

(No Model.)

2 Sheets—Sheet 1.

C. E. PARKER & S. W. WILLIAMS.  
SULFUR CANDLE AND PROCESS OF MAKING SAME.

No. 527,881.

Patented Oct. 23, 1894.

Fig. 1.

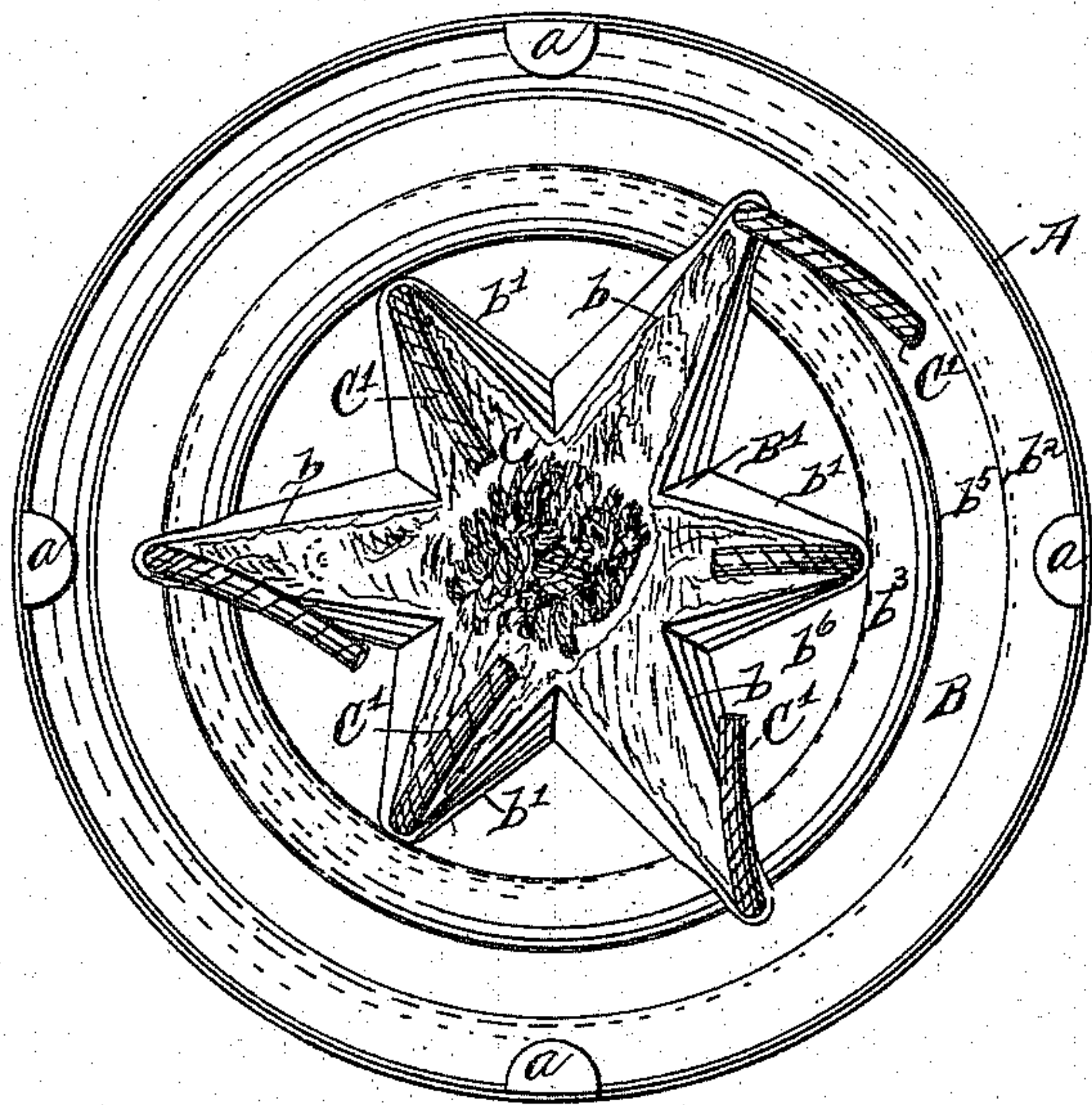
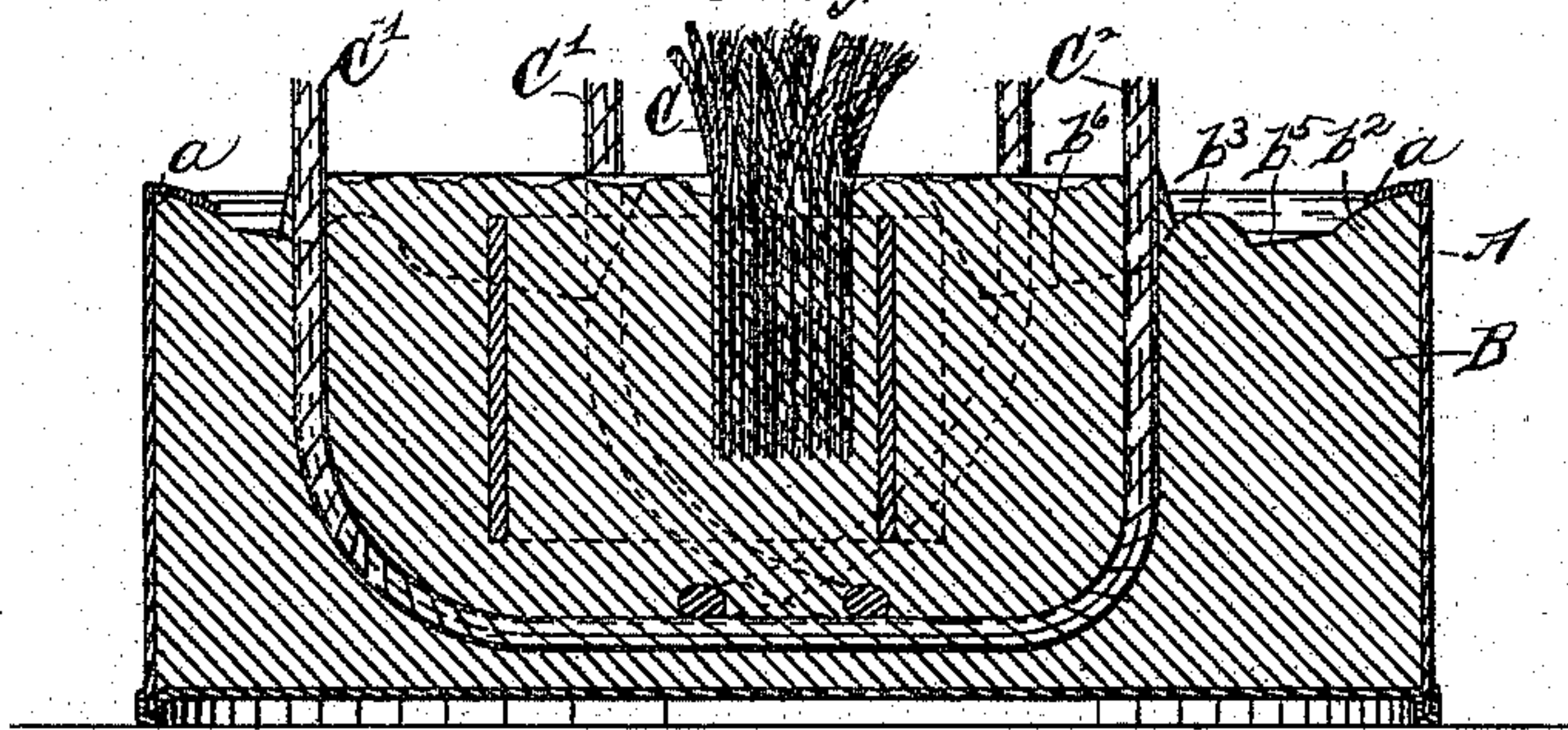


