is exceedingly to be regretted that any portion of them whatever has been lost.

The sufficiently large number of 1216, however, yet remain whose details have been preserved in their comparative entireness. It must be further observed, that it is sometimes impossible to fill up answers to all the questions; and I may exemplify this remark by the well known difficulty in determining the number of days intervening between the cessation of the catamenia and the commencement of labour, but in all cases in which the results have been obtained from numbers less than the total, the precise number will be stated.

I propose to enumerate at first general details; and I will reserve to the conclusion of the paper, the narrative of such peculiarities in the labours as have been specially noticed in the records.

Of the 1960 women admitted, besides deducting the five cases of abortion already noticed, we have further to add to this latter number, 14, who either left the Hospital before delivery or were expelled for bad conduct. These deductions reduce the total number to 1949.

Of the 1949 patients 17 have died, the causes of the deaths having been the following:—five from puerperal fever; six from peritonitic and metritic affections; one from epilepsy complicating the labour, and ending in cerebral congestion; and five from puerperal convulsions. This proportion yields a ratio of mortality in the cases, of 1 to 114.6 labours, thus exhibiting a highly favourable ratio.

Of this number there are only 1208 entries in the register, which can be rendered tributary to the purposes of this paper, the record containing nothing

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*In the *British American Journal* of February, 1847, the late Dr. McCulloch contributed an interesting paper on the statistics of the Hospital based upon 354 cases, which had up to that period of time been admitted. These cases which furnished the ground work of his deductions are among the 747, whose details are now all lost except the record of their admission and confinement. I will therefore avail myself of his labours whenever I find them suiting my purpose.

More lately, Dr. Fenwick, with my permission, has given, in the *Medical Chronicle* for September, 1857, the particulars of 1009 accouchements.

whatever, of the balance of 747, with few exceptions, except their name, date of entry, confinement and religion. It appears, however, that the 1208 gave birth to 1223 children, of whom 667 were boys, and 556 were girls, and adding the statistics of Dr. McCulloch, of the 354 which he reported, we have the following numbers, 845 boys and 732 girls.

The ages of 1301 are given, and after classification they appear as follow:—

15 years of age and under,	1	from 30 to 35.....	85
from 15 to 20.....	235	from 35 to 40.....	43
from 20 to 25.....	586	from 40 to 45.....	3
from 25 to 30.....	347	from 45 to 50.....	1

The age of the youngest admitted is recorded by Dr. McCulloch in his paper. It was 14 years and 7 months. In this case the presentation was a posterior occipito-iliac. The labour lasted seven hours, and the child weighed six pounds. The age of the oldest was 47.

Casualties among the births.—Out of the whole number of casualties among the births, I find that 42 were born dead, and 34 children were still born. Of these last the statistics are as follow: of the 34 infants, there were 21 males and 13 females. Of the males, attempts at resuscitation were successful in 17 cases, and unsuccessful in 4. Of the females, attempts at resuscitation were successful in 10 and unsuccessful in 3, exhibiting a total of 27 to 7, or three-fourths of cases of still-born children, in which the efforts for resuscitation have been crowned with the most complete success. In all the cases which have occurred since 1854, the application of the stethoscope, and the evidence furnished by it alone, as to the action of the infant's heart, prompted the perseverance in the efforts for resuscitation, which were frequently attended with success under the most unpromising circumstances. And on this point I may remark, that experience has served to convince me, that on no account whatever, should the means for resuscitation be discontinued, until that instrument, and *that instrument only*, furnishes incontestible proof of the cessation of the action of the heart.

With regard to the particular gestation in which the deaths and still-births occurred, I glean the following: of the 42 born dead, 27 were males and 15 were females. Of the males 20 died in the first accouchement, 4 in the second, and 3 in the third and subsequent ones. Of the females 9 died in the first accouchement, 2 in the second, and 4 in the third and subsequent ones. Of the still-births there were 21 males and 13 females. Of the males, 12 still-births occurred in the first, 6 in the second, and 3 in the third and subsequent accouchements; and of the females, 9 occurred in the first accouchement, 3 in the second, and 1 in the third or subsequent one. These figures strongly corroborate Prof. Simpson's views as to the influence of the male offspring in the induction of difficulties.

The following general averages are deducible from the foregoing: that the deaths of the infants were to the whole births as 1 to 46.4; that the still-births were to the whole births, as 1 to 60.90, and that the recoveries in the still-births were to the deaths in the same as 27 to 7, or nearly as 4 to 1.

Duration of labour.—In 1094 cases of accouchement, the mean duration of the labour was found to be 7 hours 35 minutes. The longest labour lasted

84 hours; a labour of such duration occurred twice; in both cases males were born, in one instance living, in the other dead. The duration of the shortest labour was 12 minutes. The time here meant is the completion of the two first stages of the labour or the birth of the child. I find the comparative duration of the labours as follows:—

Under 1 hour.....	24	from 45 to 50 hours.....	11
From 1 to 5 hours.....	291	" 50 to 55 "	1
" 5 to 10 "	394	" 55 to 60 "	3
" 10 to 15 "	254	" 60 to 65 "	0
" 15 to 20 "	82	" 65 to 70 "	1
" 20 to 25 "	78	" 70 to 75 "	0
" 25 to 30 "	29	" 75 to 80 "	2
" 30 to 35 "	9	" 80 to 85 "	2
" 35 to 40 "	8	" 85 to 90 "	0
" 40 to 45 "	2		

In 1192 labours.

Time between the rupture of the membranes and birth of child.—The period of time intervening between the rupture of the membranes and the birth of the child is recorded in 746 out of the 1949 labours, and the mean time was ascertained to be 2 hours 48 minutes. The longest period was 71 hours; the shortest, contemporaneous with, or shortly after the birth of the child.

