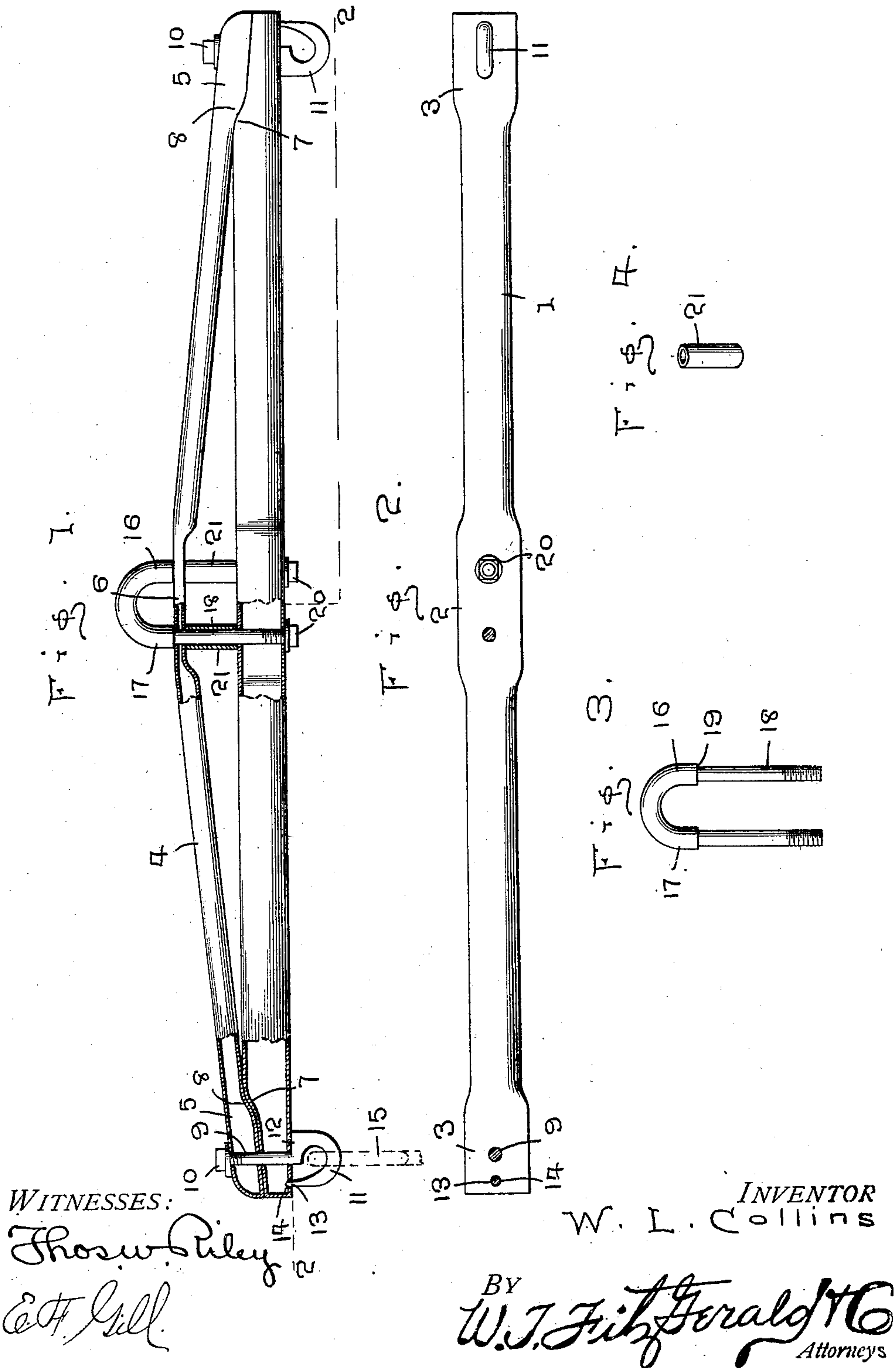


W. L. COLLINS.  
SWINGLETREE.

APPLICATION FILED AUG. 11, 1908.

907,744.

Patented Dec. 29, 1908.



WITNESSES:

Thomas W. Riley  
E. H. Gill

INVENTOR  
W. L. COLLINS

BY  
W. J. FitzGerald & Co.  
Attorneys



# UNITED STATES PATENT OFFICE.

WILLIAM L. COLLINS, OF CAIRO, WEST VIRGINIA.

