upper part of vagina with fluctuation on the right side. Oct. 27, first galvano-puncture, negative, on left side, vaginal, 100°, five minutes. Remained in bed 48 hours, with some relief on the following days. Nov. 2, second galvano-puncture, negative, vaginal, in the *cul de sac*, right side, one centimetre, 140°, 5 minutes. Two days later spontaneous opening of cyst and discharge of fluid, no pus or blood. End of pain and diminution of swelling. Nov. 15, first appearance of menstruation since abortion; flow continued for three days, pain on left side only. Since then all has been natural, locally and otherwise, and patient worked hard even at menstrual periods.—*Brit. Med. Jour.*, May 12, 1888.

C. B. KEETLEY (London).

IV. Tubal Pregnancy. By LAWSON TEIT F. R. C. S. (Birmingham). Patient, æt. 27 years, married six years, but never pregnant, menstruated regularly till Christmas, then she had missed till March, during the whole of which time she was confined to bed by what she called inflammation of the womb. She recovered enough to get up, but on the second day of her getting out of bed she was suddenly seized with acute, violent pain, which from the description was probably an acute attack of peritonitis. Soon after a tumor was recognized on the left side of the uterus. Had several attacks of peritonitis. When seen by Mr. Tait she was emaciated, in constant pain, quite unable to get about, and evidently suffering from pus in the pelvis. Examination revealed a tumor as large as a fœtal head on the left side of the pelvis. Suppuration of left Fallopian tube was diagnosed, no idea of pregnancy being entertained. The abdomen was opened, and the following state disclosed: Omentum glued over contents of the pelvis and below it several coils of intestine adherent, on removing these a cavity was opened up containing a quantity of extremely fetid, purulent fluid. Cavity was as large as a Jaffa orange, and a mass was encountered easily recognized as a piece of placenta. It was now seen that the cavity was a dilated Fallopian tube, forming the anterior, posterior and lower walls, whilst the upper part was formed by the coils of intestine and omentum. All round the cavity were

sharp hard points, foetal bones embedded in cyst-wall. The part of the cyst formed by the Fallopian tube was removed and the pedicle tied. The presence of fibroid proved conclusively the accuracy of the above supposition. This case proves what was not known certainly before: that rupture of a tubal pregnancy into the peritoneal cavity is not necessarily fatal. Such cases no doubt are very rare. Although it is possible to conceive that absorption of the contents of the cyst might take place, yet the danger of the occurrence of suppuration, as in the above case, is so imminent that it is not safe to leave such cases alone. Besides the Fallopian tube could never have resumed its function and for years would have been liable at any moment to suppurate. The patient made a good recovery, and Mr. Tait recommends the removal of the tube together with the remains of pregnancy in all cases. He has drawn up the following table:

Scheme of ectopic gestations in tubo-ovarian tract:

1. Ovarian, possible, but not yet proved.

2. Tubal in free part of tube, and is;

(a) Contained in tube up to the fourteenth week, at or before which time *primary* rupture occurs, and then the progress of gestation is directed into.

(b) Abdominal or intra-peritoneal gestation, uniformly fatal, unless relieved by abdominal section, primarily by hæmorrhage, secondarily by the suppuration of the ruptured sac and peritonitis.

(c) Broad ligament, or extra-peritoneal gestation.

(d) May develop in broad ligament up to full time, and be removed at viable period as living child.

(e) May die and be absorbed as extra-peritoneal hæmatocele.

(f) May die, and the suppurating ovum may be discharged at or near the umbilicus, or through the bladder, or intestinal tract.

(g) May remain quiescent as lithopædia.

(h) May become abdominal or intra peritoneal gestation by secondary rupture.

3. Tubo-uterine or interstitial is (a) contained in the part of the tube embraced by the uterine tissue, and so far as is known, is uniformly fatal by intra-peritoneal rupture (as b) before the fifth month.

Mr. Tait adds: "The above scheme gives a complete consistent story of the pathology of ectopic gestation, so far as I know it, and it certainly removes an enormous amount of the confusion which has hitherto existed concerning it, and many of the difficulties encountered in the treatment.—*Lancet*, Sept. 1 1888.

H. H. TAYLOR (London).

BONES, JOINTS, ORTHOPÆDIC.

I. A Contribution to the Treatment of Traumatic Separation of the Epiphysis of the Upper End of the Humerus, etc. By PROF. HELFERICH (Griefswald). The rare cases of traumatic separation of this epiphysis have sometimes been confounded with luxation of the head of the humerus. Pathological collections furnish numerous examples in which union of the epiphysis and diaphysis have occurred, in this class of cases. He communicates the following case: A lad of 16, while wrestling, fell violently and struck upon the left shoulder. The head of the humerus was found in its normal position under the acromion, while the rounded upper end of the shaft was displaced forward and inward, under the coracoid process, from which position it could be slipped up and down, and when strong downward traction was made, soft crepitus was developed. An apparent shortening of the arm of $1\frac{1}{2}$ cm. was observed. An attempt at reposition proved unsuccessful, owing to the interposition of soft parts between the fragments, and an incision into the joint was practiced. The upper end of the humerus had penetrated into the axilla through a button-hole slit in the capsule, which latter it was found needful to enlarge before reduction could be accomplished. The fragments were then fastened together with a long awl-shaped steel pin, which projected beyond the surface at the line of sutures. This was removed at the first change of the dressings, at the end of eight days. The shoulder-joint regained its function in a short time.

The literature of the subject reveals only one similar case, that reported by Lange, of New York (*ANNALS OF SURGERY*, March, 1883). Esmarch communicated, however, at an earlier date, an operative procedure for compound dislocation of the humerus at the shoulder-joint,