(No Model.)

# G. E. MACY.

## VEHICLE REACH COUPLING.

No. 458,058. Patented Aug. 18, 1891.

Fig: 1.

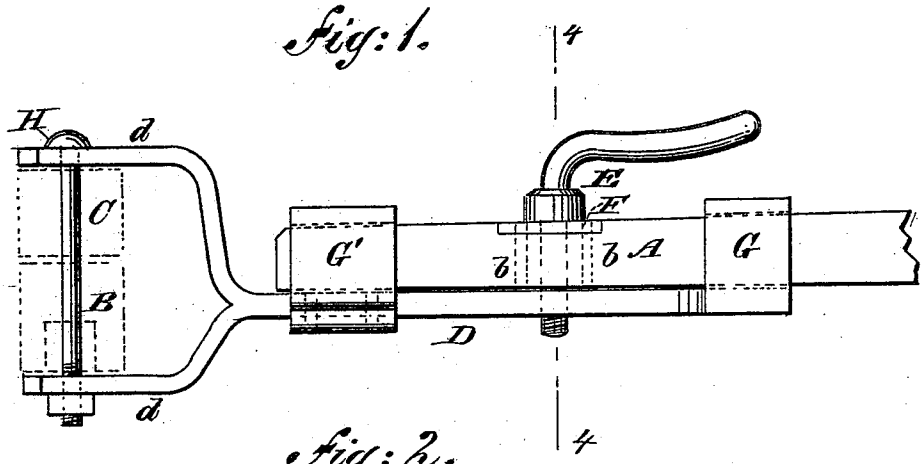



Fig: 2.

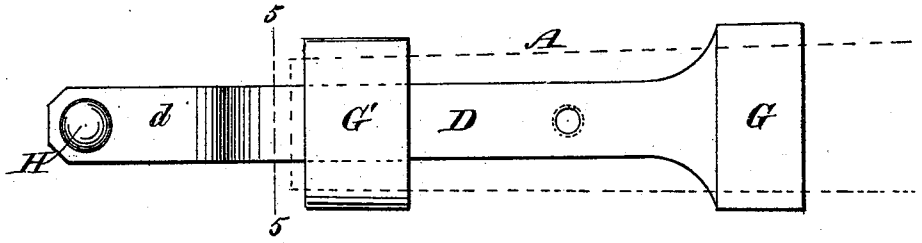
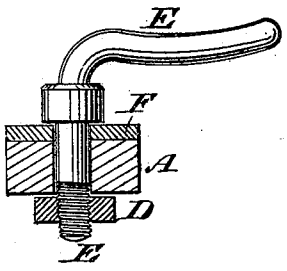



Fig: 3.

Fig: 4.



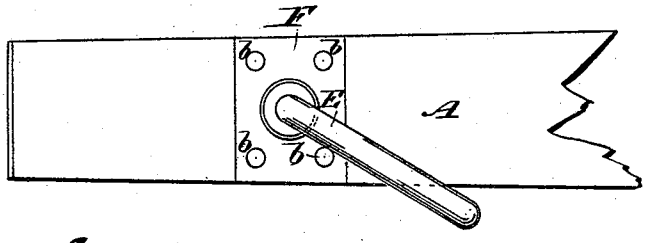
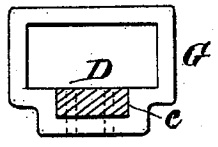




Fig: 5.




WITNESSES:

Chas. Nichq.

C. Sedgwick

INVENTOR:

G. E. Macy

BY Munn & Co

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

GEORGE E. MACY, OF ORLANDO, FLORIDA.

## VEHICLE-REACH COUPLING.

SPECIFICATION forming part of Letters Patent No. 458,058, dated August 18, 1891.

Application filed June 2, 1891. Serial No. 394,834. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE E. MACY, of Orlando, in the county of Orange and State of Florida, have invented a new and useful Improvement in Vehicle-Reach Couplings, of which the following is a full, clear, and exact description.

This invention relates to the coupling reach or pole connections between the front and rear axles of a wagon or other vehicle; and it consists in a novel construction of the same, substantially as hereinafter described, and more particularly pointed out in the claim.

The invention may be used either on one or two horse wagons, but is more especially designed for use on one-horse wagons for farm use, and it provides for a detachable or adjustable slidable connection which dispenses with the usual front hounds and slide-bars, also the usual sand-bolster, thereby greatly simplifying the construction of a wagon.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a wagon reach or coupling pole, in part, with my invention applied and showing its special construction for establishing connection with the front axle and bolster of the vehicle. Fig. 2 is a plan of the same, the coupling-pole only being shown by dotted lines. Fig. 3 is a plan view of the coupling-pole, in part, with fastening applied. Fig. 4 is a transverse section mainly upon the line 4 4 in Fig. 1, and Fig. 5 is a transverse section upon the line 5 5 in Fig. 2.

A indicates the reach or coupling pole, in part, for establishing connection between the front and rear axles, B (shown by dotted lines) indicating the front axle, and C its bolster.

D is a metal bar made detachable from and adjustable on or along the pole A to adjust or vary the length of reach connection between the front and rear axles, and secured, when set, to the reach or pole by a tail-head screw E passing through a flange or plate F, secured on the pole by rivets *b* and through the pole and bar D; or an ordinary coupling-pin may be used instead, or both, if desired. Said bar D is constructed with a loop or band-like clip G at its rear end to hug and closely receive the pole A within and through it, and another independent clip or band G′ is also provided or riveted on it to hug or hold the front end of the pole and bar D together and to provide for the sliding of the bar along the pole or the pole on it, said clip having a recess *c* in it to receive the bar D, which is narrower than the pole. The front end of the bar D is made with a fork *d* projecting both above and below the main body of the bar and in advance of it, to straddle or receive within it the front axle B and its bolster C and to unite them with the bar by a king-bolt H, passing through said fork and front axle and its bolster.

It will be apparent that it will make no material difference whether the slidable bar D be arranged on top of the coupling-pole instead of underneath it, as here shown, such change being a mere reversal of the parts without varying the action or use of the coupling connection.

The coupling pole or reach may be connected with the rear axle in the ordinary or any suitable manner.

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

In coupling reach or pole connections between the front and rear axles of wagons and other vehicles, the combination, with the reach or coupling pole A, of the slidable bar D, adjustable along said pole or the latter along it, constructed with a fork *d* at its front end adapted to receive the front axle and bolster within it and carrying a king-bolt H, uniting them therewith, and said bar D being further constructed or provided with band-like clips G G′, hugging or receiving the coupling-pole through them, and with independent locking or coupling means, substantially as described, for securing the bar and pole together, essentially as herein set forth.

GEORGE E. MACY.

Witnesses:
E. K. SMITH,
JNO. B. NOKES.