carbolic acid, and the great cavity was finally packed tightly with iodoform gauze soaked in turpentine. An antiseptic dressing and a splint were bandaged on and the constricting band was removed. Absolutely no hæmorrhage occurred.

Skiagram of tumour showing loculi formed by thin bony septa.

Dr. H. D. Rolleston, who kindly examined the tumour microscopically, reported that the "growth shows myxomatous tissue, and in places the structure suggests a spindle-celled sarcoma, while in others there are young cartilage cells. It is more probably a myxo-chondroma with recent sarcomatous change than a chondrifying myxo-sarcoma. There are numerous areas of fatty degeneration in the tumour."

The cavity slowly became obliterated by granulation tissue, and the gauze packing, which was removed daily after soaking the arm for some time previously in a bath of hot boric lotion, was omitted on Oct. 22nd. On Nov. 3rd the patient unfortunately developed a severe sore-throat, and the tonsils and uvula rapidly became covered with a yellowish white exudation, and the glands behind the angle of the jaw were enlarged and tender. The temperature, however, never rose above 99.8°F., and although the exudation was examined several times by Dr. C. Slater, bacteriologist to the hospital, no diphtheria bacilli were ever found. By Nov. 10th the throat was well and the wound in the forearm was practically healed, and she was discharged from the hospital on Nov. 17th. Her present condition is excellent.

The swelling is much smaller, the arm is strong and can be used freely, and all pain has disappeared.

Remarks by Mr. MARMADUKE SHEILD.—It is too early to say if the cure can be considered permanent. The suspicion of sarcomatous elements being mixed with the cartilage makes one cautious in prognosis. In instances of chondrosarcoma of the bones the growth has repeatedly been known to recur in other parts, as the lungs or the meninges of the brain. The consolidation and shrinkage of the osseous shell, however, look very promising, and time alone can settle the question of local or general recurrence. The skiagram shows a small growth lower down in the shaft. This may possibly take on growth and expand the bone, but if it does so it will be treated in the same way as the larger growth.

This case is an extremely interesting example of what help may be obtained by skiagraphy in the diagnosis of tumours of the bones. Of course, all exostoses appear plainly. Periosteal sarcomata merely give a faint shade unless impregnated with calcareous salts. Cavities in the bone, the site of cysts or abscesses, are usually distinctly demonstrated. In the present illustration the lobulated outline characteristic of cartilaginous tumours is plainly seen. And this, with the long history of the growth, rendered an approximate diagnosis possible.

Enucleation of tumours of bone has long been practised by surgeons, but the true ultimate results are perhaps hardly enough known. Many of the cases are done in hospital practice, and the patients are lost sight of, and the experience gained is lost or lies buried in the private mausoleums of hospital notes. Hitherto the operation has usually been done for myeloid growths, and I have seen it twice performed for these tumours in the head of the tibia. Both cases were very unfavourable. In one the growth rapidly recurred; in the other sepsis supervened and the knee-joint suppurated. The operation has also been done for angiomas of bone—so-called osteo-aneurysm. The differential diagnosis of these growths from very vascular sarcomata is vague and unsatisfactory, and in some reported cases diagnostic errors are manifest.

As regards central enchondromata of bone they are undoubtedly rare. By far the greater number of these tumours originate on the surface of the bones, in which by pressure they may form deep hollows. Fixed by the periosteum and fascia the similarity to a tumour growing out of a bone is very great. I have seen one of the best of the former surgeons in London amputate a finger when he supposed the bone was distended by a cartilaginous tumour, and the growth fell from the bone upon the ground after the periosteum was divided over it. The appearances of the cartilage in the present case, especially the lower patch, are very suggestive of "islets" of undeveloped cartilage left in the bone, though there is no evidence of old marked rickets in the patient.

