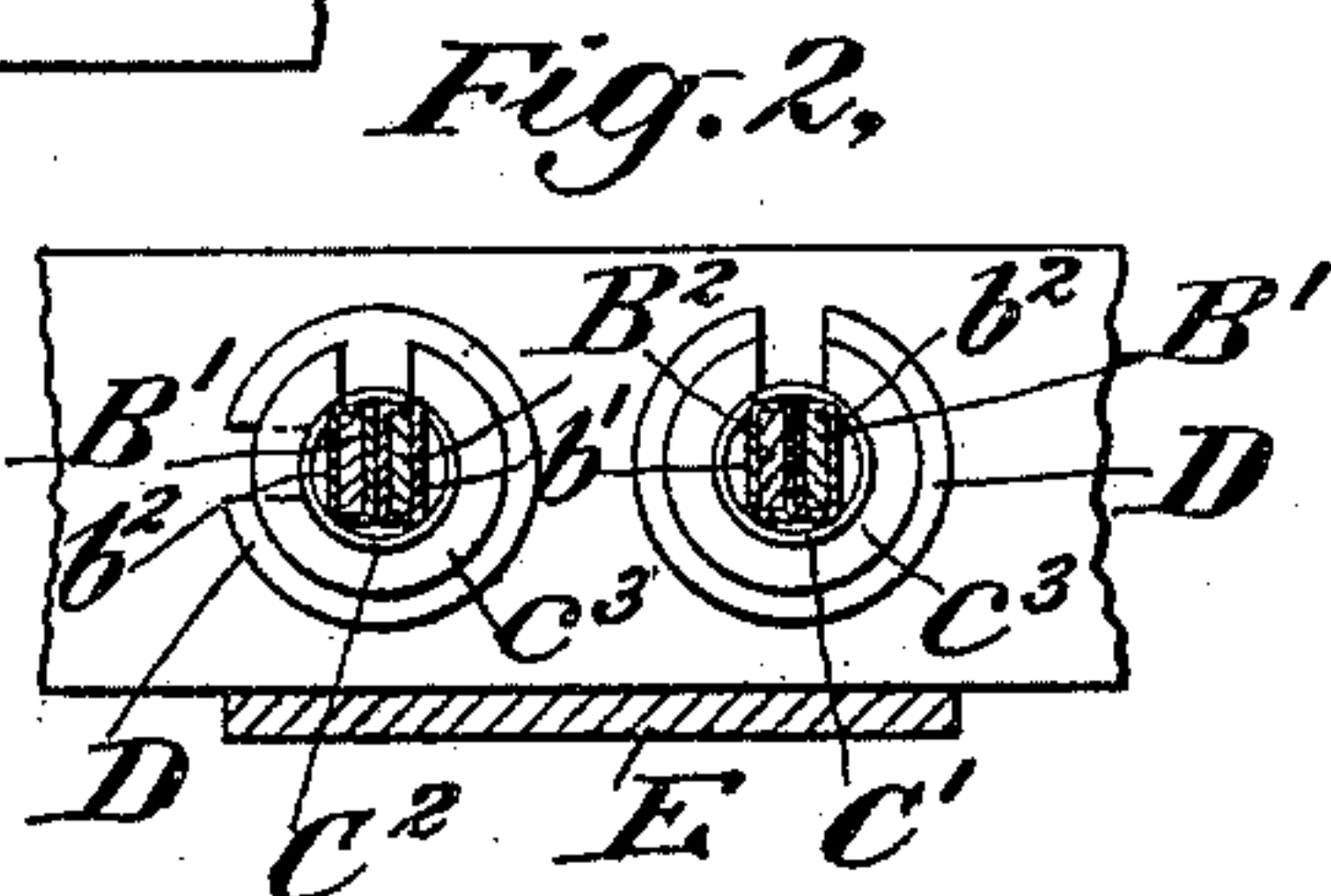
