M. D. Theirs.

"A critical analysis of 1000 midwifery cases"

by

Michael Davar M.B. C.M. 1876
24 Lamosta Place
Edinburgh.

April 16th 1890.
Introduction

Proportion of Live - Legitimate and Illegitimate

Chance of Pregnancy

Presentations

Miscarriages

Proportion of Stale

Face Presentations

Forehead and Pelvic Presentations

Shoulder Presentations

Foot Presentations and Prolapse Anus

Irri Pregnancy

Instruments Cases

Vernice

Spina Bifida

Total Mortality

Maternal

Puerperal Fever

Antiseptic

Scarlatina - Smallpox - Insanity

Catalepsia

Remorse on Jaded Is - Use of Syph - Cure of Perineum - Expulsion of Placenta

Remorse on Post-Partum Anemia

Pleuronii Dolor - and Confinement of Two Infants
In casting about for a subject for the M. D. there after my graduation in 1876, it was some what difficult for me, as I have no doubt it is for others, to decide what it should be. As I have always had, since commencing practice, a natural taste for obstetrics, I prepared myself, as well as I was able to take accurate notes of my midwifery cases, thinking that careful observation would be good practice for myself, and that an analysis of these notes might form an acceptable thesis. In drawing up this analysis, I have excluded the first 150 cases which I attended, as I was anxious to perfect myself, as far as possible, in the diagnosis of positions, and to have a little skill in the management of difficult labors, before I attempted to make a collection for recording.

The cases, which I propose to bring under notice, are or rather should have been the next thousand consecutive labors occurring in my practice in St. Louis, but unfortunately for the conscientious, I left in my career to Edinburgh in December 1884, the records of over 150 cases. That misfortune left me with the notes of only 850 cases. I was therefore obliged to wait till I had accumulated sufficient notes in this city to make up the requisite number.
The following record therefore is made up of 850 cases occurring in Kincardine, a small town in Forfarshire, and the surrounding district, partly agricultural and partly pastoral, and 150 cases occurring in Edinburgh.

Proportion of sexes.

In the thousand cases there were.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>507</td>
</tr>
<tr>
<td>Female</td>
<td>468</td>
</tr>
<tr>
<td>Prim male</td>
<td>5</td>
</tr>
<tr>
<td>&quot; female</td>
<td>8</td>
</tr>
<tr>
<td>Prim male female</td>
<td>6</td>
</tr>
</tbody>
</table>

Abortions — 9 — 1000.

Thus giving a proportion in single pregnancies of about

100 males to 92 females.

of single and twin births combined.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>105</td>
</tr>
<tr>
<td>Female</td>
<td>97</td>
</tr>
</tbody>
</table>

This proportion is not far from the recognised normal proportion of

105 males to 100 females.

Then it is stated that in illegitimate births, this proportion is reversed.

In the 1000 cases, thus were.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Legitimate births</td>
<td>923</td>
</tr>
<tr>
<td>Illegitimate &quot;</td>
<td>77</td>
</tr>
</tbody>
</table>
From the 923 legitimate births deduct 7 abortions, which leave 916 births yielding 914 children + 18 half-turns = 932 children. The relative proportion of sexes in these 932 legitimate children is—

Female — 367. Female — 199.  
This will give a proportion of something like—

105 males to 92 females in country practices and 92 males to 108 females in town practices.  

a condition of things almost the very reverse, thus showing that while there are more males than females born in the country, the very reverse holds in town.

Then coming to the assertion that in illegitimate births there are more females than males, I find that in 17 illegitimate births yielding 19 children, there are 41 males and 38 females, a fact which does not bear out the statement in my practice at least.

Again, the statement, that the chances of a young wife having a boy in her first pregnancy are at the maximum, while those of a mother near the close of her reproductive life are at the minimum, is borne out by my statistics as regards this country, but only as regards the matrons in town life. In estimating these figures I have taken all multiparae after the fourth labour. In the Country, the number of
principalae having sons is 114, while 14 had daughters, and the number of multiformae (after fourth-child) having sons is 138, while 12 had daughters outnumbered 157. Now in the town, 14 principalae had sons, and 31 had daughters, a marked contrast to the Country principalae. The multiformae, on the other hand, keep up the character from them, maximal to 14 had sons and 26 had daughters.

Presentations.

In tabulating the following figures referring to presentations, I may say the record is sufficiently correct. Of the 1000 cases, there are 16 which either fall under the head of miscarriages under 4 months, or in which I have no note, leaving 984 made up of:

- Cranial presentations 959.
  - Breech ... 23.
  - Superior Efeminity ... 1.
  - Inferior ... 1.

Giving the following percentages:

<table>
<thead>
<tr>
<th>Source</th>
<th>Breech</th>
<th>Sup. Efem.</th>
<th>Infr.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shwar</td>
<td>97.46</td>
<td>2.33</td>
<td>.1</td>
<td>.1</td>
</tr>
<tr>
<td>Edin. Hospital</td>
<td>90.7</td>
<td>.69</td>
<td>.16</td>
<td>.32</td>
</tr>
<tr>
<td>Grefory</td>
<td>93.3</td>
<td>2.02</td>
<td>.57</td>
<td>1.01</td>
</tr>
</tbody>
</table>
These percentages of the Edinburgh Hospital and Mr Gregory, as data from "Zeistman" are faulty, maximum as there is a large number of the cases, which are not accounted for, thus making a slight discrepancy between theirs and mine.

Miscarriages,

Of these, there were 25, equal to a percentage of 25.

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Cranial 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breech</td>
<td>1</td>
</tr>
<tr>
<td>Foot</td>
<td>1</td>
</tr>
<tr>
<td>In total</td>
<td>14 25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Periods</th>
<th>6th month 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 &quot;</td>
<td>3</td>
</tr>
<tr>
<td>4 &quot;</td>
<td>6</td>
</tr>
<tr>
<td>3 &quot;</td>
<td>6</td>
</tr>
<tr>
<td>2 &quot;</td>
<td>2 25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Debris at 1st month</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 1</td>
</tr>
</tbody>
</table>

| Single at this period | 23 25 |

In the County 13 multifurca and 3 primigravid miscarried = 1.53 percent and .35 percent.
In the known 7 multifurcated and 2 primiparous cases, miscarried = 4.66 per cent and 1.33 per cent respectively, showing the very much greater tendency for both multifurcated and primiparous to miscarry in late life.

Postmature.

In tabulating the various postmatures, it is not without some difference that I do so, knowing some of the difficulties which are met with in practice. But as far as I was able to arrive at a correct diagnosis of the postmature, I can honestly say that the following statement is as likely wrongly correct as could be made.

Often there were cases in which it was impossible to tell what the original postmature was, owing to various causes, such as being too late in arrival at the bedside, and this more especially in the Comal where one had to travel sometimes as much as 18 miles to a confinement, and a hypercaustic jumps in some women not permitting a sufficient examination in the early stage.

In the few cases there was the following position:

1st... Left occiput - anterior - 699.

2nd... Right occiput - posterior - 120.

3rd... Right occiput - anterior - 60.

4th... Left occiput - posterior - 19 898.
Sex presentations 5.

Forehead 1.

Breech 23.

Left Obstetrically 1.

Infected 1.

Pattern unrecorded owing to various causes.

Before going further it may be as well to state what I mean by my definitions of the bimanual positions, as these definitions are not in accordance with what I was taught when a student.

