

(No Model.)

E. N. CASE.
ALARM PADLOCK.

No. 589,930.

Patented Sept. 14, 1897.

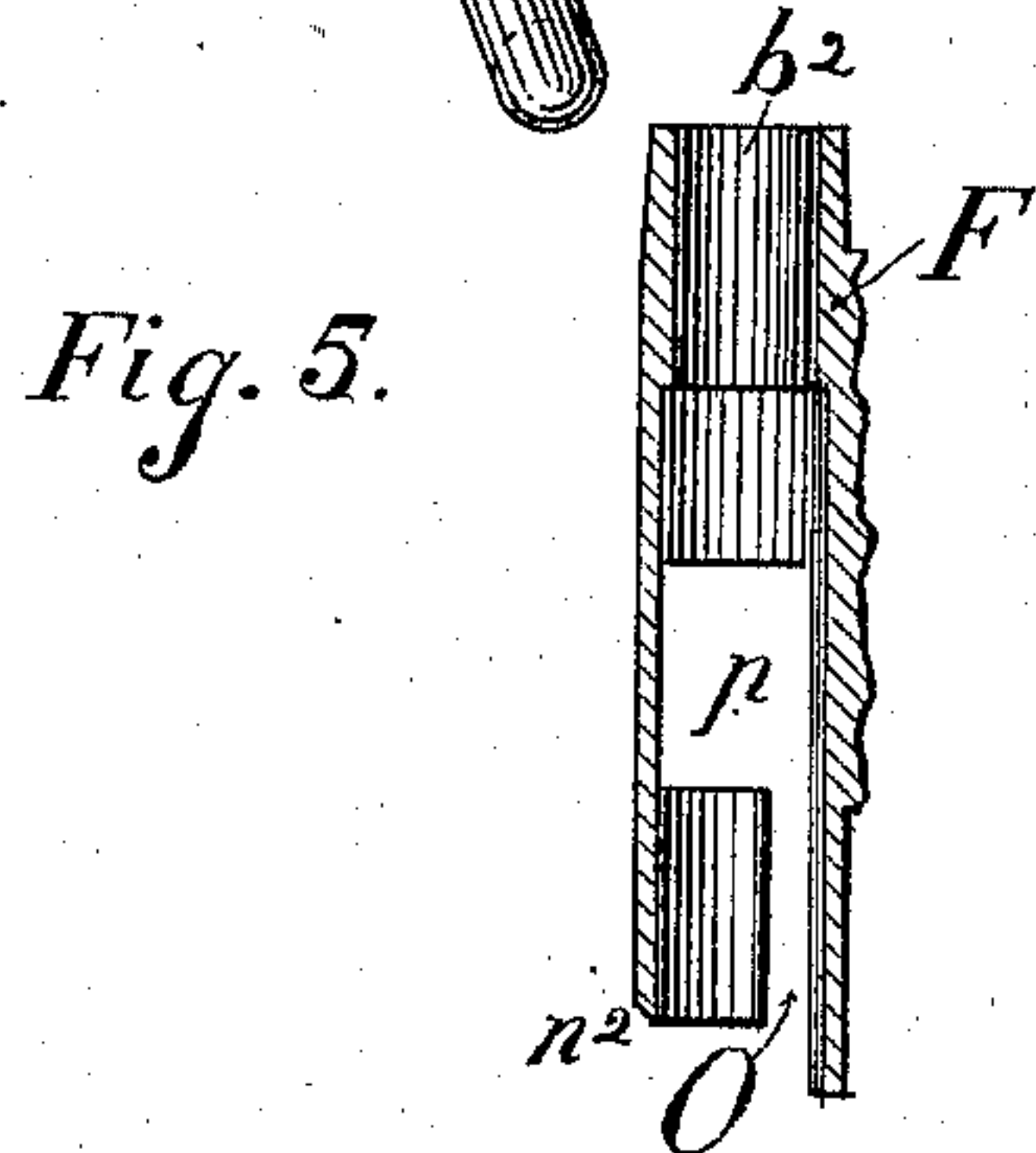
