

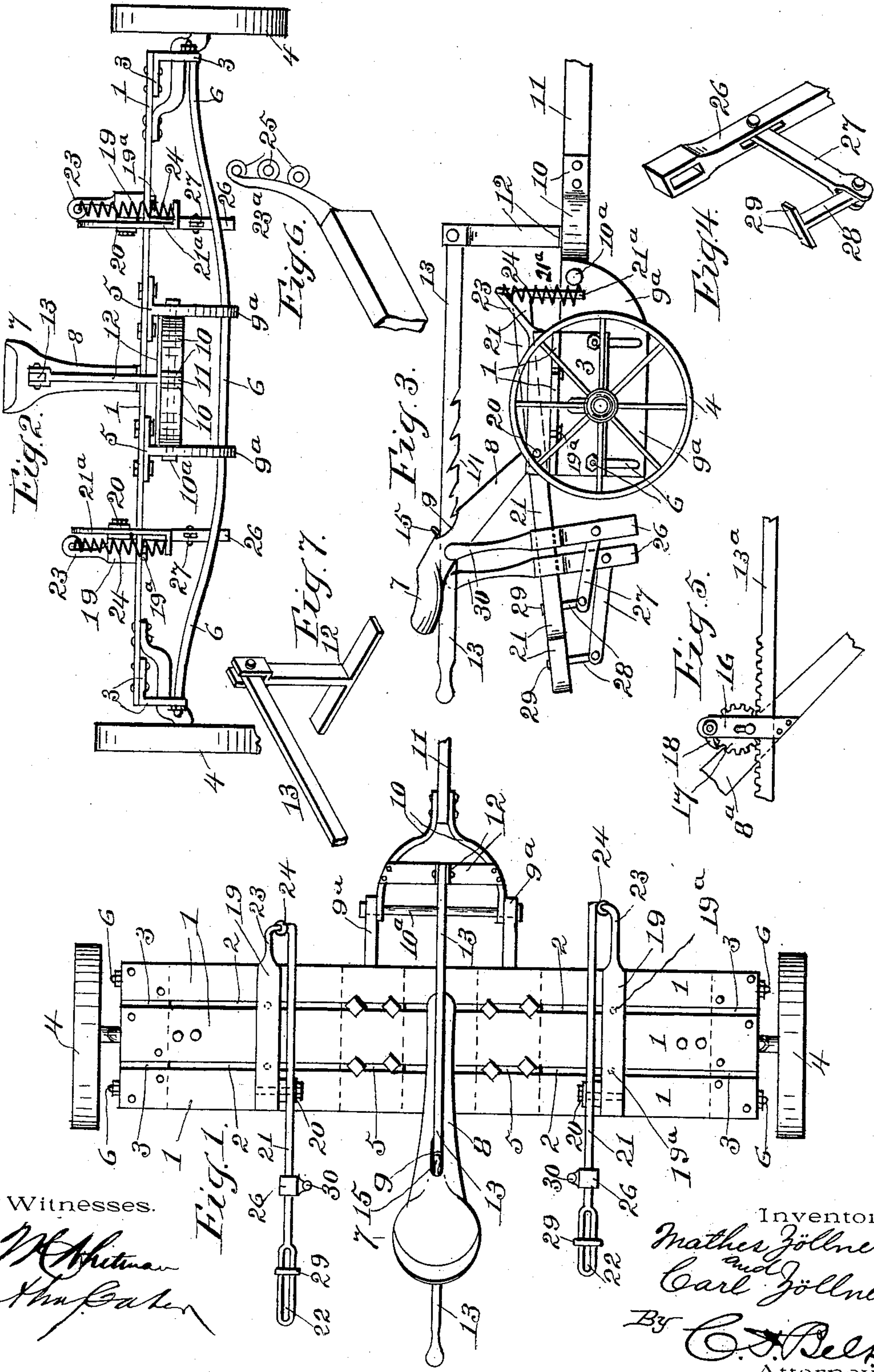
No. 615,775.

Patented Dec. 13, 1898.

M. & C. ZÖLLNER.
FRAME FOR CULTIVATORS.

(Application filed July 26, 1898.)

(No Model.)



Witnesses.

W. Whitman
Wm. Baker

Inventors

Mather Zöllner
and
Carl Zöllner

By *C. J. Reel*
Attorney.

UNITED STATES PATENT OFFICE.

MATTHIES ZÖLLNER AND CARL ZÖLLNER, OF BLACKLAND, TEXAS.

FRAME FOR CULTIVATORS.

SPECIFICATION forming part of Letters Patent No. 615,775, dated December 13, 1898.

Application filed July 26, 1898. Serial No. 686,968. (No model.)

To all whom it may concern:

Be it known that we, MATTHIES ZÖLLNER and CARL ZÖLLNER, citizens of the United States, residing at Blackland, in the county of Rockwall and State of Texas, have invented certain new and useful Improvements in Frames for Cultivators and other Agricultural Implements, of which the following is a specification.