By left-obstetric autotomy, I mean that the occiput of the child is lying towards the left iliac-femoral curve of the mother’s pelvis - the left side as regards the mother - the occiput autotomy as regards the child in relation to the mother, and so with the other three positions. They are named 1st, 2nd, 3rd and 4th as regards their frequency.

In making an examination, it is very much easier to diagnose the position by this method, than by the old style, where you had to think of the right or left oblique diameter in reference to the mother, and then determine the occiput or forehead as regards the child.
The following table gives the following percentages:

<table>
<thead>
<tr>
<th></th>
<th>1st LOA</th>
<th>2nd ROP</th>
<th>3rd ROA</th>
<th>4th LOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savar</td>
<td>75.24</td>
<td>12.91</td>
<td>6.44</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simpson</td>
<td>76.45</td>
<td>22.68</td>
<td>0.29</td>
<td>0.58</td>
</tr>
<tr>
<td>Murphy</td>
<td>63.23</td>
<td>16.18</td>
<td>16.18</td>
<td>4.42</td>
</tr>
<tr>
<td>Drake</td>
<td>86.36</td>
<td>1.04</td>
<td>9.79</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Then mapping them out into Column and time cases as here:

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>Face</th>
<th>Breech</th>
<th>Breech Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savar</td>
<td>592</td>
<td>104</td>
<td>50</td>
<td>15</td>
<td>1</td>
<td>20</td>
<td>1 3 1 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drake</td>
<td>107</td>
<td>16</td>
<td>10</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

With the following percentages:

<table>
<thead>
<tr>
<th></th>
<th>1st LOA</th>
<th>2nd ROP</th>
<th>3rd ROA</th>
<th>4th LOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savar</td>
<td>75.28</td>
<td>13.24</td>
<td>6.37</td>
<td>1.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drake</td>
<td>74.3</td>
<td>11.11</td>
<td>6.94</td>
<td>2.77</td>
</tr>
</tbody>
</table>

Breech Face Inclined Arm Port

|      | 2.47 | .33 | .1   | .1 |

The following table shows the terminations of the 2nd or ROP, and the 4th or LOP position in Column and time, with the complications and results.
<table>
<thead>
<tr>
<th>Country</th>
<th>Cases</th>
<th>2nd Po. or ROP into 3rd Po. or LOA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiparae</td>
<td>48 cases</td>
<td>14 fresh, 34 unaided, 3 stillborn, 1 post-misc.</td>
</tr>
<tr>
<td>Secundae</td>
<td>6 do</td>
<td>3 do, 3 do, 1 do</td>
</tr>
<tr>
<td>Primiparae</td>
<td>31 do</td>
<td>17 do, 14 do, 1 do</td>
</tr>
<tr>
<td>Total</td>
<td>85 do</td>
<td>34 do, 51 do, 5 do</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Po. or ROP, due face anteriorly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiparae</td>
</tr>
<tr>
<td>Secundae</td>
</tr>
<tr>
<td>Primiparae</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Po. or ROP delivered at term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiparae</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Po. or LOP into 1st Po. or LOA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiparae</td>
</tr>
<tr>
<td>Primiparae</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Po. or LOP, due face anteriorly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiparae</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Po. or LOP delivered at term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiparae</td>
</tr>
<tr>
<td>1st PO.</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>2 cases</td>
</tr>
<tr>
<td>4 sheep</td>
</tr>
<tr>
<td>2 maid</td>
</tr>
<tr>
<td>14 do</td>
</tr>
<tr>
<td>12 do</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd PO. hit face anteriorly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 cases</td>
</tr>
<tr>
<td>2 sheep</td>
</tr>
<tr>
<td>1 do</td>
</tr>
<tr>
<td>2 do</td>
</tr>
<tr>
<td>3 do</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd PO.</th>
<th>1st PO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 case</td>
<td>1 case</td>
</tr>
<tr>
<td>1 sheep</td>
<td>1 sheep</td>
</tr>
<tr>
<td>1 maid</td>
<td>1 maid</td>
</tr>
<tr>
<td>2 do</td>
<td>2 do</td>
</tr>
<tr>
<td>3 do</td>
<td>3 do</td>
</tr>
<tr>
<td>1 do</td>
<td>1 do</td>
</tr>
<tr>
<td>2 do</td>
<td>2 do</td>
</tr>
</tbody>
</table>

The percentage of 2nd position midship, symptom total is 87.5.
- 12 do - leading face forward - 87.5.
- 3 do - 4th position midship, symptom total - 94.77.

This is thus evidently a far greater proportion of cases leading face forward than is generally believed. The case presented in these pages are bona fide cases, for in not one of them was any attempt made to
ail spontaneous rotation.

Dr. Inns and Barry aver, that spontaneous rotation in ROP cases occurs in 96 per cent, leaving 4 per cent to end face downward, while Dr. West found that out of 481 cases, 15 ended face downward = 3.11 per cent.

In corroboration of Schmitt's observation that the face of the born head sometimes turns itself first to one side, and then to the other before the shoulders are born, I may say that I have noticed this hesitation on the part of the advancing child in at least 3 cases - all undoubted first position - two of which ultimately turned face up - and one face down, evidently as if the shoulders first tried one diameter, and then another for the easiest passage.

Face Presentation.

Reguency - 5 altogether - 4 in Comaty and 1 in town.

The proportion therefore being:

1 in 100. Comaty 1 in 212. Town 1 in 150.

The published statistics vary from 1 in 175 to 1 in 324.

The average of 7 tables taken at random being 1 in 244.

In the 5 cases there were 3 multiparas and 2 decadens, the births occurring at wide intervals, with the exception of 2, which were consecutive. The first was my 64th case,
The second my 273°, the third my 294°, the fourth my 358° and the fifth my 581°.

The first, a multipara, was delivered of a son, posterior, right mesial posterior, i.e., child lying towards the right sacroiliac synchondrosis, and forehead to left iliac-pubic eminence — by forceps, department uterinum failing to take place — child alive — mother made a quick recovery.

The second, a secunda, was delivered of a son, posterior, left mesial anterior, i.e., child lying to the left iliopectoinal eminence — by forceps — child alive — mother did well.

The third, a secunda, the Contrasted Encelagous, and whose first birth 15 months previously was a 3° or ROA postier, delivered by forceps, stillborn.

was delivered of a son, posterior, right mesial posterior — by forceps — child again still born — mother made a quick recovery. This woman has not again become pregnant up to the present date.

The fourth, a multipara, was Enfaced of a daughter, posterior, left mesial anterior — by forceps. Child living, and mother made a good recovery.

The fifth, a multipara, was delivered of a son, posterior, right mesial anterior, by forceps. Child living, and mother well. This woman, while being attended by another practitoner succeeded in her next confinement, which I am informed was also a difficult forceps case.
These cases for simplicity may be tabulated thus:


There were three 2 men-patiner cases, which failed to return into their natural terminations - the R.M.A., but which were quite easily delivered by Venus under the influence of an anesthetic. I do not know whether this procedure is the orthodox way or not, but my results prove that this is better than previous, as one child was born alive, while the other, which was stillborn, was the child of a woman with a contracted conjugate, and whose first child was a fairly normal position, was also still born. It is hardly possible, however, for a practitioner with a very limited experience of few cases to assume sufficient skill to enable him to decide as to the proper way and time to manipulate a bad-case case into some other and more favorable position. One must do one's best in each individual case for mother and child, and this action applies more especially to cases occurring in the country, miles away from any professional assistance.
In other brachial anterior cases, which were delivered by forceps, might, without any difficulty, have terminated in a natural way, if sufficient time had been given, but this, I considered, might have been cruel to the mother, and dangerous to the child. With my present experiences, I would, as soon as I made out the position in a face case, other conditions being favorable, allow five minutes more and deliver with forceps, while in brachial posterior position, if after a fair time of waiting with manipulative assistance there were no signs of rotation, I would proceed to perform version. The adoption of these measures in the latter class of cases may avoid the more extreme method of perforation, and thus assure the probable birth of a living child.

