The transformation of the spermatids into spermatozoa takes place while they are in intimate association with the Sertoli cells, a number of them fusing with the cytoplasm of an enlarged Sertoli cell, as shown in Fig. 6, *s*, and probably receiving nutrition from it. In each spermatid there is present, in addition to the nucleus, an archoplasm sphere, from which the centrosomes have migrated so as to lie free in the cytoplasm. The details of the transformation are still to a certain extent under discussion, the view here presented being only one of the many which have been advanced within recent years. On the fusion of the spermatid with a Sertoli cell, a delicate filament (Fig. 8, *f*), the beginning of the axial filament of the spermatozoön, appears in its cytoplasm, seeming to arise from the centrosome which lies at one end of it. The archoplasm sphere (*a*) and centrosome migrate to opposite sides of the nucleus, which gradually assumes an excentric position, and the archoplasm becomes converted into the head-cap (*hc*) while the centrosomes, enlarging, form the anterior portion or neck of the middle-piece (*mp*), the remainder of that structure being formed from the axial filament surrounded by a cytoplasmic sheath. As the axial filament lengthens the cytoplasm is drawn out with it to

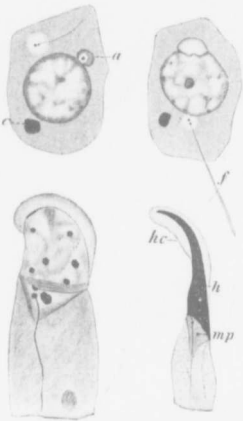

FIG. 8.—FOUR STAGES IN THE TRANSFORMATION OF A SPERMATID INTO THE SPERMATOZOÖN OF A RAT.

a, Archoplasm; *c*, mass of chromatin which is later absorbed; *f*, axial filament; *h*, head; *hc*, head-cap; *mp*, middle-piece.—(*von Lenhossék.*)