No. 774,853. PATENTED NOV. 15, 1904.

N. A. SMALLMAN.

STRAP ATTACHMENT.

APPLICATION FILED MAY 16, 1904.

NO MODEL.

FIG. 1.

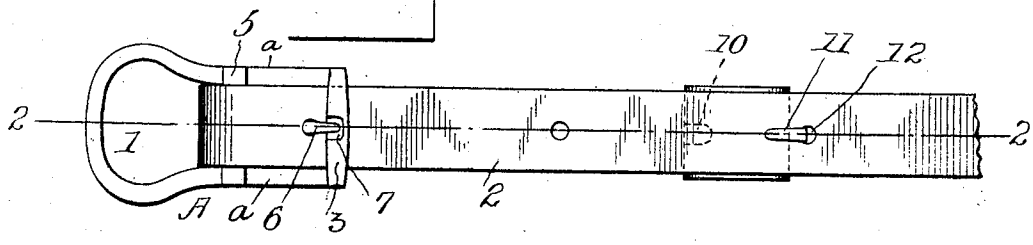


FIG. 2.

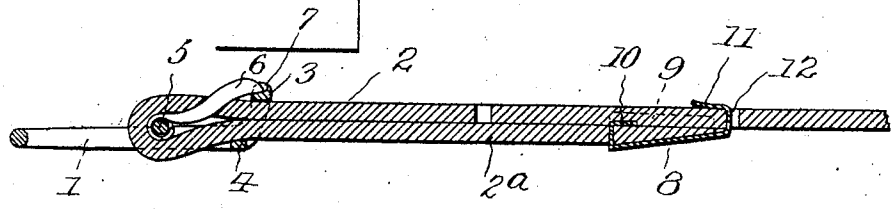


FIG. 3.

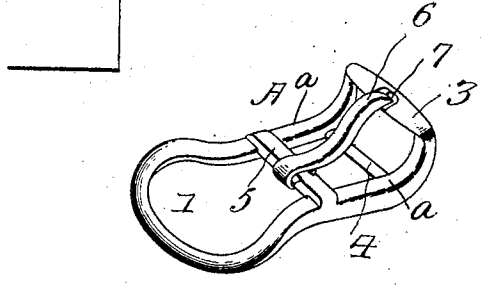
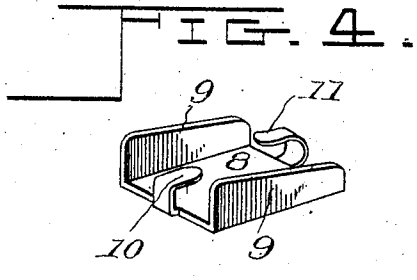


FIG. 4.



Witnesses:

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No. 774,853. Patented November 15, 1904.

UNITED STATES PATENT OFFICE.

NICHOLAS ALLEN SMALLMAN, OF FORT COVINGTON, NEW YORK.

STRAP ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 774,853, dated November 15, 1904.

Application filed May 16, 1904. Serial No. 208,303. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS ALLEN SMALLMAN, a citizen of the United States of America, residing at Fort Covington, Franklin county, in the State of New York, have invented certain new and useful Improvements in Strap Attachments; and I do hereby declare that the following is 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.

This invention relates to new and useful improvements in a strap attachment; and it consists in certain features of novelty in the detail construction and arrangement thereof whereby a strap is provided upon which is carried a buckle within a looped portion thereof, which buckle may be connected with the breeching-braces, with a neck-strap, with a back-strap, or with an overdraw-check, as may be desired; and it consists in certain features of novelty, all as hereinafter more fully described, and specifically pointed out in the claims.

The object of the invention is to produce a device including a buckle, strap, and appurtenant connections that will permit of the lengthening or shortening of a reverse strap, the buckle remaining at the loop end of such strap, and including means whereby the end portion of the strap may be connected to the intermediate portion thereof to hold the device in position.

In the drawings, wherein similar characters of reference indicate corresponding parts in all the views, Figure 1 is a plan view of a strap provided with my invention. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detached detail view illustrating the preferred form of buckle used with my invention, and Fig. 4 is a detached detail of the keeper hereinafter referred to.

