

The absence of symptoms in the 4 cases is quite contrary to the teaching of the text-books. It has been suggested that this worm is identical with a tape-worm found in the rat. It is much smaller, however, than the worms found in the rats in this district. The rat tape-worm measures some 2 or 3 inches or even more in length and has 14 to 16 large hooks.

Tænia saginata.—This tape worm was found 4 times. In each case one or two segments were found as well as the ova in the stools. In only one case did the patient know of the worm's presence. *T. solium* was not found.

Trichocephalus dispar.—This worm seems uncommon in this district as the ova were only found 5 times. One case in which only these ova were found showed a marked, eosinophilia, but as only one stool was examined, the man may have had other parasites as well.

Oxyuris vermicularis.—The ova, as distinguished from the worm, were found only 5 times.

Ascaris lumbricoides.—This worm was found in 17 cases. In only one case could any symptoms be ascribed to it. I was asked to see a small girl who was said to have dysentery with griping pains and to be very ill. Round worm ova were found in her stool and a dose of santonin caused the expulsion of 30 worms, the child rapidly becoming quite well. Major Clayton Lane, I.M.S. (*I. M. G.*, April 1904), states that santonin will often expel round worms in cases where no ova have been found in the fæces. I cannot agree with this as I had santonin administered to 60 under-trials and convicts, in whose stools no ova had been found and in no case was a single worm expelled. On the contrary, I have been struck with the enormous numbers of ova in the fæces, produced by one or two female worms.

Strongyloides stercoralis.—I have not found the ova of this worm in a single case so far. I think that my method would prevent my finding the larvæ. At the same time I have made a number of water preparations with the object of finding the larvæ but unsuccessfully. I do not think, therefore, that it can be common.

Conclusion.—In spite of the small number of people in series B, I think I have succeeded in showing that infection with intestinal parasites, especially the *Ankylostomum duodenale*, is common in this part of the Central Provinces, though the degree of infection is low and nothing compared with that met with in damp parts of India and Assam. Although cases with the classical symptoms of ankylostomiasis are doubtless rare, still I think that the fact that so many people show a certain amount of blood changes is against our dismissing this wide-spread infection as of little or no practical importance. The examination of fæces is never particularly pleasant work, and it is by no means easy to

obtain the necessary material. Even in a jail the under-trial prisoners do not like having their stools examined. The more ignorant apparently think that the intention is to "work magic" on them. The general idea amongst the police and their families—so I was told—was that we were preparing some new kind of medicine! In view of these prejudices I intend to confine my further investigations, as far as apparently healthy people are concerned, to the "under-trials" in the jail. As the latter is very small, the number of people available will be somewhat limited. This fact is my only excuse for publishing what may be considered an unfinished investigation.

I have to thank two Sub-Assistant Surgeons, Rao Sahib Govind Vithal and B. N. Mangrulkar, for their great assistance in obtaining the necessary material for me.

SANITATION IN THE PLAINS.

BY L. REYNOLDS,

CAPT., I.M.S.,

96th Berar Infantry.

At present the latrine in India is, as usually met with, a most insanitary arrangement; dark, airless and evil smelling.

In the *Indian Medical Gazette** I have already described a type of latrine for hill stations which has proved extremely satisfactory.

The latrine here described is intended for the plains and is a distinct improvement on the usual model.

My object is to expose the whole interior of the latrine to direct sunlight for some hours in the day and provide free ventilation.

The accompanying figures explain the plan.

The latrine is constructed of galvanized corrugated iron.

Outside Screen.—This is sufficiently high to secure privacy. If the ground be flat and not overlooked by buildings, it need not be more than 6 ft. high. Between the lower border of the screen and the ground there is a space of 1 ft.

Compartments.—Platform just sufficiently high to take receptacle. If too high, floor is sure to get fouled. Note free space between platform and door. Both platform and floor are covered with cement which is continued forward to the gutter. The floor has a slight incline towards the gutter.

The Gutter.—Consists of glazed drain pipe cut in half longitudinally and has a slight fall from the dead end towards the outflow, at the outflow the gutter projects over a pit which is lined with cement and is of such a depth that a good-sized receptacle can be placed under the projecting end of the gutter.

* *Indian Medical Gazette*, December 1910.

SANITATION IN THE PLAINS.

BY CAPTAIN L. REYNOLDS, I.M.S.,

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FIG I. IN PLAN.