The foetal mortality in my face cases is therefore 1 in 5 = 20 per cent — a mortality which should not have occurred at all, for I am confident that if I had not waited too long for a spontaneous rotation in the case, I would have been able to have delivered a living child at an earlier stage. I was therefore most anxious that she should be free from pregnancy again, in order to test my experience at the test, but as I have said already, that never happened.

The maternal mortality was "nil".
The other case falls naturally under this head — a
forehead presentation. Though at the time I diagnosed
the case as one of forehead presentation, and put it
down as such in my notes, I have always had a little
doubt in my mind as to the real nature of the pres-
entation. Was it an ordinary 2nd orROP position leading
towards, in which the flexion movement had not
taken place to the usual extent, or was it a face pres-
entation in which the movement of extension had fallen
short of the usual? As it was, the left frontotubal
was the most prominent part, was the first point seen
at the valve and had a caput succedaneum, and suc-
cessively the forehead, nose, and chin except under the
pubic arch, the vertex remaining well within the
perineum till after the discharge of the child. It
was a fine narrow pelvis, and permitted such a mode
of birth to take place quite easily. I have therefore
classed it as a forehead presentation, the only one oc-
turring in the whole series of cases. Both mother and
child did well.

Pelvic Presentations:

Frequency — 23 in 1860 = 1 in 80 = 1.25
Published statistics show a proportion of from 1 in 45
to 1 in 78 (Pery).
In single pregnancies the proportion was 1 in 69.
In twin " " " 11 in 17.
In the latter there were 7 cases in which one of the twins presented breech, and 4 cases in which both children presented breech.
Of the single pregnancies, 14 in number with breach presentation:
7 were multiparae.
2 " , decuriae.
3 " , primiparae.
Of the twin pregnancies 9 in number with 11 breach presentation:
6 were multiparae.
2 " , decuriae.
1 " , primiparae.
Of the cases in single pregnancies:
12 were males. 7 children of multiparae, 2 of decuriae, 3 of primiparae.
2 were females. Children of multiparae.
Of the cases in twin pregnancies:
5 were males. 2 of multiparae, 2 of decuriae, 1 of primiparae.
10 " , females. 5 of multiparae, 1 of decuriae.
Of the 23 cases all were dorsum anterior position, 20 occupying the left oblique diameter, and 3 the right oblique diameter.
Maternal mortality 1 in 23 = 4.3 per cent.
Fetal " " 3 in 23 = 13 per cent.
"Charcot" finds the maternal mortality at 13 per cent, and the fetal at 33 per cent, while "Rigby" finds the maternal mortality at 26.3 per cent.

While my maternal mortality is very high - 41.3 per cent, my fetal mortality of 13 per cent compares favorably with the statistics which I have been able to gather.

**Shoulder Presentation.**

In the series of cases there has been only one shoulder presentation, a number which does not at all correspond with the published statistics such as "Princin" 1 in 125, "Amerika" 1 in 70, "Ballanin" 1 in 24.29.

and that in this case the discrepancy is due to the fact that this is the only shoulder case in my whole practice, over 1300 cases, a very small percentage indeed. The case was one of Edward Wilson's with head to the left, the right shoulder presenting. He was born a metepane, was easily delivered by Version under the influence of an anaesthete. Both mother and child did well. The previous labors were normal. This small percentage of cross presentations, I cannot account for in any way, since I have practiced midwifery amongst the natives in West and Medealder, tribes in Salaribia, Europeans in East Thania, seacoast and the farm servant class in Hivriinian, and on...
Preface.

This like the shoulder presentation is the only one in the 1000, and like it, the only one in my practice. By a curious coincidence, it was my first case in Edinburgh, early in 1883. The mother was a primipara, and the child a female. Perhaps one might call it a breech birth, but as, on my arrival, the left foot was the first part reached, I call it a footling. There was no special difficulty with the head or arms, the head being extracted by traction, with the fingers of the left hand in the child's mouth.

Postscript.

Frequency of in 1000 = 1166 = .6 percent.

"Chopickett" and others for the frequency as 1162.22.

Presentation of the cord occurred in 4 multiparas and in 2 primiparas. Thus, leaving out the statement, that the

then appears more frequently in multiparas than primiparas.

The whole of the 6 cases occurred in vertex presentations, 3 being in the 1st position and 3 in the 2nd position.
A more detailed account of the cases follows:

Of the 1st cases 2 (children of a multiparous primipar) were born living, and 2 (also children of a multiparous primipar) were stillborn.

Of the 2nd cases 1 (child of a multiparous primipar) was born living, and 1 (also child of a multiparous primipar) was stillborn. The mother dying on the second day, a short report of these cases will appear further on.

The cases may be tabulated thus:

<table>
<thead>
<tr>
<th>Case</th>
<th>Mother</th>
<th>Father</th>
<th>Child</th>
<th>Pregnancy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>198</td>
<td>M 37</td>
<td>F 28</td>
<td>D 1</td>
<td>1st P</td>
<td>living</td>
</tr>
<tr>
<td>211</td>
<td>M 29</td>
<td>F 30</td>
<td>D 2</td>
<td>2nd P</td>
<td>still</td>
</tr>
<tr>
<td>334</td>
<td>M 32</td>
<td>F 35</td>
<td>D 1</td>
<td>1st P</td>
<td>living</td>
</tr>
<tr>
<td>396</td>
<td>M 33</td>
<td>F 34</td>
<td>D 2</td>
<td>2nd P</td>
<td>living</td>
</tr>
<tr>
<td>428</td>
<td>M 34</td>
<td>F 35</td>
<td>D 1</td>
<td>1st P</td>
<td>living</td>
</tr>
<tr>
<td>560</td>
<td>M 36</td>
<td>F 37</td>
<td>D 2</td>
<td>2nd P</td>
<td>still</td>
</tr>
</tbody>
</table>

My personal mortality in these cases is therefore 50 percent as compared with:

- "Gengenmann" — 63.3% c.
- "Acker" — 43% c.
- "Janzon" — 55% c.
- "Cheretall" — 53% c.

In the treatment of cord presentation, each case must be considered on its own merits. The only rule that is common to all is to decide quickly what to do, and
to carry your decision into practice at once. Of the 5 cases occurring in Kirkcudbright, my 3 successful cases were in the town, where I reached them in a very short time after being called, while my 2 unsuccessful cases were in the country (one 3 miles distant, the other 12 miles), and I need hardly add, that it was in the latter case that the mother succumbed also. My Edinburgh case, which was unsuccessful as far as the child was concerned, could have ended in no other way, as on my arrival the cord was painless, and the cord (a primipara) was only very partially dilated.

From Premonitory.

Of this class of cases there were 19 = 1.9 per cent.

= \[
\frac{1}{100}
\]

"Norman" = 1 in 90.

"Medical" states that in "India" 1 in 53, in "Palems" 1 in 114.

1\[\frac{1}{2}\] from one of children of multipleurs.

2\[\frac{1}{3}\] primiparas.

