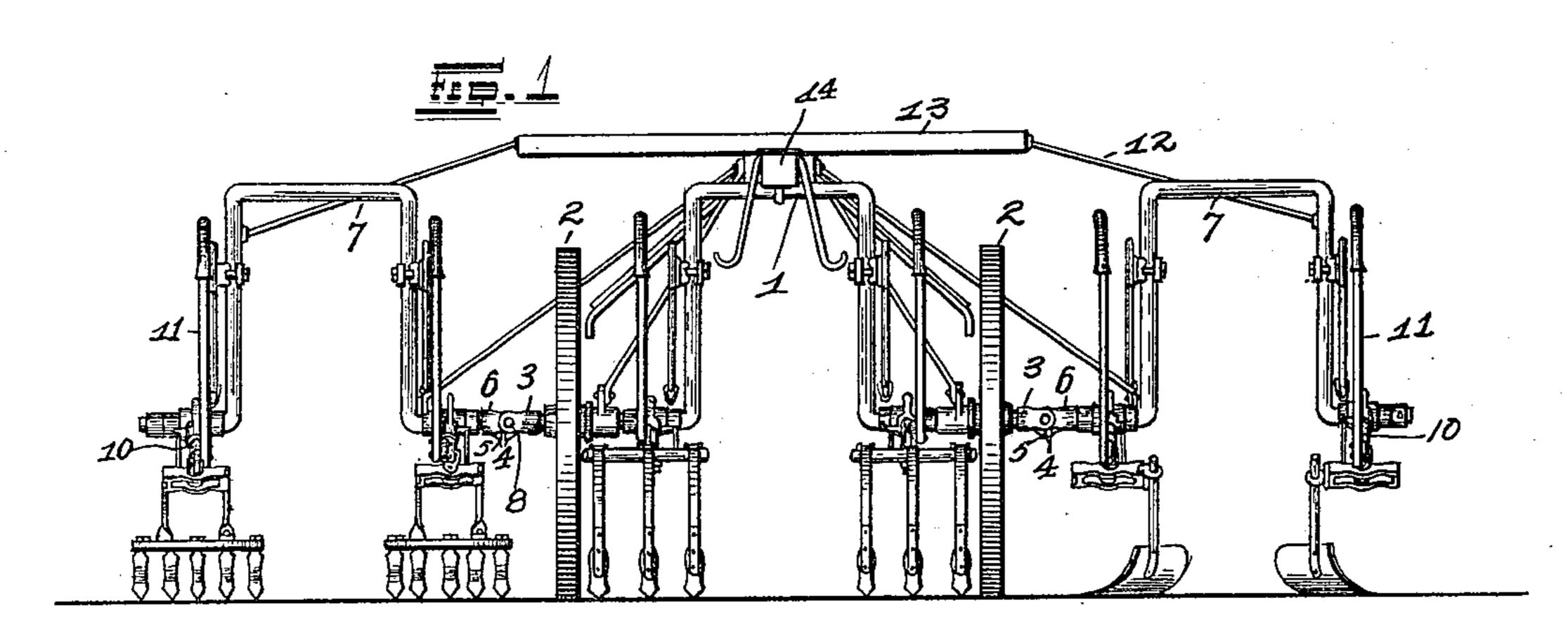
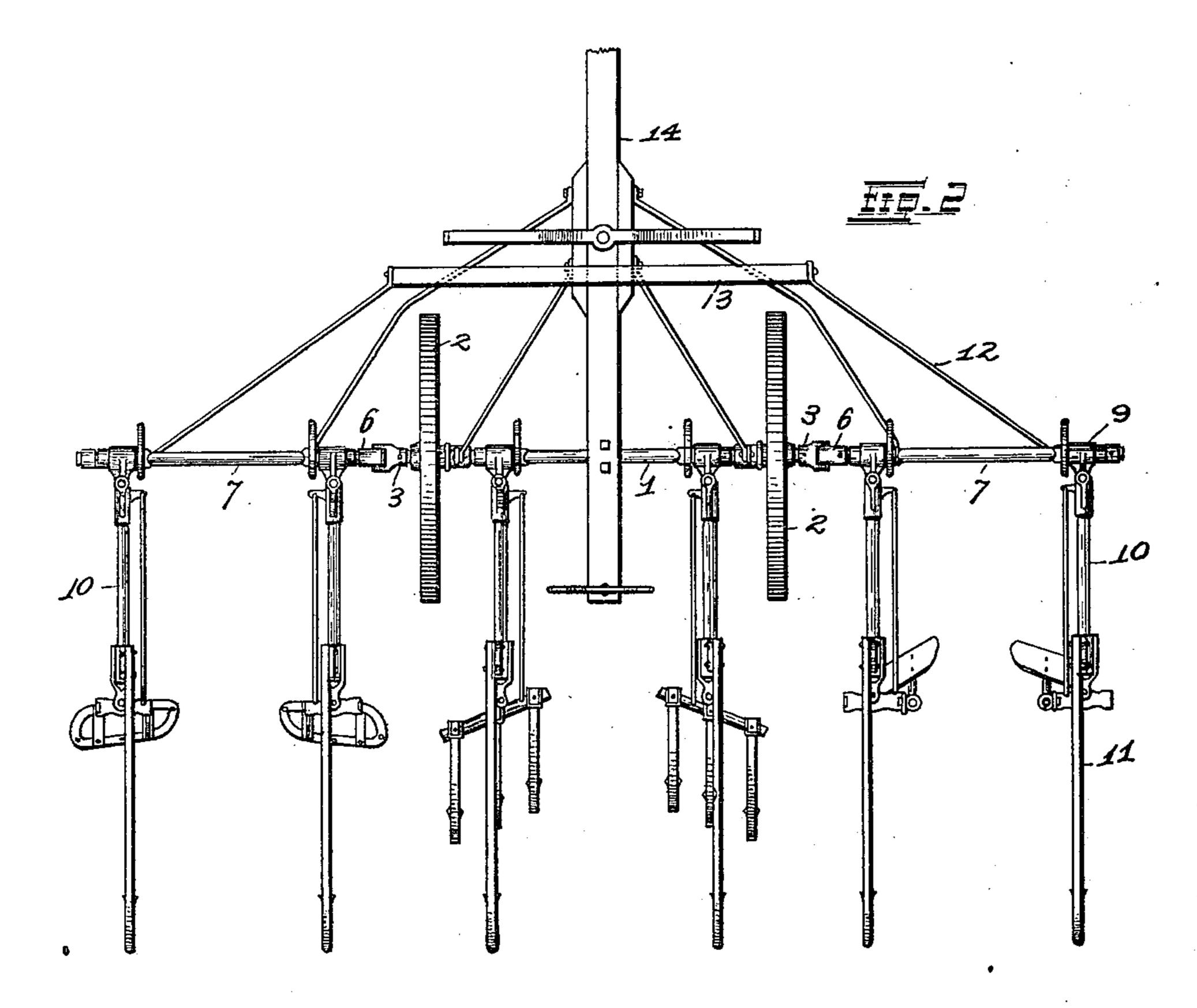
## E. W. STARK. CULTIVATOR.

