(No Model.) 2 Sheets—Sheet 1.

J. A. BAUGH.

COTTON CHOPPER.

No. 457,040. Patented Aug. 4, 1891.

FIG. 1.

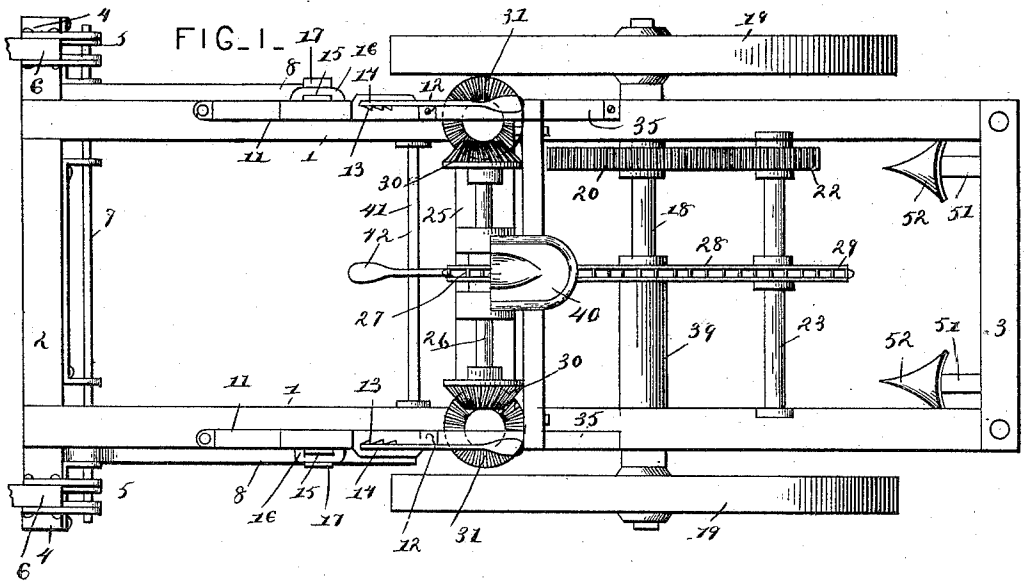
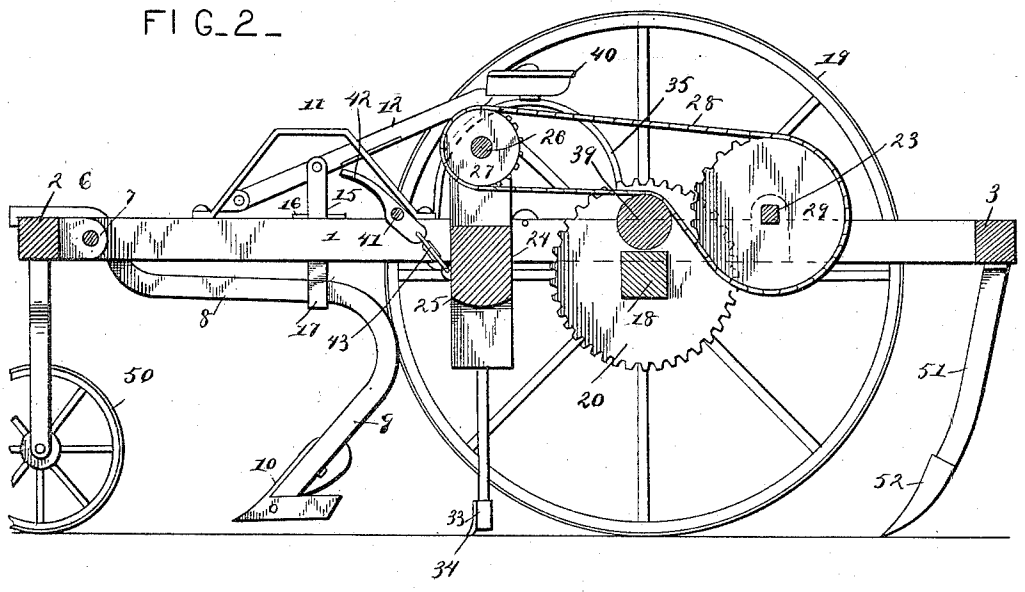


FIG. 2.



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(No Model.) 2 Sheets—Sheet 2.

J. A. BAUGH.

COTTON CHOPPER.

