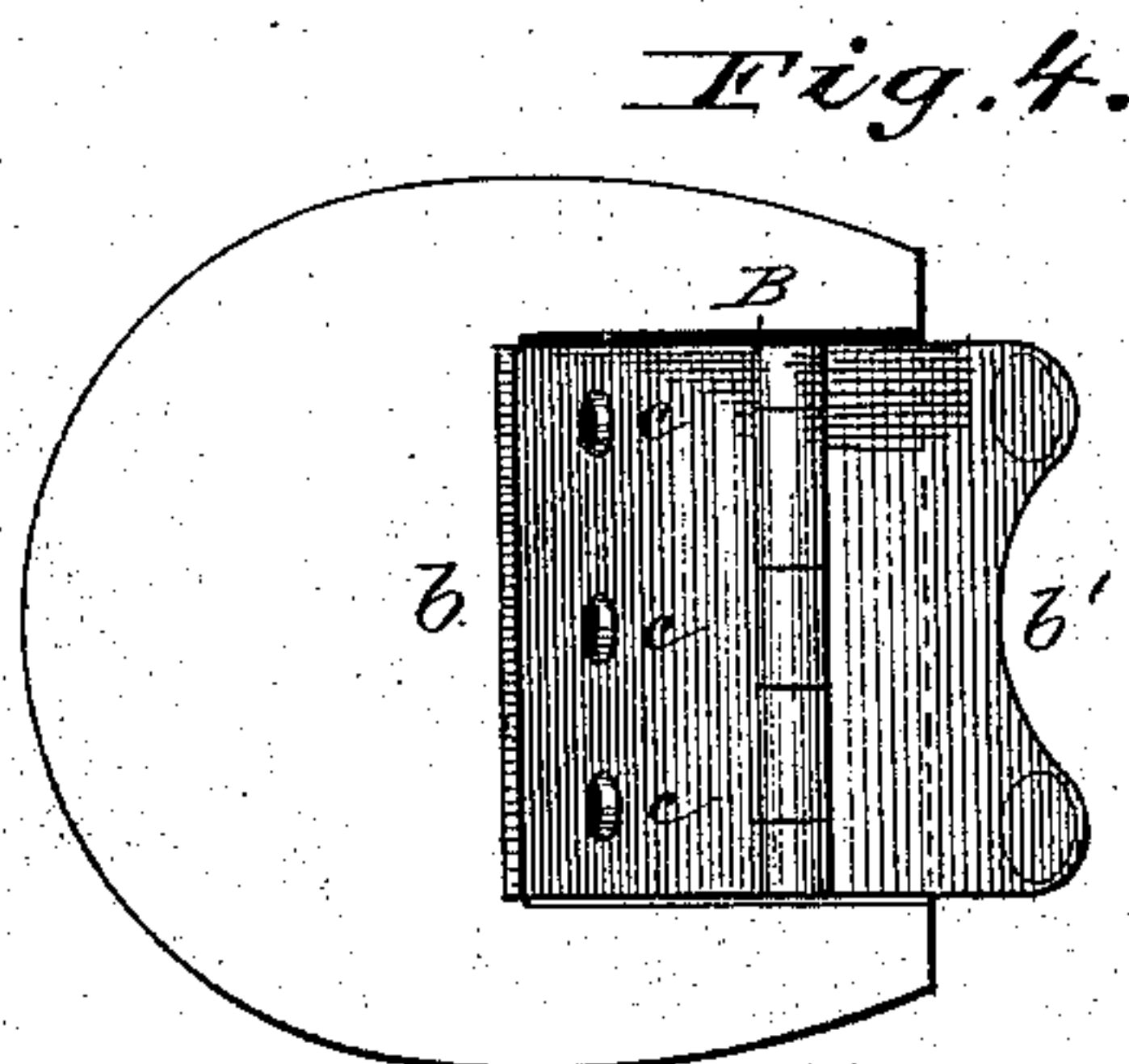
