

T. S. Judson.

Tie-Strap.

N<sup>o</sup> 75683

Patented Mar. 17, 1868.

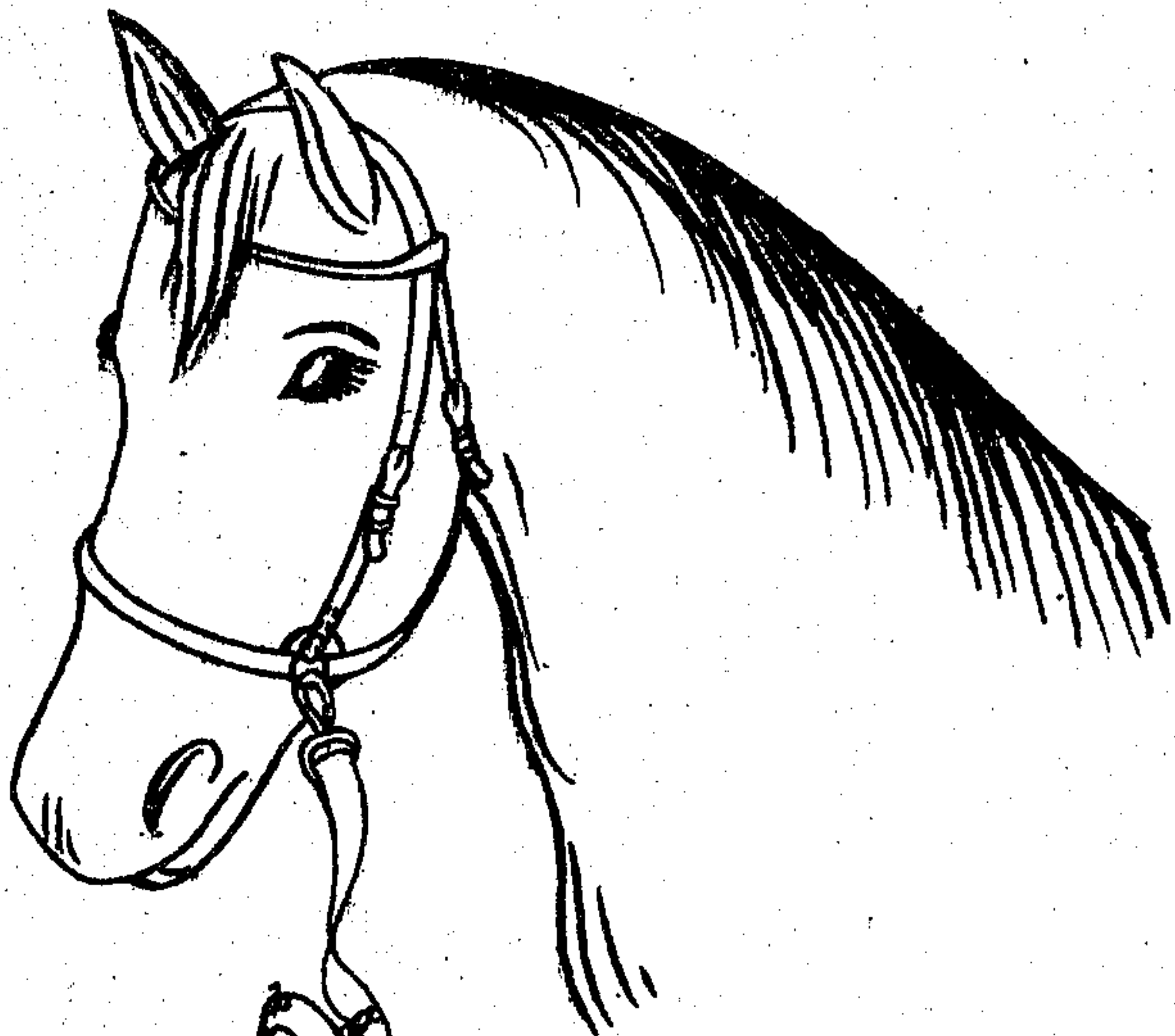


Fig. 1.

