

C. HOTZ.
Tongue for Trail-Wagons.

No. 214,143.

Patented April 8, 1879.

Fig: 1.

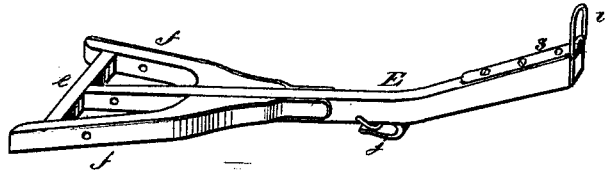


Fig: 2.

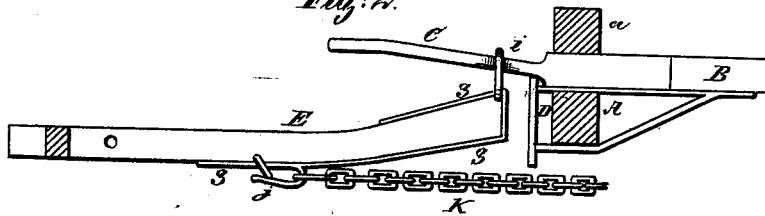
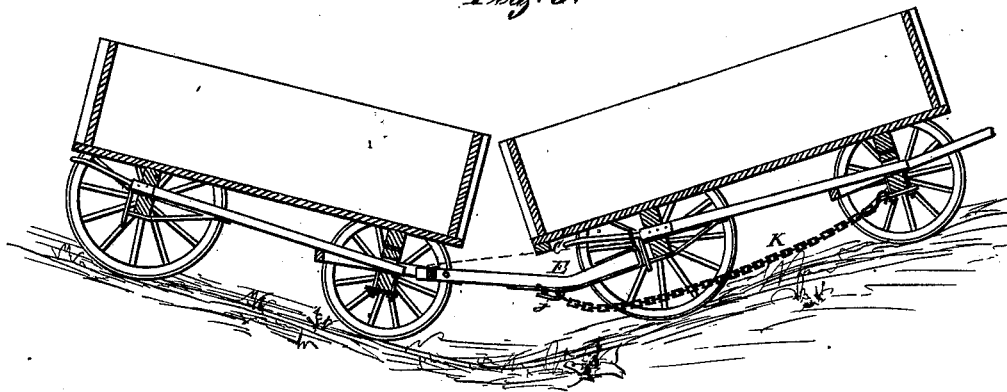


Fig: 3.



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CHRISTOPH HOTZ, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TONGUES FOR TRAIL-WAGONS.

Specification forming part of Letters Patent No. **214,143**, dated April 8, 1879; application filed March 4, 1879.

To all whom it may concern:

Be it known that I, CHRISTOPH HOTZ, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Trail-Tongues for Wagons; and that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

On our western plains, for the purpose of requiring as few teamsters as possible with the transportation of freight, it has been the practice to couple the wagons behind each other, and to hitch all the horses to the front wagon of the thus-formed train, which is called the "lead-wagon," while the others, coupled behind, are called the "trail-wagons;" and for securely coupling the several wagons each has fixed to its rear axle a rearwardly-projecting wrought-iron horn, with a bumper-plate underneath, and the trail-wagons have each a short and blunt tongue in place of the usual wagon-tongue, which strikes against the bumper-plate of its lead wagon, and is supported by having a ring pivoted to its front upper edge placed over the horn of said lead-wagon, and by a hook secured to the under side of said trail-tongue it is coupled to the end of a tug-chain which extends forward under the reach of the next wagon and connects with the front axle of the same.

My invention relates to the construction of the trail poles or tongues, which heretofore, on account of their being made straight, have been the cause of frequent trouble. When in passing a valley or ditch the lead-wagon was already on the uphill incline while the trail-wagon was still on the downhill incline said trail-pole would come in contact with the overhanging ends of the wagon-boxes, and would either lift the box from the bolster or would overstrain and break the trail-tongue or some of its adjoining connections, and it is the object of my invention to prevent such accidents.

My invention consists in the peculiar construction of the trail-tongue, as more fully hereinafter specified.

In the drawings, Figure 1 represents a perspective view of the trail-tongue. Fig. 2 represents a sectional elevation of the same coupled to the lead-wagon, and Fig. 3 represents an elevation in section of two wagons

coupled with my improved trail-pole and while passing a valley.

Like letters in the several figures of the drawings indicate like parts.

A designates the rear axle-beam; *a*, the bolster; B, the reach; C, the rearwardly-projecting wrought-iron horn, rigidly secured upon the rear axle; and D, the bumper-plate of the lead-wagon.

E is the trail-tongue, framed with its rear end to a cross-brace, *e*, and between two tongue-hounds, *f*, to which it is bound by iron straps and rivets in the usual manner. The forward end of this trail-tongue E is re-enforced by an iron strap, *g*, secured upon the top, over the end, and thence extending on the bottom to the junction of the tongue with the hound ends. This strap *g* at the upper corner of the trail-pole has formed a loop for holding a ring, *i*, which, when placed over the horn C, will support and guide the trail-pole; and to the strap on the under side of the trail-pole is formed a strong hook, *j*, provided with a locking-link for attaching the end of the tug-chain K, which extends forward to the front axle of the lead-wagon and is coupled thereto.

To this trail-tongue E, as will be seen from the drawings, I give a crooked or curved shape by first shaping the same of a straight stick of timber cut longitudinally parallel with the grain of the wood, and then after making it steam-hot I bend it by clamping to a former-block.

This curved trail-tongue, when pivoted between the fore axle-hounds of the trail-wagon and suspended to the horn C of the lead-wagon, will clear the overhanging wagon-box ends under the most unfavorable relative positions of the two wagons, where a straight tongue would strike the rear end of the wagon-box, as shown in dotted lines in Fig. 3, while at the same time the line of the tug-chain is thereby dropped sufficiently low to become entirely clear of the rear axle and bumper-plate.

What I claim as my invention is—

The curved trail-pole E, substantially as and for the purposes set forth.

CHRISTOPH HOTZ.

Witnesses:

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