

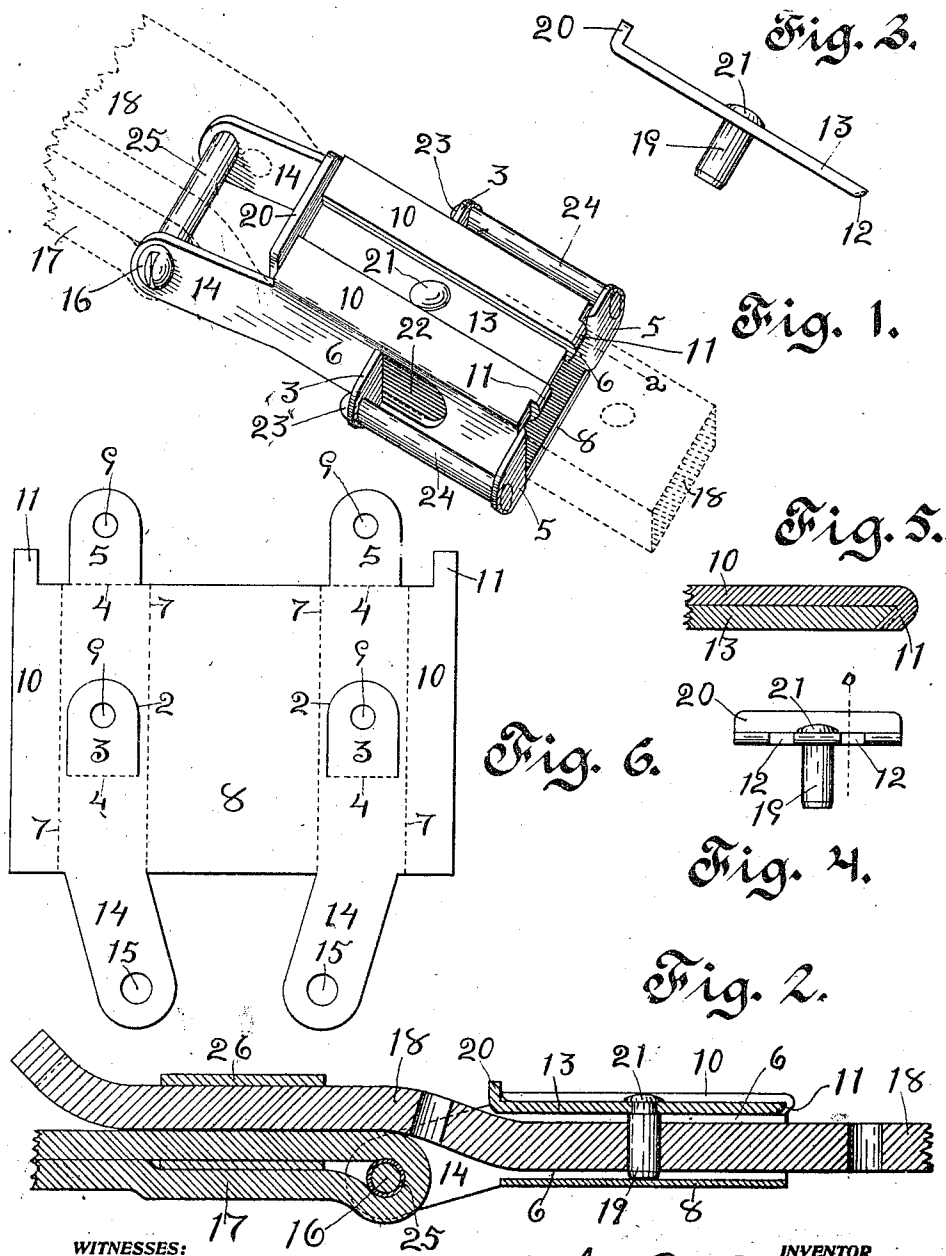
N. P. PETERSEN.

TUG BUCKLE.

APPLICATION FILED APR. 7, 1910.

982,090.

Patented Jan. 17, 1911.



WITNESSES:

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UNITED STATES PATENT OFFICE.

NIELS P. PETERSEN, OF HERMAN TOWNSHIP, WASHINGTON COUNTY, NEBRASKA.

TUG-BUCKLE.

982,090.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed April 7, 1910. Serial No. 553,943.

To all whom it may concern:

Be it known that I, NIELS P. PETERSEN, a citizen of the United States of America, residing in Herman township, in the county of Washington and State of Nebraska, have invented certain new and useful Improvements in Tug-Buckles, of which the following is a specification.

My invention relates to improvements in tug-buckles having a removable tongue-plate to support a stud-tongue across a strap-way through a body bent from a sheet-metal blank; and the objects of my improvement are, first, to construct from a single piece of sheet-metal a buckle-body forming a strap-way and having integral legs and ears to carry chape-bolts for attachment to hame-tug, back straps and belly-bands; second, to shape a sheet-metal blank that can be bent to form such an integral body; and third, to provide means whereby the removable tongue-plate will couple and lock together the opposite edges of the bent body around the strap-way and support the thin sheet-metal against the draft of the belly and back-bands. I attain these objects, with others of minor importance hereinafter more particularly set forth, by mechanism illustrated by the accompanying drawings in which similar numerals refer to similar parts throughout all the views, and in which—

Figure 1 is a perspective view of the complete assembled buckle alone, its application to tug and hame-tug indicated by dotted lines; Fig. 2, a central longitudinal section through the buckle, tug and hame-tug assembled and buckled; Fig. 3, an edge elevation of the tongue-plate removed from the buckle body; Fig. 4, a rear-end view of the tongue-plate; Fig. 5, a lengthwise section through the locking hooks at the rear end of body and tongue-plate on the broken lines *a* and *b* of Figs. 1 and 4; and, Fig. 6, a view of the flat sheet-metal blank before it is bent to form the strap-way and chape-bolt-supporting ears.

