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.,
Ramsey, Isle of Man.

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-

land it was only 21.30. This high death-rate the lecturer attributed chiefly to the strong winds which prevail, and also affirmed that the geographical distribution of the disease in the island supported this theory. In other words, the windier the district the greater the phthisis mortality. I will deal with the first part of this statement before dealing with the distribution of the disease.

The phthisis mortality-rate was roughly half as much again as in England and Wales, and Dr. Haviland considers this to be due to the island being in an exceptional degree exposed to strong winds. Mr. A. W. Moore, F.R.M.S., Speaker of the House of Keys, who has made a more exhaustive study of Manx climate than any other man, says:

With regard to our winds, my opinion is that they are frequent but not exceptionally strong, and that for the greater part of the year they are mild and damp. It is not likely, indeed, that our winds are either more or less frequent and strong than the winds of the adjacent coast, though, being more exposed, we feel them more. If it were so, our atmospheric pressure would show greater variations than on these coasts, and its mean would be different. Of this, however, there is no trace. The mean annual isobars of atmospheric pressure of the British Islands, according to Mr. Buchan, vary from 29.74 in the Shetlands to 29.98 in the Channel Islands. This calculation has been made by him for the years 187-80 from a very large number of stations, among which are for the Isle of Man, the Point of Ayre, Douglas Head, Calf of Man, and Ballasalla. These, when reduced to mean sea level and 32° F., and differentiated for the whole period of twenty-four years, give a mean of 29.882, which enables him to place the Isle of Man between the isobars of 29.88 and 29.90, in absolute conformity with other places in the same latitude.

Whether Dr. Haviland's theory is right or not, I think that in the case of the Isle of Man he starts with false premisses, and therefore his deductions cannot be accepted without some hesitation. This, however, need not prejudice the second statement, namely, that the geographical distribution of phthisis is incidental with the relative exposure to strong winds. I will briefly consider this point.

Dr. Haviland's figures dealt with only three years, namely, 1880, 1881, 1882. He prepared a phthisis mortality table, giving the averages for each parish and town in the island, and satisfied himself that these figures justified his theory. In preparing a pamphlet on Manx consumption,² which I published in 1899, I worked out the results for the last fifteen years. The three years' table and the fifteen years' table by no means give the same distribution of the disease, as will be seen when the two are placed side by side. The parishes are grouped into four divisions, east, west, north, and south.

Annual Phthisis Mortality per 10,000 Persons Living.

		1880-82.	1883-97.			1880-82.	1883-97.
Isle of Man		31.63	25.70				
Western—				Northern—			
Peel	29.65	24.66	Ramsey	26.89	21.41		
German	29.70	16.02	Maughold	23.24	23.27		
Patrick	30.47	22.78	Lezayre	29.31	29.04		
Michael	27.22	15.19	Andreas	36.10	26.91		
Ballaugh	41.19	26.66	Bride	65.83	25.07		
Southern—				Jurby	25.29	27.57	
Castletown	32.24	21.40	Eastern—				
Malew	33.39	20.23	Douglas	29.46	27.19		
Santon	22.67	24.13	Onchan	24.44	15.30		
Arbory	44.54	24.01	Lonan	37.65	41.17		
Rushen	39.88	29.76	Braddon	35.40	30.44		
			Marown	27.12	21.12		

We now see the serious discrepancies that arose in the 1880-82 calculations, discrepancies that the author was in no way responsible for, for they were due to the fact that very limited statistics were at his disposal. In the three years' table we find that Bride had a death-rate of 65.83 per 10,000 living. In referring to this exceedingly high death-rate, Dr. Haviland explained that it was due to its open and exposed position, with a low coast-line that offered no resistance to the wind. At the southern extremity of the parish run the Bride Hills, in an east to west direction, and he contended that the parishes to the south of these hills would naturally have a less mortality than Bride, which they certainly had on the three years' calculation. On the fifteen-years basis, however, we find we have an entire reversal, as Bride is slightly below the insular average, and, with the exception of Maughold, has a lower phthisis rate than any other northern parish, while the parishes to the south of the Bride Hills, which have whatever shelter these hills may afford, have a phthisis-rate considerably higher than the insular average.

Since the prevailing winds in the Isle of Man blow from a westerly quarter, and since the western coast line does not in any way break the force of the wind before its sweeps the

adjoining parishes, we should naturally expect, if the wind theory were true, that the western division would give us the highest phthisis rate. Instead of this, however, it gives us the lowest, namely, 21.94, as against 24.19, 23.15, and 24.53 for the northern, eastern, and southern divisions respectively, and the parish of Michael, probably the most wind-swept on the island, has actually the lowest phthisis-rate, namely, 15.19.

The parish of Lezayre, which is almost an inland parish, and includes the sheltered valleys of Sulby and Glen Auldyn, and for the most part lies snugly at the foot of the mountains, consequently escaping the strong winds, ought to be fairly free from phthisis; nevertheless, we find its rate to be 29.04.

Lonan, the bulk of whose inhabitants live in the sheltered Glen of Laxey, which is only exposed to the east wind, the prevalent wind in the island, holds the unenviable position of having the highest phthisis mortality rate—namely, 41.17 per 10,000 living.

With the causes of the high phthisis mortality in the Isle of Man, and of the geographical distribution of the same—which have been fully dealt with by me in the small work mentioned above—we are not at present concerned, further than determining to what extent, if any, wind exposure is a contributory factor.

In studying the distribution of consumption among a small nation and over a small area of land, I do not feel justified in formulating or refuting general principles, especially when put forward by so great an authority as Dr. Haviland. Nevertheless, I feel bound to say that, after careful investigations, covering a period of fifteen years, I find that the results obtained can in no way be considered to support the theory that strong winds are accountable for the peculiar distribution of the disease in the Isle of Man, whatever may be the case elsewhere.

With regard to Dr. Gordon's paper I have little to say. It is excellent work and excellently carried out, and must be recognised as a valuable contribution to the study of phthisis. I have no knowledge of Devonshire and its minute topography, and am therefore not in a position to criticise the details.

It is, however, well to remember that in dealing with the statistics of small parishes containing from 70 to 1,000 inhabitants one must be prepared to take into account fifteen or twenty years at least, or the results will be of little value. It is also a little misleading to speak of phthisis among women and children who shut themselves up in small cabins to escape the inclemency of the winds as being due to wind exposure; it is due to a vitiated atmosphere and infection. The adult males in such districts are doubtless remarkably free from the disease. It is well, therefore, to give the sex-mortality when investigating the effects of wind exposure on phthisis.

REFERENCES.

- 1 BRITISH MEDICAL JOURNAL, January 12th, 1901, and October 27th, 1900.
- 2 *The Causes of Consumption, with Special Reference to its Prevalence in the Isle of Man.* Douglas, I.O.M.: Brown and Sons Limited.

THYROID EXTRACT AS A REMEDY, WITH ILLUSTRATIVE CASES.

By P. BLAICKIE SMITH, M.D.,

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AMONG the many remedies introduced to the notice of the medical profession during the last ten years, few possess the therapeutic range of the preparations of the thyroid gland. It is apparently a specific in myxœdema and allied conditions, it has proved its efficacy in skin diseases of infinite variety, it has been of service in cases of extreme obesity, and, in inoperable carcinoma it has in many instances, with or without oöphorectomy, exercised a restraining if not a curative influence upon the progress of the malady.

But although such results are recognised yet it must be admitted that the action of the drug, except in cases of myxœdema, is often uncertain and disappointing in the extreme. Notwithstanding, the remedy is very valuable.