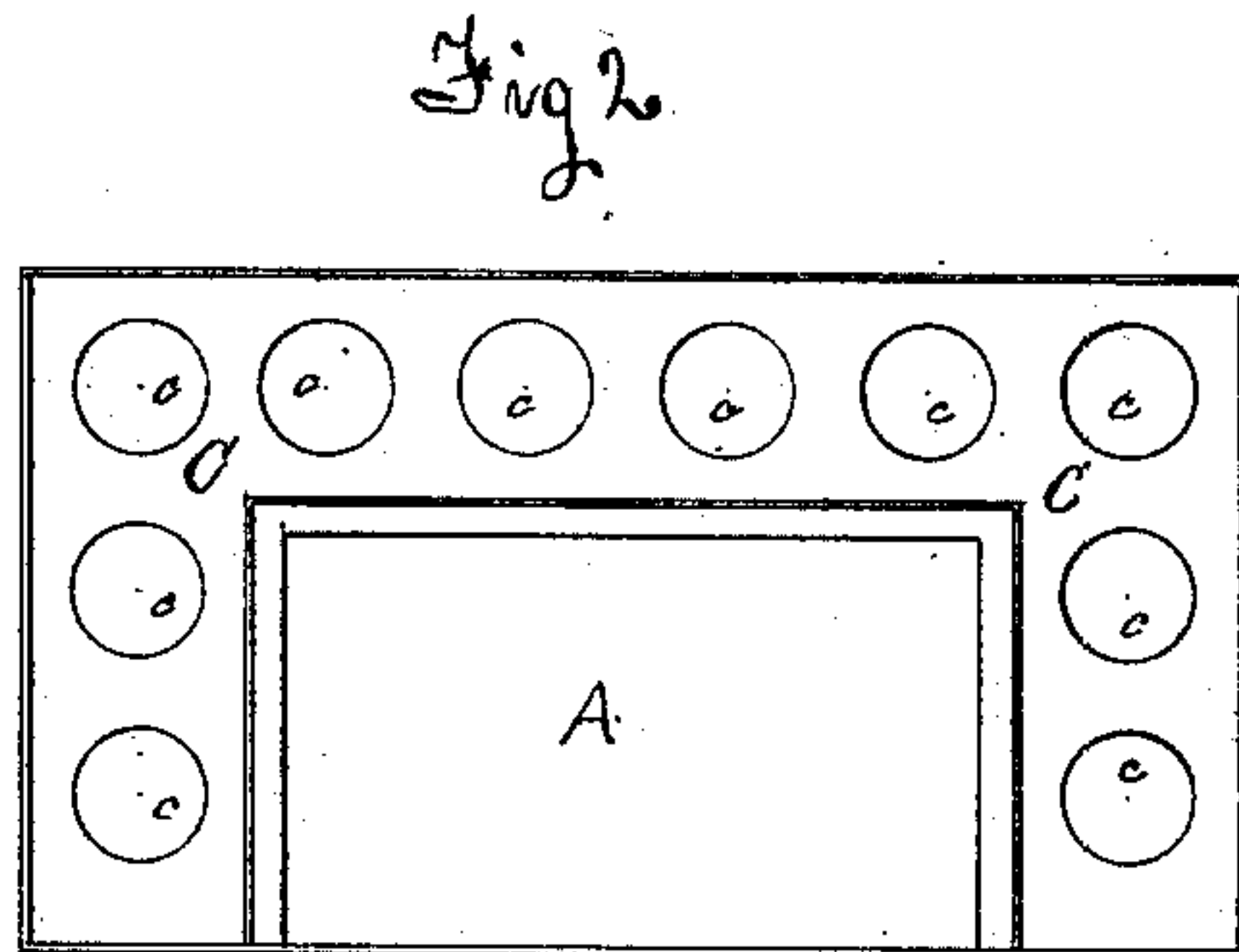
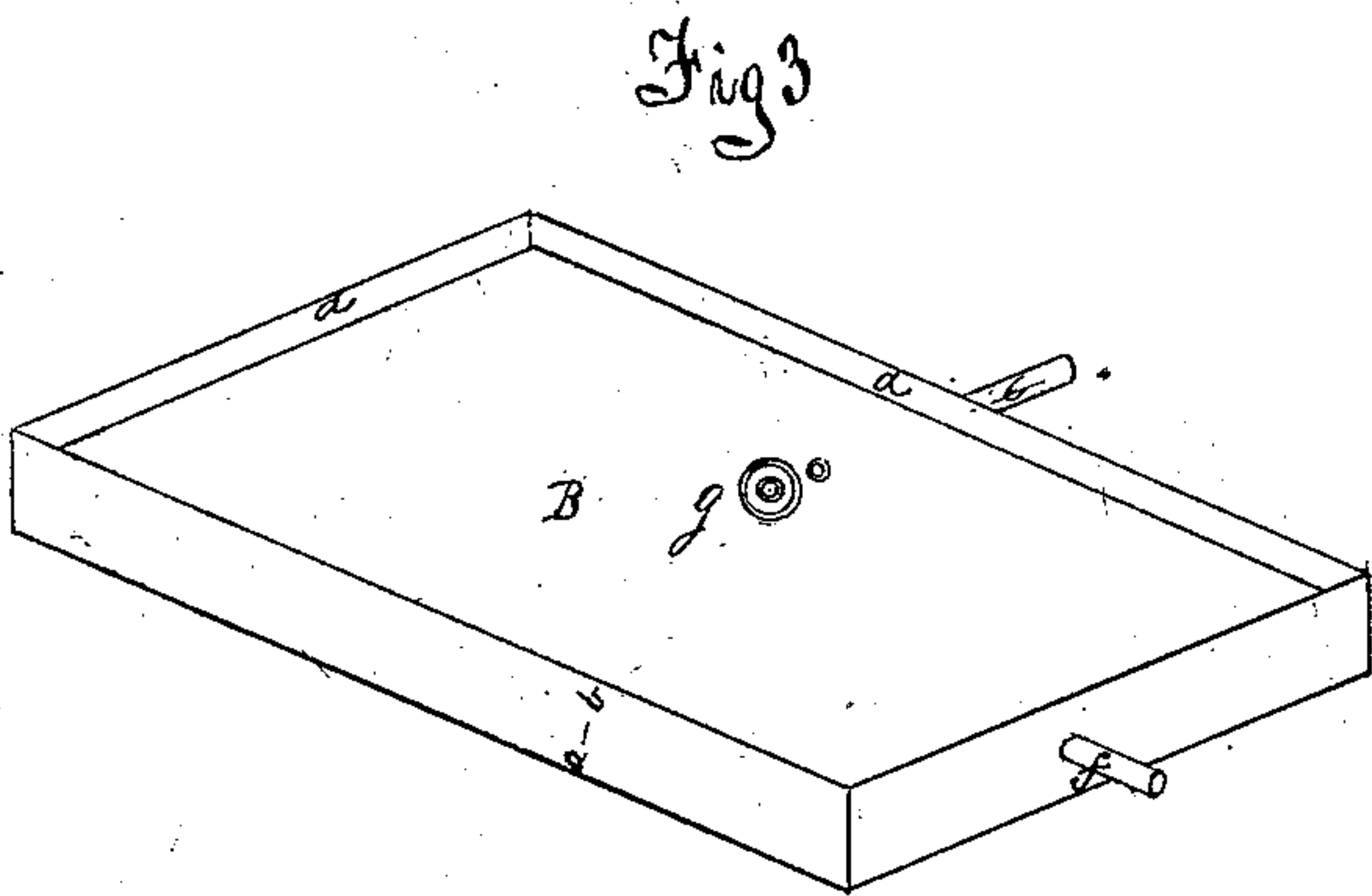
