

May 13, 1875.

Dr. J. BURDON SANDERSON, Vice-President, in the Chair.

The Presents received were laid on the table, and thanks ordered for them.

In pursuance of the Statutes, the names of the Candidates recommended for election into the Society were read from the Chair as follows:—

William Archer, M.R.I.A.
James Risdon Bennett, M.D.
Dietrich Brandis, Ph.D., F.L.S.
James Caird, C.B.
Prof. John Casey, LL.D.
August Dupré, Ph.D., F.C.S.
James Geikie, F.R.S.E.
James Whitbread Lee Glaisher,
M.A.

John Baboneau Nickterlien Hennessey, F.R.A.S.
Emanuel Klein, M.D.
E. Ray Lankester, M.A.
George Strong Nares, Capt. R.N.
Robert Stirling Newall, F.R.A.S.
William Chandler Roberts, F.C.S.
Major-General Henry Y. D. Scott,
R.E., C.B.

THE CROONIAN LECTURE, "Experiments on the Brain of Monkeys" (Second Series), was delivered by DAVID FERRIER, M.A., M.D., Professor of Forensic Medicine, King's College. Communicated by Dr. SANDERSON, V.P.R.S. Received April 27, 1875. The following is an Abstract:—

This paper contains the details of experiments on the brain of monkeys, supplementary to those already laid before the Society by the author. They relate chiefly to the effects of destruction, by means of the cautery, of localized regions previously explored by electrical stimulation.

Twenty-five experiments are recorded in detail, and the individual experiments are illustrated by appropriate drawings. The results are briefly summed up as follows:—

1. Ablation of the frontal regions, which give no reaction to electrical stimulation, is without effect on the powers of sensation or voluntary motion, but causes marked impairment of intelligence and of the faculty of attentive observation.

2. Destruction of the grey matter of the convolutions bounding the fissure of Rolando causes paralysis of voluntary motion on the opposite side of the body; while lesions circumscribed to special areas in these convolutions, previously localized by the author, cause paralysis of voluntary motion, limited to the muscular actions excited by electrical stimulation of the same parts.

3. Destruction of the angular gyrus (*pli courbe*) causes blindness of the opposite eye, the other senses and voluntary motion remaining unaffected. This blindness is only of temporary duration, provided the angular gyrus of the other hemisphere remains intact. When both are destroyed, the loss of visual perception is total and permanent.

4. The effects of electrical stimulation, and the results of destruction of the superior temporo-sphenoidal convolutions, indicate that they are the centres of the sense of hearing. (The action is crossed.)

5. Destruction of the hippocampus major and hippocampal convolution abolishes the sense of touch on the opposite side of the body.

6. The sense of smell (for each nostril) has its centre in the subiculum cornu ammonis, or tip of the uncinatè convolution on the same side.

7. The sense of taste is localized in a region in close proximity to the centre of smell, and is abolished by destructive lesion of the lower part of the temporo-sphenoidal lobe. (The action is crossed.)

8. Destruction of the optic thalamus causes complete anæsthesia of the opposite side of the body.

9. Ablation of the occipital lobes produces no effect on the special senses or on the powers of voluntary motion, but is followed by a state of depression and refusal of food, not to be accounted for by mere constitutional disturbance consequent on the operation. The function of these lobes is regarded as still obscure, but considered to be in some measure related to the systemic sensations. Their destruction does not abolish the sexual appetite.

10. After removal both of the frontal and occipital lobes, an animal still retains its faculties of special sense and the powers of voluntary motion.

The Society then adjourned over the Whitsuntide Recess, to Thursday, May 27th.

May 27, 1875.

JOSEPH DALTON HOOKER, C.B., President, in the Chair.

The Presents received were laid on the table, and thanks ordered for them.

Mr. I. Lowthian Bell and the Right Hon. Sir James Colville were admitted into the Society.

The following Papers were read :—