

J. R. FINLEY.
WHIFFLETREE.

No. 171,113.

Patented Dec. 14, 1875.

Fig. 1.

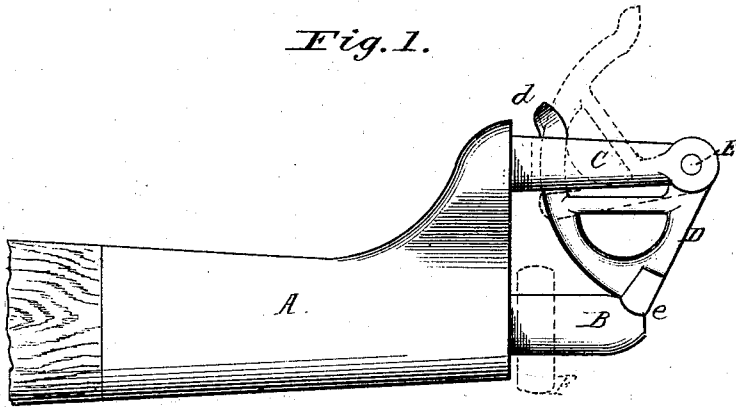


Fig. 2.

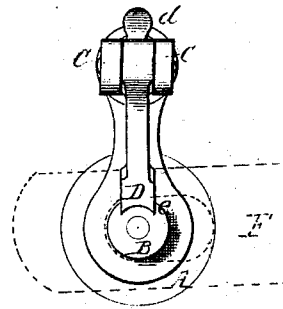


Fig. 3.

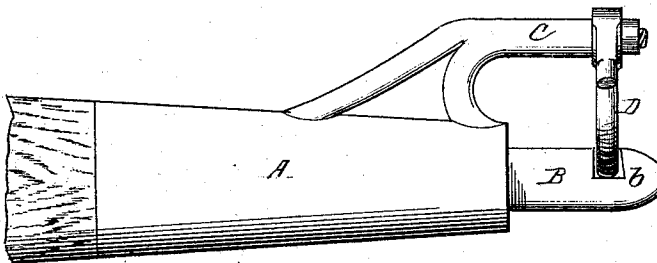
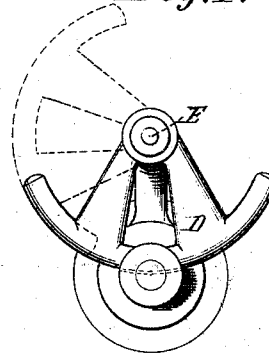


Fig. 4.



Witnesses:

J. S. Grooms
Frank Cloudy

Inventor.

James R. Finley
By James L. Norris
att'y.

UNITED STATES PATENT OFFICE.

JAMES R. FINLEY, OF DELPHI, INDIANA, ASSIGNOR OF ONE-HALF HIS RIGHT
TO JAMES M. WATTS, OF SAME PLACE.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **171,113**, dated December 14, 1875; application filed
September 9, 1875.

To all whom it may concern:

Be it known that I, JAMES R. FINLEY, of Delphi, in the county of Carroll and State of Indiana, have invented certain new and useful Improvements in Swingle-Tree Attachments, of which the following is a specification:

The object of my invention is to produce a trace-fastener which shall be capable of being easily and economically made, and which shall prevent the unfastening of a trace; and to this end it consists in pivoting above the trace-pin a latch which shall fall by its own weight, into such position in relation to the trace-pin as to prevent the trace from slipping therefrom, as more particularly hereinafter described and claimed.

In order that those skilled in the art may be enabled to make and use my invention, I will describe the same in connection with the drawings forming part of this specification, in which—

Figure 1 shows a side view, and Fig. 2 an end view, of one form of fastener constructed according to my invention; and Figs. 3 and 4, a side and end view, respectively, of another form embodying the same principle.

Like letters indicate similar parts in all the figures.

A is the ordinary thimble or cylinder of a trace-fastener, from which projects the ordinary pin B, for receiving a tug or trace, F, as shown in dotted lines in Figs. 1 and 2. Attached to, cast upon, or made with the thimble A, in any suitable manner, is a projection or lug, C, above and parallel with the pin B. In Figs. 1 and 2 the projection C is slotted, and in the slot is arranged the segmental gravity-latch D, pivoted at E, and arranged to fall by its own gravity, so that the lower end *e* thereof rests upon the trace-pin B. At the other ex-

treme of the segment there is preferably formed the thumb or finger piece *d*, for the more easy manipulation of the segmental latch D.

In operation the latch is raised, as shown in dotted lines, Fig. 1, and the trace slipped on. The latch, being then released, drops by its own weight into the position shown in full lines, securely holding the trace on the pin.

In Figs. 3 and 4 the segmental latch D is pivoted upon the end of the projection C at right angles to the trace-pin, the pin, preferably, having a recess, *b*, formed therein for the segment to work in. In this form the segmental gravity-latch is raised, as shown in dotted lines in Fig. 4, and the trace slipped on, when, the latch being released, it falls into position and holds the trace securely. It will be noticed that the principle is the same in both forms, and that the gravity-latch is so arranged as to normally prevent the trace from slipping off, and so that a positive manipulation of the latch is necessary for the removal of the trace, thus rendering its operation certain and reliable.

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

In a trace-fastener, the combination, with the trace-pin, of a projection or lug, C, arranged above the pin, and a gravity-latch, D, pivoted to the projection or lug, and resting normally upon or near to the trace-pin, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

JAMES R. FINLEY.

Witnesses:

WILL F. DUNKLE,
C. A. POWERS.