of digestion or sleep or emotions, which frequently affect the pulse-rate of normal individuals.

As regards the temperature changes present in epilepsy, the author is in complete accord with the results obtained by Ceni. He, however, has never found the temperature fall below 35° C. In 66 per cent. of the cases examined the temperature was found to be subnormal, and this more frequently among women than men. The hypothermic crises varied in duration, at times lasting from eight to twelve hours, or even longer, and had no connection with the number or intensity of the fits, or with the variations in blood-pressure or pulse-rate previously referred to.

The author has shown that all these modifications of the blood-pressure, pulse-rate, and temperature pursue an autonomous course, and are independent of the cortical manifestations of epilepsy. He maintains that this disproves the theory that the alterations in function of the central nervous system represent an organic reaction to eliminate toxins from the circulation. He holds the belief that in epilepsy we have to deal with an irritant that is continually acting on the central nervous system, to which the nerve-centres react quite independently of one another.

The cortical reaction manifests itself in the classical signs of the disease—fits, and alterations in the psychical state; while the alterations in blood-pressure, pulse-rate, and temperature are the results of the action of the same irritant, be it mechanical or toxic, on the bulbar centres.

A. I. EADES.

On Agrammatism and Derangements of the Inner Speech [Ueber Agrammatismus und die Störung der Inneren Sprache]. (Archiv f. Psychiat. u. Nervenkrank., Bd. 41, Heft 2.) Heilbronner, K.

Agrammatism may be regarded as an approach to aphasia, consisting in a loss of the power of constructing correct sentences. Dr. Heilbronner, of Utrecht, describes a case of this kind. A young man had received an incised wound in the left temporal region, which was followed by loss of blood, and unconsciousness which lasted for four weeks. After this time he began to speak, but with difficulty. He was received into the Psychiatric Clinique at Halle, where he was under observation for fourteen months. On admission there was noted right facial paralysis and deviation of the tongue, with spastic paresis of the right side. He wrote with the left hand with much readiness. In the ward he spoke little, and with difficulty, as if he had some mechanical stop. Although he had a sufficient vocabulary and understood complicated sentences, he used ungrammatical phrases in speaking as well as in writing, like the pigeon English spoken by the Chinese, or the Hindustani attempts of the British soldier, which are mostly in the imperative. Specimens of his composition are given in the descriptive paper, filling thirty pages. The author presents at the end the following conclusions: (1) Agrammatism can follow a slight motor disturbance of speech; (2) it can continue for years, even under conditions which favour the recovery from the symptoms of aphasia; (3) agrammatism with aphasies is not necessarily connected with mental weakness; (4) agrammatism with motor aphasia is not a secondary result of the motor speech deficiency, but a distinct affection; (5) a considerable degree of agrammatism may be combined with a slight loss of the apprehension of small sentences and their import, perhaps without any loss of this apprehension; (6) the result of a slight motor disturbance may injure the construction of sentences more than the inner apprehension of spelled words; (7) in agrammatism the injury to the power of expression as shown in writing is greater than the loss of the receptive power in reading; (8) the power of finding the right word can, notwithstanding the loss of fluency in speech, remain intact in agrammatism; (9) the recurrence of the same fault in the analysis of words observed in experiments repeated at different times justifies the hope that some law and order may be yet discerned in pathological derangements of speech.

WILLIAM W. IRELAND.

On Defective Children [Leicht Abnorme Kinder]. (Allgem. Zeits. f. Psychiat., Bd. lxii, H. 4.) Thoma E.

Under this title Dr. Thoma, of Illenau, Baden, considers the case of children weakminded or under the burden of nervous diseases, excluding the graver forms of imbecility, idiocy, and cretinism, as well as severe and recurrent epilepsy. Above these there is a grade of children who have recently come into notice owing to the establishment of schools for pupils of deficient intelligence in some of our large towns. Dr. Thoma treats these cases under the heads of neurasthenia and hysteria. Emminghaus has described the first of these affections in children as a neurosis of the cerebrum, with some weakness of the intellectual faculties, alteration of the temper, and anomalies of innervation. It may be acute or chronic, often coming on suddenly, and showing itself in great listlessness and the loss of the usual brightness and playfulness of children. In the school, they are inattentive, learn with difficulty, and soon lose what they have been taught. The pupils are wide and react readily, the conjunctiva is injected. There are a great variety of other symptoms, such as flushing of the face, bleeding at the nose, cold hands and feet, feeling of heat in the head, noises in the ear, palpitation at the heart, and dyspnœa. The sleep is bad, with night terrors. As all these symptoms do not occur in one case, it is difficult to give a general description. Sometimes there is only a single symptom to guide the physician. Characteristic of neurasthenia in children are what is called the phobies, terrors easily excited by slight causes, such as monophobia, the fear of being alone, or the fear of some animals, as spiders, mice, or toads. Thoma mentions one case of a woman, æt. 22, who, on the occasion of a search being made in the school for some stolen chocolate, was ever after haunted with the idea that she should always have with her some friendly person as a witness of what she did. Against this weakly yielding to dominant ideas, the author prescribes a careful diet, withdrawing the child from pressure at the school, gymnastic exercises, and manual work; as medicines, he recommends valerian and the bromides. Such children are often affected by what the French call Tics convulsifs, uncouth or jerky motions, such as winking, shrugging the shoulders, hawking, snorting, biting the lips or