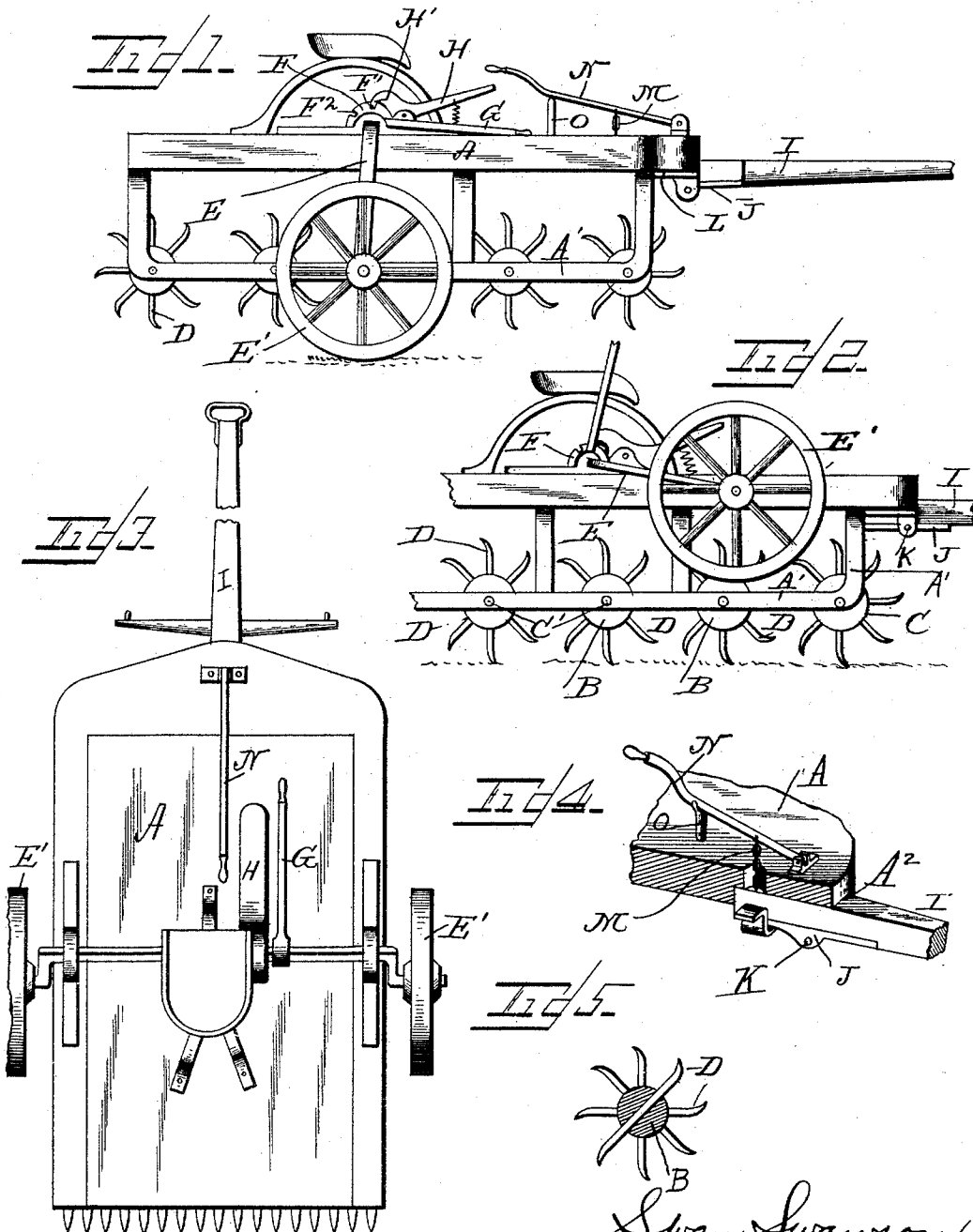


(No Model.)

S. SWANSON.
CULTIVATOR.

No. 468,271.

Patented Feb. 2, 1892.



WITNESSES
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UNITED STATES PATENT OFFICE.

SWAN SWANSON, OF CHICAGO, ILLINOIS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 468,271, dated February 2, 1892.

Application filed January 2, 1891. Serial No. 376,561. (No model.)

