abundance of octahedral crystals of oxalate of lime. The pulse was regular and feeble. I suggested the desirability of witnessing an attack, and accordingly saw him during two, at his home.

The diagnosis I then formed has been corroborated during the last three months, a visit to Bath having given me the opportunity of narrowly watching my patient in three attacks. During the year he has been under my care, he has been seized at intervals varying from a week to seven weeks. The intervals, on an average, have certainly been longer than they were before that time. He has always led a quiet, sedentary life, and there appear to have been no special exciting causes inducing the paroxysms. Sometimes they came after a meal, or a walk, and once a railway journey was thought to have a similarly injurious influence. The patient, before I saw him, always felt a fulness on the left side of the abdomen when seized, but had not the least idea of any tumour. Now, however, since he has been taught to minutely observe his condition, he detects a fulness of the left side as the first in the series of events.

The natural history of a seizure is as follows. Fulness below the left costal margin is, as I said before, the first symptom. It is shortly followed by pain, sharp at first, afterwards becoming dull and aching, over the left front of the abdomen. There is none in the flank. Vomiting quickly follows, the ordinary contents of the stomach being ejected.

This may occur twice or three times, at shorter or longer intervals. The temperature remains normal; the pulse and respirations quiet. The tongue becomes somewhat furred, the appetite goes, and soon the patient begins to expectorate a great quantity of liquid, sometimes tinged with blood, more often not. It seems a mixture of saliva and gastric mucus. I have known more than a pint and a half during an attack. The pain subsides in from twelve to thirty-six hours, and there is no more uneasiness. Very shortly after an attack commences, a large tumour is detected, reaching from the left costal margin to the level of the umbilicus, or even below it; and from the median line to about an inch or inch and a half from the extreme left edge of the abdomen. It can readily be felt in the left flank. It distinctly pushes the belly of the left rectus muscle forward, and alters the contour of the front surface of the abdomen. The fingers can be inserted by pressure between the upper edge of the mass, and the ribs. There is generally obscure resonance in front of the swelling—no doubt from the descending colon. A line of resonance separates the upper part of the tumour from the costal margin. It has a distinct elastic feel to the touch; fluctuation is not, however, satisfactorily made out. It is easily moved about between the fingers of the two hands, and is seen and felt to move forwards when the hand is pressed into the flank against it.

It descends on inspiration one or two inches, resuming its position on expiration. It is tender at first, but, after the first day or two, handling is borne without inconvenience. The swelling varies a little in size, but, as a rule, resembles in size and shape a large ostrich egg, one end pointing to a spot about an inch and a half to the left of the umbilicus, and just above it, the other to the anterior extremities of the floating ribs. The stomach resonance is increased upwards. I think I can always satisfactorily make out the spleen in its proper place, by percussion. The bowels are generally confined during the attack. This may partly be accounted for by the opiates given at the onset. The evacuations, when they occur, are perfectly natural. The urine used always to remain apparently unaltered, but was rather scanty sometimes. During the three attacks in Bath, it became scanty and loaded with urates; the specific gravity being about 1025. At my request, the patient made a series of observations running through an attack, of the quantity of urine. The result showed that, from November the 5th to December the 1st, 1873, when he was free, the amount varied daily from $1\frac{1}{2}$ to 3 pints. On December 1st, when a paroxysm began, it was $1\frac{3}{4}$ pints; on the 2nd, $1\frac{1}{2}$ pints; on the 3rd, 4th, and 5th, $\frac{3}{4}$ pint; from the 6th to the 14th, a pint; and on the 15th, when the swelling passed away, it was $1\frac{1}{2}$ pints. Thus, during the attack, the urine was evidently diminished in quantity. This was the longest attack he ever experienced—lasting a fortnight. Coincidentally with the disappearance of the swelling, he felt a frequent desire to pass urine—three times in an hour or so. This never was the case under ordinary circumstances. After the first two or three days the patient feels quite well, and his appetite returns; but he does not, of course, get up until the tumour has disappeared. It goes away rapidly, as a rule. For instance, the last time, he went to sleep at 11 P.M., the swelling being as large as ever; and at 4 A.M. he awoke, and found his enemy had fled; and at 10 A.M. I could not detect the least evidence of its existence. In the intervals the urine had always contained a superabundance of oxalate of lime—no pus, blood, albumen, nor casts. During the attacks the oxalates were much diminished, and nothing abnormal could be seen with the microscope. But, in the urine passed while the tumour was diminishing, and immediately after it had entirely dis-

