(No Model.)

J. CHRISTMAN.

TOBACCO HILLER.

No. 600,303. Patented Mar. 8, 1898.

Fig. 1.

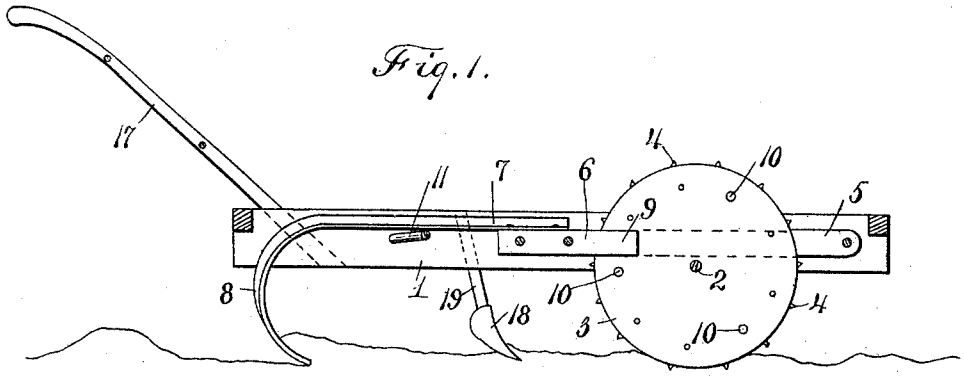


Fig. 2.

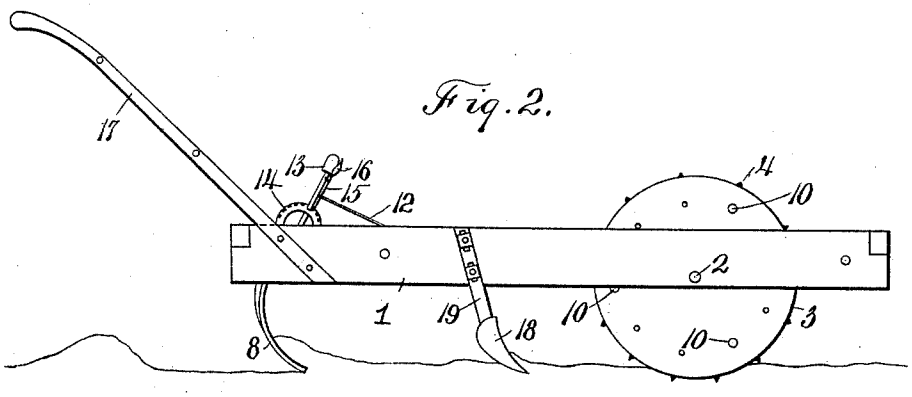
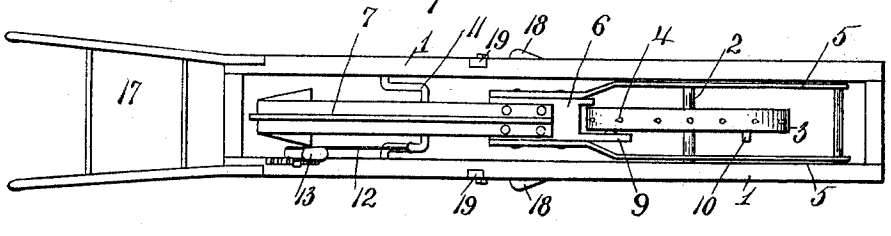


Fig. 3.



Witnesses
W. E. Allen.
Victor J. Evans

Inventor
John Christman.
By John Wedderburn
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN CHRISTMAN, OF CRAVER, OHIO.

TOBACCO-HILLER.

SPECIFICATION forming part of Letters Patent No. 600,303, dated March 8, 1898.

Application filed July 12, 1897. Serial No. 644,200. (No model.)

To all whom it may concern:

Be it known that I, JOHN CHRISTMAN, of Craver, in the county of Clermont and State of Ohio, have invented certain new and useful Improvements in Tobacco-Hillers; and I do hereby 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.

This invention relates to improvements in machines for forming hills in preparing ground for planting tobacco or for other purposes, the object of the same being to provide a machine of this general character which possesses the advantages of being simple and cheap in construction and also the more important advantage of quickly and effectually hilling the soil, accomplishing the work in a more thorough manner than by the use of similar machines which have come under my notice.

With the above objects in view the invention applies more especially to tobacco-hillers, the same comprising in its construction a wheel-frame carrying a vibrating digger and laterally-projecting pins extending from the supporting-wheel and operating the digger, together with a device for throwing the digger out of an operative position, all as will be fully described in the following specification and specifically set forth in the appended claims.

