

G. H. DENNIS.
Harness-Pad Plates.

No. 149,379.

Patented April 7, 1874.

FIG. 4

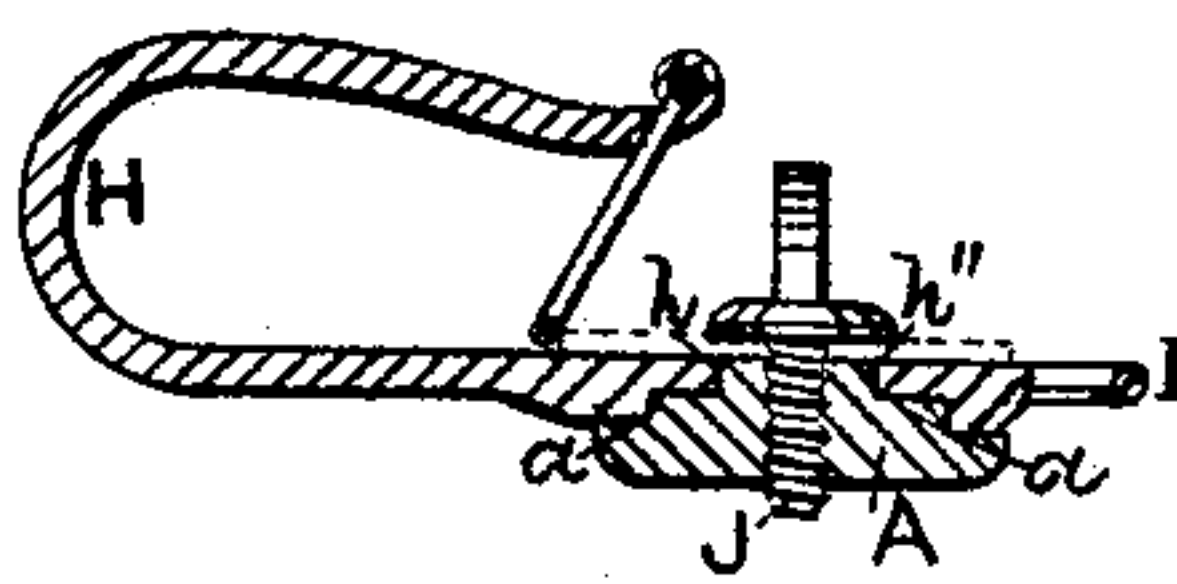


FIG. 3

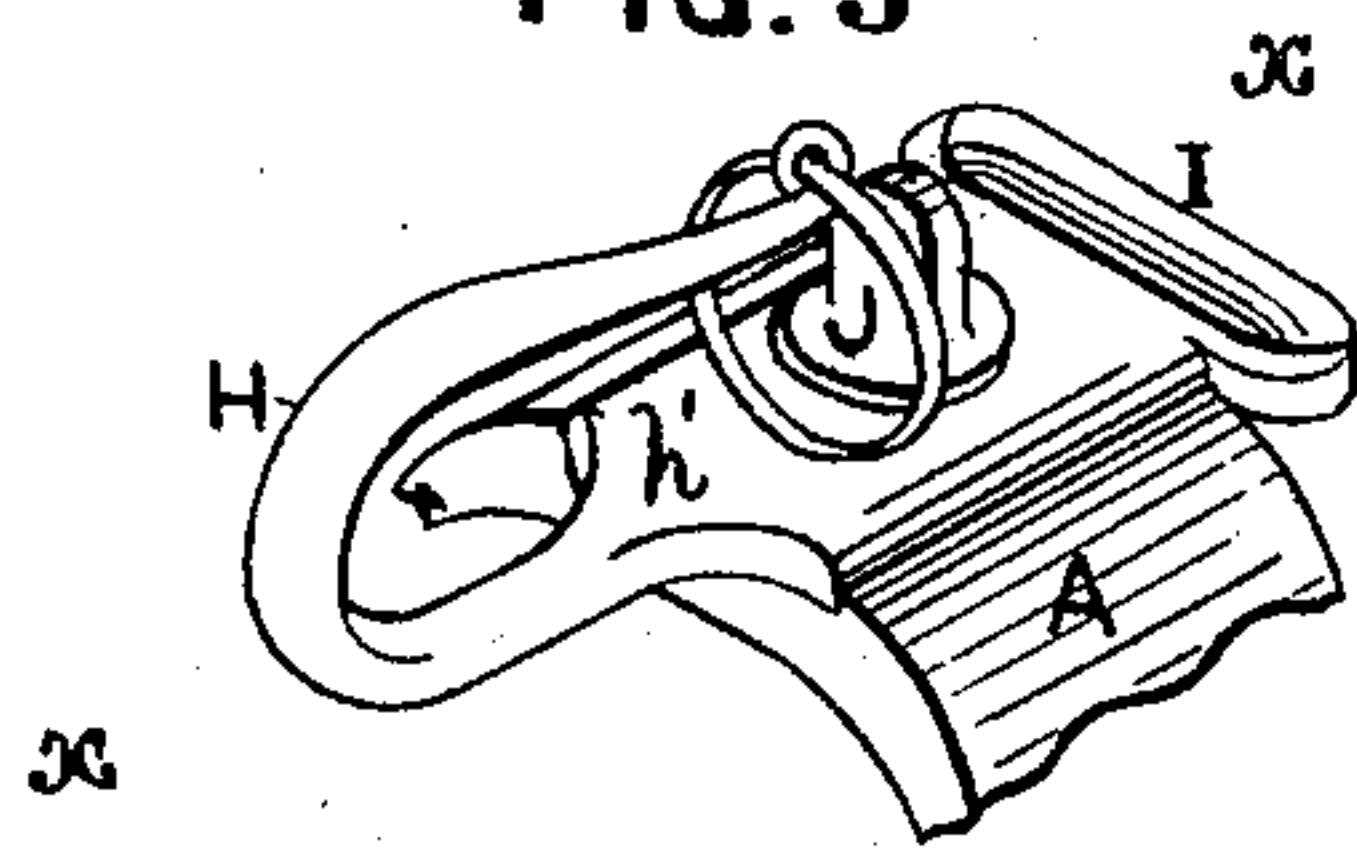