"Vancouver" states that one third of twin labors are premature. My cases do not bear out this state. truth, but rather the very reverse.

From pregnancies in which labor was at full term
\[ \frac{16}{84.2} = \text{per cent} \]

Mrs. Lee at \( \frac{5}{6} \) month - 1.

2. Miss Jones - one born alive at full time or very nearly, the other in which development was arrested at or about the 14th month, with mummified - 3rd trimester. 1.

3. Miss Jones - one born alive at about full time, the other in which development was arrested at or about the 6th month, being in a soft developed condition - a mutiny: 1.

There are thus only 3 cases leading to premature labor.

\[ \frac{3}{15.7} = \text{per cent} \]

There were no triplets.

One woman only had trinio three times and is con- ceeving within 4 years and 3 months. Nine had trinio twice.

My number of 8.5 per cent fully corroborates Metcalf's statement that the number of pluralium multiparae is about 8 per cent greater than that of singleium primiparae.

Kleinmacher states that in 61 known pregnancies, the youngest mother was 19 years old, while the oldest was 41 years of age. My youngest mother was 24, while her oldest was 40.

As regards premonition, I find that my cases end...
very closely with published statistics —

<table>
<thead>
<tr>
<th></th>
<th>Vater</th>
<th>Breck</th>
<th>Cino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helmette</td>
<td>69.58</td>
<td>25.25</td>
<td>5.17</td>
</tr>
<tr>
<td>Dewar</td>
<td>65.7</td>
<td>34.2</td>
<td>17</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>Vater &amp; Breck</th>
<th>Helmette</th>
<th>Dewar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leopold</td>
<td>41.65</td>
<td>49.29</td>
<td>47.36</td>
</tr>
<tr>
<td>Fisher</td>
<td>25.63</td>
<td>34.49</td>
<td>31.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15.78</td>
</tr>
</tbody>
</table>

**Use of Instruments**

In the 1000 cases, foetuses were used 126 times, being equal to 12.6 per cent. I know that this number is small when compared with the practice of some men, but it was quite as often as there was any need for. Certainly I was often inclined to use instruments in these last cases, rather than wait or a little, but one has to be very careful in coming to this, that he does not credit an obstetrician does not suffer from being too ready with the "iron", as they are popularly termed. Once a man gets the reputation of being too ready with his "iron" people become very careful of sending for him. But these people, as a rule, one of opinion. Their labour is as should always be a natural process, and birth with horror on the midwives and the accompanying chloroform. A prepa
labour is a nine days' talk amongst the nurses of a
glen district, and sometimes a great deal longer. This
antipathy is perhaps dying out somewhat, owing to
the increasing facilities for communication with town people,
but I know that 13 years ago, when I commenced practice
in the country, the aversion to instruments was very strong.
My predecessor in Kinlochleven, who was in practice for over
40 years, and who attended over 500 confinement so that
time, had only one pair of short forceps, and not very clean
to look, which he used very seldom (perhaps all the better
for his patients). He has terminated some of his cases, has
always been a puzzle to me, for in addition to the fact of
there being short single curved forceps, he as often went to
the country without them as with them. He has told me that
it was no uncommon thing for him to work on a woman
in labour for 2 and 3 days, but he could give me no
definite information as to his venturi. Which I rather
believe was very much higher than what we are accustomed
to at the present day. I find that in town I am asked
to use the instruments very much oftener than I think fit
and proper, and this is probably due to the fact that
the town woman has very much less patience and fortitude.
Hence the country woman, who, born and brought up very
far from medical assistance, learns through succeeding
generations to cultivate patience to an extraordinary degree.
The average country woman could teach her town sister many a lesson in that respect.

I may here submit my table of instrumenat doses, shewn in the table below, the causes, which led to operative interference will be seen at a glance.

**Place of application of screw, and the causes for application in Country and Town.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>pr. m.</td>
<td>pr. m.</td>
<td>pr. m.</td>
<td>pr. m.</td>
<td>pr. m.</td>
<td>pr. m.</td>
</tr>
<tr>
<td>6 36 26</td>
<td>8 8 9 9</td>
<td>1 2 19 32 31</td>
<td>15 0</td>
<td>1 4 14 15 8 0</td>
<td>2 6 5 7 8 9 2 2 35 46 46 23 0</td>
</tr>
</tbody>
</table>

It will thus be seen that there were 126 cases altogether delivered by screw, and of these the instruments were applied 116 times below the brim, and 10 times at or above the brim. In comparing Country and Town practice, I find that 88 Country cases were delivered by screws, and 38 Town cases, being equal to 10.35 per cent. and 25.33 per cent. respectively. That this great disparity between Country and Town practice is not altogether due to greater skill, the result of greater experience, but rather to the causes, is shown by referring to the following table and accompanying remarks.
Number of times in each 100 cases that forceps were applied:

<table>
<thead>
<tr>
<th>1st Hundred</th>
<th>6 times</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
<td>19 &quot;</td>
</tr>
<tr>
<td>3rd</td>
<td>10 &quot;</td>
</tr>
<tr>
<td>4th</td>
<td>12 &quot;</td>
</tr>
<tr>
<td>5th</td>
<td>12 &quot;</td>
</tr>
<tr>
<td>6th</td>
<td>5 &quot;</td>
</tr>
<tr>
<td>7th</td>
<td>4 &quot;</td>
</tr>
<tr>
<td>8th</td>
<td>13 &quot;</td>
</tr>
<tr>
<td>9th</td>
<td>19 &quot;</td>
</tr>
<tr>
<td>10th</td>
<td>26 &quot;</td>
</tr>
</tbody>
</table>

Here we have a very small number of times in the 6th and 7th of the series, where we have a naturally limited with greater experience a much larger number. In the 2nd hundred there is exactly the same number as in the 9th hundred. As I have said already, I only delivered with forceps in the whole series of cases than that was agreed. I must therefore look for other causes, and there are found in the 2nd last column of the previous table. In the whole series forceps were applied 81 times for inertia coupled with a 2nd, 3rd, or 4th positive, and of those 81 times, 57 belonged to the family and 30 to the town = 60 and 20 percent respectively. Inertia, or a condition which may be described as the Dutch vernacular as a "rant of fucking" in the Manchester
in my series of cases at least, of the large proportion of cases having been terminated by instrumental aid—the example of the deteriorating and curtailing influence which town life has on child-bearing women. I have not the slightest doubt that I could, if I had liked, have raised up my percentage of instrumental cases in town to 30 or 40 per cent, but I could hardly have acted in a similar way in the County, without damaging my reputation. Another point to be noticed here is the comparatively large number of cases of contracted pelvis in the County as compared with the town. There were 18 cases (16 at from and 2 at set) in the County = 2.11 per cent, and not one in town. This is all the more singular, since one would have expected the very opposite, hard work, etc., leading to bad hygiene conditions, such as we have in factories and workshops in town, being one of the greatest factors in producing pelvic anomalies.