It has been common heretofore in the manufacture of harnesses to provide straps which are sewed to various portions of the harness and to provide buckles which are connected by sewing or other means of attachment with such harness, through which buckles adjustable straps have been passed, while slidable keepers, generally of leather, have been sewed or otherwise secured to such straps for the purpose of holding the loose or adjustable end of the straps in position; but in such devices where a keeper secured to the strap has been used a common objection to such means of securing is that the end of the strap generally projects beyond the keeper for a greater or less distance, whereby an objectionable protuberance is provided which will catch the driving-rein and with which the tail of the horse is liable to become entangled. To avoid difficulties heretofore encountered in the manufacture of harness in this respect, the present invention has been produced, wherein a buckle A is used, said buckle being provided with a loop 1 at one end, which loop may be sewed into the breeching-braces or connected with any other suitable part of the harness where used. When connected with the breeching-braces, the hip-strap 2 enters the top of the buckle A—that is, between the cross-bar 3, at the end of said buckle opposite to said loop, which bar serves as a tongue-stop, and the tension-bar or cross-bar 4, located in a plane relatively lower than the bar 3 and approximately in the plane of the said loop 1—the said strap then passing around the draft-bar 5, which draft-bar is located between the bar 4 and said loop 1 and serves as a tongue-supporting bar, upon which the tongue 6 is pivoted, after which the strap again passes between the bars 3 and 4 and out of the buckle, as best shown in the section view, Fig. 2. Thus a loop is provided in the strap, which loop engages therewith in such manner that the entire strain applied to the strap is received by the draft-bar 5, tongue 6, and recessed bar 3, the said bar 3 being provided with a recess 7, in which the free end of the said tongue may rest, thereby permitting the pointed end of the tongue to rest approximately in the plane of the bar 3, so that when draft is applied to the strap 2 there will be no protuberance caused by the buckle on which the horse's tail may be caught when the harness is in use. Between the bars 3 and 5 is the bar 4, and said bars 3 4 5 are connected to the side bars *a a*, which latter are substantially parallel. Beyond the said draft-bar said side bars merge in the loop 1, which

is preferably wider than the distance between said side bars. The end portion 2^a of the strap 2 is provided with a keeper, (best shown in Fig. 4,) such keeper comprising the plate 8, having formed integral therewith the flanges 9, which are preferably widest upon that portion of the keeper which lies next the buckle and which tapers, as shown in Fig. 4, toward the opposite end, at which end such flange is somewhat narrow. Either connected with or formed integral with the plate 8 is a securing-hook 10, which hook is adapted to be passed through an eyelet or opening in the portion 2^a of the strap, as shown in Fig. 2, and thereby securing such keeper in position upon that end of the strap, which, as will be noted in the sectional view, is preferably somewhat reduced in thickness toward its end for the purpose of decreasing the thickness of the strap thereat. In addition to the hook 10 a hook 11 is provided upon or integral with the opposite end of the keeper, which hook is adapted to project through one of the eyelets 12 in such strap 2 for the purpose of locking the keeper in position upon an intermediate portion of the strap, and thereby holding the end portion 2^a properly supported in position.

The device herewith illustrated is applicable to various parts of the harness, the construction of which is well known, and may also be applied to various other purposes, and when used it will be evident that the strap 2 may be quickly adjusted, while permitting the buckle A to remain within the loop end of such strap, and when in use there will be no strain upon the portion 2^a of the strap, the strain being entirely taken up by the portion thereof which engages with the draft-bar and tongue.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structures set forth.

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

1. In a strap attachment, a buckle having a relatively wide loop portion, a plurality of cross-bars on its opposite end portion, one of said cross-bars being in substantially the plane of said loop and one being in a relatively higher plane, an intermediate draft-bar serving as a tongue-support, a tongue thereon, in combination with a strap looped upon said draft-bar and doubled between said cross-bars, and a flanged keeper, said keeper having engaging hooks thereon engaging with the end portion of said strap and with an intermediate portion thereof.

2. In a strap attachment, a strap, a buckle thereon, provided with a relatively wide end loop, a tongue draft-bar intermediate the length of said buckle, a recessed top bar, a cross-bar between said top bar and tongue-bar, in combination with a keeper provided with engaging hooks at its opposite ends for engagement with the end and an intermediate portion of said strap.

3. In a strap attachment, a strap provided with a loop, a buckle having a single draft-bar about which said strap-loop is folded, said buckle having a harness-engaging loop, and a keeper on the end of said strap, said keeper comprising a plate, side flanges integral therewith, means on said plate for engaging the end of said strap, and means for engaging an intermediate portion thereof.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

NICHOLAS ALLEN SMALLMAN.

Witnesses:

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