

happen in the case of birds: on the injured side *sensation*, or the power of responding to a stimulus, remains intact; while *perception*, or the power of mental recognition, is destroyed.

This description applies to the grey matter of the cerebral hemispheres as a whole. But of course the question next arises whether it only acts as a whole, or whether there is any localization of different intellectual faculties in different parts of it. Now, in answer to this question, it has long been known that the faculty of speech is definitely localized in a part of the grey matter lying just behind the forehead; for, when this part is injured, a man loses all power of expressing even the most simple ideas in words, while the ideas themselves remain as clear as ever. It is remarkable that in each individual only this part of one hemisphere appears to be used; and there is some evidence to show that left-handed persons use the opposite side from right-handed. Moreover, when the side which is habitually in use is destroyed, the corresponding part of the other hemisphere begins to learn its work, so that the patient may in time recover his use of language.

Within the last few years the important discovery has been made, that by stimulating with electricity the surface of the grey matter of the hemispheres, muscular movements are evoked; and that certain patches of the grey matter, when thus stimulated, always throw into action the same groups of muscles. In other words, there are