(No Model.)

H. T. RICHMOND.

ANTI-FRICTION PAD TREE.

No. 315,444. Patented Apr. 7, 1885.

Fig. 1.

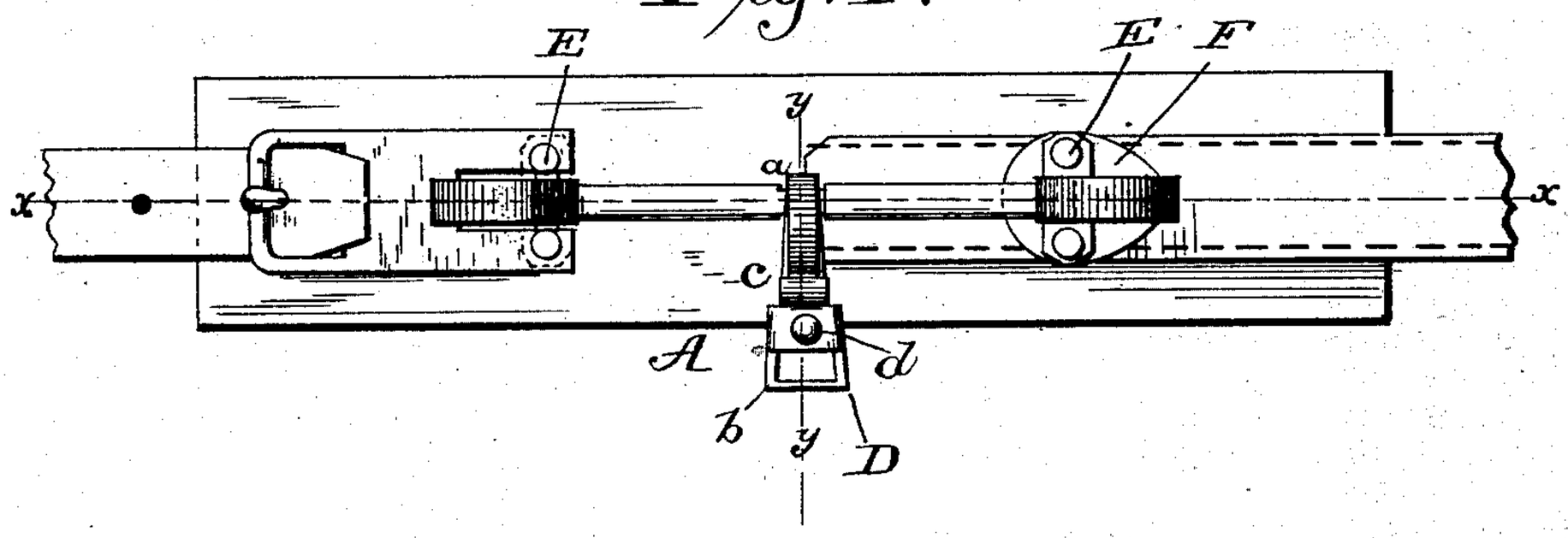


Fig. 2.

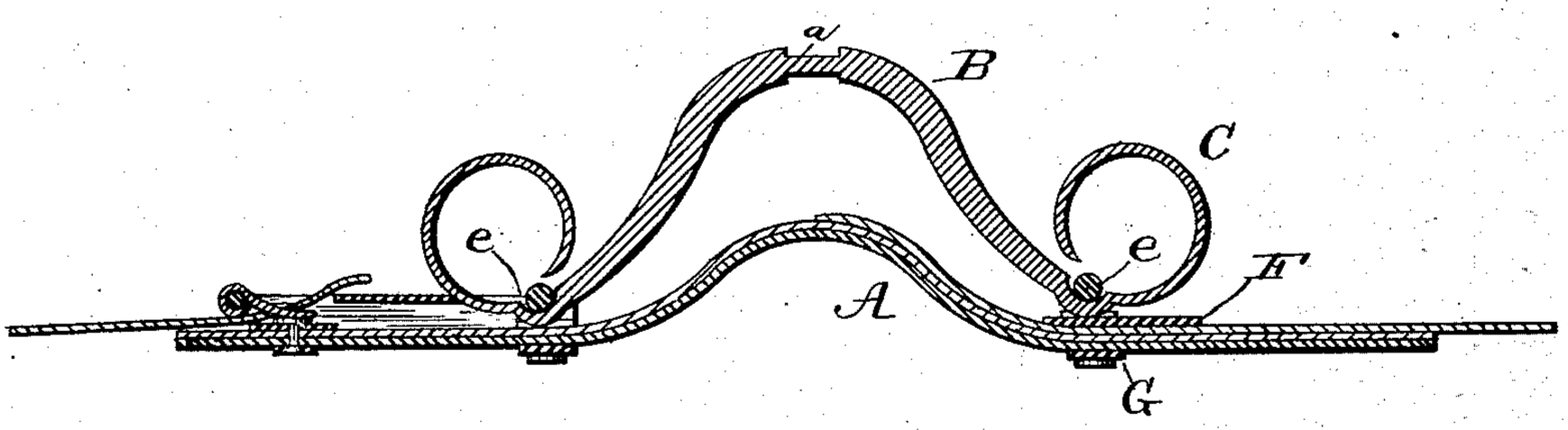


Fig. 3.

