D. B. HASELTON.

CLEANING ATTACHMENT TO COTTON PICKERS.

No. 258,060.

Patented May 16, 1882.
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2 Sheets—Sheet 2.
UNITED STATES PATENT OFFICE.

DANIEL B. HASELTON, OF CHARLESTON, SOUTH CAROLINA.

CLEANING ATTACHMENT TO COTTON-PICKERS.


Application filed August 16, 1881. (No model.)

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 Cleaning Attachments to Cotton-Pickers; 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, in which—

Fig. 1 is a bottom plan view; Fig. 2, a central longitudinal section; Fig. 3, a perspective view of the forward end of the machine, and Fig. 4 a cross-section through one of the cleaning-brushes. Fig. 5 is a cross-section through the front of the machine.

This invention relates to cotton-cleaners, and has for its object to provide a machine that will gather together the projecting branches of the growing cotton-plant into proper position to be operated upon to clean the bolls and other parts of the plant, and remove and destroy insects previous to picking the cotton from the bolls.

To enable others skilled in the art to make and use my machine, I will now proceed to describe its construction and operation.

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

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

C indicates the gatherer, which consists of two parallel side plates secured to the swinging adjustable frame D, pivoted at E to the main frame or body of the machine, and projecting forward below said body, as indicated in the drawings. To the forward extremities of said plates are attached the forward ends of two plates, F, which extend backward and converge, their rear ends being rigidly fastened to the front end of the swinging frame D or to a standard, G, secured thereto. The forward end of the frame D is raised and lowered by means of a screw-rod, a, running up through the frame of the machine, and provided with an adjusting-nut, d, on its upper end, as seen in Fig. 2. This allows of the frame carrying the inclined brushes being raised or lowered to correspond with the height of the lower branches of the plants to be cleaned, and also of being raised free of any obstructions when moving the machine from place to place. The upper edges of the plates F curve outward for the purpose of running under the projecting branches of the growing plant, (as seen in Fig. 3,) so as to gather the plants into a fan-like form and direct them between the converging plates and deliver them to the brushes or cleaners.

The letter II indicates the brushes or cleaners. These consist of two parallel rollers journeled in bearings at opposite ends of the swinging frame D, and provided with a series of longitudinal brush-holders, I, which are detachably secured to the rollers, so as to be readily removed and replaced when the brushes become worn. The brushes may be made of any suitable material, but are preferably made of broom-corn, and they are so arranged on their respective rollers as to work alternately between each other, as indicated in Fig. 5. It will be observed that these brushes are arranged on an incline toward the front of the machine, which enables them to operate upon plants at different stages of growth.

I am aware that fans have been used for beating the plants, and also that said fans have been made capable of vertical adjustment as well as horizontally; but experience has shown that it requires a more effective means of ridding the plants of insects, dirt, and dead leaves, and hence I adopt brushes, which I find accomplish the object in view much more perfectly.

The side plates, C, are extended upward into the forward end of the apparatus and form a receptacle or box above the cleaners or brushes, and above the brushes are located the curved guards K, having a space between their adjoining edges, through which the leaves, dirt, and insects brushed from the plant pass upward. At the forward end of the box or receptacle above named is located a transverse trough, M, for containing burning sulphur or other poison to destroy living insects brushed from the plants. The dirt and insects brushed...
up from the plants fall to the sides of the
guards, and by reason of the inclination of the
swinging frame will gravitate toward the front
of the receptacle, where they may be dis-
charged through suitable openings, if desired.
The receptacle or box before mentioned is
provided with a suitable cover, and the rear
journals of the brush or cleaner rollers are pro-
vided with intergearing cog-wheels P, one of
which is formed with a pulley, R, from which
extends a chain, S, to a pulley, T, upon the
shaft U, the latter being provided with a loose
pinion, V, and clutch W, the latter being op-
erated by a lever, Y, to throw it into and out
of gear, with the cogs upon the driving-wheel
B, as seen in Fig. 1, and thus throw the brushes
into or out of operation, as may be desired.
The height of the body above the ground is to
be such as to just clear the tops of the plants,
which will vary according to the variety of
cotton to be cleaned.
In operation the gatherers F run under the
extending branches of the plant, and as the
machine is drawn forward they are raised and
drawn together without friction or any ten-
dency to pull the plant out of the ground, and
guided into proper position between the clean-
ing-rollers, which brush off all dirt, leaves, and
insects without pressing the cotton from the
boll. The machine is designed for cleaning
the plants just before picking, and may be
used to great advantage in connection with
the cotton-picker for which a patent was is-
sued to me June 28, 1881.

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

1. The combination, in a cotton-cleaner, of the two cleaning-brushes placed upon an in-
ecline with their lower ends toward the front of the machine, with their operating mech-
anism, whereby the dirt, leaves, and insects are brushed from the growing plants previous to
picking, substantially as specified.

2. The combination, in a cotton-cleaner, of cleaning-brushes, with the receptacle above the
same, and the sulphur-receptacle for contain-
ing burning sulphur or other poison to destroy living insects brushed from the plants,
substantially as specified.

3. The combination, with the rotary brushes and their guards, of the receptacle above the
brushes, having channels at each side for the reception of the dirt and insects brushed off
the plants, substantially as specified.

4. In combination with the swinging frame and the main frame, the screw-rod and ad-
justing-nut for elevating the frame, substan-
tially as and for the purpose specified.

In testimony that I claim the foregoing as my own invention I affix my signature in pres-
ence of two witnesses.

DANIEL B. HASELTON.

Witnesses:

WM. J. MILLER,

WM. W. HOUSTON.