(No Model.) 2 Sheets—Sheet 1.

# W. R. JACKSON.

## COTTON CHOPPER.

No. 567,345. Patented Sept. 8, 1896.

Fig. 1.

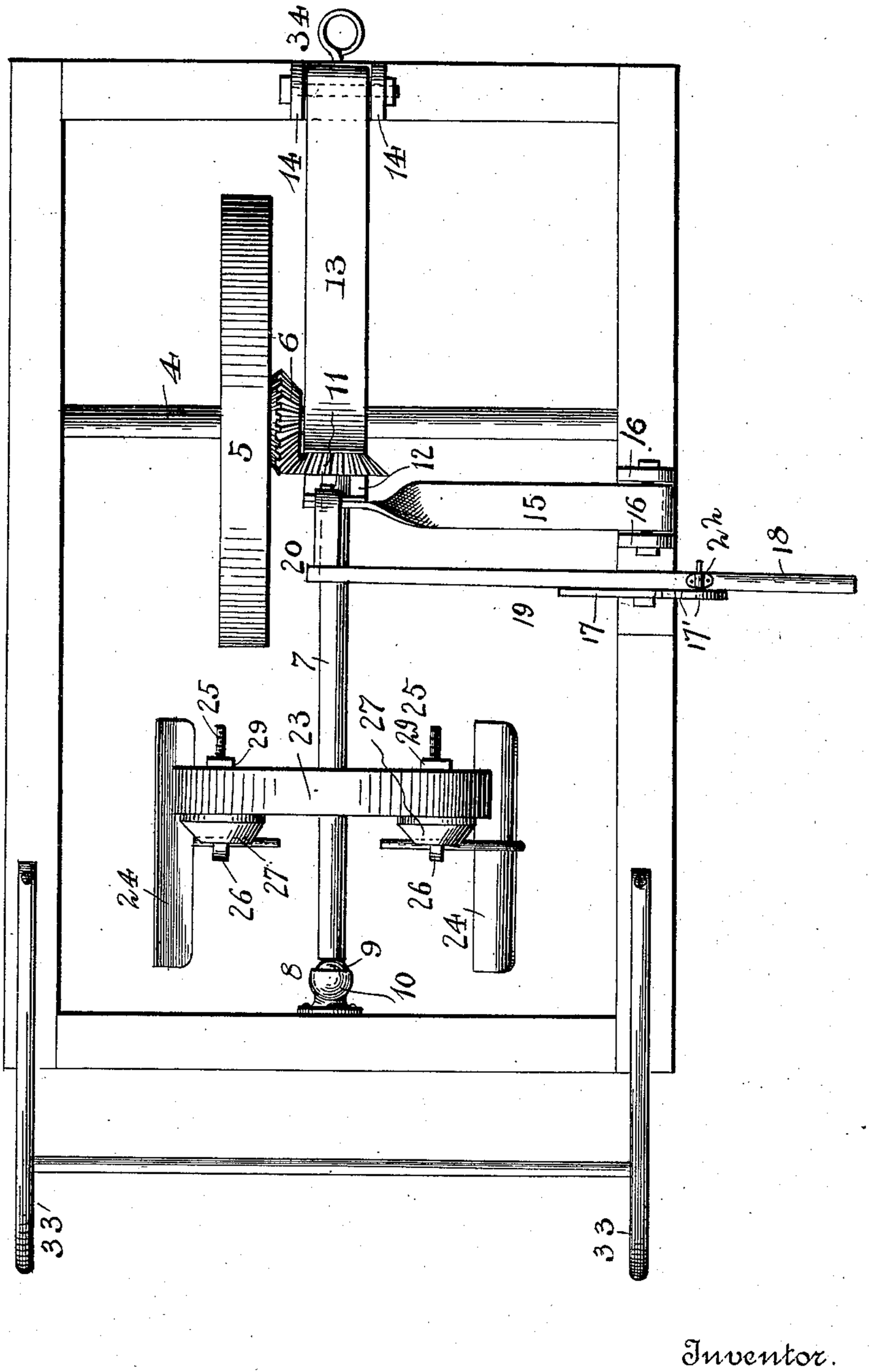
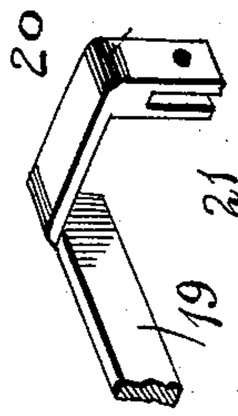



Fig. 4.

