

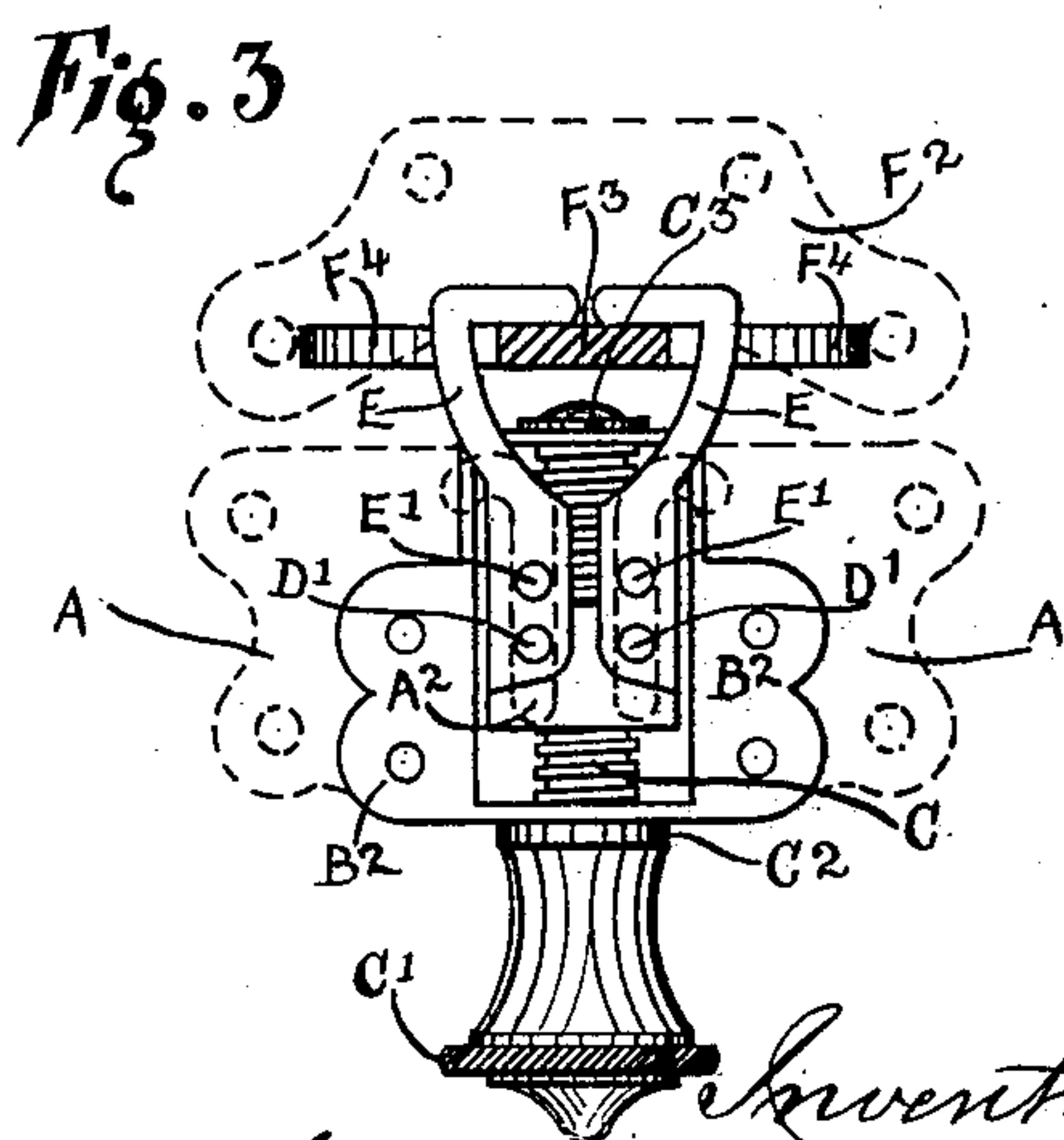
