

rated from the shaft of the bone, the fragment is held to the fibula by the tibio-fibular ligament, but the bone itself, no longer under control of this ligament, slips upon the smooth articular surface of the astragalus, puts the deltoid ligament on the stretch, and crowds the internal malleolus against the skin in the most threatening manner. The skin may slough from this pressing bone, and convert this into a case still more serious; but if this complication be escaped, there are no means within the range of surgery which can return and keep in position this damaged and displaced tibia. You may reduce such a fracture every hour in the day; there is no trouble in the reduction, the difficulty is in keeping the parts in their normal places. Bandages and splints are not well borne if you apply them with any degree of tightness; you, by promoting sloughing, increase the gravity of your already unpromising case, and place in jeopardy the life of your patient.

I have already referred to the simplest form of Pott's fracture; that is, to that form in which deformity may not be expected; but unfortunately the great majority of these accidents do not belong to this class. This fracture is by no means unfrequent. Of ninety-three cases given by Hamilton, of fracture of both bones of the lower third of the leg, the fibula and internal malleolus were broken in seventeen—about one in five and a half cases. The pathological anatomy of this form of injury, involving, as it always does, except in the cases I have already mentioned, a partial dislocation as well as fracture of both bones, is apparent. The fibula which gives external support to the articulation in its upright position, is broken and falls against the tibia, the internal malleolus to which is attached the deltoid ligament or the most powerful portion of that ligament separates from the tibia, hence this bone having literally lost its moorings, glides inward and projecting beneath the skin gives great width to the joint. In some cases it projects an inch beyond the articulating surface of the astragalus. An intensified specimen of this fracture, taken from a man who had died from alcoholism a few days after the injury, I had the honor of presenting to the Academy, in April of last year.

In the treatment of these cases the same difficulties are encountered as in fracture of the tibia within the joint before referred to. You may adjust the parts, but as soon as you remove your hands they resume their abnormal positions. You will be fortunate if the tibia does not press its way to the surface. Pott looked upon flexion of the limb as of the utmost importance in the treatment.

Others, by an elevated position, drain the blood from these as they do in all cases of fracture where it is practicable. It seems strange, and yet it is true that such a man as Dupuytren should have attempted, under such circumstances, to control a tibia by a tourniquet. His patient was not so fortunate as to lose only his limb,—he lost his life.

*Fracture of the tibia within the joint, where, from the peculiarities of the case, reduction is impossible.* This occurs where a fragment is broken loose from the tibia and thwarts the best efforts of the surgeon at replacement. Reduction in some such cases is impossible, and although this is one of the most humiliating of all the experiences which fall to the lot of the physician, yet it is a comfort to know that the wisest and most skilful have failed in accomplishing it. Hamilton, writing on a case of this kind, says: "Our efforts were prolonged in all more than an hour, when, as we had made no impression upon the bone, and the patient had repeatedly implored us to desist, the attempt was given over. The end of the tibia seemed to rest partly upon the astragalus, and the extension was plainly all that was demanded; but the obstacle was beyond doubt within the articulation, or rather between the tibia and fibula. \* \* \* \* \*

Not long since I had occasion to amputate a limb for a compound dislocation inward at the ankle joint, and the possibility of this fracture was confirmed by dissection. About one-third of the outer portion of the articular surface was broken off obliquely, and the fragment was lying so displaced that a reduction would have been rendered impossible. \* \* \* \* \* Dr. Townsend, of Boston, has reported a case of compound dislocation in which amputation became necessary, and, with other injuries, the dissection showed a fragment from the outer margin of the tibia, one inch and a half long, and one inch thick at its widest part, with a very sharp point, displaced and lying almost transversely over the astragalus."

In this contribution to the report of the Section on Surgery, I have space left for but one more of the various lesions of the ankle joint; this space I shall devote to the astragalus. Situated above securely between the malleoli, resting below upon the os calcis, and in front braced against the scaphoid, the astragalus is seldom disturbed; but when it is, the most serious consequences generally follow. I have already discussed its simple dislocation and easy reduction. Unfortunately, this is seldom the case; usually the luxation is compound or complicated. When the dislocation is compound, resection or amputation should be resorted to. The former (resection), without there be very great in-