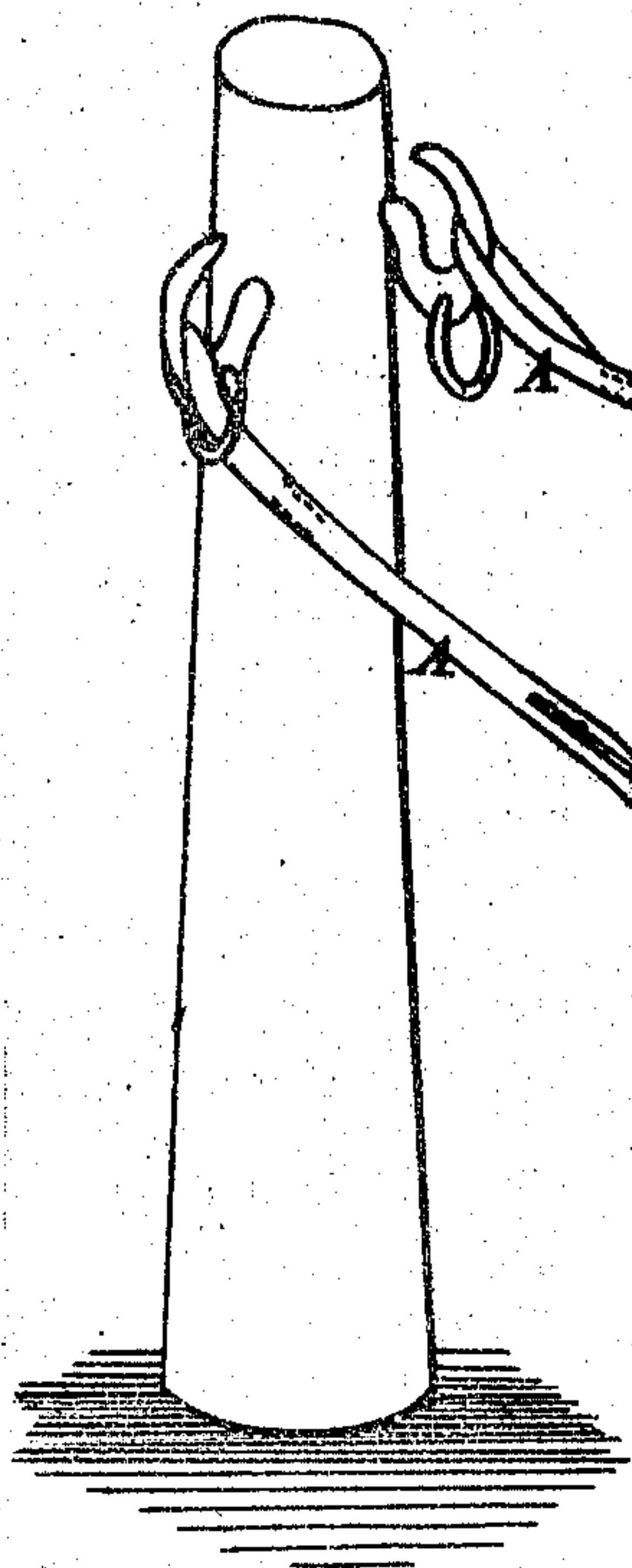
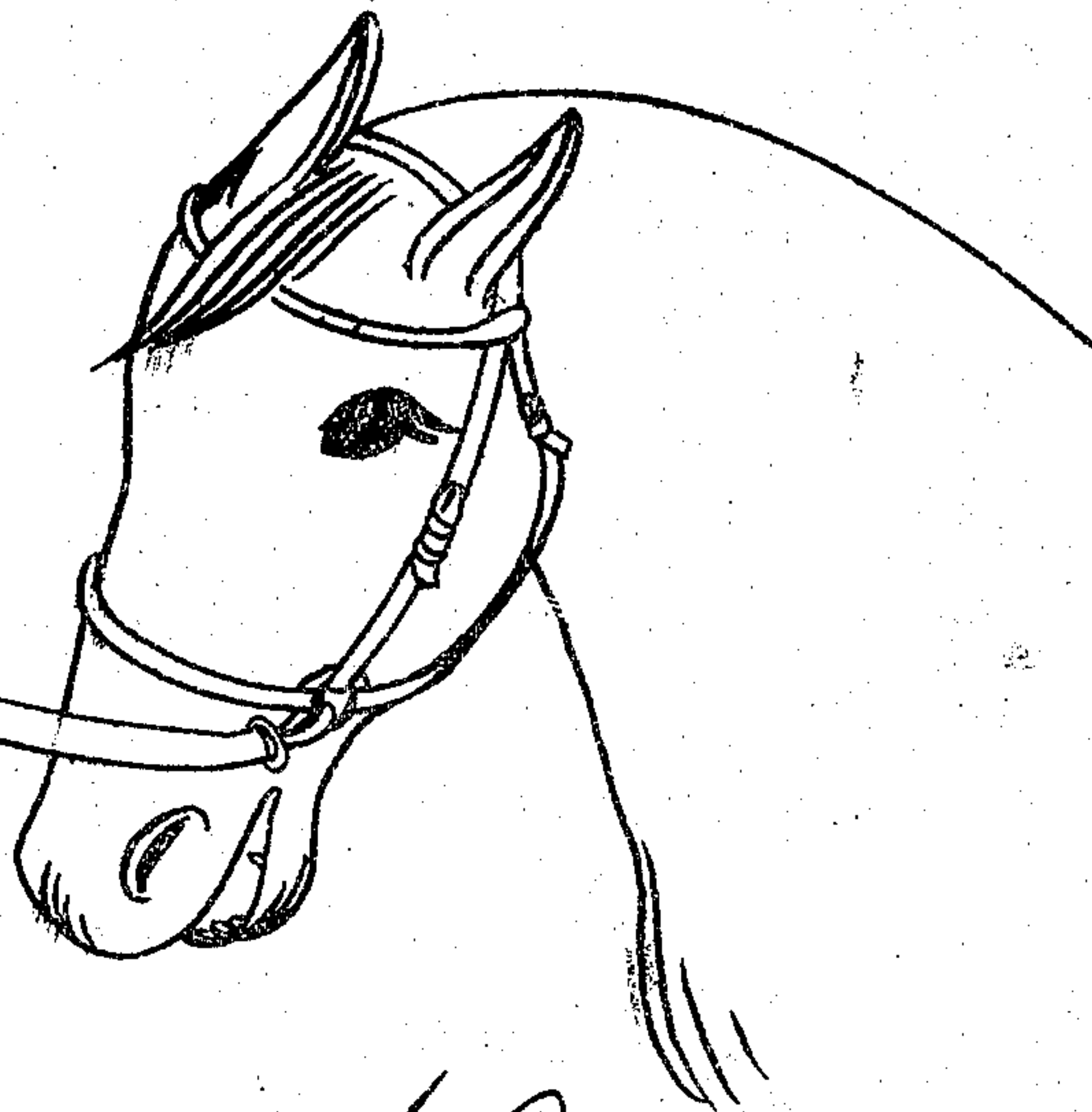


