

C. F. WHIPPLE.
 Wagon Hounds and Tongue.

No. 161,648.

Patented April 6, 1875.

Fig 1.

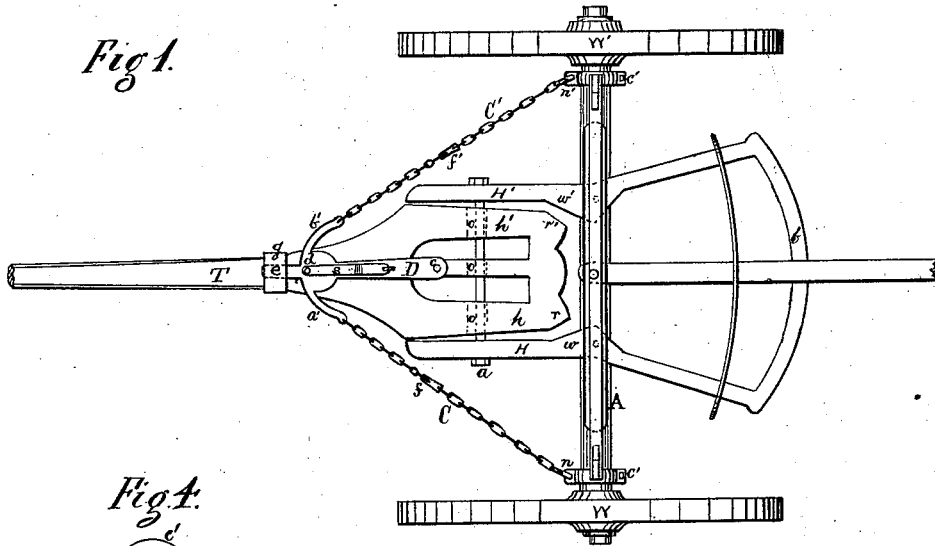


Fig 4.



Fig 2.

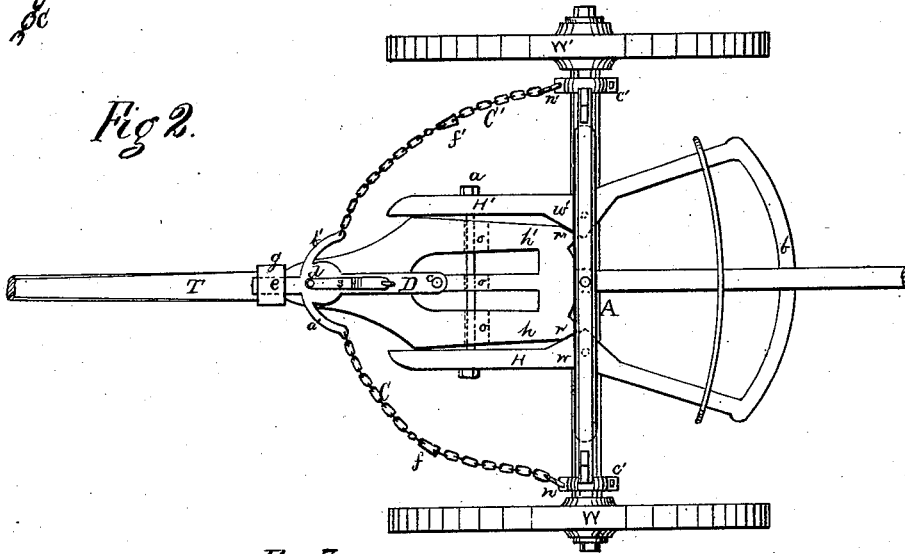
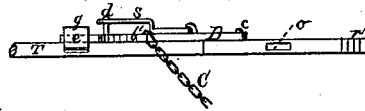


Fig 3.



Witnesses.

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IMPROVEMENT IN WAGON HOUNDS AND TONGUES.

Specification forming part of Letters Patent No. 161,648, dated April 6, 1875; application filed February 9, 1875.

To all whom it may concern:

Be it known that I, CLARENCE F. WHIPPLE, of Grand Rapids, county of Wood and State of Wisconsin, have invented certain new and useful Improvements in Wagons, of which the following is a specification, reference being had to the accompanying drawings forming part hereof.

My invention relates to a wagon having the tongue so constructed, and attached to the wagon in such a manner, that the draft upon the team is equalized, while the tongue is prevented from striking the horses by switching from side to side when either of the forward wheels of the wagon encounters an obstruction, and so that the wagon may be firmly braced against and guided by the tongue in going down hill, or in backing the team; and my invention consists in the devices, and their combination and construction, hereinafter particularly described.

Figure 1 is a plan view of the front part of a wagon embodying my invention, showing the wagon in position when the team is drawing. Fig. 2 is a similar view of the same, showing the tongue in position when going down hill or backing the team. Fig. 3 is a side view of a portion of the wagon-tongue. Fig. 4 is a similar view of the peculiar device by which I attach the draft-chains to the axle.

