

cases, and in many cases three times. The results were uniform. I am therefore of the opinion that this apparatus can be relied upon, after an exposure of from ten to fifteen minutes, to destroy thin layers of the commoner, non-sporulating, pathogenic organisms.

Very truly yours,

THOS. B. CARPENTER.

EXPERIMENTS, SERIES No. 2.

This series was primarily conducted with a view to ascertain if school clothing of children or a suit worn by nurse or doctor into the presence of contagion might be thoroughly sterilized by placing them in a wardrobe and leaving them exposed over night to the fumigation of this little lamp.

Satisfactory results reported by Dr. Carpenter suggested the possibility of the Low disinfector being installed for purposes of instrument, ligature, and napkin fumigation without removal from their various receptacles in the modern dental instrument cabinet.

On this series Dr. Carpenter reports:

BUFFALO, N. Y., July 15, 1899.

Dr. F. W. Low, Buffalo, N. Y.

Dear Doctor.—I herewith report results of experimental work upon the Low formaldehyd lamp.

The material used in each experiment consisted of cotton threads thoroughly soaked in bouillon cultures of the following organisms: *Staphylococcus pyogenes aureus*, *Bacillus pyocyaneus*, *Bacillus diphtheriæ*, *Bacillus typhi abdominalis*, and *Bacillus anthracis* (sporulating). The threads were thoroughly dried before exposure to the action of the lamp. The disinfecting chamber consisted of an ordinary tight closet, with a capacity of 15.8 cubic feet. In all tests the lamp was placed upon the floor of the closet and allowed to burn for twelve hours. A wire combustion cone was used. After removal of the lamp, ammonia gas was generated in the closet and the threads were allowed to remain for fifteen minutes in the atmosphere. This was done to destroy any possible chemical combination between the organisms and the formaldehyd gas. Four impregnated threads of each organism were used in each test, only two of which were exposed to the gas. The other two were used for control. The test threads were exposed in open Petri dishes. In each case the growths were examined to determine the presence of the test organism.

Experiment 1.—The dishes were placed on the floor of the