

(No Model.)

2 Sheets—Sheet 1.

F. G. WINNEK.
TONGUE SUPPORT.

No. 378,070.

Patented Feb. 14, 1888.

Fig. 1.

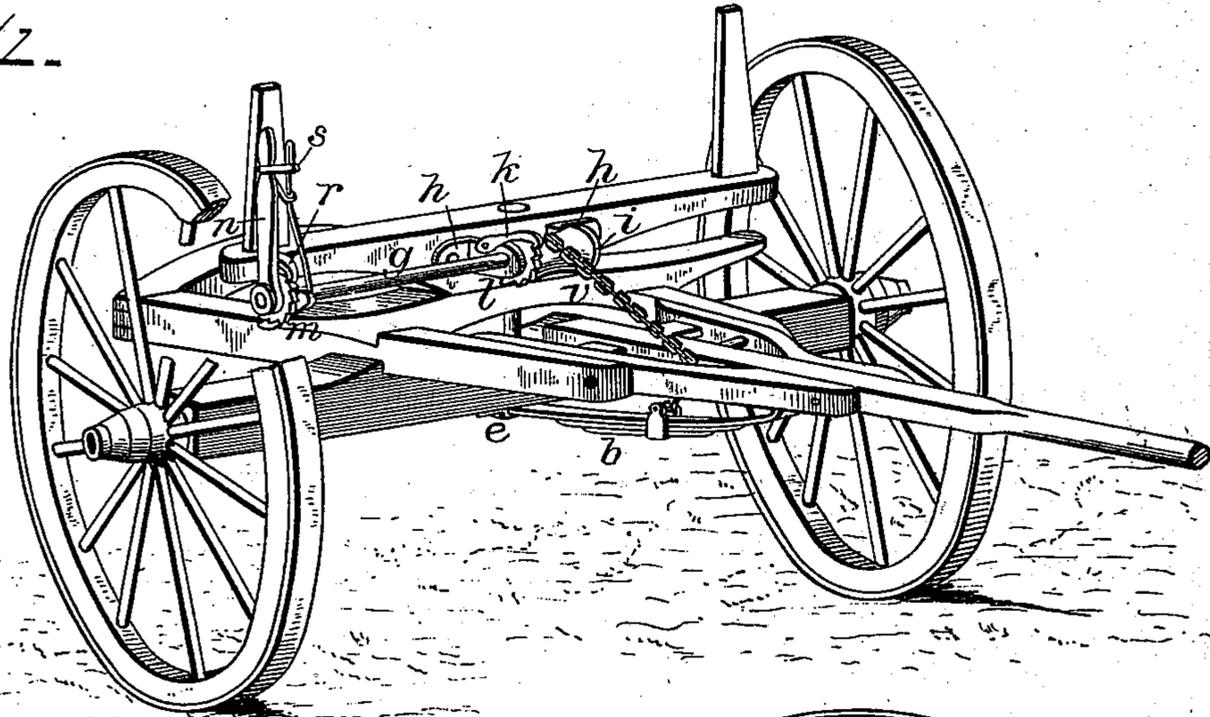


Fig. 2.

