inner nucleus of the funiculus cuneatus was well developed, the outer, however, showed a marked diminution of volume on both sides.

CRANIOMETRY AND ITS MOST RECENT INVESTIGATIONS.

By Prof. J. Kollman (*Correspondenzblatt der Deutschen Gesellschaft für Anthropologie, Ethnologie und Urgeschichte*, 1891, April, May and June). (Ref. in *Neurolog. Centralblatt*, No. 19, 1891). Kollmann devotes the first two parts of his paper to the criticism of the recent publications of Benedikt (*Kraniometrie und Kephalmetrie*) and Von Török (*Grundzüge einer Systematischen Kraniometrie*, etc.) in their mathematico- and mechanico-physical bearings. It is very difficult in a short abstract to convey to the reader the essentials of Benedikt's work and especially more so that of Török's, where the five thousand angular and linear measurements are to be considered. The human skull has no absolute unchangeable form according to Benedikt's and Von Török's ideas. It is not built like a crystal but receives the impress of, that is, it is developed according to racial peculiarities and changes. The skull follows the law of relationship in the vertebrates. Morphology and biology show only the structure of the skull. The segmental nature of the skull can not be doubted any longer and it is not to be explained by way of mathematics and mechanics.

Kollman found among Europeans two entirely different forms of facial formation, countenance as it were, that are transferred from parent to offspring. The large and small form of countenance (*leptoprosop*) and the short and wide (*chamialprosop*). For each of these standard cases he has made a countenance index after the formula

$$\frac{\text{Breadth of zygomæ} \times 100.}{\text{Length of countenance.}}$$

Low forms are reckoned with an index below 90, and high above 90. With the long countenance are found high orbital sockets, small, long nose, small superior and inferior maxillary bones, small palate and narrow zygomatic arches. With the wide countenances are found low orbital cavities, short nose with wide apertures, broad and flat nasal bones, low superior maxillary, broad and wide palate, prominent cheek bones and outstanding zygomatic arches. However, in the broad as in the long countenance the anatomi-

cal foundations of the complicated configurations of the face vary in a reciprocal manner.

European people that were formerly looked upon from an anthropological and ethnological point of view as a racial unity (such as the Germans, English, French and Italians) do not belong throughout as a single type of race, but as a mixture of several races. To prove this fact there was at one time obtained the statistics of more than ten million school children concerning the color of the eyes, hair and skin. It showed that spread over Europe are two races, the blonde and the brunette, and these faces have in the most intimate way intermingled one with the other, so that many mixed varieties have resulted. For instance, in Germany, 54 per cent.; Austria, 57 per cent.; Switzerland, 63 per cent. The Germans, Swiss and Austrians show not alone ethnical, but particular corporal differences although they are all derived from the blonde and brown varieties. The races and type from which they are sprung are everywhere the same. The racial anatomical delineations or impressions in the offspring are influenced by whichever element most thoroughly predominates in the progenitors. Somatic statistics and craniometry show the multiple forms of types that may be developed in one and the same nation. The Indian tribes of British Columbia show according to measurements of skulls made by Boas, two different varieties of head formation, in which the facial outlines and bodily height were in accordance with the variety of the skull. These people are also composed of two races which have mixed one with another without the formation of a blended race. The representatives of the race always remaining distinctly recognizable as in the European people. In the same manner Luschau showed that the Tachtadschy, a Grecian tribe in Syria, consists of two portions living beside one another who can be clearly distinguished in spite of their marital mixtures for thousands of years.

ON HYDROMYELUS AND SYRINGOMYELIA.

Von Dr. Karl Schaffer und Dr. Hugo Preisz, zu Budapest, mit zwei tafeln. (*Archiv. für Psychiatrie u. Nervenkrank.*, xxiii., Bund., pp. 1-39). The authors of this monograph have made a contribution of immense value to the pathology and causation of hydromyelus and syringomyelia. They have presented the histories of six cases suffering from either one of the affections or of both combined and