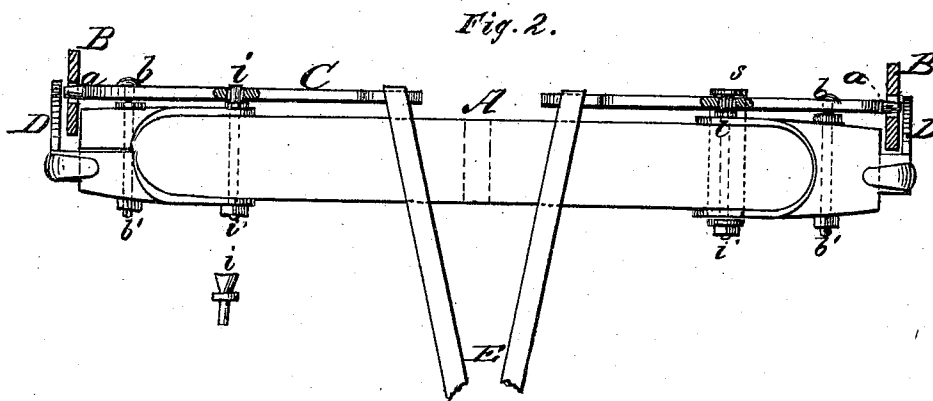
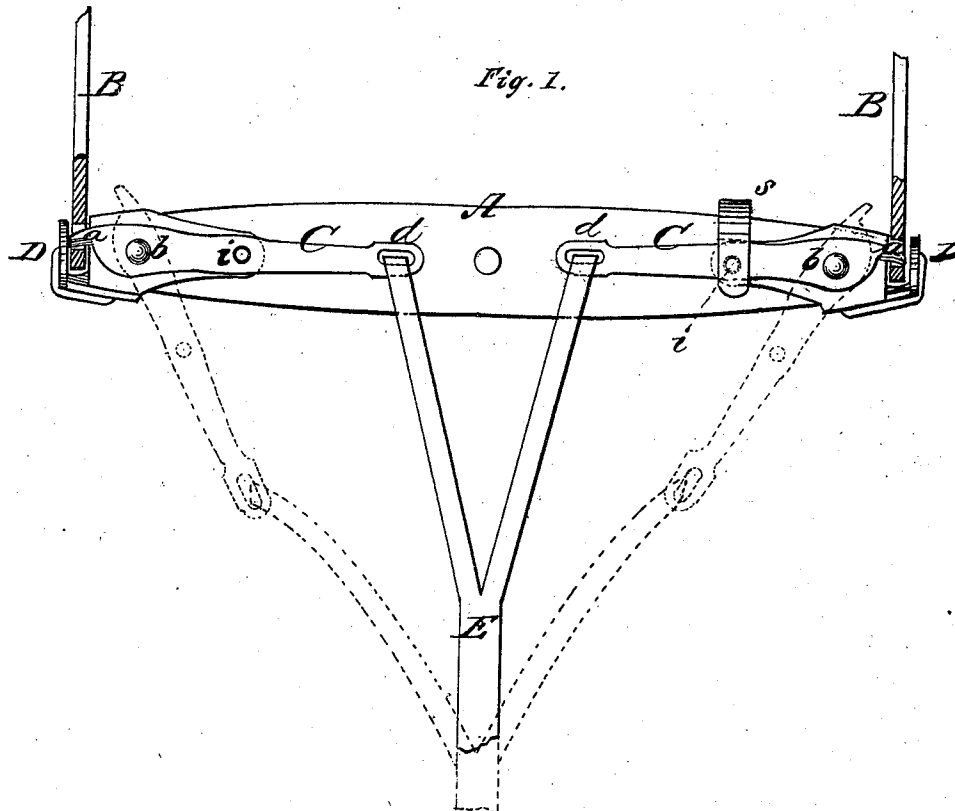


D. R. ELKIN.

Whimmetrees.

No. 148,196.

Patented March 3, 1874.



WITNESSES:
George B. Upham,
Robert Everett,

INVENTOR,
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per.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

DAVID R. ELKIN, OF ALSTON DEPOT, SOUTH CAROLINA.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **148,196**, dated March 3, 1874; application filed February 7, 1874.

To all whom it may concern:

Be it known that I, DAVID R. ELKIN, of Alston Depot, in the county of Fairfield and State of South Carolina, have invented a new and valuable Improvement in Whiffletree Attachments; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my whiffletree attachment. Fig. 2 is a side elevation of the same.

This invention has relation to devices which are applied to whiffletrees for the purpose of holding the traces and allowing them to be quickly released. The invention consists in the combination of releasing-straps and retaining-pins with levers which hold the traces to the ends of a whiffletree, as will be hereinafter explained.

The following is a description of my invention:

In the annexed drawings, A designates a whiffletree, on the ends of which metal ferrules are rigidly secured by means of bolts, hereinafter explained. B B represent traces, through the cockeyes of which angular pins *a* pass, which pins are formed on the outer ends of the shortest arms of two levers, C C. The pins *a* are made angular for the purpose of more securely holding the traces, and to insure against a casual detachment of the traces from their pins *a*, I form caps or guards D on the ferrules, which caps will only allow the traces to be detached from the whiffletree when the levers C are allowed to assume the positions indicated by dotted lines in Fig. 1. The levers C C are connected to pivots *b* formed on the upper ends of bolts *b'*, which pivots are enlarged

heads formed on these bolts. When levers C C are adjusted into line with the whiffletree for holding the traces, they are held in such position by means of retaining-pins *i*, which enter holes made through said levers, as shown in Figs. 1 and 2. The pins *i* taper downwardly for the purpose of preventing any tendency of the levers casually rising and becoming detached from the pins; and, to insure against such casual detachment, I employ flat springs *s*, which are secured to the whiffletree and curved over said pins so as to press upon their ends, as shown on one side of Figs. 1 and 2. E designates the forked ends of a detaching-strap, which are secured to the perforated ends *d* of the levers C for the purpose of moving these levers to the positions shown in dotted lines when it is desired to release the traces.

The manner of releasing the traces is to lift the inner ends of levers C C off the pins *i* and draw these ends backward, which can be conveniently done by a person sitting in a vehicle.

Pins *i* are formed on bolts *i'*, which, with the bolts *b'*, are used to secure the ferrules or tips on the ends of the whiffletree, as shown in Fig. 2.

What I claim as new, and desire to secure by Letters Patent, is—

The levers C, having angular pins *a* on their outer ends, and connected to the whiffletree A by means of pivots *b*, in combination with guards D, retaining-pins *i*, and releasing-strap E, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DAVID RAIFORD ELKIN.

Witnesses:

C. A. PETTY,

JNO. H. COUNTS.