

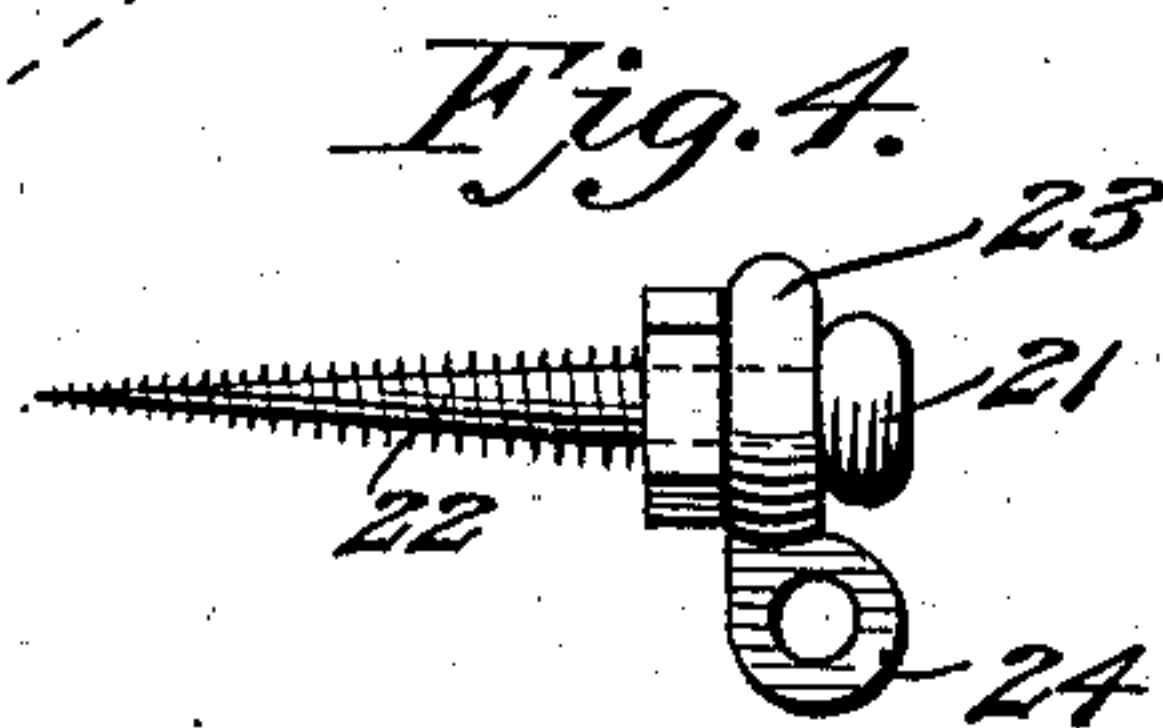