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(No Model.) 2 Sheets—Sheet 2.

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## COTTON CHOPPER.

No. 567,345. Patented Sept. 8, 1896.

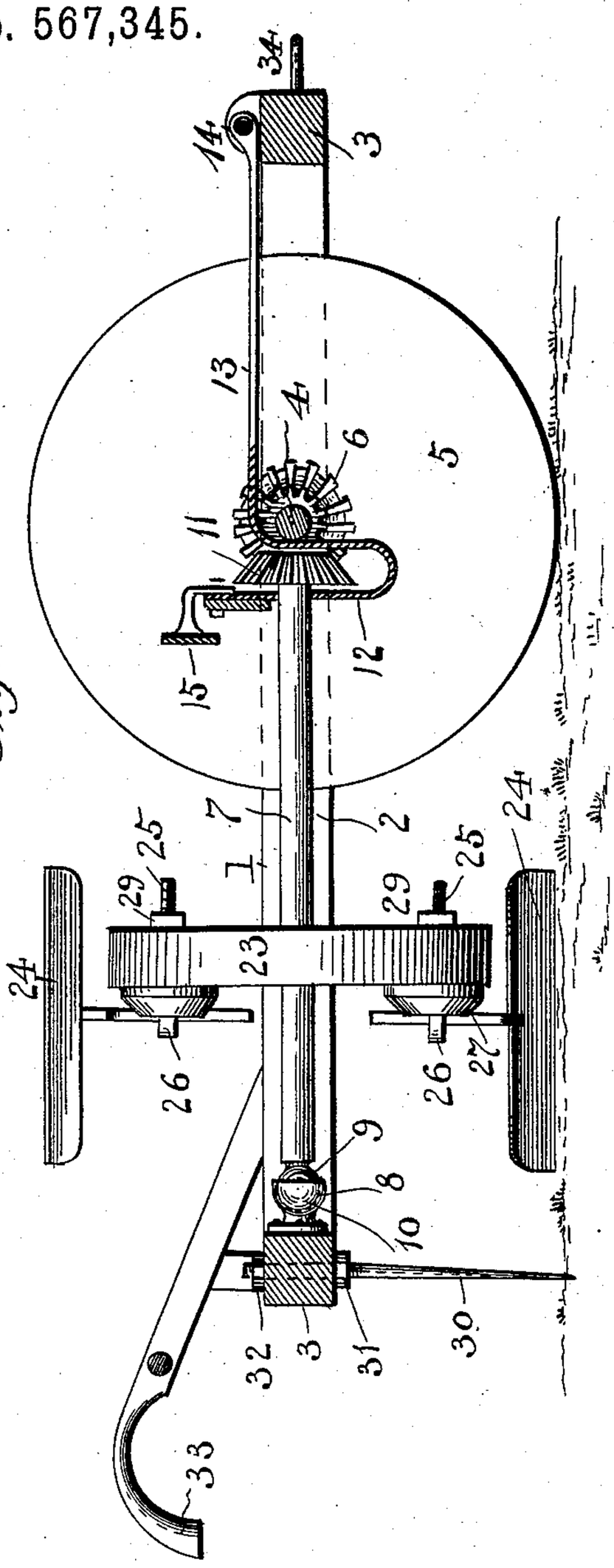


Fig. 2.

