NOTES FROM THE RECORDS OF THE LOUISE MARGARET HOSPITAL.

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The hospital contains fifty-five beds. It is divided into a maternity section containing three labour wards and twenty-five lying-in wards, and a general section containing fourteen beds for women and thirteen for children. In addition there has been added this year a section for officers' families consisting of a labour-ward and two lying-in wards, three single-bedded wards for general cases, and a ward of eight beds for children.

A hospital of this size, full as it usually is, naturally provides a wealth of clinical material. More than this, it deals with cases in numbers large enough to justify the hope that their consideration may be of interest and not without value.

The period under review is from the beginning of 1924 to August of 1927—i.e., three years and eight months.

I propose first to deal with the maternity side.

During this period there were 2,200 confinements. A general consideration of this series is of considerable interest in tracing the influence, if any, of antenatal examination and institutional management upon the course of parturition and the puerperium.

Calculation of Term.—Throughout the period one method of calculating the expected date of delivery has been uniformly employed—viz., three months back from the first day of the last period, and add seven days. Excluding all premature births, this method has given an average error of 6·3 days. There have been apparently only four cases of true post-maturity in the series.

The following table shows the cases analysed by presentation:

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Per Cent.</th>
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<tbody>
<tr>
<td>L.O.A.</td>
<td>56·0</td>
</tr>
<tr>
<td>R.O.A.</td>
<td>33·2</td>
</tr>
<tr>
<td>R.O.P.</td>
<td>3·0</td>
</tr>
<tr>
<td>L.O.P.</td>
<td>2·1</td>
</tr>
<tr>
<td>Breech</td>
<td>4·2</td>
</tr>
<tr>
<td>Face</td>
<td>6·25</td>
</tr>
<tr>
<td>Transverse</td>
<td>0·13</td>
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which gives a total vertex presentation of 94·6 per cent. It will be seen that only in one particular is there any marked divergence from the usual textbook figures, viz., in the unusually high incidence of the second vertex (R.O.A.).

It is difficult to give an adequate explanation of this. The high incidence occurs equally over the whole three and a half years, during which period many different clinical observers have been responsible for making the records. It may be that a proportion of cases come first into hospital...
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when labour is well advanced, that they include a number of third vertex (R.O.P.) cases in which rotation has occurred before examination and so escaped observation.

A system of recording antenatal examinations which was started in 1924, enables one to test the accuracy of this supposition, and a comparison of the number of R.O.A. presentations diagnosed antenatally preserves to some extent this abnormally high frequency, it having been thus diagnosed in seventeen per cent of vertex cases. One is forced then to the conclusion that though rotation from R.O.P. to R.O.A. position does early occur with sufficient frequency to escape observation in the labour ward of a hospital, yet R.O.A. is both the lie and the subsequent presentation in a larger proportion of cases than is usually given.

The proportion of persistent occipito-posterior deliveries (twenty per cent) is about normal.

Face presentation occurred in the proportion of 1 in 400 labours. In no case was it a cause of dystocia.

Breech Presentation.—My practice in these cases has been influenced by the necessity of providing opportunity of practising version for officers undergoing courses of instruction; and at the same time providing the pupil midwives with a sufficiency of breech deliveries. The practice then has been to turn primigravidæ and to leave multipæ whose obstetrical history is good. Yet in spite of this the proportion of breech deliveries remains practically normal (4.2 per cent). It must be pointed out here that included in the series are a number of premature births which normally provide a higher proportion of breech deliveries. The futility of turning before the thirty-sixth week has been fully demonstrated by the number of spontaneous versions and recurrences that are met with prior to this period.

Maternal Mortality.—In the 2,200 cases there occurred five maternal deaths. Of these two had not been examined antenatally, and had not intended to be delivered in hospital till the emergency arose which brought them in, viz., one case of eclampsia, and one of obstructed labour. The latter had been more than three days in labour. Repeated attempts at instrumental delivery had been made before admission and she was in an extremely grave condition on arrival. Craniotomy was done, and she died of shock.

It will be seen that even including all the fatal cases, the mortality-rate worked out at 2.2 per thousand—nearly half that given by the Registrar-General for the United Kingdom.

The five deaths were: For eclampsia, 2; obstructed labour, 1; postpartum hæmorrhage, 1; puerperal septicæmia, 1. The fatal case of puerperal septicæmia is of such considerable interest that I give a short résumé of the notes.