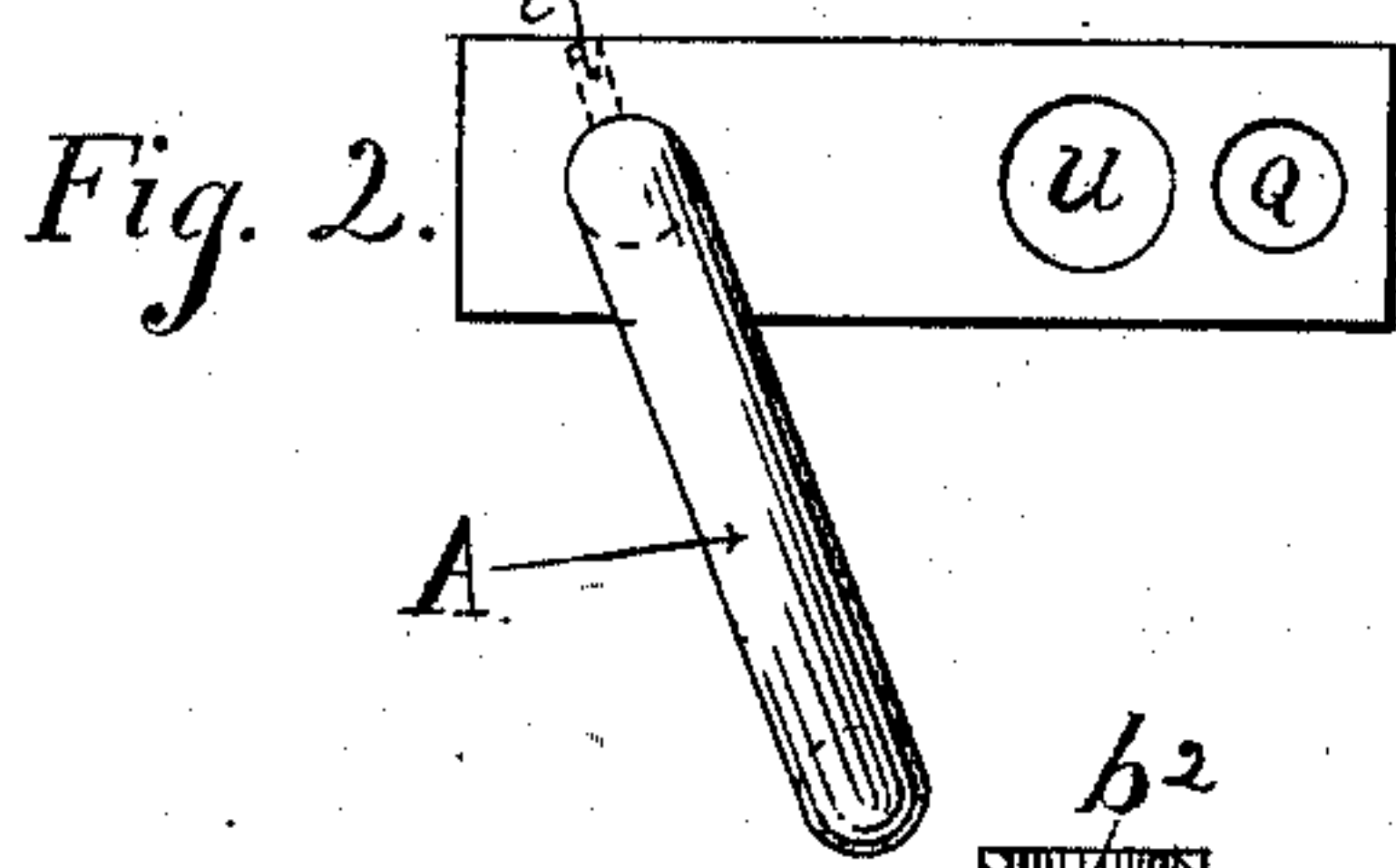