(Application filed July 2, 1900.)

(No Model.)

2 Sheets—Sheet 1.





Witnesses Alfred WEickst AMRippan Snventor. Esgar VS. Stark. By Aigdow Longan, Attys No. 667,596.

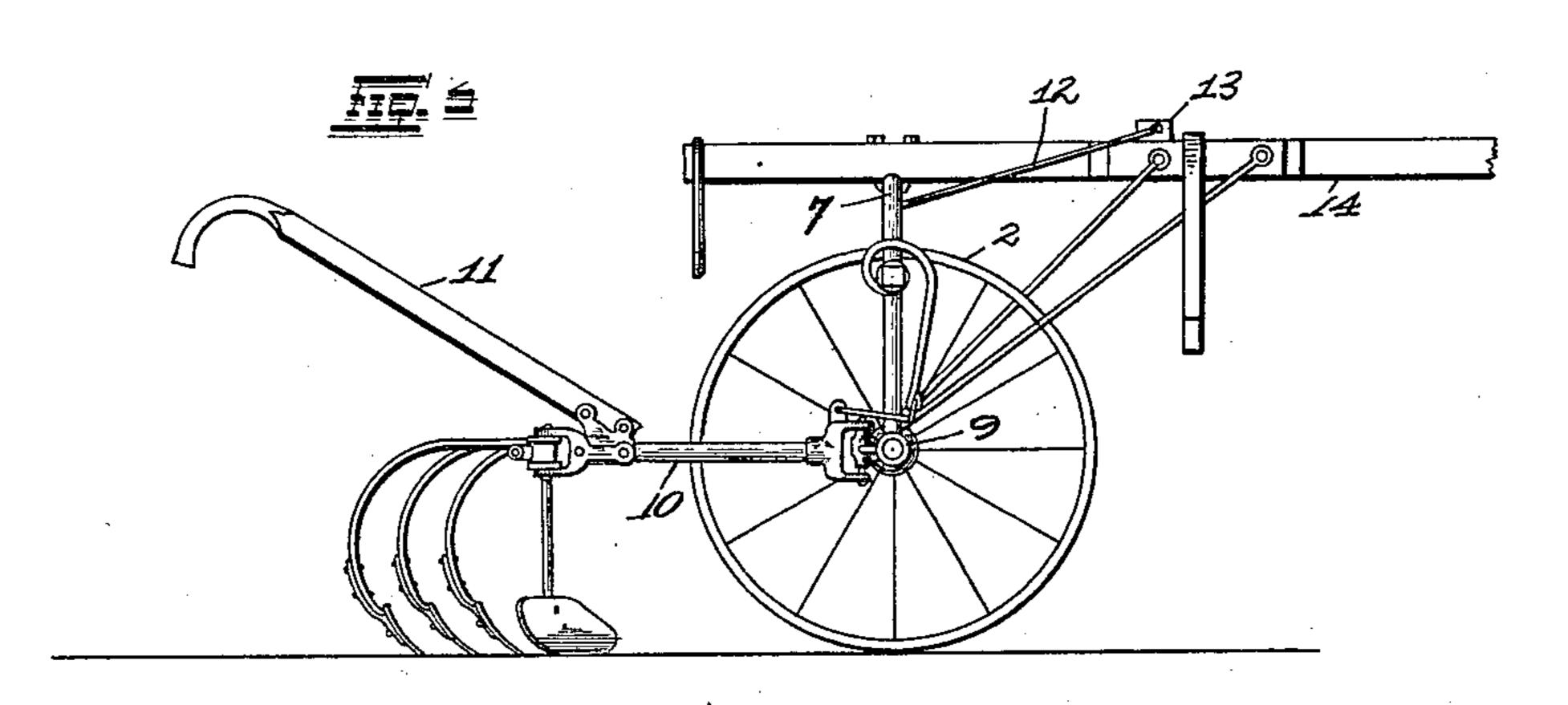
Patented Feb. 5, 1901.

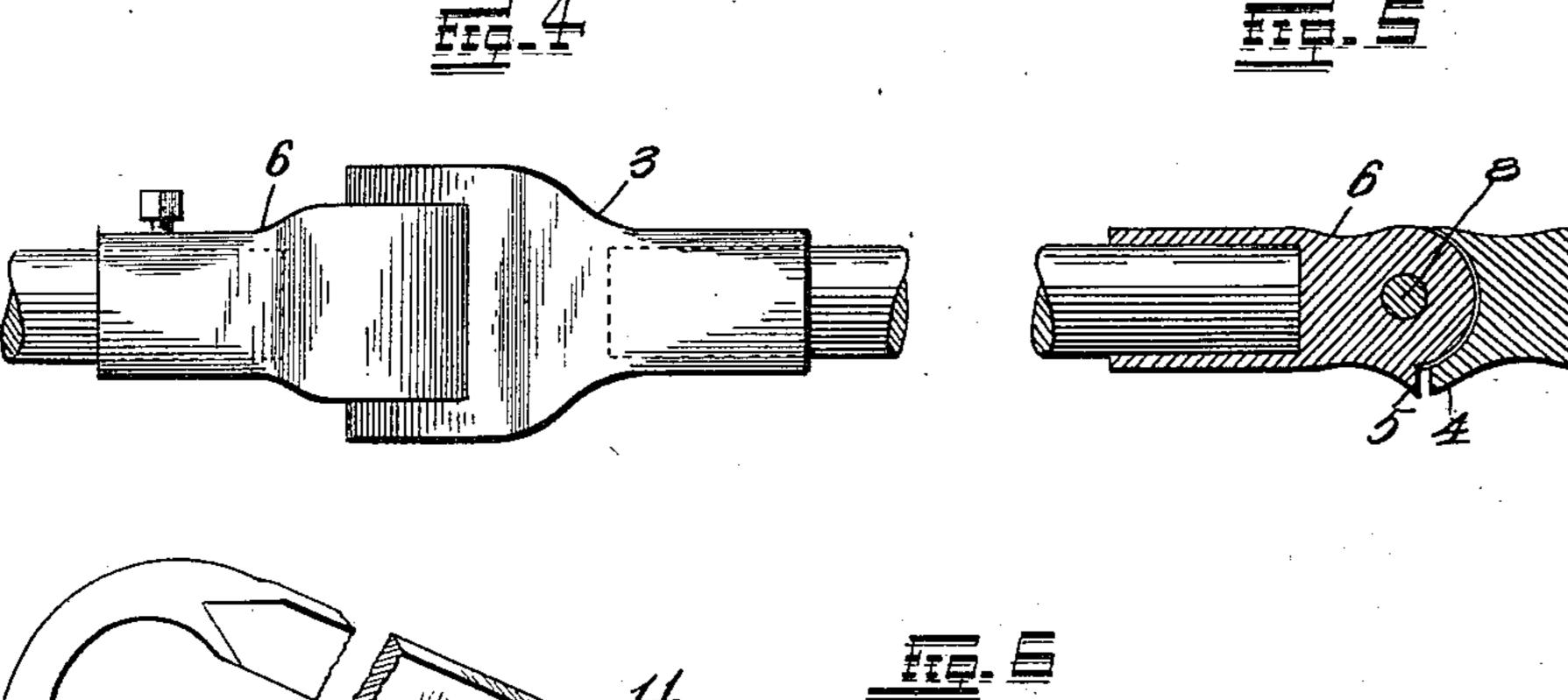
## E. W. STARK. CULTIVATOR.

