

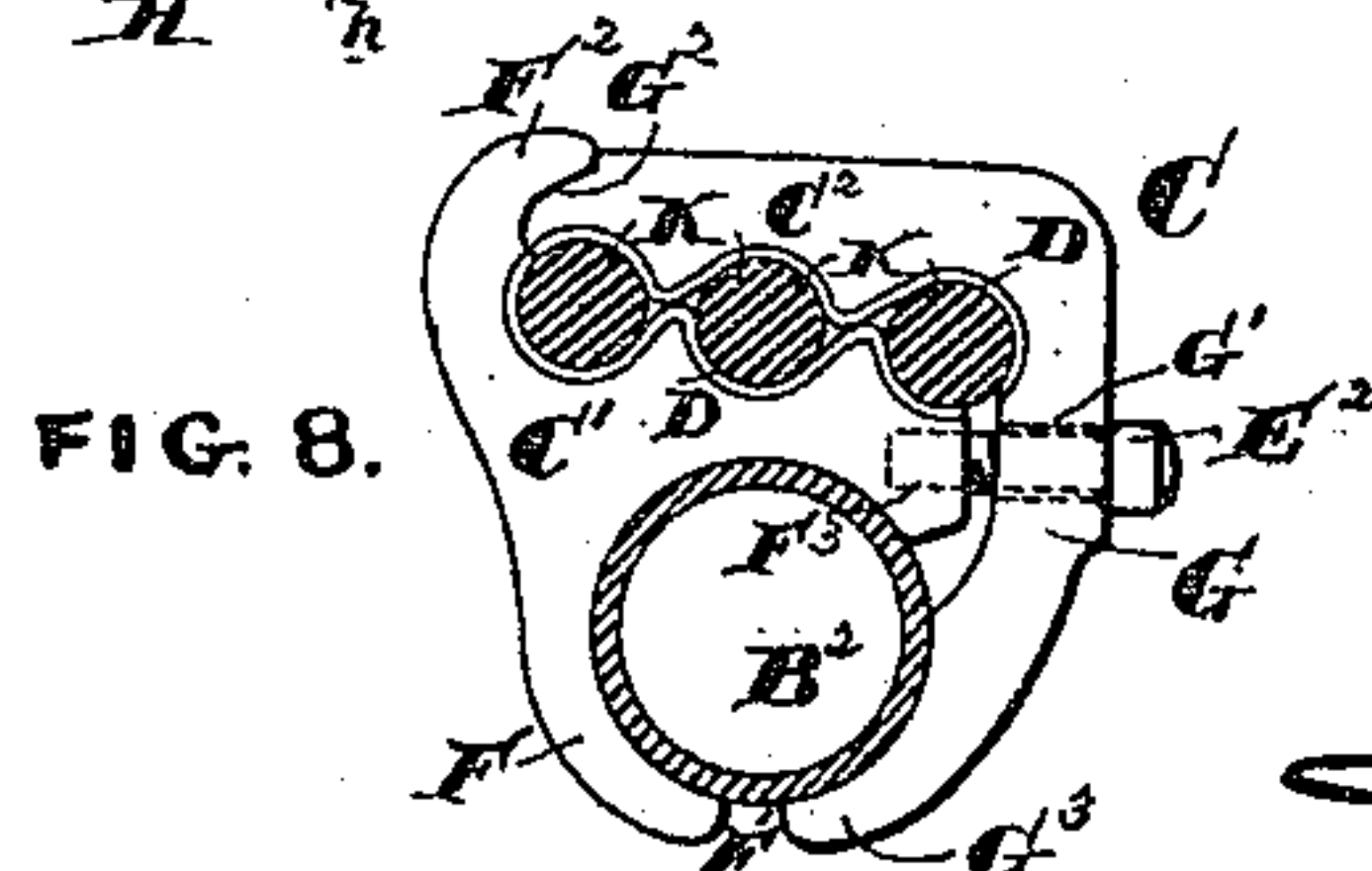
