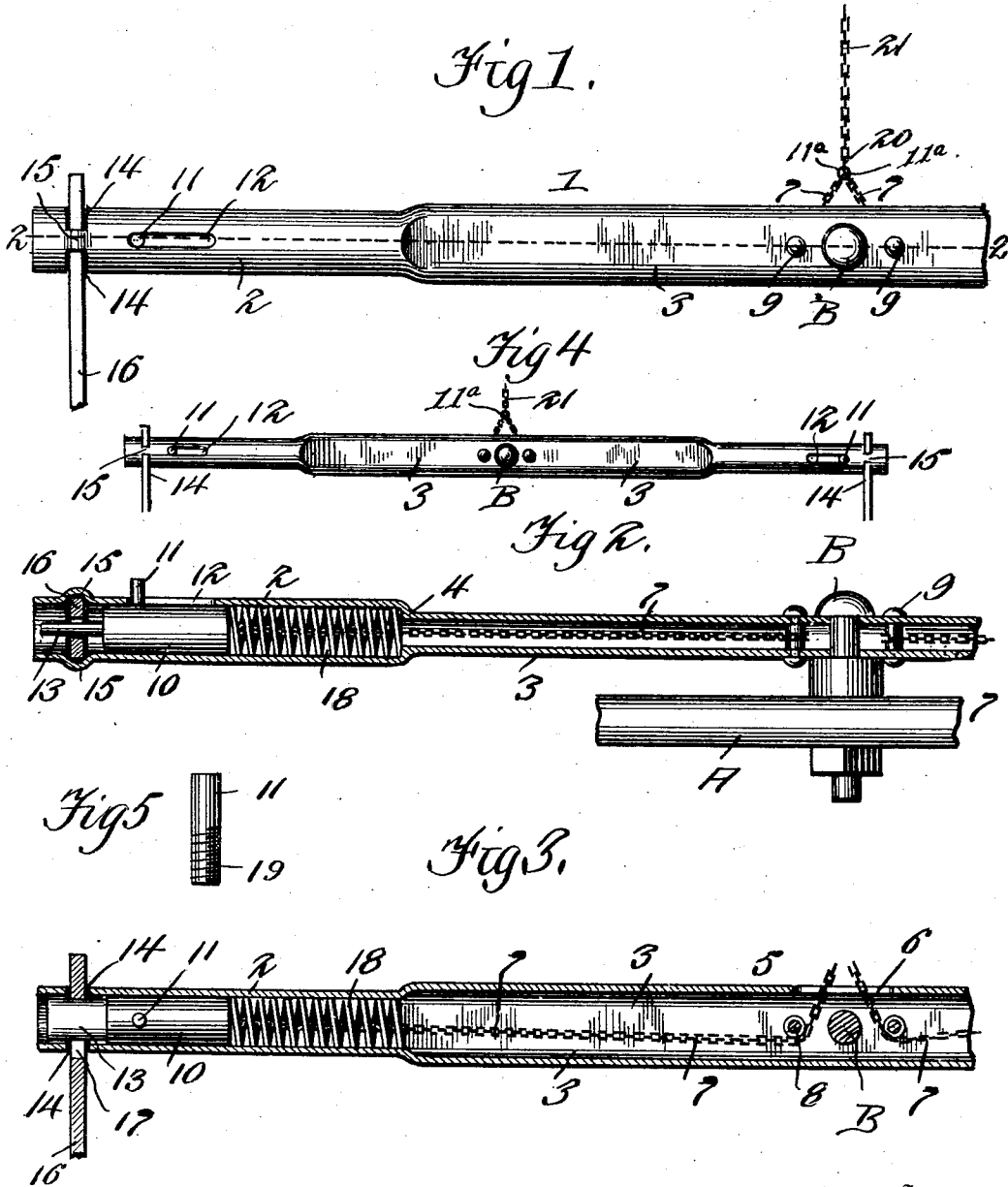


C. V. ANTENAT.
SWINGLETREE.
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930,118.

Patented Aug. 3, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

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SWINGLETREE.

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To all whom it may concern:

Be it known that I, CHARLES V. ANTENAT, a citizen of the United States, residing at Sheridan, in the county of Lasalle and State of Illinois, have invented new and useful Improvements in Swingletrees, of which the following is a specification.

This invention relates to swingletrees and particularly to one adapted for use as a horse releaser, and the object of my invention is to provide a device of this character that can be constructed principally from a single piece of metal tubing, the said tubing having flattened intermediate portions adapted to form shoulders inwardly of the ends of said tubing, said tubing being provided with cylindrical end portions extending outwardly of said shoulders and slidable spring pressed bolts mounted in said cylindrical end portions and adapted for operation for engagement with trace ends of usual construction.

