G. M. DWIGHT.

Wheel Cultivator.

No. 85,001. Patented Dec. 15, 1868.

Fig. 1.

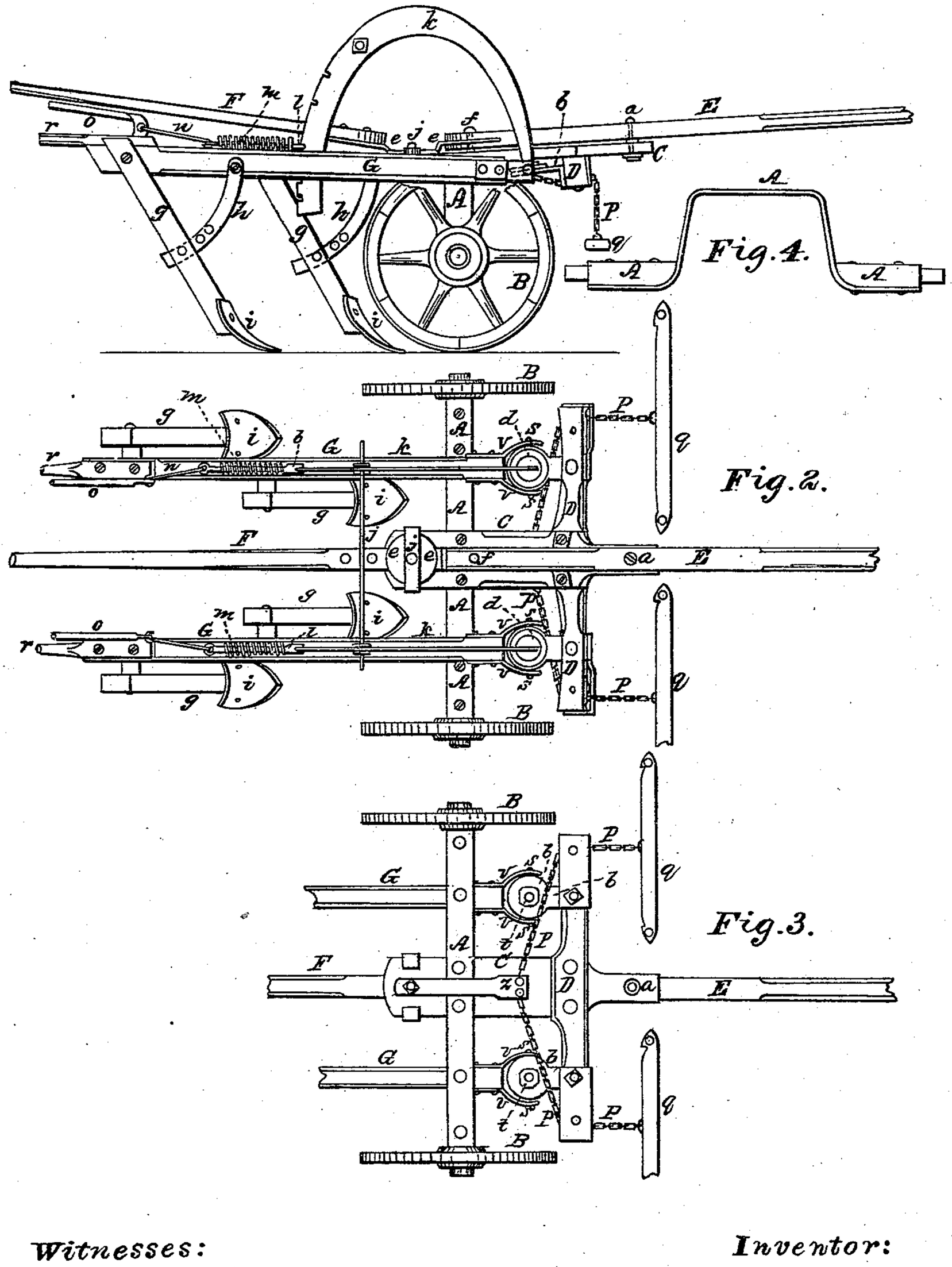

Fig. 4.

Fig. 2.

Fig. 3.

Witnesses:

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By his attorney

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GEORGE M. DWIGHT, OF OREGON, ILLINOIS.

Letters Patent No. 85,001, *dated December* 15, 1868.

IMPROVEMENT IN CULTIVATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE M. DWIGHT, of Oregon, in the county of Ogle, and State of Illinois, have invented a new and improved Cultivator; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which form a portion of this specification.

Figure 1 is a side view of my improved cultivator.

