J. H. HARFORD.

Whiffletree-Clip.

No. 220,238. Patented Oct. 7, 1879.

Fig. 4.

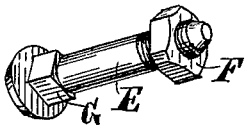


Fig. 1.

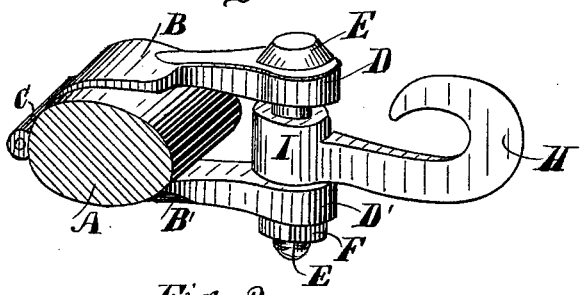


Fig. 2.

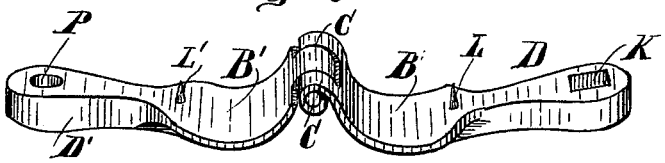


Fig. 5.

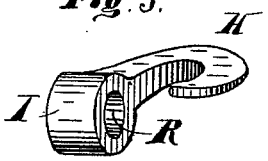
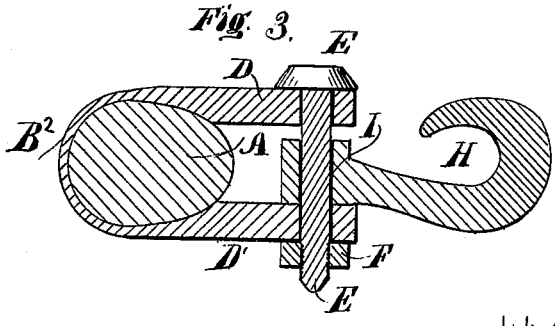


Fig. 3.



WITNESSES;
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G. H. Bennett.

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his Attorney

UNITED STATES PATENT OFFICE.

JOHN H. HARFORD, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO HIMSELF AND LYMAN V. MOONEY, OF SAME PLACE, ONE-HALF TO EACH.

IMPROVEMENT IN WHIFFLETREE-CLIPS.

Specification forming part of Letters Patent No. **220,238**, dated October 7, 1879; application filed August 30, 1879.

To all whom it may concern:

Be it known that I, JOHN H. HARFORD, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Single-Tree Clips, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to provide a single or double tree with an adjustable detachable clip provided with a trace-hook.

My invention consists, mainly, in the new construction and arrangement of a clip provided with broad curved parts, having spurs on their inner sides to be embedded in the wood, and prevent lateral movement of the clip when secured to a single or double tree, and, further, provided with projecting jaws to receive and hold the trace-hook and its pivot-bolt; also, in the new combination of elements which are deemed essential in my newly-organized single-tree clip, as will be hereinafter first fully described in the specification, and then set forth in the claims.

In the accompanying drawings, in which like letters of reference in the different figures indicate like parts, Figure 1 represents a perspective view of my improved device attached to a section of a single-tree. Fig. 2 is a perspective view of my improved clip opened out. Fig. 3 is a sectional view of a modified form of my new single-tree clip. Fig. 4 is a perspective view of the bolt that holds the hook, and Fig. 5 is a perspective view of the hook.

A represents the single-tree; B B′, the sides of the clip; C, the hinge-joint at the rear; D D′, the forward projecting parts or jaws of the clip; E, the bolt; F, the nut; G, the square shank of the bolt; H, the hook; I, the boss of the hook; K, the square hole in the projecting part D, to receive the square shank G of the bolt E; L, the pins or spurs to be embedded in the single-tree to prevent slipping; P, the round hole in the projecting part D′, to receive the round part of the bolt E; and R, the bolt-hole in the hook, all of which are constructed as shown in the drawings.

The sides B B′ of the clip are made broad and thin, and provided with the hinge-joint C, as shown in Fig. 2. When the clip is placed on the single-tree A, the points or spurs L L′ are forced into the wood to prevent the clip from slipping. The hook H is then placed between the jaws D D′, and the bolt E inserted in the holes K, R, and P, where it is made fast by the nut F, as shown, leaving the hub or boss I of the hook loose.

If it should be desired to clamp tighter on the single-tree, then the nut F may be screwed up farther on the bolt E, thus drawing the jaws D D′ of the clip closer together.

I am well aware that clips have heretofore been constructed with a broad band to surround a single-tree; also, that hinged or pivoted coupling-sleeves for surrounding a single-tree provided with ears to receive a bolt are old; but I am not aware that a single-tree clip has heretofore been constructed as in my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. The clip composed of the broad curved parts B B′, provided with spurs L L′, the hinge C, the projecting jaws D D′, provided with holes K P, as and for the purpose specified.

2. In combination with the clip, composed of the broad curved parts B B′, provided with spurs L L′, and the projecting jaws D D′, with holes K and P, the bolt E, nut F, and hook H, as and for the purpose specified.

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

JOHN H. HARFORD.

Witnesses:
E. O. FRINK,
L. V. MOONEY.