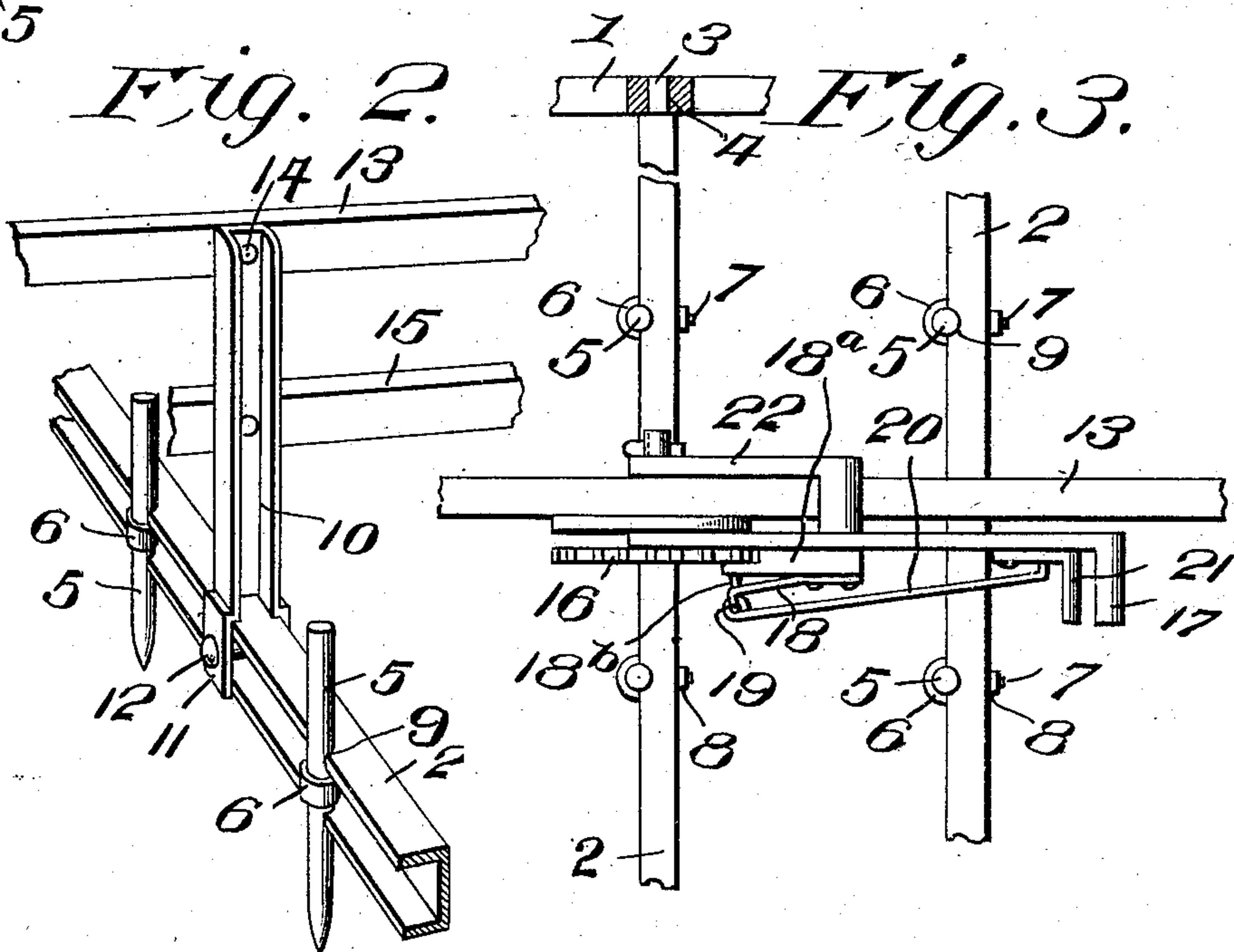
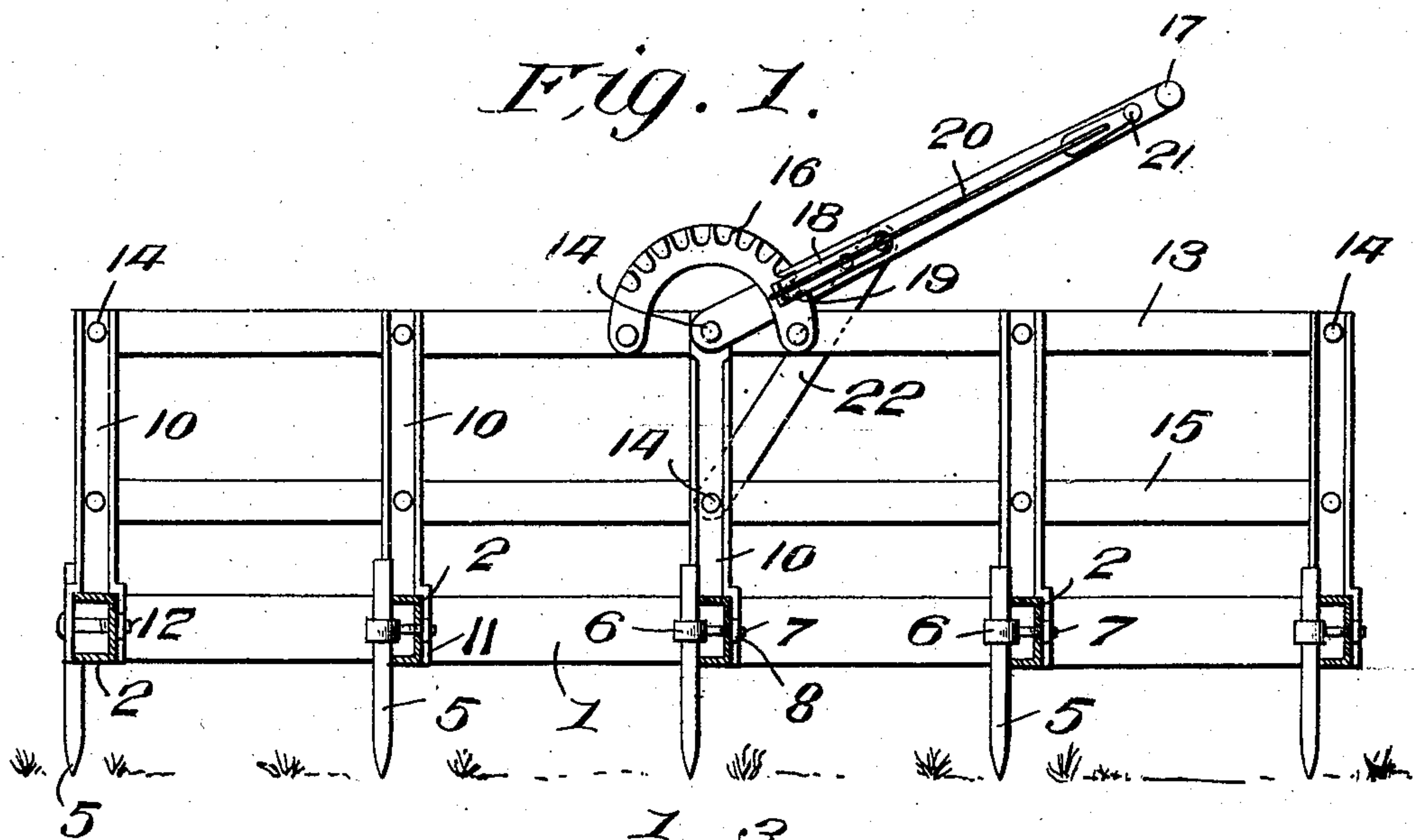


