T. CEBULLA.

LOCK.

APPLICATION FILED NOV. 10, 1909.

990,225. Patented Apr. 25, 1911.

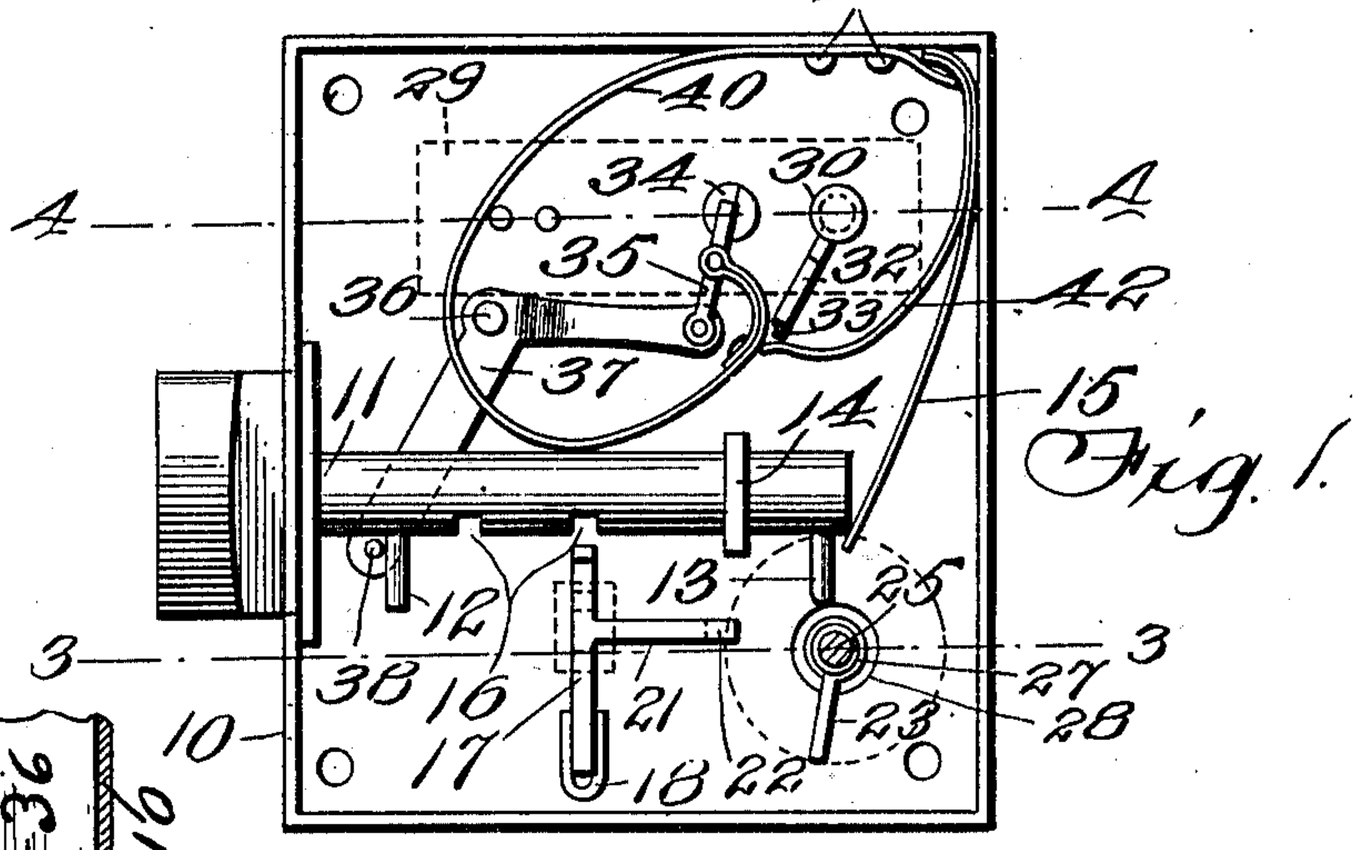

Fig. 1.

