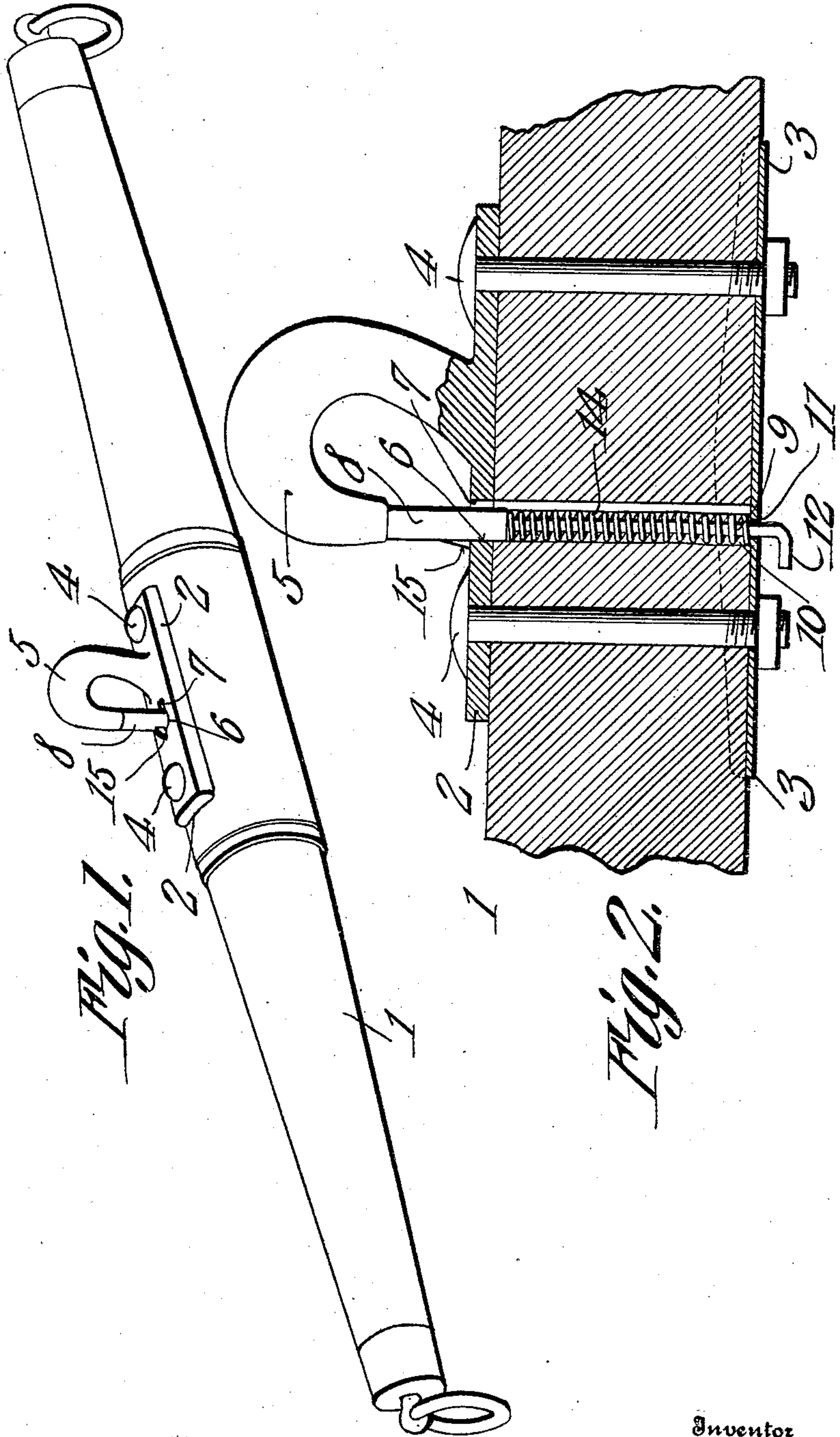


929,040.

L. M. SNYDER.  
NECK YOKE HOOK.  
APPLICATION FILED MAR. 16, 1909.

Patented July 27, 1909.



Witnesses  
*E. J. [Signature]*  
Mason B. Lawton

Inventor  
*Lawrence M. Snyder.*

By *C. A. Snow & Co.*  
Attorneys



# UNITED STATES PATENT OFFICE.

LAWRENCE M. SNYDER, OF REYNOLDSVILLE, PENNSYLVANIA.

## NECK-YOKE HOOK.

No. 929,040.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed March 16, 1909. Serial No. 483,771.

*To all whom it may concern:*

Be it known that I, LAWRENCE M. SNYDER, a citizen of the United States, residing at Reynoldsville, in the county of Jefferson and State of Pennsylvania, have invented a new and useful Neck-Yoke Hook, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form of a device of the class above specified which shall be inexpensive to manufacture, facile in operation and devoid of complicated parts.

With these and other objects in view as will hereinafter more fully appear, the invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that within the scope of what hereinafter is thus claimed, divers changes in the form, proportions, and minor details of construction may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings Figure 1 shows my invention in perspective and Fig. 2 is a vertical longitudinal section thereof.

The device herein described is adapted primarily although not exclusively to be used in connection with that portion of a harness attachment which is known as a "jockey neck yoke."

