defects were all very favourably influenced in the good remission series.

The authors are inclined to attribute the improvement to the high temperature. They found that from a serological standpoint, a parallelism exists between the number of febrile paroxysms and the improvement. Bunker and Kirby regard the improvement as due to a form of foreign protein therapy acting on a nervous system which has not been too badly damaged.

G. W. T. H. FLEMING.

Intravenous Treatment of Some Epileptics with Calcium Chloride and Glucocalcium. (Journ. of Nerv. and Ment. Dis., April, 1927.) Klein, E., and Forcione, E.

The authors used calcium chloride and gluco-calcium on two groups of fourteen patients. They found no benefit from the use of calcium over four- and five-month periods. If anything there was a tendency towards an increase in the number of fits. There was no advantage in the use of gluco-calcium over calcium chloride, and no increase in the calcium concentration of the blood-serum after the injection of one-half to two grains of calcium salts.

G. W. T. H. FLEMING.

4. Psycho-Pathology.

The Syndrome of Mental Automatism and Its Rôle in the Formation of the Chronic Systematized Psychoses. (Fourn. of Nerv. and Ment. Dis., April, 1927.) Bailey, P.

It is to de Clerambault that we owe the conception of mental automatism and its $r\delta le$ in the development of paranoia and paraphrenia. The automatism is a triple one, comprising phenomena of three sorts, (a) sensory, (b) motor and (c) ideoverbal. It includes all the processes described under the name of hallucinations, but includes many illusions and other phenomena of a negative character. The sensory group consists of hallucinations and illusions which are familiar enough. The motor group consists of hallucinations of kinæsthetic sensibility, especially of the vocal musculature.

The ideoverbal automatisms are allied to the psychic hallucinations of Baillarger or the pseudo-hallucinations of Kandinsky, and are considered by de Clerambault to be most important. They are either positive or negative. The positive phenomena include psychic hallucinations, ideorrhæa, mute procession of the past, substitution of thought, pressure of thought, false recognition, passage of an invisible thought, echo of thought, enunciation of acts, anticipation of thought and flight of thought. The negative phenomena include arrest of thought, seizure of thought, absence of thought, disappearance of thought and sudden forgetting. To these Henyer and Lamache have added thought-reading. De Clerambault considers that all the phenomena of mental automatism have their origin in a physico-chemical alteration of the cells of

the central nervous system. The effects of intoxications and infections on the central nervous system follow several laws: (a) The effects of each toxin differ; (b) in general the cells are more susceptible the higher their position in the hierarchy of function; (c) the cells defend themselves more easily the slower the attack; (d) the latent period is important; (e) the nervous cells defend themselves better as the patient grows older—at least until the onset of senility.

De Clerambault divides the pure chronic systematized psychoses into constitutional and degenerative psychoses. In the constitutional psychoses hallucinations are absent; in the degenerative group deliria are absent. Most chronic psychoses are made up of a mixture, e. g., the chronic hallucinatory psychoses. The constitutional psychoses present, as it were, a hypertrophy of some one trait. Serieux and Capgras recognize three main groups, the passional, the interpretative and the imaginative psychoses. The patient reacts to the initial phenomena by the formation of a systematized delirium, the nature of which depends on many factors: (a) The strangeness of the phenomena; (b) the intellectual make-up of the patient; (c) the nature of the hallucinatory process and its concordance with the character of the patient; and (d) his affective tone.

G. W. T. H. Fleming.

The Conception of Dissociation. (Brit. Journ. of Med. Psychol., March, 1927.) Hart, B.

Janet's conception of dissociation was that mental elements and processes could preserve an independent existence apart from the main stream of consciousness, and by this conception he explained the phenomena of hysteria and hypnosis. There are considerable objections to Janet's cut-and-dried conception, for dissociation does not separate the mind into compartments. The various systems are all related and work together, perhaps with a different gear as it were. Hart believes in a functional conception of dissociation, and would extend it to cover cyclothymia and the manic-depressive psychosis, to the mechanism of hallucinations, to elaborate delusional systems which do not interfere with conduct, and even to the logic-tight compartment mechanisms observed in everyday life. Freud's conception of the unconscious is a conceptual construction, created in order to explain not facts, but what are really inferences. Janet's conception is a classification of observed phenomena.

In Freud's conceptions of the ego and the id a further division of the mind is formulated. He regards the ego as "the connecting organization of the mental processes in an individual," centred in the perceptual system of the psychical apparatus. The remainder of the psyche is the id. Perception plays in the ego the part which instinct plays in the id. This again is a conceptual construction. The whole of Freud's concepts are too fluid and plastic to be of much value from a methodological standpoint. The psychoanalyst very largely avoids the question of multiple personality and dissociation.

G. W. T. H. Fleming.