being usually from six to eight days, with fifteen days as the maximum. Surgical treatment has been employed in three cases, all of which, however, ended fatally, though in one of Jacob's patients torpor and epileptoid movements disappeared after trephining and drainage of the abscess cavity. Medical treatment is apparently hopeless. The author's case was characterized by marked listlessness and somnolence, cough, incontinence of urine and feces, hiccough, and absence of headache until the day preceding death. The temperature during the last fortnight was usually about 101° F. There were no rigors and no ocular or localizing symptoms. This patient, a New Zealander recently arrived in England, had never been in any country in which amebic dysentery is known to be endemic. The bowel showed no macroscopic dysentery lesions, though cysts of the pathogenic ameba were found in the stools. Treatment with emetine hydrochloride and later with emetine bismuth iodide had no apparent effect on the amebæ of the liver abscess; nor did they prevent the extension of the infection to the brain. Cysts were no longer found in the feces, however, after the treatment with the double iodide. The amebæ of the liver abscess disappeared after irrigation of the abscess cavity with quinine sulphate.

Luzzatti, T. SPASMOPHILIA IN CHILDREN. [Policlinico, 26, June 15, 1919.]

This paper deals with the difficulties in diagnosis of this condition and its many allied convulsive states. Electrical tests are often highly valuable; early neuropathic or psychopathic trends speak for spasmophilia in this differentiation. Chloral and bromides by rectum are recommended in treatment.

Essick, C. R. TRAUMATIC ABSCESS OF BRAIN. [Amer. Arch. Neur. and Psych., 1, June, 1919, J. A. M. A.]

Experimental abscesses produced in the cortex of thirty-five cats by injury and infection of the brain resulted in a rapidly fatal process which stimulated the traumatic injuries of the central nervous system in man. The affected part enlarged and brought about a marked dislocation and compression of the remainder of the nervous tissues. In 50 per cent. of the cases the infection reached the ventricular system within a few days, and from there usually spread into a basilar meningitis through the metapores of the fourth ventricle. The tendency of the infective process to invade the subarachnoid space from the point of injury was not marked, but in a third of the animals the infection entered the subdural space, forming there a subdural abscess. These lesions were very different from the more slowly growing abscesses extending from the air sinuses. The latter, occurring frequently in man, may be differentiated by the relatively slight swelling and dislocation, and by the development of a definite connective tissue capsule between the lesion and the sound

parenchyma. The traumatic abscess in the experimental animal extended rapidly along the fiber tracts. No encapsulation could be demonstrated in any of these observations. Healing took place by ingrowth of connective tissue.

Smith, G. Elliot. THE SIGNIFICANCE OF THE CEREBRAL CORTEX.

In the first of the series of Croonian Lectures on the significance of the cerebral cortex Professor Elliot Smith defined the aim and scope of his task as an attempt to discover how the cerebral cortex acquired its distinctive powers as the organ of intelligence.

Head's researches have provided a new vision of the significance of the brain, and have thrown such a brilliant light into some of the darkest corners of cerebral structure and function as to compel every investigator of the nervous system to re-study the results of his own investigations with the aid of this new illumination. The activity of the thalamus is the physiological process which is expressed in consciousness by a crude awareness to contact, heat, cold, and pain, and the affective aspects, the pleasantness or unpleasantness, of these experiences, whereas the cerebral cortex endows these basic functions with spatial qualities, intensity and relativity. Head's recognition of this fundamental distinction makes it incumbent on those who are investigating the problems of the evolution of the brain to inquire into the means by which the cortex acquired its powers of memory, of discrimination, and of spatial reference. The fact that these epicritic attributes are especially associated with the neopallium, which is found in its fully developed form only in the mammalian brain, suggests an inquiry into the nature of cerebral function in vertebrates other than mammals, and into the circumstances which brought the neopallium into existence.

The cerebral cortex was evolved from that part of the brain which originally was little more than the receptive center for impressions of smell and the instrument for enabling the sense of smell to influence the animal's behavior. Unlike all the other sensory tracts, those which convey impulses from the olfactory organ reach the cerebral cortex directly—that is, without passing through the thalamus. From a psychological point of view, therefore, the sense of smell occupies a unique and distinctive position. It represents the germ of all the higher psychical powers, or, perhaps it would be more accurate to say, the cement that binds together the elements out of which the powers of the cerebral cortex, as the repository of the impressions of past experiences, the organ of discrimination and appreciation of space and time, are developed.

In the primitive vertebrate behavior is dominated by the sense of smell. It is the means by which the animal finds its food and determines its qualities, by which it recognizes friends or enemies, sexual mates or rivals. Smell is possessed of affective qualities which endow it with a direct meaning such as is not associated with either of the other two