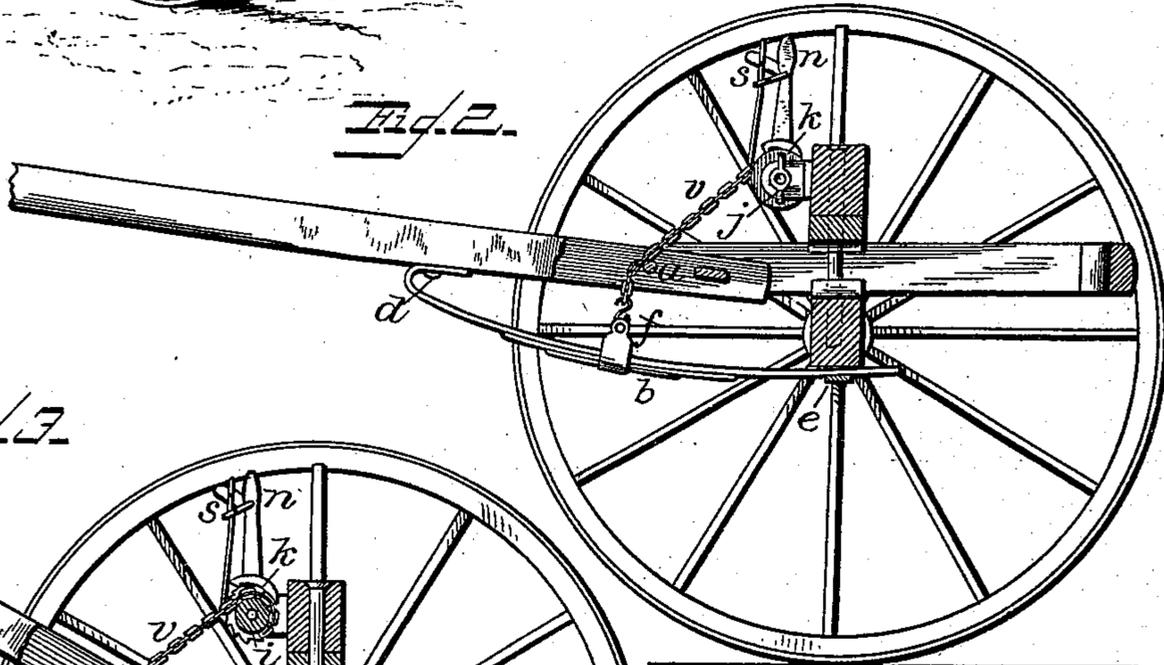
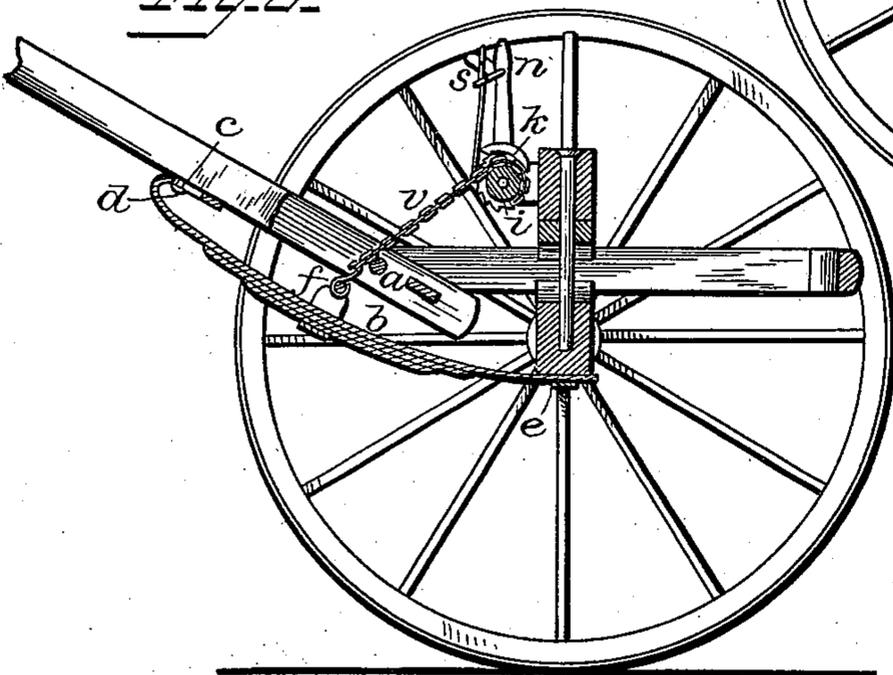


Fig. 3.



WITNESSES

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(No Model.)