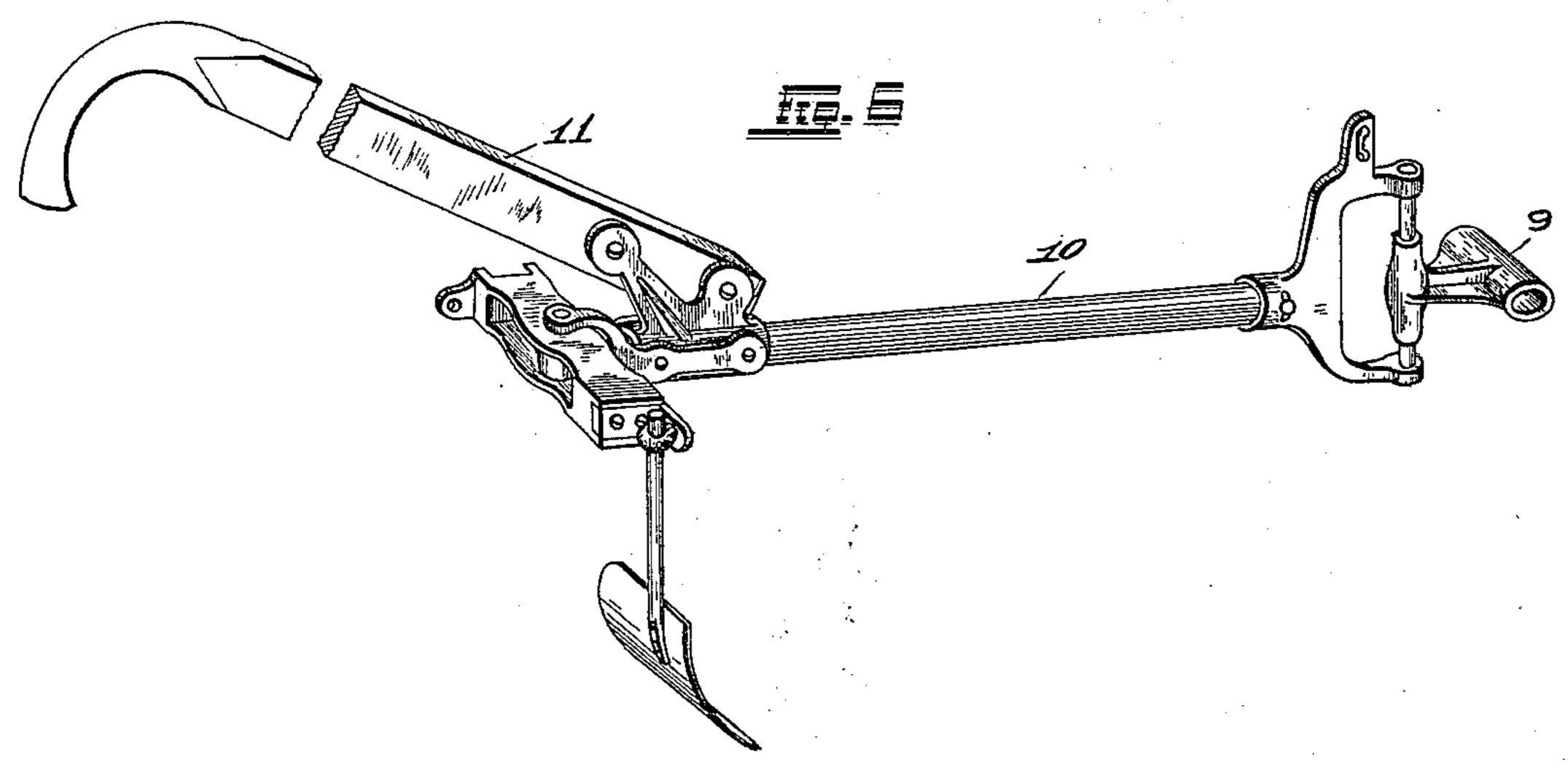
(Application filed July 2, 1900.)

