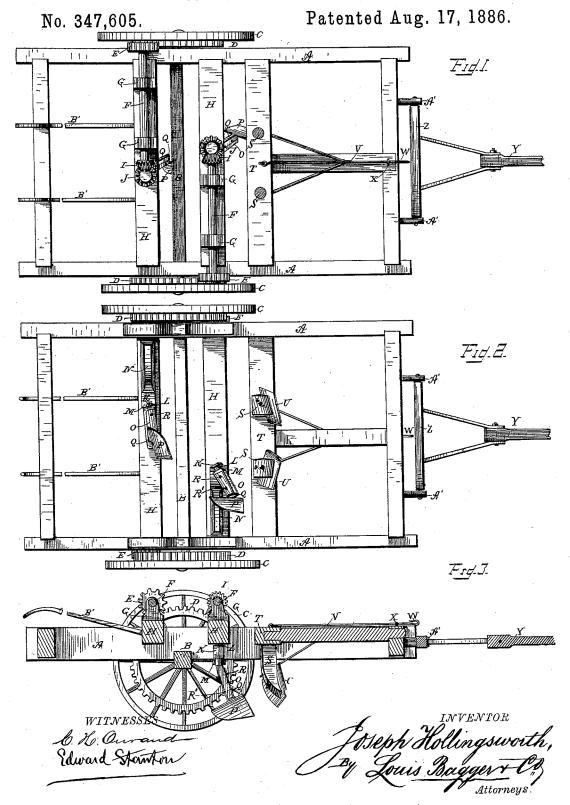
## J. HOLLINGSWORTH.

COTTON HOEING MACHINE.



## UNITED STATES PATENT OFFICE.

JOSEPH HOLLINGSWORTH, OF KILBOURNE, LOUISIANA, ASSIGNOR OF ONE-HALF TO SIMON WITKOWSKI, OF SAME PLACE.

## COTTON-HOEING MACHINE.

SPECIFICATION forming part of Letters Patent No. 347,605, dated August 17, 1856.

Application filed March 20, 1886. Serial No. 195,921. (No model.)

To all whom it may concern:

Be it known that I, Joseph Hollings-WORTH, a citizen of the United States, and a resident of Kilbourne, in the parish of West 5 Carroll and State of Louisiana, have invented certain new and useful Improvements in Cotton-Hoeing Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will en-13 able 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, and in which-

Figure 1 is a top view of my improved cotton-hoeing machine or cotton-chopper. Fig. 2 is a bottom view of the same, and Fig. 3 is a longitudinal vertical sectional view of the machine.

Similar letters of reference indicate corre-

sponding parts in all the figures.

My invention has relation to cotton-hoeing machines or cotton-choppers; and it consists in the improved construction and combina-25 tion of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a rectangular frame mounted upon an axle, B, having two wheels, CC, journaled 30 upon its ends. The inner sides of these wheels are formed with cogged rims D, which engage pinions E upon the outer ends of two shafts, F F, journaled transversely to the frame in bearings G, upon the upper sides of 35 two cross pieces, H H, in the middle of the frame, one cross-piece a short distance in advance of the other. The inner ends of these shafts, which extend to a short distance beyoud the central line of the frame, are pro-40 vided with bevel-pinions II, which mesh with corresponding pinions, J J, upon the upper ends of two shafts, K K, journaled in vertical bearings L upon the cross-pieces, and in bearings M upon the inner ends, of braces N, se-45 cured upon the under sides of the cross-pieces. The lower ends of these vertical shafts are bent so as to form oblique standards O, to

which chopping blades or hoes P are secured.

These blades are provided with shanks Q,

pivotally connected thereto by the pins R'. The upper ends of said shanks are secured to the standards by frangible pins or break-pins R, which will give way when the blades strike anything they cannot cut or push aside, and 55 permit said blades to swing on the lower pins and pass over such obstacles. Two shovelstandards, SS, project downward from a crosspiece, T, in the forward portion of the frame, and are provided with suitable shovels, U U, 60 at their lower ends, and the inner end of the draft-rod V is secured to this cross-piece, having its outer hooked end, W, passing through a bail or staple, X, upon the forward end piece of the frame. The tongue Y is pivoted with 65 its inner cross-piece, Z, between perforated lips A' A' upon the front end piece of the frame, and handles B' B' are secured to the rear cross-piece, serving to guide the machine in turning. It will now be seen that when 70 the machine is propelled the drive-wheels will revolve the horizontal and the vertical shafts, and the revolving vertical shafts are so arranged that in revolving the hoes will strike successively in the same place of the row from 75 opposite sides, so that spaces will be formed in the rows at regular intervals, in which the plants are cut down. The forward shovels will clean the ground at both sides of the row, and the hoes will, in revolving, cut away the 80 plants at regular intervals, and after the plants have once been chopped the spaces between the plants may be kept clean by the revolving hoes by setting the hoes and starting the machine so that the hoes will strike the said spaces. 85

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

1. A cotton hoeing or chopping machine having vertical shafts bent at their lower ends 90 to form oblique standards, to which the chopping blades or hoes are attached, and means for revolving said shafts, substantially as and for the purpose set forth.

2. In a cotton hoeing or chopping machine, 95 two vertical revolving shafts having their lower portions bent obliquely and provided with hoes at their lower ends, and placed, one behind the other, on opposite sides of the centerso which embrace the standards, and which are I line of the machine, the said shafts revolving 100 9 347,605

in opposite directions, so as to strike successively the same place from opposite sides, as and for the purpose shown and set forth.

3. In a cotton hoeing or chopping machine, the combination of the drive-wheels having cogged rims, two shafts journaled transversely upon the frame, one behind the other, and having pinions meshing with the drive-wheel cog-rims, and having their inner ends extending slightly beyond the central line of the frame and provided with bevel-pinions, shafts journaled in vertical bearings, and having their upper ends provided with bevel-pinions mesh-

ing with the pinions of the horizontal shafts, 15 and having their lower portions bent ob-

liquely, and shovels or hoes having their shanks pivoted to the lower ends of the oblique shafts and provided with break-pins, the shafts revolving in opposite directions so as to strike successively the same place from opposite directions with their hoes, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature

in presence of two witnesses.

## JOSEPH HOLLINGSWORTH.

Witnesses:

HENRY FETTENBERG, J. H. SEMPLE.