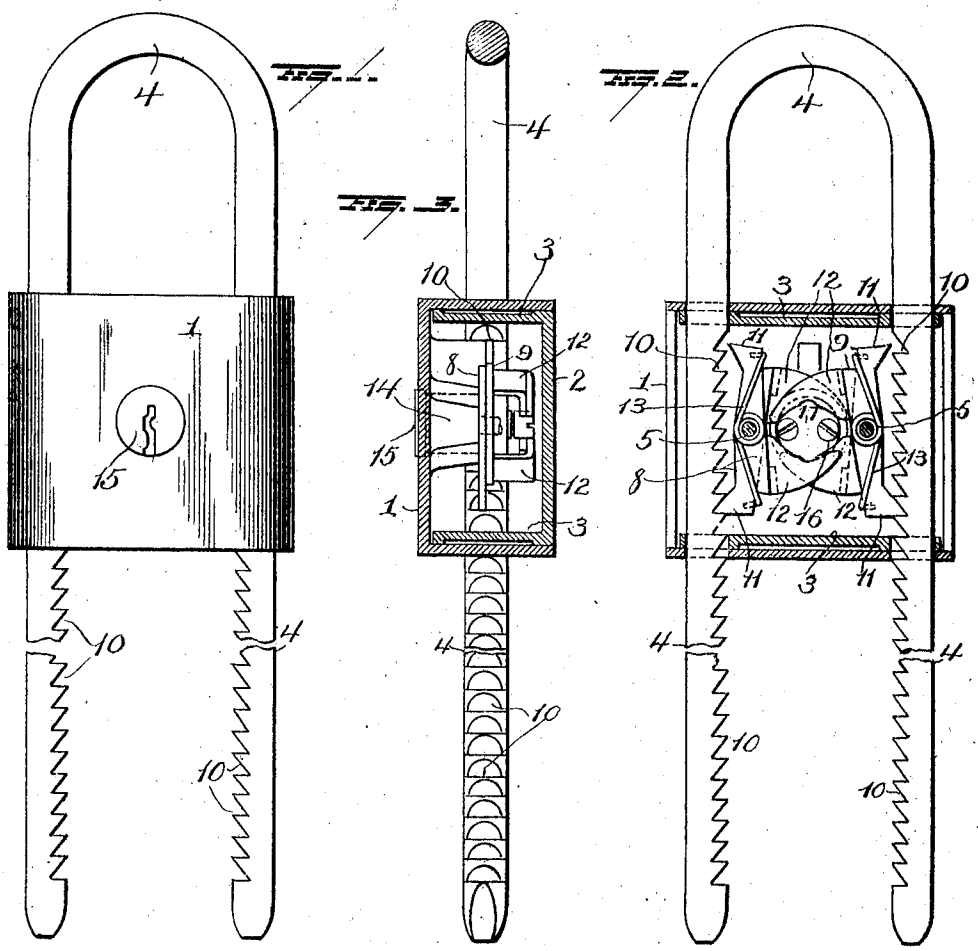
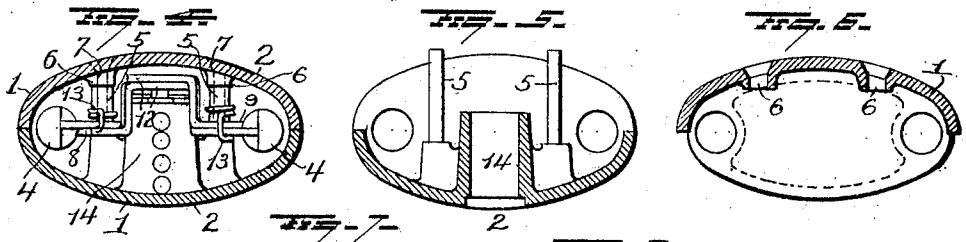
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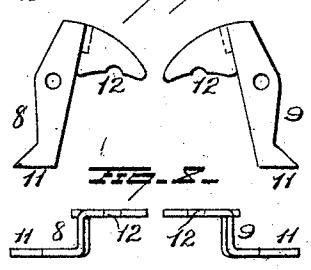
F. K. HEYER

PADLOCK

Filed Jan. 3, 1925









Inventor

F. K. Heyer

By Seymour & Bright

Attorneys

Patented Mar. 17, 1925. 1,530,177

UNITED STATES PATENT OFFICE.

