

No. 863,933.

PATENTED AUG. 20, 1907.

J. B. McLAREN.
FUMIGATOR.

APPLICATION FILED DEC. 17, 1904.

Fig. 1.

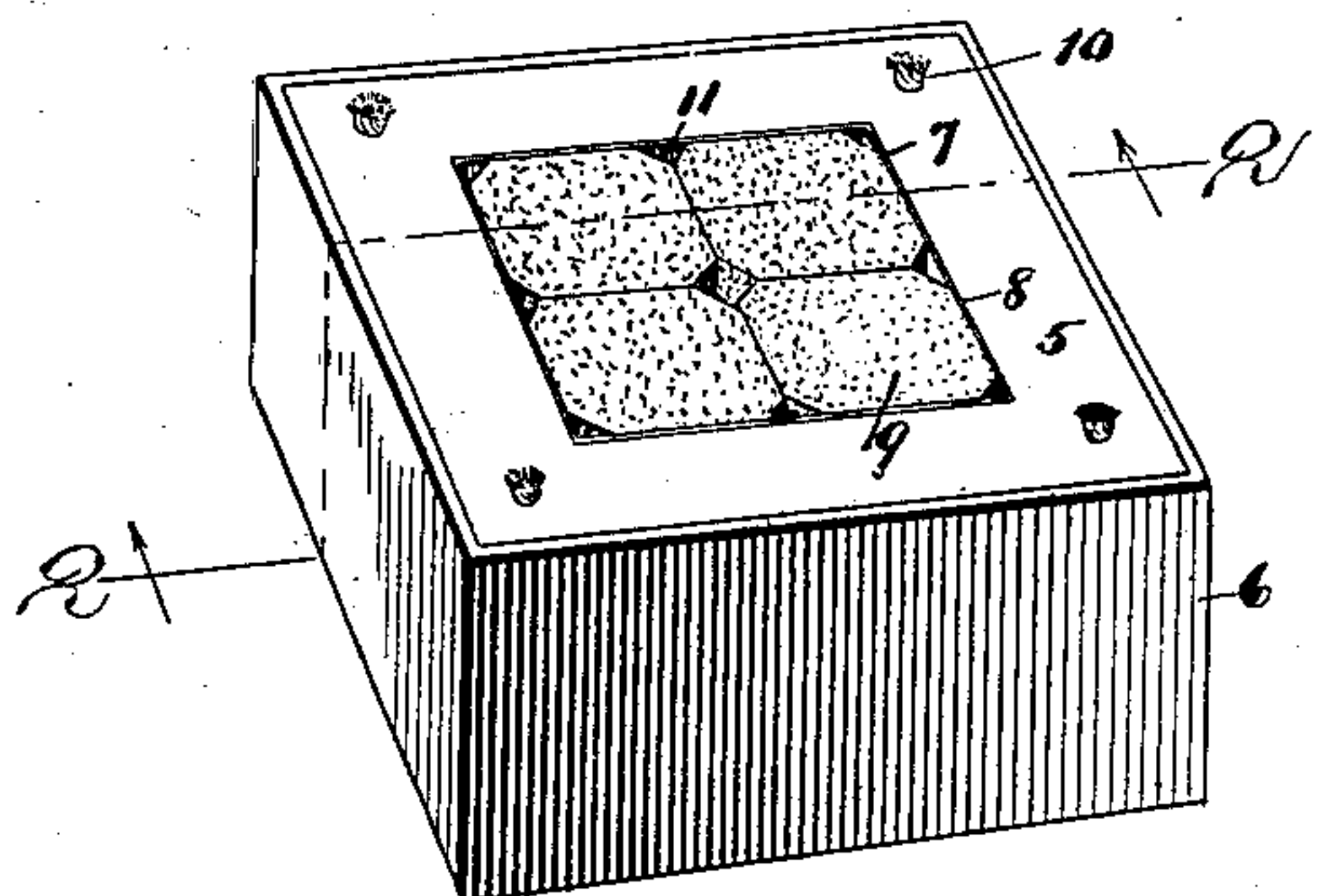
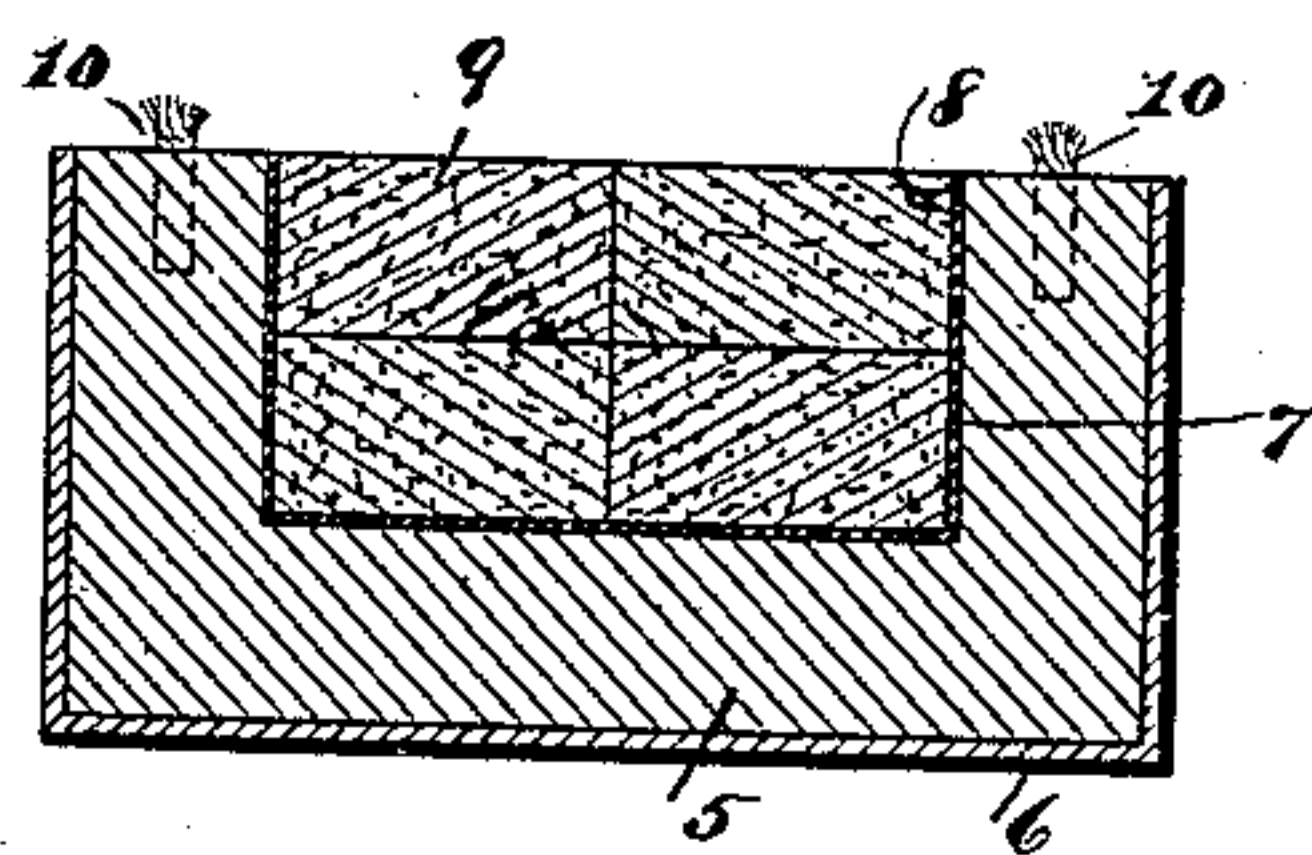


