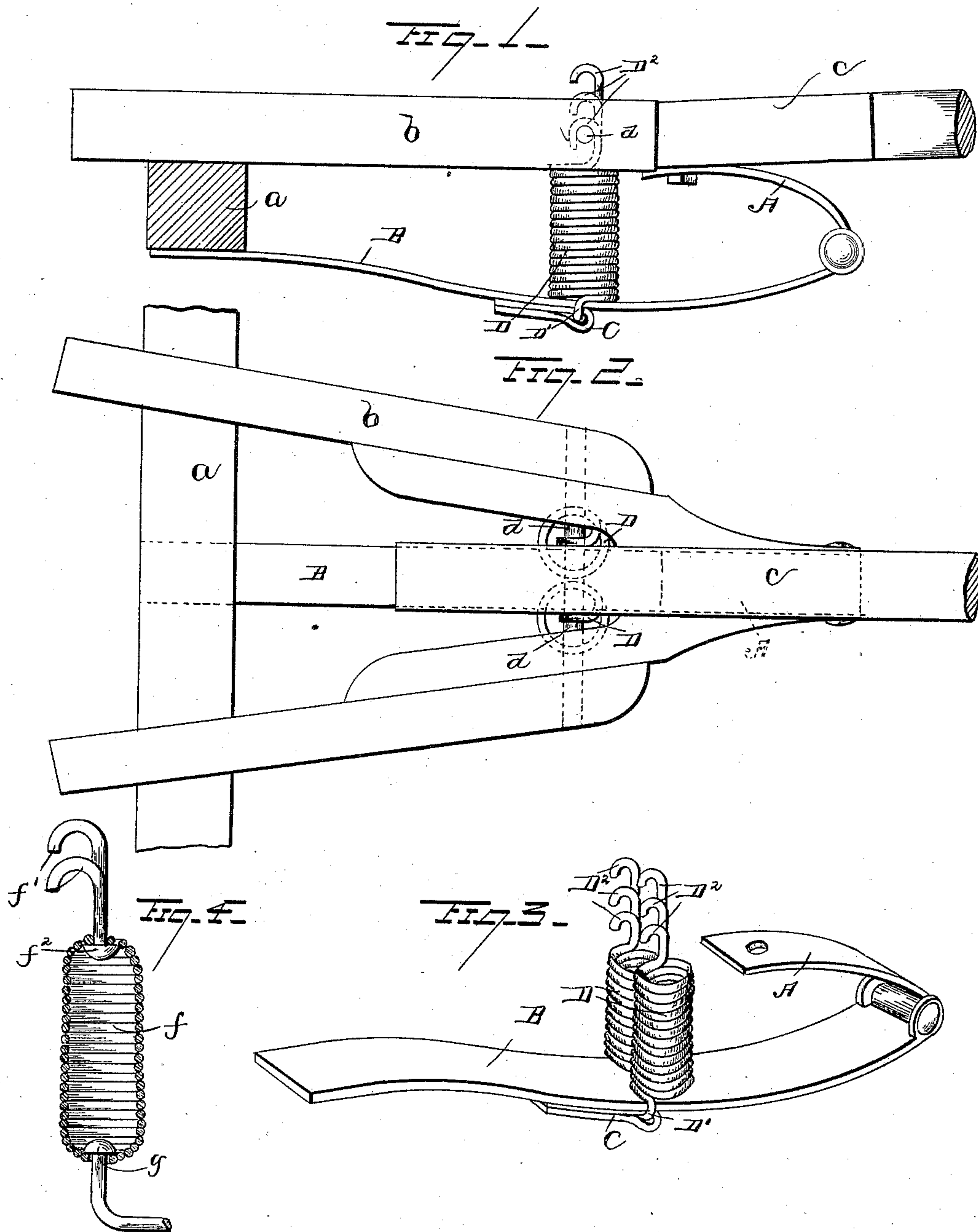


(No Model.)

