

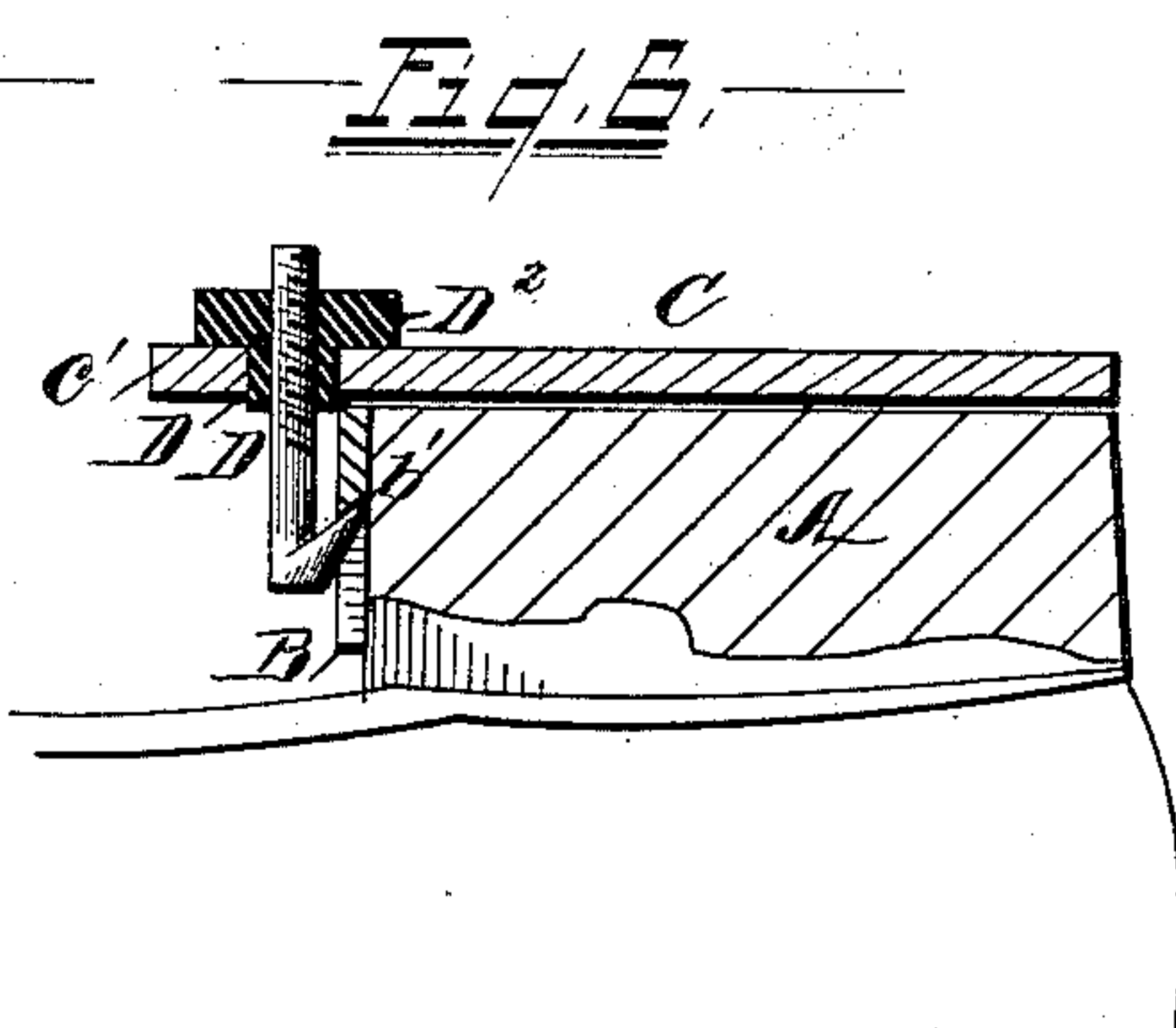
