

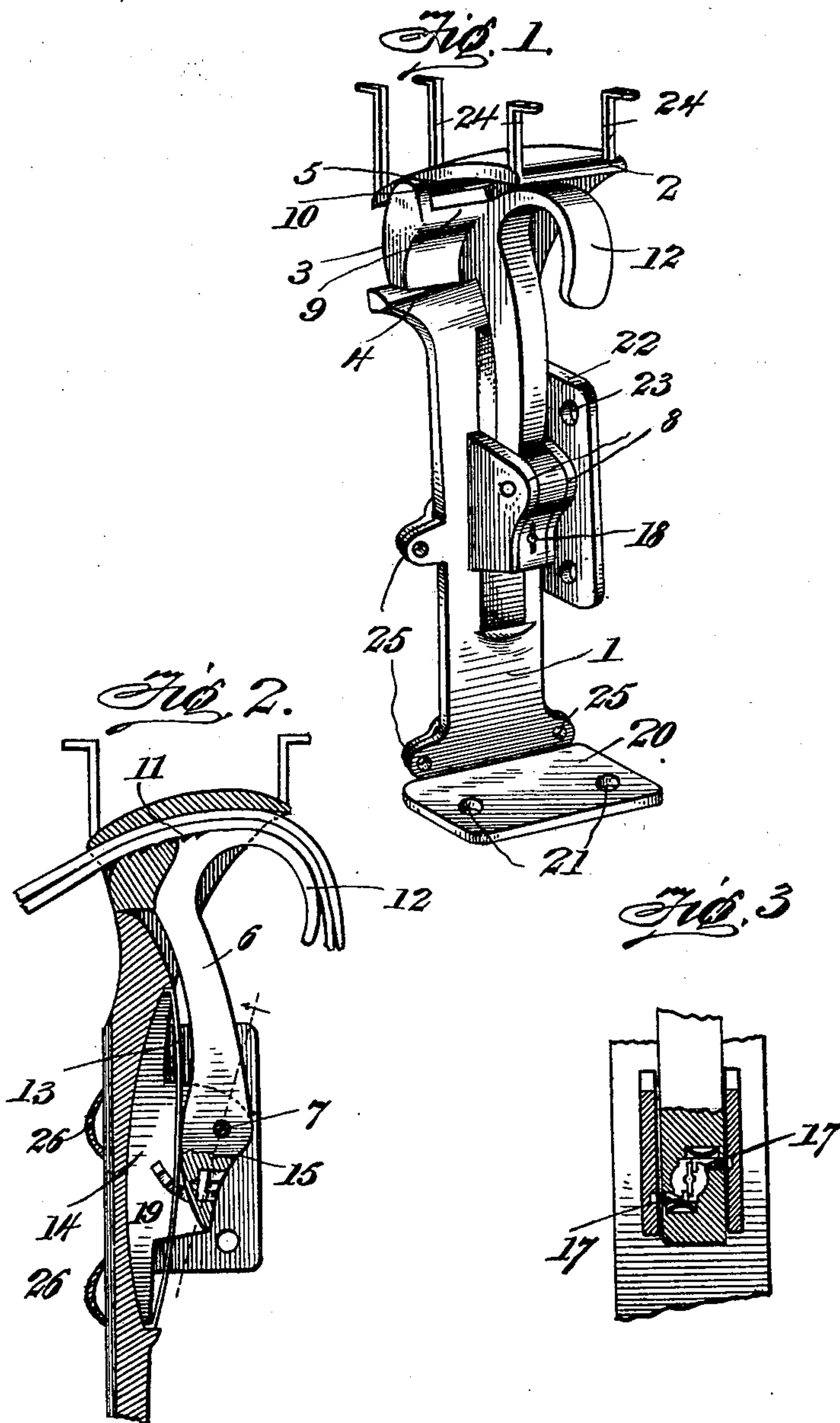
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Patented July 2, 1901.

A. F. VORKELLER.
REIN SUPPORT AND LOCK.

(Application filed Apr. 6, 1901.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

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REIN SUPPORT AND LOCK.

SPECIFICATION forming part of Letters Patent No. 677,722, dated July 2, 1901.

Application filed April 6, 1901. Serial No. 54,729. (No model.)

To all whom it may concern:

Be it known that I, AUGUST F. VORKELLER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Rein Supports and 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 improvements in rein supporters and locks, and has for its object the provision of means for supporting a pair of reins in such manner that the same will be securely locked, but capable of removal.