M. E. JOHNSON.
WAGON TONGUE SUPPORT.

No. 344,910.

Patented July 6, 1886.



Witnesses
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UNITED STATES PATENT OFFICE.

MONROE ELLIOTT JOHNSON, OF PITTSBURG, KANSAS.

WAGON-TONGUE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 344,910, dated July 6, 1886.

Application filed May 15, 1886. Serial No. 202,250. (No model.)

To all whom it may concern:

Be it known that I, MONROE ELLIOTT JOHNSON, a citizen of the United States, residing at Pittsburg, in the county of Crawford and State of Kansas, have invented a new and useful Improvement in Wagon-Tongue Supports, of which the following is a specification.

My invention relates to an improvement in wagon-tongue supports; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my invention attached to a wagon-tongue. Fig. 2 is a bottom plan view of the same. Fig. 3 is a detached perspective view of my tongue-supporter. Fig. 4 is a modified form of spring.

a represents the front axle of a wagon. *b* represents the hounds, and *c* represents the tongue, the rear end of which is pivoted between the hounds upon the usual transverse rod, *d*.

The object of my invention is to provide a device for raising or supporting the outer end of the tongue, thus relieving the horses' necks from the weight thereof, and thereby lessening the labor of hauling the vehicle. This object I attain by the construction hereinafter described.

A represents a plate, which is bolted to the under side of the tongue near the rear end thereof. To the rear end of the said plate is hinged a supporting-arm, *B*, which is slightly curved, as shown, and extends rearwardly from the plate *A*, and bears against the under side of the front axle. To the under side of the arm *B* is riveted a metallic loop, *C*.

D represents a pair of twin-coiled springs, which are formed from a single piece of spring-wire. The lower ends of the said springs are connected together by the wire loop *D'*, which is secured in the loop *c* on the under side of the arm *B*, thereby securing the lower ends of the springs to the said arms. The upper end of each spring is provided with a series of hoops, *D''*, arranged one above the other, and adapted to engage the rod *d*. The function of these springs is to keep the rear end of the arm *B* tightly pressed against the lower side of the axle, and thereby supporting the outer end of the tongue, as will be very readily understood. By providing the series of hoops *D''* for each of the springs the latter may be

attached to the rod *d* at any desired tension, so as to regulate the pressure of the springs on the supporting-arm *B* to the requisite extent, in order to insure supporting the free end of the tongue.

In Fig. 4 I illustrate a modified form of spring, which consists of the coiled spring *f*, having the hook *f'* at its upper end made separately, and provided with a head, *f''*, around which the upper end of the wire forming the spring is coiled. The lower end of the spring is coiled around the headed shank *g*, which is attached to the arm *B*.

Having thus described my invention, I claim—

1. The combination, in a wagon-tongue supporter, of the plate *A*, the arm *B*, hinged thereto and provided with the springs having the hooks for the purpose set forth, substantially as described.

2. The combination, in a wagon-tongue supporter, of the plate *A*, the arm *B*, hinged thereto, and the springs *D*, attached to the said arms, and having the series of hooks *D''*, for the purpose set forth, substantially as described.

3. The combination of the hounds, the tongue, the bolt or rod pivoting the tongue to the hounds, the plate attached to the under side of the tongue in advance of the pivotal bolt, the arm having its front end hinged to the said plate, and its rear end bearing under the front axle or other support, and the supporting-springs connecting the said arm to the pivotal rod or bolt, substantially as described.

4. The combination of the hounds, the tongue, the bolt or rod pivoting the tongue to the hounds, the plate attached to the under side of the tongue in advance of the pivotal bolt, the arm having its front end hinged to the said plate, and its rear end bearing under the front axle or other support, and the springs attached to the said arm and provided with the vertical series of hooks *D''*, adapted to engage the pivotal bolt, and thereby support the tongue at any desired tension of the springs, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MONROE ELLIOTT JOHNSON.

Witnesses:

J. B. RILEY,

RANDALL DRYDEN.