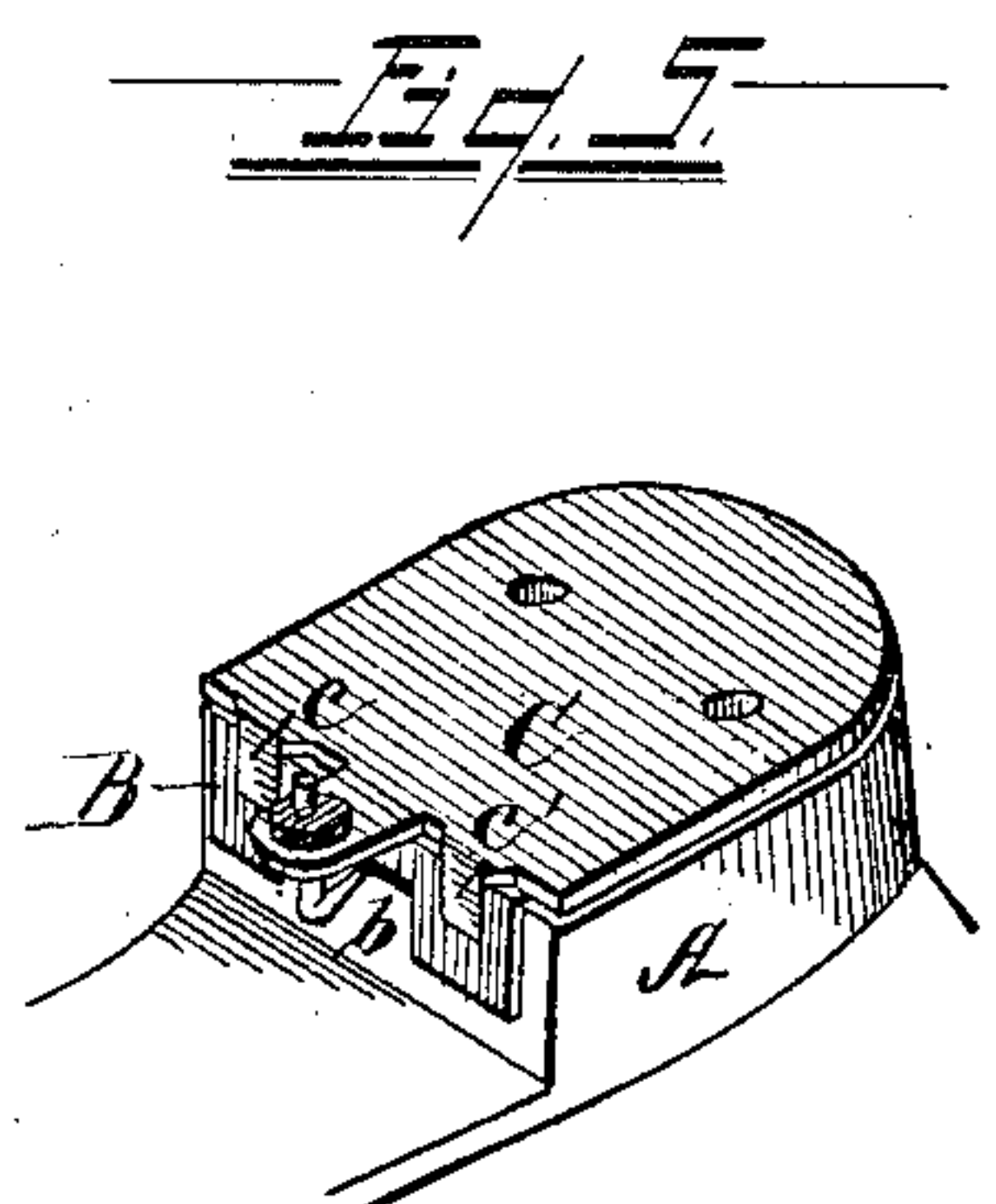
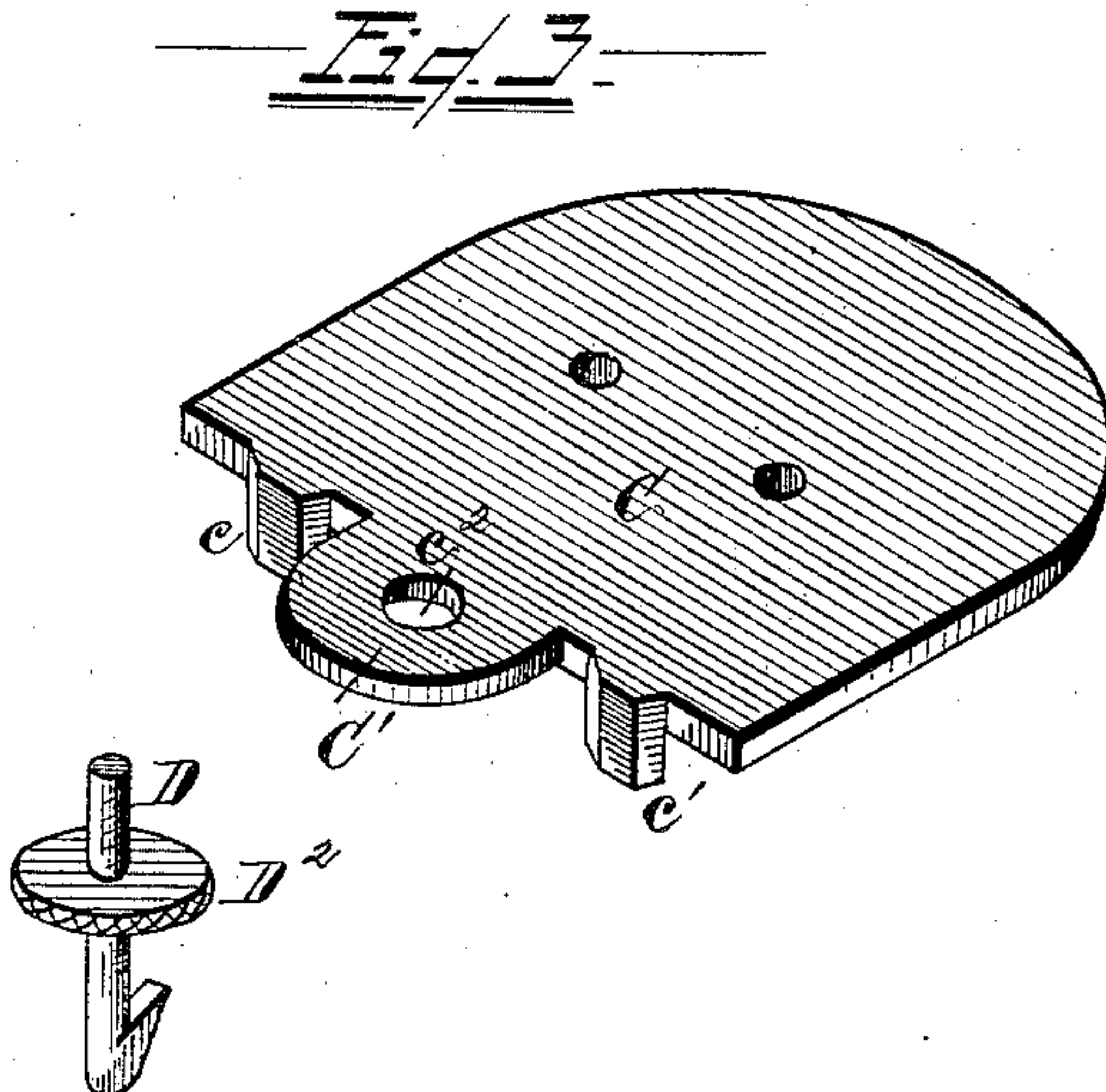
