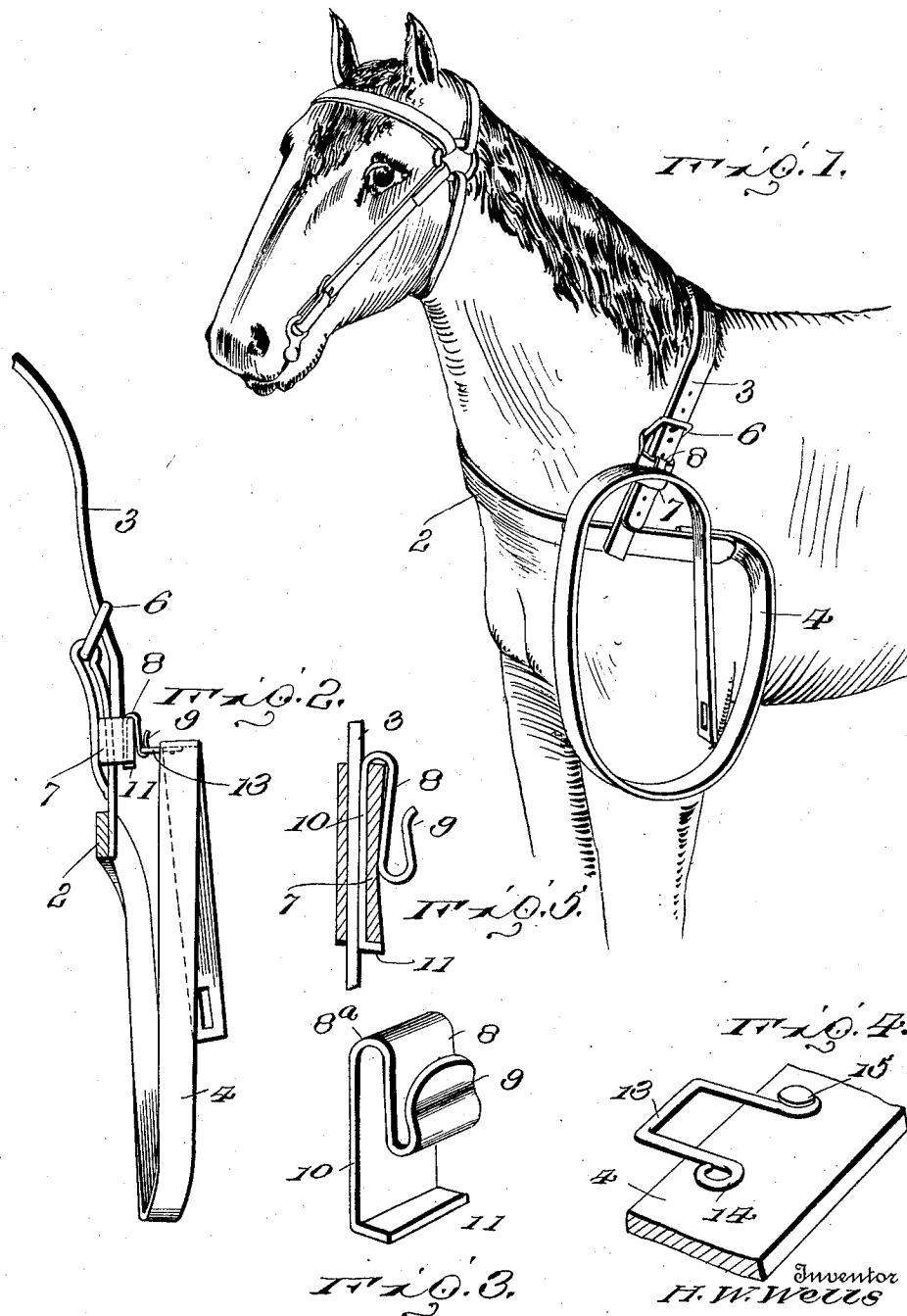


H. W. WELLS.
TRACE HANGER.
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1,016,591.

Patented Feb. 6, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

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TRACE-HANGER.

1,016,591.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY W. WELLS, citizen of the United States, residing at Clements, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in Trace-Hangers, of which the following is a specification.

My invention relates to harness and particularly to a trace-hanging device therefor, the object of the invention being to provide a device, easily applied to a harness, whereby the tug or trace may be hung upon the neck strap when the horse is being unharnessed, instead of tying the tug or trace in a knot or loop as is now commonly done. Such a knot must of necessity be loose and very often becomes undone, allowing the trace to drop down beneath the horse's feet. My invention permits the traces to be looped and hung upon the neck strap, from which position they cannot be removed except with intention, the operation taking but a fraction of the time taken in tying the trace into a knot.

