

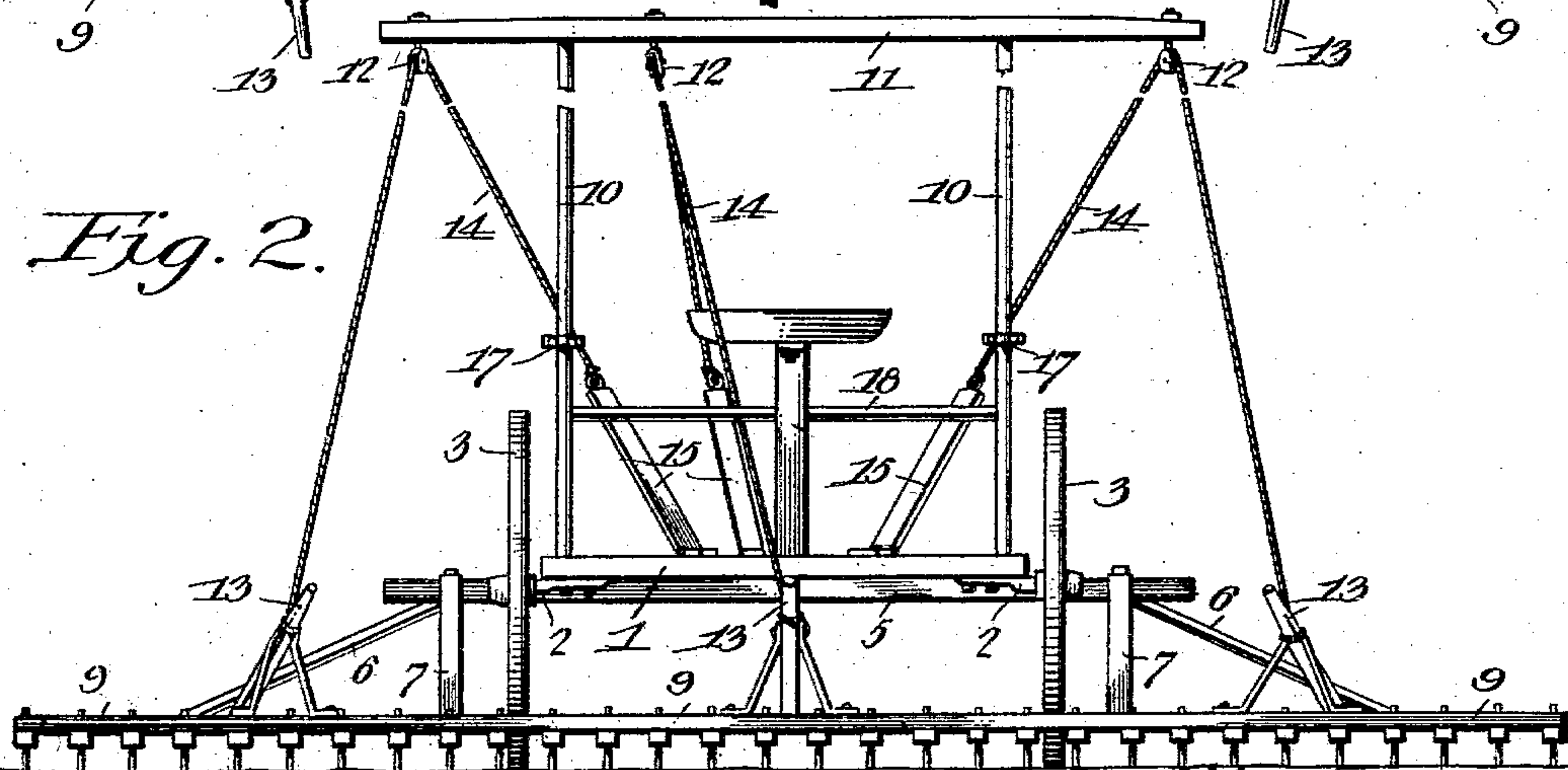
