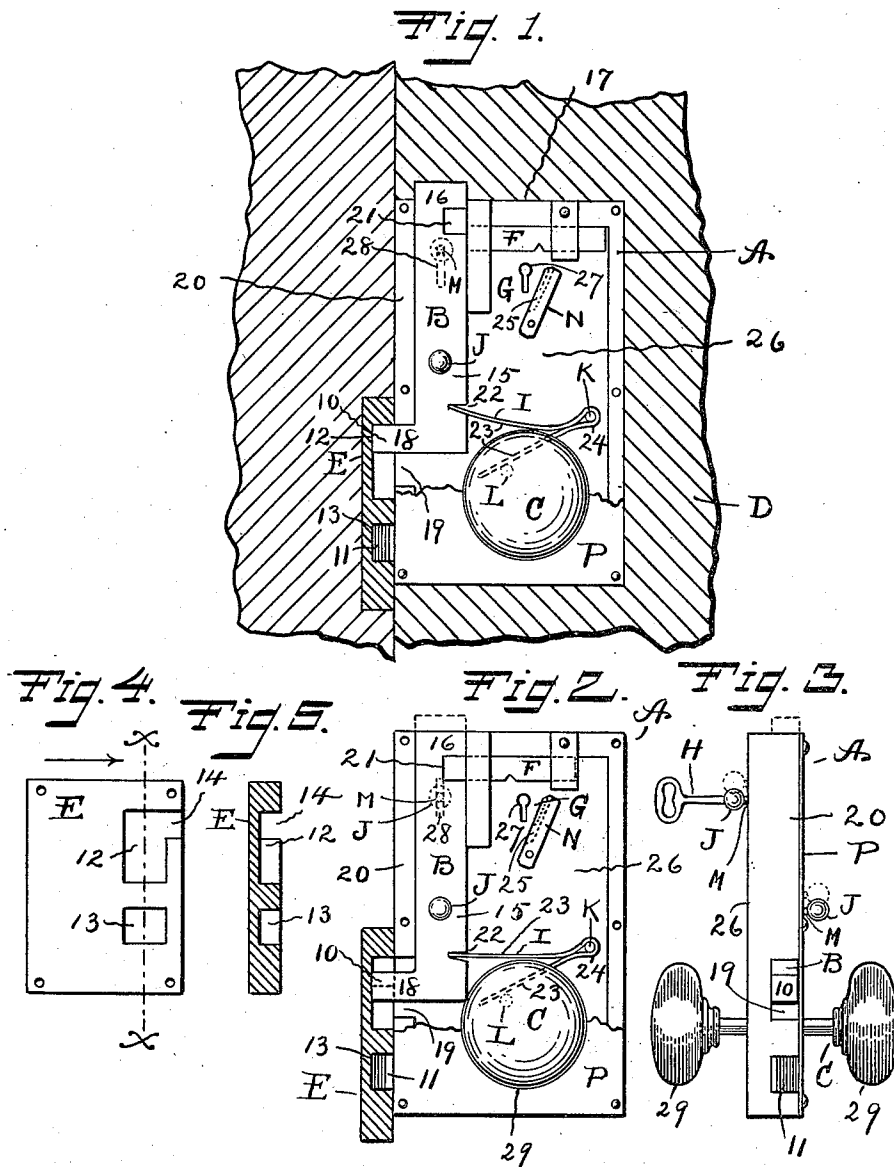


N. TRIANTAFILU.
DOOR LOCK.
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Patented Aug. 29, 1911.



WITNESSES:-

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UNITED STATES PATENT OFFICE.

NICHOLAS TRIANTAFILU, OF NEW BRITAIN, CONNECTICUT.

DOOR-LOCK.

1,002,097.

Specification of Letters Patent.

Patented Aug. 29, 1911.

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To all whom it may concern:

Be it known that I, NICHOLAS TRIANTAFILU, a citizen of Greece, residing in New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Door-Locks, of which the following is a specification.

My invention relates to improvements in locks and the objects of my improvements are to produce a lock whose bolt member has an engaging nose that is always projected beyond the casing, and a suitable keeper therefor, whereby means are provided for preventing the disengaging of the said nose and keeper by forcing the said nose inwardly within the said casing.

