A CHEAP SANITARY TRAP.

By Lieut.-Colonel J. O. CHUKERButi,
Indian Medical Service.

A.—Requisites.
(1) A kerosine oil or ghee tin; (2) Five pieces of small tin sheeting; (3) Chopped dry straw; (4) Some powder consisting of sixteen parts of copper sulphate and six parts of lime.

B.—General Description.
(a) Method of Construction.
(1) Cut off the cover on one end of the kerosine oil or ghee tin; this coverless tin is the trap proper.
(2) Solder cornerwise inside the trap a piece of tin sheeting from a quarter of an inch above the top to an inch above the bottom, dividing thus the trap into two triangular equal chambers; this sheeting is the baffle plate.
(3) Cut a semi-circular hole about two inches below the upper border of one side of a chamber, solder a trough along the margin of the hole,
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strengthen the free end of the trough by a cross-bar; this trough is the inlet adjunct.

(4) Solder three inches below the upper border of the trap proper and along the margins of the perforated semi-circular areas two larger troughs with perforated outlets on either side of the other chamber; these are the outlet adjuncts.

(5) Inside the chamber on the side of the outlets and on either margin of each perforated area, make linear sockets with strips of tin to hold tightly, when pressed down, a sheet of tin with a handle; this sheet is the sluice plate.

(b) Method of Using.

(1) Put the trap into a “kucha” or “paca” pit at the end of the drain.

(2) Adjust the inlet under a ledge fitted at the end of the drain.

(3) Keep the trap in position by weights, cementing or fasteners.

(4) Close the inner end of one outlet adjunct by adjusting the sluice plate.

(5) Fill the other outlet adjunct with chopped dry straw (“Bhusa”) mixed thoroughly with the lime plus copper sulphate powder, in the proportion of a drachm of the powder to one ounce of straw.

(6) Run in the sullage by the inlet adjunct into the trap proper.

(7) Let the effluent run out into absorptive gardens or herring bone systems.

(8) Alternate the direction of the effluent by one or the other outlet adjuncts into different absorptive areas whenever desired to facilitate quick evaporation and absorption.

(9) Clean the debris from the bottom of the trap proper whenever required, otherwise the passage under the baffle plate will get blocked and the trap will be put out of action.

(10) Put fresh chopped straw whenever necessary into the outlet adjuncts otherwise filtration and precipitation will fail sooner or later.

(c) Processes Involved.

(1) Separation of fat and other floating matter by the baffle plate in the inlet chamber.

(2) Sedimentation of coarse and heavy particles in the inlet chamber and of fine particles in the outlet chamber.

(3) Filtration (coarse) through the medium of chopped straw in the outlet adjuncts.

(4) Precipitation of soap and greasy matter in colloidal suspension by lime plus copper sulphate powder in the outlet adjuncts.

(5) Alternation of the direction of the effluent through outlets by means of the adjustable sluice plate.
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C.—Advantages.

1. Absorption of the effluent in the fruit and flower gardens is facilitated by absence of clogging.

2. There is a retardation of growth of organisms and of some mosquito larvae by the alkaline property of the effluent.

3. There are no unpleasant malodorous effluvia of decomposed fat, food particles and other organic matter in the effluent channels.

4. Tins can be obtained at public expense for sanitary purposes and construction charges do not exceed six or seven annas per trap.

5. In Indian Cantonments like Ferozepore and Multan where soakage pits are not advisable on account of the sources of drinking water supply being shallow, open, or tube wells, not more than thirty feet deep, and where the level of sub-soil water is very high—six feet in certain localities—and consequently waste water has to be disposed of in absorption areas, this trap is considered useful. It has been in use for some time in Ferozepore, Multan and Jullundur Cantonments and has proved satisfactory.

6. The size of the trap can be altered and materials for construction selected to suit the need for disposal of different amounts of sullage in British and Indian lines and according to the size of the effluent drain.

A Few Historical Facts on Antisepsis in Obstetrics and Gynaecology During the Last Century.

By Major C. E. Eccles,
Royal Army Medical Corps.

Before the advent of Listerism, it was said that the usual death-rate from child-bed fever in Lying-in Hospitals was from 2 to 10 per cent, and in so called "epidemics" this limit was often exceeded. In the women who survived, feverless child-beds were comparatively low.

Under the antiseptic methods adopted at this time, the mortality from sepsis in well managed institutions was less than 1 in 200, and the morbidity did not exceed 10 per cent.

Norris and Dickinson, writing in 1897, gave the following examples to show what was possible under the present perfected system of aseptic obstetrics:

Professors Groth, Netzel and Sonders, of Stockholm, reported 17,862 births under their direction, with one death in 344 cases infected.

In Copenhagen, in 1,218 hospital deliveries, the death-rate was 0.24 per cent.

The Boston Lying-in Hospital, in 1891, recorded 550 deliveries with no death-rate from septic causes.