No. 747,077. PATENTED DEC. 15, 1903.

J. H. LEE.

STRAP HOLDER.

APPLICATION FILED FEB. 9, 1903.

NO MODEL.

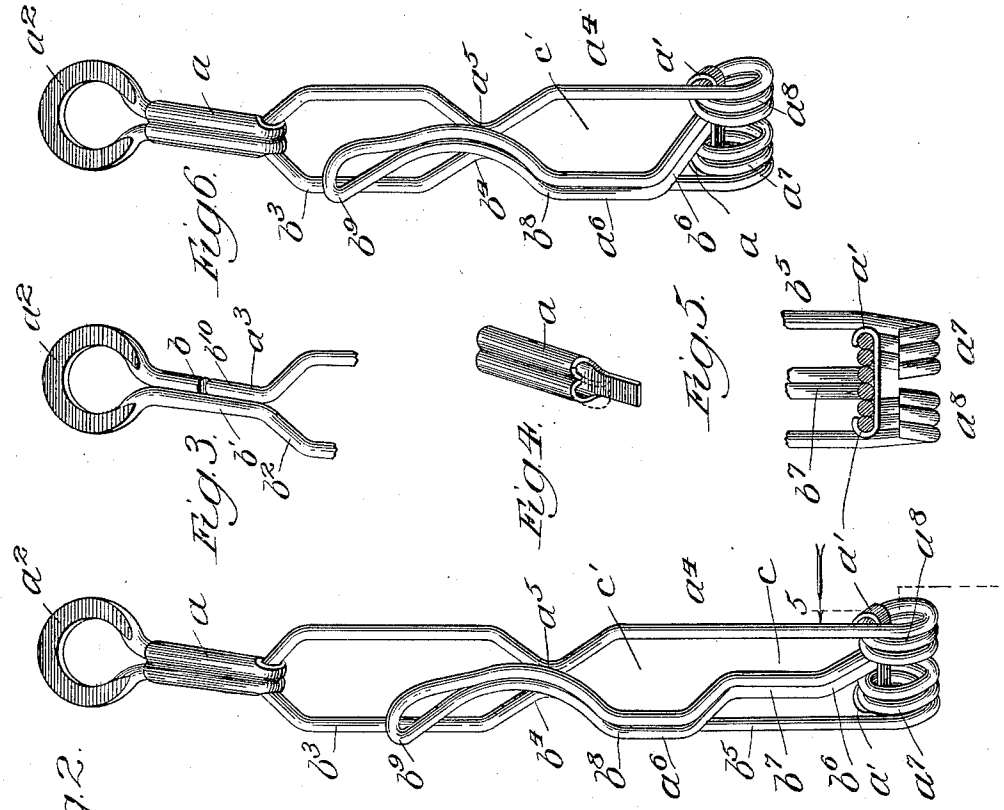


Fig. 6.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 2.

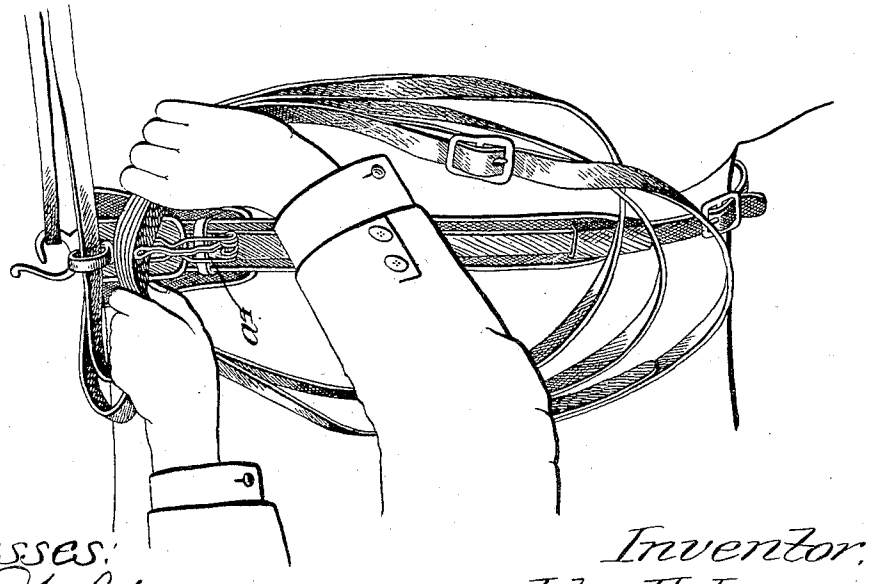


Fig. 1.

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No. 747,077. Patented December 15, 1903.

UNITED STATES PATENT OFFICE.

JOHN H. LEE, OF CHICAGO, ILLINOIS.

STRAP-HOLDER.

SPECIFICATION forming part of Letters Patent No. 747,077, dated December 15, 1903.

Application filed February 9, 1903. Serial No. 142,581. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. LEE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Strap-Holders, of which the following is a specification.

My invention relates particularly to holders for lines and lead-straps of the nature of the device for which Letters Patent No. 624,626 were granted to Turner Lee, May 2, 1899.

