Because of the association of cirrhosis of the liver and lenticular degeneration, some of these cases showed hepatic inefficiency, and feeding with raw liver was tried. The results, although not startling, suggest that benefit had accrued from the treatment. The author thinks that there may be a hepatic hormone which has a beneficial action on the cells of the nervous system.

G. W. T. H. FLEMING.

3. Treatment.

The Malaria Treatment of General Paresis. (Journ. of Nerv. and Ment. Dis., March, 1927.) Ferraro, A., and Jong, T. C. C.

Three methods are given for transporting the malarial parasites: (a) Sodium citrate method: 5 c.c. of malarial blood are mixed in a sterile tube with 5 c.c. of $^{5}\%$ sodium citrate solution. Tube closed with a rubber cork and hermetically paraffined.

(b) Agar blood method: 10-15 c.c. of malarial blood are defibrinated with small glass balls, then transferred to a tube containing agar blood distributed on an inclined plane. Closure of

tube as in (a).

(c) Gelatinization method: 2 c.c. of malarial blood are put in 10 c.c. of sterile chemically pure gelatin. The gelatin must be dissolved at 30° C. in a water-bath. The blood and gelatin must then be shaken for a few minutes and left to solidify.

The average number of malarial attacks allowed was 12; in some cases as many as 20 were permitted. Of the 120 cases treated, 26% have shown very good remissions, 27% a marked improvement.

When the different types of cases were considered, the authors found the greatest number of good remissions in the expansive-paranoid type; next in order came the depressed type and then the manic type. The demented type showed the least improvement. Gerstmann found the best results with the simple demented cases, Kirschnaum, Pilcz, Herzig and Joosmann and Stienaerts with the manic cases. The older the patient the less probability there is of improvement from malarial treatment.

There is quite a marked prolongation of life in the unimproved cases. Serologically the authors found between two and three years after treatment that 86% had a negative blood Wassermann and 68% a negative fluid Wassermann. The pleocytosis is the first element to show improvement; this occurs a few days after treatment. The globulin reaction and the colloidal gold reaction are more persistent. The paretic curve tends towards the syphilitic type.

Within 35 months there is a close correlation between the serological and clinical improvement. In four cases there followed on the treatment a typical "præcox" reaction, with auditory hallucinations, paranoid ideas, mannerisms and a more or less pronounced negativism. Generally speaking the reflexes did not show any great improvement; in the unimproved cases they were often worse after treatment. Co-ordination, ataxia, tremors and speech 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