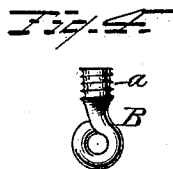
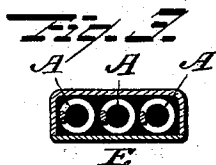
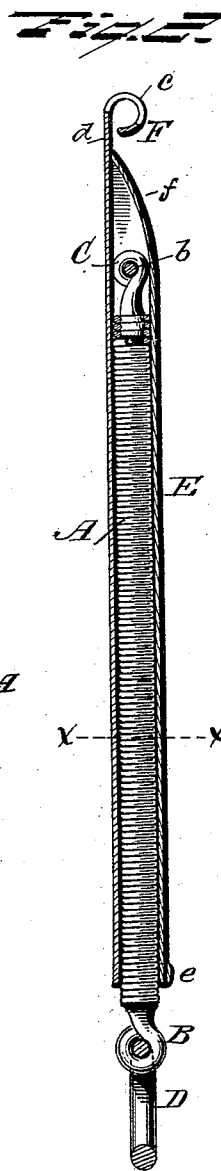
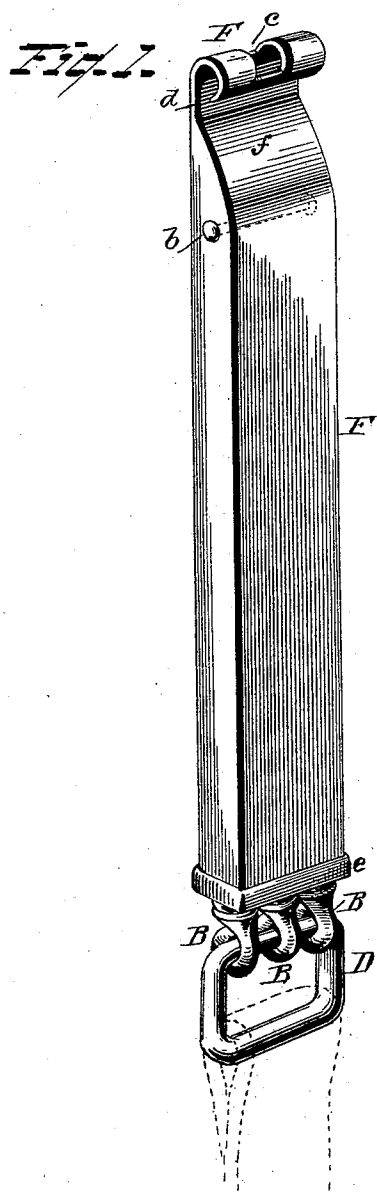


(No Model.)

G. BECK.
HARNESS ATTACHMENT.

No. 529,014.

Patented Nov. 13, 1894.



Witnesses
C. Williamson.
H. Goddard.

Inventor
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Attorney.

UNITED STATES PATENT OFFICE.

GEORGE BECK, OF ST. LOUIS, MISSOURI.

HARNESS ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 529,014, dated November 13, 1894.

Application filed August 30, 1894. Serial No. 521,675. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BECK, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Attachments to Harness; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide an attachment to harness that will take the place of the tug-strap and prevent the horse from becoming sore where the saddle rests from the constant up and down motion of the shafts caused by the rising and falling of the horse's back when in motion and also from the weight of the driver when jumping on the shaft when getting in or out of the vehicle.

The invention consists in an attachment constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a perspective view of my improved attachment showing the strap to which the shaft tug is buckled in dotted lines; Fig. 2, a longitudinal section thereof; Fig. 3, a cross section taken on line *xx* of Fig. 2; Fig. 4, a detail view of one of the hangers showing the grooved seats for the coils of the spring.

In the accompanying drawings A represents a closely coiled spring having connected to its respective ends the hangers B C. The hanger B has connected thereto a suitable loop D for attaching a strap to which the shaft tug is buckled or otherwise attached, as shown in dotted lines of Fig. 1. The opposite hanger C is securely connected within an inclosing case E by means of a transverse pin or bolt *b* which extends through the eye of the hanger and through the sides of the casing. The hangers have shanks with grooved seats *a* for the coils of the spring whereby the coils are securely held in engagement with the shanks and prevented from becoming detached when the spring is expanded by the weight or strain thereon. If desired a little solder may be used as an additional security against the ends of the spring becoming detached from the shanks of the hangers. One or more of these springs may be used as found most desirable, although I have shown three

of the springs as the number that would produce the best results.

The casing E is preferably constructed of sheet steel although any kind of metal may be used, said casing completely inclosing the springs with exception of its lower ends which extend through the open end of the casing, so as to enable them to be drawn out or the coils expanded when pressure is brought thereon.

The upper end of the casing E is closed and one side is inclined as shown at *f* and the casing terminates in a slotted curved bearing F for engaging therewith a suitable buckle, the tongue of the buckle extending through the slot *c* in the bearing, so that it will enable the buckle to be attached to the saddle of the harness. The open or lower end of the casing is reinforced by a brace *e* whereby its strength is increased and preventing the sheet metal from becoming easily bent at this point so that the opening through which the springs extend will not be decreased in size and consequently the free movement thereof will be assured. The incline *f* of the casing enables the buckle to be easily connected to the curved bearing F, the incline forming a tapering end to the casing. Providing this means by which a buckle may be connected to the end of the casing, enables the attachment to be connected with any harness. The casing which incloses the springs is of material importance in that it prevents the springs from rubbing against the saddle and wearing it caused by the forward and backward swing of the shafts when the horse is in motion.

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

An attachment to harness, consisting of a suitable casing, one or more springs contained therein, hangers having shanks with grooves to form seats for the coils of the springs and form a connection between the hangers and springs, and a slotted curved bearing upon the end of the casing for attaching a buckle thereto, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE BECK.

Witnesses:

WM. D. CONROY,
HEY. ZWILLING.