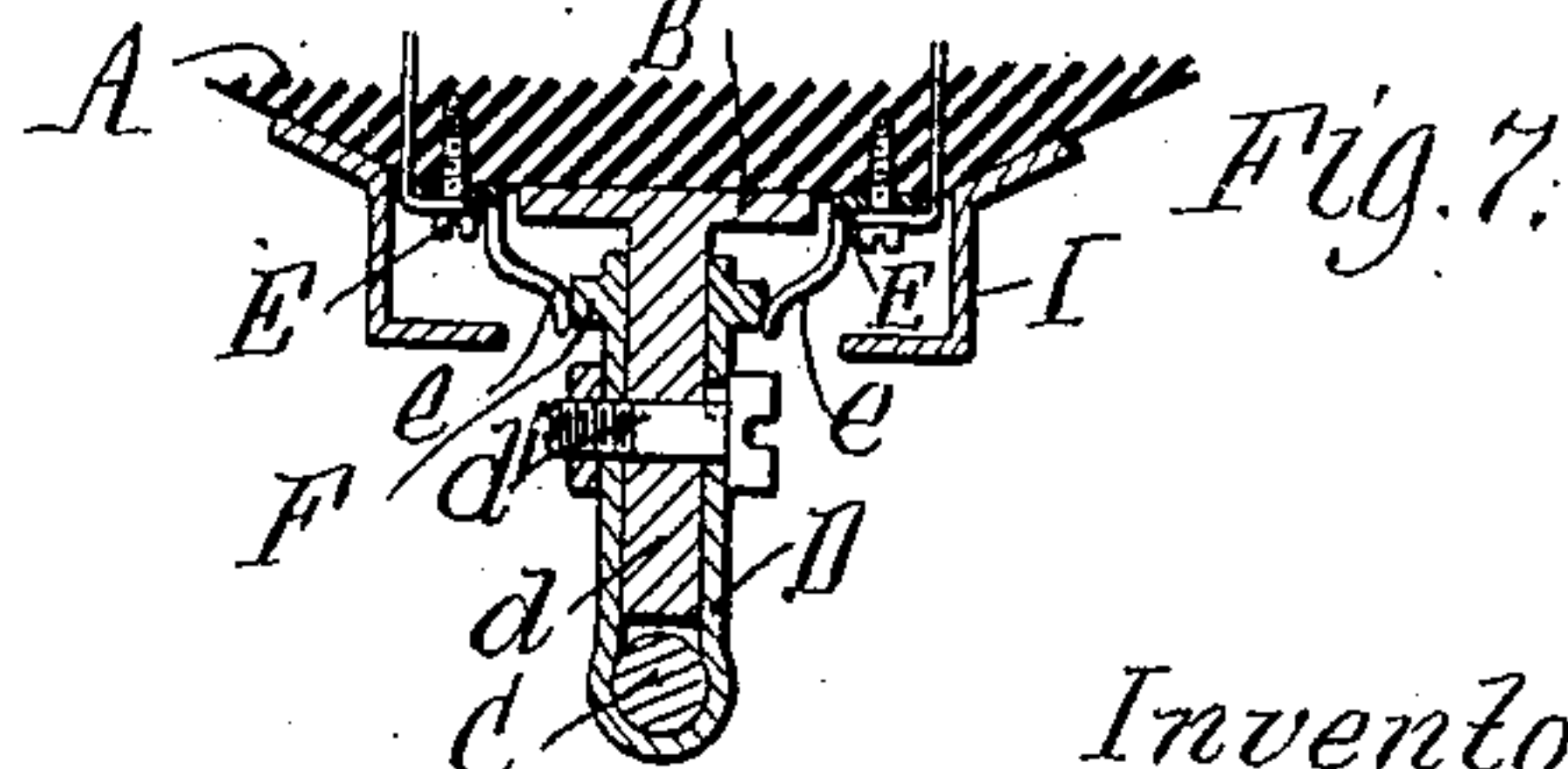
