J. M. GWINNELL.

Harness-Saddle.

No. 198,608. Patented Dec. 25, 1877.

Fig. 1.

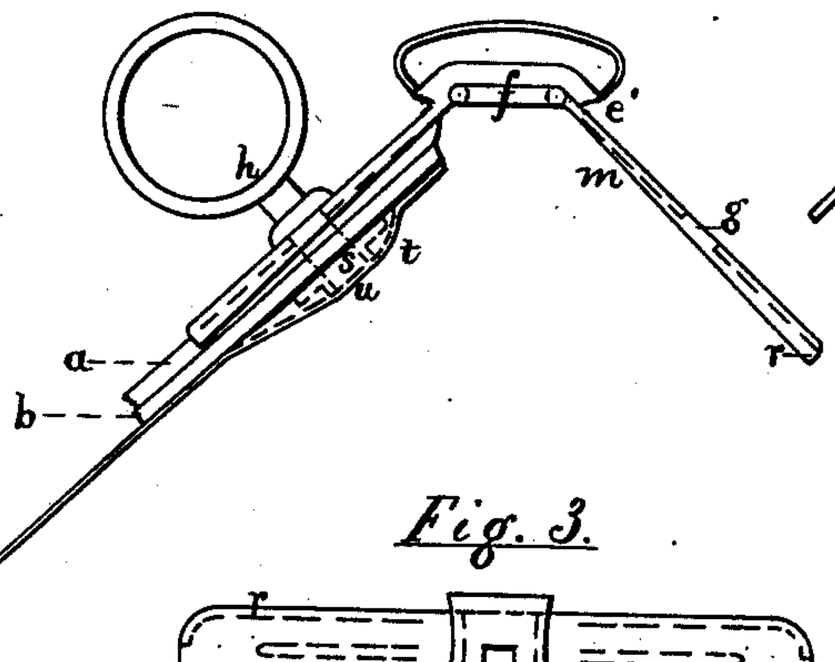


Fig. 2.

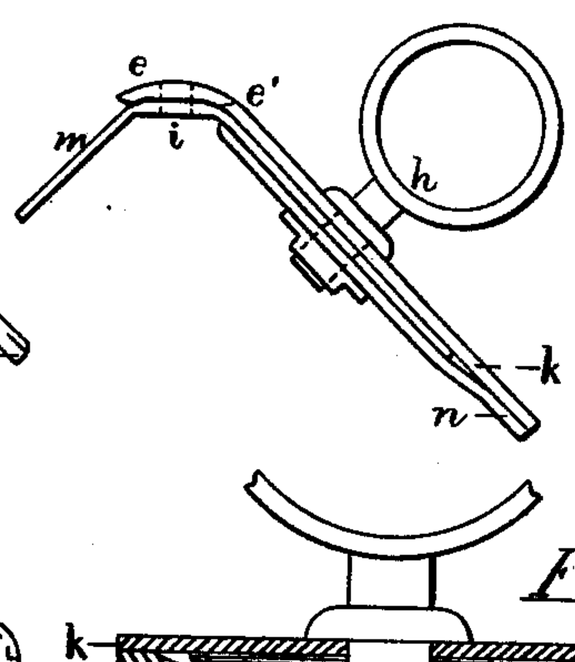


Fig. 3.

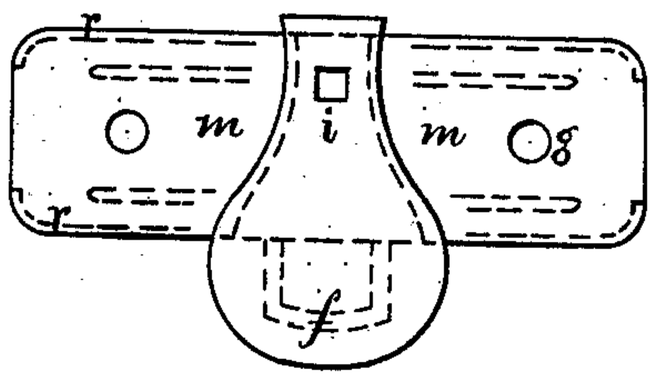


Fig. 4.

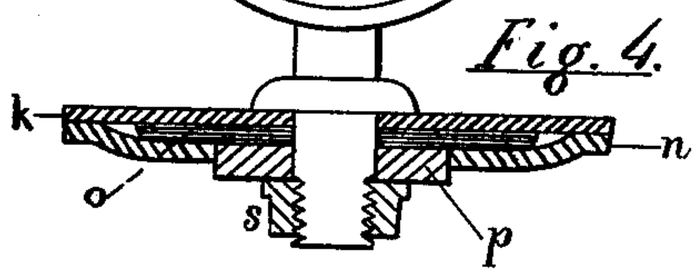
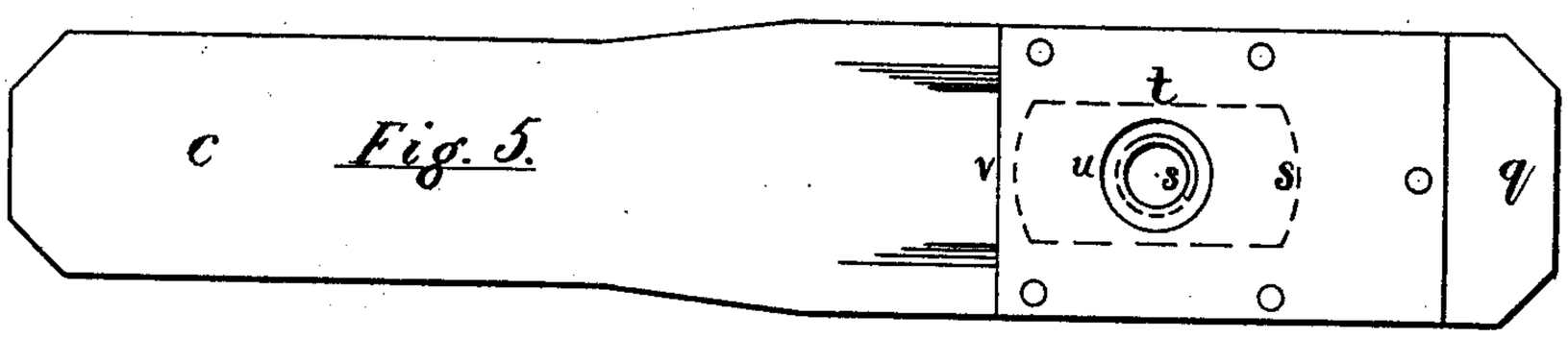