Scale $\frac{1}{4}$ Inch to 1 Foot.

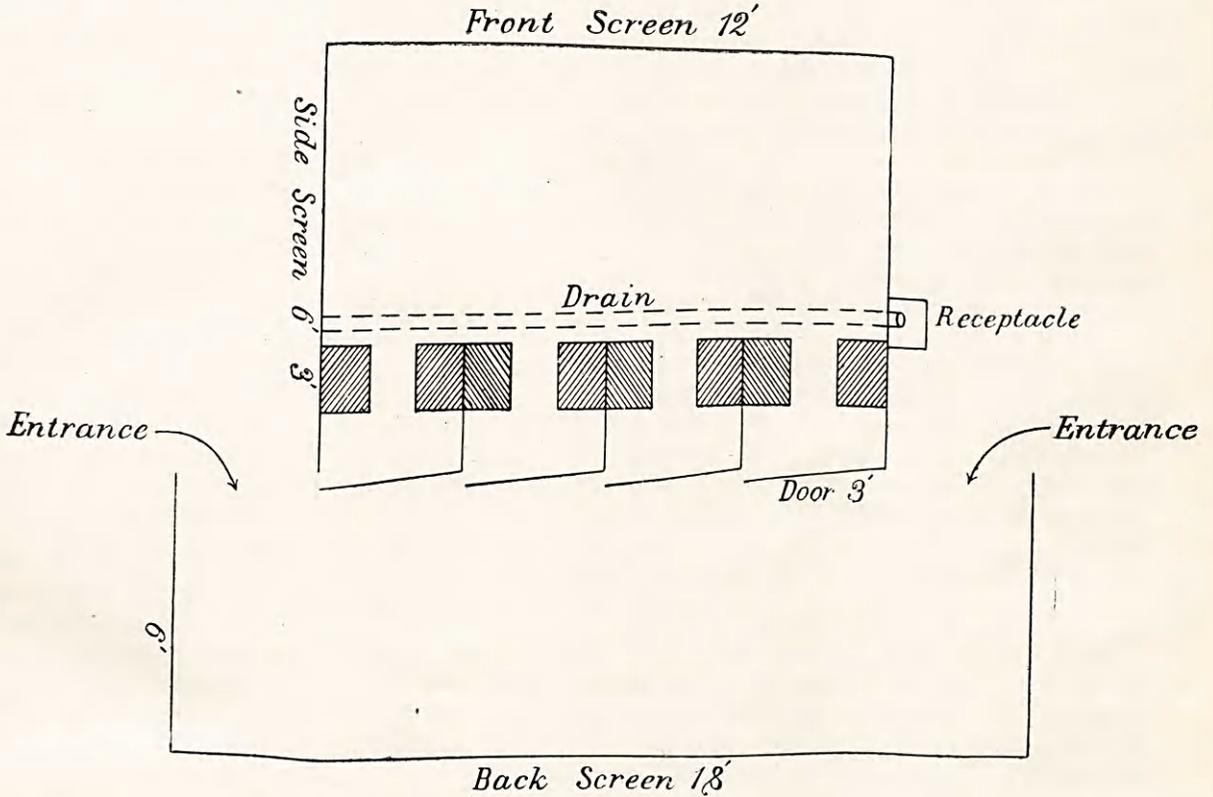
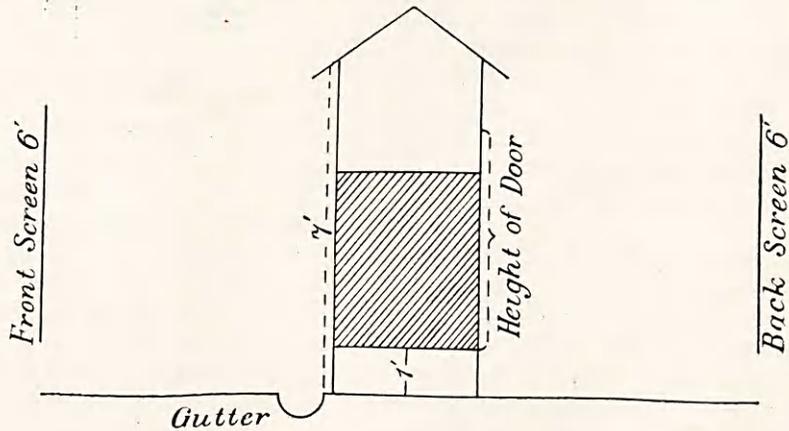


FIG II. SECTION FROM FRONT TO BACK.

