urine was ordered to be drawn off and the bladder to be washed out with a solution of Condy's fluid daily, using a soft catheter; and it was found on passing a No. 10 catheter that there was no return of the former disease, stricture. The patient, of course, remained in bed, taking milk diet only, and on Nov. 9th he stated that he was much more comfortable; the mucus in the urine had considerably diminished, and there was only a small staining of blood; the tongue was clean, and the pulse 72; the bowels comfortably open.

On Nov. 13th the notes suggest that the patient was rapidly improving, for the pain was subsiding. He expressed himself as greatly relieved. Tongue clean, temperature normal, and but little blood in the urine. This apparent improvement can only be referred to his complete rest in bed.

On the 15th, Mr. Norton's fourth visit, he found the patient complaining of great pain, aching and lancinating, in both loins and over the pubes; the pelvic growth had very distinctly increased in size, and the glands along left Poupert's ligament were enlarged. The bowels were still open normally. Temperature normal; pulse 76; but he could not sleep and his appetite was failing. He had literally no irritability of the bladder, never requiring to pass urine oftener than when in a state of health; it contained a large quantity of blood and mucus. A catheter was passed, and, after drawing off the urine, it was moved a little freely in the bladder, which bled rapidly. Examination by rectum disclosed no tumour within reach of the finger, but there was a gland behind the bladder enlarged to the size of a cob-nut but quite movable. It was concluded that there was a tumour of the bladder, which bled freely when touched, and which was the cause of the condition of the mucous membrane, and it was clear that the tumour was carcinomatous, and that the pelvic mass was secondary growth. From this time the disease made rapid progress; the tumour had increased visibly at each examination, twice a week; the bowels became confined; he suffered from tympanites and spasmodic or cramping pains in the upper abdomen, and from aching and lancinating pain in the pelvic region; the pulse was 90; the blood increased in quantity in the urine, and was of a florid-red colour; and the patient got no rest at night except under the influence of opium.

On the 19th the temperature rose to 101°; and on Dec. 4th he was jaundiced, and for a week previously the bowels had not been opened except by large enemata. The pulse was now 100, the temperature ranging between 100° and 102°. He was refusing food, and each day becoming sensibly weaker, the tongue brown and dry, and the breath fetid. On Dec. 9th he died.

Remarks by Mr. NORTON.—At my first visit there was no blood in the specimen of urine shown to me, but a very great quantity of mucus, and at the visit I recognised the presence of the growth at the brim of the pelvis. The mucus was evidence of severe catarrh, and I looked upon this as the result of a former stricture and of a dilated bladder unable to expel all its contents. I therefore made him pass his water, and then inserted a soft catheter to see if any were retained; but I found the bladder empty, a proof that there was no paralysis, a very common cause of catarrh, and one the presence or absence of which one should never fail to ascertain by the method I have mentioned in every case of catarrh of the bladder that comes under notice. The tumour in the pelvis I did not like to pass an opinion upon at my first visit; I thought it to be malignant, because he complained of pain, and manipulation did not cause the pain to arise at the moment of examination, and because the tumour was intensely hard and immovably adherent. At my third and fourth visits there was blood in quantity in the urine, and this blood was of a florid colour, evidently derived from a bleeding surface, and not smoky, as it appears when arising from passive congestion or a diseased condition of the kidneys. Now the blood came in quantity with the last four drops of urine. I therefore passed a metal catheter to sound the bladder, and found that hæmorrhage was produced by moving the instrument within the bladder. I had now no hesitation in asserting that the bleeding was from a growth in the bladder, and that the tumour in the pelvis was secondary deposit or in connexion with it. I say in connexion with it for this reason, that notwithstanding the condition of the urine there was absolutely no irritability of the bladder. He passed urine only three or four times a day, from which I inferred that the tumour was not situated near the neck, but at a distance from that region, probably near the summit of the bladder, and that the tumour was not large

so as to be compressed when the bladder was empty, otherwise there would have been pain and irritability of the bladder. I now examined per rectum, and could not feel within the length of my finger any definitely marked growth. Now, if the tumour were at the summit of the bladder, as it turned out to be, it would be closed up to the region where the secondary growth, or extension of the same, was situated—namely, at the brim of the pelvis. We had now clearly diagnosed the case, and as it was malignant disease, there was no possibility of operative interference. We had, therefore, only to watch the case and treat or relieve symptoms. We had to give the patient rest by means of soporifics, and to relieve pain by anodyne injections into the bladder, and later on to overcome the obstruction in the bowels by laxatives and enemata.

LEITH HOSPITAL.

COMPOUND DEPRESSED FRACTURE OF THE SKULL; EXUDATION OF CEREBRAL MATTER; RECOVERY.

(Under the care of Dr. FINLAY.)

