and back, 10 cases; headache or dizziness, 8 cases; paresthesia, 6 cases; loss of visual power or diplopia, 5 cases; gastric crises, 5 cases. During treatment the symptoms were, in the order of frequency: disturbances of sensation (92 per cent.), lancinating pains (85 per cent.), loss of patellar reflex (83 per cent.), Argyll-Robertson pupil (79 per cent.), Romberg symptom (71 per cent.), ataxia (55 per cent.), disturbance of bladder and rectum (50 per cent.), gastric crises, inequality of pupils, paresthesia, headache, vertigo, girdle sensation, weakness of extremities, ocular paralyses, optic-nerve atrophy, cardiac neuroses, psychical disturbance, diplopia, laryngeal crises. In the treatment of these cases, antisyphilitic remedies and silver nitrate were practically without result. Amelioration of symptoms was obtained in one-half the cases by exercise and regimen.

JELLIFFE.

CONTRIBUTION A L'ÉTUDE DES KYSTES PARASITAIRES DU CERVEAU CAUSÉS PAR LE CYSTIQUE TENIA ECHINOCOCCUS (Contribution to the Study of Parasitic Cysts of the Brain Caused by Taenia Echinococcus). Gothard and Riche de Monsseaux (Nouvelle Iconographie de la Salpêtrière, 14th year, No. 1, Jan.-Feb., 1901, p. 19).

Some anatomical observations, together with remarks on the etiology and localization of echinococcus cysts, illustrated by the report of the following case: A man, sixty-nine years old, subject to convulsions, followed by coma. This condition has lasted some years. He was brought to the hospital in such a comatose state and died without regaining consciousness. At the autopsy, as soon as the dura was opened, there was an escape of clear fluid which came from a cyst about the size of a hen's egg situated in the right hemisphere. Microscopic examination showed the presence of parasites adherent to the cavity of the cyst. The pyramidal cells of the cortex showed changes of two sorts, one acute, and the other the result of a long-continued increase in pressure, due to the presence of the tumor. Although echinococcus cysts of the brain are not rare, observations which include the demonstration of the parasite are very infrequent. There are no distinctive symptoms by which the presence of a parasitic cyst can be made known. Some give rise to no signs whatever, others, according to their location, produce cephalæa, vertigo, vomiting, ocular manifestations, Jacksonian epilepsy, paralysis, etc. The progress of the symptoms is usually rapid, rarely lasting over three years. Sudden death is frequent. The positive diagnosis of these cysts may be extremely difficult, owing to the absence of typical diagnostic signs. It is important to recognize the conditions in which echinococcus may develop. It is found most frequently among those who live in close contact with dogs, as the echinococcus is the larva of a taenia found in these animals. These cysts being usually limited and easily enucleated, and not leading as a rule to permanent injury of the cerebral tissue, they are especially favorable cases for operation. In sixteen cases of operation, reported by Auvray, for hydatid cysts of the brain, there were no deaths and seven cures. Exploratory trephining is justifiable in obscure cases according to Flammarion.

SCHWAB.

STEREOGNOSIS AND ALLIED CONDITIONS. C. W. Burr (American Journal of the Medical Sciences, 121, 1901, March, p. 304).

The author records examples of the loss of the stereognostic

sense (astereognosis or stereoagnosis, as he prefers to call this condition) and states conclusions, of which the chief are the following:— (1) The ability to recognise objects by handling them depends upon the integrity of the afferent nerves, the cortical sensory area and the cortical perceptive area (*vide* below)—disease of any of these will make it impossible for the patient to recognise objects by handling them. (2) Which form of sensation is most necessary for the recognition of any given object depends upon the qualities of the object. Tactile anesthesia, if sensibility to stronger pressure is preserved, causes little or no difficulty. The space-sense (*i.e.*, the faculty of distinguishing simultaneous impressions), the localising sense and the sense of position are probably the most important. (3) There is a distinct area of the cortex in which sensations produced by handling objects are grouped together to form tactile memory images: this, the tactile perceptive area, is in the parietal lobe and it is not the same thing as the sensory area, though it may be located within the boundaries of the latter. (4) Tactile amnesia includes the cases in which, on account of disease in the tactile perceptive area, the tactile memory images are destroyed. It is not unfrequently associated with mind blindness and, indeed, it is probable that always in recognising objects by handling them we recall from memory a more or less faint recollection of the visual appearance of the object. Auditory memories are less frequently recalled, because less frequently needed to make a complete percept, and those of smell and taste quite rarely. Burr emphasises the fact that we must clearly distinguish between the two forms of astereognosis, peripheral and central. The former is due to failure of one or more of the primary sensations (from disease of the sensory nerves, or of the sensory tracts in the central nervous system); the latter is caused by disease of the cerebral cortex, which interferes either with the proper correlation of the various sensations received from handling an object, or with what Burr calls the "tactile mental images," stored up in a particular part of the cerebral cortex (*vide* above). More stress he thinks, ought to be laid on the tracts which connect the sensory cortical area related to handling objects with other sensory centers, especially the visual, whose associated activity seems necessary for the recognition of objects by handling.

JELLIFFE.

MYOKYMIA, OR PERSISTENT MUSCULAR QUIVERING. R. T. Williamson (Brit. Med. Jour., Dec. 15, p. 1,705).

The symptoms in the following case correspond to those of the very rare affection to which Professor Schultze has given the name of "myokymie," and Dr. Kny (who had previously reported two similar cases) that of "myoclonus fibrillaris multiplex." The writer has only been able to find records of eight cases in medical literature.

A clerk, aged twenty-one, was admitted to hospital suffering from peculiar persistent quivering of the muscles of the limbs, trunk, and face. The left leg had been suddenly paralysed in infancy (probably owing to acute anterior poliomyelitis) and had remained useless. At the age of sixteen it had been seriously injured, through an accident, and amputation had been necessary at the upper part of the left thigh. Two years before he came under observation, he first noticed quivering of the muscles of the right leg. The onset was gradual, and the quivering spread in the course of time to the muscles of the