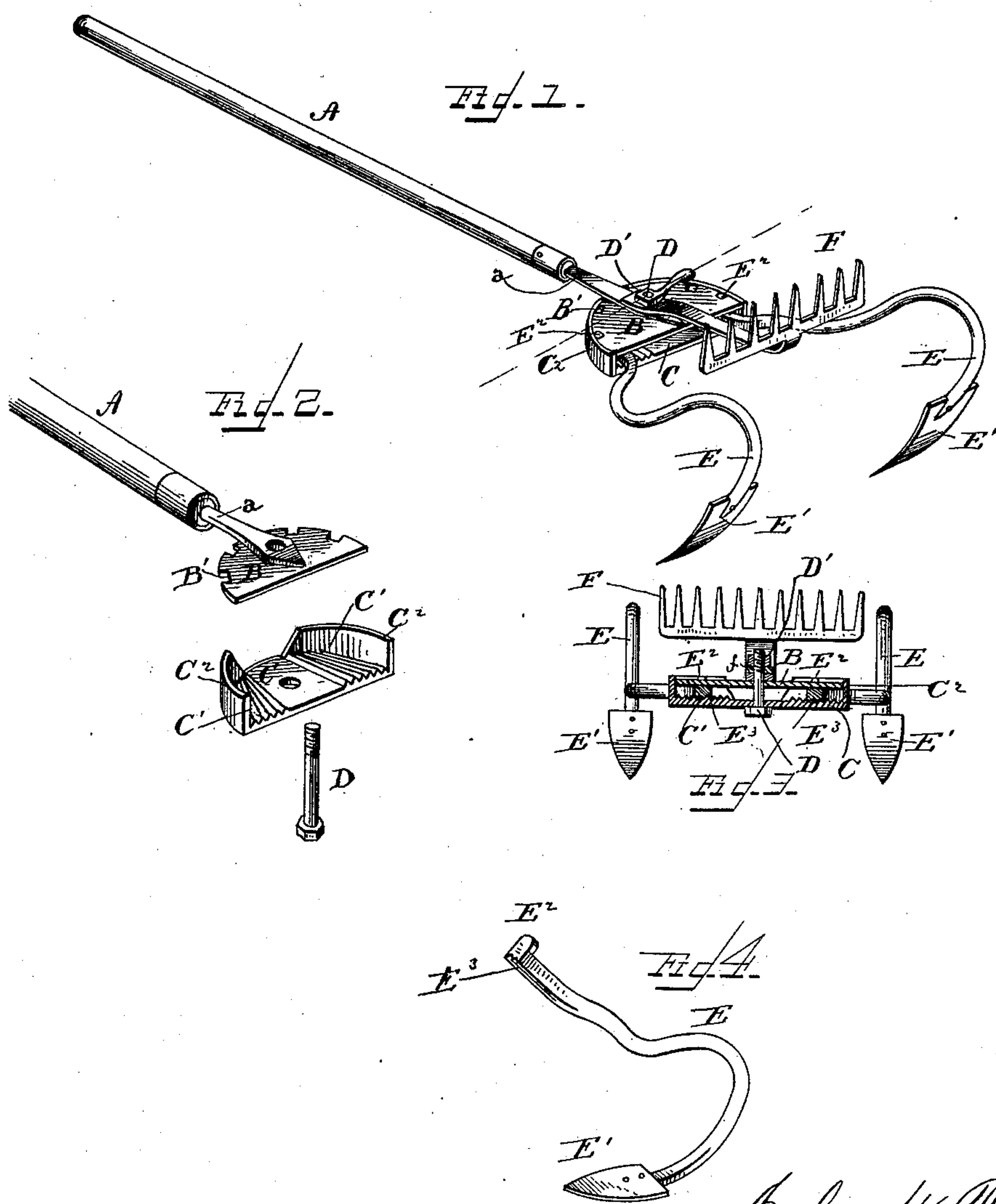


(No Model.)

J. W. POWER.
COMBINATION GARDEN TOOL.

No. 351,712.

Patented Oct. 26, 1886.



WITNESSES
J. L. O'Rand
Arthur L. Morsell

John W. Power,
INVENTOR
By Louis Bagger & Co.,
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN WILLIAM POWER, OF CARTHAGE, INDIANA, ASSIGNOR OF ONE-HALF
TO FREEMONT PORTER, OF SAME PLACE.

COMBINATION GARDEN-TOOL.

SPECIFICATION forming part of Letters Patent No. 351,712, dated October 26, 1886.

