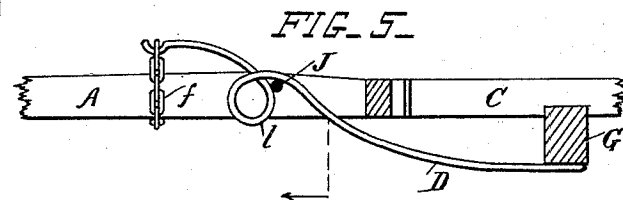
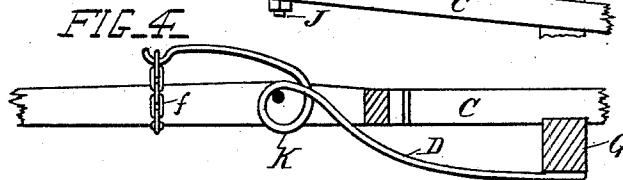
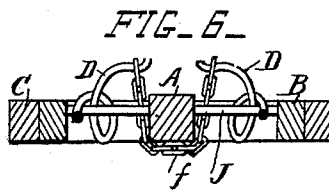
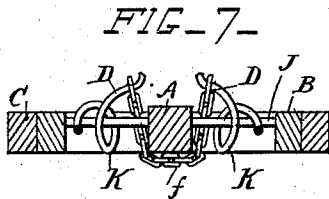
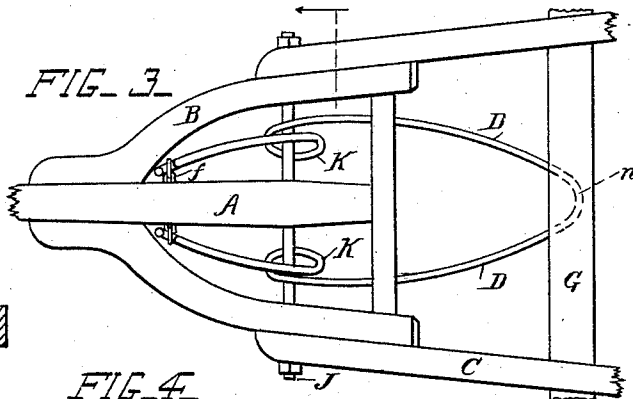
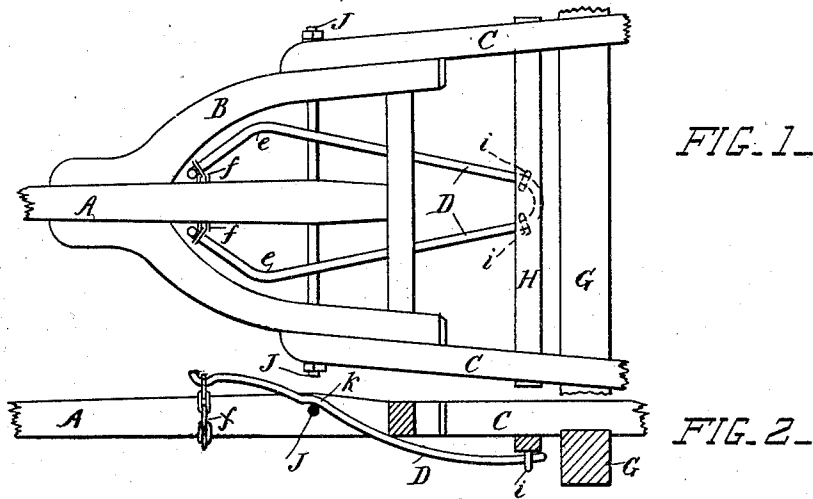


(No Model.)

J. W. WETMORE.
WAGON TONGUE SUPPORT.

No. 475,836.

Patented May 31, 1892.



Witnesses

Walter Allen
Geo. L. Wheelock.

Inventor

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UNITED STATES PATENT OFFICE.

JEROME W. WETMORE, OF ERIE, PENNSYLVANIA.

WAGON-TONGUE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 475,836, dated May 31, 1892.

Application filed February 28, 1889. Serial No. 301,590. (No model.)

To all whom it may concern:

Be it known that I, JEROME W. WETMORE, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Wagon-Tongue Supports; and I do hereby 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 the letters of reference marked thereon, forming a part of this specification.

My invention relates to improvements in wagon-tongue supports constructed of steel bars extending from a fixed point at the axle between the hounds over the tongue-bolt to a supporting-chain passing under the tongue forward of the bolt.

The objects of my invention are the following: First, in the steel-bar supports there is much dead weight, my purpose being to lessen this dead weight; second, while the support is composed of a single bar, I secure equal pressure on both hounds; third, to secure improved means of adjustment in the class of tongue-supports where the spring-bar passes over the tongue-bolt; fourth, to secure improved means of adjustment when the coil in the spring-bar on or forward of the tongue-bolt is chiefly relied on for the necessary flexibility of the spring. I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical view of a form of the improvement when there are no coils in the spring-bar; Fig. 2, a longitudinal vertical section of the same; Fig. 3, a vertical view of the spring and part of the wagon-gears when the bar has intermediate vertical coils and the tongue-bolt passes through them; Fig. 4, a vertical longitudinal section of the same, as shown in Fig. 3; Fig. 5, a vertical longitudinal section when the coils are forward of the tongue-bolt and the spring extends back under the axle; Fig. 6, a vertical cross-section of the form of which Fig. 5 is the longitudinal section and as seen looking in the direction of the arrow in Fig. 5; Fig. 7, a vertical cross-section of the form repre-

sented by Fig. 3, as seen looking in the direction of the arrow in Fig. 3.

A B represent the wagon-tongue; C, the hounds; D, the spring; *e*, the angle in the spring, from which to the chain is a short lever by which torsional action is secured in the long section from *e* back to the axle; *f*, the chain passing from one end of the spring under the tongue to the other and supporting the tongue; G, the axle; H, a bar under the hounds forward of the axle, under which the middle bend of the spring is fastened. This is one of the means of holding down that part of the spring. In some constructions of the running-gears of wagons this may be preferable.

i represents staples to hold the spring to H; J, the wagon-tongue bolt; K and L, the vertical coils in the spring. This form of the spring will be preferable, as the coil is a section of the spring and helps hold it in place either by resting against the bolt, as in Figs. 5 and 6, or by passing around the bolt, as in Figs. 4 and 7. The coil L, Fig. 5, will pass from the point above the lower quadrant nearly vertical, so as to form a good bearing against bolt J. The arms of the spring may cross to the opposite side of the tongue, so as to give greater leverage for torsional action in the main section of the spring, or they may run more directly forward and depend mostly on the elasticity given by additional coils.

I claim—

The combination, with the hounds, the bolt passing through the hounds, and the tongue pivoted on the said bolt, of the upwardly and forwardly inclined fork and spring having its looped rear end secured under the hounds and its middle portions resting on the said bolt, and a looped flexible support passing under the tongue and attached to the front ends of the spring above the tongue and permitting the tongue to be raised between the ends of the spring, substantially as and for the purpose set forth.

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

JEROME W. WETMORE.

Witnesses:

WALTER SCOTT,
W. H. CAUGHEY.