FIG. 2

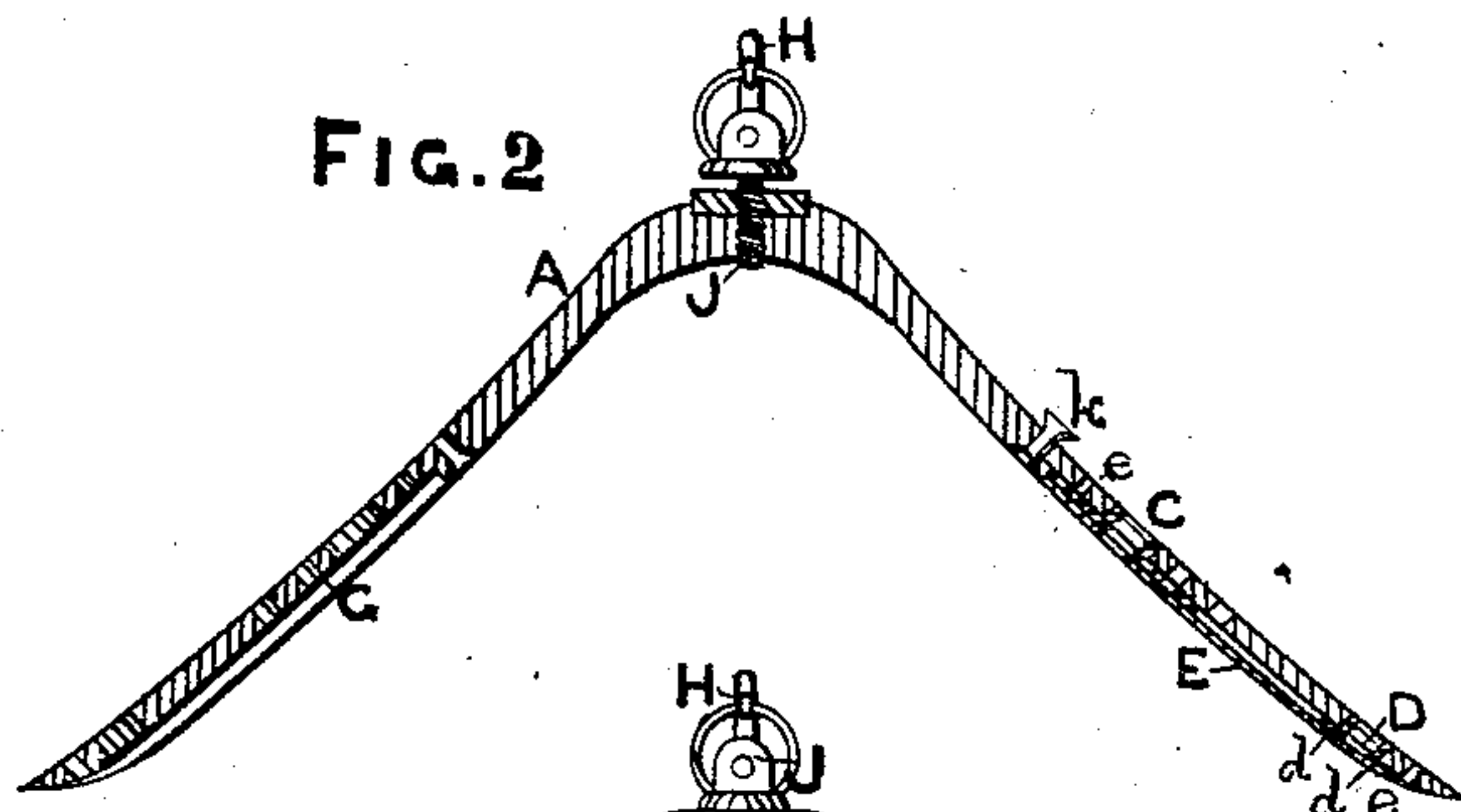
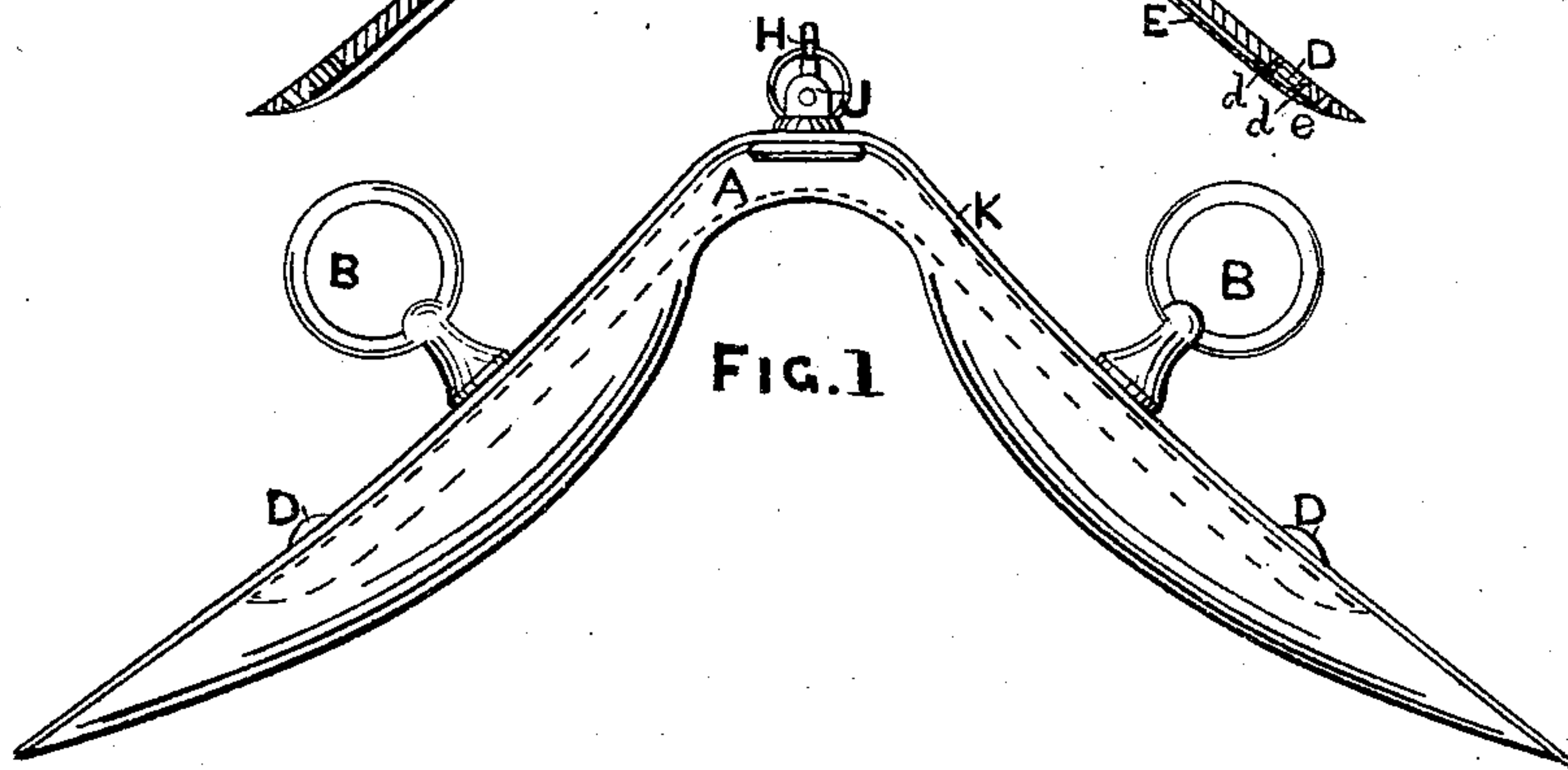


