No. 660,571. Patented Oct. 30, 1900.

P. C. GREENAWALT.

HASP LOCK.

(Application filed July 13, 1900.)

(No Model.)

Fig. 1.

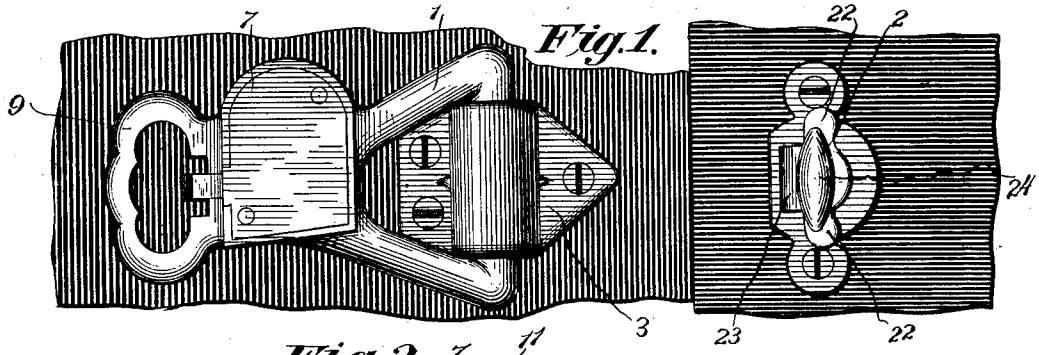


Fig. 2.

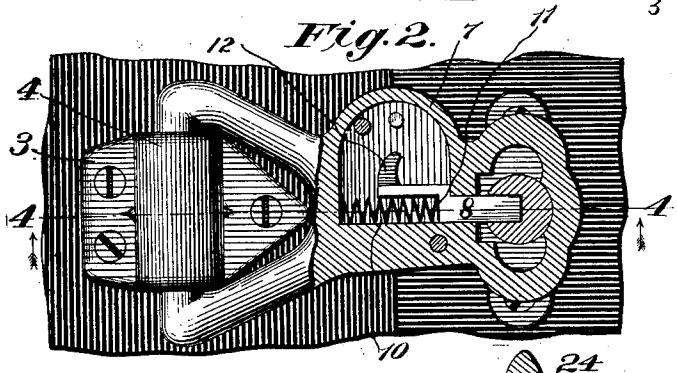


Fig. 3.

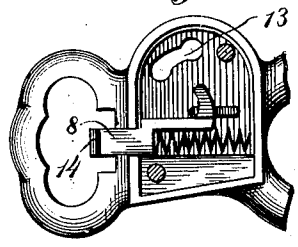


Fig. 4.

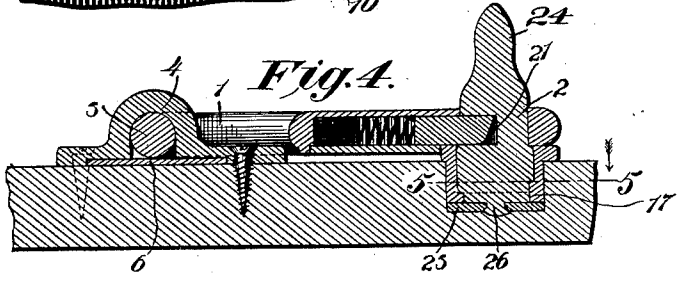


Fig. 5.

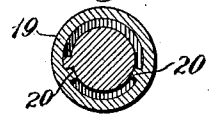


Fig. 6.

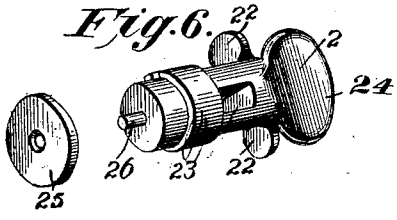


Fig. 7.

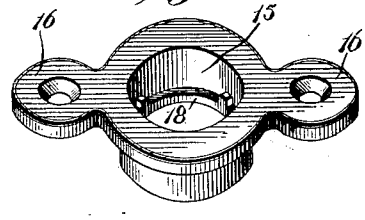
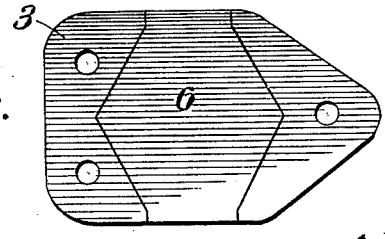


Fig. 8.



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UNITED STATES PATENT OFFICE.

PETER C. GREENAWALT, OF READING, PENNSYLVANIA.

HASP-LOCK.

SPECIFICATION forming part of Letters Patent No. 660,571, dated October 30, 1900.

