

No. 689,686.

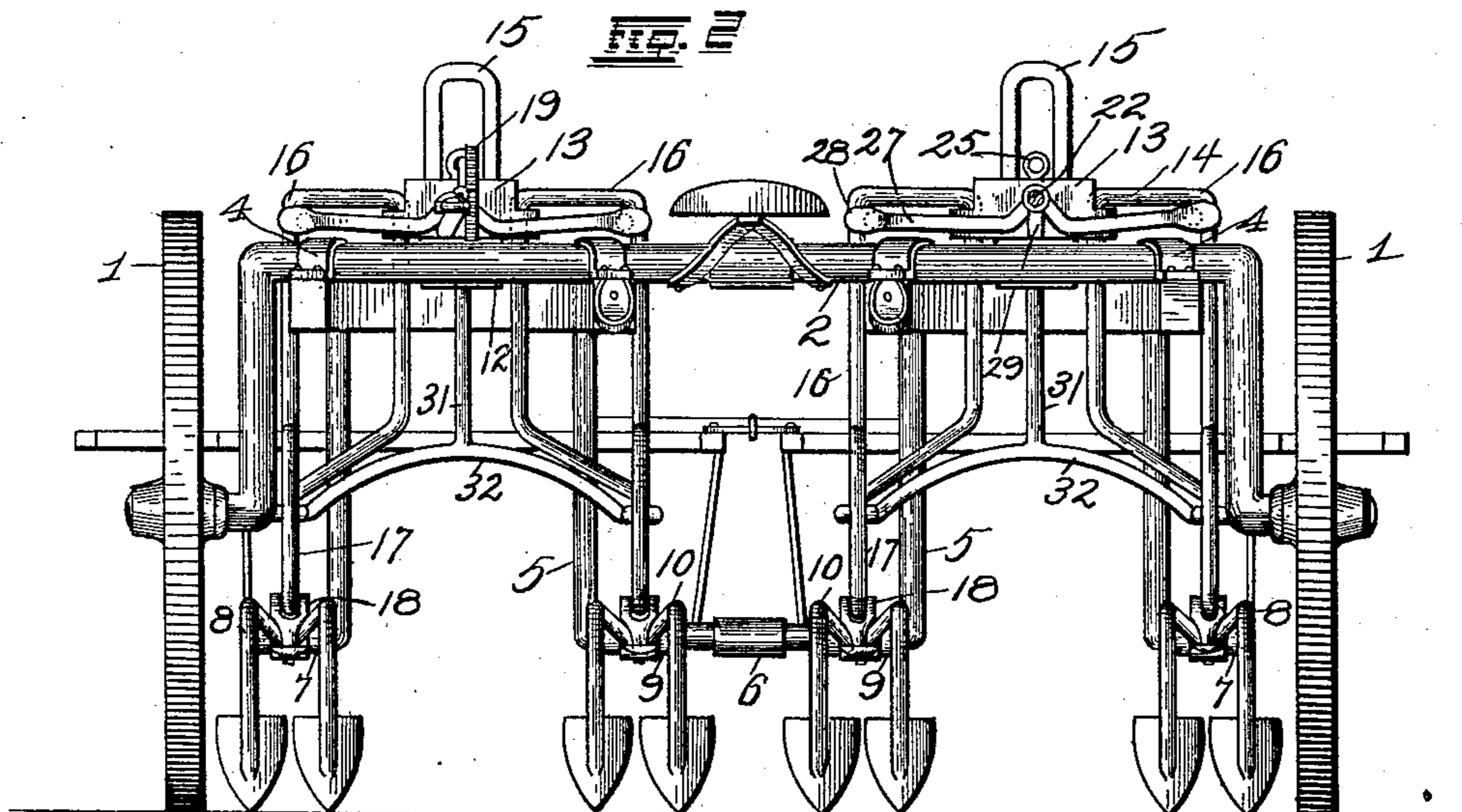
