

tanelle; in hypertrophy there is none, and there is often a depression in that situation.

In hydrocephalus the distance between the eyes is increased from the fluid inserting itself between and distending the sutures formed by the frontal and ethmoid bones; in hypertrophy this is not the case.

As to the treatment, all that one can hope to do, is to keep the patient in as healthy a state as possible, and treat any active symptoms which may arise.

Illustrations of Heredity. By JAMES R. DUNLOP, M.B.,
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During the autumn of last year I had occasion to visit the parish of Minto, in Roxburghshire, and on making enquiries as to the history of a certain patient, W. N., who was about to be sent to the asylum at Melrose, where I held the position of assistant medical officer, I was told that he was one of seven children who were imbecile, out of a family of eleven, and that the father of this family was popularly supposed to be not altogether right in mind. Thinking that if I followed up this case it might prove to be of some interest, I determined to investigate it.

The sources of my information are reliable, comprising Mr. Hamilton, the registrar and parish schoolmaster of Minto, the registrar of Cavers, Dr. Spence, of Denholm, Mr. Steele, Chamberlain to the Earl of Minto, and many respectable old people who have lived long in the neighbourhood, and whose memory concerning the events of their youth was still vivid. I have endeavoured to make the family history as complete as possible, but the difficulties of such a task are well known: friends frequently refuse information, and even deny the existence amongst themselves of diseases which are known to them; frequently also wishing to tell as much as they can, they mislead the enquirer by their erroneous opinions concerning many affections. I shall not comment on the few facts I have collected, but simply detail them with the aid of the accompanying diagram.

In all there appears to be a neurotic taint in four generations; more especially in the third. Concerning the first gene-

ration I have very meagre information, but sufficient to show the neurotic element in one, the progenitor of all the others marked in the diagram. This man lived long in the parish of Minto. Taught to be a tailor, he soon found himself unable to gain a livelihood by that occupation, and descended to the position of a common labourer. A few old people who remember him say he was "peculiar" in many ways, and they also remember their parents being accustomed to talk of him as "daft." The village children, taking notice of him as being peculiar, used to tease him, and it was no uncommon sight to see him chasing them. They were always afraid of him. He is said to have been temperate, and to have lived to old age. I cannot learn the cause of his death, nor can I gain any knowledge of his relations. His wife was an active woman, much respected by her neighbours, and was also temperate in her habits. By this marriage there were born four children—three males and one female. Their order of birth and their ages, with the exception of one, I have been unable to ascertain. Of these four, one male was sane, and presented nothing eccentric or peculiar in his manner or conversation; he was temperate, and, so far as I can learn, free from any manifestations of nervous disease. The female called Ann was said to be weakminded, the children about the place taking notice of her as being peculiar. She ran errands and did house work for the servants of a neighbouring county family. She had an illegitimate son in no way peculiar, and afterwards married the reputed father; she had, however, no other issue. Another male, who left the district for the north, and of whom I can find no further trace, was said to be weakminded, more so than his brother next mentioned. The fourth, John, a tailor by trade, like his father became a farm labourer. Mr. Steele says, "That although reputed sane, he was a somewhat strange-looking man, with a peculiarly shaped head, and that he was fond of quaint sayings and of telling wonderful stories." Mr. Hamilton, who also knew him, says "he was eccentric in all his ways, though capable of looking after his own affairs;" and one or two old people who have worked with him in the fields say he often said queer things and performed foolish antics, in order to cause the laughter of his fellow-workmen. From all I can learn I can come to no other opinion than that this man was decidedly weakminded. He married an active woman, shrewd for her station. She was eleven

years younger than her husband, and is said to have come of a good healthy stock, with no liability to neuroses or phthisis. Both husband and wife were temperate, lived an even life, and were not much troubled with hardship or privation. The husband died of "old age and debility," in 1848, aged 71 years, while his wife died in 1860 from "disease of the liver." They had eleven of a family, seven of whom were idiotic or imbecile. The first, Alexander, born 1807, died in 1876 from "peritonitis resulting in connection with a congenital hernia." Of the five imbeciles, who reached middle life or beyond it, he was the only one able to converse much, the other four being only able to use certain phrases from a very scanty vocabulary. The second, Helen, born in 1809, is still living, aged 71 years, has taken care of the others, and is a sensible woman for her position. She is unmarried, and so far as I am aware has had no children. She is said to have been temperate all her life, and never to have suffered from any nervous disorders. The third, Mary, born in 1811, and said to have been an imbecile, died in 1823, aged 12 years, the registrar being unable to give the cause of death. The fourth, William, born in 1812, now 68 years of age, an idiot, and presently an inmate of the Roxburgh District Asylum at Melrose, is unable to converse beyond giving monosyllabic answers to simple questions. The fifth, John, an idiot, born in 1814, died in 1871 from what his medical attendant certified as "marasmus." He and the last mentioned were said to be the least endowed of all. The sixth, Robert, an imbecile, born 1817, died in 1878 from "debility due to caries of the bones of the foot." He was hardly able to speak, but evinced great grief on the death of Alexander. The seventh, Jean, born in 1819, died in 1863 from "phthisis," and was said to be a sensible woman, with no noticeable eccentricity. She was temperate in her habits, and I cannot find that she ever suffered from any nervous disorder. She bore an illegitimate daughter, named Maggie, a sharp and intelligent girl, who on growing to womanhood died also of "phthisis." The eighth, Thomas, born in 1821, died in 1875 from "chronic bronchitis, with nervous exhaustion." This man was neither imbecile nor weakminded, though peculiar in look, manner, and talk. When at school, his master says, he was able to learn much as other boys, but was noted as being always somewhat of a recluse, and inclined to hypochondriasis.