Duration of gestation.—With regard to the number of days during which gestation progressed, the greatest pains were taken to ensure accuracy, and out of the whole number of patients admitted, there are only 714 cases whose information can be considered at all reliable. The period taken is the time intervening between the last day of the last catamenial flow, and that at which labour commenced. Every one in practice knows the difficulty that exists in ascertaining this period with precision. These difficulties are enhanced in Hospital practice, where there exists every motive for deception on the part of the patient. Retaining for the calculation all whose statements seemed probable, and rejecting all which bore even the seeming of improbability, we have then 714 cases for the basis of our statistics on this point; and it will be observed that the results, given below, bear out with singular exactitude the conclusions drawn from 150 gestations, and long ago published by Merriman on the same subject, and subsequently quoted, I believe, by Churchill. The following are the results obtained in the U. L. Hospital, of 714 women, at different ages.

4	were	delivered	in	the	37th	week;	i. e.,	from	the 252nd	to the 259th day
37	"	"	"		38	"	"	"	259	" 266 "
127	"	"	"		39	"	"	"	266	" 273 "
265	"	"	"		40	"	"	"	273	" 280 "
157	"	"	"		41	"	"	"	280	" 287 "
85	"	"	"		42	"	"	"	287	" 294 "
29	"	"	"		43	"	"	"	294	" 301 "
10	"	"	"		44	"	"	"	301	" 308 "

I now notice the singular circumstance, singular, if the statements made by the several patients could be implicitly relied on, that the register enumerates

two cases whose gestation lasted only 237 days, and three in which it was prolonged to 319 days. Out of the whole number of 714 cases, labour commenced in 22, on the 270th day; in 44 on the 279th day; in 79 on the 280th day; and in 17 on the 281st day. Then comes a singular anomaly during the next seven days, from the 282nd to the 288th both inclusive, the relative numbers following each other in the following order, 21, 22, 24, 22, 21, and 30.

Number of gestations.—In 1208 cases the following figures represent the number treated at their different gestations. Doubt may be thrown upon the entire truthfulness of the statements, and it is fact that unmarried women have been known to falsify their true pregnancy, for the purpose of entering the Hospital, to avoid the operation of a rule, which is carried out as strictly as possible, that unmarried females shall not be admitted twice. But the greatest care has been taken to ensure correctness, and the following table will therefore shew the number of admissions at their several gestations. Out of 1208 accouchements

645	were delivered of their	1st	child.	15	were delivered of their	7th	child.
283	"	2nd	"	6	"	8	"
124	"	3rd	"	9	"	9	"
66	"	4th	"	0	"	10	"
37	"	5th	"	0	"	11	"
22	"	6th	"	1	"	12	"

Weight of the Infants.—The weight of the infants is given in 1185 cases exclusive of the twin and triplet cases. I find the mean average weight to be 7 lbs. 3 oz. The heaviest was a girl weighing 11 lbs. 12 oz; the lightest was a boy, who weighed, at term only 4 lbs. The child measured however 17 inches, and did well.—It was his mother's third accouchement, who attributed its diminutive weight to the severity of the labour which she had undergone. The mother was very intemperate. Whether this had any influence on its nutrition in utero, I leave to others to decide.

The average weight of newly born infants has been found to vary in different countries. Why it is so, it is difficult to say. Thus in France according to Camus at the Hopital de la Maternité the average weight was $6\frac{1}{4}$ lbs. In Brussels $6\frac{1}{2}$ lbs., in Moscow, $9\frac{1}{15}$ lbs., and in the United States, according to Beck, the average weight is 7 lbs.

In the 13 twin pregnancies of which we have record, which yielded as many males as females, the average weight of the males was 6 lbs. $6\frac{5}{16}$ oz. and of the females 6 lbs. $6\frac{13}{16}$ oz., showing the average weight of the girls to be slightly the greater. The following is the relative weight of the triplets in the only case which occurred, No. 1, 5 lbs. 8 oz.; No. 2, 4 lbs. 12 oz., and No. 3, 4 lbs. 12 oz. In the whole births the average weight of the boys predominated over that of the girls by 10 oz—that of the boys having been 7 lbs. 8 oz., that of the girls 6 lbs. 14 oz.

Weight of the Placenta.—The weight of the Placenta is recorded in 835 cases. Its average weight was ascertained to be 1 lb. 4 oz.—The heaviest weighed 4 lbs. 1 oz. and occurred only once. Placentas weighing 4 lbs. occurred three times, all together with the first mentioned in primiparous women, the mothers and

children doing well. It might be supposed that this apparent hypertrophy (if it may be so called) was of a morbid nature. There is nothing in the record to favour any such idea. The lightest one weighed 10 oz. It occurred also once, and in a primiparous woman, who also with her child, at term, did well. This one also shewed no signs of disease. A placenta weighing 11 oz. also occurred once, and cases in which they weighed 12 oz. were noticed 6 times. With two exceptions these were also met with in primiparous women. The weight of the Placentas in the case of the triplets, to be hereafter mentioned, was 6 lbs. 8 oz. Battledore placentas were noticed 18 times, being once in 46.3 labours.

Length of the umbilical cord.—The length of the umbilical cord, was measured in 1180 cases; Its mean length was ascertained to be 19.5 inches. The longest measured 47 inches. It occurred only once, and was four times encircled round the infant's neck. The shortest measured 5 inches, and was nine times noticed. Between the extremes of 47 and 5 inches, the record furnishes examples of all the intermediate lengths, some of course more prevalent than others. I subjoin a table shewing the comparative frequency:

From	1	to 5 inches long, there were	11
"	5	to 10 "	61
"	10	to 15 "	235
"	15	to 20 "	377
"	20	to 25 "	326
"	25	to 30 "	113
"	30	to 35 "	41
"	35	to 40 "	12
"	40	to 45 "	3
"	45	to 50 "	1

The foregoing table excludes the twin and triplet cases. The mean length of the umbilical cord in these cases was ascertained to be 18.5 inches.

Length of the infant.—The length of the infant is given in 815 cases. It ranged between 14 and 27 inches; 14 inches was the shortest, nine of the infants born having measured this length; 27 inches was the length of the longest, of which there were only three examples. The mean average length estimated from the whole number of cases is 20.3 inches. The relative prevalence of the lengths will be seen by reference to the following table.*

9	infants	measured	14 inches.	221	infants	measured	21 inches.
10	"	"	15 "	142	"	"	22 "
21	"	"	16 "	45	"	"	23 "
33	"	"	17 "	18	"	"	24 "
67	"	"	18 "	4	"	"	25 "
100	"	"	19 "	2	"	"	26 "
139	"	"	20 "	3	"	"	27 "

* Caseaux, in his admirable work "A Theoretical and Practical Treatise on Midwifery," American Edition, 1850, makes the following remark, in alluding to the induction of dystochial labours by excessive volume of the fœtus: "That the largest children are never more than twenty-three inches from vertex to heel." The foregoing table, upon which the utmost reliance can be placed, shews the large proportion of 27 out of 815 infants whose measurements exceeded that length.

