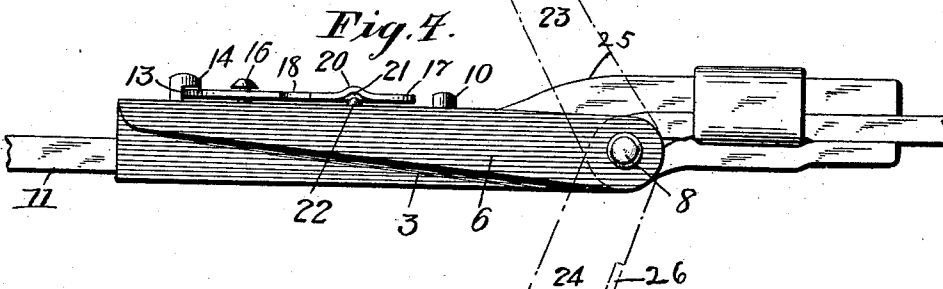
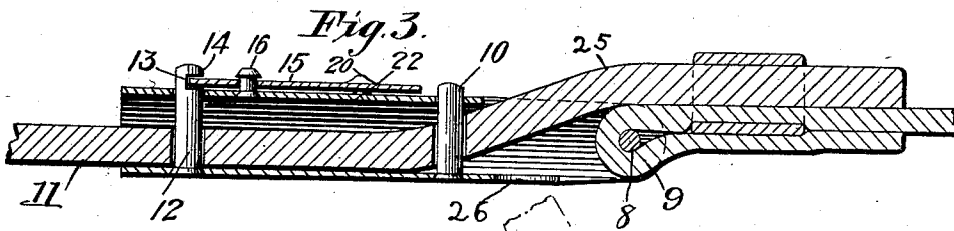
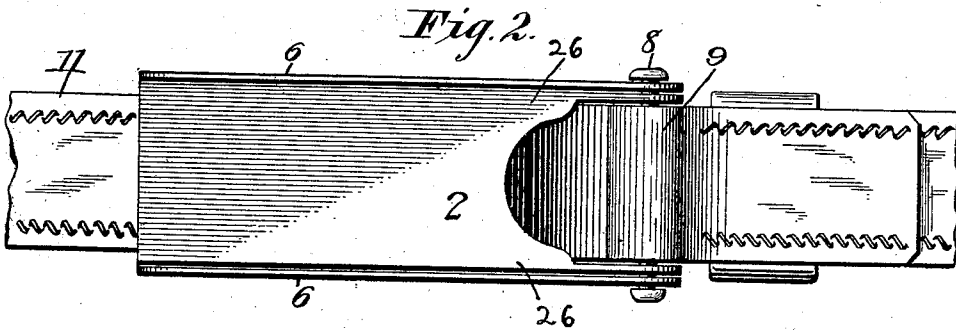
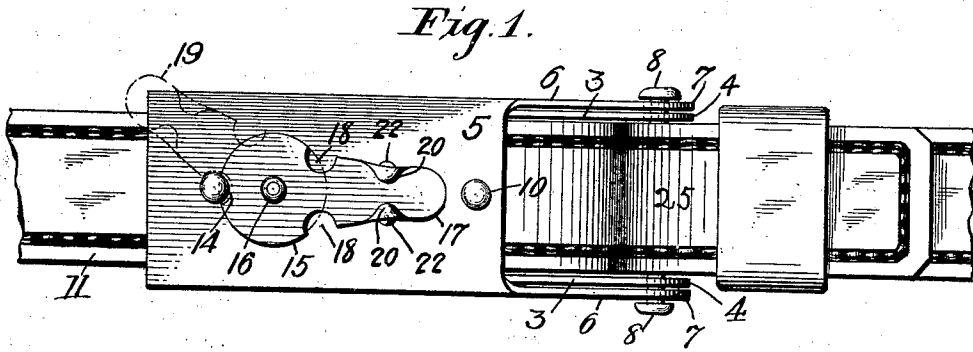


R. B. CARTER.
HARNESS BUCKLE.

APPLICATION FILED SEPT. 20, 1909.