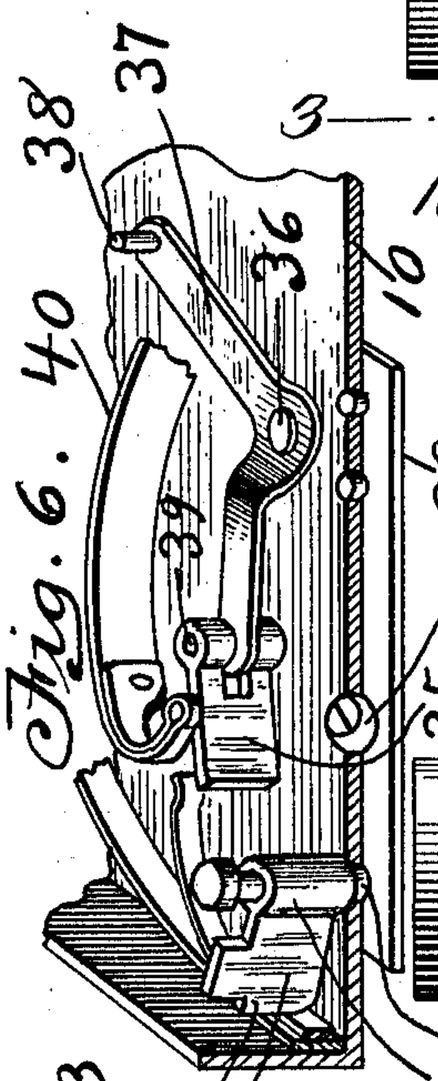

Fig. 6.

