eyes; left worse. Thyroid gland somewhat enlarged. Interesting features of case are age and loss of vision. Cause of blindness due to pressure of compact cellular tissue of orbit upon optic nerve.

J. E. CLARK (New York).

TRAUMATIC HEMORRHAGE OVER THE THIRD ANTERIOR FRONTAL CONVOLUTION; OPERATION; REMOVAL; RECOVERY; REMARKS ON PRESENT STATUS OF BRAIN SURGERY. William C. Krauss (Amer. Jour. of the Med. Sc., Sept., 1904).

The patient received the injury from a fall, striking the right side of the head on the pavement. He was not immediately unconscious; and the next day was, with the exception of bruises, apparently well. Symptoms of serious injury appeared gradually and progressively; headache, vomiting, aphasia and paraphasia, and on the fourth day Jacksonian epilepsy, involving only the right side of the face. A diagnosis of hemorrhage over the left frontal region from *contre-coup* was considered likely, and an operation performed. Three teaspoonfuls of blood clot was removed. Recovery was complete in one month.

C. D. CAMP (Philadelphia).

APHASIA AND THE CEREBRAL ZONE OF SPEECH. Charles K. Mills (Amer. Jour. of the Med. Sc., Sept., 1904).

Dr. Mills presents a series of personal observations demonstrating the existence of the centers of the zone of language. According to this exposition, the auditive center for speech is situated at the junction of the first and second temporal gyres, about opposite the point where the horizontal branch of the Sylvian fissure turns upward posteriorly; the dynamic, or motor speech center, occupies the hinder portion of the sub-frontal or third frontal convolution, and, according to the views of the writer, the insula, or, at least, its anterior half; the visual centers immediately concerned with speech are located in the angular gyre; the site of the graphic, or uniting center, is in the caudal half or third of the second frontal convolution, and the naming center is probably situated in the third temporal convolution. These different centers are connected each to the other by a system of to and fro association, so that the impulses from special areas probably pass in both directions. Personal clinico-pathological cases, with necropsies, are given to show the correlations of the zone of language with the motor and sensory spheres of the brain, and also there is adduced the biological principle which is fundamental to our conception of the speech zone and its subdivisions, *i. e.*, that the centers for word-hearing, word-seeing, speech-associations and for writing have developed in the race and in the individual as these functions, or attributes have been added to man's resources for communicating by language with his fellows.

C. D. CAMP (Philadelphia).

THE TREATMENT OF CHRONIC INTERNAL HYDROCEPHALUS BY AUTO DRAINAGE. Alfred S. Taylor (The Amer. Jour. of the Med. Sc., Aug., 1904).

After a review of the literature of the subject the author relates the histories of six cases of operation for the cure of this condition with a mortality of 50 per cent. In only two of the cases was the disease process apparently arrested, and from his experience he draws the conclusion that the only feasible method of treatment is some form of internal or auto-drainage, which must be slow and either permanent or much prolonged; and also that in order to be successful the operation must be brief, must involve the escape of but a small amount of cerebro-spinal fluid, and should be performed early in the disease, before irreparable damage has been done to the brain structure.

C. D. CAMP (Philadelphia).