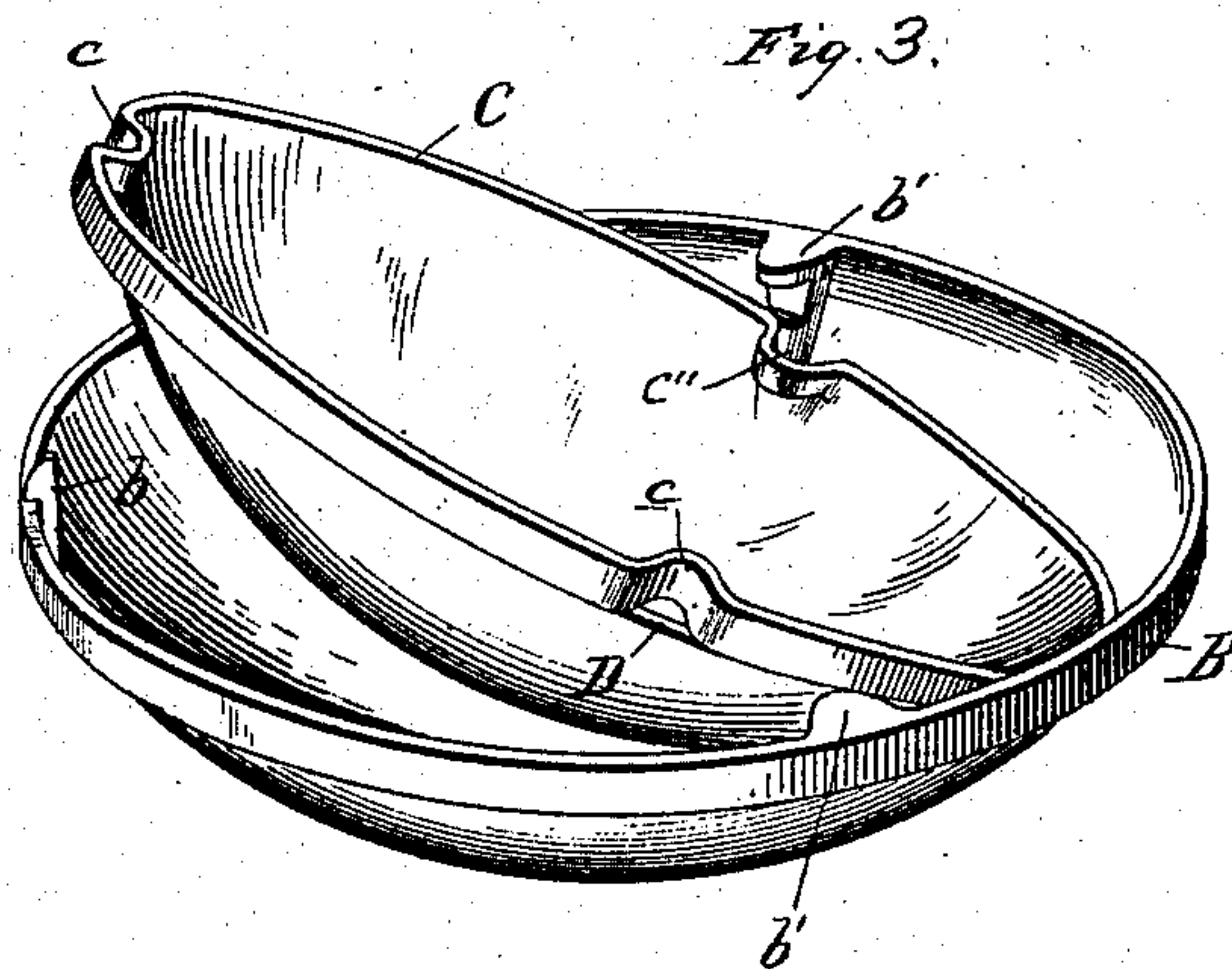