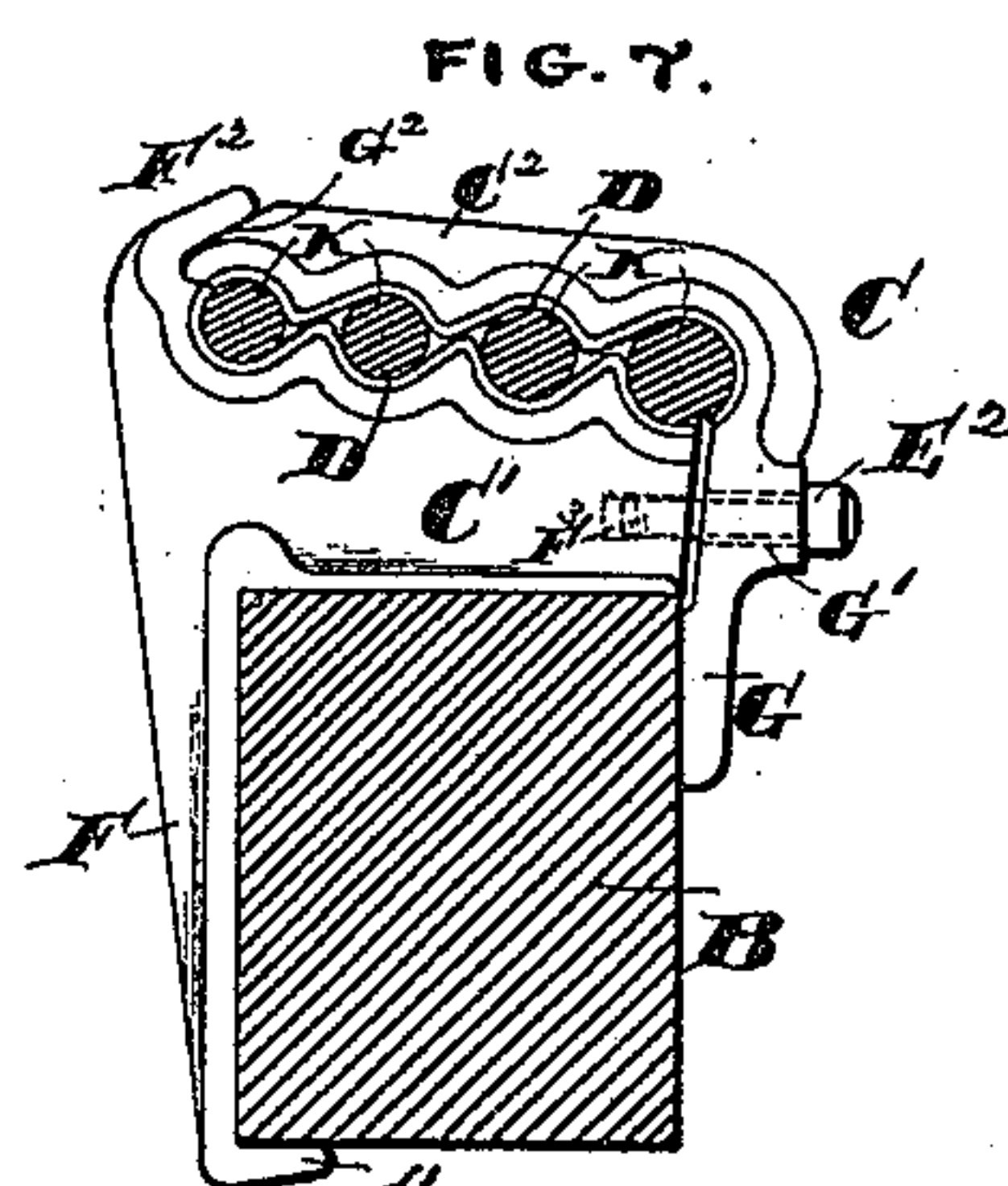