From the foregoing statistics we are enabled to draw the following general conclusions.

The mortality of the mothers was as 1 to 114·6 admissions.

The mortality of the infants was to the whole births as 1 to 46·4.

The still-births were to the whole births as 1 to 60·9.

The recoveries in the still-births were to the deaths as 4 to 1.

That the mortality among the mothers occurred chiefly in primiparous women.

That the still-births occurred chiefly with male offspring.

That the chief mortality occurred also with the same.

That the average duration of labour was 7 hours, 35 minutes.

That the average time intervening between the rupture of the membranes and the delivery of the child, was 2 hours 48 minutes.

That upon the whole, the labours lasted longer with male than with female infants, and that the principal difficulties occurred chiefly with the former.

That by far the largest proportion of women were confined in their 40th week, or between the 273rd and 280th day, thus affording additional testimony to the law upon this point.

That the average weight of the infants was 7 lbs. 3 oz.

That the average length of the infants was 20·3 inches.

That the average length of the umbilical cord was 19·5 inches.

And that the average weight of the placenta was 1 lb. 4 oz.

In an ensuing paper I propose to analyse the labours, specifying the presentations and positions, with their relative prevalence; and conclude with a sketch of the peculiarities witnessed in the most important cases of parturition of which the books of the Hospital contain a record, whether occurring in my own time or in that of my predecessor.

Montreal, January 30th, 1860.

(2.)

In my first paper on the Statistics of the University Lying-in Hospital, published in the second number of the *British American Journal*, I considered in detail all the circumstances connected with the cases treated in it as far as the records permitted, with the exception of the labours themselves and their peculiarities. These I reserve for a future occasion, and it is to these that I purpose now to address myself; but before doing so I desire briefly to supply an omission in not having alluded to the monstrosities observed during the currency of the practice as more immediately appertaining to the subject of that paper.

Monstrosities, or the effects of imperfect development on the one hand, or of superfluous development on the other, have been noticed six times since the establishment of the Hospital. Two infants were born anencephalic, one of them having had only a single nostril. Both lived a few minutes after birth. Another infant was born wanting all the ribs from the second to the seventh on the left side, thus exhibiting at each expiratory effort a deep soft sulcus through which the heart's action could be distinctly perceived and felt. Superadded to these defficiencies in the osseous organization of this infant, a like absence occurred in the spinous processes of all the vertebræ from the second or third cervical to the last lumbar, constituting a Spina Bifida of no ordinary character. This infant, strangely, imperfectly organized as it was, lived about twenty-four hours. The fourth was born with six fingers on the left hand, and a corresponding number of toes on the left foot, these supernumerary appendages having been removed by ligation shortly after its birth. The fifth one had Spina Bifida, the posterior part of the third Lumbar vertebra being wanting. And the last one presented a very unusual appearance. "The parietal bones were separated by a sagittal suture, 2½ inches in width. Attached to the integument were two tumours one above the other, the one next to the cranium was smaller than the one above it, and the deciduous membrane and amnion which enclosed the product of conception extended to these tumours by a cord-like process and enveloped them." The patient who bore this child stated that she had received a blow from a cudgel during her pregnancy on the left side of the abdomen; the woman, however, bore her child the full term of gestation, but it was still born, and died soon after its birth.- It presented by the feet.

To proceed now with the more immediate subject of this paper.

Out of the 1949 entries in the books of the Hospital, I can only find 849 of which a record of the peculiarities of the labour remains; and if to this number

we add the 354, whose statistics were given in a very general manner by the late Dr. McCulloch in the *British American Journal* of 1847, and which I now propose to make use of to the extent they permit, we have then the number of 1203 cases as the basis of our present statistical observations.

An inspection of the register will disclose the fact that the classification of the labours adopted was the old one of "Natural, Preternatural, Laborious and Complex," an excellent enough one for ordinary purposes, but scarcely precise enough for statistical uses. With the exception of the 354 cases which furnished the basis of Dr. McCulloch's observations, whose division in that paper I adopt as suitable to my present purposes, I have carefully examined the details of the remaining 849 labours, exclusive of the multiple pregnancies of which I have the record, and have reduced them to Nægele's system of classification, the one which seems to me the simplest, and at the same time the most scientific and truthful, Following, then, this system of classification, we have the following numbers of each of his four principal varieties of presentation:

Occipito-Iliac,	1153
Sacro-Iliac,	33
Mento-Iliac,	10
Cephalo-Iliac,	7
	1203

Following up these four principal divisions, I find the following varieties in the presentations:

1 Occipito-Iliac.—1st Position	1101	cases	
2nd "	28	"	
3rd "	8	"	
4th "	9	"	
5th "	3	"	
6th "	4	"	
			1153
2 Sacro-Iliac—Anterior	30	"	
Posterior	2	"	
Left Transverse	1	"	
			33
3 Mento-Iliac—Anterior	8	"	
Posterior	2	"	
			10
4 Cephalo-Iliac—Left lateral plane	5	"	
Right lateral plane	2	"	
			7
		Total cases—	1203

While the Occipito-Iliac presentations are thus shown to exhibit the large preponderance of about 96 per cent. of the whole accouchements, the other forms of presentation show the following ratios: the Sacro-Iliac presentations, 1 in every 36.45 labours or 2.7 per cent.; the Mento-Iliac presentations 1 in every 120.3 labours or 0.8 per cent; and the Cephalo-Iliac presentations, 1 in every 171.8 labours or 0.4 per cent.

Besides these cases we have to enumerate nineteen cases of twins which include those enumerated by the late Dr. McCulloch and one case of Triplets. The results of these labours may be thus briefly noticed.

