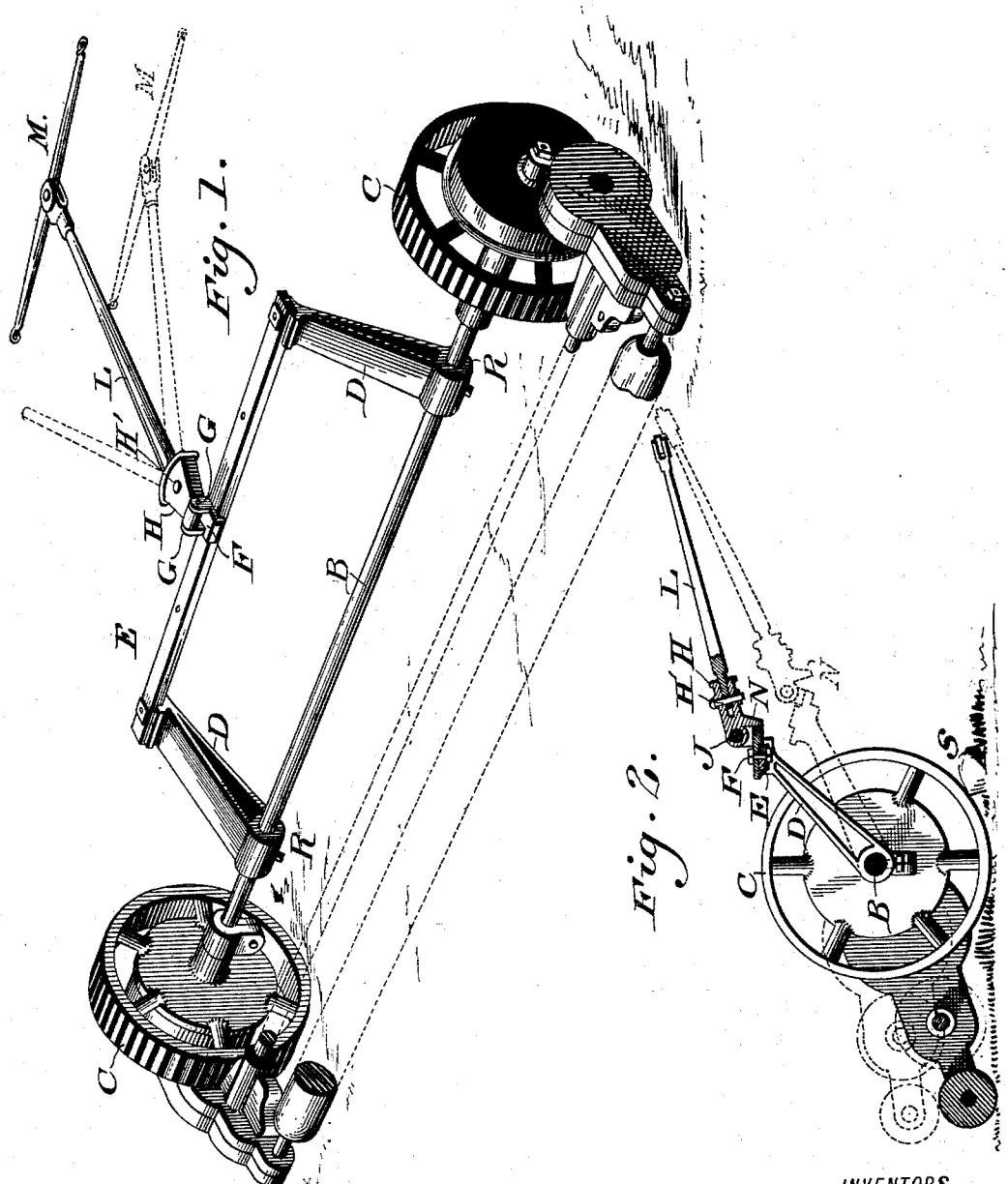
(No Model.)

2 Sheets—Sheet 1.

J. BRAUN & H. DECK.

TONGUE ATTACHMENT FOR LAWN MOWERS.

No. 456,472. Patented July 21, 1891.