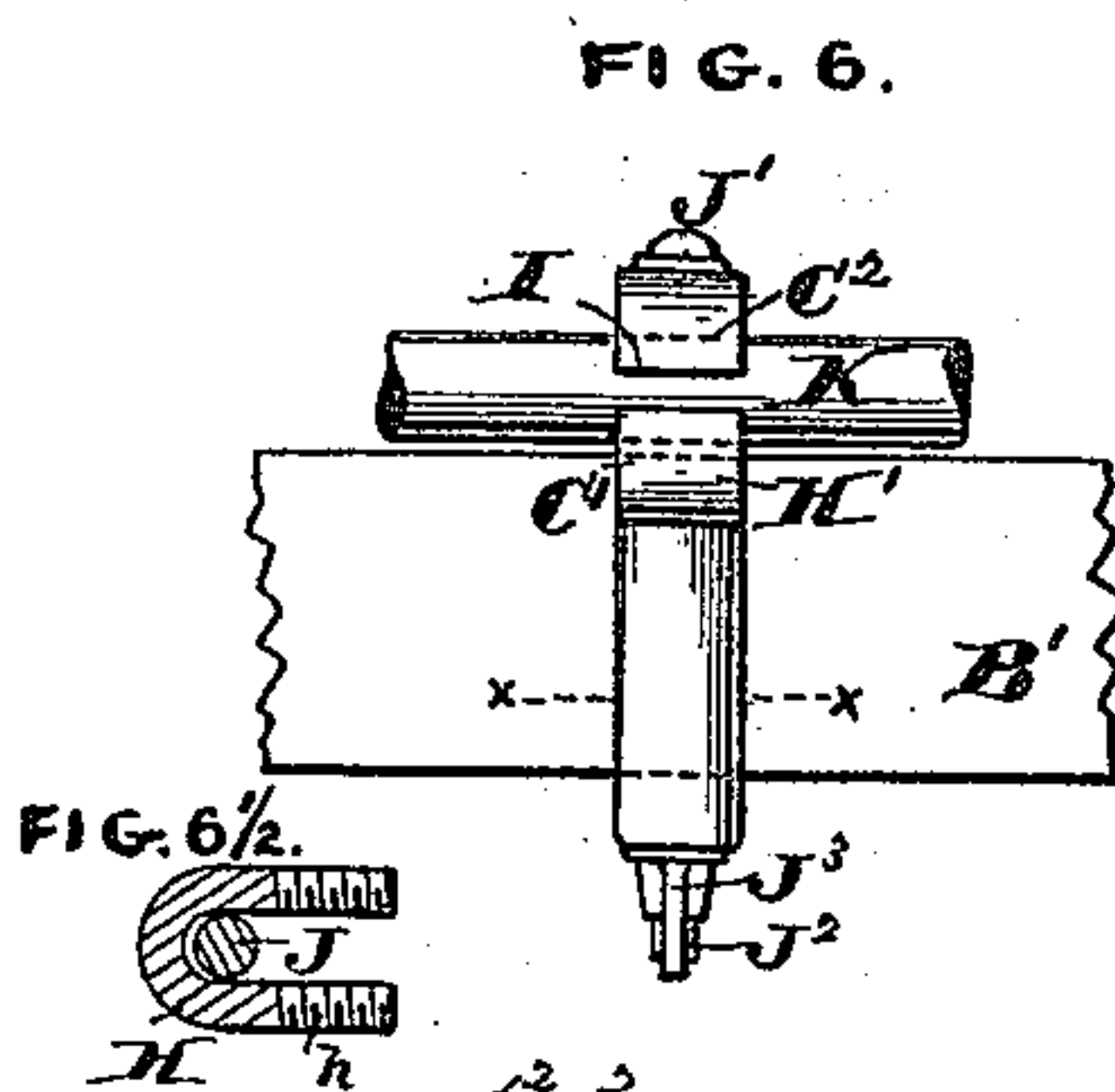
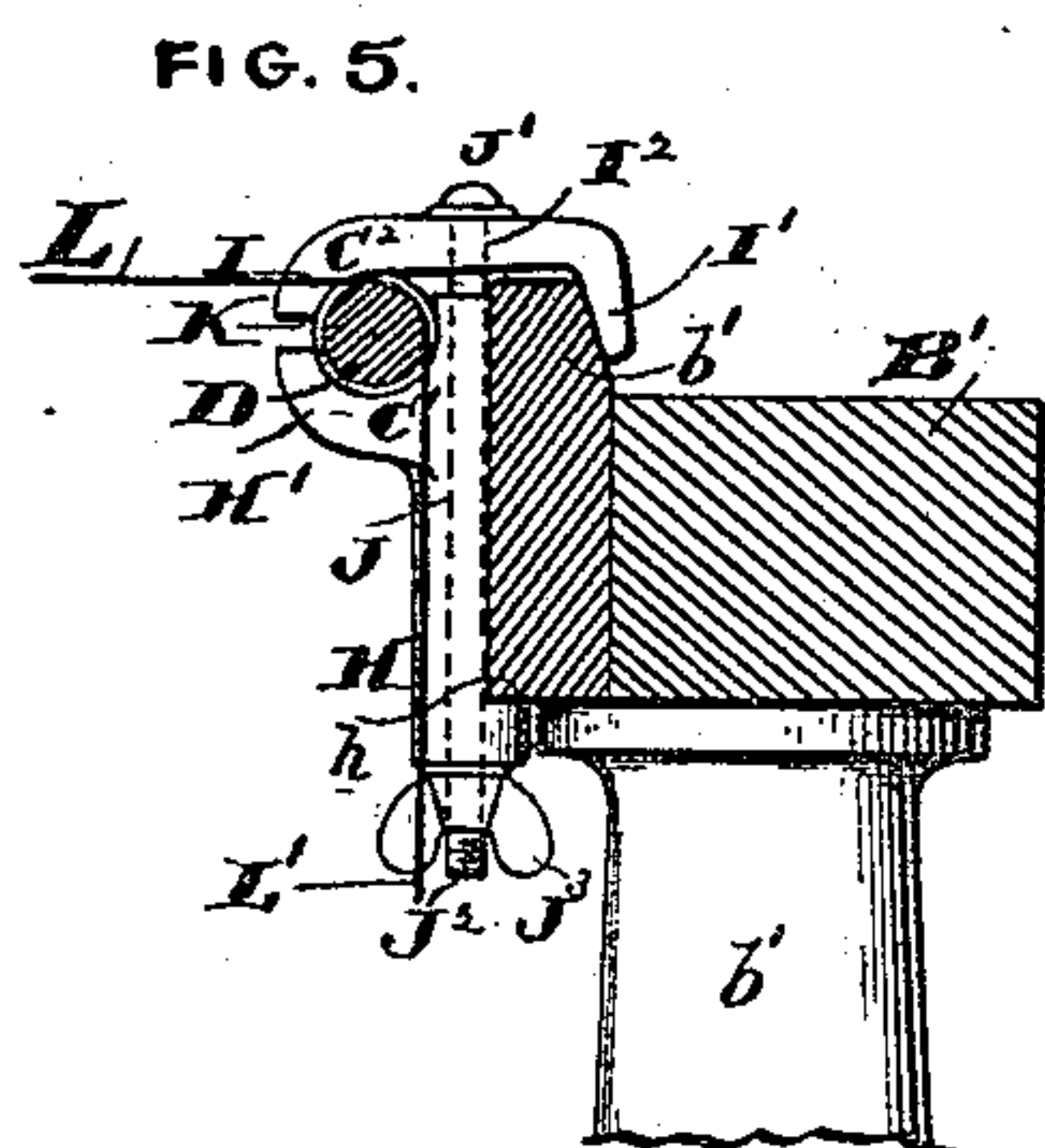
