

L. F. WHEELLESS.

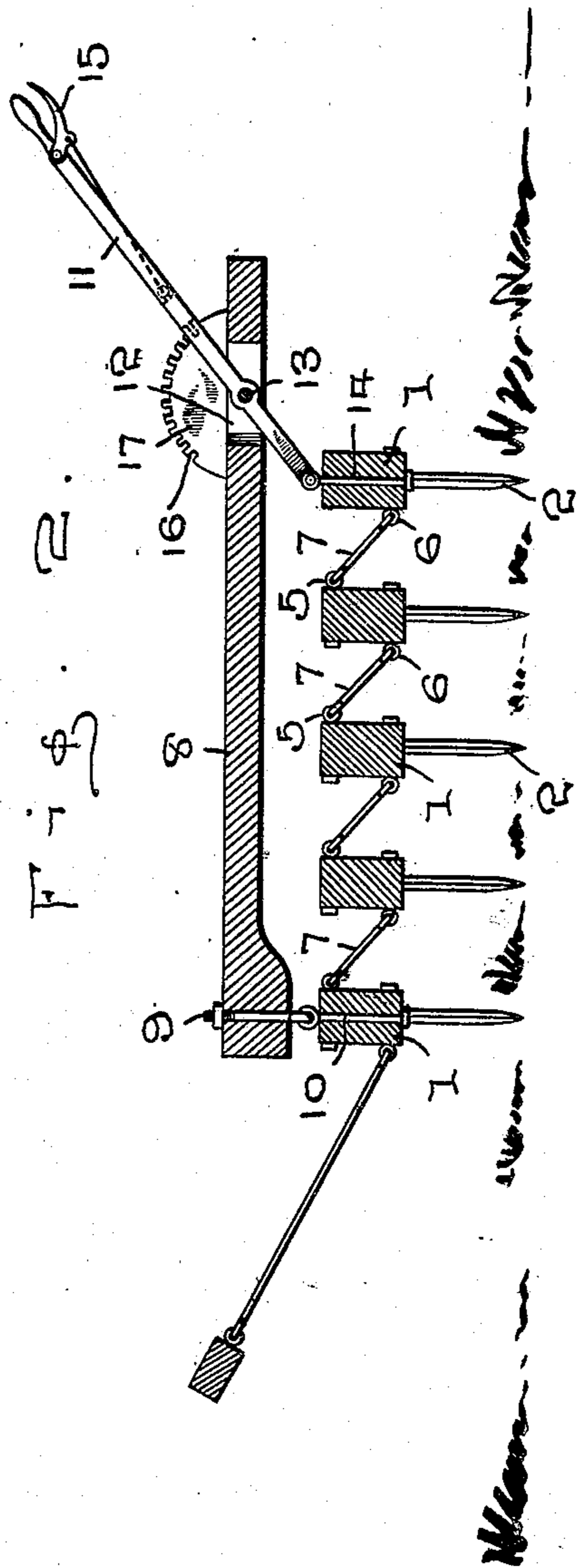
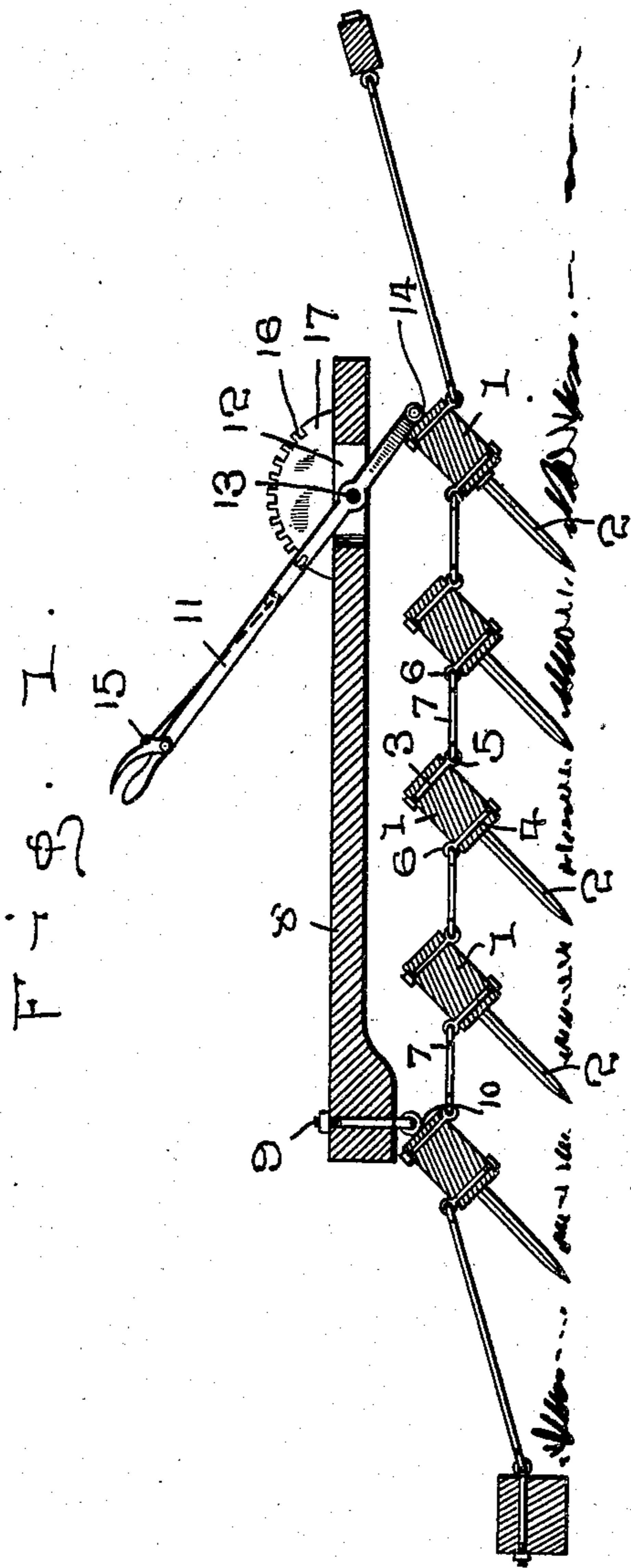
HARROW.

