(No Model.)

W. F. GARRETT.

AUTOMATIC TELESCOPE GRIP AND BICYCLE LOCK.

No. 590,613. Patented Sept. 28, 1897.

Fig. 1.

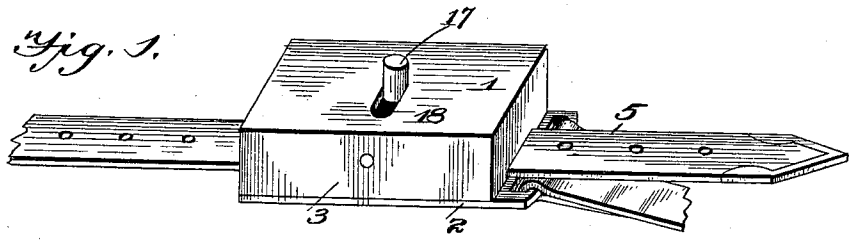


Fig. 2.

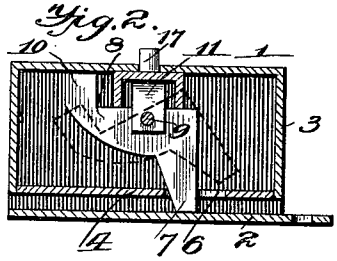


Fig. 3.

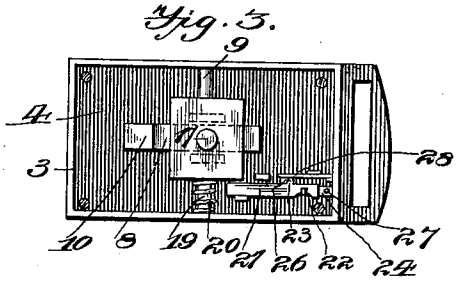


Fig. 4.

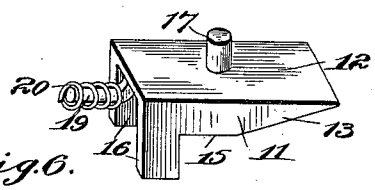


Fig. 5.

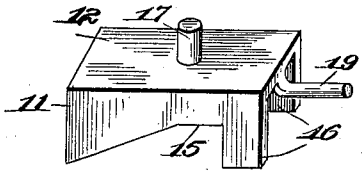


Fig. 6.



Fig. 7.

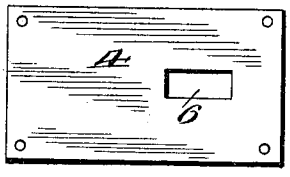


Fig. 8.

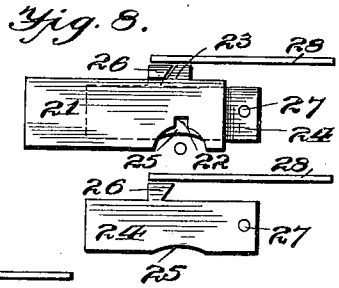
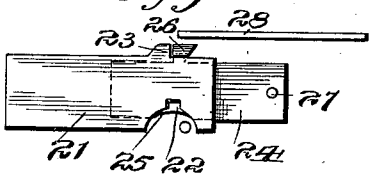


Fig. 9.



WITNESSES

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AUTOMATIC TELESCOPE-GRIP OR BICYCLE LOCK.

SPECIFICATION forming part of Letters Patent No. 590,613, dated September 28, 1897.

Application filed November 21, 1896. Serial No. 613,035. (No model.)

To all whom it may concern:

Be it known that I, WILBUR F. GARRETT, a citizen of the United States, residing at Centreville, in the county of Appanoose and State of Iowa, have invented certain new and useful Improvements in Automatic Telescope-Grip or Bicycle 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.

This invention relates to locks, and is designed particularly for use upon grips or satchels and also as a bicycle-lock, although it will be apparent as the description proceeds that the said lock may be used in various ways and at numerous points which will readily suggest themselves to the mind.

The principal object of the invention is to provide a simple, cheap, compact, and efficient lock to be used in connection with a perforated strap or link chain and to be manipulated by the pressure of the thumb or finger for engaging and releasing the strap or chain, the said lock also having provision whereby the operative parts thereof may be held rigidly in order to prevent access to the article with which the lock is engaged.

The invention consists in a lock embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a lock constructed in accordance with the present invention, showing also a strap engaged thereby. Fig. 2 is a longitudinal section through the lock. Fig. 3 is a plan view of the lock with the top casing-plate removed. Fig. 4 is a detail perspective view of the slide. Fig. 5 is a similar view of the slide, taken from the opposite side. Fig. 6 is a plan view of the base-plate of the lock. Fig. 7 is a similar view of the intermediate plate or web of the lock. Fig. 8 is an enlarged detail plan view of the locking mechanism in its unlocked position. Fig. 9 is a similar view of said mechanism, showing the same in its locked position.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

The improved lock contemplated in this invention comprises a substantially rectangular case consisting of the top 1, the bottom 2, the sides and ends 3, and an intermediate plate or web 4, arranged in a plane parallel with the top and bottom plates 1 and 2 and spaced a sufficient distance from the bottom plate 2 to permit a perforated strap 5 or link chain to be inserted through the lock, as shown in Fig. 1.