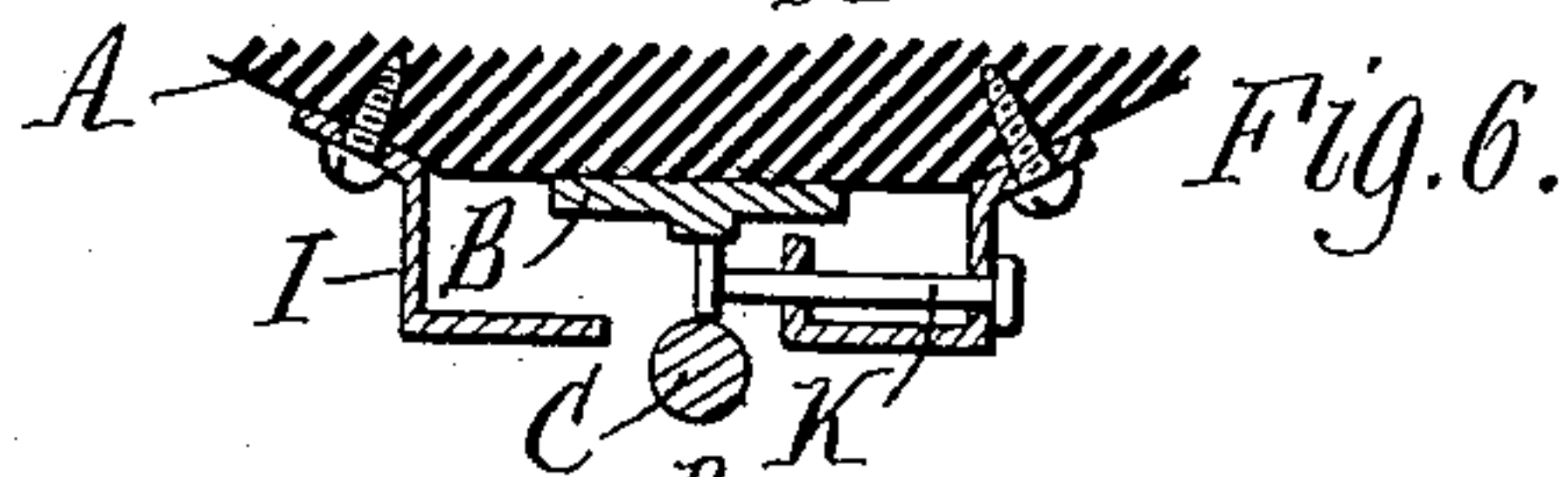
