August 7, 1915

Amongst the diseases spread by flies are enteric fever, summer diarrhœa of infants, diarrhœal sickness, cholera, dysentery, anthrax and malignant pustule, tuberculosis, and probably ophthalmia, gangrene, and plague. Their connection with the spread of smallpox, diphtheria, and leprosy is also suspected. Clearly, therefore, those waging war upon them are rendering valuable service to the human race.

PREVENTATIVE AND REMEDIAL MEASURES.

Of all control measures the prevention of breeding is, we are told, by far the most im-portant. "Malarial and yellow fever are eradicated by the interference with the rearing places of the mosquito. Similarly the house fly could be controlled, and its power as a disease carrier nullified. As has been said, the chief rearing place is horse manure. An ideal method would be to prevent the access of flies to all such refuse, but in many cases this is impracticable. Horse manure should be treated with some substance which would destroy the larvæ or prevent the eggs from hatching. It has been observed that flies prefer to ovipost in the warm excreta, and on this account eggs are often deposited in the manure before it is thrown into the storage receptacle.

"No expedient which does not aim at the actual and positive destruction of the fly larvæ is of any real value. Even the slaying of the millions of adult flies cannot have the beneficial effect that must inevitably follow the destruction of the larvæ, for the reason that the progeny of any single female fly killed, if it has had an opportunity of depositing its eggs, may still total many millions during the summer season."

OVICIDAL AND LARVICIDAL TREATMENT.

The stern necessity of dealing with the destruction of the fly since its recognition as a disease carrier induced the United States Bureau of Entomology to undertake, in conjunction with the Bureaux of Chemistry and Plant Industry, investigations for the purpose of finding a chemical that would destroy this pest in its principal breeding place, namely, horse manure, without reducing the fertilising value of the manure. Twenty-four different chemicals were tried in various concentrations, but only seven showed decided larvicidal action in the strengths used, and the only ones which came under the "satisfactory" definition are borax and calcined colemanite, the latter being crude calcium borate, as mined in California, after subjection to a high temperature. These should be applied by means of a flour dredger, in definite proportions, immediately the fresh manure is removed from the stable, and particular attention should be paid to the outer edges of the pile.

There is an interesting chapter on educational work, and on research work in the United States of America, and the concluding chapter describes a British experiment. A very interesting illustration represents a fly trap at the end of (1) the tenth and (2) the eleventh days, placed over untreated manure. In the latter case 932 flies were taken out after chloroforming.

No. 3 shows a fly trap placed over manure treated with borax or calcined colemanite at the end of eleven days. Only one very sluggish fly appeared.

The results " prove the tremendous influence exerted by both borax and calcined colemanite as larvicidal agents."

HOW SHOULD AN OPERATING SURGEON BE GOWNED ?

Dr. Francis Reder asks the above question, and proceeds to answer it in the American Journal of Surgery.

"What is the proper garb for a surgeon? Let us enumerate the necessary parts for his attire. For his head, a piece of gauze not less than six thicknesses, with a width of about four inches, long enough to encircle the head. This gauze bandage covers the forehead, and should reach the eyebrows. A similar gauze bandage is applied in a manner to cover chin, mouth (and nose, if so desired), and the cheeks; it is secured on top of the head. Upon the head is then placed an operating-room cap. This covers up the hair. The dressing is not as hot as it appears. It is comfortable. The gauze bandages are thick enough to absorb all perspiration, so that there is no need of any wiping; the face feels quite dry. This face dressing is best applied by the surgeon himself, as he can better adjust it to his comfort than a nurse. For the body, a medium heavy shirt of a cotton fabric (a basket weave is admirably suited to absorb perspiration), duck trousers and duck shoes (tennis shoes with white rubber soles), constitute an attire that is beyond criticism. These articles of dress, excepting the shoes, should be surgically clean, i.e., next to being sterile. The clothes are worn next to the skin, all other clothing (undergarments) having been removed.

I.