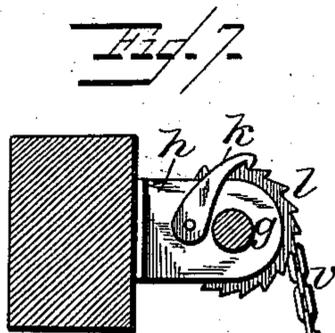
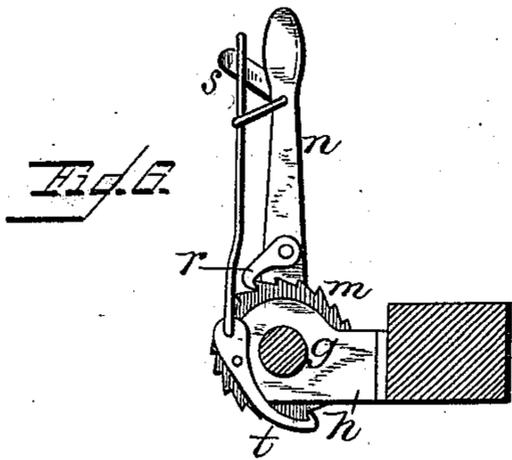
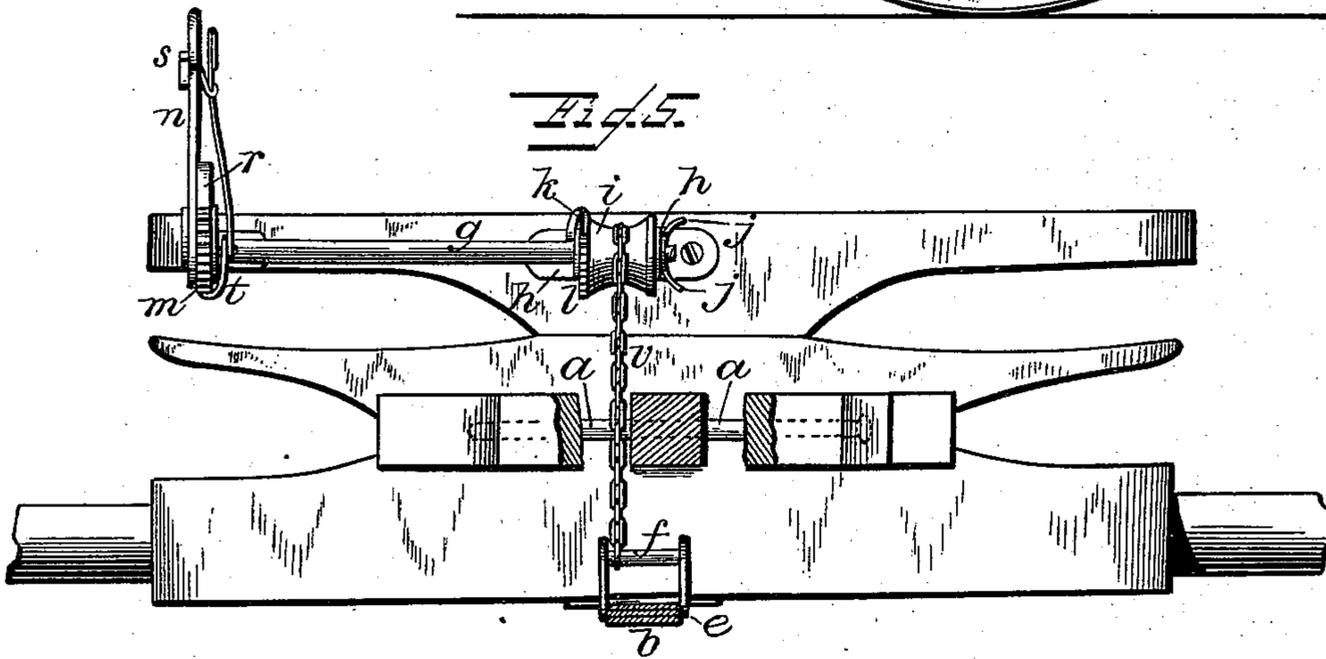
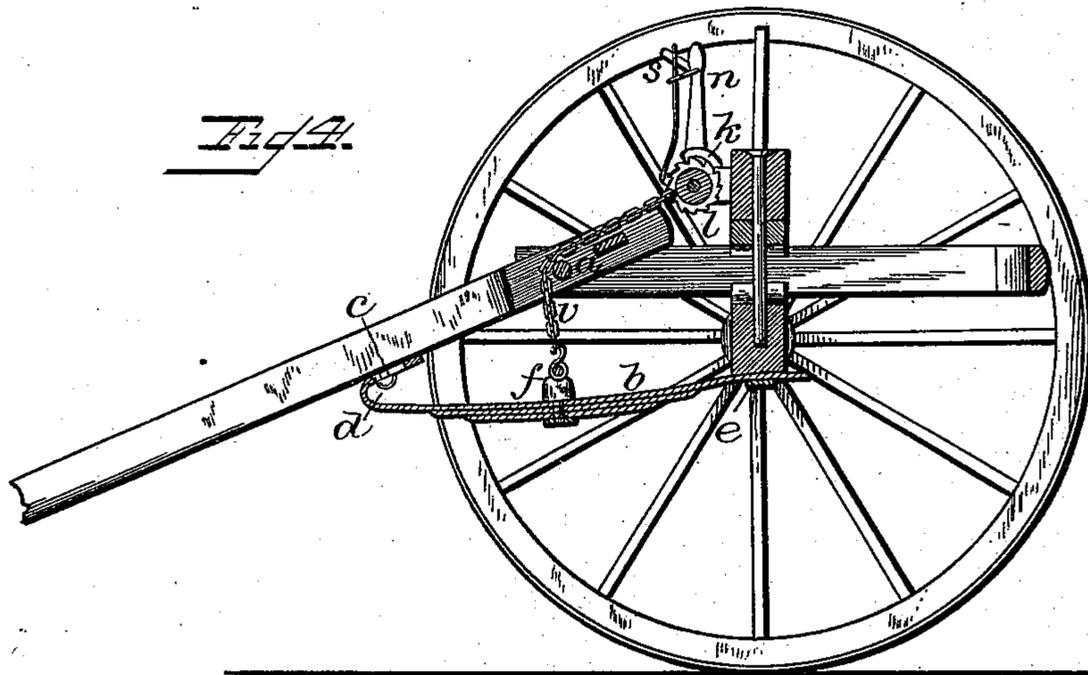
2 Sheets—Sheet 2.