For the following notes we are indebted to Mr. C. Stein:—

The two cases of compound depressed fracture of the skull, each of which was complicated by wound of the brain and loss of cerebral substance, will be found very interesting, whilst the result in each proves the wisdom of the treatment adopted. In neither case do the symptoms appear to have been in anything like proportion to the amount of injury sustained. In the case under Mr. Spofforth's care there were no symptoms beyond those produced at the time of injury; and in the case under the care of Dr. Finlay, beyond twitching of the left hand, noticed seven days after admission, there were no symptoms of importance developed. In neither case was there any paralysis noticed, and in each the recovery appears to have been perfect.

J. S.—, a boy eleven years of age, was brought to Leith Hospital on October 7th, 1884, at 4.30 P.M., his head having been crushed between the edge of the pavement and the wheel of a lorry. He was semi-comatose, though struggling and screaming, and had vomited freely. There was a scalp wound one-third of an inch long, situated an inch below the right parietal eminence, and the surrounding portion of the scalp was much bruised and swollen. Lying in the wound was a slight speck of a whitish substance resembling brain matter. Blood was oozing freely from the wound. On examining the skull, there was found an extensive depressed fracture involving a considerable portion of the right side of the skull. The pupils were equal. A light dressing was applied to the wound, and the boy was put to bed, where cold was applied to his head by means of an ice-bag. During the night he remained more or less unconscious, and was exceedingly restless.

Next morning (Oct. 8th), Dr. Finlay considered it advisable to examine the fracture more thoroughly. During the administration of chloroform the boy struggled considerably, and fully a tablespoonful of brain matter escaped from the wound. The wound was enlarged upwards and downwards, and an extensive V-shaped fracture was found extending downwards and backwards from the original wound. The apex of the fragment of bone was depressed to the extent of the thickness of the skull. Owing to the great extent of the fracture, Dr. Finlay considered any operative interference unwarrantable, and accordingly the wound was dressed with glycerine of carbolic acid and salicylic wool. During the course of the day the patient gradually became more conscious, but towards night he was again very restless and complained of pain in his head. After a hypodermic injection of morphia he fell asleep.

The patient continued to improve steadily, and by Oct. 18th he ceased to complain of pain in his head, was able to sit up in bed, and took his food well. The wound was at first dressed every two days, and afterwards at longer intervals, and was entirely healed by Oct. 27th.

On Nov. 7th the patient was allowed to leave his bed.

On the 24th he was discharged from the hospital. During the whole course of his illness his temperature only once reached 100° F., which occurred on the morning of the fourth day after the accident (Oct. 11th), while on the evening of the same day his temperature was 98.4°.

On Oct. 14th there was perceptible occasionally a slight twitching of the left hand.

On Dec. 5th the patient came to the out-patient room

with his father, who stated that he was as intelligent and active as before the accident, and quite able to go on with his school work. On examining the skull, there was to be felt a distinct depression about one inch long, and large enough to allow the end of the little finger to lie in it, situated nearly one inch below the parietal eminence, just at the position of the original wound. The boy was quite bright and intelligent, and there was no loss of power or sensibility in any part of the body, neither were any morbid sensations present.

KIDDERMINSTER INFIRMARY.

COMPOUND DEPRESSED FRACTURE OF SKULL; EXUDATION OF CEREBRAL MATTER; TREPHINING; RECOVERY; REMARKS.

(Under the care of Mr. SPOFFORTH.)

WE are indebted for the following notes to Mr. Frederic S. Barber, house-surgeon:—

Mary B—, aged twenty-five, was admitted on Nov. 11th, at 1.20 A.M. She was unconscious, much collapsed, and bleeding freely from the scalp. On examination it was found that over the left parietal region there was a large lacerated wound leading down to a depressed fracture of the parietal bone near its anterior inferior angle, the depressed portion being about an inch and a half in length at its free edge, and being driven in to the extent of about one-third of an inch. Behind this, and situated over the posterior inferior angle of the parietal bone (and over the lateral sinus), was an incised wound, leading down to a well-marked fracture of the bone, but with no depression. There was also another scalp wound and continuance of the fracture over the longitudinal sinus above the occipital protuberance. From the history, the above had all been produced by an assault with a hatchet. The wounds were dressed with carbolic oil, and restoratives given to the patient, who remained unconscious till about 5.30 A.M., when she became dreamily aware of her surroundings and able to answer simple questions. In this state she remained till the forenoon, when Mr. Spofforth proceeded to trephine. On removing the dressings, those coming from the anterior wound were found to be smeared with cerebral matter, and a quantity of cerebral matter was noticed beneath the scalp. In elevating the depressed portion (after removing a semicircular pledget), Mr. Spofforth found it necessary to use his whole force. The wound was loosely sewn up with silver, a small drainage-tube introduced beneath the scalp, having two free ends, and dressed with carbolic oiled lint and absorbent wool. The dressing was allowed to remain undisturbed for fifteen days, at which time the wounds were found to be quite healed (with the exception of the orifices for the tubing), perfectly dry, and a marked absence of purulent discharge. The tubing was withdrawn and a fresh dressing applied as before; afterwards it was freely oiled and lightly protected by a bandage. She complained of much pain at first, which was checked by a one-grain opium pill occasionally, and a calomel purge was given, otherwise she received no medicine. Her mental faculties were not impaired, and all her special senses were perfect. She had inability for voluntary micturition for a few days, but that has since become normal. The highest temperature reached was 100.8° on the fifth day and 100.6° on the eighth day, since which time it became quite normal.