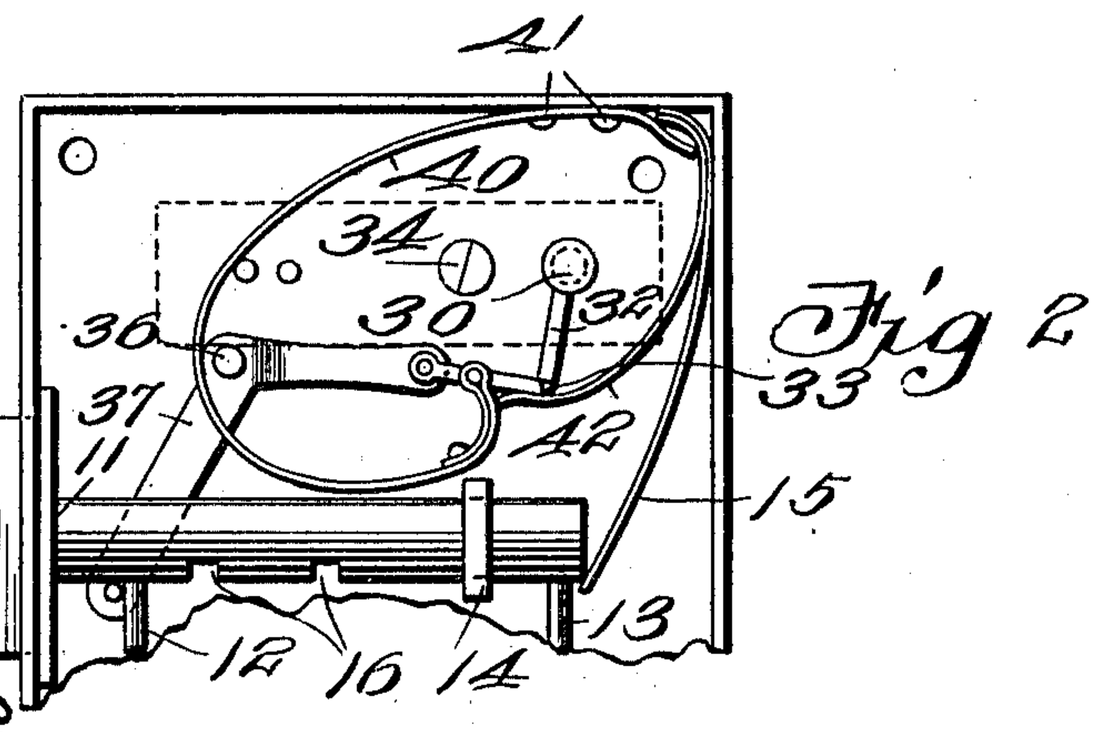

Fig 2

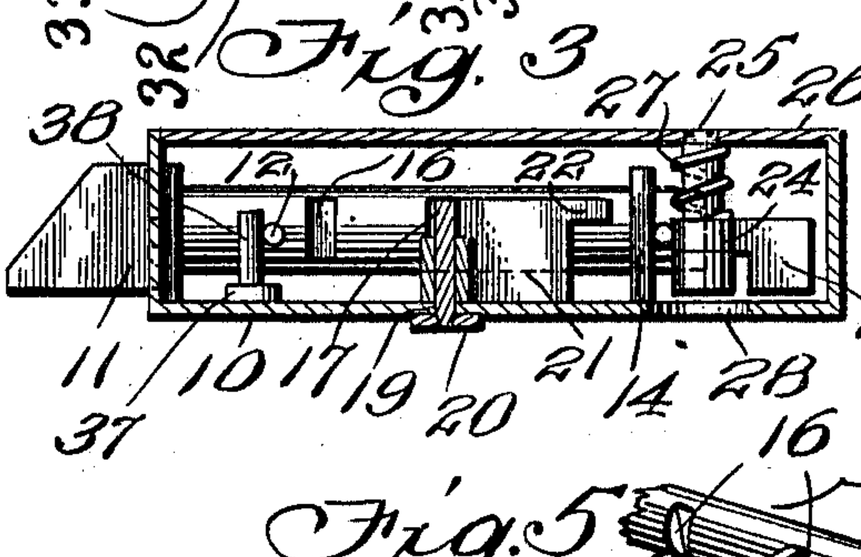

Fig. 3

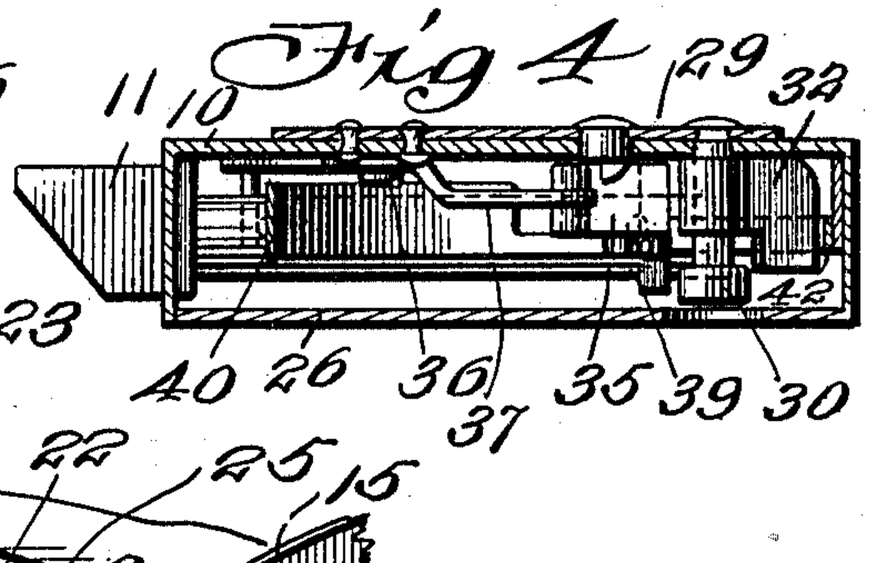

Fig 4

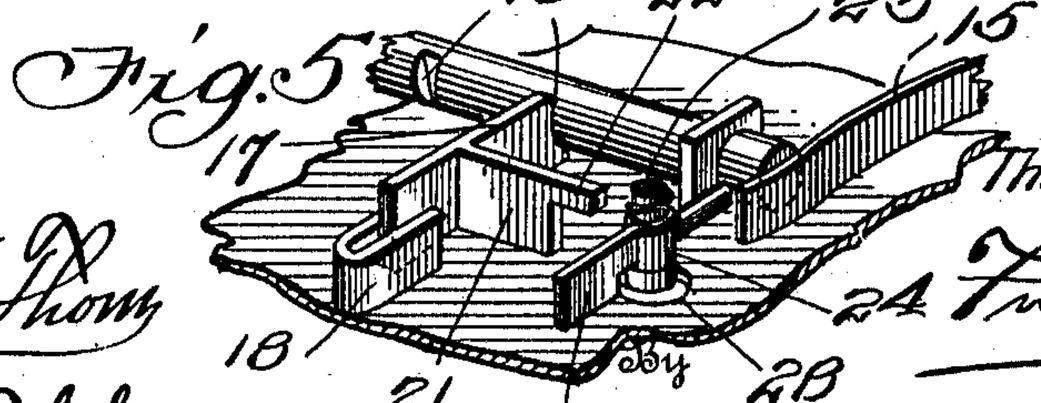

Fig. 5

Witnesses
Geo. A. Thom
A. G. Blakeney.

Inventor
Thomas Cebulla.
By Franklin W. Howson
Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS CEBULLA, OF LATROBE, PENNSYLVANIA.

LOCK.

990,225. Specification of Letters Patent. Patented Apr. 25, 1911.

Application filed November 10, 1909. Serial No. 527,259.

To all whom it may concern:

Be it known that I, THOMAS CEBULLA, a subject of the Emperor of Austria-Hungary, residing at Latrobe, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to locks of the sliding bolt-type, and to that class wherein the devices for sliding the bolt are held out of the path of the key or operating devices, except where it is desired to operate the lock by a person knowing the conditions thereof.

The object of this invention is to provide a lock, so constructed as to prevent persons, ignorant as to its construction and the necessary movements from operating the same.

Further objects will be apparent from the following specifications and drawings in which:—

Figure 1 is a view of the lock as locked, the rear plate being removed. Fig. 2 is a similar view, showing same ready to be unlocked. Fig. 3 is a sectional view on line 3—3 of Fig. 1. Fig. 4 is a sectional view on line 4—4 of Fig. 1. Fig. 5 is a detail perspective view of the rear end of the sliding bolt. Fig. 6 is a detail perspective of the operating member.