As regards the relative proportions of primiparae and multiparae requiring instrumental assistance, I find that in the County there were 36 cases, the former due to inertia and a stiff, projecting uterus. The latter chiefly due to inertia and a contracted pelvis. While in town there was a much greater proportion of primiparae requiring aid, viz. = 24. As compared with 14 multiparae, the causes being in the former, inertia and a stiff, projecting uterus.
in my cases of cases at least, of the large proportion
of cases having been terminated by instrumental aid—
the example of the dilating and evacuating influence
which long life has on child-bearing women. I have not
the slightest doubt that I could, if I had liked, have
reduced my percentage of instrumental cases to about
30 or 40 per cent, but I could hardly have acted
in a similar way in the Country, without damaging my
reputation. Another point to be noted here is the comparatively
large number of cases of contracted pelvis in the
Country as compared with the town. There were 18 cases
(16 at borne and 2 at vert) in the Country = 2.14 per cent,
and not one in town. This is all the more singular, since
one would have expected the very opposite, hard and nuy
bad hygiene conditions, such as we have in factories and
workshops in towns being one of the greatest factor in producing
pelvic anomalies.

As regards the relative proportions of primiparae and
multiparae requiring instrumental assistance, I find that
in the Country there were 36 cases; the former due to
inertia and a stiff, protruding perineum; the latter
chiefly due to inertia and a contracted pelvis; while in
the town there was a much greater proportion of primiparae
requiring aid, viz. 24. As compared with the multiparae,
the cause is being in the former, inertia and a stiff perineum,
And in the latter, Martha Whitley.

The mortality in foetis cases was as follows:

<table>
<thead>
<tr>
<th></th>
<th>Fetal</th>
<th>Maternal</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>6.8</td>
<td>nib.</td>
</tr>
<tr>
<td>Town</td>
<td>5.2</td>
<td>nib.</td>
</tr>
</tbody>
</table>

Among the 6 county cases, 3 were the children of women with a contracted uterus, 1 was complicated with a prolapsed cord, and 2 both no definite cause assigned.

Of the 2 town cases, 1 was complicated with a prolapsed cord, while the other was due to the premature rupture of the membranes in a woman who had had 4 previous miscarriages. This woman, since then, has been delivered of a male child successfully at the full time.

No woman in county or town, or show foetis were used, died.

There is no doubt that the foetis properly applied and used in cases of 'stiff perineum' are very useful in saving the perineum. Jane after time I have experienced this, and I never have the slightest hesitation in using them in all such cases, knowing that I get better results with them than without them.
Verden Cases.

12 women were delivered by this method, 11 in the Country, and 1 in the Town.

Perhaps the result will be best seen, if I append the following table of the Cases:

<table>
<thead>
<tr>
<th>Series</th>
<th>No.</th>
<th>Cause</th>
<th>Child</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>1° no.</td>
<td>1</td>
<td>Face prev.  Cont. Ejacut</td>
<td>living</td>
<td>living</td>
</tr>
<tr>
<td>2° no.</td>
<td>1</td>
<td>2° prev. wth. do.</td>
<td>stillborn</td>
<td>did 3° dep.</td>
</tr>
<tr>
<td>3° no.</td>
<td>1</td>
<td>Face prev. — do.</td>
<td>—</td>
<td>living</td>
</tr>
<tr>
<td>4° no.</td>
<td>1</td>
<td>2° prev. — do.</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5° no.</td>
<td>2</td>
<td>2° prev. — do.</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6° no.</td>
<td>2</td>
<td>4° prev. wth Cont. Ejacut</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7° no.</td>
<td>3</td>
<td>4° prev. — do.</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>8° no.</td>
<td>1</td>
<td>1° prev. wth Prol. Ecto — do.</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9° no.</td>
<td>1</td>
<td>2° prev. — do.</td>
<td>stillborn</td>
<td>did 2° day</td>
</tr>
<tr>
<td>10° no.</td>
<td>1</td>
<td>Right Should. Perin.</td>
<td>living</td>
<td>living</td>
</tr>
</tbody>
</table>

It will then be seen that the cases are pretty well distributed through the whole series. — Verden was employed in 8 cases with contracted pelvis (as I did not find it possible to deliver with forceps), in 2 cases with prol.
Funus in cranial presentations, in a 2\textsuperscript{nd} position above the
brim, and in 1 shoulder presentation.

The mortality was as follows


______________________________

Spina Bifida.

4 cases equal to 1 in 250;

3 females, and 1 male.

3 females died, --- 2 in 3 weeks, and 1 in 6 days.

1 male died, --- in 12 days.

Here was no surgical treatment allowed.

______________________________

Here were 2 cases of Placenta Previa, Selampheo
or Sibophile Septations.

(In reference to Placenta Previa, I may note that I
have had to deal with 2 partial cases of this complica-
tion within the last five months. As the notes of these cases
do not come within the scope of this paper, it is unnecessary
that I say more than the mother were all multifetal, that
the fetuses in both cases were ejected at the 6th month, and
that both the mothers made good recoveries.)
Factful Mortality.

There were 28 stillborn children in the whole series, and I have classified them into what may be conveniently termed (1) Non-preventable, and (2) Preventable. The former includes those foetuses, which had been dead in utero for some time, or had died at an early stage of labour. The latter includes those which died in the later stages of labour, and which might have been born alive under more favourable circumstances, or if better skill had been available.

They are thus tabulated -

Non-preventable 11 = 1.1 per cent.
Preventable 17 = 1.7 per cent.

Then as to Country (850) versus Town (150)

Country Non-preventable 7 = .82 per cent
Town - do - 4 = 2.66

Country Preventable 16 = 1.88
Town - do - 1 = .66

It is to be observed that there is a marked discrepancy between the proportion of non-preventable stillbirths in the country and those in the city, being rather over 3 times more frequent in the latter than in the former. The only reasons, which can be adduced for this difference, are the healthier conditions under which country people live,
And this great immunity from specific disease. In my country practice it was exceedingly rare to meet with aphisic in any of its forms, though there were not a few cases of puerperal. Of the 4 nonpreventable country cases, there was only 1 in which there was a suspicion of tuberc — one of them, with the exception of that single case, had a childbirth in previous labors. In the 7 cases, the fetuses had been dead in utero for periods varying from 2 days to as many months. On making inquiries, no cause could be assigned for the uterine deaths beyond the usual causes, which all pregnant women are subject to. Of the 4 nonpreventable town cases, there were evidences of specific disease in all, and besides, each of them had had previous miscarriages and still births as well. While commenting on this immunity from aphisic in my country practice, I noted that, while at one period, I had as many as 7 cases of cancer of tongue, breast, and womb in my clinic, I had only one case of phthisis, while it very seldom happened in our clinic. In not many miles distant, there had been cases of phthisis in a very limited time, and not one case of cancer.

As compared with the preventable cases, the very opposite holds, for the proportion of country and town is as 3 to 1. This difference may be due to less facts. (1) That I
had to deal with a much larger proportion of con-
tactable cases in the country than in the town, indeed.
My only preventable stillbirth in town was a precipitous
funic in a cranial presentation. (2) Of my want of skill
in the country in bringing difficult cases to a successful
issue, I notice that the greater proportion of their
preventable stillbirths occurred in the earlier years of my
practice, the fetal death rate diminishing as my expe-
rience increased.

The 18 preventable country cases included 11 contracted
pelvis, 2 pelvisae, 2 case of cord and 4 breeches, while the
12 cranial presentation comprised 1 - 2 1/2 " po. " 7 - 3 1/2 " po. ,
3 - 4 " po. " and 1 face.

3 were delivered by long forceps, 6 by vesico, and 1 unaided.
The 1 preventable town case was, as mentioned before, a posture
of cord, the child being delivered by median forceps.

Of these 16 preventable country cases, 7 were 6 women
who had, as far as I could ascertain, repeated difficult labors.
In Mrs. M. Mattope, a large phlebotomic woman with
pelvisae abnormally and contracted conjugate, in a series
of 3 births had the following results:

The first child - a 4 1/2 " po. " was delivered alive by long
forceps.

