

tions to account for this fall in temperature, and it gradually continued until 26th when he died. He was comatose for almost the last three days of his life.

#### Post-mortem Examination.

This was performed two hours after death. The body was very shrunken, and rigor mortis had set in markedly. There was a sweat rash on the abdomen.

On opening the abdomen the small intestine was found extremely congested, the mesenteric glands were greatly swollen, and all the mesenteric vessels like cords. The spleen showed nothing significant. The interior of the ileum was much discoloured by a greenish brown viscid material which had stained the mucous membrane deeply. On its removal the Peyer's patches appeared considerably swollen as were also the solitary follicles.

The process of ulceration had started everywhere, and the solitary follicles presented a crater-like appearance. Close to the periphery of the patches long ragged masses of œdematous tissue hung free into the lumen of the gut, but ulceration had not proceeded in any place to a great depth.

No other pathological condition was noticeable.

#### Points of Interest.

1. The extreme severity of the case and the very characteristic *post-mortem* appearances.

2. The very misleading respiratory symptoms.

3. The extremely foul condition of the mouth and abundance of sordes. This, coupled with some respiratory disturbance, marked every case I have seen, so much so that the coincidence of the two will always lead me to look for typhoid.

4. The absence of any typical symptom of enteric fever.

5. The cause of death I ascribe to toxæmia as toxic symptoms were present from an early date, and there was no lesion found *post-mortem* to account for it.

6. The re-action with the sedimentation test was peculiar. A change was noticed almost at once, but after twenty-four hours I found the bacilli had fallen together into masses at regular intervals forming a series of little disc-like platforms in a colourless column of liquid. I have never seen this occur before and can only explain it by imagining that the process was so rapid that masses were formed too quickly to sink owing to contact with the walls of the tube.

#### Post-mortem Examination on a Gurkha Sepoy who died of Enteric Fever.

On opening the abdomen the following pathological conditions were noted:—

1. There was a considerable amount of serous fluid in the peritoneal cavity.

2. The mesenteric lymphatic glands were greatly enlarged.

3. Slight enlargement of the spleen (this, though slight, was easily discernible on palpation *ante mortem*).

4. Intense congestion of the peritoneum in patches along the anti-mesenteric border of the intestine.

5. In several places the omentum was adherent to the intestine along the affected border. No actual perforation could be recognised.

6. The Peyer's patches were deeply ulcerated, in some places down to the sub-serous layer.

7. The wall of the gut was greatly thickened in several places where reparative processes had evidently taken place.

It would be interesting to hear upon what grounds the occurrence of enteric among natives was ever denied or considered uncommon. I believe two theories existed.

1. That immunity, acquired by persistently dirty habits of many generations of ancestors, has been transmitted.

2. That most natives have suffered from the disease in early life under the heading of "bukhar."

But neither of these theories are possible in the face of recent experiments with emulsions, &c., so it seems that the sooner we forget them the better.

Yours, &c.,

ABBOTTABAD; T. G. N. STOKES, M.B., I.M.S.  
December, 1901.

#### INFLUENCE OF COLOUR AND MATERIALS UPON ANOPHELES.\*

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—May I be allowed to add a few remarks on the subject of the influence of colour and materials upon anopheles, to supplement those of Captain Liston, I.M.S., in his contribution to the last number of the *Indian Medical Gazette*.

My experience has been similar to his, in that the colour yellow does not repel the anopheles, as affirmed by Dr. George Nuttall in a recent number of the *British Medical Journal*; but at the same time I have frequently found them resting on silk. In Dinapore in August and September of this year, anopheles were fairly common in my house, and my "trap" for them was an orange-yellow Chinese silk purdah hung in a darkish corner of the bed-room. Frequent visits to this curtain during the day resulted in a daily mortality of from six to ten insects, whilst in the whole of the rest of the room (a dark one), it was the rarest thing to find any, either on hangings, clothes, or walls.

In the spring of 1900 I had several pairs of curtains of coarse twill calico, and a punkah frill of art muslin, made for my house at Fyzabad. These were dyed in the bazaar with native dyes. The punkah frill orange, and the curtains yellow, green and dark crimson. These curtains have been in use on and off ever since in various stations, and although I have frequently sought for mosquitos, I have never found a single specimen of either culex or anopheles resting on them; in fact the mosquitos appear to shun them altogether.

This I attribute not to the colour or the material, but to some substance common to the various native dyes, and inimical to the mosquito, and the subject seems well worth further investigation.

I am, &c.,

KOHIMA;  
ASSAM.

W. S. WILLMORE,  
Lieutenant, I.M.S.

#### A "HARD CASE."

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—I should be much obliged by your giving me an answer to the following "Hard Case."

