L.D.S. R.C.S. Eng.; A. F. A. Howe, L.D.S. R.C.S. Eng.; and J. K. Clark, L.D.S. R.C.S. Eng.

Inspector-General of Hospitals and Fleets (retired) A. B. Messer, honorary physician to His Majesty the King, has been awarded the Greenwich Hospital pension of £100 a year, rendered vacant by the death of Inspector-General William Macleod, C.B.

Lieutenant-Colonel L. A. Waddell, C.I.E., I.M.S., has been appointed Principal Medical Officer and Antiquarian with the Thibetan Mission and escort.

Correspondence.

"Audi alteram partem."

NEUROTIC HEREDITY AND CANCER.

To the Editors of THE LANCET.

SIRS,—Although cancer is not especially frequent amongst asylum populations, yet the instances of its occurrence (visible or verified by necropsy) which have come under my notice in asylums have been in cases of hypochondriacal melancholia and imbecility, psychoses in which neurotic heredity is seldom or never absent. In private practice neuropathic conditions in cancerous patients or their near relatives are met with or heard of so frequently in comparison with the apparently direct transmission of cancer that one is impelled to believe that the real hereditary connecting link between the cancer of the parent and that of the offspring is not cancerous but neurotic. Taking in the first place those of my own cases in which the cancer was distinctly visible or tangible and otherwise perceptible (of cervix uteri, pharynx, neck, or tongue), and the diagnosis, moreover, confirmed by other medical men, I find I have notes of six cases in which either the patient or a near relative (son, daughter, father, mother, brother, or sister)—sometimes the patient and several relatives—presented one or more of the following conditions: hysteria, neurasthenia, transitory delusional and hallucinatory attacks, general paralysis (in a male patient's father), eccentricity, weak-mindedness, paraplegia, spastic paraplegia, marked asymmetry, malformation of the ears and other features, opaque nerve fibres, phthisis, or anæmia. Then five other of my cases (gastric, vesical, or renal cancer) presented in themselves or the near relatives eccentricity, delusions of suspicion, extreme timidity, migraine, severe neuralgia, excessive intolerance of pain, strabismus, malformation of the ears, or transverse fissuring with puffiness of the lips.

Strahan (quoted by Talbot, "Degeneracy") gave an account ("Marriage and Disease") of a family of which the father died from gastric cancer at 60 years of age, a paternal uncle cut his throat at 56 years of age, and the mother died from a fit at 54 years of age. There were seven children; of these one died from cancer, one from convulsions in infancy, and three from phthisis, one was epileptic (had been twice in asylums and was married, without issue), whilst only one was sane and fairly healthy. Referring to history one finds illustrious victims of cancer who have been undoubtedly neurotic. Napoleon is an instance in point. Witness his epileptic fits, his window-counting obsession or obsessional impulse, and his intense egoism, not to speak of his "star" and his "familiar" which may have been mere clap-trap. Other illustrious personages who have died from cancer have had relatives eccentric, epileptic, suicidal, paralytic, or periodically insane.

Let us now reverse the process and look from the neurotic subject to the cancerous relatives. A young adult female patient of mine who suffered from severe though curable chorea was descended from grandparents two of whom (the maternal) died from cancer; her mother is neurotic, eccentric, and the subject of chronic eczema, and her maternal aunt has had a cancerous breast removed. Two female patients suffering from dementia præcox sprang from a grandfather who died from gastric cancer at the age of 60 years, whose brother and sister died at a later age from senile dementia, and of whose sons one was a ne'er-do-well, three were alcoholic (two of whom died from phthisis), and one was kyphotic. A female patient, aged 62 years, who has nearly all her life suffered intensely from symptoms which she prefers to call "nerves"—viz., pains and paræsthesiæ of all

sorts, with fancies that she is affected with any fatal disease of which she hears, so that in some of her periodical exacerbations her condition has bordered on agitated melancholia—had a brother who died from cancer of the throat. Her daughter and sons are distinctly neurotic and eccentric. Her daughter has four children, each of whom is, or has been, affected with one or more of the following—viz., chorea, convulsions, nystagmus, chorea major, flightiness, unruliness, dwarfism, congenital cataract, aural and ocular malformations, dorsal hairiness, psoriasis, molluscum, and rickets.

Talbot ("Degeneracy") quotes from Kiernan¹ a description of a degenerate family of which the following are some of the items. The progeny of a nymphomaniac and her strabismic migrainous cousin were a ne'er-do-well, a periodical lunatic, a dipsomaniacal daughter who died from gastric cancer, deformed triplets who died at birth, an epileptic imbecile son, a hermaphrodite, a prostitute, a double monster born dead, a normal daughter, and a paranoiac son. The progeny of a female sexual invert and her cousin, a versifier, soon divorced, were a daughter with periodical nymphomania, who had some artistic and literary ability, and a son who died from gastric cancer. The progeny of a normal woman and her ataxic husband were a dead-born sarcomatous son, a gouty son, twin boys paralysed in infancy, twin girls normal, a normal son, and a son ataxic at 14 years of age.

