OBSTETRICS AND GYNECOLOGY

193

graft from the tibia was employed successfully in every case in a series
of thirty-two cases, and with this material there was a notable absence
of after-headache, indicating the better tolerance of the living graft
by the tissues as contrasted with sterilised bone. A considerable
margin of free periosteum should be removed in addition to that
covering the graft from the tibia. If necessary a thin graft of
6 to 8 cm. in length may be cut, with a breadth of from 2 to 3 cm.
Instead of bridging the gap with a single graft, several strips of bone,
with its periosteum, may be arranged so that they overlap. The
periosteal surface should be applied next the dura mater. The ends
of the graft should be pared down so that they may rest without pro-
jecting on the pericranium at the edge of the gap. The subsequent
repair of the gap is always firmer after transplantation of bone than
when cartilage has been used. In very large defects of the skull it
may be advantageous to combine both forms of graft. The author
believes that a certain amount of new bone is subsequently formed
from the transplanted bone and periosteum.

In forty-eight cases the cranial defect was filled by portions of costal
cartilage, as recommended first by Morestin. The operation was
successful in all but two of the cases, and the grafts, with few excep-
tions, united firmly in position. When the gap is of any size, several
grafts of cartilage will be necessary. These are placed between the
dura and the scalp, and there may be some difficulty in preventing
them from shifting their position. The author recommends for fixing
the grafts the insertion of several catgut strands through the edge
of the pericranium and crossing the defect in the skull so as to form
a sort of meshwork around or over the grafts. Large grafts are not
advisable, as there is a tendency for the surface to curve inwards and
to press upon the cortex.

There was no operative mortality in the series of 106 cases.

J. M. G.

OBSTETRICS AND GYNECOLOGY.

UNDER THE CHARGE OF

A. H. F. BARBOUR, M.D., AND J. W. BALLANTYNE, M.D.

MOTHER AND CHILD WELFARE IN FRANCE.

The long discussion on the subject of the protection of mothers and
infants in factories, and especially in munition works, which has
occupied so many sittings of the French Academy of Medicine, and to
which reference has already been made (Edin. Med. Journ., June 1917,
p. 452), has at length been brought to a conclusion, and several
findings have been stated (Bull. de l'Académie de médecine, No. 11, for
13th March 1917, pp. 354-370). The Academy, keeping in mind that
the extension of women's work in factories, and especially in munition
works, will bring a serious risk of depopulation if the pregnant and the nursing woman worker be not sufficiently and immediately protected, puts forward the following recommendations:—(1) Pregnant and nursing women employed in works, and particularly in munition works, must be given only things to do requiring an effort which shall be moderate both in form and duration. Every kind of occupation exposing the worker to traumatism (slow or rapid), causing fatigue, and leading to insufficient sleep should be forbidden to them; the half-day system, with a maximum of six hours, should be applied to them in preference. They must be set free entirely from night work. They shall be excluded from every kind of employment, which by its dangerous, its toxic, or its anti-hygienic character, would constitute a risk to their health and would, in consequence, compromise the pregnancy and lactation. (2) The repose for, approximately, four weeks before confinement, which was made optional by the law of 17th June 1913, should be made obligatory for women workers in munition factories. (3) Consultations regarding mother and child welfare, conducted by a doctor of medicine, shall be provided for the women workers, so as to furnish them with advice and suitable treatment. The doctor in charge shall have the power of stating the necessity for a change of employment, for the lessening of the work, and even for its stoppage altogether in every pregnant or nursing woman in whom he shall regard its continuance as likely to compromise her health or the life of her child. In order to obtain for women workers in factories and munition works the advantage of the health conditions which their sex demands, the appointment of a special woman superintendent is essential. She would be intermediate between the male staff of the workshops and the women workers. The factory superintendent of the British system should be represented in French industry. (4) For the purpose of favouring maternal nursing there should be measures adopted in factories and munition works for allowing women to nurse their babies under thoroughly hygienic conditions and during their working hours. The same privileges should be given to wet-nurses who may be working in the factories. (5) The pregnant or nursing woman whose condition causes her to change her employment or to reduce or cease her work shall receive an allowance compensating her for the diminution in or the loss of her salary. This allowance should be guaranteed by the State, working through some insurance association. (6) In addition to providing rooms for nursing the babies the administration ought also to establish day nurseries for the children where the necessity arises.

