(No Model.)

J. E. HILL.

BUCKLE.

No. 590,738. Patented Sept. 28, 1897.

FIG. 1.

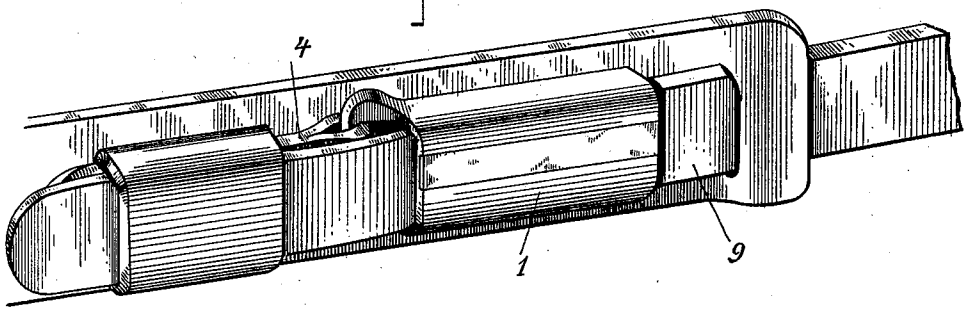


FIG. 2.

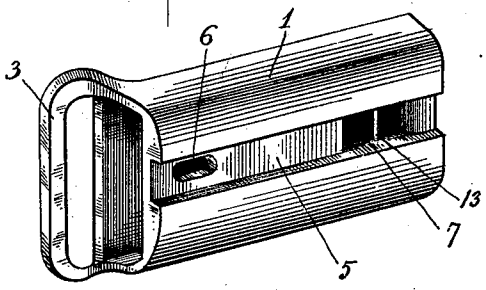


FIG. 3.

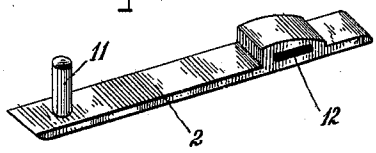
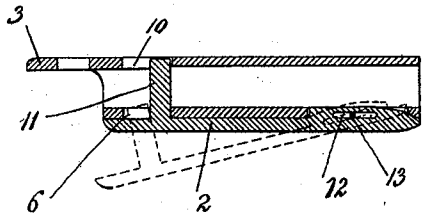


FIG. 4.



Inventor

JOHN E. HILL.

Witnesses

John F. Dieffenwierl.

V. B. Hillyard.

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN E. HILL, OF CENTRE HARBOR, NEW HAMPSHIRE.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 590,738, dated September 28, 1897.

Application filed March 31, 1897. Serial No. 630,170. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. HILL, a citizen of the United States, residing at Centre Harbor, in the county of Belknap and State of New Hampshire, have invented a new and useful Harness-Buckle, of which the following is a specification.

This invention provides a buckle for general use where two straps are to be connected together, and is of especial advantage when applied to harness, as it offers no projecting parts for catching the horse's mane or tail, loose parts of the harness, fly-nets, or other appurtenances applied to the animal for useful or ornamental purposes.

Other objects and advantages are contemplated and will appear as the nature and details of the invention are more fully understood; and to this end reference is to be had to the following description, and the accompanying drawings, in which corresponding and like parts are referred to and designated by the same reference-characters.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a perspective view showing the invention as it appears when applied to a tug. Fig. 2 is a perspective view of the box-loop having the latch-bar detached. Fig. 3 is a detail view in perspective of the latch-bar. Fig. 4 is a longitudinal section showing the operation of the latch-bar by dotted lines.

The buckle consists, essentially, of the box-loop 1 and a latch-bar 2, the box-loop having an eye or link 3 at one end to receive the relatively fixed strap 4, which is connected therewith in any of the usual ways. A longitudinal channel or groove 5 is formed in the outer side of the box-loop, and is intersected at one end by an oblong opening 6, and communicates at its opposite end with a rectangular slot 7, the latter being the full width of the channel or groove and corresponding to the width of the latch-bar. The cross-bar 8 at the outer end of the rectangular slot 7 is slightly beveled on its outer side toward the slot 7 to afford clearance for the heel or rear end of the latch-bar when the latter is moved, so as to effect the release of the tug or adjustable strap 9. An oblong opening 10 is formed in the rear side of the box-loop directly opposite the oblong opening 6 and in register therewith, and these openings 6 and 10 receive a stud 11, projecting from the inner side of the latch-bar and passing through one of a series of openings in the tug or strap 9, whereby the said stud receives a support upon each side of the opening or passage of the box-loop through which the strap or tug 9 passes.

The latch-bar 2 is of a length corresponding with the outer side of the box-loop and is of a thickness and width corresponding to the depth and breadth of the channel or groove 5, into which it is snugly seated when in working position, as clearly indicated in Fig. 1. The stud 11 may be formed with or applied to the latch-bar, as found most convenient, and will be sufficiently stout to sustain the strain to be imposed thereon. The rear or heel portion of the latch-bar is thickened and longitudinally slotted, as shown at 12, and the latter receives a pin or cross-bar 13, extending across the rear portion of the channel or groove 5 directly opposite the slot 7, thereby retaining the latch-bar against accidental displacement and forming a support for the said latch-bar to slide and turn upon.

A buckle constructed substantially as set forth is especially adapted for use in connection with a tug, as it admits of the latter passing straight through the box-loop and of its ready release and connection when required for lengthening or shortening the tug or for loosening it in an emergency, thereby obviating the cutting of the tug, which is frequently necessitated upon a horse falling before he can regain his feet. The latch-bar is released by moving it forward a distance corresponding to the width of the cross-bar 8, after which it is turned upon the pin 13, thereby withdrawing the stud 11 from the tug or strap 9, when the latter can be moved easily within the box-loop either forward or backward, and after the required adjustment is had the stud 11 is pressed through the opening in the tug or strap coming opposite the stud, when upon pulling the tug backward

the stud 11 will engage with the rear ends of the openings 6 and 10 and the heel portion of the latch-bar will be drawn over the cross-bar 8, thereby securing the parts in their adjusted position.

Having thus described the invention, what is claimed as new is—

A buckle comprising a box-loop provided with means for attachment therewith of a strap and having a longitudinal channel or groove in its outer face, and having a rectangular slot near one end of the channel and an oblong opening near the opposite end thereof, and having a corresponding oblong opening in the rear or opposite side or wall of the box-loop, in transverse alinement with the first-mentioned oblong opening, a pin or cross-bar extending across the rectangular slot, and a latch-bar snugly fitting within the channel or groove and coming flush with the outer side of the box-loop and having its rear portion thickened and longitudinally slotted to receive the aforesaid pin, upon which it slides and turns, and provided near its free end with a stud to project across the space of the box-loop and operate in the oblong openings and having its opposite or heel end entering the aforesaid channel in the rear of the said pin or cross-bar, substantially as and for the purpose set forth.

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

JOHN E. HILL.

Witnesses:
FRANK L. TOWLE,
FRED S. COE.