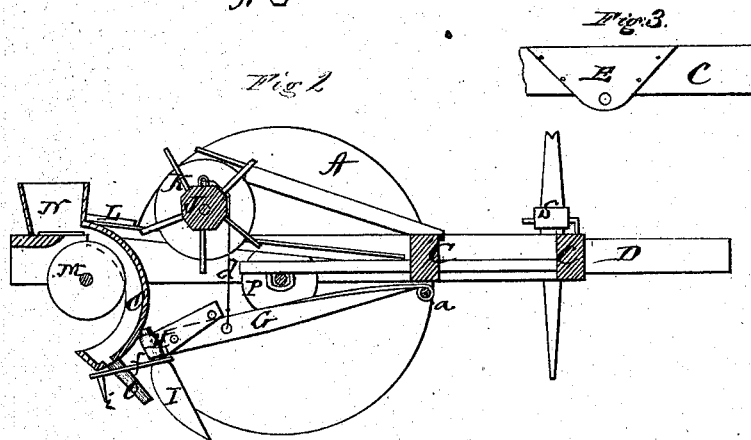
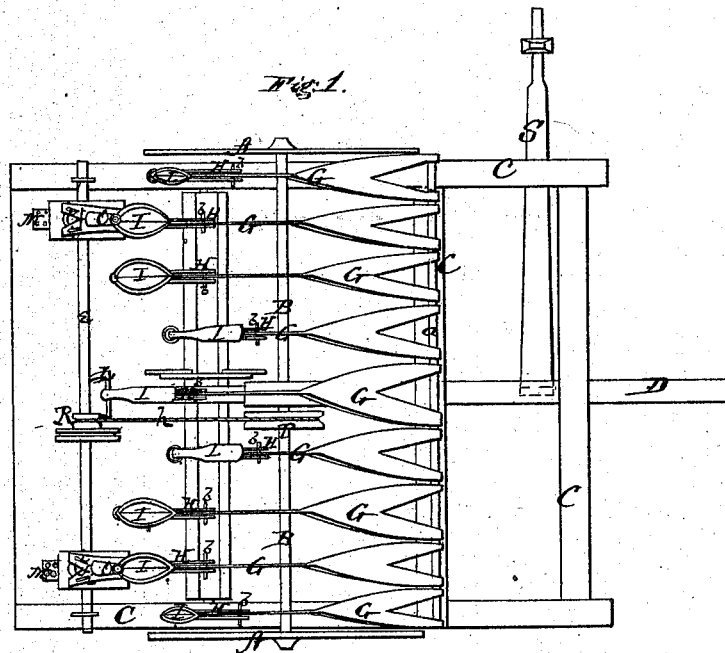


J. CLEMENTS.
Corn Cultivator.

No. 107,760.

Patented Sept. 27, 1870.



Witnesses
Harry King,
J. C. Clements.

Inventor:
Jesse Clements.
per Almon D. Mason
Att'y.

UNITED STATES PATENT OFFICE.

JESSE CLEMENTS, OF BLOOMING GROVE, INDIANA.

IMPROVEMENT IN CORN-CULTIVATORS.

Specification forming part of Letters Patent No. **107,760**, dated September 27, 1870.

To all whom it may concern:

Be it known that I, JESSE CLEMENTS, of Blooming Grove, in the county of Franklin, and in the State of Indiana, have invented certain new and useful Improvements in Corn-Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a corn-cultivator, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a bottom view, and Fig. 2 a longitudinal vertical section, of my machine. Fig. 3 is a side view of a section of one of the side beams, and Fig. 4 is a plan view of one of the corn-hoppers.

A A represent the wheels, which are five feet in diameter, and secured to a revolving axle, B, passing through suitable journal-boxes on the under side of the frame C. This frame is made of four pieces of scantling, of sufficient strength for durability, two running lengthwise and two crosswise, both of which latter are forward of the axle B, with a tongue, D, in the center, and with double-tree for two horses.

There are two circular, or rather segmental, irons, E, bolted on the sills near the front, through which pass the rod *a*, on which hinge the tongues or shanks G G. These tongues or shanks are made of bar-iron of sufficient strength, split at the front end and spread apart about six inches, and twisted just back of the split to stand edge up, each fork having an eye to fit the rod *a*, which is about one-inch round rod. The center tongue or shank is about four and a half feet long, the next on each side four feet, the next on each side four and a half feet, the next to those five feet, and the outside ones on either side are four and a half feet.

On the end of each tongue or shank is a clevis, H, with a socket for teeth, flukes, shov-

els, &c. Said clevises are fastened on the tongues with a bolt, and then run back about twelve inches and turn up, with holes through which a wood pin, *b*, is placed, this pin passing above the tongue. By this arrangement it will guard against and prevent breakage, as the pins *b b* break and the flukes I I fall back.

The teeth are varied from a cutter to a shovel, which can be changed to suit the size of the corn, and the depth is regulated by a roller, J, placed in the frame back of the axle and over the shovels, with a latch-wheel, K, by which the depth is easily regulated.

The tongues or shanks G G are coupled to said roller by chains *d d*, and the latch-wheel on said roller is arranged convenient to the driver's seat L, which is on a line with a tongue of the carriage and back of the gage-roller. The driver's seat is arranged so that he has the team and a row of corn always before his eyes at the same time.

The planting is done by the following arrangement: A small shaft, *e*, is placed on the frame back of the driver's seat, on which shaft are placed two cylinder-wheels, M M, about twelve inches in diameter, with two rows of holes, varying from two to three inches apart, with a screw sunk in each hole to regulate the dropping. Said cylinders are arranged about three and a half feet apart on the shaft. The hoppers N N are arranged so that the cylinders or wheels run through them, with a slide in the hopper and over the cylinder, so that it will cover the one or other row of holes. Beneath the wheels is placed a spout, O, to conduct the corn into the furrow, which is made by two of the shovels, arranged to suit the width desired, on each of which is placed an iron, *f*, in the shape of the letter V, fastened on above the shovel, with the open end back, and two small cutters, *i i*, set so as to cover the corn.

The planter is operated by a flat chain, *h*, from a pulley, P, on the axle, and one, R, on the dropper-shaft *e*. I also provide a gage, S, for furrowing off the ground, said gage consisting of a staff about six feet long, with a cross-piece sliding on one end thereof, to point in the furrow last made. The other end is hinged on the center and front of the frame, so that it can be turned on either side at pleasure.

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

1. The arrangement, in a cultivator, of the forked shanks G G, provided with the pivoted clevises H H, carrying the shovels I I, and the V-shaped irons *ff*, with their cutters *ii*, all hinged to the rod *a*, and connected to the roller J, substantially as set forth.

2. The combination, in a cultivator, of the wheels A A, axle B, frame C, tongue D, shanks G G, clevises H H, shovels I I, roller J, latch-

wheel K, planter M N O, seat L, cutters *ii*, and with or without the gage S, all constructed and arranged as described, to operate substantially in the manner and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of February, 1870.

JESSE CLEMENTS.

Witnesses:

T. J. POWERS,
E. M. MCCREADY.