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FIG_5_

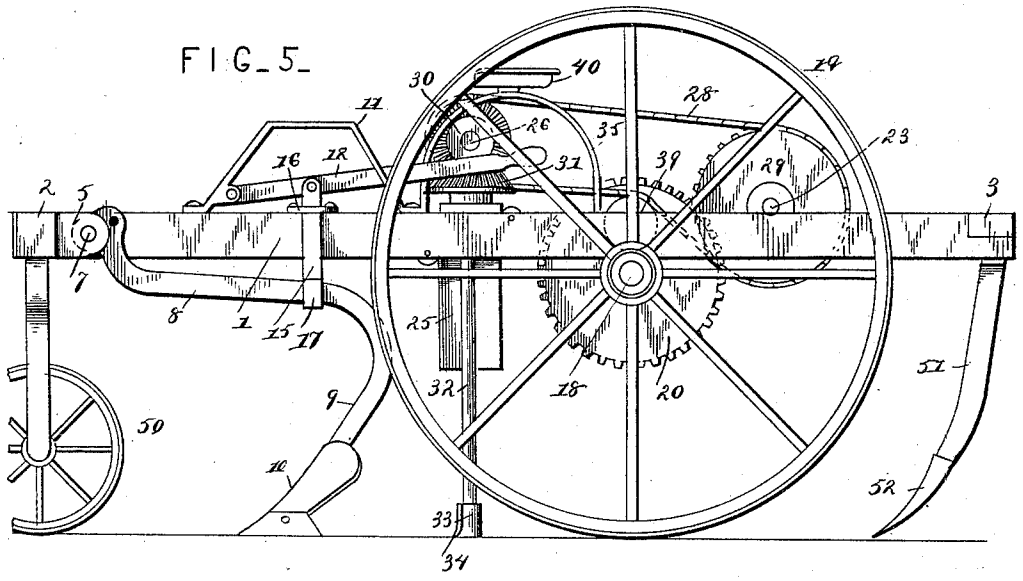
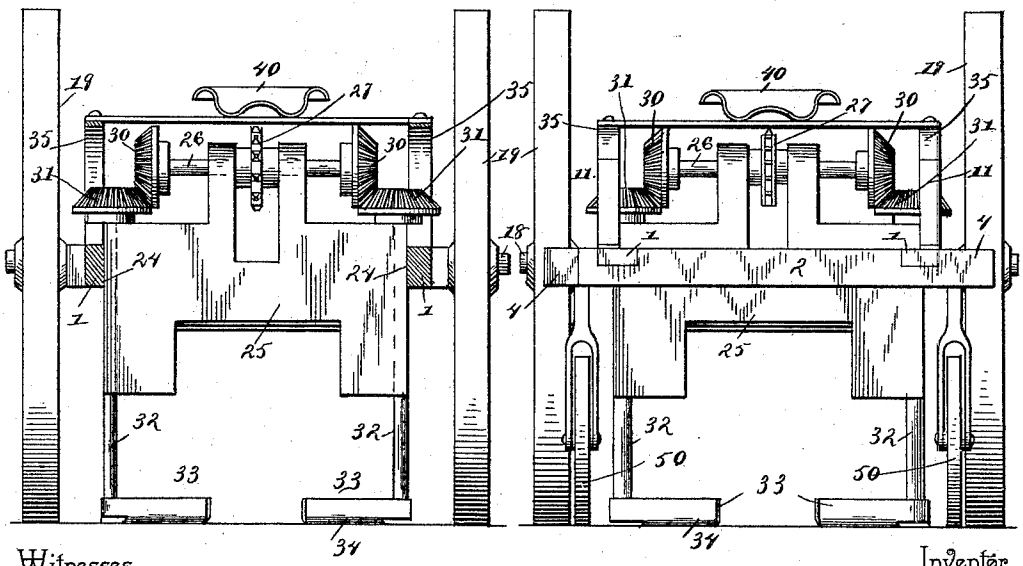


FIG_4_

FIG_3_



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES A. BAUGH, OF AURORA, TEXAS, ASSIGNOR OF ONE-HALF TO PLEASANT F. LEWIS, OF SAME PLACE.

COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 457,040, dated August 4, 1891.

Application filed March 21, 1891. Serial No. 385,938. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. BAUGH, a citizen of the United States, residing at Aurora, in the county of Wise and State of Texas, have invented a new and useful Cotton-Chopper, of which the following is a specification.

This invention relates to cotton-choppers; and it has for its object to provide a machine of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a plan view of a cotton-chopper constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a vertical transverse sectional view. Fig. 4 is a front elevation. Fig. 5 is a side elevation.

Like numerals of reference indicate like parts in all the figures.

The frame of the machine is composed of the side pieces 1 1 and the front and rear cross-pieces 2 and 3, the former of which has its ends extended laterally, so as to form the brackets 4 4, the rear sides of which are provided with clips 5, to which the shafts 6 are hinged for the attachment of the draft. The said shafts are hinged upon a transverse rod 7, which also serves for the attachment of the plow-beams 8. The latter are provided with standards 9, the lower ends of which carry the furrow-openers 10 or cultivator-blades, plows, or scrapers of any suitable construction. Brackets 11, which are mounted upon the upper sides of the side beam 1, are provided with levers 12, adapted to engage notches 13, formed at the sides of the slots 14 in the said brackets, thus enabling the levers to be retained at any desired adjustment. The levers 12 are pivotally connected with vertical rods 15, mounted slidingly in guides 16 upon the upper sides of the side beams, and provided at their lower ends with loops 17 for the passage of the plow-beams, which latter may thus be adjusted to and retained in any desired position within the range of the movement of the levers 12.