The element upon which the device is supported, consists in the present instance of a jockey neck yoke 1. Upon opposite faces of the neck yoke 1 are mounted plates 2 and 3, the upper plate or top plate 2 being assembled with the bottom plate 3 and with the neck yoke 1 by means of retaining members, shown in the form of bolts 4 which are passed transversely through the neck yoke 1 into engagement with the said plates. The top plate 2 forms a base from which rises a hook 5 the extremity of which is downbent and disposed above an aperture 6 in the top plate. This aperture 6 is substantially circular in outline. From one side of it, however, projects radially a slot 7. This aperture 6 in the top plate is carried downward through the neck yoke as shown

in Fig. 2. I further provide in carrying out my invention a locking bolt comprising a body portion 8 adapted to slide and to rotate in the aperture 6 in the top plate. This body portion of the locking bolt is provided with a radially projecting stud 15 which is adapted to contact with the upper face of the top plate 2. The stud 15 is so positioned upon the body 8 of the locking bolt, that when the said stud is in contact with the upper face of the top plate, the upper extremity of the locking bolt will be in contact with the end of the hook 5. The locking bolt is diminished at its lower end as denoted by the numeral 9 and this diminished portion 9 passes outward through an aperture 11 in the bottom plate 3, the extremity of the diminished portion 9 being overbent as denoted by the numeral 12 to form a finger-hold whereby the locking bolt may be slid in the channel 10 in the neck yoke. A coiled compression spring 14 surrounds the diminished end 9 of the locking bolt and has abutment at its upper end with the body portion 8 of the locking bolt its lower end being in abutment with the bottom plate 3.

Supposing the parts to be in the position shown in Figs. 1 and 2, it will be seen, that since the stud 15 is in contact with the upper face of the top plate 2, the locking bolt is held in contact with the extremity of the hook 5. Now when it is desired to free the locking bolt from its contact with the hook 5, the overbent end 12 of the locking bolt is grasped below the bottom plate 3 whereby the locking bolt may be rotated to bring the stud 15 into vertical registration with the radial slot 7 in the top plate 2. The locking bolt may then be drawn downward opening the hook 5. When the portion 12 of the locking bolt is released from the grasp of the fingers, the bolt will fly upward into its contact with the hook 5, being actuated by the spring 14. The portion 12 of the locking bolt may then be swung laterally to move the stud 15 out of vertical registration with the slot 7, whereupon the locking bolt will be held securely in contact with the terminal of the hook 5.

Having thus described my invention what I claim as new and desire to protect by Letters Patent is—

1. In a device of the class described, a plate provided with an aperture having a radial extension; a hook rising from the plate intermediate the ends thereof; a lock-



ing bolt slidably mounted in the aperture in the plate and having a stud to engage the upper face of the plate to hold the end of the locking bolt in contact with the hook, the stud being receivable by the radial extensions of the aperture, to free the bolt from the hook.

2. In a device of the class described, a supporting element; a plate mounted upon the supporting element and provided with an aperture having a radial extension; a hook rising from the plate; a locking bolt slidably mounted in the aperture in the plate and having a stud to engage the upper face of the plate to hold the end of the locking bolt in contact with the hook, the stud being receivable by the radial extension of the aperture, to free the bolt from the hook, the locking bolt being terminally extended through the supporting element, and laterally bent, in its extended portion.

3. In a device of the class described, a supporting element; plates disposed upon opposite sides of the supporting element; retaining members uniting the plates with each other and with the supporting element; one of said plates being provided with an aperture having a radial extension; a hook rising from the last named plate; a locking bolt slidably mounted in the aperture in the plate and having a stud to engage the upper face of the plate to hold the end of the locking bolt in contact with the hook, the stud being receivable by the radial extension of the aperture, to free the bolt from the hook, the locking bolt being terminally extended through the supporting element and through both of said plates, and laterally bent in its extended portion.

4. In a device of the class described, a supporting element; plates disposed upon opposite sides of the supporting element; a hook rising from one of said plates; the last named plate being provided with an aperture having a radial extension; a locking bolt slidably mounted in the aperture in the plate and having a stud to engage the upper face of the plate to hold the end of the locking bolt in contact with the hook, the

stud being receivable by the radial extension of the aperture, to free the bolt from the hook, the locking bolt being terminally extended through the supporting element and through both of said plates, and laterally bent in its extended portion; and a compression spring assembled at one end with the locking bolt, and at the other with one of said plates.

5. In a device of the class described, a supporting element; a top plate and a bottom plate mounted upon the supporting element, the plates and the supporting element being apertured in alinement, the aperture in the top plate comprising a circular portion and a radial slot projecting from the circular portion, the aperture in the bottom plate being of smaller diameter than the circular portion of the aperture in the top plate; a hook rising from the top plate; a bolt mounted in the apertures of the plates and of the supporting element and being arranged to contact terminally with the end of the hook, the bolt consisting of a body portion to register in the circular portion of the aperture in the top plate and a reduced terminal to register in the aperture in the bottom plate, the reduced terminal being extended through the bottom plate to form a finger-hold, the body of the bolt having a radially projecting stud to engage the upper face of the top plate when the bolt is in contact with the hook, the bolt being rotatable in the apertures of the plate and of the supporting element to bring the stud into alinement with the slot, and being slidable in said apertures to free the bolt from the hook; and a compression spring surrounding the reduced terminal of the bolt, one end of said spring being in abutment with the body of the bolt, the other end being in abutment with the bottom plate.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

LAWRENCE M. SNYDER.

Witnesses:

E. NEFF,

ALF. STARR.