

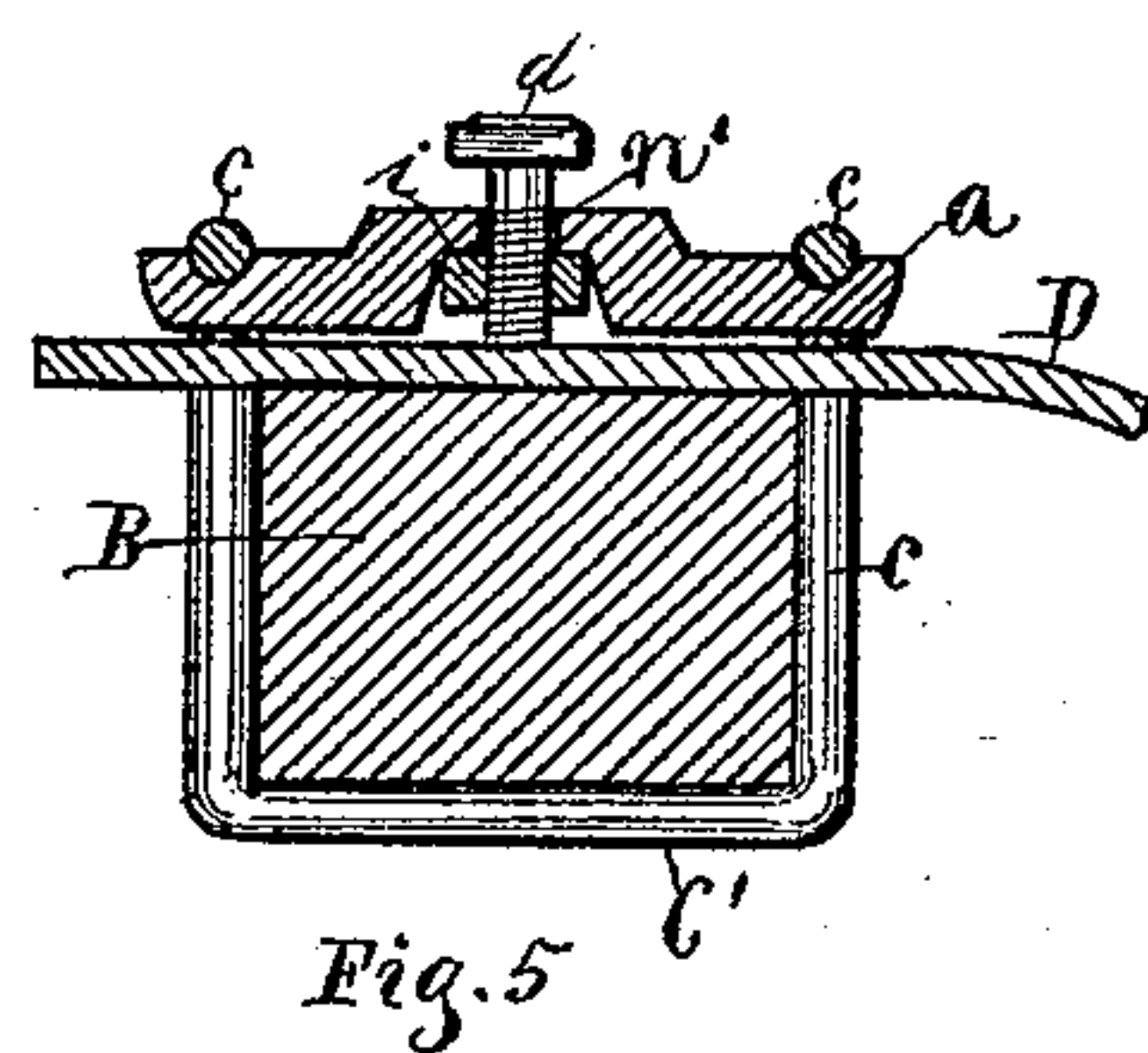