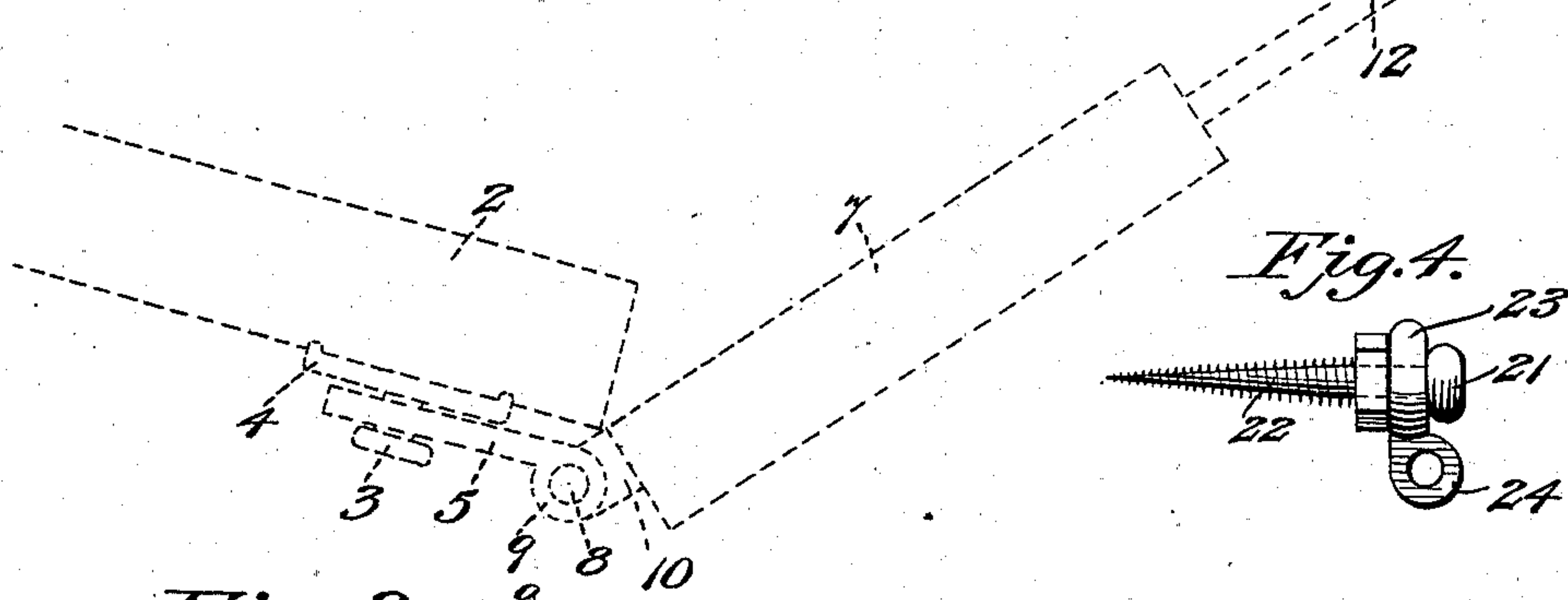
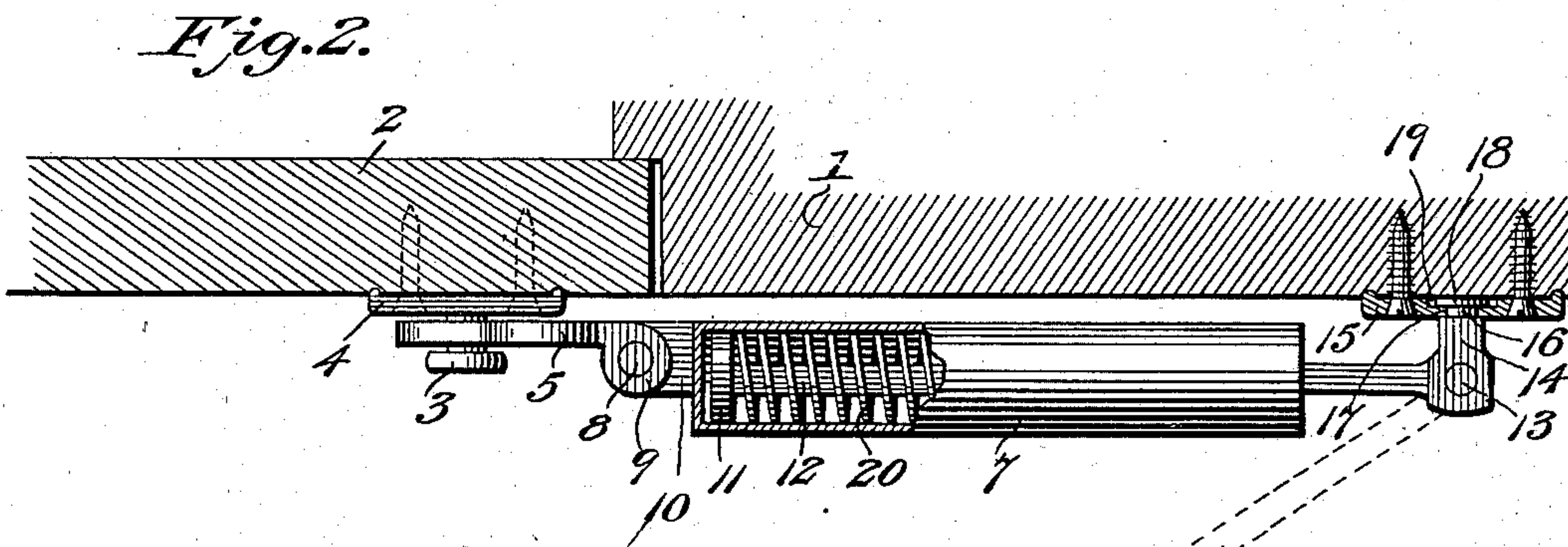