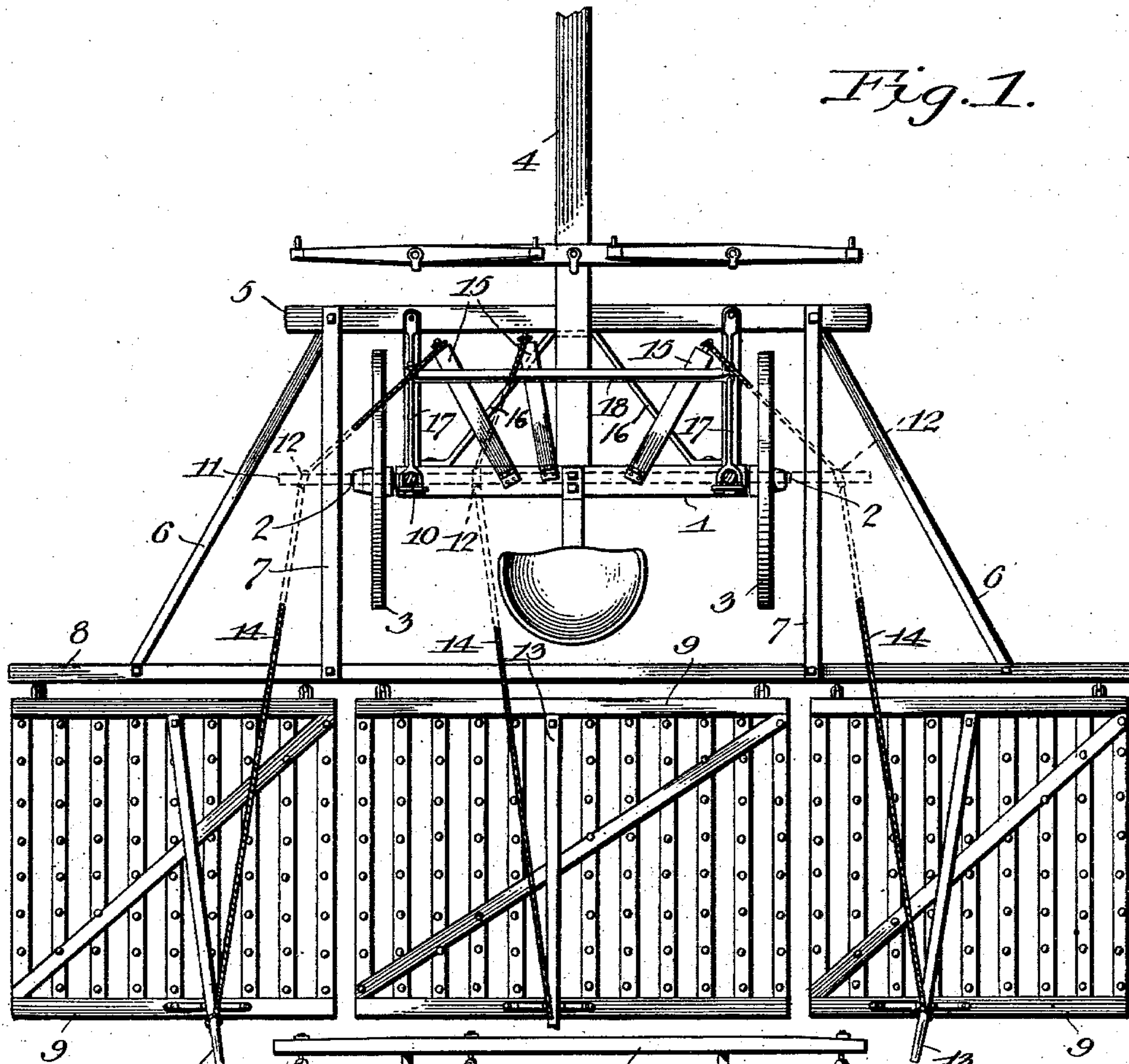
No. 740,875.

