But can external agencies bring about a transmissible morbid nervous state? Brown-Séquard's experiments, consisting of hemisection of the cord or division of the cervical sympathetic in guinea-pigs, induced epilepsy in the animals, and their progeny were readily thrown into These appear to Professor Hamilton to be fallacious, convulsions. but he does not state why. As crucial evidence of the transmissibility of acquired nervous disturbance from alcohol he would accept evidence it is quite impossible to obtain. He first requires a man free from ancestral taint. Does such an individual exist? Can we determine an individual to be such? The determinants concealed in the germ plasm seem to be rather difficult to scrutinise. He attributes mental derangement as usual to variation occurring in a far back ancestor; congenital syphilis as due simply to intra-uterine contagion. The eradication of a vicious heredity by inbreeding is next discussed, and Professor Hamilton states his opinion that it is possible, but the vice may appear atavistically, generations afterward. Professor Hamilton then asks evidence of telegony in disease, e.g., can a tubercular first husband so affect his wife that his tubercular characters are imprinted on the offspring of a second marriage?

Dr. Clouston followed, and emphasised the fact that Weissman admits that environment, e.g., climatic conditions, might affect the germ plasm, and so the subsequent individual; and on this admission he seems to endeavour to account for all the hereditary character of the neuroses, and so utterly repudiates the essentials of Weissman's teachings.

Professor Ewart described experiments on pigeons, showing that the degree of ripeness of the ovum at the time of impregnation influenced the character of the offspring.

Dr. Ballantyne spoke of the difficulty in separating cases of intrauterine contagion from cases of hereditary transmission, and stated also that experimental methods relative to the transmission of acquired characteristics might be used during the period of development of the embryo with better results.

Dr. James was opposed to Weissman's theory. It was against "instinct and common sense." He credits Herbert Spencer with this statement

Professor Schäfer mentioned that Dr. L. Hill had repeated Brown-Sequard's experiments with negative results as to the transmission of the neurosis.

Dr. W. Leslie Mackenzie's contribution can be characterised as able and lucid. He controverts the consolations drawn by Dr. Clouston from what he called Weissman's admissions. W. J. Penfold.

5. Clinical Psychiatry and Neurology.

The Psychoses of Puberty. (Rpt. xiii, Cong. Internat. de Méd., Sect. de Psychiat.) Marro and Ziehen.

The above was one of the subjects selected for discussion in the Section of Psychiatry at the International Medical Congress (held last August at Paris), and papers were contributed by Professor Marro of

Turin, by Dr. Ziehen of Jena, and by Dr. Jules Voisin of Paris. The views of the last-named having been already epitomised,(1) it only remains to notice the papers of the two former. Professor Marro presented as his conclusions the following:—(1) That puberty exercises an important influence on the psychic life, and that pre-existent mental disturbances might thereby be invested with characters which previously they did not manifest, or manifested only in a minor degree; or indeed that it might open up the way to definite mental disorder. (2) That amongst psychoses affecting young persons of both sexes at the age of puberty, there was one in particular which might be regarded as specific—the hebephrenia of Hecker. (3) That the morbid manifestations of this form of psychosis combined in a special way the symptoms of certain other mental disorders, and that the post-mortem appearances showed morbid structural changes in the cerebral cortex and meninges—possibly consequent on a process of auto-intoxication, due to digestive irregularities and disordered metabolism. (4) The epoch of puberty and the precocious and abnormal exercise of sexual activity might be the means of originating morbid manifestations, stamping in some cases the individual with permanent peculiarity, although in others this might be effaced in after life under favourable circumstances. (5) The prophylaxis of mental disorder at this epoch demanded strict attention to avoid all causes which may interfere with the normal development of the organism, such as excess of physical or mental fatigue, and especially the precocious and abnormal exercise of sexual functions.

Professor Ziehen (of Jena) based his conclusions upon a consideration of about 400 cases of mental disease occurring about the age of puberty. Mental morbidity attained one of its maxima at this period, its manifestations being much influenced by hereditary taint. Apart from this, or in conjunction with it, anæmia, bodily and mental overstrain, acute infectious diseases, and especially sexual excess, played notable parts in the mental troubles of this period. Almost all the recognised forms of mental disorder were met with at puberty—some more prevalent than others, and subject to certain modifications as regards symptoms and course. It was erroneous to speak of a special psychosis of puberty to include the above. The only specific mental disorder of puberty seemed to be that form of dementia which Kahlbaum and others had described as hebephrenia, and this was comparatively rare. Amongst other mental disorders affecting puberty were folie circulaire, mania, melancholia, acute paranoia, wild hallucinations, and hysterical and epileptic mania. The prognosis in psychoses occurring at puberty was usually less favourable than in cases beginning after puberty. Rest in bed is usually to be avoided in the treatment of pubescent patients; as also the administration of narcotics. The most important curative means was judicious employment, both for the body and the mind, regulated for each hour of the day. Caution was needed as to the admixture of such patients with adults in the wards of an asylum. G. E. SHUTTLEWORTH.

(1) See p. 151.

The Maniaco-melancholic Insanity of Kraepelin [Sulla Frenosi maniaco-depressiva del Kraepelin]. (Il Manicomio, fasc. i, 1900.) Galdi, R.

This paper is a critical study of Kraepelin's recently expressed views of the nature and nosological position of mania and melancholia. In the last edition of his Psychiatrie the Jena alienist classifies the psychoses into acute, demential, and chronic; and in the acute non-demential psychoses distinguishes two groups, viz, (1) simple melancholia occurring in advanced life, and (2) the maniaco-melancholic insanity, embracing the rest of the acute cases which end in recovery. The essential character of the latter group is the occurrence of symptoms of mental exaltation (gay, expansive disposition, logorrhea, etc.) and symptoms of mental depression (melancholic disposition, slowing of psycho-motor reaction); these symptoms appearing separately, or in irregular alternation, or simultaneously in a confusional form. The disease may begin at any age, but most usually appears in youth; it may be manifested only by a single attack of mania or melancholia, but in most cases two or more attacks occur in a lifetime, separated by uncertain intervals; it affects women more than men; and it arises on a basis of degeneracy.

Thus Kraepelin regards mania and melancholia as different phases of the same morbid state, as depending on the same pathological cause.