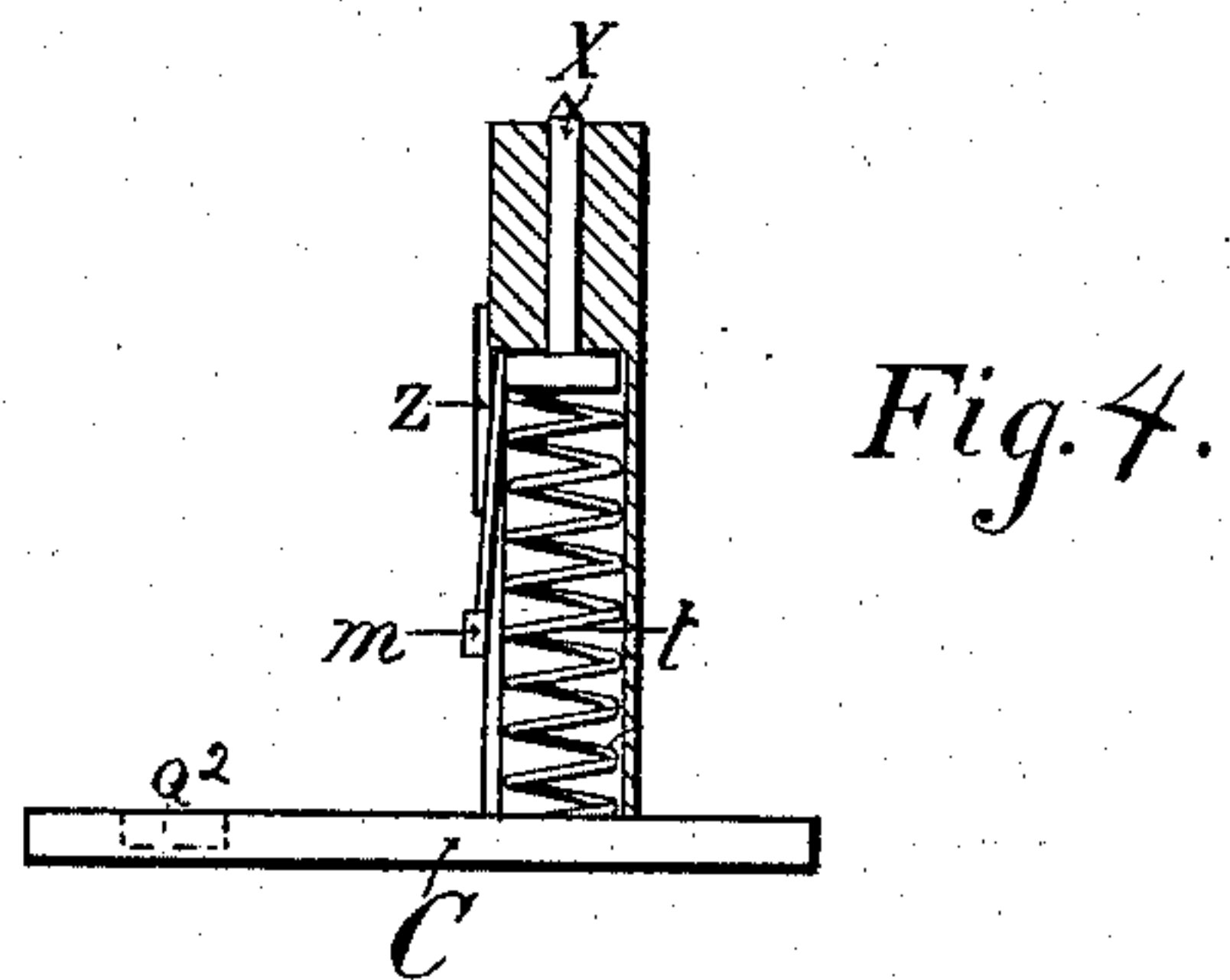
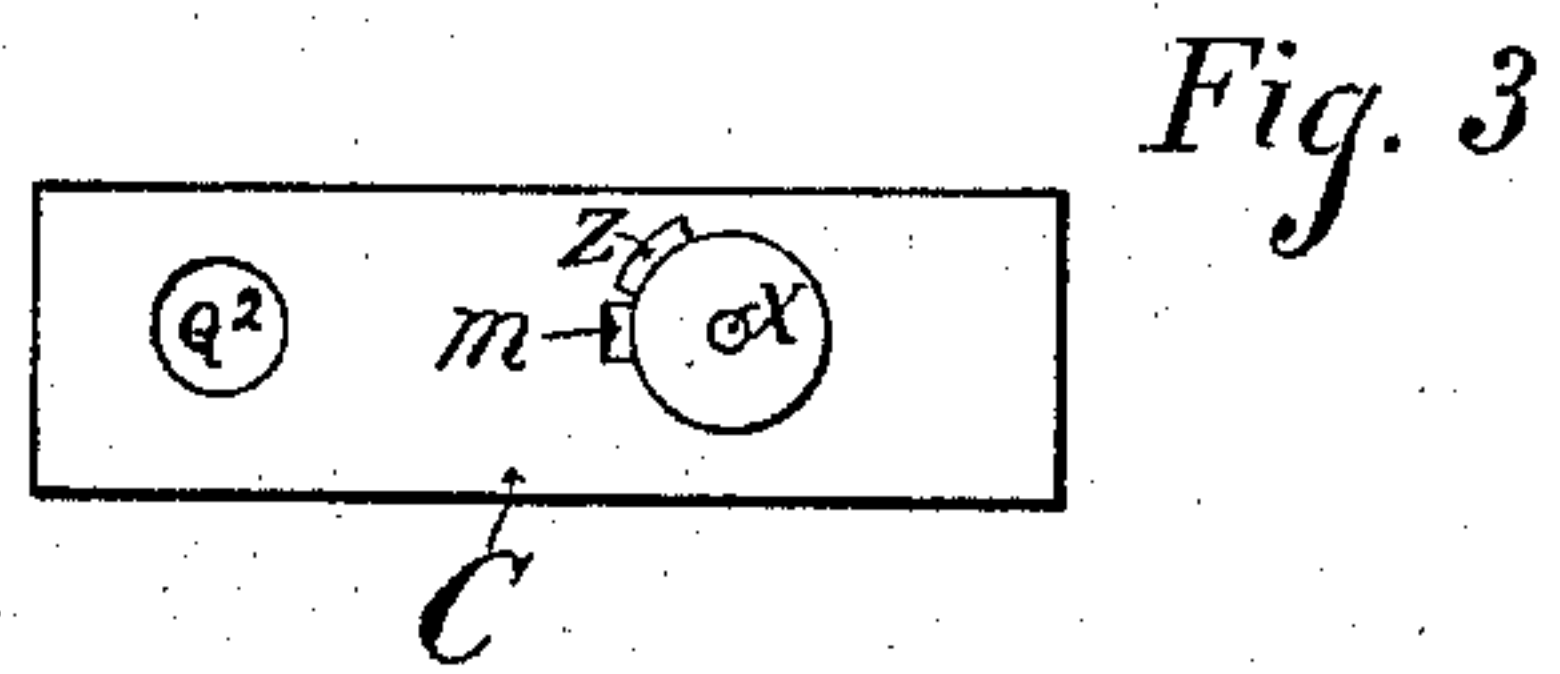
