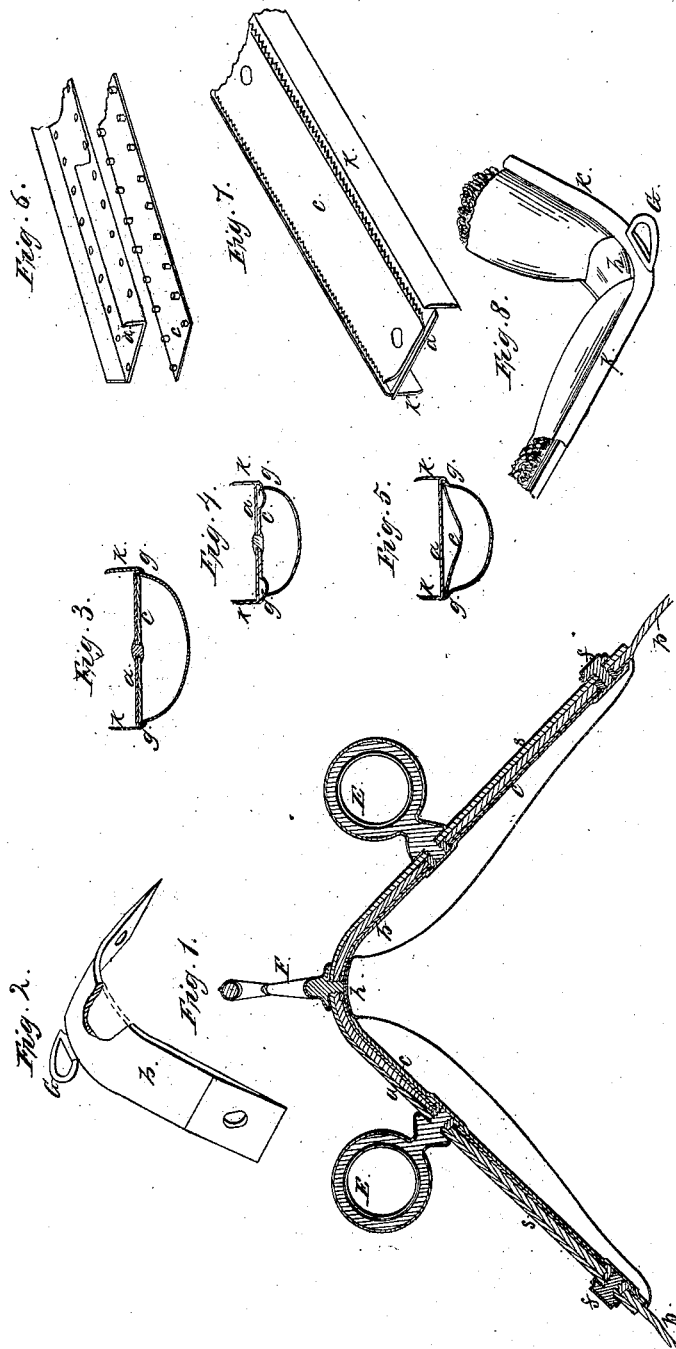


A. D. Brown,

Harness Saddle,

N^o 5822-

Patented Oct. 3, 1848.



UNITED STATES PATENT OFFICE.

A. D. BROWN, OF NEW YORK, N. Y.

HARNESS-SADDLE.

Specification of Letters Patent No. 5,822, dated October 3, 1848.

To all whom it may concern:

Be it known that I, ANDREW D. BROWN, of the city, county, and State of New York, have invented sundry new and useful Improvements in my "Improved Manner of Combining the Pad and Housing of Harnesses for Coaches, Buggies, &c."; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

Figure 1, is a longitudinal section through the center of a pad and housing, constructed and combined in accordance with my latest improvements, and Figs. 2, 3, 4, 5, 7, 8, represent in detail, the various parts of the same. Fig. 6 represents, in perspective, a modification of the housing and fastening plates.

Similar letters indicate like parts in all the figures.