The offspring from the twin cases was 20 boys and 18 girls; and with regard to their mode of presentation I find that 24 presented by the vertex and 14 by the breech or feet, and of the whole number, only one, a boy, was lost. The proportion of twins to the whole births bears a ratio of 1 to every 63.3 labours. The relative weights of the males as compared with the females in these cases were detailed in my previous paper.

The triplet case alluded to produced two boys and one girl; of whom one a boy was still born but afterwards died, although every effort was made to resuscitate it. In this case the first presented by the breech, and the other two by the vertex. The ratio of Triplet cases to the whole is as 1 to 1968. Alluding to multiple pregnancies, Churchill furnishes the following comparative ratios from British, German, and French practice, that of twins 1 to $77\frac{3}{4}$ cases, and that of triplets as 1 to 5840 cases.

After these prefatory remarks let us examine the complications which have been manifested in the different labours.

Among the Occipito-Iliac presentations I find the vertex complicated with a collateral descent of one hand eight times; and with that of both hands once. In seven of these cases the right hand was the one which descended along with the head, the hand most commonly placed near the ear. In one case only was it the left hand. All these cases terminated favorably with one exception in which the child was still born, but was afterwards resuscitated by the usual appliances. This latter case was additionally complicated with an entortillement of the cord around the child's neck. There was no appeal to operative assistance in any of these cases.

There were four cases in which the presentation of the vertex became complicated with a Prolapsus of the Funis to a greater or less extent. In two of these cases the prolapsed cord was returned and maintained above the brim of the Pelvis, the infants having been born vigorously alive; in a third case under like circumstances the child was still born, yet every effort at resuscitation was fruitless; and in the fourth case, the child had been dead for at least twenty-four hours, as afterwards ascertained. But in this case the vertex presented in the 3rd position, and although the funis was returned, it became necessary to resort to the long forceps as the head had not become engaged in the cavity of the Pelvis. This infant was of course brought into the world dead.

One Occipito-Iliac case was complicated with mania, which declared itself four days before the accouchement. Nothing peculiar transpired in regard to this event, nevertheless the maniacal symptoms continued for seventeen days afterwards, when she was discharged without much amelioration of her condition, and placed under the care of her friends, as the case had become no longer suited to the Hospital. Another case of this class was complicated with epilepsy, to which the patient had been subject for several years previously. In this case, the presentation was natural, but in consequence of the supervention of an attack in-

mediate delivery was necessitated. The child was born dead, and the woman died five hours after the accouchement had been completed.

In another case, the patient had been brought to the Hospital comatose, and had been so for fourteen hours previously, the coma having resulted from puerperal convulsions, of which no less than seventeen fits had occurred before her admission; it does not appear that the woman had received any treatment prior to her admission. The forceps were used in this case,—the child was born dead, but the mother recovered and was discharged on the fifteenth day afterwards. In another instance, convulsions threatened after the delivery of the child and before that of the placenta. The timely employment of the lancet, and immediate extraction of the after-birth arrested the further progress of the symptoms.

Another case was complicated with extensive œdema of the labia majora. After labour had commenced, the labia were punctured, which effectually removed any obstacle to the delivery which might have been afforded by this condition of the vulvar aperture. It was this patient's first child.

A rather singular complication was exhibited in another patient. After admission she became affected with jaundice which necessitated her removal to the Montreal General Hospital, where shortly after her entrance severe cerebral symptoms manifested themselves accompanied with violent delirium. This condition terminated in puerperal convulsions which continued until her death, which took place a few hours after her delivery, which was effected by Dr. Craik, the house surgeon of that Institution, artificially. The child in this instance was born dead. I was informed that at the autopsy which took place, the liver was found very much atrophied.

As apparently connected with this case, I may incidentally remark that one or two cases of a somewhat similar character occurred in private practice about the same time. I saw one of these cases with Prof. Holmes. She was married and in the sixth month of her second pregnancy. She was taken ill on a Friday with the premonitory symptoms of jaundice, which declared itself more and more unmistakably until she was first seen on the following Thursday by Dr. Holmes. On the following day severe delirium set in succeeded by coma, at which period I saw her. She died early on the following day. At the post-mortem examination of this case, the liver was also found considerably atrophied, especially the left lobe, of an intensely yellow colour, and so soft as to break down readily under the finger. This case furnished the material for an important monograph from the pen of Dr. Holmes, which appeared in the Montreal Medical Chronicle for January 1856.

One case occurred in which the vertex presented, complicated with additional presentations of the left hand, right foot and Funis. This very rare complication was reported in the same Journal for June 1855, by the gentleman in attendance upon it, and I will allude to it more particularly hereafter.

One case of laceration of the perineum occurred, and in a rather singular manner. The presentation was normal, but complicated by severe, occasional spasmodic rigidity of the lower extremities. These having been considered as not involuntary, the patient was cautioned very emphatically not to permit them. Notwithstanding this caution, she closed her thighs on the head of the fœtus when

it was pressing on the perineum, and the occiput beginning to emerge. This forced the face violently against the perineum, and notwithstanding every exertion on the part of the gentleman in attendance to prevent it, the perineum yielded, and a considerable laceration took place, which was afterwards treated in the usual manner.

Cases of Placenta Prævia occurred three times: in two of these intances the placenta was only partially implanted over the os uteri, and in the other case, completely. I will notice this latter case on a future page.

Rigidity of the os externum uteri was frequently observed, but very seldom as offering any serious impediment to the progress of the labour. Eight cases are on record however, in which this condition of that part very materially protracted the labour, and became in fact the real obstacle, demanding the employment of energetic means to subdue it. In one case I find that Belladonna inuntions had been resorted to without the slightest apparent effect; and after several hours had elapsed, it was finally subdued by the exhibition of twenty minims of Vin. Ipecac. every hour. The ordinary method pursued now in these annoying cases, which, while it rapidly subdues the rigidity, at the same time saves the time and anxiety of the attendant, is the administration of one grain doses of Tartar Emetic given every half hour. I have rarely been compelled to administer more than two such doses, while in the large majority of cases, I have usually found it to yield in the course of twenty or twenty-five minutes after the exhibition of the first dose.

