

B. F. WHETSELL.
 SWINGLETREE CLIP OR TRACE FASTENER.
 APPLICATION FILED APR. 21, 1909.

945,145.

Patented Jan. 4, 1910.

Fig. 1.

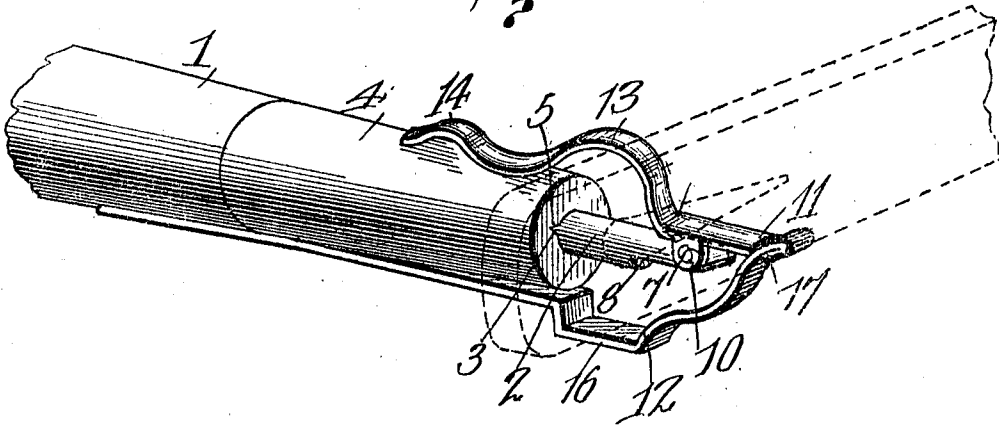


Fig. 3.

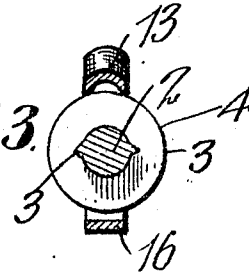
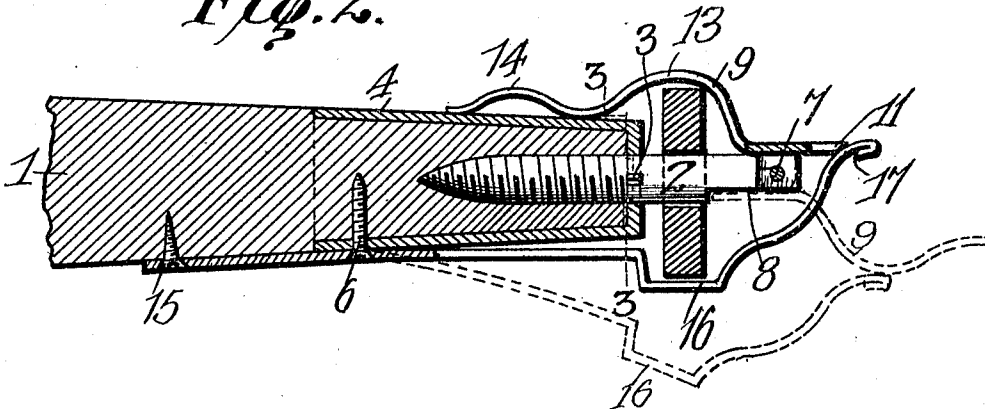


Fig. 2.



B. F. Whetsell Inventor

Witnesses

Stewart Rice.
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UNITED STATES PATENT OFFICE.

BENJAMIN F. WHETSELL, OF ELKINS, WEST VIRGINIA.

SWINGLETREE-CLIP OR TRACE-FASTENER.

945,145.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed April 21, 1909. Serial No. 491,369.

To all whom it may concern:

Be it known that I, BENJAMIN F. WHETSELL, a citizen of the United States, residing at Elkins, in the county of Randolph and State of West Virginia, have invented certain new and useful Improvements in Swingletree-Clips or Trace-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to trace fasteners, and has for its object the production of novel means whereby a trace may be quickly attached or detached from a whiffletree.

Another object of this invention is the production of a whiffletree hook, which will securely hold a trace in place and prevent any rattling.

With these and other objects in view this invention consists of certain novel constructions, combinations, and arrangements of parts as will be hereinafter fully described and claimed.

In the drawings; Figure 1 is a perspective view of one end of a whiffletree, showing my improved device applied thereto; Fig. 2 is a longitudinal section of the same; and Fig. 3 is a section taken on line 3—3 of Fig. 2.

Referring to the drawings by numerals 1 designates a whiffletree in the end of which is adapted to be threaded a bolt-member 2, which member is provided intermediate its ends with a pair of laterally-extending lugs 3. Adapted to fit upon the outer end of the whiffletree 1 is a casing, or sleeve, 4 which also fits over the bolt-member 2, and said casing is provided at its outer end with a plurality of socket-portions 5 adapted to receive the lugs 3 upon the bolt-member. Sleeve 4 is held against rotation by means of a screw 6, which passes through said casing and firmly secures the same to the whiffletree. Therefore, it will be obvious that the bolt-member 2 will be also held against rotation.

