

HEAD AND NECK.

I. The Factors that Determine Hypertrophy of the Skull in Mollities Ossium, Osteitis Deformans, Rickets, and Hereditary Syphilis. By W. ARBUTHNOT LANE, M.S., F.R.C.S. (London). In this paper Mr. Lane attempts to prove that the hypertrophy of the skull in the above diseases is mechanical in its causation, being dependent upon and remedial of the softening which precedes it. His theory is that nature makes attempts to protect, and shield the brain in consequence of its important nature, and however little capacity there is for repair, almost the whole of it is concentrated in strengthening and thickening the brain case. "In diseases such as osteitis deformans, rickets, and congenital syphilis, the function of sheltering the brain has the first claim upon the fund of repairing capacity, the remainder being distributed among the several other portions of the osseous system in proportion to the importance of the demand of each." His views are opposed to Rindfleisch who describes the bones as being first decalcified and then converted into fibrous tissue, the fibroid material subsequently undergoing a mucoid change. His grounds for doing so are the following: "In an early case of mollities ossium I found that the spaces in the softened bone of the skull cap were much smaller than those in that portion of the bone that was yet hard, and this transition for the comparatively large spaces in the normal diploe to the very fine reticular net work in the soft pliable bone was very distinct in and about the spreading margin of soft bone. If the process, as explained by Rindfleisch were true of the skull, we ought to find the spaces in the soft bone filled with mucoid material, and much larger than those in the nearly normally hard bone. It is difficult to understand the application of his theory to the thick soft skull seen in an advanced case of mollities. I examined sections made through the hard and the soft pliable portions of the vault of the skull, and I found associated with the general decalcification a deposit of decalcified lamellæ of fibrous tissue upon the enfeebled bony trabeculæ gradually diminishing the calibre of the intervals between them. The endosteal deposit of a decalcified strengthening callus is followed at a later date by a similar periosteal deposit on the other surface of the

skull. I think that Rindfleisch saw the same microscopical appearance as my sections presented, but he regards the fibrillation and cell deposit lining the decalcified trabeculæ as being another downward grade in the process of its conversion into mucoid material, and a stage of degeneration, while I regard the fibrous tissue as *an effort to strengthen and repair*, by a callus, which is, owing to the recuperative power in the individual, unprovided with lime salts."—*Brit. Med. Jour.*, vol. ii, 1887.

H. H. TAYLOR (London).

II. Case of Axe Wound of the Skull. By DR. HEINRICH I. RODZEWICZ (Nijni-Novgorod Russia). An old, but hale and sound rustic parson, æt. 56, was struck on the head with an axe. A couple of hours later the writer found the old man lying in bed quite conscious and quiet. He got up and walked with some support to a sofa near a window to be better examined. About the middle of the right parietal region there was present a clean cut, slightly gaping wound measuring $4\frac{1}{2}$ cm. in length and penetrating down to the brain which could be seen through the gaps in the dura mater. On clearing the surface of the latter, two fragments of the inner table of the parietal bone each about $2\frac{1}{2}$ cm. long were found and removed. There was but a trifling hæmorrhage. The edges of the skull fissure were slightly everted. Neither vomiting nor any cerebral symptoms, except a severe headache were present. Having cleansed the whole injured area with cotton-wool soaked in an alcoholic solution of salicylic acid, the writer stitched the scalp wound with six carbolized silk sutures, applied salicylic cotton-wool, and above it a large lump of snow in a table napkin. Contrary to all expectations, the old man made a good recovery. When visiting Dr. Rodzewicz about three months later, the patient was quite cheerful and only complained that his hearing on the *left* side had grown worse after the accident. His wound was found to be completely united.—*Rüsskaia Meditzina* No. 38, 1887.

III. Compound Comminuted and Depressed Fracture of the Skull, with Lacerated Wound of the Brain; Trephining; Recovery. By DR. IVAN A. PRAKSIN (St. Petersburg). A