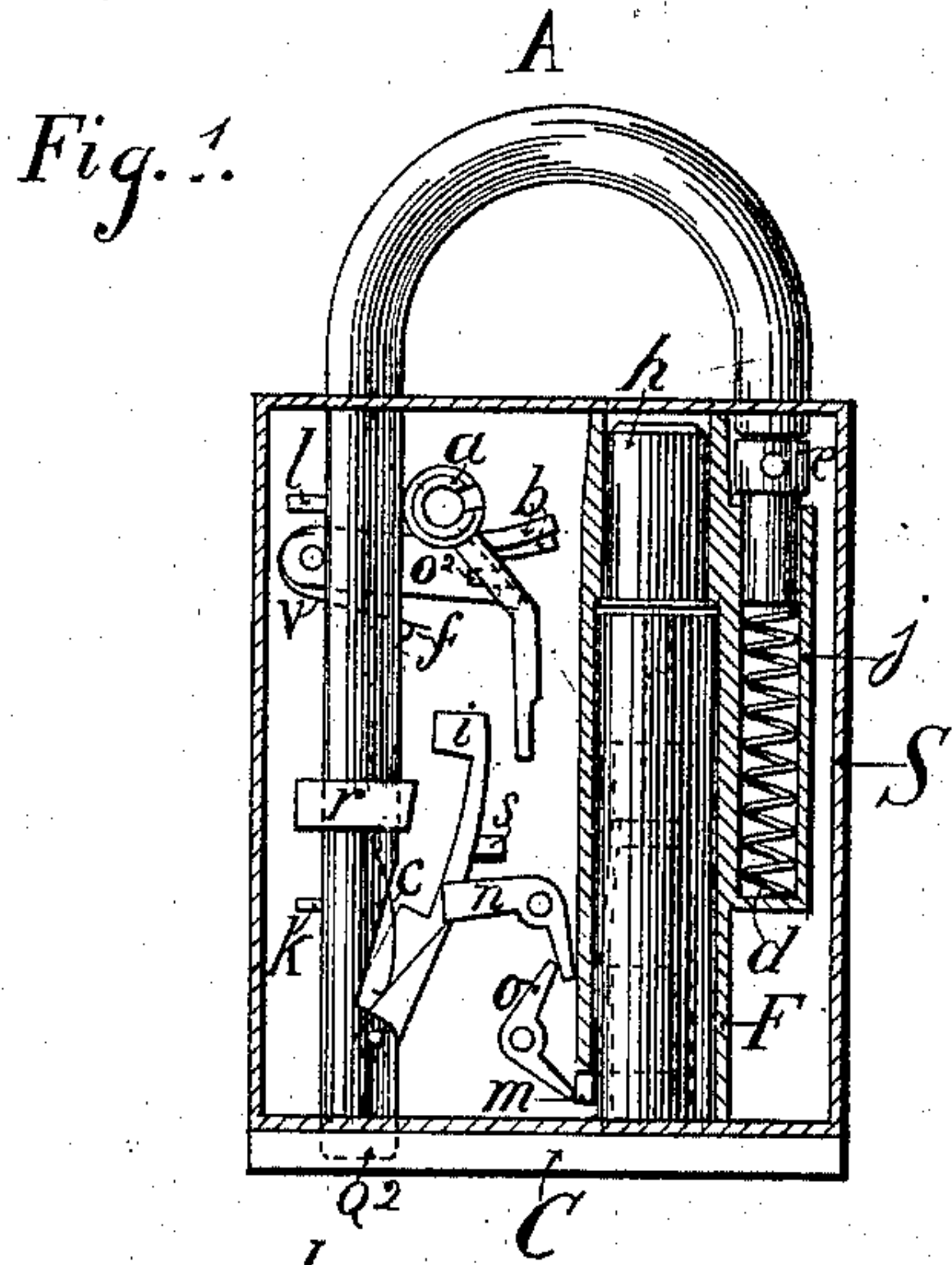