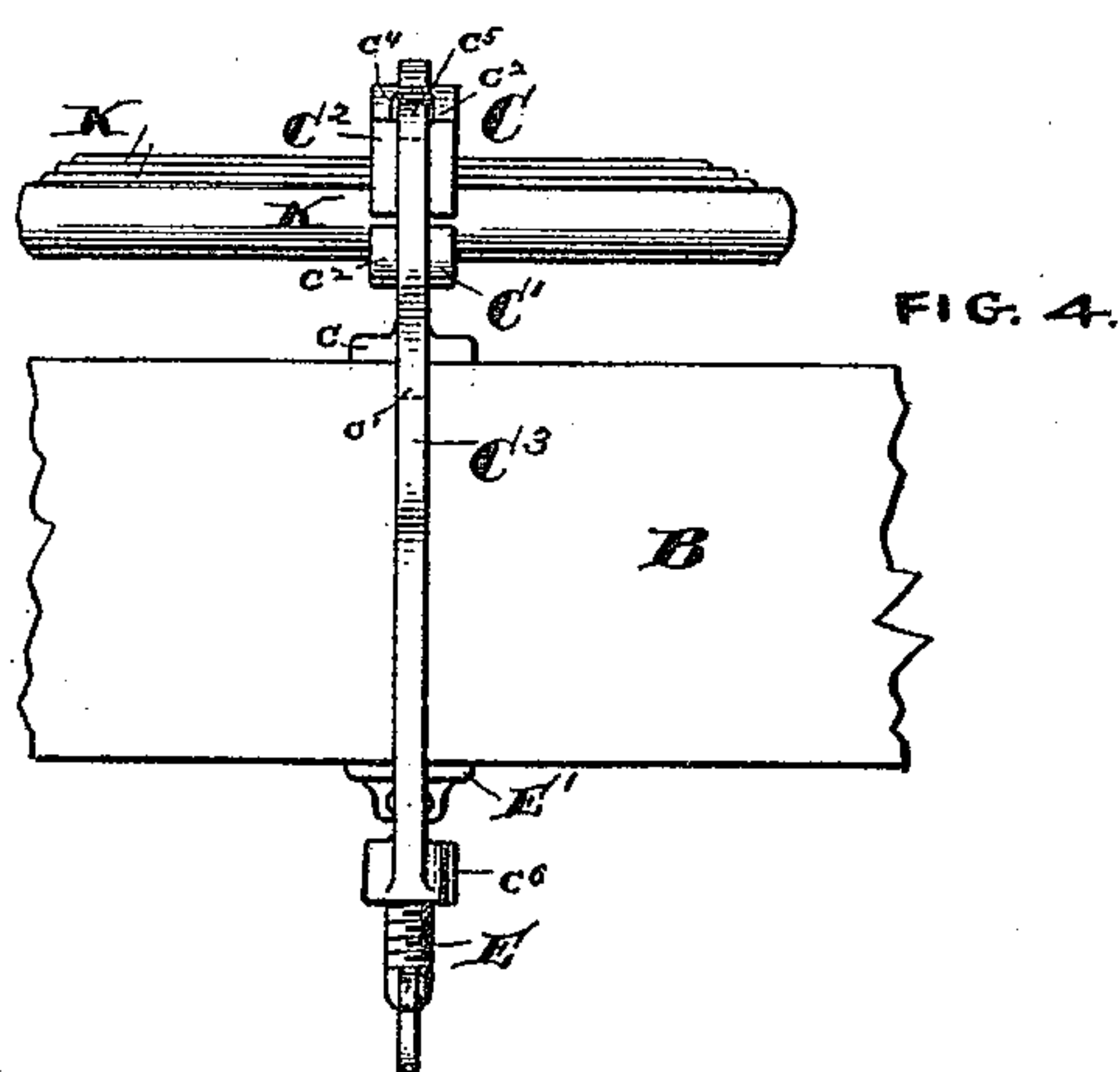