In the accompanying drawings, which form part of this specification, and wherein like numerals of reference refer to similar parts throughout the several views, Figure 1 is a longitudinal section of a tobacco-hiller constructed in accordance with my invention. Fig. 2 is a side view, and Fig. 3 is a plan view, of the machine.

Referring more particularly to the drawings, 1 1 designate longitudinal side beams of the supporting-frame, which are mounted upon a transverse axle 2, carrying the supporting or ground wheel 3, the latter being preferably provided with the usual spurs or traction-points 4 to properly engage the ground. To the forward ends of the longitudinal side beams of the machine is pivoted a metal frame 5, extending rearward and presenting a connecting portion 6, through which is passed the shank or handle 7 of a hoe or digger, which is curved downward at its rear end and has the hoe-blade 8 rigidly secured thereto. The connecting portion 6 of the pivoted frame carrying the hoe or digger is preferably of considerable weight to force the hoe-blade into the ground during the operation of the machine. It will be noted that the pivoted frame which carries the hoe or digger extends beyond the front of the supporting or ground wheel, passing at opposite sides of the same, and extending forward from the weighted portion 6 is an arm 9, the free end of which bears against one side of the rim of the wheel 3, and in connection with this arrangement the wheel is provided with laterally-projecting pins 10, adapted to engage the arm and elevate the digger against the combined weight of the hoe proper and weighted connecting portion.

Upon the longitudinal side beams of the machine is pivoted a curved bar 11, which lies below the shank or handle of the hoe and serves as a stop to arrest the descent of the same, said curved bar or pivoted arch being connected by a rod 12 to operating-lever 13, pivoted to a cross-piece at the rear end of the frame. The adjustment of the lever will regulate the depth to which the hoe will enter the ground, and in order to secure said adjustment a toothed segment 14 is provided and engages a sliding dog 15 upon the operating-lever, the said dog being manipulated in the usual manner by means of the handle 16. When this lever is thrown rearward to the extent of its movement, it will elevate the digger and move the arm 9 out of the path of the laterally-projecting pins extending from the ground-wheel, this serving to throw the machine out of operation.

The operator walks in the rear of the machine and guides the same by the ordinary plow-handles 17, which are secured to the longitudinal side beams and braced in the usual manner.

The machine is provided with cultivator-shovels 18 18, located in front of the hoe or digger and are adapted to loosen the soil in advance of the operation of forming the hills. These shovels are of the ordinary pattern and are attached to standards 19, which are secured to the longitudinal side beams and thoroughly braced.

From the foregoing description, in connection with the accompanying drawings, the construction and operation of my improved tobacco-hiller will be readily apparent, for as the machine is drawn across the field the cultivator-shovels will loosen the soil and the digger will be drawn across the soil for a short distance, and, being struck by one of the pins on the ground-wheel, will be elevated to clear the hill and properly shape the same, after which the weight of the digger will send it into the ground in position to scrape soil for another hill. It will be noted that the rim of the ground-wheel is provided with a series of openings in order that the pins may be adjusted to regulate the distance between the hills. In transporting the machine from place to place the lever 15 is thrown to raise the digger clear of the ground and out of the path of the pins.

The machine constructed in accordance with my invention will form regular hills of a uniform height, and the parts are constructed and arranged with a view to simplicity and cheapness.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a machine for forming hills, the combination of a wheel-frame, a digger pivoted to the forward end of the frame and extending rearward therefrom, a weight attached to an intermediate portion of the digger and comprising a forwardly-projecting arm, and pins attached to the rim of the ground-wheel to engage the forwardly-projecting arms, substantially as shown and for the purpose set forth.

2. In a machine for forming hills, the combination of a wheel-frame, a hoe or digger pivoted at the forward end thereof to extend rearward, pins projecting from the rim of the ground-wheel, an arched bar limiting the downward movement of the hoe or digger, and means for adjusting the arched bar, substantially as shown and for the purpose set forth.

3. In a machine for forming hills, the combination of a wheel-frame, a hoe or digger pivoted to the forward end of the same and extending rearward, pins on the rim of the ground-wheel striking a part of the hoe or digger to elevate the same, an arched bar limiting the downward movement of the hoe or digger, a lever connected to the arched bar and held adjusted by a toothed segment; together with cultivator-shovels depending from the frame and located in advance of the hoe-blade, substantially as shown and for the purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN CHRISTMAN.

Witnesses:
CHRISTOPHER CRAVER,
JOSEPH SPAHR.