

No. 667,598.

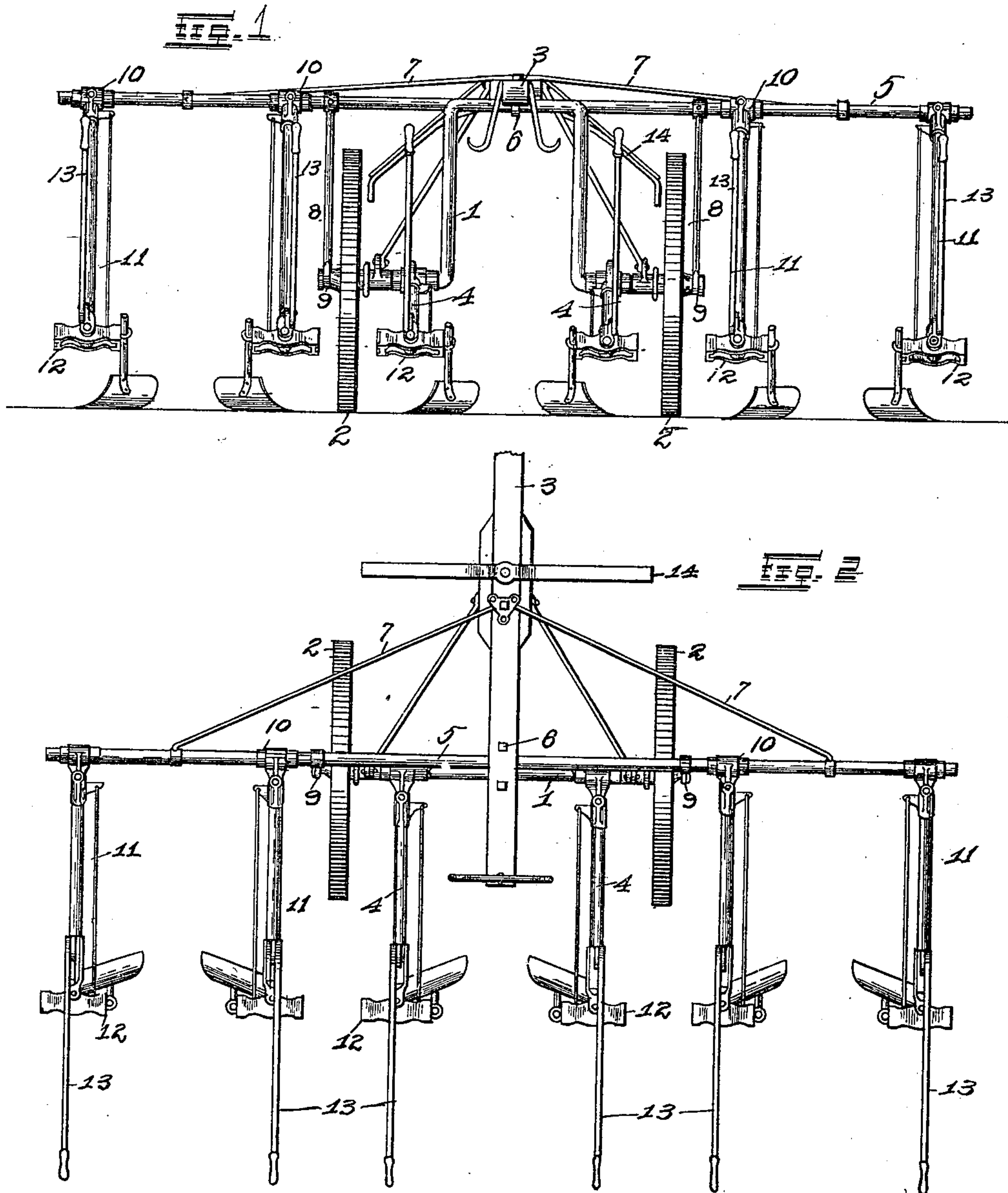
Patented Feb. 5, 1901.

