The relation of height to size and weight will, of course, be carefully considered. With regard to the lives that should go to India, it is understood that those in the services are picked lives; though, even with these, some points are omitted in the medical examinations which are deserving of inquiry. At present, if an individual have been vaccinated or had the small-pox; if he show no tendency to insanity, or epilepsy, or hernia, etc., he is, *ceteris paribus*, considered eligible, and passed; and yet he may not be so fit as appearances indicate. The dyspeptic, for example, especially if he be liable to low spirits, should not make India the land of his adoption. The swarthy and the fair* complexioned should alike avoid it; the former being likely to suffer from "liver", the latter from "sun". Those who have "weak bowels" should not risk it. The practice of sending the consumptive (under all circumstances) to India is, happily, diminishing, as it is becoming generally understood that certain parts of that country—the low damp climate of Bengal, for instance—are quite inimical to such cases. In the higher and drier stations, improvement may be expected. The hill-station of Ootacamund, in the Madras Presidency, is particularly suitable. Notwithstanding the risks from climate that have been here referred to, the *res angusta domi* is too often all-powerful in determining the future career of a youth. Interest, too, may influence, and the prospect of prizes not attainable at home. Under any circumstances, the man who has decided upon India should, whenever possible, consult a physician experienced in tropical disorders as to his proclivities and the best mode of obviating them.

In examining a tropical "life", attention would naturally be drawn to the complexion. This may be natural, or it may be the result of permanent destruction of the secreting portions of the liver. Even in the latter case, there is no cause for special consideration, as, if the assuree have left India for good, there may yet be quite liver enough for health. The general bearing is very important. Indications of disordered nervous system should be carefully sought for. Shattered nerves are frequently the result of a prolonged residence in India. The liver and spleen will obviously require especially careful examination. However disagreeable the duty, if there be the least suspicion, be the intending assuree married or single, the medical officer should look for signs of blood-poisoning from syphilis. The dissemination of this poison, and its effects, in India are much greater than is commonly supposed. The kidneys will be seldom found to be the seat of disease.

With regard to the question—Has the assuree, one of a long-lived family, who has lived in India for thirty years (including half-a-dozen spent in furloughs of two years at a time), as fair a chance of living to a good old age as other members of the family who have never left England?—the answer must obviously depend upon circumstances. Here is an example. A. B., who was recently examined at an assurance office, did not go to India till he was twenty-three. He had led a careful life in England, and his habits were regular. He had not (when he presented himself for assurance, at fifty-seven) suffered at any time from serious illness. He had risen rapidly in his profession, and, at fifty-five, retired from the Indian service in good health. His ancestors, on the male side especially, were remarkable for longevity, their several ages at death varying from eighty to ninety-five. His father, naturally a hale active little man, died at sixty, in India, having imprudently played at cricket, of which he was particularly fond, in a damp misty month (February), at one of the dampest stations in Bengal. The induced catarrh became a fatal bronchitis. Beyond occasional attacks of dyspepsia, he had never, during a service of nearly forty years, been ill; and, humanly speaking, had he not, for the sake of promotion, returned to India at so advanced a period of life, he might have been living now. Considerable stress was, however, laid upon the fact of the death at a comparatively early age by the medical officer of the company, whilst no questions were asked as to the longevity of A. B.'s family. A. B.'s mother's family were also long-lived; but his mother had died of cancer of the breast at fifty-five, and a sister of phthisis at forty-four, years of age. These facts, taken separately and without inquiry, would obviously be very important. But investigation would have elicited that the former, of excellent *physique*, had never complained of even a headache till she was fifty. Then, with a change in the uterine functions, a scirrhus tumour appeared in the right breast. It was completely removed by an eminent London surgeon, and she continued for four years to enjoy her usual good health; when she became a widow, and then, the tumour having reappeared, and life no longer having any charms for her, she abandoned herself to her fate. The tumour became an open sore, and death soon followed. The sister, who died of phthisis, had gone with her