As collateral evidences may be adduced: 1. The marked relationship between the presence of nerves and the spread and limitation of cancer in the skin and muscles, as shown by Mr. G. Lenthal Cheate² (The common origin of the epidermis and the great nervous centres from the epiblast is worth bearing in mind in this connexion.) 2. The fact observed by Mr. D'Arcy Power³ that after operation recurrence is diminished in frequency and postponed by change of scene and surroundings, which is well known to be a useful measure in the treatment of diseases of the nervous system. 3. The beneficial action of radium on some malignant and certain nervous diseases.⁴ 4. The simultaneous increase of cancer and functional nervous diseases in civilised communities. 5. The markedly greater incidence of cancer in certain urban (Australian metropolitan) than in the surrounding rural districts.⁵ (Syphilis, alcoholism, and tuberculosis are much more probably co-results with cancer of urban life than causes of the disease.) 6. The rarity of cancer as well as of nervous diseases amongst savages.

It may be objected that animals suffer from cancer. But are they not also subject—at all events, those of which we know most—to chorea, convulsions, paralysis, and hydrophobia? The observations here submitted are too few to be conclusive, but I think they are sufficiently numerous and relevant to warrant investigation in this direction. Those who are best fitted to offer evidence on the point are private practitioners who actually *know* the patients and their near relatives. Should it be proved conclusively that the neurotic—not necessarily the degenerate—constitution is a predisponent of cancer it hardly needs saying that the knowledge of this relationship would be of great service in the diagnosis of the early stages and perhaps to some extent even in the prophylaxis of that disease.

I am, Sirs, your faithfully,

Liverpool, March 16th, 1904. JAMES SHAW, M.D. R.U.I.

PS.—That cancer is, or appears to be, most common in districts which are very well watered and wooded is by no means an insuperable bar to the acceptance of the view that neurotic heredity is the chief predisposing cause of the disease. Such districts must naturally include deep secluded valleys where insalubrious climatic conditions and the custom of intermarrying closely tend to accentuate and to perpetuate any original neurotic taint.—J. S.

PARTIAL RESECTION OF THE ASTRAGALUS FOR TALIPES VARUS.

To the Editors of THE LANCET.

SIRS,—I am not aware if the undermentioned simple modification of Lund's operation for talipes varus has been tried before. In September, 1902, I was asked to see a boy,

¹ Medicine, September, 1897.

² Brit. Med. Jour., Dec. 12th, 1903.

³ Quoted in the Hospital, Dec. 19th, 1903.

⁴ Dr. A. Darier: THE LANCET, March 5th, 1904, p. 652.

⁵ Dr. G. Cooke Adams: THE LANCET, Feb. 13th, 1904, p. 422.

aged eight years, who since the age of three years had been unable to walk (even to school). I found a typical case of talipes varus. The lad was placed under chloroform by my assistant and after tenotomy of the tibialis anticus and posticus I made an incision through the skin over the dislocated portion of the astragalus and drawing the tissues on each side I removed a wedge-shaped piece of this bone as large as possible but leaving the articular surfaces (the apex being downwards). After tenotomy of the tendo Achillis I dressed the wound and put on a splint of my own construction. The plantar fascia I left intact as I considered in so young a subject that it would stretch. The wound healed rapidly. The boy used a pair of Messrs. Down Bros.' boots until they wore out, since when he has used ordinary ones. He can now run about without trouble. I would draw your notice to the following points: (a) the ease with which the operation was done in a cottage, taking less than 30 minutes; (b) the fact of it being practically bloodless; and (c) the deep restraining ligaments being apparently reached without difficulty. I have not had an opportunity of performing this operation again but thought perhaps that someone more fortunately situated might like to try it.—I am, Sirs, yours faithfully,

ALFRED W. HAYLES,

Surgeon to the Cwmbran Colliery, &c.

March 25th, 1904.

PREVENTION OF INFECTIOUS DISEASE IN BATH.

To the Editors of THE LANCET.

SIRS,—In his letter in your issue of March 26th, p. 896, Dr. Preston King has shifted somewhat from the very decided position he took up in his previous communication, inasmuch as he now admits that if Section 126 of the Public Health Act, 1875, be taken alone my contentions are quite right.