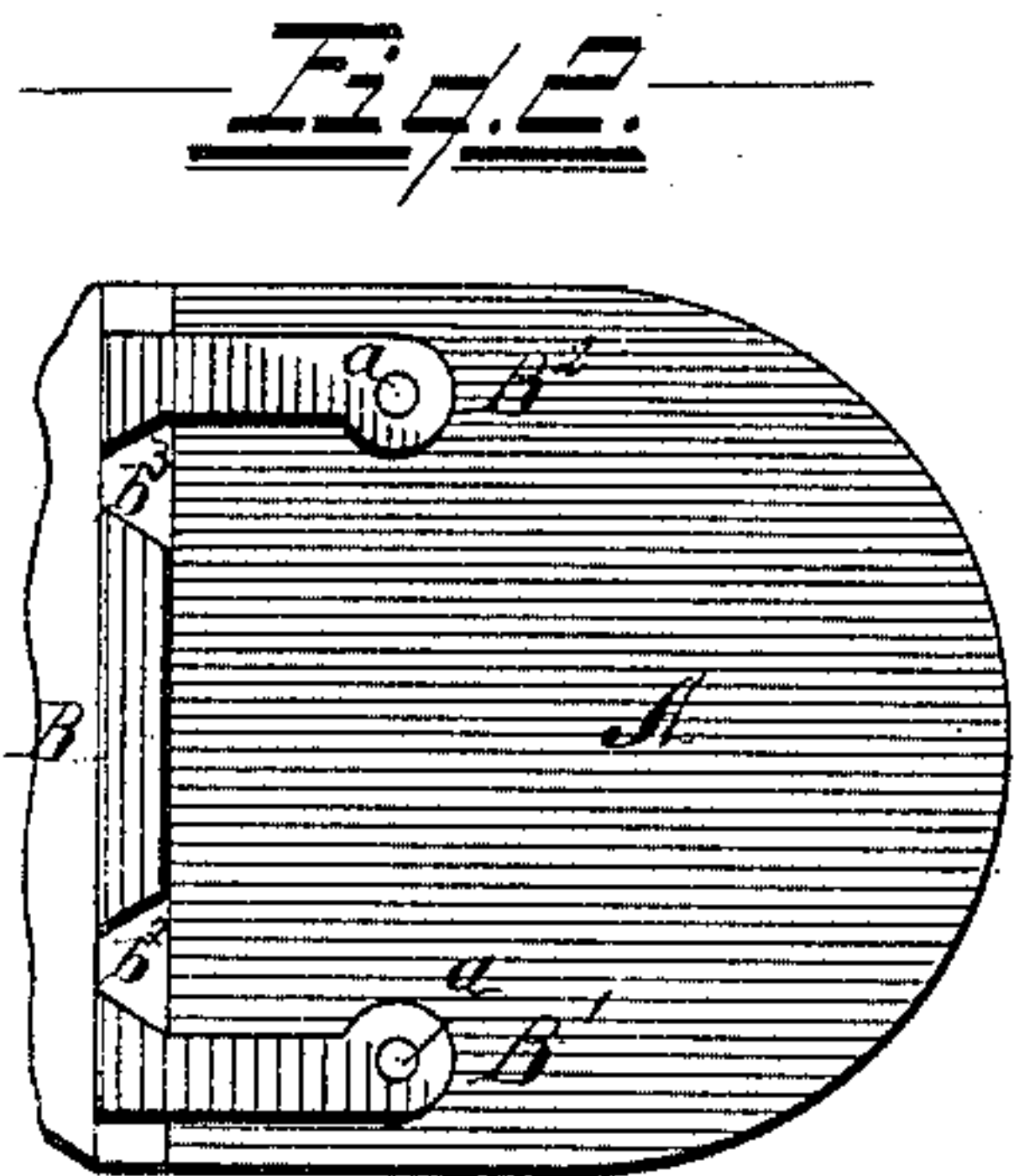