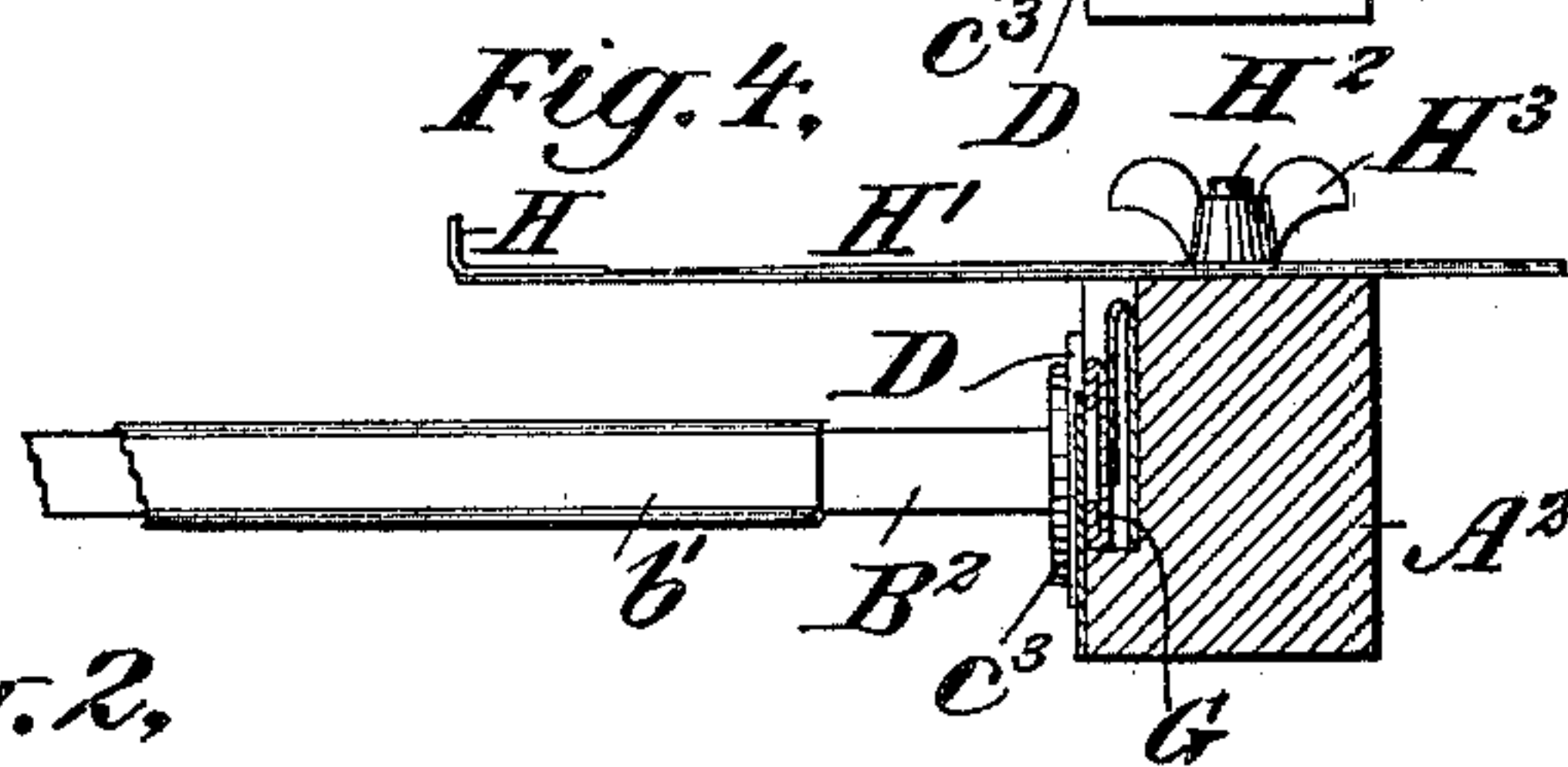
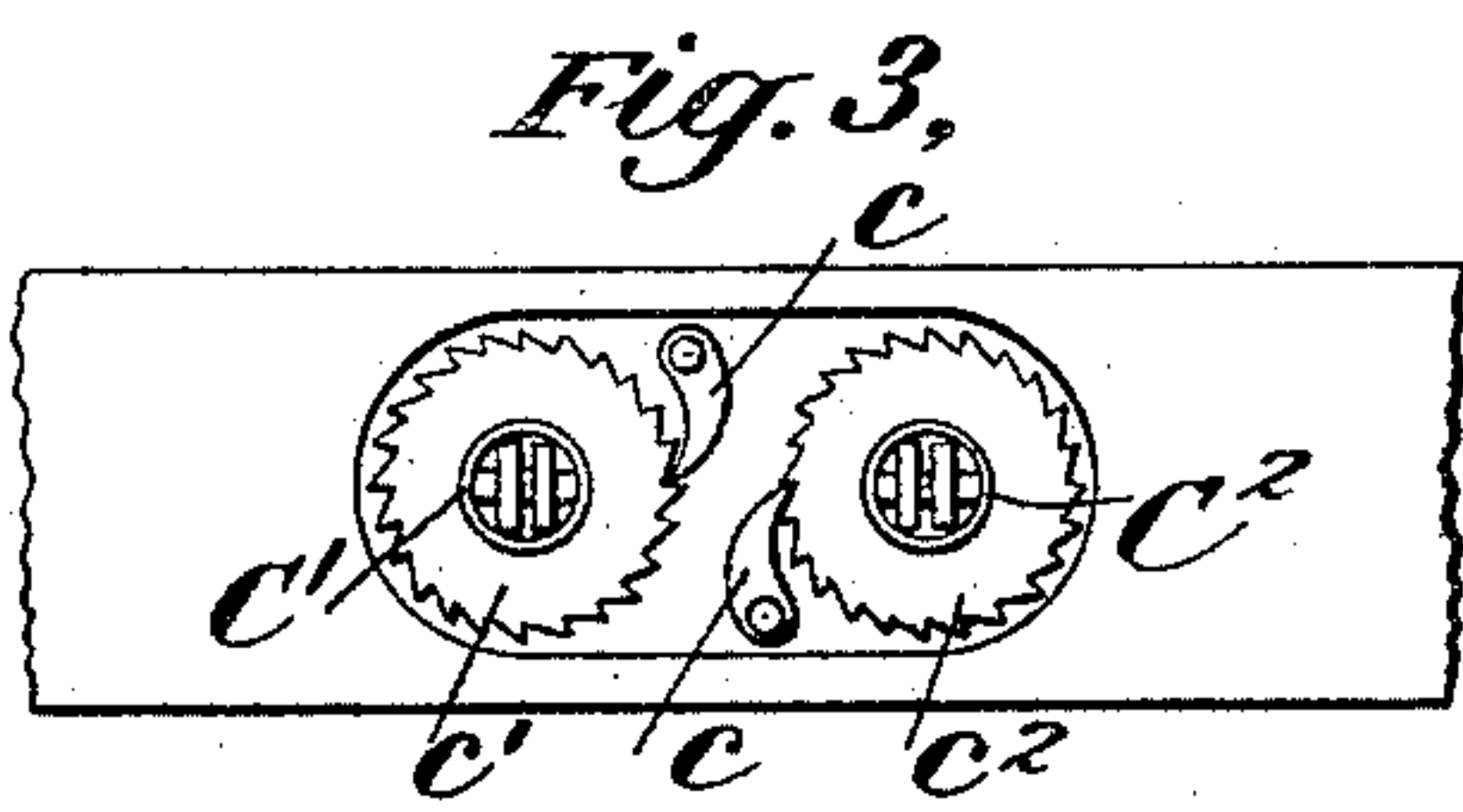
