

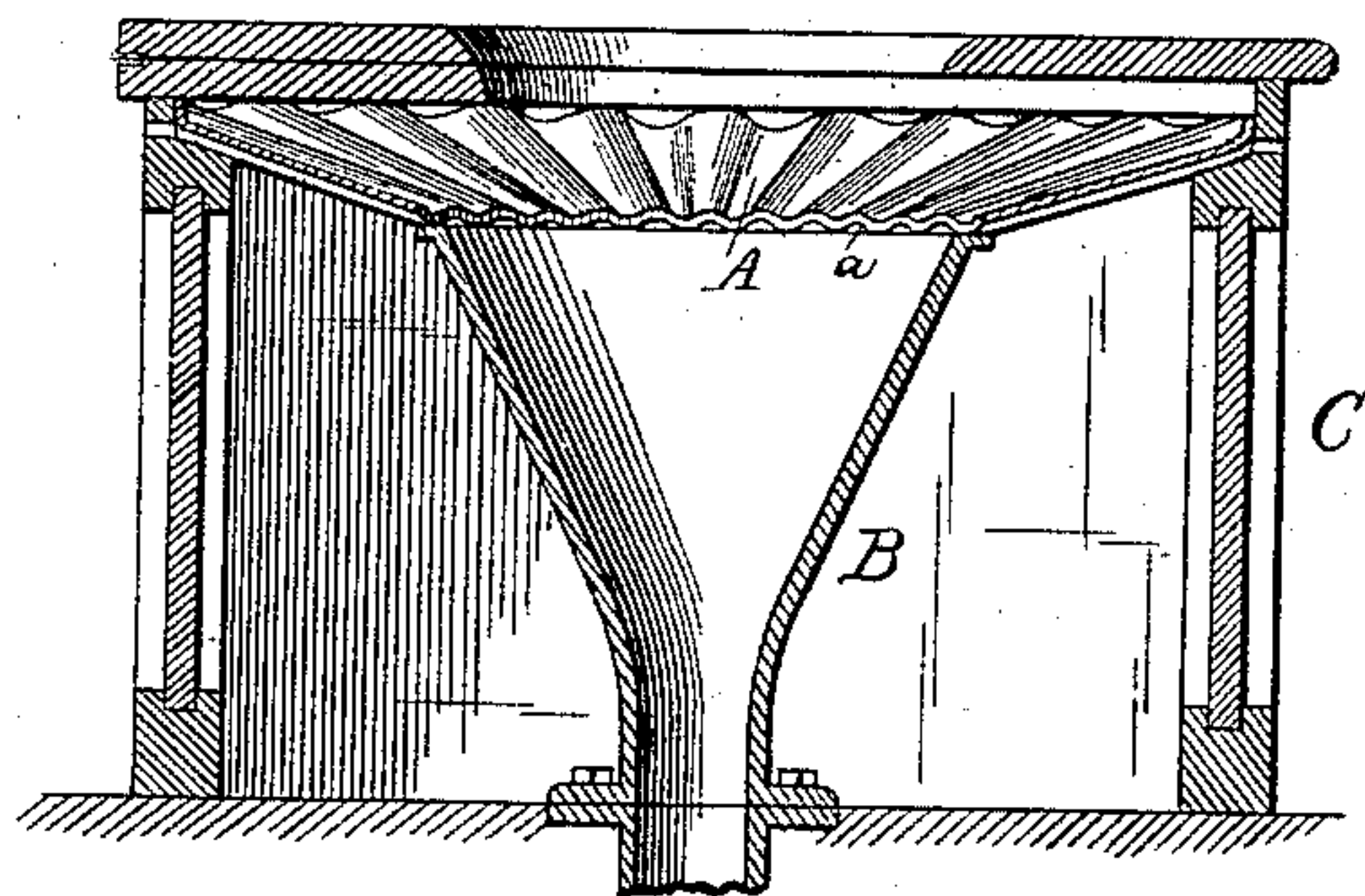
(No Model.)

