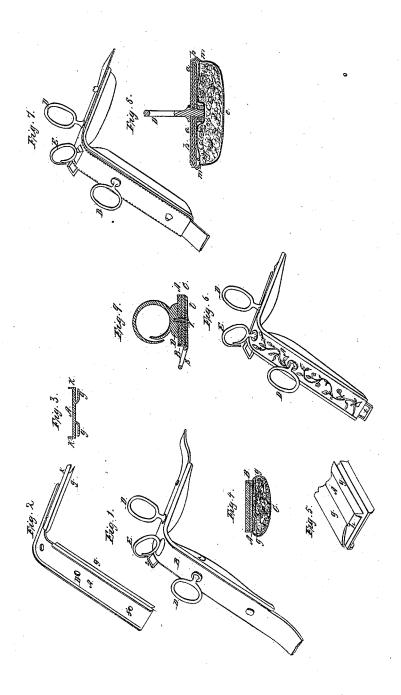
A. D. BROWN. Harness Saddle.

No. 5,408.

Patented Dec. 28, 1847.



N. PETERS, Photo-Lithographer, Washington, D C.

## UNITED STATES PATENT OFFICE.

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

## HARNESS-SADDLE.

Specification of Letters Patent No. 5,408, dated December 28, 1847.

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 a new and Improved Manner 5 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, in which—

Figure 1, is a perspective view of a housing, plate, and pad, combined by my improved method; Fig. 2, a perspective view of the metallic housing plate detached, and Fig. 3, a transverse section of the same; Fig. 4, is a transverse section of the housing, plate, and pad combined, and Fig. 5, is a perspective view showing the under side of one end of the housing plate. Fig. 6, is a perspective view of an ornamental housing plate, combined with a pad, with which no housing or covering of leather is made use of. Fig. 7, is a perspective view of a housing and pad combined in the usual manner. Fig. 8, is a transverse section of the same.

My invention consists in giving the metallic housing plate A, such a shape that the pad can be connected to the same with-30 out the use of nails or screws; or by sewing or stitching, and in such a manner that the housing plate itself shall constitute the upper side of the pad. The peculiar shape of the housing plate A, also enables me to se-35 cure a leather cover, or housing, to the same without the aid of nails or stitching. The housing plate may be made of any suitable malleable metal. I generally make it of cast iron, and render it malleable in the usual manner. Figs. 2, 3, and 5, represent the form of the housing plate A, and appendages; g, g, are clamp pieces, cast with, or riveted to the under side of the plate A, the edges of which are parallel with the 45 edges of the plate. Between the lower ends of the clamp pieces g, g, there are short clamp pieces h, (Fig. 5.) k, k, are vertical flanches rising from each edge of the plate

upward, as represented in Figs. 3, and 5.

The edges of the piece of leather C, forming the under side of the pad, are passed leather cap e, that incloses the same. Simi-

A. After the housing plate and clamp

edges of the clamp pieces are slightly turned

50 pieces have been rendered malleable, the

under the clamp pieces g, g, and secured 55 by forcing the clamp pieces upon the same; the pad is then stuffed with hair, or other suitable material, after which the lower ends of the pad leather are passed under the end clamp pieces h, h, and secured by forcing 60 them down upon the same. The central portion of the pad leather C, is secured to the under side of the crown of the housing plate by a metallic strap t, to which the crupper loop s, is connected; a screw v, passing up through the strap t, the pad leather C, housing plate A, and housing leather B, enters the check hook E, and securely fastens them to each other, as represented in Fig. 9.

Fig. 9.

The housing leather B, is closely fitted to between the 70 the upper side of the plate A, between the flanches k, k, and secured by the check hook E, terrets D, D, and screws f, f. The terrets D, D, and screws f, f, pass into female screws 75 formed in apertures D', and f', in the plate A. The flanges k, k, serve not only to secure the sides of the housing leather B, and prevent moisture from getting under the same, but also to give stiffness to the housing plate, 80 by which it can be made lighter. I sometimes make an ornamental housing plate, as represented in Fig. 6, or make it plain with beading upon the edges, or with the entire plate fluted, and gilded or silver 85 plated; or of any other ornamental form, in which case, I dispense with the leather covering, or housing. It will readily be perceived that by my improved combination of the housing plate and pad, that the pad is 90 rendered perfectly water proof, consequently its durability is greatly increased, and it will preserve its perfect form for a great length of time.

To enable others not familiar with harness making to estimate and comprehend the merits of my invention, I have in Figs. 7 and 8, represented the ordinary manner of constructing and combining the pads and housing plates. a, is the metallic housing 100 plate, incased in the two pieces of leather b, b, united at their edges by stitching; the pad casing is composed of the two pieces of leather m, and c, stitched to each other at their edges; d, is a nut which receives one of 105 the terrets D. The nut d, is secured to the under side of the back m, of the pad, by a leather gap a, that incloses the same a.

lar nuts are secured in like manner to the back of the pad for the reception of the screws f, f.

The covered housing plate is secured to the 5 pad by the terrets and screws f, f, as represented. When new, the edges of the pad fit closely to the housing, but after it has been used for some time, the edges of the pad begin to sag, as shown in Fig. 8, water 10 gets in between the housing and pad, and entering the pad, rots the leather; causing the fastenings of the terrets to give way, when all beauty and symmetry of form and proportion is destroyed, and speedy destruc-15 tion ensues. It is hardly necessary therefore to say, that economy, beauty, and durability all result from my improved manner of constructing and combining the housings and pads for harnesses. But a little over 20 half the leather is used in the construction of my improved combined pad and housing, that there is in the construction of the pad

and housing in universal use; and the difference in the labor of manufacturing is very greatly in my favor.

What I claim as my invention and desire

to secure by Letters Patent is—

1. The combining the clamp pieces g, g, and h, with the housing plate A, for the purpose of securing the pad leather C, to 30 the same, and causing the housing plate to form the upper side of the pad, substantially in the manner and for the purpose herein set forth.

2. I also claim the manner of combining 35 the housing leather B, with the plate A, by means of the vertical flanches k, k, the terrets D, D, and screws f, f, substantially as

herein set forth.

## ANDREW D. BROWN.

Witnesses:
Z. C. Robbins,
Guy C. Humphries.