(Model.)

J. J. THOMAS.

TONGUE SUPPORT.

No. 266,401. Patented Oct. 24, 1882.

Fig 1

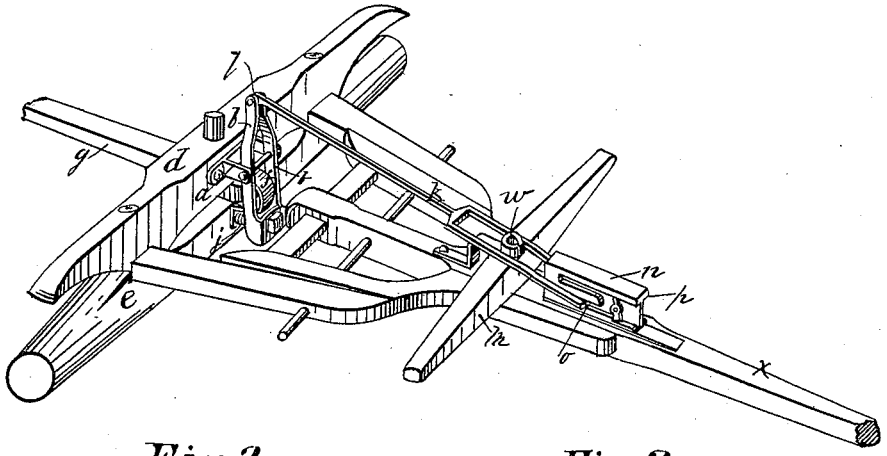

Fig 2

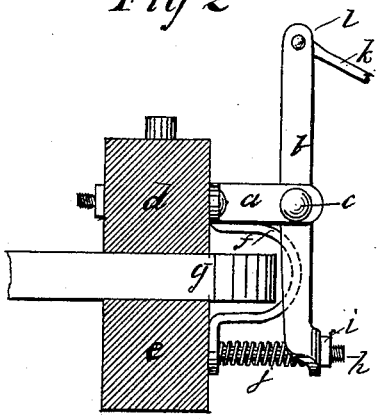

Fig 3

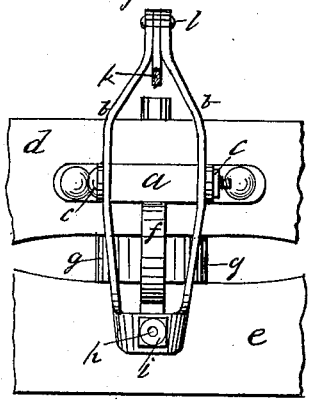

Fig 4

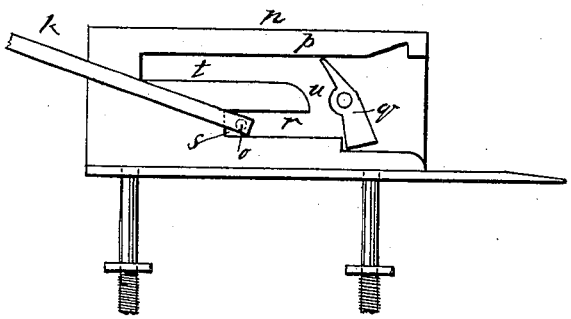

Fig 5

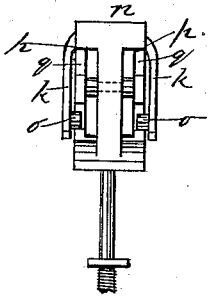

Fig 6

WITNESSES:

Chas. C. Howell.
C. Sedgwick

INVENTOR:

J. J. Thomas

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN J. THOMAS, OF SALT LAKE CITY, UTAH TERRITORY.

TONGUE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 266,401, dated October 24, 1882.

Application filed July 19, 1882. (Model.)

To all whom it may concern:

Be it known that I, JOHN JEFFREYS THOMAS, of Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented a new and Improved Tongue-Supporter for Wagons, of which the following is a full, clear, and exact description.