Mrs. F., aged 28, primigravida—admitted in labour at term. Normal and easy delivery, second stage one and three quarter hours; three routine
vaginal examinations made; third stage completed rapidly and satisfactorily. Infant six pounds six ounces. The patient on leaving the labour ward had a temperature of 100° F., pulse 120.

A history was obtained that six weeks previously she had had a sore throat associated with joint pains and swelling of legs. This had cleared up but had left her debilitated. Twenty-four hours after delivery, temperature was 102° F., with painful swelling of ankles and wrists. Three days later erythema nodosum appeared on the extremities and later changed to a definitely purpuric eruption. On the eighth day systolic and presystolic murmurs were noticed. On the tenth day a haemolytic streptococcus was isolated from both blood and lochia. Thereafter she ran the typical course of a grave septicæmia and died twenty days after delivery. She was treated with serum and vaccines and locally in the routine manner. Of peculiar interest is the fact that on the seventh day the infant developed idiopathic erysipelas and died the same day. There is no doubt that the source of infection was antepartum in origin and that delivery merely determined the onset of the condition.

Morbidity-Rate.—I have taken as the standard for this, a temperature of 100° F. or over for more than twenty-four hours during the fourteen days after delivery. I have worked out the morbidity figures for the years 1924 and 1925 only. For the remainder of the period they do not apparently materially differ.

Total number of cases showing morbidity:—

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
<th>Morbidity Rate</th>
</tr>
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<tbody>
<tr>
<td>1924</td>
<td>68</td>
<td>11 per cent.</td>
</tr>
<tr>
<td>1925</td>
<td>64</td>
<td>10.9&quot;</td>
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</tbody>
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Of these, considering the associated condition recorded:—

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Uncomplicated labours</td>
<td>74.5</td>
</tr>
<tr>
<td>Complicated labours</td>
<td>25.5</td>
</tr>
<tr>
<td>Abnormal lochia</td>
<td>31.0</td>
</tr>
<tr>
<td>Mastitis</td>
<td>30.0</td>
</tr>
<tr>
<td>Coincident disease</td>
<td>13.0</td>
</tr>
<tr>
<td>No obvious cause</td>
<td>42.5</td>
</tr>
</tbody>
</table>

In only twelve per cent of these cases did the pyrexia occur on the third day—quite at variance with the time-honoured tradition. The remainder were scattered impartially over the whole puerperium.

The figures are of interest in as much as they show that even where conditions are made as favourable as possible, a completely apyrexial puerperium is only obtained in some ninety per cent of cases. It must be remembered, however, that in a teaching hospital as this is, pupil midwives and medical officers must be afforded facilities for making vaginal examinations at all stages of labour which otherwise would not be necessary. Moreover, pupil midwives are constantly coming and going, and there are at all times those who are yet in the rudimentary stage of experience and knowledge. A system which is rigidly enforced ensures that the names of everyone making a vaginal examination are recorded on the chart of the
case concerned. This has on occasion been the means of tracing a series of morbidity cases to an individual.

Complications of Labour.—I shall consider here only the principal ones:

(a) Placenta praevia: There were twenty-one cases with no maternal death-rate, but a foetal mortality of ninety per cent. In the majority of cases the diagnosis was made early. The routine management has been—plugging, the De Ribes bag, and version at the earliest possible moment with leg traction. Only one case was dealt with by Caesarean section. One case was noteworthy in that though the placenta was central, and had to be traversed in performing version, yet the child survived. All statistics give a mortality of something like 99.9 per cent in such cases.

(b) Accidental haemorrhage: There were thirty cases of this, none of the gravest type. The routine management which has been found satisfactory has been morphia, plugging, rupture of the membranes. I have not done Caesarean section for this condition. The alleged association of accidental haemorrhage with toxæmia has not been clearly established in our series.

(c) Prolapse of the cord: This has occurred in five cases. The textbook methods of dealing with this serious complication are in my opinion hopelessly difficult and impracticable. A manœuvre which I recently learnt of getting the cord well down, wrapping it well up in a bundle of sterile gauze and returning; the whole well past the presenting part offers a much better chance of its staying where you have put it. I shall never attempt to deal with such a case in any other way.

(d) Post-partum haemorrhage: This is recorded in fifty-six cases. It was the cause of one maternal death—a case in which the contractile action of the uterus was notably lacking throughout. Secondary plugging some hours later in the theatre failed and the woman died about eighteen hours after delivery.

