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is cheap, easily renewable, and when properly applied can be made to overcome many individual peculiarities of foot or boots. It is a common practice to keep the fusslappen oiled or greased; and another not generally known practice amongst men who suffer from easily blistered or "fried" feet, is to first wrap their feet in an old piece of newspaper. I have never tried this myself, but was told by an old soldier that as soon as the paper had got warm and accommodated itself to the shape of the foot it was most comforting and effectual.

The boots are kept thoroughly oiled or greased, and are only polished for church and other big parades.

The system of company bootmakers is decidedly sound, as minor repairs or alterations can be executed on the march, but the great secret of success is the personal supervision by company officers, medical officers, and N.C.O.'s, the feet and boots of all men being inspected daily, and daily washing of the feet being strictly enforced. A dusting powder of salicylic acid, starch and French chalk for hardening the feet is constantly used on the march, and also in barracks, while formalin in powder and liquid form is also provided.

There is no specified punishment for a man who falls out with sore feet, but should the company officer consider the soreness due to neglect in the repair of his boots, washing his feet, applying dusting powder, &c., he may and does punish him, with most excellent results.

THE SANITATION OF STANDING CAMPS IN INDIA.

BY LIEUTENANT-COLONEL F. W. CATON JONES.

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The following notes are supplementary to those on Indian sanitation already published in the Journal for January, 1907.

We have all, I am sure, been depressed by the very insanitary condition into which camps get after being occupied for a short time. This, too, in spite of all the instructions in the little red books.

Being a "Fly Maniac," I judge of the result of our efforts, and gauge our peril, by the number of flies present. Flies are the camp warning signal of enteric fever danger. But please note that the "Fly Maniacs" do not relax any precautions against water infection. They are as keen on that as their brethren of the "water only" school. But they recognise both dangers.

In making recommendations, the first consideration out here is one of expense, but much can be done at little cost. A sharp outbreak of cholera in the 117th Maharratlas in October last made us think out a system of disposal of excreta in camp by which flies would not be attracted or bred. Lieutenant M. F. Reaney, I.M.S., and myself
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elaborated a plan which was most thoroughly carried out by the officer commanding and his officers, who took great interest in the work.

This plan we determined to try in our winter camp. The various camps were occupied from a fortnight to two months continuously. The winter in the Central Provinces is mild, and flies swarm in and close to villages.

The following were the instructions given:

Diagram of bamboo framework seen from above with kerosine oil tins in position.

ADDITIONAL SANITARY RECOMMENDATIONS FOR STANDING CAMPS.

Latrines, European.—Twenty feet total length.

Seats for 10 per cent. of troops should be provided. Seats of bamboo similar to above should be made beforehand. The ends and centre rest on sand-bags. These must be high enough to raise the framework above the receptacles. These receptacles should be kerosine tins with one side evenly cut off lengthways. The tins should be tarred inside.

Before use, crude carbolic acid lotion (1:20) should be put in each tin to a depth of 2 inches and replaced as often as necessary. When half full the tins should be emptied into the ordinary latrine receptacles. Two of these should do for every twenty seats or perhaps more. These receptacles should be kept close to the latrine.

The kerosine tin should be washed with a little carbolic lotion (1:20) over the receptacles and put back in its place with 2 inches of lotion in it.

The kerosine tins and the receptacles should be pesterned outside daily. Kerosining is not enough as the oil rapidly evaporates. When a receptacle is nearly full it should be carried (hung on a pole if necessary) to trenches dug close to (not more than 60 yards away from) the latrine.

For an ordinary receptacle, capacity 9 gallons, a trench 6 feet long by 2 feet broad by 1 foot deep will suffice.

At least a sufficient number of trenches for a day and a half (and better for two days) should be dug in advance by the troops. The earth taken out should be pulverised.

In black cotton soil this cannot be done efficiently until the earth taken out has been exposed to the sun for a day. Hence the necessity for two days trenches in advance in such soil.

Before a receptacle is emptied into its trench, a layer of pulverised earth to a depth of 2 inches should be thrown evenly into the bottom of the trench. The receptacle is then emptied into the trench, fouling of surrounding ground being carefully avoided.
some of the dry pulverised earth is thrown into the receptacle to give it an earth washing. The inside of the receptacle is then washed with a little water.