Remarks.—We notice the position of the depressed fracture almost over the middle meningeal and of the posterior one over the lateral sinus; then the evidence of the membranes being ruptured and the cerebral matter exuding, and at the same time apparent absence of meningitis; the continued integrity of all the senses; and the rapid repair of the parts, with scarcely any suppuration.

THE Rivers Committee have presented a report to the Manchester City Council in which, after careful consideration of the question of the best method for the treatment and disposal of the sewage of Manchester, it is recommended that they be authorised to make inquiries and report as to the land which can be obtained at a reasonable rate for carrying out either the irrigation or precipitation system, and to report to the Council the result of such inquiries, together with particulars of the scheme to be adopted for the complete interception of the drainage of the city.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Displacement and Fracture of the Axis.—The Radical Cure of Club-foot.

AN ordinary meeting of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair. The following gentlemen were elected Fellows of the Society: Drs. W. D. Halliburton, F. W. Mott, Theodore D. Acland, A. Haig, Messrs. James Berry, John Cahill, W. M. Collins, F. H. Hawkins, K. W. Millican, and J. Poland.

A paper on a case of Displacement and Fracture of the Axis was read by Dr. DAVID LOWSON. The paper was communicated to the Society by Sir Prescott Hewett, Bart. The injury occurred ten years ago to a man aged seventy-five, who fell on the vertex of his skull from a wall six feet high. After recovering consciousness, the patient experienced great pain in the neck. The head was bent back and carried stiffly. Nasal respiration was obstructed, and the mouth kept open to render respiration easier. Deglutition was difficult; the voice had a nasal intonation; and a hard swelling could be seen and felt projecting from the back of the pharynx. There was no paralysis or anæsthesia. The patient died in July, 1884, from a disease having no connexion with the injury. At the post-mortem examination it was found that the axis was bent back to an angle of 60°, the bodies of the second and third vertebræ were ankylosed, and the arch of the third was partially telescoped into that of the second, to which it had become ankylosed. The cord was gently bent opposite the site of the injury, and the spinal canal at this point was quite wide and roomy. The specimen was exhibited to the Society, and also a somewhat similar one from the St. Bartholomew's Hospital Museum. It appeared that Sir James Paget had discovered a specimen of displacement and fracture of the axis in a churchyard, and Sir Prescott Hewett had had two cases similar to the one here recorded.—The PRESIDENT referred to the rarity of this injury, and to the obstruction of the œsophagus caused by the projection of the displaced bodies of the vertebræ.—Mr. ADAMS asked whether any attempt was made to put the neck straight. There need be no fear of doing harm by straightening the neck in cases which were usually partial unilateral dislocations of the neck; symptoms referable to injury of the cervical nerves were generally present. Three cases were briefly related which had been treated by him by immediate extension and complete rest.—Mr. NOBLE SMITH said he had seen one case of this injury, and there was a projection in the region of the second or third cervical vertebra. The patient was placed under chloroform, and the neck was restored to its normal shape without disaster. Reference was made to certain specimens in the museums of the hospitals, showing the conditions resulting from caries of the body of cervical vertebræ.—Dr. LOWSON said, in reply, that his patient suffered but little, and so really required no surgical interference. His case was one of injury, and he had said nothing as to the consequences of disease of the cervical vertebræ.

A paper on the Radical Cure of Club-foot was read by Mr. RICHARD DAVY. The author arranged his subject under the following heads:—1. The line of thought that has induced operative procedures in cases of intractable club-foot. 2. The cases especially suited for operation. 3. The operation itself, the description of its details, and the instruments necessary for its performance. 4. The list of twenty-six cases operated on by the author, and notes of other cases operated on by other surgeons. 5. The exhibition of casts taken before and after operation, and also of living specimens or the results gained. Also six specimens of the blocks of bone removed by the operations. 6. General observations on club-foot, with conclusions. The author considered that his operation was founded on the experiment made on the dead body of freely opening the transverse joint, twisting the foot into varus position, and inserting into the transverse tarsal joint a wedge. This demonstration justified the removal of the cuboid bone on the living subject in 1874, and, in addition, the base of the fifth metatarsal bone in 1875. The instruments and splint used by the author were exhibited, and his method of operating and after-treatment described. The open-air