

(No Model.)

D. RUGGLES.  
Cotton Picker.

No. 242,560.

Patented June 7, 1881.

Fig. 2.

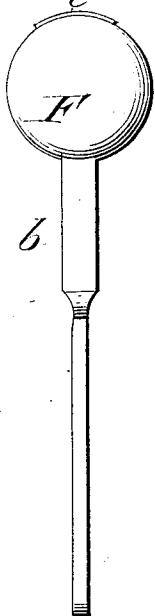


Fig. 1.

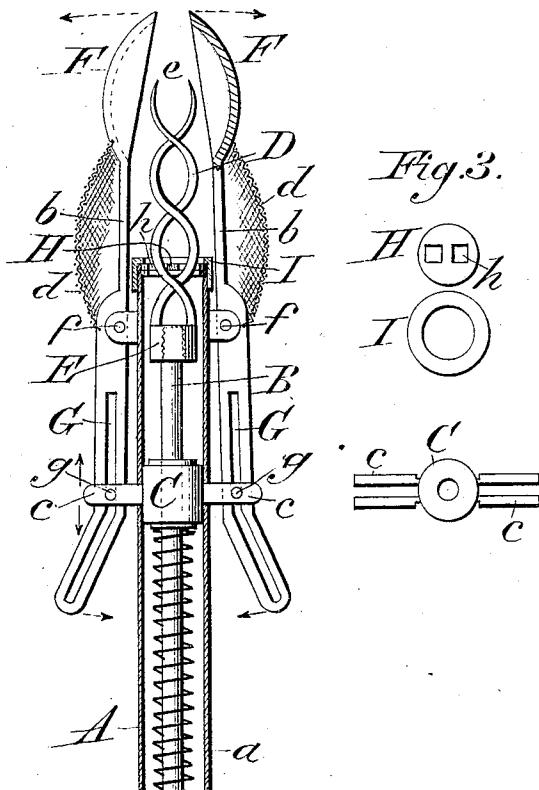


Fig. 3.

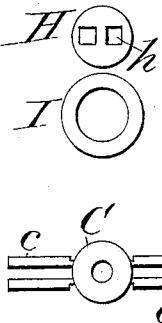
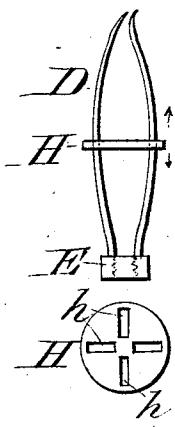
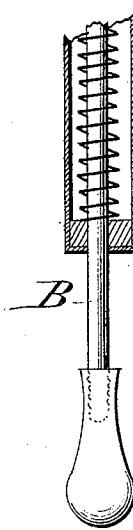


Fig. 4.



A



B

Attest:

J. H. Schott  
Robert A. Hood

Inventor:

Daniel Ruggles.

# UNITED STATES PATENT OFFICE.

DANIEL RUGGLES, OF FREDERICKSBURG, ASSIGNOR TO EDWARD S. RUGGLES, OF FRIEDLAND, VIRGINIA.

## COTTON-PICKER.

SPECIFICATION forming part of Letters Patent No. 242,560, dated June 7, 1881.

Application filed March 2, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL RUGGLES, a citizen of the United States, residing at the city of Fredericksburg, in the county of Spotsylvania and State of Virginia, have invented 5 a new and useful Cotton-Picker, or machine for picking, extracting, and harvesting lint-cotton from the boll or capsule when matured and ripe, of which the following is a specification.

My invention consists of a lint-cotton picker, as a machine for automatic action, and as a substitute or to supplement the human hand in picking and gathering lint-cotton from the 15 cotton-boll in the field, with a view of facilitating harvesting. I accomplish these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal section 20 of the entire machine. Fig. 2 is a longitudinal elevation of a grappling-claw. Fig. 3 is an end view of the revolving disk, with its cap. Fig. 4 shows a modified form of the screw or fork, with its disk.

25 The same letter refers to corresponding parts of the machine.

A is a hollow cylinder, of any required length and diameter, admitting of sectional extension.

B is a piston-rod, admitting also of sectional 30 extension, carrying a spiral spring, a, and both contained within the cylinder, revolving freely in it. The piston-rod carries the slide C, in which it revolves between two washers pinned to the rod. Said slide has slotted projecting arms e e, which are pinned to the slotted grappling-claws F F at G G, admitting 35 of movement in the slots as the piston-rod is carried forward and back within the cylinder, bearing the slide C with it, on which one end 40 of the spiral spring rests, while the other end is attached to the piston-rod, so as to close and extend with it.

45 F F are two grappling-claws with slots G G, pivoted fulcrums f f, made springs at b b, closing and grasping at e, when the piston-rod presses forward the slide C.

D is a screw or fork, screwed to the piston-rod at E, and projecting its prongs through the orifices h h in a revolving disk, H, fastened

50 by a cap, I, and is plunged by the spiral spring into the cotton-boll e, while held by the grappling-claws, and extracts the cotton when withdrawn, the disk sweeping it off, and it drops into the netting d, while the grappling-claws open again. i represents a cutter attachment 55 for the claws.

The manner of operating and using my invention is as follows: Grasp the cylinder with the left hand and the piston-rod with the right; press with the spiral spring and carry 60 forward the slide C as a wedge, closing the grappling-claws F F upon the cotton-boll e, into which the lint screw or fork plunges at the same time with a revolving motion, and by revolution extracts the lint-cotton from the 65 cotton-boll; then withdraw it by the piston-rod toward the disk H, where it is swept or discharged from the prongs of the lint screw or fork as they are withdrawn in the orifices h h, 70 with their points still projecting slightly through the disk, while the lint-cotton drops into the small netting d, or other receptacle. The grappling-claws open at the same time and are adjusted for closing on another cotton-boll.

Without the cotton-lint screw or fork the 75 machine is adapted for picking fruit.

I claim as my invention and desire to secure by Letters Patent—

1. The combination of a hollow cylinder, A, containing a rotating and revolving piston-rod, 80 B, provided with a spiral spring, a, operating a rotating screw or fork, D, a revolving disk, H h, fastened by a cap, I, at the end H of the cylinder, and slide C, with slotted arms e e, connected by pins g g with slots G G in the grappling-claws F F, pivoted at f f as fulcrums, 85 made springs at b b, and operated as herein-before described.

2. The combination of a hollow cylinder, A, containing a revolving and reciprocating piston-rod, B, provided with a spiral spring, a, operating a rotating screw or fork, as a hand cotton-picker, to extract cotton from the cotton-boll e, with a rotating disk, H h, held by the cap I, with a netting, d, to receive the cotton, the grappling-claws F F, made springs at b b, and pivoted as levers, with fulcrums at f f, for opening, closing, and grasping the cot- 95

ton-bolt, the slide C c c, in which the piston-rod revolves, operating substantially as hereinbefore described.

3. The combination of a hollow cylinder, A, 5 a revolving and reciprocating piston-rod, B, a spiral spring, a, grappling-claws F F, pivoted at fulcrums f f, springs at b b, connected at the slots G G with the slide C c c, which

govern the motions and action of the grappling-claws F F, with their cutter attachments to i, operating in combination substantially as hereinbefore described.

DANIEL RUGGLES.

Witnesses:

JOHN C. TASKER,  
F. H. SCHOTT.