Fig. 2.



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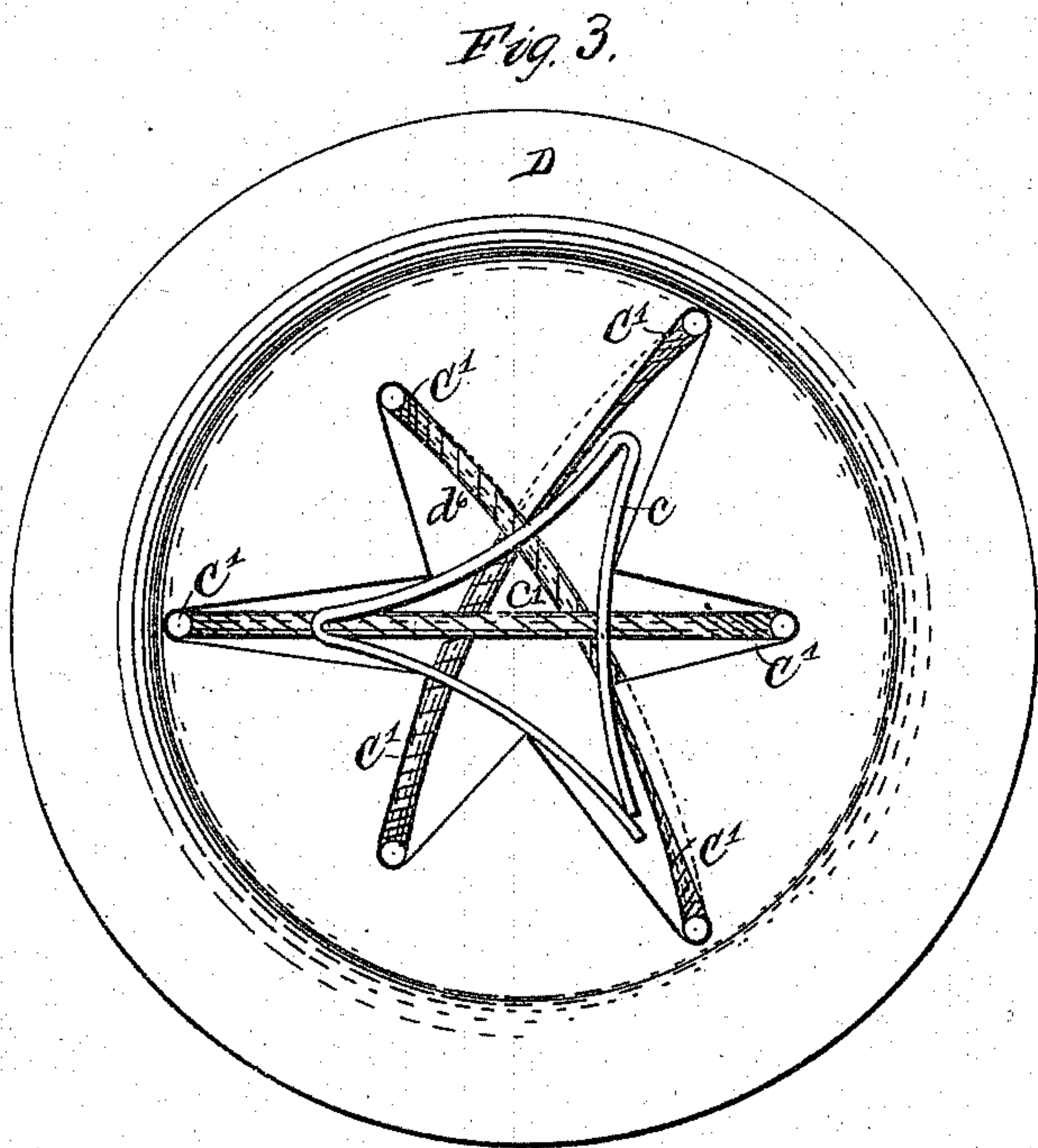
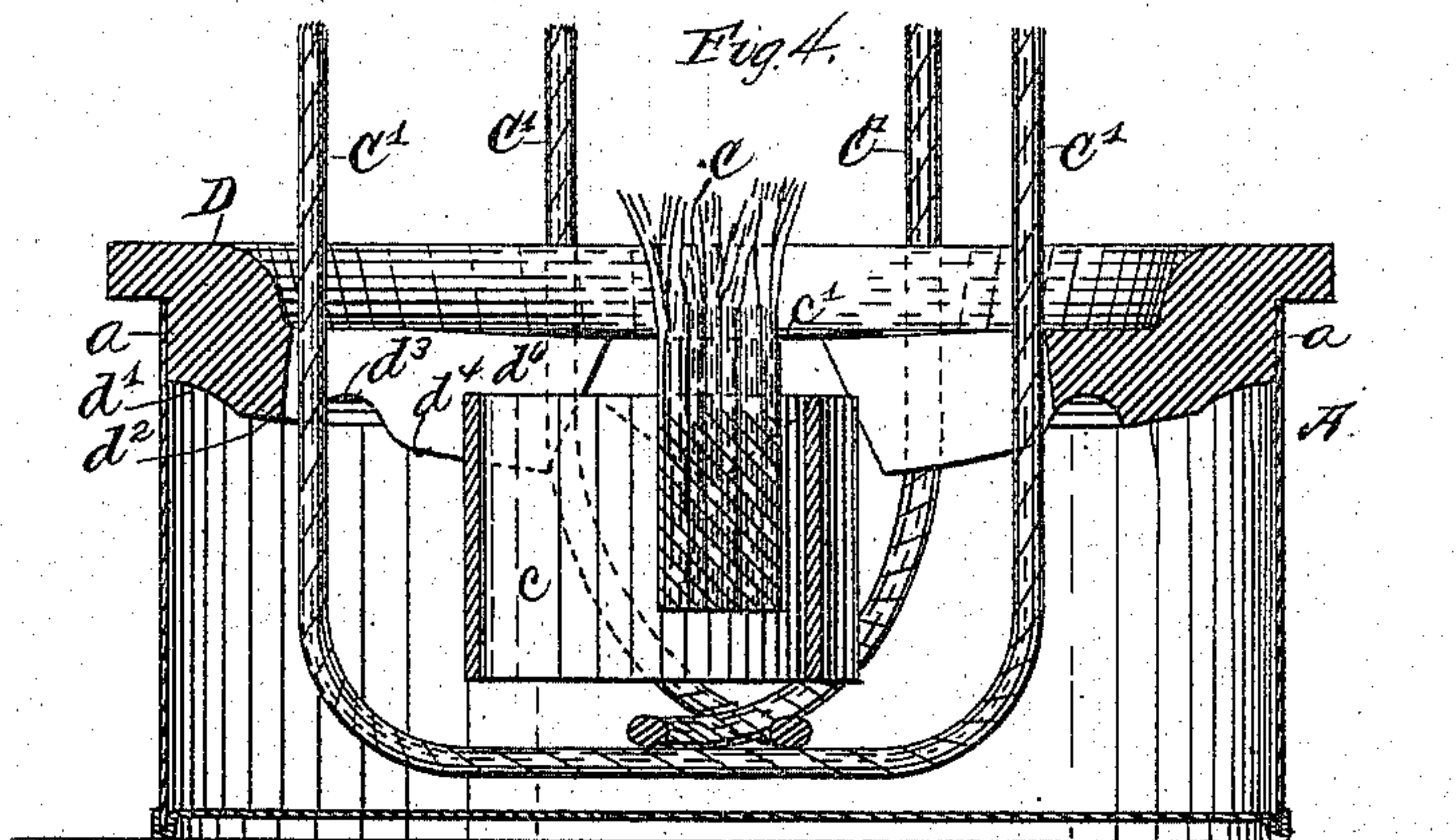
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# UNITED STATES PATENT OFFICE.

