

follow this method when feasible. I therefore, as you observe, press the knife down at the point indicated, until I reach the bone, and I now make my curved incision. A broad curved spatula is now placed in either side of the wound, to hold it open; and upon further examination, we find the periosteum to be very much thickened. I now take this probe-pointed bistoury, and make my incision through the periosteum, half encircling the femur at the point below the trochanter minor, and then taking this periosteal elevator, I endeavor to peel off the periosteum; remember, it is very necessary to leave as much of the periosteum as possible; and now reaching the digital fossa, we divide the rotator muscles. Having peeled off the periosteum, I now take this small thumb-saw, and make my section below the trochanters, and with the aid of these lion-forceps withdraw the head, neck, and trochanters of the femur *en masse*. The acetabulum I find to be necrosed, and completely perforated to the internal periosteum, this, however, being intact.

Now although I have removed nearly five inches of this man's femur, I find that the bone is diseased still further down. I therefore peel off the periosteum still lower and my assistant pushing the shaft of the femur upward toward the wound, bringing the bone more fully into view and thus enabling me to remove the necrosed portion with greater facility, I find it necessary to remove another inch of the shaft in this case; this being done, I remove carefully as much as possible of the dead bone from the acetabulum and portion of the pubes which I find is also necrosed; the latter, however, is a somewhat difficult matter owing to the close proximity of the femoral artery to the diseased structures. The wound is now thoroughly washed out with a carbolized solution of a strength of one to forty. The operation itself is very simple but the after-treatment is extremely important, the whole secret of your success depends upon this. My assistant now carefully holds the diseased limb for fear of injuring the artery while the patient is placed in the wire cuirass, this being a wire cradle made to fit the patient with movable foot-pieces by which your extension can be maintained. I now fill the wound with Peruvian balsam, manipulating it in such a manner that it penetrates to all parts of the cavity in every possible direction. You now observe that I take this piece of oakum which is also saturated with the balsam, and carefully pack the wound in order to maintain the original shape of the periosteum, and thus as new bone is formed, it will be of serviceable thickness and strength. I now insert the drainage-tube, and put in a suture at the upper and lower portion of the wound, and endeavor to secure union of these portions of the incision by union by first intention.

You observe that as the patient lies in the cuirass, the anus is directly over the opening pos-

teriorly, thus allowing of free evacuations without soiling the instrument. The whole secret is to secure the sound limb as a means of counter-extension; first fastening the sound limb to the leg-piece with a roller bandage, commencing at the foot, and as you reach the knee, place a folded newspaper over it to prevent flexion; then passing your bandage around the thigh, and as you reach the perineum, bring your bandage from the perineum over the handle of the instrument at the side, by which means your counter-extension is secured. Having now fastened the sound limb in this manner, we apply our extension straps of adhesive plaster to the diseased limb, making the extension from the thigh and never from the leg alone in these diseases of the hip-joint; these straps, you observe, are secured in the ordinary manner with the roller bandage; and the foot is now secured to the right foot-piece of the instrument, and by means of this screw at the bottom the requisite extension is made. Having effected this, we now fasten the limb to the instrument with a roller bandage, carefully padding the inequalities of the limb in order to obtain equable pressure at all points. I now moisten the wound with carbolized oil, and cover it with carbolized cotton and the usual antiseptic dressing; securing the whole with a broad roller. This dressing can be left on for twenty-four, forty-eight, or sometimes ninety-six hours, or until such time as moisture shows itself upon the outside of it. You will also notice that I pass one or two turns of the roller over the abdomen, and thus secure perfect immobility of the parts.

Four months afterwards the patient was again brought before the class. During the intervening time since you last saw him, Dr. Keyes, in whose ward he was placed, found it necessary to make another incision, and remove further portions of necrosed bone to the extent of about another inch of the femur. At the time I performed the operation I feared such might be the case, but as the periosteum was very thin, and firmly adherent to the shaft lower down, and the diseased portion was so extremely small in amount and in the centre of the shaft, I was in hopes Nature would have eliminated that portion without further necrosis. This fact shows how absolutely necessary it is to remove all necrosed bone when operating. There are, however, some cases in which this may, perhaps, be impossible. We find that we now have a shortening of the limb to the extent of almost four inches. My impression is that, had the extension been properly adjusted, the shortening would not have been so great.

I now intend to apply the long hip splint, in order that the man can go out of doors and secure the benefit of the fresh air. You will notice that the sinuses are yet open, the lower ones discharging slightly, but the upper one has almost ceased, but a few drops of pus passing daily. Th