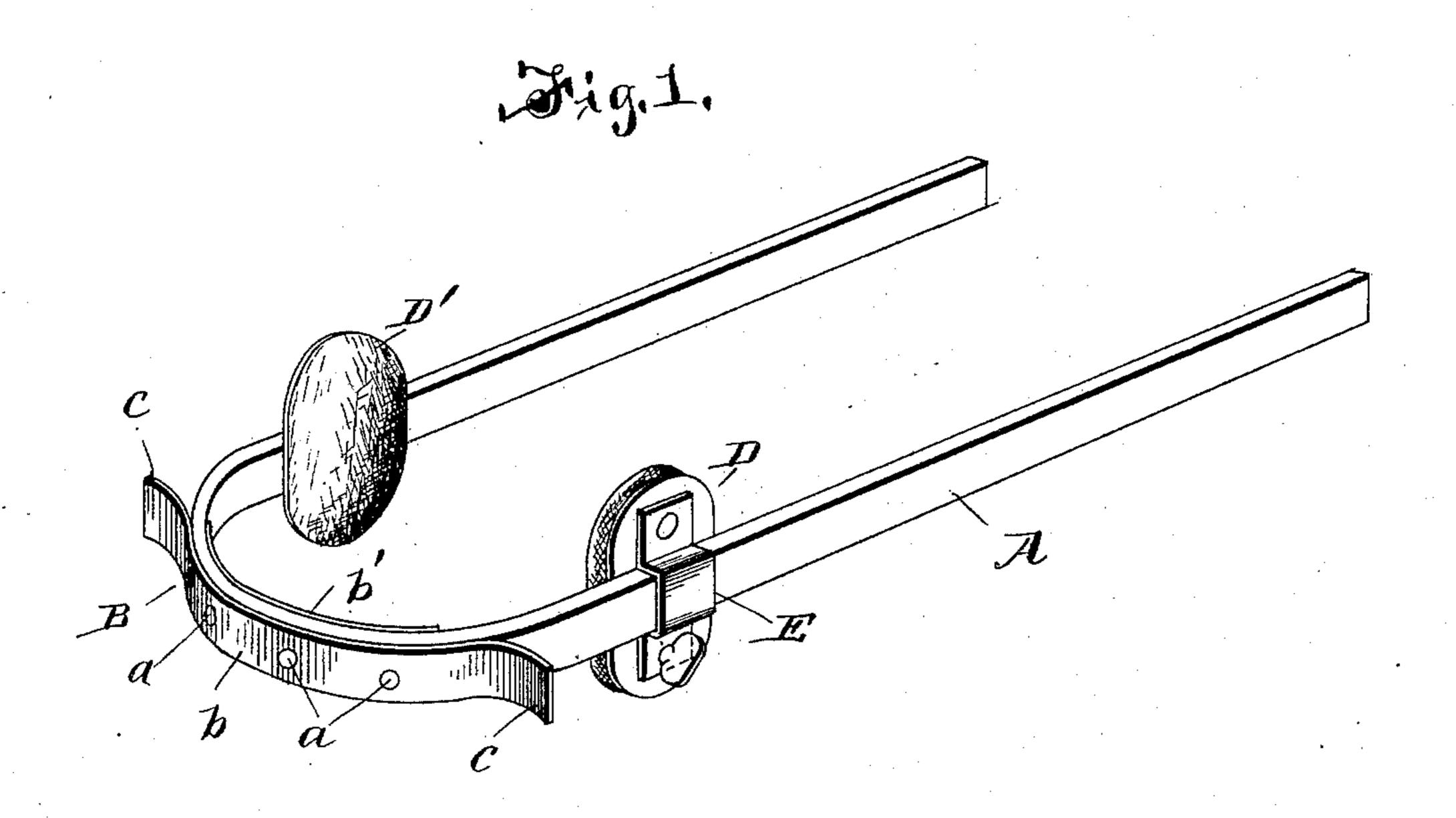
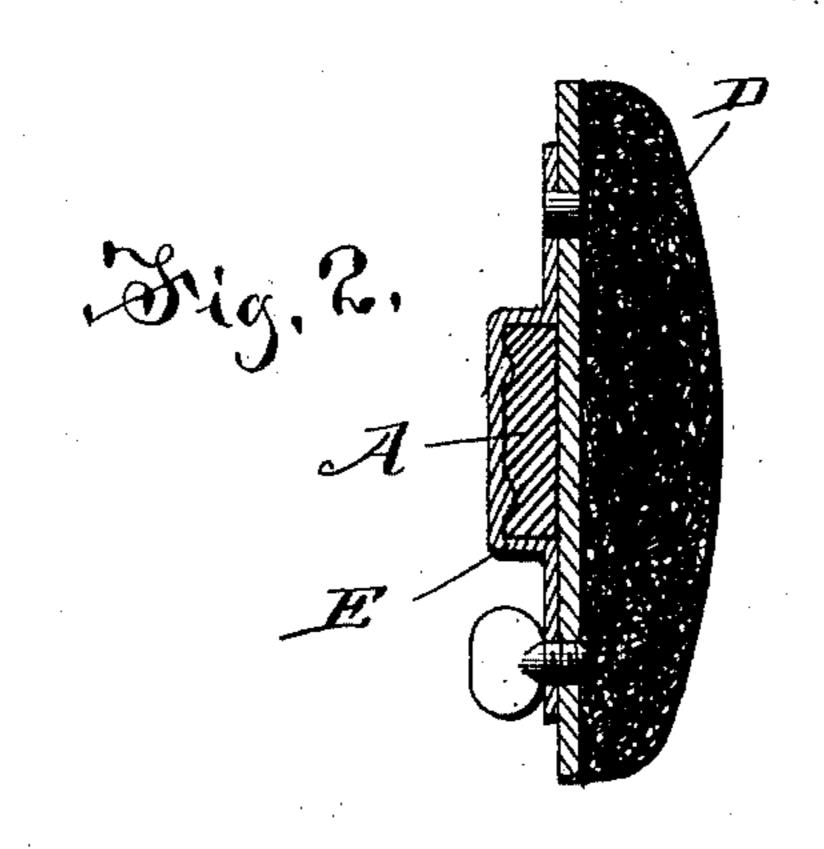
(No Model.)