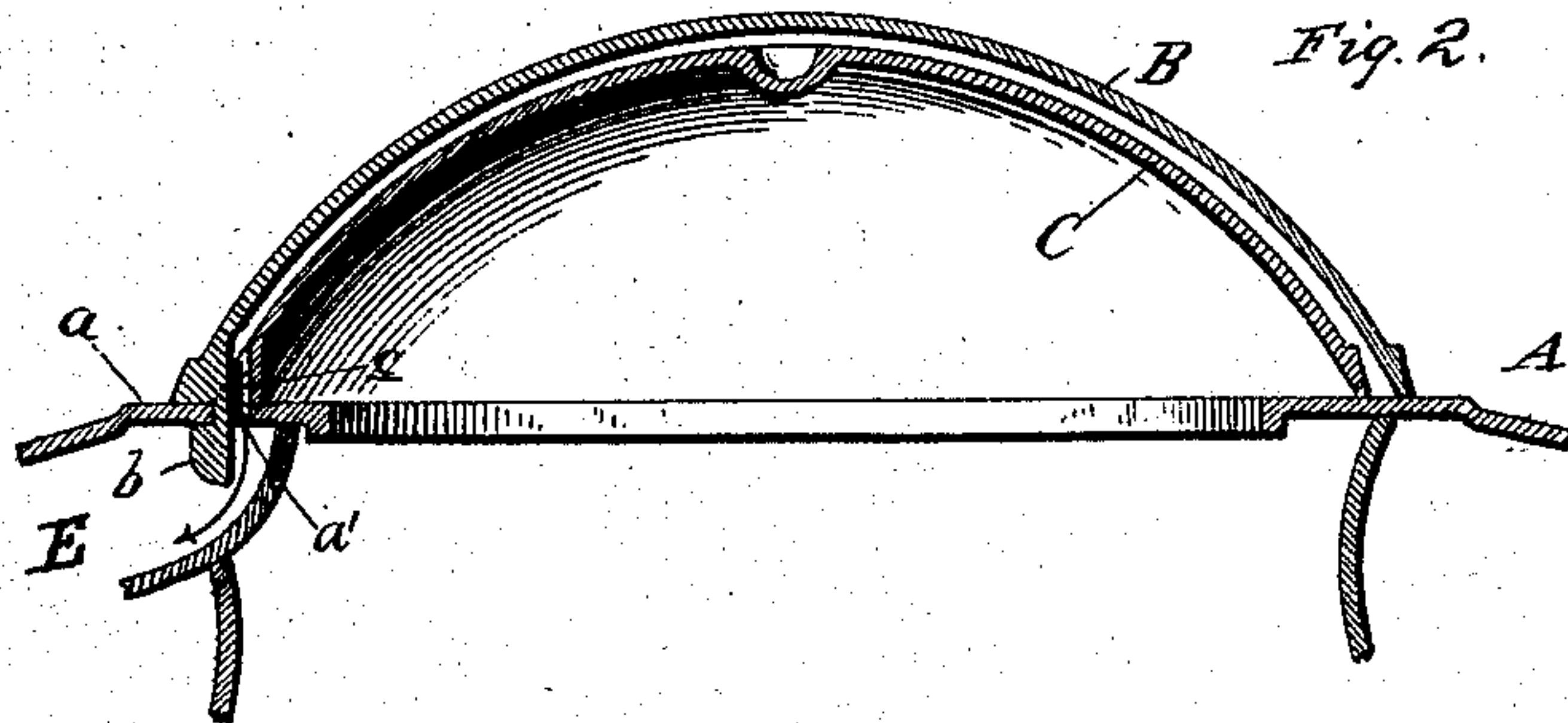
