To show I bear his method no ill-will I make two practical suggestions: (1) the substitution of a glass-fibre brush for the camels hair brushes, and (2) the inclusion of a well or pigeonhole in a corner of his equipment box, which will serve to hold the iodine phial securely in a vertical position, when in actual use.

Apologizing for the length of this letter.

I remain,
Yours faithfully,
E. A. R. NEWMAN, M.D.,
LT.-COLONEL, I.M.S.

16, ALIPORE ROAD,
Sept. 10th, 1913.

RELAPSING FEVER IN THE DARJEELING DISTRICT.

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—I would like to briefly record an outbreak of this disease at Margaret's Hope Tea Estate at an elevation of 5,000 feet. The outbreak was traced to the arrival of the wife of a tea-maker who arrived ill direct from Nepaul.

This occurred at the end of May of this year.

The total number of cases were 25, of these 15 recovered, 10 died, 4 cases relapsed once, and 2 cases twice.

The Main Symptoms.—Fever beginning in the evening, pain in the back and limbs. Vomiting, diarrhœa, slight jaundice, in profuse sweating at the time of remission, duration of the fever six to eight days.

These cases occurred in 5 houses, not immediately adjoining having a free air space between each house.

Blood slides stained with Leishmann's stain from all cases spirochætes were seen readily, one case showing 10 spirilla in a field viewed through 1/12″ oil immersion lense.

I have to thank tea garden Dr. Babu for histories and sending me the blood slides, Sub. Asst. Surgeon Sasi M. Dass and Compounder Paul of the Kurseong Hospital for staining and preparation of the slides for examinations.

KURSEONG,
Sept. 1st, 1913.

Yours, etc.,
A. D. HUMPHRY,
M.R.C.S. (Eng.), L.R.C.P. (Lond.),
Civil Medical Officer, Kurseong.

DENGUE IN GUZRAT.

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—I beg to crave your indulgence to spare little space in your esteemed and widely circulated journal for the notes taken by me on Dengue prevalent at Borsad, which will no doubt interest its readers, most of whom I believe must not have seen it before in India.

Dengue is a specific and highly infectious fever occurring mostly in warm climates in widespread epidemics. If once introduced into a town or locality it spreads rapidly affecting many inhabitants and almost all members of a family; at present it is prevalent in the whole of Guzrat, having made its appearance in Surat in the beginning of summer when the temperature began to rise and then spreading on the north in Broach, Kaira, Panchmahals, and Ahmedabad districts, not leaving the areas located in Baroda territory intervening them and beyond Ahmedabad such as Patan, Mesana, Kisnagar, Vadargar, etc. About 40 years ago it was seen in Guzrat when it was known by the vernacular name of 'Tuntia.'

Etiology.—No definite virus has been found out as yet. Culex larvæ are abundantly found but anopheles larvæ are totally absent.

It generally occurs in the hot part of the year, in the late summer and early autumn, and ceases in the beginning of winter. High temperature appears to be one of its conditions for the prevalence during monsoon it does occur but indifferently.

Incubation Period.—The shortest incubation period noticed is 24 hours, but averagely it ranges from one to four days, the longest one is a week at the most.

Symptoms.—Initial fever and eruption.