PREGNANCY AND FIBROID TUMOURS.

Dr. A. Heimo, the first assistant in the Obstetrical and Gynecological Clinic of the University of Geneva (Ann. de gynéc. et d'obstét.,
1917, s. 2, vol. xii. pp. 449-557), has recorded four cases in which pregnancy was complicated by the presence of a uterine fibroid. His observations were made under the supervision of Professor Beuttner of the University of Geneva. It is clear that myomata are a more frequent complication of pregnancy than has hitherto been thought; but, on the other hand, the records at Geneva show that their influence does not frequently act as an obstruction in labour. At Beuttner's clinic, between the years 1907 and 1915, in only four instances (those related in this article) was surgical interference necessary. An interesting diagnostic sign is spoken of. If an irregularity in the contour of the pregnant uterus is noticed, its disappearance under an artificially induced contraction of that organ will prove that it was due to a small part of the fœtus, whilst its accentuation will point to its myomatous character. Even with the aid of this means of differentiation one is sometimes in doubt, and it is for this reason that laparotomy is to be preferred as the operative procedure. Having opened the abdomen, the operator can see clearly what is present, and can decide upon the best plan to follow. The vaginal route is obscure, and the following of it is apt to lead to "disagreeable surprises." Generally speaking, hysterectomy is to be chosen; but in the presence of a single and clearly circumscribed subperitoneal fibroid enucleation (myomectomy) is not to be put lightly aside. Dr. Heimo is of opinion, from the study of the Geneva cases, that fibroids do not in a large proportion of patients lead to sterility. Not more than 20 per cent. of the women suffering from these tumours were sterile. He quotes Hofmeier's statement, that in some cases the fibroid actually facilitates conception by delaying the menopause. Pinard takes another line of thought, and believes that the presence of uterine myomata is a consequence of sterility, that it is in fact a punishment inflicted upon every uterus which has not fulfilled its physiological duty. Dr. Heimo's general conclusion is that there has been a widespread tendency to exaggerate the influence of myomata in causing sterility and their evil effects upon pregnancy. Further, individual cases differ so much in every detail that each must be looked at upon its own merits. In support of what Dr. Heimo has maintained regarding the value of enucleation in some cases of myomata in the pregnant uterus, allusion may here be made to Dr. John A. M'Glinn's record of two successful myomectomies during gestation (Amer. Journ. Obstet., March 1917, vol. lxxv. pp. 406-408). He points out that myomectomy in the case of the non-pregnant woman has a mortality as high or higher than subtotal hysterectomy on account of hæmorrhage and infection, and that in pregnancy these dangers are increased, whilst the risks of abortion are added, and after the fifth month that of uterine rupture appears. At the same time justifiable indications are occasionally met with. Thus, in one of the two instances cited by Dr. M'Glinn the
tumour—an intraligamentous fibroid on the right side—so entirely filled the pelvis there as to displace the uterus to the other side and press injuriously on the bladder and rectum. For this reason the broad ligament was opened, the tumour was shelled out and cut away from its uterine attachment, and the wound in the uterus (about 3 ins. in length) was closed with catgut sutures. She made a good recovery and was delivered at the full term of a living child after a normal labour. In the second case the diagnosis of rupture of an extra-uterine pregnancy was made on account of sudden and agonising abdominal pain and shock. The abdomen was opened, and then it was found that a pedunculated fibroid tumour of the uterus had undergone torsion of its pedicle. It was enucleated, and, notwithstanding the fears of the operator, the pregnancy (then at the fifth month) progressed to the full term, and a living child was born after an easy labour.