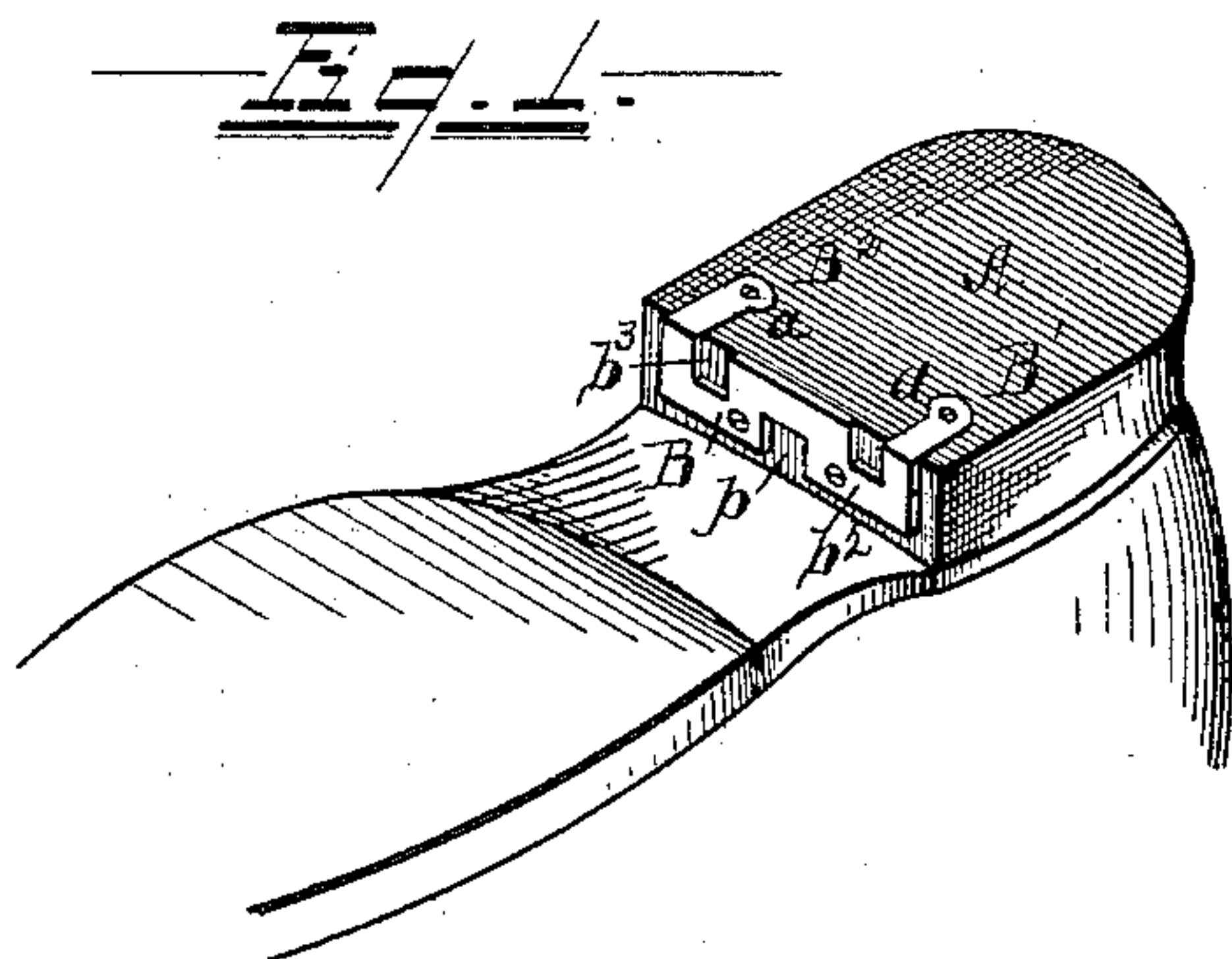
(No Model.)

