granules. The granules are therefore to be regarded, not only in the fascia dentata but also in the neo-cortex, as "matrix cells." To the possibilities of such a development from the granules there must be some limit, and in the postcentral cortex of the elephant a granular layer is no longer to be found; the reserve cells having all been used up, there can never be a super-elephant.

Sydney J. Cole.

## 3. Clinical Psychiatry.

Two Cases of Familial Dementia Pracox [Deux cas de Démence Precoce Familiale]. (L'Encephale, April, 1920.) Laignel-Lavastine.

Cases of dementia præcox occurring in different members of the same family are by no means uncommon. The first example given is of brother and sister both admitted to the asylum during the same year. The family history is bad. The father died æt. 63; he was an alcoholic, was irritable and prone to anger, suspicious, and seclusive. He was also influenced by ideas of persecution; stated to have had syphilis. All the family on the paternal side nervous and unstable. A nephew was an idiot. Mother healthy. There were five children, of whom the first two died in infancy of meningeal trouble. The eldest of the three surviving children is normal. The other two are the patients noted. The brother was nervous and fretful as a child. The symptoms of dementia præcox appeared when he was 17½ years old, a month after a fall from a bicycle, when he was unconscious for several hours. He was suspicious, restless, destructive, and deluded, believing that people interfered with him and prevented him from working. Then for several months he was mute. He became increasingly apathetic.

The sister was apparently a normal child and was quite intelligent. Mental disorder appeared when she was æt. 12, after she had been frightened by her insane brother. There were bursts of laughter for no apparent reason. For a time she was able to continue with her work; but at 15 years of age she again experienced emotional shocks, and is stated to have suffered from chorea, which was soon cured. At about 17 she became worried because she thought people were going to do her harm; she was apathetic, capricious in regard to food, usually mute; there were grimaces and mannerisms.

In both there are now mental enfeeblement, disorientation and apathy, grimaces, and a tendency to remain in one position for prolonged periods.

The youth exhibits more mutism, inertia, and catatonia; echolalia and stereotypy. The girl is more excited, laughs, talks incoherently, is childish and timid, and speaks in the third person. They scarcely recognise one another. The condition is one of hebephreno-catatonia. Wassermann of blood and of spinal fluid negative in both patients, nor is there any noteworthy change in the number of leucocytes or in the amount of albumen in the cerebro-spinal fluid.

In the second series of cases there was paranoid dementia præcox in three sisters. The first exhibited mutism, stereotypy, explosive laughter, and emotional indifference. She had pulmonary tuberculosis. For a time she improved, then again began to laugh and grimace, was difficult with food, and was confused. Later there were ideas of persecution by people who compelled her to laugh and grimace in order that she should be thought mad; she believed that she was magnetized and that her food was poisoned. She had to be tube-fed; she was suicidal and attempted her life in various ways.

The second patient had ideas of persecution and of grandeur, with hallucinations of hearing. At times she said she wished to marry, at others that she wished to become a nun. She also had pulmonary tuberculosis, of which she died. The third sister had ideas of persecution and was hypochondriacal.

A younger sister and a brother are nervous, and the family history is distinctly neuropathic, but no record of tuberculosis, syphilis, or alcoholism could be obtained.

In the discussion which followed, M. Leroy mentioned an instance of a brother and two sisters who exhibited the symptoms of dementia præcox. He had regarded the sisters in the first place—ten years previously—as suffering from a form of periodic mental disorder, but later the diagnosis became clear. The difficulty of accurate diagnosis is very great in certain cases; but where definite dementia præcox is noted in one member of a family, it assists in coming to a conclusion where the patient's brothers or sisters show signs of mental disorder.

Hubert J. Norman.

The B— Family and the F— Family: A Contribution to the Study of Heredity in Mental Diseases [Famille B— et Famille F—:

of Heredity in Mental Diseases [Famille B— et Famille F—: Contribution à l'Étude de l'Hérédité des Maladies Mentales]. (Ann. Méd.-Psychol., July-August, 1920.) Minkowska, F., and Minkowski, E.

In 1912, in the Burghölzli Asylum, Zurich, were two patients—brother and sister—who had each been admitted five times previously, and who, though they had on former occasions exhibited melancholic depression or maniacal excitement and appeared to be cases of cyclothymia, presented now a schizophrenic condition resembling dementia præcox. It occurred to Prof. Bleuler that this metamorphosis of the mental disorder might be due to a convergent heredity of cyclothymia on one side and dementia præcox on the other. Mainly to find out if this was so, the writers have investigated, under Bleuler's direction, the family history on each side as far back as the great-grandfather, and have collected information as to all his descendants—about 350 from the paternal great-grandfather and about 250 from the maternal. They have been able to give two complete genealogical trees.

have been able to give two complete genealogical trees.

The influence of convergent heredity is demonstrated, though not in the full sense of Bleuler's surmise. On the maternal side the mother and the great-grandfather were epileptics. Altogether we find on this side 9 epileptics, 7 cases of mental alienation, and 54 instances of children dying in infancy. Two modes of hereditary influence of the epilepsy are distinguishable: the graver shows itself in sterility, high infant mortality and progressive extinction of the stock, and in the occurrence of isolated cases of epilepsy among adults; the other and less grave shows itself, not in sterility nor in any excessive mortality

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