In discussing the validity of this view Galdi confines himself to clinical arguments; he considers that criticism from the statistical standpoint is open to fallacy, and that pathological evidence is at present of dubious value. Having pointed out that many observers, from Pinel and Esquirol onwards, have admitted a fundamental connection between mania and melancholia, the author questions whether there is clinical justification for Kraepelin's generalisation of this idea by the substitution of his maniaco-melancholic insanity for the older types. He argues that the affective state in mania and melancholia, though the most important, is not the sole factor in the clinical individuality of these disease forms; that oscillations in that state do not destroy the stability of the clinical type; and that such oscillations occur in other well-marked forms of mental disease. As an example of the last-mentioned fact, he gives the history of a case of chronic insanity in a degenerate subject, where after thirteen years of maniacal exaltation the patient suddenly became and remained melancholic; the affective tone was changed, but beneath it the impulsive and delirious character remained unaltered, and showed the continuity of the morbid condition.

His conclusion is that, though there is no ground in pathology for opposing mania to melancholia, nevertheless clinically a sufficient number of cases occur in which one condition or the other does exist in well-defined and stable form, and that therefore in a classification based on symptoms it is desirable to retain the two groups, and not to merge them in a single maniaco-melancholic psychosis.

W. C. SULLIVAN.

Sexual Life, Marriage, and Offspring of an Epileptic [Vie sexuelle, mariage, et descendance d'un épileptique]. (Prog. Méd., Sept. 22nd, 1900.) Bourneville and Poulard.

This is the observation of an average case of idiopathic epilepsy, reported in the exhaustive manner which renders Bourneville's clinical records so reliable. The points specially dwelt on are the patient's sexual history, and the evidences of degeneracy in his children. Sexual appetite was excessive for some years; fits never occurred during or soon after coition. Of the patient's eight children three died in infancy; one was epileptic, and two presented anomalies of character.

W. C. SULLIVAN.

Paralytic Idiocy [Idiotisme e Sindrome di Little]. (Ann. di Nevr., fasc. iii and iv, 1900.) Mondio, G.

This is a long and careful description, illustrated by engravings, of five cases of paralytic idiocy. In only one of these were there peculiar symptoms apparent at birth. In the second case the child fell ill after two years, the third when about ten months old, and the fourth and fifth had passed the third year of life. There was present in all paralysis of the limbs, hemiplegia or paraplegia, with disturbance of the intelligence ranging from idiocy to weak-mindedness. Choreic movements and epileptic seizures were observed in some of the cases. Dr. Mondio regards them as congenital. In all he finds nervous disease in the life history of the parents and in the collateral relations. He takes much pains and some repetition to elaborate this point. Dystochia and accidents during birth, causing injury to the brain and hæmorrhages, and assigned as causes by some authors, he regards as mere coincidences, and gives little weight to encephalitis or cysts. The primary lesion in his opinion is aplasia of the whole cortical and spinal motor system, principally affecting the paracentral lobes. In this respect he differs from most writers, who assign to paralytic idiocy a variety of causes and lesions; and although the views of others who have treated of the subject before him have not met with his approval, it is certainly not because he has neglected to study them, judging by the erudite way he discussed a large number of citations. W. W. IRELAND.

Progressive Myopathy with Mental Insufficiency [Myopatia progressiva e insufficienza mentale]. (Riv. Mens. di Neuropat. e Psichiat., August, 1900.) De Sanctis, S.

The author reviews the literature of the progressive myopathies, more especially from the point of view of the accompanying mental symptoms. He considers that sufficient attention has not been directed to this point.

He describes the case of a boy æt. ten years, who first showed symptoms of the muscular condition when five years of age. This was accompanied by an evident mental disturbance of the nature of intellectual and moral weakening. At eight years he was sent from school owing to mental dulness and lack of discipline. He now suffers from progressive muscular atrophy affecting most of the muscles of the body; the thighs are pseudo-hypertrophic. The condition is slowly advancing.

His mental condition is apathetic; the attention much reduced; the memory moderate; his intellectual powers are very limited, and there is moral deterioration. The simultaneous development of the mental and physical conditions is of interest.

J. R. GILMOUR.

On Three Cases of "Hysteria Magna" [Ueber drei Fälle von "Hysteria magna"]. (Arch. f. Psychiat. u. Nervenkr., B. xxxiii, H. 3, 1900.) Steffens, P.

The first case is interesting chiefly from the difficulty of the diagnosis. A girl æt. 16, with tubercular heredity and history, suffered for some years from pain and tenderness in the lumbar vertebræ, the reflexes being sometimes increased and the temperature sometimes above normal, and the case was at first regarded as one of spinal caries, or possibly only of spinal irritation. Later, with headache, high temperature, and "cerebellar gait," signs of commencing optic neuritis were observed, and the diagnosis of cerebral tumour, probably tubercular, was arrived at. Eventually, however, the patient developed seizures in which maniacal violence was associated with convulsions and contortions of the usual hystero-epileptic character, of all of which the patient afterwards remembered nothing. Charcot's "hysterical stigmata" were also present, notably loss of the conjunctival reflex, concentric reduction of the field of vision, and varying analgesia in symmetrical zones. Treatment (after the hysterical symptoms appeared) was chiefly isolation, and the patient made a good recovery.

The second patient, a girl of 17, suffered from hysterical convulsive seizures, chiefly affecting the right side, with headache, and sometimes—not always—loss of consciousness. They could sometimes be stopped by flicking with a wet cloth, etc. In some of these attacks the pupils were dilated and fixed. Numerous hysterical stigmata were present. The mental state was very variable, fluctuating from depression (one serious suicidal attempt) to exaltation, and marked by fits of confusion with hallucinations and delusions. After one severe attack gastric symptoms appeared, and the stomach was found to contain no free HCl; this, however, reappeared after ten days' freedom from attacks. Treatment had little effect, and after two years the girl was discharged

only "improved."

In the third case, that of a girl æt. 24, after an attack of melancholia (two suicidal attempts) there were paroxysmal seizures of an acutely maniacal character, ushered in by headache or gastric pain, in which the patient suffered from hallucinations and delusions, and showed unilateral hysterical stigmata. Afterwards there was complete forgetfulness of what had taken place, and between the attacks the patient's condition was absolutely normal. An interesting point is that the amount of liquid ingested and of urine passed increased enormously at the time of an attack. She was discharged improved.

A fourth case is given, without much connection with the others, of a man who died in status epilepticus, the convulsions being idiopathic in origin, and affecting one side (the left) only. Only one other such case has been described.

The differential diagnosis between hysteria and epilepsy is then discussed, and it is shown that no single sign belongs exclusively to

one or the other, even the pupillar fixity, supposed to be peculiar to the latter, having been found in hysteria by various observers. As the two diseases shade imperceptibly into each other clinically, the author argues that there is probably no essential difference between them, but that both are due to the same cause occurring in different forms, and with varying intensity and duration.