appeared, the oxalates were again superabundant, and also aggregated into microscopic calculi. A good many pus-cells were seen in each field, and here and there a blood-cell, with some large nucleated cells in various stages of degeneration, and occasional casts from the straight renal tubes. There was, of course, a slight trace of albumen. After a day or two the urine resumed its normal state, and not a blood nor pus-cell could be seen after repeated microscopic examinations; and the urine, after standing some hours, showed only the very faintest deposit.

Numerous medical men had been consulted previously to myself, but only one discovered anything abnormal, and he decided that the spleen was enlarged. The physical characters of the tumour did not suggest to me the idea of any such condition, but seemed decidedly to point to the left kidney, and the urinary changes fully confirmed that opinion. What is the cause of this intermitting hydronephrosis? At first I was much inclined to believe there must be some congenital malformation of the ureter, from the total absence of symptoms of renal calculus. I know it may be said that a congenital state should have been attended with symptoms from a very early period. But Dr. W. Roberts relates a case in which hydronephrotic attacks did not commence till quite as late as my patient's did. Of course, I am well aware that renal calculus does not necessarily produce any symptoms at all. And closer study convinces me that the pelvis of the left kidney contains a calculus, probably of oxalate of lime, which from time to time is dislodged from its usual position, and, falling over the entrance of the ureter, blocks the organ, sets up, by spasm and irritation, the pain, and causes the temporary hydronephrosis. The vomiting may be partly reflex, partly due to the pressure of the mass on the cardiac end of the stomach. The fluid so profusely discharged by the mouth may partly be due to gastric catarrh. The pus and blood in the urine, after an attack, would be produced by irritation of the mucous membrane of the pelvis of the kidney. A few doses of liquor opii sedativus, with or without effervescing saline draughts, have always effectually relieved the pain and vomiting. I have not found altering the position of the patient of any use in dislodging the calculus. The treatment in the intervals, certainly with great general improvement, has been directed against the so-called oxalic acid diathesis. I do not myself see any other satisfactory solution, but I should be grateful for any remarks which would throw more light on this, to me, very interesting case.

TWO CASES OF DIASTASIS IN ADOLESCENTS.

By CLEMENT DUKES, M.B., B.S. Lond.,
Medical Officer to Rugby School.

CASE I.—Mr. X., aged 18, on December 10th, 1872, while playing in the close at the school, was pushed on the outer side of his right leg while his legs were extended laterally from the median line, when he suddenly felt acute pain above the knee, and fell down; and the limb was powerless.

On examination, the knee-joint was not swollen. No distortion was perceptible to the eye. The leg lay powerless on the bed. The foot was neither twisted nor everted. The limb was slightly shortened on measurement. On taking hold of the limb, no crepitus could be elicited, nor any movement, though pain was felt, whichever way it was moved. On slightly flexing the leg, a rapid movement in the limb was felt, like two smooth surfaces passing quickly one over the other. The situation of this rub was found by a slight depression being felt about two inches above the knee; and the lower bone could be felt slightly prominent posteriorly on the upper part of the popliteal space, being rotated a little backwards by the gastrocnemius. The diagnosis was made of diastasis, or separation of the condyles from the shaft of the femur. This epiphysis is the last to unite—viz., at twenty years.

Treatment.—The difficulty was to keep the surfaces of the bone accurately together, owing to their slippery nature.

1. A suspending thigh-splint with pulleys was first tried, but without success.

2. The straight "long outside" splint, with the perineal extenders, was then applied with better success, but not complete.

3. To the "long outside" was added a small straight back-splint with a pad sewn on it, to keep the lower end from slipping backwards. The perineal band was moved, and extension kept up by a weight passing over pulley at foot of bed.

