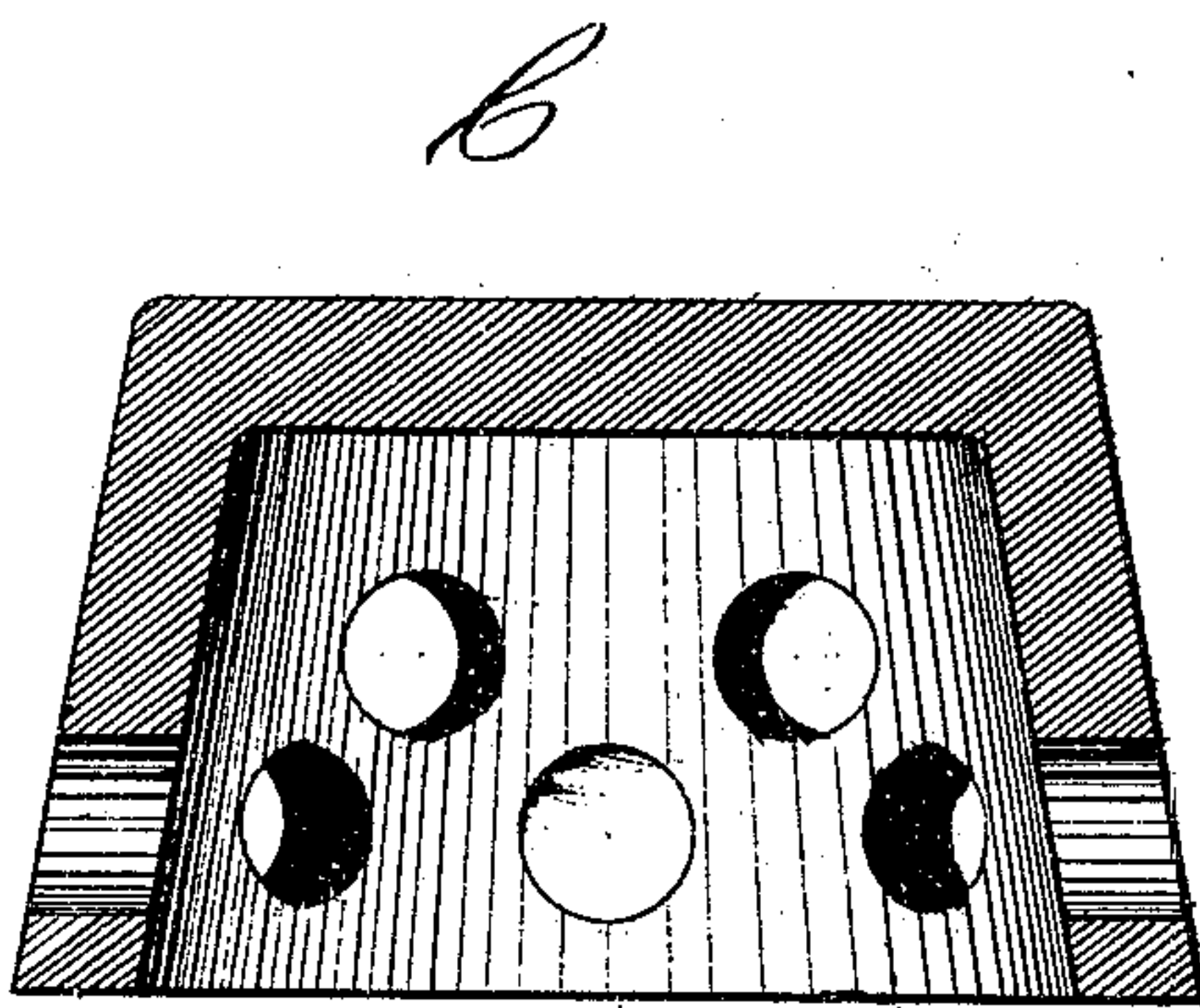
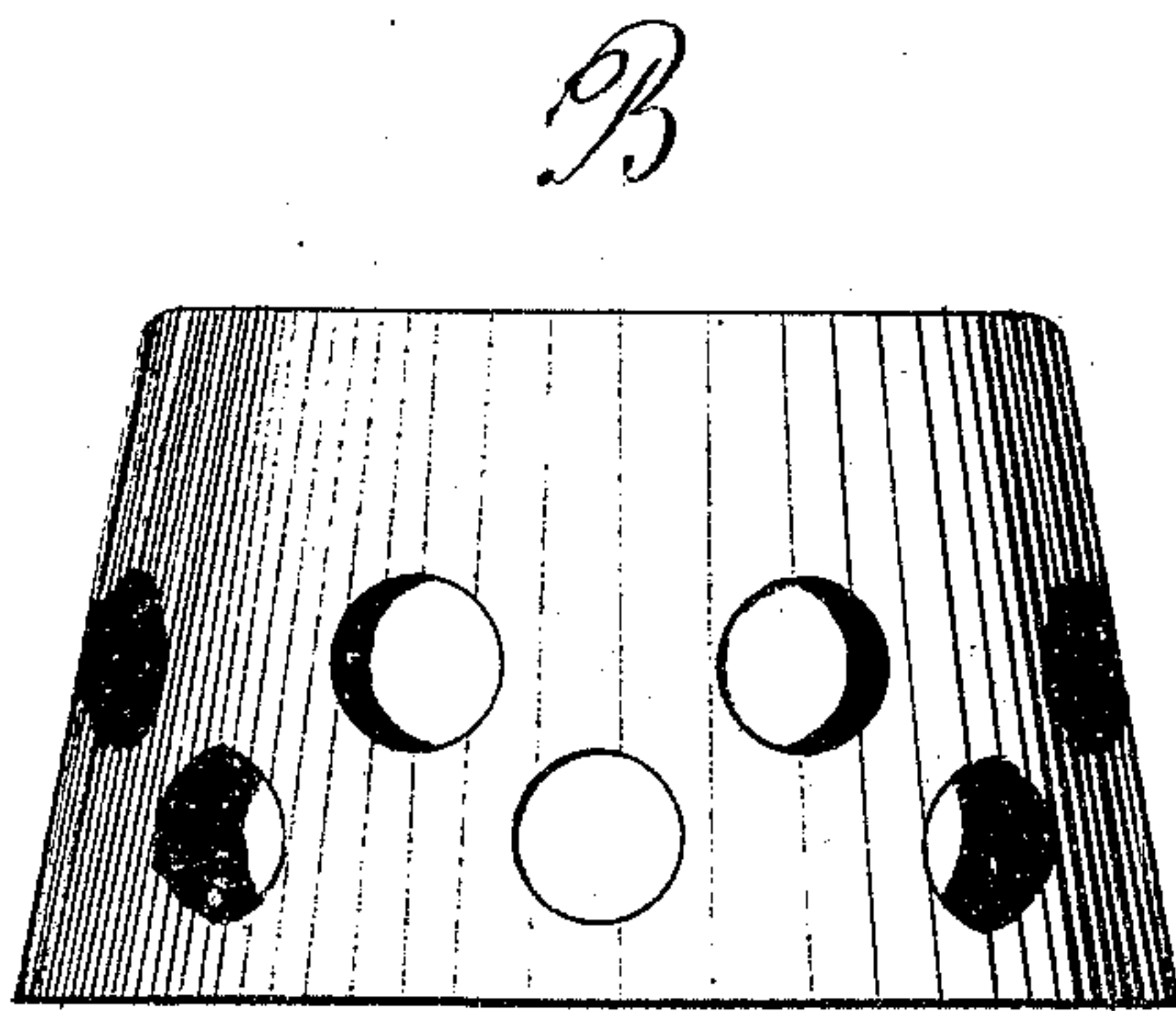