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WITNESSES

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INVENTOR

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Attorney

UNITED STATES PATENT OFFICE.

FREDERICK G. WINNEK, OF LEAVENWORTH, KANSAS, ASSIGNOR OF TWO-THIRDS TO JOHN H. ATWOOD AND THOMAS P. FENLON, JR., BOTH OF SAME PLACE.

TONGUE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 378,070, dated February 14, 1888.

Application filed November 4, 1887. Serial No. 254,263. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK G. WINNEK, a citizen of the United States, residing at Leavenworth, in the county of Leavenworth and State of Kansas, have invented new and useful Improvements in Wagon-Tongue Supports, of which the following is a specification.

My improvement relates to devices for supporting wagon-tongues; and the object of my improvement is to provide for raising the tongue from its supported position by the driver from his position in the wagon when it may be desired to do so to relieve the horses' shoulders, and particularly to raise the tongue up high out of the way in the event of the horses running away, and also to provide for relieving the spring of the weight of the tongue by lowering the latter and its supporting-spring when the wagon is not in use. These objects I attain by the construction shown in the accompanying drawings, in which—

Figure 1 represents the fore wheels and tongue of the running-gear of a wagon having my improved tongue-support applied thereto. Fig. 2 is a vertical section of the same with the tongue supported in position to relieve the horses. Fig. 3 shows a similar section with the tongue raised up out of the way. Fig. 4 shows a similar section with the tongue lowered to the ground. Fig. 5 shows a front view of the raising and lowering device and the tongue-support. Fig. 6 shows the spring-pawl-lever device for raising the tongue from the wagon-body, and Fig. 7 shows the winding-drum device.

The fore wheels, axle, hounds, bolster, and bolster-pillar block of a wagon are shown in the drawings, these being all the parts that are necessary to illustrate the use of my improved tongue-support.

The tongue is pivoted to the front ends of the hounds in the usual manner by the cross-bolt *a*, and for supporting the tongue I use a semi-elliptic spring, *b*, having its front end bent in the form of a **U**, the bent end having a slot, *c*, in the length of the spring and fastened to the under side of the tongue by a bolt, *d*, passing through said slot, so that the spring may have a certain play over the bolt in raising and lowering the tongue. The other end

of the spring extends under and rests against the axle, being retained in position in line with the tongue by a drive-loop, *e*, driven into the under side of the axle.