In one case the child was dead born at full term, covered thickly with the copper coloured rash of tertiary Syphilis. The infant had not been long dead, as the skin evinced few of the signs of maceration. It occurred in the case of a married woman, who does not appear to have ever suffered from any of the primary symptoms of that affection, although occasionally herself covered with a rash for which she could not account, but which had yielded to the medical treatment adopted from time to time as it appeared.

Nineteen cases of Puerperal fever occurred in the Hospital at different periods since its establishment, and in every instance necessitating its temporary closure. One of these cases, although I place it under this head, was an unmistakable, and well marked case of Uterine Phlebitis, in which the formation of secondary abscesses took place in the joints of the elbow and wrist. This woman recovered. Of these cases seven terminated fatally, and the fortunate issue in the remaining is chiefly attributable to the very prompt treatment to which the patients were submitted after the existence of the disease in the Hospital had been too emphatically realized.

Seven severe cases of Uterine Hæmorrhage occurred, five before the delivery of the placenta, and two after. The Hæmorrhage in all these cases was controlled by the usual means, no ulterior bad consequences having resulted.

As a matter of curiosity I now record the following circumstance which is certainly curious, if true, and there does not seem to exist any good or sufficient ground for doubting the woman's veracity, as she could have gained or secured nothing by the falsehood whatever, if one. This patient, a respectable looking married woman, 40 years of age, and the mother of four previous children,

declared that she had not perceived any catamenial flow whatever, since the birth of her fourth child, then six years of age. I think this may be set down as another instance of the vagaries, sometimes exhibited by Dame Nature in the performance of this function. Equally singular anomalies are on record.

The forceps were employed in nineteen instances, the short forceps seventeen times, and the long forceps twice. One case in which the latter was used has been already alluded to, and the other was one in which contraction of the antero-posterior diameter of the brim existed, and the attempt to deliver having been ineffectually made by this instrument, it was afterward effected by version. The chief features of this case will be detailed afterwards. In the seventeen short forceps cases, the child was extracted dead in two instances, the bodies having exhibited the ordinary signs of death having taken place some days previously. In one of these cases the child was not only dead, but both it and the placenta were very considerably decomposed. In the other two cases, the infants were born 'still.' To both the usual means of resuscitation were applied, but only in one case with success. In the remaining thirteen cases the infants were living when born. In only one case was the issue unfavorable to the mother. I will give an abstract of this case also shortly.

Podalic version was performed six times. In five of these cases the presentations were some portions of the infant's lateral planes. In the sixth case, it was performed to convert a vertex into a footling case, and effect the delivery through a contracted brim, which did not appear possible in any manner, except by means of craniotomy. I have briefly alluded to this case in the last paragraph. In one instance of arm presentation, the late Dr. McCulloch succeeded by means of *external manipulation*, (a practice again lately urged for adoption more generally,) in bringing the head to the brim of the pelvis, thus avoiding the hazard of this operation.

No cases have as yet occurred in the Hospital, requiring the performance of any of the other obstetrical operations, a matter of some congratulation.

A word lastly as to the general employment of chloroform. During the attendance of the late Dr. McCulloch, as well as since I have had charge of the Hospital, chloroform has been but sparingly used; its general use is prohibited in all ordinary labours; but it is employed whenever anything untoward occurs which demands an artificial assistance. It has accordingly been employed in all the cases of version, and in forceps cases, after the blades of the instrument have been introduced and locked. Such are the cases to which its employment has been as yet restricted, because no others have as yet occurred to require it.

I will conclude these statistics, by giving in as short detail as possible, the particulars of some of the principal and most important cases which have occurred in the Hospital since it was opened; and to render these observations as complete as possible, I will place under contribution Dr. McCulloch's communication in a former series of this Journal, previously alluded to, as also that of Dr. Fenwick.

MONTREAL, April 25th, 1860.

(3.)

I will now conclude these observations by reporting as briefly as possible the leading features of some of the more important cases which have occurred in the Hospital since its establishment.

Case I.—*Case of twins. Concealed delivery of one child.* This important case, of which I propose to give merely an abstract, was reported at length by Dr. S. C. Sewell, in whose practice it occurred, in the 2nd Vol. of the old series of the British American Journal, for 1846. It possesses important medico-legal bearings.

On the 16th November 1845, Dr. Sewell was requested by a gentleman, a patient of his, to visit his servant woman, Bridget Cloone, aged 40, who, he stated, was suffering from colic and pain in the back. After arrival at the house, Dr. Sewell was induced to suspect a pregnancy, which was confirmed by vaginal examination. He estimated the gestation to have been about seven or eight months. Upon being charged with it, the woman indignantly denied the impeachment, but admitted, that "if there was anything inside her it was no child." She was immediately removed to the U. L. Hospital, where on examination, one hour afterwards, Dr. S. found the os uteri dilated and the membranes protruding, indicating a concealed labor in progress. He then detected what appeared to be a funis lying coiled in the upper part of the vagina, on pulling which, a free extremity came down but not to the vulvar aperture. Dr. Sewell left, and on returning shortly afterwards, he found Dr. McCulloch in attendance, a child having been just delivered by the feet, and the woman still persisting that there was no child. It is necessary now to notice that the extremity of the free funis presented every appearance of having been cut by a pair of scissors or knife. Information of the circumstances was lodged at the Police Office, and on examining her trunk of clothing at the house of her master, the body of a male child was found underneath the clothes which it contained, these having been carefully smoothed over it.

Without entering further into detail, it will suffice to enumerate the conclusions arrived at by Drs. McCulloch and Sewell after a *post mortem* examination, performed by order of the Coroner:

"1. That the child had breathed freely.

"2nd. The marks of injury on the right breast and neck were inflicted during life.

"3rd. They were in all probability caused by the left hand of an adult grasping the neck of the infant.

" 4th. The protrusion of the tongue and the position of the hands are probably referable to strangulation.

" 5th. Death was not caused by hæmorrhage from the cord ; and

" 6th. The child was between seven and eight months of utero-gestation."

