If we look in another direction to a body of men who for a part of the year give themselves over to often very great feats of endurance—the guides in Switzerland—it will be found that some of the most active and enduring are small men, but equal to carrying their own weight and all the extras that a guide is required to carry. The standard of height, then, ought to be a low one in the army. In my opinion your short wiry man is infinitely more able to stand the wear and tear of a campaign than your tall, finely-built man. With regard to chest measurement, I must own I am a great sceptic. It seems to me that those who attach so much importance to chest measurement overlook the fact that there are at least two very distinct types of chest—the broad chest and the long, narrow chest which cannot be measured. The lung capacity of two men of exactly the same height might be practically the same; yet their ordinary chest measurement might differ by inches. The tape only measures the horizontal diameter; it takes no cognisance of the vertical.

Lastly, with reference to weight: I remember a little more than a year ago being consulted by a young man who was coaching for the army. He was hoping to get into a crack cavalry regiment. He was well built and in excellent health. I would have unhesitatingly passed him as a first-class life for assurance. His only trouble was that he was a stone too light and he wanted to be fattened up. In other words, every effort was to be made to put a quite unnecessary stone of flesh on to a man who would be in every way healthier and more fitted for his work without it. I could not get the stone of extra flesh on him; but, as he passed well out of Sandhurst, I heard that they gave him his commission. Can anything be more absurd than this? It seems to me that if the matter of physical fitness for active service were left in the hands of competent medical men to decide each case on its own merits, without hedging them round with all sorts of standards, it would be far better. The result would be that very probably many small useful men would get in who are not now accepted, while others taller and finer in appearance might not. After all, in the matter of life assurance we get on very well without too many standards.

Intermittent Albuminuria.

To what extent I would ask does great muscular strain tend to produce or exaggerate those cases of intermittent albuminuria which are so common among young men? Let me take a typical case. An undergraduate, apparently in the very best health, seeks my opinion as to his fitness for rowing. I find all the organs healthy and the muscular development good—everything satisfactory until I come to the urine, when I discover a distinct cloud of albumen with the ordinary tests. On further examination I find that after a night's rest no trace appears, that with slight exertion the amount is very small, but after a hard row the amount is very considerable. Often the effect of exercise is so marked that while the urine first passed after exercise will contain a very distinct trace, urine passed an hour or two later will contain either no albumen or only a very slight trace. I generally advise these patients to give up all competitions involving great muscular exertion, such as rowing in races and running in athletic sports, and to take to more moderate exercise in the form of golf or sculling or lawn tennis. Here again, if harm is done by muscular effort the injury will be of very gradual onset, and will not make itself felt for years. I take it that the explanation of this form of albuminuria is that there is some defect in the walls of the blood vessels which supply the kidney, that with the increase of blood pressure, which is the first result of muscular effort, the defective walls allow a certain amount of serum to escape, and the more often the muscular effort is repeated the more easy it becomes for the serum to transude. It would be very interesting by a systematic examination of the urine to ascertain the percentage of cases of this form of albuminuria in young adults at one or other of our large public schools. Certainly at Oxford I am, accidentally as it were, constantly coming across cases which probably existed undiscovered at school—undiscovered because the trouble gave rise to no symptom whatever. Treatment seems to do very little good. If they have albumen in their first year of residence they invariably have it in their fourth year, and then I lose sight of them.

CASES OF ADULT GENERAL PARALYSIS WITH CONGENITAL SYPHILIS.

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In his Croonian Lectures on the *Degeneration of the Neurone*,* delivered in June last, Mott refers to the occurrence of "juvenile" general paralysis in close association with a history of congenital syphilis, and in a footnote remarks that "it is possible that some of the cases occurring in adults in which no history of acquired syphilis can be obtained may still owe the disease to an inherited taint." In this connection he refers to a patient who was under my care at Bethlem Hospital, and was subsequently transferred to Banstead Asylum, in whom there was undoubtedly inherited syphilitic taint and a history of paternal general paralysis, but in whose case the disease did not manifest itself till she was 28 years of age, this being several years above the age of the "juvenile" cases met with by Mott, who were between the ages of 8 and 23.

