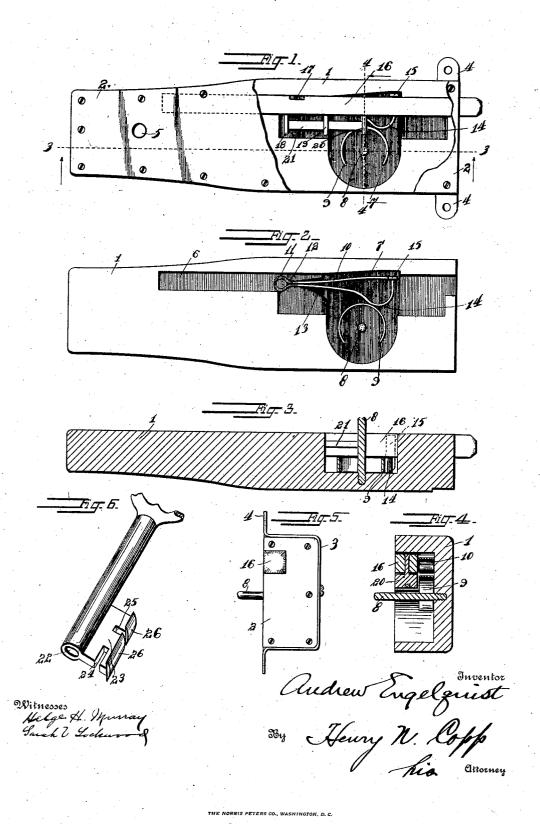
A. ENGELQUIST.
LOCK.
APPLICATION FILED APR. 10, 1906.



## UNITED STATES PATENT OFFICE.

## ANDREW ENGELQUIST, OF HARDWOOD, MICHIGAN.

## LOCK.

No. 852,832.

Specification of Letters Patent.

Patented May 7, 1907.

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To all whom it may concern:

Be it known that I, Andrew Engelouist, a citizen of the United States, residing at Hardwood, county of Dickinson and State of Michigan, have invented certain new and useful Improvements in Locks, of which the following is a specification.

This invention relates to locks and, more particularly, to locks for the doors of outto buildings, such as barns, warehouses, gran-

aries, etc.

The object of the present invention is the provision of an improved lock, especially adapted for the uses heretofore set forth, of simple, strong, durable, and inexpensive construction, which will be of such improved construction and novel operation that it cannot be easily picked or broken.

Another object of the invention is the provision of an improved lock of the sliding bolt type which may be projected more or less as desired, being adapted for greater or lesser retraction at the will of the operator.

The invention is set forth hereinafter and the novel features are recited in the ap-

pended claims.

In the accompanying drawings: Figure 1 is a face view; Fig. 2, a similar view with the bolt removed; Fig. 3, a section on line 3—3 of Fig. 1; Fig. 4, a section on line 4—4 of Fig. 1; Fig. 5, an end view; and Fig. 6, a perspective of the key.

The body or casing 1 of the lock may be of wood or metal and is adapted for attach35 ment to the door. The parts are protected by a plate 2 and an arc-shaped strap 3 having ears 4 which are provided with openings through which and another opening 5, bolts or screws may be passed to secure the lock on 40 the door.

It is preferable to employ some hard wood for the body 1 on account of its lightness, cheapness and strength and because of the nature of the use to which this lock is put.

The body 1 is chambered out to form the bolt groove 6, and it also has a locking cham-

ber 7 which is deeper than the bolt groove. In the chamber 7 is a pintle or stem 8 and arranged concentrically thereto is a ward 9.

I employ an improved form of locking 50 spring 10 made from a single strip of springy or resilient metal which is doubled upon itself and formed into a bow 11 which fits snugly in a pocket 12, whereby it is held. The members of the spring extend from the 55 bow 11 into a flaring cavity 13 and thence into the chamber 7, one of said members being provided with a curved or bowed tumbler 14 which lies adjacent the ward 9, while the other member constitutes the latching or 60 locking means and is provided with a finger 15 extending out at right-angles to the plane of the spring.

The sliding bolt 16 fits the groove 6 and is adapted for movement back and forth there- 65 in when actuated by the key. This bolt has a notch 17 which is adapted to receive the locking finger 15 when the bolt is fully projected, but at other times the locking finger simply bears against the top of the bolt. On 7c the lower side of the locking bolt are three rigid wards 18, 19 and 20 which are connect-

ed by an intermediate strip 21.

Referring to Fig. 6, the key employed has a socket 22 to receive the pintle 8 and is provided with a ward 23 which has a notch 24 to receive the ward 9, being also provided with a slot 25 to receive the strip 21 and having the cam 26 which is adapted to bear against the bow-shaped tumbler 14 and also 80 against the wards 18, 19 and 20. To fully retract or project the bolt requires three complete turnings of the key which, on each turning, presses back the tumbler 14 and engages one of the wards (18, 19 or 20). When the 85 bolt is fully projected, it is locked by the engagement of the locking toothin the notch 24.

As more than one turning of the key is required and because the peculiar construction of the parts necessitates the use of a 90 special kind of key, this lock is very difficult to pick, while its few parts and their strength

and construction makes the lock one which cannot be easily broken or in any manner tampered with.

Having thus described my invention, what 5 I claim as new, and desire to secure by Let-

ters Patent, is:-

In a lock, the combination with a sliding bolt having wards, of a locking mechanism comprising a spring locking arm having a ro free end adapted to engage and lock the bolt, an independent springy tumbler having a

free bowed part engageable with the free part of the spring arm, and means for guiding the key in its movements so that it will engage with the bowed tumbler to cause release of 15 the locking arm from the bolt.

In testimony whereof, I hereunto affix my signature in presence of two witnesses:

ANDREW ENGELQUIST.

Witnesses:

Witnesses:

J. F. KELLY, Amos Lalonde.