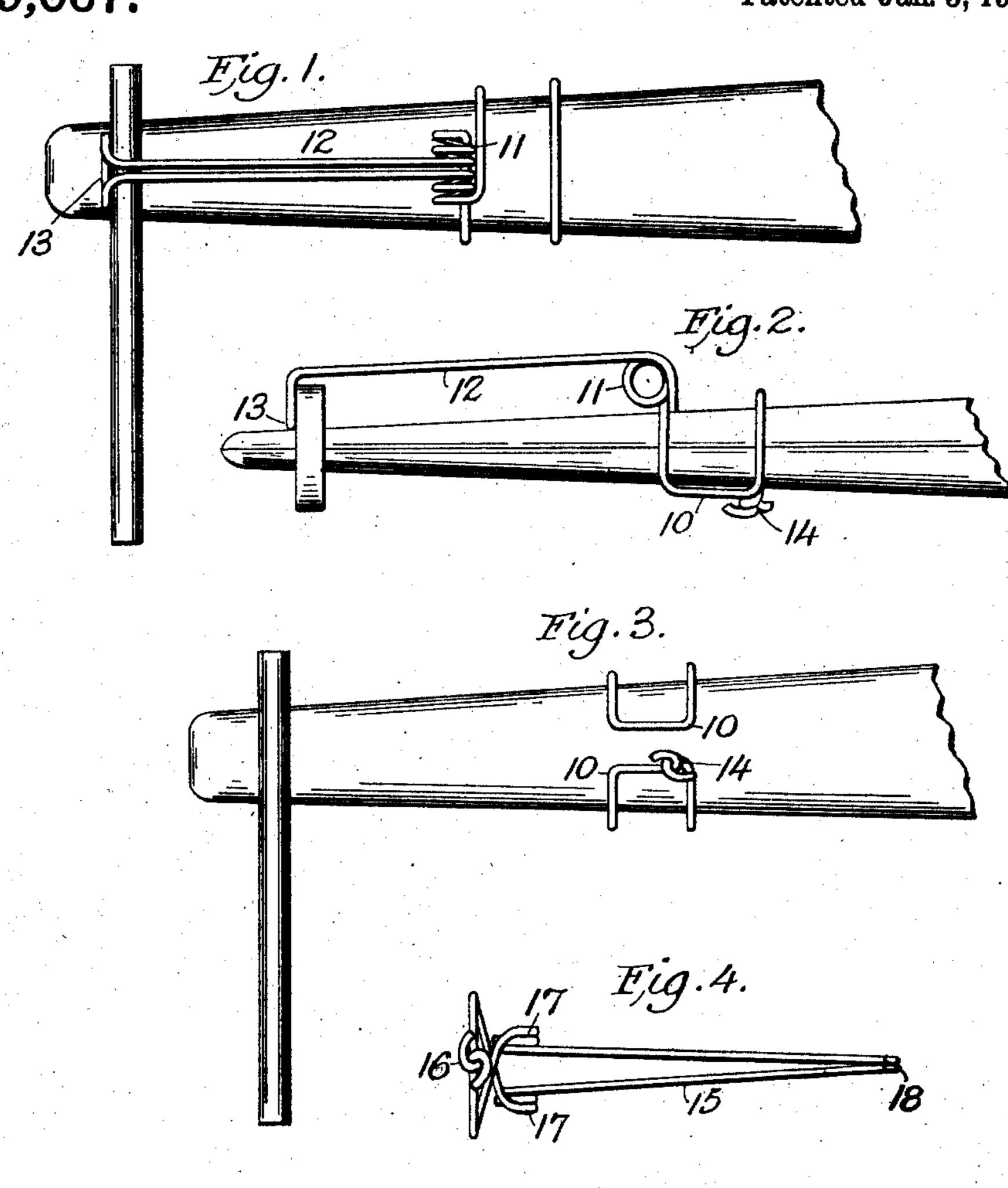
A. F. CROSBY.