It is not always possible to distinguish between pregnancy and a fibroid of the uterus without operation. Thus Dr. A. M. Judd reported to the Brooklyn Gynecological Society (Amer. Journ. Obstet., March 1917, vol. lxxv. pp. 496-498) two cases of degenerated myomata, in both of which he was unable to exclude pregnancy until he had opened the abdomen. In the first case—a woman 43 years of age who had had seven full-time labours and two miscarriages—the menstrual history had been regular till seven weeks before Dr. Judd had seen her. There was pain in the lower part of the abdomen, a quick pulse, and a temperature of 100° to 102°, and a smooth, round, hard mass about the size of a four-months' pregnancy; there was some moisture in the nipples, but no foetal heart was heard. The diagnosis of early pregnancy complicated by a fibroid was made, and, when the temperature had fallen, Dr. Judd performed hysterectomy. The pathologist reported the presence of a degenerating fibroid without pregnancy; the uterus showed an interstitial endometritis. The second case was even more interesting. The patient was 39 years of age, and she complained of vaginal hemorrhage; she had been married for two years and had had three miscarriages. The uterus was enlarged to the size of a four-months' pregnancy. There was a temperature of 100°. The abdomen was opened, and if Dr. Judd had not noticed a nodule projecting from the right side of the uterus he would have regarded it as a simple case of pregnancy and closed the cavity again. As it was, he removed the uterus and received from the pathologist the report that the condition might be a fibroid tumour undergoing myxomatous or hydatid degeneration, or that it might be a hydatid mole undergoing fibroid changes. The endometrium in its histology showed no evidences of pregnancy, but was simply hypertrophied. In both these cases the softness of the tumour suggested pregnancy. At the same meeting at which Dr. Judd recorded his
diagnostic difficulties Dr. A. C. Beck (p. 498) showed a specimen of fibroid tumour which had complicated pregnancy and labour. The patient was a thirty-year-old primiparous negress in whose uterus several fibroids could be palpated. One of these tumours was fixed in and completely obstructed the pelvic inlet. Since the woman was desirous of having a child it was decided to allow the pregnancy to go to term and perform Cesarean section. With the onset of labour pains the big obstructing fibroid was drawn by the uterine contractions up out of the pelvis, and so for the time being the brim was set free for the foetus to enter. The child, however, was presenting by the breech, and it was feared the tumour would again descend and block the head, so the Cesarean section was performed, and then the uterus was removed. Both mother and child did well. Dr. J. O. Polak (p. 499) also showed a specimen of a myoma complicating pregnancy. The patient was 30 years of age, and had enjoyed good health till the commencement of her pregnancy, when she was seized with intense pain, vomiting, and obstipation. Later, she had a second attack, when Dr. Polak saw her, and found a sensitive mass in the lower part of the abdomen, accompanied by a rise of temperature, by leucocytosis, and by an increased polynuclear count. The diagnosis of pregnancy with a degenerating fibroid tumour was made. After the subsidence of the temperature Dr. Polak opened the abdomen and removed the tumour and the uterus. The pregnancy was in a saculation of the uterus, which was adherent and incarcerated in the pouch of Douglas, with the tumour, a degenerating fibroid, attached to the anterior uterine wall, lying above it. The woman made a good recovery.

The cases which have been summarised above reveal the numerous diagnostic pitfalls which await the observer, be he obstetrician or gynecologist; they illustrate the caution which must be used in dealing with such complications even after the abdomen has been opened; and they exhibit the modifying influences of a pregnancy upon such tumours. In no circumstances more than in gestations complicated by fibroid growths must the old caution of never being surprised by any happenings be more scrupulously observed; and the surgeon must be ready-witted as well as ready-handed to deal successfully with the various emergencies which may face him.

J. W. B.

REPORT BY THE CENTRAL MIDWIVES BOARD FOR SCOTLAND.

In terms of section 24 of the Midwives (Scotland) Act, 1915, the Central Midwives Board for Scotland have the honour to present the following report of their work during the past year:—

Constitution of the Board.—The Midwives (Scotland) Act was passed on the 23rd December 1915. On 18th February 1916 the Board was
duly constituted, with the exception of two members, representatives of the midwives, to be appointed by the Lord President of the Council when a sufficient number of midwives had been enrolled.

