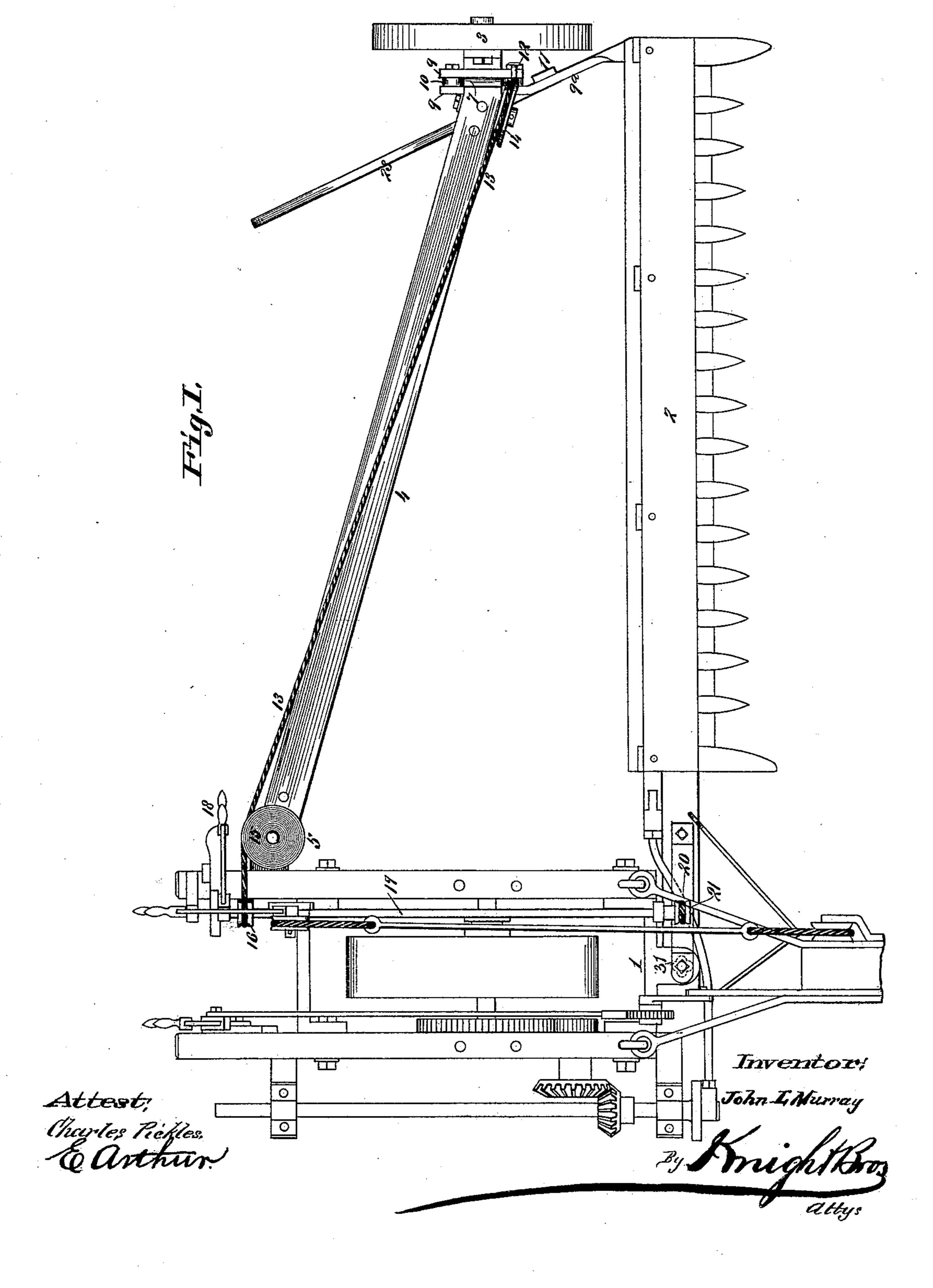
## J. I. MURRAY. MOWER.

No. 423,942.