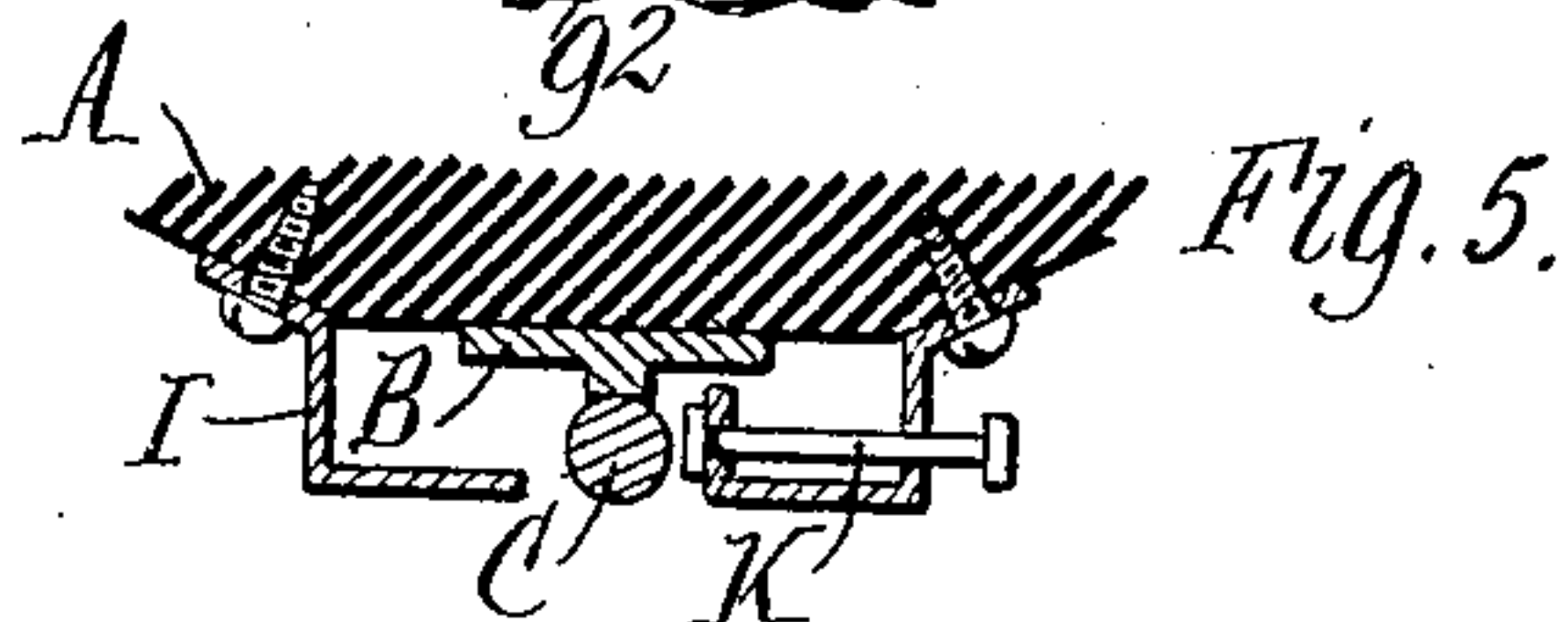
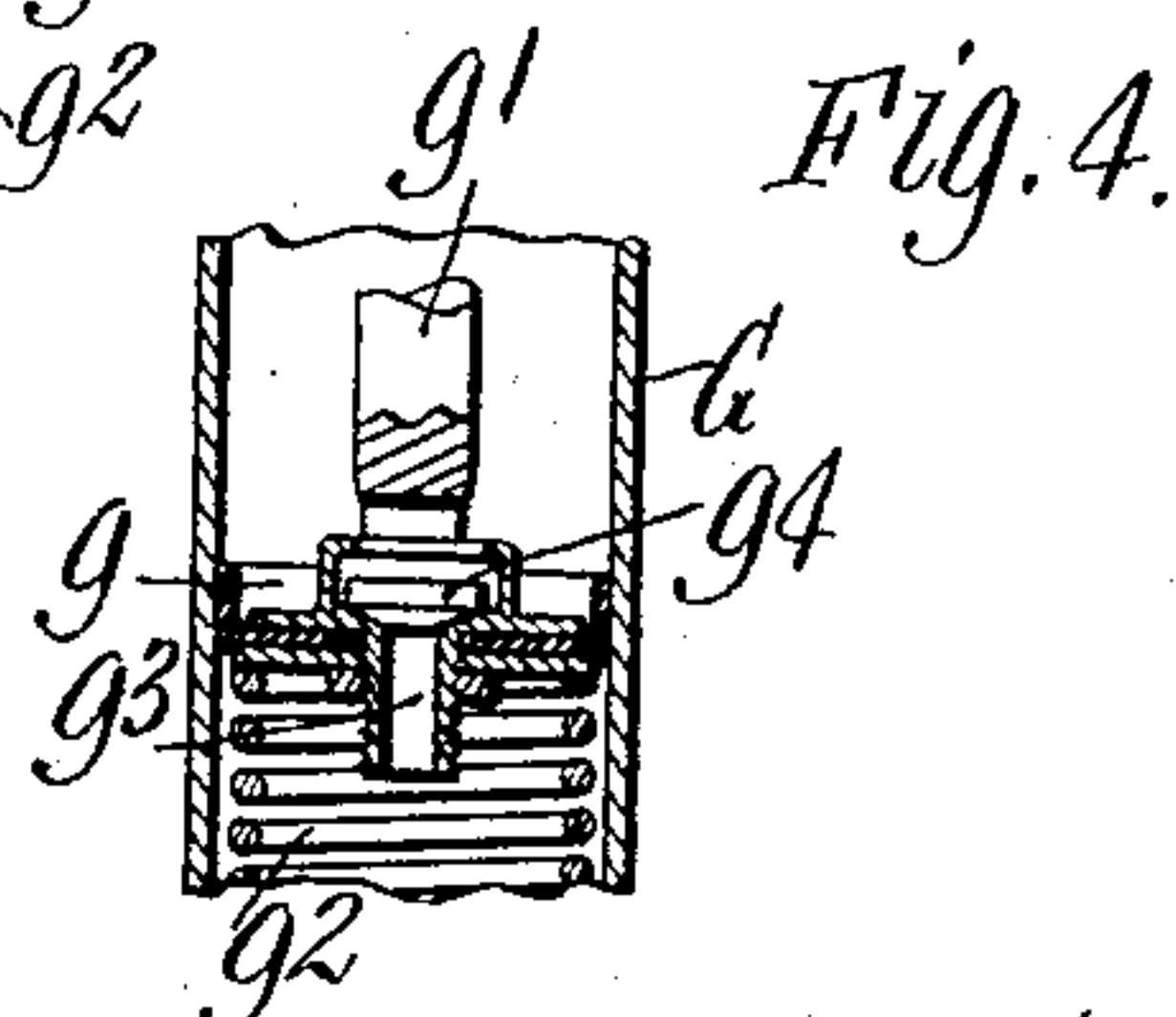
