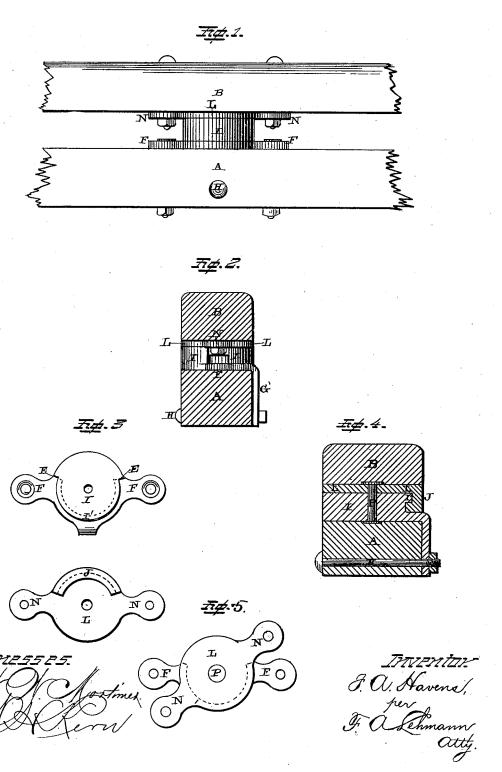
## F. A. HAVENS.

### WHIFFLETREE COUPLING.

No. 262,540.

Patented Aug. 8, 1882.



# United States Patent Office.

### FRED A. HAVENS, OF WETHERSFIELD, CONNECTICUT.

#### WHIFFLETREE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 262,540, dated August 8, 1882.

Application filed April 3, 1882. (Model.)

To all whom it may concern:

Be it known that I, FRED A. HAVENS, of Wethersfield, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Whiffletree-Couplings; and I do hereby declare the following to be a full, clear, and exact description of theinvention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in couplings for whiffletrees; and it consists in the combination of two parts or castings which have suitable shoulders or stops formed upon them to limit the movement of the whiffletree and suitable flanges so formed as to constitute a clutch for holding the two parts together, and which parts are pivoted together by means of a central bolt, as will be more fully described hereinafter.

Figure 1 is a front elevation of my coupling. Fig. 2 is a side elevation of the same, the two trees being cut away. Fig. 3 is a detailed view of the two parts of the coupling. Fig. 4 is a vertical section of the same. Fig. 5 is a plan view of the two parts of the coupling by themselves.

A represents a double-tree, and B the whiffletree. Upon the top of the double-tree is
bolted the lower part, I, of the coupling, which
has the two shoulders E formed upon opposite sides, so as to regulate the distance the
35 upper part of the coupling shall turn. This
part of the coupling is secured in position upon
the single-tree by means of the two lugs F,
through which suitable clamping-bolts are
passed, and by means of the extension G, which

extends down over the side of the double-tree, 40 and through which is passed the bolt H. Upon the top of this part of the coupling, extending from one shoulder or stop to the other, is a flange, I', under which a corresponding flange, J, on the other part, L, of the coupling catches. 45 This part L of the coupling is secured to the under side of the single-tree by means of suitable lugs, N, through which suitable clampingbolts are passed. This part L consists of a flat plate, which rises upon the lower part of the 50 coupling, and which has simply the flange J formed on one side, so as to catch on the corresponding flange, I'. The ends of this flange J as the whiffletree is turned strike against the shoulders or stops formed on the lower part of 55 the coupling, and thus prevent the whiffletree from turning too far around. These two parts of the coupling are pivoted together by means of a pivotal bolt, P, which passes through their centers and holds them securely together, while 60 it allows them to turn freely upon each other as far as the shoulders or stops will allow.

Having thus described my invention, I

A coupling for whiffletrees, composed of the 65 casting I, having the flange I' extending partially around its upper edge, the lugs F, extension G, and stops E, the casting L, having the flange J on one side, and lugs N, in combination with the pivotal bolt P and bolt H, 70 substantially as shown and described.

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

FRED A. HAVENS.

Witnesses:
T. M. MALTBIE,
W. H. KERN.