

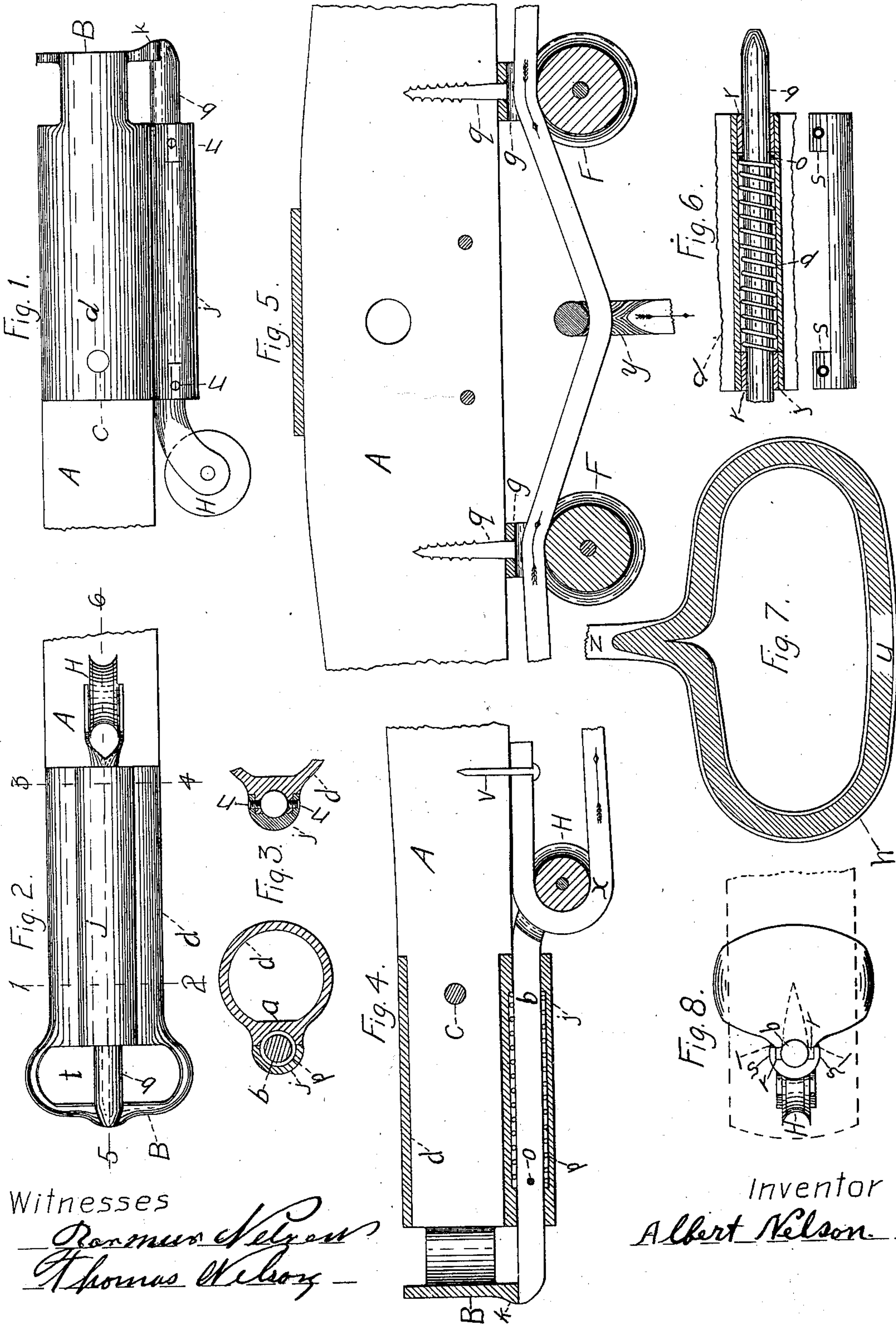
No. 661,888.

Patented Nov. 13, 1900.

A. NELSON.
WHIFFLETREE.

(Application filed Oct. 30, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

ALBERT NELSON, OF IDAHO FALLS, IDAHO.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 661,888, dated November 13, 1900.

Application filed October 30, 1899. Serial No. 735,347. (No model.)

