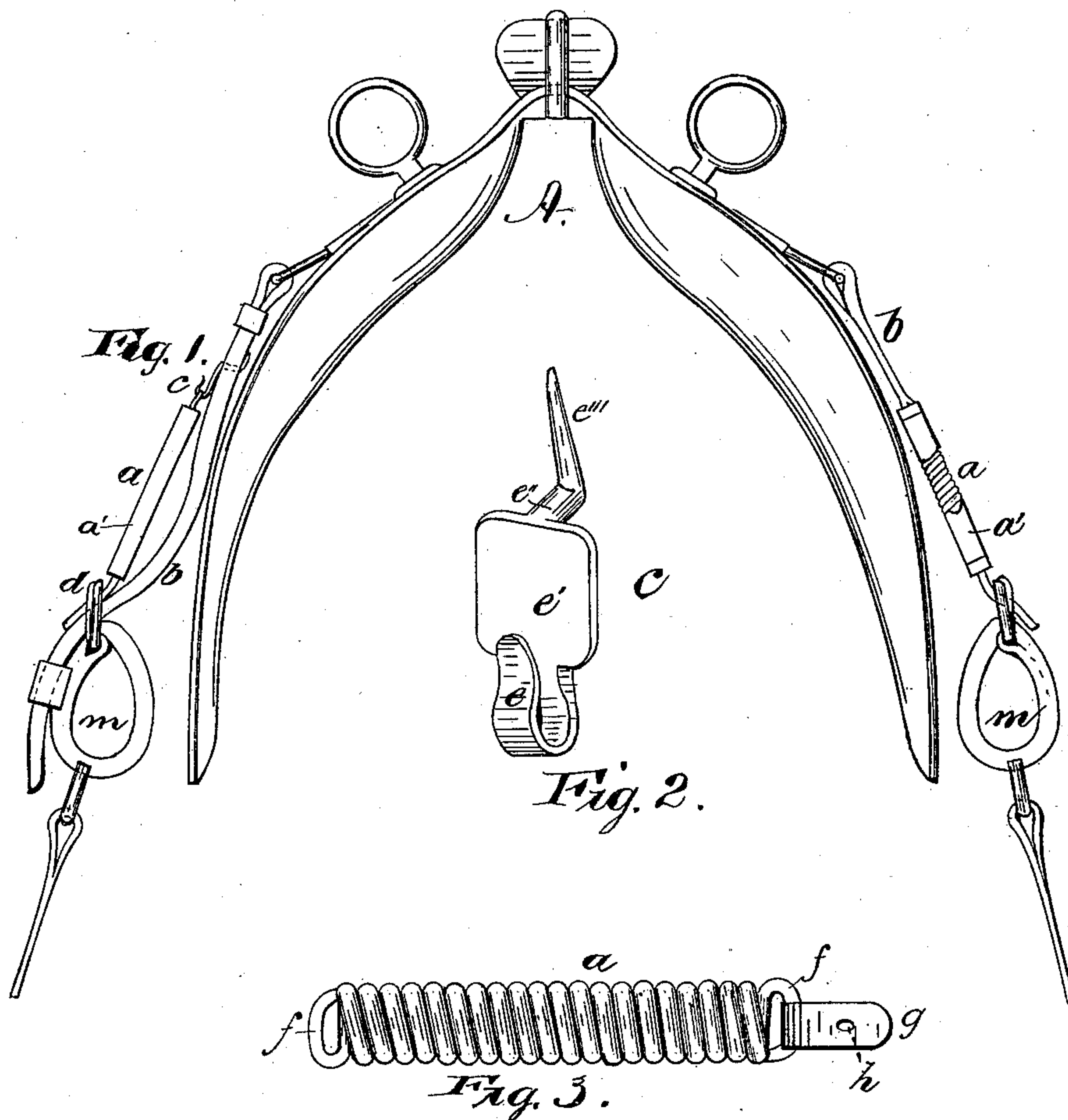


(No Model.)

A. W. FRAZEE.  
HARNESS SADDLE.

No. 297,250.

Patented Apr. 22, 1884.



*Attest:*  
*J. F. Campbell.*  
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*by Drake & Co., attys.*

# UNITED STATES PATENT OFFICE.

ALVAH W. FRAZEE, OF NEWARK, NEW JERSEY.

## HARNESS-SADDLE.

SPECIFICATION forming part of Letters Patent No. 297,250, dated April 22, 1884.

Application filed August 15, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ALVAH W. FRAZEE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Harness-Saddles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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.

