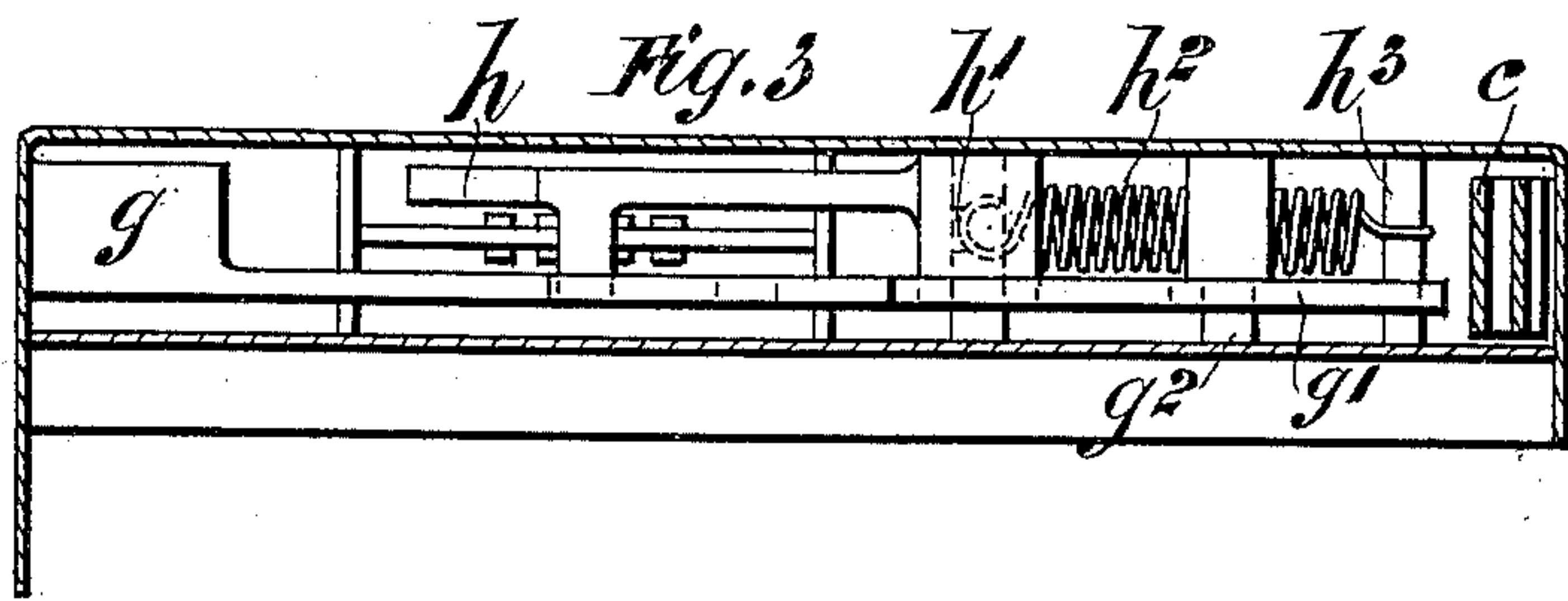
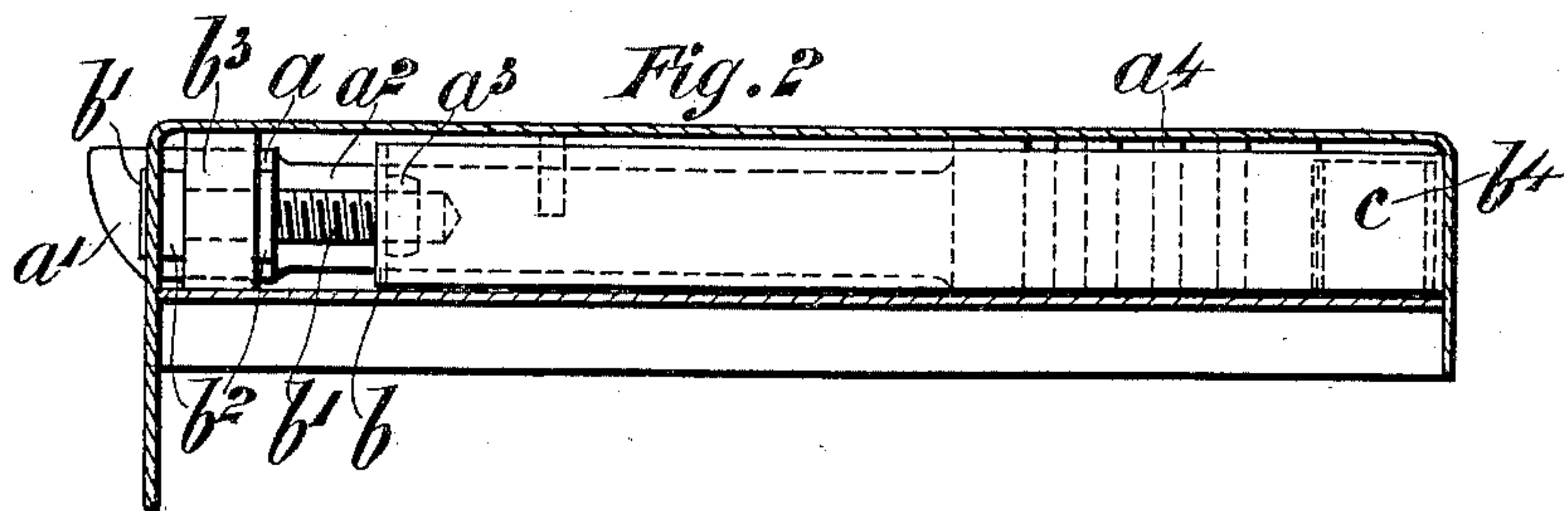
