degree of insight, which enables the patients to accept statements as to the morbid nature of these hallucinations. The delusions are not as firmly believed in as with most other psychotics. The ability to discuss symptoms in a detached way is another important feature. S. L. LAST.

Sexual Sterilization. (Amer. Journ. Psychiat., vol. xci, p. 897, Jan., 1935.) Baragar, C. A., Davidson, G. A., McAlister, W. J., and McCullough, D. L.

The writer describes four years' experience in Alberta, during which 288 cases (M. 87, F. 201) had been passed by the Eugenics Board. The operations (206 in number) have been followed by no serious sequelæ. No complaints of change in libido or sex satisfaction have been received. Of the 288 cases, 156 were mentally defective, 36 were mental defectives combined with psychosis, 87 were otherwise psychotic and 9 were borderline. Social problems were prominent features in many of the histories. Facts indicating hereditary predisposition were found in 60.8% of the cases. There is no present evidence that sterilization will lead to promiscuity or lowering of moral standards. M. HAMBLIN SMITH.

Trypanosomiasis with Predominating Mental Symptoms [Trypanosomiase à symptomatologie psychique prédominante]. (Ann. Méd. Psych., vol. xv [1], p. 1, Jan., 1935.) Fribourg-Blanc and Lassale.

The case described was unusual, in the first place, on account of the extreme brevity of the initial phase, nervous and mental symptoms being evident three months after onset. In the second place, the mental symptoms concerned the affective rather than the intellectual sphere. Particularly abnormal emotionalism, phases of extreme irritability and sudden outbursts of violent behaviour were noted. Thirdly, the successful tryparsamide therapy despite the fact that injections were not commenced until a year after onset. During the first series of injections there was an exacerbation of symptoms—pyrexia, alternating agitation and stupor associated with persecutory delusions. It is thought that this acute psychotic episode was brought about by the sudden liberation of endotoxins from the massive destruction of trypanosomes by the arsenic. Stanley M. COLEMAN.

The Ætiology of Manic-depressive Syndromes, with Special Reference to their Occurrence in Twins. (Amer. Journ. Psychiat., vol. xci, p. 725, Jan., 1935.) Rosanoff, A. J., Handy, L. M., and Plesset, I. R.

A study of 90 pairs of twins with manic-depressive syndromes. Among 23 pairs of monozygotic twins, both twins were found to be affected in 16 instances, and one of each pair in 7 instances. Among 67 pairs of dizygotic twins, both were affected in 11 instances and one in 56 instances. Hence it is plain that germinal factors play an important part; but in some cases factors other than heredity are required. The importance of sex is indicated by the fact that among 32 pairs of opposite-sex twins both were affected in 3, the male alone in 5, and the female alone in 24 instances. No case was found of one twin with a manic-depressive syndrome and the other exhibiting a neuropsychiatric condition belonging to another clinical group. The bulk of manic-depressive syndromes occur on a hereditary basis, either under ordinary conditions of life or under the influence of external factors, which are, for the most part, of psychogenic nature. A hypothesis is offered of the mode of inheritance, in which the existence of a cyclothymic factor (c) in the autosomes is assumed, and an activating factor (A) in the X-chromosomes. On this hypothesis, human subjects may be classified, with reference to the cyclothymic components of temperament, into six types of men and nine types of women. Two types in men and four in women represent temperamental constitutions which make possible the development of manic-depressive psychoses. There are 54 possible types of mating. A series of formulæ is given representing the theoretical expectation of the composition of the resulting offspring. The hypothesis is not out of harmony with the known facts of familial distribution of manicdepressive psychoses, and it seems capable of explaining quantitative differences

within the group. Hereditary factors play a variable part in different cases. We must be prepared, in checking any hypothesis, to find phenotypes numerically falling below genotypes, as they certainly do among monozygotic twins. M. HAMBLIN SMITH.

The Depression and Mental Disease in New York State. (Amer. Journ. Psychiat., vol. xci, p. 763, Jan., 1935.) Pollock, H. M.