To all whom it may concern:

Be it known that I, SWAN SWANSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have
5 invented certain new and useful Improvements in Cultivators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable
10 others skilled in the art to which it appertains to make and use the same.

My invention consists in a new and improved cultivator which is light and strong in its construction and exceedingly effective in its operation; and the invention will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a side elevation showing the carrying-wheels bearing the cultivator. Fig. 2 is a similar view showing the said wheels
20 raised out of the way. Fig. 3 is a top plan view. Fig. 4 is a detail view of the lever controlling the tongue. Fig. 5 is a transverse section of one of the rollers.

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

Referring to the several parts by letter, A indicates the floor or platform of the cultivator, and A' A' its side frames, in the lower
30 part of which the rollers carrying the cultivator-teeth are mounted.

B B indicate the rollers, of which four are here shown employed, these rollers being made of wood and having secured to their ends the metal cap-pieces or plates C, which
35 are formed with the bearing-spindles C', which fit and turn in bearings in the lower part of the side frames A' A'.

The double-ended cultivator-teeth D are square in cross-section and are pointed and sharpened at each end. These teeth are driven
40 diametrically through the wooden rollers B, so that their ends project for an equal distance on both sides thereof, and the pointed ends of the teeth are curved forward, as shown, so that in operation they will leave
45 the earth in a vertical line as the machine is driven forward and the rollers revolve, as will be readily understood. Any number of rollers may of course be employed, according to the
50 size of the cultivator-frame.

E indicates the axle, which is mounted in bearings on the platform A, as shown, and

has journaled upon its cranked outer ends the broad-tired wheels E'. Upon the central part of the axle is secured a cam F, which is
55 formed with two deep recesses F' F². Upon the axle is also secured a hand-lever G within convenient reach of the driver's seat, by means of which the axle can be turned to raise or lower the supporting-wheels E'. By pressing
60 the handle end of the lever G forward and down the wheels E' E' are lowered and the cultivator-frame, with its toothed rollers, raised up above the ground, as shown in Fig. 1, when the hooked inner end H' of a pivoted
65 spring-actuated foot-lever H is pressed into the recess F' of the cam F, and this locks the wheels securely in this position. The machine can then be drawn along the road without the teeth of the rollers coming in contact
70 with the ground. When the field is reached, it is only necessary to press down the outer end of the foot-lever with the foot to release its hooked end from the notch F', when the weight of the machine-body will lower it until
75 the teeth D enter the ground, when the wheels E' will be raised up out of the way and will be held in that position by the hooked end of the lever catching in the recess F² of the cam F.

On the under side of the inner end of the tongue I is bolted a casting J, and a pivot-bolt K passes through this casting and through the inner ends of brackets L, bolted beneath the forward end of the platform A, the inner
85 end of the tongue fitting and playing in a longitudinal recess A², formed in the under side of that end of the platform. The inner end of the tongue is connected by a chain M with a hand-lever N, which is pivoted at its
90 forward end to the top of the platform, as shown.

When the body of the cultivator is raised to draw the machine along the road, the inner end of the hand-lever N is raised and caught
95 and supported on the recessed upper end of a short vertical post O, thus raising the inner end of the tongue and holding the tongue firmly in a horizontal position. When, however, the cultivator is lowered into its operative position, the inner end of the hand-lever is disengaged from the recessed post O, leaving the inner end of the tongue free, so that
100 its outer end can rise and "give" when the

cultivator is running unevenly over the ground in operation.

From the foregoing description, taken in connection with the accompanying drawings, 5 it is thought that the construction, operation, and advantages of my new and improved cultivator will be apparent and that further description is unnecessary.

Having thus described my invention, what I 10 claim, and desire to secure by Letters Patent, is—

In a cultivator, the combination, with a machine-frame having suitable cultivator-teeth 15 mounted within it, of the axle mounted in bearings on the machine-frame and having

the cranked ends, the wheels mounted on said ends, the cam F, immovably secured on the axle and formed with the recesses F' and F², the raising and lowering lever G, secured to the axle, and the centrally-pivoted spring- 20 actuated foot-lever H, formed with the inner locking end adapted to engage in the recesses F' and F² of the axle-cam F, substantially as set forth.

In testimony whereof I affix my signature in 25 presence of two witnesses.

SWAN SWANSON.

Witnesses:

OSCAR GEYER,
CARL PALMER.