Fig. 6.

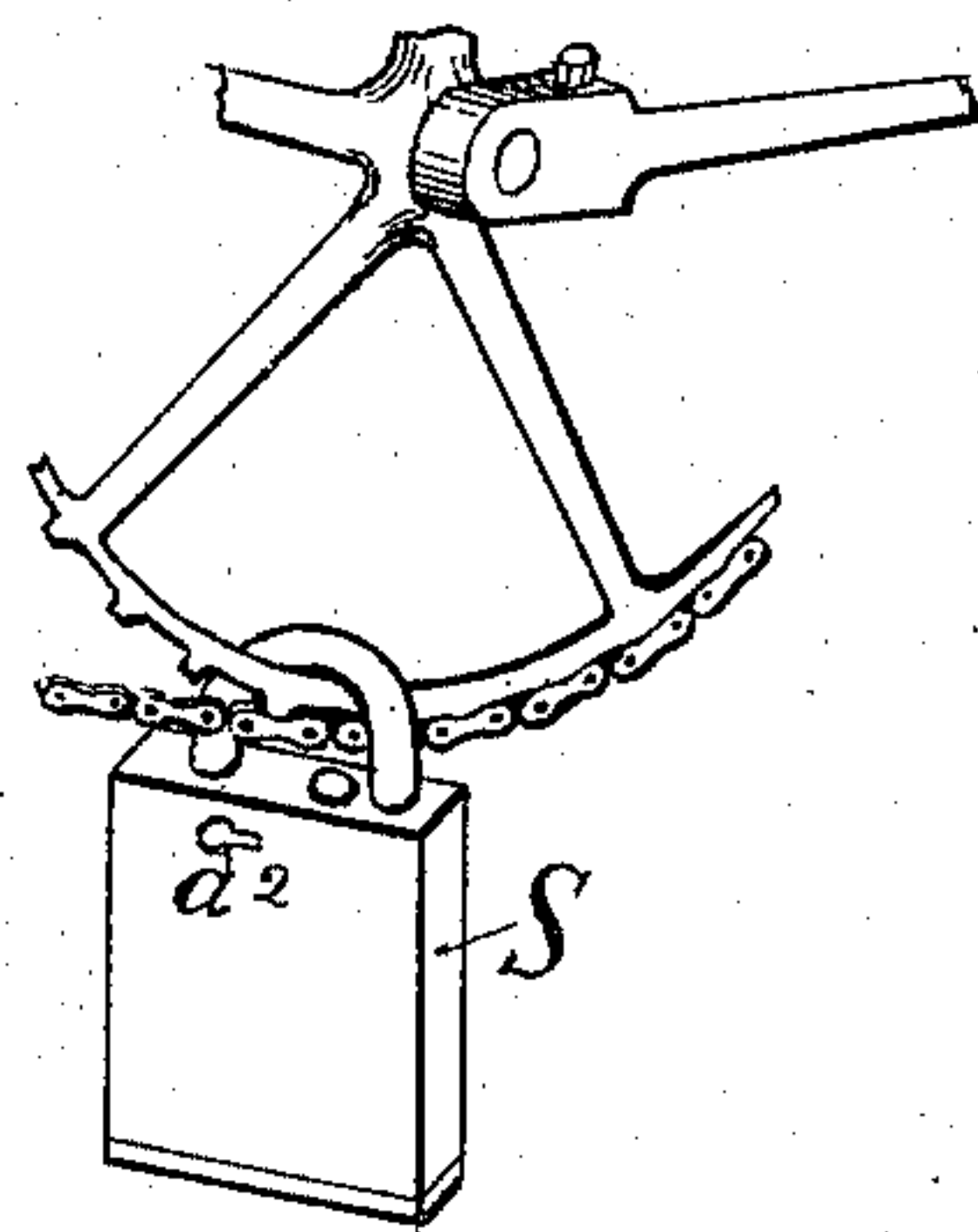


Fig. 7.

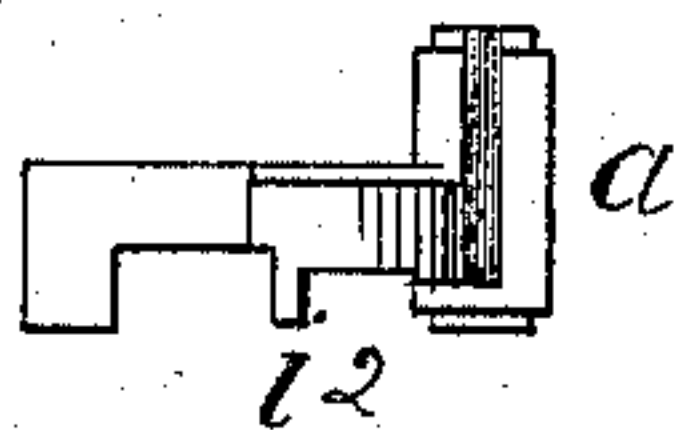
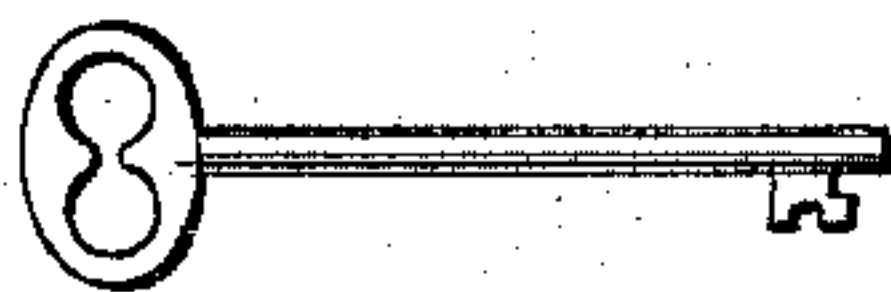


Fig. 8.



Witnesses
J. S. Johnson
W. H. Cotton

Inventor
E. N. Case

UNITED STATES PATENT OFFICE.

EDWARD NEWELL CASE, OF CHICAGO, ILLINOIS.

ALARM-PADLOCK.

SPECIFICATION forming part of Letters Patent No. 589,930, dated September 14, 1897.

Application filed August 10, 1896. Serial No. 602,345. (No model.)