It was his definite statement to which I chiefly took exception, because I was satisfied he could not support it by any section of any Act of Parliament. I know that many others share his opinion in this matter, but I entirely disagree with this view of the question and as the point involved seems to me to be an important one I will give a few of the reasons upon which I base the opinion I hold. In the first place I will point out that the word "dangerous" does not appear in the Notification Act. Had this been so Dr. King's case would have been a much stronger one, but the absence of that important word, in my opinion, materially weakens his argument. Again, the objects of Section 126 and the Notification Act are not altogether similar. The sole purpose of Section 126 is to prevent the spread of dangerous infectious disorders, whereas the primary object of the Notification Act is to provide for the notification of infectious disease to local authorities. Of course, I am aware that its ultimate object is the prevention of the spread of infectious diseases. The Notification Act gives power to local authorities to make diseases notifiable for temporary periods. This has been frequently taken advantage of in the case of chicken-pox. Now chicken-pox is not scheduled because it is a dangerous infectious disorder but because it very much resembles mild and modified forms of small-pox. It is simply done to obtain information and to enable the authority to investigate these cases and to secure as far as possible the notification of all cases of small-pox.

Does a step of this kind on the part of a sanitary authority cause Section 126 to apply to chicken-pox? Can chicken-pox be a dangerous infectious disorder one week and cease to be so during the next? The Infectious Diseases (Notification) Act was adoptive and was not put into force throughout the country; consequently, if Dr. King's contentions be right, then Section 126 had a different application in different local government districts, according to whether the Notification Act was adopted or not and according to whether other diseases than those mentioned in the Act were included therein. Surely it cannot be argued that an adoptive Act could define and modify in a district in which it was not in force an important section of the Public Health Act, which Act is the foundation of the whole sanitary administration of the country. In 1899 the Notification Act was made compulsory throughout the country except in Huddersfield. This Act not being in force in Huddersfield, has Section 126 a different application in that borough?

It seems to me most unlikely that erysipelas can be held

to be a dangerous infectious disorder and the so-called puerperal fever is only dangerous and infectious to lying in women. It is neither dangerous nor infectious so far as the general public are concerned. Consequently if Section 126 applies at all to this disease that application must be of a very partial and limited character. Therefore, seeing that the legislature included in the Notification Act diseases that are not dangerous infectious disorders in the true sense of the term and did not include therein diseases that admittedly bear those characteristics, how can it be held with any weight of reason or force of argument that Parliament intended the Notification Act to define, to modify, and to limit the application of Section 126 of the Public Health Act? The vagueness is in the assumption that Parliament intended this rather than in the meaning of the term "dangerous infectious disorder."

I am, Sirs, yours faithfully,

Halifax, March 28th, 1904.

J. T. NEECH.

SYPHONAGE AND HYDRAULIC PRESSURE IN THE LARGE INTESTINE.

To the Editors of THE LANCET.

SIRS,—I gather from Dr. Keith's remarks in a recent number of THE LANCET that he has seen only the brief account given in the reprint, with notes, of my article in the *Edinburgh Medical Journal*, but much additional evidence will be found in my book (Churchill). A large part of Dr. Keith's criticism is directed against the existence of tonicity in the longitudinal bands, but all of this falls to the ground, for the fact has been confirmed by actual observation. I used glass tubes in most of my experiments because I wanted to see what was going on, but I obtained precisely the same results with a length of old garden hose, bent to imitate the flexures of the colon, and I contend that the concertina-like shortening of the bowel and other by-effects of the tonic contraction would give a rigidity at least equal to this. Moreover, I pointed to many clinical and other phenomena which are perfectly explained by the syphon hypothesis and by no other.

Arguments drawn from observations in animals have but little bearing upon the case, for the simple reason that the colon is horizontal. Were this the case in man peristalsis, though handicapped by the presence of sacculi and the absence of any true circular fibres, would probably suffice. To take a case of orthopnoea, of perhaps years' duration, how can peristalsis of a large-bored and feeble ascending colon suffice alone to propel the intestinal contents? Dr. Keith also seems to question my point that the ileo-cæco-colon is constructed on hydraulic lines, but surely this is indisputable and has only to be pointed out to be at once recognised. It has, at any rate, the endorsement of a large number of physicists with whom I have been in communication.

I am, Sirs, yours faithfully,

March 26th, 1904.

R. W. LEFTWICH.

A DISCLAIMER AND PROTEST.

To the Editors of THE LANCET.

SIRS,—I have just received by post a book entitled "Fruitless Experiment," edited by Stephen Smith, M.R.C.S., and published by the London Anti-Vivisection Society, in which my name appears as a contributor. I should esteem it a favour if you would allow me to state that the article in question is published without my knowledge or consent and that I strongly object to the unauthorised use of my name and work in this connexion.

I am, Sirs, yours faithfully,

Welbeck-street, W., March 28th, 1904.

WILLIAM MURRELL.

THE INSTITUTE OF MEDICAL SCIENCES APPEAL AND SIR DONALD CURRIE'S GIFT.

To the Editors of THE LANCET.

SIRS,—Your leading article of last week, commenting on the munificent gift of Sir Donald Currie to the school of advanced medical studies about to be formed in connexion with University College Hospital contains the following: "It is possible that Sir Donald Currie's gift will indirectly postpone the completion of the scheme of building new laboratories at South Kensington."