

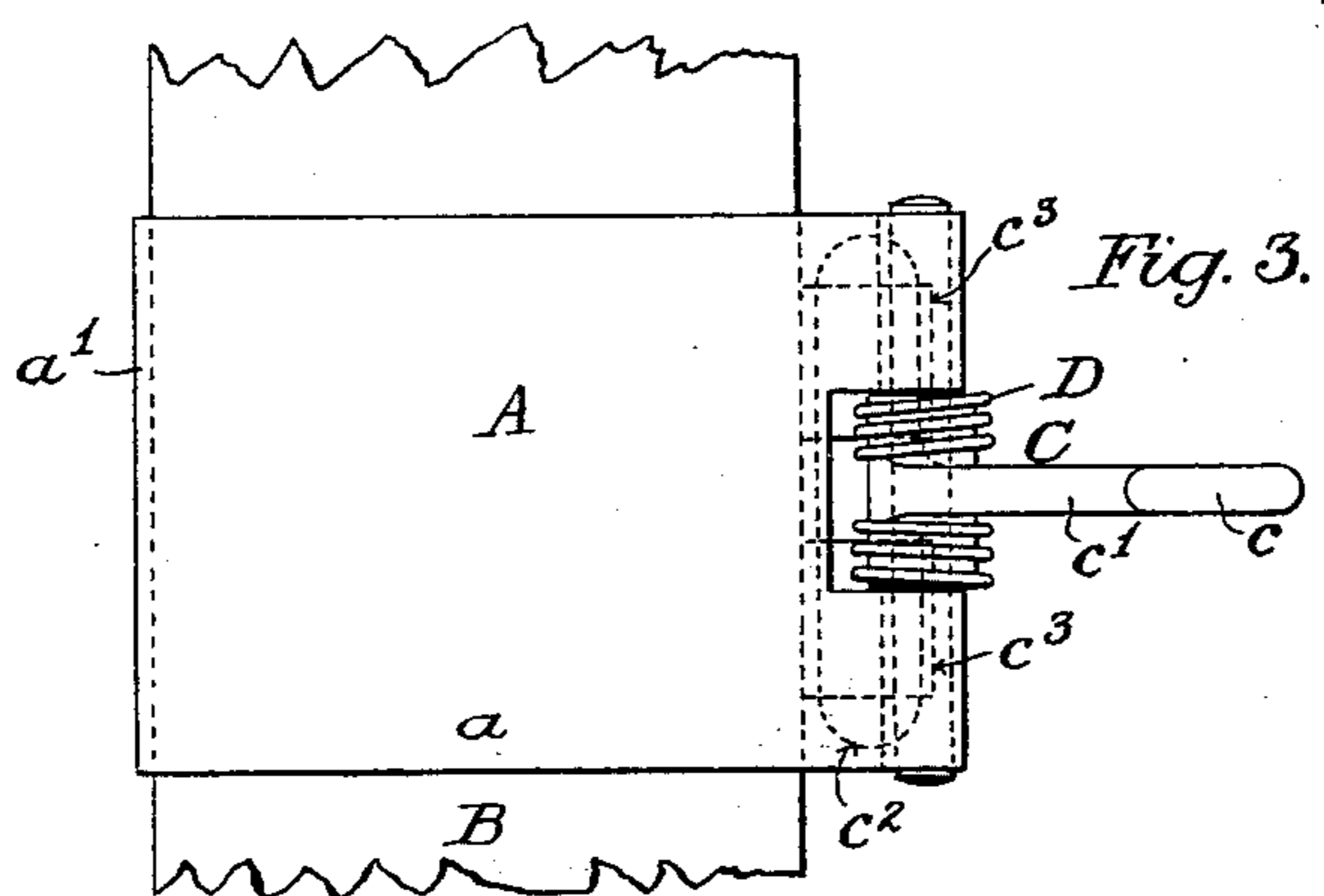