Scale $\frac{1}{4}$ Inch to 1 Foot.



Side screens of compartment.—These are the height of a man's head when in the squatting position thus leaving a free space between side screens and roof. Below, the screen ceases at the level of the platform.

Door.—The lower border of the door reaches within a foot of the ground and is 5 ft. 6 in. high. Between the door and roof there is a space of 1 ft. 6 in. when the door is wide open there is a gangway 3 ft. wide.

Site.—If possible, latrine should face south. The following are the advantages of this type of latrine.

The front of the compartment is absolutely open and direct sunlight floods the interior in the morning and afternoon; during the hottest time of the day the platform is sheltered from the sun by the roof.

The only entrance or exit is through the doors of the compartments and therefore privacy is maintained. The spaces between the screens and ground and also between the doors and roof allow free ventilation. The floor and platform of the compartments are impermeable and can be readily washed out, the dirty water passing along the gutter into the receptacle.

For Europeans commodes should be provided. The following is a useful pattern. The seat consists of a ring of wood which fits loosely into a ring of angle iron. This is supported by three legs of angle iron. The height of the commode should be just sufficient to allow an enamelled iron receptacle to pass easily between the seat and the floor. The receptacle is held in position by iron slots fixed to the under surface of the seat. The seat can be readily removed and cleansed. Ample space between the compartments and the front and back screens is very necessary to ensure free ventilation and the admission of plenty of direct sunlight.

A Mirror of Hospital Practice.

SYPHILIS IN TIBET.

By R. F. D. MACGREGOR,

LIEUT., I.M.S.,

Gyantse.

THE commonest disease in Tibet is undoubtedly syphilis. Venereal disease as a whole is very prevalent, but gonorrhœa and soft sore are comparatively uncommon. From January 1st, till August 31st, 1911, 439 persons attended the Civil Hospital here: of these 144 were suffering from venereal disease, giving a percentage of 33. A great many of the cases of syphilis are of a severe nature, largely because the people put off coming to hospital till the disease has taken a firm hold, and also because some of them go for

treatment to Lamas. It is only when the latter have experimented and failed that the hospital is resorted to. It is a curious fact that the stress of the disease seems largely to fall on the bones and joints. The following cases illustrate this:—

(1) *S. Ch. M.*—Admitted on August 19th, 1911, complaining of inability to bend his right elbow. He had been attending hospital last December and January for syphilis, but had left before he had derived much benefit under chloroform; adhesions in the elbow joint were broken down and the patient has now very good movement in that joint.

(2) *C. Ch. M.*—A similar case to the above. Patient had never been under treatment for syphilis. He was quite unable to bend his elbow and it was evident that very dense adhesions had formed. The patient is still under treatment.

(3) *P. T. F.*—Admitted late one night complaining of great pain over the heart and swelling of the right arm. Under palliative treatment she passed a fairly good night: next day on examination she proved to be a well-marked case of syphilis. The swelling subsided in a few days and she has now greatly improved, though transient swellings occurred in the left elbow and right knee joints.

Difficulties in treatment.—Apart from the fact that those suffering from syphilis tend to put off coming to hospital till very late, there is one disease prevalent in Gyantse which has a very important bearing on treatment. That is scurvy. It is the exception to have a patient in hospital whose gums are not spongy; many too suffer from hæmorrhages chiefly from the nose.

At first all cases of syphilis here were treated by mercurial inunction, but it was found that almost immediately the patients' mouths got into a very bad condition for the reason mentioned above. Much more satisfactory results have been given by the intramuscular injection of ten minims of mercurial cream.

The weekly interval which elapses between each injection is utilised in getting the mouth into as clean a condition as possible.

I have had the opportunity of giving "*Salvarsan*" to two patients; both doses were given intramuscularly and the results have been extraordinarily good.

1. *D. T. T. M.*—Admitted on 23rd August 1911 suffering from a very large ulcer completely surrounding the penis; there was also a deep ulcer below and to the right of the umbilicus. He suffered from sores in the mouth and there was a pustular rash on the backs of the thighs. *Salvarsan* was administered a week after admission, '6 grm. being injected into the muscles of the buttock. The patient experienced very little discomfort after the injection. The sores