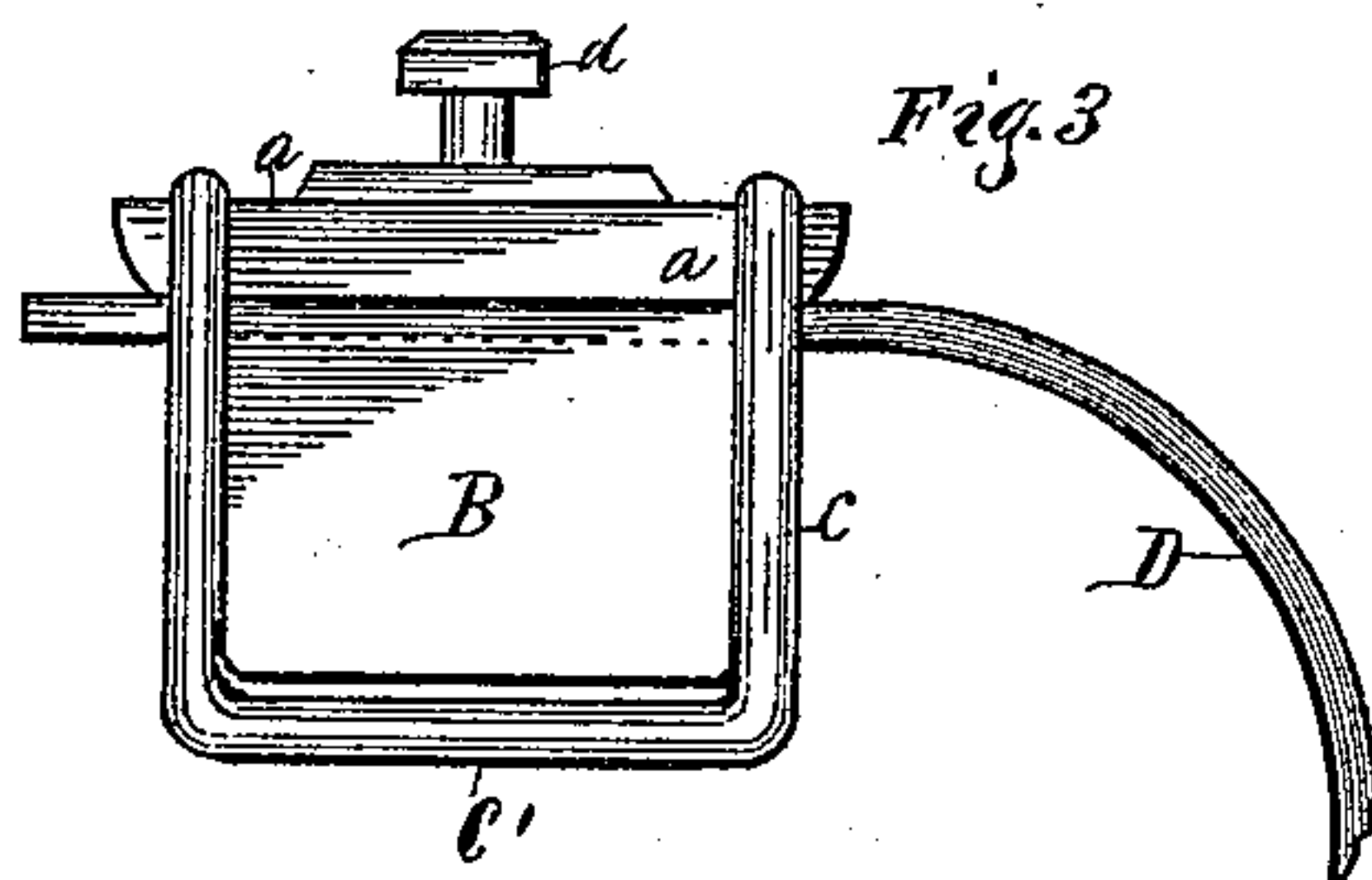