parents to India when eighteen years of age, and married and became a mother shortly afterwards. Frequent pregnancies and continued lactation undermined her strength (European mothers, as a rule, are less able to suckle their offspring in India than they would be in England); and, at twenty-eight, tubercles were detected in the left lung. For sixteen years she battled with the disease; and, from time to time, regained very much of her former good health. But her condition was not treated with the serious attention it deserved; and, at forty-four, the poor sufferer finally succumbed. Four of A. B.'s brothers and sisters had died in infancy. Much, too, was made of this point. But what were the facts about which no questions were asked? Three of the children had died half a century ago in India from the effects of teething (a period more trying to European children in a tropical country than in a cold one), when the diseases of childhood, moreover, were less understood, and when, owing to difficulties of transport, change of air—so important a factor in aiding recovery—could not readily be obtained. The fourth infant died in England from unchecked hæmorrhage after leech-bites—a melancholy instance of neglect. When A. B. left India, he was advised not to do so, as he had evidently, it was urged, twenty years more work in him even in that country! The result of A. B.'s medical examination was, that three years were added to his life in the policy. Too great importance was attached: *a.* To the idea of blood-poisoning (cancer) in the mother, and to its hereditary nature; but, as Dr. Sieveking observes, "the female organs of reproduction are specially liable to the disease, and...the female sex has an infinitely greater proclivity to cancer than the male sex; and the taint, if any, would scarcely affect the assuree"; *b.* To the death of the sister from phthisis; for, although, as the same author has observed, "where both (cancer and tubercle) occur in the same family, any member of it must be regarded as bearing a double risk", the circumstances of the case were such as would not affect A. B. himself, whose lungs had for so many years been under tropical influences; *c.* To the deaths of so many members of the family, as to the circumstances attending which, however, no inquiries were made; *d.* To the death of A. B.'s father from a chest-affection. And yet, whilst stress was laid upon these points, leading to an increased rate of premium, no inquiries were made about the longevity of A. B.'s ancestors, male or female, and no careful investigation was made of those organs and parts of the constitution which would be liable to derangement after so long a residence in India. The satisfactory result of inquiries in these directions should quite have neutralised any unfavourable opinion formed upon a consideration of the four adverse (?) facts above referred to. A. B., who has a sister five years younger than himself—also a tropical life, enjoying excellent health—might, with her, be considered a "selected life".

COMPLETE INVERSION OF THE UTERUS: REDUCTION ON THE FIFTEENTH DAY.

By ALEXANDER FORD, L.R.C.P.Ed., Harrogate.

INVERSION of the uterus is so rare an accident that the following case may not be without interest.

On February 20th, Mrs. B., aged 22, primipara, was delivered of a healthy child. During the later months of pregnancy, she suffered from a fixed pain on the left side; but her general health was good. Labour was normal as regards the first and second stages. After the expulsion of the child, I waited about ten minutes and made traction on the cord, maintaining pressure on the uterus with my left hand. The cord snapped off. I then introduced my hand into the uterus and grasped the placenta, which was partially adherent. I removed all but a small piece. Presently my patient lost a large quantity of blood. She said she "could not see", and felt as though she should "sink through the bed". Her countenance became deadly pale, and her pulse so weak and fluttering that I could not count it. I administered stimulants freely and she rallied. I left her at 11 A.M. I saw her again in the evening and found her very weak.

On the following day, the patient complained of having severe after-pains and cramps down the thighs. The bladder had not acted. I drew off her urine, introducing my finger into the vagina to serve as a guide to the orifice of the urethra. There was no change when I saw her in the evening. I passed the catheter, and administered an opiate.

On February 22nd, my patient's condition had altered in that the cramps had subsided; the bladder had not acted. On introducing my finger into the vagina, I came upon a globular body filling up that canal, and this body was the inverted uterus. I made an attempt—a poor one, I must admit—to reinvert the fundus, and failed.

On February 23rd, Dr. Myrtle saw the patient with me, and rightly

* The fair scrofulous, for whom the warm and dry parts of India are usually well adapted, are not, of course, included in this category.

judged that reduction would be difficult. Acting on his advice, I consulted Dr. James Braithwaite of Leeds.

On February 25th, the patient was seen by Dr. Braithwaite. His attempts at reduction were unsuccessful. He was, however, of opinion that the end might be attained by tiring out the os uteri, and suggested the exertion of steady pressure on the fundus. The apparatus used for this purpose is depicted in the accompanying diagram. C represents an India-rubber pad, which was fitted to the cup-shaped depression at the extremity of the vulcanite pessary B, and maintained in position by a string which was knotted inside the India-rubber ball D, and had its other end passed through the annular pad C, and through the stem of the pessary A. The apparatus was kept *in situ* by two straps, attached behind and in front to a belt passed round the abdomen. The diameter of the cup-shaped end of the pessary was two inches.

I began this plan of treatment on February 26th, and for the first three days I removed the instrument every morning and renewed my attempts at reduction daily. It then occurred to me to keep the apparatus in constantly, and merely undo the straps in order to draw off the urine and syringe out the vagina. I was led to believe this the better mode of procedure, because the daily removal and reintroduction of the instrument caused the patient much pain, and because the attempts at reduction excited strong expulsive efforts.

March 1st. The pessary was not withdrawn. I contented myself with emptying the bladder and washing out the vagina. I kept up steady pressure on the fundus until the evening of March 6th.

On March 6th, Dr. Braithwaite again saw Mrs. B., and reinverted the uterus while the patient was under the influence of chloroform.

