

M. W. POND.
Harness-Pads.

No. 140,385.

Patented July 1, 1873.

Fig. 1.

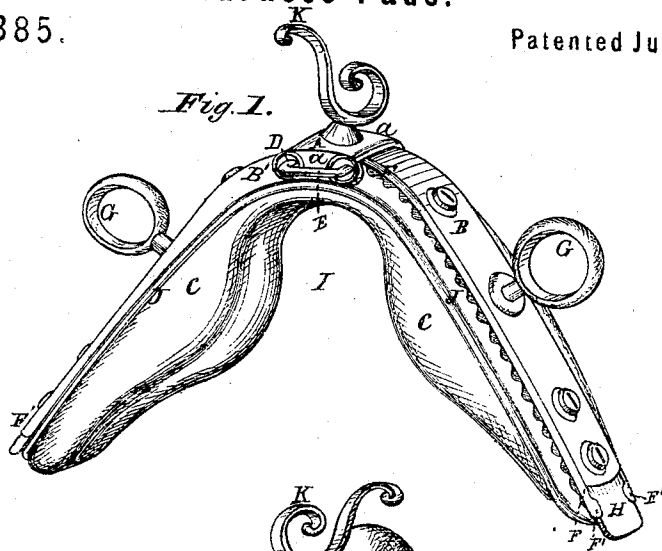


Fig. 6.

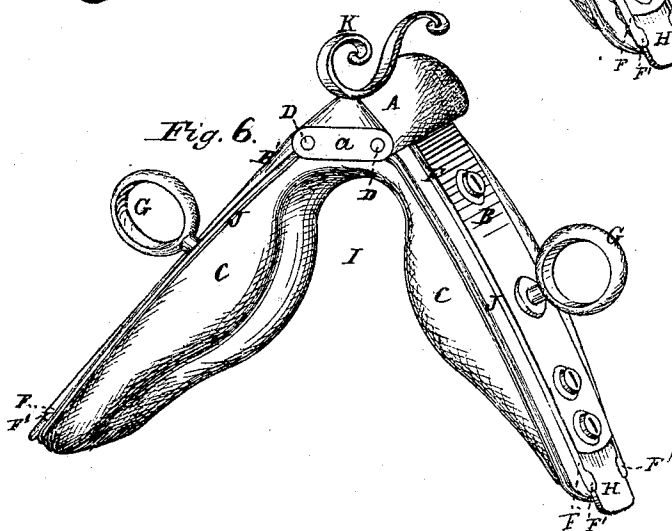
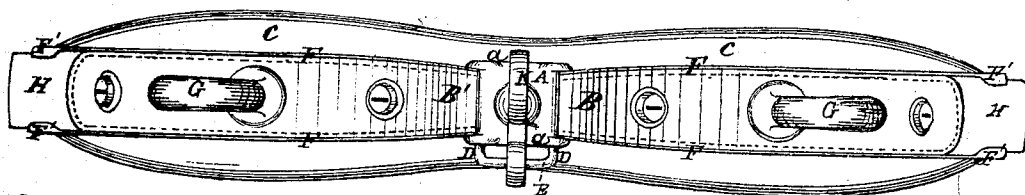


Fig. 2.



Witnesses:

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James M. Borden

Inventor:

Martin W. Pond

By his atty
M. Salazar

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Fig. 3.