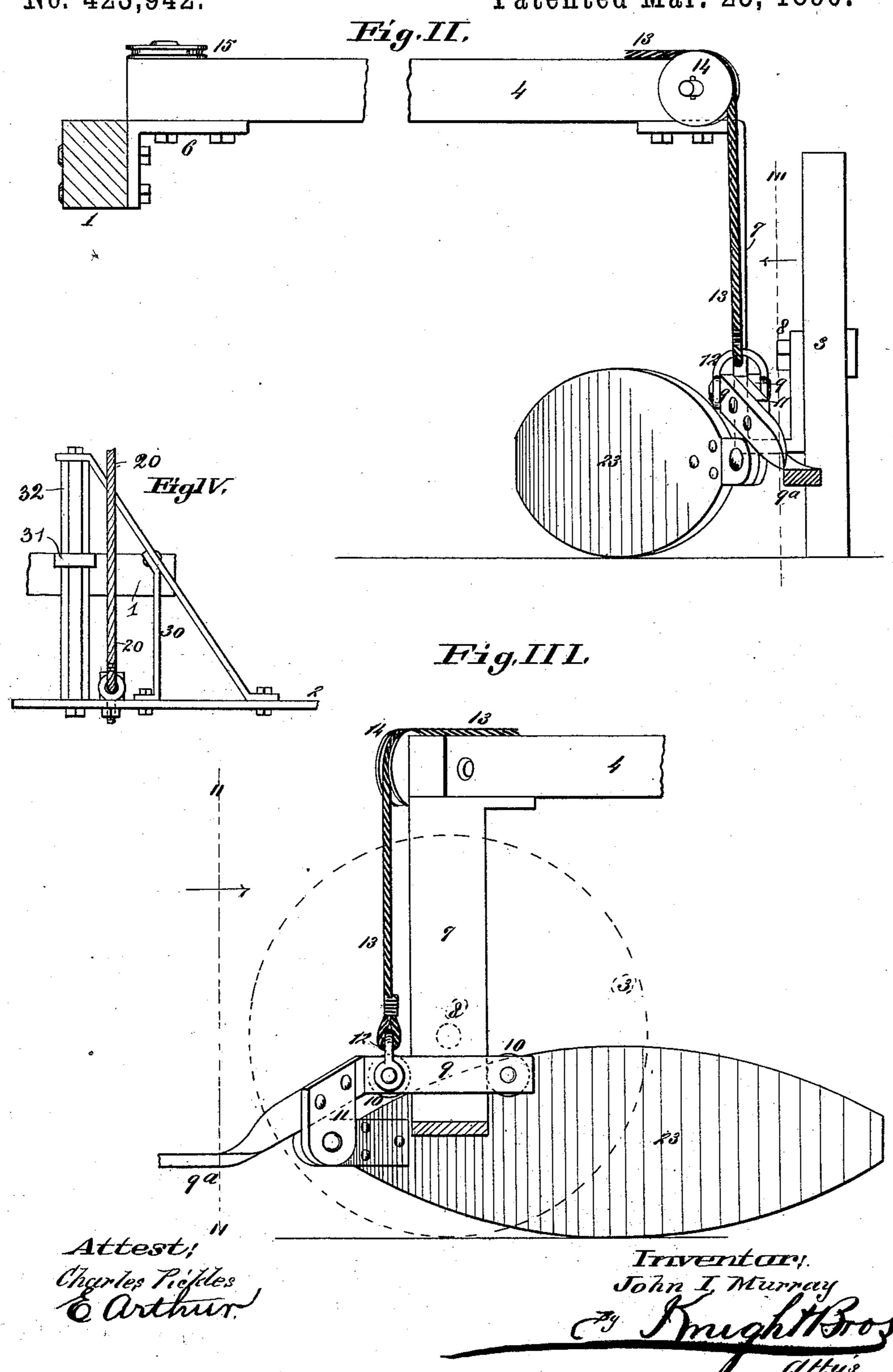
Patented Mar. 25, 1890.



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## United States Patent Office.

JOHN I. MURRAY, OF ST. LOUIS, MISSOURI.