Fig. 2.



Witnesses:

H. S. Gaither
M. A. Kiddie

Inventor

John B. McLaren

By *Wm. B. Bell*
Attorney

UNITED STATES PATENT OFFICE.

JOHN B. McLAREN, OF CHICAGO, ILLINOIS, ASSIGNOR TO BAUER & BLACK, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

FUMIGATOR.

No. 863,933.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed December 17, 1904. Serial No. 237,254.

To all whom it may concern:

Be it known that I, JOHN B. McLAREN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Fumigators, of which the following is a specification.

The object of this invention is to obtain in a single fumigator the germicidal properties of sulfur and formaldehyde by making the fumigator in part of sulfur and in part of paraformaldehyde and so constructing it that the heat produced by the burning sulfur will reconvert the paraformaldehyde into formaldehyde gas at the same time that the sulfur is being converted into sulfurous acid gas.

In the accompanying drawings I have illustrated a simple form of my invention and referring thereto Figure 1 is a perspective view. Fig. 2 is a sectional view on the line 2—2 of Fig. 1.

The fumigator comprises a cake 5 of sulfur inclosed within a box 6 and having a central cavity 7 to receive the box 8 containing the paraformaldehyde tablets 9. The sulfur may be cast in the box 6, which is preferably made of pasteboard sufficiently substantial to protect the device in shipping and prevent the sulfur from running while burning. At each corner of the sulfur cake I provide a wick 10 to facilitate igniting the fumigator. The sulfur cake may be cast on the box 8 or the latter may be inserted in a cavity formed in the cake. This box is preferably made of thin pasteboard which will permit the passage of heat from the sulfur to the paraformaldehyde but will prevent the sulfur and paraformaldehyde from mixing.

The paraformaldehyde is preferably made in the form of tablets, of any suitable size and number and are constructed to leave gas circulating spaces 11 between

them when they are arranged in place in the box 8. In the form illustrated in the drawings the tablets are made of rectangular shape with their corners cut away so as to provide a gas circulating space at each corner of each tablet.

In the construction of the fumigator the proper proportions of sulfur and paraformaldehyde are provided so that each is sufficient to fumigate a room of a given size. The sulfur when ignited burns over the entire surface and generates sufficient heat to reconvert the paraformaldehyde into formaldehyde gas while it is itself converted into sulfurous acid gas. In this way I obtain from the one fumigator and at the same time the germicidal effect of the formaldehyde gas and the sulfurous acid gas, each of which is germicidal to certain organisms only. By thus combining these two germicidal agencies I provide a fumigator which is universal in its germ destroying properties.

The fumigator may be made in various sizes and proportions of parts and it can be likewise made in different shapes as a whole and as to any of its parts, without departing from the invention.

Without limiting myself to the exact construction and arrangement of parts herein shown and described, what I claim and desire to secure by Letters Patent is:—

A fumigator consisting of a cake of sulfur and a charge of paraformaldehyde, said cake having a central cavity opening at the top thereof, a pasteboard box seated in said cavity and containing said paraformaldehyde charge, and a pasteboard box inclosing the sides and bottom of the sulfur cake, substantially as and for the purpose described.

JOHN B. McLAREN.

Witnesses:

A. BAUER,
W. J. McDONALD.