malignancy. The upper part of the sigmoid was slightly distended; on tracing it downwards the lower six inches presented a remarkable appearance. Along one-half of its circumference it was closely and tightly bound down by old-standing adhesions and scar tissue to the lateral wall of the left iliac fossa. Springing from the lowest inch or two of the sigmoid was a mass of bands which stretched upwards and forwards to the anterior abdominal wall, and the left and upper part of the bladder; it was at this point that the obstruction was most marked; there was a sharp kink in the bowel. The lumen of the rest of the affected portion was also slightly diminished. With some difficulty these adhesions were separated and divided; the gut, which was freed, showed some slight thickening of its wall on that side which had been bound down, but not on the opposing half of the circumference. A rectal examination, made at the close of the operation, gave normal findings.

It is probable that at some time or other at one or more points along one side of the sigmoid there had been inflammatory trouble, which had spread along that side and gradually bound the bowel down in the manner shown at the operation. The origin of this inflammatory process is doubtful; from the condition of things seen it was quite possibly due to inflammatory changes in one or more diverticula on the affected side of the gut, this inflammatory process having spread and then subsided. I should say, therefore, that this was a case of early but arrested diverticulitis; I know of no other pathological condition which could fit in with the findings. The patient made an uninterrupted recovery and he has no further trouble with his bowels.

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Reports of Societies.

FETAL INTRACRANIAL HAEMORRHAGE DURING BIRTH.

AT a meeting of the Edinburgh Obstetrical Society, held on June 9th, Dr. WILLIAM FORDYCE, President, in the chair, Dr. EARDLEY HOLLAND read a paper on cranial stress in the fetus during labour, based on *post-mortem* examination of a consecutive series of 168 fresh fetuses. Most of these had undergone breech or forceps delivery, or delivery through contracted pelvis, but a few were born after apparently normal labour. Injuries of the septa of the dura mater were found in 81, or 48 per cent., with subdural cerebral haemorrhage in all but two cases.

The septa of the dura mater were described and shown to form a perfect mechanical system of stress bands and stress lines. The theory was developed that the septa of the dura mater—that is, the tentorium cerebelli, falx cerebri, and falx cerebelli—were, functionally, ligaments of the cranial bone, and limited the alteration in shape or moulding of the head during labour.

During excessive change in shape or moulding of the fetal head excessive strain is thrown on the septa, and they are overstretched and may ultimately tear. The tears occur in the area of greatest stress in the "stress bands"; the usual site is the anterior border of the tentorium at its junction with the falx cerebri. If tearing occurs, the limitation of movement of the cranial bones is removed, and the head is free to undergo an excessive alteration in shape. Further alterations in the relationship of the intracranial contents are thus brought about; the chief of these is kinking and stretching of the vein of Galen. The fixed point of this vein at its entrance into the straight sinus is moved upwards and forwards; the acutely kinked vein becomes engorged and tense, and may rupture. Rupture of the vein of Galen, however, is rare; the vessels that usually give way, and are the cause of subdural haemorrhage, are the tributaries of the vein of Galen coming from the cerebellum and pons Varolii.

The lecturer said that, clinically, tearing of the tentorium cerebelli—an almost non-vascular membrane—was not in itself dangerous; the danger lay in the cerebral haemorrhage which accompanied or followed it. Besides being found in dead-born fetuses, these injuries were extremely common in infants who had died during the first week of life as the result of difficult labour. Their frequency in breech cases suggested that intracranial haemorrhage was the cause of death, and not, as usually described, pressure on the cord, with asphyxia. It was indicated, therefore, to avoid haste and methods likely to cause undue cranial stress. Healed tears might be found in children several months old, and an example was shown. There could be no doubt that many of these injuries were not immediately fatal; surviving infants might die either in the early days of life or after a few weeks or months. The extent to which these injuries were responsible for infantile cerebral disease, such as spastic paraplegia, mental defects, backwardness, and other similar conditions, formed an interesting speculation.

Dr. J. W. BALLANTYNE and Dr. F. J. BROWNE discussed Dr. Eardley Holland's paper, and showed specimens illustrating head injuries in the newborn fetus. Dr. Ballantyne considered that Dr. Holland's contribution must now be considered as the classical paper on the subject; it seemed evident that tearing of the vessels in the neighbourhood of the tentorium was a common cause of haemorrhage. He and Dr. Browne, however, had more often found haemorrhage in other sites, and in their experience intraventricular haemorrhage was frequent. They were convinced that prematurity was an important factor; asphyxia, post-natal infection, and syphilis were other possible causes. The nature of the haemorrhages seemed to put operative interference out of court. Sir HALLIDAY CROOM said that many years ago, in children after efforts made to resuscitate for asphyxia, he had found lacerations of the liver, intestines, and spleen; one case which he submitted to Professor Cunningham showed a laceration of the tributary vessels of the Galen vein. Dr. HAIG FERGUSON emphasized the need for care in the application of forceps in premature children. He referred to the paper of Meyer, who reported 24 cases of tearing of the tentorium in 64 stillbirths; this was a percentage of 37.5 as compared with Dr. Holland's 48 per cent. He believed that in the majority of cases of cephalhaematoma a fracture of the bone took place. Dr. HENDRY said that out of 250 cases in the Glasgow Maternity Hospital they had only had one case of fracture of the cranial bone with cerebral haemorrhage. They had only found injury to the tentorium in 8 out of 250 cases. He pointed out how easy it was to injure the tentorium in the process of examination. Dr. JOHNSON believed that the subject had important clinical bearings, and he was sure that injuries of this sort which were not lethal were important causes of mental defects. The PRESIDENT thought it more likely that the haemorrhages found in breech cases were due to asphyxia and not to stress.

Dr. EARDLEY HOLLAND, in reply, agreed with Dr. Ballantyne that there were many causes of haemorrhage. He himself had focussed his attention on tentorial conditions; the examination rendered the specimens unfit for any further investigation. It was best to make a window in the side of the head and drop the brain out cautiously. His investigations had shown that there was no relation whatever between cerebral haemorrhage and a positive Wassermann reaction.

Reviews.

THE AFTER-TREATMENT OF WOUNDS AND INJURIES.

IN his book on *The After-Treatment of Wounds and Injuries*[1] Mr. R. C. ELMSLIE has produced an eminently straightforward practical work. It is the fruit of personal experience gained in a military orthopaedic hospital, and does not pretend to be a complete treatise on the subject. He observes that the principles of military orthopaedics are in no way different from those of civil orthopaedic surgery, though the applications may be new and changing. These principles depend upon what may, after all, be regarded as guiding ideas in all surgery: "a knowledge of pathology, a clear appreciation of mechanics, and the realization that the surgeon's aim is to restore function." Probably the sooner we get rid of the convention that military orthopaedics is a special department in surgery the better. There seems no good reason why any good practical surgeon should not learn to do satisfactory orthopaedic work. Nor is there any reason against the general practitioner making himself familiar with this class of case and endeavouring to cultivate the orthopaedic conscience

[1] *The After-Treatment of Wounds and Injuries.* By R. C. Elmslie, M.S., F.R.C.S. London: J. and A. Churchill. 1919. (Med. 8vo, pp. vii + 323; 144 figures. 15s. net.)