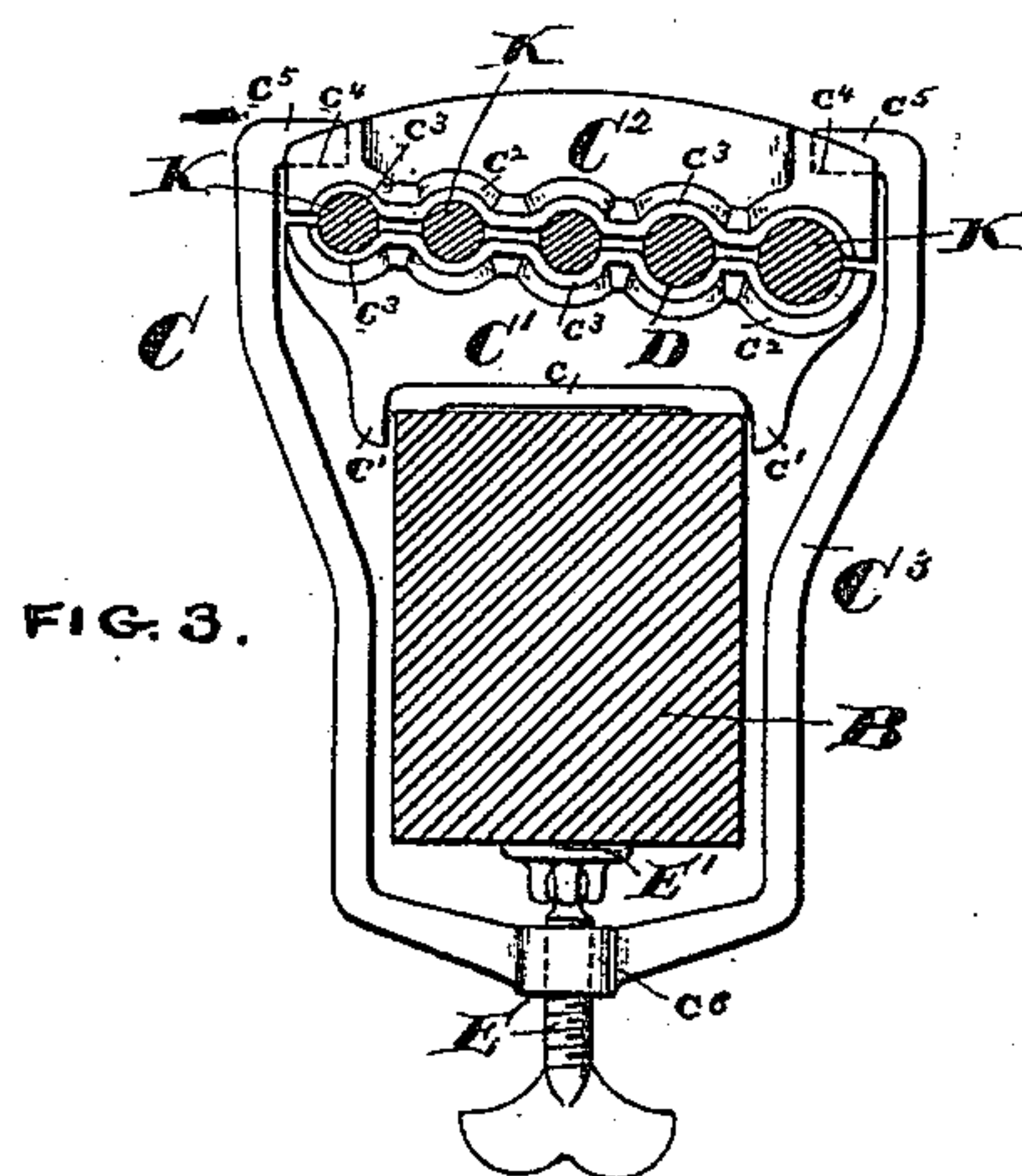