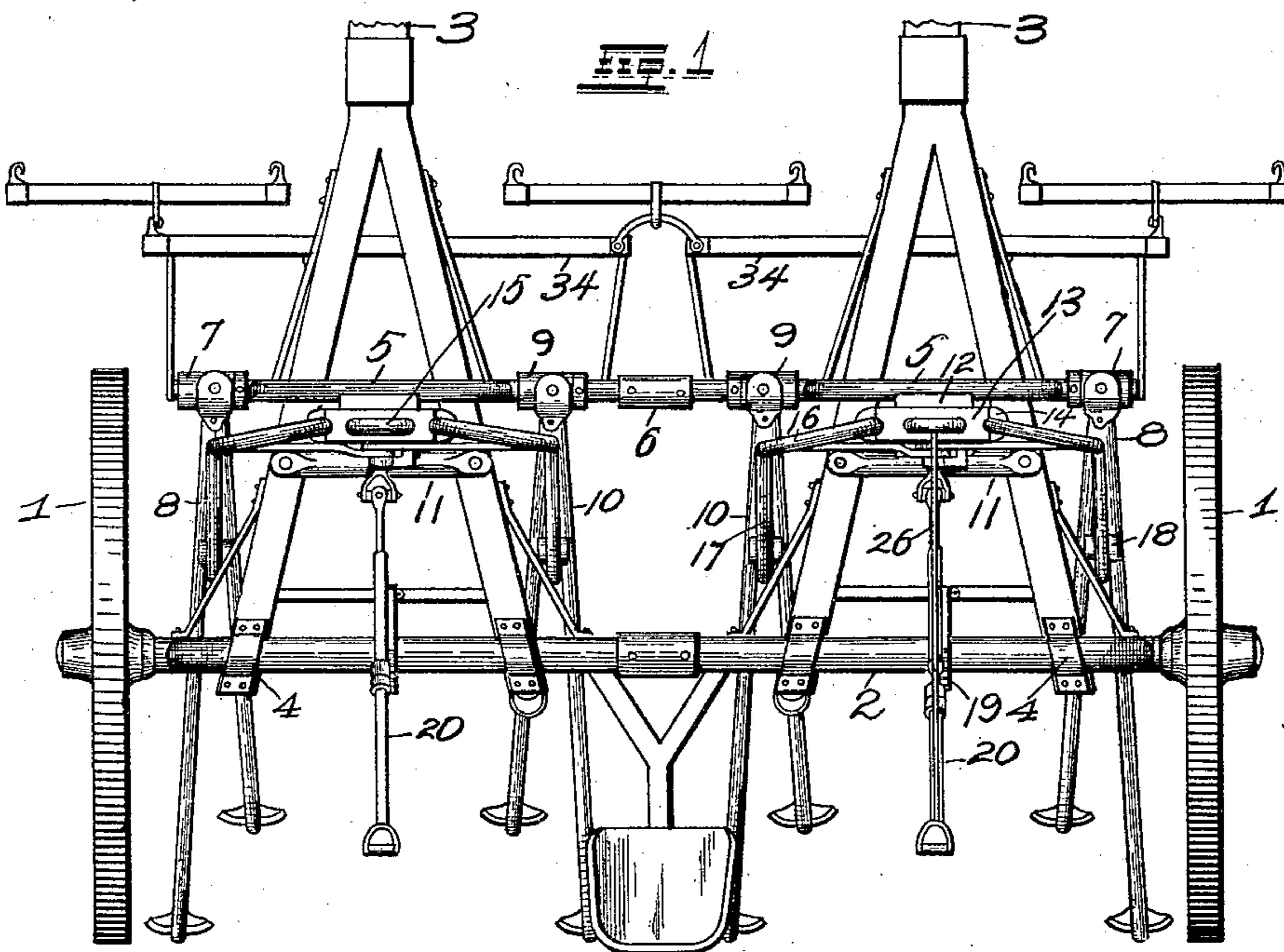
Patented Dec. 24, 1901.

