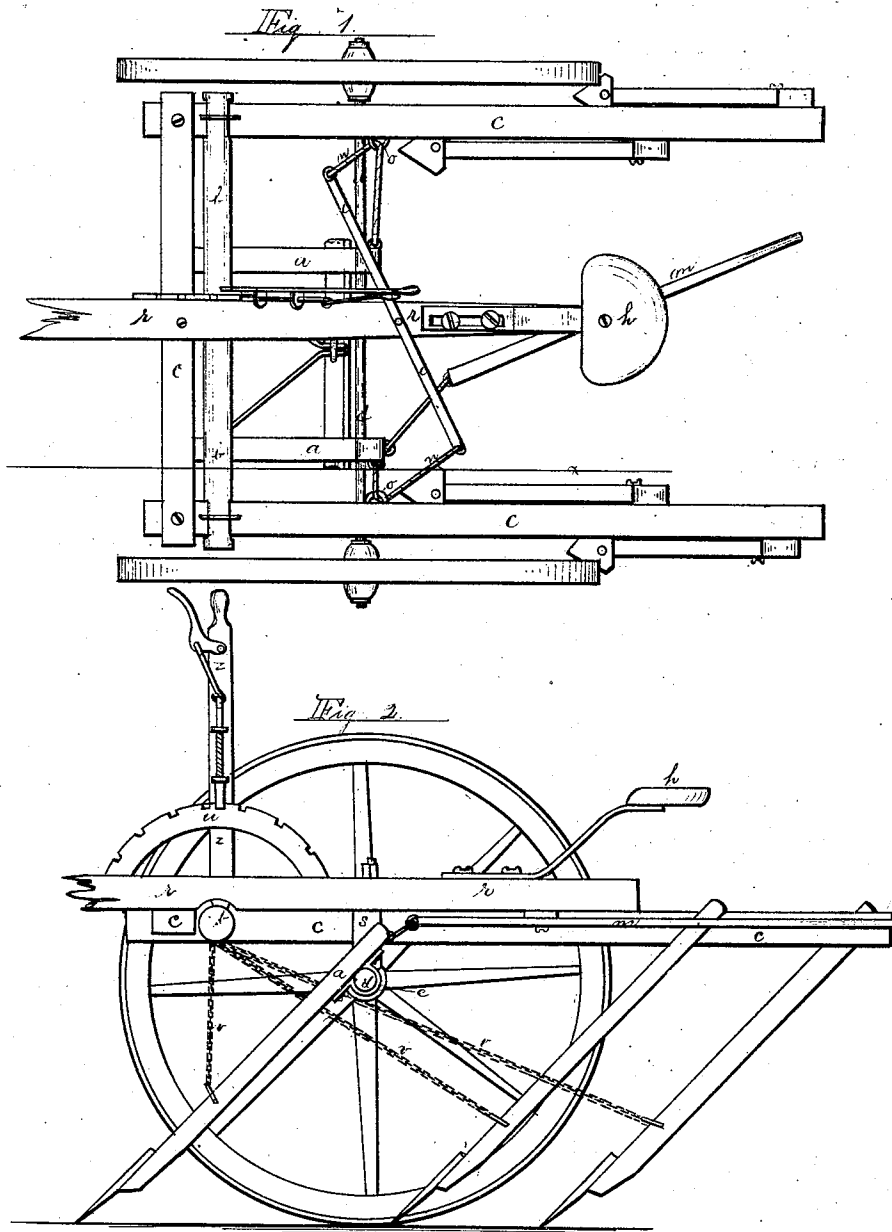


F. FARNSWORTH.

Cultivator.

No. 101,720.

Patented April 12, 1870.



Witnesses

Thos. B. Hutchins
H. Lowe

Inventor

Frank Farnsworth

United States Patent Office.

FRANK FARNSWORTH, OF FRANKFORT, ILLINOIS.

Letters Patent No. 101,720, dated April 12, 1870.

IMPROVEMENT IN SULKY CULTIVATORS.

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

Be it known that I, FRANK FARNSWORTH, of Frankfort, in Will county and State of Illinois, have invented certain new and useful Improvements on a Sulky Cultivator; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings making a part of this specification, in which—

Figure 1 is a plan view on the top, and

Figure 2, a longitudinal sectional view of the same on the line *z*.

The improvements I claim to have made consist principally in the manner in which I obtain the horizontal motion of the two front dodging shovel-beams *a*, and in the simplicity of the construction of the main frame *C*.

The main frame consists of but three pieces, shown in fig. 1, resting on and fastened to the iron axle *d*, to which axle the two front dodging shovel-posts *a* are attached by means of boxes *e*, fig. 2, so they will slide horizontally for the purpose of plowing crooked rows.

The horizontal motion is imparted to said shovel-beams by means of the operator placing his feet on either end of the pivoted cross-bar *i*, as he rides in the seat *h*.

Attached to either end of said cross-bar is a chain or rope, *n*, which, after passing through the staple or pulley *o*, on the inside of the main frame *C*, connects with the shovel-posts *a*, as shown in fig. 1.

It will be readily seen that by working said cross-bar on its pivot at the center, the shovel-posts *a* will be moved to any place desired.

In most machines of this character these two front shovel-posts are attached to the frame in advance of the axle, in which case they cause a heavy weight on the horses' necks when in operation.

It will be readily seen that this is in a measure avoided by having them attached to the axle as shown, and the other shovel-posts all being in the rear of the axle, there can be little or no weight on the horses' necks, especially when the seat *h* may be adjusted for-

ward or backward, as shown in fig. 1, so the weight of the operator will assist in balancing the machine.

In case the operator should desire to walk in the rear of the machine while at work, he can operate the shovel-posts *a* by means of the lever *m*, as shown in the figures.

The simplicity of the frame consists in the employment of but three main pieces *c*, and they are strengthened so there will be no wrenching of the parts by means of the tongue *r*, which attaches to the cross-bar of the frame *C*, and to the axle *d* at its center by means of the post *s*, fig. 2, and extends far enough back to receive the seat *h*, as shown.

In order to regulate the depth of the plows in the ground, or to lift them out entirely, I use the roller *b* mounted on the front end of the frame *C*, as shown, to which I attach the shovel-beams by means of chains *v*, which wind upon said roller by means of operating the lever *z* backward or forward, and may be retained at any desired point by means of the notched segment *u*, as shown. The whole machine is mounted on wheels, as shown, in the ordinary way.

Claims.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is as follows:

1. The combination of the shovel-posts *a*, axle *d*, boxes *e*, chains *n*, pivoted cross-bar *i*, and lever *m*, arranged, operating, and constructed as and for the purposes set forth.

2. The main frame *C*, in combination with the roller *b*, segment *u*, lever *z*, and chains *v*, arranged, operating, and constructed as and for the purposes set forth.

FRANK FARNSWORTH.

Witnesses:

THOS. H. HUTCHINS,
H. LOWE.