1,065,919.

Patented July 1, 1913.



Witnesses:

Marion O. Miller
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UNITED STATES PATENT OFFICE.

RICHARD BAXTER CARTER, OF BLAIR, NEBRASKA, ASSIGNOR TO THE PERFECTION HARNESS AND TUG BUCKLE COMPANY, OF BLAIR, NEBRASKA.

HARNESS-BUCKLE.

1,065,919.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed September 20, 1909. Serial No. 518,671.

To all whom it may concern:

Be it known that I, RICHARD BAXTER CARTER, a citizen of the United States, residing at Blair, in the county of Washington and State of Nebraska, have invented certain new and useful Improvements in Harness-Buckles, of which the following is a specification.

My invention relates to improvements in harness-buckles in which an inner casing, carrying strap-securing tongues and an outer casing to retain said strap in engagement with said tongues are hinged and locked together; and the objects of my improvements are, first, to produce the lightest possible sheet-metal-case buckle of two parts pivoted together and connected to a chape, hame-tug or other anchoring strap; second, to provide an efficient convenient lock to releasably secure the parts and retain the strap to be buckled. I attain these objects with others of minor importance by the mechanism illustrated in the accompanying drawing, in which—

Figure 1, is an outside or face view of the buckle as applied closed and locked to a tug of a harness; Fig. 2, an inner-side view next to the animal; Fig. 3, a central longitudinal section; and Fig. 4, an under edge view of Fig. 1, or a top edge view of Fig. 2.

Throughout these views similar parts are referred to by the same numerals.

The inner case consists of the oblong plate 2 having the side edge flanges 3 and 3 standing outward from the inner plate and of uniform width to gage the thickness of the strapway; these flanges are extended forwardly beyond the forward end of the inner plate to form the hinging legs or ears 4 and 4. The outer or face plate 5 is of similar reverse form but wider so that its inwardly standing flanges 6 and 6 embrace and inclose the projecting edges of the flanges of the inner plate 2, the two parts thus forming a strapway inclosed but open at the ends. The flanges 6 and 6 are tapered, narrowed to a rounded point at the back end to avoid an unprotected projecting angle liable to distortion in use. The forward ends of these flanges are extended beyond the forward end of the face-plate to form ears 7 and 7 to match the extending ears 4 and 4 of the inner plate. The chape-bolt or pivot-bolt 8 is disposed through the perforated ends of these ears as shown and hinges the

inner and face plates together. Intermediately around this pivot-bolt the rear loop 9 of the hame-tug is disposed. This pivot-bolt is disposed centrally to give a straight direct-line draft on all connected parts so that the inner side of the buckle with such attached and connected parts will present a smooth surface against the animal. On the longitudinal center and toward the forward end of the inner plate the stud-tongue 10 is set to project across the inclosed space between the inner and face plates and through the regular tongue-hole of the interposed inclosed tug 11. A corresponding perforation through the face-plate receives the outer end of the tongue to support it against the draft on the tug. Toward the back end and in longitudinal alinement with the tongue 10 is set a like stud-tongue 12; it is of sufficient length to project through a registering perforation in the face plate far enough to have cut in its front side the notch 13 flush with but beyond the face of the plate. This forms the lip 14 which overhangs the edge of the revoluble latch-plate 15 to lock the buckle closed.

The latch-plate consists of a concentrically pivoted disk disposed on the face of the face-plate mounted on the riveted pivot-stud 16 so that its peripheric edge will revolve through the notch 13 when the buckle is closed. It has the radial arm 17, on each side of the base of which a curved portion of the peripheric edge of the disk is removed to form the curved notches 18 and 18. Through these notches the lip 14 passes in opening and closing the buckle; for this purpose the latch-plate being turned to the position indicated by the broken lines 19 in Fig. 1; or turned in the reverse direction to the opposite side of the stud-tongue to pass through the other notch. When locked the arm is disposed centrally along the face, as shown in Fig. 1, bringing the notches 18 and 18 the farthest possible distances from the engaging lip. Each side edge of the arm has a small portion bent or struck outward to form the outwardly-projecting semi-hemispheric knobs 20 and 20 and the semi-hemispherical concavities 21 and 21 on the inside of each edge. The face-plate has the hemispherical knobs or lugs 22 and 22 struck or punched out on its face and disposed and spaced to engage in the concavities to retain the arm in the cen-

