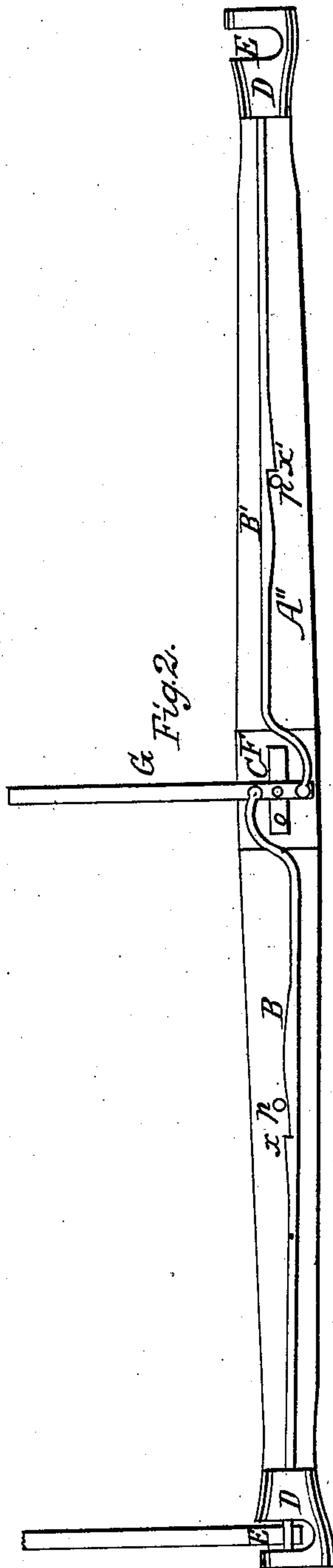
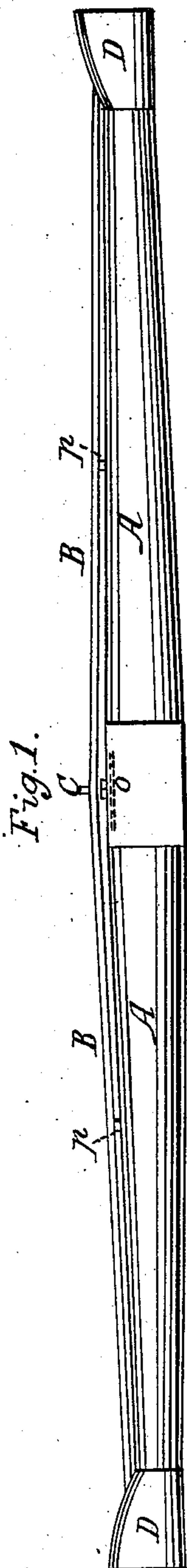


D. A. SMITH.

Whiffletree.

No. 17,752.

Patented July 7. 1857.



# UNITED STATES PATENT OFFICE.

DAVID A. SMITH, OF WASHINGTON, DISTRICT OF COLUMBIA.

## WHIFFLETREE.

Specification of Letters Patent No. 17,752, dated July 7, 1857.

*To all whom it may concern:*

Be it known that I, DAVID A. SMITH, of the city of Washington, District of Columbia, have invented certain new and useful Improvements in Whiffletrees; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

10 The nature of my invention consists in an improved mode of attaching and detaching traces for whiffletrees.

In order that those skilled in the arts may manufacture and use my invention I will proceed to describe its construction and operation.

In the accompanying drawings which form a part of this specification Figure 1 is a plan view. Fig. 2 is a side elevation.

20 In Fig. 1 A is the whiffletree. B are spring rods, *p* are pins in the whiffletree, C is a pivot, *o* is a sliding plate into which pivot C enters. D are slotted caps on the ends of the whiffletree.

25 In Fig. 2 A is the whiffletree, B B<sup>1</sup> the spring rods, C pivot entering sliding plate *o*, G is a lever attached to spring rods B and sliding plate *o* by pivots as seen. *p* are pins in the whiffletree, D are slotted caps forming the ends of the whiffletree, *x x*<sup>1</sup> are notches in the spring bars B, B<sup>1</sup>. F is a plate extending to the sides and several inches with the length of the whiffletree. E slots in caps D.

35 In the operation of this invention one trace may be put into slot E as seen in Fig. 2, then by means of lever G which is raised as seen rod B is pushed through the aperture in the end of the trace and it is secured; the

other trace may be introduced into the opposite slot and lever G moved in the same direction as at first and B<sup>1</sup> will be forced into slot E and through the aperture in the end of the trace. A reverse motion of lever G will detach the traces in the same manner.

Plate *o* is a sliding plate and works under plate F, seen in Fig. 2. Lever G is attached to the sliding plate by means of the pivot C; this pivot C acts as a fulcrum when the lever G is being elevated to a perpendicular, but after it crosses the perpendicular line the pivot which attaches B to lever G becomes the fulcrum, as one end of rod B stands firmly against one side of the slotted cap D. When lever G stands in the position seen in Fig. 2 and it is desired to draw in bar B and detach the trace the notch *x*<sup>1</sup> catches on the pin *p* and thus changes the fulcrum to the end of lever G which enables me to draw in the bar B with great ease.

It will be seen that only one of the traces can be fastened at a time so that it can be operated by one person without any difficulty.

Having thus fully described the nature of my invention, what I claim as new and desirable to secure by Letters Patent is—

The lever G attached to a movable fulcrum on plate *o*, and sliding in slotted plate F, for operating the spring bars B and B<sup>1</sup> alternately, as described, and for the purpose set forth.

DAVID A. SMITH.

Witnesses:

JOHN S. HOLLINGSHEAD,  
F. G. CLAYTON.