

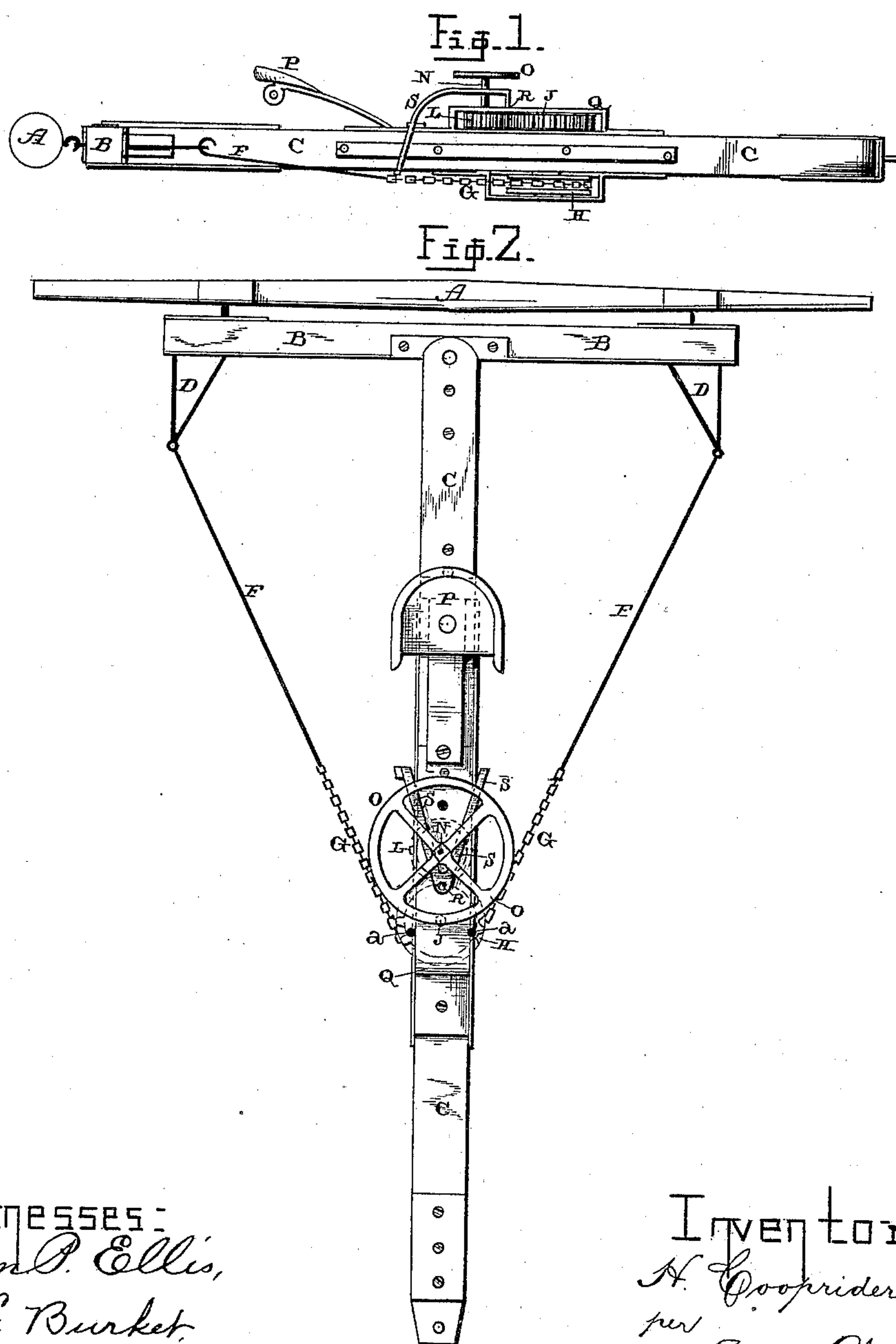
(No Model.)

H. COOPRIDER, Jr.

## TRACTION TONGUE FOR THRASHING MACHINES.

No. 395,547.

Patented Jan. 1, 1889.



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# UNITED STATES PATENT OFFICE.