APPLICATION FILED JAN. 19, 1909.

924,517.

Patented June 8, 1909.

2 SHEETS—SHEET 1.



WITNESSES:

Thos. W. Riley
M. A. Newcomb,

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L. F. WHEELLESS.

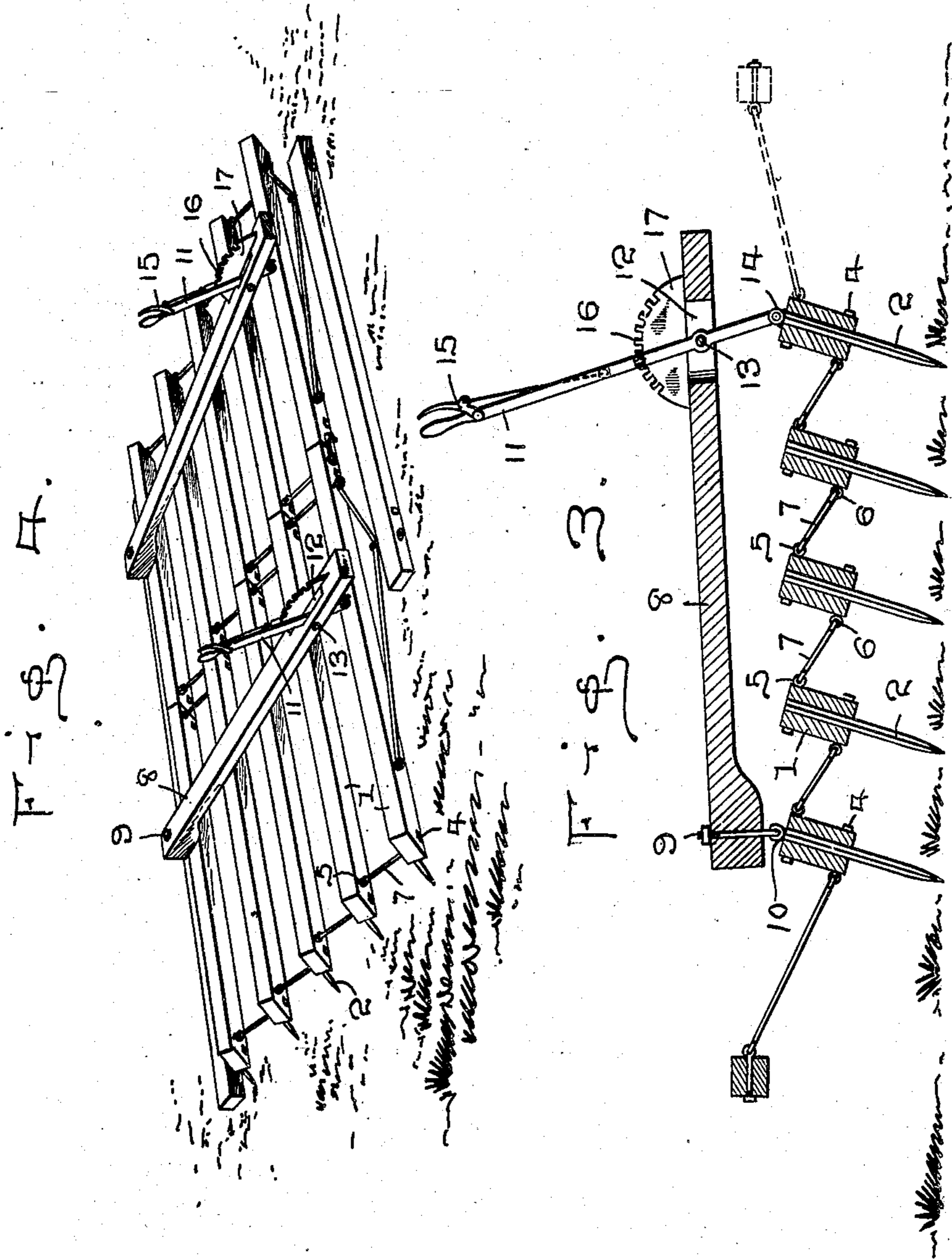
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UNITED STATES PATENT OFFICE.

