the thigh, other associated congenital deformities or anomalies. etc.

## Acquired Absence of the Patella.

The patella has been removed for inflammatory affections, osteomyelitis, chronic (2 a, b, c.) or tubercular in nature (3 a, b, c, d.); for fractures, transverse (4 a, b.), or comminuted (5 a, b, c.) in type: for primary malignant disease (6.) A cursory study of the collected cases shows, among other things:-

- That the removal of the patella can be successfully performed under spinal or under general anæsthesia.
- That though the patella seems under certain conditions to be unessential for locomotion; nevertheless, its removal is invariably followed by impairment of power, by some functional loss. I have personally examined some of these cases, and though, as in Prof. J. B. Murphy's (3 c.) and in Dr. Cassius.
- Rogers (4 b.) cases, the patients have very serviceable knee-joints, it cannot be gainsaid that as a general rule, kneejoints without patelle are impaired joints. To preserve the continuity of the extensor apparatus of the leg, to conserve, after removal of the patella, the stability of the knee-joint, the gap left by its extirpation must be obliterated, by suturing the tendon of the quadriceps to the ligamentum patellae, and by such operative measures, plastic or other, as may be indicated in the individual The extirpation of the patella is always a sacrifice. loss deprives the knee-joint of the protecuve influence which this bone affords to the articulation, this sesamoid bone being an important factor in the distribution over a considerable area of any force applied to the front of the knee. The patella provides considerable leverage for the quadriceps muscle and its removal is followed by a weakening and an impairment of the action of the quadriceps extensor tendon upon the leg. All sesamoid bones are mechanical accessories of the tendons in which they are partially or completely embedded. By this sesamoid bone, the tendon of the quadriceps is kept spread out and prevented from being gathered up in a round cord. The patella forms a much more suitable pulley for movements round the condyles than the tendon itself, and in addition, serves a minor purpose in keeping