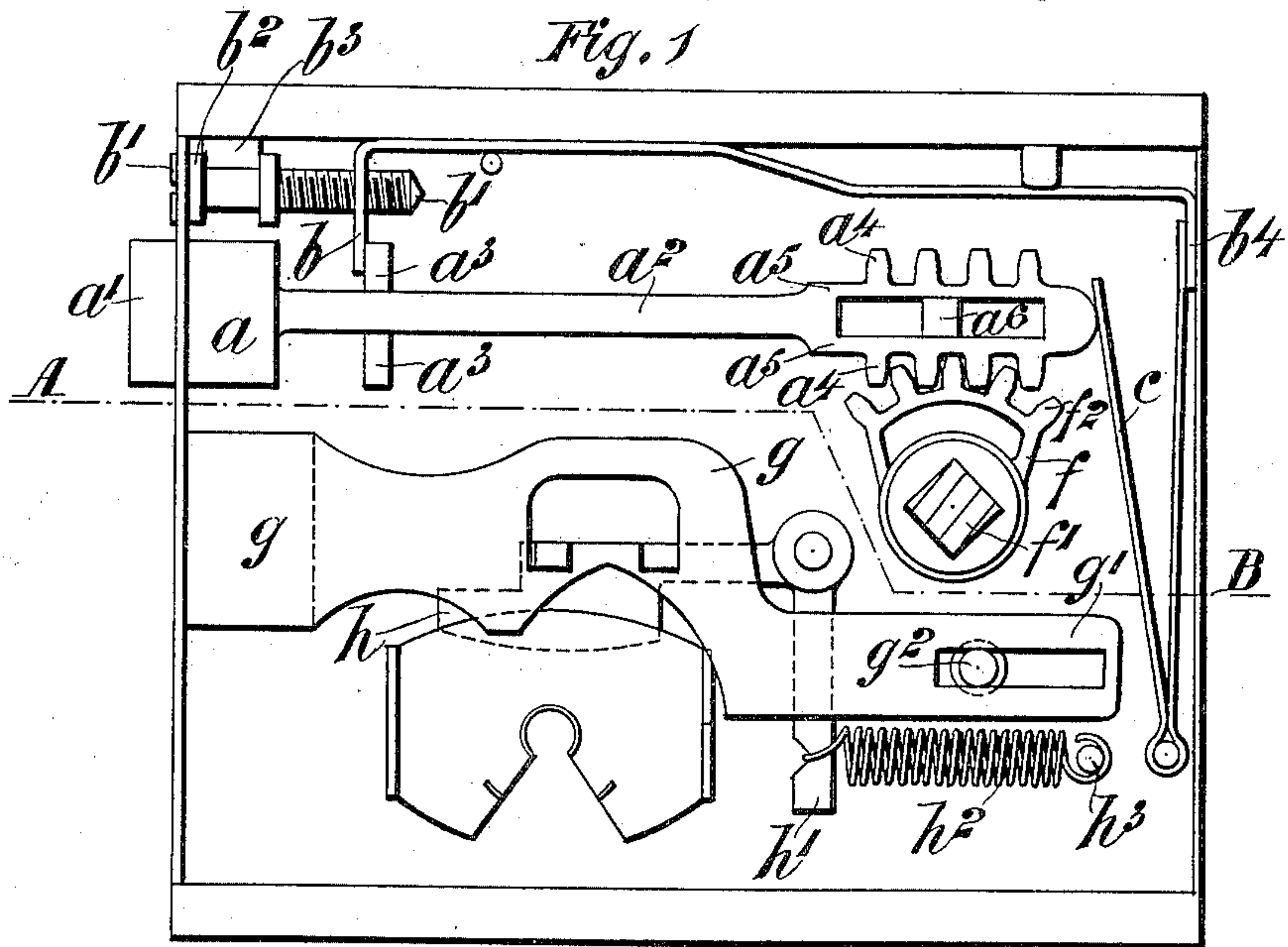


