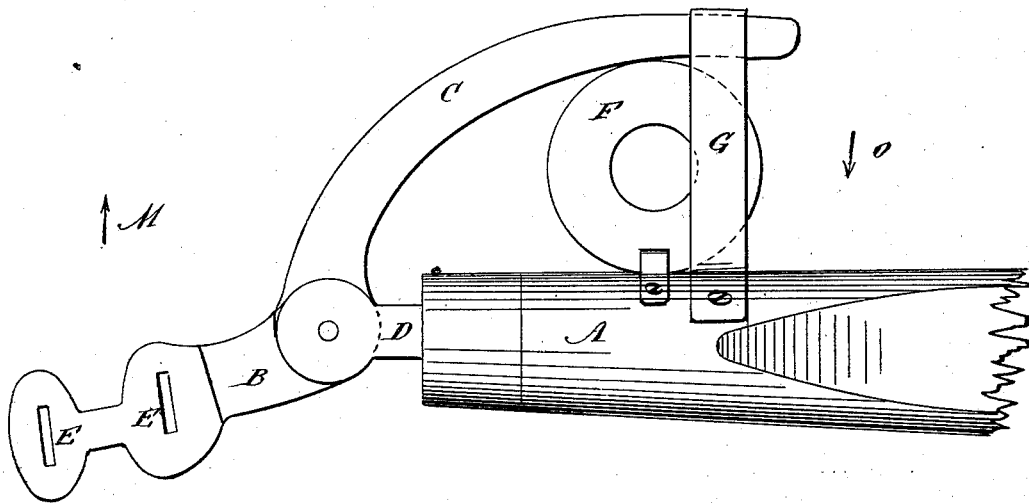


J. A. CHASE.  
Whiffletree.

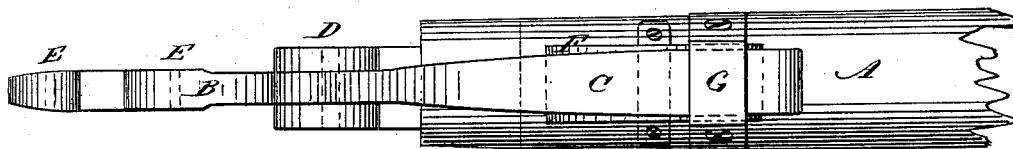
No. 216,656.

Patented June 17, 1879.

*Fig. 1*



*Fig. 2*



WITNESSES:

*C. Newell*  
*C. Sedgwick*

INVENTOR:

*J. A. Chase*  
BY *Wm. H. [Signature]*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JULIAN A. CHASE, OF PAWTUCKET, RHODE ISLAND.

## IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **216,656**, dated June 17, 1879; application filed April 29, 1879.

*To all whom it may concern:*

Be it known that I, JULIAN A. CHASE, of Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and Improved Whiffletree Attachment, of which the following is a specification.

The object of my invention is to provide an elastic attachment for the whiffletree of a wagon or carriage, which will prevent the sudden jars and shocks caused by inequalities in the road from being transmitted from the wagon to the horse, or, vice versa, from the horse to the wagon.

The invention consists in the arrangement of a lever pivoted at the end of a whiffletree, the short arm of the lever being provided with the ordinary hooks or eyes for the fastening of the trace. Between the long arm of the lever and the body of the whiffletree an elastic member, such as a metal spring, piece of rubber, or like material, is interposed, so that when a shock is received by the small arm of the lever the same will be weakened or entirely destroyed by the elastic member between the long arm and the whiffletree.

In the drawings, Figure 1 is a plan view. Fig. 2 is a front view, as seen from the head of the shafts.

Similar letters of reference indicate corresponding parts.

A is a whiffletree, at the end of which the lever B C is pivoted between the jaws D. E E are the hooks or eyes to which the traces are fastened. F is an annular rubber spring interposed between the longer arm C and the whiffletree A. G is a metal guide-piece, which guides the arm C, and also assists in holding the spring F.

Instead of the annular rubber spring F, any other kind of spring—such as a curved,

straight, or spiral steel spring, or any other kind, rubber or like spring—may be used.

Instead of one spring, a number of graduated springs may be used.

The arm C is either curved, straight, or angular, as the spring employed may require. The long arm of the lever and the spring may be provided with a metal covering or casing, to prevent persons from tampering with it, for better appearance, and to keep dust, &c., from it.

If the horse pulls, the small arm B will move in the direction of the arrow M, and the long arm C will move in the direction of the arrow O; but as the spring F is interposed between the arm C and the whiffletree A, the same will, by means of its elasticity, press the arm C in the direction of the arrow M, and thus counteract the power applied at B.

If the arm B is suddenly pulled in the direction of M, it would give the wagon a shock if the spring F were not there to receive the same. In a like manner, if the wagon were to stop suddenly or strike against some obstruction, the horse would receive the shock if again the spring were not interposed.

This attachment can be applied to any whiffletree, is very inexpensive, and operates perfectly.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with the whiffletree A, of the lever trace-holder B C, the jaws D, the spring F, and the loop-guide G, as shown and described.

JULIAN A. CHASE.

Witnesses:

SAML. F. DEXTER,  
P. W. ARNOLD.