WITNESSES:

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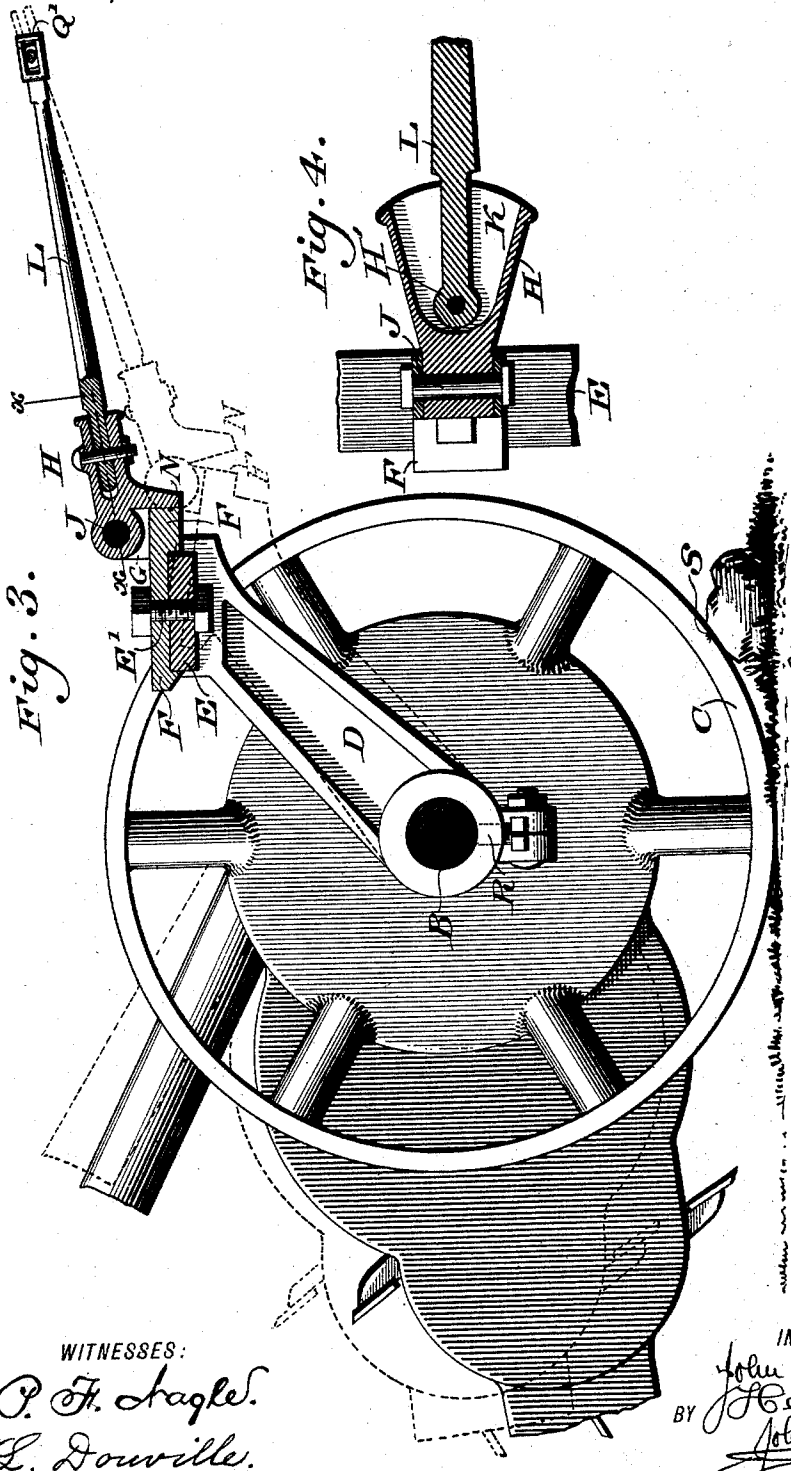

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UNITED STATES PATENT OFFICE.

JOHN BRAUN AND HENRY DECK, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO JOHN BRAUN & SONS, OF SAME PLACE.

TONGUE ATTACHMENT FOR LAWN-MOWERS.

SPECIFICATION forming part of Letters Patent No. 456,472, dated July 21, 1891.

Application filed January 17, 1891. Serial No. 378,107. (No model.)

To all whom it may concern:

Be it known that we, JOHN BRAUN and HENRY DECK, citizens of the United States, both residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Tongue Attachments for Lawn-Mowers, which improvement is fully set forth in the following specification and accompanying drawings.