My primary object is to improve the construction of the holder described in said Letters Patent, rendering the same more durable and economical and of improved operation.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a broken perspective view illustrating the method of attachment of the holder to the saddle of a harness and the manner in which a coiled line is inserted into the holder; Fig. 2, a perspective view of the holder as it is preferably constructed with distinct spaces for receiving either the line or the lead-strap, as desired; Fig. 3, a broken perspective view of the upper portion of the holder with the clip employed thereat removed; Fig. 4, a perspective view of said clip as it appears when closed, excepting that the tongue at the lower end of the clip is shown open; Fig. 5, a broken sectional view taken as indicated at line 5 of Fig. 2 and illustrating the manner in which the coils are joined at the base of the holder; and Fig. 6, a perspective view of a modified form of the holder.

The holder is constructed, preferably, from a single length of wire bent to form a clip a, serving to secure the meeting ends of the wire, and a clip a', serving to secure the coils together at the lower end of the holder. In this construction the wire is shaped to form an eye or perforate attaching-head a^2, a neck portion a^3, a shank a^4, having a tongue-bearing a^5, and a tongue a^6, connected through the medium of coils a^7 a^8 with the lower ends of the shank-wires. The wire starts at a point b about the middle of the length of the neck a^3, extends upwardly, is curved to form the eye a^2, extends downwardly to form the portion b' of the neck, extends obliquely to form the portion b^2 of one shank-wire, then downwardly to form the portion b^3, is offset to form the portion b^4 of the tongue-bearing, then extends downwardly to form the portion b^5, then is coiled rearwardly, upwardly, and forwardly to form the coils a^7, then is brought forwardly between the shank-wires, as shown at b^6, then extends upwardly and slightly backwardly to form the part b^7, then is offset to form the part b^8, then is curved and bent upon itself to form the hook and loop b^9, then is shaped to correspond with the portion of the tongue just described, then is coiled to form the coils a^8, and finally extends upwardly and is shaped to form the remaining shank-wire, terminating at a point b^{10} adjacent to the point d.

In practice the wire is bent at a point a short distance from its center to form the loop-form tongue end b^9, the tongue is shaped in a suitable die, the eye and neck portion is formed in a suitable manner, the tongue is turned between the shank-wires to form the coils, the shank-wires are struck together to form the tongue-bearing, and the clips are applied to securely join the ends of the wire and hold the coils together. The clip a comprises an elongated sheet-metal member having its two lateral edges turned rearwardly and embracing the wire at the neck portion of the holder and a tongue at the lower end of the clip, which is curved rearwardly between the shank-wires adjacent to the neck portion and then upwardly to hold the extremity b^{10} in contact with the extremity b. The clip is preferably struck in on longitudinal lines, as indicated, to form distinct channels for the wires. The clip a' comprises, preferably, a sheet-metal member extending through the coils a^7 a^8 and having its ends turned rearwardly and toward each other to embrace the coils just beneath the shank-wires.

The construction described affords a space c for receiving a lead-strap or tie-strap and a space c' receiving the folded or coiled line. As is now well understood, the device is applied to the saddle of the harness by unscrewing a turret-ring, inserting the shank thereof through the eye a^2, and then screwing the turret-ring down to clamp the holder to the saddle or back-pad of the harness. The preferred manner of inserting the line is indicated in Fig. 1. The line is thrown

from the vehicle, so as to be at the right side of the person, is drawn backwardly to prevent dangling of the cross-lines, is grasped by the left hand at the cross-lines, the right then moved to form a loop or coil, the line passing under the cross-lines, the coiling operation is continued, the upper portion of the coils are then turned to bring the outside ply of the line beneath the other plies, and the insertion is made by giving to the upper portion of the coil a quarter-turn. The result is to cause the coil, owing to the natural stiffness of the line, to hang close to the side of the horse.

In the modification shown in Fig. 6 the construction is similar to that described, except that the distinct lead-strap-engaging portion of the holder is omitted and the holder is correspondingly shortened. The manner of forming the holder is the same as those already described, except that the portion just mentioned is omitted. In this construction the line may be done up in the usual manner and, when desired, the lead-strap may be done up in the space ordinarily occupied by the line by first folding the lead-strap at a distance from its extremity.

By suitable press operations it is possible to so firmly unite the wire ends as to prevent all possibility of movement and to secure the coils snugly together. When the holder is japanned or nickel-plated, as ordinarily is done, it presents a very neat appearance, with no objectionable projections. The extremity of the tongue is perfectly smooth, and there is no danger of separation of the members of which the tongue is composed. Moreover, the integral formation at the extremity of the tongue aids in preventing separation of the shank-wires, while the smoothness at the extremity of the tongue prevents the line from catching or being marred. The result is that an exceedingly neat and durable construction is provided.

Changes in details of construction within the spirit of my invention may be made. Hence no undue limitation should be understood from the foregoing detailed description.

What I regard as new, and desire to secure by Letters Patent, is—

1. A device of the character described, comprising a suitable shank, tongue and attaching-eye, said shank having a neck portion adjacent to said eye, said portions being formed from a single length of wire with alined extremities at said neck portion, and a clip embracing the members of the neck portion and having means for preventing longitudinal displacement of the severed member, for the purpose set forth.

2. A device of the character described, comprising a wire bent near its center to form a tongue extremity, the members being suitably shaped to form the tongue, then coiled at the base of the tongue and extended upwardly to form a shank with a suitable neck, one member terminating between the ends of the neck, the other member extending upwardly and curved to form the eye and then downwardly into alinement with the extremity of the short member, and a clip embracing the wires at the neck and having a tongue extending between the shank-wires beneath the neck, for the purpose set forth.

JOHN H. LEE.

In presence of—
L. HEISLAR,
WALTER WINBERG.