FIG. 1



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE H. DENNIS, OF MONMOUTH, ILLINOIS.

IMPROVEMENT IN HARNESS-PAD PLATES.

Specification forming part of Letters Patent No. 149,379, dated April 7, 1874; application filed February 7, 1874.

To all whom it may concern:

Be it known that I, GEORGE H. DENNIS, of Monmouth, county of Warren and State of Illinois, have invented certain Improvements in Harness-Pad Plates, of which the following is a specification:

The nature of my invention relates to improvements in harness-pad plates; and the invention consists, first, in constructing the pad-plates with grooves or recesses in their under sides deep enough to receive the terret-nut, the pad-screw nut, and a thin metallic plate for securing them in position; and, secondly, in an improved method of fastening the water-hook and crupper-loop to the pad-plate, all as hereinafter fully described.

In the accompanying drawings, Figure 1 is a view of a harness-pad formed over my improved pad-plate. Fig. 2 is a longitudinal vertical sectional view of the pad-plate. Fig. 3 is a perspective view of the upper part of the pad-plate, showing the crupper-loop and water-hook in position; and Fig. 4 is a cross-section of Fig. 3, on line *x x*.

Referring to the parts by letters, letter A represents the pad-plate, of cast-iron, malleable iron, or any other suitable material. B B are the terrets, and C C the nuts into which the terret-shanks are screwed to secure them in place. D D are the pad-screws, or finishing-screws, and *d d* the pad-screw nuts. E E are thin metallic plates, secured to the plate A by screw-bolts *e e*. G G are grooves or recesses, one in each end and under side of the said plates, and deep enough to receive the nuts *c* and *d* and plate E. H is the water-hook, and I the crupper-loop, formed in one piece, as shown at Figs. 3 and 4, with a rectangular hole, *h*, through their connecting-plate *h'*, which fits over a corresponding projection, *h''*, from the upper and central part of the plate A. The plate *h'* has a central groove across its under side, the shoulders at each side of which fit into corresponding rabbets *a a* in the edges of the upper part of the plate A. J is a screw-bolt, the shank of which passes through the plates *h'* and A, and the head of which rests upon the leather on the

upper side of the plate *h'*, holding it securely upon its seat on the plate A, the formation of which is such, as will be plainly seen, as will give the fullest strength to the connection of the plate *h'* to the plate A for the size of the parts where the connection is made—a connection, also, which will resist strain from any direction which may occur. The terret-nuts C being seated in the under side of the plate A will enable them to resist greater force side-wise against the terrets without being loosed from their fastenings, and will make them stronger in every respect. The nuts C and *d* and plates E should be of such thickness that when put in position the outer surface of the plate E will be flush with the surface of the plate A, and completely fill the upper part of the groove G, producing an even surface on the under side of the plate A. When the shank of the terret becomes broken in the nut C, as will sometimes happen, or when it is necessary to replace one of the nuts C with a new one, access may be had to said nuts C by simply removing the tacking of the lower padding to what is usually known as the nut-piece K, and drawing back the said padding slightly, and then turning the plate E around so as to uncover the desired nut; while in the ordinary construction, in order to get access to the nuts C, the nut-piece K must be released from the plate A by cutting the rivets *k k*, which secure it thereto.

I claim—

1. The harness-pad plate A, having the grooves G G to receive the terret and pad-screw nuts therein, said grooves covered by a thin metallic plate flush with the face or under side of the plate A, substantially as and for the purpose set forth.

2. In combination with the plate A, having the projection *h''* and rabbets *a a*, the combined water-hook and crupper-loop H I, having the rectangular hole *h* and groove *h'*, for connection, in the manner specified.

GEORGE H. DENNIS.

Witnesses:

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