E.E.G. also provides a good indication of the effect of treatment. The writers think that the absence of waves from the frontal area means that the synchronized discharge of groups of cells is not great enough to develop sufficient voltage for detection through the skull.

Brain mechanisms in epilepsy are merely extreme variations of those of normal brain function.

G. W. T. H. Fleming.

Epilepsy: A Paroxysmal Cerebral Dysrhythmia. (Brain, vol. lx, p. 377, Dec., 1937.) Gibbs, F. A., Gibbs, E. L., and Lennox, W. G.

The writers investigated the electro-encephalogram in epilepsy, and consider that it demonstrates the existence of a paroxysmal cerebral dysrhythmia. They examined a group of 400 epileptics, of whom 120 had seizures while the encephalograms were being made.

They found that seizures involving the cortex were accompanied by characteristic fluctuations in the action potentials. *Grand mal* has a fast, psychomotor attacks a slow, and *petit mal* an alternating fast and slow rhythm.

The exact pattern during the seizure tends to be characteristic for each patient. Antecedent to these gross abnormalities of rhythm is a lack of a competent control of cerebral rhythms.

Some patients have sub-clinical seizures which are typical short disturbances of rhythm not attended by subjective or objective evidence of a seizure.

Petit mal may occur during sleep. Grand mal may be predicted many hours in advance.

In some patients abnormal activity begins in one area of the cortex and spreads to involve other areas. One patient with abnormal spikes confined to the frontal area greatly improved following bilateral amputation of the frontal lobes.

The inhalation of carbon dioxide and the administration of glucose result in temporarily abolishing certain abnormal rhythms. In some patients attention prevents the development of abnormal rhythms.

G. W. T. H. Fleming.

Vegetative Disorders in the Syndrome of the Red Nucleus and the Thalamus [Vegetative Störungen im Rotenkern-Thalamussyndrom]. (Zeitschr. f. d. ges. Neur. u. Psychiat., vol. clix, p. 396, 1937.) Széky, A.

The author describes a case showing a thalamic syndrome, including disorders of sensation as described by Head, central pains, thalamic hand, etc. On top of these symptoms there were some vegetative ones. Trophic ulcers occurred on the affected side. The skin was cool and cyanotic, and on the same side there was hyperidrosis, which occurred spontaneously as well as in response to pilocarpine. The author assumes the hypothalamic region to be involved as well.

S. L. LAST.

5. Pharmacology and Treatment.

The Treatment of Schizophrenia with Pentamethylenetetrazol [Traitement de la schizophrénie par le Pentaméthylénetétrazol (Cardiazol)]. (Ann. Méd. Psych., vol. xcvi [i], p. 23, Jan., 1938.) Delgado, H.

Observations on the technique of Meduna's cardiazol therapy are followed by a review of the results obtained by previous workers using this method of treatment. Of the 17 schizophrenics treated by the author, 6 are in a complete remission. The other 11 are still receiving treatment, and of these, 4 show incomplete remission, 2 marked improvement, 4 inconstant improvement, and 1 shows no mental change.

Stanley M. Coleman.