of the eyeballs to the left, right-sided ptosis, incontinence of bladder and rectum, existed about two weeks. Intense pain, evidently of central origin, was felt in the left thigh. SPILLER.

48. EXPERIMENTAL RESEARCHES AND EXPERIENCES CONCERNING INFILTRATION ANESTHESIA. H. Braun (Archiv für klinische Chirurgie, Vol. 57, No. 2, September, 1898).

This very exhaustive investigation begins with a consideration of the general principles of local anesthesia, of which the author distinguishes three separate kinds. The anesthesia may be purely mechanical; or it may be partly mechanical and partly due to the paralyzing influence of the material employed, or, finally, it may be a true regional anesthesia, due to the specific action of the agent used upon the terminal nerve filaments.

In the course of these experiments a number of the more recently proposed local anesthetics were investigated in conjunction with Dr. Heinze, including guaiacol, guaiaryl, aneson, orthoform and eucaine "A." The author found most of them more or less irritating, and unsuitable for the infiltration anesthesia, at all events; more especially guaiacol, which was intensely irritating, and insoluble in water. Eucaine "A" was the only one that effected a practically useful regional anesthesia; but the author does not think that it is equal to very dilute cocaine solutions either in its local anesthetic effect or in the absence of irritation.

The author then investigated cocaine, the lower limit of effective action of which he found to be at 0.005 per cent. (1:20,000), and finally proceeded to beta-eucaine, a substance closely related to it. The limits of its effective action is 0.005 per cent.; like cocaine the addition of 0.04 per cent. of the drug masks the pain of the injection, and equal percentage solutions of both drugs have the same freezing point. Even 10 per cent. beta-eucaine solutions cause no pain any more than cocaine; the intensity and duration of the infiltration anesthesia is the same for solutions of both drugs of equal percentages; only the spread of the anesthesia beyond the limits of the directly infiltrated zone was slightly slower with a 1 per cent. beta-eucaine solution. "There can therefore be no doubt," the author says, "that cocaine and beta-eucaine are the only two substances to be considered in the selection of a drug for infiltration anesthesia; they alone paralyze without irritation, and without injury to the tissues; and they alone effect an anesthesia lasting enough for practical purposes, even in extreme dilution."

JELLIFFE.

PSYCHIATRY.

49. ZUR AETIOLOGIE UND THERAPIE DER PROGRESSIVEN PARALYSE, (Etiology and Therapy of General Paresis). R. Seeligmann (Deutsche Zeitschrift f. Nervenheilkunde, 13, 1898, p. 233).

From a statistical study of cases in the Constanz Asylum the author found that in 130 cases in males, 95 (73 per cent.) had had syphilis, 10 had had a chancre and 25 had never been infected, though some of these were not above suspicion. With reference to more unusual general symptomatology he notes irregular sleeping in the day with persistent insomnia during the night, and cramp-like pains in the abdomen. In some 80 cases, 57 showed reflex immobile pupils, in 18 the reaction was normal, and in those with immobile pupils the knee tendon reflexes were increased in 30 cases and absent in 14; in those with normal eyes a similar proportion was noted, 10 had increased knee

jerks and in four the reflex was absent. The author believes that energetic mercurial treatment may be of benefit in some cases.

50. SUR UN CAS DE PARALYSIE GÉNÉRALE JUVÉNILE A DÉBUT SPINAL (On a Case of Juvenile General Paresis of Spinal Origin). A. Joffroy (Revue de Psychiatrie, 1898, p. 166).

This communication gives the clinical history of a male 24 years of age who had been affected for three or four years past. Difficulty in speech, Argyll Robertson pupils, tremor of tongue and of fingers were pronounced. Memory was impaired, judgment nil and incoherent and absurd ideas of grandeur were evidence of the diagnosis. Another case in a male of 19 is described, and one in a woman of 23 who had been ill for two years. The author states that the characteristic feature in these early cases is the dementia rather than delusional ideas of grandeur. While not disbelieving in the para-syphilitic theory as accounting for the disease, he is inclined to lay more stress on hereditary alcoholism.

51. WELCHE ÄNDERUNG HAT DAS KLINISCHE BILD DER PROGRESSIVEN PARALYSE DER IRREN IN DEN LETZTEN DECENNIIEN ERFAHREN (What Clinical Changes Has General Paresis Undergone in the Last Ten Years)? E. Mendel (Neurologisches Centralblatt, 17, 1898).

This subject has received some attention during the past few years, and the changes noted by the various authors would seem to show that some alteration in the type of the disease was manifest. The present author believes that, as a rule, general paresis with simple advancing dementia is more common now than formerly, and that cases with great impulsiveness and delusions of grandeur are fewer. His statistics show that in and about the year 1880 the typical cases observed were of 180 cases, 55 in number, while in 1898 of 194 cases only 24 were of the classical order; whereas in 1880 only 37 of the demented cases were observed, while in 1898 there were 70 of this kind.

He also finds that remissions are commoner now than formerly, and also that the disease is, if anything, on the increase, in which particular its increase among women is to be noted, the proportion in his cases being 4 to 1. General paresis in husband and wife is also commented upon as well as the occurrence of paresis and tabes. Thus in seven cases both had paresis; in six, paresis in the husband and tabes in the wife; in three, tabes in the husband and paresis in the wife, and in four cases tabes in both were found. The author suggests that a change in the syphilitic virus might account for this variation in the type, and that some sort of a change in the virus has taken place is held by prominent syphilographers.

52. L'ATROPHIE DU NERF OPTIQUE PAR RAPPORT AU TABES ET A LA PARALYSIE GÉNÉRALE (Optic Atrophy in Tabes and in General Paresis). M. Klippel (Revue de Psychiatrie, 1898, p. 102).

Optic atrophy causing blindness is by no means a rare symptom in tabes, but the author states that in this respect there is a great contrast in these diseases in that it almost never occurs in general paresis, or if present, it is an essentially different class of affection. Tabes is always an affection of the peripheral neurons, whereas paresis always affects the central neurons. In the one there is distinct blindness, in the other there is psychical blindness, dementia.