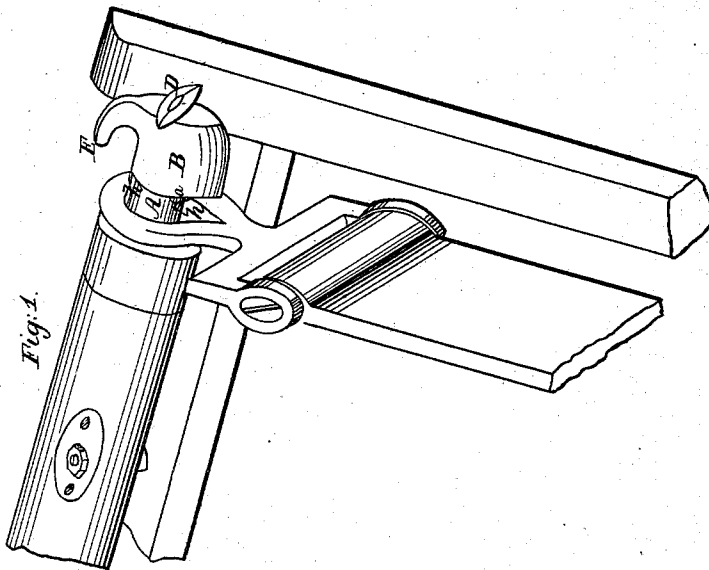
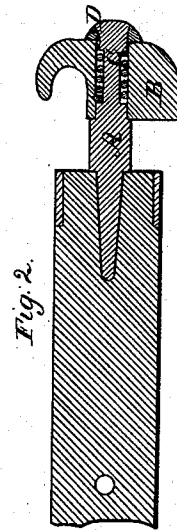
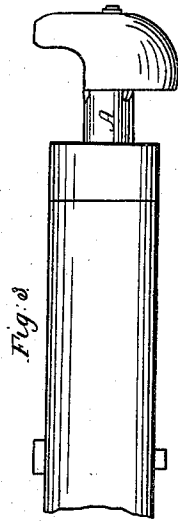


S. M. PERKINS.
WHIFFLETREE HOOK.

No. 26,291.

Patented Nov. 29, 1859.



Witnesses

J. G. Smith

Edwin James.

Inventor,

Geo. Chapman

UNITED STATES PATENT OFFICE.

S. M. PERKINS, OF ALBANY, ILLINOIS.

WHIFFLETREE-HOOK.

Specification of Letters Patent No. 26,291, dated November 29, 1859.

To all whom it may concern:

Be it known that I, S. M. PERKINS, of Albany, in the county of Whitesides and State of Illinois, have invented a new and useful Improvement in Whiffletree-Hooks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, forming part of this specification, in the several figures of which similar characters of reference denote the same part.

Figure 1— represents a perspective view of a whiffletree hook embracing my improvements connected to the whiffletree and the trace attached. Fig. 2— represents a sectional elevation of the whiffletree and hook, showing the spring within the hook. Fig. 3— represents a modification in the arrangement of the position of the revolving spring button for retaining the trace on the hook.

The object of my improvements in whiffletree hooks is to give greater security in the attachment of the trace to the whiffletree; and my invention for effecting this object consists in combining with the stud which enters the end of the whiffletree a spring button so arranged that when turned in one position the eye of the trace is passed over it on the outside to the stud and held by the springing back of the button so as not to be unhooked when the trace is extended in drawing the carriage or slackened in going down hill; and my invention further consists in combining with a turning spring button a stationary button so arranged as to prevent the eye of the trace, in all positions from being unhooked without turning the revolving button.

My invention also consists in arranging the stops and spring of the turning button, so as to retain the button in such a position as not to be turned by the trace when hooked to the whiffletree, and also to retain it in a position at right angles to the stationary button; and my invention also consists in constructing the turning button with a hooked end in order to catch the eye of the trace and hold it while being passed from the outside over the end of the button.

In the accompanying drawing is represented my improved whiffletree hook which consists of a shank or stud (A) which is driven into the end of the whiffletree. To the end of this stud is attached a turning

spring button (B) and on the interior of the button and coiled around the shank is a spiral spring (C), one end of which is attached to the shank and the other to the button.

Extending from the inner edge of the button is a projecting pin (*a*), and on the shank are two stops (*b* and *h*) which regulate the range of motion of the button in either direction. In the present instance these stops allow the button to be turned about a quarter of a circle from a horizontal to a vertical position, and the spring is so arranged as to carry the button from a vertical position forward to a horizontal. To the outer end of the shank which passes through the button, is attached a stationary stop (D) arranged at right angles to the turning button, when against the forward stop, and extends sufficient distance beyond its sides to prevent the eye of the trace being drawn over the end of the button.

The rear end (E) of the button (B) is made in the form of a hook in order to catch the rear end of the eye of the trace, and hold it while it is passed over the end of the button. In hooking the trace to the whiffletree the button (B) when arranged as described, is turned to a position nearly vertical to correspond or be in line with the stop (D). The eye of the trace is caught and held by the button hook (E) and then passed over the outer stop and button. On being released the button springs back to nearly a horizontal position and at right angles to the outer stop, and the trace is held by the button and stop from being drawn off the whiffletree hook.

It will be seen from the arrangement of the spring (C) and the direction in which it draws the button and also the position of the stop (*b*) and the projecting pin (*a*) which bears on the stop when the button is in a state of rest, that the button cannot be turned by the eye of the trace in any position it would assume in drawing the carriage so as to allow the trace to be disconnected from the whiffletree hook.

I do not confine myself to the precise arrangement, form or position of the spring button in relation to the whiffletree as it may be arranged and constructed in the manner represented in Fig. 3, in which the outer stop is removed and the button held in a vertical position when at rest, and turned

in a horizontal position to pass the eye of the trace over and connect or disconnect it with the whiffletree.

Having thus described my improvement in whiffletree hooks, what I claim as new and desire to secure by Letters Patent is—

1. The combination of the stud with a revolving spring button arranged substantially as described for the purpose set forth.

10 2. In combination with a revolving spring button I claim a stationary stop (D) so arranged as to prevent the eye of the trace in all positions from passing over the button.

3. I claim the combination of the spiral

spring, the projecting stud and the inner stop arranged substantially as described, for the purpose set forth. 15

4. And I also claim constructing the button with a hooked end substantially as described for the purpose set forth. 20

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

S. M. PERKINS.

Witnesses:

D. S. EFNER,

D. W. OSTRANDER.