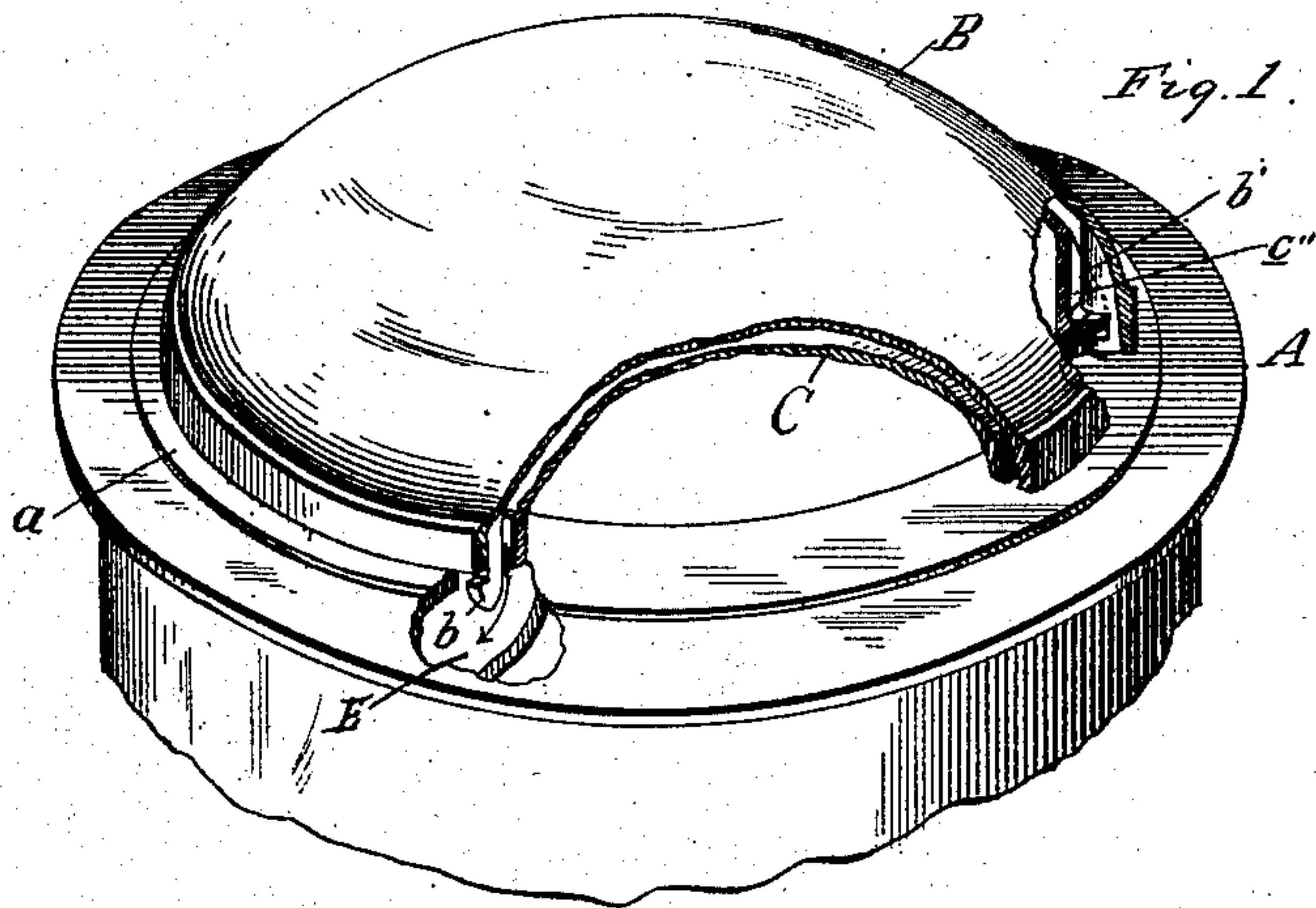