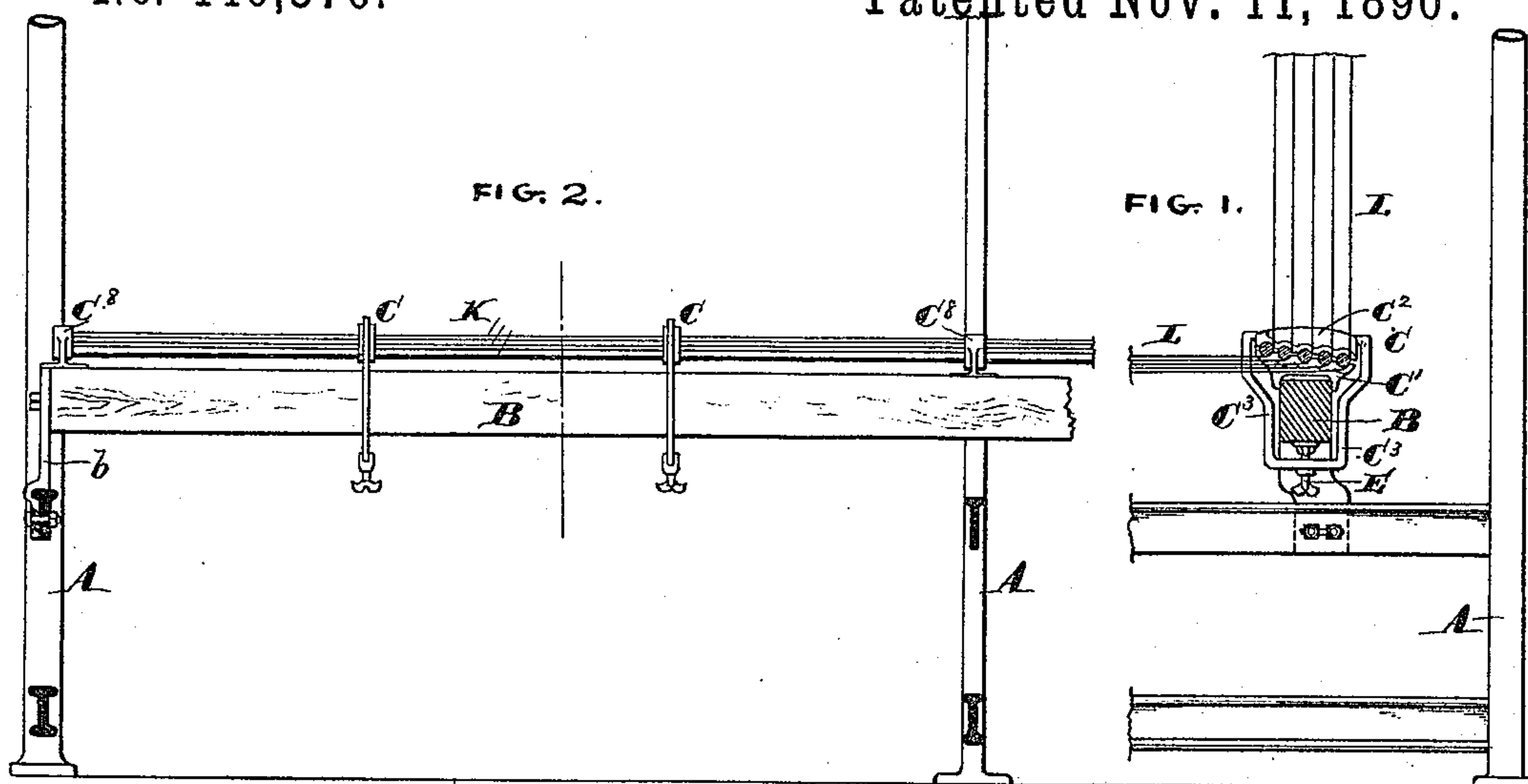
(No Model.)