The second child - a 2 1/2 " po. " lying in face anteriorly -
was delivered stillborn by vesico, after explosion of membranes.
The third child — a 4th portion — was extracted alive by long forceps.

II. Mrs. O., a small negro primipara with contracted pelvis, had 2 births. The first, a 3rd portion with palpable fundus delivered by long forceps, stillborn. The second 15 months afterward — a face presentation — delivered stillborn by forceps. She has had no children since.

III. Mrs. A. a thin negro multipara with contracted pelvis, had a series of 3 births —

The first — a 2nd portion with palpable fundus — delivered stillborn by long forceps.

The second, 12 months afterward — a 4th portion ending face anteriorly — by long forceps, alive.

The third, again 12 months afterward — a 3rd portion — was also delivered by long forceps, alive.

IV. Mrs. W., a short, thick-skull multipara with contracted pelvis, was delivered of a child — a 4th portion — stillborn, by long forceps. Twelve months afterward she was again delivered of a 4th portion by forceps, alive.

V. Mrs. S., an ordinary sized, prime, multipara with contracted pelvis, was delivered of a child in 2nd portion, stillborn by forceps. Six months afterward, she was again delivered of a child in 2nd portion, stillborn by forceps. As this woman left the district, I had no opportunity of seeing her again in subsequent confinement, although...
I learned afterwards, that the results were the same as with myself.

VI. Mrs. B., a married aged, labor complicated, multipara with contracted pelvis, was delivered of a child - a 2nd position - stillborn, without instrumental aid. Six years afterwards, she was again delivered of a child - a 2nd position - by long forceps, also.
Material Mortality

In the first and second cases there were 9 deaths equal to a mortality of 99 per cent. Comparing Country with town, I find that there were 7 deaths in the country series if 830 = a mortality of 82 per cent while I had 2 deaths in the town series of 130 = a mortality of 1.33 per cent.

The following table will show at a glance the various points to be noted in these deaths.

<table>
<thead>
<tr>
<th>Series</th>
<th>Rank</th>
<th>Cause</th>
<th>Mode of death</th>
<th>Mean of death</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st 100</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd 100</td>
<td>1</td>
<td>Syphilitic</td>
<td>Vernix</td>
<td>3rd day</td>
</tr>
<tr>
<td>3rd 100</td>
<td>1</td>
<td>Septic fever</td>
<td>Unmarried 1st</td>
<td>4th</td>
</tr>
<tr>
<td>4th 100</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5th 100</td>
<td>1</td>
<td>Pneumonia</td>
<td>Unmarried 1st</td>
<td>3rd</td>
</tr>
<tr>
<td>6th 100</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7th 100</td>
<td>1</td>
<td>Septic fever</td>
<td>Unmarried 1st</td>
<td>4th</td>
</tr>
<tr>
<td>8th 100</td>
<td>2</td>
<td>Syphilis</td>
<td>Unmarried Brash</td>
<td>12th</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phlebotom</td>
<td></td>
<td>15th</td>
</tr>
<tr>
<td>9th 100</td>
<td>1</td>
<td>Pneumonia</td>
<td>Vernix 2nd</td>
<td>2nd</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Syphilis</td>
<td>Unmarried 1st</td>
<td>11th</td>
</tr>
<tr>
<td>10th 100</td>
<td>2</td>
<td>Septic fever</td>
<td>Unmarried 1st</td>
<td>5th</td>
</tr>
</tbody>
</table>

9 deaths = 9 per cent.

7 deaths in Country = 830 = 82 per cent.

2 do 130 = 1.33 per cent.

In considering the material mortality, my results may
be looked upon as something not out of the ordinary
sine, my 2 per 1,000, but in reality my maternal mortality
is very much less, as indeed strange it may seem, than
the deaths in the only deaths which have occurred in my
practice from the time that I first attended midwifery
cases, when at a student, up to the present date. Counting the
150 cases which I had before the series of 1,000 commenced,
my first death was my 339th case while in the 550 cases
records of which I keep, there was not a single death.
Practically therefore there have been 4 deaths in at least
1350 cases or 1 in 337 = .39 percent.

None of the deaths were in Entogen cases.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Death</th>
<th>Date of Death</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>2nd</td>
<td>209</td>
<td>6mos 15 days</td>
</tr>
<tr>
<td>2nd</td>
<td>3rd</td>
<td>209</td>
<td>16mos 8 days</td>
</tr>
<tr>
<td>3rd</td>
<td>4th</td>
<td>209</td>
<td>11mos 8 12 days</td>
</tr>
<tr>
<td>4th</td>
<td>5th</td>
<td>209</td>
<td>7mos 8 days</td>
</tr>
<tr>
<td>5th</td>
<td>6th</td>
<td>209</td>
<td>3mos 7 days</td>
</tr>
<tr>
<td>6th</td>
<td>7th</td>
<td>209</td>
<td>2mos 7 days</td>
</tr>
<tr>
<td>7th</td>
<td>8th</td>
<td>209</td>
<td>2mos 7 days</td>
</tr>
<tr>
<td>8th</td>
<td>9th</td>
<td>209</td>
<td>2mos 7 days</td>
</tr>
</tbody>
</table>

After period therefore were there any consecutive deaths,
unless the two deaths 5th and 6th which occurred in the
8th hundred may be considered as such. Between these
2 deaths there were 4 cases, none of which went wrong.
with an interval of 29 days. There were at least a dis-
tance of 44 miles between them, and the only source of
contagion must apparently have been myself. I could not
learn of any other piece of sick case in the district of the
latter. A remarkable fact to be noted in the series of
deaths, is that in only 2 cases was artificial aid required
or used - viz - version, the other 7 cases being very easy
labour, and occurring in maternities, with the exception of
our primipara. In 6 of these cases therefore, there was the
least possible interference with nature - easy short labour, and
yet death ensued. In the primipara there were, without
any doubt, calcareous or osseous fetlock, providing a
cause for sepulchre infection.

The first death, which occurred in the record, was that
of a lady, who had been on a visit to Germany during her
pregnancy, and who came home after less than half her
pregnancy. She was not well, complaining of symptoms
of a typhoid character. At about the full time labour came
on, and as the child's head became impacted at the breech,
version was performed under chloroform, after an ineffectual
attempt to deliver by long forceps. Next day she had
shivering with the temperature 104°, and the typhoid
symptoms became fully developed - pain in the right
hypochondrium, diarrhoea, &c. - deep sour up and down
death. Taking place on the 5th day. The uterus and vagina
were usually pushed out with a 1 to 2 centi-metric tone, large doses of quinine and ipecac, with formalin and spirits of benzoin. Had I been aware of these typical symptoms before the confinement, I would have naturally have put down this death as being due to a septic peritonitis. The result of the mode of deliverance, I believe, that had the labour been on ordinary one, she would have recovered. It was the "vomitus" that aggravated the symptoms, leading to a fatal result.

My second death occurred 3 months afterwards - a multipara in her 7th confinement. The labour was short and easy - a 3rd position. Death took place on the 4th day, with all the ordinary symptoms of death. You could hardly have been any connection between these 2 deaths, as I attended 31 labours between the 2 dates, including 2 septic cases for postpartum fevers, a premature birth at 7 months, and 3 somewhat tedious labours owing to facility of position. In these 31 cases, she was not on any cesarean bein during the puerperal period. At the time of this confinement, there was no case of puerperal fever in the neighborhood, either before or after her death. This case was evidently one of puerperal catarrhemia, but her cause, I do not know.

