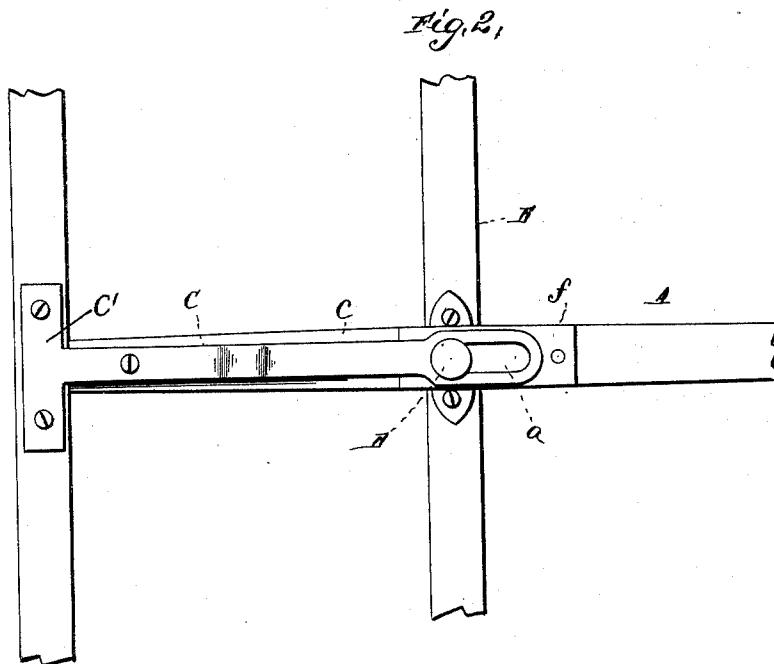
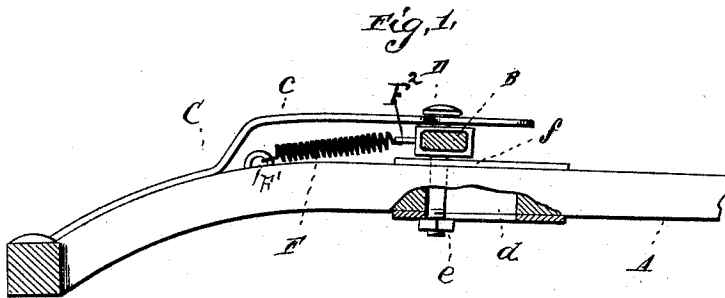


(No Model.)

E. T. CARTER.
DRAFT EQUALIZER.

No. 468,237.

Patented Feb. 2, 1892.



WITNESSES:

Philip C. Masi
Geo. H. Parmelee

INVENTOR

E. T. Carter

BY *Edw. Anderson*
his ATTORNEY.

UNITED STATES PATENT OFFICE.

EPHRAIM TENNY CARTER, OF MORRISON, ILLINOIS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 468,237, dated February 2, 1892.

Application filed May 29, 1891. Serial No. 394,560. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM TENNY CARTER, a citizen of the United States, and a resident of Morrison, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Adjuster Attachments for Doubletrees; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical longitudinal section. Fig. 2 is a top plan view.

This invention has relation to draft equalizers or adjusters for doubletrees of vehicles; and it consists in the novel construction and combination of parts, as hereinafter specified.

In the accompanying drawings, illustrating the invention, the letter A represents the tongue of a vehicle, and B the doubletree.

C is a strap or piece of metal secured to the tongue and having the forward end or arm *c* bent upwardly therefrom in the manner shown. In the forward end of this curve is an oblong slot *a*. The rear end of said strap is provided with a perforated T-head *C'*, as shown.

D is a doubletree bolt or pivot, the upper portion of which slides freely in the slot *a* of the arm *c*. The lower portion of the bolt after passing loosely through the doubletree passes through an oblong or longitudinal slot *d* in the vehicle-tongue and is secured by a nut or head *e*. Slotted reinforcing or guard plates *f* are preferably secured around the marginal edges of the slots *d* to prevent wear from the bolt.

F is a spring secured at one end to the tongue under the arm of the strap C by means of the eye or staple *F'* and at the opposite end to the central portion of the doubletree by means of a similar eye or staple *F''*. By this arrangement it will be seen that the vehicle is relieved from jerking by sudden starts of

the team. The tugs are also kept tight and prevented from unhooking and an even draft maintained. It is also obvious that the strap C, which is usually formed with a perforated T-piece, enables the attachment to be applied to any ordinary tongue by bolts or screws, all that is necessary being to form the elongated slot for the bolt *d* and to provide the bearing-plates *f*. No special construction of tongue is required.

This device may also be made applicable to singletrees.

I am aware of Patent No. 196,091, granted October 16, 1877, and I do not, therefore, broadly claim my invention; but said patent shows a device which necessitates a special construction of doubletree and tongue, while the present device is capable of application to any ordinary tongue.

This device also shows the spring located in front of the doubletree and compressible under the draft instead of at the rear and extensible under draft.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The draft-equalizer comprising the metallic strap C, having at its rear end a perforated T-head *C'*, the forward portion of said strap being bent upwardly from the tongue to form an arm which receives the doubletree thereunder, said arm having an oblong slot *a* therein, a bolt D, sliding freely in said slot and passing loosely through the doubletree and through an elongated slot *d* in the tongue, and a helical spring at the rear of said doubletree under said arm and extensible under draft, one end of said spring being connected to an eye or staple *F'* on the doubletree and the other end to a similar eye on the tongue, substantially as specified.

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

EPHRAIM TENNY CARTER.

Witnesses:

FRANK D. RAMSAY,
JOHN H. SNYDER.