HENRY COOPRIDER, JR., OF CLAY CITY, INDIANA.

## TRACTION-TONGUE FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 395,547, dated January 1, 1889.

Application filed July 31, 1888. Serial No. 281,548. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY COOPRIDER, Jr., of Clay City, in the county of Clay and State of Indiana, have invented certain new and  
5 useful Improvements in Traction-Tongues for Thrashing-Separators; 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  
10 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in traction-tongues for thrashing-separators;  
15 and it consists in the combination of the tongue, which is pivoted at its rear end to a bar which is fastened to the machine which is being drawn by the traction-engine, braces which are attached to opposite ends of the  
20 bar, a chain which is attached to the braces, a sprocket-wheel which is secured to the tongue and around which the chain passes, a wheel secured to the shaft of the sprocket-wheel, a pinion which engages with the wheel,  
25 and a locking device for holding the tongue in any desired position, all of which will be more fully described hereinafter.

The object of my invention is to provide an apparatus by means of which the separator  
30 can be guided as it is being drawn across the field by the traction-engine, and to lock the tongue in any desired position, so as to prevent a strain being exerted upon the one who guides.

35 Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is a plan view of the same.

A represents the axle of the separator, and to which the bar B is fastened in any desired  
40 manner. To the bar B the tongue C is pivoted at its rear end, and to each end of the bar is secured a brace, D, which projects forward any suitable distance. To each one of these braces D is fastened a connecting-rod,  
45 F, and to the outer ends of the rods F is fastened a chain, G, which extends around the sprocket-wheel H, journaled on the under side of the tongue. The links of the chain catch in the sprockets of the wheel, and whenever  
50 the wheel is turned the tongue is made to move by the wheel H either to one side or the other, so as to guide the machine in any desired direction.

Secured to the upper end of the shaft I of the sprocket-wheel H is a spur-wheel, J, which  
55 is placed upon the top of the tongue C, and which wheel J meshes with the pinion L, which is also journaled upon the top of the tongue. The shaft N of the pinion L is provided with a hand-wheel, O, at its upper end,  
60 so that the operator sitting upon the seat P can readily turn the wheel so as to move the tongue to guide the separator in any desired direction.

The two wheels J N are held in position upon  
65 the top of the tongue by means of a suitable strap, Q, which extends over their tops, and through which strap at any suitable point is made a hole or opening, R, through which the front turned-down end of the locking-lever S  
70 passes. This locking-lever is pivoted upon opposite sides of the tongue, and has one of its lower ends turned outward, so as to form a treadle, by means of which the operator is enabled to operate the locking-lever entirely  
75 by his foot alone while the hands are holding the wheel O. Through the wheel J are made any suitable number of perforations or recesses, a, which, when moved under the opening through the strap, allow the turned-down  
80 front end of the locking-lever to enter, and thus lock all of the wheels in position in such a manner that they cannot be moved until the front end of the lever is raised, so as to release them. This lever serves to lock the  
85 wheels and the tongue in any desired position, so as to take off from the operator all strain of having to hold the tongue in any one position.

When the wheel is turned in any one di-  
90 rection, the tongue is inclined to the same side to which the wheel is turned, and the operator is thus enabled to guide the machine as it is drawn across the field, so as not to run into any obstructions and depressions, and  
95 for any purpose desired. As soon as the machine is moving in the desired direction, the operator can force the front end of the locking-lever into one of the openings or recesses in the wheel J, and thus hold the machine  
100 perfectly steady without any strain upon him.

Having thus described my invention, I claim—

1. The combination of the pivoted tongue, the bar provided with braces, the chain con-  
105 nected to the braces, the sprocket-wheel



around which the chain passes, the toothed wheel, and an operating-pinion for turning the tongue in any desired direction, substantially as shown.

- 5 2. The combination of the stationary bar, the braces secured thereto, the sprocket-wheel, the chain, the perforated wheel secured to the shaft of the sprocket-wheel, the operating-pinion, and a locking-lever whereby

the wheels can be locked in any desired position, substantially as described.

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

HENRY COOPRIDER, JR.

Witnesses:

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