To all whom it may concern:

Be it known that I, ALBERT NELSON, a citizen of the United States, residing at Idaho Falls, in the county of Bingham and State of Idaho, have invented a new and useful Whiffletree, of which the following is a specification.

My invention is an improvement in the class of whiffletrees which are provided with attachments adapted to release the traces or tugs when due traction is applied.

The improvement is embodied in a certain combination and arrangement of parts, hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a top view of the clip. Fig. 2 is a back view of the clip. Fig. 3 is a vertical section of the clip on the line 1 2, Fig. 2, also a section of the cylinder containing the bolt and spring on the line 3 4, Fig. 2, showing how the two parts of the cylinder are held together. Fig. 4 is a horizontal section on the line 5 6, Fig. 2, showing also a portion of the operating device. Fig. 5 is a horizontal section through the center of the whiffletree, showing a part of the operating device. Fig. 6 is a back view of the cylinder containing the spring and bolt with the back half of the cylinder removed. Fig. 7 is a part of the operating device and, in connection with Figs. 4 and 5, shows the method of withdrawing the bolt. Fig. 8 is an end view of the clip, showing the tug in dotted section.

Similar characters refer to similar parts throughout the several views.

The main shaft A, of wood, is that of an ordinary whiffletree, except that its top and back sides are straight lines. On each end of the shaft A and secured thereto by the rivet c is the clip B, composed, essentially, of two horizontal iron cylinders. The larger cylinder d and the front half or base of the smaller cylinder j are made in one piece. (See Fig. 3.) The inner surface of d is not a true circle, but is slightly flattened on the back side at a, Fig. 3, to allow for cutting away a part of the outside material to give room for the spring p. The outer end of d is enlarged both ways in its vertical diameter to give room for the tug-opening t, Fig. 2. It is also enlarged on its back side on its horizontal diameter to form the small projections 11, Fig. 8, between

which rests the outer end of the bolt b. The extra material that would otherwise be cut away from this enlargement is upset, forming a slight projection k, Figs. 1 and 4, on the end of the cylinder. The smaller cylinder j contains the spring p, which keeps the bolt b locked. Through b is the pin o, which compresses the spring when the bolt is drawn. In one end of b is the pulley H, which forms a part of the operating device hereinafter referred to. The back part of the cylinder j is a separate piece and is secured to the base of the cylinder by the screws n n, Fig. 3, through the lugs s s, Fig. 6, in the corresponding lugs r r, Fig. 8, on the base and against which rests one end of the spring p when in position.

The operating device heretofore referred to consists of the leather cord x, secured to the back side of the shaft A by the T-headed nail v and passing around the pulley H, as shown in Fig. 4, thence to the pulley F, which is secured to the back side of the shaft A by the frame g and the screw q, thence through the loop y to the opposite pulley F, and thence to the other end of the whiffletree. The loop is adapted to slide free on the bolt-connecting cord b, so that when the cord z is pulled traction is applied to both bolts to a practically equal degree. To the loop y is attached a buckle, (not shown in the drawings,) into which buckles the cord z, Fig. 7, which passes back over the dashboard through a loop attached to the dashboard. On the end of the cord z is the handhold h, which is an iron form or center u, covered with leather. The arrows in the drawings show the direction of the motion while withdrawing the bolts.

It will be seen that by the attachment of the ends of the cord x to the whiffletree, as shown, and then passing it over pulleys H on the bolts b, and thence over the fixed pulleys F, the following advantage is attained, namely: The effect of the tractive force applied to the cord is practically double that produced when the ends of the cord are attached directly to the bolts. The pull applied by the cord z is equally effective on both bolts b in consequence of the connection of the pull-cord z with the bolt-cord x.

What I claim is—

The combination with the whiffletree and
tug-clips applied to its ends, and spring-bolts
carried in said clips and having pulleys jour-
naled on their inner ends, of a cord passing
5 over the pulleys and secured at its ends to
the whiffletree at points intermediate of said
bolts and pulleys, and a pull-cord attached

to the cord connected with the bolts as shown
and described.

ALBERT NELSON.

Witnesses:

T. W. NELSON,
RASMUS NELSON.