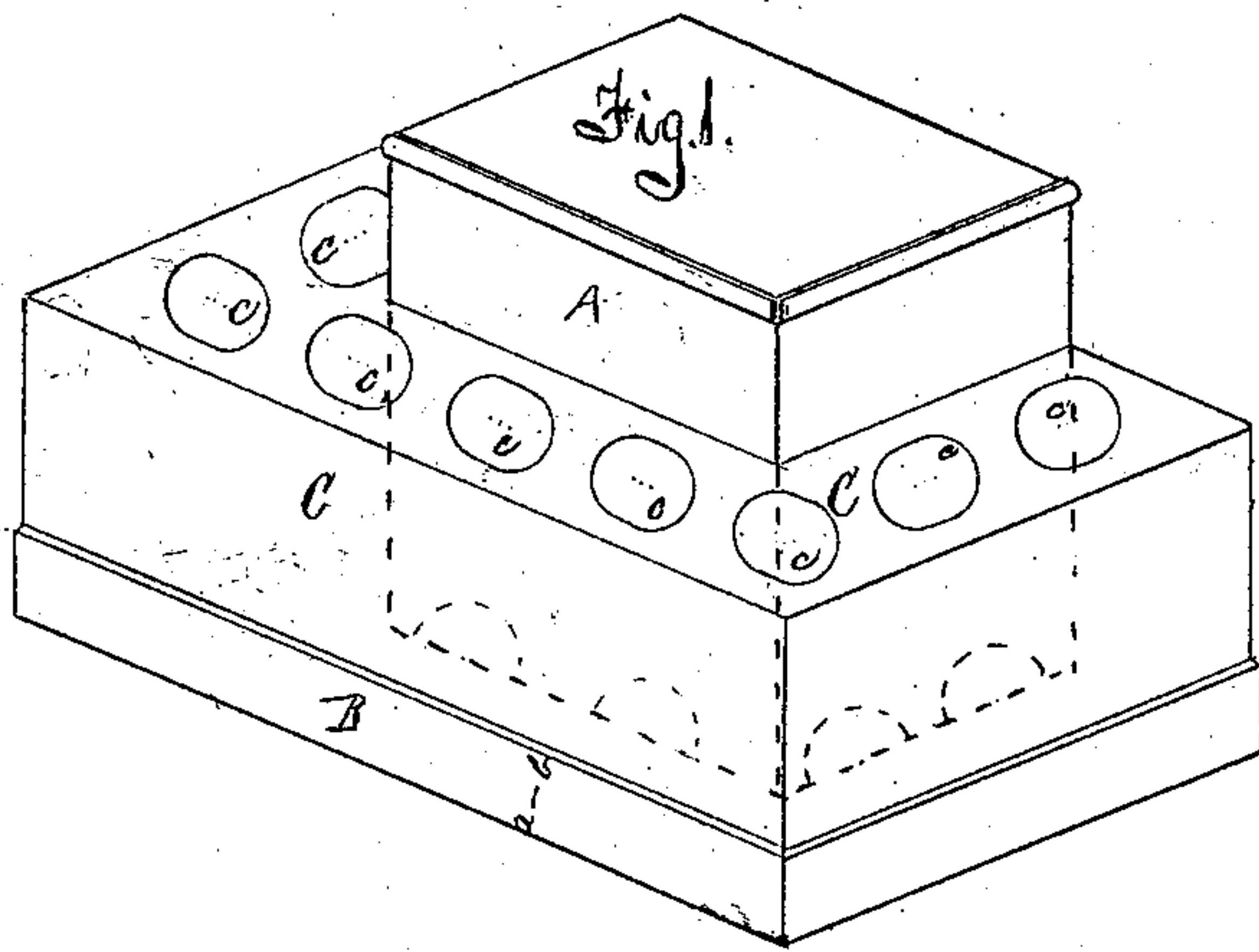