With this object in view the invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically claimed.

In the accompanying drawings, Figure 1 represents a perspective view of a rein-support embodying the features of my invention. Fig. 2 represents a longitudinal vertical section of the same; and Fig. 3 is a detail sectional view on a plane cutting through the lugs in which the clamping-arm is pivoted, showing the locking mechanism.

When it becomes necessary for a driver to leave his wagon or to temporarily dispose of the reins, it has been found convenient to provide means for supporting the reins until retaken by the driver, and in the provision of such supports I have conceived that a means for locking the reins would tend to prevent any liability of horses being stolen without the reins first being cut, whereby the thief would be the more readily detected, and my invention contemplates a rein-holder which is adapted to automatically lock the reins placed within it.

In constructing my improved rein-holder I provide a body portion, as 1, preferably of metal, and formed at its upper end with a segmental enlarged portion, as 2, beneath which is formed a slot or rein-receiving opening, as 3, said slot being formed between said segmental portion 2 and an enlarged lug or projection, as 4, extending to one side of said body portion 1, whereby any desired width of reins

may be passed through said slot. It will be noted that the under face of the enlarged portion 2, as at 5, is curved, which is a very important feature of my invention, as will be hereinafter set forth. An arm, as 6, is pivotally secured by means of a rivet or bolt, as 7, between lugs or projections 8 8 and is provided at its upper end with an elongated portion extending transversely thereof, as at 9, which elongated portion is preferably provided with an upwardly-extending lug at 10, adapted to engage the edge of enlargement 2 for guiding arm 6 in its pivotal movement, said elongated portion normally filling or partially filling slot 3. The upper face of elongated portion 9 is preferably formed with rearwardly-slanting teeth, as 11, which in operation are adapted to frictionally engage the reins and prevent their removal. Extending rearwardly from the upper end of arm 6 and having its outer end curved downwardly is provided a handle, as 12, by which said arm 6 may be moved to release its engagement with the reins.

It will be noted by reference to Fig. 2 of the drawings that arm 6 is pivoted to one side of the longitudinal center, and thereby a constant tendency is created for said lever to move in the direction of the side having the preponderance of weight as a natural result of the law of gravitation. This feature is considered by me as very valuable, as it makes possible the operation of arm 6 without auxiliary means for throwing the elongated portion 9 to its position within the aperture 3. To assist the arm 6 and more positively retain it in its normal position with elongated portion 9 within the slot 3, I provide any preferred form of spring, as 13, which is adapted to press the lower end of said arm 6 outwardly. A recess, as 14, is preferably formed in the body portion of the rein-support beneath said spring 13 for permitting that portion of arm 6, as 15, extending below the bolt 7 to be swung against the pressure of said spring 13.

In order to prevent the removal of the reins by an unauthorized person, I contemplate providing any preferred form of lock within the portion 15 of arm 6, whereby the said arm may be permanently held at any desired pivotal position. My preferred form of lock, as

shown in the drawings, comprises spring-pressed bolts, as 17 17, approached and operated by a suitable key through keyhole 18, the said bolts being adapted to be thrown outwardly in opposite directions from the center and into engagement with a segmental toothed rack, as 19, upon the sides of each of lugs 8. This rack is preferably formed of a series of ratchet-teeth, whereby the said bolts 10 17 may engage any one of said teeth and retain arm 6 in the desired position. It will readily be seen that an automatic action of bolts 17 17 may be had, whereby they will be held in constant engagement with rack 19 15 except when disengaged by means of a key, whereby any attempt to remove reins from engagement with the holder or support will only tend to tighten the grip of elongated portion 9 upon them.

20 Of course it will be understood that I do not claim any specific form of lock; but my invention contemplates providing means for locking lever 6 at its lower end, whereby the reins cannot be removed except by the use of 25 the key.