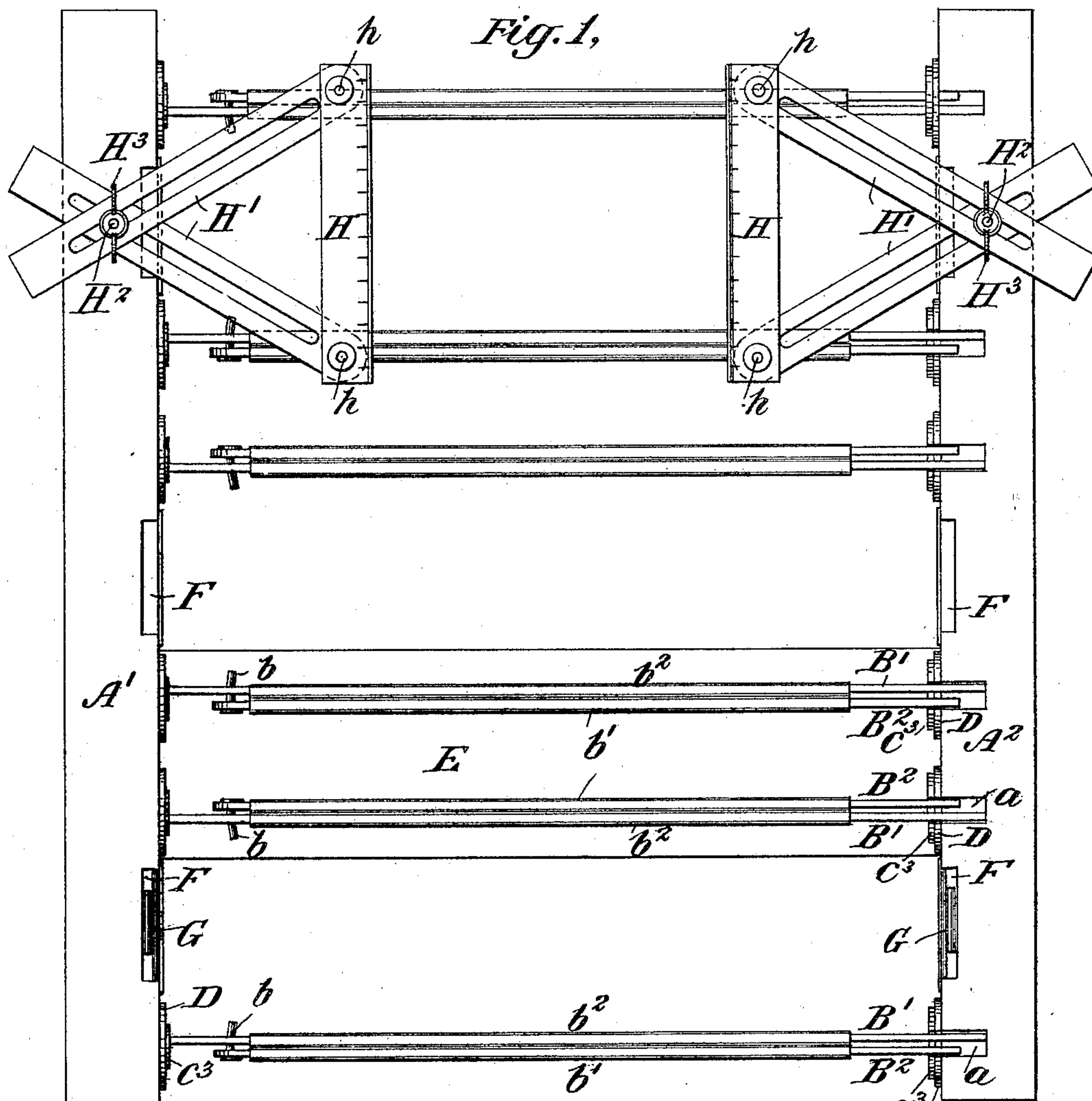


