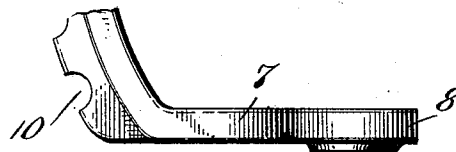
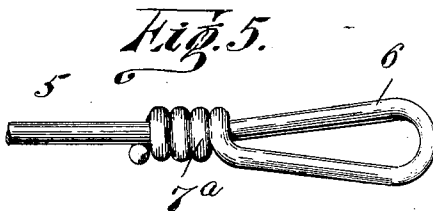
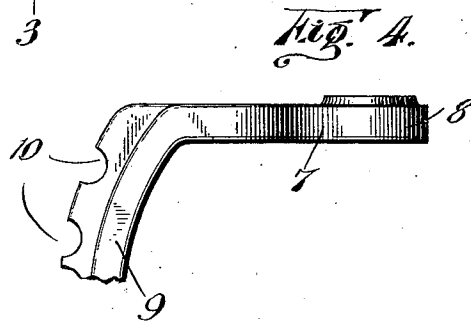
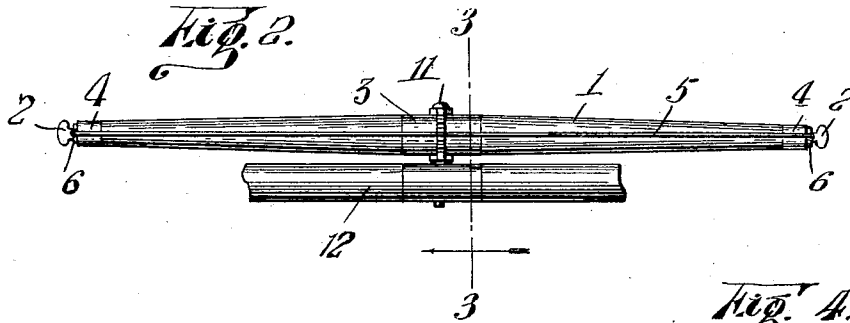
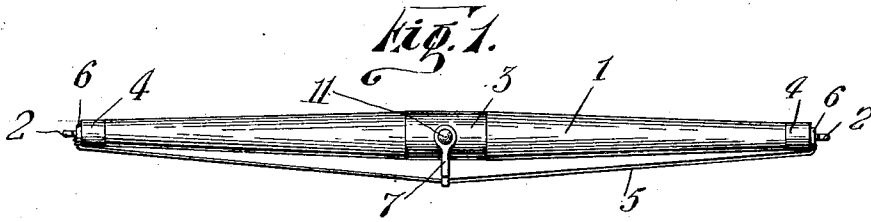


E. LUST.  
SWINGLETREE.  
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977,459.

Patented Dec. 6, 1910.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ELMER LUST, OF REASNOR, IOWA.

SWINGLETREE.

977,459.

Specification of Letters Patent.

Patented Dec. 6, 1910.

Application filed March 16, 1910. Serial No. 549,694.

*To all whom it may concern:*

Be it known that I, ELMER LUST, a citizen of the United States, residing at Reasnor, in the county of Jasper and State of Iowa, have  
5 invented certain new and useful Improvements in Swingletrees, of which the following is a specification.

This invention relates to swingletrees, and one of the principal objects of the same is to  
10 provide simple and reliable means for giving additional strength to an ordinary whiffletree.

Another object of the invention is to provide a whiffletree with a steel truss rod extending from end to end of the whiffletree,  
15 means being provided at the center of the whiffletree to adjust the strain of the truss rod.

Still another object of the invention is to provide an ordinary wooden whiffletree with a steel wire truss connected to the opposite  
20 trace hooks or buttons at the ends of the whiffletree, said steel wire truss extending across a straining device pivoted centrally to the whiffletree and designed to force the  
25 center of the truss outward away from the whiffletree to brace the same and to give additional strength to the structure.

These and other objects may be attained  
30 by means of the construction illustrated in the accompanying drawing, in which,

Figure 1 is a plan view of a swingletree provided with a truss rod connected thereto in accordance with my invention. Fig. 2 is  
35 a rear elevation of the swingletree shown pivotally connected to a portion of a double-tree or vehicle frame. Fig. 3 is a sectional view on the line 3—3 of Fig. 2 looking in the direction indicated by the arrow. Fig.  
40 4 is a detail side elevation of the straining device for the truss rod made on an enlarged scale, shown broken away in the center. Fig. 5 is a detail elevation of one end of the truss rod made on an enlarged scale.

Referring to the drawing for a more particular description of my invention, the numeral 1 designates a swingletree, which may be of the usual or any preferred form,  
45 said swingletree being provided with end

hooks or buttons 2 for the trace eyes. The 50 swingletree center may be provided with a metal sleeve or collar 3 and a ferrule 4 may be fitted to the ends of the swingletree.

A steel wire truss rod 5 is provided with end loops 6, said loops being formed by  
55 twisting the ends of the wire around the body portion thereof, as shown at 7<sup>a</sup> in Fig. 5. The loops 6 are passed over the hooks 2 and engage the shanks of said hooks.

A straining device for the truss rod 5 is  
60 shown detached in Fig. 4 and comprises the parallel arms 7, each having a perforated boss 8 at the end thereof, said arms being connected by a curved portion 9 having a series of notches 10 formed on the outer edge  
65 thereof, said notches being disposed in a curved line. This straining device is pivotally mounted upon the swingletree 1 by means of a bolt 11, said bolt extending  
70 through the perforated bosses 8, through the whiffletree, and through the double-tree or cross bar 12.

When it is desired to adjust the strain of the truss rod 5, the straining device is moved  
75 on the bolt 11 to occupy a position lying at the side of the swingletree, and when the rod 5 is placed in one of the notches 10 in said straining device the latter is moved on its pivotal point to throw the straining device at right angles to the swingletree, as  
80 shown in Fig. 1, thus straining the truss rod 5 and giving additional strength and stability to the swingletree. The notches 10 in the straining device are arranged in slightly different arcs struck from the pivotal point  
85 of said straining device, thus permitting a range of adjustment of the truss-rod to stiffen the swingletree.

From the foregoing it will be obvious that my invention is of simple construction, can  
90 be readily applied to any ordinary swingletree, will serve to give great strength to the swingletree and can be adjusted from time to time as required.

I claim:—

1. A swingletree provided with a steel wire truss having loops at its ends which engage the shanks of the swingletree hooks,  
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and a pivoted straining device connected to the whiffletree and provided with a series of notches to be engaged by the truss rod.

2. A swingletree provided with a steel wire  
5 truss rod, said truss rod having loops formed in the ends thereof for engaging the shanks of the trace hooks and a straining device pivotally connected to the center of the swingletree, said straining device having a

curved member provided with a series of 10 notches to be engaged by the truss rod for stiffening the swingletree.

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

ELMER LUST.

Witnesses:

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RILEY LUST.