The object of this invention is to provide a contrivance by which the horses may be relieved of the weight of the tongue of the wagon, and to arrange the contrivance so that it may be connected or disconnected at will for use or not, as required.

The invention consists essentially of a short lever located vertically in front of the axle and sand-board, with a strong spring behind the lower end, the upper end having a rod or bar connected to it, and extending along over and beyond the evener, where a locking device is provided for readily connecting it with the tongue when it is wanted to support it thereby, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a tongue and part of the front running-gear of a wagon, with my improved tongue-supporter attached. Fig. 2 is a transverse section of the axle and sand-board along the reach, showing a side elevation of the lever and spring contrivance. Fig. 3 is a front elevation of the axle, sand-board, and the lever contrivance. Fig. 4 is a side elevation of the locking device, and Fig. 5 is an end elevation thereof. Fig. 6 is a side view of the evener pivot-bolt.

I make a substantial bracket-frame, *a*, for the support of the lever *b* on a pivot, *c*, a little in front of the sand-board *d* and the axle *e*, extending a curved bar, *f*, downward from said frame in such a manner as not to interfere with the operation of the reach *g*, to form a brace to said frame, and also to support a stud-pin, *h*, which extends through the lower end of the lever *b*, and has a nut, *i*, to limit the forward swing of the lower end of said lever, and on which a strong spring, *j*, is coiled, which is to resist the thrust of the lever when said lever is connected with the tongue *x*, and thus support the weight of the tongue through the means of said lever, and a connecting-rod, *k*, pivoted to the upper end of the lever at *l*, and extending along beyond the evener *m* to a locking-block, *n*, with which the said rod *k* connects by the lugs or studs *o* on the slotted front end, running from the front end of said block along back under ledges *p* of the top past the gravity retaining-pawls *q*, into and down through passages *u* into grooves *r*, and against the shoulders *s*, thus suspending the tongue on the spring, which gives to the front end of the tongue an elastic play that relieves it of the shocks it would be subject to if rigidly suspended. The block *n* is provided with other and longer grooves, *t*, into which the studs *o* of rod *k* may be shifted by lifting up said rod when it may be desired to let the tongue fall. To suspend the tongue again on the springs when hitching the horses on, needs only to raise the tongue until studs *o* will fall through spaces *u*, and then lower it until said studs slide back in the grooves *r*. The pawls *q* will prevent the rising of the tongue in such case so far as to allow the escape of the studs *o* altogether from the locking-block; but when said studs are in the grooves *r* they can be entirely disconnected from the block by lifting the tongue, as they will then strike the lower ends of the pawls and lift and pass them.

The lever *b* is made of two members or branches, which are sufficiently separated from each other to straddle the brace *f* and the end of the reach, and for stiffening it laterally.

The rod *k* is branched along the evener suitably for allowing the evener-bolt *w* to be applied or removed between the branches.

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

1. The combination of lever *b*, spring *j*, rod *k*, and a connecting-block, *n*, with the tongue *x* and the front running-gear of a wagon, substantially as described.

2. The bracket-frame *a*, brace *f*, stud *h*, and spring *j*, in combination with lever *b* and the axle and sand-board of a wagon, substantially as described.

3. The combination, with the rod *k*, having

studs *o*, and the tongue *x*, of the block *n*, having grooves *t r*, and gravity-pawls *q*, substantially as described.

4. The block *n*, having top ledges, *p*, grooves *t r*, passages *u*, and gravity-pawls *q*, in combination with rod *k* and tongue *x*, substantially as described.

5. The levers *b* and tongue *x*, in combination with the rod *k*, pivoted at *l* to the upper end of the lever, extending beyond the part *m* and locking to the block *n*, as shown and described.

JOHN J. THOMAS.

Witnesses:
G. M. FORBES,
C. E. FARNSWORTH.