(No Model.)

N. F. REED.

WHIFFLETREE HOOK.

No. 588,474. Patented Aug. 17, 1897.

Fig. 1.

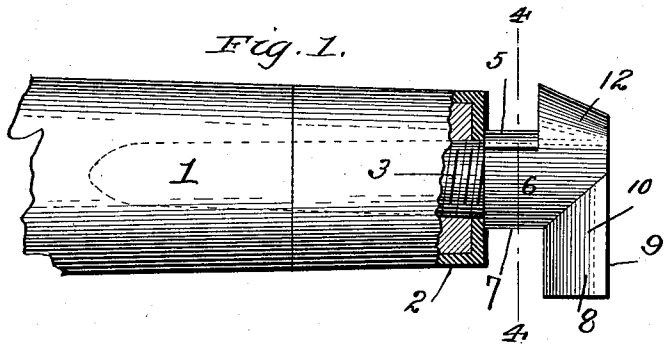


Fig. 2.

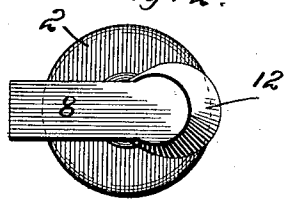


Fig. 3.

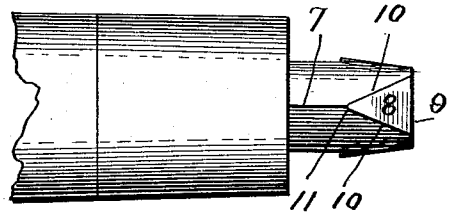


Fig. 4.

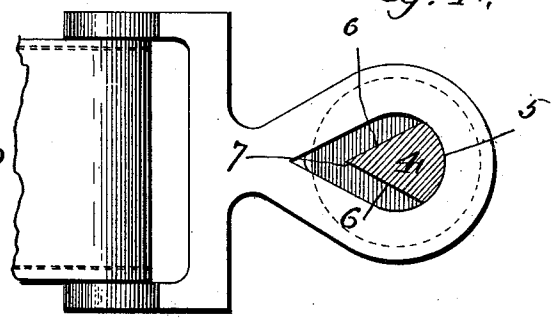


Fig. 5.

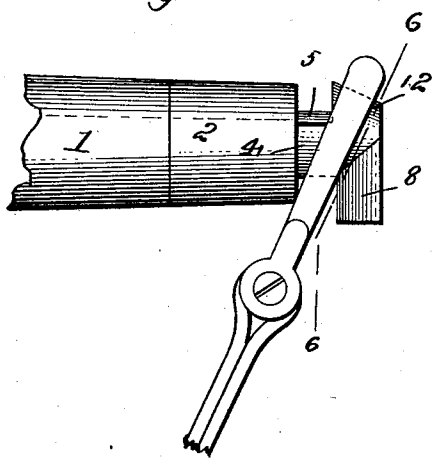
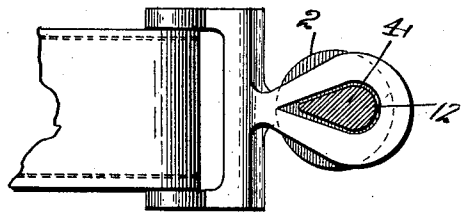


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

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WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 588,474, dated August 17, 1897.

Application filed April 28, 1897. Serial No. 634,271. (No model.)

To all whom it may concern:

Be it known that I, NATHAN F. REED, a citizen of the United States, residing at Centerville, in the county of Lamoille, in the State of Vermont, have invented certain new and useful Improvements in Whiffletree-Hooks, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a plan view of the hook in position on one end of a whiffletree. Fig. 2 is an end view thereof. Fig. 3 is a front view. Fig. 4 is a vertical view on line 4 4 of Fig. 1, showing the trace-tug in position. Fig. 5 is a plan view showing the manner of placing the trace-tug over the hook, and Fig. 6 is a sectional view on line 6 6 of Fig. 5.

This invention relates to a new and improved whiffletree-hook; and it has for its object to provide a hook of simple and durable construction which will be effective in preventing the accidental displacement of the trace-eye.

The invention consists in the novel combination and arrangement and construction of the parts hereinafter described, and particularly pointed out in the claim appended.

Referring to the various parts by numerals, 1 designates one end of a whiffletree, which is provided with a cap 2, formed with a central aperture in its end. Passing through this aperture is the screw-shank 3 of the whiffletree-hook. The hook consists of the tug-engaging portion 4, of substantially triangular shape in cross-section, having the convexed rear side 5. From the upper and lower ends of this rear portion the upper and lower sides 6 6 of the tug-engaging portion extend forwardly and converge, said sides meeting at edge 7 in a horizontal plane with the center of the curved side 5. From the outer end of this tug-engaging portion a horn 8 extends forwardly, said horn being triangular in cross-section, its outer face 9 being vertical, and its upper and lower sides 10 10 converging and meeting at edge 11 in line with the middle of the outer vertical face, said edge being in the same plane with the edge 7 of the portion 4. From the rear side of the tug-engaging portion 4 extends rearward an enlargement 12, whose rear face is a portion of a cylinder and is beveled forwardly from its inner to its outer end, the outer face of the enlargement being vertical, as shown. This hook is especially designed for use in connection with trace-eyes having an opening of substantially triangular shape, the rear wall thereof being curved, as shown in Fig. 4.

To place the trace-eye over the hook, it is necessary to place the edge 11 in the forward angle of the trace-eye opening and then move the eye rearwardly on the horn 8 until the edge 7 is reached. The rear end of the eye is then passed over the circular enlargement 12 and into the space between it and the end of the whiffletree. The enlargement 12 is beveled, as shown, in order to have as large a barrier to retain the trace-eye in place as possible, and at the same time permit it to be removed when desired.

It will be seen that by the peculiar shape of the hook it is adapted for use in connection with a peculiarly-shaped trace-eye, but it may be employed in connection with trace-eyes of other shapes.

To remove the trace-eye, it must be raised to a horizontal position and forced rearwardly until the forward point of its opening engages the edge 7, and then it can be passed over the cylindrical enlargement 12. It is designed to have the trace-eye fit the hook closely when passing over the enlargement 12, as shown in Fig. 6, to make accidental displacement nearly impossible.

When there is no draft on the traces, the trace-eyes will drop down at their forward ends and displacement in that position is impossible.

It will thus be seen that I provide a whiffletree-hook which is exceedingly simple and durable and which may be easily operated and yet cannot be readily displaced accidentally.

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

A trace-hook consisting of a shank having its upper and lower sides converging to a front edge 7, a forward-projecting horn 8 connected to the end of said shank and having its upper and lower sides converging inward

to an edge 11, this edge joining and being approximately in the same plane with said edge 7, and a rearward extension or knob projecting from the shank in line with the horn, the rear side being beveled off outward and forward and its inner face being abrupt, substantially as and for the purposes set forth.

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

NATHAN F. REED.

Witnesses:
CARLOS S. NOYES,
BESSIE M. ADAMS.