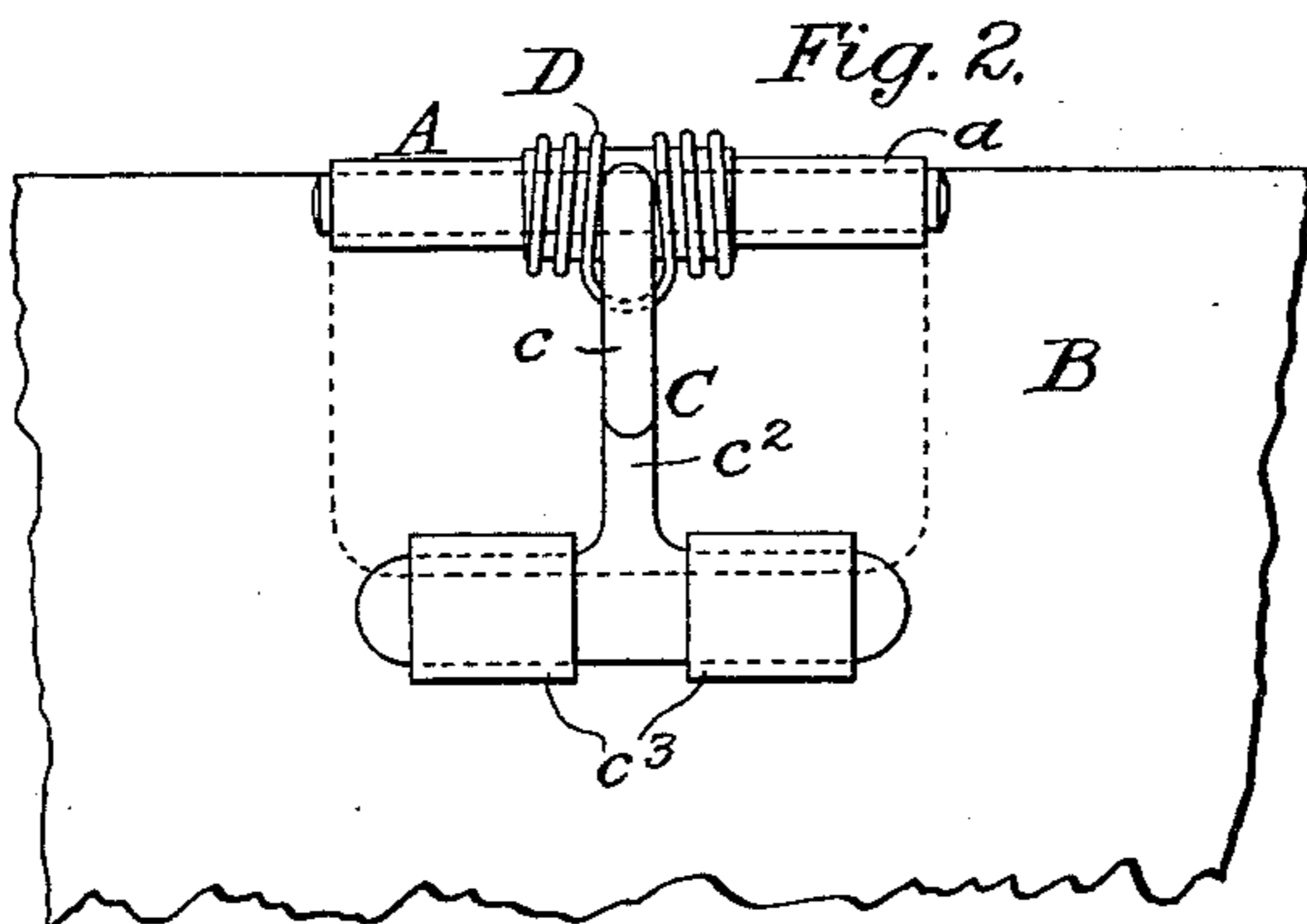