(No Model.)

W. J. KEEP.
BASE BURNING STOVE.

No. 368,951.

Patented Aug. 30, 1887.



Witnesses
E. A. Naeder
E. A. Bond

Inventor
William J. Keep
By his Attorney
J. M. Robertson

UNITED STATES PATENT OFFICE.

WILLIAM J. KEEP, OF DETROIT, MICHIGAN.

BASE-BURNING STOVE.

SPECIFICATION forming part of Letters Patent No. 368,951, dated August 30, 1887.

Application filed April 17, 1886. Serial No. 199,268. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. KEEP, of Detroit, in the county of Wayne and State of Michigan, having invented new and useful Improvements in Base-Burning Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a new and useful improvement in coal-stoves; and this invention consists in a novel and peculiar construction and arrangement of covers for the top of self-feeding and other stoves, its object being to prevent the escape of coal-gas into the room and the entrance of air from the room into the magazine. Stoves have heretofore been constructed with either a single cover fitted as tight as possible or with double covers more or less complicated in construction.

The object of my invention is to form a seal between the outside air and the gas inside the stove; and it consists in the peculiar arrangement, construction, and combination of parts hereinafter more particularly described, and then definitely pointed out in the claims.

In the manufacture of stoves it is very important to have the swing-cover (which fits over the magazine holding the fuel) fit air-tight, for when the fuel is low in the magazine the space above becomes heated and draws the air in under the swing-cover if it does not fit tight, the fuel in the magazine becomes ignited, so that when the swing-cover is swung open the gas in the magazine puffs out in the room, and is liable to burn a person's face if too near. I have succeeded in accomplishing my object by providing a double-swing cover so constructed that both swing as one cover, and at the same time form double air-tight joints, all as hereinafter described, and shown in the accompanying drawings, of which—

Figure 1 is a perspective view of the top of a stove provided with my improvement, with parts broken away. Fig. 2 is a vertical section of the same. Fig. 3 is a perspective view of the covers inverted and partly separated to show the mode of putting them together.

Referring, now, to the details of the drawings, A represents an ordinary stove-top, preferably with a raised rim, *a*, and a hole, *a'*, adapted to

receive a lug, *b*, preferably formed on the outer cover, B. At about equal distances from each other and from the lug *b* are formed spurs *b'*, which project inwardly toward the center of the cover.

At C is shown the inner cover, having three recesses, *c c' c''*, cast in its outer surface. The recesses *c' c''* are each provided with a rib, D, set horizontally in the recess; but the recess *c* is without any rib, so as to enable it to embrace the upper part of the lug *b*.

I prefer that the two covers should be so proportioned as to leave a little space between the two, which space may be in communication with the inside of the stove through the flue E, and consequently with the chimney, whereby any air or gas that may escape from the magazine beneath the edges of the under cover and the top of the stove will be drawn downward into the flue, as shown by the arrow in Fig. 2.

By examining Fig. 3 it will be seen that by pushing the inner cover to the right the ribs D will pass under the spurs *b'* on the cover B, and that the recess *c* will embrace the lug *b*, and thus one cover will readily receive the other. If, now, the two covers are reversed, the ribs D will rest on the spurs *b' b'*, and when the covers are set in their proper position on the stove-top, with the lug *b* in the hole *a'*, the two will swing together sidewise without separating, as the two covers are held together by the spurs, the ribs, and the lug *b*. The ribs and spurs are so proportioned and arranged that while they hold the two covers securely together they are still loosely held, so that each will rest on the rim *a* independent of the other, and as the lower edges of both covers are ground to fit the rim there is little, if any, chance for gas to escape; but if it should escape the inner cover it cannot pass into the room, for the draft from the stove will draw any such escaping gas down through the hole *a'* into the flue E, as shown by the arrow.

It should be understood that the loose connections between the covers admit of one of the covers bearing on the rim, even if the other does not. This is important, for if a small particle of coal should accidentally get under the edge of one of the covers, so as to prevent its making a tight joint, the other cover, being

loosely connected to it, would rest on the rim all around and thus make a tight joint, so that all escape of gas from or ingress of air to the reservoir would be prevented.

5 I prefer to have the spurs, ribs, lugs, &c., arranged as shown, because both covers always move together, and one securely supports the other, which would not be the case were the parts arranged reversely, as might be done.

10 Having thus shown one mode of carrying out my invention, but without limiting myself to the construction shown, what I claim is—

1. A stove provided with two covers, one fitting loosely within the other and each having an independent bearing on the top of the stove, substantially as described.

2. A stove provided with two covers, one fitting loosely within the other, each having an independent bearing on the top of the stove, and the two constructed to swing together, substantially as described.

3. A stove provided with a flue and two covers, one of said covers projecting within the other and fitted therein to leave a space between the two, and a passage leading from said space to said flue, substantially as described.

4. A stove provided with two covers, one fitted loosely within the other, each having an independent bearing on the stove-top, and one constructed to support the other while swinging off of said stove-top, substantially as described.

5. The combination of the stove-top A and the cover B, provided with the lug *b* and spurs *b' b'*, with the cover C, having recess *c* and ribs D, all substantially as shown and described.

WILLIAM J. KEEP.

Witnesses:

WILLIAM H. SEXTON,
CHARLES W. KEMPT.