

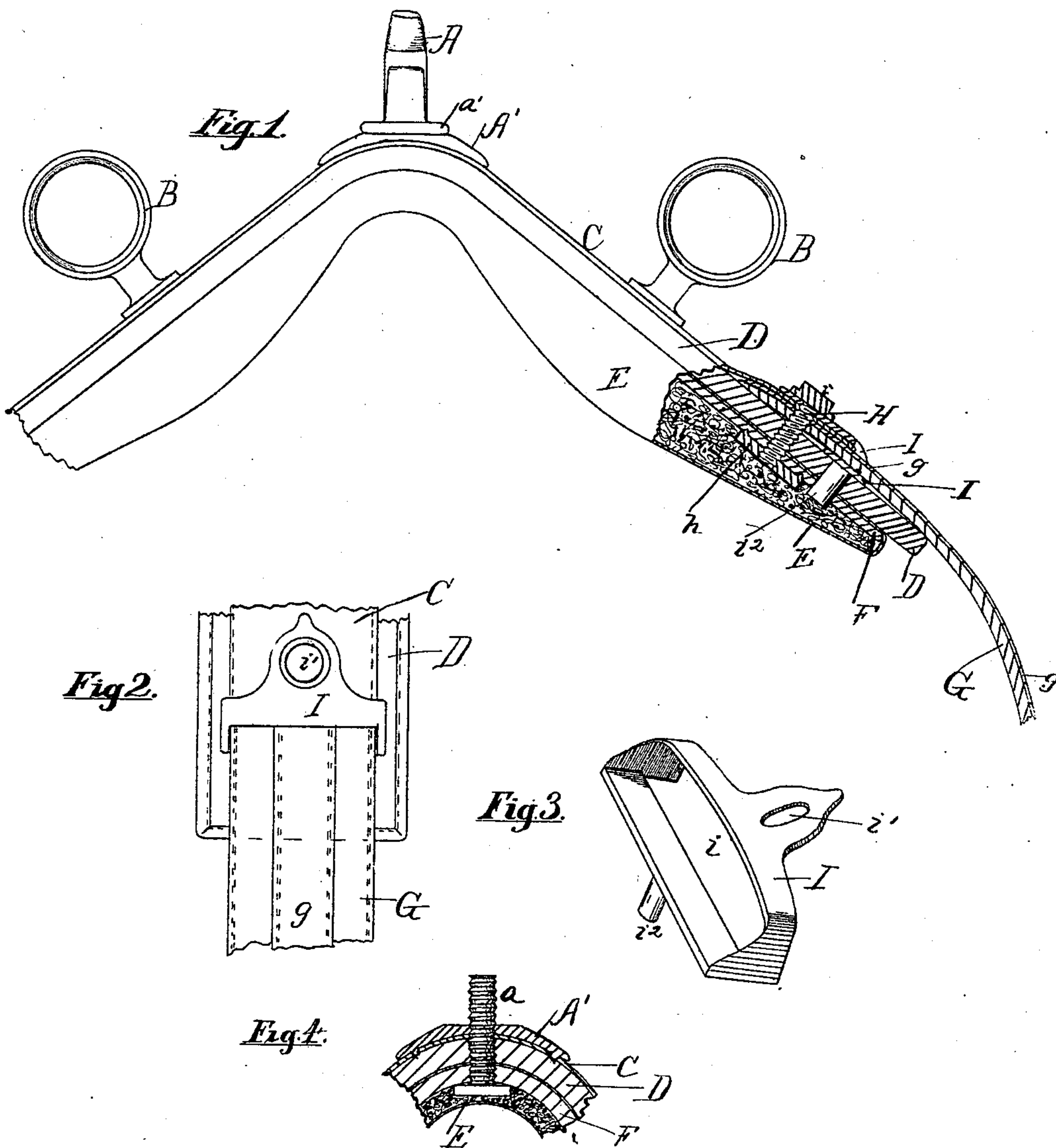
(No Model.)

R. J. WELLES.

HARNESS PAD.

No. 270,711.

Patented Jan. 16, 1883.



Witnesses:

*J. Everett Brown*  
*H. W. Munday.*

Inventor:

Richard J. Welles,

*per Munday Evans & Adcock*

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# UNITED STATES PATENT OFFICE.