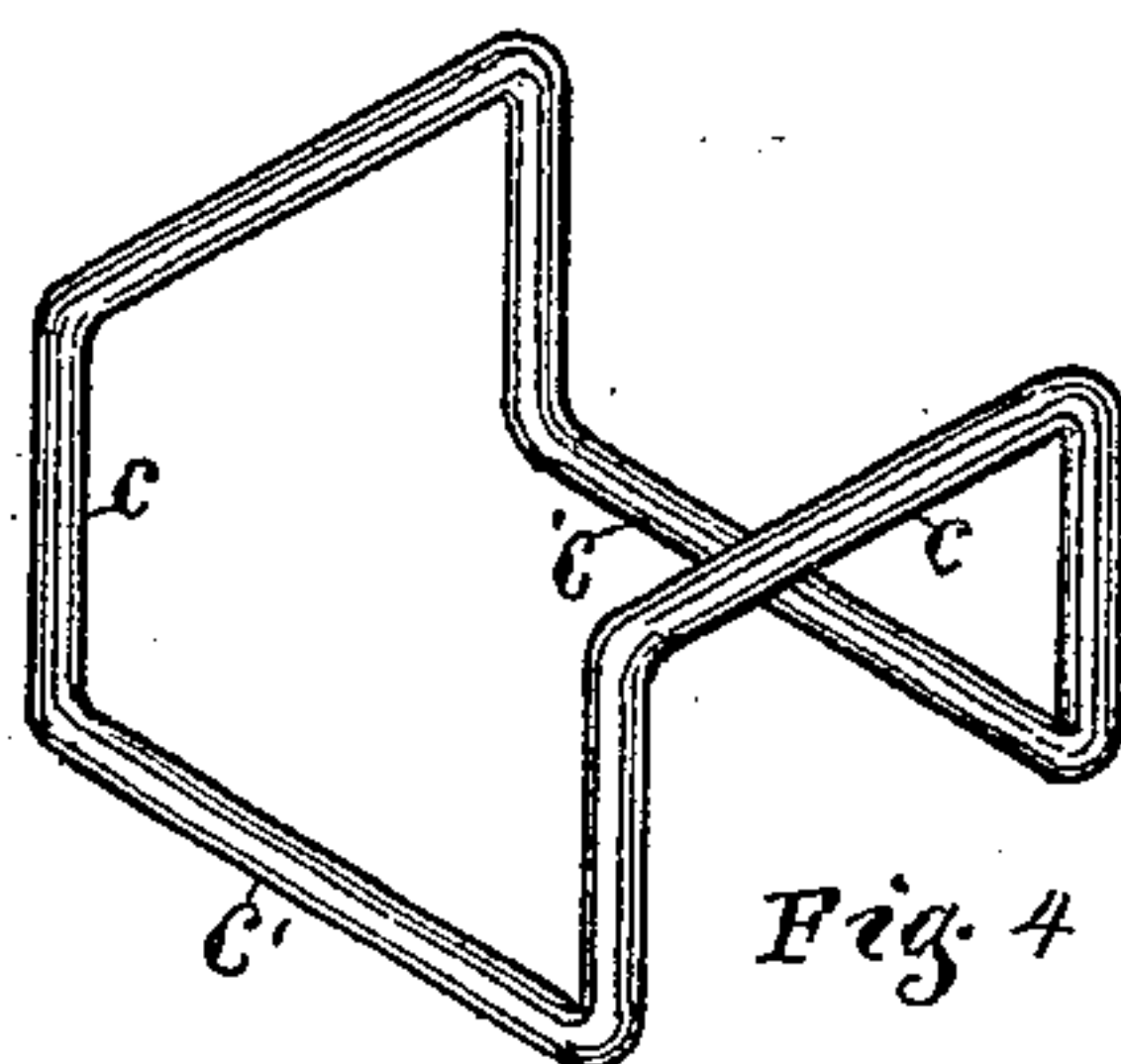