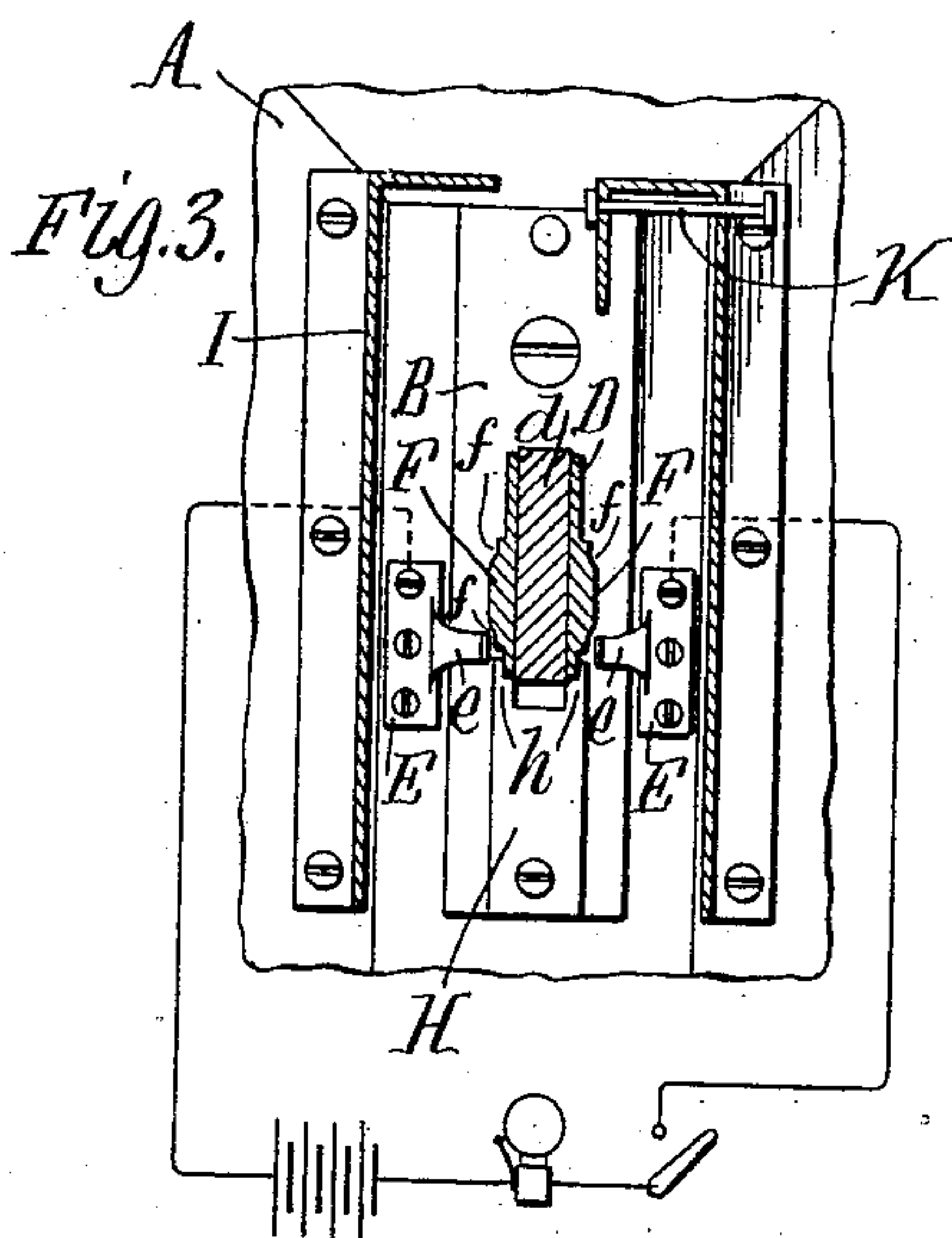
