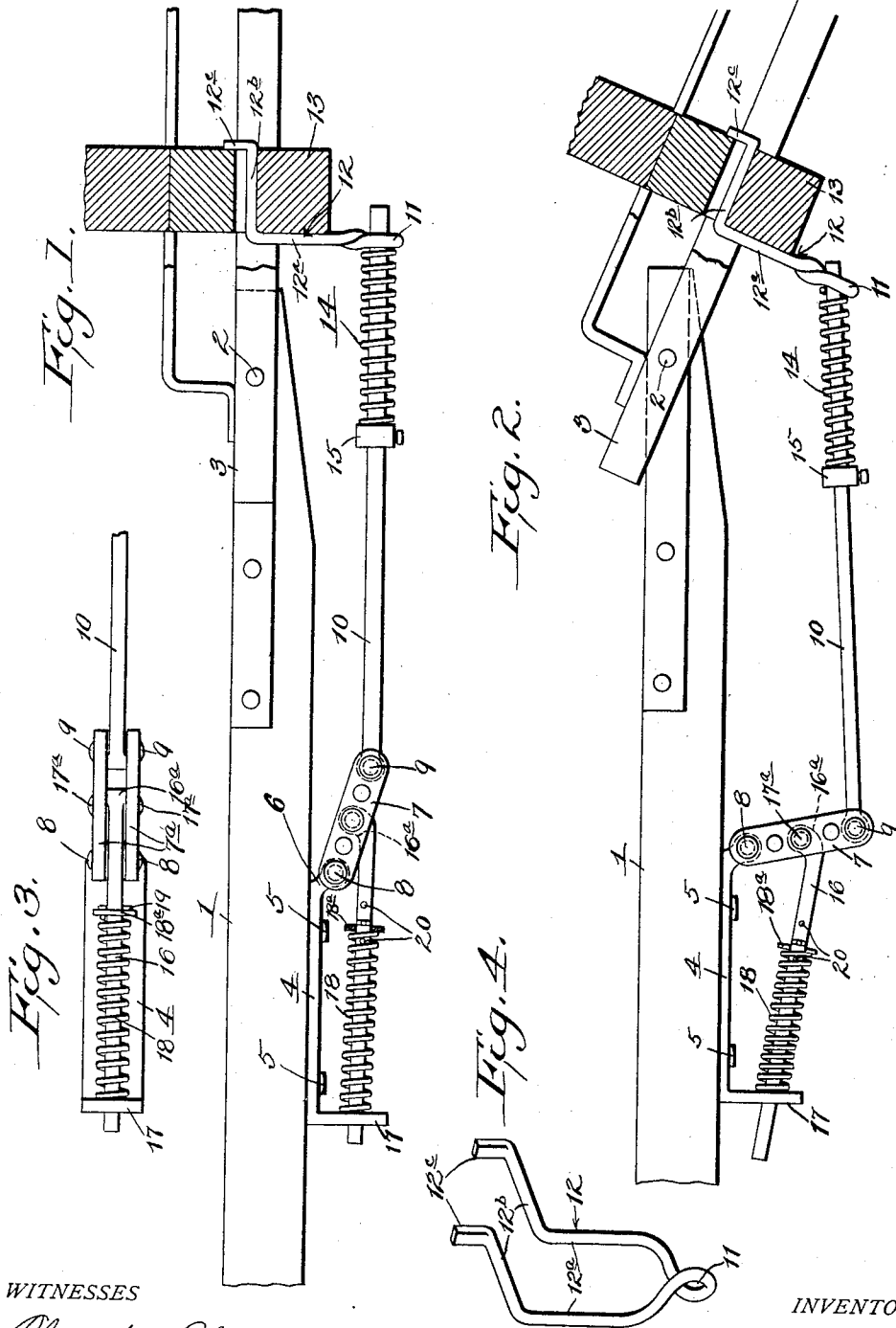


T. S. HALL.
 AUTOMATIC CUSHION TONGUE SUPPORT.
 APPLICATION FILED JUNE 29, 1912.

1,039,526.

Patented Sept. 24, 1912.



WITNESSES

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THOMAS S. HALL, OF SULLIVAN, ILLINOIS, ASSIGNOR OF ONE-HALF TO STONEWALL JOHNSON, OF SULLIVAN, ILLINOIS.

AUTOMATIC CUSHION TONGUE-SUPPORT.

1,039,526.

Specification of Letters Patent.

Patented Sept. 24, 1912.

Application filed June 29, 1912. Serial No. 706,709.

To all whom it may concern:

Be it known that I, THOMAS S. HALL, citizen of the United States, residing at Sullivan, in the county of Moultrie and State of Illinois, have invented certain new and useful Improvements in Automatic Cushion Tongue-Supports, of which the following is a specification.

The present invention relates in general to vehicles, and more particularly to an improved cushion support which is designed to relieve the weight of the tongue from the neck of the draft animal, and which embodies novel features of construction whereby it will operate in an effective manner to maintain the tongue yieldingly in a substantially horizontal position regardless of whether the vehicle body is in a normal or dumping position.