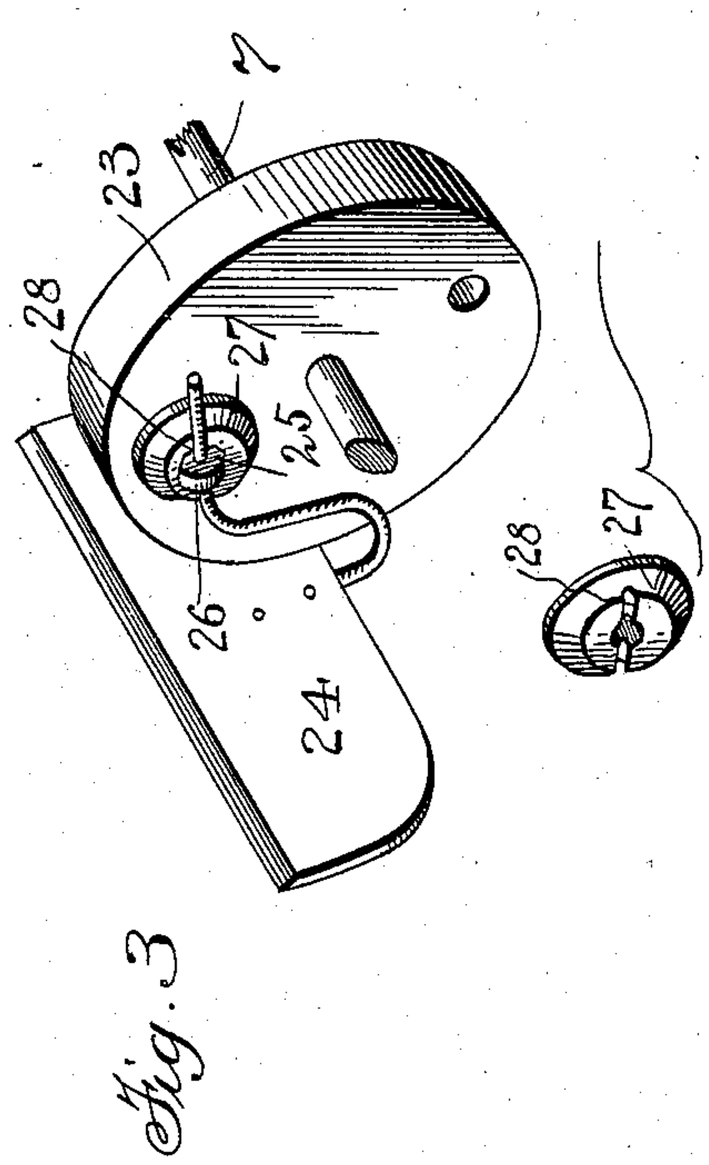


Fig. 3.

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# UNITED STATES PATENT OFFICE.

WILLIAM R. JACKSON, OF SEVILLE, GEORGIA.

## COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 567,345, dated September 8, 1896.

Application filed November 5, 1895. Serial No. 568,051. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM R. JACKSON, a citizen of the United States, residing at Seville, in the county of Wilcox and State of Georgia, have invented certain new and useful Improvements in Cotton-Choppers; and I do 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.

My invention relates to cotton-choppers.

The object of the invention is to simplify the construction and to provide a chopper which will possess superior advantages with respect to simplicity, durability, and efficiency.

With these objects in view the invention consists of certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a top plan view of my improved cotton-chopper. Fig. 2 is a longitudinal vertical sectional view of the same; and Fig. 3 is a detail perspective view of the cutter-wheel, one of the blades, the washer, and fastening-bolt and nut. Fig. 4 is a detail view.

In the drawings, 1 denotes the frame of the cotton-chopper, which may be of any well-known and approved construction, but which is shown in the present instance as consisting of the side beams 2, connected by the end beams 3. 4 denotes a drive-shaft which is journaled in the sides of the beams and which is provided with a combined drive and supporting wheel 5 and with a pinion 6.

7 denotes the cutter-shaft, the rear end of which is connected to the rear cross-bar by a universal joint 8, composed of the ball 9 and spherical socket 10. The front end of said shaft is provided with a pinion 11, which engages with the pinion 6 on the drive-shaft. The front end of the cutter-shaft is journaled in the rear hooked end 12 of a bar 13. The other end of said bar is pivoted between vertical lugs 14, projecting upward from the front cross-piece of the frame.