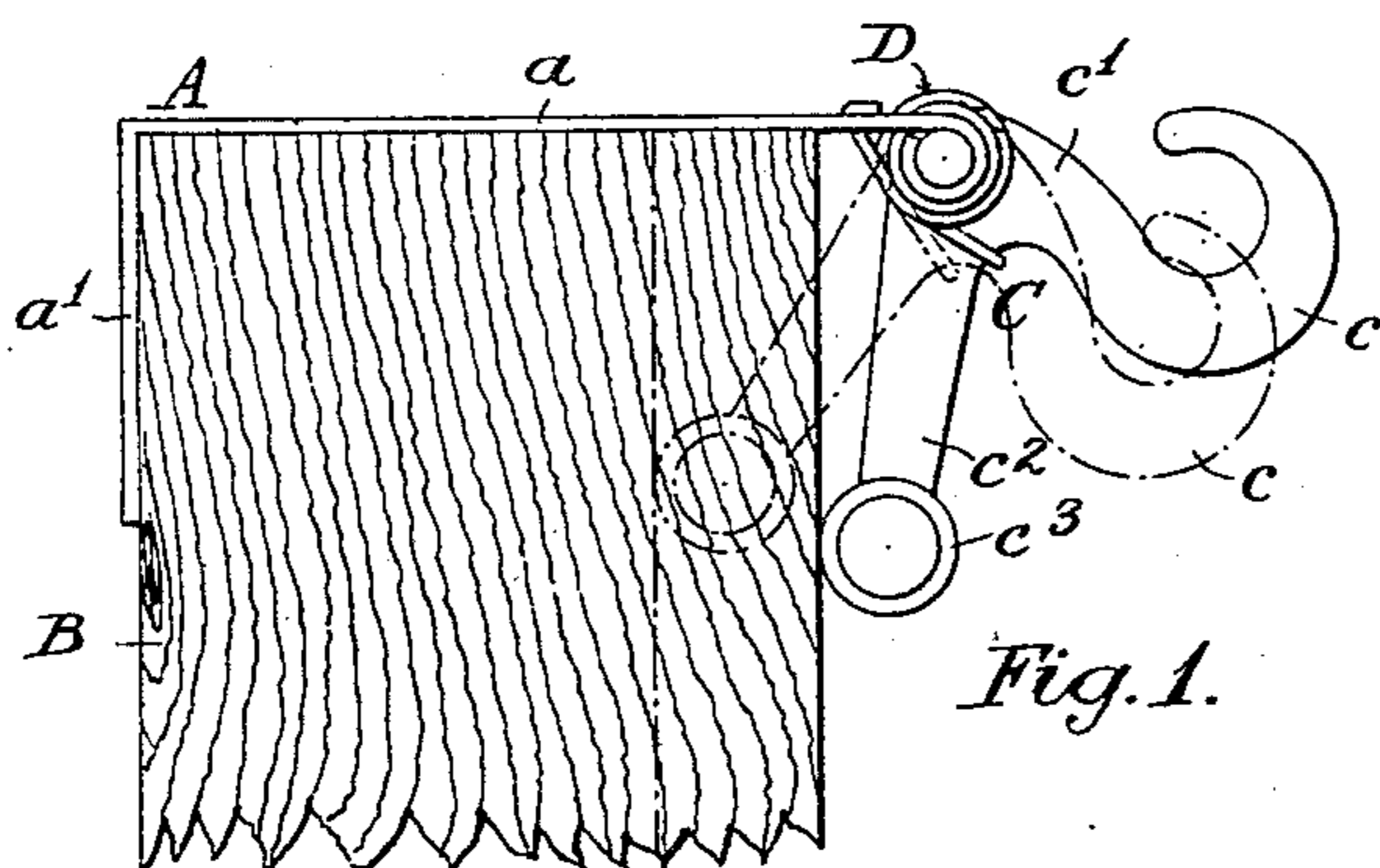
No. 638,813.

