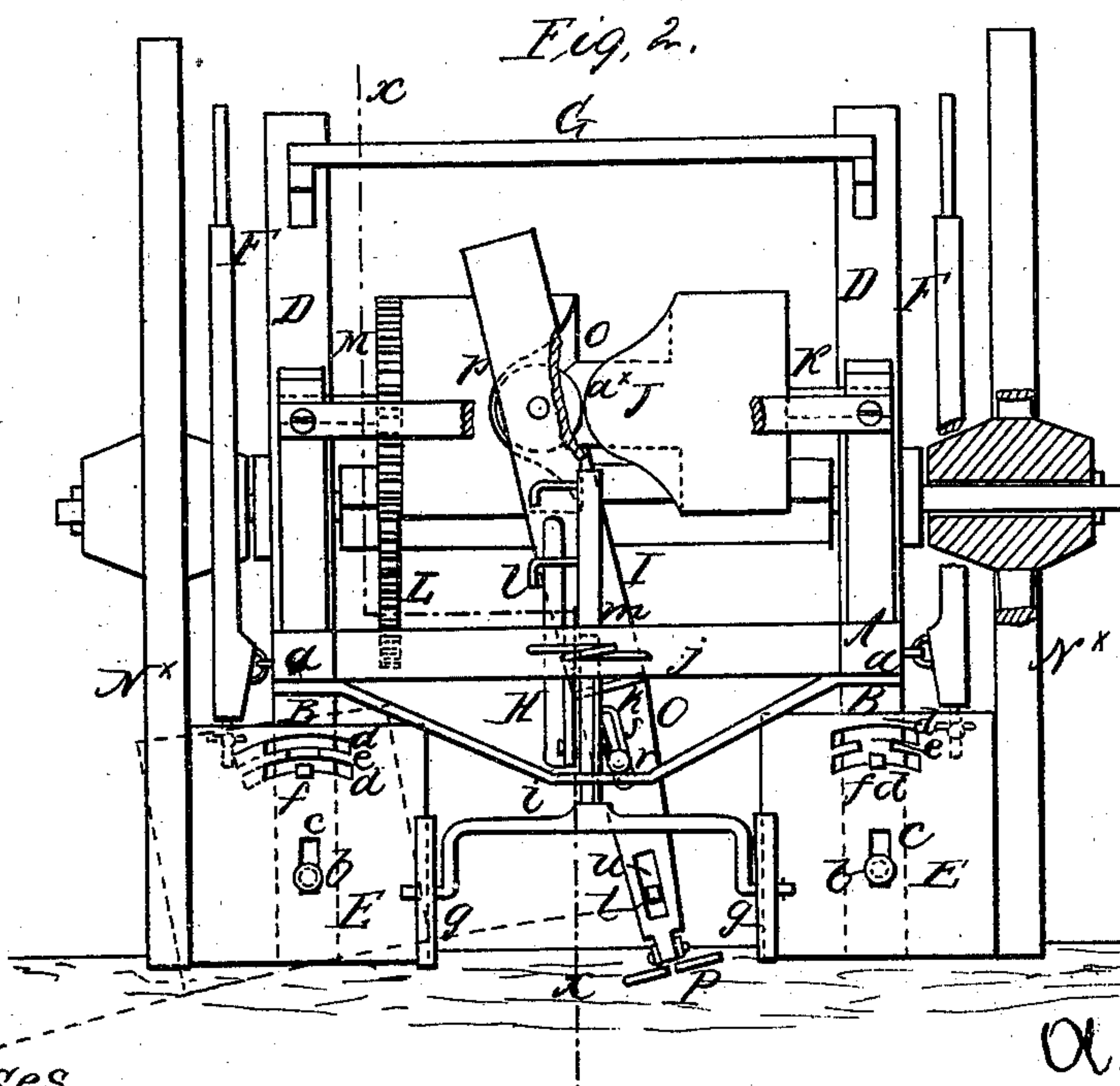
