

A. STAUFFACHER.
Cultivator.

No. 225,304.

Patented Mar. 9, 1880.

Fig. 1.

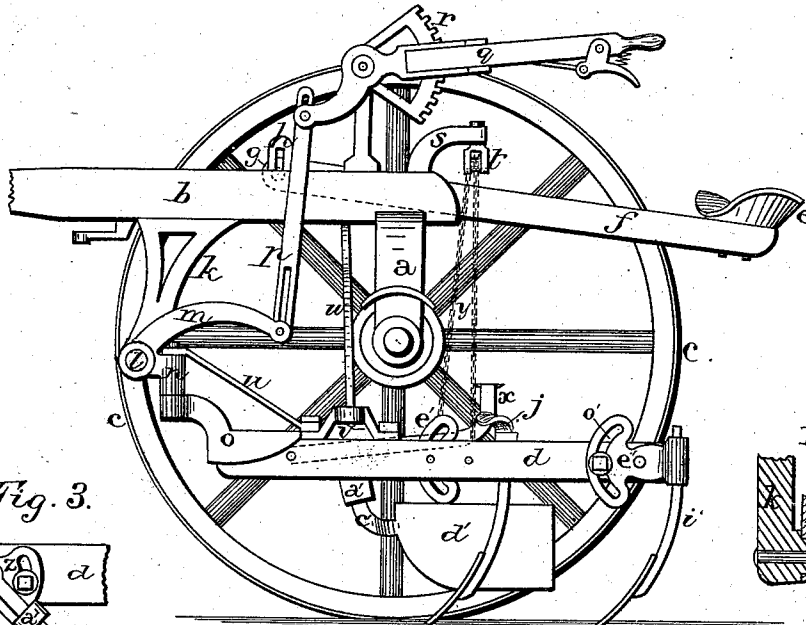


Fig. 3.

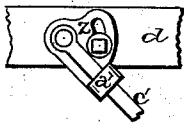


Fig. 5.

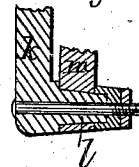


Fig. 2.

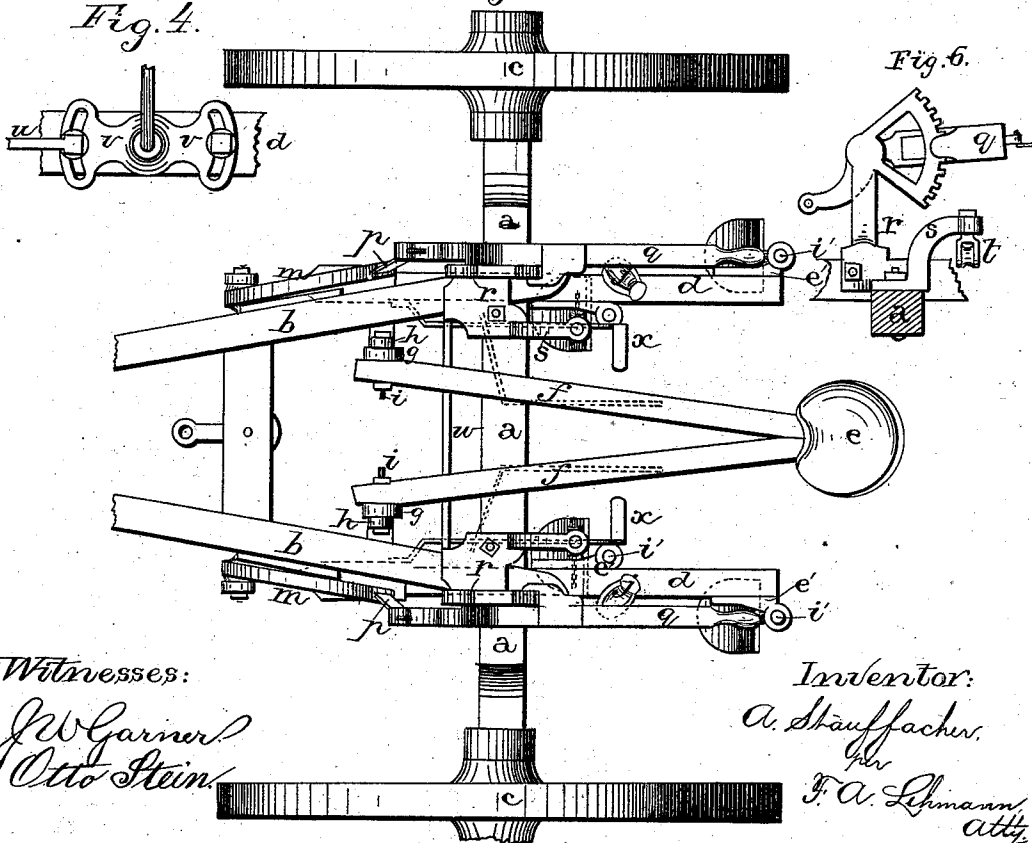


Fig. 4.