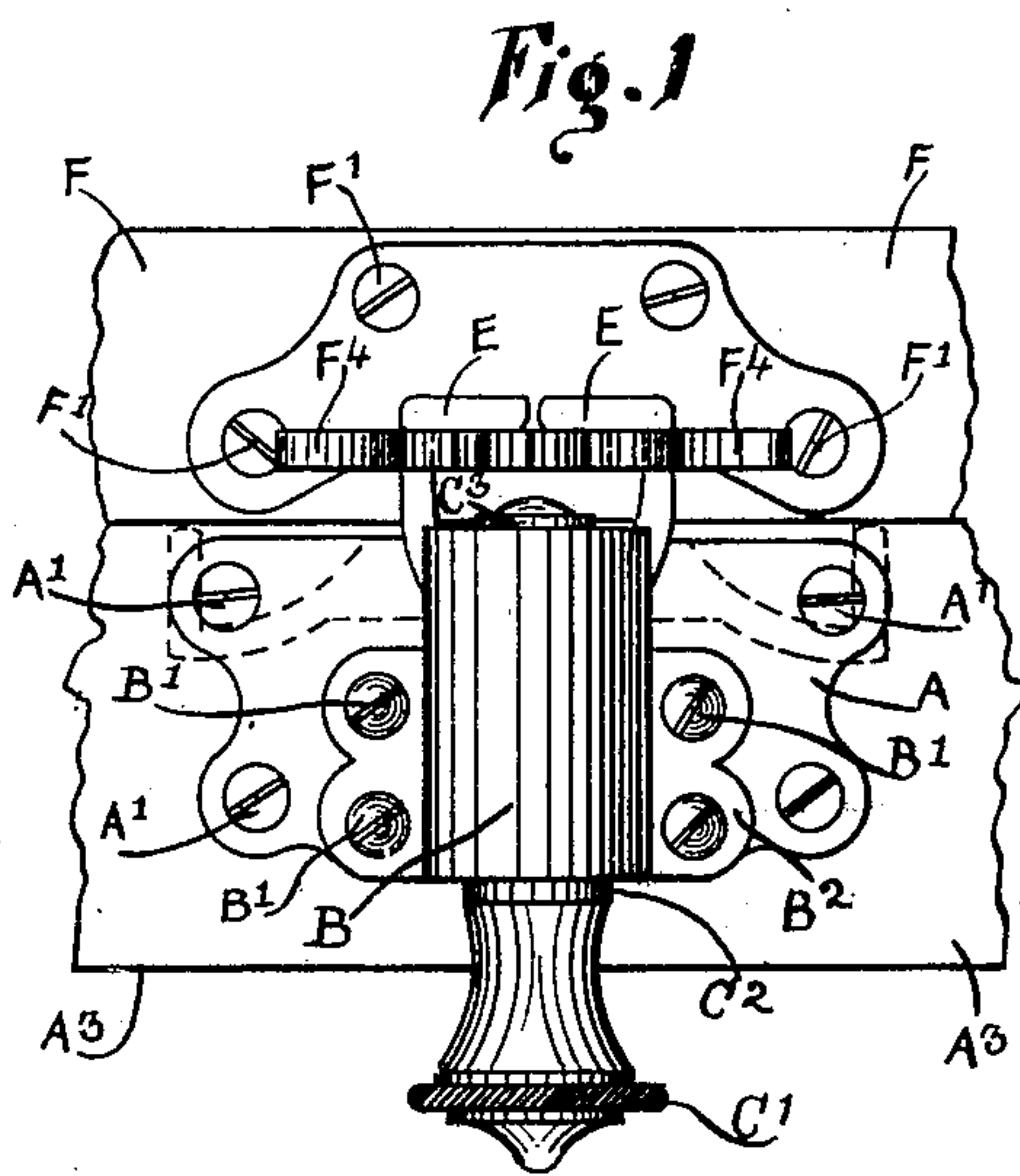