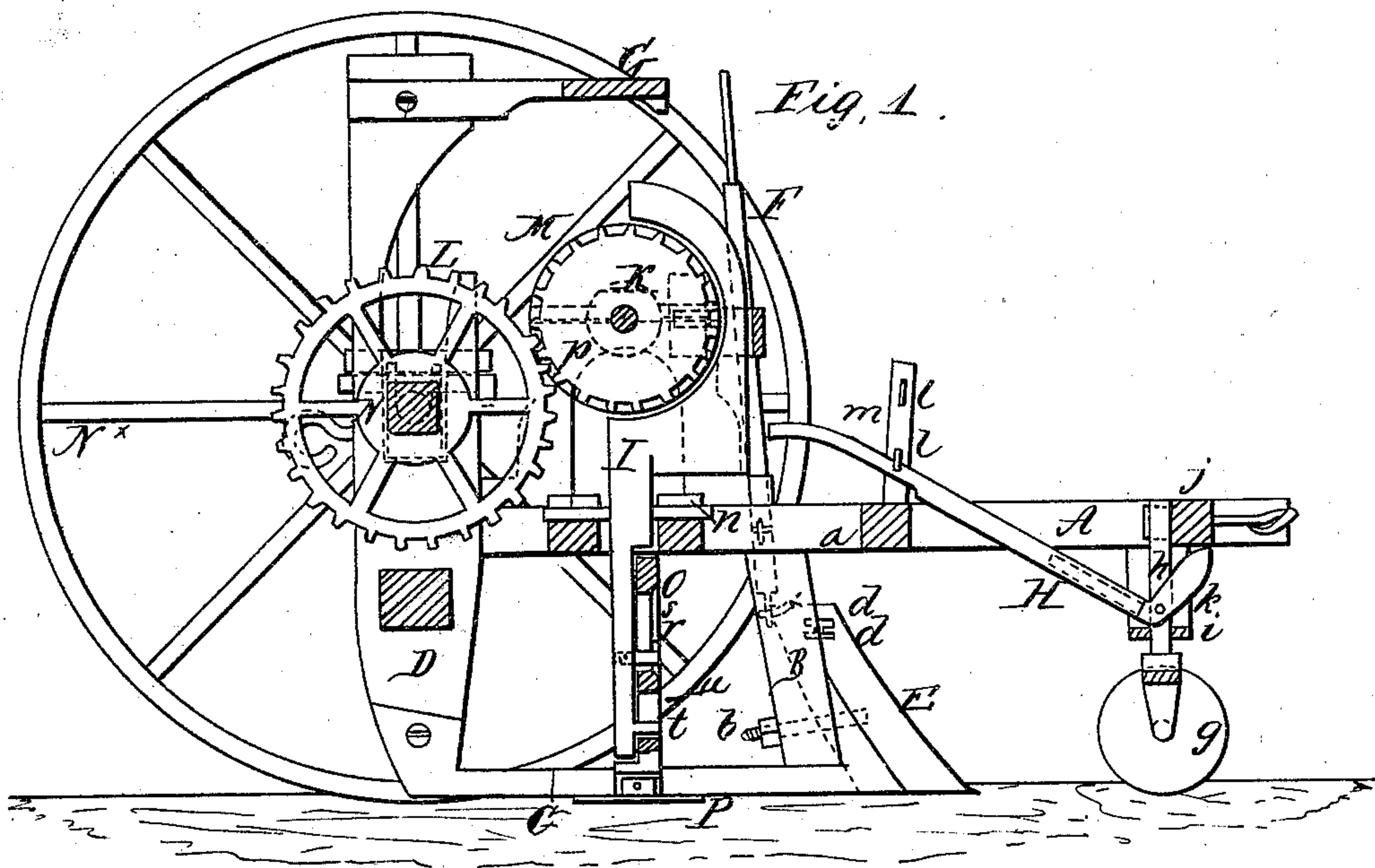