J. McKIBBIN.
CULTIVATOR.

(Application filed June 11, 1900. Renewed Sept. 23, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

Alfred O. Eicher
J. H. Rippey

Inventor.

James M. Kibbin
By Higdon & Longan, Attys

No. 689,686.

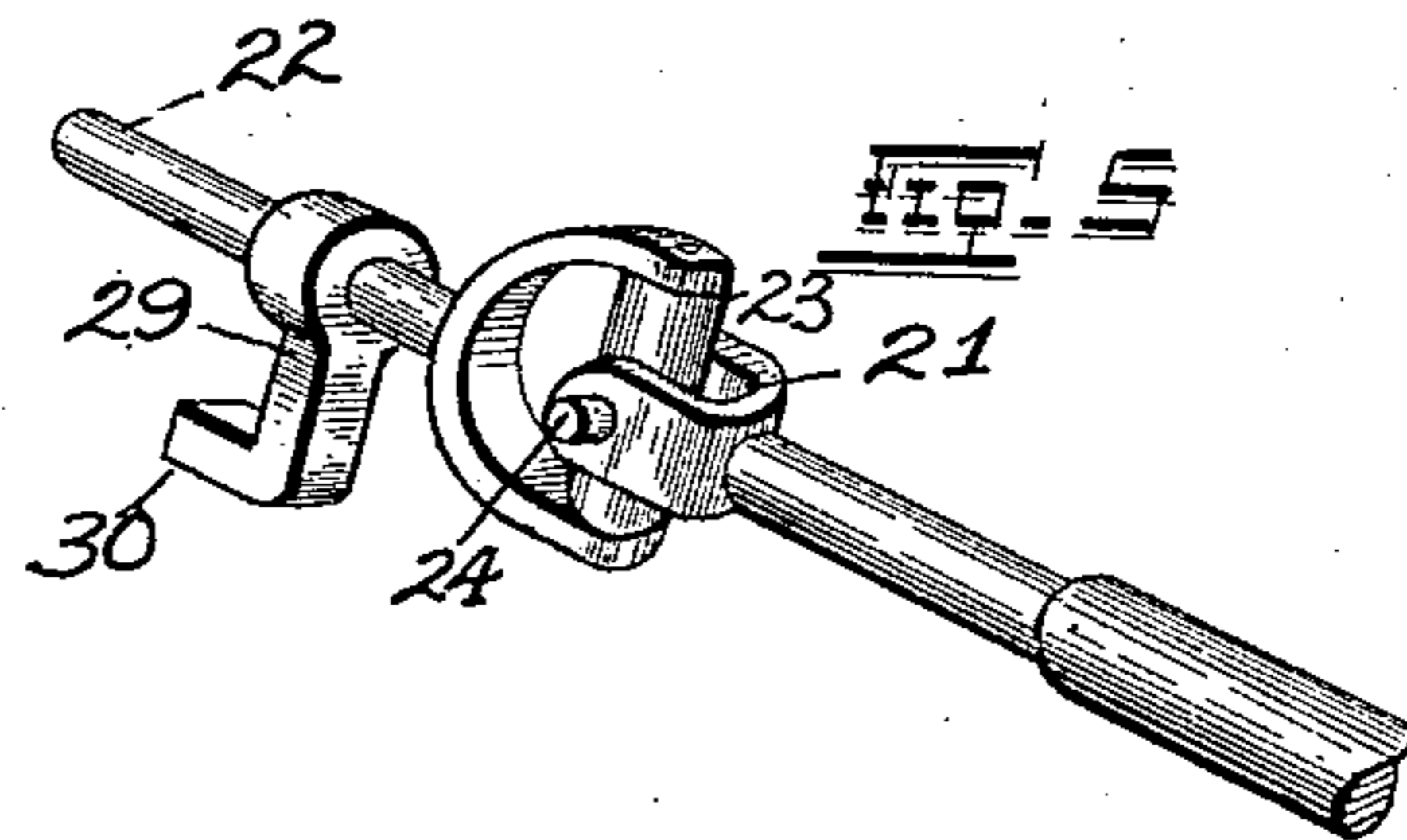
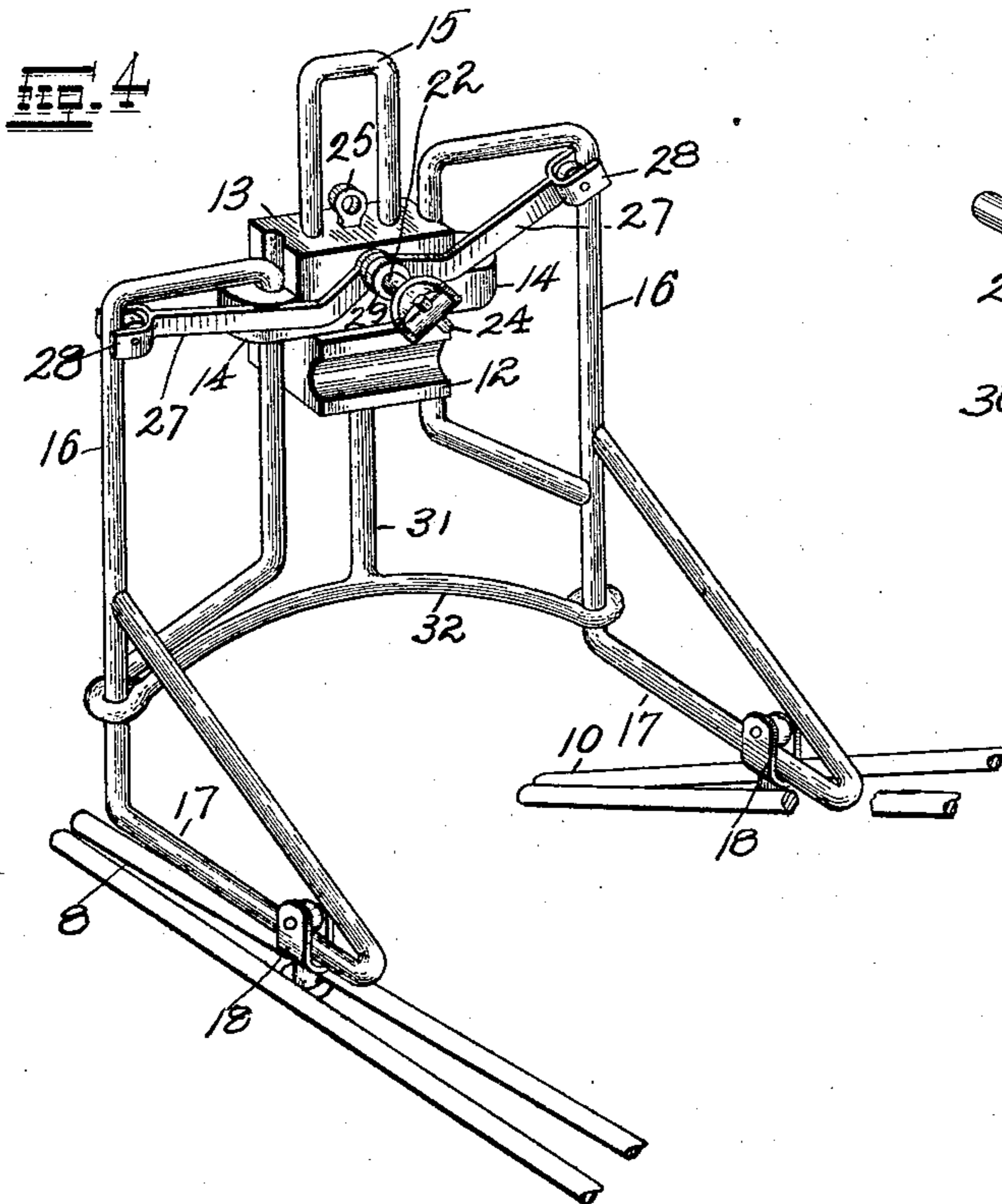
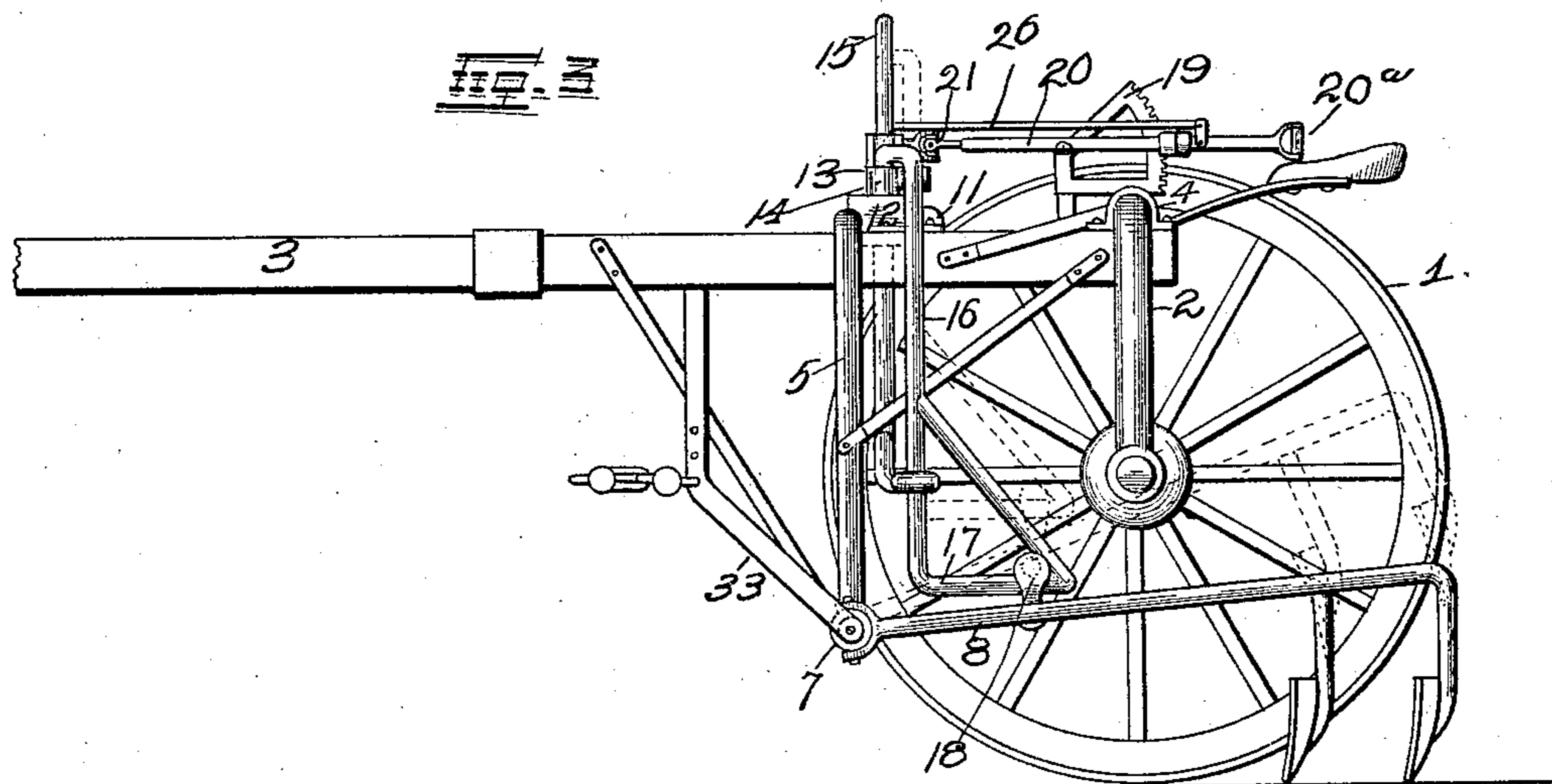
Patented Dec. 24, 1901.