CHARLES E. PARKER AND SEWARD W. WILLIAMS, OF EAST ORANGE, NEW JERSEY, ASSIGNORS TO THE SEABURY & JOHNSON, OF NEW YORK, N. Y.

## SULFUR CANDLE AND PROCESS OF MAKING SAME.

SPECIFICATION forming part of Letters Patent No. 527,881, dated October 23, 1894.

Application filed October 5, 1892. Serial No. 447,928. (No specimens.)

*To all whom it may concern.*

Be it known that we, CHARLES E. PARKER and SEWARD W. WILLIAMS, both of East Orange, county of Essex, and State of New Jersey, have invented a new and useful Improvement in Disinfecting or Sulfur Candles and in Processes of Making Same, of which the following is a specification.

The invention relates to sulphur candles for disinfecting and the object of the invention is to provide a candle so constructed that a rapid and thorough ignition is insured, and further, to facilitate the manufacture of the same.

We will describe a candle embodying our invention, and then point out the novel features in the claims.

In the accompanying drawings, Figure 1 is a plan view, showing a candle embodying our invention. Fig. 2 is a transverse vertical section thereof. Fig. 3 is a plan view of a mold in position on the case or container. Fig. 4 is a transverse vertical section thereof.

We will first describe the completed candle and then describe the process of making the same.

Referring by letter to the drawings A designates a case or container, here shown as circular in form, and open at the top. This case or container is preferably made of sheet metal and it may be provided on its upper edge with a number of keepers *a* adapted to be turned over on the disinfecting material, as shown, to retain it in place.

