

(No Model.)

E. L. HOWE.

CLIP FOR SINGLE TREES OR WHIFFLE TREES.

No. 497,983.

Patented May 23, 1893.

Fig. 1.

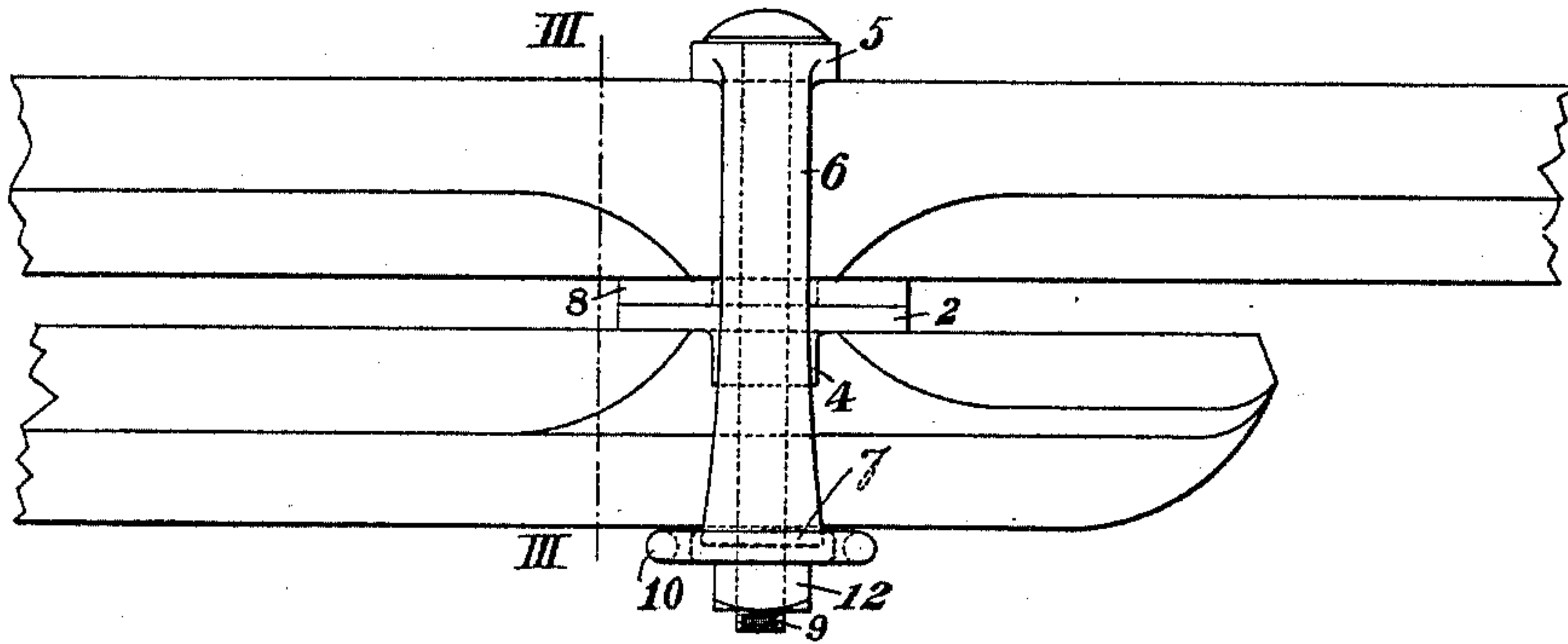


Fig. 2.

