

clude the most difficult cases, and should be discarded on Kocher's own statistics.

On the same page he says: "The chief thing is that we cure four-fifths of the patients, those who remain radically healed, with a minimum loss of time and sacrifice of every sort." (An average of seven and a half days in bed.)

V. BASSINI'S OPERATION has many admirers in America. It consists in ligaturing and cutting off the sac; raising the cord and suturing the border of the rectus, internal oblique, transversalis and the transversalis fascia to Poupart's ligament, behind the cord. The aponeurosis of the external oblique is sewed in front of the cord.

#### OBJECTIONS.

1. The sac is cut off.
2. The triangular depression, where the vas deferens and vessels meet to form the spermatic cord, is left unguarded except by the elastic peritoneum.
3. Supernumerary veins are not removed from the cord, should they exist.
4. I think it an objection that all the aponeurotic structures are not sewed behind the cord.

VI. HALSTEAD'S OPERATION differs so much from Bassini's that it may be called quite a different and an original operation. It is a very complete and carefully studied out laparo-herniotomy, and has added something new to the means which aid in securing a radical cure, viz., the removal of the superfluous veins from an hypertrophied cord. The skin incision is made in the usual way, but extends upward quite far. "The aponeurosis of the external oblique muscle, the internal oblique and transversalis muscle and the transversalis fascia are cut through from the external abdominal ring to a point about 2 cm. above and external to the internal abdominal ring. The vas deferens and the blood vessels of the cord are isolated. All but one or two of the veins of the cord are excised." (Halsted.)

The sac is cut away, the peritoneum sutured, and then two other rows of sutures bring the severed structures together. The cord is left subcutaneous.

#### OBJECTIONS.

1. The sac is not utilized.
2. The six or eight mattress sutures are inserted

in such a manner that, when tied, an eversion is effected which leaves, internally, a certain amount of concavity along the whole line of the incision.

3. The V-shaped depression where the vas deferens and vessels come together is not strengthened.

4. There is too much cutting of important structures situated above the internal abdominal ring. It is practically a laparotomy.

In Dr. Halsted's paper (*Bulletin Johns Hopkins*, No. 29, March, 1893) it is stated that "the communication between the sac and the abdominal cavity is sometimes large enough to admit one's hand."

The severance of the three abdominal muscles and deep fascia above the internal abdominal ring is not necessary. We know that simple abdominal section in the hands of the best operators is, in a certain proportion of cases, followed by rupture. Every structure cut which strengthened the abdominal wall has to be sewed. The more extensive the cutting, the more numerous the stitches of necessity must be. In every stitch there is a danger of its being insecure or septic.

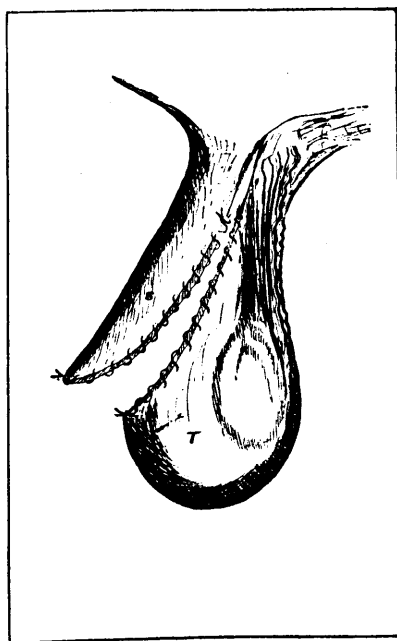


PLATE IV.

DRAWING WITH THE SAC IN CONGENITAL HERNIA.

S.—Sac formed from upper half of the tunica vaginalis testis.  
T.—New tunica vaginalis testis.