No. 842,239.

PATENTED JAN. 29, 1907.

E. A. PARRETT.
CONTROLLING MEANS FOR HARROWS.

APPLICATION FILED SEPT. 5, 1906.



E. A. Parrett ^{Inventor}

Witnesses
Thos. W. Riley
Lucie Anderson

⁵³¹⁴
W. J. Fitzgerald & Co.
Attorneys

UNITED STATES PATENT OFFICE.

EARL AUD PARRETT, OF NORTH MANCHESTER, INDIANA.

CONTROLLING MEANS FOR HARROWS.

No. 842,239.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed September 5, 1906. Serial No. 333,295.

To all whom it may concern:

Be it known that I, EARL AUD PARRETT, a citizen of the United States, residing at North Manchester, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Controlling Means for 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 more particularly to that class wherein teeth are used for cultivating the earth; and my object is to provide means for adjusting the pitch of said teeth, whereby the earth may be cultivated at different depths.

A further object is to provide means for attaching the adjusting mechanism to the harrow-frame whereby the teeth may be adjusted in either direction and held in their adjusted position.

A still further object is to provide means for regulating the slant of the teeth, whereby the draft-animals may be secured to either side of the harrow-frame, so that when one edge of the teeth becomes worn the opposite edge thereof may be employed.

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

In the accompanying drawings, which are made a part of this application and in which I have shown my preferred form, Figure 1 is a sectional view through a harrow-frame, showing my improved attachment secured thereto. Fig. 2 is a perspective view of a portion of the harrow-frame, showing the manner of attaching my improved device thereto; and Fig. 3 is a top plan view of a portion of the harrow, showing my improved shifting mechanism secured thereto.