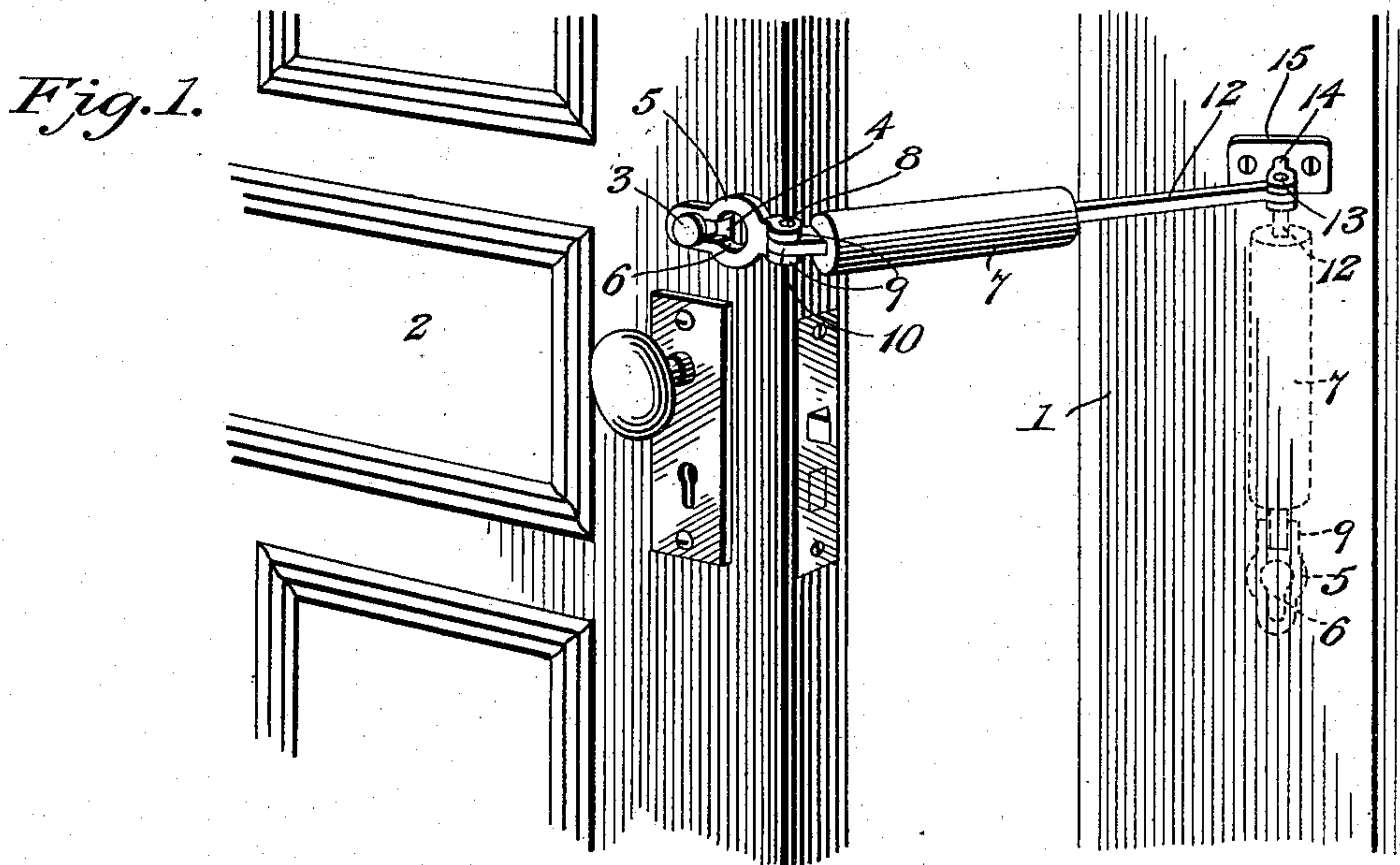
No. 654,723.