On 19th April 1916 the Order of the Privy Council approving of the rules prepared for the institution of the roll was received. Thereafter steps were taken for advertising that the roll was open, and the medical officers of health and local supervising authorities were sent an explanatory statement showing the position of matters.

The Board resolved to delay the final revision of the rules for the supervision of midwives until the two representatives of the midwives had been appointed by the Lord President of the Council.

On 25th May 1916 it was reported that a sufficient number of midwives had enrolled to permit of the list being submitted to the Lord President of the Council in order that he might make the necessary appointments. The intimation of the appointment of the representatives of the midwives by the Lord President was made on 6th July 1916.

**Rules Prepared.**—The rules were thereafter finally revised and adjusted.

It may be pointed out that consideration of these rules was also delayed until the proofs of the new rules prepared by the Central Midwives Board for England were available (July 1916), and the Board resolved that the curriculum, etc., required should be co-extensive with the requirements of the new English rules.

**Rules Approved.**—On 26th August 1916 the rules received the approval of the Privy Council. Thereafter a memorandum in regard to the provisions of the Act was sent to supervising authorities and medical officers of health.

**Recognition of Institutions, Teachers, and Appointment of Examiners.**—Due intimation was given by advertisement that applications would be considered.

**Recognition of Curriculum.**—The Central Midwives Board for England intimated that after 31st March 1917 they proposed to remove from their training list all institutions and persons hitherto recognised in Scotland.

Notification of this decision had been sent by the English Board to the institutions and teachers affected, and the Scottish Board thereupon invited applications for recognition to be lodged with them.

**Reciprocal Recognition as Regards Curriculum.**—The Boards have come to a reciprocal arrangement in regard to the recognition of the curriculum in the two countries.

It has been arranged that midwives receiving their training at recognised institutions in Scotland may enter for the examination in England on their schedules being countersigned by the Secretary for the Central Midwives Board for Scotland.
A similar understanding applies to midwives who have been trained in England and who desire to appear for the examination of the Scottish Board.

A list is annexed of approved institutions, and teachers and examiners appointed.

Reciprocal Recognition as Regards Examination.—At the present time, owing to the English Midwives Board not having similar powers, the Scottish Board are only in a position, until the end of this year, to enrol midwives who have passed the English Midwives Board's examination and desire to practise in Scotland. On the other hand, midwives passing the examination of the Scottish Board cannot be enrolled in England in order to practise there without passing the examination of the English Midwives Board. Until that Board obtains an Amending Act reciprocal arrangements in regard to examinations cannot therefore be instituted.

Examinations.—Regulations for the conduct of examinations and for examiners were submitted and duly approved by the Privy Council.

After intimation by advertisement the first examination of the Board was held, when seventy-seven candidates entered. The examination was conducted simultaneously at Edinburgh, Glasgow, Dundee, and Aberdeen.

The candidates made a very creditable appearance, and sixty-nine passed the examination.

Financial Statement.—As required by section 13 of the Act, the Board beg to submit the financial statement for the year ended 30th December 1916.

It will be noted that the work of the Board has been initiated and carried out in an effective and economical manner. A credit balance has been carried forward to next year without requiring any levy on the supervising authorities.

The Board desire to express their thanks to the Privy Council for making arrangements whereby the original grant was continued for another year in case of emergency.

Roll.—For the period to 31st March 1917 the number of midwives enrolled is 2026. Of these, 1957 were enrolled under the provisions of section 2 of the Act, while 69 were enrolled after passing the examination of the Board.

English Board.—The Board desire to take this opportunity of expressing their indebtedness to the Chairman of the English Board, Sir Francis Champneys, Bart., and to the Secretary, Mr. Duncan, for the generous help they have extended to the Scottish Board, and for the benefit of their ripe experience.

J. Halliday Croom, Chairman.
D. L. Eadie, Secretary.

50 George Square, Edinburgh,
31st March 1917.