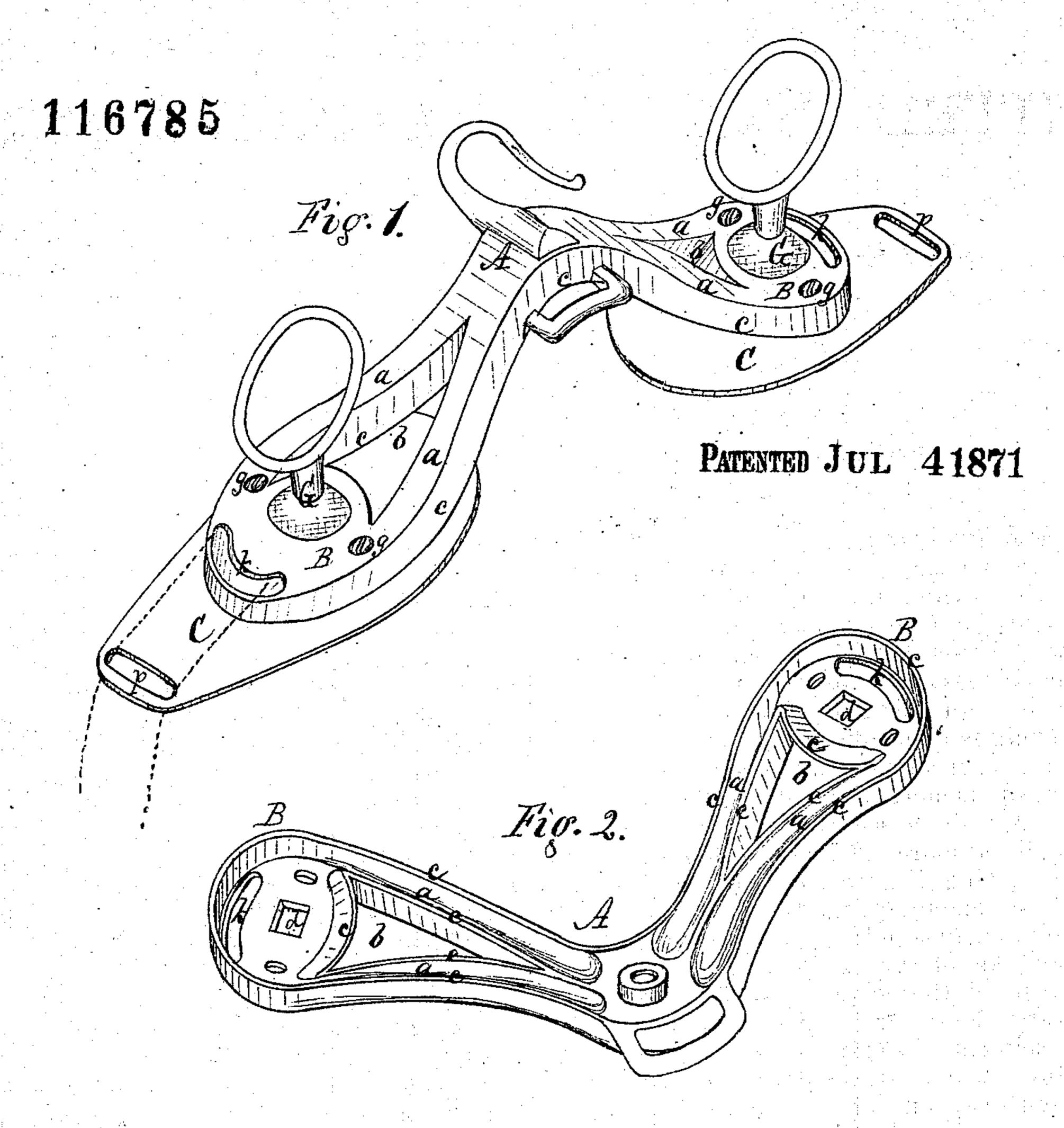
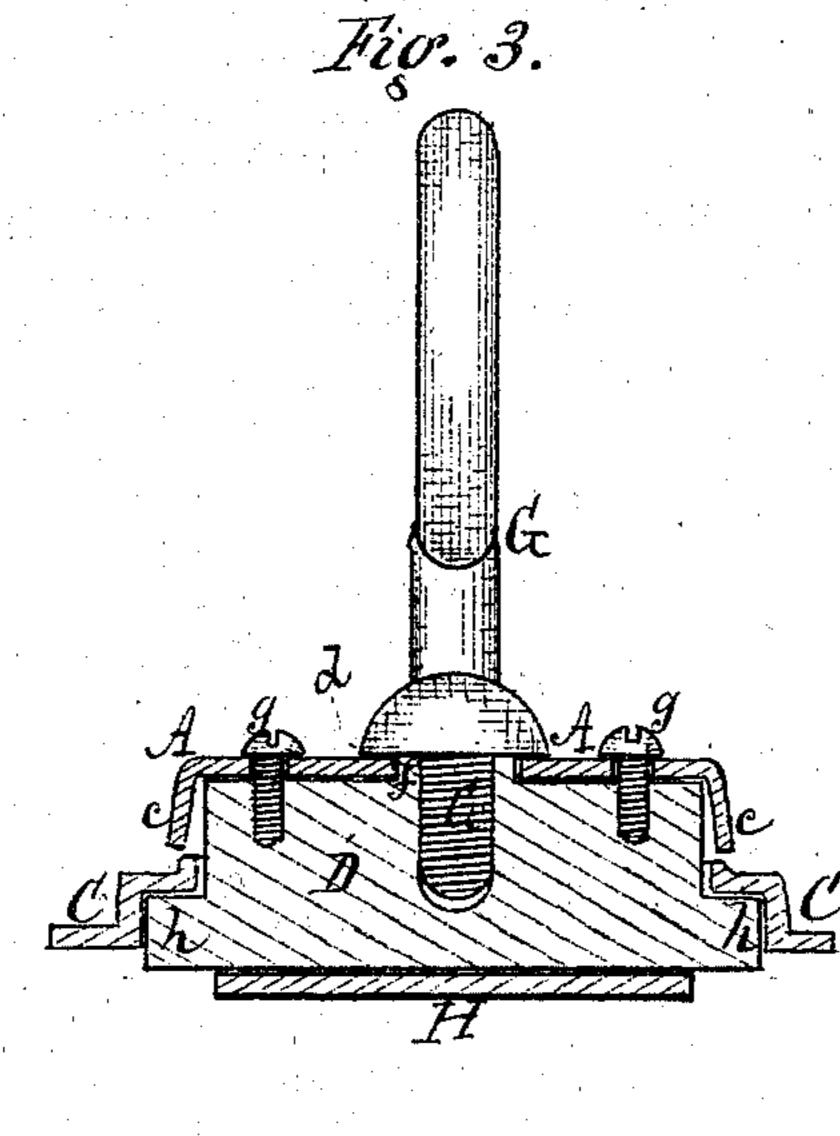
Cteo. Woods._ Saddle. Tree.