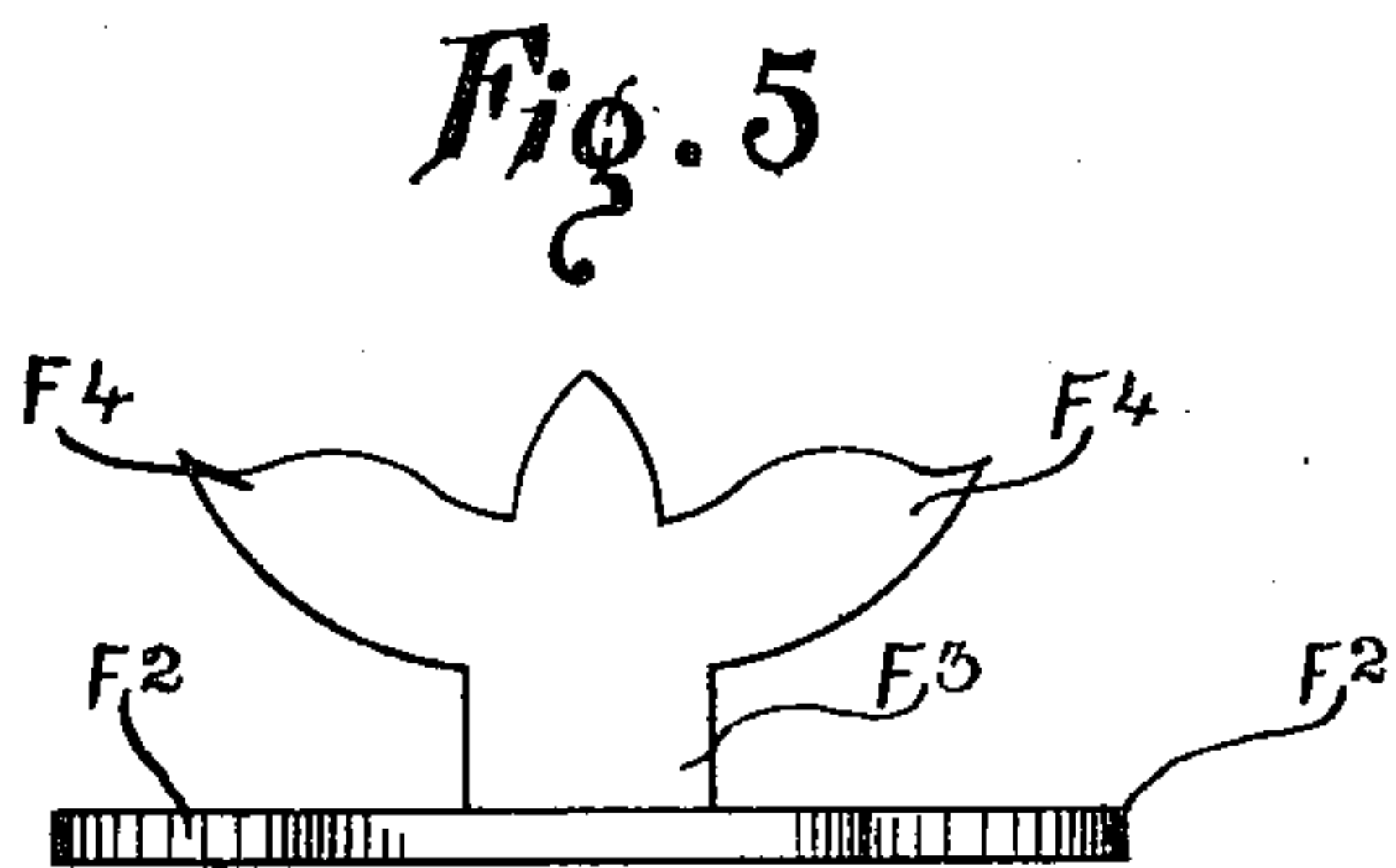