To conclude this case using Dr. Sewell's own words when narrating it; " the rest of the evidence went to shew that she had been a widow for some " years; that she had carefully concealed her pregnancy; that she had taken " powerful emmenagogue medicines prescribed by an irregular practitioner up " to the day of delivery, and that she was seen half an hour before Dr. Sewell's " arrival at the house, to get out of bed, stand by its side, take a pair of scissors " from underneath the pillow and *cut something under the bed clothes.*" There seems to be an incongruity in the latter part of this statement, the italics of which are my own. The cord could not have been divided under the bed clothes, she standing at the time by the bed side, as the shortness of the cord lying in the vagina, evidently indicates it to have been severed close to her own person, furthermore proved by the length of the cord attached to the infant which was found to be nine inches. I cannot explain this apparent discrepancy. The result however of the case was, that the coroner's Jury returned a verdict " of wilful murder " and she was immediately put under arrest. The bill of indictment founded upon this verdict was afterwards thrown out by the Grand Jury. The woman was then indicted for concealing the birth of an illegitimate child, convicted, and sentenced to six months' imprisonment. It is not only unnecessary, but out of place here, to consider the important medico-legal bearings of this case.

Case 2.—*Turning by external manipulation in a trunk presentation.*

Mrs. McM. was admitted on the 24th July 1852, and labour set in on the following day. The membranes had not ruptured, but on vaginal examination a hand was detected presenting at the os uteri. Dr. McCulloch was notified of the circumstance and was in prompt attendance. The right hand was now diagnosed to be the presenting one; and by careful examination, the head of the fœtus was distinctly felt in the right iliac fossa. Instead of turning the child, he determined to attempt to bring the head to the superior strait. By a series of well managed external manipulations he eventually succeeded in displacing it from the right iliac fossa, and lodging it over the brim of the pelvis where it fortunately remained. A rupture of the membranes, with the consequent increase in the force of the uterine contractions, maintained it in its position, and it advanced along with the hand, which it was found impossible to return. The shoulder became pressed under the chin, and the forearm and hand became extended along the face and parietal bone. The child was born alive but died thirty hours afterwards. The parietal bone was found to be distinctly indented by the hand and fingers of the infant at the time of its birth.

I think there can be no doubt that version performed by external manipulation, may be far more frequently resorted to than it is, and that this means of converting an unfavourable presentation into a favourable one has been to a very great extent lost sight of. It is scarcely taught in the schools, and rarely alluded

to even in obstetric works, but it is an operative procedure of great merit, and should be attempted in all cases, if the *accoucheur* is fortunate enough to see his patient before the membranes have ruptured, some portion of the infant's lateral plane presenting, the head not very remotely placed from the centre of the brim of the pelvis, and at the same time no unfavourable complications existing which may demand a prompter termination of the labour than this method affords, whether for the sake of the mother or the child. Under such circumstances, this method should be adopted in preference to submitting the mother and her infant to the hazards necessarily encountered in the performance of podalic version. A case occurred in my own private practice about three months since, which exhibits the feasibility of the operation, and the comparative ease with which, at least, in this instance, it was performed. Mrs. McH———, whom I had twice previously attended in her accouchements, sent for me in her fifth. In the fourth labour the infant presented by the breach, but beyond this all went well in the preceding ones. She was tall, and rather slenderly built, but well proportioned. The labour had been in progress about a couple of hours before I arrived at her house, and on examination, I found the os uteri dilated to about the size of a crown, the membranes protruding to a slight extent, and enclosing, what after some difficulty I made out to be an elbow. The globular form of the fœtal head was distinctly enough traceable in the left iliac region. Bearing in mind the success obtained in the case above reported, I resolved, as the uterine action was not urgent, and intervals of several minutes occurred between the pains, to attempt to bring the head to the superior strait by means of external manipulation. Placing one hand on that portion of the abdomen opposite the child's head, and the other on the part opposite its nates, by gentle pushes and impulses, I felt the head, after about twenty minutes manœuvering, gradually receding from its position; and at an ensuing vaginal examination, I had the satisfaction of feeling the vertex, the elbow having completely disappeared. By this time the pains had become more rapid and efficient, and were fast losing their primitive character. A severe bearing down pain soon came on during which the membranes ruptured, and in the course of about an hour afterwards, the vertex presented at the vulvar aperture in the first position. I am fully of opinion that this procedure may be more frequently resorted to than it is. After the membranes have ruptured, this operation becomes impossible.

Case 3.—*Presentation of the vertex, complicated with prolapsus of the funis, left hand, right foot, and left lateral plane.*

This case occurred since my connection with the Hospital and was reported in the Montreal Medical Chronicle for June 1855, by Mr. (now Dr.) Kollmyer the gentleman who was in attendance upon it; I will therefore give a *résumé* of it.

Bridget B. aged 28, married, strong and healthy, applied for admission into the U. L. H. on the 23rd March 1855. The present is her fourth pregnancy, nothing untoward having occurred in her previous accouchements.

Labour supervened about 10 A. M. on the morning of the 22nd April and having been summoned, Mr. K. found on examination, the os uteri thick, mosit,

cool, and yielding. The pains continued, and the membranes ruptured about 1. P. M. when a very large quantity of liquor amnii escaped.

On examination immediately after this event, a loop of the umbilical cord presented itself externally, but no other presenting part could be reached by the finger. Thinking it a case for version a dose of opium was administered, and I was sent for. On my arrival at the hospital, after introducing a considerable portion of the hand, I detected the occiput presenting above the brim, and inclined towards the mother's right sacro-iliac synchondrosis, but so much so as to impress me with the idea that the labour might terminate spontaneously, if no other obstacle intervened. A little to the left of the occiput, a careful examination still further detected a foot, which was diagnosed to be the right one, and a little higher up a hand, which turned out to be the left one, while stretched across the brim of the pelvis lay the child's left lateral plane, and the umbilical cord still pulsating was prolapsed. By the application of the stethoscope the pulsations of the fœtal heart were heard, and counted at 40 in the minute, thus indicating the extreme danger in which the child was placed. I at first imagined that I had to deal with a case of multiple pregnancy, but on carefully examining, the fact was ascertained that the funis, foot, occiput and hand all appertained to the same child. An attempt was made to return the prolapsed funis, and push up the inferior extremity and body so as to permit a more complete engagement of the occiput, but the powerful uterine action which was going on utterly precluded this manœuvre. By this time the pulsations in the cord had ceased. Having resolved upon the immediate operation of version, chloroform was administered, and when its anæsthetic influence had been secured, I proceeded to its accomplishment, by seizing the right foot, and bringing it into the vagina, where it was secured by a fillet; with some difficulty I next succeeded in seizing the other foot, and the labour then progressed as usual until the delivery of the arms. With very great difficulty the posterior or sacral arm was made to effect its curve over the child's chest, but all attempts to perform the same operation with the anterior or pubic one proved unavailing. This arm was found to have become crossed behind the child's neck and rested on the brim of the pelvis. This difficulty necessitated a recourse to the blunt hook. This instrument was passed upwards along the back of the child, and fastened upon the shoulder, which was brought by careful traction into the cavity of the pelvis, where afterwards manual interference effected the disengagement of the arm. The head was finally extracted after considerable exertion.