Application filed July 13, 1900. Serial No. 23,522. (No model.)

To all whom it may concern:

Be it known that I, PETER C. GREENAWALT, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Hasp-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.

My invention relates to improvements in locks, and particularly to hasp-locks.

It consists in a lock having a suitable hasp, a staple or keeper adapted to be engaged by the same, and a bolt carried by the hasp and adapted to engage the said keeper for locking the parts together.

It also consists in certain other constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 represents a hasp-lock embodying my invention, the hasp being folded back in an unlocked position. Fig. 2 represents a view, partially in elevation and partially in section, of the lock, the sectional portion being taken through the lock and staple to show the interior constructions of the same. Fig. 3 represents a detail view of a portion of the hasp, the face-plate of the lock carried thereby being removed to reveal the locking-bolt mounted in the casing. Fig. 4 represents a central longitudinal section through the hasp or staple lock. Fig. 5 is a detail sectional view through a portion of the staple or keeper, showing the means for limiting its movement. Fig. 6 represents a perspective view of the staple removed from its socket and the washer for securing the same within the socket. Fig. 7 represents a detail perspective view of the socket for receiving and holding the staple. Fig. 8 represents an inverted plan view of the clip for pivotally supporting the hasp.

My invention is designed to provide a hasp and staple lock which will have no separable parts likely to be lost, as when the ordinary padlock is used, and which though simple in construction can be made very strong and will not be likely to get out of order readily.

In the drawings I have shown an embodiment of my improved lock which comprises a hasp 1 and a staple 2. The hasp is mounted upon one portion of the parts to be locked together, preferably upon a door or other movable part, and is pivotally secured thereto by means of a plate or clip 3, which may be bolted or otherwise secured in position. The clip 3 is made of suitable strength and is arched, as at 4, to surround the pivotal bearing 5 of the hasp 1. It is also provided with flanges through which screws or bolts may be passed to secure it in position. As seen in Figs. 4 and 8 of the drawings, the clip or plate 3 is preferably provided with a back wearing-plate, as 6, to receive the wear of the pivotal bearing 5 of the hasp. This plate is preferably provided with an angular contour, as seen in Fig. 8, adapted to fit snugly in a recess having a corresponding contour. The plate 6 is held in place when the clip or plate 3 is bolted or screwed in position, as will appear by reference to Fig. 4 of the drawings.

The hasp 1 may be made of any desired shape, a convenient form being shown in the drawings, in which the hinged portion is of a generally-triangular shape, while the central portion of the hasp is slightly enlarged to form a casing 7, adapted to accommodate a locking-bolt, as 8. The outer free end of the hasp is provided with an aperture, as at 9, which is of a suitable shape to fit over the staple 2. The bolt 8 is preferably a sliding bolt and extends into the casing 7, where it is engaged by a spring 10, which engages the bolt 8 behind a shoulder 11 formed thereon. The inner end of the bolt 8 is provided with a lug, as 12, adapted to be engaged by a suitable key for retracting the bolt. The key, which may be of any suitable design, gains access to the casing through an ordinary keyhole, as 13, and when turned will engage the tumblers of the bolt and draw the same inwardly against the action of the spring 10. The outer end of the bolt 8 projects into the aperture 9 of the hasp, and when the hasp is closed over the staple it is designed to en-

gage a recess formed therein for locking the parts together. The outer end or nose 14 of the bolt 8 is preferably beveled, so that when it engages the staple 2 it will be readily forced into the casing 7 by the contact with the said staple.

The staple 2 is designed to be arranged in proper relation to the hasp for locking the desired parts together, and it comprises a cylindrical staple proper adapted to engage a bearing formed in a socket 15. The socket 15 is provided with laterally-projecting lugs 16, which may be perforated to receive screws, bolts, or other attaching means. The barrel of the staple is preferably reduced at its inner end, as at 17, so that it may engage a bearing-surface 18, formed in the socket 15. The inner end of the said barrel is also provided with a shoulder or projection, as 19, which is arranged in the path of projections or shoulders 20 20, formed on the inner surface of the socket 15. These shoulders or lugs 20 limit the revolution of the staple 2, permitting it to be turned half-way around. Above the casing 15 the barrel of the staple 2 is preferably slightly reduced again and is formed with a keeper-socket, as at 21, for the reception of the bolt 8. Above the keeper-socket the staple is provided with laterally-projecting lugs, as 22 22, and a beveled bolt-engaging surface 23. The shape of the lugs and the beveled bolt-engaging surface are such as to fit exactly the opening 9, formed in the hasp, when the staple is turned in the position shown in Fig. 1. When the staple is turned in the opposite direction, the lugs and shoulders on the said staple will not pass through the opening 9, as it does not properly register with the same in that position. The beveled receiving-face 23 of the staple is arranged upon the opposite side of the staple-barrel from the keeper-socket 21. When the staple is in the position shown in Fig. 1, the hasp may be folded over the same and be forced down upon it, the beveled surface 23 serving to push the bolt 8 inwardly. The bolt will then rest against the cylindrical surface of the staple-barrel. After the lugs 22 have passed through the opening 9 the staple may be turned by means of its flattened head portion 24 until it assumes a position opposite to that occupied by it in Fig. 1 or until it has been turned half-way around. As soon as it has been turned half-way around the keeper-socket 21 will be presented to the end of the bolt or lock 8, which will immediately spring into the same under the influence of the spring 10. In this position it will be noted that it is impossible to separate the parts without turning the staple, since the lugs 22 22 are no longer in position to coincide with the aperture 9 and will therefore hold the hasp in place and also since the bolt 8 will not permit the staple to be turned until the said bolt has been retracted. This can only be accomplished by the use of a proper key, which may be inserted in the keyhole 13 for the purpose of retracting the bolt, as heretofore mentioned.