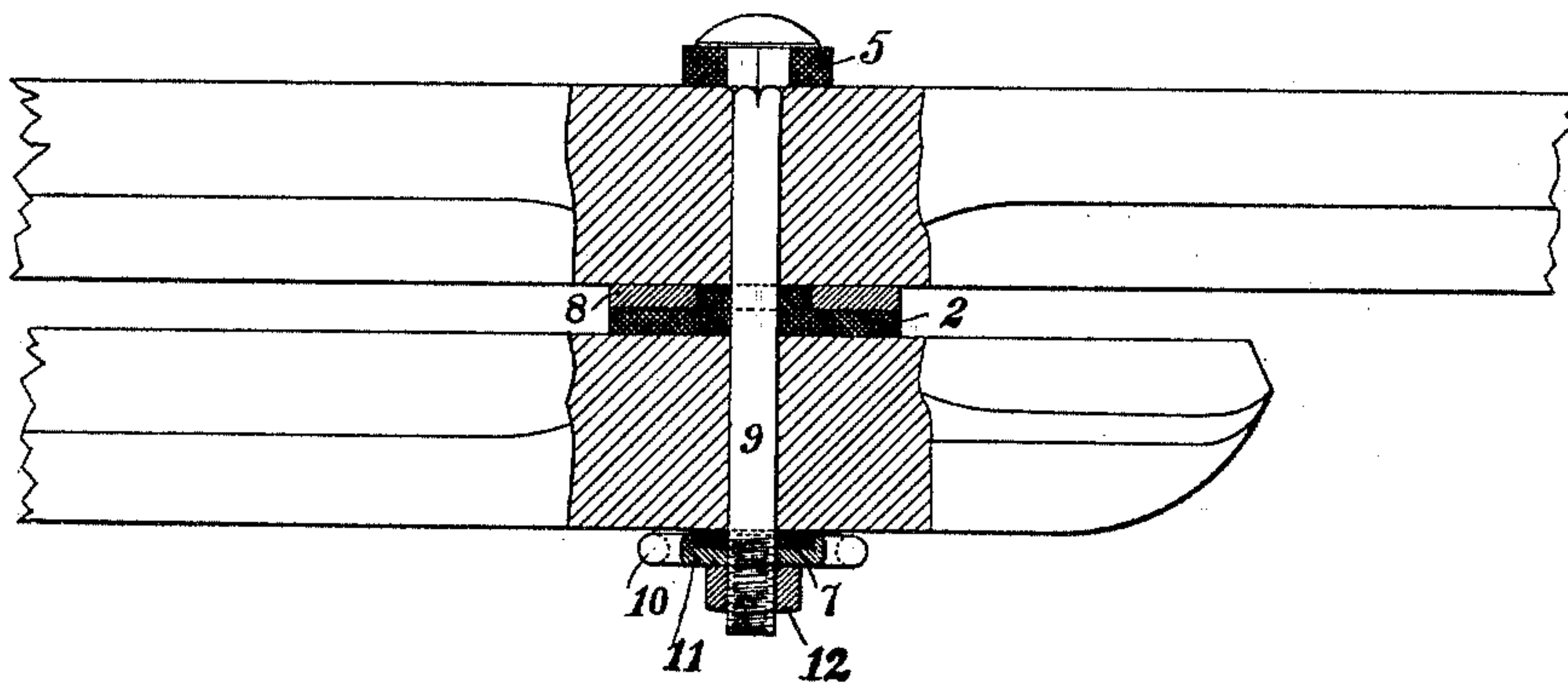
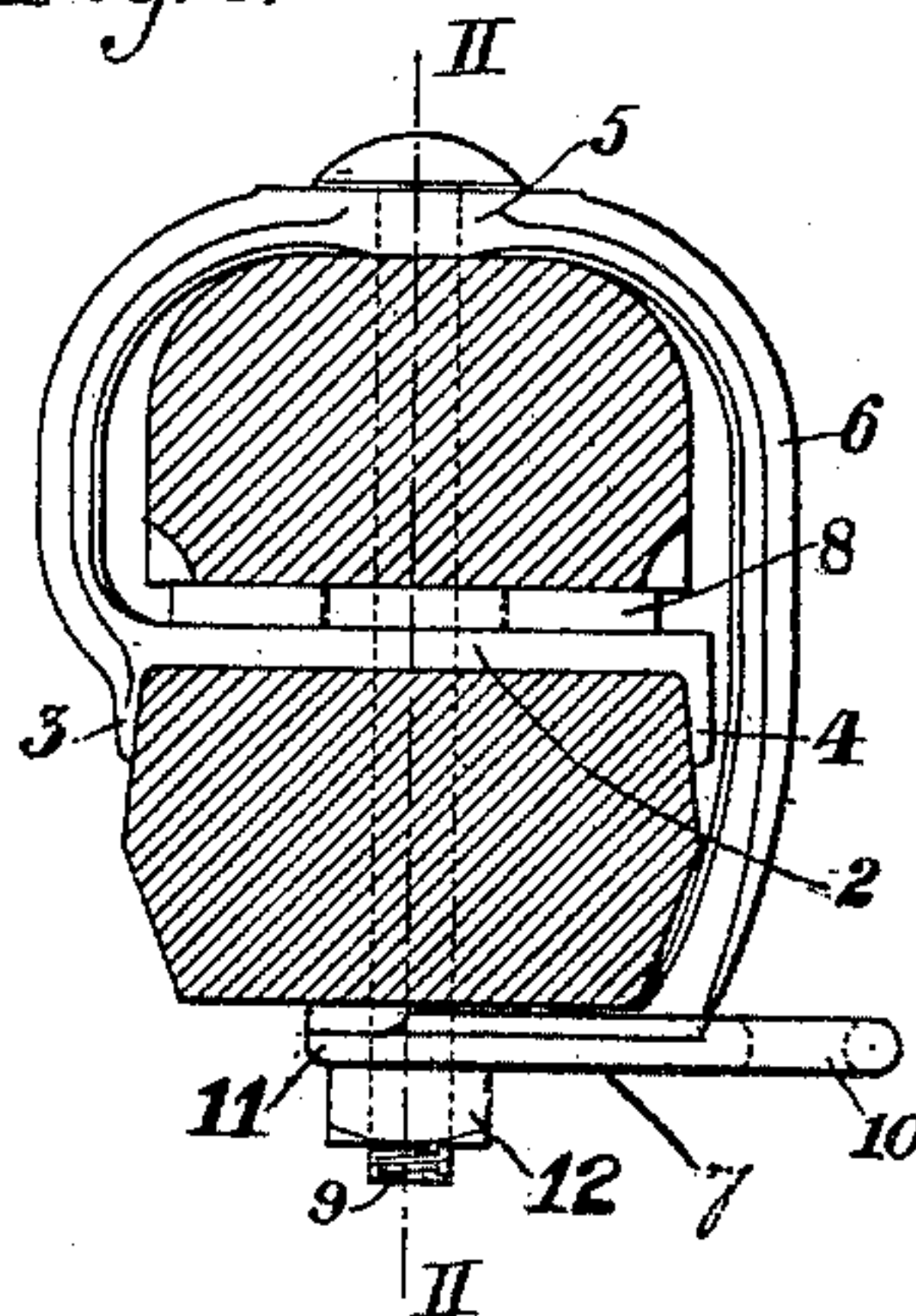


