

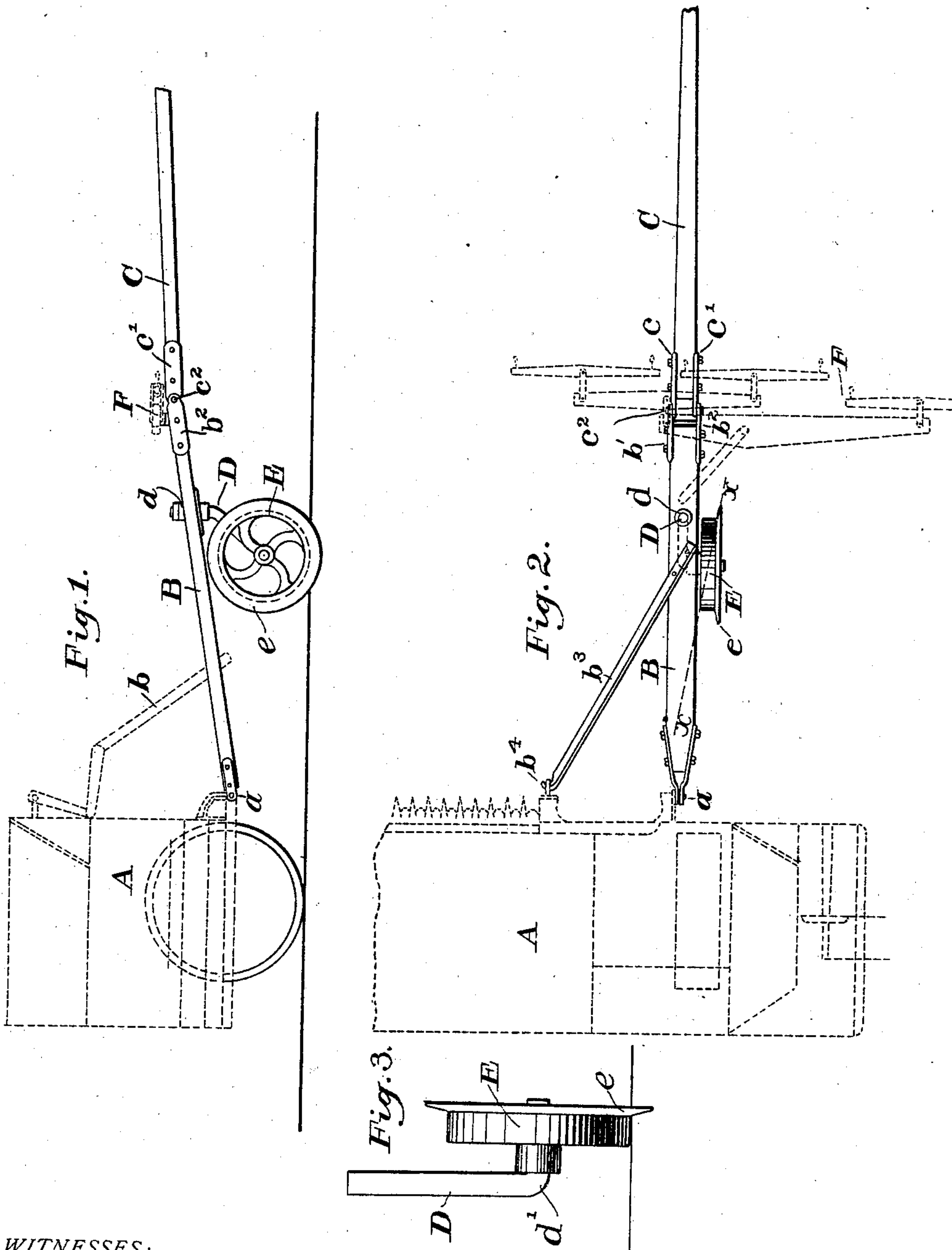
No. 679,836.

Patented Aug. 6, 1901.

O. S. ELLITHORP.
TONGUE TRUCK FOR HARVESTERS.

(Application filed Feb. 12, 1901.)

(No Model.)