By this means, a firm union was obtained at the end of six weeks; the limb was of full length; and he was allowed to get up.

On examining the limb, no one could have told that there had been a disunion; for there was not the slightest thickening at the seat of injury; no provisional callus being thrown out as in fracture, union being effected in the cartilage. Fearing lest this should not be strong enough

at the end of six weeks to support a tall strongly-built youth, I made a leather case, which he wore for a week or two.

CASE II.—Mr. T., aged 16, on July 4th, 1874, for three months had had a little pain at the inner side of the arm at the elbow, when exercising in the gymnasium. This culminated in an injury there, through a fall from the horizontal bar while performing the exercise called "back away". His account is, that he kept hold of the bar with his hands too long, so that in the turn, instead of alighting on his feet as usual, he fell on "all fours", with his arms extended; but the force was sufficient to make the left arm suddenly flex outwards. He felt something crack, and cause him pain at the elbow and a feeling of faintness.

On inspection, the arm was held stiff, neither flexed nor extended. There was a swelling over the internal condyle of the humerus, like a swelled bursa, making the condyle appear very prominent. Immediately below this, instead of the usual convex contour on the inner as well as the outer side of the forearm, there was a considerable hollow or concave outline, with slight extra thickness of the muscles of the forearm antero-posteriorly. Owing to this, the outer contour of the forearm seemed increased in convexity, but was in reality normal when the two arms were compared; thus dispelling the idea of a dislocation of the radius and ulna outwards, which it resembled at first, from the prominent inner condyle with the depression below.

On manipulation, flexion and extension were perfect and almost painless; also rotation internally and externally; but, when the palm of the left hand was placed over the inner condyle, and the arm moved, great pain was elicited. On manipulating over the inner condyle more minutely, a morsel of bone could be felt, freely movable when laid hold of with the fingers, causing no crepitus, but moving easily and smoothly, and distinctly external to the joint; being a separation of the internal epicondyle from the humerus, caused by muscular action through the forcible flexion of the forearm on the arm. There was no injury of the ulna nerve. The inner condyle of the humerus unites at the age of eighteen.

Treatment.—A rectangular splint was applied, and a figure-of-8 bandage and a pad on the elbow. Position and union were effected well.

SURGICAL MEMORANDA.

AURAL TUMOUR.

ON Saturday morning, the 5th instant, Miss S., aged 15, came to show me a tumour, of the size of a large cherry, growing from her left ear. Its root was a little behind the meatus, and the tumour itself was of the fungoid or cauliflower excrescence nature, and of a pale red colour, occasionally bleeding when touched. A delicately made *écraseur* would have removed it at once very nicely; but, not having one at hand, I tied it with silk. Next morning, it had mortified; and, on the 7th, it being loose, I easily twisted it off. Daily application of lunar caustic has now completed the cure. I wish to record this, as, during thirty years' experience, I have not seen a similar case.

R. M. MANN.

OBSTETRIC MEMORANDA.

ON THE INDUCTION OF PREMATURE LABOUR.

DR. J. G. SWAYNE's paper on the induction of premature labour, in the JOURNAL of August 8th, has brought to my recollection two occasions on which I was obliged to resort to that treatment to secure the safety of one of my patients.

Prior to 1850, I had attended Mrs. P. in her first and second confinements, and, from the contracted state of the pelvis on both occasions, I was obliged to resort to the use of the long forceps to accomplish her delivery. The first time, she made a tolerably good recovery, but, on the second occasion, from shock, etc., her life was so jeopardised, that I felt it would be unsafe to let her go on to the full period of gestation; if she should again become pregnant, I determined to produce premature labour. Early in 1851, I was informed she had again conceived, and, like all the rest of the world, I went to London in that year to the great Exhibition, when, meeting the late Dr. Lever at my old medical school (Guy's), where he at that time was the Lecturer on Midwifery, I made him acquainted with the case, asking his advice as to the mode of treatment. He said I was not only justified in resorting to premature labour, but that it was my duty to do so. Thus fortified with the opinion of one of authority in such matters, soon after my return home, and as near as I could find, in the early part of the eighth month of

