

time of the emotion but as psycho-physical dispositions or traces, so that where there is retro-active hypermnesia the emotion would seem to have the power to strengthen these dispositions and the connections by which they may be called into life. The author gives illustrative cases.

C. W. FORSYTH.

2. Neurology.

Some Observations on the Influence of Angle of Section on Measurements of Cortex Depth and on the Cyto-architectonic Picture. (Journ. Nerv. and Ment. Dis., April, 1918.) Orton, S. T.

The author gives the results of his control measurements of sections from various cortical areas. He used a special block-holder, equipped with a scale, and rotatable, so that from one block of cortex seven or eight planes of section could be made, cutting the cortex at as many different angles. All the measurements were made at the apex of convolutions, where the axes of the majority of nerve-cells pass vertically into the white matter. The depth increments referable to obliquity are tabulated as percentages of the shortest measurement. He concludes that, using sections cut and mounted with extreme care to avoid undue obliquity, one may expect an error of something under 6 *per cent.*, of which almost one half is due to difficulty in determining the line of demarcation between cortex and white matter. The fixing of this line is somewhat arbitrary, owing to the rather gradual and straggling manner in which the spindle-cells of the lowest cortical layer disappear as the white matter is reached.

The cyto-architectonic picture is not much altered except when obliquity is marked. Owing to the wide variations in their vertical orientation, the apparent shape of the pyramidal cells will not serve as an accurate control, though, by ascertaining the proportion of truncated cells to those with long processes, one could probably detect an obliquity sufficient to induce a depth error of 10 *per cent.*

He discusses the significance of depth for evaluation of the cortex, and considers the spatial importance of the vascular system and neuroglia, as well as of variations in the number and volume of nerve-cells and nerve-fibres. He notes the occasional occurrence of great cell richness in a thin cortex, due perhaps to lack of development (or possibly to devastation) of intercellular structures, or to diminished thickness of myelin sheaths. A small brain, whose size is dependent, not on a reduction in number of essential structures, but rather on the size of the constituent elements, may yet in a functional respect be fairly normal.

SYDNEY J. COLE.

3. Clinical Psychiatry.

Atypical Form of Arteriosclerotic Psychosis: A Report of a Case. (Journ. Nerv. and Ment. Dis., December, 1919.) Uyematsu, S.

A married woman, æt. 40, began to have difficulty in doing her work, complaining of headaches, which gradually became more severe. Her memory gradually failed for both recent and remote events. After

about seven years walking became difficult, and finally she was bed-ridden, being unable to stand. A tremor of the hands developed, and it was necessary to feed, dress, and care for her. No syphilitic evidences; Wassermann negative in blood and spinal fluid. No sclerosis of peripheral arteries. Blood-pressure 160-80. Pupils irregular, the right dilated; reaction to light slow, to accommodation *nil*. Tactile appreciation slightly impaired; inability to localise readily for touch or space; wincing to pin-pricks. Knee-jerks exaggerated. Right ankle clonus. No Babinski. Marked tremor of hands, tongue and lips. Speech retarded and slurring. The clinical condition much resembled general paralysis, except for its protracted course and the negative Wassermann. Diagnosis, "cerebral tumour?" Died comatose at the age of 48.

Brain 970 grm. Dura thick. Pia slightly opaque; much fluid beneath it. Diffuse atrophy of convolutions, very marked over vertex, and involving the posterior parts of the frontal lobes, and the entire parietal and occipital lobes. The only parts that did not show this curious atrophy were the orbital portions of the frontal lobes, anterior part of superior frontal gyri, anterior part of gyrus fornicatus, the superior and middle temporal gyri, opercular portion of left hemisphere, the insulæ and unci. The healthy portions are related to certain regions of arterial blood-supply. At the points of greatest atrophy the cortical surface had a moth-eaten appearance (*état vermoulu* of Pierre Marie). Old hæmorrhage in left internal capsule. The vertebral arteries, basilar, internal carotids and major arteries of cerebrum and cerebellum all very sclerotic. Sclerosis of coronaries; commencing sclerosis of aorta.

In the cortex, immediately under the glial surface, were many small cystic areas, mostly triangular or wedge-shaped, with their bases against the surface. Some lay deeper, and these were mostly under the valley between two gyri. The cysts were surrounded by a luxuriant growth of glia. The inside of the cyst was not empty space, but was occupied by a net-like structure of capillaries, perivascular connective tissue, glia fibres and a few cellular elements. The condition is rare, and resembles Fischer's *spongiöser Rindenschwund*. Side by side with cystic areas were scar-tissue formations. The smaller vessels of the cortex showed here and there a "packet formation." Somewhat similar changes were found in the cerebellum. The author attributes them all to arterio-sclerosis, of unexplained ætiology, not syphilitic. No syphilitic endarteritis found anywhere.

A full and detailed report. Fifteen photographs; those showing the naked-eye distribution of the atrophy are particularly interesting. Commentary; survey of literature; bibliography.

SYDNEY J. COLE.

General Paralysis and Traumatism. [*Paralysie Générale et Traumatisme*]. (*Rev. Neur.*, No. 22, October, 1915.) Benon, R.

This prolific writer here surveys the diverse opinions of authors respecting the significance of injury in the ætiology of general paralysis, since the first description of the disease by Bayle in 1822, and gives eighty-four references. He considers that injury can act neither as a determining nor as a predisposing cause, and that it is very