The object of the invention is to provide a cushion tongue support which is comparatively durable and inexpensive in its construction, which can be readily applied to any standard type of vehicle, and which can be readily adjusted so as to operate effectively upon the particular vehicle to which it may be attached.

With this and other objects in view, the invention consists in certain novel combinations and arrangements of the parts as will more fully appear as the description proceeds, the novel features thereof being pointed out in the appended claims.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a side elevation of the device showing it as applied to a vehicle tongue, the various parts being in the position assumed when the vehicle body is in a normal or upright position. Fig. 2 is a similar view showing the position assumed by the different parts when the vehicle body is in a tilted or dumping position. Fig. 3 is a bottom plan view of the tongue bracket, and Fig. 4 is a detached perspective view of the abutment bracket which is applied to the wagon axle.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Specifically describing the present embodiment of the invention, the numeral 1 55 designates a vehicle axle which has the rear end thereof pivoted in the usual manner upon the pin or bolt 2 which connects the forwardly projecting hounds 3. A bracket 4 is secured to the lower face of the tongue 60 at a suitable point thereon, any convenient form of fastening members such as the screws 5 being utilized for retaining the bracket in position. The rear end of the bracket is provided with a bearing member 65 6 which has a lever 7 pivotally mounted thereon at 8. As shown more clearly by Fig. 3, this lever 7 comprises two complementary side members 7^a which have a spaced and parallel relation to each other. The free 70 end of the lever 7 is pivotally connected at 9 to the forward end of the main thrust or supporting rod 10, the rear end of the said rod 10 passing loosely through an opening or eye 11 in an abutment bracket 12 which 75 is secured to the vehicle axle 13. As shown by Fig. 4, this abutment bracket may be conveniently formed by suitably bending a single length of material, and comprises the spaced arms 12^a which project downwardly 80 along the front of the axle 13. The upper ends of the arms 12^a are extended rearwardly and horizontally so as to fit over the top of the axle between the axle and the sand board, the extremities of the arms being 85 extended upwardly at 12^c. Surrounding the main thrust rod 10 is a coil spring 14 which is interposed between the axle bracket 12 and a set collar 15 which is adjustably mounted upon the rod 10, the said 90 set collar being adjustable to regulate the tension in the spring. A rebounding rod 16 extends forwardly from the lever 7, and has the rear end thereof extended upwardly at 16^a and pivotally connected to the middle 95 portion of the lever 7 at 17^a. The forward end of the rebounding rod 16 passes loosely through an opening in a wing 17 which projects downwardly from the tongue 1. This wing 17 may, as in the present in- 100 stance, be formed integral with the bracket or plate 4, although this is by no means absolutely necessary. A coil spring 18 surrounds the rebounding rod 16 and is interposed between the wing 17 and washer 18^a 105 which may be held in an adjusted position

by means of a pin 19 which is adapted to pass through a selected one of the openings 20.

In the normal position of the parts, when the vehicle body is in an upright position, the lever 7 is swung rearwardly, as indicated by Fig. 1, and the thrust upon the rod 10 produced by the spring 14 serves to support the tongue 1 and retain the same in a substantially horizontal position. However, when the wagon body is tilted as indicated by Fig. 2, the abutment or axle bracket 12 is swung forwardly so as to swing the lever 7 downwardly and forwardly. The increased tension in the main spring 14 is counteracted by the tension which is thus produced in the rebounding spring 18, the forward swinging movement of the lever 7 serving to push the rebounding rod 16 through the wing 17 so as to produce tension in the rebounding spring 18. Owing to the peculiar relation existing between the different parts, the tongue 1 is always retained yieldingly in a horizontal position, regardless of the position of the wagon body.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A tongue support including a lever, means for mounting the lever upon the tongue, an axle bracket, a thrust rod connected to the lever and loosely engaging the axle bracket, yielding means carried by the

thrust rod and engaging the axle bracket, and cushion means yieldingly resisting the forward movement of the lever.

2. A cushion tongue support including a lever, means for mounting the lever upon the tongue, an axle bracket, a main thrust rod connected to the lever and slidably engaging the axle bracket, yielding means carried by the thrust rod and engaging the axle bracket, a rebounding rod connected to the lever and extending forwardly along the tongue, and yielding means resisting the forward movement of the rebounding rod.

3. A cushion tongue support including a lever, means for securing the lever to a vehicle tongue, an axle bracket, a thrust rod having the forward end thereof pivotally connected to the lever while the rear end thereof slidably engages the axle bracket, a spring carried by the thrust rod and bearing against the axle bracket, a wing projecting downwardly from the tongue, a rebounding rod slidably engaging the wing and pivotally connected to the lever, and a spring carried by the rebounding rod and engaging the wing.

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

THOMAS S. HALL.

Witnesses:

J. A. WRIGHT,
L. R. SMITH.