On the view of the sheet-metal blank the solid lines 2 and 2 are where the metal is cut through to free the sides and rounded outer-end edges of the forward chape-bolt ears 3 and 3. The dotted lines 4, 4, 4 and 4 indicate where the metal is bent at the base of the ears 3, 3 and 5, 5, to stand said ears at right angles to the integral supporting sides 6 and 6 of the body and strap-way as shown

in Fig. 1. The transverse dotted lines 7, 7, 7 and 7, indicate where the metal sheet is bent at right angles to form the longitudinal angles and inside corners of the buckle-body and inclosed strap-way. The central portion 8 forms the connecting flat back of the body and strap-way; the adjoining narrow portions 6 and 6, centrally and longitudinally aligned with the ear portions 3 and 5 and with the perforations 9, 9 etc. in their rounded ends, form the edge-sides of the buckle and strapway; and the outer parallel narrower edge portions 10 and 10 form the opposed face flanges of the body that overlap the face of the tongue-plate along its opposite longitudinal edges. The rear chape-bolt ears 5 and 5 are round-ended rearward extensions on the rear ends of the side portions 6, 6 of the blank, and smaller rectangular extensions 11 and 11 at the rear ends of the flange portions—the rear corners of the body blank—are adapted to be bent inwardly to form hooks to engage the notches 12 and 12 in the rear end of the tongue-plate 13. The side portions 6 and 6 are extended forward beyond the forward edge of the blank body to form the integral chape-bolt legs 14 and 14; their extended ends are rounded as shown and provided with perforations 15 and 15 to receive the chape-bolt 16 by which the forward end of the buckle is fastened in the rear-end loop of the hame-tug 17. These legs are inclined edgewise in the blank, convergently toward each other at their projecting ends, so that when the blank is bent to form the body, as shown in Fig. 1, they support the hame-tug loop on the connecting chape-bolt sufficiently out of alinement to allow the tug 18 with the seated tongue 19 and tongue-plate to pass into and out of the forward end of the strap-way.

The tongue-plate 13 is a flat rectangular sheet having on its forward end the outwardly standing lip or flange 20 to shield, and to engage the forward end of the face flanges to support the tongue against the draft on the tug. The notches 12 in the rear end of the tongue-plate are disposed and shaped to receive the inwardly-bent hooks 11 at the rear inner angles of the face flanges, all as shown in Figs. 1, 2, 4 and 5. These hooks support the rear end of the tongue-plate against the tug draft; seated in the notches they lock the rear ends of the flanges against edgewise movement away

from each other whereby the rear end of the body would be distorted; and, as they are inclined under the end of the tongue-plate they prevent the inner rear angles of said flanges from being accidentally bent outwardly therefrom. The stud-tongue I have shown as a separate part shouldered and riveted through the plate, there being ample space for a full strong head 21 between the opposed edges of the face flanges; but, it is obvious that said tongue and plate may be made integral; possibly with advantage.

The openings 22 from which the ears 3, 3 are struck outward serve to drain and ventilate the strap-way so that in case of wetting by storms or otherwise it soon dries out and the tug does not remain soaked and become softened around the tongue to be stretched and weakened.

The chape-bolts 23 and 23 have ends threaded through the ears 5, 5 and carry protecting sleeves 24 disposed between said ears and ears 3. And the chape-bolt 16 is seated in like manner in the perforations at the ends of its supporting legs and carries therebetween a like sleeve 25 to protect the engaged loop of the hame-tug.

I claim:

1. A harness buckle, comprising a sheet-metal body bent to form a strap-way, integral partly severed side portions and rearward extensions bent outward and perforated to form ears, chape-bolts disposed through said ears to carry back and belly bands, integral forwardly-inclined perforated extensions, a chape-bolt disposed through said forward extensions to engage a hame-tug, and a flanged plate having a fixed stud-tongue and adapted to be removably seated in said strapway with its flange seated against the forward end of said body to support said tongue across said strapway.

2. A harness buckle, comprising a body of

sheet metal bent to a tube-shape to form a strap-way, integral inclined ears at the forward end of said body to carry a hame-tug chape-bolt out of alinement with said strap-way, a tongue-plate having a stud-tongue thereon and adapted to be removably inserted in said strap-way against the inside of the opposed edges of the inclosing sheet-metal body to support said stud-tongue across said strap-way and notches in the rear end of said tongue-plate, and hooks at the rear ends of said body to engage the rear end of said tongue-plate in its notches.

3. A sheet-metal blank, to be bent to form a tubular-strap-way buckle-body, comprising a rectangular sheet having an intermediate partly severed portion and a corresponding extension on one edge of said sheet both adapted to be bent outwardly at right angles to form a pair of ears to support a laterally disposed chape-bolt and a pair of reversely inclined extensions on the edge opposite to said ear extension disposed to form a pair of ears to support an attaching chape-bolt out of alinement with said strap-way at one end of the completed buckle-body.

4. A sheet-metal blank for a tubular-strap-way buckle-body, comprising a rectangular sheet adapted to be bent to form a base and sides and having at one edge a pair of convergently inclined extensions outstanding from the side-forming portions to form opposed ears to support therebetween a chape-bolt at one end of said strap-way and out of alinement therewith.

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

NIELS P. PETERSEN.

Witnesses:

PAUL PETERSON,
J. E. LUTZ.