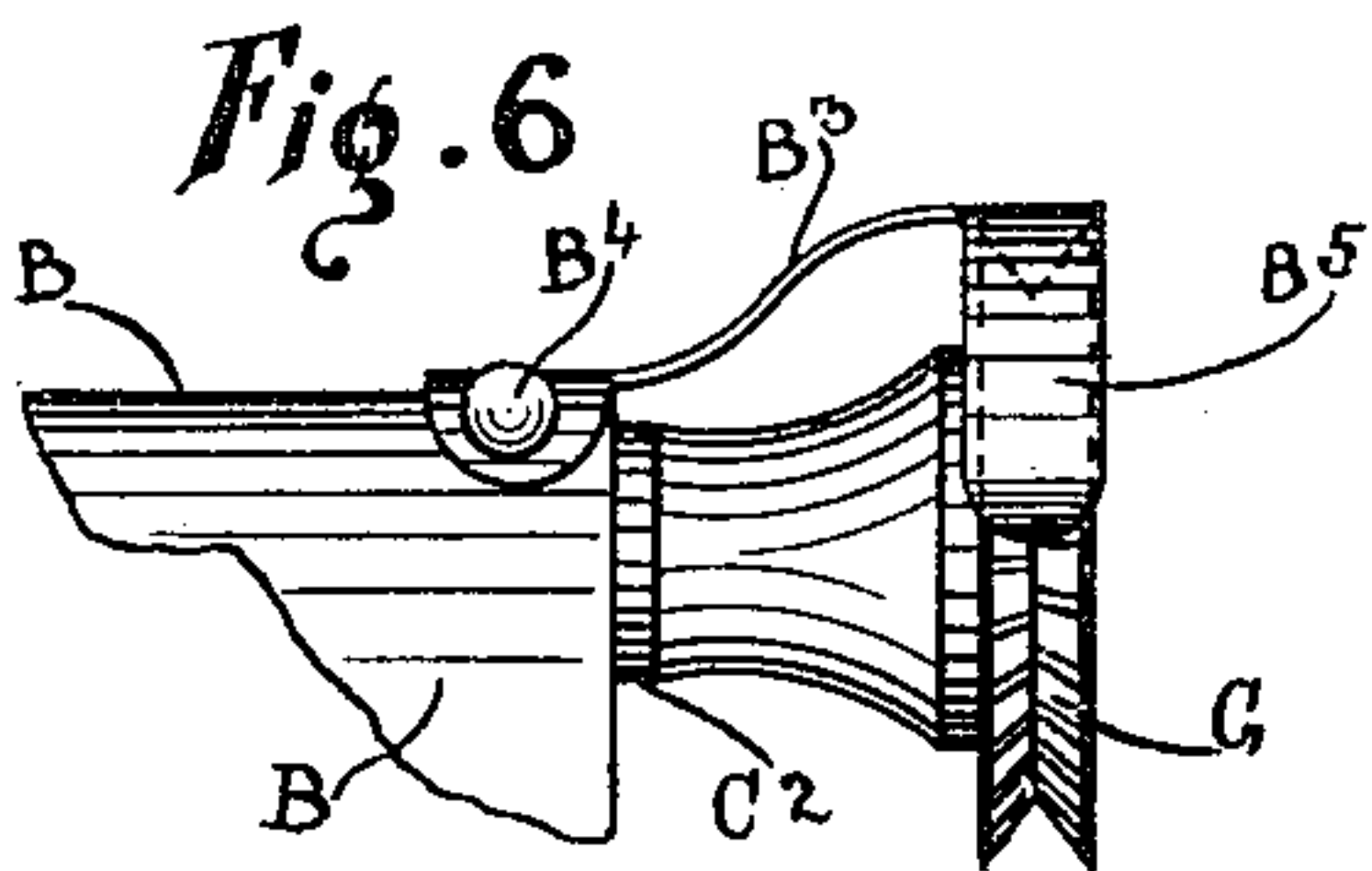