LORA F. WHEELLESS, OF VILONIA, ARKANSAS.

HARROW.

No. 924,517.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed January 19, 1909. Serial No. 473,086.

To all whom it may concern:

Be it known that I, LORA F. WHEELLESS, a citizen of the United States, residing at Vilonia, in the county of Faulkner and State of Arkansas, have invented certain new and useful Improvements in Harrows; 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.

My invention relates to new and useful improvements in harrows and is more particularly an improvement over my former patent #887164, issued May 12, 1908, and my object is to provide a harrow having teeth which may be set at various angles and a further object is to provide means for quickly operating the teeth to dispose them at various angles.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claim.

In the accompanying drawings forming part of this application, Figure 1 is a transverse sectional view through the harrow showing the teeth thereof on an inclination. Fig. 2 is a similar view showing the teeth in a vertical position and the draft appliance located at the opposite side of the harrow from that shown in Fig. 1. Fig. 3 is a sectional view showing the teeth set to enter the soil when the harrow is moved forwardly. Fig. 4 is a perspective view of the harrow complete.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates a plurality of beams, through each of which are extended a plurality of teeth 2, and in order to make the beams and teeth therein travel in unison, bolts 3 and 4 are disposed, respectively, through the upper and lower edges of the beams, the bolts having eyes 5 and 6, respectively, which extend on opposite sides of the beams and the bolts 3 of one beam are connected to the bolts 4 of the next succeeding beam by means of links 7, said links engaging the eyes of the bolts.

A bar 8 is extended laterally across the beams 1 and is attached at one end to the outer beam by means of a bolt 9 extending through the bar and a similar bolt 10 ex-

tending through the beam, said bolts having eyes which interlock with each other and thereby making a pivotal connection between the bar and beam.

The opposite end of the bar is secured to the opposite beam through the medium of a lever 11, which lever is extended through a slot 12 in the bar and is pivoted therein by extending a pin 13 laterally through the bar and slot and through an opening in the lever, the lower end of the lever being pivotally secured to a bolt 14, which bolt extends through the beam 1.

The lever 11 is provided with a latch mechanism 15, which is adapted to engage the notches 16 in a rack 17 and thereby hold the lever in various adjusted positions.

By this construction it will be readily seen that when it is desired to change the angle of the teeth 2, the lever 11 is to be swung forwardly or rearwardly, as the case may require and after the lever has been adjusted to the proper position, the latch is to be engaged with one of the notches in the rack and the teeth thereby held in their adjusted position.

By providing this form of device, the teeth may be quickly adjusted to various angles and held in their adjusted positions and this operation may be performed while the harrow is in motion, if desired.

It will further be seen that this form of harrow may be very cheaply constructed and at the same time rendered strong and durable and it will likewise be seen that the harrow may be quickly adjusted for shallow or deep cultivation.

I claim:

In a harrow of the class described, the combination with a plurality of cross beams having teeth attached thereto, bolts passing laterally through the upper and lower portions of said beams, each bolt having an eye, the eye of the upper bolts being opposed to the eyes of the lower bolts and links engaging the eyes of the upper bolts of one beam and the eyes of the lower bolts in the next succeeding beam; of a bar above said beams, a bolt passing vertically through one end of said bar, a bolt vertically disposed through one of said beams, said bolts having interlocking eyes, a lever pivotally secured adjacent the opposite end of said bar, a bolt passing vertically through the beam below the

lever engaged end of the bar and having an
eye with which the lower end of the lever
engages, a rack on the bar and means carried
by the lever adapted to engage the notches
5 in said rack and hold said lever and parts
attached thereto in their adjacent positions.
In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

LORA F. WHEELLESS.

Witnesses:

A. J. MOORE,

W. F. THOMSSON.