Referring to the drawings, in which similar reference-numerals designate corresponding parts throughout the several views, 1 indicates the frame of a harrow, which may be constructed in any preferred manner, in which are located a plurality of bars 2, said bars having trunnions 3 at each end thereof, which are adapted to be seated in a suitable bearing 4 in the frame 1.

Secured to the bars 2 are a plurality of teeth 5, said teeth being held in position upon the bars 2 by means of collars 6, which are disposed around the teeth and are provided

with threaded stems 7, said stems being disposed through suitable openings in the bars 2 and are held therein by means of nuts 8, and to prevent lateral movement of the teeth upon the bars 2 one face of the bars is provided with notches 9, in which are seated the teeth 5.

Each of the bars 2 is provided with an upwardly-extending standard 10, the lower end of which is bifurcated and a section 11 thereof disposed on each side of the bar and is secured thereon by means of a bolt 12. The extreme upper end of the standards are connected together by means of a plate 13, said plate being pivotally secured to each of the standards 10 by means of a pin 14. A similar plate 15 is pivotally secured to the standards 10 at a suitable point between the plate 13 and the standards 10, so that when one of said standards is tilted all of the standards will be moved simultaneously and in unison therewith. A rack-bar 16 is secured in any preferred manner to the plate 13 and preferably at the longitudinal center thereof and is disposed over the end of the middle standard 10 and is adapted to cooperate with a lever 17, which is mounted upon the pin 14, used to pivotally secure the central standard to the upper plate.

A spring-latch 18 is secured at one end to a guide-bar 18^a, while the opposite end thereof is provided with a pin 18^b, which is adapted to pass through an opening in the guide-bar 18^a and engage the rack-bar 16 and hold the lever in its adjusted position. The lower end of the latch 18 is provided with an ear 19, with which engages a rod 20, the opposite end of said rod being disposed into engagement with a suitable operating-handle 21, so that when an upward pull is imparted to said handle the latch will be disposed from engagement with the rack-bar and the lever left free to rotate upon its pivot-pin.

In order to cause the movement of the lever 17 to rotate the bars 2 upon their respective trunnions, and thereby dispose the teeth 5 at various angles, a link 22 is secured at one end to the lever 17, while the opposite end thereof is secured to the pin 14, employed in pivotally connecting the plate 15 to the central standard 10, so that when the lever 17 is disposed from side to side upon the rack-bar the standards 10 will be moved and the pitch of the teeth 5 varied.

As shown in the drawings, the lever 17 and link 22 are so arranged that when the lever is moved in the opposite direction the teeth

will be slanted rearwardly, thereby rendering a shallow cultivation to the soil, and it will be seen that by moving the lever from notch to notch upon the rack-bar various slants may be imparted to the teeth.

The form of harrow herein shown is adapted to be drawn in either direction, which is accomplished by hitching the draft-animals to either side of the harrow, and when the harrow is being drawn in one direction and it is desired to use the opposite sides of the teeth the draft-animals are changed to the opposite side of the frame and the teeth slanted in the opposite direction beyond a vertical position, the standards 10 being first disposed in a vertical position, after which the lower end of the link 22 is disengaged from the pin 14 and the lever 17 moved to the opposite side of the rack 16, after which the link is again placed in engagement with the pin 14, when upon directing the lever 17 to the opposite side of the rack-bar 16 the lower ends of the teeth will be moved rearwardly, thus reversing the cutting edge of the teeth.

By this construction it will be seen that I have provided a very cheap and economical device for readily regulating the pitch of the harrow-teeth and one that may be applied to any form of harrow wherein the bars are rotatably mounted within their respective frame and one wherein the draft-animal may be secured to either side of the harrow.

What I claim is—

1. In a device of the class described, the

combination with a harrow-frame having bars rotatably mounted therein, and teeth on said bars; of standards secured to said bars, plates pivotally secured to said standards, a rack-bar rigid with one of said plates, a lever pivotally secured to one of said standards, a latch on said lever adapted to engage said rack-bar, and means interposed between one of said standards and lever whereby when the lever is moved, the bars 2 will be rotated and the pitch of the teeth varied.

2. In a device of the class described, the combination with a harrow-frame having bars movably mounted therein, and teeth on said bars; of standards on said bars, plates connecting all of said standards and pivotally secured thereto, a rack-bar on one of said plates, a lever pivotally secured to one of said standards, a latch on said standard and adapted to engage said rack-bar, means to control the movement of said latch and a link disposed between said lever and one of the standard and interchangeably secured thereto whereby the slant of the teeth may be regulated and the cutting edges of the teeth reversed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EARL AUD PARRETT.

Witnesses:

FRANCIS B. MOE,
W. F. MYERS.