(e) Adherent placenta: The records show twenty-three cases of this. The term is elastic and there are included only those requiring manual removal. I have found that inexperienced midwives in their anxiety lest the uterine contractions should fail in the third stage, often over-knead the uterus. This nagging at the organ undoubtedly contributes to the setting up of a spasm, with the consequent retention of a placenta which is not really adherent at all. Our pupils are taught that while the hand should be kept upon it, the uterus should be left alone as long as it is contracting. Above all, of course, premature efforts at expulsion must be avoided.

Caesarean Section.—This was performed 19 times, of which 17 were for contracted pelvis, 1 was for persistent transverse presentation, 1 was for central placenta praevia associated with grave toxæmia. In one of these cases the operation was done twice within the period we are considering. There was no maternal mortality, and the infant survived in all but one case.
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No extreme case of contracted pelvis was met with. The smallest true conjugate was measured to be three inches, or just under.

It must be noted that something like ninety-nine per cent of women delivered in hospital have been examined antenatally at least once—many more than once. All primigravidae and multiparae with doubtful obstetric histories undergo pelvimetry. The fit of the foetal head has, however, always been regarded as the test of supreme value. Dealt with in this way, the appropriate management of a case of contracted pelvis has usually been fairly obvious. About one-third of the cases of Cesarean section have fallen within the class which allowed of a trial of labour (of course without any vaginal examination) before operation was ultimately decided upon.

Only one method of suturing the uterus has been employed both by myself and my colleagues, viz., two layer sutures of silk. I have always employed this method, and in the two cases in which I have done the operation twice on the same patient, the soundness of the old suture line which results from silk was most striking.

Of the cases there are only two which merit further reference:—

Mrs. J., primigravida, aged 32, attended antenatal clinic. A normally developed healthy woman. Gait normal. Her measurements were: Interspinous, 11½ inches; intercristal, 9½ inches; external conjugate, 8 inches.

No specific record appears that the fit of the foetal head was tested. She was seen once antenatally, and it is possible that, deceived by the apparent normality of the case, the supreme test was overlooked.

On February 24, 1924, the medical officer on duty telephoned me that high forceps on a completely floating head had failed, and he had, quite properly, given up the attempt. I found a somewhat contracted outlet, but this was clearly not the reason for the difficulty at the stage. Cesarean section was done, and such extreme distortion of the brim was found at operation that it seemed at first that there was an osteoma. The case was one of Naegeli's pelvis, and the maldevelopment of one ala of the sacrum shows up fairly well in the skiagram which was subsequently taken. This is a rare case, but illustrates well the importance of Munro-Kerr's test, as, had it been done our course would have been clear from the outset.

The other case is that of Mrs. M., primigravida, aged 25. An advanced case of phthisis with large cavities at both apices. She was sent to me for an opinion by a civil practitioner who was to attend her in confinement. Unfortunately she was then too near the twenty-eighth week to terminate pregnancy, which earlier would have been indicated. I left her for induction at the earliest moment. She was very ill-developed, and had a justo minor pelvis with a true conjugate of three inches. The foetus was small. She disappeared, and returned about the eighth month. The foetal head could then by no means be made to enter. Her general condition was very bad—orthopnoea, an incessant cough, much wasting, and a rapid pulse. She remained in hospital, and improved much in the last four weeks of pregnancy, but could obviously not stand a general anaesthetic. Cesarean
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section under stovaine was done at term, and a child of seven pounds delivered. The patient was sterilized. The interesting thing is that she has improved very markedly in the seven months since delivery. She is quite apyrexial and putting on a lot of weight.

In one other "failed forceps" case which came to Caesarean section I delivered the placenta per vaginam, and swabbed the uterus with brilliant green-violet solution, passing the swabs out also by the vagina. The convalescence was uneventful. I believe these measures are of value as an alternative to hysterectomy in such infected cases.

Forceps Delivery.—Forceps were applied in ninety-seven cases, i.e., four per cent. The condition which most frequently called for their use was in occipito-posterior cases, either after manual rotation or after spontaneous rotation, in which flexion was deficient. A few only were cases of frank disproportion between cavity or outlet and fetal head.

That institutional midwifery is of immense advantage to the woman admits of little argument, but one is inclined to think that perhaps the most incalculable benefit lies (or should lie) in saving her from the obstetrical forceps. Removed from anxious relations, under the constant observation of a staff to whom time is no object, and in the atmosphere of calm routine which prevails, Nature, who, after all, is not a bad midwife, is allowed a hand. The ultimate good to the woman lies undoubtedly in patience. This counsel of perfection, of course, breaks down too often in other circumstances, but conscientious antenatal examination should do much to preserve it.