(No Model.)

T. D. EISNER.
EMBROIDERY FRAME.

No. 604,742.

Patented May 31, 1898.



WITNESSES:

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THEODOR D. EISNER, OF WEST NEW YORK, NEW JERSEY, ASSIGNOR, BY
MESNE ASSIGNMENTS, TO FREDERICK BRAUN, OF NEW YORK, N. Y.

EMBROIDERY-FRAME.

SPECIFICATION forming part of Letters Patent No. 604,742, dated May 31, 1898.

Application filed April 2, 1896. Serial No. 586,004. (No model.)

To all whom it may concern:

Be it known that I, THEODOR D. EISNER, of West New York, in the township of Union, county of Hudson, and State of New Jersey, have invented a certain new and useful Improvement in Fabric-Holding Devices for Embroidering-Machines, of which the following is a specification:

My improvement relates to frames for supporting fabrics to be embroidered in machines of the kind generally known as "Swiss-embroidery" machines, wherein there is a multiple arrangement of needles and concomitants for embroidering a number of duplicates of the same pattern simultaneously.

My improvement consists in a novel frame specially adapted for holding a number of comparatively small pieces of fabric upon which the pattern is to be embroidered.

I will describe a frame embodying my improvement, and then point out the novel features in the claims.

In the accompanying drawings, Figure 1 is a front or face view of a frame embodying my improvement. Fig. 2 is a longitudinal section of the same. Fig. 3 is an end view of a portion of the same. Fig. 4 is a transverse section.

Similar letters of reference designate corresponding parts in all the figures.

A' A² designate rails which may be made of wood or any other suitable material and extend parallel to each other.

B' B² designate pairs of bars arranged side by side, extending between the rails A' A², and preferably made of metal. The bar B' of each pair is fitted in sleeves C' C², which are inserted in sockets of the rails A' A². These sleeves are provided at the outer extremities with ratchet-wheels c' c², with which are engaged pawls c, actuated by springs to engage with the ratchets and to secure the sleeves in position after rotary adjustment, the object being to permit of the rotation of each pair of bars to wind up the projecting edges of fabric clamped between them for the purpose of tightening the fabric. Each of the bars B² is near one end pivoted by a pivot b to its fellow bar B', and at the other end is free to move through a notch a in the rail A² and through a radial opening into the sleeve

C'. Preferably the pivot-pin b will be fastened to the bar B² and be detachable from the bar B', so as to permit of the ready removal of the bar B².

