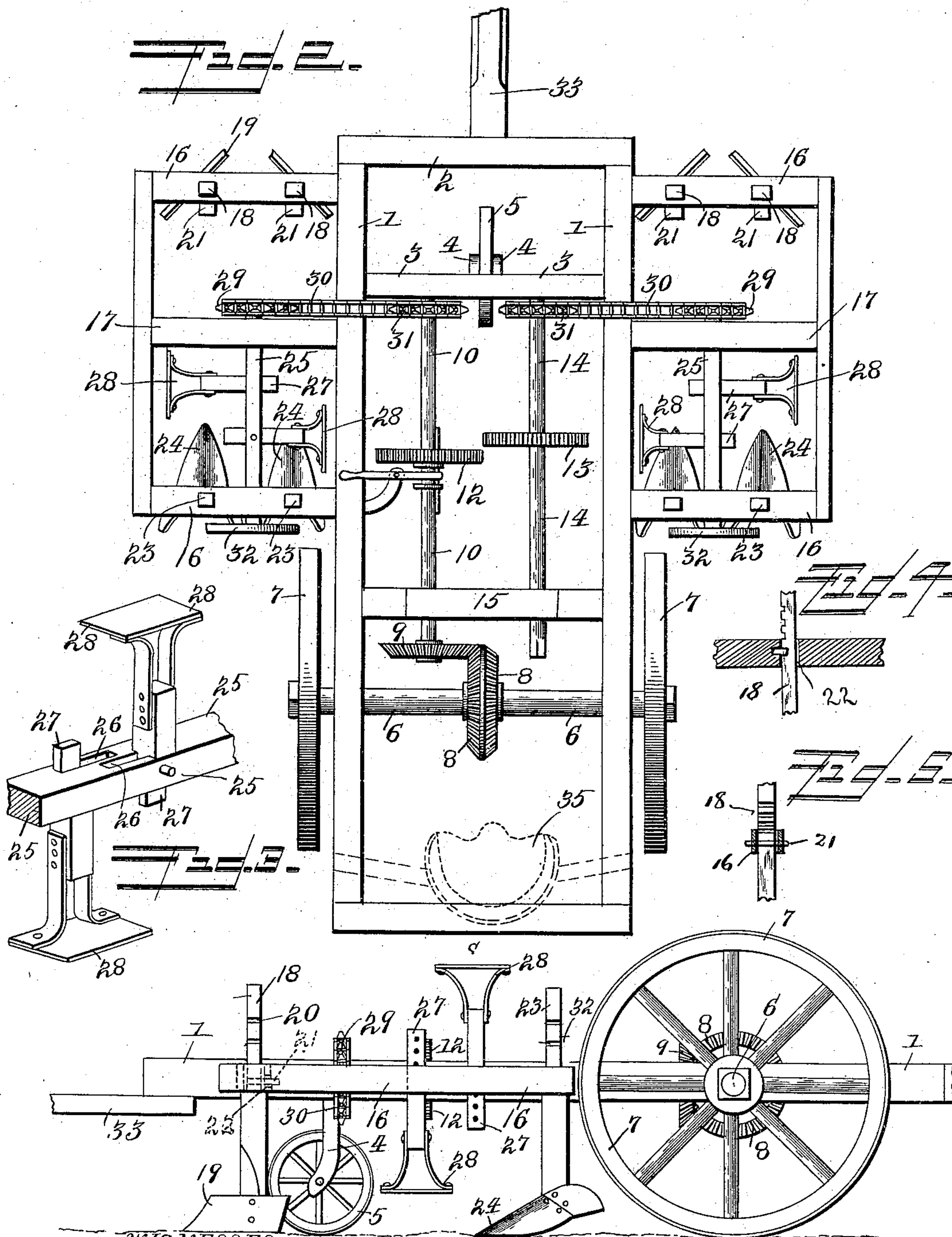


(No Model.)

E. N. BRICKELL.
COTTON CHOPPER.

No. 486,661.

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WITNESSES:
F. L. Ourand
J. L. Coombs

INVENTOR:
Edward N. Brickell,
By *James Quinn & Co*
Attorneys

UNITED STATES PATENT OFFICE.

EDWARD N. BRICKELL, OF WINTON, NORTH CAROLINA.

COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 486,661, dated November 22, 1892.

Application filed February 20, 1892. Serial No. 422,218. (No model.)

To all whom it may concern:

Be it known that I, EDWARD N. BRICKELL, a citizen of the United States, and a resident of Winton, in the county of Hertford and State of North Carolina, have invented certain new and useful Improvements in Cotton-Choppers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable 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.

My invention relates to cotton-choppers or machines which are drawn over the rows of drilled cotton-plants and cut gaps in the rows, so as to leave the plants in bunches or hills.

