

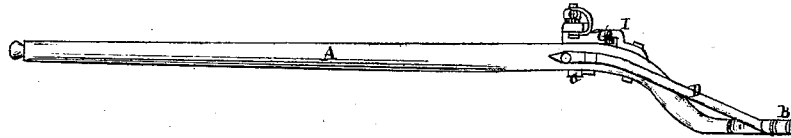
C. A. MOORE.

Whiffletree.

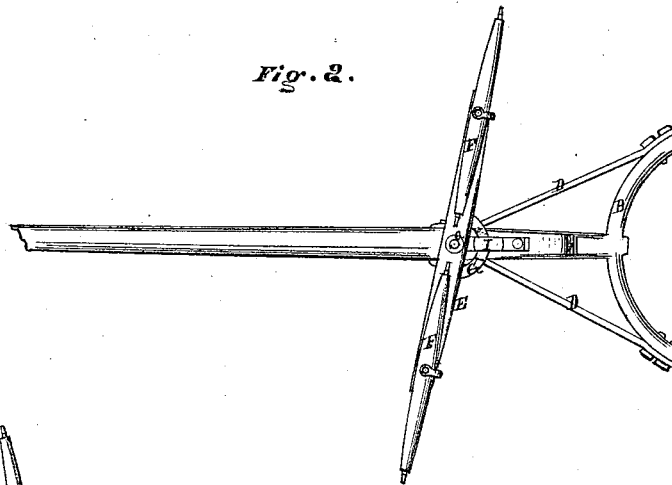
No. 107,082.

Patented Sept. 6, 1870.

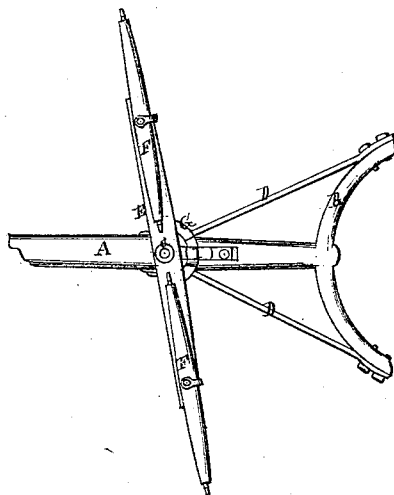
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Inventor,  
C. A. Moore  
per Burridge & Co.  
Attorneys

Witnesses.  
J. H. Burridge.  
D. L. Humphrey

# United States Patent Office.

CHARLES A. MOORE, OF AKRON, OHIO.

Letters Patent No. 107,082, dated September 6, 1870.

## IMPROVEMENT IN CARRIAGE-POLE COUPLING.

The Schedule referred to in these Letters Patent and making part of the same

Be it known that I, CHARLES A. MOORE, of Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Carriage-pole Coupling, of which the following is a description.

Figure 1 is a side view of the carriage-pole.

Figure 2 is a top view of the same.

Figure 3 is also a top view.

Figures 4 and 5 are detached sections.

Like letters of reference refer to like parts in the different views.

This invention has for its object the attachment of a double-tree to the pole of a carriage, so that it shall vibrate only to a certain required degree, thereby dispensing with the check-straps or chains, now generally used for that purpose, as set forth in the following description.

In fig. 1, A represents a carriage-pole, of which B is the hound, whereby it is connected to the carriage, and

D, side braces,

E is the double-tree bar, and

F the single-tree, attached thereto, all of which are or may be constructed in the ordinary way.

The bar E referred to is connected to the pole by means of a bolt, *a*, and which is prevented from swinging or vibrating beyond a certain necessary degree by means of a half circle, G, figs. 2 and 3, the ends of which are secured to the under side of the bar E.

In the upper face of the semicircle is formed a deep, wide notch, H, fig. 4.

Said figure represents a front edge view of a detached half circle. A top view of the same is shown in fig. 5, in which H represents the notch referred to.

I, figs. 2 and 3, is a reach or stay-strap, one end thereof being bolted to the pole, whereas the other is secured by the bolt *a*.

It will be observed that the strap lies in the notch, hence, when the bar to which the half circle is attached shall be turned in either direction, obliquely to the direction of the pole, the shoulders of the notch will strike the strap, and thereby prevent the bar from turning beyond a certain distance, to the extent shown in fig. 2 in one direction, and to that shown in fig. 3 when turned in the other direction.

By this means the double-tree or single-tree, F, thereof are restrained from falling so far back as to strike the wheel of the carriage, in consequence of an unequal strain being exerted upon the double-tree by an uneven draft of the team, or on turning around.

To accomplish this same purpose, there is ordinarily used a strap or chain, attached to each end of the bar E, whereas the other is attached to the axle-tree.

Such straps soon wear out, or, if chains are used, they are heavy and noisy, and both of which offer a lodgement for dust and mud, whereas, in my device for this purpose, it is more durable, neater in appearance, and offers no lodgement for mud, &c.

It is also much stronger and safer, for, in the event of the breaking of the bolt *a*, the semicircle will hold the team to the carriage, and, therefore, result in no serious injury.

### Claim

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

The semicircle G, provided with a notch, H, when arranged in relation to and in combination with the double-tree E, pole A, and strap I, substantially in the manner as described, and for the purpose specified.

CHARLES A. MOORE.

Witnesses:

W. H. BURRIDGE,  
JAMES F. MCDUGEL.