Each of the sleeves C' has combined with it a locking-disk D, which is inserted between a flange c³, with which each sleeve C' is provided, and the adjacent face of the rail A². After the free end of the bar B' has been inserted in the sleeve through its radial opening and through a corresponding radial opening of the locking-disk D the latter may be rotated by pressure exerted by the finger of the operator, so as to move its radial opening out of line with that of the sleeve C', whereupon the bar B² will be secured.

The bars B' B² are preferably covered with sleeves b' b², of soft rubber or like material.

Portions of fabric may be secured between two adjacent pairs of bars B' B². After having been clamped along different lines either or both pairs of bars may be rotated to tighten the fabric between them.

Surplus fabric may be rolled up by the hand of the operator and tucked into transverse receptacles E, formed in alternate pairs of bars by means of boards extending between the rails A' A².

Between each two pairs of bars which are intended to be connected by a piece of fabric are means for fastening the corners or upper and lower portions of a fabric. These means consist of pockets F, formed in opposite faces of the rails A' A², and detachable plates G, which may be rolled up in the fabric with it and inserted into the pockets.

For the purpose of securing angular edges of pieces of fabric I may combine with the rails A' A² fastening devices H, connected at their ends by pivots h to longitudinally-slotted rods or strips H', whose slots embrace screws H², extending from the rails A' A² and combined with nuts H³, whereby the rods or strips H' may be clamped in different positions.

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

1. In a frame for holding materials to be embroidered, the combination with the longitudinal rails, of pairs of clamping-bars, the bars constituting each pair being arranged

side by side, and one being pivoted at one end to another and secured at the free end by a fastening device consisting of a notched rotary disk, substantially as specified.

5 2. In a frame for holding materials to be embroidered, the combination of longitudinal rails, pairs of clamping-bars extending between the said rails, and rotary bearings for the pairs of clamping-bars, substantially
10 as specified.

3. In a frame for holding materials to be embroidered, the combination of longitudinal rails, pairs of clamping-bars extending between the said rails, rotary bearings for the
15 pairs of clamping-bars, and detents for holding said bearings against rotary movement, substantially as specified.

4. In a frame for holding materials to be embroidered, the combination of longitudinal
20 rails, pairs of clamping-bars extending between the said rails, rotary bearings for the pairs of clamping-bars, pivots for connecting one bar of each pair at one end to its fellow, and a fastening for connecting the free end
25 of said bar in place, substantially as specified.

5. In a frame for holding fabrics to be embroidered, the combination with longitudinal rails, of several pairs of clamping-bars and transverse receptacles independent of the
30 clamping-bars extending from one longitudinal rail to the other, intermediate and beneath alternate pairs of bars, substantially as described.

6. In a frame for holding materials to be
35 embroidered, the combination of longitudinal rails, two pairs of clamping-bars extending between said rails, pockets intermediate the said two pairs of clamping-bars, on that face of one of the rails to which these pairs
40 of clamping-bars extend, and clamping-pieces for said pockets, substantially as specified.

7. In a frame for holding materials to be embroidered, the combination of longitudi-

nal rails, clamping-bars extending between said rails and serving to hold, along parallel
45 lines, the material to be embroidered, additional clamps connected to said rails and means for securing said clamps at different angles with respect to the clamping-bars, substantially as specified. 50

8. In a frame for holding materials to be embroidered, the combination of longitudinal rails, clamping-bars extending between said rails and serving to hold, along parallel
55 lines, the material to be embroidered, and additional clamps connected to said rails at their ends by longitudinally-slotted rods, and fastening devices whereby longitudinal and lateral adjustment of the clamps is permitted, substantially as specified. 60

9. In fabric-holding devices for embroidering-machines, the combination with longitudinal rails, of pairs of clamping-bars extending between said rails, rotary bearings for each pair of said clamping-bars, capable of
65 independent rotary movement of the bars in both directions, and means for holding the rotary bearings against movement, substantially as described.

10. In fabric-holding devices for embroidering-machines, the combination with longitudinal rails, of pairs of clamping-bars extending between the rails, and fastening devices carried upon the longitudinal rails each comprising a clamp, slotted bars pivotally connected to the clamp at separated points and
75 securing devices engaging the slots of the slotted bars for holding them against movement, substantially as described.

In testimony whereof I have signed my
80 name to this specification in the presence of two subscribing witnesses.

THEODOR D. EISNER.

Witnesses:

DAVID C. SELTMAN,
WALTER A. PAULING.