J. McKIBBIN.
CULTIVATOR.

(Application filed June 11, 1900. Renewed Sept. 23, 1901.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses

Alfred A. Einker
J. H. Rippey

Inventor

James McKibbin.
By Higdon & Longan, Attys.

UNITED STATES PATENT OFFICE.

JAMES MCKIBBIN, OF VENICE, ILLINOIS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 689,686, dated December 24, 1901.

Application filed June 11, 1900. Renewed September 23, 1901. Serial No. 76,138. (No model.)

To all whom it may concern:

Be it known that I, JAMES MCKIBBIN, of the city of Venice, Madison county, State of Illinois, have invented certain new and useful
5 Improvements in Cultivators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to cultivators; and
10 it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

Figure 1 is a plan view showing the construction and arrangement of my improved
15 cultivator. Fig. 2 is a view from the rear. Fig. 3 is a side elevation. Figs. 4 and 5 are detail views showing the different parts made use of in carrying out the invention.

In the drawings, 1 denotes the traction-
20 wheels, which are mounted on the axle 2, bent in the form shown, the part between the wheels being approximately on a level with the upper edges of the traction-wheels. Connected to the axle 2 are the bifurcated rear
25 ends of the tongues 3, the said tongues being retained in position by means of bearing-clips 4. Supported by the forks of the tongues at a suitable distance in front of the axle 2 are arch-bars 5, the outer and inner ends
30 thereof being bent downwardly in the manner shown in Fig. 2, the ends being extended in horizontal position. The inner ends of the arch-bars supported by the different tongues are connected together by means of an adjustable sleeve 6. Mounted upon the outer
35 end of each of the arch-bars is a sleeve 7, connected to which are the plow-carrying frames 8, and mounted upon the inner end of each of the arch-bars are similar sleeves 9, connected to which are the inner plow-carrying
40 frames 10.

Supported by the rear ends of the tongues 3 at a suitable distance in the rear of the arch-bars 5 are retaining-rods 11, and supported
45 between said rods and the arch-bars 5 are guide-blocks 12. Mounted above each of the guide-blocks 12 is an elevating-block 13, the said blocks having projections 14 at their ends. The elevating-blocks 13 are retained
50 in position on the blocks 12 by means of the guides 15, extending upwardly from the said blocks 12.