Fig. 2.



WITNESSES.

Wm. B. Bailey  
Chas. Page, Jr.

Thomas S. Judson  
by H. B. Hook  
Notary.



# United States Patent Office.

THOMAS S. JUDSON, OF MATTEAWAN, NEW YORK, ASSIGNOR TO HIMSELF  
AND HENRY A. ALDEN, OF SAME PLACE.

*Letters Patent No. 75,683, dated March 17, 1868.*

## IMPROVED TIE-STRAP.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO WHOM IT MAY CONCERN:

Be it known that I, THOMAS S. JUDSON, of Matteawan, in the county of Dutchess, and State of New York, have invented certain new and useful Improvements in Hitching or Holding-Straps for Horses; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings.

When a horse is hitched to a post or in his stall, it is necessary that the strap by which he is held should be of sufficient length to allow him a certain freedom of motion, so that, for instance, he may be able to reach the hay above him, or to lie down, or to move some distance from the place where he is tied. The strap, for this reason, is so "slack" at times that the horse will step upon it or catch his leg over it, and his endeavors to free himself when thus entangled frequently occasion the breaking or injury of the strap. To obviate this difficulty, the hitching-strap has sometimes been made wholly or partly of an elastic material, which will stretch or contract according to the movement of the animal; but when made of this material it is much too weak to withstand the strain to which it is often subjected, besides being open to other objections.

The object of my invention is to remedy these difficulties; and to this end it consists of the combination, with a strap of leather, or other ordinary or suitable material, of an elastic band or spring for taking up the slack of the strap, under such an arrangement that when the strap is extended its full length, any further strain will be borne directly by the strap and not by the spring. The spring, therefore, is only used to prevent the slackening of the strap, and is not subjected to any undue or excessive strain, which can come only upon the strap.

To enable those skilled in the art to understand and use my invention, I will now proceed to describe the manner in which the same is or may be carried into effect, by reference to the accompanying drawings, in which—

Figure 1 represents my improved hitching-strap when contracted.

Figure 2 is a representation of the same when extended to its full length.

A is the hitching or halter-strap, which is made of leather or other material usually employed for such purpose. To illustrate more fully the nature of my invention, it is represented attached to the headstall of an ordinary halter upon a horse's head. In order to take up the "slack" of the strap, so that the latter shall be held sufficiently taut at all times, an elastic band or spring, *a*, is employed, as shown in fig. 1. The strap is folded so as to form one or more folds, *b*, at any point between its ends; and the elastic band passing loosely through holes formed in these folds, is firmly united or attached at each end, *c*, to the strap, by any suitable means. When the elastic device is not stretched it will hold the folds of the strap, as represented in fig. 1, and while yielding so as to allow the strap to be extended to its full length, will at all times take up any slack there may happen to be. When, however, the strap is fully extended, as shown in fig. 2, the elastic device will be relieved from any further or excessive strain, which will be borne directly by the strap.

The band *a* may be made of vulcanized rubber or any other suitable material, or a metallic spiral spring may be employed for the purpose.

Any number of folds *b* may be formed on the strap. The holes formed in the folds *b*, between the points *c*, are slightly larger than the diameter of the band which passes through them, so as to allow the necessary play to the latter.

Having now described my invention, and the manner in which the same is or may be carried into effect, what I claim, and desire to secure by Letters Patent, is—

The combination with a hitching or halter-strap, made of any ordinary or suitable material, of an elastic band or spring, applied to said strap substantially in the manner and for the purposes herein shown and set forth.

In testimony whereof, I have signed my name to this specification before two subscribing witnesses.

THOMAS S. JUDSON.

Witnesses:

CONRAD GUTGESELL,  
JNO. C. NOE.