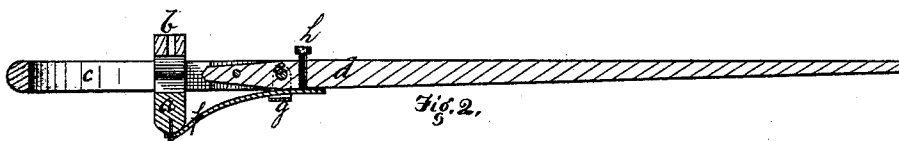
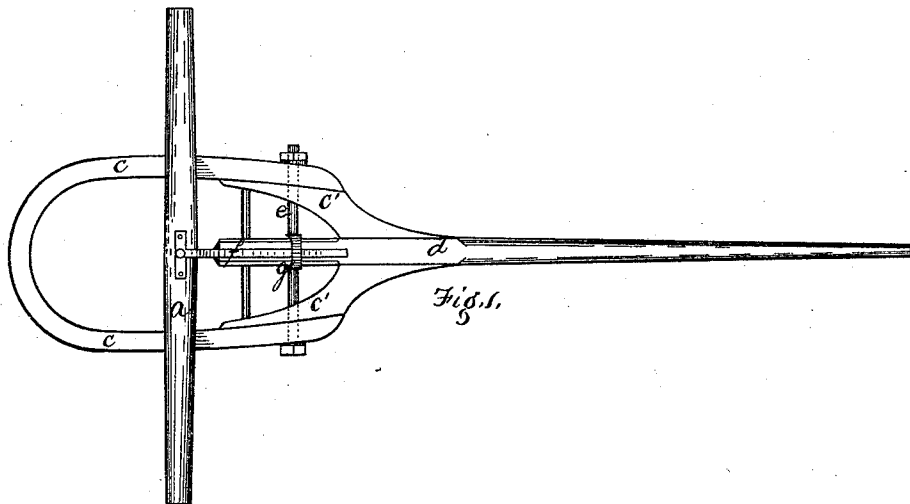


J. D. MEALS.  
TONGUE-SUPPORTS.

No. 170,878.

Patented Dec. 7, 1875.



WITNESSES.

W. H. Henshull  
James E. Ray

INVENTOR.

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attys

# UNITED STATES PATENT OFFICE.

JOSEPH D. MEALS, OF NORTH WASHINGTON, PENNSYLVANIA, ASSIGNOR  
TO HIMSELF, ANDREW J. JACK, AND THOMAS G. JACK, OF SAME PLACE.

## IMPROVEMENT IN TONGUE-SUPPORTS.

Specification forming part of Letters Patent No. **170,878**, dated December 7, 1875; application filed  
October 23, 1875.

*To all whom it may concern:*

Be it known that I, JOSEPH D. MEALS, of North Washington, in the county of Butler and State of Pennsylvania, have invented a new and useful Improvement in Devices for Supporting Wagon-Tongues; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a view of the under side of the forward axle, tongue, and hounds of a wagon; and Fig. 2 is a vertical section of the axle, tongue, hounds, &c., illustrating my invention.

Like letters refer to like parts wherever they occur.

My invention relates to the devices employed for supporting the tongues of wagons and similar vehicles; and consists in combining with the tongue a spring confined by a yoke or similar device, and a set-screw bearing on the spring, whereby the tension of the spring may be regulated and the tongue adjusted.

In constructing my improved device I have had in view such a combination of the devices as would at all times support the tongue, so as to take the weight thereof off of the team, and, at the same time, leave the tongue at liberty to rise and fall as the irregularities of the road, ruts, and stones were encountered by the wheels, thus avoiding the worrying and galling of the horses, common where the tongue is rigidly connected to the hounds or axle.

I will now proceed to describe my invention, so that others skilled in the art may make and use the same.

In the drawing, *a* indicates the forward axle; *b*, the bolster or sand-board; *c*, the hounds; *c'*, the tongue-hounds; *d*, the tongue, and *e* the usual rod or device for coupling the tongue to the wagon-hounds. *f* is a spring of tem-

pered steel, sufficiently strong to support the weight of tongue *d*, said spring being secured at one end to the front axle *a* by means of a plate riveted or bolted to the axle, or by means of a threaded bolt or nut, or in other suitable manner, the opposite end of spring *f* being free, and the spring, somewhere in its length, confined by a yoke, *g*, which prevents the displacement of the spring, but permits it to glide upon the under side of the tongue without interfering with the requisite vertical play thereof. The under side of tongue *d*, against which the free end of the spring *f* bears, and over which it moves, may, if deemed desirable, be protected by a plate, or in other suitable manner. The tongue is provided with a set-screw, *h*, the end of which bears upon the spring *f* near its free end, so that by causing the set-screw to project more or less below the tongue, the tension of spring *f* may be regulated, the spring being confined by the yoke or loop *g*.

The advantage of these devices is, as before specified, that the tongue is carried by a yielding support, which relieves the team from the weight and jar incident to loaded wagons passing over rough roads.

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

In combination with the running-gear and pivoted tongue of a wagon, a spring for supporting the tongue, said spring having one fixed end and one free end, a yoke for confining the spring, and a set-screw bearing on the free end of the spring, for adjusting the tension of the spring, substantially as specified.

In testimony whereof I, the said JOSEPH D. MEALS, have hereunto set my hand.

JOSEPH D. MEALS.

Witnesses:

F. W. RITTER, Jr.,  
A. J. JACK.