In order to movably hold the staple 2 in position in the socket 15, I preferably secure a washer 25 to the inner end of the said staple, and projection 26 on the said staple being forced through an opening in the washer and headed, so as to rivet the parts together. This will be apparent by reference to Fig. 4 of the drawings.

It will be evident from the foregoing description that I am enabled by my invention to produce a simple though very effective hasp and staple lock and that the parts may be made as strong as desired. A hasp and staple lock of this kind is well adapted for use upon all sorts of doors and gates. They are especially well adapted for use upon cellar-doors, barn-doors, farm-gates, car-doors, and the like.

Having thus described the invention, what I claim is—

1. A hasp and staple lock comprising a hasp, a locking-bolt carried by the said hasp, and a movable staple adapted to be moved into one position to be engaged by the hasp, and into another position to be engaged by the said locking-bolt, substantially as described.

2. A lock comprising a hasp, a casing formed thereon, a reciprocating bolt carried by the said casing, means for holding the bolt normally in its outer position, a staple-engaging portion formed upon the said hasp, a revoluble staple formed with a contour adapted to register with the contour of the staple-engaging portion of the hasp, and means formed in the staple for engaging the locking-bolt, whereby the parts may be locked against separation.

3. A lock comprising a hasp, a clip or securing-plate inclosing a portion of the same for holding it pivotally in position, a lock secured to the hasp and having a bolt for engaging a staple, a staple-inclosing portion formed upon the hasp, a revoluble staple provided with a recess for engaging the end of the bolt, and lugs or shoulders formed upon the staple of such a contour that the hasp may be forced down over the same when the staple is in one position but cannot be moved therefrom when the staple is turned to another position.

4. A lock comprising a hasp, a plate or strap adapted to inclose a portion of the hasp for holding it pivotally in position, a back plate arranged beneath the clip and fitting in the retaining-recess therein for receiving the wear of the hasp, a lock carried by the hasp, and a staple adapted to be engaged by the hasp and the lock, substantially as described.

5. A lock comprising a hasp and a locking-bolt carried thereby, a revoluble staple, a socket for holding the same in place, said socket having one or more lugs or shoulders formed therein, and a lug formed upon the

staple, the structure being such that the staple may be turned within the limit of the lugs in the said socket so as to be engaged and locked by the hasp and locking-bolt, substantially as described.

6. A lock comprising a hasp, a locking-bolt carried thereby, a revoluble staple, a socket for receiving and holding the same in place, a washer adapted to hold the staple in the said socket, the said staple being also provided with a keeper-socket adapted to receive the end of the bolt carried by the hasp, lugs upon the said socket adapted to coincide with an aperture in the hasp when in one position only and an inclined surface formed upon the staple upon the opposite side thereof from the keeper-socket for forcing the bolt inwardly when the hasp is placed over the staple, the whole structure being such that when the staple is in one position the hasp may be forced down upon the same and when the staple is turned the keeper-socket will engage the end of the bolt on the hasp so as to prevent the staple from being turned and the hasp from being disengaged therefrom, substantially as described.

7. In a lock, the combination with a hinged hasp and a revoluble staple, of a casing formed upon the hasp, a slide-bolt mounted therein, the said bolt having a shoulder within the casing, a spring mounted behind the shoulder for holding the bolt normally in its outer position, and a lug formed upon the inner end of the bolt, the structure being such that a key may be used to engage the said lug and retract the bolt for unlocking the parts, substantially as described.

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

PETER C. GREENAWALT.

Witnesses:
WM. W. FETTER,
S. P. FETTER.