Patented July 31, 1900.

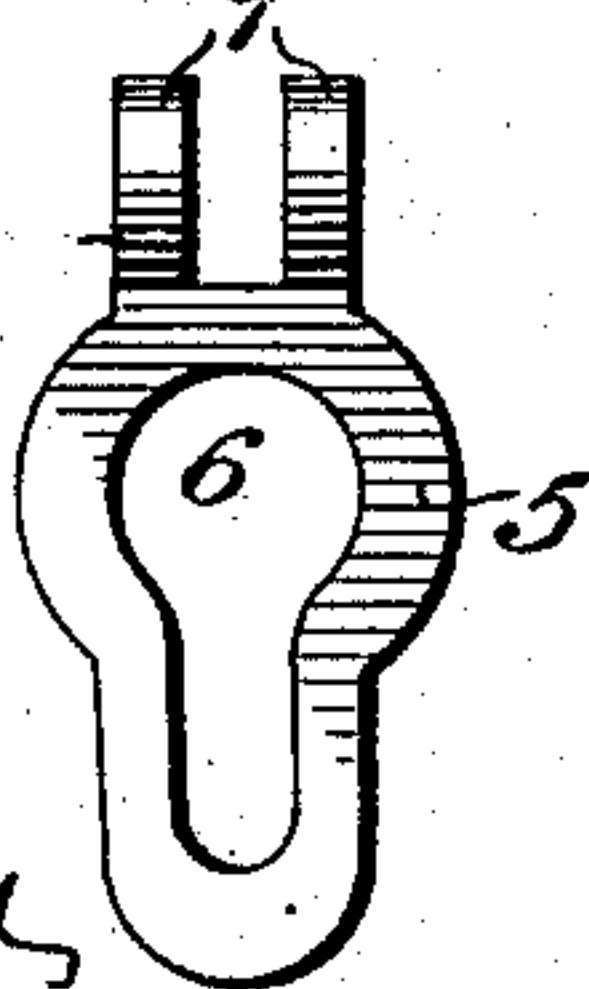
P. A. FRANKS.  
DOOR CHECK.

(Application filed Mar. 22, 1900.)

(No Model.)



Witnesses  
*Edwin S. Speckee*  
*Klaus F. Fuhner*



*Peter A. Franks*  
By *E. G. Siggers* Inventor Attorney



# UNITED STATES PATENT OFFICE.

PETER A. FRANKS, OF GALION, OHIO, ASSIGNOR OF TWO-THIRDS TO  
HORRACE H. LININGER AND FRANK A. SMITH, OF SAME PLACE.

## DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 654,723, dated July 31, 1900.

Application filed March 22, 1900. Serial No. 9,723. (No model.)

*To all whom it may concern:*

Be it known that I, PETER A. FRANKS, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have invented a new and useful Door-Check, of which the following is a specification.

My invention relates to a novel door-check; and my object is to provide a simple, ingenious, and inexpensive device which will permit a door to be opened to a predetermined extent and lock it against further movement, except in the event of a person located within the apartment desiring to release the door entirely.

It is frequently desirable, particularly in isolated districts, to provide some means for securely locking a door against all movement except such as will enable the inmate of a house to communicate with and inspect a person desiring admittance, and it is to effect this end that I have invented the device, to be hereinafter described, for the accomplishment of the objects stated.

In the drawings, Figure 1 is a perspective view of a portion of a door-casing and door, the latter being slightly opened and retained against further movement by my improved door-check, the position of the latter when not in use being indicated by dotted lines. Fig. 2 is a sectional view, on a somewhat-larger scale, through like portions of a door and casing equipped with my device, certain parts of which are broken away for the purpose of illustrating interior parts and the partially-opened position of the door being indicated by dotted lines. Fig. 3 is a detail view of the locking-plate, and Fig. 4 is a detail view of a modified form of swivel connection for the rear end of the plunger-rod.

Referring to the figures of reference indicating corresponding parts in the several views, 1 indicates a portion of a door-casing, and 2 is a portion of a door constructed and related to the casing in the ordinary manner.

3 indicates a headed locking-stud extending from a stud-plate 4, screwed or otherwise secured upon the inner face of the door adjacent to its free edge and which is designed to be engaged by the locking-plate 5 of the extensible door-check, comprehending the

preferred embodiment of my invention. The locking-plate 5 may be of any suitable form, but is preferably provided with a key-slot 6, the opposite ends of which are of just sufficient size to receive the head or the shank of the locking-stud 3. This plate is designed to be pivotally connected to a cylindrical casing 7—as, for instance, by means of a pintle 8, passing transversely through the pair of parallel ears 9, extending from the rear end of the locking-plate and straddling a terminal lug 10, through which the pintle 8 also passes.

