health authorities immediately after notification by the attending physician. But in isolated localities, or when delay in obtaining sanitary relief is unavoidable, the physician and the nurse must direct the members of the household in applying the prescribed regulations.

Additional precautions in sulphur fumigation, recommended by the Health Authorities in charge of sanitation in New Orleans during the present epidemic :--

"Remove all ornaments of metal, such as brass, copper, silver, and gilt, from the room that is to be fumigated. All objects of a metallic nature, which cannot be removed, can be protected by covering the objects tightly with paper, or with a thin coating of vaseline applied with a brush.

"Remove from the room to be fumigated all fabric material after thoroughly shaking. Open all drawers and doors of furniture and closets.

"The room should be closed and made as tight as possible by stopping all openings in chimney, floor, walls, keyholes, and cracks near windows and doors.

"Crevices can be closed by pasting strips of paper (old newspapers) over them with a paste made of flour.

"The sulphur should be placed in an iron pot, flat skillet preferred, and this placed on bricks in a tub or other convenient water receptacle with about an inch of water in the bottom. This is a precaution which must be taken to guard against accidents, as the sulphur is liable to boil over and set fire to the house.

"The sulphur is readily ignited by sprinkling alcohol over it and lighting it.

"The apartment should be kept closed for two hours, and then opened up and well ventilated.

"NOTE.—To find the cubic contents of the room, multiply the length of the room by the width, and this total by the height, and to find the amount of sulphur necessary to fumigate the room divide the cubic contents by 500, and the result will be the amount of sulphur required in pounds.

"Take, for example, a room 15 ft. long, 10 ft. wide, and 10 ft. high, we would multiply  $15 \times 10 \times 10$ , equals 1,500 cubic feet. Divide this by 500, and you will have the amount of sulphur required, viz., 3 lb."

(D) Kerosene Oil to destroy the larvæ of the mosquitoes in cisterns, gutters, pools, and other water surfaces where the eggs of the mosquitoes are deposited and develop into wrigglers

The following facts bearing on mosquito destruction recommended by the Board of Public Health and Marine Hospital Service in the circular of July 31st, 1905, are of special value in suggesting the proper use of coal oil as a mosquito destroyer in infected Io alities.

FACTS BEARING ON MOSQUITO DESTRUCTION.

"1. Mosquitoes live in the vicinity in which they breed. They do not often fly a long distance. "2. Mosquitoes breed only in water—usually in artificial collections of fresh water.

"3. The young mosquito, or wriggler, lives in water at least seven to twelve days.

"4. Although the wrigglers live in water, they must come frequently to the surface to breathe.

"5. Coal-oil on the surface of the water prevents the wrigglers from breeding.

"6. Destroy the breeding places and you will destroy the mosquitoes.

"7. Empty the water from all tubs, buckets, cans, flowerpots, vases, &c., once every forty eight hours.

"8. Fill or drain all pools, ditches, unfilled postholes, and the like.

" 9. Change regularly every day all water needed in chicken-coops, kennels, &c.

"10. Treat with oil all standing water which cannot be screened or drained (1 oz. of oil will cover 15 square feet of surface). The oil does not affect the water for use if the water is drawn from below.

"11. Where oil is applied to standing water it must be distributed evenly over the surface.

"12. Put fine wire netting (eighteen meshes to the square inch) over cisterns, wells, and tanks of water in everyday use.

"13. Places in which it is undesirable to put oil, such as watering-troughs for stock, lily ponds, and so forth, can be kept free from wrigglers by putting in goldfish or minnows.

"14. Clean away all weeds, grass, and bushes about ditches, ponds, and other possible breeding places, since these afford a hiding place for the mosquitoes.

"15. Clean up vacant lots and brekyards of all cans, tins, bottles, and rubbish in which water may collect and stagnate.

"16 First do away with, or treat, all places where mosquitoes are known to breed, and then begin to work on places where they might breed.

"17. Inspect and treat with coal oil gutters, culverts, ditches, manholes, catch basins, &c., along the roadside. Manhole covers should be screened." (E) The Aromatic Essential Oils and other sub-

stances which are repulsive to mosquitoes:

Such as citronelle, lavender, pennyroyal, menthol, camphor, eucalyptus, and thymol, may be used, pure or mixed with alcohol or glymol, to protect the exposed surfaces of the skin of the attendants in the sick-room to aid in keeping off mosquitoes.

(F) The Hand Palmetto Fan, and the Electric Fan whenever this is available.

The electric fan is not only most valuable as a means of cooling the hot summer atmosphere of the usual sickroom in yellow-fever districts, but is also a very effective destroyer of mosquitoes. In all cities where electric plants exist the electric fan is not to be regarded as a luxury, but as a necessity.\*

<sup>\*</sup> See communication by Surgeon W. F. Arnold, United States Navy, on "The Mosquito and the Electric Fan," in *American Medicine*, August 12th, 1905.