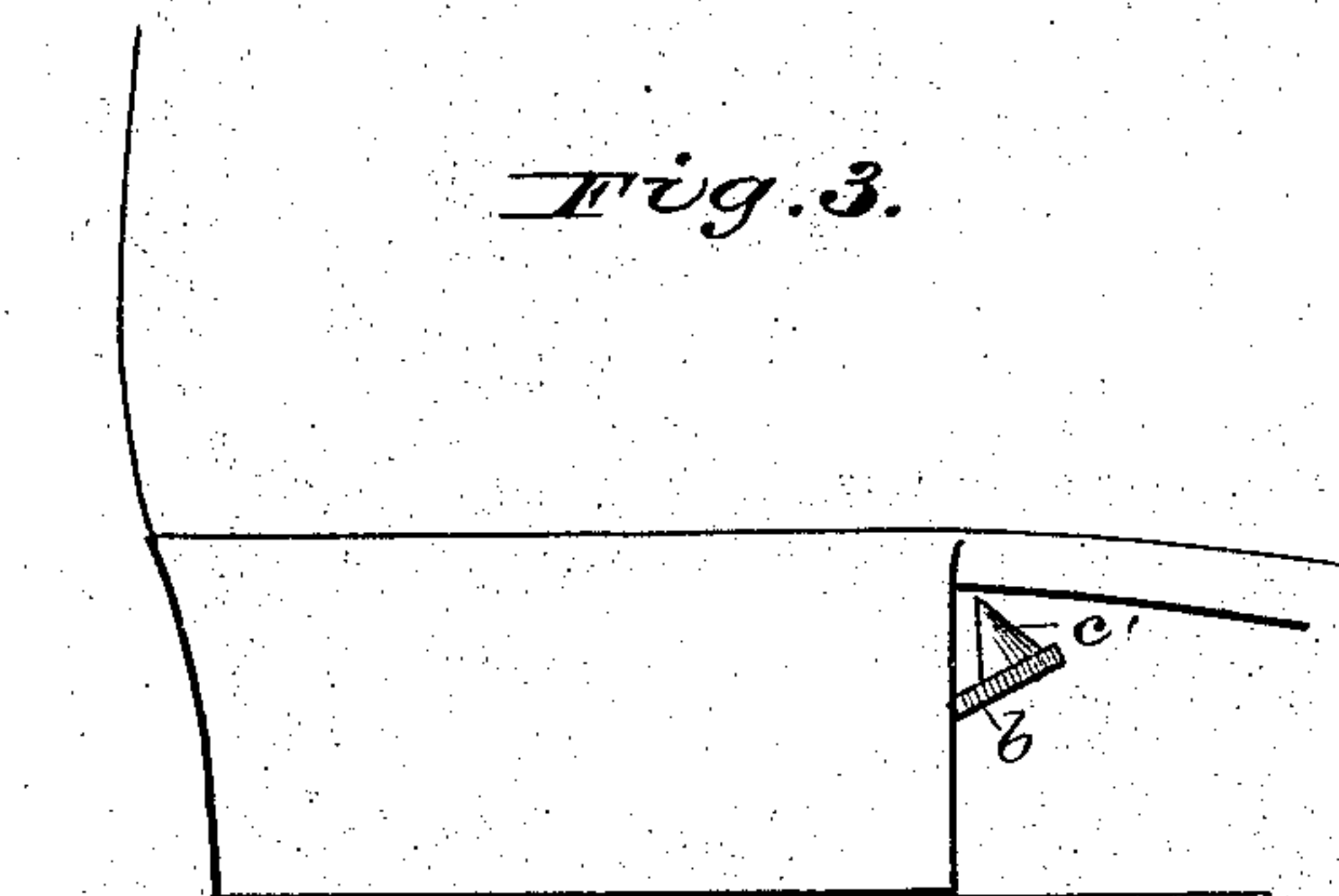
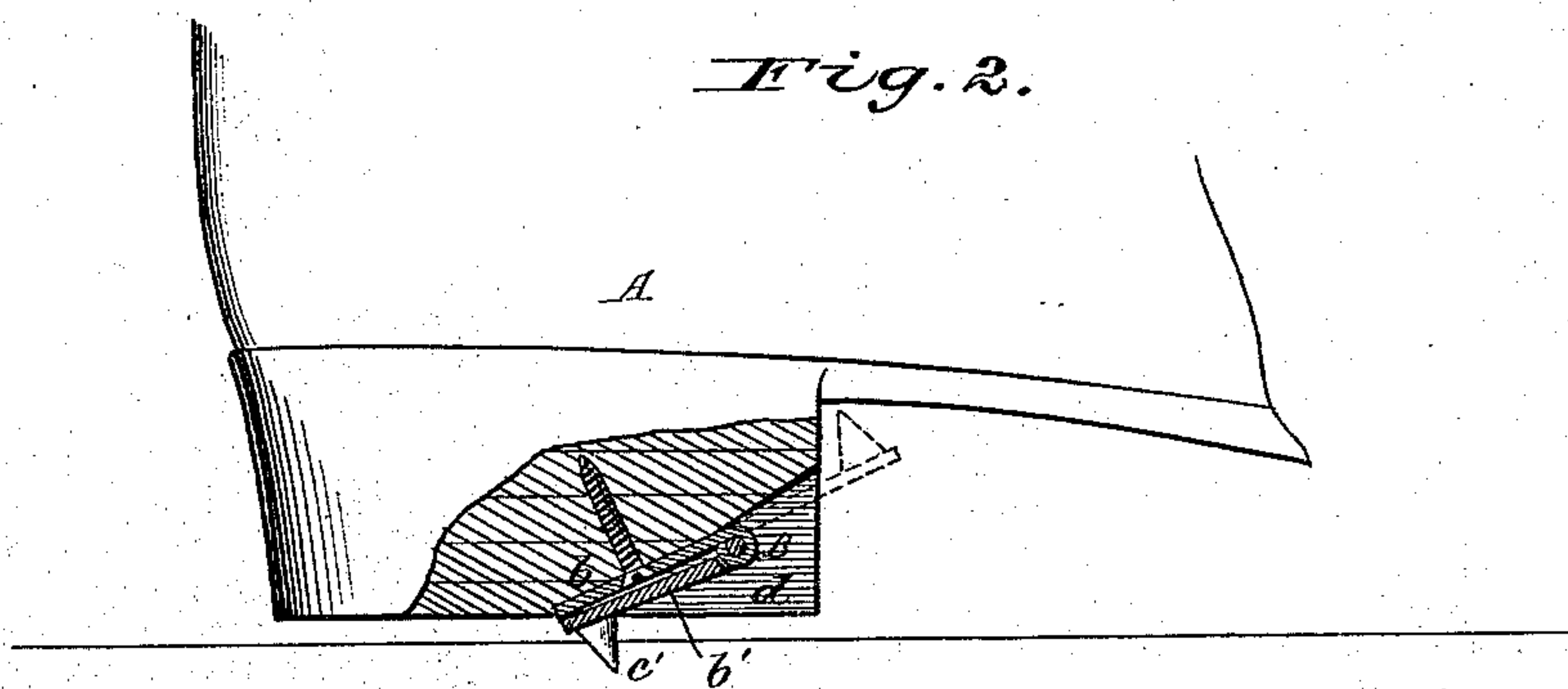
