

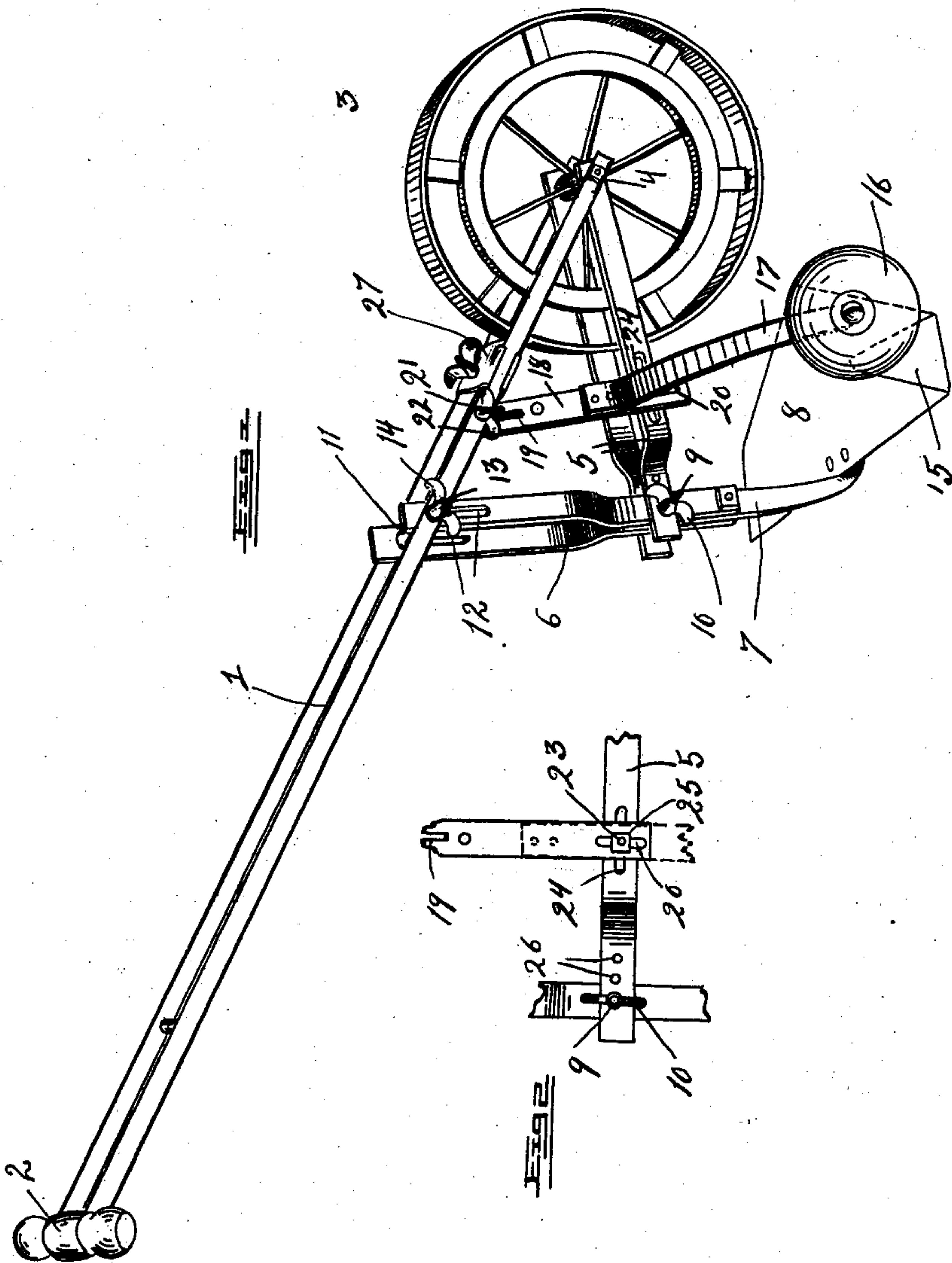
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PATENTED JAN. 19, 1904.

E. PIGGOTT.
WHEEL HOE.

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NO MODEL.



Witnesses
C. F. Wright
M. C. Cook

Inventor
Edmund Piggott.
By R. B. Wheeler & Co.
Attorneys

UNITED STATES PATENT OFFICE.

EDMUND PIGGOTT, OF DETROIT, MICHIGAN, ASSIGNOR TO PIGGOTT MANUFACTURING COMPANY, LTD., OF DETROIT, MICHIGAN.

WHEEL-HOE.

SPECIFICATION forming part of Letters Patent No. 750,218, dated January 19, 1904.

Application filed October 10, 1902. Renewed June 4, 1903. Serial No. 160,021. (No model.)

To all whom it may concern:

Be it known that I, EDMUND PIGGOTT, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michigan, have invented certain new and useful Improvements in Wheel-Hoes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a wheel-hoe; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claims.