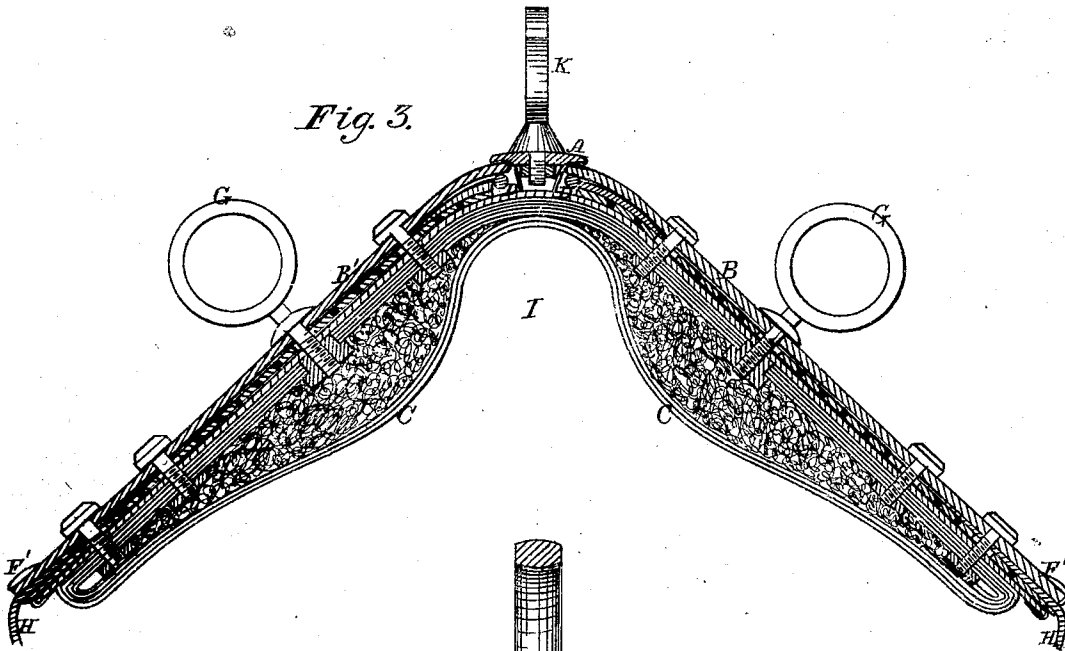
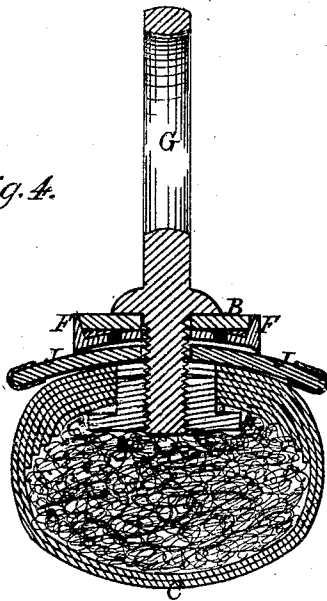


Fig. 4.



Witnesses:

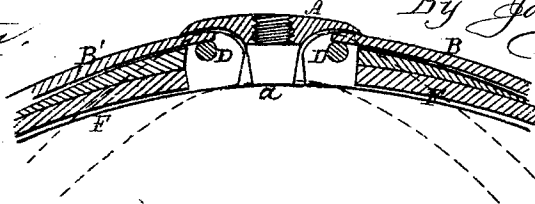
West Wagner,
Jr. D. Patten.

Inventor:

Martin W. Pond.

By Johnson, Klauke & Co.
His Attorneys.

Fig. 5.



UNITED STATES PATENT OFFICE.

MARTIN W. POND, OF ELYRIA, OHIO.

IMPROVEMENT IN HARNESS-PADS.

Specification forming part of Letters Patent No. **140,385**, dated July 1, 1873; application filed December 2, 1872.

CASE B.

To all whom it may concern:

Be it known that I, MARTIN W. POND, of Elyria, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Harness-Pads, of which the following is a specification:

The invention which forms the subject-matter of this patent is designed as an improvement of the harness-pad patented to me February 21, 1871; and my said invention consists in securing the flanged cap to the flanged plates by the same staple which forms the loop for the back-strap and the hinges of the joints; in providing the lower ends of the flanged plates with slight lips extending toward each other for the purpose of holding the skirt in place; in making the flanged plates concave, in their cross-section, to receive the bulge of the pads and allow the flange-bosses to fit closely upon the housing; and in the combination, in a coach-harness pad, of the several parts, constructed and arranged for use, as will be more fully herein-after described.