The frame of the machine is mounted upon an axle 18, having transporting-wheels 19. Said axle carries a spur-wheel 20, which meshes with a pinion 22 upon a transverse shaft 23, which is mounted in suitable bearings upon the side pieces 1 of the frame in rear of the shaft or axle. The side pieces 1 1 are provided in front of the axle with vertical grooves 24, forming bearings for a vertically-sliding frame 25, provided at its upper end with bearings for a transverse shaft 26, having a sprocket-wheel 27, which is connected by a chain 28 with the sprocket-wheel 29 upon the transverse shaft 23. The ends of the shaft 26 are provided with beveled pinions 30, meshing with beveled pinions 31 at the upper ends of shafts 32, which are journaled vertically in the sliding frame 25. Said shafts are provided at their lower ends with radially-extending hoes or blades 33, having curved lower edges, as shown at 34. These blades, when the machine progresses along the row, will serve to chop out the plants at suitable intervals, leaving the stands of cotton at the desired distance apart, as will be readily understood. A pulley 39 is suitably journaled to one of the side pieces of the main frame to support the endless chain 28 and to keep the latter sufficiently taut.

The side pieces 1 of the frame are provided with suitable spring-supports 35 for the seat 40, in front of which is arranged a cross-bar 41, upon which is pivotally mounted a lever or treadle 42, which is connected by a link 43 with the vertically-sliding frame 25, which may thus be adjusted by pressure of the driver's foot so as to raise or lower the rotary chopping-blades to any desired elevation. Said blades may be thrown out of operation, when desired, by raising them to a sufficient height. The brackets 4, formed by the lateral extensions of the front frame-beam 3, are provided with caster-wheels or gage-wheels 50 to support the front part of the frame. The rear ends of the side beams of the frame

are to be provided with standards 51, having cultivator-blades 52 for hilling up the stands of cotton.

In order to facilitate the raising and lowering of the frame 25, the side beams 1 1 of the main frame are provided on their upper sides with rollers 45, bearing against the rear sides, and on their under sides with rollers 46, bearing against the front sides, of the side pieces of said frame 25.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. When the machine progresses over the field, the plows or cultivators will stir and agitate the soil and the rotary cutting-hoes will chop out the plants, leaving the stands of cotton any desired distance apart, which may be regulated by so arranging the gearing as to cause the chopping-hoes to be rotated more or less rapidly.

The general construction of the machine is simple and inexpensive, and it is durable, as well as efficient in operation.

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

1. In a machine of the class described, the combination of the frame, the brackets mounted upon the side pieces thereof, the levers pivoted to said brackets, the vertically-sliding rods extending through guides or keepers connected pivotally with said levers and provided with loops at their lower ends, and the plow-beams hinged to the frame extending through the loops at the lower ends of the vertically-sliding rods, substantially as and for the purpose set forth.

2. In a cotton-chopper, the combination, with the plows or cultivators, of the vertically-sliding frame, the vertical shafts journaled in said frame and having chopping-blades or hoes at their lower ends and beveled pinions at their upper ends, the transverse shaft journaled at the upper end of said frame and having beveled pinions meshing with those at the upper ends of the vertical shafts, and means for transmitting motion to said transverse shaft from the supporting-wheels of the machine, substantially as set forth.

3. In a machine of the class described, the combination of the plows or cultivators, the vertically-sliding frame having the vertical shafts provided at their lower ends with vertical chopping-blades or hoes having curved lower edges disposed at an angle to the body of the blade, means for vertically adjusting the said frame, and suitable operating mechanism, substantially as and for the purpose set forth.

4. In a machine of the class described, the combination of the frame, the vertically-adjustable plows or cultivators, the vertically-movable frame having vertical shafts provided with radial chopping-blades or hoes at their lower ends, the transverse shaft at the upper end of said frame having pinions meshing with pinions at the upper ends of the vertical shafts, the revoluble axle having a spur-wheel meshing with a pinion upon a counter-shaft, a sprocket-wheel upon the latter connected by a chain with a sprocket-wheel upon the transverse shaft of the vertically-movable frame, and the supporting-pulley for said chain, all arranged and operating substantially as and for the purpose set forth.

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

JAMES A. BAUGH.

Witnesses:
W. C. HILL,
N. W. BLEMMER.