First of all there is a feeling of general malaise or rheumatic pains in a limb or fingers or toes. It sets in quite suddenly and in most of the cases the fever is ushered in by chilliness or by rigors followed by a deep flushing of the face; in whichever way it begins temperature goes up soon, the head and eyeballs ache excessively and some limb, joint, chest or thigh is racked with peculiar stiff rheumatic-like pains which are aggravated by movement. The loins more or less pain and become a seat of great discomfort; the face round the eyes becomes suffused and generally skin of the white body is more or less flushed; the eyes get injected in many cases, congestion and ulceration of the mucous membrane of the mouth and throat is also seen in some cases; the whole face is swollen, and bloated. This congested erythematous condition of the whole body forms the initial eruption. These symptoms are intensified rapidly pulse becomes 100 to 120 p.m. Temp. goes up to 101° to 104° or 105°. There is inability to move owing to great headache, the severe pain in loins and limbs and febrile prostration is great. At intervals the skin perspires but for the most part it is hot and dry. There is generally gastric disturbance and vomiting is seen in many cases. Tongue is coated with moist creamy fur which later on becomes dry and yellow in some cases; the patient continues in this condition from 24 to 48 hours, temperature going down after 24 hours in most of the cases or fever subsides on the 3rd day, by profuse perspiration or diarrhœa in some cases. In rare cases there is epistaxis which gives great relief to the headache. With the subsidence of the fever erythematous or reddened condition of the skin disappears. In rare cases fever subsides slowly during a period of three or four days without crisis of diaphoresis. Afterwards the patient is able to get up from his bed and passes from the agony of the 1st stage to the calm and comfort of the 2nd one. Sometimes the patient attends to his business when the thermometer readings are normal; pains in the joints or limbs which continue in very mild form in many cases remind him of the past stage and warn him that he is not perfectly well as yet. There is generally tenderness of the soles and giddiness in walking; the tongue cleans and the appetite returns.

Terminal Fever and Eruption.—This state of good health continues from one to three days. There is return of slight fever in some cases, high fever in rare cases. It is of a very short duration—a few hours only, some cases had no fever; with the occurrence of this secondary fever an eruption of a measly character appears; the pains recur more severely than in the 1st stage in some cases; the fever subsides soon but the eruption which is at times very evanescent keeps out for two, three days or at the most a week longer or is followed by disquamation. The patient does not remain in bed generally at this time, the fever being less or absent and hence overlooked and pains being less severe than before.

Character of the Eruption.—It is absent in a few cases and present in many cases; sometimes it is slight so much so that it is overlooked. The eruption is rubeolar in character, it commences usually on palms and backs of the hands extending to the middle of the forearms, with tingling and sometimes pricking sensations; the spots are dusky red, circular and slightly elevated about the size of a pea; it extends and is best seen on the back, chest, face, upper arms and thighs at first as isolated, slightly elevated, circular reddish brown rubeoloid spots. I have not seen the eruption larger than a pea but the books say that sometimes it ranges from $\frac{1}{8}$″ to $\frac{1}{2}$″ in diameter. The spots enlarge after a time, coalesce in many cases and thus irregular large patches are formed leaving only isolated patches of sound skin between them here and there; in a few cases redness of skin is seen all over in an unbroken way. The rest is seen abundantly on the hands, waists, arms and knees where they are coalescent. They fade in the order in which they appear, *viz.*, first on the hands, wrist, arms, neck, face, thighs, etc. Desquamation takes place and lasts for about two, three weeks, in many it is less and furfuraceous; it is accompanied by itching; in some instances the fading of the eruption occurs. Strength is regained by and bye and appetite returns; the patient finds weakness in most of the cases for about two or three weeks, in some instances the loins pain severely and continue paining for days or weeks; sometimes some muscle tendon or joint remains aching or pains in them become so severe as to send the patient to bed again. Knee is often affected, wrists or shoulders are also affected and their muscles remain paining longer. In one case the tarsal articulations were painful. These pains in the joints or muscles are felt worse when a patient gets out of his bed in the morning and on movement of the affected parts after they are at rest. They are relieved somewhat by rest and warmth. Convalescence is delayed by continuance of pains in which are accompanied by anorexia, general debility, mental depression, sleeplessness, evanescent, occasional feverish attacks, boils, urticarial eruptions, and by pruritus. Lymphatic glands in some cases are also affected.

Relapses are not uncommon, and 2nd attacks are often seen.

Mortality is almost nil but in the case of very young children convulsions and delirium appear. In old and infirm persons an attack of Dengue proves fatal. I had one case of an old man who was found to be in the comatose condition had hyperpyrexia and diarrhœa and at last succumbed. Pregnant women are not free from the attack, but it does not prove fatal in them nor it affects the fœtus.

I had no opportunity to remark the *post mortem* appearances.