Toxæmia of Pregnancy.—It is impossible to deal more than cursorily with this subject here. Taking the presence of albumin in the urine without other symptoms as a manifestation of toxæmia in its simplest form, this is recorded in five per cent of 1,500 cases. There is reason to suppose that this proportion holds good over the whole series.

At the other end of the scale there were nine cases of eclampsia with two deaths in the whole series. In the intermediate class there were forty-six cases which exhibited toxæmic symptoms of a severity necessitating admission into hospital. Of these there were but three cases of pernicious vomiting.

Induction of labour for threatened eclampsia was done on four occasions. The remaining cases yielded to treatment, and came spontaneously into labour after admission, or later at term.

For many years at the Louise Margaret Hospital there has been one routine treatment for toxæmic conditions in all their forms—the eliminative treatment. In severe cases absolute fasting, with ingestion of a large amount of water combined with intensive saline purgation. In the actual eclamptic state this line of treatment holds good with modifications necessary in the circumstances. Stomach and colon lavage is always carried out, leaving magnesium sulphate in the stomach. This is repeated frequently if fits continue. Chloroform is administered when necessary to control the fits, and to allow the lavage to be done. Morphia and othe
hypnotics are very sparingly used. Veratrone has been found of no use. Great stress is laid on the importance of keeping the patient's head well down and on the side, to keep her from being drowned by her own secretions. Vapour baths have been found of proved value.

One word more is necessary on the subject of the vomiting of pregnancy. All who have worked in the hospital must have been struck by the paucity of admissions from this cause compared with its apparent frequency outside. There were, as I have mentioned, three cases of true toxic vomiting, of which two had to have the pregnancy terminated. Admissions for minor degrees of this condition and for neurotic vomiting were extremely rare.

There is a popular idea that a pregnant woman requires plenty of food washed down, perhaps, with a bottle or two of stout, but I believe it is really otherwise. In our antenatal work the importance of aperients and of limiting the diet is constantly taught, and this is emphasized in the case of women showing any sign of toxicity.

We perhaps flatter ourselves in thinking that our antenatal advice has anything to do with our comparative freedom from toxæmic conditions, but it may be so.

**General Wards.**

The number of cases admitted during the period was: Women, 932; children, 1,449. And the deaths: Women, 15; children, 98.

The vast majority of the women dealt with being in the third and fourth decades of life, the accidents and ailments associated with the child-bearing period and their sequelæ, make up a considerable proportion of the admissions. The remainder were the ordinary diseases, accidents and emergencies met with in a general hospital. I shall limit myself therefore more particularly to the gynæological work.

In looking back upon the work of the general wards during these three and a half years, there stands out very clearly an impression of the extreme frequency of infection by *Bacillus coli* of the female urinary tract. A study of the records and notes of cases confirms this, and brings out very clearly that the condition is a very fruitful source of confusion and mistaken diagnosis. It is difficult to give actual figures, for in many cases it is merely a coincident condition.

When the infection is confined to the bladder, the symptoms are those of acute or subacute cystitis, but long-standing chronic cases with irritability of the bladder, and symptoms suggestive of partial incontinence are common enough. When the higher urinary tract is acutely involved, fever, rigors, vomiting, a rapid pulse, general malaise, pain in one or both flanks, or referred to the iliac fossæ, and a brown dry tongue, constitute a common picture. Such a case, especially where the local pain and tenderness seem confined (as frequently happens) to the right iliac fossa and flank, bears a baffling resemblance to appendicitis. I remember some six years ago seeing a girl, aged 8, in two such attacks, in which it was the urinary findings alone which strengthened one in the decision against operation. The case eventually cleared up under an autovaccine. In another type of acute or
subacute pyelitis where headache, general malaise and joint pains are prominent, the case is naturally diagnosed influenza or rheumatism. It is thus protean in its manifestations, and since the diagnosis is only established by culture of the urine, the resources of a hospital are usually necessary to clear the case up. Its particular association with pregnancy is well known, but owing to the tendency to recurrence, if not thoroughly treated, it is met with very frequently in non-pregnant women who no doubt date the original infection from a former pregnancy. Our experience is that a vaccine (preferably but not necessarily an autovaccine) is a most potent and valuable agent in the cure. Of all vaccines I consider that of B. coli is the most trustworthy in its effects. It is of course necessary to render the urine alkaline.

During the period under review, 1,439 operations under a general anaesthetic were performed. Of these some twenty-five per cent were gynaecological in the true sense of the word. From what I have said of the average age of patients it will not be surprising that malignant disease was very rarely met with.

