

LOWER LIMB.

ARTICULATIONS, KNEE JOINT—No. 5.

HEAD OF TIBIA, WITH STRUCTURES IN POSITION.

A section has been made through the joint, and the lower end of the femur removed by dividing the crucial ligaments.

I. Behind the ligamentum patellæ is a pad of fat, covered by synovial membrane, from which a slender process passes to the intercondylar notch, the ligamentum mucosum. From its margin two folds pass outwards on each side, the ligamenta alaria. This fold covers the transverse ligament, which joins together the anterior ends of the semilunar cartilages.

II. The semilunar cartilages deepen the hollow for receiving the condyle of the femur on each side. They are narrow curved strips of fibro-cartilage, covered with synovial membrane on each side. The outer cartilage is nearly circular, while the inner is more semicircular in outline. They are firmly attached at each end to the head of the tibia, and also along the convex margin by the coronary ligaments, which pass to the margin of the head of that bone.

The margin of the internal cartilage is attached to the flat internal lateral ligament, but the external cartilage is separated from the external lateral ligament by the tendon of the popliteus muscle.

III. Attached to the head of the tibia in the mesial plane, from before backwards, lie—(1) the anterior end of the internal semilunar cartilage; (2) the anterior crucial ligament; (3) anterior end of the external semilunar cartilage; (4) posterior end of the same cartilage; (5) posterior horn of internal semilunar; (6) posterior crucial ligament.

IV. The relation of the popliteal vessels to the posterior ligament of the joint should be noticed—the artery lying nearest to the ligament, but separated from it by some fatty tissue.

The figures indicate—

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| 1. Ligamentum patellæ.                           | 7. Posterior crucial ligament.           | 14. Tendon of popliteus.       |
| 2. Retropatellar pad of fat.                     | 8. Posterior ligament of the knee-joint. | 15. Internal lateral ligament. |
| 3. Ligamentum mucosum.                           | 9. Popliteal artery.                     | 16. Sartorius tendon.          |
| 4. Anterior end of internal semilunar cartilage. | 10. Popliteal vein.                      | 17. Gracilis tendon.           |
| 5. Anterior end of external semilunar cartilage. | 11. Internal popliteal nerve.            | 18. Semitendinosus tendon.     |
| 6. Anterior crucial ligament.                    | 12. Tendon of biceps.                    | 19. Semimembranosus tendon.    |
|  | 13. External lateral ligament.           |                                |

SECTION VIII CARD NO. 12

