(No Model.)

E. N. CASE.

ALARM PADLOCK.

No. 589,930. Patented Sept. 14, 1897.

Fig. 1.

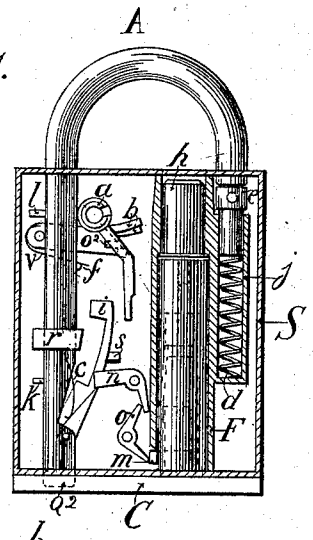


Fig. 3

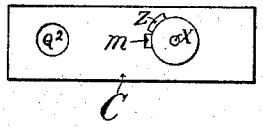


Fig. 4.

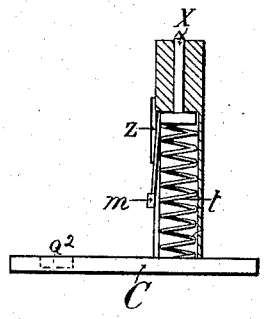


Fig. 2.

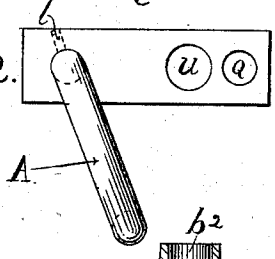


Fig. 5.

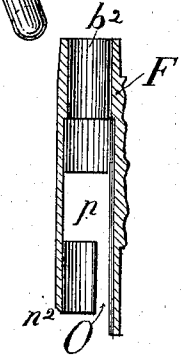


Fig. 6.

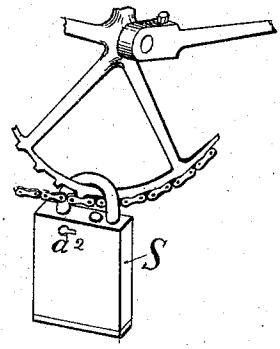


Fig. 7.

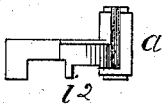


Fig. 8.



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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.

2. In an explosive alarm-padlock the firing device C having projection Z and socket Q^2 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.

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Witnesses:
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