Nitnesses. Arche Baine L. F. Organi

Mun Sun 1-1871

Inventor. Sy f. Fraser & Co., Rochester, en

UNITED STATES PATENT OFFICE.

GEORGE WOODS, OF ST. CATHARINE'S, CANADA.

IMPROVEMENT IN SADDLE-TREES.

Specification forming part of Letters Patent No. 116,785, dated July 4, 1871.

To all whom it may concern:

Be it known that I, George Woods, of St. Catharine's, in the county of Lincoln and Province of Ontario, Canada, have invented a certain new and useful Improvement in Adjusting-Trees for Harness-Saddles, to be called or known as "Woods' Improved Adjusting-Tree," of which the following is a specification:

This invention consists in the construction and arrangement as hereinafter described, whereby greater strength is secured and the pads are made to adjust more easily to the horse's back.

In the drawing, Figure 1 is a perspective view of my improvement. Fig. 2 is a similar view of the scroll-yoke inverted; Fig. 3, a section through

the axis of one of the pad-plates.

A represents the yoke or skeleton, which I denominate the "scroll-yoke." It is usually made of cast-iron. Heretofore it has been made with a single bar on each side of the center, connecting with the outer or pad-plate bearings B B. I form it with two bars or branches, a a, on each side, which leave a space, b, in the center. I also construct each bar with vertical flanges cv', as clearly shown in Fig. 2. The outer flange extends all around the yoke. The advantage of this construction is that greater strength is insured, and there is less liability of the spreading or flattening of the yoke under long action and usage than where a single bar is used. This effect is not only owing to the double or branched form of the bars, but also to the flanges c c'. C C represent the pad-plates, which are situated under the bearings B B of the yoke. They are attached as follows: A square hole, d, is formed in the center of each bearing, in which rests a corresponding lug, f, of a block, D. The bearing is attached to the block by the terret G screwing down therein, and also by side screws g g, which clamp the parts firmly together. The block is provided with two journals, h h, which rest in suitable bearings or sockets of the yoke, and a clamp-spring, H, at the bottom, holds the block up firmly in place. The bottom of the

block resting on the spring may be made sufficiently angular or projecting to give a slight degree of elasticity from the pressure of the spring thereon. This construction is clearly shown in Fig. 3. k are holes in the ends of the yokebearings, and p p similar holes in the ends of the pad-plates.

Heretofore the straps from the harness have been attached to the ends of the pad-plates. I attach them to the ends of the yoke instead. They may pass up through the holes in the ends of the pad-plates and play freely therein, thereby also allowing the pad-plates a free action.

By the construction and arrangement before described I secure a better attachment of the pad-plates to the yoke, and also give a freer action to the pads. The screws, in addition to the terret, produce a firmer hold, so that the blocks or pivot-irons are perfectly stiff. The journals and spring at the bottom give the necessary turning action and elasticity for the plates to adapt themselves to the horse's back. The attachment of the harness to the ends of the yoke instead of to the pad-plates, as heretofore, is also of much importance, as it allows a perfectly free action of the pads, and prevents galling or rubbing of the horse's back.

What I claim, and desire to secure by Letters

Patent, is—

The scroll-yoke constructed with the branching arms a a and flanges c c, the pad-plates C C, and the blocks D D attached by the screws g g and springs H H, said yoke and pad-plates having the openings k k for the attachment of the harness direct to the yoke, the whole arranged as described, and operating in the manner and for the purpose specified.

In testimony whereof I have hereunto set my

hand this 8th day of March, 1871.

GEORGE WOODS.

Witnesses:
R. F. Osgood,
ARCHD. BAINE.