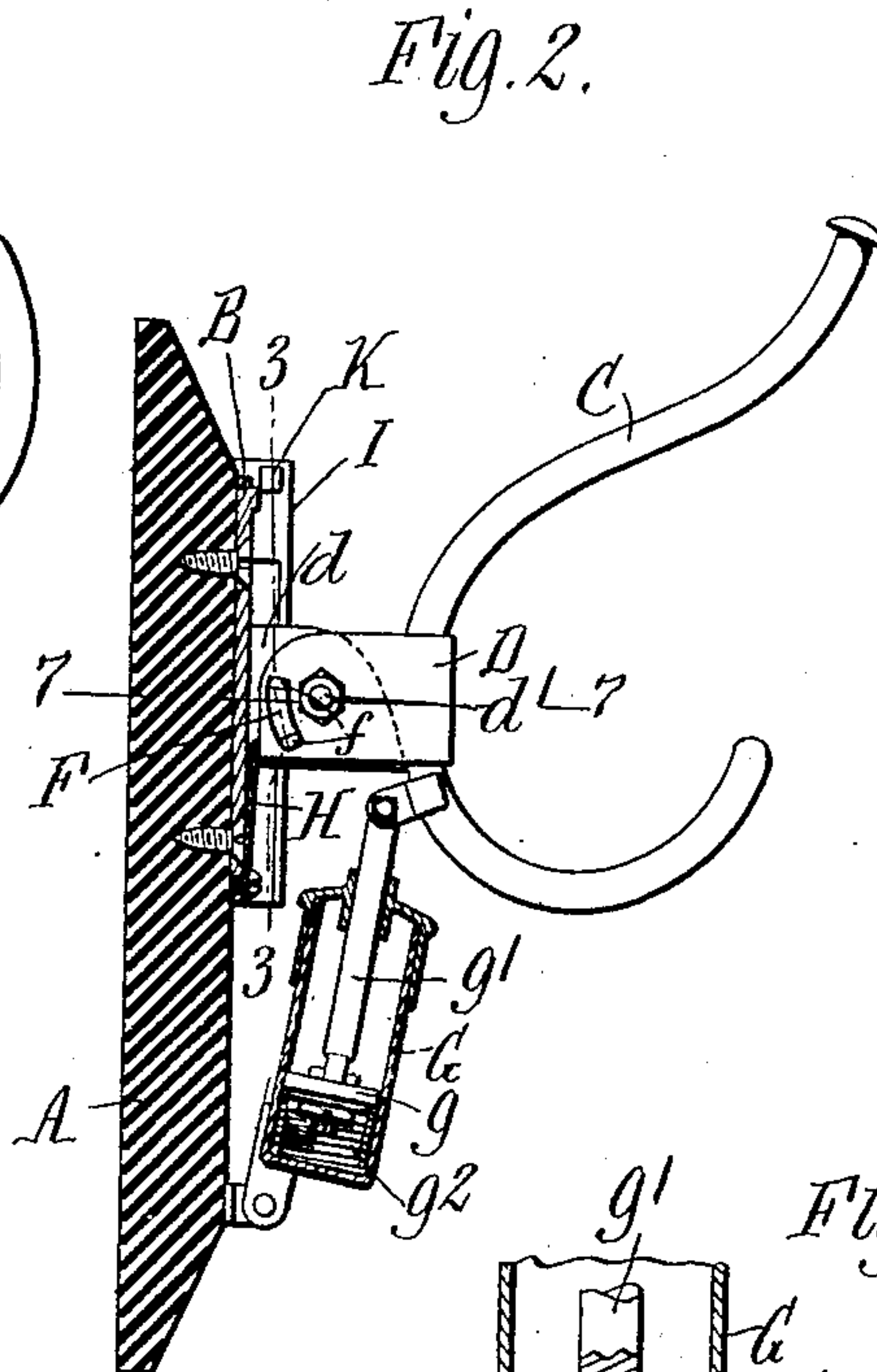