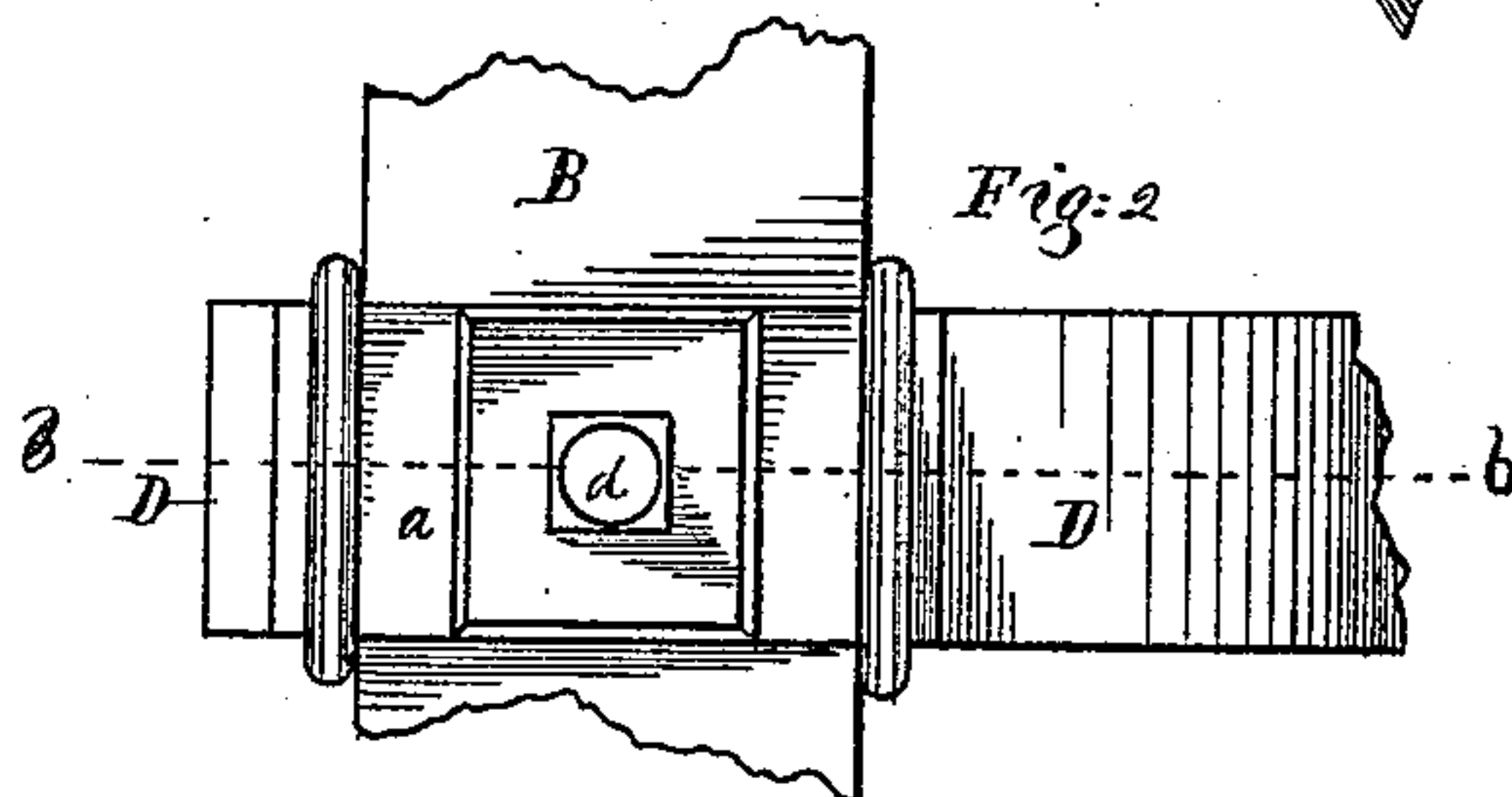
