



# United States Patent Office.

JAMES H. CHAPMAN, OF NEWTON, IOWA.

Letters Patent No. 88,275, dated March 30, 1869.

## IMPROVEMENT IN GARDEN-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, JAMES H. CHAPMAN, of Newton, in the county of Jasper, and in the State of Iowa, have invented certain new and useful Improvements in Garden-Cultivators; and 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.

The nature of my invention consists in the construction and general arrangement of a "garden-cultivator," which is simple, light, and easy to operate.

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, which form a part of this specification, and in which—

Figure 1 is a perspective of the carriage for the cultivator, with one of the implements attached; and

Figures 2, 3, and 4, are perspectives of other implements that may be attached to the carriage.

The object of my invention is to furnish a light carriage to be pushed or pulled by hand, and to which I attach any one of a series of implements, by which the work in a garden may be readily accomplished.

This carriage, with the implements, I call a "garden-cultivator."

A represents the axle, on each end of which is placed a wheel, B.

One of these wheels is removed in fig. 1, the better to show the construction of the carriage.

From the axle A, two arms, C C, project on one side, said arms being, for a suitable length, straight, and then curved upward, and at their outer ends connected by a handle, D.

At a suitable point from the axle A, the arms C C are connected by a cross-bar, E, which strengthens the same.

Between the arms C C, at a suitable point between the handle D and cross-bar E, is placed a wheel, F, the axle of which has its bearings in the said arms.

This wheel may be used or dispensed with, whichever may be desired.

The implements which are attached to the carriage thus constructed, are each attached to a beam, which on its upper side is provided with metal bars, extending upward. Said metal bars being provided with a num-

ber of holes, and passed through slots in the arms C C, where they are held by pins passing through said arms and holes, the implements may be raised or lowered at pleasure.

In fig. 1, I have represented a cutter, H, which will run any desired depth under ground, cutting off all weeds, &c.

This cutter is secured to the under side of a beam, G, said beam having on its upper side two metal bars *a a*, and thus secured to the under side of the arms C C, by means of pins *b b*.

Fig. 2 represents a rake, consisting of the beam G', metal bars *a' a'*, and a series of teeth, I I, which latter are curved forward, and secured to the under side of the beam G'.

This rake will tear to pieces and rake up weeds or trash, and by raising the handles of the carriage, this will all be deposited in a pile.

In fig. 3, I have shown three small plows, J J, attached to the under side of a beam, G", said beam also having metal bars *a" a"*, to attach it to the carriage.

Fig. 4 shows one plow, K, attached to a beam, G"', having metal bars *a''' a'''*.

This plow can be used at the side, as shown, to throw up dirt to the row of vegetables, or it may be set in the centre, to mark out and trench with, and to cover the seeds when drilled in the trench.

It will be seen that all these implements, when attached to the carriage, can be raised or lowered, so as to work at any depth required, and they may also be reversed, so that the cultivator may be pushed or pulled, whichever may be desired.

Having thus fully described my invention,

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

The combination of the curved arms C C, axle A, wheels B B and F, cross-bar G and its plates *a a*, supporting the shovels H I J K, or their substitutes, all substantially as herein specified.

In testimony that I claim the foregoing, I have hereunto set my hand, this 11th day of January, 1869.

J. H. CHAPMAN.

Witnesses:

S. G. SMITH,  
J. A. HAMMER.