The child, which was born dead, was unusually large. It weighed 10 lbs. ½ oz., and measured 26 inches in length. The funis was also unusually long, having been about 28 inches in length. The duration of the labor was about 5½ hours, and the mother recovered well.

Case 4.—*Presentation of the Vertex, complicated by projection of the Promontory of Sacrum; rigidity of the uterine orifice; ineffectual attempts at delivery by the long forceps; finally by version successful.*

Mrs. Eliza Feeny, a married woman, stout and vigorous, aged 37 years, in her second pregnancy, was admitted into the U. L. Hospital, at 10 a. m. of the

26th of July, 1856, her labour having commenced at 3 a. m. that same morning.

Immediately after her admittance a copious discharge of liquor amnii took place. Attendance on this case, having fallen in rotation to Mr. (now Dr.) Cunnyngham, that gentleman was immediately summoned. In a little while after having been seen by him she complained of a good deal of pain in the pubic region, apparently due to distension of the bladder. A catheter was accordingly had recourse to, and a considerable amount of urine was drawn off. The vaginal examination disclosed a vertex presentation, but the pains continuing active and severe without the slightest apparent progress in the labour, Mr. C. judged it proper to send for me. Having been absent from home, Dr. Fraser was called in, who, discovering considerable rigidity of the uterine orifice, prescribed a mixture as well for the purpose of diminishing that obstacle as to lull the violence of the uterine action. The following was the mixture:

Antim et Potassæ Tartrat, gr. vi.
Morphiæ Mur. Solut. (Ph. E.) ℥ i.
Aquæ ℥ vi M,
Capiat ℥ j. quaque quarta parte horæ.

By the time she had taken three doses of the medicine, I arrived at the Hospital, and on examination found the os uteri rigid, dilated to about the size of a shilling-piece, and the vertex presenting. There was furthermore noticed a very considerable projection forwards of the promontory of the Sacrum, which could be readily touched by the finger. Anticipating now considerable difficulty in the management of the case, Dr. Fraser was recalled along with Dr. Holmes and Dr. Workman, the registrar of the hospital, and, after consultation, a full bleeding was deemed expedient, which was immediately performed, and a draught containing a drachm of the solution of the muriate of morphia was exhibited internally. It was now about 5 p. m.; and under the impression that the uterine action would become more regular and effective, and to give full time for the reduction of the rigidity, it was agreed to meet together again the same evening at half-past nine o'clock.

On our return to the hospital at the appointed time, matters were found much in the same condition. There had been no further entrance of the vertex into the cavity of the pelvis, but the rigidity had yielded; the os uteri was considerably dilated, and what was of great consequence, dilatable. A second amniotic pouch now formed, which eventually ruptured, carrying along with the water as it gushed forward a loop of the Funis, which it was found impossible to return, thus additionally complicating the case. Pulsation was for a considerable time felt in it. On consultation it was now deemed advisable to have recourse to the long forceps, which were repeatedly applied by myself, and afterwards by Dr. Holmes, but which as often slipped off the head. It was finally resolved upon to have recourse to version. The patient having been thoroughly chloroformised, with very great exertion and difficulty, arising out of the violence of the uterine action, I succeeded in bringing down one foot, and afterwards the other, but now exhausted, I requested Dr. Fraser to complete the extraction of the fœtus, which, after powerful tractive efforts was at length accomplished. The child

was born dead, but the mother, notwithstanding the severity of her labour, made an excellent recovery, and was discharged from the hospital on the 7th August.

I find in the remarks on this case in the ward-book of the hospital, that the biparietal diameter of the child's head measured 4½ inches, and that the antero-posterior diameter of the brim of the pelvis, ascertained by digital measurement, was only three inches. The following additional peculiarities in regard to the child are on record: Its length was 24 inches; its weight 10lb. 8 oz.; and the length of the funis umbilicalis was 45 inches. It is worthy of remark that her accouchement, two years previously, was only of two hours duration, that child was then living, nothing unfavourable having occurred.

Case 6.—*Vertex presentation in the left Transverse position, complicated with generally contracted diameters of the brim of the pelvis, and an exostosis of the Right Sacro-iliac Synchondrosis. Forceps.*

M. N. G., an unmarried primipara, aged 30 years, of short stature, stout and active was admitted into the U. L. Hospital on the 22nd January, 1855, and labour came on the 18th March at 6 a.m. As soon as possible after this was known the gentleman to whose charge this case fell was sent for. This party confident in his own powers, and too proud to consult the matron with whom he had had an altercation some time previously, was resolved to manage it exclusively himself, which the matron, grossly neglecting her duty, permitted him to do. In fact, he stated that he had enjoyed an extensive midwifery practice in Upper Canada, in the place where he resided, and was therefore competent to any emergencies which might arise. The unfortunate result of this case proclaims how shamefully he violated his obvious duties. He arrived at the hospital at about 7 a.m.

