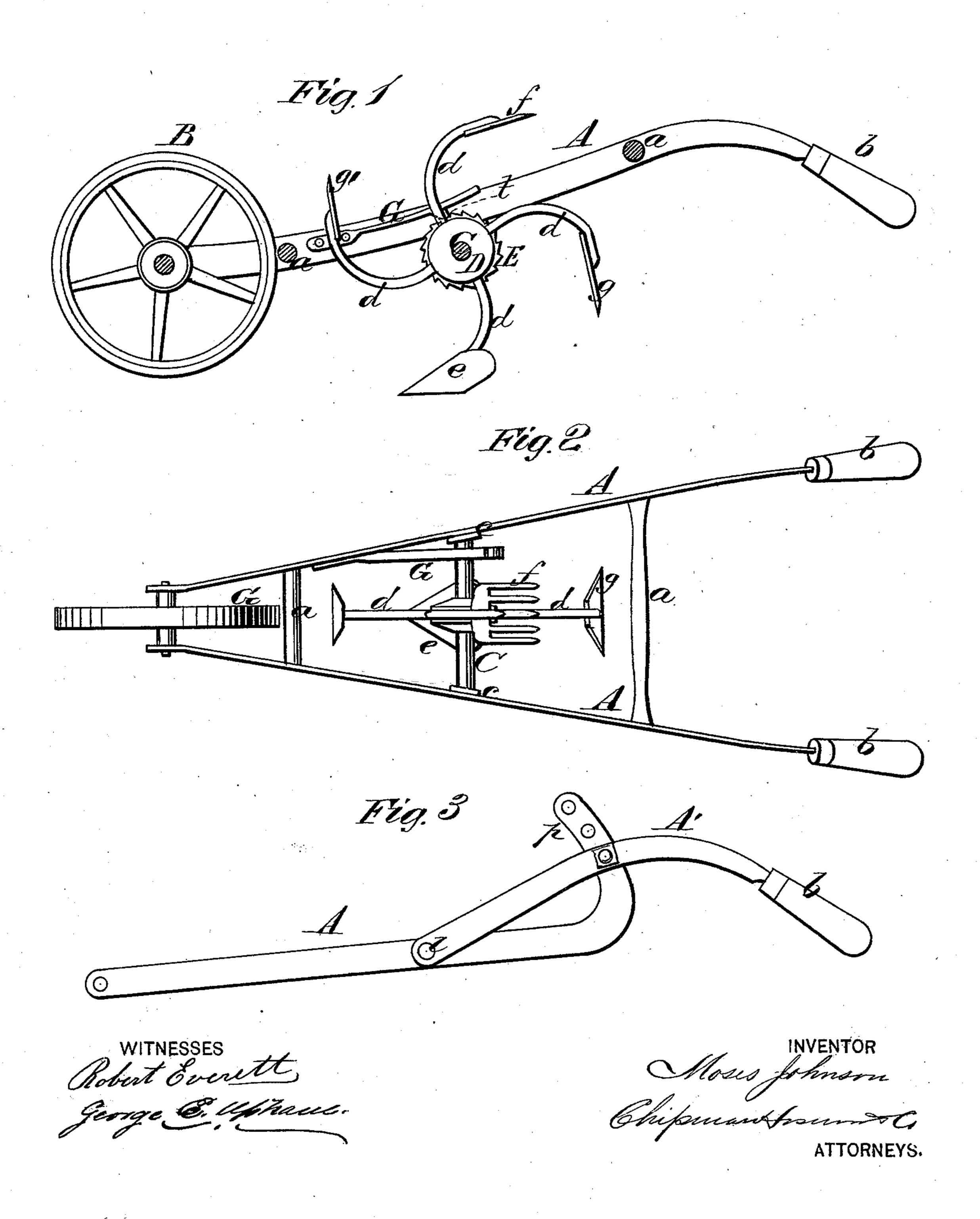
## M. JOHNSON. GARDEN-WEEDER.

No. 176,963.

Patented May 2, 1876.



## UNITED STATES PATENT OFFICE.

MOSES JOHNSON, OF LOCKPORT, NEW YORK.

## IMPROVEMENT IN GARDEN-WEEDERS.

Specification forming part of Letters Patent No. 176,963, dated May 2, 1876; application filed April 15, 1876.

To all whom it may concern:

Be it known that I, Moses Johnson, of Lockport, in the county of Niagara and State of New York, have invented a new and valuable Improvement in Rotary Hand-Weeder for Gardens; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical sectional view of my machine, and Fig. 2 is a plan view. Fig. 3 is a detail view.

This invention has relation to garden implements; and it consists in combining with a hand-barrow a number of cultivating devices, which are applied to arms radiating from a shaft, which shaft can be turned at pleasure, and any one of said devices adjusted in position for operation, as the nature of the work to be done requires, and securely held in such position, as will be hereinafter explained.

In the annexed drawings, A A designate the arms of the barrow, which are connected together by cross-bars a a, and provided with handles b b on their rear ends, and supported by a wheel, B. C designates an axle, which is adjustable about its axis in bearings c, and on which are keyed a hub, D, and a ratchet-wheel, E. From the hub D spring a number of curved arms, d, one of which has attached

to it a cultivator-tooth, e; another, a rake, f; another, a broad shovel, g, and another, a narrow shovel, g'.

Any other cultivating device may be sub-

stituted for any one of those shown.

G designates a spring, having a pawl-tooth, t, formed on it, which prevents the axle C from turning backward, but allows it to be turned forward, for bringing any one of the cultivating devices into a position for operation, as may be desired, at the same time holding the other cultivating devices out of operation.

For the purpose of adjusting the handles to suit persons of different heights, I make each arm of two pieces, A A', pivoted together at i, (see Fig. 3,) and connect the rear piece A' to the upturned arc p of the front piece A by means of a removable bolt passed through one of a number of holes made through the said arc, and through the rear portion A'.

What I claim as new, and desire to secure

by Letters Patent, is—

The rotating axle C, having ratchet-wheel E and radial arms d, for the attachment of cultivating devices, in combination with the spring tooth-pawl G, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

MOSES JOHNSON.

Witnesses:

J. J. ARNOLD,

H. W. PALMER.