

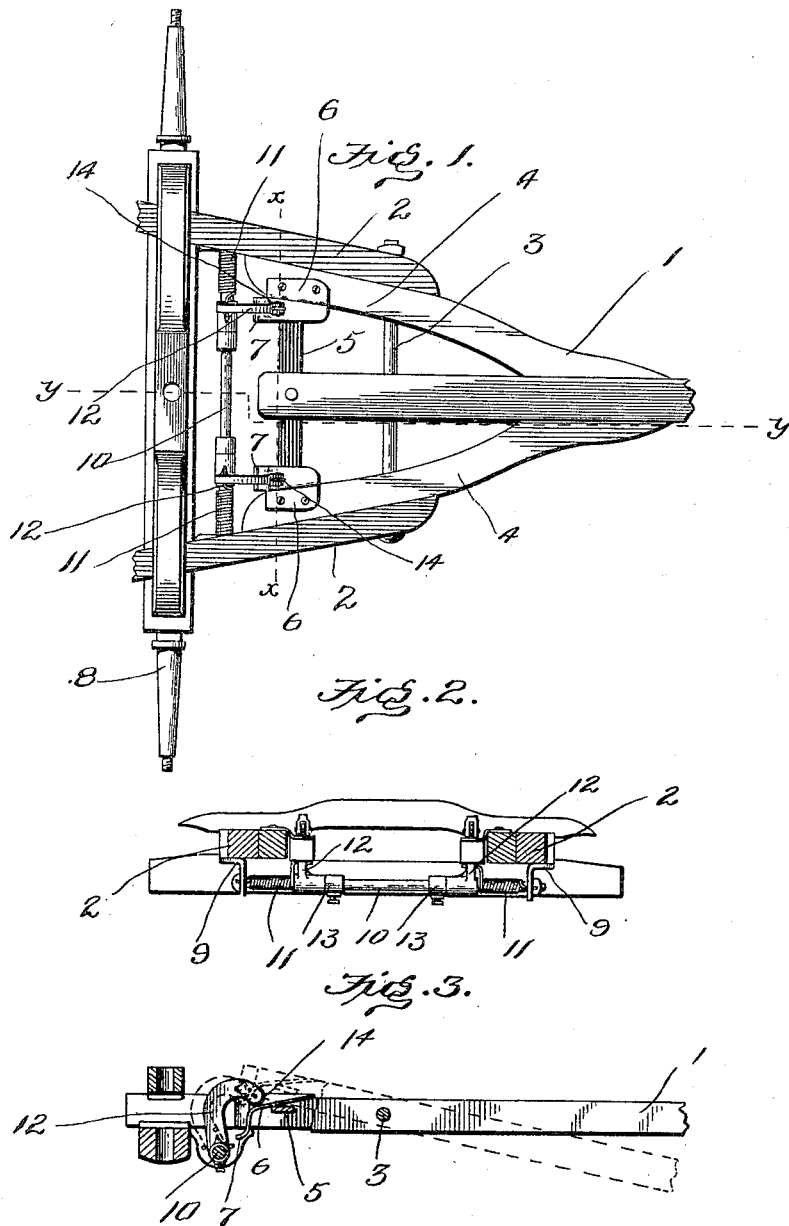
No. 649,372.

Patented May 8, 1900.

C. H. SUTTON.
TONGUE SUPPORT FOR VEHICLES.

(Application filed June 9, 1899.)

(No Model.)



WITNESSES
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TONGUE-SUPPORT FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 649,372, dated May 8, 1900.

Application filed June 9, 1899. Serial No. 719,953. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. SUTTON, a citizen of the United States, residing at La Cross, in the county of Rush and State of Kansas, have invented certain new and useful Improvements in Tongue-Supports for Vehicles; 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.

My invention relates to tongue-supports for vehicles; and one object of the same is to produce a device of this character which shall be simple in construction, efficient and reliable in use, and one which will not easily become disordered or broken.

Another object of my invention is to produce a tongue or thill support for vehicles which will permit a limited movement or play to the tongue or thills without undue friction of the parts of the support.

I attain these objects and advantages by means of an arrangement of antifriction-rollers and a spring rock-shaft, as shown in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan view of the rear portion of a wagon tongue and hounds, showing my invention applied thereto. Fig. 2 is a transverse vertical section of the same, taken on the line *xx* of Fig. 1. Fig. 3 is a longitudinal section of the same, taken on the line *yy* of Fig. 1.

Like numerals of reference designate like parts wherever they occur in the various views of the drawings.

1 is a vehicle-tongue of usual construction, pivoted between the hounds 2 upon the bolt or rod 3. The divergent rear ends 4 of the tongue are connected by a cross-bar 5 in the usual manner. Secured at or near the rear ends of the portions 4 are the bearing-plates 6. These plates are curved downwardly toward the rear and are pivoted at their free terminal ends with stops 7 for a purpose which will be presently described. Underneath the hounds 2, immediately in front of the axle 8, two hangers or angle-irons 9 are secured in any suitable manner. Journalled within these hangers is a rock-shaft 10. Springs 11 surround the rock-shaft near its ends inside the hangers 9. The outer

end of each spring 11 is suitably secured to its respective hanger, while the inner ends of said springs are secured, respectively, to the arms 12, held rigidly upon the rock-shaft by means of the collars 13 and their set-screws. The arms 12 are curved forwardly, and at their free ends antifriction-rollers 14 are journaled. These antifriction-rollers are held by a yielding action upon the bearing-plates 6 at all times by means of the resiliency of the springs 11.

It will be seen by the foregoing that the tongue of the vehicle is permitted a limited vertical movement. As shown by dotted lines in Fig. 3, the tongue has reached the limit of its downward movement and the antifriction-rollers 14 bear against the stops 7. When the tongue moves upward at its front end, the antifriction-rollers 14 traverse the bearing-plates 6 and hold the tongue yieldingly in any position it may assume within the scope of the bearing-plates 6.

It is obvious that the springs may be adjusted as to tension by use of the collars and set-screws to compensate for light or heavy tongues or thills.

I am aware that many changes may be made in the details of my invention without departing from the spirit or scope of the same. Therefore I do not wish to be limited to the exact construction shown.

What I desire to secure by Letters Patent and claim is—

1. A tongue-support for vehicles, comprising a yielding rock-shaft, curved arms, carried by said rock-shaft, antifriction-rollers journaled in the arms and bearing-plates upon the rear ends of the tongue, substantially as described.

2. A tongue-support for vehicles, consisting of a rock-shaft journaled to the hounds, springs on the rock-shaft, arms mounted on the rock-shaft and connected to the springs, antifriction-rollers mounted on the arms, and bearing-plates secured to the tongue and provided with limited stops for the rollers, substantially as described.

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

CHARLES H. SUTTON.

Witnesses:

L. H. ROBERTSON,
W. M. NEWMAN.