Diagnosis.—It is easy, owing to the fact that it is attended with a rash, articular pains and occurs in rapidly increasing

epidemics. It should not be confounded with measles, rheumatism and influenza as well as malarial fevers, whose symptoms are clear and differ from those of dengue. Initial fever with congested erythematous condition of the skin, secondary slight fever mearly eruption and articular pains are diagnostic signs in dengue.

Treatment.—Isolation which is most essential in this infective type of fever is recommended for, but it is not observed by natives, and hence there are many victims. It runs a definite course and hence it is useless to attempt to cut it short. The patient as soon as he feels ill goes to bed and takes perfect rest. He is asked not to leave his bed till his terminal eruptions fade or disquamate and disappear. Light liquid diet is necessary. Diaphoretic mixture is given adding in some cases Tinct. Aconite in moderate doses which no doubt lessens the severity, when the pains are found severe Phenacetin is added to give relief; cold applications to the head is advised and constipation is not overlooked by adding Epsom Salt to the mixture. For pains, Liniment Belladona or Opii is given whereby relief is felt. Salicylates and Iodide of Potassium are advocated not neglecting Quinine early morning for 4 or 5 days. In addition tea of Tulshi (Basil-Ocymum Sanetum) and Fudina (Mutha Sativa) leaves twice a day is advised to all patients, who do take it with advantage.

In convalescent state tonics such as Quinine, Strychnine, Iron, mineral acids and vegetable bitters such as Quassia Columba Gentian, etc., are administered.

The above treatment has given relief to most of my patients by lessening their sufferance from severe symptoms or shortening its course to some extent.

Yours obediently,

BORSAD DISPENSARY, 27*th August* 1913. } GANPATRAM DALSUKHRAM, *Sub-Assistant Surgeon.*

SALVARSAN IN ORIENTAL SORE.

To the Editor of "THE INDIAN MEDICAL GAZETTE."

DEAR SIR,—Will you or any of your readers kindly inform me through the medium of your journal if injections of Salvarsan or Neo-Salvarsan have been tried with success in the treatment of Tropical Ulcer (Oriental Sore).

KINDAT, 1*st Sept.* 1913. } Yours, etc., W. L. BROOKS.

THE COMMON DISEASE OF HILL PEOPLE.

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—On the morning of 13th July 1913, at 5 A.M., I was called to see a Nepali woman, named Lochmi Kamini, 19 years age, who was collapsed from continued vomiting and purging which began at midnight. Her body and limbs were cold and face cyanosed, pulse was imperceptable at wrist, eyes sunken, but her voice remained unaltered (though low). There were intense thirst and retching, and colicy pain in the pit of the stomach. She was passing watery motions. There were cramps on her abdomen and lower limbs.

I applied hot bottles and hot stones wrapped up over her back and limbs. Turpentine, ginger powder and rum also rubbed over her body and limbs, and ice was given to relieve thirst, in the meantime I examined her fæces under 2/3" lens and readily discovered Ova of Round Worm in numbers.

The following medicines were immediately administered. Castor Oil and Turpentine followed by Santonine and Cinnamon powder 3 doses of abovemixture and powder were given every 3 hours with stimulating massages and hot applications; one hour after the first dose of the Emulsion and Santonine powder the patient vomited violently which brought up 3 living round worms along with other liquid vomits. This encouraged me to push on the Santonine powders, etc., though the patient was still very restless and retching. At about 2 P.M., she had two motions which expelled 31 round worms in 3 bunches some living and some dead. But no improvement of her collapse state, restlessness and retching, a warm Saline solution with few drops of Turpentine and 2 pints of soap water as rectal douche were applied, with the buttock raised for about half an hour. This brought out not only 9 round worms but the signs of reaction followed:—Her pulse and breathing improved and marks of cyonosis disappeared. Body became warm and thirst relieved.

Another rectal douche followed at 5 P.M., secured further improvement of her condition, but occasional hiccough began to trouble her now. The following soothing drink was given to make her quiet and she slept for some hours.

A teaspoonful of barley water, salt, limejuice, white of egg duly mixed and strained in a pint bottle given every 15 minutes. At 10 P.M. she passed high colour urine and again slept at night.