B. LUKENS. BREAST STRAP ATTACHMENT.

No. 468,669.

Patented Feb. 9, 1892.





Witnesses Samuel Ker Philipbellasi. Benjamin Lukens by E. W. Anderson his Attorney

United States Patent Office.

BENJAMIN LUKENS, OF ANDERSON, INDIANA.

BREAST-STRAP ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 468,669, dated February 9, 1892.

Application filed August 28, 1891. Serial No. 404,000. (No model.)

To all whom it may concern:

Be it known that I, Benjamin Lukens, a citizen of the United States, and a resident of Anderson, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Steel Breast-Strap Attachments for Relieving the Pressure on Wind-Pipes and Jugular Veins of Horses; and I do declare the following to be 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, reference being had to the accompanying drawings, and to letters of reference marked thereson, which form a part of this specification.

Figure 1 of the drawings is a perspective view, and Fig. 2 is a transverse section.

This invention has relation to breast-strap attachments for harness; and it consists in the novel construction and combination of parts, as hereinafter specified, and pointed out in the claim.

The object of the invention is to keep the breast-strap away from the wind-pipe and jugular vein of the horse to protect the breath and blood while pulling heavy loads.

In the accompanying drawings, illustrating the invention, the letter A designates an or-

dinary breast-strap.

B is a metallic (preferably steel) bow consisting of an outer plate b and an inner plate b', between which the breast-strap passes and is secured by bolts or rivets a. The outer plate b is preferably longer than the inner plate b' and is curved outwardly at its ends, as shown at cc. By means of this bow the strap is held outwardly away from the wind-pipe and the jugular vein and the pressure of draft brought on the side portions of the breast. These bows may be made of different thicknesses of plate, according as they may be designed for attachment to a light or heavy harness.

D D' are pads of any suitable material,

which are placed on the breast-strap, one on 45 either side of the metallic bow, and are secured thereto by a clasp or keeper E, which is movable upon said strap to permit the adjustment of the pads to the desired point. These pads are designed to press upon the cen- 50 ter of the shoulder-bone of the horse and protect the breast from injury at the points where the pressure of the draft is brought by the bow B. The keeper or clasp E is of metal and has a hinged or pivotal connection with the 55 pad at one end and at the other is suitably secured thereto, as by a removable screw, in order that the pads may be held in position and easily removed when desired. The central portion of this strap is bowed up to per- 60 mit the passage thereunder of the breast-strap. For ordinary use the bow may be employed without these pads; but for heavy draft I find it advisable to use them, as they may be put on or taken off at pleasure. The bow B may 65 may be either of ribbed, corrugated, or plain metal, according to the strength desired.

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

The combination, with a breast-strap having a spring-metal guard at its bow portion, said guard comprising a pair of plates secured to the strap and between which it passes, of pads therefor, said pads having each a metallic clasp or keeper hinged or pivoted to its outer surface at one end and detachably secured thereto at its other end, said clasp or keeper having at its central portion a bow or loop, through which said strap is passed, substantially as specified.

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

BENJAMIN LUKENS.

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Witnesses:

D. C. CHIPMAN, SAMUEL P. MOORE.