16 indicates the elevating-frames, the inner vertical portions of which operate in bearings formed in the projections 14. The
55 said elevating-frames are bent at their lower ends in triangular form, the points of which triangular portions extend rearwardly, as shown in Fig. 3. Carried by the lower portion 17 of each of the triangular portions is a
60 clip 18, which, as shown, are connected to the plow-carrying frames 8 and 10. The inner vertical portions of the frames 16 are allowed to operate freely in the bearings in the blocks 13 and may be raised or lowered there-
65 in in the manner presently described.

Secured upon the axle 2, near each end thereof, is a gear-segment 19, and pivoted to the front sides of said segments are levers 20,
70 the forward ends of which levers are bifurcated, as indicated by 21.

Rotatably carried by the blocks 13 are regulating-rods 22, which are provided with forks on their rear ends, within which forks are
75 carried pins 23, and integral with each of the pins 23 are the diametrically opposite pins 24, connected to which are the forks 21 of the levers 20.

Carried by the blocks 13 are eyes 25, to which are connected the rods 26, the rear
80 ends of the rods being connected to the levers 20 behind the segments 19. The purpose of these rods 26 is to elevate the blocks 13, and thereby the frames 16, whenever the rear ends of the levers 20 are depressed. From
85 this it may be seen that the depression of the rear end of the lever on one side of the cultivator will elevate both plow-frames on that side.

On some occasions it may be desirable to
90 elevate only one plow-frame at a time. The means which I employ for accomplishing this end comprise the arms 27, carried by the rod 22. The outer ends of the arms 27 are provided with forks 28, between which are the
95 outer vertical portions of the frames 16.

To elevate the plow-frame, the handle 20^a is engaged and turned, thereby turning the rod 22, which will elevate the required arm
27, whereby the frame 15 will be raised. 100

Keyed upon the rods 22 adjacent to the arms 27 are the angled levers 29, the lower portions 30 of which project forwardly beneath the arms 27. As hereinbefore men-

tioned, the rods 22 are free to turn in bearings in the blocks 13, and when turned therein the lower portion 30 of the levers 29 will contact with one of the arms 27, thereby elevating the outer-ends of said arms. This will throw the outer ends of the said arms 27 against the upper horizontal portion of the frames 16, thereby elevating said frames and the plow-frame carried thereby. Thus it may be seen that by operating the different levers one or all of the plow-frames may be elevated at one time, whichever may be desirable.

The frames 16 are braced in the desired position by means of the rod 31, rigidly secured to the blocks 12, carried upon the lower end of which rod are the horizontal arms 32, the outer ends of which are bent around the outer vertical portions of the frames 16 in the manner shown in Fig. 4.

The shafts 5 are braced in the required position by means of the metallic braces 33, connecting the ends of the said shafts to the forks of the tongues 3. The doubletrees 34 are supported by suitable connections to the braces 33.

A cultivator constructed as described is applicable for plowing two rows at a time and may be operated by one person, the plows being elevated and lowered in the manner described, in which positions they may be held by means of the gear-segments 19.

I claim—

1. A cultivator, comprising an axle, tongues connected to said axle, bearing-blocks supported by said tongues, elevating-blocks carried by said bearing-blocks, adjusting-frames carried by said elevating-blocks, means for operating said adjusting-frames, and connections between the adjusting-frames and

the plow-frames of the cultivator, substantially as specified.

2. A cultivator, comprising an axle, tongues supported by said axle, shafts supported by said tongues, plow-frames connected to said shafts, elevating-blocks supported above the said tongues, adjusting-frames supported by the said elevating-blocks, means for operating said elevating-blocks and thereby the adjusting-frames, and connections between said adjusting-frames and the plow-frames, substantially as specified.

3. In a cultivator, an axle, tongues supported by said axle, a shaft supported by said tongues, plow-frames connected to said shaft, bearing-blocks carried by said tongues, elevating-blocks carried by said bearing-blocks, adjusting-frames supported by said elevating-blocks, means for elevating said adjusting-frames, and means for holding them in any adjustment in which they are placed, substantially as specified.

4. In a cultivator, an axle, tongues supported by said axle, bearing-blocks carried by said tongues, elevating-blocks supported by adjusting-frames carried by said elevating-blocks, means for operating said elevating-blocks and thereby the adjusting-frames, and means for retaining said adjusting-frames in any position in which they are placed, and connections between said adjusting-frames and the plow-frames of the cultivator, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES MCKIBBIN.

Witnesses:

ALFRED A. EICKS,
J. D. RIPPEY.