The third death was that of a multipara 15 months afterwards, with 2 puerperal cases intervening, then there
Could not possibly be any contagion from the preceding premature death. This was a heavy, middling-aged mulatto woman living in a house situated close to a stream, which was not of the purest nature. Two days after her confinement, which was at the full term, she had an attack of double broncho-pneumonia, which necessitated her being delivered almost in the sitting posture, her breathlessness being so great. Her labor was easy and speeded. After the delivery, she was soon able to lie down, the pneumonia advancing steadily till death took place 3 days afterwards. In this case the labor was easy, but never fitful till the last day, when it was very slightly so. She had no pain in the abdomen or legs. There was no symptoms, and the temperature never rose above 102. Stimulants and other remedies, internally and externally, were freely used—she was emaciated to the last, when she died of sheer suffocation, the air cells of both lungs being completely blocked. Can this case be placed in the class of premature fever? Was it quite possible that the woman at the end of her pregnancy was not in the best of health—that she was born of Assistance against the influence of bacteria upon labor pain—that she was mainly exposed in the warm month of June to the influence of decomposing matter in the streams, which caused the gable wall
of her house. That there was a great deal very much within the statutory distance allowed by the law, but this was nothing serious in the country. In fact, he said, under which she and her daughter lived once each, that it was always a standing puzzle to me how any of the women in the tenement got safely through their confinement periods. As more fact therefore of the occurrence attack taking place two days before the confinement, does not preclude the idea of the death being due to puerperal septicemic pneumonia. I have always hugged myself with the idea that it was not so, and that it was a simple case of double bronchopneumonia rendered fatal by the complication of her confinement. With my later experience, I am still inclined to hold this opinion that there was nothing septic (I mean puerperal septicemia) about the case, and that the woman must have died in any case. There were 3 confinements within 50 yards of the house during the following 3 weeks attended by myself, without a bad symptom in one of them.

The fourth death was that of a young healthy primipara at a farm standing 18 months afterwards, with 25 cases intervening. She was of a strong, forceful and overbearing temperament, living in a superior cottage house on the roadside fully 100 yards from the standing. Her labour, I believe, was an easy one. The placenta came away
The disease set in after a few minutes, and the discharge was normal. Everything was in favor of a speedy and happy recovery, but on the second day there were shivering, a rapid rise of temperature to 104°, symptoms from the left groin spreading over the lower abdomen - the lesions became severe and fatal - and death took place on the 4th day. The symptoms were those of septicaemia involving the left iliac region, the cause being a radiating abscess.

It could be the initial cause of this death, it is difficult to say. There was no fever of any kind within miles of the station, and no septicaemia. Communication of any kind as far as could be made out, through the streets, was made. Of course, it means that we are not cognizant of the condition of the women waiting in the hospital.

It may be that some women are mistrusting at the time, and I could conceive it quite possible that a woman with dirtied fingers might infect a puerperal woman, while replacing a soiled napkin. I do not know whether there is much in such a suggestion, but it is nothing of misapprehension. The same thought occurred to me, when considering the probable cause of my death. I could make it for the suggestion that no woman, while mistrusting, should be allowed to attend a puerperal woman, unless under proper precautions. It would be much safer if all infirmary nurses had passed their examination.
My fifth death was that of a multipara in her 9th confinement, a plain little woman with too many cares on her head. The labour took place in December 1882, 11 months and 12 days after the last death, and 110 cases intervening. The presentation was a breech—child, a male, stillborn. The case went on well for the first 5 days, then she rose from her bed to resume her household duties. This was too much for her—she went back to bed on the 7th day, and died from her exhaustion on the 12th day. There was no rise of temperature except on the day and the day after she returned to bed. The history became cloudy, but not fatal. I attributed this death to the fact that the woman was completely worn out by the excessive labour she had previously to her confinement (five of her children were suffering from progressive paralysis in various stages). The sixth death occurred in the fourth confinement afterwards. Mrs. A multipara in her fourth pregnancy, a young, stout healthy country woman was delivered of a male child—position—Labour easy—on 13th May 1883. On the 3rd day, she developed symptoms of \\
Dilectesia in both legs, ending in \\
Odelepsyasis dolens, and died on the 15th day. This death was evidently due to blood poisoning, but the source is not easy to detect. She was living under favourable circumstances, and she knew was good, situated on a hillside with ample fall.
for druggists. The only cause which appears to me as a
feasible one is, that she had no attendants, two of James's
daughter, one of whom had her periods at the time
of confinement, and may have attended to the woman's
diapers, after attending to herself.

I now come to my last frequent death in the Country.
In labour, owing to the circumstances, was perhaps the most
difficult case, with which I have had to deal either before
or since, and a short account of which may be of interest.
Mr. L. a mulatto man in his 6th confinement, living 12 miles
from town, and for me on the morning of 17th August 1833,
at 2 a.m. On my arrival about 2 hours afterwards, I
found her sitting up in bed, very anxious looking, very
short of breath, and with a presentation that she would
die. On making an examination per vaginam, the mem-
briums were found ruptured - the cervix obliterated - the
size about the size of half a crown, dry, some and non-di-
tensible - the head at the 3rd, and so far as I could
make out lying in the right occipito-posterior position. The
pains were irregular and faint. After sitting for some
time without much of any progress, I proceeded to
assist dilatation of the os with my fingers, well encased
with the usual Conley method - direct clamps. (I was
12 miles from town, had ridden the distance, and had
only a pair of medium silks, and a little chloroform)
with me.) The progress of dilatation was very slow, but after a couple of hours, the pains, aided by the gentle pressure of the dilatation, diluted it sufficiently to allow the introduction of forceps. The head however remained persistently at the brim, so thick the median forceps I had with me were useless. About this time, the case became further complicated by a prolapse of the cord, which resisted all jar or endeavors to return it, owing to its walls of the uterus being closely applied to the body of the child. I then administered chloroform, which was done very badly, the woman sometimes vomiting, at other times ceasing to breathe. As a result I could not give the chloroform to the membranes. The pains now became very severe, the portal vessels were apparently acting as a stimulator. I first passed my left hand, and then my right into the uterus, when each in turn became immersed and almost paralyzed. I pushed the chloroform further, and then succeeded in passing my right hand in front of the child, and getting hold of the right foot, speedily turned the child on its long axis, and delivered a male child, stillborn. The placenta was expelled entire in a few minutes. The discharge post-partum was copious, and so I was made as comfortable as possible.
Owing to the hectic rash however, she could not lie down, nor being the physical effects of broncho-pneumonia. Very shortly afterwards, she had a strong cough, her temperature rose up to 105. Symptoms of peritonitis now developed, and she died in 36 hours after the delivery. As I was anxious to know the condition of the uterus, I pleaded hard for a necropsy, but was refused. It is always very difficult to get a p.m. in the country, then being a sort of antipathy to any interference with the body, after death. What did this woman die of? Did I in my endeavours to perform vesico-hysterotomy, void of fluid damage the walls to such an extent, that there was a rupture, or that death took place from effusion into the peritoneal cavity, setting up fatal peritonitis? or was the death due to simple peritonitis, complicated with the previous broncho-pneumonia, or was it acute peritonitis? These questions have never been able to answer satisfactorily to myself.