Other objects and advantages will be apparent as the nature of the invention is better disclosed, and it will be understood that changes within the scope of the claim may be resorted to without departing from the spirit of the invention.

In the drawings forming a portion of this specification and in which like characters of reference indicate similar parts in the several views, Figure 1 is a top plan view of the swingletree, Fig. 2 is a longitudinal sectional view on the line 2—2 of Fig. 1, Fig. 3 is a horizontal sectional view, Fig. 4 is a top plan view similar to Fig. 1 showing a complete swingletree, Fig. 5 is a detail view of one of the studs or finger pieces.

Referring now more particularly to the drawings there is shown a swingletree 1 which is preferably constructed from tubular metal and is provided with cylindrical end portions 2 and an intermediate flattened portion 3. By the construction of the flattened portion 3 it will be seen that a shoulder 4 is formed at the inner end of each of the cylindrical portions 2. In the front wall 5 of the portion 3 of the said swingletree is formed a slot 6 through which pass chains or similar flexible elements 7, which chains pass over rollers 8 mounted upon pins 9, the latter being mounted at their ends in the upper and lower walls of the portion 3 as clearly shown in Fig. 2 of the drawings. A portion of a carriage or vehicle shaft is

indicated at A and a swingletree is pivoted to said shaft by means of the bolt B.

In each end 2 of the swingletree is mounted a bolt 10 and as shown, each bolt is provided with a stud or finger piece 11 disposed in a slot 12 formed adjacent to the end of the portion 2, and it will thus be seen that the bolts are prevented from rotary movement but are effectively mounted for movement longitudinally of the swingletree. Each bolt is provided with a flattened outer end 13. Adjacent to each end, the portions 2 have slots 14 formed in their front and rear sides, and at the upper and under sides, the walls of the slots are connected by bight or curved portions 15 which portions serve as stops to prevent vertical movement of the trace ends. By the provision of the slots 14 it will be seen that the ends of the traces 16 may be passed through the portions 2, and the portions 13 of the bolts 10 may be projected through the eyes 17 formed in the traces, as shown. To effectively prevent the displacement of the portions 13 from engagement with the traces, I provide helical springs 18 which are mounted in the portions 2 of the swingletree and are disposed between the shoulders 4 and the inner ends of the bolts 10 respectively and serve to normally hold the studs or finger pieces at the outer ends of the slots 12. The chains 7 have their ends within the swingletree attached to the bolts 10, and the ends of the said chains outwardly of the slot 6 are connected by a ring or the like 11^a adapted to receive a snap hook 20 carried by a chain or flexible element 21. In operation, it may be stated that the chain 21 is carried to a convenient point in the vehicle in order that it may be conveniently grasped at the time of a runaway, and by pulling the chain toward the driver of the vehicle it will be understood that the bolts 10 will be retracted or drawn inwardly to disengage the portions 13 of the said bolts from the traces, whereupon, it is obvious that an animal is free to escape from the shafts of the vehicle. The studs or finger pieces 11, as shown in Fig. 5 of the drawings, are provided with threaded inner ends 19 to engage correspondingly threaded passages formed in the bolts.

From the foregoing it will be seen that a simple and inexpensive swingletree is provided, and by constructing the same from hollow metal and by providing the circular

end portions which are bent at the ends, it will be understood that in assembling parts of the device the springs 18 may be first placed into the portions 2, and the bolts inserted next, after which, the studs or finger pieces 11 may be engaged with the bolts to hold the same from displacement.

Having thus described the invention, what is claimed as new, is:—

- 10 A device of the class described comprising a swingletree formed from metal tubing, said tubing having a flattened intermediate portion adapted to form shoulders inwardly of the ends of said tubing, said tubing having cylindrical end portions extending outwardly from the shoulders, slidable bolts mounted in said cylindrical end portions, said cylindrical end portions having slots formed therein and disposed longitudinally

of the swingletree, removable studs carried by the bolts and slidably mounted in said slots, springs confined between the inner ends of said bolts and said shoulders, said cylindrical portions having slots formed therein extending at right angles to the first named slots, traces having their ends disposed in the last named slots, trace engaging means carried by said sliding bolts, and means for moving the bolts against the tension of said springs so that the said trace engaging means can be moved into disengaged positions.

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

CHARLES V. ANTENAT.

Witnesses:

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