Within the casing 7 is located a spring-resisted plunger or piston 11, from which extends axially a plunger-rod 12, piercing the rear end of the casing and pivotally connected at its rear extremity, as by a pintle 13, to a swiveled stud 14, rotatably mounted in a stud-plate 15, screwed or otherwise secured to the door-casing 1, preferably in substantially the horizontal plane of the locking-plate 4. Any suitable means for accommodating the rotary movement of the swiveled stud 14 may be provided; but I prefer to form said stud with a reduced shank 16, passing through an aperture 17 in the plate 15 and provided with a terminal head 18 of greater diameter than the opening 17 and located within a recess 19, formed in the face of the plate 15 opposed to the casing.

Relative longitudinal movement of the plunger-rod and cylindrical casing 7, which parts constitute members of the extensible door-check, is resisted by a spiral spring 20, encircling the plunger-rod 12 within the casing 7 and bearing at its opposite ends against the opposed faces of the plunger and the rear end of the casing. It will now appear that when the locking-plate is in engagement with the locking-stud the energy of the spring 20 will tend to telescope or contract the extensible members of the check, thus tending to retain the door in its closed position. If now the occupant of the room desires to open the door sufficiently to permit inspection of and communication with a person outside without rendering it possible for the door to be forced open to a greater extent, the door is swung back in the ordinary manner against the resistance of the spring 20, which opposes the extension of the check as the door is



opened. As soon, however, as the plunger has reached the limit of its stroke the door will be securely locked against further inward movement, and as soon as released the door will be swung closed by the action of the spring 20 as the latter restores the extensible members 7 and 10 to their normal positions. It will be observed that if it is desired to open the door wide when the check is in position to prevent such movement the locking-plate may be drawn longitudinally until the large end of the key-slot 6 can be drawn over the head of the locking-stem 3. When so released, the entire device will drop to an unobtrusive vertical position upon the door-casing, as indicated in dotted lines in Fig. 1 of the drawings, this position being made possible by reason of the mounting of the plunger-rod upon a swiveled stud having a horizontal axis.

In Fig. 4 of the drawings I have illustrated a modified form of swivel connection for the rear end of the plunger-rod, which form contemplates the employment of a fixed headed stud 21, secured to the door-casing by a threaded shank 22 and designed to rotatably engage a collar 23, provided with one or more ears 24, designed to be pierced by the pivot 13, passed through the end of the plunger-rod.

From the foregoing it will be observed that I have produced a simple, inexpensive, and ingenious door-check which will effectually accomplish the several objects hereinbefore enumerated; but, while the present embodiment of my invention appears to be preferable, I do not desire to be limited to the structural details defined, as it is obvious that many changes, modifications, and variations might be effected without departing from the spirit of the invention. For instance, the extensibility of the check might be obtained by the employment of any number of relatively-movable sections; the plunger-rod might be constructed in two parts, extending from the opposite ends of the casing and retained by an intermediate spring, the locking-plate being in that event secured to one of said rods; the spring might be eliminated altogether and a pneumatic resistance substituted therefor; the relation of the casing

and plunger-rod might be reversed, or the casing 7 might be countersunk in the door-jamb. In fact, the possibilities of structural rearrangement are practically limitless, and I therefore reserve the right to effect such reorganization of the entire device or any part thereof as may be properly embraced within the scope of the protection prayed.

What I claim is—

1. The combination with a swiveled supporting member, of an extensible door-check pivotally connected at one end to said member, and locking means carried at the opposite end of the check.

2. The combination with a swiveled supporting member, of an extensible door-check pivotally connected at one end thereto, and a slotted locking-plate pivoted at the opposite end of the door-check.

3. The combination with a fixed member, as for instance, a door-casing, of a movable member, as for instance, a door, a swiveled stud extending from said fixed member, a headed locking-stud extending from the movable member, an inflexible extensible door-check pivotally connected at one end to the swiveled stud, and a slotted locking-plate pivotally connected at the opposite end of said check and designed for engagement with the locking-stud.

4. The combination with an apertured stud-plate, of a swiveled stud carried thereby, a plunger-rod pivoted to said stud by a pintle extending transversely therethrough, a plunger on the plunger-rod, a cylindrical casing inclosing the plunger, a spring encircling the plunger-rod within the casing and bearing at its opposite ends against the end of the casing and the plunger, a locking-plate pivotally carried at the free end of the cylindrical casing and provided with a key-slot, and a headed locking-stud designed to be engaged by the locking-plate.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PETER A. FRANKS.

Witnesses:

WM. S. MCKIBBEN,

J. W. COULTER.