L. BRANDEIS.  
SHIELD FOR WATER CLOSETS.

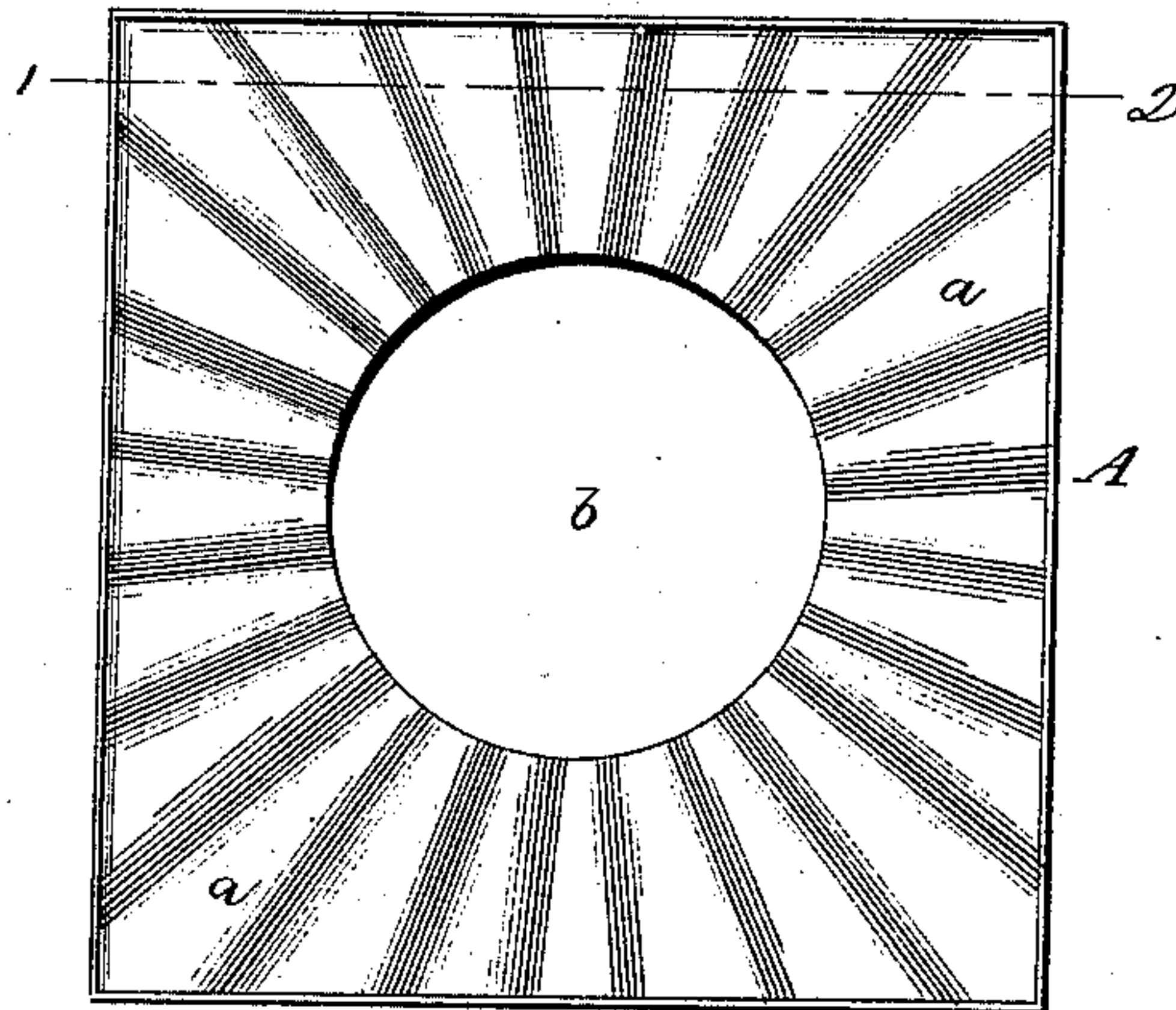
No. 305,141.

Patented Sept. 16, 1884.

*fig. 1.*



*fig. 2.*



*fig. 3.*



Witnesses:  
*John Hinkel*  
*H. E. Farnham.*

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# UNITED STATES PATENT OFFICE.

LEOPOLD BRANDEIS, OF BROOKLYN, NEW YORK, ASSIGNOR TO JULIA  
BRANDEIS, OF SAME PLACE.

## SHIELD FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 305,141, dated September 16, 1884.

Application filed April 11, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, LEOPOLD BRANDEIS, a citizen of the United States, and a resident of the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Shields for Water-Closets, of which the following is a specification.

My invention relates to improvements in protecting-shields or drip-trays for water-closets; and it consists in a shield provided with radial corrugations or channels for collecting the drippings and conveying them to the central opening, while the channels of the under side of the corrugated shield permit a free circulation of air between it and the seat or wood support below, whereby all offensive odors or vapors arising from the closet are carried off and the under side of the shield kept dry and oxidation thereof or rotting of the wood-work below the same prevented.

In the drawings, Figure 1 is a central vertical sectional elevation of a water-closet provided with my improved shield. Fig. 2 is a plan view of the shield, and Fig. 3 is a cross-section of the shield on the line 1 2 of Fig. 2.

In shields of this character heretofore constructed with smooth surfaces, it has been found that small quantities of fluids are apt to be retained on the surface of the shield unless a very great pitch toward the discharge-opening is given thereto, inasmuch as on a perfectly smooth surface, even though slightly inclined, a fluid will spread and be retained thereon until evaporation takes place, thus oxidizing or otherwise injuring the surfaces and giving rise to offensive odors. To overcome these objections I construct the shield A with radial corrugations *a*, or other suitable channels, for collecting and conveying the fluids from all parts of the shield to the central discharge-opening, *b*, therein, above the usual hopper, B, of the closet C. By this construction of the shield the retention of the drippings on its surface is prevented, as the fluids readily collect in the depressed channels and flow freely therein to the discharge-opening, and are thereby prevented from

spreading and standing on the face of the shield, thus overcoming the necessity of giving the surface thereof that steep inclination which would otherwise be unavoidable.

For the purpose of admitting fresh air at all times to the interior of the closet, I also corrugate the shield A on the lower side, forming channels for the free circulation of air between the shield and wood-work supporting it, thus insuring a continuous circulation of pure air below the shield, and preventing the fouling of the closet by the collection of moisture, and also preventing the rotting of the wood-work, which would result if moisture collected between the shield and the wood. The corrugations on the reverse side of the shield also extend to the edge of the central opening therein, so as to conduct thereto any condensed vapors, and so that the air can circulate between the shield and the hopper at the point of discharge into the latter.

The shield A may be made of any suitable material—such as enameled metal, rubber, gutta-percha, glass, or crockery-ware of any kind, papier-maché, or metal and glass combined—and may be pressed into shape between dies or molded in any well-known manner.

It is obvious that instead of having the entire surface of the shield corrugated it may be provided with a less number diverging only from the corners thereof, the sides being sloped to discharge their fluids into the channels by which they are conveyed to the central discharge-opening.

I claim—

The combination, with a closet bowl or hopper, of a shield having corrugations or channels arranged above the bowl or hopper, whereby the drainage and ventilation are facilitated, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEOPOLD BRANDEIS.

Witnesses:

LUDWIG BRANDEIS,  
TIMOTHY GALVIN.