I believe that in Mrs. B.'s case the inversion was not complete until the third day after delivery. The extraction of the placenta caused, I have no doubt, a depression of the fundus, and this depression terminated in the extraordinary accident which is the subject of these remarks. The process of inversion was going on during the day following her confinement; and the cramps were due to the circumstance that four layers of uterine wall occupied the vagina. It was not yet complete; for my finger did not come upon the fundus when emptying the bladder. It was not until about 2 A.M. of February 22nd, that the patient felt a sense of relief from the cessation of the cramps, and on the morning of that day my finger encountered a globular body occupying the vaginal canal. The removal of the placenta was unattended with any difficulty; it did not require as much manipulation as some others which I have had occasion to remove.

Were the symptoms which immediately followed the removal of the after-birth such as to have led me to infer what was the real nature of the case? If so, I did not interpret them aright. They were alarming enough, but not conclusive. Very similar symptoms occur without there being inversion. On January 18th, I attended Mrs. M., aged

34, primipara. Beyond a protracted first stage, there was nothing in the least abnormal in her labour. There was not a single accidental complication, and yet her condition bore a striking resemblance to that of Mrs. B.

CLINICAL MEMORANDA.

DIPHTHERIA: CROUP: TRACHEOTOMY.

In a short communication on the above subject by Dr. Bowles in the last number of the JOURNAL, there occurs the following statement. "Lastly, Dr. George Johnson in a contemporary so far changed his front as to state that bad drains (*strains*) is evidently a misprint for *drains*" as well as diphtheria are responsible for false membranes."* And Dr. Bowles goes on to predict the triumphant results of this assumed "change of front".

I believe that the paper to which Dr. Bowles refers is one published in the *Lancet* of February 16th, in which I state, as the result of my own investigations, that, "in the absence of direct contagion, the occurrence of membranous pharyngitis or laryngitis affords conclusive evidence of infection by sewage-poison conveyed through either air or water". By this, of course I meant to say that the membranous exudation which characterises diphtheria, when not the result of direct contagion from a previous sufferer, is caused by a drain-poison. That so plain a statement should have been misunderstood by so intelligent a physician as Dr. Bowles, makes one almost despair of the possibility of escaping misconstruction. Does he maintain that a false membrane which has resulted from infection by a drain-poison cannot be diphtheria? To state that "bad drains as well as diphtheria are responsible for false membranes" would seem to me to be as absurd and unmeaning as to affirm that bad drains as well as typhoid fever are "responsible" for ulceration and sloughing of Peyer's patches. In the paper to which reference is made, I simply maintain the doctrine which is very generally accepted, that the diphtheritic poison, like the typhoid poison, often escapes from a defective drain; and I further insist upon the practical importance of tracing the infection to its source, and not erroneously attributing a membranous exudation to exposure to cold or heat or other non-specific agencies.

GEORGE JOHNSON, M.D., F.R.S.

SURGICAL MEMORANDA.

ROTATION OF THE SPINE.

MR. CHRISTOPHER HEATH, in a clinical lecture delivered at the University College Hospital on the subject of lateral curvature of the spine, which is reported in the JOURNAL of May 25th, supported the theory advanced by Dr. Sayre, that the rotation of the vertebrae which is present in this deformity arises from the unbalanced action of the serratus magnus muscle. Dr. Sayre's theory is as follows. The scapula becomes a fixed point by contraction of the rhomboidal muscles; the serratus magnus acting from this fixed point draws upon the ribs, and converts them into levers of the first class; the power being at the attachment of the serratus magnus, the fulcrum at the transverse process, and the weight at the body of the vertebra. The serratus magnus, by its contraction, acts on the long arm of the lever and rotates the vertebra. The fallacy of this theory is evident. The scapula becomes a fixed point by contraction of the rhomboidei muscles; therefore the spinous processes from which these muscles take origin must also be fixed points; that is to say, the vertebra is at one and the same time a rotating body and a fixed point, which is absurd.

FREDERICK R. FISHER, F.R.C.S., Surgeon to the National Orthopaedic Hospital, etc.

CASE OF EXTRACTION OF A BULLET FROM THE SHEATH OF A TENDON AFTER FIVE MONTHS' LODGMENT.

ON April 30th, I was consulted by a young woman with reference to a very prominent tumour on the back of her hand. It was perfectly painless; and her only reasons for seeking advice were the obvious disfigurement and a slight difficulty attending piano practice. Its situation was between the metacarpal bones of the middle and ring fingers, its centre being rather less than an inch from the metacarpophalangeal articulation. It was hard, inelastic, and slightly irregular

* Dr. Bowles has sent us a note stating that the word "*strains*" should have been "*drains*"; and that the commencing word "*lastly*" should have been "*lately*".—ED.