The case is of importance and interest in showing how far central tumours can be diagnosed by the x rays and as affording an undoubted example of the efficacy of the practice of enucleation in suitable cases. The method of operating, making the part exsanguine and stuffing with turpentine gauze before removing the bandage above, renders it possible to perform such operations with no loss of blood whatever. My previous experience of enucleation of tumours of bone has been confined to the jaws. I have had one instance of enucleation of a myeloma from the antrum of Highmore and one from the lower jaw which seemed permanently cured. At least, there was no return after three years. I have also had one case of large cyst of the lower jaw which contained brownish fluid sparkling with cholesterine. This was opened, scraped out, and stuffed, with a tedious after-treatment, but ultimate cure. I never was able to establish clearly the pathology of this remarkable cyst, but I believe it was quite unconnected with dental causes.

CUMNOCK COTTAGE HOSPITAL, AYRSHIRE, N.B.

A CASE OF ABSENCE OF THE ANUS AND RECTUM, WITH
COMMUNICATION BETWEEN THE INTESTINE AND
URINARY TRACT; OPERATION WITH
RECOVERY.

(Under the care of Dr. JAMES McQUEEN.)

DR. J. McQUEEN is to be congratulated on the favourable result of the operation which he performed in the following case, for these abnormal communications between the rectum

and bladder are not prone to close spontaneously, even though a free way be made for the contents of the bowel. He was, however, clearly in the right in endeavouring to establish the normal channel. This should always be done if it be possible to reach the rectum from the perineum, for in these cases it may be found practicable to close the recto-vesical communication at a subsequent operation. Formerly it was advised, as he mentions in his remarks, to make an artificial anus in the inguinal region to divert the fæces, but of late years it has been recognised that the benefits of a normally situated anus outweigh the extra risks of attempting to open the bowel from the perineum and the possibility of non-closure of the recto-vesical fistula.

A married woman was confined at the Cumnock Cottage Hospital on July 23rd, 1900, of a healthy, well-nourished male child. While visiting her on the following day Dr. McQueen's attention was directed by the midwife to the fact that there was "something peculiar" about the anus of the child. On examination it was found that the anus was absent and that at the point where it would have been expected there was a papillary projection closely resembling a small external pile. There was no bulging in the perineum. During the examination of the child a small quantity of faecal-stained mucus exuded from the urethra. On inquiry it was found that this had occurred on several occasions since birth. After explaining the serious nature of the condition permission was obtained to attempt to remedy it.

The papilliform projection already noted was first removed and the incision was extended towards both the coccyx and the pubes. As there was no appearance of a rectum or any bulging point dissection was carefully carried up, keeping well into the surface of the sacrum. On getting to a depth of about one and a quarter inches a tense shining membrane was met. On inserting the finger it was found that this bulged downwards when the infant cried or strained. With some difficulty the membrane was seized with a bulldog forceps, and on making an exploratory puncture some meconial-stained fluid exuded. The gut was now separated from its connexions, but considering the depth and narrowness of the opening and the proximity of the peritoneum this could not be done to any great extent. The gut having been pulled down to the surface was incised for about half an inch and a large quantity of meconium was evacuated. The lips of the opening into the bowel were stitched to the lips of the cutaneous incision and a dry dressing was applied.

The progress of the case for the next two days was uneventful. On the third day it was found that the stitches had sloughed out of the friable perineal tissues. The gut had retracted a short distance, but the red, pouting mucous membrane formed a guide to the object sought. It was again pulled down and stitched as before, but on the fourth day the stitches again gave way. On this occasion, however, the bowel had not retracted so far and consequently it was deemed advisable to leave the structures as they lay. Four weeks later the orifice became constricted and faecal matter was again passed from the urethra, but not in great quantity. Digital dilatation was performed and continued once a week for three weeks, the mother being instructed to pass a bougie twice daily. The bougie was afterwards alone used, but in 10 days slight constriction again occurred. On inserting the finger a little faecal matter exuded from the penis, although the mother had not observed any for some weeks previously. Since then the case has proceeded in an eminently satisfactory manner. For the last 15 weeks no fæces appeared in the urine and the bougie is now only occasionally used. The only thing that one can note on external examination is that the anus is deeply planted, doubtless owing to the gut dragging on the surface incision. The child's health has all along been excellent, and he is at present (aged five and a half months) a well-nourished, healthy child.

