No. 706,109. Patented Aug. 5, 1902.

N. REISNER.

WHIFFLETREE ATTACHMENT.

(Application filed Feb. 8, 1902.)

(No Model.)

FIG. 1.

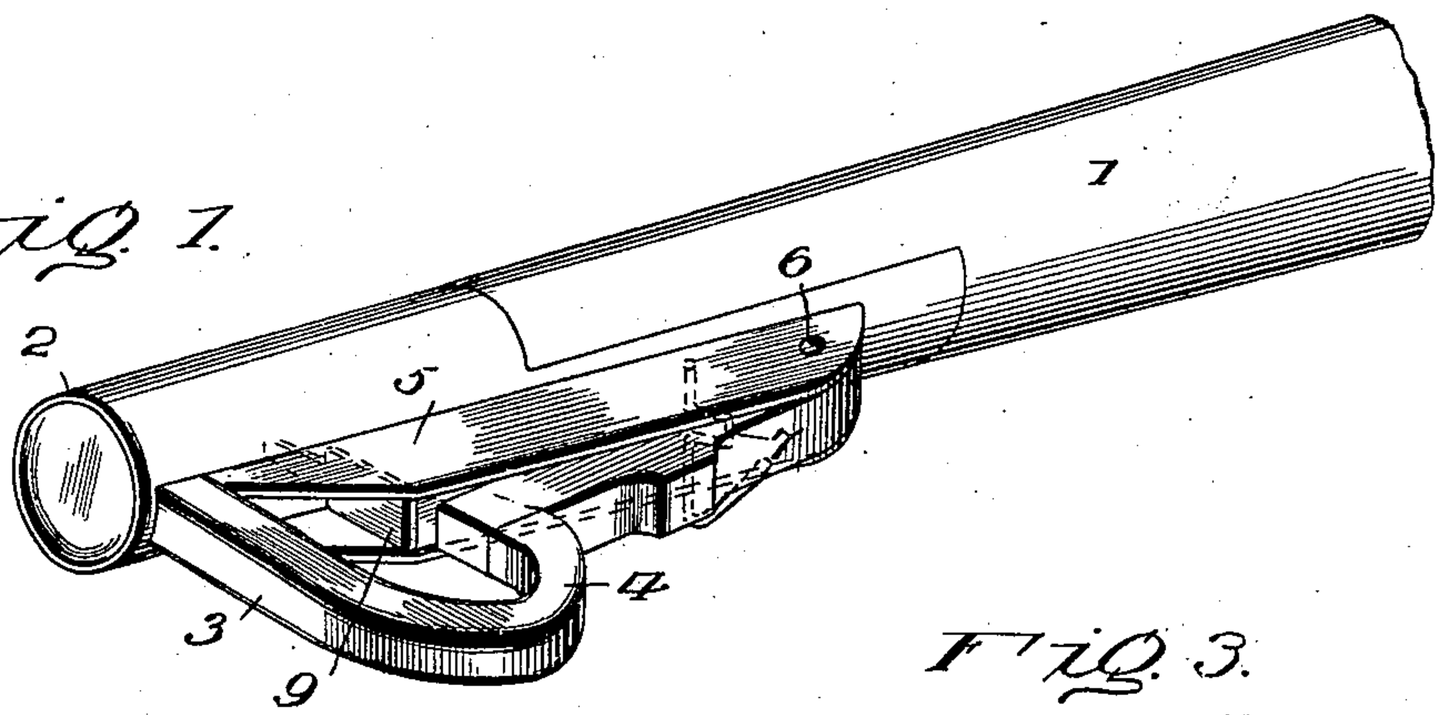


FIG. 3.

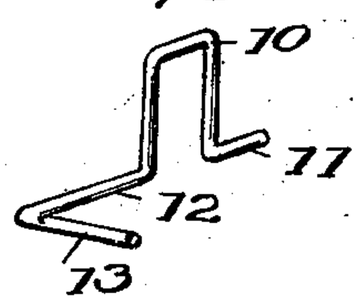


FIG. 2.