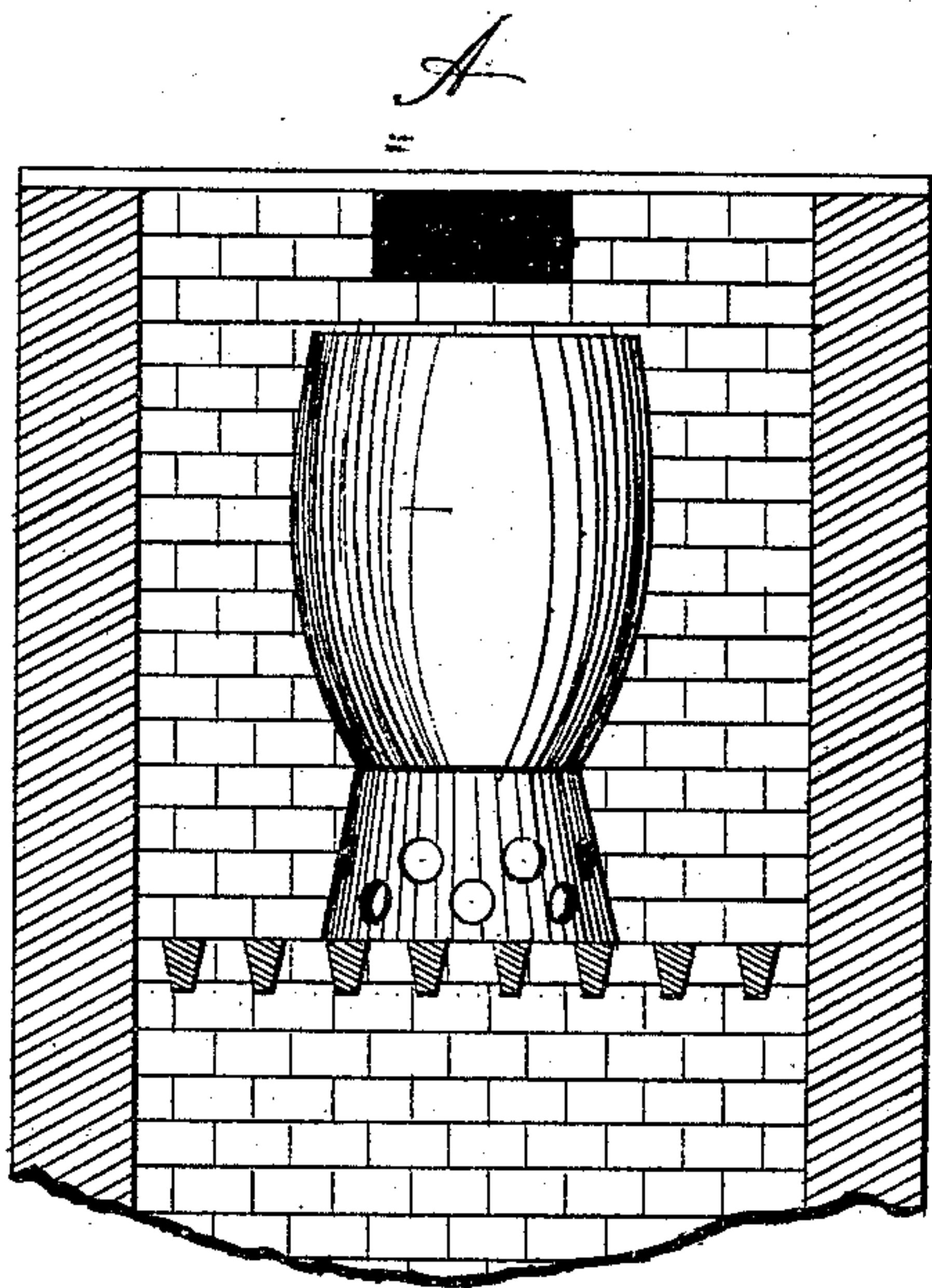


