

foci of various special movements were found about the base of the encephalon, pons, medulla oblongata and other parts. The considerable amount of lesion often discovered at the floor of the fourth ventricle in general paralysis, and the degeneration of cerebral and spinal nerves, warn us against too ready an indictment of motor centers in the cerebral cortex, as answerable for the frequent and characteristic motor impairment; that of the lips, tongue, face and articulatory organs generally. (Mickle, General Paralysis, ed. 1880). If Charcot had added to his hypotheses the probability that the base and central ganglia were the true and only motor centers, a solution of the difficulties which surround the Ferrier system could be arrived at without ignoring the doctrines of localization. Let the area be circumscribed to really the most vital parts of the brain, then could all the phenomena be explained. It would then become more evident why traumatic injury and destruction from pathological processes on the surface are not always followed by functional and mental unsoundness. If this explanation be accepted it will be seen that the surfaces and upper portions of these nervous masses thus become adjuncts to vital organs in the center and base of the brain. The former, in their analogy of structures and juxtaposition, give power but do not impart function; they are auxiliaries but not necessities to the ganglionic centers; they intensify energy but do not direct; they are—as it were—additional cells to the battery, but are not its controlling agency. I repeat this view in another form to avoid ambiguity and misconstruction. It is worthy of remark in this connection, as it is a matter of experiment, that such a large area as the Rolandic zone can be destroyed, and yet leave the intelligence unimpaired. A considerable portion of the frontal or even of the occipital lobes can be removed without any