Referring specifically to the drawings the lock comprises the usual casing 10 and a sliding bolt 11 which has two pins 12 and 13, extending laterally from the shank thereof. The rear end of said shank passes through a guide 14 which is secured to the casing 10 and also serves as a stop, limiting the outward movement of said bolt by means of the pin 13. The bolt is normally held in extended position by a spring 15 bearing against the rear end thereof, the other end of said spring being secured to the casing.

The shank of the bolt is recessed as at 16 to receive the end of a latch 17 which slides in a guide 18. A stem on said latch extends through a slot 19 in the casing 10 and carries thereon a head or thumb piece 20. This latch by engagement in the recesses 16 holds the bolt in either extended or retracted position. Extending laterally from the latch is a trigger or operating piece 21 which terminates in a finger piece 22 in which is intended to be struck by a leaf or wing 23, on a collar 24 mounted on a stud 25 carried by the back plate 26 of the casing. Interposed between the back of the lock and the collar 24 and surrounding the stud 25 is a coiled spring 27 in expansion. This spring 27 yields under pressure and permits the leaf to swing in path of the finger 22. Without depressing the spring the leaf passes between the finger 22 and the front of the casing, thereby failing to slide the latch 17 and release the bolt. The leaf 23 and collar 24 are cut away to provide for the head of the stud 25. The stud 25 is so located that when the key is inserted through the key hole 28 and straddles the leaf 23 to turn the same, the end of the leaf engages the pin 13 to retract the latch.

The foregoing description may be considered as that of operating the bolt from the inside while the mode of operating the lock from the opposite side is quite different, the following being a description thereof.