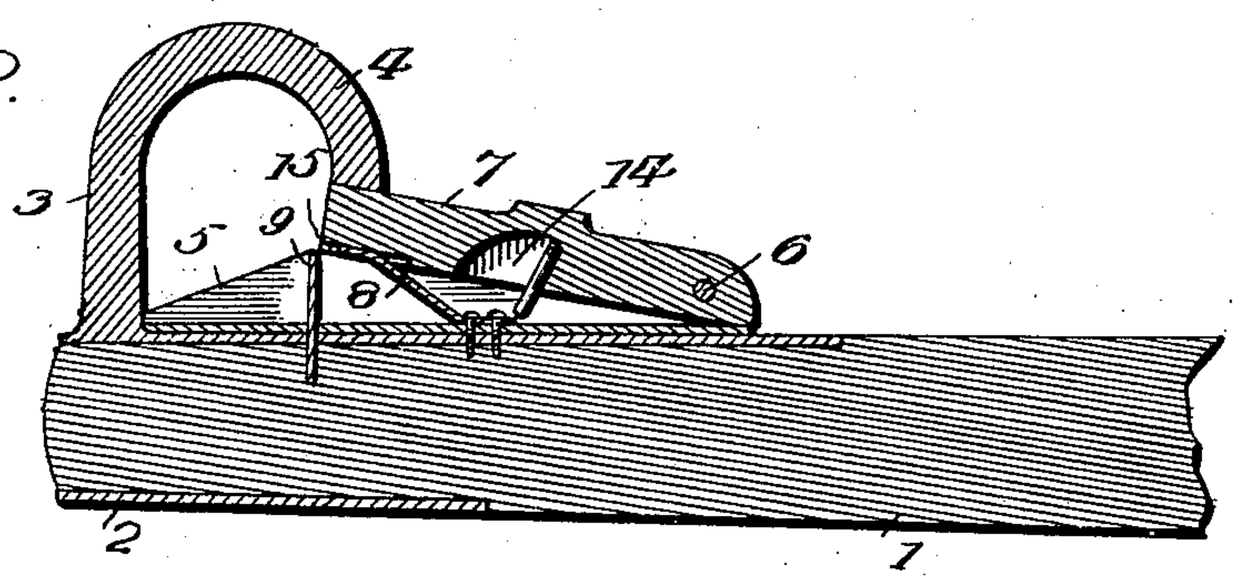
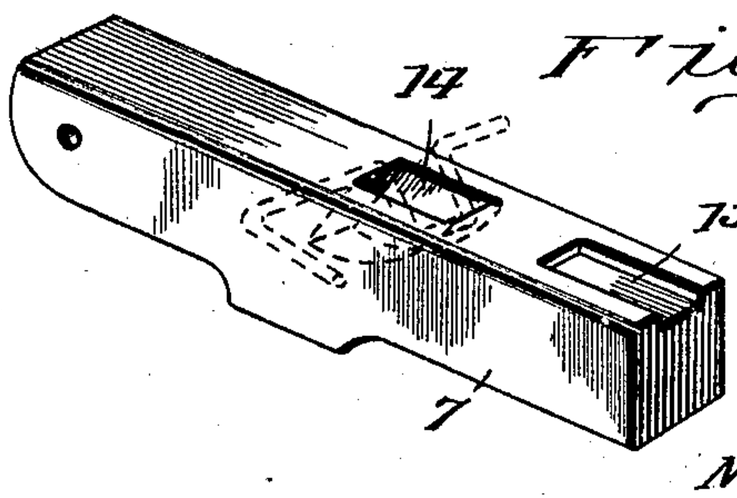


FIG. 4.



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UNITED STATES PATENT OFFICE.

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WHIFFLETREE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 706,109, dated August 5, 1902.

