

C. W. GAGE.

Thill-Coupling.

No. 45,118.

Patented Nov. 15, 1864.

Fig. 1.

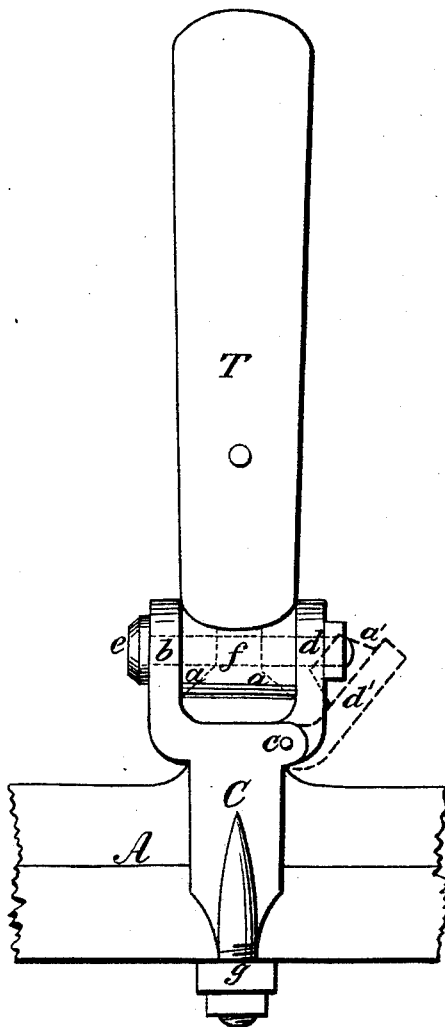
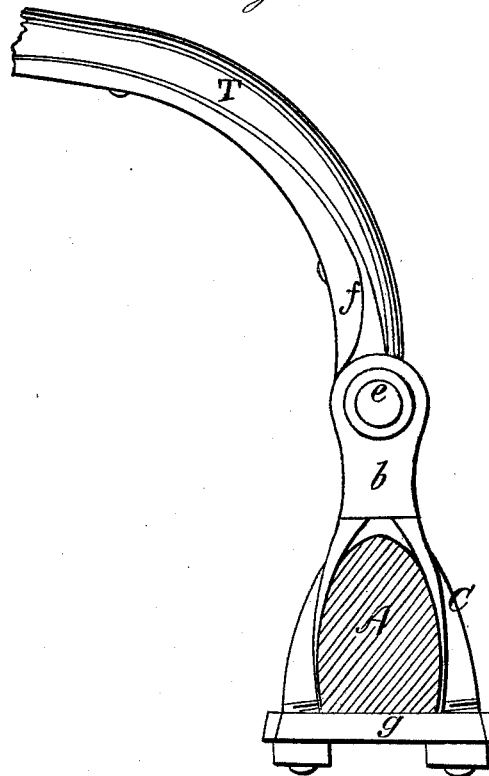


Fig. 2.



Witnesses:

Asst Billings
Lyman M Newton

Inventor:

C. W. Gage
By his atty
Wm J. Goughborough

UNITED STATES PATENT OFFICE.

C. W. GAGE, OF HOMER, NEW YORK, ASSIGNOR TO HIMSELF AND JAMES
NORTHRUP, OF SAME PLACE.

IMPROVEMENT IN THILL ATTACHMENTS OR COUPLINGS.

Specification forming part of Letters Patent No. 45,118, dated November 15, 1864.

To all whom it may concern:

Be it known that I, C. W. GAGE, of Homer, in the county of Cortland and State of New York, have invented a new and useful Improvement in Thill Attachments for Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a view of the rear side of the clip C, a section of the axle A, and the end of the thill T. Fig. 2 is a side elevation of the same.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to that class of thill attachments having one movable jaw, (an improvement on my patent issued July 23, 1861;) and it consists mainly in attaching the jaws of the shackle-joint to the clip when one of the jaws is hinged to it by a pivoted joint; and its object is to permit the thills or the pole to be removed or exchanged without disturbing or loosening the clip, which is unavoidable when the jaws are attached to the clip-bar, as in my former invention, above referred to.

To enable others to work my invention, I will describe its construction and operation.

A in the drawings represents a section of the axle-tree; C, the clip; T, the end of the thill; *f*, the thill-iron. The jaw *b* is forged on the clip, as shown in the drawings, while the jaw *d* is hinged to it on the opposite side. These jaws are provided with conical journals, as indicated by the dotted lines *a* in Fig. 1,

similar to those shown in my former patent, and the object of having one jaw, *d*, hinged or adjustable is the same as in that. The jaws may be attached to the front or to the back side of the clip C, if desirable, instead of on the top, as shown in the drawings.

When the jaws *b* and *d* are attached to the clip-bar *g*, as heretofore practiced, (when the adjustable jaws were used,) one of the threaded ends of the clip constitutes the pivot on which the hinged jaw turns. Therefore whenever it becomes necessary to remove the thills or the pole in exchanging either for the other it is necessary to loosen the nut on that end of the clip, which, of course, loosens the clip itself, and, both being loose at the same time, they are very liable to get displaced; but when the jaw *d* is hinged to the clip C instead of to the clip-bar *g* by an independent joint-pivot, *e*, that jaw may be opened, as indicated by the red lines *d'*, by removing the bolt *e* without loosening or disturbing the clip in the least. Besides, it is thought the parts can be more easily made in this way if they are to be forged, which is desirable on certain classes of vehicles, in order to make the shackles as strong as possible with a given weight.

What I claim as my invention is—

The combination of the jaws *b* and *d*, constructed as described, with the clip C, for the purposes set forth.

C. W. GAGE.

Witnesses:

WM. S. LOUGHBOROUGH,
ASA H. BILLINGS.