Secured to the casing 10 is a spring 29 which carries a stud 30, near one end thereof, said stud being similar to stud 25 in that it carries a collar 31 having a leaf 32 thereon similar to collar 24 and leaf 23. The outer end of the leaf 32 is reduced in height and thickness as indicated at 33, said condition forming a groove or notch the function of which will be described later. The spring 29 also carries a catch or stud 34 intermediate of the stud 30 and the rivets securing said spring to the casing, this catch serving to hold a leaf 35 out of the path of the revolving leaf 32.

Pivoted to the casing as at 36 is a bent lever 37, one arm extending under the shank of the bolt 11, and having a pin 38, which engages or arrests the pin 12 on the bolt when the lever is swung. The other arm of the lever has the leaf 35 pivoted at the end thereof. Upstanding from the leaf 35 is a stud 39 and about this stud is bent or looped the reduced end of a spring 40, which spring is continued in an irregularly curved direction until it contacts with and is secured to the casing as at 41. There is a small spring 42 bent to lie in the path of the leaf 32, to cause the movement of said leaf to be sluggish, and also to limit the swing of the leaf

35 when released by the catch 34. Both springs 42 and 15 are clamped by the extended end of spring 40 beyond point 41.

The operation of the device is as follows:—The key is inserted through the keyhole in the manner shown in Fig. 1 and, by depression of the spring 29, the stud 34 will release the member 35 and spring 40 to cause the same to assume the position shown in Fig. 2 of the drawings, after which the wing of the tongue coöperating with said member will cause the angled lever 37 to tilt and retract the bolt by the pins 38 and 12 coming in contact with each other, the spring 15 serving to throw the bolt in the opposite direction.

Having thus described my invention what I claim to be new is:—

1. A lock comprising a casing, a spring-pressed sliding bolt mounted therein and provided with notches, a latch adapted to engage said notches and provided with a lateral projection with a finger at its end, a stud projecting from the casing, a rotatable spring-pressed leaf mounted thereon coöperating with said finger to retract the latch from the bolt, a pivotal angle lever mounted within the casing, a leaf pivotally mounted upon said angle lever, and a rotatable leaf designed to be actuated by a key and cooperating with the leaf upon said angle lever to retract the bolt within the casing.

2. A lock comprising a casing, a spring-pressed sliding bolt mounted therein and provided with notches, a latch adapted to engage said notches and provided with a lateral projection with a finger at its end, a stud projecting from the casing, a rotatable spring-pressed leaf mounted thereon coöperating with said finger to retract the latch from the bolt, a pivotal angle lever mounted within the casing, a leaf pivotally mounted upon said angle lever, a spring fastened to the casing, a catch fixed to said spring and extending within the casing and adapted to engage the leaf upon said lever, a stud fixed to said spring and extending within the casing and adapted to be engaged by a key, a rotatable leaf mounted upon the stud upon said spring and coöperating with the leaf upon the angle lever to cause the latter to tilt to retract the bolt within the casing.

3. A lock comprising a casing, a spring-pressed sliding bolt mounted therein and provided with notches, a latch adapted to engage said notches and provided with a lateral projection with a finger at its end, a stud projecting from the casing, a rotatable spring-pressed leaf mounted thereon coöperating with said finger to retract the latch from the bolt, a pivotal angle lever mounted within the casing, a leaf pivotally mounted upon said angle lever, a spring fastened within the casing and pivotally connected with said leaf upon the angle lever, a leaf spring fastened to the outer face of the casing, a catch upon the spring which is fastened to the casing, extending through an aperture in the latter and disposed in the path of the leaf upon the angle lever, a stud fixed to the spring which is fastened to the casing and extending within the casing, a leaf pivotally mounted upon the stud upon said spring and coöperating with the leaf upon the angle lever to cause the bolt to be retracted within the casing as a key releases the catch upon said spring and is turned against the leaf upon said stud.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

THOMAS CEBULLA.

Witnesses:
PAUL KIRCHNER,
P. C. TONER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."