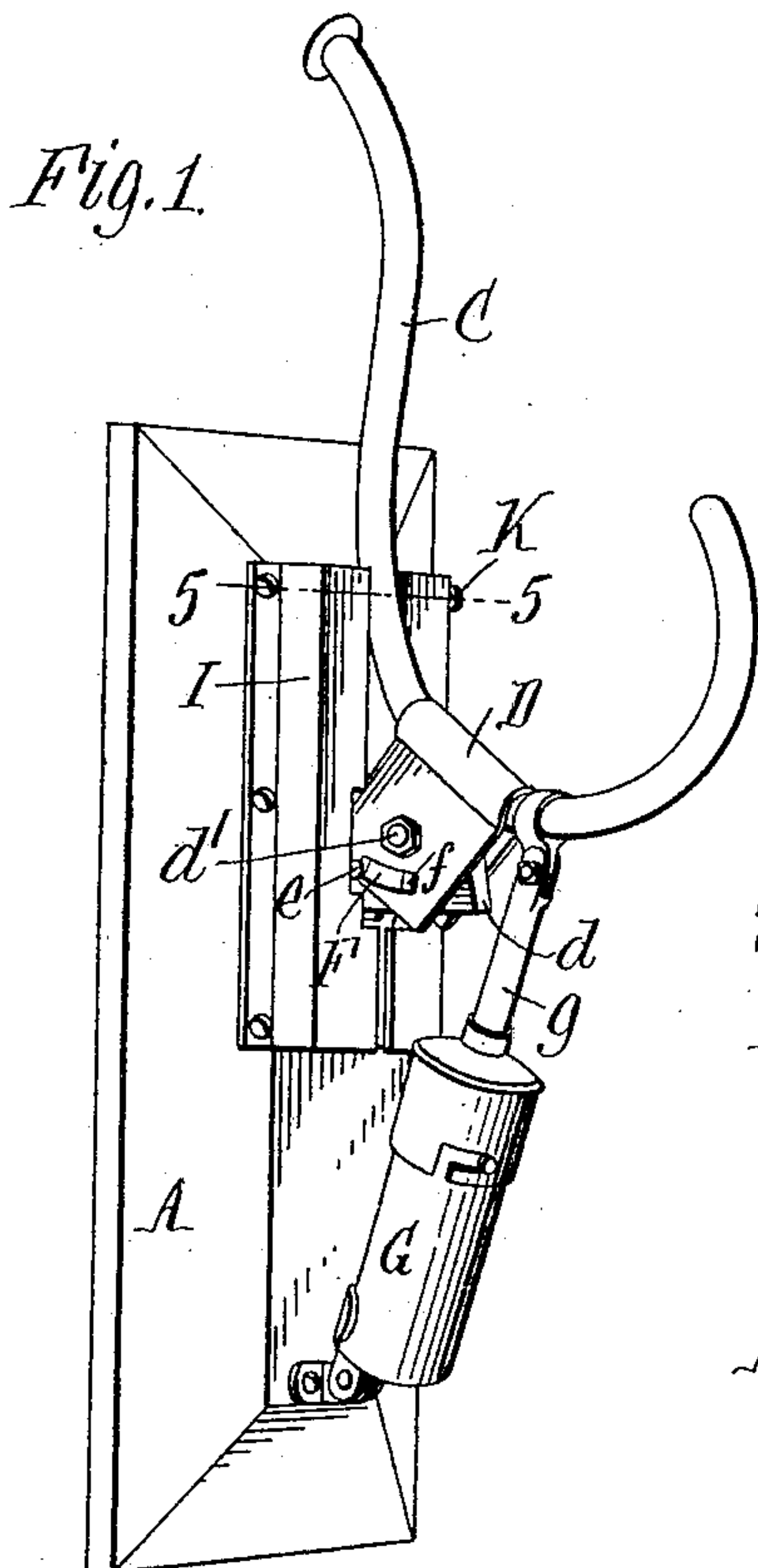


