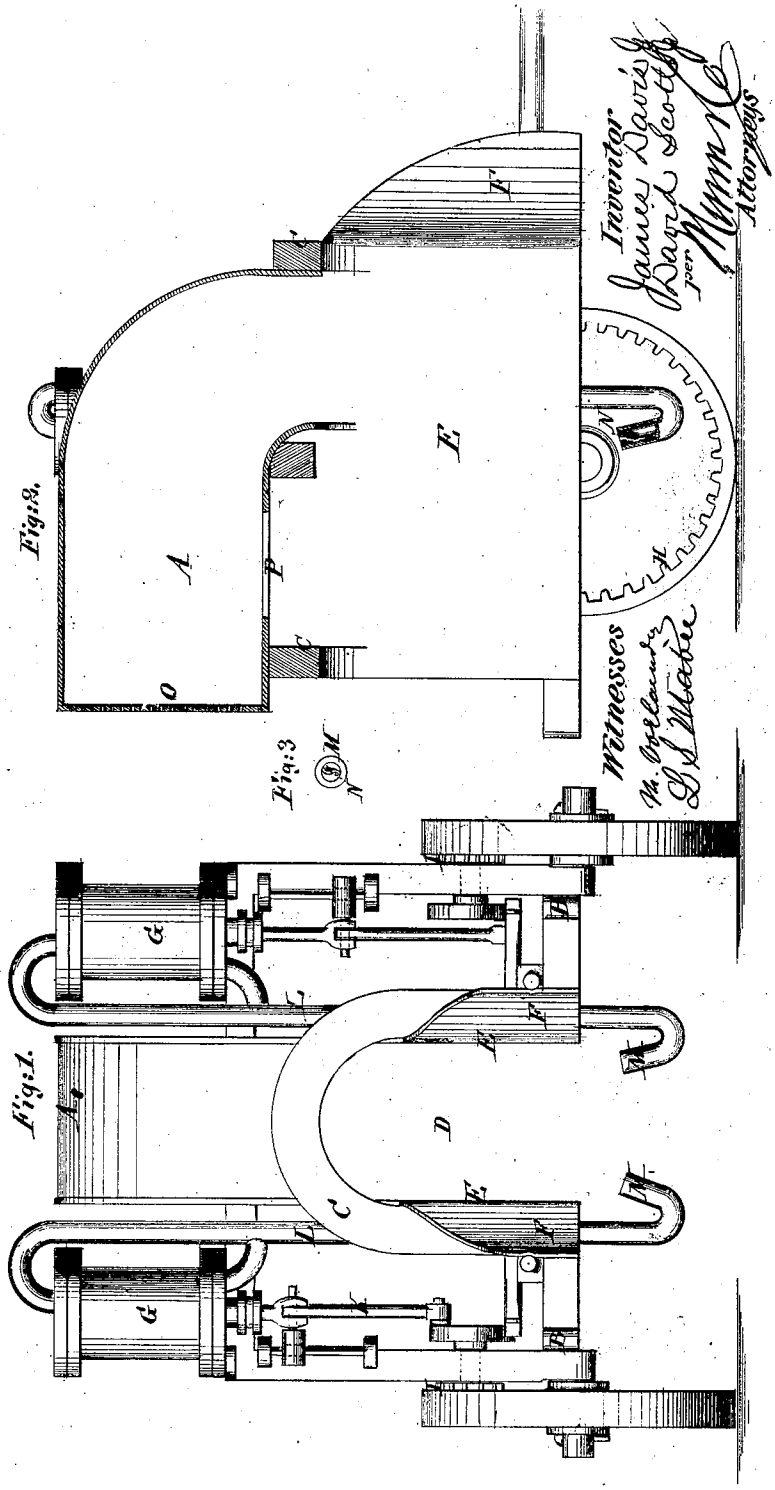
No. 101,439. PATENTED APR. 5, 1870.

J. DAVIS, JR. & D. SCOTT, JR.

COTTON HARVESTER.



United States Patent Office.

JAMES DAVIS, JR., AND DAVID SCOTT, JR., OF GREENSBOROUGH, NORTH CAROLINA.

Letters Patent No. 101,439, *dated April* 5, 1870.

IMPROVEMENT IN COTTON-HARVESTERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that we, JAMES DAVIS, JR., and DAVID SCOTT, JR., of Greensborough, in the county of Guilford and State of North Carolina, have invented a new and improved Cotton-Harvester; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to improvements in machines for gathering cotton; and consists in the arrangement of discharging pipes or nozzles, with reference to the case for receiving the cotton; and, also, in a provision of means for imparting a spiral course to the air-blasts, as hereinafter specified.

Figure 1 represents a front elevation of our improved machine.

Figure 2 is a longitudinal sectional elevation of the same.

Figure 3 is an end view of the blast-nozzles.

Similar letters of reference indicate corresponding parts.

A is the receiver, which may consist of any suitable sheet-metal or other case.

It is mounted on a truck with short axles, attached to the side rails B, which are united by yokes, C, or other suitable means, to provide a space, D, between the side frames and the bottom of the receiver, sufficiently high and wide to allow the machine to pass along, taking plants in this space.

In connection with this receiver and the frame are two vertical or nearly vertical side plates, with flaring front ends, F, for condensing the branches laterally, so that blasts of air delivered under the row in an upward direction will have the best effect in detaching the matured cotton and delivering it into the receiver above.

Such blasts may be generated by any approved means and in any preferred way, by fans, pumping-engines, bellows, or other apparatus.

In this example we have represented a pair of vertical piston-pumps, G, one on each side of the receiver, and suitably supported in the frame.

They are worked by internal gears, H, in the rims of the truck-wheels, cranked pinions I, and connecting-rods K.

The air is conducted from the pump-cylinders by the pipes L L, reaching nearly to the ground, and having up-turned nozzles, M, from which the air is delivered in the right direction to have the best effect.

For increasing the effects of the blasts, we have placed spiral vanes or chutes, N, in the mouths of these nozzles, to give spiral directions to the air-blasts, which we find to cause a more intense action and better direction of the currents to the receivers.

Any preferred number of blasts may be applied on each side, either in the same lines horizontally, or vertically, or otherwise.

The end O of the receiver is perforated, to allow the escape of the air while retaining the cotton, and a discharge-orifice, P, may be placed in the bottom or elsewhere, for the removal of cotton from time to time, the same being provided with a slide door or other means of closing it.

This machine is designed to be drawn by horses, or other means, and is to be passed over the rows from time to time to remove the accumulations of matured cotton, leaving that which is not matured, and which will not be detached by the air-blasts, which are designed to have only force sufficient to take the ripe fiber, which adheres less tenaciously than the other.

Having thus described our invention,

We claim as new and desire to secure by Letters Patent—

1. The arrangement with relation to the receptacle A, of the air-discharging pipes or nozzles M, substantially as and for the purpose specified.

2. The spiral vanes N, arranged in the blast-nozzles, substantially as and for the purpose specified.

JAMES DAVIS, JR.
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Witnesses:
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D. F. CALDWELL.