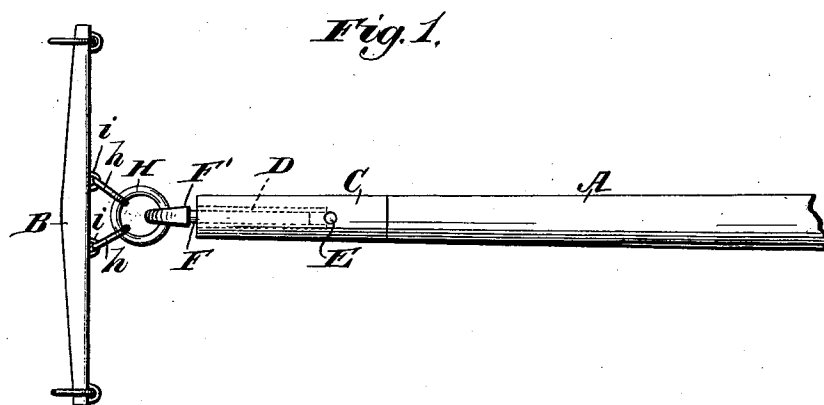


(No Model.)

W. C. DOWLING.
WAGON TONGUE.

No. 506,986.

Patented Oct. 17, 1893.



Witnesses:
Robert Cruik.
G. W. Rea,

Inventor:
William C. Dowling.
By *Edward Taggart.*
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM C. DOWLING, OF ALPINE, MICHIGAN.

WAGON-TONGUE.

SPECIFICATION forming part of Letters Patent No. 506,986, dated October 17, 1893.

Application filed April 4, 1893. Serial No. 469,053. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. DOWLING, a citizen of the United States, residing in the township of Alpine, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Wagon-Tongues, of which the following is a specification.

This invention has for its object to provide a new and improved neck yoke attachment for the tongue or pole of a vehicle, whereby the neck yoke has a swivel connection with the tongue or pole, and the back pressure is exerted on a line coincident with the longitudinal axis of the latter.

To accomplish this object, my invention consists in the features of construction and the combination and arrangement of parts hereinafter described and claimed.

Figure 1 is a bottom plan view of the device complete. Fig. 2 is a side plan view of the bolt sliding in the tongue; and Fig. 3 is a plan view of the end of the tongue.

Similar letters refer to similar parts in the different figures.

A is a wagon tongue, and B is a neck yoke. The end portion of the tongue is surrounded by a thimble C, made of iron or steel, its purpose being to prevent the end from splitting out by the strain which is brought upon it. This thimble or band may be of any desired shape or form, so long as it accomplishes that purpose. A longitudinal hole is bored in the end of the tongue, extending in about ten or twelve inches, and a cylindrical metal socket shown in Fig. (3) by D, is driven in. This socket is to save the tongue from wear by the sliding bolt. I also find it desirable to bore a hole in the tongue at right-angles to this longitudinal hole, and located at the inner end thereof, as shown in Fig. (1) by E. This allows the free escape of any dirt or obstacles that may get into this socket from the open outer end.

F in Fig. (2), is a bolt eight or ten inches long of proper shape to fit the socket and headed. I prefer to make the head flat, and approximately, half round in shape, as this form makes a smooth desirable end finish for the tongue, but the form of the same is not material. Through the head F of this bolt is

a ring hole G, through which the large ring H is passed. This large ring is held to the neck yoke by the two smaller rings *h—h*, and the staples *i—i*, as shown in Fig. (1), and in the form similar to the usual construction. The ring-hole G is formed in the head F' at a point coincident with the longitudinal axis of the bolt F, and the latter is inserted in the metallic socket D at the center of the tongue or pole, all in such manner that when the wagon is pressed forward, or the team pulls backward, the back pressure is exerted on a line coincident with the longitudinal axis of the tongue or pole. This improved construction and arrangement also obviates the necessity of employing any extraneous device for retaining the bolt F in the socket D, while said bolt is free to turn axially and to move longitudinally in said socket.

It will readily be seen that when the device is in use, and the wagon comes forward on the horses, the advancing end of the tongue will be held back by the head of the bolt, and this construction will give all the needed strength. The arrangement of the sliding bolt, which will easily revolve, and of the large and small rings, permits the neck yoke to be easily turned in all directions, and to go forward and back as far as is necessary, so that all the usual differing motions and positions of the different horses are easily permitted. The tugs, if properly adjusted, will not permit the neck yoke to be drawn far enough forward to disengage the bolt from the socket, but when the horses are unhitched, they will go forward, and the tongue will drop in the usual way.

As I have constructed this device, it is arranged to give about the same longitudinal movement of the tongue which is permitted by the usual present construction where a large ring slips over the end of the tongue, and is held by a stop some distance from the end. But this distance, evidently, can be regulated at pleasure by increasing or diminishing the length of the bolt and the containing socket. By this construction I entirely do away with the end of the tongue projecting beyond the neck yoke, and thereby with the annoyance, delay and trouble caused by catching the lines under this projecting end.

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

1. The combination with a wagon tongue or
5 pole having a longitudinal bore, and a metallic thimble C mounted on the end of the tongue or pole, of a bolt F having a head F' provided with a transverse ring-hole G located coincident with the longitudinal axis of the bolt,
10 said bolt being freely slidable lengthwise and axially rotatable in the longitudinal bore of the tongue or pole, a ring H loosely engaging the ring-hole in the head of the bolt, and a neck yoke B loosely connected with the ring,
15 whereby the back pressure is in a line coincident with the longitudinal axis of the tongue or pole, substantially as described.
2. The combination with a wagon tongue or

pole having a longitudinal bore, a metallic cylindrical socket D inserted into the longitudinal bore, and a metallic thimble C mounted on the end of the tongue or pole, of a bolt F having a head F' provided with a transverse ring-hole G and freely slidable lengthwise and axially rotatable in the metallic cylindrical
20 socket, a ring H loosely engaging the ring-hole in the head of the bolt, and the neck yoke B loosely connected with the ring, substantially as and for the purposes described.

In witness whereof I have hereunto set my
hand and seal in the presence of two witnesses.

WILLIAM C. DOWLING. [L. S.]

Witnesses:

ARTHUR C. DENISON,
EDWARD TAGGART.