H. POPPERTT.
GARMENT HOOK.

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918,088.

Patented Apr. 13, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY POPPERTT, OF BUFFALO, NEW YORK.

GARMENT-HOOK.

No. 918,088.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed January 16, 1909. Serial No. 472,644.

To all whom it may concern:

Be it known that I, HENRY POPPERTT, a subject of the Emperor of Austria and the King of Hungary, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Garment-Hooks, of which the following is a specification.

This invention relates more particularly to improvements in garment hooks which operate an alarm device when the garment has been removed from the hook and thus prevent the garment from being stolen or surreptitiously removed by unauthorized persons.

One object of this invention is to provide a hook of this character of simple construction which will automatically operate an alarm for a definite time after the garment has been removed therefrom, and which requires no setting or manipulation of its parts for terminating the alarm and placing the hook in position to receive another garment.

Further objects of the invention are to produce a relatively slow return movement of the hook to its normal receiving position after the garment has been removed, during which movement the alarm is operated, and to provide means for limiting the return movement of the hook so that the alarm will continue to sound after the garment has been removed from the hook until the hook is released and permitted to return to its receiving position.

In the accompanying drawings: Figure 1 is a perspective view of a garment hook embodying the invention, showing the hook in its garment-receiving position. Fig. 2 is a side elevation thereof, partly in section, showing the hook in its supporting position. Fig. 3 is a fragmentary sectional elevation thereof, on an enlarged scale, on line 3—3, Fig. 2, showing the electric alarm and the connection therefor. Fig. 4 is a fragmentary longitudinal section, on an enlarged scale, of the air cylinder. Fig. 5 is a fragmentary cross-section on line 5—5, Fig. 1, on an enlarged scale. Fig. 6 is a similar section, showing the stop in engagement with the hook for limiting its return movement. Fig. 7 is a fragmentary cross-section on line 7—7, Fig. 2.

Like letters of reference refer to like parts in the several figures.

A represents a base or frame of wood or other insulating material which is adapted to be suitably secured to a wall or other sup-

port; B represents a metal base plate which is secured to the front side of the frame A by screws or in any other desirable manner; and C represents a garment hook of usual form which is pivotally secured to the base plate B to swing in a vertical plane. In the construction shown, a U-shaped strap D embraces and is secured to the hook C with its ends straddling the opposite sides of a post *d* on the base plate B to which they are pivotally secured by a bolt *d'* passing through the post and these ends. Any other suitable means, however, may be employed for pivotally securing the hook to the base plate.

Secured to the frame on opposite sides of the base plate B are plates E E having contact arms *e* which extend toward the hook strap D and are adapted to engage segmental contact plates F which are arranged on the opposite end portions of this strap. The plates E E are suitably connected electrically to the opposite ends of an electric circuit in which are included a battery or some suitable source of current, an alarm device, and a cut-out switch, all of any suitable type and construction. The circuit between the plates E E is completed when the arms *e* are in engagement with the contact plates F, and is broken when these parts are moved out of engagement with each other. The contact plates F have depressions *f* in their contact faces at each end thereof, and the length and location of these contact plates on the end portions of the strap D are such that when the hook C is in its upright or garment-receiving position, as shown in Fig. 1, or in its extended or garment-supporting position, as shown in Fig. 2, the contact arms *e* will be opposite the depressions *f* and out of engagement with the contact plates F; while in any intermediate position of the hook the contact arms will always be in contact with the plates F. The circuit is thus broken when the hook is in either its garment-receiving or its garment-supporting position, but is completed through the device for operating the alarm when the hook is in any intermediate position. For returning the hook from its extended garment-supporting position to its upright position and regulating the movement thereof when the garment is removed, the following means are preferably employed: An air cylinder G, which is closed at both ends, is pivotally secured at its lower end to the frame A, and is provided with a piston *g* having a piston stem *g'* which extends