B designates the disinfecting material, which may be sulphur or of compounds containing sulphur, or analogous material. The disinfecting material has a central raised portion *B'*, here shown as substantially star-shaped, or having the radiating points *b b'*. The points *b* are longer than the points *b'* and the long and short points alternate. The upper surface has raised annular portions *b<sup>2</sup> b<sup>3</sup>* forming troughs or depressions *b<sup>5</sup> b<sup>6</sup>*. The raised portion *b<sup>2</sup>* is at the outer edge of the disinfecting material, and the raised portion *b<sup>3</sup>* connects with the outer ends of the long points *b* and connects with the outer ends of the short points *b'*. The upper surfaces of the points *b b'* are preferably roughened or left in a rough state, as the slight projections

ignite rapidly and spread the flame. This construction or configuration of the top surface insures the even distribution or flow of the melted and burning disinfecting material, or, in other words, the raised portions are so arranged that the flow of burning material will be toward the center from certain of the igniters and toward the circumference from the other igniters.

C designates a central igniter consisting of a tuft of combustible material, such as wicking, and C' shows the outer igniters consisting of combustible cord or wicking.

The igniter C is secured in the center of the disinfecting material, but does not reach to the bottom thereof. The igniters C' are here shown as consisting of three cords each one being extended across the bottom of the disinfecting material and having the ends extended up through points *b b'*.

We will now describe the process of making the candle, referring particularly to Figs. 3 and 4.

D designates a mold adapted to rest on the upper edge of the case or container, with the fasteners *a* bearing against its periphery. The mold has depressions and raised portions to form the depressions and raised portions of the disinfecting material, that is, it has an annular depression *d'* to form the raised portion *b<sup>2</sup>*; the raised portion *d<sup>2</sup>* to form the depression *b<sup>5</sup>*; the depression *d<sup>3</sup>* to form the raised portion *b<sup>3</sup>*; the raised portion *d<sup>4</sup>* to form the depression *b<sup>6</sup>*; and the depression *d<sup>6</sup>* to form the star-shaped portion. The depressions *d<sup>6</sup>* open outward through the top of the mold block, and the ends of the igniting cords C' are extended through the opening at the points to hold the cords in position while pouring the melted sulphur or similar material through the opening in the mold.

In operation the mold is placed in position on the case or container A. The ends of the igniting cords are inserted through the opening as shown, and then a piece of combustible paper *c* is inserted and sustained by the mold. This piece of paper *c* is bent substantially triangular shaped and stands vertically in the case or container. The paper serves materially to spread the flame and keep the material ignited. The melted material B is



poured through the opening *c'* within the fold of the paper *c* and the pouring is continued until the material B reaches the top surface of the mold. While the material B is in a  
5 semi-fluid or soft condition the tuft of igniting material C is forced into place as by this means the tuft C counteracts the contraction of the material B.

We prefer to first prepare the igniter C by  
10 dipping its lower portion in melted disinfecting material and allowing it to become cold, as this will form a solid body to force into the mass within the case A, which will, of course, adhere, to the material on the igniter.

15 We find this method of forming the candle preferable to the method of casting the disinfectant material on the mold and then transferring it to a container A, as by forming it in the mold and directly in the permanent con-  
20 tainer we save a considerable amount of labor and expense and furthermore the material is sure to be snugly fitted within the container.

Having described our invention, what we  
25 claim is—

1. The process of forming a disinfecting candle, consisting in placing a mold on the top of a permanent container while the latter is in an upright position with its open end upward,  
30 supporting igniting material or cords by said mold, pouring melted disinfecting material through an opening in said mold, and allow-

ing it to flow through the latter into the container and then inserting in the mass of disinfecting material a tuft of igniting material, 35 substantially as specified.

2. In a disinfecting candle, the combination with a case or container, of disinfecting material formed with separate circular cavities in its upper surface, and a raised central portion, the latter extending radially outward toward the case or container and terminating in the form of points alternately in said cavities, and wicks passing downwardly through the mass of the disinfecting material at the  
40 end portions of said points, substantially as specified. 45

3. In a disinfecting candle, the combination with a case or container, of disinfecting material formed with raised portions, and wicks  
50 passing downwardly through such raised portions and also through the mass of the disinfecting material, said raised portions being provided with roughened surfaces intermediate of said wicks and the center of the candle, 55 substantially as specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CHARLES E. PARKER.

SEWARD W. WILLIAMS.

Witnesses:

GEO. P. KINGSLEY,

FRANCIS O. HUNT.