

sented in the next level of centres, the mid-brain and cerebellum : and that they are all re-re-represented in the highest level of centres, the cerebral. The fact that the basal ganglia have important functions does not disprove that the cerebrum has still more important ones.

Gowers, in his work on diseases of the nervous system, states that "acute lesions of either the caudate or lenticular nucleus generally causes hemiplegia, but this is permanent only if the internal capsule is damaged. If the lesion is confined to the gray substance of either nucleus there are usually no persistent symptoms, motor or sensory." So much for one of the basal ganglia. Now for the other. "Slight hemiplegia has been observed when the disease is in the middle third of the thalamus, but is absent if the lesion is small or is near the ventricular surface: hence there is strong presumption that the loss of power is due to interference with the motor part of the internal capsule, which is adjacent to the middle."

Thus by the process of exclusion we can feel sure that in man the great voluntary motor and perceptive sensory centres are not in "the base ganglia." To all the above, however, can be added the proof obtained from the course taken by a descending degeneration. After the removal or destruction of a portion of the cortex in the Rolandic region, a tract of degenerated fibres can be traced through the internal capsule, along the crura of the crus cerebri, then in the pyramid of the medulla, and finally down the spinal cord. Such proof is unanswerable: and, at once and forever, settles the fact that these fibres come from the cortex. Therefore the cortex has a functional and nutritional control over these fibres, and must be a "surface" centre for them.

In many statements I may have been vague in my effort to be brief. I would gladly not have been forced to differ so widely from my esteemed friend, Dr. Clark: but, as his influence might induce some to look backwards, when we should all be looking forwards, I have taken it upon myself to break a lance in defence of what I believe to be a sound doctrine—"the doctrine of cortical functional centres."

In order to avoid every chance of appearing unfair, I have used Dr. Clark's own words, as to the position and extent of the injuries under discussion.

The cases cited by him do not afford any foundation for his statement, "that I am convinced that localization of function lies in the base ganglia, and not in the hemispheres."

PREVENTION OF MISCARRIAGE.

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Once more I venture in the face of very unsatisfactory experience to raise the time-worn question, "Can miscarriage be prevented?" The writer's experience which, at the least, has not been long enough to adduce very decisive conclusions, has until recently been the reverse of encouraging. This will be shown by one or two cases subjoined, a sample of many presenting the same wearying similarity to himself and of many thousands which could be compiled and which show how fatally numerous are the blighted lives that never begin to be, but "like untimely fruit, drop from the tree of history."

Case I.—Mrs. S—, age 27, married eight years, first pregnancy, family history of patient and husband good, both healthy. Was called in September, 1889, and found her in agony of pain, cervix dilated to admit barely index finger, contractions strong and frequent, considerable flowing. Administered of Tr. opii. and Fl. Ex. viburnum prunifol. half a drachm each, repeated twice at half-hour intervals. Pains quickly ceased and permanently. Nothing further occurred that evening, nor next day, but on the third day the fœtus and placenta which had just formed, were expelled or rather removed by inserting two fingers into uterus. The fact that this had to be done, as decomposition was beginning, and that I had afterwards cause to fear that some shreds remained behind with consequent trickling hemorrhages and malaise of two months, made me regret that I had interfered with the process of expulsion. Through the anxiety of parents to have a child of their own, added to the impression made on my mind by an article in a reputable journal just at that time, induced me to hope that viburnum might do much, if not a great deal, in staying the trouble in this case. The woman has since given birth to a healthy female child, so I conclude there is nothing seriously wrong in the uterine functions.