through the upper end of the cylinder and is pivotally connected with the hook C. A coiled spring g^2 is located between the piston and the lower end of the cylinder, and is compressed by the piston when the hook is moved to its extended position and tends to lift the piston and thus return the hook to its normal upright position. In the piston g is a port g^3 having a valve g^4 mounted therein to close this port when the piston is moving upwardly in the cylinder under the action of the spring g^2 . The upward movement of the piston is thus resisted by the air in the cylinder above the piston, and as the piston stem fits loosely within the cylinder, the air can escape gradually from the cylinder above the piston, thus producing a relatively slow return movement of the hook. If desired, any other suitable means may be employed for returning the hook to its upright position and for regulating this return movement. To supplement the action of the spring g^2 , a secondary spring H may be employed if desired. This spring is secured to the base plate B and has forked arms h which straddle the post d and engage and are held under tension by the opposite end portions of the strap D when the hook is in its extended garment-supporting position. These arms thus give an initial return movement to the hook when the latter is released by the removal of the garment. The electric circuit is completed through the device during the time the hook is returning from its extended to its upright position, and the alarm is operated continually throughout such movement but ceases when the hook reaches its upright position. It is sometimes desirable that the operation of the alarm device shall continue for a much longer time, and for this purpose suitable means may be employed for preventing the hook in its return movement from passing out of electrical connection with the alarm device. In the construction shown, a divided casing I surrounds the base plate B and in one side of this casing near its upper end is mounted a sliding stop device K which is movable into the path of the hook C for engaging the same and limiting the return movement thereof, so that the hook will remain in its circuit completing position. The alarm will then be operated until the stop device has been moved out of engagement with the hook and the latter has moved to its upright garment-receiving position.

The operation of the device is as follows: The hook normally stands in its upright position, as shown in Fig. 1. When a garment is placed on the hook the weight of the garment swings the hook down to its extended supporting position, shown in Fig. 2. When the garment is removed, the hook, under the action of its spring, will return slowly to its first position, and during this movement the

contact plates F will be in contact with the arms e and thus complete the circuit through the device, causing the alarm to sound until the hook has reached its upright position, when the connection is broken. The hook is then in position to receive another garment. If for any reason it is desired to have the alarm operated for a longer time, the stop K may be moved into the path of the hook for preventing its return to its upright position, in which case the circuit will not be broken and the alarm will continue until the stop has been moved to allow the hook to assume its upright position.

I claim as my invention:

1. The combination of a garment hook which is movably mounted and is adapted to support a garment, means for moving said hook from its supporting position when the garment is removed therefrom, means for retarding the motion of the hook and electric signaling means including contacts which complete the electric circuit for operating the signal while the hook is being moved from its supporting position, substantially as set forth.
2. The combination of a pivoted garment hook which is adapted to support a garment, means for moving said hook from its supporting position when the garment is removed therefrom, means for retarding the motion of the hook, and electric signaling means including contacts which complete the electric circuit for operating the signal while the hook is being moved from its supporting position, substantially as set forth.
3. The combination of a pivoted garment hook which is adapted to support a garment, means for moving said hook from its supporting position when the garment is removed therefrom, means for retarding the motion of the hook, electric signaling means including contacts one of which travels over the other during the movement of the hook for completing the electric circuit for operating the signal, and means adapted to be positioned to arrest the movement of the hook while the contacts are in engagement with each other, substantially as set forth.
4. The combination of a garment hook mounted to be moved from a normal position by the weight of a garment thereon, means for returning said hook to its normal position when the garment is removed therefrom, means for retarding the return movement of the hook, and an electric signaling device including contacts one of which travels over the other during the return movement of the hook for completing the electric circuit to operate the signaling device during such return movement, substantially as set forth.
5. The combination of a garment hook, a support upon which said hook is pivoted to be moved from a normal position by the weight of a garment, means on said support

for returning said hook to its normal position when the garment is removed, means for retarding the return movement of said hook, and an electric signaling device including
5 contacts on said hook and said support which have sliding engagement with each other during the return movement of the hook to its normal position for completing the electric circuit to operate the signaling device during

such return movement, substantially as set forth.

Witness my hand, this 13th day of January, 1909.

HENRY POPPERTT.

Witnesses:

EDWARD C. HARD,
C. B. HORNBECK.