W. R. Dawson.

On Hystero-epilepsy [Ueber "Hystero-Epilepsie"]. (Arch. f. Psychiat. u. Nervenkr., B. xxxiii, H. 3, 1900.) Steffens, P.

Referring to the theory put forward by him, of the essential identity of hysteria and epilepsy, the author argues that between those of "pure" epilepsy and "pure" hysteria there are transition cases, displaying in every gradation the characters of both diseases, to which the name of "hystero-epilepsy" may properly be given; and he brings forward an interesting case as showing that even a severe cortical lesion may give rise to attacks of this mixed character instead of Jacksonian

epilepsy.

The case is that of a woman æt. 28, with tubercular heredity, who had undergone several operations on the left side of the cranium, in one of which the dura was opened up, and the temporal lobe explored, through the mastoid process (opened for middle-ear disease), with the result that she suffered from intense headaches afterwards. Trephining was subsequently performed, and a sero-sanguineous cyst in the posterior central gyrus evacuated, with very temporary improvement; and the morphia given to allay the pain led to the formation of the morphia habit. After recovery from this, and separation of several small sequestra, a series of seizures occurred of a curiously variable character. In most the patient became suddenly unconscious, there were clonic and tonic spasms of the extremities, and sudden awakening; the tongue was never bitten; only once was there enuresis, and the pupils, as a rule, reacted to light. Once or twice there was froth on the lips. Once there was a preliminary cry, the pupils were fixed, and consciousness was not fully regained for half an hour; and on another occasion without marked spasm, except of the jaws, there was a period of "grandes attitudes," followed by one of increased tendon reflexes and general analgesia. The spasms were never restricted to one part. Hysterical stigmata were present between the attacks—reduction of visual field and various sensory impairments, sometimes general, at others in symmetrical zones, or unilateral, or of the special senses,—and there was the usual hysterical variability of character, though the patient seems to have been in the main normal mentally. The pain in the head had lessened before the onset of the convulsive attacks. The patient was discharged on trial. W. R. DAWSON.

A Case of Hysterical Fever [Di un caso di febbre isterica]. (Il Manicomio, fasc. i—xi, 1899.) Fontana, M.

The patient, a woman, was born in 1867. Her grandmother and one brother were hysterical. As a child she had night terrors. At eighteen the menses appeared, and were accompanied by marked pain in the ovarian region. At twenty she had convulsive seizures, in which she did not lose consciousness, did not pass urine, nor bite her tongue.

These seizures began with the ovarian pain and with sensations in the throat, and terminated in prolonged attacks of vomiting of frothy, clear, or blood-stained mucus. These attacks became more frequent, and led to her admission to the asylum in 1891. Since then other hysterical manifestations have been contractures of the arm, cured by hypnotic suggestion, diffuse anæsthesia for pain sensation, absence of the pharyngeal reflex and anuria. There were also marked idiosyncrasy for antipyrin, antifebrin, and salicylate of soda. The most interesting feature, however, was that, during the years 1891 to 1898, she had febrile attacks at frequent intervals, during which the temperature ranged from 37.9° to 39°, and even to 40°. These attacks would last for eight to ten days on an average. There was no apparent cause. The type of fever was irregular, sometimes continuous, sometimes intermittent. The pulse and respirations might be normal, or there might be increase in the rate of breathing; she did not lose weight during them. Malaria, tuberculosis, auto-intoxication, etc., could all be excluded, and the fever seemed to have a pure "nervous" origin.

The author reviews the literature of the subject at some length.

J. R. GILMOUR.

A Case of Abdominal Tympanites of Hysterical Origin [Un cas de tympanisme abdominal d'origine hystérique]. (Nouv. Icon. de la Salpt., Jan., Feb., 1900.) Beniot and Bernard.

This is the case of a soldier who, having been the subject of syphilis, cystitis, and abdominal pains, in December, 1897, noticed that with increase of the pain his belly began to swell. This was thought to be due to cystitis. On and off until March he was laid up for it. On the 15th of March, after admission into hospital, the main positive symptom noted was marked tenderness near and to the right of the umbilicus. The tympanites was never spontaneous, but always followed fatigue; it was uniform, and came on gradually; it disappeared gradually and progressively without any emission of gas, and without appreciable peristalsis. His family history was good. Although there was an absence of hysterical stigmata the diagnosis seemed to be clearly hysterical, and in favour of this was the mental state of the patient, and the possibility of auto-suggestion arising from the fact that an uncle and a brother were being treated for some abdominal trouble. Cases of permanent or lasting meteorism are not rare in hysterical patients; but intermittent, almost voluntary meteorism, as in this case, is decidedly a rare occurrence. Care was taken to exclude the possibility of simulation or malingering, and there was no evidence of hysterical aërophagia or air-swallowing. Concerning the mechanism or pathogeny of this phenomenon, it seems clear that the seat is exclusively intestinal, and that it does not arise from over-production of gas, but from excess of distension of the gases normally in the bowel, for no emission of gas, per os or per anum, accompanied the return of the abdomen to the normal state. The hypothesis favoured by the authors is that of some temporary paralysis of the involuntary muscular tissue of the bowel, the case coming under the category of mono-symptomatic visceral hysteria. Hitherto there has been a tendency to believe that hysteria affects only the voluntary muscles, or muscles of relation, as XLVII.

contradistinguished from the involuntary or organic muscles, but with the progress of our knowledge examples of these organic determinations of hysteria seem to become more frequent and less controvertible.

H. J. MACEVOY.

A Case of Hysterical Hemiplegia cured by Hypnotic Suggestion, and studied by aid of the Cinematograph [Un cas d'hémiplégie hystérique guéri par la suggestion hypnotique, et étudié à l'aide du cinématographe]. (Now. Icon. de la Salpt., March and April, 1900.) Marinesco, M. G.

This is the report of a case of right hysterical hemiplegia with hemianæsthesia—superficial and deep—to all forms of stimulation except in the index finger.

The chief interest of this paper lies in the careful study of the gait by aid of the cinematograph, especially when read in conjunction with another paper by the same author, in which he similarly studied the gait in cases of organic hemiplegia, and which was published in *La Semaine médicale* of July 5th, 1899.

In the present paper there are reproductions, from cinematographic films, of the patient walking (a) during the swing of the affected leg,

(b) during the swing of the sound leg, and (c) after recovery.

The chief difference, to which the author draws attention, between the gait in hysterical hemiplegia and that in organic hemiplegia is this: that in the former there is little or no movement at the joints of the affected limb; while in the latter there is a certain amount of flexion at the hip, knee, and ankle.

