J. Chapman.

Wheel Cultivator.

No. 49,856. Patented Sept. 12, 1865.

Fig. 1.

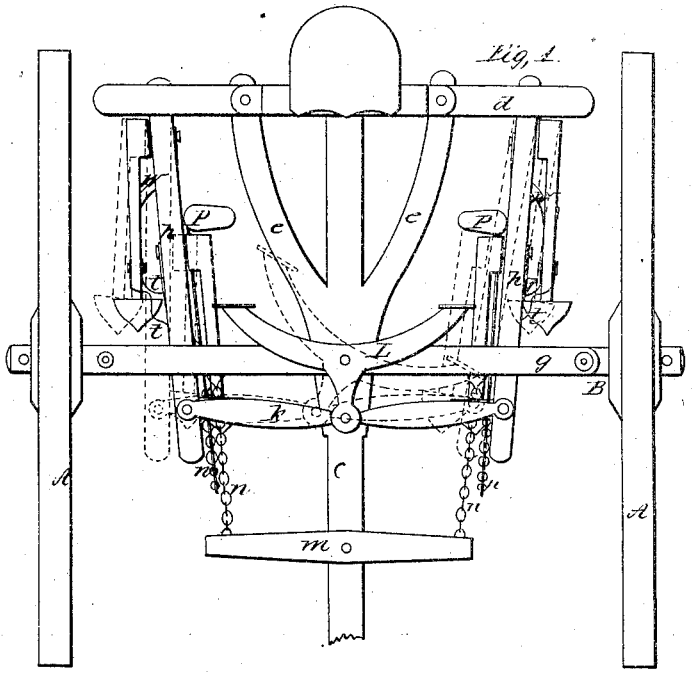
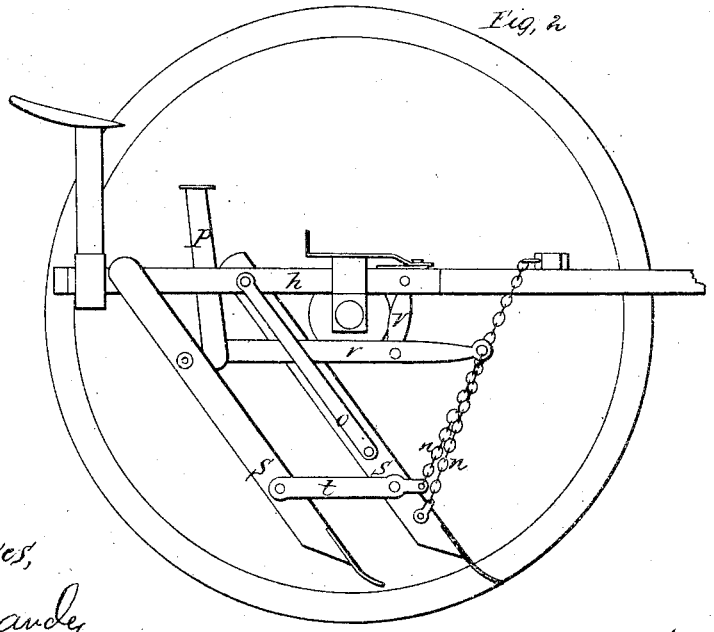


Fig. 2



Witnesses,
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per T. H. Alexander Atty

UNITED STATES PATENT OFFICE.

JASPER CHAPMAN, OF LINN COUNTY, IOWA.

IMPROVEMENT IN CORN-CULTIVATORS.

Specification forming part of Letters Patent No. **49,856**, dated September 12, 1865.

To all whom it may concern:

Be it known that I, JASPER CHAPMAN, of Linn county, in the State of Iowa, have invented certain new and useful Improvements in Corn-Cultivators; and I hereby declare that the following is a true and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 in the annexed drawings represents a plan view of my planter. Fig. 2 is a side view of the same, with the interposing wheel removed.

The body of my machine consists of the wheels A, the axle B, the coupling-pole C, and the flat bars *d*, which are placed one above the other, with a space between them sufficient to admit the hounds *e e*, the opposite ends of the hounds embracing the coupling-pole C and resting on the axle B. Over the axle B, lengthwise, is placed the tie *g*, secured to the axle at each end by a bolt which passes through a block of sufficient thickness and through the axle B.

h h represent two beams, the front ends of which are intended to have a horizontal motion in the space between the axle B and the tie *g*. The hinder ends of beams *h h* rest in the space between the bars *d*, and play freely on a bolt which passes through them and through the bars *d*. The beams *h h* are confined together near their front ends by a narrow metal plate, *k*.

L designates a foot-lever, made also of plate metal, curved in form, and having the curved extremeties turned upward, so as to be acted upon by the feet of the operator. The lever L plays on a bolt which passes through its center and through axle B, and has an arm extending forward that rests on the center of plate *k*, and plays on a bolt which penetrates it and the coupling-pole C. Each of the beams *h* has two standards, *s*, attached to it, one on the inner and one on the outer side of *h*. To these standards the shovels are adjusted. The upper ends of standards *s* play vertically on the bolts that confine them to beams *h*. The lower ends of each brace of standards are confined together by two metal plates, *t*, riveted to each other. The upper ends of plates *t* extend a little above the two front standards, *s*, to admit of a connection with the lower ends of chains *n*, the upper end of one of each brace of chains being attached to the cross-bar *m*, and the upper ends of the two shorter chains being secured to the front ends of the horizontal levers *r*. The levers *r* have their fulcrums at the lower ends of pendants *v*, and play with a vertical motion, so as to elevate or lower the beams *s*. The levers *r* are operated by the vertical plates or bars P P.

In order that the standards *s* may be kept from varying in position any farther than they are acted on by their respective levers, the front standards are secured to beams *h* with the braces *o*, and the hinder standards are similarly fastened to the beams *h* with the braces *w*.

In operating my machine, it will be observed that the driver, being seated above the bars *d*, can throw the plow-beams *s* to the right or left at pleasure by using his corresponding foot on lever L, and that he can either elevate or depress the beams by acting with his feet on the vertical bars P P.

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

1. The double bars *d*, constructed and operating as and for the purpose herein set forth.

2. The combination of the lever L, the plate *k*, and the beams *h h*, in the manner and for the purpose herein specified.

JASPER CHAPMAN.

Witnesses:

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