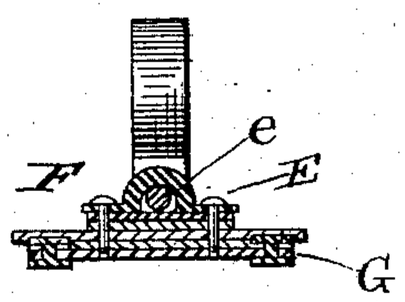
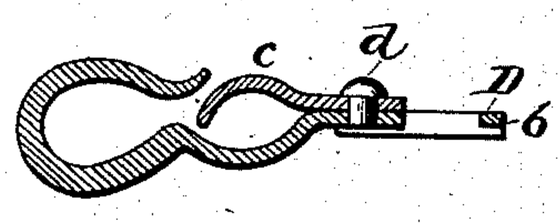


Fig. 4.



WITNESSES

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ANTI-FRICTION PAD-TREE.

SPECIFICATION forming part of Letters Patent No. 315,444, dated April 7, 1885.

Application filed January 31, 1885. (No model.)

To all whom it may concern:

Be it known that I, HENRY T. RICHMOND, a citizen of the United States, residing in the town of Malvern, county of Mills and State of Iowa, have invented a new and useful Improvement in Anti-Friction Pad-Trees, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a plan view of a pad-tree embodying my invention. Fig. 2 is a central longitudinal section thereof. Fig. 3 is a sectional view on line *x x*, Fig. 1, the check-hook being omitted. Fig. 4 is a sectional view of the check-hook on line *y y*, Fig. 1.

Similar letters refer to similar parts throughout the several views.

My invention relates to improvements in anti-frictional pad-trees; and it consists in the construction and arrangement of certain parts thereof hereinafter fully described, whereby the friction or rubbing of the pad on the back of the horse caused by the motion of the head while checked up is prevented.

Referring to the drawings, A represents a pad constructed of leather and in the usual manner.

B represents a yoke formed of metal and of a shape similar to that shown in Fig. 2 of the drawings, having terrets C integral therewith. The upper portion or bend of the yoke is recessed at *a*, so as to secure the check-hook D. The said check-hook D is composed of two parts, *b* and *c*, pivotally connected at *d*, so as to permit a lateral play of one part on the other. The said part *b* is provided with a loop, to which may be secured the back-strap. The yoke B is also cut away at *e e*, so as to form journals.

E represents a link spanning or embracing the journal *e* of the yoke, and is secured to the pad A by screws passing through the ends thereof, and the bearing-plate F (which may be of any suitable shape) to the screw-plate G on the under side of the pad, the said screw-plate being formed of metal of any proper shape, and secured to the pad by being riveted thereto, the upper ends of said rivets being on the inside of the said pad.

By the device herein described the yoke B has an oscillating motion forward and backward on the hinges or pivoted connections formed by the parts *e* of the yoke, links E, and bearing-plates F, while the pivotal connection of the parts *b* and *c* of the check-hook D permits a lateral play of the check-rein without transmitting motion to the yoke, thus removing all strain and motion due to the action of the check-rein from the back-pad. This is true especially of all jerking motion of the yoke caused by the sudden movement of the head of the horse, the yoke readily accommodating itself by its oscillating and pivotal connections to such motion.

The buckle attachment shown in the drawings is not claimed, and therefore not described.

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

1. A pad-tree provided with an oscillating yoke having bearings secured to the pad on either side, substantially as and for the purpose set forth.

2. The yoke B, having journals *e e*, in combination with links E E and bearing-plates F F, said links spanning said journals *e* transversely to the axis of the said yoke, substantially as and for the purpose set forth.

3. The yoke B, having journals *e*, in combination with links E, bearing-plates F, pad A, and screw-plate G, said links, bearing-plates, and screw-plates being suitably secured to said pad A, substantially as described.

4. An anti-frictional pad-tree composed of the yoke B, having the journals *e*, links E, pad A, means for securing said links to said pad, and check-hook D, substantially as described.

5. An anti-friction pad-tree composed of an oscillating yoke, transverse links forming a pivotal connection with said yoke, bearing-plates, screw-plates, and a check-hook, substantially as described.

6. The check-hook D, composed of two parts pivotally connected, in combination with yoke B, having journals *e*, links E, pad A, and means for securing said links to said pad, substantially as described.

HENRY T. RICHMOND.

Witnesses:
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M. H. TAFT.