W. H. B. STODDART.

Epileptic Attacks preceded by Subjective Auditory and Taste Sensations, probably due to a Tumour of the Left Temporo-sphenoidal Lobe. (Lancet, April 21st, 1900.) Michell-Clarke, J.

This is a contribution to the literature of what Dr. Hughlings Jackson has called the "uncinate group of fits."

A woman æt. 40 was first seen in November, 1898, when she gave the history of a gradual onset of headache, giddiness, occasional sickness, and pains in the eyes. She then had slight left hemianæsthesia and a tendency to stagger in walking, and there was optic neuritis. In January, 1899, the hemianæsthesia had disappeared, but there was twitching on the right side of the mouth. In April she had a fall, owing to her right leg giving way without apparent reason. In July her chief symptoms were (1) "attacks" preceded by hallucination of taste and smacking of the lips, and by hallucinations of hearing a band playing at a distance; she did not lose consciousness, but was afterwards unable to understand what was said to her and to speak, and while recovering from this condition she used wrong words (paraphasia); (2) headache, chiefly nocturnal; (3) giddiness; (4) occasional sickness; (5) pains in the eyes; (6) optic neuritis; (7) a dull mental state; (8) paresis of right arm and leg; (9) slight right deafness to the high notes of Galton's whistle.

The condition of the patient altered but little during the remainder of her illness. She died comatose in December, 1899. Unfortunately

no autopsy was allowed, but there is every probability that she had a tumour in her left temporo-sphenoidal lobe. W. H. B. STODDART.

On the Cerebral Symptoms associated with Carcinoma [Ueber Hirn-symptome bei Carcinomatose]. (Neur. Cbl., No. 4, February 15th, 1900.)

This is the report of a discussion on the above subject by the Medical Society of Hamburg. The discussion was opened by Saenger, and continued by Nonne, Luce, Trömner, and Lauenstein.

The general outcome of the discussion was that toxines derived from a carcinoma may cause general cerebral symptoms such as apathy, coma, etc., but not local paralyses. Local paralyses, when they occur, are due to metastases, which may be so small as to require the aid of a microscope to demonstrate them. There is no cerebral symptom-complex which can be looked upon as characteristic of carcinomatosis.

W. H. B. Stoddart.

Differential Diagnosis between Organic Hemiplegia and Hysterical Hemiplegia [Diagnostic differentiel de l'hémiplégie organique et de l'hémiplégie hystérique]. (Gaz. des Hôp., May 5th, 1900.) Babinski, M.

In the diagnosis between these two affections undue importance has been attached to the extrinsic characters (i. e., relating to the presence or absence of certain phenomena independent of the intrinsic characters or disorders of motility on the side affected, such as the circumstances under which the attack appeared, the nature of the soil upon which it is developed, etc.). Babinski believes that no certainty attaches to them, and therefore dwells upon the importance of a careful study of the intrinsic characters themselves, which as a rule furnish the decisive elements of differentiation. As an illustration of this he reviews the characteristic differences between facial palsy of organic and functional origin; he refers to the platysma sign (weakness of the platysma myoides on the hemiplegic side, and therefore predominance of its action on the normal one), and to the exaggerated flexion of the forearm on the affected side (in the absence of amyotrophy) which one sees in organic but not in hysterical cases.

A more recently observed sign, to which Babinski attaches a high value, and which is observed in most cases of organic hemiplegia, is the associated movement of flexion of the thigh, or, as it may be better termed, combined flexion of the thigh and trunk, observed when the patient, lying flat on a resisting flat surface—e.g. the floor,—tries to sit up; on the affected side the thigh becomes flexed on the pelvis, and the heel is lifted off the surface. This sign is only present after a certain lapse of time from the onset of the hemiplegia; but while it appears in organic hemiplegia, it is never present in hysterical cases.

Concerning the importance of tendon reflexes in the diagnosis of hemiplegia, Babinski dwells on the difficulties to be met with in certain cases, and on the fact that their external manifestation may be modified or interfered with by psychical influences. The radial reflex, which is often neglected in the examination of cases, is a very reliable tendon reflex. Abolition or exaggeration of tendon reflexes on the paralysed side, and the presence of true ankle- or knee-clonus, may be considered,

if not as laws, at all events as rules which admit of but very few exceptions. With regard to the extensor response to the plantar reflex-Babinski's sign—he believes that faulty technique is responsible for the contradictory results of certain observers; in cases of hysterical paralysis he has never observed the phenomenon, and he is of opinion that if its absence does not warrant an exclusion of the possibility of a diagnosis of organic affection of the central nervous system, its presence is sufficient to affirm the existence of such an affection. Important points in diagnosis, upon which he dwells, are also the character of the contracture in organic hemiplegia as compared with that of hysterical hemiplegia, and the distinctive characteristics and the mode of evolution of the paralysis in the limbs (absence of alternating improvements and relapse, etc.). Hysterical paralysis being a psychical disorder, a result of a perturbation of the imagination or the will, a product of suggestion or auto-suggestion, can only be manifested by phenomena upon which imagination, will, or suggestion have influence, and this is borne out by experience; the muscular tonicity, reflex movements (tendon or cutaneous), are not affected in hysteria. In a tabulated form the author gives in conclusion the characters relating to disorders of movement which differentiate organic from hysterical hemiplegia.

H. J. MACEVOY.

On the "Femoral Reflex" in Interrupted Conductivity of the Dorsal Region of the Cord [Ueber den "Femoralreflex" bei Leitungsstörung des Dorsalmarks]. (Neur. Cbl., January 1st, 1900.) Remak, E.

This paper is interesting in view of Babinski's contribution to neurology with regard to the plantar reflex. The author first epitomises previous observations on the femoral reflex by himself and others. He then records a recent case of a child, two years old, with spastic paraplegia from Pott's disease, involving the third and fourth dorsal vertebræ. There was spasticity of the legs, with increased tendon reflexes and some diminution of sensation. Stroking the sole of the foot caused extension of the big toe with dorsiflexion of the foot. Stroking the skin on the upper anterior part of thigh caused plantar flexion of the first three toes, and occasionally extension of the knee. More powerful stimulation caused flexion of the hip.

The author gives it as his impression, from the cases which he has observed, that lesions in the upper part of the dorsal cord induce the reflex more to affect the toes, while lesions in the lower part induce it more to affect the quadriceps extensor cruris.

W. H. B. STODDART.

Researches on the Clinical Value of the Toe Reflexes—Babinski's Extensor Phenomenon and the Antagonistic Reflex of Schäfer [Recherches sur la valeur seméiologique des réflexes des orteils]. (Prog. Méd., April 28th, 1900.) Verger and Abadie.