Remarks by Dr. McQUEEN.—The above case seems to be interesting from two points of view, especially because of the probable etiological explanation of the condition viewed from a developmental standpoint, and the bearing of this on the operative procedure and its result.

1. The bladder and urethral tract develop from the allantois which is an invagination of the wall of the hinder part of the primitive intestine. The neck of the allantois becomes obliterated, but in the case noted this seems to have persisted, maintaining the connexion between the blind pouch of gut and some part of the urinary tract during extra-uterine life. In addition the protodæum was absent and consequently no rectum was formed to evacuate the

contents of the intestine. The fistulous tract which persisted was analogous to a Meckel's diverticulum—the persistent neck of the umbilical vesicle, or to a persistent neurenteric canal communicating with the post-anal gut or to a patent urachus. All of these conditions are found as anomalies in extra-uterine life. In the case under discussion it is impossible to say at which point of the urinary tract the fistulous connexion with the intestine persisted. Judging from the depth at which the gut was found it seems not improbable that the junction was high up, possibly in the lower part of the bladder.

2. If this be the real explanation of such a case is it not possible that the fistulous connexion may close up spontaneously when nature has dispensed with its services through the aid of operation? The neck of the umbilical vesicle, the neurenteric canal, and the urachus are all normally closed when their functions are taken up by other organs. So in a case like the present: free passage has been given to the contents of the intestine and the persistent allantoic neck has probably become obliterated.

Judging from text-books the perineal operation is practically discarded as hopeless in cases like the present; it is recommended that a colotomy be performed at once. An artificial anus in the loin is quite consistent with life, but the discomfort and inconvenience must be very great. Besides, the mortality incidental to this operation in infants is very high. Granted that a vain search be made through a perineal incision in such a case, it can easily be closed up and a colotomy performed. By a colotomy, of course, the fæces are thrown out ere they reach the allantoic neck, and so the danger of their passage into the urinary tract is entirely obviated. In a perineal operation, however, there seems a reasonable hope that the fistula will be closed through its function having been superseded by the relief given by operation, although for a short period a little fæces may pass at times. It may be argued that the smallest quantity entering the bladder is a danger, but there is also the probability that the neck of the allantois will not be wider than the urethra, and that consequently what enters by the one can be thrown out by the other. Obviously, at all events, whatever operative interference is determined upon it must be radically carried out, and that, too, without delay if a favourable termination be anticipated.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Epidemic of Arsenical Poisoning in Beer-drinkers in the North of England during the year 1900.

A MEETING of this society was held on Jan. 8th, Dr. F. W. PAVY being in the chair.

Dr. ERNEST S. REYNOLDS (Manchester) made a communication on an Epidemic of Arsenical Poisoning in Beer-drinkers in the North of England during the year 1900 (illustrated by lantern slides). Dr. Reynolds's attention was first drawn to this subject in June, 1899, when he noticed an unusual number of cases of various skin eruptions, amongst them as many as five or six suffering from erythromelalgia in the workhouse infirmary. Later there was an unusual number of cases of peripheral neuritis. He then noticed that the skin eruptions occurred in the patients suffering from neuritis, and remembering that herpes might be produced by arsenic he suspected the beer, which was the apparent cause of the multiple neuritis in these patients. Professor Sheridan Delépine analysed various specimens of beer and found that they contained quantities of arsenic varying from two to four parts per million, which was equivalent to about one grain of arsenious oxide in three gallons. The same observer had found that invert sugar might contain 0.2 parts per 1000, glucose 0.8 parts per 1000, and sulphuric acid as much as 1.4 per cent. of arsenious acid, which was equivalent to four ounces of arsenious acid in the gallon, all of which substances were used in the manufacture of beer. Traces of arsenic could also be found in "sulphured" hops, various malts (from the anthracite used in manufacture), and in the vulcanite tubing. Various observations had led to the discovery that many beers were extensively contaminated with arsenic and that the beer and stout in