

substances, centrifugal spread of organisms, and irregular constriction or dilatation of cerebral vessels due to involvement of the sympathetic. The lymphatics from the nasal sinuses pass finally across the superior cervical ganglion of the sympathetic, the internal carotid artery, the vagus nerve and the internal jugular vein.

G. W. T. H. FLEMING.

Takata-Ara Reaction in the Cerebro-spinal Fluid [*Le reazione di Takata-Ara nel liquido cefalo-rachidiano*]. (*Rass. Internaz. di Clin. e Terap.*, vol. xii, November, 1931.) Curti, G.

The author gives the results of 243 Takata-Ara reactions. He found the reaction to correspond to a considerable extent with the result of the Wassermann reaction, Weichbrodt's reaction, and the colloidal benzoin and gummastic reactions. He found the metaluetic type of reaction occasionally in dementia præcox, hemiplegia, cerebral tumour, post-encephalitic Parkinsonianism, etc., and thinks therefore that the reaction should not take the place of other more commonly used tests.

G. W. T. H. FLEMING.

Certain Pathological Aspects of Neurosyphilis. (*Brain*, vol. lv, June, 1932.) Stern, R. O.

After examining a series of cases of general paralysis and tabes dorsalis, the author points out the constant presence of lesions in the basal ganglia identical with and almost as severe as those found in the cerebral cortex. Apart from the demonstration of spirochætes in the cerebral cortex, the quickest method by which general paralysis can be diagnosed histologically is by the Prussian-blue reaction. This method can be used even after prolonged fixation. In congenital cases the characteristic lesion is the degeneration and disappearance of nerve cells.

G. W. T. H. FLEMING.

The Non-specificity of the Histologic Lesions of Dementia Paralytica. (*Arch. of Neur. and Psychiat.*, vol. xxviii, November, 1932.) Wertham, F.

The author examined the nervous tissue of chickens who had suffered from *Spirochætosis gallinarum*, and found infiltration of small vessels with plasma-cells, proliferation of Hortega cells with formation of rod-cells, and iron deposits in intra-adventitial spaces and in the Hortega cells. These three changes are often regarded as the three cardinal histological signs of general paralysis. A group of apparently normal chickens were then examined and exactly the same conditions were found, due, the author assumed, to a new spontaneous disease in chickens. Jahnke examined these brains and could find no evidence of the presence of spirochætes. The author found "dementia paralytica iron" in the chicken brain. This iron test has generally been regarded as specific for general paralysis.

G. W. T. H. FLEMING.

The Histopathology of Therapeutic (Tertian) Malaria. (*Amer. Journ. Psychiat.*, vol. xii, July, 1932.) Bruetsch, W. L.

Therapeutic malaria produces an activation of the mesodermal tissue, in which the stimulation of the histiocytes and the activation of the undifferentiated mesenchymal cells are outstanding features. The immediate tissue-reaction of the body to the malaria plasmodium consists in a stimulation of

the reticulo-endothelial apparatus, leading to a new formation of macrophage-tissue in various organs. The blood histiocytes are mainly derived from the specific endothelium. The intravascular macrophagic phagocytes are clasmatocytes, in the sense of Sabin and others. The capillary endothelial cells do not become phagocytic while they retain their anatomical position in the vessel wall. In the nervous system the macrophagic response has been greatest in the leptomeninges. In the arachnoid the malaria-stimulated histiocyte stands out distinctly from the less active arachnoid lining cell. Around middle-sized and large cortical vessels a small increase in the number of macrophages has been found. In the perivascular spaces of the large vessels in the white matter, in the striatum, and in the pons, stimulated histiocytes are more numerous. The small mesodermal elements along the cortical capillaries have not been seen to be activated. The microglia as a whole does not take part in the general reaction of the reticulo-endothelial system.

M. HAMBLIN SMITH.

The Question of Silver Cells as Proof of the Spirochætal Origin of Disseminated Sclerosis. (*Journ. of Neur. and Psychopath.*, vol. xiii, July, 1932.)
Rogers, H. J.

Eleven cases of disseminated sclerosis were examined by Steiner's silver method, the author having previously spent a long time examining general paralytic brains to familiarize herself with the appearance of the silver cells and *Spirochæta pallida*.

In one case out of the eleven she found an organism similar to the Steiner organism, but she found the silver cells in every case, and also in many cases a histological picture resembling spirochætal fragments. The brain from cases of cerebral softening, myotonia congenita, bulbar paralysis and diffuse brain sclerosis gave uniformly negative results. The silver cells, as in general paralysis, are perivascular in position.

G. W. T. H. FLEMING.

The Brain in Acute Rheumatic Fever. (*Arch. of Neur. and Psychiat.*, vol. xxviii, October, 1932.) Winkelman, N. W., and Eckel, J. L.

The authors describe five cases of acute rheumatic fever with autopsy findings, particular attention being directed to the brain. They point out that Neyman describes the normal person's reaction when fever is artificially produced as follows: At 102° F. there is a feeling of impending danger; at 102.5° F. the sensation of a desire to run away; at 103° F. the patients become quiet; from 103°-103.5° F. they become somnolent, but they feel well again at 105° F.; and at 106°-107° F. they become comatose.

The most uniform finding in the brain in the five cases, apart from the cloudy swelling common to all toxic conditions, was a productive endarteritis of the small cortical vessels. The size of the pericellular spaces and of the perivascular spaces of His was in direct relation to the amount of œdema present.

The large vessels remained relatively unaffected. The changes in the small vessels were of two kinds: (1) An acute and recent change with swelling and proliferation of the lining cells and at times with new vessel formation. This is the same type of change as is seen in the acute stage of syphilis.

(2) Thickening and hyalinization of the vessel walls. This is a later change, and appears to result from a colloid disorganization of the connective tissue,