The "antagonistic reflex" of Schäfer, as is known, is an extension of the toes produced in certain pathological cases by compression of the tendo Achillis in its upper or middle third, flexion being the response in normal cases. Babinski believes it to be identical with the phenomenon first described by him—extension of the toes when the sole of the foot is stimulated, and believes it is a skin or superficial reflex (not a tendon reflex). These reflexes have been carefully studied by Verger and Abadie. As they well say at the outset, marked difficulties are encountered in the investigation of Babinski's sign; e.g., stimulation of the external aspect of the sole of the foot may produce extension in one case, while that of the internal part may produce flexion.

They have experimented with normal cases, that is free from nervous affections, and with pathological cases (cases of nervous diseases).

In normal cases they conclude that the reflex movements of the toes consecutive to stimulation of the plantar cutaneous surface, as a rule, constitute the first stage in a long series of defensive reflexes studied long ago under the name of plantar reflex. A feeble stimulus causes the toes only to move; as it increases in intensity the movement is generalised, and extends to the other segments so that the whole limb is drawn away. If the reflex excitability is increased, a feeble stimulus may produce a generalised reflex straight away, the toes remaining apparently fixed; the movements of the foot as a whole take precedence of the local movement.

The phenomenon of Schäfer is of a different order from that of Babinski; the intrinsic characters of the movements are different, and the two phenomena are independently variable.

As regards the behaviour of these reflexes in pathological cases, they examined five patients suffering from locomotor ataxy, two with spasmodic paraplegia from spinal compression, and fifteen cases of hemiplegia. Testing the cases for several days in succession, they found inconstancy and variability in the reflex phenomena; but some results are constant. To begin with, in organic hemiplegia the so-called antagonistic reflex of Schäfer does not exist; its clinical value is nil. With regard to Babinski's sign, they conclude that the great importance attached to it by some observers is ill-founded. It exists; it is frequently seen in organic hemiplegia, but it may be absent, for example, in cases of descending lateral sclerosis after cerebral hemiplegia; it may be present on both sides with a unilateral lesion, etc. Its results are not always constant; it is not so important as ankle-clonus or knee-clonus.

H. J. Macevov.

Landry's Paralysis. (Journ. Nerv. Ment. Dis., February, 1900.) Knapp and Thomas.

Landry's Paralysis: Remarks on Classification. (Ibid., April, 1900.)

Taylor and Clark.

Each of these papers bases its remarks on a recent case of the disease.

In the former paper the authors, by somewhat extending the view of Ross that Landry's paralysis is essentially a form of peripheral neuritis, regard the disease as an affection of the whole of the peripheral motor neuron. Photographs are given of a Marchi preparation of the sciatic nerve, and of a Nissl preparation of some large anterior horn cells of the spinal cord. Both show the characteristic signs of degeneration. These authors, therefore, would still be inclined to regard Landry's

paralysis as a distinct entity. [It must, however, be remembered that such degeneration is quite common in multiple neuritis.]

Taylor and Clark, on the other hand, pay more attention to the many divergences of opinion with regard to the clinical symptoms, course, pathology, and ætiology ot "so-called Landry's paralysis," and consider it "probable that the affection does not represent in itself a process to which the term disease may properly be applied, and that therefore it is desirable to drop the term as unnecessary and misleading."

W. H. B. STODDART.

A Study of the Lesions in a Second Case of Trauma of the Cervical Region of the Spinal Cord, simulating Syringomyelia. (Journ. Nerv. Ment. Dis., February, 1900.) Lloyd, J. H.

In June, 1894, Dr. Lloyd reported two cases of this kind in the Journal of Nervous and Mental Disease.

The autopsy of the first case was reported in the spring number of *Brain*, 1898, and the present contribution is the report of the autopsy of the second case.

When the patient came under observation, there was paralysis of all four limbs, with atrophy of the muscles of the shoulder girdle. Below this level there was right thermo-anæsthesia and analgesia, but there was no loss of tactile sensation. This condition remained practically unchanged till the patient's death in 1899.

Post mortem it was found that the grey matter was largely destroyed at the seat of injury (fourth to seventh cervical vertebræ). The white matter was also largely destroyed, but the posterior columns were intact.

The case appears to support the view of Van Gehuchten and others that, while tactile sensibility is transmitted by way of the posterior columns, and is uncrossed in the cord, the pain and temperature senses are transmitted by way of the grey matter, and pass upwards along the antero-lateral tract of Gowers of the opposite side.

W. H. B. STODDART.

The Relation between Trigeminal Neuralgias and Migraine. (Journ. Nerv. Ment. Dis., March, 1900.) Putnam.

Dr. Putnam has for years held and expressed the opinion that there is a closer kinship between trigeminal neuralgia and migraine than that which is expressed by saying that both diseases are indicative of a neuropathic tendency on the part of the patient.

The present paper is a further contribution to the same subject, and is based upon the case of a young man of nineteen, who suffered from daily recurring attacks of trigeminal neuralgia, preceded by hemianopia and accompanied by nausea.

The author refers to other cases bearing on the same subject, e.g., migraine in early years changing to trigeminal neuralgia, ophthalmic neuralgia accompanied by migranoid features, etc.

W. H. B. STODDART.

Vertebral Osteo-arthropathies in Locomotor Ataxy [Les ostéo-arthropathies vertébrales dans le tabes]. (Nouv. Icon. de la Salpt., March, April, 1900.) Abadie, J.

After reviewing the history of the subject which seems to point to the rare occurrence of this affection, Abadie is inclined to believe that it may be overlooked. In four years he has seen five cases with one autopsy. His paper deals with the cases already published and with recently observed ones, and is divided into two parts: the first including cases with autopsy—the two cases of Pitres and Vaillard and one personal one, to which he adds a description of specimen in the Salpêtrière Museum; the second including notes of cases in which no pathological details are known—three cases of Kroenig and four personal ones (two of which have not been published before). Full notes (clinical and pathological) with plates of the three cases in which an autopsy was performed (i.e., the first part of his paper) are given in the above number of Nouvelle Iconographie. The iliac bones, sacrum, and lower lumbar vertebræ were extensively affected in Abadie's case.

H. J. Macevoy.

Generalised Neuro-fibromatosis—Recklinghausen's Disease [De la neuro-fibromatose généralisée—maladie de Recklinghausen]. (Gaz. des Hôp., Nov. 11th, 1899.) Levy, G.

Nov. 11th, 1899.) Levy, G.