14th *July* 1913.—She was better, hiccough left her off at night. She felt hungry, but she was still kept on barley water and milk salted, rice water and limejuice.

15th *July* 1913.—She was kept on soft rice and *dal* juice.

16th *July* 1913.—Felt better and began solid food.

In July 1902, while I was in charge of the Pedong Dispensary at Sikkim frontier, one Nepali Chetri Boy, aged 14 years came to me from Kalimpong, and said he was suffering from dysentery with troublesome hiccough for a period of 9 months (for treatment as a last resort). As there was no in-door accommodation at the time, I had to keep the boy and his friends in one of the houses in the bazar.

The case exhibited the following symptoms on his arrival there:—Body and limbs emaciated with oedematous feet, Abdomen retracted, pulse feeble with temperature ranging from 99°—101°, tongue red and irritable, conjunctiva yellow tinged, hiccough comes on now and then. Heart and lungs feeble. Liver enlarged below 1" costal margin. Spleen normal. He complained much of the colic pain at navel, and straining at his motions, and the stools consisted of scanty fæces mixed with mucus and blood stain passed 7-8 times in 24 hours. On examination of the fæces under microscope readily disclose numerous Ova of Ascaris. He was immediately put on Santonine, Turpentine and Emulsion Oil Ricini and he was not allowed any solid food, but rice water and milk mixed up with limewater. At about 3 P.M., that is, after 6 hours (when he had 6 grs in 2 doses of Santonine from 9 o'clock in the morning) he passed in two motions nothing but bunches of round worms which numbered 57. And the Santonine mixture was pushed on for another two doses for the night. On the morning I counted 61 worms passed in three motions during the night. His motions and colic pain became less but the hiccough and retching were still troubling him. The treatment of diet and medicines were continued for six days more which brought out a total number of 267 round worms. His hiccough disappeared from the 5th day and the motions also become free from mucus and blood from 7th day, when his fæces were again examined. Very few of the eggs were found in them. But as the boy became impatient to see his mother, his relatives took him back on the following morning much improved. Some bitter tonic for a few days use was supplied to the boy with necessary instructions. The total Santonine administered in 7 days was 42 grs. which expelled 267 round worms and recovered the long standing hiccough and dysentery.

In my 30 years' service I have had many opportunities to come in contact with diseases of intestinal parasites in Bankura, in Western Bengal, at Mymensing in Eastern Bengal, at Hazipore in Behar, and at last at Pedong and Kurseong in the hills. I notice in this hill these parasitic diseases are exceptionally common or more than in any other part of the Province.

In this point of view the hill people may be divided into three classes, *i.e.*, Nepaulese, Bhutias and Lepchas. The Nepalese are infected with Ascaris, Butias with tape worms, and Lepchas both tape and round worms.

The ankylostoma cases are also common amongst garden coolies irrespective of their race and sects. I have noticed some infected with all the three parasites at a time in cases of dysentery which were revealed under microscopical examination.

The following dispensary figures will show the prevalence of intestinal parasite cases over total admission:—

		1910.	1911.	1912.
Intestinal parasite	...	2,400	2,595	3,116
Total admission	...	5,727	6,070	7,026

About 50 p. c. of the total patients were treated for intestinal parasite.

KURSEONG HOSPITAL, 1*st September* 1913. } Yours faithfully, SASI MOHAN DAS, *Senior Asst. Surgeon.*

A CASE OF SINUS CURED UNDER IODINE TREATMENT.

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR.—The following case may interest your readers:—

A Hindu lady, aged 32 years, came with a boil on her left breast about 3 inches below the clavicle for treatment on 31st July 1913. It was found when examined, quite mature and fit for opening. But operation was obstinately refused. Needling by the lady, however, brought the pus out; but there was considerable pain, swelling and redness about the region, giving indication of bagging. The external opening even was too small for free and efficient drainage. Operation was again proposed, but refused. The wound was probed, and a track to the length of abous 2 inches was discovered. 15% watery solution of Iodine (as no spirit was available in my dispensary) was used as antiseptic lotion for washing and Tinct. Iodine was painted