The bolt-member 2 is provided with a flattened outer end 7 and a flattened side 8. A locking-member 9 is adapted to be pivotally secured to the outer end of the bolt-member 2 and said locking-member 9 is provided with a pair of ears 10, which ears are adapted to fit upon said flattened end, and are pivotally secured thereto, thereby pivotally mounting said locking-member upon said bolt-member. The locking-member 9 is provided with a protruding outer end 11, which end is adapted to engage the spring-member 12,

hereinafter described. The locking-member 9 is provided with a primary bulged portion 13 and an auxiliary bulged portion 14, the bulged portion 13 allowing the free movement of the trace upon the bolt-member 2. The bulged portion 14 facilitates the gripping of the locking-member 9 for operating the same, and allowing the trace to be removed from the whiffletree. The spring-member 12 is secured at its inner end by means of screws 15, and 6, which latter 6, holds the sleeve 4 against rotation. The spring-member 12 is also provided with a bulged portion 16, which is adapted to be opposite to the bulged portion 13 of the locking-member, and receive the trace, which is adapted to be placed upon the bolt-member 2. The outer end 17 of the spring-member 12 engages the outer end 11 of the locking-member 9 and holds the same in a locked, or closed, position, as shown in Fig. 2.

When it is desired to remove the trace from the bolt-member 2 the locking-member 9 is swung, so as to have the outer end 11 positioned upon the flattened side 8 of the bolt-member 2 as shown in dotted lines. Then the trace can be easily slipped from the outer end 11 of the locking-member 9 and after said trace has been slipped upon said end the locking-member 9 can be thrown in an upright position, or at right angles to the bolt-member 2, and said end will push the trace out of engagement with the spring-member 12, and then the trace can be easily slipped off of the locking-member 9. Therefore, it will be obvious that the trace can be easily attached to, or detached from the whiffletree.

It will be obvious that by having the structure constructed in accordance with the foregoing specification, and as illustrated in the official drawing, I have produced novel means for easily and quickly attaching a trace to the end of a whiffletree.

To place the trace on the bolt member 2, the locking member 9 is thrown to a vertical position and the trace is engaged therewith and slid down thereon till it partly rests upon the member 2 and partly projects from the end thereof, the depending end 11 holding the outer end 17 of the spring member 12 spaced apart from the end of member 2. As the member 9 is swung over into the position shown in dotted lines in Fig. 2, it will carry the trace into a position from which it may be manually pushed into the position

shown in Fig. 2, the bulged portion 13 of the member 9 bearing against the outer end 17 of the member 12, and forcing the latter into the position shown in dotted lines in Fig. 2 and holding it in such position till the trace is pushed onto the member 2. Then the member 9 is thrown back into the locked position shown in Fig. 2. To remove the trace the operation is reversed.

10 What I claim is:

1. A device of the class described comprising a sleeve, a bolt provided with a flattened outer end and a flattened side, a locking-member provided with a plurality of ears, 15 said ears engaging and pivoted to said flattened end, said pivoted member provided with an extending outer end adapted to engage said flattened side when in an extended position, and fit snugly thereon, for allowing 20 the trace to be quickly attached thereto.

2. A device of the class described comprising a bolt provided with a flattened outer end, a pivoted member provided with a plurality of ears and a protruding end, said ears 25 being pivoted to said flattened end, a casing adapted to fit over said bolt, said pivoted member provided with a gripping portion adapted to normally engage said casing, and means adapted to engage the outer end of 30 said pivoted-member and normally hold said gripping-portion in engagement with said casing.

3. A device of the class described comprising a whiffletree, a bolt threaded in one end 35 thereof, means positioned upon the end of said whiffletree and engaging said bolt-member for holding the same against rotation, a pivoted locking member secured to the outer end of said bolt-member, said locking member provided with a protruding end, primary 40 and auxiliary loop portions, a spring member secured to said whiffletree and engaging the outer protruding end of said locking member, said protruding end adapted to 45 hold the spring member out of engagement with said bolt member, and said primary

bulged portion of said locking member adapted to force a trace positioned thereon from between the protruding end of said locking member and the spring member 50 when being swung from a vertical to a horizontal position.

4. A device of the class described comprising a whiffletree, a bolt threaded therein, means engaging said bolt for holding the 55 same against rotation, a locking member pivotally secured to the outer end thereof, a spring member, said locking member provided with a protruding end adapted to engage said spring member and adapted to 60 hold the same out of engagement with said bolt member, said bolt member adapted to receive a trace and said protruding end of said locking member adapted to force the trace off said bolt and out from between said 65 spring member and said bolt member when said locking member is being thrown from a horizontal to a vertical position and when the trace is being removed from the fastener.

5. In a device of the class described the 70 combination with a support, of a bolt member secured thereto, a spring member provided with a bulged outer end, a locking member pivotally secured to said bolt-member and provided with a protruding end, 75 and a primary and auxiliary bulged portion, said protruding end adapted to engage the outer end of said spring member for allowing the trace to be placed upon said bolt-member and said primary bulged portion 80 adapted to force said trace upon said bolt member when being thrown into a horizontal position, and said locking member adapted to normally hold said trace against displacement from said bolt member. 85

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

BENJAMIN F. WHETSELL.

Witnesses:

B. M. HOOVER,
ETHEL W. DEAR.