(No Model.)

W. B. BUST.
LOCK.

No. 604,652.

Patented May 24, 1898.



Witnesses:
John H. H. H. H.
Rich. C. Brown.

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UNITED STATES PATENT OFFICE.

WILLIAM BURNLEY BUST, OF DUNEDIN, NEW ZEALAND.

LOCK.

SPECIFICATION forming part of Letters Patent No. 604,652, dated May 24, 1898.

Application filed October 28, 1897. Serial No. 656,688. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BURNLEY BUST, a subject of the Queen of Great Britain, and a resident of 2 Commercial Chambers, Manse street, Dunedin, in the Colony of New Zealand, have invented certain new and useful Improvements in Locks for Doors and the Like, of which the following is a specification.

This invention relates to locks used for fastening doors and the like; and the object of the present invention is to provide a lock with a reversible bolt which may be readily adjusted, so that it will engage with the catch-plate after the door has shrunk or from other cause has become separated from the catch-plate and with means of operating the tumblers with certainty.

In a lock constructed according to my invention the handle operates a spring-bolt having the usual beveled face projecting exteriorly and having a check-pin upon its shank which rests upon a stop when the bolt is projecting. This said stop may be operated by a screw and the bolt allowed to project to a greater distance as required, the stop being retained by the spring of the bolt, and thus the pressure of the spring upon the bolt is kept practically constant. It is thus unnecessary to have the bolt projecting so far from the lock as is the case with ordinary locks. The bolt is operated by a toothed segment fixed upon the spindle of the handle, the teeth of which segment engage with the teeth of a rack upon the shank of the bolt. The check-pin and rack are duplicated, so that by reversing the bolt the lock may be used either for a right or left hand door. The bolt operated by the key is provided with a slotted extension which receives a guide-pin as a support. The tumbler has an arm upon which a spring acts to keep the tumbler down upon the bolt to lock the same.

In order that my invention may be most easily understood, reference will be made to the accompanying drawings while giving a detailed description.

Figure 1 is a side view of a lock with the inner plate removed. Fig. 2 is a plan of the same with the top plate removed. Fig. 3 is a cross-section on line A B, Fig. 1.

Similar letters refer to corresponding parts.

Referring to the drawings, the bolt a has a

beveled face a' , and upon its shank a^2 is fixed the pin a^3 , projecting on both sides. This pin a^3 normally rests upon the stop b , being pressed thereagainst by spring c acting upon the shank of the bolt a . The adjusting-screw b' may be operated from the outside of the lock by an ordinary screw-driver or the like, is threaded to screw into the stop b , and has collars b^2 , which take upon each side of the guide-block b^3 .

The bolt and stop are shown on Fig. 1 withdrawn as far as possible into the lock; but by turning screw b' they may be advanced to cause the bolt to project farther and thus reach a catch-plate, which from any reason is separated by a space from the lock. It will be seen that as the screw b' advances the stop and bolt the spring c is made to follow by the bent end b^4 of the stop. Thus the pressure of the spring c upon the bolt a is practically constant. The bolt is operated by the toothed segment f , which fits upon the spindle f' of the usual handle. The teeth f^2 of this segment gear with the teeth a^4 of the rack a^5 , which forms part of the shank a^2 . When the handle is turned, the bolt is advanced and slides upon the stud a^6 , and immediately the handle is released the pin a^3 will fall back upon the stop b . It will be seen that the rack a^5 and pin a^3 are duplicated, so that the bolt a may be reversed and the lock thus adapted to a right or left hand door, as required.

The lower bolt g or the bolt operated by the key has a slotted extension g' capable of sliding upon the pin g^2 , and the tumbler h has an arm h' , upon which a tension-spring h^2 , looped upon stud h^3 , acts to keep the tumbler down upon the bolt, as shown on the drawings.

I am aware that the screw b' may be retained by means other than the block b^3 , that a spiral spring may be used in place of spring c or a flat or laminated spring in place of coil-spring h^2 , and that the extension g' of bolt g may slide in a fork instead of being slotted to slide upon the stud g^2 ; but these are obvious modifications, and I have shown the forms which I prefer and have found to answer best in practice, being aware that the details may be modified in several ways by a skilled person without exceeding the ambit of my invention.

Having now particularly described and as-

certained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a lock, the combination of a casing, a
5 bolt provided with a pin, a spring engaging
said bolt, one end of said spring serving as
a stop with which said pin engages and an
adjusting-screw mounted in said casing and
engaging the said stop, substantially as de-
10 scribed.

2. In a lock, the combination of a casing, a
bolt provided with a rack and a pin, a han-
dle provided with a rack, a spring engaging
said bolt, one end of said spring serving as a
15 stop with which said pin engages and an ad-

justing-screw mounted in said casing and en-
gaging the stop, substantially as described.

3. In a lock, the combination of a casing, a
bolt provided with a stop and with two racks,
a handle provided with a rack, a spring en- 20
gaging said bolt near one end and having the
other end bent over and provided with a screw-
threaded perforation and an adjusting-screw
provided with collars and a screw-thread, said
casing being provided with a perforated guide- 25
block, substantially as described.

WILLIAM BURNLEY BUST.

Witnesses:

A. J. PARK,
JOHN IMRIE.