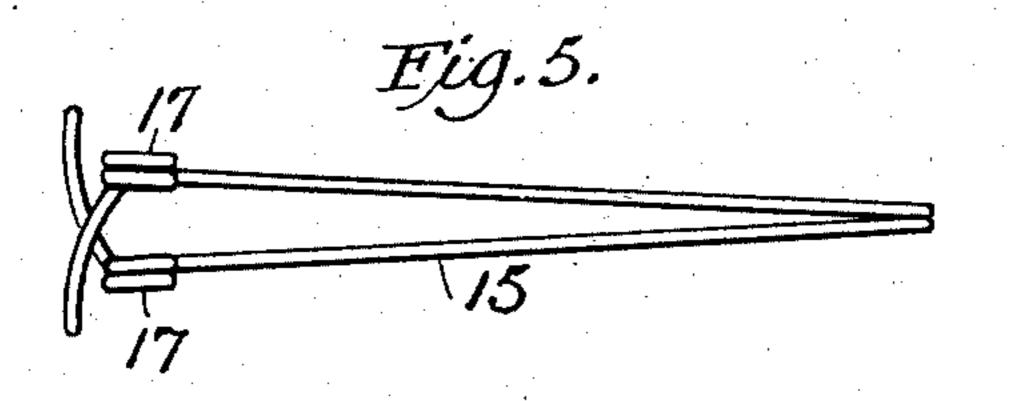
WHIFFLETREE HOOK.

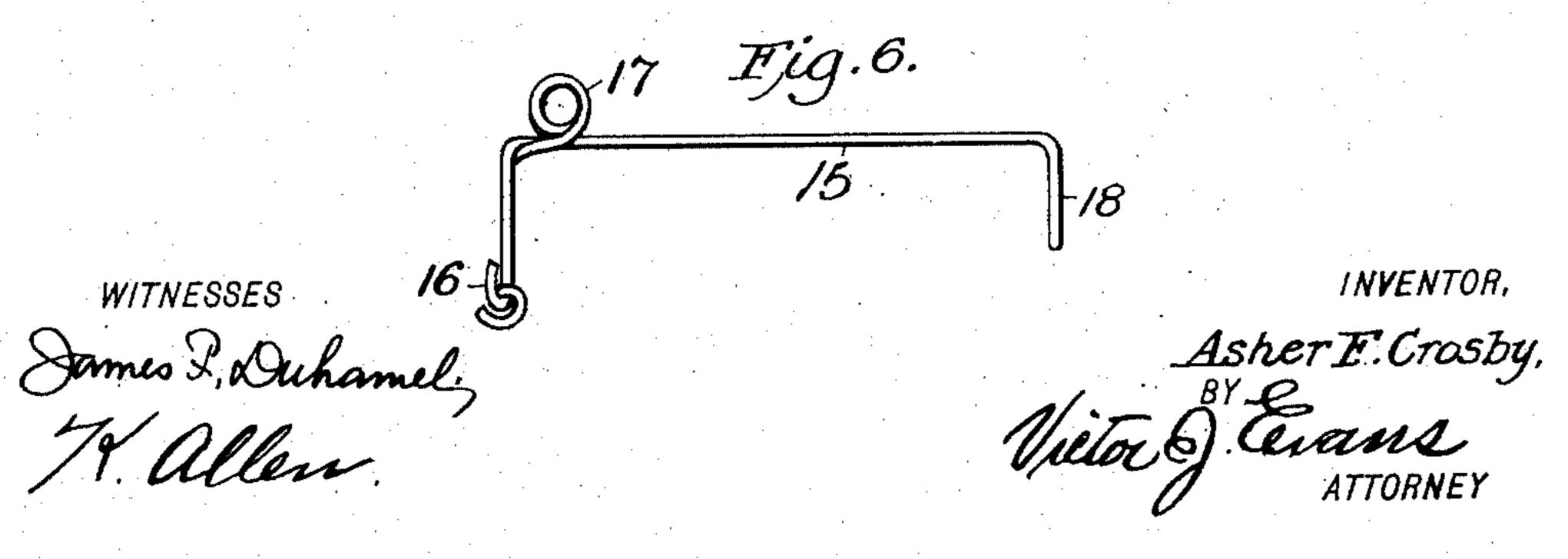
APPLICATION FILED APR. 13, 1907. RENEWED NOV. 3, 1908.