*J.C.M. Manus,*

*Crucible Mold.*

*No. 104,179.*

*Patented June 14, 1870.*



*Witnesses*

*H. H. Brown*  
*Wm. H. Ham*

*Inventor*

*James C. M. Manus*

# United States Patent Office.

JAMES C. McMANUS, OF PROVIDENCE, RHODE ISLAND.

*Letters Patent No. 104,179, dated June 14, 1870.*

## IMPROVEMENT IN CRUCIBLE-STANDS FOR FUSING METALS.

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

I, JAMES C. McMANUS, of Providence, in the county of Providence and State of Rhode Island, have invented certain Improvements in Apparatus for Fusing Metals, of which the following is a specification.

### *Nature and Objects of the Invention.*

The first part of my invention relates to a hollow stand or support for a crucible, made of fire-clay, or any compound whatsoever that will resist the action of heat, so constructed that it will serve to keep the crucible from sinking down upon the grates below after the fuel has been consumed at the bottom of the furnace, the object of this part of my invention being to avoid the necessity of raising the crucible, which, when filled with metal, gradually settles through the partially-burned fuel and rests upon the grates, when, coming in contact with the current of cold air passing up through the grates, it frequently cools, while the fire is sufficient around the sides to heat it to the required temperature, thereby saving an extra amount of fuel, which must be supplied, and also the time which is lost during the kindling of the newly-supplied fuel.

The second part of my invention relates to certain apertures in the sides of the stand.

The objects of this part of my invention are:

First, to distribute the air more thoroughly through the fire, thus causing more rapid combustion, and hence a greater degree of heat.

Second, that the current of air passing up through the grates; and thence through the apertures, may serve to keep the stand at a lower temperature than it would otherwise be, thereby preserving it amid the intense heat to which it is exposed.

### *Description of the Accompanying Drawing.*

Figure A is a sectional view of a furnace, showing the crucible and stand as in use.

Figure B is a longitudinal view of the stand.

Figure C is a longitudinal sectional view of the same.

I claim as my invention—

1. A hollow stand, substantially as and for the purpose herein set forth.

2. A stand with apertures in the sides, substantially as and for the purpose herein set forth.

JAMES C. McMANUS.

Witnesses:

H. H. BROWN,  
WM. H. HAM.