A Case of Generalised Neuro-fibromatosis with Autopsy [Neuro-fibromatose généralisée—Autopsie]. (Nouv. Icon. de la Salpt., Jan., Feb., 1900.)

Marie and Couvelaire.

These two papers, taken together, form an excellent résumé of this rare but interesting disease. The first paper is a full general account of the disease, while the second is an account of a case which was carefully observed for four years. The autopsy was very completely and carefully performed, and there are some new observations. Generalised neuro-fibromatosis is a disease characterised by tumours of the nerves and of the skin, pigmented spots in the skin and, less constantly, by painful cramps, anæsthesiæ, difficulty of walking, mental hebetude, loss of memory, and general cachexia. There is rarely a history of direct heredity; more frequently a parent or relation may have suffered from one of the neuroses of degeneration. Occasionally brothers and sisters are similarly affected. The disease is looked upon as congenital, although it may not manifest itself before old age. Usually the onset is in the second or third decade of life. Men are affected much more frequently than women. Among the exciting causes are mentioned general ill-health and bad hygienic surroundings. The tumours are apt to appear especially at points of pressure and friction from the clothes.

The various signs of the disease make their appearance more or less simultaneously. The cutaneous tumours may be thousands in number. They are of the size of a split pea or smaller, and are either in the skin or in the subcutaneous tissue. They may be situated in any part of the body except in the palms and soles. Occasionally several become confluent, so as to form a large tumour (tumeur royale de Boudet); this is, as a rule, soft to the touch, and has been compared to a bag of worms or a varicocele, and it may become transformed into a sarcoma. While

the cutaneous tumours are largely visible, the tumours on the nerves can only be detected by palpation. These are mostly situated in the smaller branches of nerves, and not in the main trunks; they have also been found in the intestine and in the central nervous system. These tumours are very rarely painful or tender. The pigmentation is of a light or dark brown, and is either punctiform or in large patches, giving a piebald appearance. The whole complexion may have an earthy tint, but the mucous membranes are never affected by the pigmentation. The patient becomes weak, and his movements are slow, heavy, and paretic. There has been a co-existence of other nervous diseases in some of the patients. Irregular forms of anæsthesia occur; commonly there is somewhat extensive loss of sensation to temperature and pinpricks. The bones, especially those of the thorax, may be deformed. The photographs of the case reported by Marie and Couvelaire show this remarkably well. The disease is progressive, and the patient dies with it, but not of it. The commonest causes of death are sarcomatous degeneration of one of the tumours and phthisis. If all the symptoms be present a mistaken diagnosis is scarcely possible. Any one or more of the symptoms may, however, be wanting. The subcutaneous tumours may be distinguished from other subcutaneous tumours by their lateral mobility, longitudinal mobility being deficient. The cutaneous tumours must be diagnosed especially from molluscum fibrosum, molluscum contagiosum, multiple fibromata and lipomata, adenoma sebaceum, and multiple dermatomyomata. The pigmentation could only be mistaken for that of Addison's disease, which affects the mucous membranes. The brown pigment is situated in the papillary layer of the corium. The subcutaneous tumours consist of connective tissue, each nodule on a nerve-trunk being commonly made up of several separate nodules situated on the several separate bundles of the nerve. This is excellently shown in the paper by Marie and Couvelaire. The tumours are more apt to be situated on the terminal branches of a nerve than upon the main nerve-trunk. There are four main theories as to the nature of the disease, viz., an infectious theory, a theory of autointoxication, a theory of a fibrous diathesis, and a theory which regards the disease as a malformation or teratoma.

The treatment is necessarily symptomatic, surgical aid being only called in for the relief of pain and other serious symptoms.

W. H. B. STODDART.

Syphilitic Polyneuritis [La polynévrite syphilitique]. (Nouv. Icon. de la Salpt., April, 1900.) Cestan, R.

Syphilitic paralysis of isolated nerves, due to gummata, pachymeningitis, osteitis, etc., has often been the subject of investigation by writers (Buzzard, Fournier, Boix, etc.); but syphilitic polyneuritis, probably on account of its rarity, has not hitherto been studied as a clinical entity. Cestan's paper is of the nature of a critical digest, in which he republishes eleven apparently undoubted cases of syphilitic polyneuritis previously recorded by others, and adds two cases observed by himself. Mercury and other toxic agencies, as causes of the cases here reported, are carefully excluded; and the author concludes that the multiple neuritis of syphilis bears well-marked characters of its own.

The symptoms make their appearance during the secondary stage, at a date varying from one to fourteen months from that of the infecting chancre, either before or during the eruption of the secondary syphilides. It would appear that a severe attack of syphilis is necessary to produce syphilitic multiple neuritis. The disease exists in three forms, which the author names motor, sensori-motor, and pseudo-tabetic, according to the relative predominance of the several symptoms. In all of these forms the prognosis is, as a rule, good. On the motor side the poison has a predilection for the musculo-spiral nerve, but the supinator longus is not spared as in saturnine palsy. The reaction of degeneration is common in the muscles supplied by this nerve. Sensory disturbances are always less marked than the motor. Pain and numbness occur to a greater extent than the various forms of anæsthesia. In the sensori-motor cases the deep reflexes are lost. The facial muscles are never involved except by some complication such as pachymeningitis.

Diagnosis of the neuritis presents no more difficulty than other forms of neuritis. The diagnosis of the cause is mainly made by exclusion. There is an absence of mental symptoms (hallucinations and loss of memory), such as are observed in alcoholic neuritis. The disease differs from saturnine palsy in that it involves the supinator longus, and from diphtheritic palsy in that it does not affect the soft palate. It differs from mercurial neuritis in that the reaction of degeneration does not occur in the latter, and further in that syphilitic neuritis improves on mercurial treatment.

W. H. B. Stoddart.

Cerebral Hæmorrhage involving the Lenticular Nucleus and the whole of the Internal Capsule; Hemiplegia; Special Type of Associated Hemianæsthesia [Hémorrhagie cérébrale intéressant le noyau extraventriculaire et toute la capsule interne; hémiplégie; type particulier de l'hémianesthésie concomitante]. (Journ. de Méd. de Bord., September 10th, 1899.) Verger.

This was quite an ordinary case of cerebral hæmorrhage, but the author publishes it on account of certain observations on the type of hemianæsthesia.

The patient, who was in a stuporose condition, gave evidence of pain on being pricked with a pin in any part of the body; but there was this difference upon the two sides, that the patient made an effort to push the pin away from any spot which was being pricked on the sound side (left), while he did not make such efforts when pricked upon the paralysed side (right). The author concludes that this was due to the patient not being able to localise painful sensations on the paralysed side. If so, the observation is in accord with certain experiments made by the author and Dr. Sellier on the dog, from which they concluded that lesions of the posterior part of the internal capsule did not cause loss of sensation upon the opposite side, but only loss of the sense of position.