O. W. SCHAUM.

GLASS BAR BRACKET FOR LOOMS FOR WEAVING SILK RIBBON  
OR FRINGE.

No. 440,370.

Patented Nov. 11, 1890.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

OTTO W. SCHAUM, OF PHILADELPHIA, PENNSYLVANIA.

GLASS-BAR BRACKET FOR LOOMS FOR WEAVING SILK RIBBON OR FRINGE.

SPECIFICATION forming part of Letters Patent No. 440,370, dated November 11, 1890.

Application filed September 12, 1889. Serial No. 323,753. (No model.)

*To all whom it may concern:*

Be it known that I, OTTO W. SCHAUM, of the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Glass-Bar Bracket for Looms for Weaving Silk Ribbon or Fringe, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to the construction of the brackets which are secured upon the warp-guiding beams, over rods supported upon which the warp-threads pass, and to breast-beams of ribbon and other narrow-ware looms, and which support the rods (generally of glass) over which the warp-threads and finished fabric pass; and the object of my invention is to provide such brackets as will be at the same time firm and secure in their hold on the beams and rods and easily adjusted along the same to adapt the loom to fabrics of varying width.

My invention will be best understood after a description of the drawings in which it is illustrated, and in which—

Figure 1 is a sectional view taken across the warp-guiding beam as secured to the loom-frame, showing my improved bracket in place thereon. Fig. 2 is a side view of the warp-guiding beam, showing two of my adjustable brackets secured thereto. Fig. 3 is an enlarged side view of my adjustable bracket constructed in what I believe to be the best form for use on the warp-guiding beam. Fig. 4 is an edge view of the same. Fig. 5 is a side view of what I believe to be the best construction of my improved bracket for use on the breast-beam. Fig. 6 is an edge view of the bracket shown in Fig. 5. Fig. 6½ is a section through the shank of the bracket on the line *xx* of Fig. 6. Fig. 7 is a view of a modified form of bracket, especially designed for use on the warp-guiding beam; and Fig. 8 is a view showing the same general construction as Fig. 7, further modified to fit on a cylindrical beam.

A, Figs. 1 and 2, is the frame of the loom.

B is the warp-guiding beam, connected with the frame by standards *b*.

B', Figs. 5 and 6, is the breast-beam, supported in the usual way, as by standards *b'*.

B<sup>2</sup> represents a beam made of a section of

tubing. As my invention requires no change in the ordinary form of the loom and its beams, it is unnecessary to show these old and well-known parts in the drawings further than enough to show how my improved brackets are attached thereto.

C, Figs. 1, 2, 3, 4, 7, and 8, indicates the warp-guiding beam-bracket, my preferred form of construction being that shown in Figs. 1 to 4, inclusive.

The bracket shown in Figs. 5, 6, and 6½ is especially adapted for use on the breast-beam, although all the modifications of my device shown can be applied on either beam.

C' in each of the figures represents the bottom or under bearing for the glass-supporting rods K, and C<sup>2</sup> is the upper bearing, between which and bearing C' the rods are clamped and held.

The main features of my invention consist, first, in making the bracket adjustable along the beam upon which it is used by means of a clamp combined with it and by which it can be readily connected and disconnected with the beam, and, second, in so combining the upper and lower bearings for the rods and the clamp that the bearings are clamped and unclamped as the bracket is secured or loosened on the beam.

In my preferred warp-guiding beam-bracket the lower bearing C' is formed of a casting having a broadened base *c*, adapted to rest on the top of the warp-beam, and ears *c'*, adapted to extend down on each side of the beam for a short distance. The upper face *c<sup>2</sup>* of this casting is also broadened and formed with recesses *c<sup>3</sup>* *c<sup>3</sup>*, arranged on a gradually-ascending plane to receive the rods K, over which the warp-threads L pass, as shown in Fig. 1. The upper bearing-piece C<sup>2</sup> has a lower face *c<sup>2</sup>*, corresponding to the face *c<sup>2</sup>* of the lower bearing and is provided with recesses *c<sup>4</sup>*, which should be in a plane parallel to the top of the beam B, as shown. Into these recesses *c<sup>4</sup>* extend the inwardly-bent ends *c<sup>5</sup>* of a stirrup-iron C<sup>3</sup>, which extends beneath the beam and is provided with a threaded perforation *c<sup>6</sup>* on its under side, in which works a screw E, the end of which is forced up against the bottom of the beam in order to cause the stirrup-iron to draw down upon the upper bearing-plate C<sup>2</sup>, causing it to clamp the rods K



tightly between itself and the lower bearing-plate C', and also clamping said lower bearing-plate against the top of the beam.