WITNESSES:

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TONGUE-TRUCK FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 679,836, dated August 6, 1901.

Application filed February 12, 1901. Serial No. 47,083. (No model.)

To all whom it may concern:

Be it known that I, ORREN S. ELLITHORP, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tongue-Trucks for Harvesting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to tongue-trucks for harvesters and similar machines, and has for its object to provide simple and efficient means for resisting side draft.

It has for its further object to lessen the weight on the horses' necks.

In the drawings, Figure 1 is a stubble-side elevation of my invention; Fig. 2, a plan view of same, and Fig. 3 a detail.

The harvesting-machine A is shown only in outline. At a stub-tongue B is pivoted and connected to the harvesting-machine by the usual tilting device b on the harvester-frame. At the front end of the stub-tongue are the plates b' and b², rigidly secured.

b³ is a brace rigidly secured to the tongue and pivoted to the harvester-frame at b⁴.

To the stub-tongue B is pivoted the tongue proper, C. This is secured to the stub-tongue B by the plates c and c', bolted thereto. The last-named plates and those b' and b² are pivoted at c² by pin or otherwise. This joint leaves the tongue proper, C, free to move vertically. Preferably passing through the stub-tongue B is the pivot of the caster-arm D. In order that it may be properly supported in the tongue, a cast socket d is provided. A wheel E, having the flange e, is supported upon a journal formed by bending the arm D at d' stubbleward. By reference to Figs. 2 and 3 it will be seen that the plane of the caster-wheel is some distance stubbleward of the line of the center of the tongue. The purpose of such placement will be understood by taking into account the fact that there is necessarily a resistance to the forward movement of the caster-wheel caused by its contact with the ground and that this resistance will have the tendency to swing the caster-arm until

that point of contact will be immediately in line with the pivot of the arm D where it is connected to the stub-tongue. The result of this will be that the wheel will be turned so that its rim will tend to approximate the dotted line X, (shown in Fig. 2,) with the corresponding result that the tendency of that wheel will be to travel stubbleward, and thus counteract side draft due to any excessive width of cut of the machine to which it may be applied. Upon the forward end of the stub-tongue is placed the draft-equalizers F, with the usual equalizers. By supporting the stub-tongue on a wheel the tongue proper, C, remains free, thus avoiding all weight upon the horses' necks, also permitting the forward end of the tongue proper always to remain supported in the neck-yoke whatever the tilt of the machine. If the draft-tongue were not provided with the joint, the position of its forward end would be changed with every movement of the tilting device. By placing the draft devices upon the stub-tongue no portion of the stress of draft is applied to the joint c², and as a result the parts forming it do not need the strength necessary if the draft devices were applied to the tongue proper, C. By choice of such placement I am enabled to cheapen the cost of manufacture materially.

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

1. In a draft device for harvesting and similar machines, a stub-tongue connected to said harvesting and similar machines, a tongue proper jointed to said stub-tongue on an axis which is substantially horizontal, draft-equalizers secured to the said stub-tongue, and a caster-wheel also secured to said stub-tongue, all combined substantially as described.

2. In a draft device for harvesting and similar machines, a stub-tongue, a tongue proper pivoted to said stub-tongue, draft-equalizers secured to said stub-tongue, a caster-wheel beneath said stub-tongue, said wheel placed stubbleward from the line of forward movement of the pivot of the arm of said caster-wheel, substantially as described.

3. In a draft device for harvesting and similar machines, a tongue, draft-equalizers secured thereto, a caster-arm beneath said

tongue, a wheel thereon, said wheel placed stubbleward from the line of forward movement of the pivot of said caster-arm, substantially as described.

5 4. In a draft device for harvesting and similar machines, a draft-tongue, a caster-arm pivoted thereto, a wheel mounted upon said
10 as described.

5. In a draft device for harvesting and similar machines, a draft-tongue, a caster-arm

pivoted thereto, a wheel mounted upon said caster-arm stubbleward and rearward from the point of pivoting said arm, said wheel 15 provided with the flange e, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

ORREN S. ELLITHORP.

Witnesses:

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