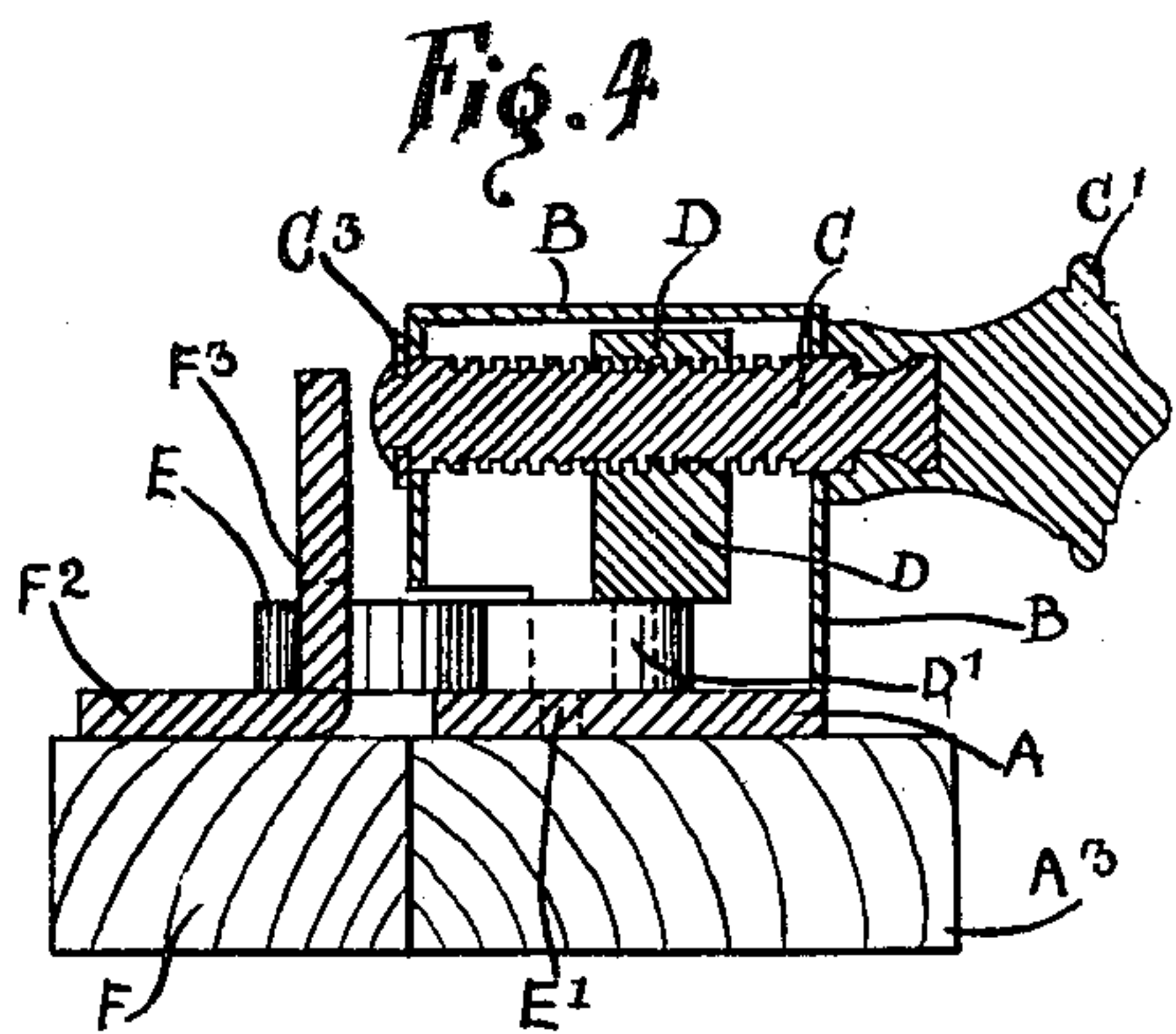