A, a Captain I.M.S., is appointed in September to the civil medical charge of a station and relieves B, a Major, R.A.M.C., who is the only medical man in the station, and has been acting, in addition to his own duties, in charge of the civil station.

Soon after A's arrival B tells A that he wishes to go away for ten days at Xmas and asks him if he will answer for him at the Station Hospital.

A refuses, as he wishes to go into the district himself at Xmas and advises B to apply for leave, and for some other R.A.M.C. man to do his work.

During the next two months A answers for B for a day or two on two different occasions, and A goes into camp for a week and B looks after one or two private cases for A.

In December B's leave is refused unless he can make local arrangements, and he again asks A to act for him.

In the meantime A has accepted an invitation to join a Xmas camp in the district, and consequently refuses B's request, but is willing to do B's work for any other ten days. B is very much offended, and accuses A of acting in an unprofessional manner and writes him a letter to say that in future he will do nothing for A except in urgent cases. Up to this time A and B had been on the most friendly terms.

What should A do?

Apologising for troubling you.

I remain,  
Your obedient servant,  
PUZZLED.

15th December, 1901.

#### PRELIMINARY NOTE REGARDING A DISCOVERY IN CONNECTION WITH THE ETIOLOGY OF THE DISEASE KNOWN IN THE TEA DISTRICTS OF ASSAM, CACHAR AND SYLHET, AS "PANI-GHAO" OR "WATER-SORES."

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—In June 1901, the *Journal of Tropical Medicine* published an article by the pen of Dr. Dalgetty of South Sylhet, dealing with the etiology of the disease endemic in the tea districts, and generally known as "Pani-ghao" (the native term), or as "water-sores" or "sore-feet of coolies."

Dr. Dalgetty arguing from the resemblance which the disease bears to the lesions of ordinary scabies, inferred a similar causation, and finding a small acarus present in the crusts from a certain number of cases, considered this to be the cause. Unfortunately the mite, which he described at length in his interesting article, appears on investigation to be only saprophytic in its habits. It is true that it may be found in the dried scabs or crusts from any neglected sore, in this country, but it also occurs in the refuse from grain-crushing mills and may be bred in large numbers on almost any dry animal matter.

\* For a fuller account of the influence of colour on Anopheles, see Nuttall in *Journal of Hygiene*, Vol. 2, Jan. 1902, p. 72.—Ed., I. M. G.

It certainly cannot be considered as a factor in the causation of a disease such as "water-itch."

A number of experiments and observations, carried out during the past season, show that the real cause of the disease in question is the *Dochmius Duodenale*.

This larval nematode is present in the soil surrounding the lines of tea garden coolies, in very large numbers during the rains, and it is through its attacks upon the bare feet of the coolies, that the characteristic lesion of the disease is produced. Judging from the result of experiments, the larval worm penetrates the skin, and in its passage introduces a number of putrefactive organisms, whose presence produces the resulting inflammation and suppuration.

As the result of experiments the disease was produced artificially upon the arm and leg of a boy, a culture of the ankylostomal larvæ being used in one case, and soil known to be infected by the larval dochmius being used in another. Similar experiments tried with Dr. Dalgetty's acarus proved entirely negative.

I am continuing investigations in order to try and trace the final resting place of the larvæ which penetrate the skin in the manner indicated.

The observations made, so far, give complete corroboration to the statements made at the last meeting of the British Medical Association by Professor Sandwith of Cairo.

I shall hope to forward shortly a full account of the experiments and observations which led to the above discovery.

CHAS. A. BENTLEY,

M.B., C.M. (EDIN.)

January, 1902.

Medl. Offr., Empire of India and Ceylon Tea Co.

## Service Notes.

FROM the 1st January 1902, Surgeon-General Benjamin Franklin, I.M.S., C.I.E., Honorary Physician to the King, has been appointed as Director-General, Indian Medical Service. Surgeon-General Franklin was born on 30th April 1844, and was educated at University College, London, and Paris University. He took the diplomas of M.R.C.S. in 1867 and L.S.A. in 1869, and entered the service in the latter year. He was promoted Surgeon on 1st July 1873; Surgeon-Major, 1st April 1881; Brigade-Surgeon, 1st January 1894; Surgeon-Colonel (seconded) on 25th October 1897. In 1889, he was appointed Surgeon to the Viceroy (Lord Lansdowne) and afterwards to Lord Elgin. On the 22nd April he was appointed Inspector-General of Civil Hospitals, Punjab, a post which he held till he became Director-General. On 22nd March 1898, he was appointed Honorary Physician to the Queen, and is now the only officer on the active list holding the appointment of Honorary Physician to the King. He has no war service. Before his appointment as Surgeon to the Viceroy he was in civil employ in the Central Provinces, and was for five years Civil Surgeon of Simla.

