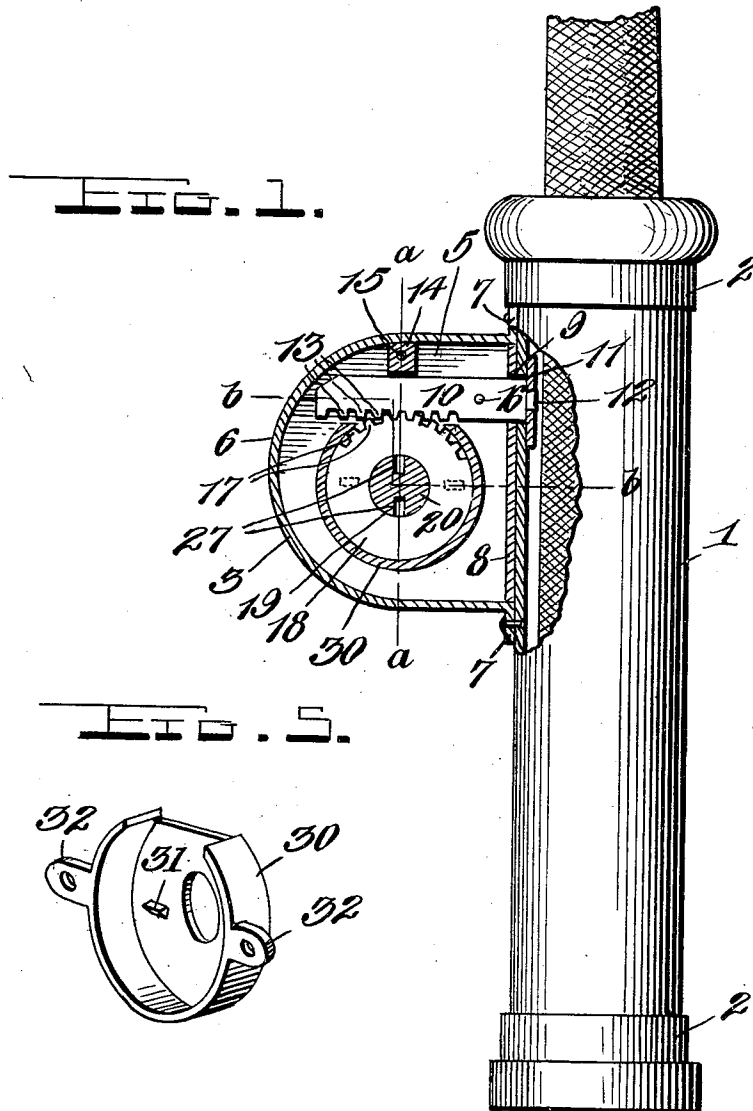


C. V. BAKER.
WHIP SOCKET.
APPLICATION FILED FEB. 25, 1911.

1,005,498.

Patented Oct. 10, 1911.

2 SHEETS-SHEET 1.



Witnesses

Chas. L. Griebner.
H. J. McQuay.

Inventor
Charles V. Baker

By Watson E. Coleman
Attorney

WHIP SOCKET.

1,005,498.

2 SHEETS--SHEET 2.



Chas. L. Griebauer.
N. F. McCauley.

Charles V. Baker, ^{Inventor}

By *Watson E. Coleman*
Attorney

UNITED STATES PATENT OFFICE.

CHARLES V. BAKER, OF NEWBERG, OREGON.

WHIP-SOCKET.

1,005,498.

Specification of Letters Patent. Patented Oct. 10, 1911.

Application filed February 25, 1911. Serial No. 610,774.

To all whom it may concern:

Be it known that I, CHARLES V. BAKER, a citizen of the United States, residing at Newberg, in the county of Yamhill and State of Oregon, have invented certain new and useful Improvements in Whip-Sockets, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to improvements in whip sockets and especially with reference to improved means for locking a whip in a socket so as to prevent the whip from being stolen, the invention consisting in the construction, combination and arrangement of devices, hereinafter described and claimed.

15 In the accompanying drawings—Figure 1 is a sectional view of a whip socket provided with locking mechanism constructed in accordance with my invention. Fig. 2 is a sectional view of the same on the plane indicated by the line *a— a* of Fig. 1. Fig. 3 is a similar view on the plane indicated by the line *b— b* of Fig. 1. Fig. 4 is a detail perspective view of the gear, showing the rear side thereof. Fig. 5 is a similar view of the detent cap.

The whip socket 1, is tubular in form and is provided near its upper and lower ends with pairs of clamping clips 2 by means of which the socket may be secured to the dashboard of a buggy or other vehicle. On one side of the whip socket, at a suitable distance from the upper end thereof, is a lock case 3, which is substantially semi-circular in form and comprises a front plate 4, a back plate 5, and a substantially semi-circular member or frame 6, the curved portion of which is secured between the edges of the plates 4, 5, the said member 6 being provided at one side of the locking case with vertical lugs 7, which bear against the outer side of and are riveted or otherwise suitably secured to the whip socket. The front plate 14 of the lock case is provided at its straight edge with a wall 8, which is integral therewith, is bent at right angles thereto and extends to the rear plate 5, the said wall 8 together with the member 6, closing the spaces between the edges of the plates 4, 5, as shown. The said wall 8, and the opposing wall or side of the socket against which it bears, are provided with coincident openings 9, through which extends a locking bolt 10, the said bolt being movable in the said openings, and being provided at its outer

end which projects into one side of the whip socket with a presser plate 11, which is here shown as having a central opening which receives a stud 12, at the outer end of the bolt, the said stud being swaged or upset so as to firmly secure the presser plate to the outer end of the bolt. The bolt is provided on its under side with rack teeth 13, and operates in a guide 14, which is secured between the front and rear plates 4, 5 of the lock case by means of a rivet 15. The bolt is provided with a stop pin 16 which serves to limit the extent of longitudinal movement of the bolt.