My eight death was my 80 yr old Edinburgh, Mrs D., a multipara in her 5th pregnancy, at that time woman of nervous temperament, and very anxious over worldly affairs, was delivered of a male child - living - present for labor easy and unaided. She attended her husband's house till within two hours of her confinement. Things went as well till the 13th day when she bled and resumed her
household duty, intending to go back to the shop in a few days. She was known for being strong, but she persisted in getting up. On the 9th day she went back to bed, had chills, but with only a slight rise of temperature. She became gradually more sick, and died on the morning of the 11th day. From what she seemed to die of, my mind the seemed to die of 

My count and last death occurred 2 months after

with causes intervening. Mrs. M. a multipara in her 4th pregnancy, was delivered of a stillborn female child in the 9th month. Labour easy. As this woman did not wish to have children, she did her own birth during the pregnancy period, by medicines and otherwise to procure abortion. Labour came on at about the 9th month, but a factor of birth being found to be a good deal deformed. Every precaution was taken to undertake the birth accepted. Labour lasted about 13 hours, with all ordinary symptoms of puerperal fever.

She has been no death since in my practice.
Before bringing this paper to a close, I would like to make one or two remarks on "Prepuatal Fever," since the term "Prepuatal" as it commends itself to a definite nature. I believe that there must be two varieties of this classed Prepuatal Fever: (1) Acute Prepuatal and (2) Septic Prepuatal.

(1) Acute Prepuatal Fever includes all those cases of simple inflammation accompanied by frequent, lasting, in short periods of from one to three or four days, which are generally known as "Puerperal." In these, the lochia becomes scanty, but not fetid. It is said as reasonable to suppose that a puerpera can take a chill, and have a simple inflammation in its abdomen, so that a non-puerperal individual can take a chill and develop a simple bronchitis or pneumonia. Hence, not in the habit of calling the latter "puerperal." These cases, like those of Endemic described by Barnes, as being produced by the demineralization of the accumulated waste stuff and other tissue brought into existence for the purpose of formation and labors, process little or no infective power. The term "Endemic Fever" is a synonym for any name of puerperal disease.

(2) Septic Prepuatal Fever includes those cases which are highly infective and putrid, which are not very amenable to treatment, and which often end in death on the 3rd or 4th day. These are cases, coined by "Endemic" and "Syndemics," well described by Barnes.
in my mind it is only by a classification of this kind, that we can intelligently explain why one woman gets so easily back to her normal condition, and why another dies. If former is an asepetic condition, the latter septic. If one were to accept the opinions of the American School, we would admit that every puerperal fever is a septic fever. I cannot agree with this. Certainly, I believe that a great many cases of septic fevers recover, and that cases of an asepetic nature at first may pass into a septic condition, but if all cases were septic from the first, there would be all probability be a very much great mortality. If every case of a puerperal fever was septic and therefore Entejevin, it would follow that every obstetrician, nurse and midwifery among a nurse duty would be a constant source of Entejevin.

It is very convenient for the microbe theorists to say that the existing forms in one woman are quite sufficient to cause these germs inoculation, and that it is necessary to many billions of bacteria to kill an individual, but this will hardly do, as every prostitute could cite cases, where delicate women, whose health is very much deteriorated, and in whom these germs would probably find a suitable culture ground, never have a bad symptom, while strong healthy women are knocked over like ninepins.
As regards the use of antiseptics, I may confess that these use has been more honored in the breach than in the observance in my practice. I do not by any means undervalue the importance of their use in obstetric practice, as I can conceive an ideal practice with antisepticism efficiently carried out, reducing the maternal mortality to almost nil. I have always kept my own hands and person scrupulously clean, and with frequent hand- or outer-antiseptics, have always used them. But in a practice such as I have had, it was utterly impossible to render everyone and everything about the perinaea antiseptic, and this is the cause of the high death-rate. I would certainly like to carry out the ideal practice, as it is only by this means that we can hope to reduce the mortality. As long as we cannot impress these antiseptic ideas upon the minds of the public, and convince the average person, even in the absence of any harm, of their own culpable carelessness, and the value of personal cleanliness in domestic midwifery, we can hardly look for much improvement.

Matthews D'Croen has estimated that 1 in every 100 die, and according to Malcomson 1 in 100, and more recently I killed one during the perinatal period. These deaths, in doubt include every cause, but it does most necessarily follow that all are due to antiseptic care. In my own record, I could say that 4 died of septicaemia, the other 5
being due to causes foreign to the peculiar state. If statistics were properly examined, it would be found that repudiation is not the cause of all the deaths, which are attributed to it.

While "Bussana" has a mortality of 0.9 percent, "Hastings" has succeeded in reducing the mortality to 0.27 percent, "Breslau" to 0.19, "Bristol" to 0.5, and "Pamni" to no death in 300. These are remarkable successes, especially that of "Hastings" and "Breslau." As regards "Pamni," statistics of no death in 300, he does not tell us his percentage. In our cases of cases, I had no death in 338 cases, but that goes for nothing.

I have had no experience of Contagia attacking a person, but I know had at least two homosexuals, while the children in the house were ill with scarlet fever. The mother escaped entirely.

One occurred in a patient, with a vague small-pox eruption very profuse, on the 2nd day after the fever. It was its usual course, and the woman made a good recovery. The child developed the fever on the 3rd day, and died on the 6th day.

There was only one case of Peripatetism, which developed in the 2nd week, the patient manifesting an extreme desire to see husband and myself. She was very anxious. She remained in a hospital for 3 months, and was discharged completely recovered.
One woman, a primipara, developed cataleptic symptoms in her first pregnancy. Complaining of a headache, she would lie down, and immediately pass into a cataleptic condition for hours, remaining insensible, motionless, and insensible to external stimuli. After five or six hours, she would rise and assume her household duties, making no complaint of nausea or stiffness in her limbs. I attended her in three successive pregnancies, in all of which she exhibited the same symptoms, the attacks occurring at intervals of one to four weeks.

In these, I have found chloral more effective than opium in delaying labour and relaxing the uterine.

As regards fright, I can almost join up its details altogether. On a sick it causes intolerable continued pain, which, whether the mother or the child is in distress, prompts too much suffering of the antecedent life of the 2nd stage, with the present in jeopardy.

Care of the Perineum. — I always support the perineum with my right hand at the moment of birth, and am glad to say that I have never had a displaced perineum.

As to disposal of the placenta, I always use the method of compression immediately after the birth of the child. As a general rule, the placenta is lying in the vagina ready for extraction after the child has been separated. I have been fortunate in never having what is termed a true...
Retained placenta, for an hour or two. Considered if
the womb. This latter accident could, I am sure, nearly
always be avoided by proper expression, and not using
A-end as a rope.

There were two cases of post-partum hemorrhage, which
were quite amenable to treatment by patience and the
hot-water douche.

There were three cases of Chloasma, from which
matters recovered, and the died.

Her were my fortunes to attend two inebriates - almost
dangerous idiots - in their own remarks - illegitimate. Sonne
A.D. aged 30,在现场 and died on 5th July 1871.
Verte, and breech presentation, labour every. The child did well.

M.T. aged 28, delivered of a daughter - 3/4 lb. ROA, by forceps.
Here was the greatest difficulty with the woman in the first
and second stage of labour, as she could not be got to understand
that was the matter. We were put under the influence of an
anesthetic at the end of the second stage, and the labour
completed. Mother and child did well.

In bringing this thesis to a close, I must apologize for
I have overstretched the limits usually allotted to such
papers. My attempts to make the analysis as complete
as possible, must be my sole excuse.

Michael Duvan