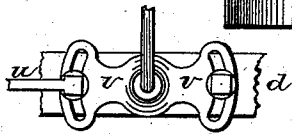
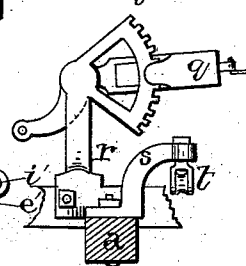


Fig. 6.



Witnesses:

J. W. Garner
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Inventor:

A. Stauffacher,
per
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att'y

UNITED STATES PATENT OFFICE.

ANTONE STAUFFACHER, OF JUDA, WISCONSIN.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 225,304, dated March 9, 1880.

Application filed October 24, 1879.

To all whom it may concern:

Be it known that I, ANTONE STAUFFACHER, of Juda, in the county of Green and State of Wisconsin, have invented certain new and useful Improvements in Corn-Cultivators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in wheel-cultivators; and it consists in the peculiar construction and arrangement of parts, that will be more fully described hereinafter.

Figure 1 is a side elevation of my invention with one wheel removed. Fig. 2 is a plan view of the same. Figs. 3, 4, 5, 6 are detail views of the same.

a represents the axle, *b* the tongue, *c* the driving-wheels, and *d* the beams, all of which are of the usual construction. The seat *e* is secured upon the rear ends of the two beams *f*, and to the front end of each beam is secured a casting, *g*, which is serrated on its inner side, so as to engage with the serrations in the side of the slotted castings *h*, secured to the inner side of the tongue. A screw-bolt, *i*, is passed through the two castings and beam, and holds the seat at any desired elevation above the two beams *d*, which are provided with the foot-pieces *j*.

Bolted to the under side of the tongue are the two hangers *k*, which are provided with the tenons *l* on their lower ends, which tenons project all the way through the ends of the levers *m*, so as to form pivots, on which the levers turn. By thus making these tenons act as pivots there is no wear and tear whatever upon the bolt which fastens the lever to the hanger, and the joint is thus made stronger and more secure.

Upon the lower end of each lever *m*, just back of the joint, is formed an eye, *n*, through which passes a pivotal bolt, upon which the casting *o* on the front of the beam *d* turns. To the upper and rear end of the lever *m* is fastened the slotted end of the connecting-rod *p*, which unites the lever *m* with the hand-lever *q*, which is provided with the usual spring-latch for locking the lever to the ratchet *r*.

The lower end of the rod is slotted, so that the driver can raise and lower the rear ends of the beams with his feet without moving the levers *q*. The upper ends of these rods *p* are provided with a series of holes, so that the beams can be regulated to run shallow or deep, as may be desired.

The ratchet or rack *r*, instead of being made in a single piece, as is usual, has an extension, *s*, made on its lower end, which extension projects to the rear of the axle and has the roller *t* secured to it. By thus forming the extension on the rack only a single casting is made instead of two, and this casting is secured in place by means of one bolt through the tongue and one through the axle.

Secured at its front end upon the top of the eye *n*, by means of the pivotal bolt, is a brace, *u*, which has its rear end fastened to the beam on top of the front end of the casting *v* by the bolt which holds the front end of the casting in place. This brace serves to prevent any twisting motion of the beam upon the bolt which passes through the eye *n*.

As the lever *m* moves vertically, and the beams swing horizontally around, it will readily be seen that each beam has a universal motion.

The castings *v* are slotted at each end, so as to be laterally adjustable on the beams, and they receive and hold the ends of the bent rod *w*, which unites the two beams together, so as to keep them always at a uniform distance apart.

To the inside of each beam is secured a foot-lever, *x*, which has one end of the chain *y*, which passes up over the pulley *t*, secured to it. As the other end of the chain is fastened to the top of the beam, whenever the driver wishes to raise the shovels over an obstruction, he has only to bear down on the lever with his foot, and the beam will be raised upward. Also, bolted rigidly to the inside of the beams are the castings *z*, which project considerably below the lower edges of the beams, and have the loops *a'* formed on their inner sides, through which loops pass the bent ends of the rods *c'*, which have the shields *d'* secured to them.

The upper ends of the rods *c'* are pivoted to the beams on the outside of the castings *z*,

and the loops *a'* serve to act as stops to prevent the shields from falling too low, or from being raised too far up when they are passing over an obstruction. These loops also serve
5 to prevent any side strain on the pivots of the rods.

Each one of the castings *e'*, in which the cultivator-standards *i'* are fastened, is provided with a slot, *o'*, so that in case the shov-
10 els should strike against an obstruction they will give backward, and thus not be broken.

The driver, sitting on his seat and with his feet on the foot-pieces *j*, can guide the two beams at pleasure.

15 When it is desired to raise the shovels high

above the earth, as in moving from and to the field, the hand-levers *q* are used.

Having thus described my invention, I claim—

The ratchet *r*, having an extension, *s*, on its rear end to receive the pulley or roller *t*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of October, 1879.

ANTONE STAUFFACHER.

Witnesses:

A. V. WITMER,
H. C. WITMER.