Application filed June 6, 1885. Serial No. 167,816. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILLIAM POWER, a citizen of the United States, and a resident of Carthage, in the county of Rush and State of Indiana, have invented certain new and useful Improvements in Combination Garden-Tools; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists in the improved construction and arrangement of parts of a combination garden-tool, which will be hereinafter fully described, and particularly pointed out in the claims.

Referring to the annexed drawings, Figure 1 is a perspective view of my improved combination garden-tool. Fig. 2 is a perspective detail view of the upper and lower plates of the head, in which the hoes are secured in their adjusted positions. Fig. 3 is a sectional view taken on line *xx*, Fig. 1; and Fig. 4 is a perspective detail view of one of the adjustable hoes.

The same letters of reference indicate corresponding parts in all the figures.

Referring to the several parts by letter, A represents the handle of my improved combination garden-tool, to the lower end of which is attached, by means of the tang *a*, a semicircular metallic plate, B. The rear curved edge of this plate B is provided with the recesses B', for the purpose hereinafter set forth, the plate being of such a size as to adapt it to fit within the upwardly-projecting guide-flange C² of a lower semicircular metallic plate C, the said flange being formed on the curved edge of the lower plate, as shown. A screw, D, passing centrally through the two plates, serves to connect them adjustably together.

E E represent the adjustable hoes, each of which is formed of a curved arm, to the lower downwardly-extending end of which is secured a blade, E', which is beveled and sharpened on its operative edges, as shown, the rear end of each curved arm being formed at its extremity with an upwardly-extending pro-

jection, E², adapted, when the rear end of the said arm is inserted between the upper and lower plates of the head, to enter and fit within one of the edge recesses B' in the rear curved edge of the upper plate, B, this arrangement preventing the hoes pulling out of the said head after they have been secured within the same by tightening the nut D' on the upper projecting end of the screw D, which passes through the two plates, as before described. The under side of the rear end of each of the arms E E is provided with the corrugations E³, adapted to engage with similar corrugations C' on the upper or inner face of the lower metallic plate C, so that when the hoes have been adjusted at the requisite distance apart and the nut D' has been screwed down the said corrugations will hold the hoes firmly in their adjusted position and effectually prevent their working sidewise, which would otherwise be liable to occur.

It will be seen from the foregoing that the distance or space between the hoes may be regulated by the operator according to the character of the work which it is desired to perform.

F represents a rake the short metallic handle of which is provided at its end with a screw-threaded aperture to adapt the rake to be secured in operative position upon the top of the head in which the hoes are adjustably secured, the upper screw-threaded end of the screw D passing through the aperture in the end of the rake-handle, and the nut D' being screwed upon the same above the rake-handle, so as to hold the rake firmly in its operative position.

When desired, a potato-digger, bladed hoe, or other implement provided with a suitable apertured handle may be secured upon the screw D in place of the rake here shown, this change being readily and easily effected by simply removing the nut D', which holds the tool in its operative position.

From the foregoing description, taken in connection with the accompanying drawings, the construction and arrangement of my improved combination garden-tool will be readily understood without requiring further explanation.

It will be seen that my improved tool is

simple in construction and at the same time very convenient and efficient in its operation. The adjustability of the hoes enables them to be used for every description of work for which hoes are adapted, and enables them to perform the same in a better manner and in a shorter space of time than was heretofore required.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination of the adjustable hoes, consisting of the curved arms having the upward projections at their rear ends, and the blades having the beveled edges, the lower metallic plate, the upper plate connected to the handle and provided with the recesses, and the screw having the binding-nut, all constructed and arranged to operate in the manner set forth.

2. The combination of the adjustable hoes, consisting of the curved arms, the rear ends of which are corrugated on their lower side and provided with the upward projection, and the blades having the beveled edges, the lower metallic plate having the corrugations on its upper side, the upper plate connected to the

handle and provided with the recesses, and the screw having the binding-nut, all constructed and arranged to operate in the manner and for the purpose shown and set forth.

3. The combination of the adjustable hoes, consisting of the curved arms having the upward projections at their rear ends, and the blades having the beveled edges, the lower semicircular metallic plate having an upwardly-projecting flange upon its curved edge, the upper plate connected to the handle and provided with the recesses, and the screw having the binding-nut, substantially as set forth.

4. The combination of the handle having a tang, the rake having the short metallic handle provided with the screw-threaded aperture, and the screw having the binding-nut, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN WM. POWER.

Witnesses:

CHARLES O. NIXON,
ALLEN W. NEWSOM.