C. C. DE CAMP.

SKATE FASTENING.

No. 309,380.

Patented Dec. 16, 1884.



WITNESSES

Samuel C. Thomas.

M. B. O'Logherty.

Chas. C. De Camp INVENTOR  
By W. W. Leggett  
Attorney



# UNITED STATES PATENT OFFICE.

CHARLES C. DE CAMP, OF OVID, MICHIGAN.

## SKATE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 309,380, dated December 16, 1884.

Application filed April 14, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES C. DE CAMP, of Ovid, county of Clinton, State of Michigan, have invented a new and useful Improvement in Skate-Fastenings; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists in the combination of devices and appliances, hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a device embodying a feature of my invention secured to a boot-heel. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view of the heel-plate of a skate embodying other features of my invention. Fig. 4 is a separate view of the hook. Fig. 5 is a perspective view illustrating the application of the device. Fig. 6 is a sectional view.

My invention relates to skate-fastenings; and it has for its object more particularly the means for fastening the heel of a skate to the heel of the boot.

My invention consists, essentially, of a separate plate permanently secured to the heel of the boot, adapted to be engaged with the heel of the skate, and means for holding the two firmly together.

I carry out my invention as follows: As illustrated in the accompanying drawings, A is the heel of the boot. B is my improved heel-plate secured thereto. This plate is provided with a socket, *b*, having a beveled edge adjacent thereto, as shown at *b'* in Fig. 6, to admit of the tongue of the hook engaging under the plate. The plate is also provided with grooves *b<sup>2</sup>* and *b<sup>3</sup>*, preferably dovetailed.