These washings must be done over the trench. The clean receptacle is then taken back to the latrine. The disused trowels from barrack latrines would be useful in the earth washing.

The dry pulverised earth from the trench is then evenly thrown over the filth until the trench has been more than filled up.

One of the trained sanitary supervisors should constantly be on duty at the latrines in the daytime, and supervise the work.

The presence of flies prove that the work is not being properly done.

Native Latrines.—Similar to above, the kerosine tins being cut lengthways and placed between stones or a small bank of earth, or sunk in small pits.

Urinals for Europeans and Natives.—Kerosine earth urinals, if properly made and "policed," may be dug in the lines (not near wells). A cube of earth (3 feet) must be dug out. The earth taken out should be pulverised if possible, or if not the pit must be filled with powdered earth or sand brought from some place near. The pit is filled to within 4 inches of the top and the surface is kerosined freely twice daily. The earth in such a pit should be free from smell for at least ten days, and possibly a fortnight. After a fortnight, or sooner if it smells, the earth must be taken out and buried, and fresh powdered earth put in and treated as above.

Cookhouses.—Sullage pits 4 feet deep, 4 feet wide and 6 feet long should be dug for each company cooking place. The earth at the bottom should be loosened for 6 inches more. On bamboo over this pit kerosine tins, cut lengthways, and with nail-holes in the bottom to form a sieve, should be placed. All liquid cook-house refuse should be poured into these perforated tins. The water runs into the pit and the solids are caught in the tin. When necessary the solids in these tins are to be emptied into the incinerator. The sullage pits should be kerosined twice daily.

Refuse.—Refuse should be burnt in an incinerator. As an experiment a portable incinerator is being made, a hollow iron cylinder 4 feet long and 4 feet in diameter, with iron bars 1 inch apart let in from the bottom, also a handle on each side. The cylinder will be placed over a trench like a field cooking trench, the grating end being nearest the ground.

The result was that the camps were the cleanest I have ever seen. There were no flies at the latrines or trenching grounds, hardly any flies
at the sullage pits, and one saw no refuse lying about the camp. The men were only too glad to be able to throw refuse and garbage at once into the incinerators. There were two of these. One round, as in the illustration, and one square. The latter was made to fold up, but the square sides did not answer quite as well as the round. The refuse was not so easily burnt. The incinerators, however, burnt everything. Tins full of wet tea-leaves, potatoes, bones, &c., &c., were emptied in straight from the sullage pits. The ashes and calcined bones, being harmless, were thrown into a nullah close by.

The sullage pits answered very well in suitable soil, and even in black cotton soil were not a nuisance when kerosined. But these last had to be filled in oftener than those in porous soil.

I am of opinion that a portable, round incinerator, 4 feet in height and 3½ feet in diameter, would suffice for 200 men. Four would be required for a battalion of infantry. I am having three small doors made in the incinerator, at equal distances, just above the grating, so as to be able to have one open to admit the prevailing wind.

The Royal Field Artillery preferred two poles as seats for their latrines; one to sit on and one as a back-rest. They answered very well. The kerosine tins were placed just behind the sitting pole.

This system could easily be carried out at permanent and semi-permanent posts on the lines of communication on service (and even sometimes in camps occupied for some days). Tins of sorts for receptacles are always available. The trenches would be dug by each party of men going through, and so be ready for the excreta of the next.

An incinerator could easily be built with mud and scrap iron at each post. By following this plan, I am sure that Bacillus typhosus would not find a breeding ground at posts, and these would not be, as they now are, centres for the distribution of enteric and other filth diseases.

The kerosine urinals answered admirably. No claim for originality is made for the system detailed above. It is the result of the experience and recommendations of many authorities, brought into working form for standing camps. The system could not have been carried out efficiently without the hearty co-operation of the commanding and company officers concerned.

A CASE OF SPONTANEOUS RUPTURE OF THE SPLEEN.

By LIEUTENANT E. G. R. LITHGOW.
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PRIVATE A., 1st West Yorkshire Regiment, was admitted, on December 26th, 1907, to the Station Hospital, Rawal Pindi, suffering from anuria and abdominal pain.

History of Illness.—On the day previous to admission, patient complained of colicky pains in the abdomen and fainting fits. He stated