The nature of my improvements consist in forming the housing plate *a*, of sheet metal, having flanches—curved inward—at its edges, projecting above and below the sides of the plate; and in securing the edges of the pad leather under the lower flanches by means of metallic fastening plates with notched edges, as hereinafter set forth; and also in combining with the housing and fastening plates, a cast arch piece *b*, for imparting to the same the requisite degree of stiffness.

The housing plate *a*, is struck into the proper form by means of dies, in a manner well known to workers in sheet metal. The upper flanches *k*, *k*, and the under flanges are curved inward at their extremities, as represented in the drawings. The edges of the fastening plates *c*, *c*, are notched, and the plates are struck into the form represented in Figs. 4 and 7. The fastening plates *c*, *c*, are secured to the under side of the housing plate by rivets, leaving just space enough between the notched edges of the fastening plates and the extremities of the flanches *g*, *g*, to pass the edges of the pad leather between them, as shown in Fig. 4.

After the edges of the pad leather have been inserted between the fastening plates *c*, *c*, and the flanches *g*, *g*, the curves are forced out of the fastening plates; by which means their notched edges are driven into the recesses under the flanches *g*, *g*,—as rep-

resented in Fig. 3:—the teeth penetrating the pad leather and holding it securely.

The edges of the fastening plates *c*, *c*, may be either straight or notched; I find that notches or saw edges however, hold the pad leather much more securely. If preferred, the fastening plates may be curved into the form represented in Fig. 5, and secured to the housing plate by forcing them down upon the same, and driving their edges, (notched or straight,) under the flanches *g*, *g*;—at the same time securing the pad leather in the recesses under the flanches.

The nuts into which the terrets *E*, *E*, and the screws *f*, *f*, are screwed, pass up through the housing plate *a*, and have flanches projecting from their lower ends, which are riveted to the housing plates. The stiffening arch piece *b*, passes over the crown of the housing plate *a*, its extremities extending a short distance below the nuts which hold the terrets.

A recess is cast in the under side of the crown of the arch piece, which receives the nut that holds the check hook *F*; the crupper loop *G*, is cast in one piece with the arch piece.

The arch piece corresponds in thickness with the suspension straps *p*, *p*. The extremities of the arch piece are beveled off, as are also the upper ends of the straps *p*, *p*, and are united to each other by a scarf joint as represented in Fig. 1; the terret nuts passing through and securely confining the same. The housing leather *s*, is fitted between the flanches *k*, *k*,—over the arch piece *b*, and the straps *p*, *p*;—and is secured by the curved edges of the flanches, the check hook *F*, the terrets, *E*, *E*, and the screws *f*, *f*. An aperture is cut out of the crown of the housing plate *a*, through which the nut that holds the check hook *F*, is passed up into the recess in the under side of the arch piece *b*.

The upper ends of the pieces of leather that form the under side of each pad are secured in close proximity to the housing plate *a*, by means of the transverse plate *h*,—which is made fast under the arch of the housing plate by having its ends forced outward into the recesses under the flanches *g*, *g*; as represented in Fig. 8.

Fig. 6, represents a modification in which I dispense with the flanches *g*, *g*, on the

under side of the edges of the housing plate *a*, and confine the fastening plates *c, c*, to the housing plate *a*, by means of rows of rivets near each edge of the fastening plates, 5 passing through apertures in the housing plate; the edges of the pad leathers being secured between the edges of the fastening plates and the housing plates.

Having thus fully described my improvements in the manner of constructing and combining the pads and housings of harnesses, for coaches, buggies, &c., what I claim therein as new, and desire to secure by Letters Patent, is—

15 1. The peculiar form of the sheet metal housing plate *a*, caused by the addition of the lower flanches, (or ledges,) *g, g*, constructed substantially in the manner herein set forth.

2. In also claim the securing the pieces of 20 leather forming the under side of the pads, with the housing plate forming the upper side of the same, by means of the fastening plates *c, c*, with notched (or plain) edges, arranged and combined with the flanches 25 *g, g*, substantially in the manner herein set forth.

3. I also claim the combination of the housing plate and pads combined in the manner herein described, with the stiffening 30 arch piece *b*, the straps *p, p*, and the housing leather *s*, substantially in the manner herein set forth.

ANDREW D. BROWN.

Witnesses:

Z. C. ROBBINS,
GUY C. HUMPHRIES.