I do not confine myself to any special means of securing the plate to the heel of the boot, nor to any definite form of the plate itself. As shown, the plate is provided with angular arms *B'* and *B<sup>2</sup>*, to engage over the bottom of the heel, the body of the plate engaging with the front of the heel. I prefer to construct the ends of said arms so as to fit into, say, a

three-eighths inch hole in the heel, so as to make the plate flush with the surface, as the hole may readily be made by a bit in the leather, and then cut out to the edge to receive the arm. This will enable any boot-heel to be readily fitted for the attachment of the plate, which may then be secured in place by screws *a* of any desired number. The plate may be of any desired shape or size fitted for attachment to a boot-heel, and may be made so light as to be permanently worn without the slightest inconvenience.

C is the heel-plate of the skate, provided with tenons *c* and *c'*, preferably dovetailed, and adapted to engage with the grooves *b<sup>2</sup>* and *b<sup>3</sup>* of the plate B. I prefer also to provide the heel-plate of the skate with a projection, *C'*, having an orifice, *c<sup>2</sup>*, therein.

D is the hook-screw cut along its upper end, and at its base adapted to engage under the plate at *b'* of the socket *b*. I prefer to provide this hook with a collar, *D'*, and a milled nut, *D<sup>2</sup>*. This hook is adapted to pass through the orifice *c<sup>2</sup>* of the heel-plate of the skate, the collar being adapted to fit into said orifice.

The operation of the device is as follows: The heel-plate of the skate is applied to the heel of the boot, the tenons *c* and *c'* being engaged with the grooves *b<sup>2</sup>* and *b<sup>3</sup>*. The hook D is passed through the orifice *c<sup>2</sup>* of the heel-plate of the skate, and its base engaged under the heel-plate of the boot at *b'*, when the nut *D<sup>2</sup>* is tightened upon the hook, firmly engaging the skate to the boot. This affords a very ready means of adjustment, and is at the same time strong, firm, and not likely to get out of engagement.

What I claim is—

1. A heel-plate adapted to be secured to the front of a heel, and constructed with dovetail grooves *b<sup>2</sup>* and *b<sup>3</sup>*, and angular arms *B'* *B<sup>2</sup>*, adapted to be secured to the bottom of a heel, said grooves being capable of receiving and holding projecting dovetail tenons on the heel-plate of a skate, substantially as described.

2. A heel-plate adapted to be secured to the front of a heel, and constructed with the beveled edge *b'* and the dovetail sockets *b<sup>2</sup>* and *b<sup>3</sup>*, said sockets being capable of receiving dovetail tenons on the heel-plate of a skate, and



the beveled edge engaging an adjustable hook carried by the heel-plate of the skate, substantially as described.

3. A heel-plate constructed with angular arms, and adapted to be secured to the heel of a boot, said plate provided with the orifice  $b$ , extending under the plate, and grooves  $b^2$  and  $b^3$ , substantially as described.

4. A heel-plate of a skate provided with tenons  $c$  and  $c'$ , and projection  $C'$ , having an orifice,  $c^2$ , therein, adapted to be engaged with a suitable plate upon the heel of a boot, substantially as described.

5. A skate-fastening consisting of a heel-plate adapted to be secured to the front of a heel, and provided with dovetailed grooves  $b^2$  and  $b^3$  and a socket,  $b'$ , and the heel-plate of a skate constructed with dovetail tenons  $c$   $c'$ , to engage the grooves, and screw-threaded hook  $D$ , to engage the socket, and a screw-nut supported on the heel-plate of the skate for adjusting the hook lengthwise, substantially as described.

6. A skate-fastening consisting of a heel-

plate adapted to be secured to the front of a boot-heel, the heel-plate of the skate provided with tenons adapted to be engaged with corresponding grooves in the former plate, said heel-plate of the skate provided with extension  $C'$  and orifice  $c^2$ , and in connection therewith a hook adapted to pass through said orifice, and to be engaged with the plate of the boot-heel, said hook provided with a collar and nut, substantially as and for the purpose described.

7. A skate-fastening consisting of a plate adapted to be secured to a boot-heel, a heel-plate of the skate provided with tenons adapted to engage with corresponding grooves in the former plate, and mechanism for connecting and binding the two plates together, substantially as and in the manner described.

In testimony whereof I sign this specification in the presence of two witnesses.

CHARLES C. DE CAMP.

Witnesses:

N. S. WRIGHT,

M. B. O'DOHERTY.