As the case of the patient referred to by Dr. Mott has never yet been published, I give here the full history of the case as far as it was possible to obtain it, and also the history of another case which has recently come under my notice in which a young married woman, 24 years of age, broke down with general paralysis, there being an undoubted history of paternal syphilis and general paralysis, although there were none of the ordinary signs of congenital syphilis in the patient herself, and most certainly she had never acquired syphilis.

In both these cases it seems to me that the factor of inherited syphilis outweighs in importance any other of the ordinarily accepted causes of general paralysis, and it is interesting that the father of each of the patients had not only had syphilis, but had died of general paralysis, there being thus a direct inheritance of both diseases. In neither case was there any history of alcoholism in the patient. The first one was a single woman with no history whatever of any sexual indulgence or irregularity, while, although the second was married, and therefore the question of sexual excess might be thought to come into play, there appeared to be, on careful inquiry, no reason to suspect this. The husband had known his wife for some time before marriage, and was quite certain that she had lived a perfectly regular life, and neither he nor she admitted any excess in married life. It is, of course, true that when she broke down her conversation tended to become obscene, and eroticism developed, but this seems to have been a complete change from her usual manner and disposition. In neither was there any history of head injury or of special stress or worry, the first being a teacher at a blind school for several years, and always being well fed and cared for, while the second had a comfortable home, without any financial or other strain.

Such cases as these seem to me to confirm Mott's opinion that some of the cases of general paralysis in which there is no history of acquired syphilis, and in which the patient can no longer be classed as "juvenile," may yet owe their inception to inherited syphilis, even though there be (as in my second case) none of the ordinary signs of this. In this connection it is, I think, important to examine more closely than has hitherto been done into the paternal history of those general paralytics whose fathers (as is often the case) are said to have died of "softening of the brain," "paralysis," "fits," or "apoplexy." It is, of course, possible that some of such causes of death cover cases of general paralysis. I cannot say that I have ever been able to satisfy myself that there has been paternal syphilis or general paralysis in any of the ordinary cases of general paralysis met with in adult males, and where there is no history of acquired syphilis, but in view of the two cases I record here it seems to me that it is possible such a condition may be found to exist if the history is carefully taken.

CASE I.—L. M. B., single, teacher at a blind school, 28, admitted to Bethlem Hospital February 20th, 1896.

Family History.—Father died in Colney Hatch Asylum on January 1st, 1879, of general paralysis. Dr. Seward, in writing to me about his case,

* Published by Bale, Son and Danielsson.

says: "I can find no reference to syphilis in his case, but patient was only in Colney Hatch a fortnight and no history was obtained." A letter from a friend who was much interested in L. M. B., and had known her a long time, says: "I hear that the first child was only just born in wedlock; then there was another birth, whether miscarriage or not is not known; then Miss B.; there were a great many after. Also the wife suffered from disease, both before marriage and after the birth of the first child, contracted from her husband. It is very probable that her living was loose during this time, as the husband had only been dead twelve months when another child was born. The drinking habits of the father are not known; one party says 'Yes,' another 'No.' His living was always loose, and the blindness (of the patient L. M. B.) was through that cause, the knowledge of which was supposed to have sent him mad." A history of alcoholism in the mother was obtained. A sister of the patient is said to have been "subject to a kind of fit which also the father had." I have had the opportunity of seeing this sister. She appears to be perfectly well mentally, and is employed at a hotel. She says that she herself was "blind" at the age of 8 for some months, but recovered. She remembers wearing a shade over her eyes and having drops applied from a blue bottle, and having a blister behind the ears. Her vision has been impaired since. She has an old nebula on the right cornea, and wears concave glasses for a high degree of myopia. There is haziness of left vitreous. No atrophy of discs, no signs of old choroiditis. She is tall and well built, has no deformity of nose and no scars about the mouth. She says her upper teeth decayed very early, and she wears artificial ones now. Her only living brother has also lost his incisor teeth. She says that most of her brothers and sisters died young of convulsions. She denies that she has ever had fits.

Previous History of Patient.—Said to have been bright and clever and good tempered. At the age of 9 became blind "gradually," without any other sign of disease of the eyes. Was one of the most brilliant pupils of a blind college, and was subsequently kept on there as a teacher, living in the college, and subsequently used to teach blind pupils privately. Is said to have had acute rheumatism several times, but never severely, and no cardiac disease resulted. Has always lived a perfectly quiet and temperate life.

