

L. P. THOMPSON.
CULTIVATOR.

No. 175,392.

Patented March 28, 1876.

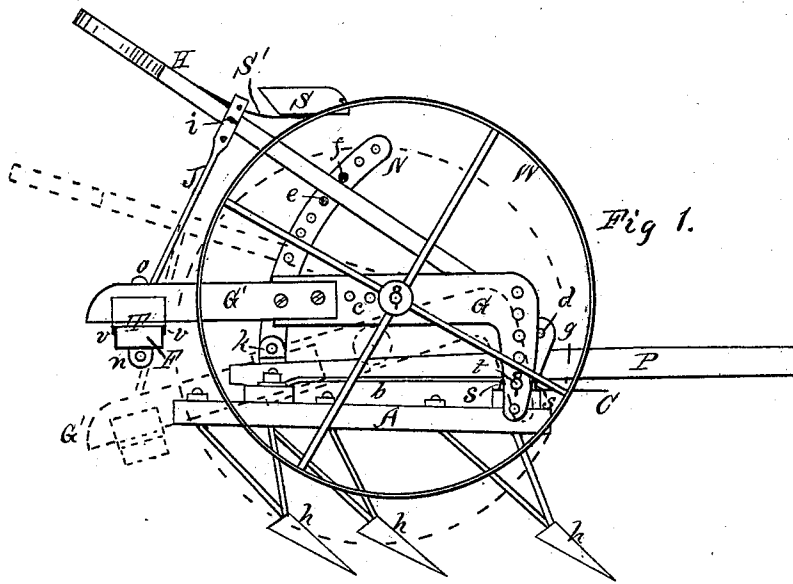


Fig 1.

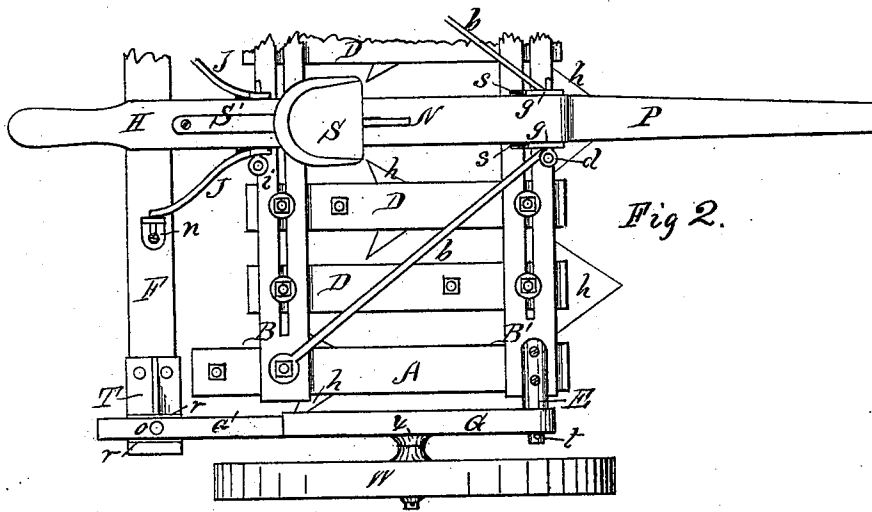


Fig 2.

Witnesses.

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IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **175,392**, dated March 28, 1876; application filed January 26, 1876.

To all whom it may concern:

Be it known that I, **LESTER P. THOMPSON**, of Phelps, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Combined Fallow and Crop Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of my improved cultivator. Fig. 2 is a plan or top view of the right-hand portion of the same.

This invention relates to combined fallow and crop cultivators, in which a primary and a secondary frame are employed; and it consists, mainly, in a novel method of adjusting the relative position, vertically, of the two frames in this class of cultivators, and in making the secondary frame invertible, whereby the vertical adjustability of the cultivator is doubled.