Our invention relates to improvements in lawn-mowers; and it consists of a novel tongue attachment, substantially as hereinafter described.

Figure 1 represents a perspective view of a portion of a lawn-mower embodying our invention. Fig. 2 represents a longitudinal sectional view of the same on an enlarged scale, the dotted lines showing the position of the parts when an obstacle is encountered by the running-gear. Fig. 3 represents a view on a larger scale of a portion of the section shown in Fig. 2. Fig. 4 represents a horizontal sectional view on line *x x*, Fig. 3.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a portion of a lawn-mower of any well-known construction, having the axle B, with the running wheels C. Mounted on the axle B are the arms D, which project upward and forward and have fastened thereon the cross-bar E. Attached to the said cross-bar by a bolt E′ is a bracket F, to the ears G of which is secured the socket-piece H by means of the bolt J. The said socket-piece is provided with a throat or tapering opening K, in which is pivotally secured the tongue L, to the front of which is pivotally attached the singletree M. The slotted or bifurcated end of the tongue in which the singletree is secured is provided with a covering-plate Q′, which acts as a stop, limiting the swing or play of the said singletree.

The pivotal connection of the tongue with the socket-piece permits a lateral movement of the said tongue, while the bolt-connection of the bracket and socket-piece allows a rising and falling of said latter with the tongue, so that a universal-joint movement of the tongue is obtained. The said tongue and singletree are shown in different lateral positions in dotted lines, Fig. 1, and in a different vertical position in dotted lines, Fig. 2.

The socket-piece is provided with a depending lug N, which ordinarily bears against the front edge of the bracket; but in case of an obstacle being encountered by the running-gearing, such as a stone, (shown at S, Fig. 2,) the fulcrum is changed to the stone, whereby the cross-bar E is drawn forward and lowered, so that the front edge thereof is no longer in contact with the depending lug N. The wheels are drawn upward and over the stone, the knife-cylinder, which is in the rear of the axle, being also raised, so as to avoid striking or coming in contact with the stone or other obstacle while passing over the same.

The arms D are secured in position on the axle B by means of the screws R, which pass through openings in collars or bosses on the same and bear against the said axle. The bracket F is also adjustably secured on the cross-bar E by means of openings in said cross-bar and bracket and the bolt H′. It will be seen that by means of this adjustment the position of the bracket relative to the longitudinal center line of the device can be moved, so that the horse or animal drawing the device may travel near or on the one side of the path which is being mowed.

By having the arms D and the universal joint formed as set forth the traction is always direct upon the axle, and the tendency of the draw or pull is to raise the rear portions of the device from the ground, so that they will lightly pass over the same.

Owing to the arms D being loosely mounted on the axle, so as to turn thereon, the same may be raised or lowered, thereby raising or lowering the cross-bar E, and thus adjusting the same to the height of different animals drawing the same.

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

1. A tongue attachment for lawn-mowers, &c., consisting of arms adapted to be secured to the axle of the mower, a cross-bar connect-

ing said arms, a bracket longitudinally adjustably secured to said cross-bar, a socket-piece having a horizontal bolt hinging it to said bracket, and a tongue pivoted in the flaring opening in said socket-piece and having lateral play, said parts being combined substantially as described.

2. A tongue attachment for a lawn-mower, consisting of arms adapted to be secured on the axle, a cross-bar connecting said arms, a bracket secured to the cross-bar, a socket-piece hinged to said bracket and having a depending lug adapted to bear against the bracket, and a tongue hinged to the socket-piece so as to have lateral play, said parts being combined substantially as described.

3. A bracket with ears thereon, a socket-piece secured to said ears by a bolt and having a tapering throat, a tongue secured to and movable in said throat, and a bolt connecting tongue and socket-piece, the said bolts being substantially at right angles to each other, said parts being combined substantially as described.

4. A lawn-mower-tongue attachment consisting of arms adapted to be adjustably secured on the axle of the mower, so as to extend upward and forward therefrom, a cross-bar secured to said arms and having a series of openings therein, a bracket adjustably secured on said bar, a socket-piece hinged to said bracket and having a depending lug adapted to abut against the same, and a tongue pivoted to said socket-piece so as to have a movement at right angles to the direction of movement of the socket-piece, said parts being combined substantially as described.

JOHN BRAUN.
HENRY DECK.

Witnesses:
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A. P. JENNINGS.