For six years he lost the use of his voice, and went about using a slate for conversation. Gradually he became better, though for a year before his death he was unable to speak above a whisper. As he was not attended by Dr. Spence, but by a neighbouring clergyman, who is now dead, I have been unable to get further particulars regarding this aphonia. His wife, a sensible woman, though lately, Dr. Spence says, she has given way to religious excess, bore one child to him, a lad now aged 18, and said by Dr. Spence to be imbecile, though capable of a certain amount of education. Unfortunately I did not see this boy, as he was from home when I was making enquiries, and I have not since been in the district. He shows remarkable taste and ability in sewing book marks, cards, &c. One which I saw was exceedingly well done. His father also had talent for the same kind of work, though not so much as his son. The ninth, Ann, an imbecile, died in 1868 from "phthisis." This woman and Alexander of the imbeciles who reached adult life were the best endowed. She was long troubled with a very large goitre. The tenth, James, born in 1827, is still alive, and is a hard-working man, though peculiar in manner and conversation, very irritable in temper, and occasionally absent-minded and forgetful. He has always been a healthy man, temperate, and has never suffered from any nervous disease. He has had eight of a family, one of whom died in infancy from measles, without special nervous symptoms. The other seven, ranging from two to eighteen years, are said to be very healthy, and to have never suffered from any nervous affection. I saw four of them, and they appeared vigorous and well nourished, with minds fairly developed for their years. The eleventh, Charles, born in 1832, died when four years old, and is said by Mr. Hamilton to have been an imbecile. The four adult imbeciles were employed chiefly in breaking stones, though they have also trenched in the fields. Dr. W. A. F. Browne, I am told, was most anxious to have a photograph of the imbeciles taken, but unfortunately their friends would not allow this to be done. I am much indebted to Dr. Crombie, of Melrose, for assisting me in my enquiries regarding this most remarkable family.

MALE.

ECCENTRIC.

Married an active woman with no obvious peculiarity.

ISSUE.

MALE. Sane.	FEMALE (Ann). Uncommon, slightly weakened, married. Issue. MALE. Sane.	MALE (John) Strange looking and eccentric, said to have rather weak-minded. Married a sensible, sharp woman with no tendency, so far as known, to neuroses. He died in 1846, at 71 years, from old age and debility. She died in 1860, at 72, from "disease of liver."	MALE. Said to have been weakened.
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ISSUE.

ALEXANDER. Imbecile. Born 1807. Died 1876. Aged 69 years. Cause of death, "Peritonitis, due to conge- nital hernia."	HELEN. Sane. Born 1809. Living.	MARY. Imbecile. Born 1811. Died 1883. Aged 12.	WILLIAM. Idiot. Born 1812. Living. Aged 68.	JOHN. Idiot. Born 1814. Died 1871. Aged 56. Cause of death, "Marasmus"	ROBERT. Imbecile. Born 1817. Died 1879. Aged 61 yrs. Cause of death, "Debility due to caries of foot."	JEAN. Sane. Born 1819. Died 1868. Aged 44. Cause of death, "Phthisis." Issue. MALE. An active sharp girl, who on growing to womanhood died also of "Phthisis."	THOMAS. Born 1821. Died 1876. Aged 54 years. Cause of death "Chronic bronchitis with nervous ex- haustion." Married a sensible woman. Issue. MALE. Imbecile. At present aged 18.	AWF. Imbecile. Born 1823. Died 1868. Aged 45. Cause of death, "Phthisis."	JAMES. Born 1827. Living. Married. Issue. Eight children free from nervous dis- ease; one died of measles, others alive. Aet. from 2 to 18 years.	CHARLES. Imbecile. Born 1832. Died 1896. Aet. 4 yrs.
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