This invention relates to certain improvements in devices to reduce the jar or strain upon a horse's back caused by the vibration of the vehicle-shafts when said vehicle is in motion, and to break the force of the impact occasioned when the shaft is stepped upon in getting off or on the vehicle.

Heretofore in some cases, where heavy wood-trees having grooves therein and back-chains have been employed in cart-saddles, a bent tube carrying springs with hooks or eyes on them has been arranged in the chain-groove of said saddle-tree, said bent tube being in one piece, and being placed over the saddle in the same manner as the back-chain, the shafts being attached to the hooks at the respective ends of the tube; but this device cannot, as will be obvious, be employed in the finer grades of harness, such harness remaining inelastic and rigid under the circumstances above enumerated, which defects it is the object of this invention to overcome.

The invention consists in the arrangement and combinations of parts, substantially as will be hereinafter set forth, and finally embodied in the claims.

Referring to the accompanying drawings, in which similar letters of reference indicate corresponding parts in each of the several figures, Figure 1 is a front elevation of a saddle, showing on one side my improvements, and on the other the same in a modified form; and Figs. 2 and 3 illustrate detail portions, which will be subsequently described.

In carrying out my invention I arrange a spring, *a*, above the shaft, where it will, directly or indirectly, receive the weight of the shaft from the tug-loop *m*, said spring being employed in connection with the back-band *b*

of a saddle. The arrangement of the spring in its relation to the back-band that I prefer is as follows, referring to Fig. 1: The spring *a* is secured to an ordinary back-band, *b*, by means of an adjustable supporting hook or device, *c*, at one end, and to the tug-buckle *d* at the other, a fullness in the back-band being formed, so that the spring takes the weight of the shaft from the shaft-tug *m*. By this peculiar construction no changes are required to be made in the construction of the harness, as the adjustable support can be applied to any ordinary back-band, the invention in this case being more in the nature of an attachment.

I may insert the spring in the back-band, as shown, on the opposite side of the saddle from the above-described device, the looped extremities of the back-band being arranged in connection with the spring-loops.

The adjustable supporting device *c* may be formed as shown in Fig. 2, as the same can be more readily, firmly, and securely fastened upon the back-band, without any preparatory changes in the latter, than by any other mode of construction of which I am aware. Of said supporting device, *e* is the lower extremity or portion, adapted to receive the loop of the spring or other portion. Said extremity is preferably hooked; but any other mode of catching or fastening a loop or billet to the lower extremity may be employed in lieu of the hook.

*e'* is an extension-piece adapted to rest against the front face of the leather, serving to provide leverage, and as a handle in the process of placing the adjustable device into position.

*e''* is a backwardly-extending portion lying at approximately right angles to the extension-piece and the upper edge of the latter. Said portion *e''* is adapted to be seated and to rest in the perforation in the leather, engaging with said leather to resist draft on the hook or lower extremity.

*e'''* is an upward prolongation of the portion *e''*, lying at a right angle thereto, and continuing the upward direction of the portion *e'*. When the said portion *e'* lies against the front of the perforated piece, below the perforation therein, the portion *e'''* is in engagement with the back of the same above the perforation, as will be understood.



The springs *a* have flattened loops *f* formed at their extremities, to engage with the hook *e* or to receive the leather loops of the back-band. The lower loop of the spring is provided with a billet, *g*, having a perforation, *h*, therein, to fasten into the buckle *d*.

In the better quality of work the spring *a* is supplied with a leather or other suitable covering, *a'*, to protect the spring, to prevent the same from wearing into the saddle or other leather portion, and to give a better finish to the harness. In a cheaper grade of harness the spring may be simply japanned.

Having thus described my invention, what I claim as new is—

1. In a harness-saddle, a hook or catching device adapted to receive and hold the spring, said spring *a*, billet *g*, and buckle *d*, all arranged and operating in combination with the back-band *b* and tug-loop *m*, as set forth.

2. In combination, the saddle *A*, back-band *b*, spring *a*, provided with covering *a'*, adjustable support *c*, having the supporting portion *e*, extension *e'*, portion *e''*, and prolongation *e'''*, the billet *g*, buckle *d*, and tug-loop *m*, all arranged and operating in combination as set forth and shown.

3. In a harness-saddle, the combination of the back-bands *b*, tug-loops *m*, and springs *a*, secured at one of their ends to the tug-loops, and at their opposite ends to the back-bands, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of August, 1883.

ALVAH W. FRAZEE.

Witnesses:

CHARLES H. PELL,  
O. DRAKE.