_Uterine Carcinoma._—I have seen but three cases within the period, all of them unfortunately being hopelessly inoperable.

_Breast Cancer._—There were six cases—five of carcinoma and one of myxosarcoma. They were all treated by the most radical removal, but recurrence is known to have occurred in three cases. The other cases, as far as is known, remain free, one of them being so for two and a half years.

One of the fatal cases has some points of interest: Mrs. B., aged 35, five children (youngest 9 months, which she suckled for three weeks only), admitted when twenty-two weeks pregnant. There was a definite and clear history that there was no lump nor anything noticed wrong with the breast until eight weeks before admission. There was found on admission an extensive growth of the upper and outer quadrant with widespread skin involvement and enlargement of axillary and supraclavicular glands. The pregnancy not only complicated matters from the point of view of operation, but contributed to the intense malignancy which the growth clearly showed. The consulting surgeon, whilst doubting operability, advised the widest possible removal as a palliative measure. The axillary vein was damaged in stripping off the involved tissue in which it was embedded, and I was obliged to tie both this and the axillary artery. The supraclavicular glands were removed as far as was possible, but pretty obviously not in their entirety. The sequel was that she did not abort, and that the establishment of collateral circulation in the arm never gave any cause for anxiety. The wound healed well by granulation and she was up on the fourteenth day. She finally miscarried at seven and a half months and died of secondary deposits in the abdomen one week later. I do not regret the course adopted as there was no local recurrence and her end was comparatively painless.

The growth was a spheroidal-celled carcinoma of encephaloid type.
The bulk of the gynaecological work consisted of operations for the correction of misplacements of the womb, repair of the cervix, vagina and perineum, the removal of ovarian tumours, the removal of infected and pregnant tubes, and curettage for various causes.

Misplacements of the Uterus.—The commonest met with is retroversion or retroflexion accompanied more or less by slackness of vaginal walls, and a deficient perineum. For the most part these patients are the victims of a too enthusiastic wielder of the obstetrical forceps. For many years my experience has confirmed me in what I believe is universally taught by gynaecologists, that whilst a few of these cases can be successfully dealt with by the vagina alone, none can be successfully dealt with by the abdominal route alone.

The few are those cases where the uterine descent is slight, the cervix torn and unhealthy, and the cystocele marked. In such cases some buttress operation, combined with amputation of the cervix such as Fothergill describes, answers very well indeed.

Where you find a badly sagging vagina, a meagre perineal body, and a uterus in Douglas's pouch, the operation popularly called the "round trip" is the only one worth doing. As to what you should do when you have opened the abdomen, I think you must be guided by the conditions found. Where the round ligaments are rudimentary, or weak or stretched, ventral suspension is the best procedure. I have had the opportunity of seeing two patients in labour on whom I had done ventral suspension one or two years previously, and parturition was quite normal. There is of course a risk of trouble, so one would choose this method with a quieter mind in cases where a future pregnancy is not anticipated.

If the round ligaments are strong, though perhaps stretched, there is not much to choose between slinging the uterus posteriorly (Baldy-Webster method), and shortening them (modified Gilliam). In the cases I have been able to follow up in which one or other of these methods have been employed some of those posteriorly slung have complained of pain, but the uterus has remained well cocked up.

In those in which the round ligaments have been shortened there has in one or two been local tenderness which eventually disappeared, but always the uterus has remained in good position. Either operation relieves the symptoms equally well.

Ectopic Gestation.—There were nine operations for this condition with no death. All had ruptured and were admitted as abdominal emergencies, the condition was occasionally mistaken for appendicitis, but generally diagnosed before operation. One of these was of more than ordinary interest.

Mrs. —— attended out-patients with a complaint of sharp attacks of pain in the right iliac fossa. I, and then an officer under instruction from the College, examined her. A swelling of the right adnexa was apparent, and while we were discussing the case the patient collapsed in the waiting-room as she was leaving the building. She became blanched and pulseless.
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in the few minutes we observed her. She was hurried off in an ambulance, and her abdomen was opened within the hour. She was an early tubal pregnancy, and one or other of us had ruptured it.

A blood-count has not in our experience proved of much assistance in the cases of ruptured tubal pregnancy. A reduction in total red cells seems fairly constant, and fits in well with the pale waxy facies which is so often a characteristic feature of the condition. White-cell count does not help much; both leucopenia and leucocytosis have been observed. Quite remarkable is the smoothness and rapidity of convalescence of these cases after operation.