The object of the invention is to provide a machine of an improved construction, whereby superior advantages are secured with respect to simplicity, economy, and efficiency. It is also an object to provide improved means whereby two rows of cotton may be chopped simultaneously, or only one, as may be desired.

The invention consists in the novel construction and combination of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a cotton-chopper constructed in accordance with my invention. Fig. 2 is a plan view of the same. Figs. 3, 4, and 5 are detail views.

In the said drawings the reference-numeral 1 designates the side bars of a rectangular frame, 2 the end bars thereof, and 3 intermediate cross-bars. The front bar 3 is provided with a pivoted downwardly-depending standard or bracket 4, carrying a guide-wheel 5. Journaled in said frame, near the rear end, is the axle 6, provided with driving-wheels 7, and on this axle is a double bevel gear-wheel 8, which is adapted to mesh with a bevel-wheel 9 on an angular shaft 10, journaled in the bars 3. This shaft at or near its center is provided with a fixed cog-wheel 12, which is adapted to mesh with a similar wheel 13 on an angular shaft 14, also journaled in the said bars 3. This latter wheel, however, is adjustable lengthwise, so as to throw it in and out of gear with wheel 12, when desired. The rear cross-bar 3, in which said shafts are journaled, is provided with a removable block 15,

which when in place secures the journals of said shafts in place and which can be removed, so as to enable said shafts to be shifted or interchanged, as will hereinafter more fully appear. Extending laterally from the side bars 1 are end bars 16 16 and intermediate bars 17, said bars being connected together at their outer ends, so as to form a frame for the choppers. In the front bars 16 are vertically-adjustable bars 18, provided with clearers 19. These bars are provided with a series of notches 20, with which are adapted to engage wedges 21, which are driven in slots 22 in the said bars 16. By removing these wedges the bars 18 can be adjusted and by again driving in the same said bars are held in their adjusted positions. In the rear bars 16 are bars 23, which carry the shovels 24. These bars are also vertically adjustable, so as to regulate the depth of penetration of the shovels.

The numerals 25 designate longitudinal shafts journaled in the rear bars 16 and intermediate bars 17. These shafts are provided with elongated slots 26, through which pass the inner ends of radial arms 27, provided with choppers or knives 28. These arms are adjustable radially and horizontally, so as to regulate the stroke or cut, as well as to vary their distance from each other. The front ends of shafts 25 are provided with sprocket-wheels 29, connected by sprocket-chains 30 with similar sprocket-wheels 31 on the front ends of shafts 10 and 14. The rear ends of shafts 25 are provided with balance-wheels 32.

The bevel-wheel 8 is shiftable upon the axle, so as to throw it in or out of gear with the bevel-wheel 9, so as to stop the operation of the choppers when not in use. The numeral 33 denotes the draft tongue or pole, and 35 the driver's seat.

The operation is as follows: The machine is drawn over the field between the rows of plants, when through the medium of the connections described the shafts carrying the choppers are rotated, whereby gaps will be cut in the rows, leaving the plants in hills. When it is desired to throw the cutters on the left of the machine out of operation, the wheel 13 is shifted lengthwise on its shaft, so as to throw it out of gear with the wheel 12. To

throw the cutters on the right out of operation, the shaft 14 is removed and shaft 10, with bevel-wheel 9 is substituted therefor, the said wheel in this instance meshing with the cogs 5 on the opposite side of wheel 8.

From the above it will be seen that the choppers on both sides of the machine may be operated simultaneously, or only those upon one side, as may be desired.

10 Having thus described my invention, what I claim is—

1. In a cotton-chopper, the combination of the supporting-frame, the axle, the double bevel gear-wheel, the interchangeable shafts, 15 one of which has a bevel gear-wheel adapted to engage with said double bevel gear-wheel, the cog-wheels on said shafts, one of which is shiftable lengthwise thereon, the sprocket-wheels on said shafts, the lateral frames, the 20 shafts journaled on said frames, having horizontally and radially adjustable arms carrying choppers or knives, the lateral sprocket-wheels, and the chains, substantially as described.

2. In a cotton-chopper, the combination of 25 the supporting-frame, the axle, the double bevel gear-wheel, the interchangeable shafts, one of which has a bevel-gear which is adapted to engage with said double bevel-gear, the cog-wheels on said shafts, one of which is 30 shiftable lengthwise thereon, the sprocket-wheels on said shafts, the lateral frames, the shafts journaled in said frames, having horizontally and radially adjustable arms provided with choppers, the lateral sprocket- 35 wheels, and the sprocket-chains, the notched bars carrying the clearers and shovels, and the wedges passing through slots in said frames and engaging with the said notches, substantially as described. 40

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

EDWARD N. BRICKELL.

Witnesses:

AUGUST PETERSON,
ARTHUR B. SEIBOLD.