Present Attack.—Nine months before admission was noticed to have slight loss of memory and of capacity to do things and to learn; lost skill on the piano and in knitting, in which she was an adept before, and could not teach. In November, 1895, was found to have lost power on the right side, and a few minutes later was found to have lost power of speech. The hemiplegia lasted thirty-six hours, and the difficulty in speech and in remembering words lasted for two or three days. She also forgot how to use her knife and fork. Symptoms gradually developed, speech is said to have become "thicker," she became irritable and restless, memory failed progressively, she became feeble, and catamenia ceased. The certificates showed that she was silent or merely answering "Yes" and "No," was vacant, taking no interest, memory bad, "silly and apathetic," eating with her fingers, losing her way, and careless about washing and dress.

History in Bethlem Hospital.

On Admission.—A young woman, aged 28, of medium height, and rather anæmic. She is quite blind, and has been so since 9 years of age. In her younger days she is said to have been sharp and quick, but lately has lost acumen. Her reaction to questions is fair. Her expression is somewhat vacant and the lines of expression somewhat smoothed out. There are scars of old cracks about the angles of the mouth suggestive of syphilitic rhagades. The upper incisor teeth have been removed, and she wears a plate with artificial ones. Palate normal. Tongue clean, and no marked tremor, and protruded straight. No defect of taste and smell, and no loss of sensation. Hearing normal. No hallucinations or illusions of the senses. Sight: Is quite blind. Mr. Lawford reports as follows: "Left pupil larger than right, neither of them acting to light; right irregularly pyramidal; no adhesions visible in either eye. No evidence of former keratitis. No choroidal disease. Optic discs very atrophic, greyish-white, with some diminution of arteries, and in right a very narrow ring of choroidal atrophy round disc. Constant irregular nystagmus." There was also noticed to be some deficient action of left external rectus muscle, and slight internal strabismus of that eye. Reflex dilatation of pupils on pinching skin of neck present. Speech impaired, rather hesitating, blurred, and indistinct, especially in words containing "r"s and "l"s. No marked tremor of lips. Gait steady, does not sway on standing. Knee-jerks absent; movements of hands clumsy in attempting to do any delicate manipulation. Memory defective. Although she thinks she is in St. George's Hospital, she cannot remember what town it is in. Is apathetic and unemotional. No delusions; has a sense of well-being not justified by her condition. Is weak-minded, apathetic, and indifferent. Organs normal.

February 27th. Condition not materially changed. Is able to read letters from friends written in the Braille type.

April 24th. Does not read or write in Braille type as well as formerly. Has to be helped in dressing and washing.

August 4th. Quiet and weak minded. Has become fat. Occasional loss of control over bladder. Does not attempt to read or write. Speech more markedly affected. Other physical signs as before.

September 30th. Transferred to Banstead Asylum.

History in Banstead Asylum.

By the kindness of Dr. Pasmore and Dr. Mott I have obtained the notes of the further progress of the patient from the time of her admission to Banstead, September 30th, 1896.

State on Admission.—Had a dazed, stupid expression; patient cried the whole time during examination, and would not reply to questions; she uttered a few incoherent remarks. Tongue tremulous; left pupil larger than right; knee-jerks absent; speech impaired; nystagmus.

Progress of Case.—Patient had a slight seizure three days after admission; was slightly convulsed generally, afterwards she became noisy and restless. No further change occurred. Patient got more demented and restless, developed gangrene of left index finger, and gradually sank and died on February 17th, 1897, four and a half months after admission.

Post-mortem Examination.—Only the skull was allowed to be opened. The dura mater was thickened, also pia mater. Pia arachnoid stripped readily

from the grey matter. The convolutions were much wasted. The grey matter was pale and very soft, and on section much wasted. The white matter was also soft and generally wasted. Lateral ventricles contained a large amount of fluid. Granulations were to be seen in the lateral and fourth ventricles. No microscopical examination was made.

CASE II.—Mrs. R. M. D., aged 24, has one boy 5 years of age, whom I have seen, and who is healthy in every respect. I saw her in consultation with Dr. Miller, of Lambeth, on September 1st, 1900.