Patented Dec. 12, 1899.

M. B. RYAN.
DETACHABLE DOOR HOOK.

(Application filed Nov. 7, 1898.)

(No Model.)



Witnesses:-

Wm. H. Gorgan
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Inventor:-

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UNITED STATES PATENT OFFICE.

MICHAEL B. RYAN, OF DANBURY, CONNECTICUT.

DETACHABLE DOOR-HOOK.

SPECIFICATION forming part of Letters Patent No. 638,813, dated December 12, 1899.

Application filed November 7, 1898. Serial No. 695,755. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL B. RYAN, a citizen of the United States, residing at Danbury, county of Fairfield, State of Connecticut, have invented a new and useful Improvement in Detachable Door-Hooks, of which the following is a specification.

The object of this invention is to provide means whereby hooks can be detachably secured to doors or other parts of varying thickness without injuring or disfiguring same; and it is principally intended for serving as a means of attachment for portable exercising apparatus, in which cords are employed and have to be suitably held, so that the user of the apparatus may exercise his muscles by pulling or drawing on same; but it will be readily understood that such means may be employed for other purposes.

A suitable method of carrying my invention into effect is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my apparatus applied to a door, the latter being shown in section. Fig. 2 is a front elevation of such apparatus, and Fig. 3 a plan view of same.

In carrying out my invention I construct an angle-bracket A with a horizontal part *a* to fit over the top or bottom of the door B, to which the hook C is to be detachably secured, and a vertical part *a'*, bent downward from such horizontal part *a*, so as to fit against the outer side of the door B, while to the opposite end of the horizontal part *a* a hook C to receive the exercising or other apparatus is pivoted. This hook C is in the form of a bell-crank or L lever, the hook proper, *c*, being formed at the outer end of the horizontal arm *c'*, while the lower end of the arm *c²* is intended to bear against the inside of the door B and so as to prevent same injuring the latter. The point at which it bears upon the door is preferably covered with a pad of india-rubber, leather, or other suitable yielding material *c³*.

A spring D may be arranged to bear upon one arm of the pivoted lever C and tend to force the vertical arm *c²* of same against the inside of the door B, so as to enable it to accommodate itself to the thickness of the door and hold the whole firmly in position thereon. Such spring D may be made by

stamping out part of the metal to which the lever is pivoted and bending same and causing it to bear upon one arm of the lever, so as to act as a blade-spring, or it may be made by twisting such portion of the metal in the form of a spiral spring, acting upon the pivoted lever, or, again, a separate spring may be employed.

In Fig. 1 it will be seen that the pivoted lever is shown in two different positions, the full lines indicating the position it occupies when applied to a door of one thickness, while the broken lines indicate the position it assumes in order to enable it to accommodate itself to a door of less thickness.

The part *a a'*, constituting the angle-bracket embracing the top or bottom and the outer side of the door B, may be in the form of a plate of metal, as shown, or it may be made of wire bent to the necessary form for effecting this purpose and acting as a spring on one arm of the pivoted lever C.

In the case of employing the hooks for portable exercising apparatus one of same will be attached to the top of the door and another to the bottom thereof, the cords constituting such exercising apparatus being secured to such hooks, so that the apparatus may be used in the usual manner, while after use the apparatus may be removed and the hooks detached without leaving any trace of same having been affixed to the door.

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. The improved means for detachably securing hooks to doors or other parts, consisting in an angle-bracket with a horizontal and a vertical part to fit respectively over the top or bottom and the outside of a door or part, and a lever pivoted to the horizontal part, a hook formed on one arm of said lever, and a spring so arranged as to cause the other arm of said lever to bear against the door or part to which the hook is to be attached, substantially as and for the purpose specified.

2. In a detachable hook, an angle-bracket A, consisting of two parts, *a* and *a'* substantially at right angles to each other, in combination with an L-lever pivoted upon one of said parts, a hook formed on one arm of

said lever and a spring, one end connected to the lever, the other end to the angle-bracket, substantially as described for the purpose specified.

- 5 3. In a detachable hook, an angle-bracket, consisting of two parts *a* and *a'* substantially at right angles to each other, in combination with an L-lever pivoted upon one of said parts, a hook formed on one arm of said lever,
10 a spring so arranged as to cause the other arm

of said lever to bear against the door or part to which the hook is to be attached, and pads *c*³ on said other arm thereof, substantially as described for the purpose specified.

In testimony whereof I affix my signature 15
in presence of two witnesses.

MICHAEL B. RYAN.

Witnesses:

H. W. CASTER,

E. A. KNIGHT.