From this time till about 11 a.m., the pains were light with considerable intervals between them, but they now began to be more active and efficient. An examination was made, which satisfied him that the infant was presenting by the vertex. The os uteri became nearly fully dilated about 3 p.m., when the pains changed to the ordinary bearing down ones. Matters continued in this state with the exception of increasing intensity in the pains, and but little engagement of the head in the cavity of the pelvis until 6 o'clock the next morning, when he at last deemed it his duty to send for me. I arrived at the hospital at 7 a.m., and on careful examination discovered a transverse presentation of the vertex, a very large caput succedaneum, and marked heat and tenderness throughout the whole length of the vagina, especially about the os uteri. The latter, however, was well dilated, and the head had become very considerably engaged within the brim of the pelvis, but closely impacted. The apparent condition of the patient was by no means promising. Her countenance was expressive of anxiety and very much flushed, the pulse was quick and hard, the pains powerfully bearing down, with very short intervals. There was no other alternative but the immediate application of the forceps. The head was low enough down to permit the use of the short pair, which were therefore used. With considerable difficulty I succeeded in applying them, antero-posteriorly on the child's head, and after considerable tractive force, the head was withdrawn.

The child was still born, and small, weighing only 6 lbs. 8 oz.; and although attempts at resuscitation were made, and continued perseveringly for nearly an hour, they proved fruitless, the heart's action ceasing in the course of three quarters of an hour.

The mother progressed favourably until the fourth day, when symptoms of pelvic cellulitis began to manifest themselves. In consequence of this she was removed to the Montreal General Hospital. An extensive abscess formed within the cavity of the pelvis on the left side, which was opened through the vaginal wall, permitting the escape of an immense amount of intensely fœtid pus. She died, however, on the 23rd of April. The pelvis forms a specimen in the pathological museum of the Faculty of Medicine of McGill College. It presents some slight obliquity; the internal plane of the Ischium on the left side shews evident traces of caries. There is a considerable exostosis on the left Sacro-Iliac Synchondrosis, and a thorough anchylosis of this articulation on both sides. The antero-posterior or conjugate diameter of the brim measures $3\frac{3}{10}$ inches and the transverse $4\frac{1}{10}$ inches.

There can be no doubt that this unfortunate creature would have survived her accouchement had a more timely assistance been afforded.

Cases 7—14.—*Vertex presentations complicated with rigidity of the Os Uteri.*

These selected cases are of no further moment than as tending to establish the value of a practice suggested by myself in the December number, 1850, of the old series of the *British American Journal*, in which there appeared a paper confirmatory of the utility of Tartar Emetic, exhibited in such cases in one grain doses, given every half hour. This practice was at the time supported by the effects witnessed in four cases of parturition, complicated with excessive rigidity of some part of the uterine orifice, and these selected. I deem it unnecessary to enter into the peculiarities of these cases, as their phenomena were nearly all alike. Rigidity of the Os Uteri presents nearly the same phenomena in all cases; except that the rigidity may be partial or complete, involving one portion or another of the uterine orifice. The above, however, are cases in which the labour was prolonged by rigidity of the whole external orifice, which acted as a tight band upon the vertex, prohibiting its advance. All these cases were managed in accordance with the principles contained in the paper to which I have adverted, viz: the exhibition of grain doses of the Tartar emetic, exhibited every half hour. In no instance was it necessary to repeat the Tartar emetic more than twice; one dose most commonly sufficing. It is my opinion that the value of exhibiting the remedy in the way indicated over bleeding, Belladonna, or the same medicine given every four hours in smaller doses as commonly advised, is unquestionable, and I adduce these cases as additional ones confirmatory of the fact.

Case 13.—*Placenta prævia. Rapid expulsion of the whole uterine contents.*

Mrs. Catharine T., aged 37, applied to me to be admitted into the U. L. Hospital, about the beginning of December, 1846. In consequence of puerperal fever having declared itself in the Institution at this period, admittance was denied, but, at the same time, the promise of assistance was extended to her in her own house, when the appointed time arrived. From the

answers returned to my questions at this time, I expected that the case would turn out one of Placenta Prævia, a suspicion which was afterwards confirmed. Symptoms of labour set in on the 17th of the same month, and her husband called at my house to notify me of the fact at 6 a.m. of that day. I immediately placed her in the charge of Mr. (now Dr. D. T. Robertson), a most intelligent pupil of my own,who immediately accompanied the husband. I should now remark that, within a few minutes after having been notified of the case, I was summoned to attend upon a lady who had engaged my services some months previously, and as the house in which Mrs. T. lived was but little out of my road to that of my own patient, I ventured to pay her a short visit, to assure myself of the state of affairs, and to assist Mr. R., if necessary, to the fullest extent my own limited time permitted. Mrs. T. was a short stout woman, in her sixth gestation, her previous ones having been all ordinary. On examining her, after entering the house, I found the os uteri dilated to nearly the size of half a crown, soft and dilatable, the pains active, but not very efficient, the placental mass completely blocking up the orifice. There was, of course, the usual hæmorrhage, but it was by no means profuse. In fact her pulse was scarcely affected by what she had lost, and was losing. The case admitted of some delay, and as my own time was very limited, not permitting me the application of the stethoscope, to ascertain the condition of the child, or the extent and nature of the placental engagement, I advised Mr. R. to send for Dr. Fenwick, then Registrar of the Hospital, and in the mean time to apply the tampon to moderate the hæmorrhage. That gentleman was accordingly sent for, and as he has reported the case in the *Medical Chronicle* for 1847, I quote the conclusion as detailed by him:

"I saw the woman shortly afterwards. On examination I found the placenta almost wholly detached, and bulging out though the os, which was dilated. The pains were lingering, and by no means severe. With each pain there was a slight gush of blood, but the quantity lost was so trifling as not to have affected the circulating system. I explained to her husband that manual interference was necessary, and while preparing myself for the immediate performance of version the patient was seized with a prolonged and vigorous pain, and as I passed my hand beneath the bed-clothes, the placenta was shot out with considerable force over my knuckles, and the child immediately followed. The uterus contracted firmly, and all was well as regards the mother. The child, however, was dead."

Nothing requires to be said about the other two cases of Placenta Prœvia, both of which were "partial." The ordinary management was adopted, and in both cases the infants born were living.

The foregoing is a sketch of some of the more important cases which have occurred in the Hospital, from its establishment to the present period. I have given them as an appendix to the two papers previously published.

Montreal, 1st July, 1860.