ments to the picture. In delirium tremens the multiplicity of hallucinations is brought in connexion with vestibular influence. Multiplicity of hallucinations, macropsia, micropsia, and dysmetamorphopsia, indicate a vestibular influence on hallucinations. The postural mode of the body is in the same way influenced in alcoholic psychosis in which the vestibular apparatus is affected as in organic neurological cases or in normals in which the function of the vestibular apparatus is changed. Vestibular changes disrupt the unity of the postural model of the body. The symptomatology of delirium tremens and alcoholic hallucinosis is considered from this point of view.

A case of barbital intoxication and a case of an eclamptic psychosis are studied from this point of view and the importance of the vestibular influence for the symptomatology of toxic psychosis is shown. But in psychosis the utilization and elaboration of the vestibular impulses in connexion with the activities of the whole brain are of special importance. The vestibular apparatus has a special function among the senses and is therefore in connexion with particular life experiences. Dysfunction of the vestibular apparatus is often the expression of two conflicting psychic tendencies. Giddiness occurs therefore in almost every neurosis. The neurosis may produce organic changes in the vestibular sphere. Giddiness is a danger signal in the sphere of the ego and occurs when the ego cannot exercise its synthetic function in the senses, but it occurs also when conflicting motor and attitudinal impulses in connexion with desires and strivings cannot be united any longer. It is as important from the psychoanalytic point of view as anxiety. The vestibular apparatus is an organ the function of which is directed against the isolation of the diverse functions of the body.

R. G. G.

**PSYCHOSES**


The results obtained by observing the temperatures of schizophrenic and nonschizophrenic groups afford confirmation of the statement that heat production in the schizophrenic reaction is low. Approximately 10,000 temperature readings in 50 schizophrenic and 50 control subjects showed that the internal temperature in the schizophrenic group was throughout the day slightly lower than in the nonschizophrenic group, both groups being at room temperature, and there was evidence to show that at room temperature the mechanism of heat control in the schizophrenic group was more active than in the nonschizophrenic group. Findings on exposure to extreme cold suggest that the mechanism of heat control acts more sharply and more strongly in the schizophrenic than in the nonschizophrenic group. On the
other hand, exposure to extreme heat reveals no weakness in the mechanism of heat control in the schizophrenic group.

These findings are not consistently true for the individual subject, but only for the group.

R. M. S.


In a series of 45 unselected cases of schizophrenia, maternal over-protection or rejection was present in 60 per cent. of the cases. Rejection was found in only two cases, with evidence coming from the patients themselves. In schizophrenia the over-protection frequently extends into the adult life of the patient and even into his hospital life after commitment.

The biological inferiority of the schizophrenic child is easily detected by the parents and serves as one of the principal causes of over-protection. The pre-schizophrenic child invites and solicits extra care and attention on the part of his parents. Over-protection establishes a vicious circle in the life of the schizophrenic child, because, on the one hand, the child needs the extra care for his development, but, on the other hand, receiving of this extra care hinders his final development, his emancipation from his parents, and his psychosexual development.

R. G. G.


Psychoses resulting from the taking of hashish are of the nature of exogenous reactions. No particular psychosis is characteristic of hashish. Frequently a state of depression is observed, and occasionally cases of schizophrenia. It is doubtful if the schizophrenia is really a result of hashish addiction.

M.


Mental disorder as a sequel to trauma, especially injury to the head, is not a frequent occurrence. A psychoneurosis rather than a psychosis is the more usual sequel. Here, cases of psychosis after injury are recorded and some attempt is made to classify them into types. (1) Injury may bring to the fore a latent infective psychosis, which may have lain dormant for an
indefinite period. (2) Injury may accentuate and caricature the usual mental ‘make-up’ of an individual, leading to psychosis of the type generally associated with the individual’s bodily build. (3) Injury may cause a complete change in the personality and behaviour of the individual. (4) In old age injury may precipitate a senile dementia.

C. S. R.


It seems most consistent with our present knowledge and the observations here reported to schematize the relationship of carbohydrate metabolism to emotional reactions in psychotic persons thus: emotional excitement produces rarely, if at all, any rise in the fasting blood sugar. Melancholic reactions appear to depress somewhat the insulinogenic function of the pancreas. Ordinarily this depression of function is demonstrable only as a moderately delayed demobilization of glucose, under a load; so that fasting blood sugars fall within normal limits except in those few persons, usually older than 45 years, whose capacity is already somewhat limited by diabetes or other organic disease.

C. S. R.


A series of 800 psychotic patients was investigated with reference to the occurrence of achlorhydria as compared with normal individuals. A percentage of 10.6 were found to be achlorhydric by the fractional test-meal method. This percentage was four points lower than that recorded by other observers for large numbers of healthy people of approximately the same age. The conclusion was therefore reached that achlorhydria does not occur more commonly among psychotics than among the sane. There was no preponderance of achlorhydria in any particular psychosis, the higher percentage apparently occurring in states of depression being due to the greater age of patients exhibiting this psychosis. The two chief forms of anaemia which are particularly associated with achlorhydria are Addisonian (or pernicious) anaemia on the one hand, and the idiopathic, hypochromic anaemia of Witts on the other. Numerous investigators have focussed their attention on the frequency with which anaemia occurs in achlorhydric subjects. In this series, six cases were found among the 82 cases of achlorhydria, i.e. 18.7 per cent. All of these were hyperchromic in type. Four were obvious cases of pernicious anaemia. The other two belonged to a group to which little attention has been drawn, namely, a hyperchromic anaemia which occurs in the elderly,
usually, but not always, associated with achlorhydria, while peptic activity remains good.

C. S. R.

**PSYCHOPATHOLOGY**


A strong suggestion of storm effect is seen in the distribution of suicides and homicides in North American cities. The rates are not highest where industrialization is most advanced, but rather where barometric pressure and temperature changes are most frequent and severe. Suicides show a definite time-relationship to weather changes as high- and low-pressure centres approach and pass by. With falling pressure and rising temperature, suicides rapidly rise. Most peaks in frequency occur at the time of a low-pressure crisis. With rising pressure and falling temperature few suicides occur. Migration from the South into the more stormy North is accompanied by a marked rise in suicides among negroes. Figures are not available to show whether the same is true of the whites. Increased economic stress in the North may, of course, play a large part in this rise. These findings indicate the likelihood that the wide shifts in temperature and pressure that accompany North American storms may play a considerable part in producing the mental instability of such populations. Much of this storm effect probably works through increasing the tempo of life and the economic competition. There probably remains, however, a distinct disturbing action of the storm changes as they affect the body directly.

C. S. R.


From the study of cases he records and discusses, the author concludes that it appears that suppressed or unrelieved resentment is capable of causing pain in a manner suggestive of a conditioned reflex. From this viewpoint, psychogenic pain must be considered as an emotional release rather than an escape, in the usual interpretation, and not necessarily having an unconsciously protective aim. The sensitive, often negativistic, egotistical and egocentric personality, with or without unconscious social compensation, is susceptible to the development of pain from an emotional (psychogenic) origin. The pain may be relieved by ego-compensating diversion or by the social relief of the cause of the underlying emotional conflicts.

C. S. R.