In the accompanying drawing: Figure 1 is a front view of my lock, in part broken out and part of a door casing showing the bolt disengaged. Fig. 2 is a similar view of the same, the door and casing being omitted, showing the bolt engaged with the keeper. Fig. 3 is a side elevation of the end of my lock. Fig. 4 is a face view of the keeper. Fig. 5 is a sectional view on the line *x x* of Fig. 4.

A is a casing which comprises a housing for the bolt B of my lock and the operating mechanism therefor to be described, and which bolt has a projecting nose 10 and as shown serves as a housing for a door knob operated latch C of ordinary construction, the spring operated bolt of which has a projecting nose 11 in the usual manner. The said casing A is adapted to be mortised in a door D so that the said bolt noses 10 and 11 will project beyond the edge of the same, a condition which is ordinary as regards the nose 11 of the door knob latch C. A keeper E has recesses 12 and 13 adapted respectively to engage with the noses 10 and 11, the recess 13 being of ordinary construction. The said bolt B has a vertically reciprocating motion and the recess 12 has an opening or passage way 14 on the side from which the door closes which registers with the said nose 10 at one of the limiting positions of its reciprocatory motion so as to permit the free movement of the said nose 10 therein back and forth, and accordingly permitting the free opening and closing of the door. With the nose 10 received in the said recess 12 and dropped as shown to the other limiting position of reciprocation the said nose 10 is restrained by the lateral walls of the said

recess 12 and the door is thereby locked. The said bolt B is an L shaped member, the general body 15 of which comprises an upwardly directed arm, the upper end 16 of which is a fit for and reciprocates in a hole in the top 17 of the casing A and at its lower end has a laterally directed arm 18 projecting through a slot 19 in the side wall 20 of the casing and has at its outer end the said nose 10. A lateral recess 21 in the said bolt B, as shown near the upper end of the same, is provided and is adapted to engage with the auxiliary bolt F of an auxiliary locking mechanism or lock G operated by a key H and hold the bolt B in the engaged or locked position.

A spring I engaging with a notch 22 in the bolt B tends to force the bolt B upward to the free or disengaged or unlocked position. Knobs J, J one on the front side and the other on the back are mounted on the said bolt B and serve as means for forcing the bolt B downward to the locking or engaging position in opposition to the spring I so that by turning the key H the auxiliary bolt F may engage the said recess 21 and hold the said bolt B in such engaged position. The said knobs J, J are offset relatively to one another so that the securing rivet or pin M may in each case pass entirely through the said bolt B without interference one with the other. Guides and lugs may be provided for guiding the lower end of the said bolt B. I prefer however to utilize the said spring I for this purpose. This I am enabled to do by making the said spring of the double arm or V type of rigid or stiff spring material having two arms 23 which may be essentially equal and straight and shaped at the apex 24 to form an eye suitable for mounting on a pin K. The lower arm 23 engages with a back pressure pin L and the upper arm 23 engages with a notch 22 and in essentially perpendicular alinement with the direction of reciprocation of the said bolt B and is adapted to act as a strut, operating against the pin 24 to restrain and limit the backward or inward movement of the lower end of the bolt B and the nose 10.

A ward block N having grooves 25 fitting corresponding projections on the key H controls the use of a suitable key for operating the auxiliary lock G. In general the said auxiliary lock G is ordinary and any form

of approved and reliable lock may be employed in the place of the same.

The back 26 of the housing A and the cover P for the same are provided with a suitable key hole 27 for the key H and slot 28 for the shank of the knob J, and means for mounting the door knob 29 of the door knob mechanism C.

My door lock as described is particularly free from danger of being maliciously opened and is especially safe and reliable.

I claim as my invention:

1. In a door lock comprising a bolt having an elongated body provided with a nose at right angles to the said body and having a limited longitudinal motion bodily in one plane and in the direction of the said elongated body, and a keeper having means for engagement and disengagement with the said nose at the respective extremes of said motion, a spring tending to hold said nose in the disengaged position, means for forcing the said nose to the engaged position and

means for holding the said nose in such engaged position.

2. In a door lock, a bolt having a body provided with a laterally directed nose at right angles to the said body, and having a limited reciprocal motion and constantly in one plane, the said nose projecting constantly beyond the body of the lock by a definite and fixed amount, a spring tending to force the said nose in one direction and in position for disengagement with the said keeper, means for forcing the said nose into position of engagement with the said keeper, and in opposition to the said spring, and an auxiliary bolt and operating mechanism therefor suitable for locking the said nose in such engaged position.

NICHOLAS TRIANTAFILU.

Witnesses:

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