to prove that there are certain relations between the shape of the skull and the direction of the convolutions; in the doliochocephalic brain they thought it to be more longitudinal, in the brachycephalic more transverse. If this be the case, the usual direction must be departed from whenever external circumstances (such as intra-uterine pressure, premature synostosis of the sutures, &c.) alters the normal development of the skull. The author closely examined six brains from skulls deformed by synostosis; he found the altered shape of the brain persists after removal, and that the convolutions present the alterations just described. He also examined the brain of a child whose head had been subjected to abnormal pressure "in utero," on account of the deficient amount of amniotic fluid, and observed similar phenomena.

We may go still further and show that under normal circumstances the sutures exert an influence upon the convolutions. The frontal gyri have not everywhere the same shape, breadth, thickness and direction. Quite in front they are usually narrow, thrown into numerous folds, and connected with one another by transverse pieces. Posteriorly, when they pass into the ascending frontal they are wide, thick, much straighter. This dissimilarity is easily explained by the topographical relations between the convolutions and the coronal suture. As long as the skull grows rapidly, the convolutions will lengthen longitudinally wherever the skull expands in that direction; this is the case for the posterior part of the frontal gyri, which are situated in the region of the coronal suture. Anteriorly and inferiorly, however, where no suture allows of such a ready expansion, the growing convolutions must become more concentrated, closely pressed together and thrown into folds. Similar considerations obtain with reference to other parts of the cerebral surface.

V. Rogner, On the Variations in the Cerebral Fissures in the Hare, the Sheep, and the Pig (*Zeitschr. für Wissensch. Zoologie*, vol. 39).—Numerous variations are to be observed in the disposition of the cerebral sulci of these animals, even on the almost smooth brain of the hare. The author reaches the important conclusion, that these variations are not to be considered as mere anomalies, but as transitional forms between the type of sulci in one kind of animals, and that observed in other kinds.

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