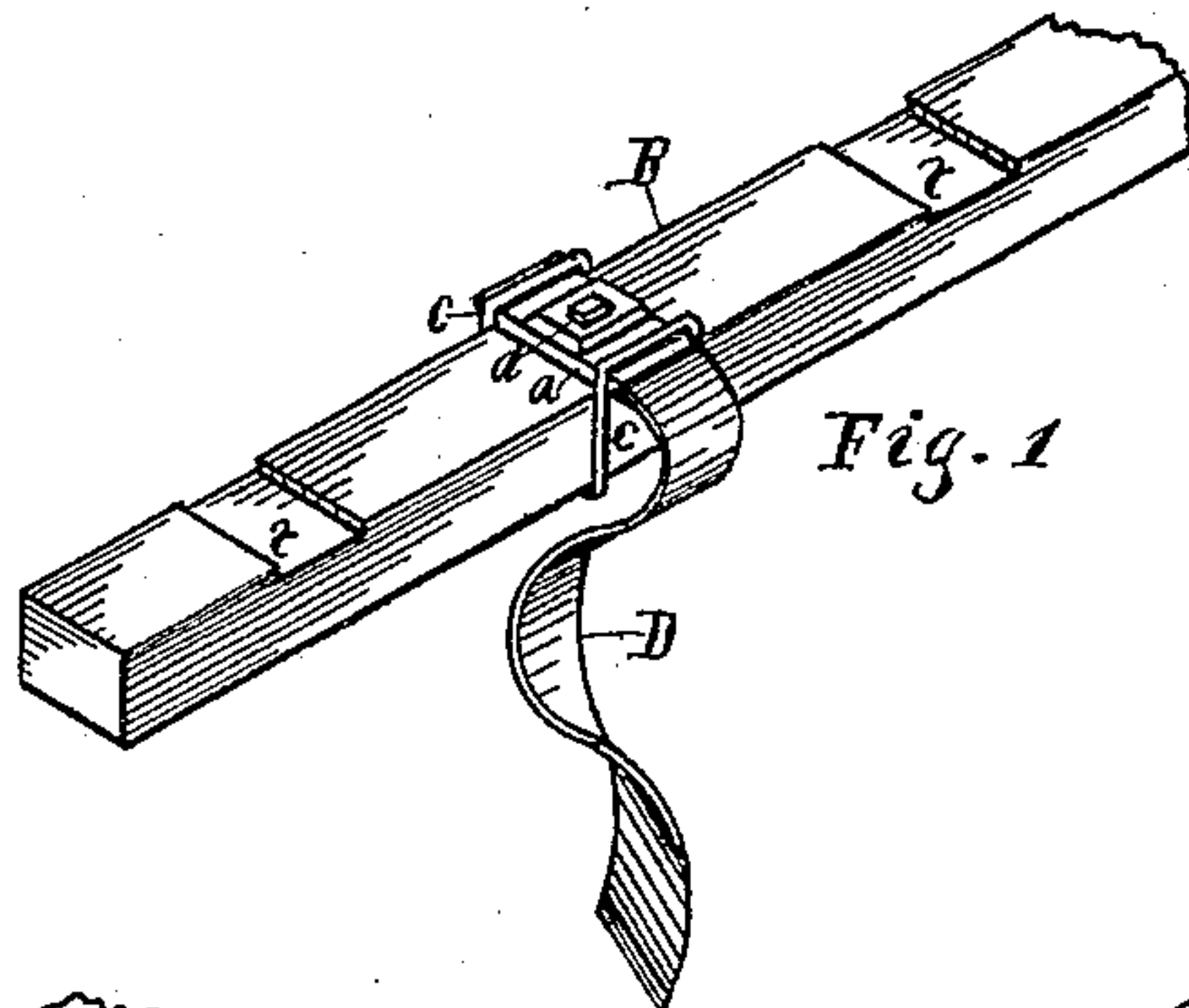
(No Model.)