F. ZEITZ.

APPARATUS FOR COOLING ALE, BEER, &c.

No. 103,955.

Patented June 7, 1870.



Witnesses
William J. Cannon
John Yilla

Inventor
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by his Attorney Francis D. Pastorius

United States Patent Office.

FREDERICK ZEITZ, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 103,955, dated June 7, 1870.

IMPROVEMENT IN APPARATUS FOR COOLING ALE, BEER, &c.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FREDERICK ZEITZ, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improved Refrigerator for Cooling Ale, Beer, Wine, and other liquors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My improved refrigerator consists of a bottomless ice-chamber, with double walls, filled in with any non-conductor, of a liquor-cooling pan or box upon which the ice-chamber stands, and of a bottle-cooling rack or holder, which also stands on the said pan, and is arranged around the ice-chamber.

On reference to the accompanying drawing, making part of this specification—

Figure 1 is an elevation in perspective;

Figure 2, a bottom plan view of the ice-chamber and the bottle-cooling rack and holder; and

Figure 3, a perspective view of the liquor-cooling pan.

Similar letters refer to similar parts in the several views.

A is a bottomless chamber, for the reception of ice. It has double walls, which are filled in with any non-conducting substance, and stands on a liquor-cooling pan or box, B, the bottom and top of which are at the proper distance, *a b*, apart to permit the free passage of the contained liquor, and, at the same time, not to present too great a depth of liquor to the action of the ice. In the refrigerators now being made they are about one-half inch apart, though the distance depends on the size and construction.

Standing on the cooling-pan or box is a bottomless bottle-cooling rack, C, which is arranged around three sides of the ice-chamber, and is immovably fixed to it.

It has perforations, *c*, in its top, for the reception of bottles, the bottoms of which rest on the cooling-pan B.

It is not intended that the ice-chamber A should

always stand upon the cooling-pan. It can either rest upon it, and have perforations at its bottom edge, as shown in fig. 1, dotted lines, for the passage of the meltings of the ice, which flow over the top of the cooling-pan B, being confined by its upwardly-projecting edges *d*, or it can be suspended above the pan, by reason of its connection with the bottle-rack C.

The liquor is supplied to and taken from the cooling-pan B by the pipes *f* and *e*, which are provided with suitable cocks for the purpose. The same pipes can also be used for cleaning the pan, by passing water rapidly in one and out the other.

When the refrigerator is in use, it has been found that its usefulness is seriously impaired by air and gases from the liquors getting in and collecting at its top, which objection I overcome by using an air-cock or vent, *g*, which, in this instance, is situated at or about the center of the ice-chamber A.

When the chamber A is filled with ice, which rests on the cooling-chamber B, its coldness is imparted to the liquor contained in the said chamber, the atmosphere of the bottle-rack C is lowered, the meltings being contained in the top of cooling-chamber, surround the bottoms of the bottles, and reduce the temperature of the liquors to a delightful, refreshing state.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The ice-chamber A, cooling-pan B, and the bottle-rack C, when combined and arranged substantially as and for the purpose shown and described.

2. The cooling-pan B, and its vent or air-cock, substantially for the purpose shown and described.

In testimony whereof I hereunto sign my name to this specification in presence of two subscribing witnesses.

FREDERICK ZEITZ.

Witnesses:

FRANCIS D. PASTORIUS,
JOHN YILLE.