The primary frame consists of the side bars *A*, to which are attached, at front and rear, slotted cross-bars *B* and *B'*, and to these are adjustably attached the intermediate tooth-bars *D*. The pole *P* is also attached rigidly to the bars *B* and *B'*. The teeth *h* may be provided with any suitable hanger-shanks, preferably braced hangers, as shown in Fig. 1. I employ a metallic jaw or saddle, *s*, bolted to the front bar *B'*. The pole is secured at this point by passing through the jaw, and its rear end is bolted to the rear bar *B*. The ears *g* of the saddle or jaw are made to project above the pole to receive the lower end of the seat-bar *H*, which is hinged thereto by the pin *d*. Its upper end is coupled to the foot-bar *F* of the secondary frame by means of the jack-frame *J* and the ear-lugs *n*. The frame *J* is provided with several holes for the pin *i*, whereby the upper end of the seat-bar *H* may be adjusted higher or lower with relation to the cross-bar *F*. The lower end of the segment-standard *N* is hinged to the rear of the primary frame by a double ear-lug, *k*, fixed to the upper side of the pole. Its upper end is provided with a series of holes, and passes loosely through a slot in the seat-bar *H*, to which it may be locked by inserting a key or pin, *f*, above the bar, and a key, *e*, below it.

The primary frame may be thoroughly braced by the diagonal rods *b*.

There is a journal-iron, *E*, bolted to the two front corners of this frame, as shown in Fig. 2, and the outer end is inserted through one of the graduations in the L-shaped metallic stock *G*. The horizontal leg of this stock is also provided with several holes, *c*, into any one of which the axial arm *x* of the carrier-wheels *W* may be screwed or otherwise secured. The wooden extension *G'* is bolted in a recess formed in the rear end of the stock *G*. The arms or bars *G'* are firmly connected to the cross-bar *F* by means of an angle-iron, *T*. This is provided with two lips, *v*, on the lower side, to clasp the sides of the bar *F*, and on the upper face are two transverse plates, *r*, the inner one extending nearly to the upper side of the bar *G'*, and may be braced or strengthened by a central web. The angle-iron is bolted to the bar *F*, and the bar *G'* is secured thereto and in its place in said angle-iron by a bolt, *o*.

The object of the slotted bars *B* and *B'* is to permit the bars *D* to be set farther apart for wider teeth, or nearer together for narrow or chisel teeth, in which latter case the number may be increased. By this means the implement may have its teeth so set as to be capable of either cultivating or hilling corn or potatoes, two rows at a time. The kind of teeth shown, and also the adjustment of the parts, represent the implement as adapted to cultivating fallow ground.

If the driver is to walk, the pin *f* should be placed in such a hole in the standard *N* as will permit the teeth to work to the desired depth, which is governed by the pin resting upon the seat-bar. By omitting the pin *e*, either or both wheels are allowed to drop into a furrow without forcing the teeth deeper into the ground, and also, if the teeth should strike any obstruction, the primary frame might rise without lifting the wheels or the outer frame; but if the driver rides the pin *e* also should be inserted.

The teeth may be raised at any time while the implement is moving or at rest, when the driver rides, by stepping upon the bar *B*, withdrawing the pin *e*, and letting his weight back upon the seat-bar *H*. By placing the

wheel-arms x forward or back in the holes c , the implement may be adjusted or balanced to carry a light or a heavy driver. This might be done by adjusting the seat upon the bar H ; but that would be somewhat objectionable by changing his relative position upon the machine.

To adapt the machine to the cultivation of crops of considerable growth, the secondary frame is detached by unhooking the standard J from the lugs n and withdrawing the pins t from the journals E . The latter allows the stocks G to be sprung off. This frame is then inverted and again attached in any desired grade. It will be seen that the primary frame will thereby be carried considerably higher than before, or as shown, and it will be necessary to apply teeth having longer shanks.

What I claim as my invention is—

1. In combination with the primary and

secondary frames hinged together in front, the fixed pole, hinged seat-bar H , and pivoted standards J , and adjusting segment or bar N , constructed and arranged to operate conjointly, substantially as and for the purposes set forth.

2. In a combined fallow and crop cultivator, the secondary frame, provided with coupling-loops n on the upper and lower side of the foot-bar F , and otherwise constructed as shown and described, whereby it may be attached to the primary frame, as shown, for cultivating fallow ground, or attached thereto in an inverted position, so as to receive longer-shanked teeth or "hillers," to adapt the same machine for cultivating growing crops.

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Witnesses:

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