Fig. 3.



WITNESSES

*N. B. Corwin*  
*A. M. Corwin*

INVENTOR

*Eugene L. Howe*  
*by W. Baxendale & Sons*  
*his Attorneys.*

# UNITED STATES PATENT OFFICE.

EUGENE L. HOWE, OF CLEVELAND, OHIO.

## CLIP FOR SINGLETREES OR WHIFFLETREES.

SPECIFICATION forming part of Letters Patent No. 497,983, dated May 23, 1893.

Application filed October 10, 1892. Serial No. 448,335. (No model.)

*To all whom it may concern:*

Be it known that I, EUGENE L. HOWE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Clips for Singletrees or Whiffletrees, of which the following is a full, clear, and exact description.

The object of my invention is to provide a clip for whiffle-trees or single-trees, of great strength, and facility of construction, being better in these respects than any other similar article known to me. It is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the clip, showing the single-tree and double-tree therein. Fig. 2 is a vertical section thereof on the line II—II of Fig. 3; and Fig. 3 is a vertical cross-section, on the line III—III of Fig. 1, also showing the single-tree and double tree or cross-bar.

As shown in the drawings, my clip is made of a continuous piece. At the middle is a transverse branch or plate 2, having at its front end and at the rear portion vertical lugs 3, 4. From the rear end of the part 2, the clip extends in a vertical loop 5, having a branch 6 extending downwardly and terminating in a horizontal portion 7. The parts 2 and 6 are separate from each other. The double-tree or cross-bar is inserted in the space between the parts 2 and 7, between the lugs 3 and 4, and the single-tree or whiffle-tree is inserted in the upper loop 5, a washer 8 being preferably interposed between the tree and the plate or branch 2. All are secured together by a bolt 9, which passes through the top of the loop 5, the single-tree or whiffle-tree, the double-tree or cross-tree and the part 7. By reason of the fact that the end of the branch 2 is unattached to the ver-

tical branch 6, flexibility is given to the loop, which enables it to be adjusted to fit singletrees of smaller size, by pressing or hammering the top of the loop toward the branch 2. The encircling of the singletree by the loop also affords a safe and effective guard for the singletree, and braces the device on its front side to which the strain is applied in use.

When the clip is used in double vehicles, with single-trees and whiffle-trees, it is necessary to provide means for holding back the clip to prevent one horse from going ahead of the other. For this purpose I use a detachable loop-piece 10, having a flanged or channeled portion 11, which fits against the part 7 around the bolt, and is clamped thereto by means of the nut 12 which holds the bolt.

Variations in form and construction of the parts within the limits of the claim may be made without variance from my invention.

The advantages of my improved clip will be appreciated by those skilled in the art.

I claim—

A clip, having a vertical single-tree encircling loop, a horizontal branch connected therewith by an upright branch, and adapted to be attached to the double-tree, or cross-bar, the portion of the clip forming the base of the loop having a lug or lugs to fit the double-tree on the opposite side, and the end of the loop being separate from the upright branch; substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 6th day of October, A. D. 1892.

EUGENE L. HOWE.

Witnesses:

MARTIN O. SENSENY,  
EMIL W. JAITE.