A. S. BAKER & C. D. SWEETLAND.

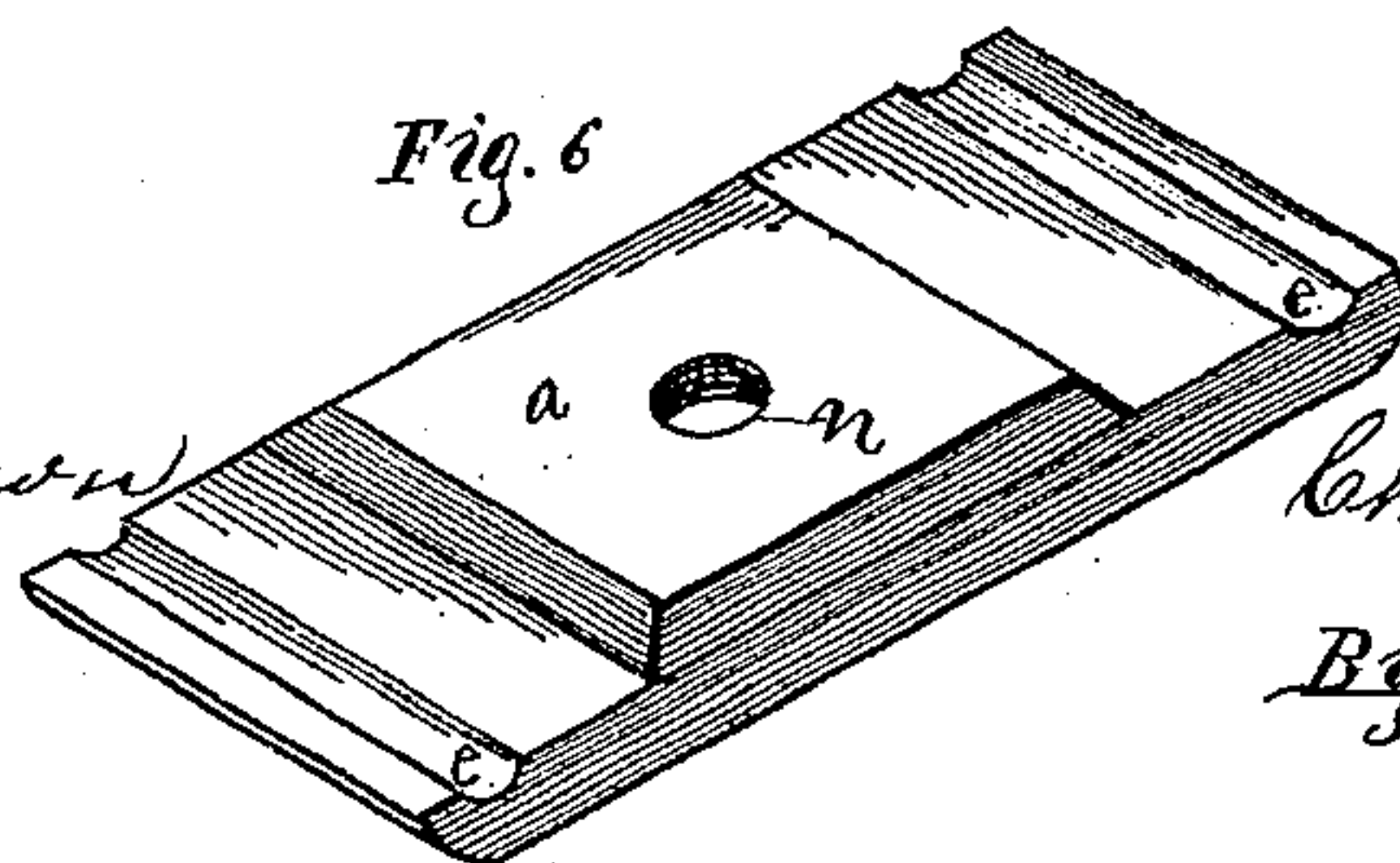
HARROW TOOTH HOLDER.

No. 248,907.

Patented Nov. 1, 1881.



Attest:
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att'y

UNITED STATES PATENT OFFICE.

ABNER S. BAKER AND CHARLES D. SWEETLAND, OF KALAMAZOO, MICHIGAN,
ASSIGNORS OF ONE-THIRD TO HEMAN M. BROWN, OF SAME PLACE.

HARROW-TOOTH HOLDER.

SPECIFICATION forming part of Letters Patent No. 248,907, dated November 1, 1881.