In the accompanying drawings—

Figure 1 represents a view, in perspective, of a harness-pad embracing my invention; Fig. 2, a top view of the same; Fig. 3, a vertical section; Fig. 4, a cross-section; Fig. 5, an enlarged section of the joint; and Fig. 6, a view, in perspective, of a gig-seat center having my improvement.

The harness-pad consists chiefly of a cap-plate, A, the pad-top B B', stuffed pads C, and the intervening housing, connected in any suitable way that will leave the parts free to flex at the center. To obtain the full benefit of the jointed center the pads C must be formed upon a block in such a manner as to furnish a fulcrum at or nearly perpendicular to the terrets G; the short arm of the lever of said pad being from the terret G to the center cap A, and the long arm thereof from the terret to the end of the flanged plate; while at the center cap the pad is greatly diminished in thickness to form a space, I, to receive the spine of the horse, and form an easy-flexing center. The pad-top is formed of the usual flanged plates F, to receive and

hold the back-band B B' and form a finish for its edges. These are united at their upper ends to the metallic cap A provided with flanges *aa* at its opposite ends, which embrace the ends of the flanged plates F and form the joints thereto, the flanges of the plates at this connection being made thicker and wider to afford the requisite strength.

By this arrangement and connection of the flanged cap A and plates F, I am enabled to use a back-band in two separate and distinct sections or parts B B', the adjacent ends whereof are received into and covered by the cap A, thereby interrupting or breaking the continuity of the band at its center, and relieve it of all tendency to break and crack at the point of the flexure, and admitting of the use of much smaller pieces of material than can be used in a continuous band, which, in the use of fine patent leather, is a matter of vital importance to the manufacturer, as it enables the use of pieces which might otherwise be thrown away.

The flanged stiffening-plates F are perforated throughout their length to lessen their weight; and in order to allow the base of the flanges to fit snugly upon the pad or housing J the plate F is made concave in its transverse section, as shown in Fig. 4, to receive and compensate for the swell or bulge of the pad and housing caused by the stuffing. The ends of the flanges F and the ends of the back-band B B', being inclosed and protected by the center cap A, are securely held in position to form the joint by means of a staple, D, passing through the flanges *aa* of the cap A and of the pad-plates F, and secured, while the bend of the staple projects from the cap to form the loop E for the back-strap; and in this way the loop serves to connect the parts and to form the center joints or hinges, as shown in Fig. 5. The ends of the back-band are thus left free to open and close beneath the cap, according to the extent of the flexure of the pad, not only thereby rendering said flexure more easy, but save the band from injury, which would, in time, destroy it. The check-hook K is secured to the cap-plate by a screw-shank and a nut upon the under side. A slight lip, F', is formed upon the lower end of each flange

F, extending toward each other just sufficient to lie over the edges of the skirt H and hold it in place. These lips F' are formed by slightly turning the edges of the flanges, and need only project about the one-sixth of an inch to serve the purpose intended. The stuffed portion of the pad is tufted at each side of their fulcrum-point for the purpose of maintaining the stuffing in its place, and consequently fixing a secure fulcrum. This feature is highly important, as without these fixed points the center joint could not perform its function.

Having described my invention, I claim—

1. The center cap and flanged plates A F, secured and held in position by the staple D, which forms the pad-joints, and the loop E for the back-strap, as described.

2. The flanged pad-plates F, having a concave form in their cross-section, as and for the purpose described.

3. The turned-over lips F' of the flanged plates F, as and for the purpose described.

4. The coach harness-pad having the jointed flanged cap A, flanged concave pad-plates F with turned lips F', and the back-band in two separate and distinct sections, B B', the several parts being constructed and arranged for use with a double fulcrum-pad, C C, substantially as described.

MARTIN W. POND.

Witnesses:

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R. C. KIBBY.