RICHARD J. WELLES, OF CHICAGO, ILLINOIS.

## HARNESS-PAD.

SPECIFICATION forming part of Letters Patent No. 270,711, dated January 16, 1883.

Application filed August 17, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD J. WELLES, of Chicago, Cook county, State of Illinois, have invented certain new and useful Improvements in Harness-Pads, of which the following is a specification.

This invention relates to certain improvements in harness-pads, designed to strengthen and otherwise improve the same; and it consists in the novel features of construction hereinafter set forth.

Figure 1 is a side view, partly in section, of my improved pad. Fig. 2 is a top view of the skirt attachment. Fig. 3 is a detached view of the metal piece used in attaching the skirt. Fig. 4 is a vertical section, at right angles to Fig. 1, of the parts by which the check-hook is secured.

Similar letters of reference indicate like parts throughout the drawings.

In said drawings, A represents the check-hook; B B, the terrets; C, the jockey; D, the housing; E, the covering of the cushion or pad proper; F, the burr-piece; G, the skirt; g, the billet or layer, and H the pad-screw.

The check-hook is held by a headed screw, a, and rests upon an arched washer, A', conforming to the upper surface of the tree or bridge of the pad, and furnishing a flat, broad supporting-surface for the base of the hook. This washer permits the hook to be screwed firmly down, and supports it at such a height above the pad as makes the attachment of the crupper-strap to the loop a' in the usual way a convenient matter. The arched form and side spread of the washer tend to make the bridge stiff and to resist the spreading of the pad, and the interposition of a metallic substance between the base of the hook and the leather prevents the hook being forced into the latter by undue tightening upon the screw. The washer also prevents the frequent strains or pulls upon the hook caused by the movements of the horse's head from working the hook loose, as it would do if not furnished with a hard bearing at the base, and from wearing into the leather.

Instead of securing the skirt in the ordinary manner, I provide a metal device, I, having a central vertical opening, i, an opening, i', through the outer cross-bar for the pad-screw,

and an under projecting unthreaded nib, i<sup>2</sup>, which passes loosely down into the housing and burr-piece. The opening i' is in an upward projection or tongue attached to the upper or outer cross-bar, and nib i<sup>2</sup> is attached to the inner or under cross-bar. The central opening, i, is of such dimension that the skirt and billet may be passed freely through it, though they are not otherwise secured thereto in any way. The pad-screw passes through the jockey, the skirt, the housing, and the burr-piece into the metallic burr h, in the usual manner, as well as through this metal attachment I. In Fig. 2 the parts are shown ready for the insertion of the pad-screw.

This construction results in the following among other benefits: The backward and forward movements of the skirt while in use do not affect the stitching by which the skirt may be united to the pad, because such movements are by this metallic attachment prevented from being transmitted to any point above it. The downward strain is the only strain which can be visited upon the pad-screw, and that is always in a direct longitudinal line, and the upper end of the pad-screw is helped to sustain said downward pull by the metallic attachment. The tighter the skirt is drawn the more firmly it holds the metallic attachment down upon the housing, and the greater the resistance by the attachment to any deflection of the pad-screw. The skirt may be united to the jockey by sewing, if thought desirable; but such is not necessary, as the only operation required in order to remove the skirt when it is not stitched to the pad is the taking out of the pad-screw, and it may be inserted with equal ease.

The main opening in the metallic piece I corresponds in shape and dimension with the skirt and billet, being only large enough to permit their free entrance therein, but not so large as to give those parts lateral play.

I reserve for a future application any claim to which I may be entitled upon the covering E and its manner of application.

I claim—

1. The combination, with the pad and check-hook, of the interposed and wide spreading metallic washer, having an arched under surface conforming to the pad, and a flat upper



surface, upon which the hook may be screwed, substantially as specified.

2. The combination, with the pad and skirt, of the metallic attachment I, having the under  
5 projecting nib on the lower cross-bar, and the upwardly-projecting tongue on the upper cross-bar provided with the aperture *i'*, through

which the pad-screw is passed, all substantially as and for the purpose set forth.

RICHARD J. WELLES.

Witnesses:

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