Application filed February 8, 1902. Serial No. 93,154. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS REISNER, a citizen of the United States, residing at Hawkeye, in the county of Fayette and State of Iowa, have invented certain new and useful Improvements in Whiffletree Attachments; 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 consists in certain novel features of combination and construction of parts necessary to produce a whiffletree attachment; and my object is to provide a tug-securing device for the end of the singletree or the like, whereby the tug will be reliably engaged and locked in such position until it is desired to release the same.

Other objects and advantages will be made clearly apparent from the specification hereinafter presented, considered in connection with the accompanying drawings, in which—

Figure 1 is a perspective view showing my invention applied to use upon the end of an ordinary singletree. Fig. 2 is a longitudinal section of Fig. 1 on a central line thereof extending through the hook portion. Fig. 3 is a perspective detail view of the locking device designed to secure the detent in a locked position. Fig. 4 is a detail view of the detent employed to lock the tug in engagement with the hook.

Reference-numerals will be employed to designate the various details of my invention and the parts deemed necessary to coöperate therewith, and referring to the numerals on the drawings 1 indicates the end of an ordinary singletree having at its extreme end the thimble 2, designed to receive the reduced end of a singletree. The said thimble may be driven tightly home upon the end of a singletree or secured by extending a rivet through the same, as may be preferred.

Integrally formed with the thimble 2 or otherwise connected thereto is the tug-engaging hook 3, having the inwardly-directed hook-terminal 4, and it is obvious that the trace-chain or tug may be readily engaged with said hook when it is desired to attach the animal to the vehicle provided with the singletree. A housing 5 is also integrally formed with the thimble 2 or otherwise attached thereto, and said housing is designed to pivotally hold by means of the rivet or bolt 6 the locking-detent 7, the inner end of which is held normally outward in engagement with the end of the hook extension 4 by means of the spring 8, said spring in this instance being a simple piece of spring-steel, though it is obvious that a coiled spring may be interposed between the walls of the housing 5 in such a manner as to engage the outer end of the detent 7 and hold the same disposed against the hook 4.

The partition-wall 9 is provided to extend between the walls of the housing 5, and thus prevent gravel or other foreign substances from entering in the way of the detent 7, and thereby prevent the free inward movement thereof when it is desired to engage or disengage the tug or trace-chain. It will be understood that said partition 9 may be integrally formed, if preferred, with the walls 5 and the hook 3, inasmuch as all of said parts may be very readily forged at one operation.

It sometimes becomes desirable to positively lock the detent in engagement with the hook-terminal 4, whereby the tug or trace-chain may not casually slip out of engagement therewith, and with this object in view I provide the detent 10, which in this instance consists of a single piece of wire bent upon itself to form said detent, and also provide the right-angled extensions 11 and 12 and the operating-handle or crank-like extension 13, whereby the detent may be readily moved downward and outwardly within the recess 14, so as to lie entirely out of engagement with the detent, or the detent may be swung inward within the limit of the recess 14, thereby insuring that the detent 7 will be positively locked against the hook-terminal 4, and thus hold the trace-chain or tug securely in place.

I prefer to provide the seat 15 in the extreme end of the detent 7 to accommodate the free end of the spring 8, thus permitting the free end of said spring to play within the seat 15 when the detent 7 is pressed inward within the housing 5.

It will be seen that the various parts of my invention may be very cheaply and expedi-

tiously manufactured and readily assembled in their respective operative positions, and while I have described the preferred construction I desire to comprehend all equivalents and substitutes.

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

The herein-described securing device for singletrees or the like, comprising a suitable anchoring-thimble 2, a hook 3 attached to the outer end of said thimble and having its free end directed inward; a housing 5 carried by said thimble having a pivoted detent 7 adapted to engage the free end of said hook; a spring adapted to hold the outer end of said detent in engagement with said hook and a pivoted detent having an operating handle or crank adapted to engage the locking-detent and hold the same against inward movement whereby the tug or trace-chain will be reliably locked in engagement with the said hook until it is desired to release the same, all operatively combined substantially as specified and for the purpose set forth.

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

NICHOLAS REISNER.

Witnesses:
F. J. DIBBLE,
G. A. OELWEIN, Jr.