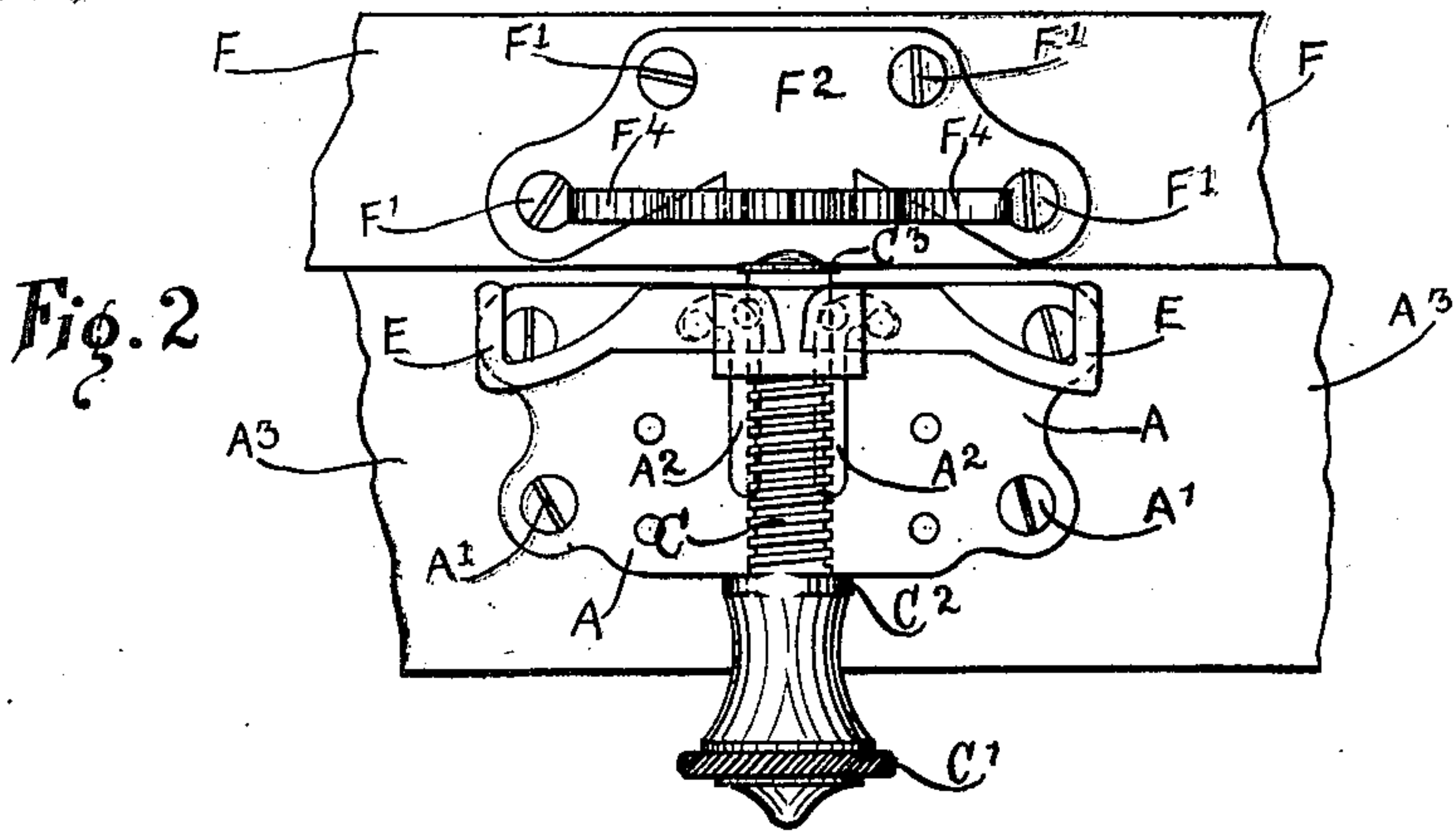
No. 658,418.

