It is noteworthy that the incubation period appeared to be the same for the two forms of the parasite, for the two quartermasters were both taken ill on the ninth day after leaving Colombo, one with benign tertian, the other with the small malignant parasite.

It has been said that Europeans are more likely to contract the malignant malarial infections, and natives the benign forms; the reverse, however, occurred in this outbreak.

Rogers in his recent work on kala-azar states that the crescent body is rarely met with in Indian fevers; this outbreak does not bear out his assertion, but concurs rather with the experience of Ross, Carter, and others, who affirm that the crescent parasite is frequently seen.

I beg to acknowledge the kindness of Dr. Manson in giving me permission to publish these notes, and also for the trouble he took in confirming my diagnosis of the blood parasites.

THE EFFECTS OF A CHILL DUE TO A SUDDEN CHANGE IN TEMPERATURE, AMOUNTING TO 150° F.

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In September, 1894, on board a steamer, of which I was surgeon, while crossing the Indian Ocean, 5 degrees south of the equator, an engineer, with his fellow engineers, was called upon one afternoon to undertake some repairs in a chamber which was situated immediately above the boilers, and surrounded by the tubes leading from the furnaces to the funnel. The temperature in this compartment was 160° F., and on this account the work had to be conducted in spells of two or three minutes at a time, as it was found that by the end of even this short period the men were threatened with symptoms of heat apoplexy. In the intervals the men came out to "cool" themselves on deck, where the heat was of course excessive at that time of day. After an hour or more of this the work was completed, and the engineer in question entered the compartment once more for the purpose of making a final inspection. He was attired in the thinnest of cotton suits, and perspiration was pouring off him from head to foot; and it was in this condition that on emerging from this atmosphere of 160° F. he immediately descended and entered the refrigerating chambers, where the temperature was more than 20° F. below freezing point, in fact few degrees above zero; the walls and floors were covered with a thick coating of snow. Without even an overcoat or a scrap of clothing in addition to his sweat-saturated cotton suit, he remained for a quarter of an hour in this atmosphere.

On retiring to his cabin he had a headache, and spent a restless night. When I saw him at 8 A.M. next day his temperature was 104° F., the pulse and respirations rapid. He was shivering violently, and was lying on his side with his knees drawn up on account of severe pain in the abdomen, the walls of which were rigid and acutely tender to pressure, sufficiently so to indicate that peritonitis was present. The bowels were costive, but this condition gave place during the next day or two to diarrhoea, with motions characteristic of inflammation of the lining membrane of the colon. The urine was loaded with albumen; circumstances did not permit of a microscopic examination for casts. In the chest there were rhonchi to be heard at various parts, with patches and tubular breathing, and signs of pleurisy, with doubtful effusion at the bases behind. Over the heart, in the second and third left interspaces close to the sternum, there was a to-and-fro friction murmur heard, but it was indefinite in character, and he could not hold his breath so as to enable one to differentiate it; it disappeared in the course of a day or two, and was not accompanied by any irregularity in the pulses, so that it was probably not due to pericarditis.

The progress of the case was characterised by a gradual subsidence of all the symptoms, and by an absence of anything in the nature of a crisis. From the afternoon of the first day the temperature and pulse-rates fell steadily, and by about the fourth day they had reached the normal. The abdominal pain became less intense, and in forty-eight hours

had disappeared, and the diarrhoea which had supervened passed off a couple of days later. The pulmonary symptoms abated also, and by the end of the first week the lungs had completely cleared up. By the end of this period also the amount of albumen in the urine was a mere trace, and within ten days from the onset of the illness the patient was in comparatively good health, and able to resume his duties. One point of interest is that throughout the case there was an entire absence of any rheumatic symptoms or pains in the limbs or joints.

Such an experience as this, involving a sudden variation in the temperature of the surrounding air, amounting to 150° Fahrenheit, must be almost unprecedented, and the surprising fact, to my mind, is that the congestion which occurred in consequence of it left no evident permanent change behind. Probably the widespread nature of the congestion was the patient's safeguard, as the view may be held that the engorgement of each organ would act to some extent as a drain or a poultice to that of the other organs, thus preventing any great amount of inflammatory effusion in any particular viscus.

MEMORANDA: MEDICAL, SURGICAL, OBSTETRICAL, THERA- PEUTICAL, PATHOLOGICAL, Etc.

THE CLINICAL VALUE OF ENLARGEMENT OF THE SPLEEN.

In all textbooks of medicine, uniform enlargement of the spleen is mentioned very prominently, as a symptom in certain common diseases. The chief are—leukæmia, engorgement from cirrhotic liver, amyloid disease, tuberculosis, peritonitis, acute miliary tuberculosis, malaria, pyæmia, erysipelas, typhoid fever, and some other zymotic diseases.

How often have those who have carefully searched for splenic enlargement actually discovered it? Of course, in surgical conditions of the spleen, one can do much both by percussion and palpation, but in the majority of likely medical cases, one rarely feels satisfied that enlargement of the spleen exists. In some cases of thin children, when the fingers can be doubled in under the edge of the ribs, the spleen can be readily felt. There can, however, be no doubt that enlarged spleen is a very valuable symptom, but it is a mistake to exalt its clinical significance seeing that it is usually only found *post mortem*. One may safely say that many famous physicians have failed to recognise enlarged spleens which have been proved, *post mortem*, to be twice the normal size. The most cautious decline to say that a spleen is enlarged till they actually feel it.

Physiologists have shown that the spleen is actively engaged in important metabolic processes. It has a very distensible capsule and plexus of veins. Even in good health it varies much in size, being largest about five hours after a heavy meal. This would constitute an initial difficulty as to the normal size of the spleen in the living subject. The spleen is also a very movable organ. If a patient be corpulent with much fat in the great omentum, if the stomach and adjacent colon be overloaded or the reverse, if the over-lying lung above be diseased, or if there be pleuritic adhesions, if the kidney be larger than normal or have much perinephric fat, obvious difficulties will arise in percussion and even in palpation.

Different percussors will bring out different results. It is wise, therefore, to warn the student not to be disappointed at not being able to discover enlarged spleen in all diseases where it is found *post mortem*. By all means let him try to discover it.

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YAWS IN MOTHER AND INFANT.

M., the wife of a native official at Nailaga, was confined of a child on February 26th, 1898. She was attended on the same day by Avisai, the native practitioner from whom I gathered the history of the child previous to March 17th, on which day I saw them both. The child was reported to me to be suffer-