There has of late been a tendency on the part of neurologists to regard the hemianæsthesia occurring in certain cases of lesion of the internal capsule as a functional or hysterical symptom occurring in the presence of organic disease, and not as a symptom dependent directly upon the lesion.

W. H. B. Stoddart.

A Case of Idiopathic Convulsions of the Tongue [Ein Fall von idiopathischen Zungenkrampf]. (Monats. Psychiat. u. Neur., B. vii, H. 1, January, 1900.) Saenger (Hamburg).

An unmarried woman, æt. 29, came under observation with the history that she had been suffering from fits for four months. These were ushered in by frequent yawning, followed by a feeling of stiffness, first in the left arm, then in the right. Then followed the convulsion, in which the mouth was forcibly opened and the tongue thrust in and out of the mouth with great rapidity. There was simultaneous tonic blepharospasm of both sides. On forcibly opening the lids it was observed that the pupils were widely dilated, and did not react to light. Respiration was rapid and superficial, expiration being accompanied by a groan; then followed a pause after the manner of the Cheyne-Stokes phenomenon, respiration starting again after about a minute. Consciousness was never lost. During the fit the whole body trembled, and there were occasional spasms in the arms. Between the fits the patient was apparently normal; the pupils reacted to light; there was no wasting, deviation, tremor, or other affection of the tongue, and hysterical stigmata were absent.

Neither the family history nor the previous history of the patient

revealed any factors of ætiological importance in the case.

Treatment by suggestion and with bromides failed. Iron and arsenic, however, were exhibited, and the patient made a complete recovery in four months.

On account of the absence of hysterical stigmata, Saenger does not feel inclined to accept the diagnosis of hysteria; nor would he class the case as an epileptic, because it did not respond to bromides. He therefore stigmatises the fits as idiopathic.

[The important point of this case is the association of the temporary loss of the pupillary light-reflex with the retention of consciousness, an association which has not, so far as we are aware, been hitherto recorded.]

W. H. B. STODDART.

A Case with Autopsy, in which Weber's Combination occurred on Both Sides [Double Syndrome de Weber, suivi d'autopsie]. (Nouv. Icon. de la Salpt., March, April, 1900.) Souques, A.

This was a case of a woman æt. 50, who, after suffering from right temporal headache for ten days, became suddenly affected with an alternate hemiplegia due to a lesion of the right crus cerebri (right third nerve palsy with left hemiplegia). Soon afterwards she developed left third nerve paresis with right hemiplegia. There was paralysis of the bilaterally acting muscles (pseudo-bulbar paralysis), and the patient sank into a state of semi-coma. Sensation appeared to be normal. She became marasmic, and died six weeks later.

Post mortem the posterior cerebral arteries were found degenerate, and there were patches of softening in both crura cerebri. The arteritis was probably syphilitic in origin. Although one of the posterior cere-

brals was completely obliterated, there was no softening of the corresponding occipital lobe, the posterior communicating artery of that side having taken up the circulation.

There are photographs of sections through the corpora quadrigemina, etc., stained by Pal's method, and showing the centres of softening.

W. H. B. STODDART.

A Case of Hæmatomyelia. (Journ. Nerv. Ment. Dis., Feb., 1900.) Lloyd, J. H.

This is a case of hæmorrhage into the cervical cord due to traumatism, in a woman æt. 53. There was paralysis of sensation and movement below the seat of injury, with incontinence of urine and fæces. The knee-jerks were at first exaggerated, but were subsequently lost. There was hyperidrosis above and anidrosis below the seat of injury. Spinal myosis was present. The patient died ten days after the injury. The lesion extended from the second to the fifth cervical segment

The lesion extended from the second to the fifth cervical segment inclusive (? third to sixth), and it was surprising to find how small was the hæmorrhage which caused the patient's death. The hæmorrhage was practically confined to the white matter.

W. H. B. STODDART.

The Common Forms of Meningitis and their Recognition, with Special Reference to Serous Meningitis. (Journ. Nerv. Ment. Dis., Dec., 1899.) Dana, Ch.

A good clinical, though perhaps not absolutely complete classification of meningitis might be set forth as follows:

Pachymeningitis:

External, due to surgical complications.

Internal: Chronic syphilitic.

Hæmorrhagic, occurring in insanity, alcoholism, and infantile scurvy.

Leptomeningitis:

Simple fibrino-purulent (acute and chronic), which may be due to almost any micro-organism.

Epidemic (acute and chronic), due to either the *Diplococcus intra-cellularis meningitidis* or to the *Micrococcus lanceolatus*. (There is no way of distinguishing the two forms except by culture.)

Chronic syphilitic.

Tubercular.

Serous meningitis:

Traumatic (acute cerebral œdema), which causes symptoms resembling meningitis, but gets well in three days.

Alcoholic or toxic ("wet brain"), which closely simulates meningitis, but gets well in ten days.

Serous meningitis of Quincke and Boenninghaus, probably due to some infection, and lasting three, four, or more weeks. This form has its acute, subacute, and recurrent types. The chronic form may give rise to symptoms resembling those of cerebral tumour. Hydrocephalus, however, develops rapidly and forms a distinguishing feature. W. H. B. STODDART.

Epidemics of Meningitis. (Lancet, April 28th, 1900.)

In the *Deutsches Archiv für klinische Medicin* (Feb. 6th, 1900) Berdach records an epidemic of seventy-two cases of meningitis in a town of 8500 people. It occurred mostly between the ages of twenty and twenty-five, the next largest group being composed of children below the age of ten years. The *Diplococcus intracellularis* of Weichselbaum was found in two fatal cases.

The headache was occipital, and the temperature only moderately raised till just before death. The face was the most common part to be affected with paresis. Herpes was present in nearly every case.

W. H. B. STODDART.

Tumour of the Superior Parietal Convolution, accurately localised and removed by Operation. (Journ. Nerv. Ment. Dis., May, 1900.)
Mills, C. K.

The symptoms were mainly those of a functional nervous disorder, and many of the most frequently observed manifestations of organic focal disease were absent. The case throws some light on the areas of representation of muscular and cutaneous sensibility, and of trophic functions.