E. W. STARK.
CULTIVATOR.

(Application filed Oct. 15, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
Alfred A. Eicher
J. D. Rippey

Inventor:
Edgar W. Stark.
By Higdon & Longan, Attys

No. 667,598.

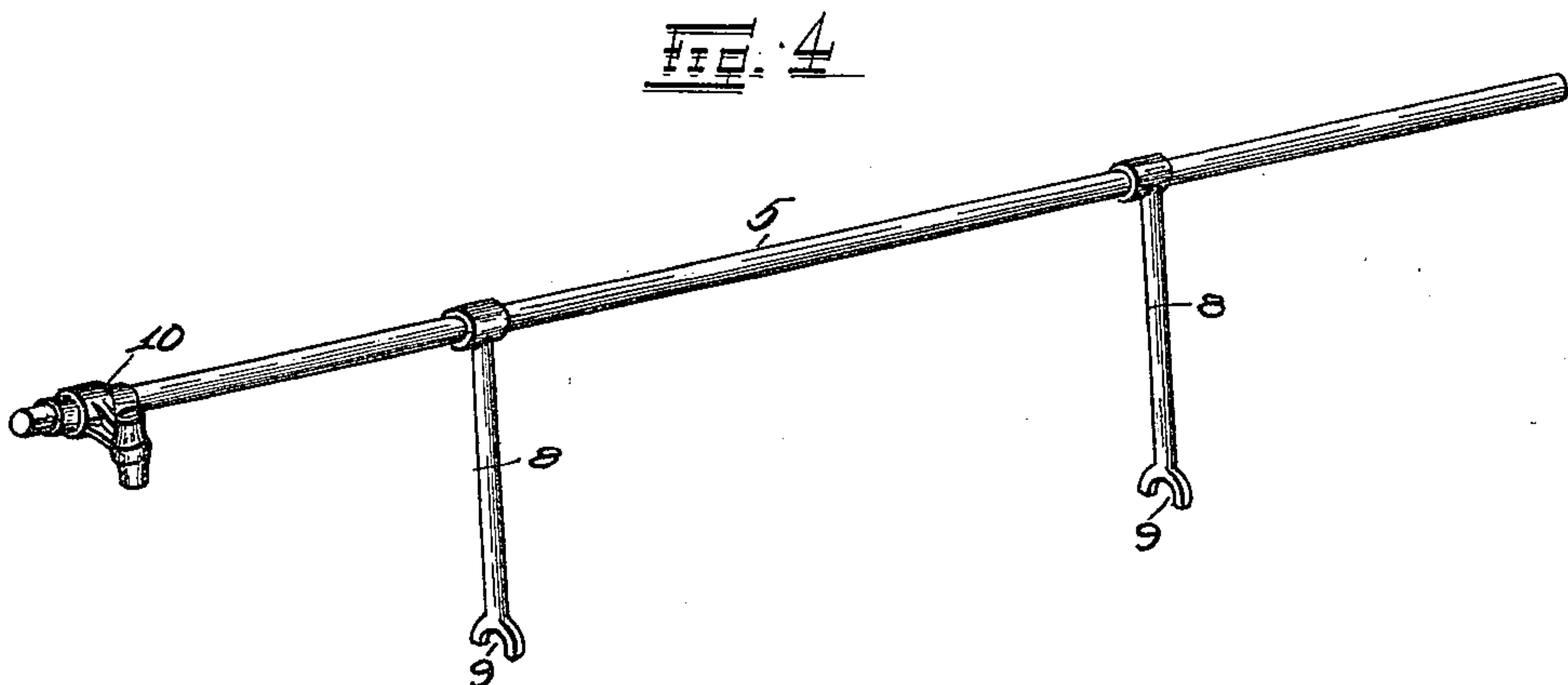
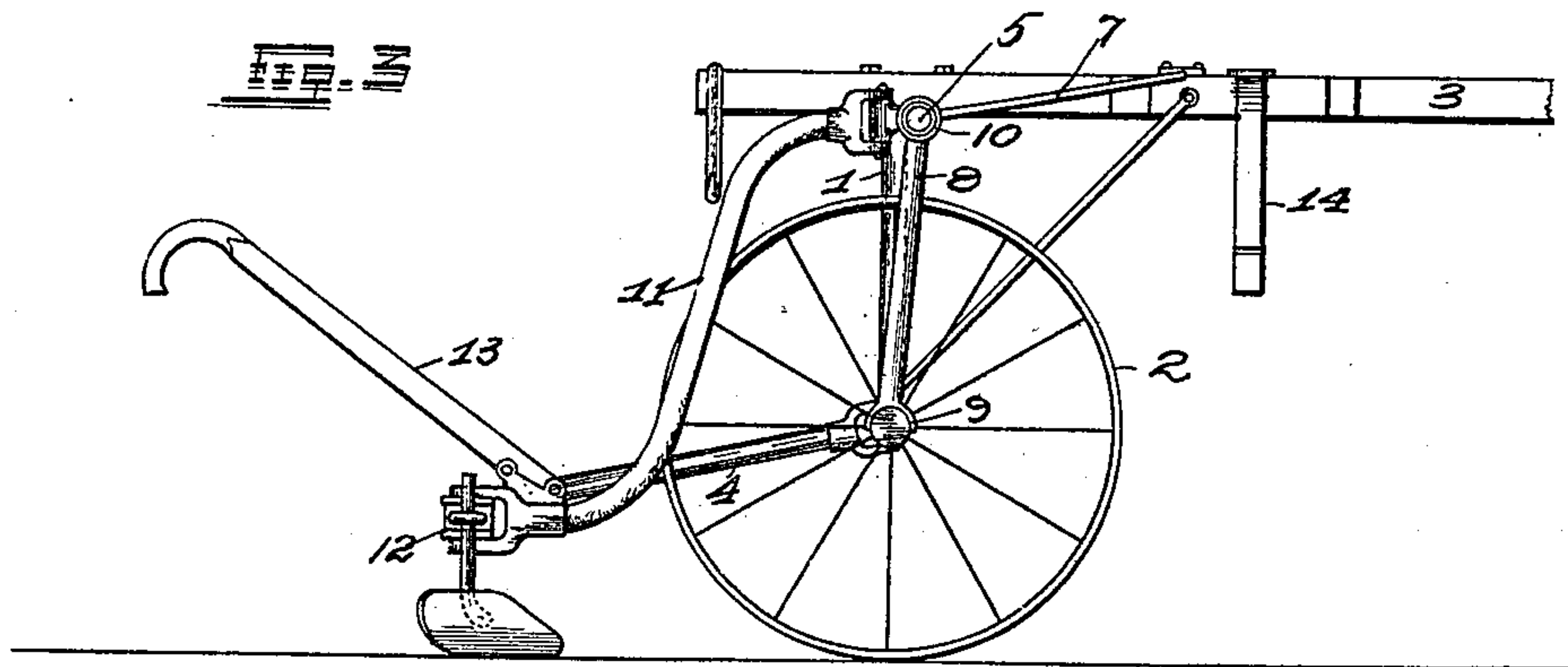
Patented Feb. 5, 1901.