pregnancy, I induced premature labour by merely puncturing the membranes with a male catheter, allowing, as near as I could guess, four ounces of the liquor amni to escape through before withdrawing it; the labour was completed in less than twelve hours. She again became pregnant, and I pursued the same plan with equally good results, the second labour being also completed in less than twelve hours. In each case, the child was born alive, the first surviving but a few hours, the other three or four days. The mother on each occasion made an excellent recovery. She has not been pregnant since, and is now a widow. When such excellent results follow the simple treatment I pursued, and we find from Dr. Swayne's cases that those in which rupture of the membranes was at first performed were the soonest to terminate, I fail to see that the treatment by sponge-tents, tangle-tents, etc., is superior or equal to the old mode of treatment; nor can I fully agree with the statement, "that to puncture the membranes before there is any dilatation of the os is to put the cart before the horse, and to invert the process of labour"; for how frequently we find the membranes are ruptured in the very earliest stage of labour, even before there is the least dilatation of the os, yet we see that Nature, "with the cart before the horse", if not quite so expeditiously, thus travels on to a prosperous termination of her journey.

STEPHEN CLOGG, Fellow of the Obstetrical Society.

CLINICAL MEMORANDA.

PERFORATION OF THE RECTUM: PERITONITIS: DEATH.

A BRIEF account of the following interesting case is, I think, deserving of a place in the Clinical Memoranda. On August 10th, I saw, in conjunction with my friend Mr. Newton, a young girl, 15 years of age, who was suffering from all the symptoms of the most acute form of peritonitis. The history obtained of the case was, that, on the previous day, the girl had gone to visit her uncle, and, whilst she was jumping on to his knee, an ordinary walking-stick, which she had not observed him to be holding between his legs, had passed up the anus. She withdrew the stick, and, though she complained of pain, she was able to continue to amuse herself for the rest of the day, the acute symptoms not developing themselves till the following night. On introducing my finger into the rectum as far as it would reach, I discovered a rent in its anterior wall, which was large enough to admit the finger into the peritoneal cavity at the apex of the recto-vaginal pouch. Death took place within forty-eight hours, and the site of the wound was verified by *post mortem* examination.

CHRISTOPHER S. JEAFFRESON, Newcastle-on-Tyne.

DEATH FROM IDIOPATHIC RUPTURE OF SPLEEN.*

A LADY, aged 35, of middle height, stout, married only five months, highly hysterical, had never been quite well since her marriage. She had menstruated regularly, but had irritable stomach, with frequent attacks of vomiting, and sometimes suffered considerable pain in the gastric region. She had been under the treatment of my friend Dr. Young for four or five weeks for these symptoms, which had been alleviated, and she was considered to be convalescent. *She never had enteric fever.* On the evening of August 5th, 1873, she was suddenly taken ill after eating some herring, and was attended by Dr. Frobisher. Violent retching continued from 9 P.M. till noon next day, and was followed, after the first hour or two of sickness, by acute pain in the left side, which rapidly spread over the whole abdomen. At noon, she sank into a state of collapse. When I saw her at 4 P.M. with Dr. Frobisher, she presented the appearance of a person in the last stage of Asiatic cholera—cold, restless, pallid, blue lips, pulseless at the wrist, whispering voice, clammy sweat—but no diarrhoea. Was it gall-stone, intussusception, internal strangulation, or rupture of an aneurism? One thing was evident—that death was inevitable. She died at 5 o'clock, twenty hours from the commencement. With great difficulty, a necropsy was obtained, and was made two days after death by myself in conjunction with Drs. Young and Frobisher. The body was very fat. There were two inches of fat in the parietes, besides a thick subperitoneal layer. The abdominal viscera were bloodless. A large clot, several pounds in weight, overlapped the lower edge of the great omentum and filled the left side of the abdomen; besides which, there was a large quantity of dark fluid blood. There were no adhesions, or signs of effused lymph, or of peritoneal inflammation anywhere. On tracing up the blood to its source, it was found to issue from a rent in the gastro-

* Read before the Leeds and West Riding Medico-Chirurgical Society.