Patented Sept. 25, 1900.

A. E. APPLETON.
FASTENER FOR WINDOWS..

(Application filed May 6, 1899.)

(No Model.)



Witnesses:

H. K. Boulter

[Signature]

Inventor
Alfred E. Appleton,
By *[Signature]* H. K. Boulter, attorney

UNITED STATES PATENT OFFICE.

ALFRED EDWARD APPLETON, OF TEWKESBURY, ENGLAND.

FASTENER FOR WINDOWS.

SPECIFICATION forming part of Letters Patent No. 658,418, dated September 25, 1900.

Application filed May 6, 1899. Serial No. 715,829. (No model.)

To all whom it may concern:

Be it known that I, ALFRED EDWARD APPLETON, builder, a subject of the Queen of Great Britain, residing at Tewkesbury, in the county of Gloucester, England, have invented certain new and useful Improvements in or Relating to Fastenings for Windows and the Like, (for which Letters Patent have been applied for in Great Britain, No. 21,133, dated October 7, 1898,) of which the following is a specification.

This invention has reference to fastenings for window-sashes and the like.

The invention consists of a device provided with two hooked arms located on the meeting-rail of one sash combined with means for closing and tightening the said arms around a catch or engaging piece on the meeting-rail of the other sash.

The invention will be understood from the following further description in reference to the accompanying drawings, in which—

Figure 1 is a plan of the sash-fastener constructed according to this invention and with the two sash-bars locked thereby. Fig. 2 is a plan with the casing removed and showing the two sash-bars unlocked. Fig. 3 is an under side plan with the base-plates shown in dotted line only. Fig. 4 is a central longitudinal section. Fig. 5 is an elevation of the catch-piece on the upper sash-bar. Fig. 6 is a detail view showing a modification.

A fastener constructed in accordance with this invention consists of a base-plate A, which is attached by screws A' to the meeting-rail of a lower window-sash A³. B is a casing, which is attached to the said base-plate preferably by screws or rivets B', passing through lugs B², formed integrally with the casing, and into the base-plate. The ends of the said casing form bearings, Fig. 4, for a screw C, provided with a milled-edged head C', by which the rotation of the screw is effected. The boss C² of the head C' is located against the exterior of one end of the casing B, and the other end of the screw, which passes through and out of the latter, is furnished with a loose washer C³ thereon, which is maintained on the end of the screw and against the opposite end of the casing by the end of the screw C

being hammered up or burred. The construction permits the screw to be rotated within the casing without traveling to and fro.

Mounted on the screw C is an integrally-threaded nut or follower D, which travels to and fro thereon upon the rotation of the screw. On the lower surface of the said nut are two downwardly-depending pins D', fitting loosely into the rear ends of two hooked arms E, each of which is also furnished with a downwardly-projecting pin E', located in a cam or guide slot A² in the base-plate A. The two cam-slots for some portion of their length are straight and parallel and each terminates in a curvilinear slot extending in opposite directions. When the pins E' are traveling along the straight portion of the slots, the arms E move forward outwardly together side by side in a straight line; but as the said pins enter the curved slots the hooked ends of the arms E diverge, and, the movement being continued, the said arms are brought end to end, as in Fig. 2, which is the withdrawn position.

On the meeting-rail of the upper sash F there is fastened by screws a base-plate furnished with a catch-piece or engaging piece F³, which is embraced by the two hooked arms hereinbefore mentioned. In the present case the plate F² has formed with it a narrow vertical plate F³ with a horizontal extension F⁴ on each side of the upper end. In actual practice when the window is fastened the hooked arms E embrace the neck of the catch-piece F³ and the upper horizontal extensions F⁴ bear on the upper edges of the pivoted arms E, and thus prevent the upper sash F being lowered when the fastener is in its closed position.

