

although at a considerable expenditure of nerve energy, fatigue rapidly ensuing. With this loss of motor co-ordination for the preservation of balance, there was, however, no diminution of muscular power.

Ferrier found on stimulating certain areas of the monkey's cerebellum with electricity, that movements of the eyes and marked loss of equilibrium in definite directions followed.

1st.—Stimulating the pyramid, either on right or left side, the eyes moved to the right or left.

2nd.—Stimulating the anterior part of the upper vermiform lobe in the middle line, the eyes turned directly up; if the electrode were placed to either side of the middle line, the eyes turned to the same side as well as upwards, but without any rotation.

3.—If electrode placed on posterior part of upper vermiform lobe in the middle line, eyes were turned directly down, and in addition to either side if electrode placed on one or other side of middle line.

4.—If lateral lobes stimulated, the eyes looked up, and upper end of vertical axis rotated towards side so stimulated.

5.—Stimulation of flocculus caused rotation on the antero-posterior axis.

*The movements of the head, eyes and body coincided.*

It was also found that on stimulating the lateral lobes there was a tendency to fall to the same side as that stimulated, associated with a rotation backwards. On stimulating the anterior portion of middle lobe, a tendency to fall backwards; on stimulating the posterior portion, a tendency to fall forwards.

On destruction of any of these areas, falling in the opposite direction ensued, *e.g.*, if lateral lobe destroyed, animal fell to opposite side, with a rotary movement backwards; if anterior part middle lobe, animal fell forwards; if posterior, backwards.

The stimulation of the mastoid in man by electrodes placed one on each mastoid, causes the head to be bent and the eyes directed towards the side on which the anode is placed; objects appear to be moving in the opposite direction, and there is a sensation as of loss of support on the opposite side of the body; hence the movement of the head and eyes to one side are compensatory to a feeling of falling to the opposite side.

Now, it is found that the movements of the head and eyes thus engendered, by placing the electrodes on the mastoid in