15 denotes a cross-bar, the outer end of which is pivoted between lugs 16 on one of the side beams of the frame, while its inner end is pivoted to the hooked end of the bar 13.

17 denotes a segmental plate having notches 17′ at its ends. This plate is secured to one of the side beams of the frame and has pivoted to it an operating-lever 18, having an inwardly-projecting arm 19, terminating in a longitudinal-projecting arm 20, which is provided with an aperture 21, that embraces the bar 15. This lever is provided with a spring-dog 22, which is adapted to engage one of the notches of the segmental plate and hold the pinion on the cutter-shaft into or out of engagement with the pinion on the drive-shaft.

23 denotes the cutter-wheel, which is keyed to the cutter-shaft, and 24 denotes the cutters, which are secured to said wheel as follows: The cutter-wheel is provided with a suitable number of apertures spaced equal distances apart, and projecting through these apertures are bolts 25, having perforated heads 26, which hold to the face of said wheel washers 27, having grooves 28. Each blade is provided with a curved arm which project through the perforations in the head of said bolt and lie in the grooves of the washer. By tightening the nuts 29 on the ends of the bolt it is evident that the head of the bolt will be drawn inward and that they will clamp the rods of the blades into the grooves of the washers, thereby securely holding the blades to the wheel. Should it be desired to adjust the blades to cut the cotton-plants closer to or farther from the ground, all that is necessary is to loosen the nuts and pull the rods of the blades into the direction desired, so as to bring the blades nearer to or farther from the ground. Again, if it is desired to adjust the angle of the blade so as to increase its cutting power by giving it a greater side thrust, all that is necessary is to loosen the nuts, as before described, and twist the rods of the blades until the blades have been adjusted to the proper angle, in which position they may be firmly secured by the nuts aforesaid.

30 denotes harrow-teeth, which are secured to the rear cross-beam of the frame and which are provided with nuts 31 on the under side of the frame and with nuts 32 on the upper side of the frame, by means of which the teeth are firmly secured in position.

33 denotes the handles, which are secured to the rear cross-beam of the frame.

34 denotes a hook or clevis, to which the horses are to be attached in the usual manner.

In operation, as the machine is drawn along the motion imparted to the cutter-wheel by the drive-wheel will cause the blades to revolve, which at predetermined intervals will cut gaps in the rows of the cotton-plants, thus elevating the plants in bunches. In moving this machine over planted ground to prevent it from cutting the plants I have provided the mechanism hereinabove described for raising the pinion on the cutter shaft out of engagement with the pinion on the drive-shaft. This allows the device to be drawn along without danger of the cutter-blades damaging the plants over which they are being moved and at the same time lessens the draft upon the horses.

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

1. In a cotton-chopper, the combination with a frame, of a drive-shaft journaled therein, a drive-wheel keyed to said shaft, a pinion keyed to said shaft, a bar pivoted to the front cross-piece of said frame to swing vertically and provided at its rear end with a hooked portion, a cutter-shaft, the rear end of which has a universal connection with the rear cross-beam of the frame, and the forward end of which is journaled in the hooked end of the pivoted bar and provided with a pinion which engages the aforesaid pinion, a cross-bar having one end pivoted to one of the side beams of the frame and its other end pivoted to the hooked end of the pivoted bar, a lever connected with said cross-bar, a segmental plate having notches, a spring-dog carried by said lever and adapted to engage said notches, whereby the pinion of the cutter-shaft may be held into or out of engagement with the pinion on the drive-shaft, substantially as set forth.

2. In a cotton-chopper, the combination with a cutter-wheel having apertures formed in its face equidistant apart, of bolts having apertured heads, washers having grooves and held to said wheel by the heads of said bolts, cutter-blades having rods which project through the apertures of said bolt-heads and lie in the grooves of said washers, and nuts upon the ends of said bolts for drawing the washers to the wheel and the rods to the washers, substantially as set forth.

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

WILLIAM R. JACKSON.

Witnesses:

E. H. BULLARD,

J. J. COLEMAN.