true that there are cases which, though taken in the very early stage, with the most approved forms of apparatus, and with the most skillful men in charge of them, do go on to suppuration in spite of all that can be done. His conclusions are summarized as follows:

(1) Protect the joint about which the bone lesion exists in the early stage and in the later stages, whether the abscess is let alone, aspirated or incised.

(2) In cases where the suppurative process is confined to a small area, it is good surgery to leave the small abscesses alone if the protective appliance is adequate.

(3) It is good practice to aspirate where the abscess is in the way of the proper adjustment of apparatus, and by such procedure one may expect good results in at least 50 per cent. of the cases aspirated.

(4) The simple incision of an abscess dependent upon bone disease depends for good results upon the extent of the bone lesion.

(5) Excision of the hip is not a measure to be employed in all cases where extensive suppuration exists, but must depend largely upon the condition of the patient and the location and extent of abscesses.

(6) Expectant treatment for the knee and ankle joint in children yields the best results for life and limb.

(7) Amputation of the ankle in a child is rarely ever justifiable except when amyloid disease of liver or kidneys threatens or is present; of a hip after a thorough excision has failed.

(8) The long-continued employment of a good fitting splint to the back in Pott's disease of the spine will yield better results than any operative procedures on the bones with which I am familiar.—*Proceedings of New York State Medical Society*—Author's Abstract.

EXTREMITIES.

Amputation of the Arm in an Hæmophiliac. By L. S. PILCHER (Brooklyn). The patient was a man, aged thirty-three, a recognized bleeder, who belonged to a family of bleeders, a maternal

uncle having bled to death from a cut on the head, and a brother having also bled to death from a blow on the nose. He himself had often bled severely from trifling wounds. He was first seen by Dr. Pilcher in 1889, at which time he was suffering from an extensive extravasation into the connective tissue planes of the forearm and hand, the results of a dislocation at the elbow sustained ten weeks before. The dislocation had been left unreduced, and the elbow was already firmly ankylosed in deformity; the hand and forearm were greatly swollen, and suppuration had already attacked and extensively infiltrated the tissues of the hand. The suppurating cavities were incised by the Pacquelin cautery knife; the middle and ring fingers were amputated in consequence of the extensive destruction of their tissues. By the careful and persistent use of iodoform tampons, forcipressure, and the actual cautery, the tendency to hæmorrhage was restrained, while a healing granulating surface developed, and finally cicatrization was accomplished. The patient was discharged at the end of seven weeks' treatment with ankylosis at elbow and wrist, with stiff fingers and a generally deformed and useless limb.

Two years and one-half later, in the fall of 1892, the patient presented himself again. The forearm was in a condition of chronic inflammatory infiltration, with discharging sinuses. The extremity still remained a useless incumbrance. In reflecting on the possibilities of relief in the presence of his known hæmophilic dyscrasia, Dr. Pilcher judged that the dangers from hæmorrhage would be quite as great from the incisions that would be required in any attempt at relieving the local conditions of the forearm as from an amputation of the arm outright; while in the latter case the patient would also be relieved entirely of the deformed and useless appendage. Accordingly, he entered the Methodist Episcopal Hospital, and was subjected at once to an amputation just above the elbow. The tendency to hæmorrhage which the cut surfaces presented was fully as extreme as had been expected. In addition to the larger vessels which, though numerous, could be identified and properly secured with clamps and ligatures, a multitude of points of free oozing declared themselves

throughout the whole extent of the cut surfaces. For the control of this bleeding perhaps as many as thirty or more mass ligatures were applied, until the whole surface of the stump was quilted by them. The freer hæmorrhage having thus been controlled, there still remained a somewhat copious bloody serous flow from the general wound surface. To control this the flaps were turned back like a cuff, the cut surfaces thus being turned out, and a circular iodoform bandage applied, so as to compress them firmly against the arm, while upon the end of the bone and upper surface of the stump an iodoform tampon was applied. Over all a suitable absorbent dressing was secured with a firm bandage, so as to maintain equable and strong compression of the limb as far up as the axilla. The patient was put to bed and the arm maintained in a continuously elevated position. An abundant sero-sanguinolent discharge continued to saturate the dressings for some days, requiring repeated changes and the adaptation of special pressure for the control of special points of discharge. By the end of a week, the patient's general strength having been maintained by suitable forced, nutrition and stimulation, it was possible to turn down the flaps and to treat the wound in the usual manner as an open flap amputation. The amount of sanguinolent flow gradually diminished, and a fairly normal granulating surface was finally established. As the case progressed a very marked atrophy and shrinking of the flaps occurred, so that although originally they had been very redundant the end of the bone now projected beyond them, necessitating the removal of an additional inch of the humerus. The hæmorrhage provoked by this was controlled by iodoform tampons and actual cautery. The ultimate closure of the wound was expedited by secondary suturing, and ultimate sound healing was accomplished. During the later course of the case a number of somewhat copious hæmorrhages occurred from time to time from some abrasion of a granulation.—*Author's Abstract.*