December 12th. Fragment of bone removed from stump of right great toe; small piece of dead bone removed from left dorsum. January 3rd, 1890. More fragments removed. February 1st. Left foot: incision healed up from bottom, leaving deep groove; some sinuses further back. Right foot: deep groove in site of incision; some ulceration at bottom of groove and on dorsum; some pain in foot.

CASE VII.—C., Mussulman, aged 36, suffering from anæsthetic leprosy for six years. June 3rd, 1889. Ulcer has perforated through to dorsum of left foot. June 7th. Probe passed from dorsum to sole, and all tissues slit forward through one toe. Wound plugged with lint. November 20th. Sinus near little toe incised, and numerous loose fragments of bone removed. December 3rd. Commencing gangrene of foot. Sinus slit up and numerous fragments of dead bone removed. Wound stuffed. December 6th. Granulating well. February 1st, 1890. One incision firmly healed between last two toes. Other incision on outer side of foot is granulating up. Another sinus is forming further back.

CASE VIII.—M., Hindu, aged 35, suffering from anæsthetic leprosy for five years. August 12th, 1889. Perforating ulcer of left sole. Bistoury passed to dorsum and tissues slit up forward. Wound stuffed with lint. August 19th. Has lost middle toe from gangrene. August 21st. Granulating well. August 30th. Head of metatarsal and other fragments of bone removed. October 25th. Incision healed up, but perforating ulcer is still left. Bistoury passed through to dorsum again, and operation repeated. Fragments of skin cut away with scissors. February 1st, 1890. Incision nearly healed. Still some granulations at upper part, where toe was lost.

When we remember that perforating ulcer is a trophic lesion associated with distinct changes in the nerve trunks higher up, the measure of success attained in the above cases is somewhat surprising. It is true that in Case VIII the perforating ulcer returned in two months, and had again to be dealt with; but up to the present time—three months after the second operation—it has not returned again. In Case V a chronic ulcer has appeared in the sole in the site of the old perforating ulcer, but it has not yet begun to perforate. In Case VI there is still ulceration on the dorsum of the foot, and in Case VII another sinus is forming further back. It is possible that these may develop later into perforating ulcers. It is difficult to give a rationale for the success of the operation, but it seems to promise well, and is worth trying further. In cases where the perforating ulcer returns, it may be well to repeat the incision in conjunction with nerve stretching. The operation, though at first sight it may appear somewhat heroic, is only a modification of the well-known surgical practice of laying open a sinus, and stuffing it, so that it may granulate from the bottom.

LEPROSY IN THE REPUBLIC OF COLUMBIA, SOUTH AMERICA.

By EDWARD H. HICKS, M.R.C.S.ENG.,
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THE local authorities have drawn attention to the alarming spread of leprosy lately in this republic. It is impossible to obtain reliable figures, but putting the entire population at 6,000,000 inhabitants, the lowest estimate gives 18,000 lepers. The tuberculated, non-tuberculated, and mutilating forms are all met with, the tubercular form being the most common.

In this country, the disease occurs chiefly in places having a temperature of 73° F. or 64° F., damp and low-lying districts being especially favourable for the development of the disease; whilst places having a temperature of 80° F. and upwards seem to have some influence in mitigating the course of the disease. This is seen in the Government lazaretto at Agna-de-Dios, two and a half days' journey from here. Here the unfortunate victims undoubtedly obtain some relief from their sufferings, and in some cases improve sufficiently to be able to earn their own living, though no systematic course of treatment is adopted at that establishment. Very few cases are reported from places having a temperature of 80° F., and of those cases nearly all are said to have contracted the disease in colder climates.

In favour of the contagious nature of the disease there is the strongest evidence. In districts in which the disease was formerly unknown, it has appeared and spread with great rapidity,

the first cases appearing shortly after the return of former inhabitants of the district who had contracted the disease in a distant province, but contagion seems only to have occurred where the leprosy and the healthy lived together on terms of great intimacy, eating and drinking out of the same vessels and using the same clothes. On the other hand, where more attention was paid to cleanliness, cases are recorded where the healthy remained unaffected.

As regards the hereditary aspect, no case is recorded of children being born leprosy, but the offspring of lepers have become lepers generally about puberty or a few years later, though some show signs as young as 6 years of age; but considering the bad hygienic conditions generally present, many of these so-called hereditary cases may really be due to contagion.

As to articles of diet, the greater number of cases occur where fish cannot be obtained; in these places, hog's flesh in various forms, impure water, the immoderate use of cayenne pepper and *chicha*, a drink made from the fermentation of maize, are considered as favourable to the development of the disease.

The race most frequently attacked are the whites, next the mixed Indians and whites, then the pure Indian, and finally the (African) negro race, which seems to be the least frequently attacked.

The principal other diseases occurring in leprosy districts are, in order of frequency, malarial fevers, various hepatic diseases, dysentery, rheumatism, and scrofula.

That localities of a certain temperature, namely, from 64° F. to 73° F., are the most infected districts there is no doubt; and it is popularly believed that sudden changes of temperature from heat to cold are frequently the means of producing the disease.

Another factor I believe in producing the disease, speaking, of course, of Colombia, lies in the poor and insufficient food, bad ventilation, and overcrowding, so common among the poorer classes in this country.

ABSTRACT OF AN ESSAY ON ALBUMINURIA IN THE APPARENTLY HEALTHY:

BEING THE PRIZE ESSAY OF THE BORDER COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION, 1890.

By JOHN MASON, M.D.CAMB.,

Formerly House-Surgeon, House-Physician, and Resident Obstetric Physician at St. Bartholomew's Hospital.

SINCE the publication of Dr. Moxon's paper on Chronic Intermittent Albuminuria in 1878, the subject of albuminuria in persons who are apparently in perfect health has been largely discussed at meetings of the British Medical Association and in the journals; but the views expressed by leading men differ widely.

Six years since my attention was specially called to this subject by the accidental discovery of albumen in the urine of a patient who seemed to be not only healthy, but particularly robust and active, and who offered me every opportunity of prosecuting my inquiries.

Accidental Albumen, or Albumen which does not come from the Kidneys.—There is one cause for this, mentioned by Sir Andrew Clark, which I have made the subject of some observations. He says: "In some young men, excited by sexual desire and denying it indulgence, there is secreted from the urethra or its adjacent glands a fluid, which, mixing with the urine, yields evidence of the presence of serum albumen." The difficulty can be easily avoided by instructing the patient to clear the urethra first with a jet of urine, and submitting only what follows to examination; but I am convinced even this precaution is unnecessary, as the glairy fluid which is exuded from the urethra during sexual excitement does not give the reactions of serum albumen; for example: On November 3rd, 1885, two specimens of urine were taken; the first contained a little mucus, no spermatozoa or cells, no albumen (picric acid and nitric acid cold). On November 24th the urine was specially examined on account of mucous secretion; that passed first only was examined; flocculent mucus throughout—otherwise clear; strongly acid, no albumen. On November 27th. Mucous secretion into urethra; urine 1022, no albumen. December 2nd. Great sexual feeling and secretion of mucus in night, 1034, acid, no albumen. I have notes of many other occasions to the same effect.

Not only is this mucus devoid of albumen, but seminal fluid,