To all whom it may concern:

Be it known that I, EDWARD NEWELL CASE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Explosive Alarm-Padlock for Bicycles, Doors, and other Objects, of which the following is a specification.

My invention relates to an explosive alarm attachment to the padlock in which the mechanism (lever, springs, &c.) is arranged to operate upon a firing-pin which comes in contact with an explosive cap or cartridge, thereby causing an alarm.

The object of my invention is to provide a locking apparatus which, if tampered with directly or indirectly while attached to a bicycle, door, or other object, will produce an alarm. I attain this object by mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation of the entire lock locked. Fig. 2 is a plan showing the bow swung to one side ready to be attached and locked. Fig. 3 is a plan of the firing device. Fig. 4 is a sectional elevation of the firing device. Fig. 5 is a section of the barrel, same as in Fig. 1, with the firing device and cartridge removed. Fig. 6 is a projection of the lock as attached to a bicycle-sprocket. Fig. 7 is a side view of arm *a*, Fig. 1, showing slot down the side. Fig. 8 is a side view of the key.

Similar letters refer to similar parts throughout the several views.

In the plate *S*, which constitutes the lock-casing, is the keyhole *a*², Fig. 6, in which turns the arm *a*, said arm *a* having a slot down one side into which the key is inserted.

In the upper part of plate *S* (which is the lock-casing) projects the bow *A*, to which is attached the pawl *i* and spring *c*, that produces an outward movement to pawl *i*.

In the cylinder *j* is the plunger *e*, which has a tendency to force the bow *A* from its position in Fig. 1 through the action of the spring *d*, the object of which is to produce automatic action to bow *A* while unlocking.

b b are tumblers of different form containing the slots *o*², which on turning the key coincide, allowing the projection *i*² on the arm *a*,

Fig. 7, to pass in, and thereby allowing arm *a* to turn against pawl *i*, thereby releasing said pawl *i* from double lever *n* while unlocking.

To insert a cartridge, the firing device *C* must be detached from the barrel *F*, leaving the barrel clear for its insertion to the chamber *b*², Fig. 5.

n and *o* are double levers for transmitting force from the pawl *i* to the trigger *m*.

To insert the firing device, the projection *Z*, Figs. 3 and 4, must be placed so as to pass through the slot *O*, Fig. 5, when it is free to turn into the position shown in Fig. 1, the slot *O* enlarging to *p*, Fig. 5. During the insertion of the firing device the trigger *m* will catch upon the edge *n*², drawing in the firing-pin and compress the spring *t*, Fig. 4, as in Fig. 1. It will be seen that if force is applied to eject the bow *A* from its position in Fig. 1 its action will be transmitted to the trigger *m* through the medium of the pawl *i* and double levers *n* and *o*, causing the trigger *m* to slip off the edge *n*², leaving the compressed spring free to act upon the firing-pin, thence upon the cartridge *h*, causing concussion.

r, Fig. 1, is a bearing through which the bow *A* passes.

s is a pin which limits the motion of pawl *i* and double lever *n*.

u, Fig. 2, is the muzzle of the barrel *F*.

*Q*², Figs. 1, 3, and 4, is a socket for bow *A* to prevent the firing device *C*, Figs. 1, 3, and 4, from turning when locked.

Q is a passage into which the end of bow *A* passes when locking.

l is a pin which acts as a stop to prevent bow *A* turning farther than is shown in Fig. 2.

k is a stop that limits the longitudinal travel of bow *A*.

f is a pin for keeping the springs *V V* in position.

V V are springs for holding the tumblers *b b* against the key.

The tumblers *b b* are common, but are suitable for a purpose set forth, and to which I attach no claim.

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In an explosive alarm-padlock the bow *A* having attached pawl *i* and spring *c* in combination with double levers *n* and *o*, all ar-

ranged and operating to force trigger *m* from edge of barrel F provided with the edge *n*², thereby releasing spring *t*, all operating when tension is brought upon said bow A substantially as set forth.

5 2. In an explosive alarm-padlock the firing device C having projection Z and socket Q² in combination with barrel F having slots O and

p and bow A all arranged to hold and lock said firing device C to padlock, substantially as described.

E. NEWELL CASE.

Witnesses:

J. S. JOHNSON,
W. H. COTTON.