The American economic depression began in October, 1929. Comparative tables for the years 1924-29 and 1929-34 are given. The patient population increased more rapidly in the second than in the first period, the increase being greatest in 1933. The trend in the rate of first admissions has been rising since 1924. The rate of increase of admissions is higher than that of discharges and deaths. A slight upward trend is noted in senile first admissions. Very great increases have occurred in the arterio-sclerotic group. No change in trend is found in the paretic group. A slowly rising trend is found in the alcoholic group; this is more affected by liquor legislation than by economic conditions. The trend in the manic-depressive group is slightly upward. A significant increase in the rate of dementia præcox first admissions has occurred since 1927; the rate was specially high in 1932-33, and this may reflect cumulative effects of the depression. The economic crisis does not appear to be the dominant factor in the increase of first admissions in any one diagnostic group, but it is an important precipitating factor in all groups. Mathematical states of the depression of the depression of the admissions in any one diagnostic group, but it is an important precipitating factor in all groups.

Investigation of Polyuria in Schizophrenia. (Amer. Journ. Psychiat., vol. xci, p. 1019, March, 1935.) Sleeper, F. H.

The average urinary output in a series of 92 male schizophrenic patients was 2532 c.c., that of 26 healthy controls was 1328 c.c. Restriction of water intake to about 1900 c.c. in 10 patients with very high urinary output resulted in no particular complaints of thirst. The kidneys of schizophrenic patients are able to concentrate and dilute urine within normal limits, in response to the ingestion of 1 litre of water. The anti-diuretic effect of pituitrin is as effective in schizophrenic patients as in normal subjects. M. HAMBLIN SMITH.

Experimental Catatonia by Means of Derivatives of Mescaline and Adrenaline. (Proc. Acad. Sci. Amsterdam, vol. xxxvii, p. 562, 1934.) Noteboom, L.

Experimental catatonia, which is considered an analogue of the syndrome of human catatonia, is produced by mescaline, 3, 4, $5 \cdot (OMe)_3C_6H_2C_2H_4NH_2$. The author compared the reactions on the central nervous system of cats of the following derivatives of PhC₂H₄NH₂: 3, $4 \cdot (OMe)_2$, 3, $5 \cdot (OMe)_2 \cdot 4 \cdot (OEt)$, 3, $4 \cdot (OMe)_2 \cdot 5 \cdot (OEt)$ (I), 3, $4 \cdot (OEt)_2 \cdot 5 \cdot (OMe)$, 3, $5 \cdot (OMe)_2 \cdot 4 - (Det)_2 \cdot 3 \cdot (OMe)_2 \cdot 4 \cdot (OMe)_2$, 3, $5 \cdot (OMe)_2 \cdot 3 \cdot (OMe)_2 \cdot 4 \cdot (OMe)_2$, 3, $5 \cdot (OMe)_2$, 3, $4 \cdot (OMe)_2$, 3, $4 \cdot (5 \cdot OMe)_3$, 3, $5 \cdot (OMe)_2 \cdot 4 \cdot (DMe)_2$, 3, $4 \cdot (5 \cdot OMe)_3 \cdot 3 \cdot 5 \cdot (OMe)_2 \cdot 4 \cdot (DMe)_2$. The effects of adrenaline, ephedrine, sympathol and nor-sympathol are also recorded. Detailed protocols are given, but no definite conclusions are reported. In general all the compounds showed some phenomena of experimental catatonia. (I) is the most toxic compound in the series. C. W. SONDERN (Chem. Abstr.).

4. Neurology.

Subacute Combined Degeneration of the Spinal Cord in Pernicious Anæmia. (Journ. Amer. Med. Assoc., vol. civ, p. 158, May, 1935.) Straus, M. B., Solomon, P., Schneider, A. J., and Palek, A. J.

Twenty-six patients suffering from pernicious anæmia and advanced combined degeneration of the spinal cord were treated by the intramuscular injection of liver extract for an average period of thirty-four months. The amount of extract given