Sterility.—The practice of gynaecology rather inclines one to divide patients into two main classes—the sterile who want children, and the fertile who do not. In the class from which our patients are drawn, the number who consult one for sterility is surprisingly large. We have been doing tubal insufflation in the hospital for about a year. Provis's apparatus is used. The technique is very simple, and an anaesthetic is rarely required. Complete passivity on the part of the patient is, I am convinced, essential for an accurate reading, and so it is better to give an anaesthetic if the patient is at all nervous and jumpy.

The findings by this method invariably conform to the condition found at subsequent laparotomy. In the few cases in which I have done salpingostomy, none have so far become pregnant. Neither, so far, have I heard of pregnancy in a case of sterility where gas entry into the tubes was demonstrated at a first or subsequent test. Still I consider the procedure of value, perhaps as a curative measure, and undoubtedly from the point of view of diagnosis, inasmuch as it affords a means of demonstrating the total occlusion of the Fallopian tubes. Where this state of things has been proved, the futility of dilating the cervix becomes apparent. Notwithstanding all this, that simple dilatation of the cervix is occasionally followed by pregnancy in the previously sterile is an undoubted fact.

Hysterectomy.—The total operation was done four times and the subtotal five times. There were three deaths—two from intestinal obstruction (paretic) and one from general peritonitis. In all but two cases the operation was done for fibro-myomata. One of the exceptions was a case fairly typical clinically of chorion epithelioma. At operation the naked-eye appearance confirmed this. The patient later had symptoms pointing to secondary deposits in lungs and spine, and she died of peritonitis. The pathological report, however, was negative.

The other case was that of a woman who had been confined in her quarters sixteen days before. After being up a few days, symptoms supervened necessitating admission. A pelvic abscess was found and drained by colpotomy. Drainage, however, was unsatisfactory. Laparotomy was then done and an acute double salpingitis and pyometra was found. The whole metrium, too, was infiltrated with pus. Total extirpation was done and both vaginal and abdominal drainage provided. She made an uneventful recovery. B. coli was found in pure culture at both operations.
There was only a mild leucocytosis and the constitutional disturbance throughout the illness was surprisingly small.

There is not space within the limits of this article to deal with the remaining surgical work at any length.

Appendicectomy was done fifty times with two deaths, both in children. Our experience is that appendicitis in children is often an obscure and puzzling condition. The general constitutional disturbance is so frequently not in proportion to the severity of the condition found at operation. Some of our worst cases have shown little or no change of pulse or temperature. The decubitus and typical abdominal facies generally, however, afford a clue. I have grown to place much faith in these in the absence of the signs which in an adult one would accept as pathognomonic. Not much reliance can be placed on the white-cell count in children. The diagnosis of appendicitis in children, then, is often extremely difficult, and leaves one on the horns of a dilemma. On the one hand, if the appendix is really inflamed, there must be no delay in operating, because such cases so rapidly slip through one's fingers; on the other hand, children stand abdominal section so badly that an unnecessary operation is often a tragedy.

Herniotomy.—Of the large number of hernias operated upon, there were three into the canal of Nuck, in adults. The remaining adult cases were femoral or umbilical. There were a considerable number of operations on children for congenital inguinal hernia. In infants operation is best deferred till they are 18 months or 2 years old. If immediately sealed with collodion, they usually heal well. There were only two cases of strangulated hernia in infants during the period. Strangely enough, these were admitted within forty-eight hours of each other.

Other Abdominal Operations.—There were five operations on the gall-bladder, all for gall-stones. In three cases I found that it was possible to conserve the gall-bladder. In two cases excision of the gall-bladder was necessary. In one of these a stone was found impacted in the common bile duct just at the ampulla. It was removed by incision and subsequent suture of the duct. All the cases did well.

Gastro-enterostomy was done twice; partial gastrectomy once.

Intussusception.—There were five operations for this with four deaths.

Hypertrophic Stenosis of the Pylorus.—Eight cases of this were diagnosed during the period. Seven of these cases were treated by gastric lavage, with two deaths, Rammstedt's operation was done on the other case with a very satisfactory result. Gastric lavage is a slow and tedious method of dealing with these cases, but with patience success is occasionally attained. Rammstedt's operation is easy to perform, and in the case treated in this way the improvement was dramatically sudden and complete.

Operation for Tonsils and Adenoids.—There were 519 cases of this with one death, due to anaesthetic poisoning. In only one case was serious hæmorrhage recorded.

Mastoid Operations.—There were seventeen operations with two deaths, due to intracranial complications.