Family History.—Her father is said to have lived a very fast life. He had syphilis, and is said to have been "still bad" at the time of his marriage. He was also alcoholic, and eventually died of general paralysis. A paternal aunt was insane. The patient is the only living child of her father, a child born before her having died in infancy, and is said to have been "much diseased." The mother is said to have died of a disease caught from the father.

Previous History.—Mr. D. did not know anything about his wife's childhood. She was married to him at the age of 18. She had been on the stage for a short time before. Her husband was perfectly sure that she had not in any way led an irregular life, had not been intemperate, and had not acquired syphilis.

Present Attack.—It is stated that eighteen months ago she had slight failure of sight. Nothing further was noticed till about six months before I saw her, when she became restless and sleepless, and the left pupil was noticed to be larger than the right. Having come into a little money as the result of the death of a relative, she spent it quickly in buying worthless things. She exchanged old silver plate for cheap and worthless jewellery, took things out of shops, and did not seem to realise they did not belong to her, cashed cheques which had come to her husband in the way of business, and which did not belong to him or her. She became excited, lost interest in her home and child, neglected her household duties, became exalted about her powers of singing, her voice being really very inferior. Gradually she became more talkative and incoherent, and could not be controlled. Her writing became shaky, untidy, and mis-spelt, and she was always writing about diamonds and jewellery. There had been a doubtful fit a few evenings before I saw her.

Condition.—She was a tall and well-grown young woman with no noticeable signs of congenital syphilis. There was no deformity of nose, no scars at the angles of the mouth, and no evidence of old keratitis. She talked volubly and quickly without hesitation or stumbling, and said that for six months she had not been able to sleep well, that her thoughts had flown very quickly, and that she could not always be sure whether she was awake or dreaming. She had a quantity of cheap jewellery about and acknowledged that she had been buying a good deal. She thought that money had been sent to her to spend and did not realise that she was spending what did not belong to her. She talked of having bought pearls for her nieces. She said she had written many letters, one being to her uncle in America. This uncle is in England, and she had seen him a few days before, but had forgotten it. She had also invited many people to dinner without her husband's knowledge and quite against their usual custom. Her husband showed me a pile of books she had just ordered from a shop, and also a long list of goods which had arrived, and for which he had received the bills. The patient herself complained that her memory has failed lately. She was nearly a month out when I asked the date, and seemed to forget what she had been doing lately. She was somewhat amorous, and while talking to me she threw off the bed-clothes exposing herself. Her husband says she has changed lately with regard to decency, and at times used indecent language, which is quite contrary to her usual habit. The pupils were unequal, the left being larger than the right, and neither acting to light and accommodation. There were no evident changes in the optic discs, but ophthalmoscopic examination was very difficult as she was so restless. There was no marked defect of sight. The tongue was protruded straight, and was not markedly tremulous. The knee-jerks were absent. There was slight swaying with eyes shut, and she could not walk along a straight line without staggering. The incisor teeth had been removed, and she wore an artificial plate. She was certified and sent to Camberwell House.

After History.—I have recently seen her again at Camberwell House with Dr. Edwards. She remains in a condition of maniacal excitement with great exaltation and eroticism and dirty habits. She seems to be going steadily from bad to worse. The physical signs remain as before, and there is no doubt she is suffering from general paralysis in the second stage.

WIND EXPOSURE AND PHTHISIS.

By CHARLES A. DAVIES, M.D. VICT.,
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DR. WILLIAM GORDON, of Exeter, in his paper read before the Royal Medical and Chirurgical Society, concludes that exposure to winds, especially when coming from the west and south-west, increases the phthisis mortality-rate.

In the discussion which followed Sir Hermann Weber is reported to have said: "Variations, as in the Isle of Man, in the phthisis mortality in the different parts of the same district seemed to correspond with the sheltered condition of the less affected portions."

Since the geographical distribution of phthisis in the Isle of Man has been quoted in support of the contention of Dr. Gordon, and since I have for some years past closely studied the question on the spot, I feel justified in giving my views at the present juncture.

In 1883 Dr. Haviland delivered a lecture in Douglas in which he showed that the annual death-rate from phthisis per 10,000 living in the Isle of Man was 31.63, whilst in Eng-