Fig. 5.



Attest:

I. C. Drake

F. J. Imlay

Inventor.

John M. Gwinnell.

By C. Drake, Atty.

UNITED STATES PATENT OFFICE.

JOHN M. GWINNELL, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN HARNESS-SADDLES.

Specification forming part of Letters Patent No. **198,608,** dated December 25, 1877; application filed November 12, 1877.

To all whom it may concern:

Be it known that I, JOHN M. GWINNELL, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Saddle-Trees; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 thereon, which form a part of this specification.

My invention relates to certain improvements in saddle-trees and their attachments, the nature of which will be fully understood from the accompanying drawings, in which—

Figure 1 is a rear view of my improved tree provided with a back-band at *a*, flap at *b*, and a sheet-iron stiffener at *c*. Fig. 2 is a front view of my improved tree provided with leather jockey at *k*, a section of which is shown in Fig. 4, and a plan of the tree alone in Fig. 3. Fig. 5 is a plan of my improved stiffener.

My improvement in saddle-trees consists in casting a raised seat or cantle upon a saddle-tree, with an undercut edge to receive and retain the edge of the leather jockey.

It further consists in providing a leather jockey of special construction to fit against the raised seat, and also a metal stiffener adapted to reach from the terret to the back-band loop, and fastened by riveting or otherwise to the under side of flap.

My improved tree is constructed, as shown in Figs. 1, 2, and 3, with raised seat *e* and crupper-loop *f* cast on the tree, and perforated at *g* for the terrets *h*, and at *i* for the rein-hook. The projection of the seat above the tree *m* is clearly shown in Figs. 1 and 2, a leather jockey, *k*, being fitted onto the tree in Fig. 2, and the seat being made of the right height by an undercut shoulder at *e'*, to come flush with the surface of the leather jockey *k*. The leather edge, fitting beneath the shoulder *e'*, is held in place and prevented from curling up.

The peculiar construction of this jockey is fully shown in the section at Fig. 4, where the tree is cut through at the center of the terret-hole, and shaded with longitudinal lines, and marked with the letter *o*. The jockey *k* is constructed with a strip of leather, *n n*, stitched or otherwise secured under each side, with a space wide enough and deep enough between them to admit the back-band *p*, the sides of the tree being inserted between the jockey and side strips *n n*. At the lower end of each strip *n* it is rounded off to match the corners of the jockey, and stitched to the same around the corner.

When designed to be used with the leather jockey, the sides of the seat should be raised to correspond with the thickness of the leather, and the latter be neatly fitted against the raised seat on each side, and secured with the ordinary tuft-nails or other appropriate fastening. The flanges *r r* on the outer edges of the tree, as shown in Figs. 1 and 3, should also be dispensed with in this case.

When my improved tree is meant to be used without a leather jockey, the seat should be but slightly raised above the sides, the shape, however, of the old detached seat being preserved by making the patterns for the castings in two parts, and producing the angular groove at *e'* by molding the patterns in a three-part flask, or laying a sand core or iron chill in the mold at each side of the seat, to produce the angular groove, as shown at *e'*.

My improved stiffener is shown in plan in Fig. 5, and in edge view in Fig. 1. It consists of a strip of sheet metal or malleable iron, either of uniform width its entire length or wider at the top *q*, to fit trees of various sizes, and is provided with a cavity or pocket for the nut *s*, formed by a cover, *v*, over a gradual depression in the upper end of the strip, the cover *v* being detached from the strip at the lower end to form an opening, by which the terret-nut *s* is introduced into the cavity. The stiffener being secured to the under side of the flap, a slit or aperture is made in the flap to admit the nut *s* to the pocket in the stiffener, and holes for the terret-shank are made through the flap and both sides of the pocket *t*, as shown at *u* in Fig. 5. The terret also passes through the back-band *a*, which is laid on outside of the flap, Fig. 1, and the stuffing of the saddle is applied directly inside or underneath the stiffener *c* at *t*.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The improved tree, constructed, as shown and described, with raised seat or depressed sides, undercut shoulder *e'*, crupper-loop, and open back, all cast in one piece, in the manner specified.

2. The combination, with a saddle-tree cast in one piece with raised seat, and having an undercut shoulder, of the jockey fitted flush against the seat, and furnished at each side with a strip of leather, the space between them forming a groove for the reception of the back-band, and embracing the sides of the tree, in the manner set forth.

3. The combination of the stiffener, constructed as described, with the saddle-tree, flap, back-band, and terret, all arranged in the manner set forth.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

JOHN M. GWINNELL.

Witnesses:
OLIVER DRAKE,
P. J. INSLEE.