Figure 2, a top view.

Figure 3, a bottom view, and

Figure 4, a side view of the axle of the cultivator, detached from the other parts thereof.

Similar letters indicate like parts in all the drawings.

The shape of the axle A of my improved cultivator is clearly shown in fig. 4.

To the raised central portion of this axle, I firmly secure a substantial body-platform, C, and to the front end of this platform I firmly secure a transverse draught-bar, D.

The tongue E of the cultivator is jointed to the front end of the body-platform C, by means of the vertical bolt *a*, which passes through the tongue, at a point distant about one-fourth the length thereof from its rear end.

The rear end of the tongue E is jointed to the front end of the guiding-lever F, by means of the metallic plate *e*, which is pivoted to the rear end of the body-platform C, by the bolt *j*.

A projecting front portion of the said plate *e* passes a considerable distance into a slitted recess in the rear end of the tongue, and is pivoted thereto by the bolt *f*, as shown in fig. 1.

It will therefore be perceived that the guiding-lever F gives the operator the power of instantly turning the cultivator to the right or left, out of the line of draught, whenever it may be desirable to do so for more efficient cultivating-purposes, or for preventing injury to the articles that may be cultivated by the assistance of this implement.

The whiffle-trees *q q* are attached to the draught-chains *p p*, which are themselves connected to the draught-plate *z*, which is pivoted to the under side of the rear end of the body-platform C, as shown in fig. 3.

The said draught-chains *p p* pass from the front end of the draught-plate *b* outwardly to and around grooved pulleys, which are respectively pivoted to the under sides of the ends of the draught-bar D.

The series of cultivator-points *i i* is secured to the inclined arms *g g*, which respectively descend from their jointed connections with the parallel beams G G, and which are respectively retained in any desired inclined position, by means of the segment-shaped perforated arms *h h*, as shown in fig. 1.

The front ends of the parallel beams G G are indirectly jointed to the draught-bar D, in such a manner as to enable the rear ends of said beams to be laterally and vertically vibrated, as circumstances may require, to wit, the flaring-metallic arms *v v*, at the front ends of the beams G G, are pivoted to the peripheries of the disks *d d*, by the pivots *s s*, and these disks *d d* are pivoted to the supporting metallic plates *b b*, which project rearwardly from their firm connection with the draught-bar D, as shown in the drawings. The after portions of the parallel beams G G may be connected with each other by any suitable means.

A metallic arch-plate, *k*, is combined with each beam G, in the manner represented in the drawings.

A screw-shank, at the forward end of each of said arch-plates *k*, passes through its respective supporting-plate *b*, and is secured therein by a screw-nut, *t*, on the under side of each of said plates, as shown in fig. 3. The after ends of the said arch-plates *k k* pass through slits in the parallel beams G G, and the said arch-plates are connected with each other by means of the rod *j*, and the pairs of nuts which work on the screw-cut portions of said rod, as shown in fig. 2, and which enable the rear ends of the beams G G to be arranged at any desired distance from each other.

Notches are cut in the outer edges of the arch-plates *k k*, which receive the catches *l l*, that are combined with the beams G G, the springs *m m*, and the lever-handles *o o*, in such a manner as to be operated by said handles.

The said notches in the arch-plates, and the spring-catches which work into the same, enable the beams G G to be elevated and retained at any desired distance above the ground, and also to be depressed any desired distance into the ground.

It will therefore be perceived that the peculiar construction of my improved cultivator enables the operator to exercise complete control over the position of the parallel beams G G, and the cultivating-points descending therefrom, enabling the same to be elevated, depressed, or moved to the right or left, as circumstances may require.

Having thus fully described the construction and operation of my improved cultivator,

What I claim therein as my invention, and desire to secure by Letters Patent, is—

1. The combination of the body-platform C, with the draught-bar D, the tongue E, and the guiding-lever F, in such a manner that when the said body-platform is combined with the bent axle A, the said draught-bar will be in the proper relative position for the combination therewith of the parallel beams G G, and the notched arch-plates *k k*, all substantially in the manner and for the purpose herein set forth.

2. When the parallel beams G G are combined with the draught-bar D, substantially in the manner herein set forth, I also claim the combination therewith of the cultivating-points *i i*, the notched arch-plates *k k*, and the spring-catches *l l*, substantially in the manner herein set forth.

The aforegoing specification of my improved cultivator signed and witnessed, this 1st day of September, 1868.

GEORGE M. DWIGHT.

Witnesses:

GEO. P. JACOBS,

ALONZO L. ETTINGER.