S. HEWIT.

Rotary Cultivator.

No. 38,109 Patented Apr. 7, 1863.

Fig. 2.

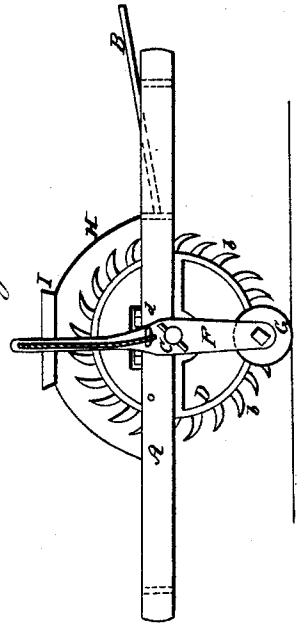


Fig. 4.

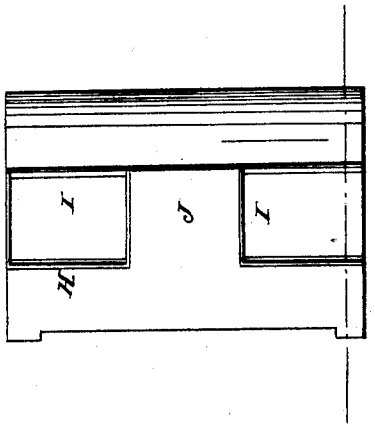


Fig. 1.

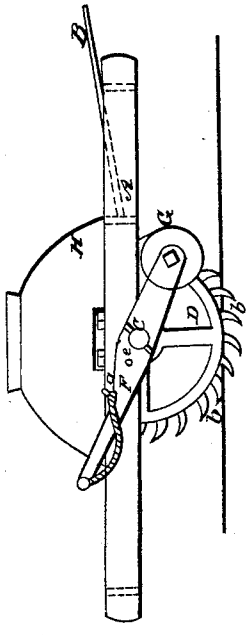
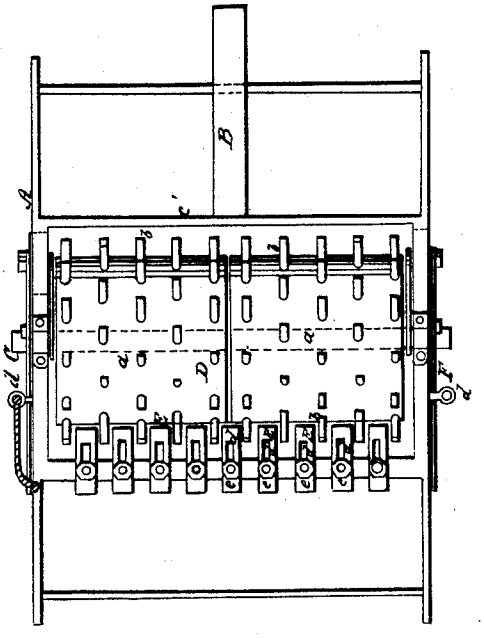


Fig. 3.



Witnesses:

J. W. Coombs

Geo. W. Reed

Inventor:

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per Munn & Co

attys.

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

SILAS HEWIT, OF SENECA FALLS, NEW YORK.

IMPROVEMENT IN CLOD-CRUSHERS.

Specification forming part of Letters Patent No. **38,109**, dated April 7, 1863.

To all whom it may concern:

Be it known that I, SILAS HEWIT, of Seneca Falls, in the county of Seneca and State of New York, have invented a new and Improved Clod Crusher and Pulverizer; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention adjusted in a position for work. Fig. 2 is a side view of the same adjusted in a position for being drawn from place to place. In this view the cap which covers the toothed cylinder is in section, as indicated by the line *x x*, Fig. 4. Fig. 3 is a plan or top view of the same with the cap removed; Fig. 4, a detached plan or top view of the cap.

Similar letters of reference indicate corresponding parts in the several figures.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a rectangular frame, and B a draft-pole attached to it.

B is a shaft or axle, which is secured in the frame A transversely at about its center.

D is a hollow cylinder formed of two equal parts or sections, *a a*, which are placed loosely on the shaft C and allowed to turn independently of each other. The parts *a a* of this cylinder are constructed of cast-iron, and are each provided with curved teeth *b*, of steel or wrought-iron. These teeth may be secured in the shell of the cylinder in any proper way, and they are so curved that their concave surfaces will face toward the back end of the machine, as shown in Figs. 1 and 2. The toothed cylinder D is between two cross-bars, *c c'*, of the frame A, and to the back cross-bar, *c*, there are attached at equal distances apart a series of horizontal plates, E. These plates E are slotted longitudinally, as shown at *d*, and are secured to the bar *c* by bolts *e*, which pass through the slots *d* and into bar *c*.

The slots *d* admit of the plates E being adjusted nearer to or farther from the cylinder D, as will be fully understood by referring to Fig. 3. The plates E are so placed as to be between the rows of teeth *b*, which have a circumferential position on the cylinder, as shown in Fig. 3. The plates E serve as clearers, and prevent the teeth from becoming choked or clogged—a contingency which would be liable to occur if the ground be stiff or clayey.

At each side of the frame A there is a lever or bar, F. These levers or bars are fitted on the ends of the shaft or axle C, and are allowed to turn or work freely thereon, and to the lower end of each lever or bar there is attached a small wheel, G, as shown clearly in Figs. 1 and 2, and through each lever or bar F there is made a hole, *c*. In these holes pins *d* are fitted, said pins passing into the side of the frame A and securing the bars in a vertical position, as shown in Fig. 2. The levers or bars may also be secured in an inclined position by fitting the pins *d* into holes in the sides of the frame A above the levers or bars F, as shown in Fig. 1. When the levers or bars F are adjusted and secured in a vertical position, as shown in Fig. 2, the cylinder D is elevated above the surface of the ground and the machine supported by the wheels G G, and may consequently be drawn from place to place with the greatest facility, and when the levers or bars are adjusted in an oblique position, as shown in Fig. 1, the wheels G G will be above the surface of the earth and the cylinder D in contact with it, the teeth *b* penetrating the earth as the machine is drawn along and the periphery of the cylinder crushing the clods.

The cylinder D is covered by a cap, H, which is of semi-cylindrical form and rests upon the frame A. This cap has two shallow boxes, I I, on its top, one near each end, a space, J, being between the two boxes, which forms the driver's seat, as shown clearly in Fig. 4. The boxes I I are designed to receive stones if it is necessary to increase the weight of the machine in order to make the teeth *b* penetrate in the earth. In working on stiff clayey soils this may be necessary.

This machine may be constructed at a reasonable cost, and will operate in the most effi-

cient manner. The chief or distinctive feature is the very ready manner in which it may be adjusted, both for work and for being transported from place to place.

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

The adjustable clearers E, arranged as shown, in combination with the toothed cylinder D, for the purpose specified.

SILAS HEWIT.

Witnesses:
CADY SILSBY,
WM. CLARKE.