## SWINGLETREE.

No. 907,744.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed August 11, 1908. Serial No. 447,991.

*To all whom it may concern:*

Be it known that I, WILLIAM L. COLLINS, a citizen of the United States, residing at Cairo, in the county of Ritchie and State of West Virginia, have invented certain new and useful Improvements in Swingletrees; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in swingle trees and more particularly to that class adapted to be formed of metal and my object is to provide means for bracing and reinforcing the body of the swingle tree, whereby the same will withstand great strain and at the same time be constructed of comparatively light metal.

A further object is to provide means for removably securing trace hooks to the ends of the swingle tree.

A still further object is to provide means for attaching the swingle tree to different objects and a still further object is to provide means for securing the bracing members to the ends of the swingle tree in such manner as to resist longitudinal strain thereon.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claim.

In the accompanying drawings which are made a part of this application, Figure 1 is a plan view partly in section of my improved swingle tree and parts attached thereto. Fig. 2 is a sectional view as seen on line 2—2, Fig. 1. Fig. 3 is a detail plan view of the clevis employed for attaching the swingle tree to various objects, and, Fig. 4 is a perspective view of a collar employed in connection with the clevis.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates the body of my improved swingle tree, which is preferably constructed of metal and formed hollow, the central portion 2 and ends 3 of said body being preferably slightly flattened or enlarged as best shown in Fig. 2.

In order to thoroughly brace the body 1, whereby the same will withstand a great strain, I provide a brace member 4, which brace member is also preferably constructed of hollow metal and extends from end to end of the body 1. The ends 5 of the brace member 4 are also preferably flattened to fit the

flattened surface of the ends 3 and as the brace member 4 extends at an angle from its central portion 6 outwardly, the meeting faces of the ends 3 and 5 are likewise placed at the same angle as the angle of the brace member to the body 1 and in order to compensate for longitudinal strain on the body and brace member, the ends 3 are provided with shoulders 7, which are adapted to be engaged by similarly formed shoulders 8 on the flattened portions of the ends 5, whereby when a strain is applied to the ends of the body 1, the shoulders 7 and 8 will bind against each other and lessen the strain of the brace member and body.

The ends of the body 1 and brace member 4 are secured together by extending bolts 9 through said ends, the rear ends of the bolts being threaded to receive nuts 10, while the forward ends of the bolts terminate in hooks 11, the integral ends of the hooks having shoulders 12, which shoulders engage the surface of the body 1 and form heads for the bolts 9, while the free ends 13 of the hooks are adapted to enter sockets 14 in the wall of the body 1 and it will be readily seen that when a trace hook 15 is engaged with the hooks 11, and the ends 13 entered in the sockets 14, said trace hooks will be prevented from casual disengagement from the hooks 11.

In securing the swingle tree to various objects, I provide a clevis 16, the closed end 17 of which is larger than the paralleling stems 18, thereby forming ledges 19, which ledges are adapted to engage the flattened face of the central portion 6 and limit the forward movement of the clevis, the stems 18 being of sufficient length to extend entirely through the body 1 and have their forward ends threaded to receive nuts 20, by which means the clevis is secured to the swingle tree.

As the central portion of the brace member 4 is at a distance from the face of the body 1, said brace member is held against inward movement by introducing collars 21 around the stems 18 and between the brace member 4 and body 1 and by firmly clamping the ledges 19 against the outer face of the brace member 4 and the inner face of the brace member against the ends of the collars 21, a rigid connection is formed between the several parts at this point. It will thus be seen that by providing the brace member and attaching the same to the body in the manner shown, said brace member and body may be



formed of tubular metal, thus producing a comparatively light swingle tree, and at the same time a very strong and durable one.

It will likewise be seen that by providing  
5 the coöperating shoulders on the ends of the swingle tree and brace member, the body 1 will withstand a severe strain and it will further be seen that the trace hooks may be securely fastened to the ends of the body  
10 and held in their secured position until such time as it is desired to remove the same.

What I claim is:

In a swingle tree, the combination with a hollow body having shoulders adjacent its  
15 ends; of a hollow brace member having shoulders adapted to coöperate with the

shoulders on the body, bolts extending through the ends of the body and brace member, hooks on one end of said bolts, the free ends of which are adapted to engage the body, trace hooks adapted to be engaged and held in position by the hooks on the bolts and a clevis adapted to extend through the brace member and body, whereby the swingle tree may be secured to an object. 25

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM L. COLLINS.

Witnesses:

J. W. COLLINS,

W. K. SHEPPARD.