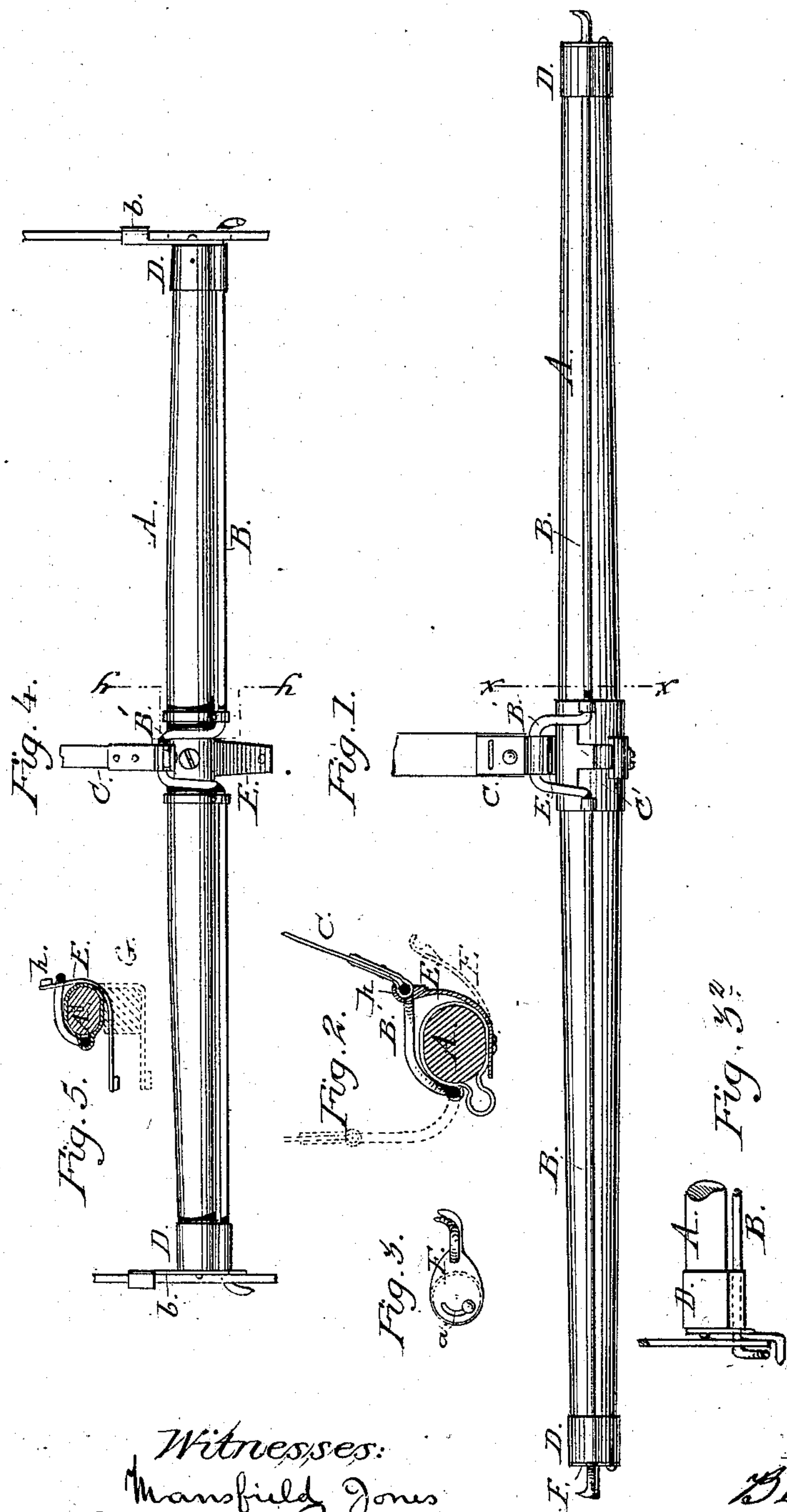


(No Model.)