The objects of the invention are to provide a simple and inexpensive hoe of the character described wherein the arrangement is such as to enable an adjustment of the handle to suit the height of the operator, to provide for changing the angle of the blade according to the character of the work to be performed, and to provide for cutting the earth in advance of the blade and by the side of the row of plants, to obviate the tearing of the plants out of the ground by a loosening of the earth's crust.

The above objects are attained by the combination and association of parts illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of an implement involving my invention. Fig. 2 is an elevation in detail of some of the parts thereof.

Referring to the characters of reference, 1 designates the handle, which comprises two parallel bars having at their free ends a suitable handle-bar 2. Journaled between the lower ends of the bars of the handle is a wheel 3, whose axle-bolt 4 is suitably secured in the bars of the handle. Mounted upon the axle-bolt is a rearwardly-extending fork 5, the sides of which embrace the wheel 3 and receive between their rear ends the depending end of the fork 6, between the sides of which the upper end of the standard 7 of the hoe-blade 8 is secured. The standard of the blade is secured between the sides of the fork 5 by

the bolt 9, which passes through said fork 50 sides, the standard 7 and the embracing sides of the fork 6 receiving upon the projecting end thereof a thumb-nut 10. The upper ends of the sides of the fork 6 lie between the bars of the handle and are separated by the interposed sleeve 11. The sides of the fork 6 are slotted, as at 12, and a bolt 13 is passed through the bars of the handle, the slots 12 in the fork sides, and the sleeve 11, said bolt receiving on its outer end the thumb-nut 13. By means of this arrangement the handle may be raised or lowered by loosening the thumb-nut so as to permit the bolt 13 to slide in the slots 12. After adjustment the handle is secured in place by tightening the nut. The forward edge of the blade describes an obtuse angle, but may be of any desired shape. At one end the blade is turned upwardly, as at 15, to form a vertical cutting edge, which projects through the surface of the ground and indicates the line upon which the hoe is working. To prevent said vertical portion 15 from tearing the earth and injuring the plant, a rotary cutting-disk 16 is employed, which is adapted to cut through the surface of the ground in advance of the vertical portion 15 of the blade. This rotary disk is journaled upon an outwardly and downwardly curved arm 17, whose upper end is secured to a vertical standard 18, having at its upper end a slot 19 and at its lower end a slot 20. A bolt 21 passes through the bar of the handle and the slot 19 and carries a thumb-nut 22. A bolt 23 passes through the slot 20 and a slot 24 in the fork side 5, receiving a nut 25 upon its outer end. The slots 19 and 20 allow of a vertical adjustment of the standard 18 to raise and lower the cutter-disk, as required, while the slot 24 allows said disk to be swung forwardly or rearwardly, as the conditions of the ground require, to change its location with respect to the vertical portion 15 of the blade. To provide for swinging the blade to change the pitch thereof, the rear ends of the sides of the fork 5 are provided with a row of apertures 26, through which the bolt 9, which secures the standard of the blade to said fork, may be passed, whereby said blade may be swung upon the bolt 13, which serves as a

pivot therefor, and the pitch of the blade may thereby be changed as desired.

With this improved device the operator may walk between the rows of plants and cut the weeds from between them, enabling a great deal of ground to be covered within a comparatively short time.

Mounted upon the bars of the handle is a scraper-plate 27, which prevents an accumulation of dirt upon the face of the wheel 3.

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

1. In a wheel-hoe, the combination of the handle the wheel journaled at the end thereof, the fork extending horizontally from the axle of the wheel, a vertical fork connected to the handle to allow a vertical movement of the handle thereon, the lower end of the vertical fork being adjustably connected between the sides of said horizontal fork, a blade, a vertical standard connected thereto, said standard being secured to the lower end of said vertical fork.

2. In a wheel-hoe, the combination of a handle composed of parallel bars, a transporting-

wheel journaled between said bars, a horizontally-extending fork mounted on the axle of said wheel, a vertical fork attached to the horizontal fork and to the handle, a hoe-blade depending from said vertical fork, a rotary cutter-disk adapted to travel slightly in advance of the blade at one side thereof, said disk depending from a vertical standard attached to the horizontal fork and to the handle, said standard being adjustable vertically and horizontally, and means for locking said standard in position.

3. In a wheel-hoe, the combination of a handle, a transporting-wheel journaled on the handle, a horizontal fork embracing the wheel and extending rearwardly, a hoe-blade, a vertical standard attached to the hoe-blade, said standard being adjustably connected to the handle and to the horizontal fork.

In testimony whereof I sign this specification in the presence of two witnesses.

EDMUND PIGGOTT.

Witnesses:

E. S. WHEELER,
M. C. POOLE.