*A. J. Goings.*

*Cotton Cultivator.*

*No. 88,627.*

*Patented Apr. 6, 1869.*



*Witnesses,  
F. S. Sprig  
Wm. A. Morgan.*

*Inventor,  
A. J. Goings.  
per Munn & Co  
Attorneys.*



# United States Patent Office.

A. J. GOING, OF CLINTON, LOUISIANA.

Letters Patent No. 88,627, dated April 6, 1869.

## IMPROVEMENT IN COTTON-CULTIVATOR.

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, A. J. GOING, of Clinton, in the county of East Feliciana, and State of Louisiana, have invented a new and improved Cotton-Cultivator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved machine for cultivating cotton, scraping the earth at each side of the rows of plants, and throwing out the same, so as to leave suitable spaces between the standing plants, the scraping and throwing out being done at one operation.

The object of the invention is to obtain a machine which will perform the work above stated in a thorough and perfect manner, and by a simple mechanism, which will not be liable to get out of repair, or become deranged by use.

In the accompanying sheet of drawings—

Figure 1 is a side sectional view of my invention, taken in the line *xx*, fig. 2.

Figure 2 is a front view of the same.

Similar letters of reference indicate like parts.

A represents the frame of the machine, which may be of rectangular or other suitable form, and of any suitable dimensions.

At about the centre of this frame, there are attached two pendent standards, B B, one at each side.

These standards are slightly inclined, and are connected, at their lower ends, to the front parts of horizontal bars, C, the rear ends of which are connected to the lower ends of uprights, D D, into which the rear ends of the side-bars *a a*, of the frame A, are framed. (See, more particularly, fig. 1.)

E E represent two scrapers, or shares, which are secured to the front ends of the bars C and standards B, by bolts *b*, the latter passing through vertical oblong slots, *c*, in the scrapers, and into bars C and standards B.

In the upper parts of the scrapers there are two curved slots, *d d*, which communicate with each other, by an opening, *e*, and through either of these slots a bolt, *f*, passes, into the standards B B.

The bolts *f* and slots *d d* serve as guides for the scrapers, and admit of a lateral adjusting movement from the bolts *b*, as centres, while the vertical oblong slots *c* admit of an upward and downward adjusting movement of the scrapers, so that the bolts *f* may work in either slot *d* of the scrapers.

The scrapers have each a lever, F, attached, for the purpose of adjusting the scrapers, said levers extending upward, within convenient reach of the driver, or seat G, and the object in adjusting the scrapers is to

make them conform to the surface of inclined ground, as, for instance, when the implement is at work on the sides of hills.

This will be fully understood by referring to fig. 2, in which an inclined ground-surface, and a proper adjustment of a scraper thereto, are indicated in red.

The front part of the machine is supported by a pair of small truck-wheels, *g g*, the axle of which has an upright spindle, *h*, attached, the spindle passing loosely up through a bearing, *i*, secured to the under side of the front part of the frame A, and also passing loosely into the front cross-bar, *j*, of the frame A.

This arrangement admits of the front part of the frame A being raised, when necessary, to allow the scrapers E to pass over obstructions.

The frame A is thus raised by a bent lever, H, having its fulcrum-pin, *k*, attached to the spindle *h*, as shown in fig. 1, the front end of the lever acting against the under side of the cross-bar *j* of the frame, and its rear end engaged, or held by hooks, *l*, in an upright, *m*, of the frame.

At the centre of the frame A, and behind the scrapers E E, there is a bar, I, which works on an axis, *n*, so as to have a lateral vibratory movement, which is given it by a cam, J, on a transverse shaft, K, on frame A.

This cam J is composed of a zigzag groove, *o*, made circumferentially in a cylinder, *p*, which is rotated by gears, L M, from the axle N, of the rear and main wheels N<sup>x</sup>, of the machine.

The upper part of the bar I has a friction-roller, *a*<sup>x</sup>, attached, which fits into the zigzag groove *o*.

The lower part of the bar I has a cutter-stock, O, attached to it by a bolt, *r*, which passes through an oblong upright slot, *s*, in O, with the bar, a projection, *t*, from I, fitting in an upright slot, *u*, in O.

By this arrangement the stock O, and, consequently, the cutter at its lower end, may be adjusted higher or lower, as desired.

The cutter, P, which is attached to the lower end of O, is of triangular form, and may be composed of one or more parts.

It will be seen, from the above description, that as the machine is drawn along, the scrapers E E will scrape the earth at each side of the row of plants, while the laterally-vibrating cutter P will thin out the plants.

I design, in practice, to have the boxes of the axle N, of the wheels N<sup>x</sup> of the machine, adjustable, so that the gears L M may be made to "mark" properly.

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

1. The scrapers E, when adapted to be adjusted

vertically and laterally upon the standards B and horizontal bars C, by means of the vertical slats *c*, parallel curved slots *d d*, opening *e*, bolts *b f*, and levers F, arranged and operating as herein described, for the purpose specified.

2. The cutter P, adjustably connected to the arm I, by means of the slots *s u*, in the stock O, the screw *r*, and the projection *t*, upon the bar I, as herein described, for the purpose specified.

3. The combination of the gearing L M, cam J, vibrating bar I, with its cutter-stock O, the scrapers E E, and truck-wheels *g g*, all arranged to operate in the manner substantially as and for the purpose specified.

A. J. GOING.

Witnesses:

CHARLES P. DELEE,  
JAMES NESOM.