WE are indebted to Lieutenant-Colonel D. G. Crawford, I.M.S., for the following details of the other officers, I.M.S., who formed Surgeon-General Franklin's batch. The first man in the batch was Colonel W. Carr-Calthrop, who is still serving as P. M. O. and Sanitary Commissioner of Assam. Next came A. Wood, who died in London 16th January 1878; then came R. C. Sanders, till recently Professor of Ophthalmology at the Medical College, Calcutta, and who after retirement is still practising his profession in Calcutta; then E. Sanders, who retired in 1891, and next came the new Director-General, and sixth on the list was F. P. Edis, who died of phthisis at Santa Barbara, California, on 9th October 1881. Then came R. Temple Wright, who retired in 1894, and after him G. McBride Davis, C.B., who is A. M. O. of the Punjab Frontier Force; then came K. P. Gupta, who retired in 1898, and H. J. Linton, who died at Peshawar on 4th April 1892. Therefore of the batch of ten, three officers still are on the active list.

THE only officers in the I. M. S. on the active list who are senior to Surgeon-General Franklin are Surgeon-General Spencer who retires this year, Colonel G. Hutcheson, Inspector-General, Civil Hospitals, of N.-W. P. and O., and Surgeon-General G. Bainbridge, the Surgeon-General with the Government of Bombay.

THE undermentioned military pupils, having passed their final examination, are admitted into the service as fourth class Assistant-Surgeons, with effect from the 27th September 1901 in the Bombay Command:—

Hubert Felix DePenning.  
Stanislaus George Smyth.  
David Ernest Barrett.  
Archibald Raymond Hastings Boyne.  
Lionel Vivian O'Brien Easdon.  
Sydney Francis Hastings Boyne.  
William Hugh Maher.  
Hermann Frank Otto.

LIEUTENANT-COLONEL A. T. L. PATCH, I.M.S., is permitted to retire from the service with effect from 19th June 1901. Lieutenant-Colonel Patch was medical officer of Kurnool, and went on furlough on medical certificate on 10th December 1898. He entered the service in April 1881.

LIEUTENANT C. F. MARR, I.M.S., went in charge of D Section, No. 52 N. Field Hospital, mobilised for duty with the operations in Waziristan.

THE following has been received for publication:—  
"Mrs. Harvey begs to offer her grateful and heartfelt thanks for the deep sympathy she has received from all parts of India regarding the death of Surgeon-General Harvey. The letters and telegrams are so numerous, however, that Mrs. Harvey finds it impossible to reply to them all individually, and is reluctantly compelled to ask her friends kindly to accept this acknowledgment of them."

LIEUTENANT J. C. S. OTELEY, Indian Medical Service, is permitted to proceed to England on medical certificate, in anticipation of leave which will hereafter be granted.

THE following appointments are made:—Lieutenant-Colonel Swayne, Royal Army Medical Corps, to officiate as Principal Medical Officer, Meerut and Bundelkhand Districts, *vice* Colonel Burnett, appointed to officiate as Principal Medical Officer, Bengal Command; Lieutenant Colonel Bourke to officiate as Principal Medical Officer, Mhow and Deesa Districts, *vice* Lieutenant-Colonel Blood, transferred to the Home Establishment; Lieutenant-Colonel Mapleton, to officiate as Principal Medical Officer, Poona District, *vice* Swayne.

LIEUTENANT-COLONEL E. CRETIN, I.M.S., 1st Brahmans, is granted leave in India for six months.

THE following notifications appeared in the *Gazette of India*, January 4th, 1902:—

*Home Department.*—The services of Lieutenant-Colonel McConaghey, I.M.S., are replaced at the disposal of the Government of the North-Western Provinces, with effect from the date on which he was relieved of his duties as Officiating Inspector-General of Civil Hospitals, Bengal.

A NEW feature appears in recent *Gazettes of India*, *viz.*, the orders of the Chief Commissioner, N.-W. Frontier Province; in them we read that Lieutenant W. H. C. Foster, I.M.S., assumed charge of the civil medical duties of Wana relieving Lieutenant F. V. O. Beit, I.M.S., and that Lieutenant-Colonel J. W. Rogers, I.M.S., made over charge of his civil duties at Kohat to Lieutenant J. A. Walker, I.M.S., on the former's going on furlough.

LIEUTENANT W. S. WILLMORE, I.M.S., has taken over charge of the Civil Surgeon's duties at Kohima, Assam.

DOCTOR F. W. TWIDALE was appointed Civil Medical Officer, Malda, on 21st December 1901.

THE following appears in Bengal Command orders:—  
"The Lieutenant-General Commanding Bengal is of opinion that Superintending Officers and *Boards of Examinations* in