tral locking position shown. The arm springs flatwise outwardly to pass over the knobs 22 and 22 and is retained between the knobs by its resiliency flatwise; the outwardly bent edges serving as finger-holds by which to turn and unlock the latch-plate. The broken lines 23 and 24 in Fig. 4 indicate the positions to which the outer and inner hinged portions respectively, of the buckle case, are swung apart, after unlocking, to remove or adjust the tug to a new position. The face-plate 5, is shorter at its forward end than the inner plate and cut squarely across between the bases of its hinging ears, making the ears longer, to allow a free out-bend of the unstrained tucked end 25 of the tug 11, when the buckle is closed and drawn into alinement, and to swing clear of said outward bend when the buckle is opened. The forward end of the inner plate is curved, to form at its sides the forwardly-extended braces 26 and 26, as shown in Fig. 2, to support the hinging ears of both plates, when the buckle is assembled, against lateral strain or their liability to be bent flatwise.

By hinging the ears of both outer and inner portions of the buckle on the same pivot-bolt to which the hame-tug is attached I double the bearings of the bolt in the buckle and support the stud-tongues at both ends directly from said pivot, chape-clip or pivot bolt. This allows the use of the lightest possible metal for the buckle case parts and still conserves the greatest possible strength.

I claim:

1. A harness buckle, comprising an inner channel having flanges of uniform width to gage the thickness of the strapway and said flanges extended endwise beyond one end of their connecting plate to form hinging ears, and this end of the connecting plate curved across to form lateral braces to said hinging ears, a reversely disposed wider outer channel to cover the strapway and inclose and shield the projecting edges of said inner channel flanges, the flanges of said outer channel extended endwise beyond one end of their connecting plate to form hinging ears of greater length paired with and lapped against the hinging ears of said inner channel and these outer flanges reduced in width toward the opposite end of

their connecting plate to eliminate their projecting edges and angles, a stud-tongue disposed on the plate of one channel to project across the strapway and seat in an aperture in the plate of the opposite channel, suitable locking mechanism to releasably fasten the channels closed together, and a chape-bolt disposed across through the opposite pairs of ears to hinge the channels together and to centrally carry an attaching loop in longitudinal alinement with said strapway.

2. A harness buckle, comprising a sheet-metal back-plate having opposite edges bent outwardly to form integral outstanding side flanges of uniform width, said flanges extended endwise beyond the end of the plate to form opposite side hinging ears and the end of the plate between these ears curved to extend with the ears and form lateral braces thereto, a sheet-metal face-plate of greater width than the back-plate, centrally perforated near each end having opposite edges bent inwardly to form integral inclosing side flanges to receive and cover therebetween the outstanding edges of the flanges of the back-plate, said inclosing flanges extended endwise beyond the end of the face-plate to form hinging ears of greater length lapped against the hinging ears of the back-plate, and these flanges reduced in width toward the opposite end of said face-plate, a pivot-bolt disposed through the opposite lapped pairs of ears and across in the longitudinal plane of the strapway between, a stud-tongue disposed at the longitudinal center toward the hinged end of the back-plate to project across the strapway into the corresponding perforation in the face-plate, a stud-tongue disposed at the longitudinal center toward the opposite end of the back-plate to project across the strapway, through the corresponding perforation in the face-plate and notched in its projecting end, and a suitable locking mechanism mounted on the face-plate to releasably engage the notched end of said stud-tongue to fasten the opposed swinging plates closed together.

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

RICHARD BAXTER CARTER.

Witnesses:

F. W. KENNY, Sr.,
GEO. B. WELLSEY.