E. W. STARK.
CULTIVATOR.

(Application filed Oct. 15, 1900.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses
Alfred Eicher
J. D. Rippey

Inventor
Edgar W. Stark.
By Higdon & Longan, Attys.

UNITED STATES PATENT OFFICE.

EDGAR W. STARK, OF LOUISIANA, MISSOURI.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 667,598, dated February 5, 1901.

Application filed October 15, 1900. Serial No. 33,108. (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 it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

Figure 1 is a view from the rear showing the arrangement of the different parts and the construction of my improved cultivator. Fig. 2 is a plan view. Fig. 3 is a side elevation. Fig. 4 is a perspective view of the extension-shaft, which constitutes an essential part of my invention.

In the construction of my improved cultivator I provide the usual central arch 1, carried by the ordinary traction-wheels 2. The tongue 3 is connected in any suitable manner to the arch 1, and the usual plow-beams 4 are secured to the horizontal parts of the said arch 1. These parts described may be of any preferred construction and are of the well-known arrangement.

5 indicates the long extension-shaft, which is of such length that when attached to the cultivator it projects on either side a sufficient distance to carry a pair of plow-beams on either end, thereby converting the usual one-row cultivator into a cultivator adapted to operate over three rows. The said shaft 5 is secured underneath the tongue 3 directly in front of the upper portion of the central arch 1 and is retained in position by means of a clip 6 or any other well-known fastening device. When in this position, the shaft is carried in a horizontal position above the wheels 2, and connected to the said shaft near either end is a brace-rod 7, the forward ends of which are secured to the tongue 3, thereby preventing the shaft from any horizontal movement during the operation of the cultivator. Braces or supports 8 have their upper ends secured to the shaft 5 and their lower ends are bifurcated, as indicated by 9, and bear upon the projecting portions of the central arch 1, which projects a slight distance beyond the hubs of the traction-wheels 2.

The said braces or supports 8 are for the purpose of retaining the shaft 5 in the desired horizontal position and in combination with the braces 7 prevent the said shaft from any oscillatory movement whatever. The sleeves 10 are mounted upon the shaft 5 in the usual manner, and connected thereto are the plow-beams 11, which, as shown in Fig. 3, are suitably bent, so that their lower ends operate in alinement with the rear ends of the plow-beams 4. On the rear ends of the plow-beams 4 and 11 are carried the usual blocks 12, to which may be attached plows of any ordinary construction. The plow-handles 13 are attached in the ordinary manner to the beams 4 and 11 and afford means whereby the plows may be operated during the movement of the cultivator.

14 indicates a support for receiving the singletrees, to which the horses are to be hitched.

A cultivator constructed as described may be used either as a one-row cultivator or may be easily and rapidly transformed into a three-row cultivator. When used as a one-row cultivator, the shaft 5 is removed by detaching the braces 7 from the tongue and by loosening the clip 6, allowing said shaft to be moved from underneath the tongue after the supports 8 have been removed from the projecting portions of the central arch 1. All unnecessary weight is then removed and the cultivator is adapted to be used as a one-row cultivator. In order to adjust the parts for a three-row cultivator again, it is only necessary to place the shaft 5 in the position shown, connect the braces 7 to the tongue 3, place the supports 8 in position, and tighten the clip 6, as shown, and the parts are then firmly secured in position and none of them can be displaced or moved out of position during the operation of the cultivator.

I claim—

1. The improved cultivator, consisting of a central arch supported by wheels, and having the usual plow-beams connected thereto between the wheels, an extension-shaft supported adjacent to and separate from said central arch, and plow-beams carried by the said shaft outside the wheels, substantially as specified.

2. A cultivator, consisting of a central arch

supported by wheels and carrying the usual plow-beams between the wheels, an extension-shaft supported adjacent to and separate from the said central arch, means for retaining the said shaft rigidly in position, and plow-beams supported by the said shaft outside the wheels, substantially as specified.

3. A cultivator, consisting of a central arch supported by wheels and carrying the usual plow-beams between the wheels, a detachable shaft supported above the wheels and projecting to either side, and plow-beams carried by the said shaft outside the wheels, substantially as specified.

4. A cultivator, consisting of a central arch arranged on wheels and having the usual plow-beams connected thereto, a detachable shaft supported above the wheels and pro-

jecting to either side of the cultivator, and suitably-bent plow-beams carried by the said shaft at either side of the cultivator, substantially as specified.

5. A cultivator, consisting of a central shaft supported by wheels and having plow-beams connected thereto, a horizontal shaft supported above the wheels, means for retaining the said shaft in position, and suitably-bent plow-beams carried by the said shaft outside the said wheels, substantially as specified.

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

EDGAR W. STARK.

Witnesses:

ALFRED A. EICKS,
J. D. RIPPEY.