June 17, 1930. J. B. FLYNN 1,764,946

SPRING CLIP GUIDE FOR DOOR LOCK BOLTS

Filed Dec. 21, 1928

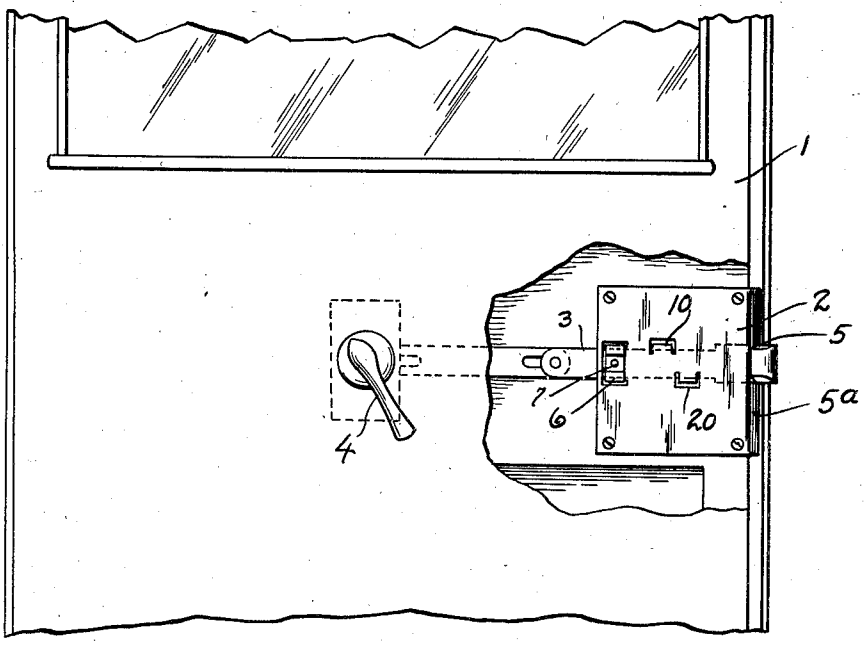


Fig. 1

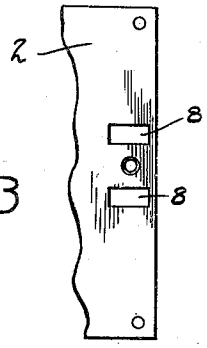


Fig. 3

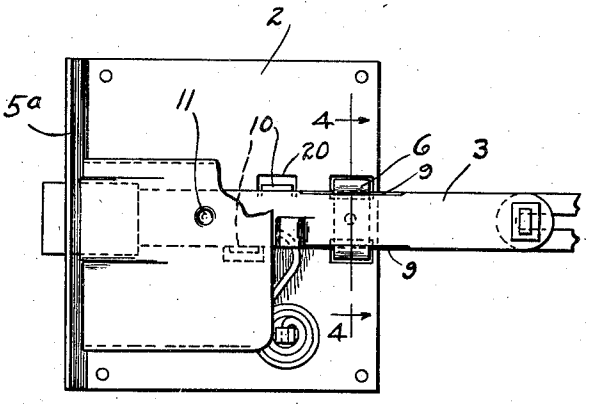


Fig. 2

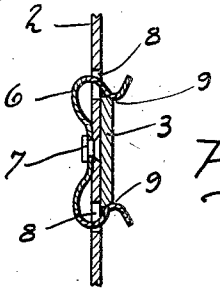


Fig. 4

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UNITED STATES PATENT OFFICE

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SPRING-CLIP GUIDE FOR DOOR-LOCK BOLTS

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This invention relates to a spring clip guide for a door lock bolt.

In a door lock for a vehicle which has a longitudinal lock bolt, and especially in case of the longitudinal lock bolt of the remote control lock, the manufacturer has been confronted with two problems, namely, the problem of providing a proper guide for this bolt, and the problem of so constructing his lock that the bolt will not rattle. It has been customary in door locks to have two guides for the bolt, namely, the guide provided by the sides of the bolt opening in the face plate and the lugs which are struck in the front plate. These struck in guide lugs in the front plate are not resilient, therefore they are liable to bind the bolt or else be spaced from the bolt and cause rattling. Hence, the object of this invention is to provide a spring clip guide for a door lock bolt which will serve not only as a guide, but also as an anti-rattler.

In the drawings:

Fig. 1 discloses in operative position in the door, a lock having a longitudinal lock bolt with a spring clip guide.

Fig. 2 is a side elevation of the lock with its longitudinal lock bolt guided by a spring clip guide.

Fig. 3 is a view of the front plate of the lock with the spring clip guide removed.

Fig. 4 is a sectional view along the line 4—4 of Fig. 2.

Referring more particularly to the drawings, the door of the vehicle may be generally designated by the numeral 1. Attached to the door in operative relation is the door lock having a front plate 2 and a door lock bolt 3, which is adapted to be retracted by any suitable retracting means 4. The door lock bolt is guided by the sides of the lock bolt opening 5 in the face plate 5^a, the struck in guide lugs 10, the punched in point 11 and by means of a spring clip guide 6 which is attached to the front plate by means of a rivet 7. The spring clip guide 6 which is roughly U-shaped, extends through the apertures 8 in the front plate and engages the lock bolt. The lock bolt 3 is beveled as at 9. The portions of the spring clip 6 which project through the apertures 8 of the front plate, engage the lock bolt along the beveled faces 9 as shown in Fig. 4, and owing to the spring action of the spring clip guide, the spring clip serves not only as a guide for the door lock bolt but also acts as an anti-rattler since it presses the lock bolt against the front plate and since the lock bolt can move vertically only against the resistance of the spring clip guide. The guide lugs 10 do not ordinarily touch the lock bolt but serve only as auxiliary guides when the bolt is subjected to distorting strains.

From the above description it is evident I have provided a guide and anti-rattling device for a door lock bolt which is simple, inexpensive, and easy to assemble.

What I claim is:

1. In a door lock having a frame, the combination of a sliding bolt, and a spring clip mounted on the frame the free ends of which serve as a guide for said bolt.

2. In a door lock, a sliding lock bolt having a beveled face, and resilient means adapted to slidably engage said beveled face and to serve both as a guide and an anti-rattling device for said lock bolt.

3. In a door lock, the combination of a lock bolt having a beveled face, a front plate with a plurality of openings, and a U-shaped resilient means attached to said front plate and adapted to project through said apertures in said front plate and to slidably engage said beveled face of said lock bolt.

4. In a door lock, a lock bolt having a beveled face, a front plate with a plurality of openings therein, and a spring clip fixed to said front plate, the free ends of said clip adapted to project through said openings in the front plate, and to slidably engage the lock bolt and serve both as a guide and an anti-rattling device for said lock bolt.

5. In a door lock, the combination of a sliding bolt, a guide for said bolt struck in the front plate, a guide for said bolt punched in the back plate, and means acting at one time both as a guide and an anti-rattling device for the lock bolt.

6. In a door lock, the combination of a sliding bolt, a guide for the bolt struck in

the front plate and having a loose engagement with the said bolt, and a resilient spring clip the free ends of which yieldably engage the bolt to serve as a guide for the same.

In testimony whereof I have affixed my signature.

JOHN B. FLYNN.