One of the great advantages of my improved rein support or holder is the provision of means for securing the same at various points on a vehicle to which it is applied. I 30 contemplate the use of a plate of any desired dimension, as at 20, perforated, as at 21, for the reception of securing means, said plate extending rearwardly from the lower end of the holder and adapted to be secured to the 35 side of a wagon or any horizontal surface thereon, as the upper edge of the dashboard. A similar plate 22 may be secured at right angles to the side of said main body 1 and provided with like apertures, as 23, for the 40 reception of any desired securing means, whereby the support may be secured to the side of the vehicle, if desired. I further provide means for securing the holder or support to the roof of a vehicle by means of upwardly-extending arms, as 24 24, which are 45 adapted to be secured in any desired manner to the said roof. As a further means of securing my improved holder I contemplate providing apertured lugs upon either side of 50 the body 1, as at 25, adapted to receive securing means for securing the said body 1 to the dashboard of the vehicle, or I may provide strips of material, as 26 26, formed with apertures at their opposite ends, adapted to 55 register with the apertures in lugs 25 and to be secured to said lugs by any preferred securing means passed therethrough, whereby the support or holder may be secured to the post supporting the vehicle-roof. Of course 60 it will be understood that I need not provide more than one of these securing means unless desired, but that I may provide all, if found desirable or preferable, and thereby make possible the application of a single device to any one of the plurality of positions 65 upon a vehicle.

In the operation of my improved rein-sup-

port when the reins are passed through aperture 3 and are engaged by the teeth of elongated portion 9 they will naturally fall 70 upon the curved handle 12, and thereby tend to force the arm 6 nearer the body 1 and tighten the grip upon said reins. I have found by experiment that the reins through stiffness do not fall at a right angle when 75 freed, but naturally curve downward, so that I have purposely provided handle 12 with the proper curve to receive the full weight of the inner ends of the reins to accomplish the object just stated. 80

As hereinbefore mentioned, the inner surface of enlargement 2 is curved, and my object in so forming the same was to provide means for preventing the possibility of the slipping of the reins, as I have found by experience that a flat surface will tend to permit such slipping and a curved surface will not. 85

Although I have described in detail one specific embodiment of my improved locking-support for reins, yet I do not desire to be understood as limiting myself to the exact construction and arrangement of parts specified, but shall feel at liberty to deviate from 90 the shape and minor details of construction within the spirit and scope of my invention. 95

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A rein-holder comprising a main body 100 provided with a rein-securing aperture and having a curved enlargement at its upper end projecting over said aperture, and a clamping-arm pivoted to the main body below the aperture provided with a clamping-head at its 105 upper end to act in conjunction with the under surface of the curved enlargement in clamping the reins, said clamping-arm being pivoted in front of its center of gravity and having its greater weight above its pivot 110 whereby it is normally held in its clamped position, substantially as described.

2. A rein-support comprising in its construction a main body, a rein-receiving aperture therethrough, an enlarged curved portion 115 above said aperture, an arm pivotally secured to said main body, a curved handle secured to the upper end of said arm and extending rearwardly therefrom and means for clasping a pair of reins whereby the weight of the inner end of the reins will fall upon said handle and tend to increase the force of said clasping means, substantially as described. 120

3. A rein-support comprising in its construction a main body, a rein-receiving aperture formed therein, an arm pivotally secured 125 to the said main body, a transverse elongated portion, adapted normally to rest within said aperture, and secured to the upper end of said arm and provided with rearwardly-extending ratchet-teeth in its upper face, a lock 130 for controlling the pivotal movement of said arm and a spring beneath said arm for pressing the lower end of the same outwardly,

whereby reins passed through said aperture will be firmly clasped, substantially as described.

5 4. A rein-support comprising in its construction a main body portion, an arm pivoted thereto and adapted to clasp reins between itself and a portion of said body portion and means for locking said arm, comprising a segmental toothed rack and a bolt carried by the lower end of said arm and adapted to be controlled by a key and to engage said rack, substantially as described.

15 5. A rein-support comprising in its construction a main body, lugs extending therefrom, an arm pivoted to said lugs, means for permitting of the claspings said reins by said arm, and means for locking said arm in different pivotal positions, comprising a segmental toothed rack upon each of said lugs and bolts carried by the lower end of said arm and adapted to engage said rack and be controlled by a key, substantially as described.

25 6. A rein-support comprising in its construction a main body portion, means for receiving and retaining a pair of reins and means for securing said support to various

points of a vehicle to which the same is applied, comprising a rearwardly - extending plate provided with apertures for receiving 30 securing means, a plate extending at right angles and secured to one of the sides of said body portion and provided with apertures for receiving securing means, upwardly-extending arms secured to the upper end of said 35 holder and provided with apertures for receiving securing means, lugs extending laterally from the sides of said main body and provided with apertures for receiving securing means and transversely-arranged strips provided with apertures adapted to register with 40 the apertures of said lugs and receive securing means passed therethrough whereby the holder may be secured to the dashboard, side, roof or roof-supporting rod of a vehicle to 45 which the supporter is applied, substantially as described.

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

AUGUST F. VORKELLER.

Witnesses:

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