909,067.

Patented Jan. 5, 1909.







UNITED STATES PATENT OFFICE.

ASHER F. CROSBY, OF TOWNERS, NEW YORK.

WHIFFLETREE-HOOK.

No. 909,067.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed April 13, 1907, Serial No. 367,996. Renewed November 3, 1908. Serial No. 460,905.

To all whom it may concern:

Be it known that I, Asher F. Crosby, a citizen of the United States, residing at Towners, in the county of Putnam and State of New York, have invented new and useful Improvements in Whiffletree-Hooks, of which the following is a specification.

This invention relates to whiffletree hooks or similar devices for engaging the trace 10 where it is attached to the whiffletree to retain it in place and consists of certain new and novel constructions which will be more fully explained in the following specification set forth in the claims and illustrated in the drawings where like reference characters are used to designate the same parts in the various figures.

Figure 1 is a plan view of the end of a whiffletree showing my improved hook applied thereto. Fig. 2 is a side view of the same. Fig. 3 is a bottom view of Fig. 1. Fig. 4 is a bottom view of a modified form of hook. Fig. 5 is a plan view of same. Fig. 6 is a side elevation.

The device is made of wire and adapted to spring or be fitted upon the end of the whiffletree as shown and is composed of two lateral clamping loops or U-shaped jaws 10 each of which passes around the side of the whiffletree to its under side and the wire of which these parts is made is formed with springs 11

to be located on the upper side of the whiffletree and project forward into the arm 12 which terminates in the hook 13. These 35 springs permit the arm to be raised for applying or removing the trace and also permit the jaws to be spread for gripping the device on the whiffletree. When the jaws are spread, the springs are compressed so that 40 the tendency of the springs to expand will

tree. It will be seen that this construction employs but one piece of wire and these various hooks, loops and springs are formed therefrom and the ends are joined in a knot

or joint 14 located on the under side of the whiffletree. The hook 13 is in this construction provided with two springs, the arm itself and the coils 11 which firmly retain it in its place against the side of the whiffletree

and prevent its release.

The modified form of the hook dispenses

with the two gripping loops and employs a single loop which envelopes the end of the whiffletree and is retained thereon by the 55 springing action of the arms 15 which are normally spread apart but when placed on the whiffletree and forced thereon as far as possible the gap between the arms closed and the resilient action firmly holds the hook 60 upon the whiffletree. This construction is of a single piece of wire also and the ends are united at the joint 16 while the coils 17 at the inner ends of the arms serve to retain the hook 18 in its place to control the end of the 65 trace.

The construction provides a very simple and cheap hook for fastening a trace in its place and the springing action of its various parts enables it to perform its work and be 70 firmly held in its place without danger of loss and it is obvious that various modifications in the arrangement of construction of certain details may be resorted to without departing from the essential features above described. 75

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

1. A trace fastener or whiffletree hook comprising a single length of wire doubled on itself to form an arm composed of two por- 80 tions, the extremity of the arm being bent downward at right angles, a helical spring at the inner end of each member forming the arm, the extremities of the wire being bent to cross each other adjacent the spring and 85 arranged to extend over the top of a whiffletree and formed into whiffletree-engaging members adapted to extend in opposite directions around the whiffletree, the terminals of the wire being looped one on the other. 90

2. A trace fastener comprising a single piece of wire doubled on itself and bent into a hook shaped arm, helical springs at the inner ends of the members forming the arm and arranged with their axes coinciding, the 95 extremities of the wire being bent into oppositely disposed U-shaped jaws in the form of hooks and the terminals of the wire being fastened together.

3. A trace fastener comprising a single 100 piece of wire doubled on itself to form an arm, the extremity of which is bent to one side to constitute a hook, helical springs at the inner ends of the members that form the

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arm and extending outwardly from each and arranged to permit the arm to be raised, the extremities of the wire being bent oppositely from the outer ends of the springs and formed into jaws capable of spreading apart by the compression of the springs for gripping a whiftletree.

In testimony whereof, I affix my signature in presence of two witnesses.

ASHER F. CROSBY.

Witnesses:

James E. Towner, Jr.,

John Towner.