A is the front axle-tree. W and W' are the front wheels. H and H' are the large hounds, formed as shown in the drawings, projecting forward at right angles from the axle-tree A, and parallel to each other, with the curved cross-bar *b* joining their rear ends, and having the bevels or wedges *w w'* formed or secured upon their inner sides immediately in front of the line of the axle, as shown. T is the tongue, formed with or carrying the small hounds *h* and *h'*, which are made with their outer sides inclined somewhat toward each other from front to rear, and with the beveled ends *r* and *r'*, as shown. The small hounds are attached to the large hounds by means of the bolt *a*, and the openings in the small hounds through which the said bolt passes are slotted, as shown at *o*. D is the draw-bar, pivoted upon the tongue at *e*, and having the hammer-strap *s* attached to it in the usual manner, as shown, with the bolt *d*, to which the evener is to be attached, pass-

ing through the hammer-strap and draw-bar, but not through or into the body of the tongue. The forward end *e* of the draw-bar works in a guide-plate, *g*, upon the tongue, as shown. The draw is provided with the arms *a'* and *b'*, one upon either side, to which the draw-chains C and C' are attached at their forward ends. The draw-chains C and C' are provided with screw-swivels *f* and *f'*, and are attached to the axle A on either side, by means of bands *c'* and *d'*, secured upon the axle, which are provided with hooks *n* and *n'*, as shown. The bands *c'* and *d'* are formed and secured to the axle as shown in Fig. 4, the band *c'* passing around over the axle, and having a lug or tongue-piece, *p*, with an opening in it projecting forward from the axle, and the band *d'* passing around under the axle and up through the opening in the lug or tongue-piece *p*, thus forming a hinge-joint in the two bands, which are then bolted together on the rear side of the axle, as shown. The end of the band *d'* is formed into a hook, *n*, to which the draw-chain C is attached. The hooks *n* and *n'* are inclined inward at an angle to the axle, so that they may be in a line with the draw-chains, to receive the draft.

Now, it is evident that the draft of the team is entirely upon the draw-bar D and the chains C and C' attached to the front axle, and not upon the tongue, or the large hounds. It is also evident that, by means of the shape given to the small hounds, and by the working of the end *e* of the draw-bar in the guide-plate *g*, that the tongue will be kept steady in the large hounds, and will not switch from side to side and strike the team, when either of the forward wheels meets an obstruction. It is also evident that, in going down hill, or in backing the team, the small hounds will play backward between the large hounds, and, by means of the beveled ends *r r'* of the small hounds bearing against the wedges *w* and *w'* on the large hounds, the forward wheels will be firmly and rigidly braced against the tongue, and the wagon thus readily guided and controlled in its course. It is also evident that, by means of the screw-swivels *f* and *f'* in the draw-chains C and C', the said draw-chains may be lengthened or shortened, as may be desired. It is also evident that, by means of

the hooks *n* and *n'*, the draw-chains may be readily and conveniently attached to the axle. And it is also evident that, by means of the hinge-joint formed by the hooked end of the band *d'* passing through an opening in the lug *p* on the band *c'*, that the said bands may be readily clasped upon and bolted in place upon the axle, as shown in Fig. 4.

I am aware that a patent has been granted for the combination, with the tongue of a wagon, of curved or beveled hounds, working on a bolt in large slotted hounds attached to the axle; and also for the combination, with the tongue of a wagon, of a draw-bar provided with rods at its ends, working in eyebolts fixed in the tongue, and arranged to slide forward and backward on the tongue in said eyebolts, together with a bent draft-rod, which engages in an eye fixed on the forward part of the draft-bar, and which are attached to chains which are secured to the axle. I do not claim these parts, intending to limit myself to the combination, with the wagon-tongue, of the slotted hounds *h h'*, having their outer sides inclined somewhat toward each other from front to rear, and secured in the hounds *H H'*, which project forward from the axle parallel to each other, by the pin *a*; and to the combination, with the tongue of the draw-bar *D*, pivoted upon the tongue at *c*, having no movement forward and backward on the tongue, but by being thus pivoted to the tongue allowing the tongue to swing laterally, such

swinging being limited, and the switching of the horses by the tongue being prevented by an arm on the forward end of the draw-bar, which engages in a guide-plate fixed on the tongue.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a wagon, the combination of the tongue *T*, the slotted hounds *h h'*, with their outer sides inclined toward each other from front to rear, the large hounds *H H'*, projecting from the axle *A* parallel to each other, the bolt *a*, the draw-bar *D*, pivoted upon the tongue at *c*, having the end or arm *e*, the guide-plate *g*, the draw-chains *C* and *C'*, with their swivels *f* and *f'*, the hooks *n n'*, and the bands *c c'* and *d d'*, as described.

2. The combination of the tongue *T*, the slotted hounds *h h'*, with their beveled ends *r* and *r'*, the large hounds *H H'*, with their wedges *w* and *w'*, the pin *a*, the draw-bar *D*, pivoted upon the tongue at *c*, the end or arm *e*, the guide-plate *g*, the chains *C* and *C'*, the hooks *n* and *n'*, and the axle *A*, as described.

3. The combination of the band *c'* with its lug *p*, having an opening in it through which passes the hooked end *n* of the band *d'*, forming a hinged joint, the bolt *x*, the axle *A*, and the draw-chain *C*, as described.

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Witnesses:

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