PATENTED OCT. 6, 1903.

M. LANGELLIER.
RIDING HARROW.

APPLICATION FILED MAY 14, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

MOSES LANGELLIER, OF RANSOM, KANSAS.

RIDING-HARROW.

SPECIFICATION forming part of Letters Patent No. 740,875, dated October 6, 1903.

Application filed May 14, 1903. Serial No. 157,155. (No model.)

To all whom it may concern:

Be it known that I, MOSES LANGELLIER, a citizen of the United States, residing at Ransom, in the county of Ness and State of Kansas, have invented a new and useful Riding-Harrow, of which the following is a specification.

This invention relates to harrows, and it contemplates more especially a riding attachment for ordinary toothed harrows which shall be provided with means whereby the harrow individually may be tilted or elevated, so as to clear the teeth of the same of accumulated trash without necessity for stopping or exertion on the part of the driver.

My invention has for its object to provide a riding attachment for harrows which shall be provided with means whereby the harrow-sections connected therewith may be easily and conveniently tilted, as described, and which said attachment shall possess superior advantages in point of simplicity, durability, and general efficiency.

My invention, with these and other ends in view, consists in the improved construction, arrangement, and operation of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan view, partly in section, of a riding-harrow constructed in accordance with the principles of my invention. Fig. 2 is a rear elevation of the same.

Corresponding parts in both figures are indicated by similar numerals of reference.

1 designates the axle of my improved riding attachment, which is here shown as provided with stub-axles 2, having spindles upon which the transporting-wheels 3 are journaled. Extending forwardly from the axle is a tongue 4, which supports a cross-bar 5, which is connected, by means of suitably-disposed braces 6, 7, with the ends of a draw-bar 8, which normally is supported slightly above the ground by means of said braces in conjunction with the harrow-sections 9, of which three have herein been shown, said harrow-sections being linked to the draw-bar, as will be readily understood. The tongue 4 also supports the doubletree for the attachment of the draft.

The axle 1 of the machine is provided with

a pair of uprights 10, which preferably consist of iron rods or pipes connected at their upper ends by a cross-brace 11, which is extended at opposite ends beyond the said uprights. The cross-brace 11 supports a plurality of pulleys 12, one for each harrow-section. Each of the harrow-sections is provided with an upwardly and rearwardly extending handle-bar 13, from which a flexible connection, such as a rope 14, extends over the appropriate pulley 12 to a treadle 15, which is hingedly connected with the axle, from which it extends in a forward and upward direction. Braces 16 connect the axle 1 with the cross-bar 5. Additional inclined braces 17 connect the uprights 10 with the said cross-bar 5, and said braces 17 support a brace-bar 18, which is disposed above the treadles 15, so as to prevent the latter when released from the foot of the operator from being thrown too far in an upward direction by the weight of the descending harrow-section, whereby they will be rendered less liable to injure the limbs of the driver.

The operation of my invention is extremely simple and will be readily understood from the foregoing description, taken in connection with the accompanying drawings. The number of harrow-sections connected with the draw-bar 8 may be increased or diminished at will; but three separate sections are believed to be the number most conveniently and profitably employed. Said harrow-sections, which may be of the simplest possible construction and which in the drawings have been illustrated as consisting simply of toothed slats or bars connected by means of cross-bars and braces, are linked to or hingedly connected with the draw-bar 8, which is connected by the braces 6 and 7 with the cross-bar 5, which constitutes a part of the frame. When the machine progresses over the field, any one of the harrow-sections that becomes choked with weeds, roots, or the like may be tilted and partially rotated by pressure of the foot of the driver upon the appropriate treadle, when the teeth will obviously clear themselves of the accumulated trash. As soon as pressure upon the treadle is discontinued the harrow-section automatically reassumes its normal operative position.

It will be understood that the elements con-

stituting my invention may be changed as to size, shape, and general manner of assemblage without departing from the spirit and scope of my invention.

5 Having thus described my invention, I claim—

1. In a riding-harrow, an axle, supporting wheels for the same, a tongue extending forwardly from the axle, a cross-bar supported
10 upon said tongue, braces connecting said cross-bar with the axle, a draw-bar, straight and diagonal braces connecting the latter with the cross-bar supported upon the tongue, harrow-sections linked to the draw-bar, and
15 adjusting means for said harrow-sections.

2. In a riding-harrow, an axle, supporting wheels for the same, a tongue extending forwardly from the axle, a cross-bar supported upon said tongue, braces connecting said
20 cross-bar with the axle, a draw-bar, braces connecting the latter with the cross-bar supported upon the tongue, harrow-sections linked to the draw-bar, an upright frame supported upon the axle, pulleys supported by
25 said upright frame, treadles hingedly con-

nected with the axle, and flexible connections guided over the pulleys and connecting said treadles with the harrow-sections.

3. A riding-harrow comprising a wheeled frame, uprights supported upon the axle of
30 said frame, a cross-bar connecting and extending beyond the upper ends of said uprights, pulleys supported by said cross-bar, a draw-bar connected with the riding-frame, treadles connected with the axle, harrow-sections connected hingedly with the draw-bar
35 and having upwardly and rearwardly extending handle-bars, flexible connections between the latter and the treadles, said connections being guided over the pulleys supported by
40 the upright frame, and a cross-bar disposed above the treadles to prevent the latter rebounding beyond the limit of said cross-bar.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in
45 the presence of two witnesses.

MOSES LANGELLIER.

Witnesses:

W. S. GRISELL,
J. M. KENDALL.