The rack teeth 13 of the bolt 10 are engaged by the peripheral spur teeth 17, of an operating gear 18. This gear is fixed on the enlarged front portion 19 of a tumbler 20. The front end of the tumbler projects a slight distance from the front side of the gear 18 and has its bearing in an opening 21 with which the plate 4 of the lock case is provided. The tumbler has a reduced rear portion 22 forming an annular shoulder 23, and is also provided with a reduced spindle 24, which spindle has its bearing in an opening 25, with which the rear plate 5 of the lock case is provided. Hence the gear wheel is mounted for revolution in the lock case, together with the tumbler. The said gear is provided on its rear side with radial locking teeth 26. The tumbler is also provided with key openings 27, for the reception of the wards 28 of a suitable key.

A detent cap 30 which is disposed in the lock case, is placed over the gear 18 and partially incases the same, and the said detent cap is provided on its inner side with dogs 31, for engagement with radial locking teeth 26, of the gear 18. The detent cap is provided with oppositely extending lugs 32 to bear against the inner surfaces of the front plate 4 of the lock case. A pair of rivets 33 which connect the front and rear plates 4, 5 of the lock case, extend through openings in the lugs 32, and hence form guides for the detent cap and on the said rivets are coiled extensible springs 34, which bear between the lugs and the rear plate 5 of the lock case and serve to normally keep the lugs in engagement with the front plate 4 of the lock case, and the dogs 31 of the detent cap in engagement with certain of the radial teeth 26 of the gear 18, so as to lock the gear and hence also the tumbler normally against rotation. The reduced portion 22, of the tum-

bler extends through a central opening in the detent cap.

The operation of my invention is as follows: Let it be assumed that the bolt is in retracted position with its presser plate 11, out of engagement with the whip in the socket, and that the detent cap is by the action of its springs 34, held in its normal position with its dogs 31 in engagement with certain of the radial teeth 26 of the gear 18. The operator in order to lock the whip inserts the key in the key openings of the tumbler and first presses the key inwardly so as to cause it to engage the detent cap 30, and move the latter rearwardly, against the tension of the springs 34, a sufficient distance to cause the detent cap to disengage its dogs 31, from the radial teeth of the gear 18, hence causing the said detent cap to release the tumbler, the gear and the bolt. The key is then turned in the required direction to cause the tumbler and the gear to partly rotate so as to cause the co-engaged spur teeth of the gear and bolt to move the bolt partially across the whip socket, and hence cause its presser plate 11 to bear against one side of the whip at some distance from the butt of the whip, and hence owing to the tapered shape of the whip, the latter is effectually locked in place in the socket. It will be understood that when the key is withdrawn after having thus caused the bolt to be moved to locking position, the detent cap by the action of its springs 34 is caused to reengage its dogs 31, with certain of the radial locking teeth 26 of the gear 18, and hence the tumbler, the gear and the bolt are held in locking position. The spring-pressed detent cap locks the bolt, through the instrumentality of the gear 18 and the tumbler, in any position in which the bolt may be placed by the key, the said detent cap being normally engaged with the gear by the action of the springs 34.

I claim:

1. In combination with a whip socket, a whip lock comprising a casing on one side of the whip socket, a locking bolt in the

casing and movable partly across the socket, said bolt having rack teeth on one side, a gear engaged with the rack teeth on the bolt, a tumbler mounted for rotation in the lock case and on which the gear is mounted for movement therewith, a detent forming a cap which, together with one wall of the casing, incases the gear, said detent being movable toward and from the gear, the gear and the detent being provided with co-acting devices to cause the detent to lock and release the gear, guides for the detent, and springs to normally hold the detent in locked position with reference to the gear, the detent being provided with an opening on one side through which the locking bolt extends.

2. In combination with a whip socket, a whip lock comprising a casing on one side of the socket, a bolt in the lock casing, and movable partly across the whip socket, said bolt being provided with rack teeth on one side, a gear having peripheral teeth to engage the rack teeth of the bolt and being also provided on one side with locking teeth, a tumbler mounted for rotation in the lock case, and to which the gear is secured for rotation therewith, the said tumbler having a key opening, a detent mounted for movement in the lock case toward and from the gear and provided with dogs to engage the lock teeth of the gear, and hence to normally hold the detent in engaged position with the gear to lock the latter and hence also the tumbler and the bolt, the said detent being so constructed and arranged with respect to the tumbler as to be engaged by the key when the latter is inserted in the tumbler, the key serving to first release the detent from the gear and to then turn the tumbler and the gear together, to cause the gear to operate the bolt.

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

CHARLES V. BAKER.

Witnesses:

LYNN B. FERGUSON,
CLARENCE E. BAKER.