FREDERIC K. HEYER, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE & TOWNE MANUFACTURING COMPANY, OF STAMFORD, CONNECTICUT.

PADLOCK.

Application filed January 3, 1925. Serial No. 325.

To all whom it may concern:

Be it known that I, FREDERIC K. HEYER, a citizen of the United States, and resident of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Padlocks; 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 improvements in padlocks,—one object of the invention being to improve and simplify the construction of padlocks in which the shackle is held in locked position through the medium of ratchet devices controlled by key-operated means and to so construct and arrange the ratchet devices that they shall be double acting in such manner that the shackle legs may be passed through the case from either end of the latter and be locked with equal security in whichever direction the said shackle legs may be passed through the casing containing the locking means.

With this and other objects in view, the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings,—

Figure 1 is a front elevation of a padlock in which my improvements are embodied.

Figure 2 is a vertical section with the ratchet lock devices shown in elevation.

Figure 3 is a sectional view taken at right angles to Figure 2.

Figure 4 is a transverse sectional view, and

Figures 5 to 9 are detail views.

In the embodiment of my invention shown in the drawings, a casing member 1 and a cover member 2 are employed,—the cover member having flanges 3 which enter the casing member and are perforated for the passage of the legs of a shackle 4, the shackle legs thus locking the two parts of the casing together. The casing cover member 2 is also provided with posts 5 which may be made to project through perforated bosses 6 in the cover member and secured as indicated at 7, Figure 4.

Pivotally mounted upon each post 5 are two dogs or ratchet bolts 8 and 9 and these are adapted to engage ratchet teeth 10 formed on the inner faces of the shackle legs, for which purpose each dog or bolt is provided at one end with a tooth 11. The dogs 8 and 9 are pivotally supported approximately at their centers upon the posts 5 and at the end portion of each dog opposite the end thereof which is provided with the tooth, an off set tumbler arm or cam 12 is located. The dogs 8 are so disposed that when the parts are assembled, their cam arms 12 will overlap below the central portion of the casing and the cam arms of the dogs 9 will overlap above the central portion of the casing. Springs 13 are coiled at their central portions about the respective posts 5 and at their ends engage the dogs 8 and 9 in a manner to press them toward the ratchet teeth of the shackle arms.

The cylinder 14 of a pin tumbler lock is carried by the central portion of the casing member 1 in line with the space between the pairs of overlapping cams on the dogs or ratchet bolts. The plug 15 of this lock has secured thereto by means of screws 16, a retaining disk 17, said screws having enlarged projecting heads disposed in the space between the pairs of cam arms or tumblers on the dogs or ratchet bolts and serving to so cooperate with one or the other pair as to retract one or the other pair of dogs or ratchet bolts from the shackle legs when said plug is turned.

My improvements are such that the shackle legs may be passed through the casing from one end or the other thereof and be securely locked in which ever direction they may pass through said casing.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent is:

1. In a padlock, the combination with a casing and a shackle provided on a leg thereof with ratchet teeth, of oppositely disposed spring-pressed dogs adapted to cooperate with said ratchet teeth whereby the shackle may be passed in one direction or another through the casing, and means for retracting one or the other of said dogs.

2. In a padlock, the combination with a casing and a shackle provided on a leg thereof with ratchet teeth, of oppositely disposed spring-pressed dogs adapted to cooperate with said ratchet teeth whereby the shackle may be passed in one direction or

another through the casing, said dogs having cam arms oppositely disposed, and means intermediate of said cam arms for retracting one dog or the other by cooperation with the cam arm thereon.

3. In a padlock, the combination with a casing and a shackle provided on its legs with ratchet teeth, of two pairs of spring-pressed dogs mounted in the casing and cooperable with said ratchet teeth whereby the shackle may be passed in either direction through the casing, cam arms on the dogs of each pair, the cam arms on the dogs of each pair overlapping each other and the cam arms of one pair of dogs disposed opposite the cam arms of the other pair of dogs, and operating mechanism provided with means disposed between the pairs of cam arms so as to cooperate with one pair or the other to retract one pair or the other of the dogs.

4. In a padlock, the combination of two casing members, one having flanges to enter the other, said flanges having perforations, a shackle having its legs passing through the casing and through said perforated flanges whereby the two members of the casing are locked together, and locking mechanism within said casing and cooperable with the shackle.

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

FREDERIC K. HEYER.

Witnesses:

CHARLES A. BERRY,

VICTOR J. HANSON.