10 This invention relates to cultivators, and particularly to an improved wheeled cultivator-frame having spring-controlled cultivator-beams provided with new and novel means for attaching plow-points, harrow-teeth, and
15 other various cultivating implements, as well as stalk-cutters and cotton-choppers.

The invention consists in the novel construction and arrangement of parts, as will be hereinafter fully described, and set up in
20 the appended claims.

In the accompanying drawings, forming part of this application, Figure 1 is a top plan view of the invention. Fig. 2 is a front view. Fig. 3 is a side view. Fig. 4 is an enlarged
25 detached perspective view of the plow or cultivator hanger. Fig. 5 is an elevation of a seat-post, showing modified means for controlling the lever connected to the tongue. Fig. 6 is a modified form of hook. Fig. 7 is
30 a perspective view of the T-shaped standard.

The same numeral references denote the same parts throughout the several figures of the drawings.

The cultivator-frame consists of plates 1, secured in place at each end, with an interval or space 2 between them, by angle-irons 3, from which the axles of the wheels 4 depend. The said plates 1 are secured about
35 the middle of their length to the short arms of two T-shaped irons 5, the long arms of which form fenders 9^a and have openings for the bowed brace-rods 6, attached at each end to the angle-irons 3. A suitable seat 7 has a post 8 secured to the plates 1, said post
40 having a slot 9. The fenders 9^a of the irons 5 project forward from the front of the frame, and the hounds 10 of the tongue 11 are pivoted by a rod 10^a to said projections. A vertically-disposed inverted-T-shaped standard
50 12 is fixed to the hounds and has a lever 13 pivoted thereto. This lever has notches or

teeth 14 and extends through the seat-slot 9, where the teeth are kept in engagement with the bottom edge of the said slot by a spring 15. A modified form of means for control-
55 ling this lever is shown in Fig. 5, the lever 13^a working in a bracket 16 on the side of the seat-post 8^a and controlled by a ratchet-wheel 17 and pawl 18.

Two or more bars 19 are adjustably secured 60 to the plates 1 by bolts 19^a, passed through the spaces 2. These bars are adjustable on the frame transverse the latter by simply loosening the said bolts 19^a. To one end of the said bars is pivoted, at 20, an L-shaped beam 21, 65 the long arm of which is looped or has a slot 22. The other end of the bars 19 has an upwardly and outwardly projecting hook 23, to which is attached one end of a spiral spring 24, the other end of said spring being secured 70 to the depending short arm 21^a of the said beam 21. A modified form of this hook is shown in Fig. 6, where the hook 23^a has lateral eyes or projections 25 for the purpose of varying the tension of the spiral springs. 75

The hangers 26 for plow-points or other cultivator implements are slidably secured upon the slotted ends of the beams 21 and have an arm 27 pivoted at one end to the said hangers and at the other end to a keeper 28, 80 slidably held in the slot 22 by integral ears 29, which engage the top edge of the slotted portion of the beams. These hangers have hand-levers 30 in convenient reach of the operator on the seat 7, whereby the hangers 85 may be raised and lowered independent of the said beams, while the spring-tension of the latter imparts to the hangers and the implements they carry sufficient resiliency for the proper operation of the same except in 90 case of an implement becoming hung or engaged with a large obstruction. Then the hanger is operated to raise the plow or implement. In case the plows or implements are all to be raised together or simultane- 95 ously the lever 7 is operated to raise the rear of the frame, which elevates the beams and hangers. When this lever is drawn back slightly, it will raise the tongue and hounds and relieve the horses of the weight thereof. 100

We do not wish to limit ourselves to any particular material or size in the manufac-

ture of the frame and its parts, nor the application of the same, nor any special implements to be attached thereto.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a cultivator-frame, of a series of plates having a space between them, angle-irons to which the plates are secured at each end, the middle irons to which the said plates are secured, and the bowed brace-rods passed through the depending portion of the said middle irons and secured to the said angle-irons.

2. The combination, with the frame, of the bars adjustably secured upon the frame, hooks projecting from one end of the bars, beams pivoted to the other end of said bars, and the spiral springs connecting said beams and hooks.

3. The combination, with the frame, the bars adjustably secured to the frame, and

the spring-controlled beams pivoted to the said bars, of the hangers slidably secured to the beams, an arm pivoted to the hangers, and the keepers pivoted to the said arms and slidably connected to the said beams.

4. The combination, with the frame, and the bars adjustably secured to the top thereof and having hooked ends, of the looped or slotted beams pivoted to the other ends of the bars, springs connecting one end of the beams with the hooks, hangers slidably secured to the other or slotted end of the beams, an arm pivoted to the hangers, and a keeper pivoted to said arm and working in said loop or slot, and having ears, as set forth.

In witness whereof we hereunto set our hands in the presence of two witnesses.

MATTHES ZÖLLNER.
CARL ZÖLLNER.

Witnesses:

JOSEPH KELLY,
J. P. BUCKLEY.