The plate or web 4 is slotted, as indicated at 6 in Figs. 2 and 7, to receive and allow of the swinging movement of the point or tongue 7 of a latch 8, pivotally mounted on a horizontal pin or shaft 9 within the lock-case, as shown. The latch 8 is fulcrumed intermediate its ends on said shaft and is provided at its upper end with an extension 10, which abuts against the upper or top wall of the case, as shown in Fig. 2. The upper edge of the latch 8 is flat and is spaced a sufficient distance from the top 1 of the case to permit of the sliding movement of a laterally-movable slide 11. This slide is best shown in Figs. 4 and 5, comprising a flat upper portion or surface 12, having at opposite sides depending flanges, one of which (indicated at 13) has an upwardly inclined or tapered edge, the said flanges being thus reversely inclined or beveled. Each of said flanges also comprises a horizontal portion 15, which contacts with the upper edge of the latch when the latter is in engagement with the strap 5, and the slide 11 is provided at one end with spaced depending ears 16, against which the lock-bolt abuts in the manner hereinafter described. Extending upwardly from the slide 11 is a thumb-piece or knob 17, the same passing through the top wall of the case and working in a transverse slide 18 therein, the said slide working across the top edge of the latch in a plane at right angles to the movement of the latch. By moving the knob 17 it will be seen that the flange 14 will act against the latch on one side of its fulcrum, so as to depress the same, while at the same time the flange 13 on the opposite side of the fulcrum will permit the latch at that point to rise. The effect then is to rock the latch 8 on its fulcrum, thereby lifting the point or tongue 7 out of engagement with the strap 5 or moving the same into engagement therewith, according to the direction in which the slide is

moved. The slide 11 is provided at one end with a stem 19, around which is disposed a spring 20, which acts to return said slide to its normal position after the same has been moved for releasing the strap 5, said spring serving as the strap 5 is turned through the lock-case to force the latch 8 into engagement with said strap.

21 designates a lock-bolt which is movable longitudinally within the lock-case. This bolt lies horizontally within the lock-case and operates in the horizontal plane of the slide 11, being adapted to be moved behind the ears 16 of the slide for preventing said slide from being reciprocated. This bolt is provided at one edge with a recess 22, in which the bit of the key works, and is provided at its opposite edge with a stump 23. Underlying the bolt 21 is a tumbler 24, having at one edge a recess 25 for engagement with the bit of the key and at its opposite edge a projection 26, which extends across the edge of the bolt and engages with the stump 23, as clearly shown in Figs. 8 and 9. The tumbler is pivoted at 27 and is rocked out of engagement with the bolt by means of the key in a manner readily understood by those conversant with the art to which this invention appertains. The tumbler is held in engagement with the bolt by means of a leaf-spring 28. By means of this construction the device may be used simply as an automatic spring-latch or as a latch and lock combined.

From the foregoing description it will be seen that I have provided a cheap, simple, and reliable latch and lock combined, which will be found very useful upon satchels, grips, bicycles, &c., but which by reason of its compactness may be employed at numerous points and in a variety of ways which will readily suggest themselves.

Having thus described my invention, what is claimed as new is—

1. The combination with a suitable lock-case provided with an opening for the passage of a strap or chain, of a latch pivotally mounted within the lock-case, and a thumb-slide operating across said latch in a plane at right angles to the movement thereof, said slide having a knob working through a slot in the lock-case, substantially as and for the purpose described.

2. The combination with a lock-case, of an interiorly-arranged latch fulcrumed intermediate its ends, and a slide movable across said latch and in a plane substantially at right angles to the plane of movement of said latch, substantially as and for the purpose described.

3. The combination with a lock-case, of a latch fulcrumed intermediate its ends therein, and a slide operating in a plane at right angles to the movement of the latch, said slide embodying an inclined flange which bears against the latch on one side of its fulcrum, substantially as and for the purpose described.

4. The combination with a lock-case, of a latch pivotally mounted therein and fulcrumed intermediate its ends, and a slide operating across the latch in a plane substantially at right angles to the movement of the latch, said slide being provided with spaced flanges having their edges reversely inclined and bearing against the latch on opposite sides of its fulcrum, substantially as and for the purpose described.

5. The combination with a lock-case, and an intermediate web or plate located therein and provided with an aperture, of a latch fulcrumed intermediate its ends within the case and working at its point or tongue through said web, and a slide working across the latch and provided with flanges having reversely-inclined edges bearing against the latch on opposite sides of its fulcrum, substantially as and for the purpose described.

6. The combination with a lock-case, of a latch fulcrumed intermediate its ends therein, a slide operating across said latch and having reversely-inclined bearing portions which contact with the latch on opposite sides of its fulcrum, means whereby said slide may be moved in one direction, and a spring for returning said slide to its normal position, substantially as and for the purpose described.

7. The combination in a lock, of a latch pivoted intermediate its ends, a finger-slide operating across the plane of movement of said latch and adapted to rock the same on its pivot, a lock-bolt movable across the plane and into engagement with said slide, and a tumbler for engaging and holding said lock-bolt, all arranged for joint operation, substantially as and for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILBUR F. GARRETT.

Witnesses:
T. M. FEE,
THOS. W. MEERS.