## MOWER.

SPECIFICATION forming part of Letters Patent No. 423,942, dated March 25, 1890.

Application filed May 29, 1889. Serial No. 312,630. (No model.)

To all whom it may concern:

Be it known that I, JOHN I. MURRAY, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improve-5 ment in Mowers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure I is a top or plan view illustrative ro of my invention. Fig. II is part in elevation and part in section taken on line 2 2, Fig. III. Fig. III is part in elevation and part in section taken on line 3 3, Fig. II, and looking in the direction of the arrow, Fig. II. Fig. IV is a de-15 tail view.

My invention relates to a device for raising and lowering uniformly a cutter-bar of a mowing-machine, the construction being such that the outer end of the bar is raised uniformly 20 with the inner end and is permanently held to any adjustment.

My invention consists in features of novelty hereinafter fully described, and pointed out

in the claims.

Referring to the drawings, 1 represents the main body of the machine, which forms no part, per se, of my present invention, and which I will not describe in detail.

2 represents the cutter-bar, and 3 the usual 30 ground-wheel, and to these my present inven-

tion does not per se relate.

4 represents a beam or arm secured to the main frame of the machine 5 by means of a suitable bracket or other support 6. 35 Fig. II.) This arm extends from the machine in an outward direction and almost or quite to the outer end of the cutter-bar. Here it is secured to a downwardly-extending plate or bar 7, to which the ground-wheel 3 is jour-40 naled at 8, as shown by dotted line, Fig. III. The lower end of the bar 7 is connected to the outer end of the cutter-bar by means of plates or strips 9, (see Figs. I and III,) these plate being provided with friction-rollers 10, that bear against the bar 7. The outer end of the cutter-bar is made fast to an extension 9a of one of the plates 9.

Secured to the plates 9 by means of a suitable clevis 12, or otherwise, is one end of a ca-50 ble 13, which passes up over a pulley 14, secured to the outer end of the beam 4, and which extends along the beam and over a pulley 15 at the inner end of the beam. From here the cable passes to a pulley 16 on a rock-55 shaft 17, provided with an operating-handle

18. It will thus be seen that by turning the shaft 17 through means of the handle 18 the cable 13 will be wound upon or unwound from the pulley 16, and thus the outer end of the cutter-bar raised and lowered at will. The 60 inner end of the cutter bar can be raised and lowered at the same time by means of a cable 20, secured to a pulley 21 on the shaft 17. (See Fig. I.)

23 represents the ordinary divider-board 65 secured to the extension 9° of one of the plates

9 by a bracket 11.

30 represent braces connecting the inner end of the cutter-bar to the frame of the ma-

chine. (See Figs. I and IV.)

31 represents a lug or ear projecting from the frame 1, and through a perforation in which extends a standard 32 for guiding the cutter-bar at its inner end in its upward movement.

By the described construction I am enabled to get a safe and easy adjustment of the cutter-bar, and such an adjustment as will cause it to be raised uniformly from end to end without any strain on any of the parts.

I claim as my invention—

1. In a mowing-machine, the combination of a cutter-bar, a beam extending from the wheel-frame to the outer end of the cutterbar, a ground-wheel secured to the beam, and 85 a cable connected to the cutter-bar near one end and passing over pulleys mounted on the beam, substantially as and for the purpose set forth.

2. In a mowing-machine, the combination 90 of the cutter-bar, a beam secured to the machine and extending lengthwise of the cutterbar, a ground-wheel secured to the beam, a cable secured to the cutter-bar and passing over pulleys mounted on the beam, and a rock- 95 shaft to which the cable is secured, and which is provided with an operating-handle, substantially as set forth.

3. In a mowing-machine, the combination of the beam 4, having pulleys 14 and 15, ca- 100 ble 13, a ground-wheel secured to the beam, cutter-bar, and plates 9, provided with friction-rollers 10, to permit adjustment of the finger-bar on the supporting-beam, substantially as set forth.

JOHN I. MURRAY.

In presence of— BENJN. A. KNIGHT, THOMAS KNIGHT.