In the plan shown I secure on the end of screw E, by means of a simple form of ball-and-socket joint, a broadened pressure-piece E', so as to allow a certain freedom of adjustment to the parts when being clamped together.

In brackets, as heretofore, made of wood the recesses  $c^3$  have been cut out of the wood and carefully fitted to the rods which rest in them. In my device, where the bearing-pieces C' C<sup>2</sup> are preferably of metal and where frequent changes in position are contemplated, it would be impossible to form the recesses to accurately fit the rods, especially as the rods generally vary somewhat in cross-section at different points along their length, and I accordingly use a bed D, preferably of leather, molded to fit the recesses  $c^3$ , and which will by reason of its yielding character fit closely on any section of rod that may be clamped between the two faces on the castings C' and C<sup>2</sup>. Felt or other similar yielding substances can of course be used instead of leather.

In the modified form of the device (shown in Fig. 7) the lower clamping-piece rests upon the beam, as in my preferred form, but is provided with a downwardly-reaching arm F, with hooked end F' adapted to extend beneath the beam, as shown, and an inwardly-inclined horn F<sup>2</sup> extends up from its top on the same side, while in its opposite side a threaded perforation F<sup>3</sup> is formed. The upper clamping-piece is provided with a wedge-like end G<sup>2</sup>, adapted to extend beneath horn F<sup>2</sup>, and at its opposite side it has a downwardly-extending arm G, arranged to rest against the side of the beam and having a perforation G', through which passes a screw E<sup>2</sup>. It is obvious that the action of said screw when engaged with the threaded perforation F<sup>3</sup> will be to draw the bearing-pieces together on the rods and clamp the bracket to the beam. In Fig. 8 is illustrated a construction similar to that of Fig. 7, save that the arm G has an inwardly-extending end or hook G<sup>3</sup>, which is especially adapted to engage a beam of cylindrical form.

In Figs. 5, 6, and 6½ is illustrated still another modification of my device, which, as aforesaid, is especially adapted for the breast-beam. In this modification the lower bearing-piece C' does not, as in the other described constructions, rest upon the beam, but by means of a downwardly-extending arm H rests against the side of the beam. This arm H has horizontal projections  $h$  at its lower end, which extend beneath the beam and should have roughened surfaces, as indicated in Fig. 6½, to enable it to take a better hold on the beam, and it (arm H) is cored out to

the U form (shown in Fig. 6½) to admit a bolt J, which also passes through a perforation I<sup>2</sup> in the upper clamping-plate C<sup>2</sup>, upon the top of which the bolt-head J' rests. The clamping-plate C<sup>2</sup> has a U shape, one arm I extending over the lower plate C' and resting upon the rod K, while the other arm I' extends over a projecting ridge  $b''$  on the beam B', as shown. On the threaded end J<sup>2</sup> of the bolt J a thumb-nut J<sup>3</sup> screws, and, as will be at once seen, the action of the nut on the bolt and through it on the clamping-plates is to draw said plates together and clamp them tightly on rod K and on beam B'.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bracket for narrow-ware looms, having, in combination with a bearing for the warp-guiding rods, a clamp whereby the bracket can be adjustably secured to the warp-guiding or breast beams of the loom.

2. A bracket for narrow-ware looms, having, in combination, an upper and lower bearing for the warp-guiding rods, and a clamp arranged to hold the bracket upon the warp-guiding or breast beams of the loom and at the same time to clamp the upper and lower bearings together upon the rods.

3. A bracket for narrow-ware looms, having a lower bearing-plate for the warp-guiding rods arranged to rest on the top of the beam, in combination with an upper bearing-plate, and a clamp arranged to hold the bracket upon the beam and at the same time clasp the bearing-plates upon the rods.

4. A bracket for narrow-ware looms, having a lower bearing-plate for the warp-guiding rods arranged to rest on the top of the beam, in combination with an upper bearing-plate, and a clamp consisting of a stirrup-iron C<sup>3</sup>, adapted to extend beneath the beam and engage the upper bearing-plate on each side, and a screw E at the bottom of said stirrup-iron and arranged to bear upon the under side of the beam.

5. A bracket for narrow-ware looms, having a lower bearing-plate for the warp-guiding rods arranged to rest on the top of the beam, in combination with an upper bearing-plate, and a clamp consisting of a stirrup-iron C<sup>3</sup>, adapted to extend beneath the beam and engage the upper bearing-plate on each side, and a screw E at the bottom of said stirrup-iron having a pressure-piece E' secured to its end by a ball-and-socket joint and arranged to bear upon the under side of the beam.

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