The invention is not limited to the use of a catch-piece of the construction shown, as it is obvious that any suitable form of catch-piece may be employed.

In the modification shown in Fig. 6 a cord-pulley G is substituted for the head C', and a spring-plate B³, fastened by screws or rivets B⁴ to the casing B and having a curved plate B⁵ extending over and partly around the said pulley G, is employed to prevent the cord accidentally getting off the pulley.

The operation of the fastener is as follows:

Assuming the hooked arms to be in their withdrawn position, as indicated in Fig. 2, so that the window can be opened, the turning of the milled-edged head C' will rotate the screw C, thereby causing the nut D to travel thereon toward the head of the latter and bring with it the ends of the hooked arms E. The pins E' on the latter in following the curvature of the said slots A² cause the hooked ends of the arms E to converge and come together, and in doing so they will embrace or close around the neck F³ of the catch-piece F⁴ on the upper sash-bar F. As the pins E' enter the parallel slots A² the hooked arms E will be withdrawn partly into the casing B and in doing so tighten around the catch-piece and draw it toward it, thus closing the two meeting-rails of the top and bottom sashes.

When it is desired to open the window, the hereinbefore-described action is reversed.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A sash-fastener consisting of a catch-piece, a pair of pivoted arms, a rotatable screw, connections between the latter and the said arms pins on the latter and cam-slots for the reception of the said pins and to guide the pivoted arms to engage or disengage the catch-piece upon the rotation of the screw.

2. The improved sash-fastener consisting of a catch-piece, pivoted arms, a rotatable screw, a nut thereon with pin connections to the said arms base-plate and cam-slots therein for the guidance of the pivoted arms.

3. In a sash-fastener, the combination with a catch-piece on the bar of an upper sash, of a pair of horizontally-arranged arms on the bar of a lower sash having their outer ends hooked, a horizontally-movable follower, means for reciprocating the follower and pivotal connections between the follower and the inner adjacent ends of the arms, and means whereby when the follower is moved in one direction the outer ends of the arms will be caused to swing together and engage the catch-piece, and when the follower is moved

in the opposite direction the said outer ends of the arms will free the catch.

4. In a sash-fastener, the combination with a catch-piece on the bar of an upper sash, of a pair of horizontally-arranged arms on the bar, of a lower sash and having their outer ends hooked, a horizontally-movable follower, a screw threaded through the follower and adapted to reciprocate the latter, pivotal connections between the follower and the inner adjacent ends of the arms, and means whereby when the follower is moved in one direction the outer ends of the arms will be caused to swing together and engage the catch-piece and when the follower is moved in the opposite direction the said outer ends of the arms will free the catch.

5. The combination with a catch-piece, of a base-plate, having cam-slots, a casing, a screw rotatable in the casing, a follower through which the screw is threaded, a pair of arms having hooked outer ends, a depending pin on each of the arms toward the inner end thereof, said pins extending into the slots as described, and pivotal connections between the lower end of the follower and the inner ends of the pins all arranged for cooperation substantially as and for the purpose set forth.

6. The combination with a catch-piece having a vertical portion and horizontal lateral extensions, of a pair of horizontally-arranged arms having hooked outer ends, a screw, connections between the latter and the arms and means whereby when the screw is turned in one direction the outer ends of the arms will swing together and engage the vertical portion of the catch-piece and lie beneath the lateral extensions of the latter, and when the screw is turned in the opposite direction the outer ends of the arms will swing apart and free the catch-piece.

In testimony whereof I have hereunto set my hand in the presence of the two subscribing witnesses.

ALFRED EDWARD APPLETON.

Witnesses:

E. N. LEWIS,

GEO. H. BLAKESLEY.