Application filed April 4, 1881. (No model.)

To all whom it may concern:

Be it known that we, ABNER S. BAKER and CHARLES D. SWEETLAND, citizens of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, respectively, have jointly invented a new and useful Harrow-Tooth Holder, of which the following is a specification.

The object of our invention is to construct an improved harrow-tooth holder in which a single binding-bolt serves the triple purpose of securing the saddle and stirrup of the holder together, binds said holder to the tooth-beam, and binds the harrow-tooth in said holder to the tooth-beam without said bolt passing through holes in the tooth or tooth-beam, thus obviating any diminution of needed strength of said parts, and effecting a very simple, cheap, and effectual holder.

The construction of our holder consists of a stirrup made of a continuous rod of metal, bent first in the form of a rectangle and then having the two ends thereof bent up at right angles with its body, forming loops, in which is located a saddle, which is provided with grooves at each end to receive the upper portion of said loops. Said saddle also has a binding-bolt passing through a threaded nut, which is loosely located in a recess in the under side of the saddle.

In the drawings forming part of this specification, in which similar letters of reference indicate like parts, Figure 1 is a perspective view of the holder securing a harrow-tooth to its beam; Fig. 2, a top view; Fig. 3, end view of the tooth-beam and side view of the holder; Fig. 4, perspective of the stirrup; Fig. 5, a cross-section on dotted line *b b* in Fig. 2; Fig. 6, a perspective view of the saddle.

B is the tooth-beam; *c*, the stirrup; *a*, the saddle, and *i* the threaded-nut in the recess of the saddle. If preferred, the nut *i* may be dispensed with and the hole *n* be constructed with threads to engage the threads of the binding-bolt *d*. *e e* are the grooves in saddle *a*, Fig. 6.

In Fig. 5 the hole *n'* of saddle *a* is not threaded, but is made large enough to admit the binding-bolt *d*.

D illustrates a harrow-tooth, made from a flat strip of metal, (not claimed *per se* in this application,) which may be located in the mortise *t* of the beam *B*, or the mortise may be dispensed with.

If deemed desirable, grooves like those at *e e* in saddle *a* may be formed in the side of the tooth-beam, to receive portions *e' e'* of the stirrup, though it is deemed that said parts will engage the beam *B* sufficiently rigid to avoid lateral displacement, even when mortise *t* is not used.

A more perfect understanding of the novelty and utility of the invention may be derived from the following description of the operation.

To adjust the holder, the stirrup *c* is first placed on beam *B*, and the saddle *a*, with its nut *i* and binding-bolt *d*, is located in the loops over said beam, as seen in Fig. 1. The harrow-tooth is then inserted between the beam *B* and the saddle *a*. As the stirrup *c* is made sufficiently large to admit of the removal of the saddle from the loops, and to replace it again readily when the tooth is not in the holder, there will be a space between the beam *B* and portion *e'* of said stirrup after the tooth is inserted in place and before the binding-bolt *d* is screwed down, as seen in Fig. 3. In Fig. 5 the binding-bolt *d* is screwed down, binding the tooth *D* to the beam *B*, the saddle to the stirrup *c* where it is located in grooves *e e*, and also binding body portion or bars *e' e'* rigidly to the beam, which operation leaves the space between the tooth *D* and saddle *a*.

The perpendicular sides of the loops to the stirrup serve to prevent lateral movement of the tooth when mortise *t* is not formed in the beam.

When the teeth are not in the holder the saddle is prevented from becoming displaced by screwing the binding-bolt *d* down till it engages the beam *B*.

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

As a means of binding harrow-teeth to the tooth-beams, the tooth-holder consisting of the stirrup having its perpendicular looped sides and horizontal base-bars, the saddle having the grooves to receive the top portions of the stirrup-loops, and the center hole and recess, with the threaded nut and binding-bolt, located therein, all substantially as set forth for the objects specified.

ABNER S. BAKER.

CHARLES D. SWEETLAND.

Witnesses:

HEMAN M. BROWN,
O. T. TATHILL.