D. B. HASELTON.  
Cotton Picker.  
No. 243,554.  
Patented June 28, 1881.
To all whom it may concern:

Be it known that I, Daniel B. Haselton, of Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Cotton-Picking Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in cotton-pickers, and it has for its object to provide a machine that will pick and collect the cotton from the bolls, as more fully hereinafter specified. This object I have accomplished by the apparatus and mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a bottom-plan view; Fig. 2, a side elevation; Fig. 3, a central longitudinal section; Fig. 4, a detail view of one of the picker-disks; Fig. 5, a section through one of the picker-rolls. Fig. 6 is a top-plan view of my picker. Fig. 7 is a detached sectional view, showing devices for clearing the brushes and collecting the cleansed cotton.

The letter A indicates the body or frame of my improved machine, which is mounted upon the wheels B and B'.

The letter A' indicates a swinging adjustable frame. To the forward end of the said frame are secured two forwardly-projecting gathering-plates, B'.

The letter C' indicates the picking-rollers. These are journeled in opposite ends of the frame A', and the rear journals are provided with intermeshing cog-wheels D', one being provided with a pulley, E', which connects by means of a chain, F', with a pulley, G', on the shaft U, by means of which the picker-rollers are operated. The said rollers consist of a series of serrated steel disks, H', rigidly secured to the shafts I', and the intermediate disks, K', loosely secured to the said shafts. The teeth at the peripheries of the steel disks are bent inward in such manner that they will readily pass over any unyielding body, but will seize the fibers of the cotton and strip it from the bolls. The outer edges of the disks K' are rounded or beveled, so as to leave the teeth free to seize the cotton. The disks K', which are made of wood, will prevent the teeth from seizing substances of any length, but will permit them to seize the cotton in the bolls, the conformation of the disks H' enabling them to take the bolls, which are approximately spherical, and hold them till the cotton is stripped. The steel disks on one roller are arranged to work against the wooden disks of the other. The rollers vary in diameter at 60 points throughout their length, so as to form a sinuous passage between them, to insure the thorough stripping of the cotton from the bolls.

Above the stripping-rollers are located two rollers, N', connecting with the cog-wheel P' on one of the stripper-rollers by means of cog-gearing R', in such manner as to be rotated faster than said rollers.

Above the brushes is located a chamber, S', having foraminous sides and longitudinal openings on each side at the top, through which the stripped and cleansed cotton is thrown upward by the brushes and collected on the top of the chamber. The cotton is cleared from the brushes as they revolve by the downwardly-projecting flanges S'' and delivered into the carrying-chamber.

The letter W' indicates a rod, screw-threaded at its upper end and provided with an adjusting-nut, V', the lower end being connected to the swinging frame. This rod serves to lift the frame when the apparatus is moving but not operating.

W' indicates a similar screw-rod, having a nut, X', at its end, and connecting with a bell-crank lever, Z, which connects with the rear swinging frame, by means of which it may be elevated.

The height of the body above the ground is to be such as to just clear the tops of the cotton-plants, and will vary according to the variety of cotton cultivated.

It will be observed that, owing to the inclined position of the stripping-rollers, every portion of the plant, from the extreme lower branches to the top, is operated upon and thoroughly stripped.

I have shown in connection with my present application a method of cleaning the cotton preparatory to its being picked, in order to fully illustrate how the two inventions may be advantageously used in connection with
each other; but as the cleaning mechanism forms matter for a distinct application, I do not enter now into a detailed description of it.

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

1. In combination with the swinging frame at the rear, the stripping or picking rollers and their operating mechanism, substantially as and for the purposes specified.

2. The stripping-disks having inclined serrations at their peripheries, the said serrations being bent rearwardly and inwardly at their extremities, whereby the disks are enabled to freely pass rigid substances, while at the same time they will seize the elastic fibers of the cotton, substantially as and for the purposes specified.

3. The stripping-rollers consisting of alternate fast and loose disks mounted on suitable shafts, the fast disks being serrated at their edges and the loose disks beveled at each side of their peripheries, substantially as and for the purposes specified.

4. In combination with the stripping-roller frame, the stripping-rollers formed of varying diameters, leaving a sinuous passage for the cotton between them, substantially as and for the purposes specified.

5. In combination with the stripping-rollers constructed of varying diameters, the clearing-brushes extending longitudinally above the same, and their operating mechanism, whereby they are operated in conjunction with the stripping-rollers to clear the same of cotton, substantially as specified.

6. In combination with the stripping-rollers and the clearing-brushes, the chamber above, having reticulated sides and longitudinal apertures at the top, on opposite sides, through which the cotton is thrown, to be collected on the top of the chamber, substantially as specified.

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

DANIEL B. HASELTON.

Witnesses:

J. SILAS LEAS,

T. H. ALEXANDER.