stimulus provoking the hallucination has nothing in common with what the patient actually has in his thoughts.

As to unilateral hallucinations, Paoli's explanation is not an improbable one—that if the recall of an image can by retrogression acquire an hallucinatory character when the sensory centres are in an over-excited state, it can also be assumed that the phenomenon could be localised in one ear, if one only of the cortical auditory centres was in a similar excitable condition. This explanation will not suit for unilateral hallucinations of sight, because of the hemianopia resulting. For them always remains the hypothesis before mentioned of a higher visual centre, if this can be admitted to be alone in a state of hyper-excitability. On the other hand, it is admitted that the two cortical visual centres are united by commisural fibres, by the co-operation of which there is formed a complete image. It is possible, Roncoroni alleges, that the half-image of one eye has a greater intensity and proneness to reaction than the half-image of the other eye; so that if one hemisphere alone is stimulated the half-image of one eye only may be projected, and this, co-operating, by means of the association fibres, with the half-image of the same eye in the other hemisphere, would give a complete unilateral hallucination of sight.

Bilateral antagonistic hallucinations can be explained if it be supposed that the sensory centres are open to stimuli of different types—for instance, representations of opposite significance; but these need not come from the representation centre corresponding to the hallucinated sensory one.

The author holds that a very serious problem remains. If the conditions under which hallucinations are formed are permanent, why is it that they manifest themselves at intervals? Perhaps, he says, it is because the stimuli capable of evoking them are present only at intervals; perchance because the arrest or disturbance of the inhibitory power is not permanent, at least in its entirety; or because the morbidly excited state of the sensory centres can undergo phases of increase or diminution.

A. J. EADES.

Mental Symptoms associated with Pernicious Anæmia. (*Amer. Journ. Med. Sci., June*, 1904.) *Pickett, W.*

Five cases of pernicious anæmia exhibiting mental symptoms are here briefly described.

A composite picture of the mental disturbance in these cases, says the author, presents a shallow confusion with impairment of the ideas of time and place (disorientation), more marked on awakening from sleep. The patient fabricates, relating imaginary experiences of "yesterday" in a circumstantial way.

Illusions, particularly of identity, are common. Hallucinations appear at times, pertaining to any of the senses.

Based upon these illusions and hallucinations, persecutory delusions arise. These are usually transient, causing episodes of fear or agitation, but they may persist for considerable periods and be thus somewhat fixed; they may be even systematised, as in one of the cases described.

The pernicious anæmia psychosis is mainly an abeyance of mind; it

rarely presents that spontaneous excitement by which some types of confusion seem to merge into true mania; so that the term "amentia," in Meynert's sense, seems appropriate for it. A. W. WILCOX.

On Insanity after Acute and Chronic Infectious Diseases [*Über psychoses nach akuten und chronischen infektionskrankheiten*]. (*Allgem. Zeitschr. f. Psychiat., H. i*, 1904, *p.* 185.) *Siemerling.*

Professor Siemerling, at the Annual Meeting of the Psychiatric Association at Kiel, read a paper on this subject. He observes that there is no infectious disease in the course of which mental derangement may not supervene. Typhoid fever appears to head the list as a cause of insanity. After an epidemic of this malady in Königsberg out of 176 patients there were eight cases of mental derangement—4·5 *per cent.* After this Siemerling ranks acute articular rheumatism and influenza. Insanity also sometimes follows attacks of pneumonia, pleurisy, malarial fever, small-pox, measles, scarlatina, and diphtheria, erysipelas, phthisis, whooping-cough, mumps, cholera, dysentery, lepra, hydrophobia, gonorrhœa, ergotism, and pellagra. The last two intoxications, which have been so ably studied by Tuczek, may be here left out of consideration. The delirium attending fevers generally passes away with convalescence. In a few cases, the mental affection continues under the form of neurasthenia or acute insanity with hallucinations (amentia), katatonia, paranoia, mania, or melancholia. There are no characteristic symptoms to distinguish insanity following infectious diseases from other forms. It is in the decline of the febrile action or in the period of convalescence that we most frequently meet with cases of insanity. The asthenic type is the commonest, with incoherency and dreamy confused mental states, shifting hallucinations, and illusions, wandering delusions, and emotional weakness. Sometimes stupor and excitement succeed one another. Siemerling has observed in children permanent weakness of mind down to idiocy following upon the exanthemata, erysipelas, diphtheria, and parotitis epidemica, influenza, and whooping-cough, sometimes taking a stuporose form, sometimes that of acute dementia. Simple mania and melancholia are rare with children. Siemerling remarks that we can no more speak of a tubercular insanity than of a typhous insanity; but it sometimes happens that in the course of phthisis and in the deepest stages of inanition the mental derangement entirely disappears. It also occurs, though rarely, that after typhus, influenza, or erysipelas the symptoms of insanity improve or there is a complete recovery. This has given hopes of effecting a cure through infection, as with the cocci of erysipelas or some other communicated disease.

As regards prognosis, insanity following infection is generally of short duration, though in a few cases it does last from several months to years. Siemerling has found those following pneumonia the most persistent.

The prognosis is bad in severe delirium, in typhoid and acute articular rheumatism (typho-mania, cerebro-rheumatismus), with a high temperature (from 41° to 44° C.) when death may follow in a few hours. This happens in half the cases. Nothing special in the treatment is