B. W. SPARKS.
Horse Detacher.

No. 238,814.

Patented March 15, 1881.



Witnesses:
Mansfield Jones
William Ridgeway

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Attys.

UNITED STATES PATENT OFFICE.

BENJAMIN W. SPARKS, OF McMINNVILLE, TENNESSEE.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 238,814, dated March 15, 1881.

Application filed May 19, 1880. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN W. SPARKS, of McMinnville, Tennessee, have invented a new and useful Improvement in Whiffletrees, of which the following is a specification.

My invention relates to improvements in detaching devices for horses as applied to whiffletrees.

It consists, first, of a whiffletree having a detaching-rod provided with a crank, and a spring provided with a stop or catch on its end outside to form a positive hold to the said rod when the said crank is passed over it.

It consists, also, in combining with a whiffletree and detaching-rod certain plates pivoted to said rod with a segmental slot and hook extending therefrom, the purpose of which is to prevent a back movement of the traces when in position for draft.

In my drawings, Figure 1 is an elevation or edge view of a single-tree, showing my attachment. Fig. 2 is a transverse section of the same. Fig. 3 is an end view of the single-tree and adjustable plate and hook secured to its end. Fig. 4 is a plan or top view, showing the single-tree with the rod attachment and guides for traces. Fig. 5 is transverse section on line *y y*, Fig. 4. Fig. 3² is a top view of the whiffletree, showing more clearly the operation of the plate F with reference to the rod B.

Similar reference letters indicate like parts in all the figures.

Referring to the drawings, A represents a whiffletree provided with a rod, B, running longitudinally in its rear and loosely secured or hinged thereto by loops which project from a center band or bands, C'. The rod B at its center is bent in the form of a crank, B', curved to conform to the whiffletree to which it is attached. The ends of the rod B are held to the ends of the whiffletree by loops formed in the finishing-thimbles D, and outside of these thimbles said ends are bent in L-form—i. e., upward and outward—to receive and hold the traces or tugs.

E is a spring, provided with a catch, *h*, attached to the under side of the whiffletree, adapted to catch the crank B' and hold the rod B with its end hooks in a direction rearward.

To the crank B' is secured, by a metal loop, the band or strap C, which extends upward within easy reach of the driver of the vehicle, by which the spring E is unlocked with a jerk and the rod rotated about ninety degrees to release the traces or tugs.

On the ends of the whiffletree (see Figs. 1 and 3) are plates F with hooks attached, secured to said whiffletree by rivets or headed nails which pass through segmental slots *a*. This device is for the purpose of preventing the traces from slipping from their hooks backward. These plates when moved about the rod B, as an axis, sliding under the heads of the nails which secure them may be adjusted to allow the release of the traces. The plates *b*, fixed to the end of the whiffletree, (see Fig. 4,) are for guiding and holding the traces against a lateral movement when the horse is moving forward or backward.

It frequently happens that when the whiffletree is weakened by constant use it is desirable that it be reversed to bring the weaker side next to the draft. Under such circumstances the strain would come upon the rod B in its entire length together with the reversed whiffletree, and in order that the detaching device be still effective I make the spring reversible to adapt it to such an emergency.

I am aware of the Patent No. 188,956, to Roberts, in which is shown a spring which holds the crank of the detaching-rod by frictional bearing, and to such I lay no claim.

Having thus described my invention, I claim—

1. The combination of the whiffletree A, detaching-rod B, provided with crank B', and spring E, provided with a stop or hook, *h*, on its end outside, to form a positive hold to the said rod B when the crank B' is passed over it, as and for the purpose set forth.

2. In combination with the whiffletree A and detaching-rod B, the plates F, pivoted to said rod and provided with segmental slots *a*, as and for the purpose set forth.

DR. BENJAMIN WILLIAM SPARKS.

Witnesses:

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