Broadly considered, the invention consists in providing a coacting hook and eye for each trace, one attached to the neck strap or equivalent part of the harness and the other to the trace or tug so that when the trace is disconnected from the whiffletree it may be looped and hung upon the neck strap where it will be supported until it is removed from this position for attachment to the whiffletree.

My invention is shown in the accompanying drawings wherein:

Figure 1 is a perspective view showing my attachment in place upon the harness. Fig. 2 is a front elevation of the neck strap and trace of the harness, the breast strap being shown in section. Fig. 3 is a perspective view of the hook and its clip. Fig. 4 is a perspective view of a portion of the trace and the eye thereon. Fig. 5 is a sectional view through the keeper and the hook, showing the hook in place on the keeper.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

Referring to these figures 2 designates the breast strap of a harness of any suitable character and 3 the neck strap therefor, 4 indicating the traces or tugs which may be

attached to the breast strap in any desired manner.

The neck strap as illustrated in the drawings is provided at 6 with a buckle through which the end of the lower section of the neck strap passes, the extremity of the strap being inserted through a keeper 7. This is the construction of an ordinary type of harness. I do not wish, however, to limit myself to this arrangement as it is entirely possible to place my attachment upon other neck straps, provided a keeper 7 or like device is attached to the neck strap.

Attached to the neck strap, and preferably the keeper, is a hook 8 shown in detail in Fig. 3. This hook is formed of a relatively wide flat piece of resilient metal, one extremity of which is turned up to form the bill 9 of the hook, this bill being somewhat concaved longitudinally so as to provide for a resilient detention of the trace eye within the bill, as will be later described. The upper end of the material forming the hook 8 is bent at right angles, and then bent downwardly approximately parallel to the base of the hook 8 and to a point below the bend of the bill, as at 10, to form a clip. It is then bent outward at right angles to the portion 10 as at 11 to form a slightly projecting flange or lip. The distance between the portion 8^a and the lip 11 is equal to the width of the keeper 7. The portion 10 of the hook is intended to be inserted behind the keeper straps and the lip 11 catches beneath the lower edge of the keeper, as illustrated in Fig. 5, thus preventing any accidental upward movement of the hook with relation to the keeper. In order to hold the hook securely upon the keeper, the portion 8 of the strip forming the hook is bent inward toward the portion 10 so that at the point 12 the portions 8 and 10 are nearer together than at the upper end of the portion 10. Thus when the clip of the hook is inserted over the keeper 7, the clip will resiliently engage the keeper. It will, of course, be obvious that there are two of these hooks 8, one on each side of the neck strap.

As a means for connecting the traces to the hooks 8, I provide each trace, at a suitable point in its length, with an eye 13. This eye, as shown in Fig. 4 preferably consists of an angularly bent wire, the extremities of which are bent round to form eyelets 14 whereby the eye 13 may be attached

to the trace 4 by rivets 15. The eye 13 is preferably attached to the face of the trace so as to project below the lower edge thereof. It will be seen that the eye 13 has a width slightly greater than the bill 9 of the hook, and that when the eye is hooked over the spring hook that the bill will have just sufficient spring to hold the eye in place against accidental movement but to permit the relatively easy removal of the eye from the hook when desired.

While I have described the eye as being placed upon the trace and the hook as being placed upon the neck strap, I do not wish to be limited to this arrangement as the parts might be transposed in position without in any manner affecting the operation of the device. I regard it, however, as preferable to provide a hook which shall engage with the usual keeper 7, as by this means the hook may be easily removed from its engagement with the keeper whenever desired, and easily applied or detached from the harness. It will be obvious also that the eye 13 may be easily attached to the harness or removed therefrom. Neither do I wish to be limited to the use of the hook in connection with the neck strap as it might be attached to any other equivalent part of the harness with practically the same effect.

The use of my invention will be obvious. When the horse is being unhitched from the wagon, the traces are disconnected from the whiffletree and looped in the position shown in Fig. 1, the eye 13 being engaged with the bill of the hook 8. When the har-

ness is being replaced upon the horse and the horse is being hitched, it is a very easy matter to remove the trace from its engagement with the hook. By reason of the peculiar form of the hook, the trace cannot become readily detached therefrom and drop down. Furthermore, it will be seen that no short bends have to be made in the leather of the trace and therefore the trace will last longer than where it is being often tied and untied.

What I claim is:

A hanger adapted to be applied to a harness keeper comprising a member formed from a single sheet of material having a flat back portion with a flange located at one end thereof and disposed at a right angle to said back portion, the other end of the back portion merging into a hook back which extends down along the back portion and converges toward the same, the hook back portion merging into a hook bill which extends up along the back portion of the hook and converges toward the same, the said hook of which the said back and bill portions are components terminating at a point between the upper and lower ends of the back portion of the hanger and being spaced from the flange formed at the end thereof.

In testimony whereof, I affix my signature in presence of two witnesses.

HENRY W. WELLS. [L. s.]

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."