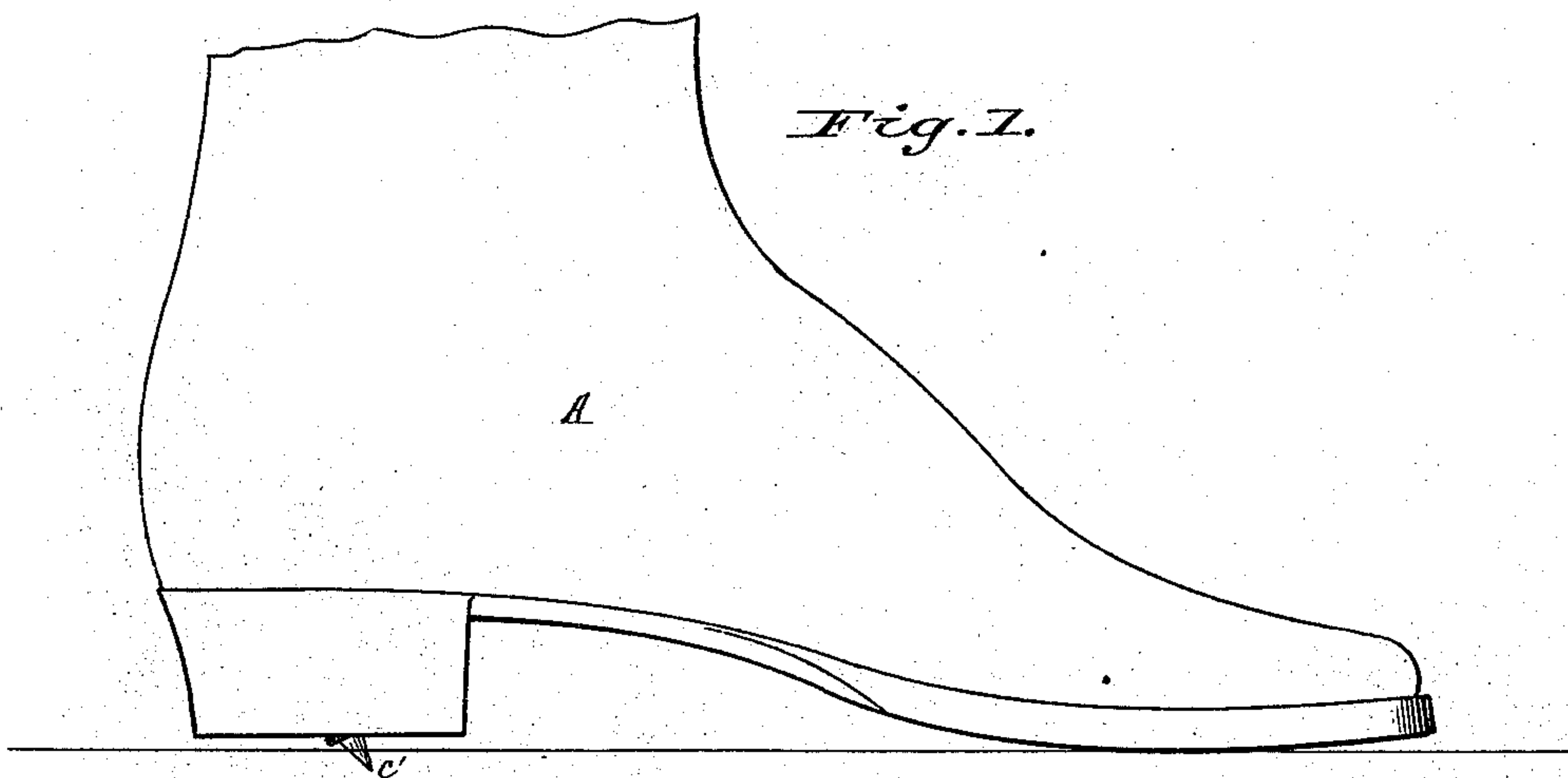