(No-Model.)

2 Sheets—Sheet 2.







Witnesses Olfred Weicker J.D. Rippey. Edgar IV. Stark. By Nigdow Longan, Attyo:

# United States Patent Office.

### EDGAR W. STARK, OF LOUISIANA, MISSOURI.

#### CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 667,596, dated February 5, 1901.

Application filed July 2, 1900. Serial No. 22,312. (No model.)

To all whom it may concern:

Be it known that I, EDGAR W. STARK, of the city of Louisiana, Pike county, State of Missouri, have invented certain new and useful 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 to it consists of the novel construction, combination, and arrangement of parts hereinafter

shown, described, and claimed.

Figure 1 is a view of my improved cultivator from the rear. Fig. 2 is a plan view. Fig. 3 is a side elevation. Figs. 4 and 5 are detail views showing the manner in which the side arches are secured to the middle arch. Fig. 6 is a view in perspective of a beam and handle.

handle. In the construction of my improved cultivator as shown I provide a central arch 1, supported by the traction-wheels 2, the ends of the arch being extended outwardly beyond the outer edges of the hubs of the traction-25 wheels and carrying on their outer ends the hinged clips 3. The said hinged clips 3 comprise one-half of the knuckle-joints, by means of which the side arches are supported to the central arch. Integral with the under side 30 of each of the clips 3 is a shoulder 4, which abut against the shoulders 2, integral with the clips 6, which are carried upon the inner extensions of the side arches 7. The clips 6 project between the outwardly-extending 35 jaws of the clips 3, in which position they are pivotally secured by means of the hinged pin 8. The positions of the shoulders 4 and 5 are such as to allow the outer ends of the arches 7 to be lowered according to the variations of 40 the surface upon which the cultivator is operated, and after the arches 7 have dropped slightly below a horizontal position they will be carried and held in that position by the

shoulders 4 and 5 abutting against each other.
The arrangement of the clips 3 and 6 is such as to allow the arches 7 to be elevated and attached by any suitable means to the tongue of the cultivator, which, as shown, is carried

by the the middle arch 1. Upon the horizontal portions of the arches 1 and 7 are car- 50 ried the collars 9, the purpose of which is to carry the plow-beams 10, upon the rear ends of which are carried the standards to which the plows are secured. The handles 11 are secured in ordinary manner to the rear ends 55 of the beams 10.

A cultivator constructed as described is to be drawn by a single team and is to cover three rows, each of the arches 1 and 7 passing over a row. By means of the clips 3 and 60 6 the side arches are allowed to lower themselves to a position lower than that occupied by the middle arch, which will allow the plows carried by the side arches to move over a lower surface than those carried by the cen- 65 tral arch. When it is not desired to use the side arches, they may be removed by removing the hinge-pin 8 or by detaching one of the clips 3 or 6, thereby allowing the arches 7 to be removed from the arch 1, and after their 70 separation the central portion may be used as a single-row cultivator.

The side arches 7 are held in the proper alinement by means of the braces 12, the said braces being connected at their forward ends 75 to the bar 13, the same being secured upon

the tongue 14 of the cultivator.

I claim—

1. A cultivator, comprising a central arch supported by traction-wheels, and side arches 80 pivotally secured to the said central arch, substantially as specified.

2. A cultivator, comprising a central arch supported by traction-wheels, side arches pivotally secured to the said central arch, and 85 means for allowing the said side arches to adjust themselves according to the variations of the surface level, substantially as specified.

3. A cultivator, comprising a central arch mounted on traction-wheels, side arches con- 90 nected to the said central arch, means for allowing the side arches to operate above or below the central arch, and means for connecting plow-beams to the said side and central arches, substantially as specified.

4. A cultivator, comprising a central arch

mounted on traction-wheels, side arches connected to the said central arch, means for allowing the side arches to be raised above the central arch, and means for allowing the side arches to be depressed a suitable distance below the central arch, substantially as specified.

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

EDGAR W. STARK.

Witnesses:

ALFRED A. EICKS, JOHN D. RIPPEY.