The spring *b* is suspended in its supporting position by a chain, *v*, hooked into a loop, *f*, embracing and riveted to the spring at the middle of its length; but the point of suspension, instead of being from the hounds, is from the bolster part of the wagon, and it is to this part that the raising and lowering devices are secured.

To the front of the bolster and at one side of the center of the length thereof I secure a shaft, *g*, by bracket-bearings *h*, and between two such bearings, on the inner end of the shaft, a concave pulley, *i*, is fixed, to which the spring-suspending chain is connected, so as to be wound thereon. This end of the shaft, outside of the bearing bracket, is provided with handle ends *j*, by which to turn the shaft to wind or unwind the chain to raise the tongue from the ground in hitching the team, or to lower the tongue to the ground when the team is unhitched. The necessary leverage for thus raising the tongue is obtained by passing the chain over the pivot-bolt of the tongue, so that the tongue-bolt becomes the fulcrum of the lever in the pulling action of the chain upon the tongue. One of these pulley-brackets has a ratchet-pawl, *k*, which takes into a ratchet-wheel, *l*, on the pulley, to hold the latter from unwinding and the tongue when raised to the proper position.

The outer end of the shaft has a ratchet-wheel, *m*, fixed thereon, and a hand-lever, *n*, mounted loosely thereon, provided with a check-pawl, *r*, working in said ratchet, to hold the shaft from unwinding. This lever is long enough and is so placed as to stand up by the side of the wagon-body within convenient reach of the driver, and is provided with a pivoted thumb-piece, *s*, connected by a link to a weighted pawl, *t*, so as to wind the chain upon the pulley, when desired. By this lever attachment the tongue can be raised by the driver up out of the way when the team is unhitched or in case the team should run away, and thus prevent collision with the tongue in the event of running into anything. The pawl

t is weighted to automatically hold it engaged with the ratchet *m*, and it is pivoted to the bracket *h*.

In unwinding the chain to lower the tongue the holding-pawls *k r* must be thrown back.

If, after the team has been hitched, there should be found any slack in the chain, so that the weight of the tongue is borne upon the horses' shoulders, the driver can from his position in the body wind up the chain by the hand-lever and raise the tongue to the desired height, and this advantage is obtained by attaching the support for the suspending device to the running-gear of the wagon.

The pulley device may be used without the hand-lever device.

I claim—

1. The combination of the tongue and its supporting-spring with a tongue raising and lowering device attached to the running-gear and consisting of the suspending chain for the supporting-spring, the pulley to which the chain is attached provided with thumb-handles, and a ratchet-wheel and a pawl pivoted to one of the supporting-brackets for said pulley, the said chain passing from said pulley to said spring over the tongue-bolt, substantially as described, for the purpose set forth.

2. The combination of the tongue and its supporting-spring with a tongue-raising de-

vice attached to the bolster of the running-gear and consisting of a pulley and shaft, a suspending chain connecting the spring and pulley, a ratchet, *m*, fixed upon the shaft, a hand-lever, *n*, loosely mounted on the shaft, and a ratchet-pawl, *t*, controlled by said hand-lever, arranged to be operated by the driver to raise the tongue, as described.

3. In a wagon-tongue support, the winding and unwinding device attached to the bolster, consisting of a shaft mounted in brackets having a fixed pulley on one end provided with a fixed end handle, *j*, and a ratchet-wheel, *l*, a pawl, *k*, controlling said pulley, a fixed ratchet, *m*, on the outer end of said shaft, and a loose hand-lever having a pawl, *r*, controlling said ratchet, in combination with a tongue supporting spring, arranged as described, and a chain connecting the pulley and spring, passing over the tongue-bolt, whereby the tongue is raised and lowered from the pulley end of the shaft and elevated by the driver with the hand-lever device, as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FREDERICK G. WINNEK.

Witnesses:

W. D. BIDWELL,
T. D. MACE.