C. BRODHEAD.
ICE-CREEPERS.

No. 177,797.

Patented May 23, 1876.



Attest:
H. L. Perrine.
J. L. Cooney.

Inventor:
Charles Brodhead.
By James L. Norris
att'y.

UNITED STATES PATENT OFFICE.

CHARLES BRODHEAD, OF BETHLEHEM, PENNSYLVANIA.

IMPROVEMENT IN ICE-CREEPERS.

Specification forming part of Letters Patent No. **177,797**, dated May 23, 1876; application filed March 11, 1876.

To all whom it may concern:

Be it known that I, CHARLES BRODHEAD, of Bethlehem, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Ice-Creepers, of which the following is a specification:

This invention relates to certain new and useful improvements in ice-creepers of that class in which the part carrying the pins or projections may be thrown back out of the way when desired, to prevent injury to the flooring or carpets when in the house, or unnecessary wear of the projections when the creeper is not desired for use.

In devices of this class, as heretofore constructed, the supporting-plate, to which the plate carrying the pins or projections is hinged, has been attached directly to the bottom of the heel, in such position that the said hinged plate, when folded up in contact with the supporting-plate, will bring the projections in proper position under the heel to take hold of the ice, and, when thrown back, will set up against the rear of the heel, out of the way.

As thus constructed, the creeper has proved objectionable, for the reason that, when folded down for use, it is clumsy and awkward, and inconvenient to the wearer, and when thrown back out of the way forms an unsightly projection behind the heel, which is liable to catch in the clothing or surrounding objects and injure the same.

My invention is designed to obviate these objections; and it consists in two plates, hinged together, one of said plates being adapted to sit into, and be secured in, a recess formed at the front of the heel, the other plate being provided with pins or projections, the swinging plate, when folded upon the stationary plate, falling flush with the lower surface of the heel and exposing the pins or projections, and, when thrown or turned out of the way, sitting in the hollow of the shoe, between the heel and the sole of the same, as hereinafter more fully set forth.

In the drawing, Figure 1 represents a bottom view of a shoe with my improved creeper attached thereto, and Fig. 2 a sectional view of the same.

The letter A represents a boot of ordinary construction, and B the ice-creeper attached to the heel thereof. Said creeper consists of two plates, *b b'*, hinged together, as shown, the plate *b* being provided with apertures *c*, for the insertion of screws, and the plate *b'* with the pointed pins or projections *c'*, to take hold of the ice. The heel of the shoe A is formed with a recess, *d*, in front, having an inclined bottom for the reception of the creeper B. The plate *b* of said creeper is secured to the bottom of said recess, the hinge sitting flush with the front of the heel, in order that the plate *b'* may be turned up into the hollow between the heel and sole of the shoe, to throw the projections out of position.

When the plate *b'* is folded over against the plate *b*, it will be seen that, by reason of the inclined bottom of the recess in the sole of the shoe, the lower surface of the plate *b'* will be flush with the lower surface of the heel, the pins on said plate projecting properly to enter and take hold of the ice.

As thus constructed, it will be evident that the creeper is free from the objections above enumerated, as, when the swinging plate is set in position for use, the pins from the only projecting parts relieve the device from all clumsiness or inconvenience to the wearer, and when turned up out of the way said plate is entirely concealed, and the projections brought in such position that they cannot possibly catch in or injure the clothing of the wearer or surrounding objects.

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

In combination with a recessed heel, the hinged creeper, adapted to be turned over upon the tread-surface of the heel when in use, or to be turned down upon the inner surface or breast of the heel when not required.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

CHARLES BRODHEAD.

Witnesses:

JOHN LONG,
FR. M. RAUCH.