D. M. COBB.

Whiffletrees.

No. 157,270. Patented Dec. 1, 1874.

Fig. 5.

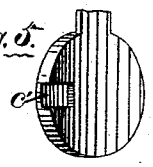

Fig. 1.

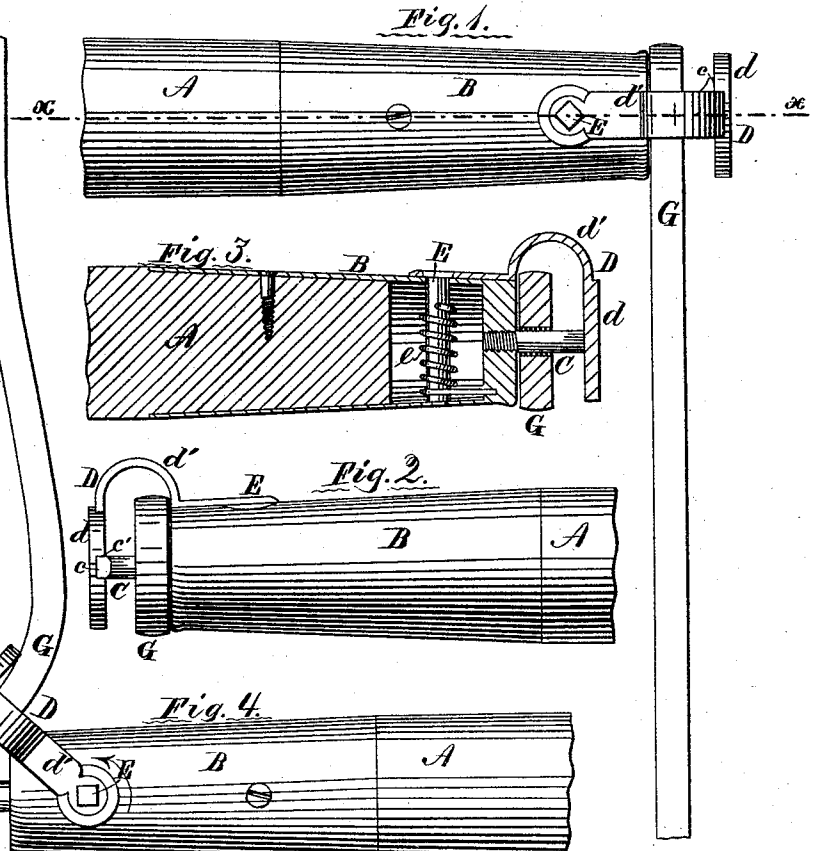

Fig. 3.

Fig. 2.

Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

DWIGHT M. COBB, OF GALESBURG, ILLINOIS.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **157,270**, dated December 1, 1874; application filed July 22, 1874.

To all whom it may concern:

Be it known that I, DWIGHT M. COBB, of Galesburg, county of Knox and State of Illinois, have invented certain Improvements in Trace-Fasteners, of which the following is a specification:

The nature of this invention relates to improvements in devices for retaining harness-traces in place upon their seats on the ends of whiffletrees; and the invention consists in the construction and arrangement of a pivoted guard for holding and releasing the trace, all as hereinafter fully described.

To enable others skilled in the art to make and use my invention, I will now proceed to describe the same with reference to the accompanying drawing, in which—

Figure 1 is a top or plan view of one end of a whiffletree and trace, and showing my invention. Fig. 2 is a rear elevation. Fig. 3 is a longitudinal vertical sectional view on the line *x x* of Fig. 1, and Fig. 4 is a top view with the parts in different position from what is shown at Fig. 1. Fig. 5 is a detail view.

Referring to the parts by letters, letter A represents one end of an ordinary whiffletree or single-tree, and B is an ordinary cap-ferrule. C is the hook, its shank end screwed into or otherwise secured in the end of the ferrule B and single-tree A, and its outer end bent rearward, and provided with a short lug, *c*. D is the locking device, formed, as shown in the drawings, of a disk, *d*, carried on the end of an arm, *d'*, which is curved upward where it passes over the trace, and its inner end is attached to a pivot-bolt, E, which extends downward into the end of the ferrule B, where it is encircled by a spiral spring, *e*, which is so attached to the adjacent parts of the ferrule as to exert a continual force on the bolt E in the direction of the arrow at Fig. 4. G is one end of a trace. The disk *d* has a groove, *c'*, partly across its face toward the ferrule B.

The operation is as follows: The full lines at Fig. 1 show the trace in position, and the lock D in position to retain it in place. To release the trace the lock D may be turned sidewise forward, as shown at Fig. 4, and the trace then removed, as indicated by full lines at the same figure. Putting the trace in place is so nearly similar in operation as to need no description. When released or left free the lock D will be thrown by the spring *e* into the position shown by full lines in the drawings at Figs. 1, 2, and 3, the groove *c'* fitting snugly on the lug *c*, and preventing thereby any upward or downward displacement of the lock G. The length of the groove *c'* is such that the lug *c*, striking its rear end, will limit the motion of the lock D, and prevent it passing too far.

Fig. 5 is a perspective view of that side of the disk *d* toward the ferrule B. The disk *d* is a size to correspond with the end of the ferrule B, so as to present a neat appearance, as a continuation of the ferrule.

The whole device, it will be seen, is neat, cheap, and practical, and can be used with a very small hole in the trace.

I claim—

1. The bolt E, having spring *e*, pivoted locking device D, and hook C, all combined substantially as and for the purpose specified.

2. The locking device D, having the disk *d*, with the slot *c'*, and the hook C, having the lug *c*, to operate in combination with the spring-bolt E and ferrule B, substantially as and for the purpose specified.

DWIGHT M. COBB.

Witnesses:

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