Dr. Mills gives the following summary:—About five months previous to the operation the patient began to show some ataxia in the right arm, and later in the right leg. All forms of cutaneous sensibility were impaired, muscular sense was lost, and astereognosis was a marked symptom. As the case progressed, paresis and eventually paralysis of the arm and leg supervened. The patient developed a disorder of speech, chiefly showing itself as a verbal amnesia and fatigue on reading. At one time there was a temporary partial right hemianopsia. Reversals of the colour fields and contractions of the fields for form similar to those supposed to be typical of hysteria were present at several of the examinations. The reflexes on the ataxic and paralysed side were somewhat exaggerated, ankle-clonus being present. The patient was emotional and markedly hysterical. The typical headache of cerebral tumour was not present, but he complained much of feelings of discomfort, distress, and pressure, and occasionally of pain, these sensations being almost uniformly referred to the left parietal or parietofrontal region near or about the median line of the head. Vertigo, nausea, vomiting, and optic neuritis entirely absent. The patient from first to last had no convulsions, and not even the slightest local spasm. The writer believed the case to be one of brain tumour originating in what he holds to be the true cerebral sensory area, this opinion being based chiefly on the sensorial localising symptoms, and on the pressure symptoms which ensued as the growth enlarged in size and the case developed. The visual symptoms, the disorder of language, the motor paralysis, and the changed reflexes were thought to be in the main pressure symptoms, although it was believed that the motor subcortex had probably been invaded to some extent. These surmises proved correct at the operation that was undertaken by W. W. Keen. The growth was successfully removed from the left superior parietal lobule. The gradual recovery of the patient is described, and the latest report as to his condition, three months after the operation, is to the effect that the only noticeable defect was a very slight limp.

W. G. Spiller examined the growth, and reports that it was an endothelioma of subcortical origin, where it presumably arose from the walls of the blood-vessels. It had no connection with the dura. The tumour was not encapsuled, and the adjacent nerve-cells were much degenerated.

Tumour of the Left Cerebral Hemisphere with Subjective Pains in the Limbs of the Opposite Side [Tumeur cérébrale de l'hémisphère gauche; phénomènes douloureux subjectifs dans les membres du côté opposé]. (Journ. de Méd. de Bord., Oct. 8th, 1899.) Verger and Laurie.

This was a case of sarcoma occupying the posterior half or more of the hemisphere. There was slight right hemiplegia with diminution of sensation in both legs and the right arm. The knee-jerks were lost. There was diminution of the right visual field. The patient came under observation complaining of headache and pains in the right arm and leg, and he suffered from these pains in the limbs until his death four months later.

W. H. B. STODDART.

Aneurism of the Left Vertebral Artery [Anévrisme de l'artère vertébrale gauche]. (Nouv. Icon. de la Salpt., Jan., Feb., 1900.) Ladame and Monakow.

A man æt. 68, who had contracted syphilis forty years previously, began to suffer in 1893 from severe attacks of vertigo and of angina pectoris. His arteries were very atheromatous. Two years later he had an attack of vertigo more severe than the rest, culminating in an apoplectiform attack, after which he always suffered from a cerebellar type of staggering. He also had some difficulty of articulation, and great inco-ordination of the movements of his right hand, so that his writing became absolutely illegible. On August 27th, 1895, after a heavy meal he had another similar attack, associated with vertigo and vomiting; consciousness was not lost. After this attack he was never again able to walk, or even to sit up in bed, since he always fell to the left side. There was, however, no marked loss of power anywhere; the right limbs were only slightly weaker than the left. From the date of this attack there was complete right-sided loss of sensation of temperature and pain, but no loss to touch. There was a slight left convergent strabismus associated with double vision. Later there was considerable difficulty of deglutition. The patient became delirious, stuporose, comatose, and finally died on October 6th, 1895. His physicians had unfortunately never auscultated the mastoid.

Post mortem there was found an aneurism—the size of a pigeon's egg—of the left vertebral artery, deeply encased in the pons and upper part of the bulb. All the arteries of the base were dilated, but more so on the left than on the right side. The results of the compression of the bulb by the aneurism are very carefully described in detail, but it is impossible to abstract this part of the paper. Briefly it may be said that most of the structures in the left half of the medulla are atrophied. As a result of the compression of the left olivary body the arciform fibres (ruban de Reil) crossing to the right inferior cerebellar peduncle

were degenerated. Conversely all the fibres in the left inferior cerebellar peduncle were degenerated, except the tract crossing from the right olivary body.

W. H. B. STODDART.

6. Pathology of Insanity.

Melancholia and Epilepsy from Softening of the Left Frontal Lobe [Melancolia ed epilessia di rammollimento del lobo frontale sinistro]. (Arch. di Psichiat., vol. xxi, fasc. vi.) Burzio.

The patient was first admitted to the Turin Asylum in 1879, æt. 39 years. A maternal aunt had committed suicide. Patient had been addicted to drink. For some time before admission he suffered from persistent headache, and from vertiginous attacks occurring every two or three months: he had latterly developed mental symptoms characterised by emotional depression with a certain degree of apathy, interrupted by crises of anxiety and agitation. For these symptoms he was sent to the asylum, where his state on reception was noted as one of melancholic depression; general health very indifferent; pupils dilated, irregular, and sluggish in reaction. With brief intervals of provisional liberation, he remained in the asylum till his death, in 1898, from pleuro-pneumonia supervening on generalised arterio-sclerosis. During the last ten years of his life he had a few epileptic fits of classic type, occurring at long intervals.

The autopsy showed an extensive area of softening occupying the greater part of the cortical and subcortical substance of the left frontal lobe, bounded by the superior and ascending frontal convolutions and the island of Reil; this condition was evidently of old standing. The carotid and the cerebral arteries of medium and small calibre presented sclerotic changes. The heart was hypertrophied, the liver cirrhosed, and the other viscera more or less diseased. Microscopic examination of the cortex adjoining the softened area showed no marked changes.

The author considers that the epilepsy and melancholia must be attributed solely to the lesion of the frontal lobe, as the arterial changes outside the softened area were not of great gravity. He points out that the dependence of melancholia upon such a lesion would be quite in accord with previous clinical and experimental evidence, which tends to connect the pre-frontal region with the higher psychic functions.

W. C. SULLIVAN.

A Research on the Condition of the Vagus and Sympathetic Nerves in General Paralysis of the Insane. (Arch. of Neur., Lond. Co. Asylums, 1899.) Wakelin Barratt, J. O.

This research was undertaken at the suggestion of Dr. Mott with the object of ascertaining if any changes were recognisable in the pneumogastric and sympathetic nerves in advanced general paralysis. Ten cases were examined (method given in detail), the sections being contrasted with other sections obtained from non-general paralytic cadavera.