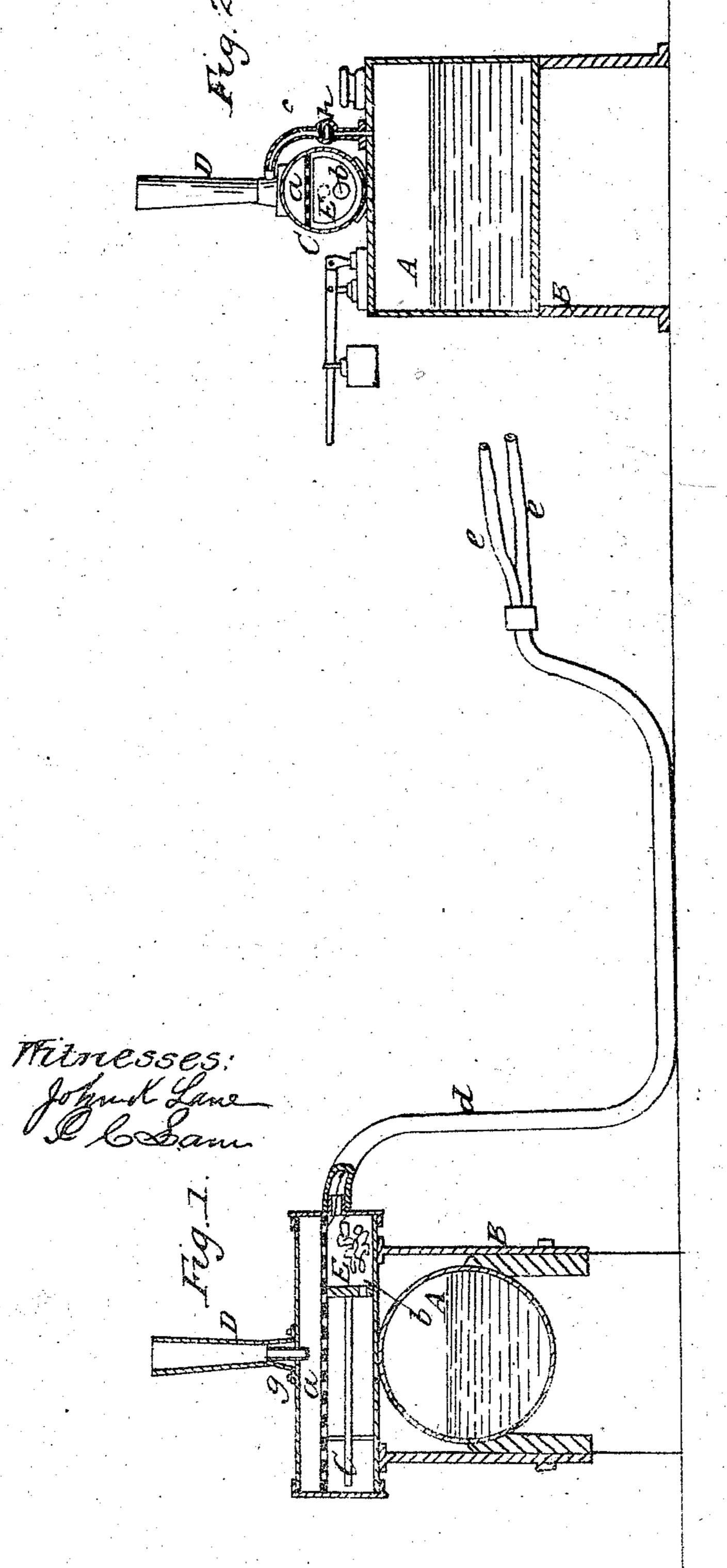
## J. GRIFFIN.

## Steam Cotton Harvester.

No. 23,168.

Patented March 8, 1859.



Treventor.

THE ECKERT LITHOGRAPHING CO., WASHINGTON, D. C

## UNITED STATES PATENT OFFICE.

JOHN GRIFFIN, OF LOUISVILLE, KENTUCKY.

## IMPROVEMENT IN COTTON-HARVESTERS.

Specification forming part of Letters Patent No. 23,168, dated March 8, 1859.

To all whom it may concern:

Be it known that I, JOHN GRIFFIN, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Machine or Device for Picking or Harvesting Cotton by Steam; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which-

Figures 1 and 2 are vertical central sections of my invention, the two planes of sections

crossing each other at right angles.

Similar letters of reference indicate corre-

sponding parts in the two figures.

This invention consists in connecting a flexible tube with a cylinder provided with a perforated plate and connected with a steamboiler, substantially as hereinafter fully shown and described, whereby a vacuum may be produced within the cylinder and the cotton picked from the bolls on the standing stalks by atmospheric pressure, the tubes being presented to the cotton by suitable attendants.

In carrying out this invention, I design to have the cylinder above mentioned connected with the boiler of a traction engine in order to facilitate the transporting of the machine and the moving of it from place to place, or from row to row in the course of the operation. I also design to employ one or more cylinders and a plurality of tubes, so that several hands may be employed and several rows of cotton picked or harvested simultaneously.

To enable those skilled in the art to make and use my invention. I will proceed to de-

scribe its construction and operation.

A represents a steam-boiler, which is sup-Ported in a frame, B, and C is a cylinder which is placed above the boiler A, and has a tube, D, attached to its upper part. Withplaced. This plate a is perforated, and may be near the upper part of the cylinder or above its center.

Below the plate a, within the cylinder C, a plunger, E, is fitted, said plunger having an opening, b, made through it, and a handle, c, attached, as shown in Fig. 1

To one end of the cylinder C, and below the plate a, a flexible tube, d, is attached. This tube may be lined with wire or have a coiledwire frame, or be arranged in any proper way to resist the pressure of the external air. The tube d may also be provided with two or more flexible branch tubes, e, as shown in Fig. 1.

The cylinder C is made to communicate with the boiler A as follows: A tube, f, passes from the upper part of the boiler into the tube D, and communicates with a short vertical tube, g, in the lower part of D, as shown clearly in Fig. 1. The tube f is provided with

a cock, h.

The operation is as follows: Steam is generated in the boiler A, as usual, and when the  $\operatorname{cock} h$  in tube f is opened the steam escapes through the tube f into g, and up through D. producing thereby a suction in the tube d and cylinder C, as indicated by the arrows in Fig. 1. The operators or attendants grasp the ends e e of the tube d and point their orifices to the bolls, and the cotton is extracted therefrom and conveyed or forced up the tube d into the cylinder C below the plate a. When the cylinder is filled the cock h is closed, the ends of the cylinder C opposite tube d removed and the cotton forced from the cylinder by operating the plunger E. The perforated plate a, it will be seen, prevents the cotton (shown in red) from being drawn up into tube D, while the hole b in the plunger permits the cotton to pass through and fill the whole of the cylinder C below the plate a.

The boiler A, as previously stated, may be mounted on wheels, and the device transported and moved from one place to another by any suitable engine driven by steam from

boiler A.

Machines may be constructed according to in the cylinder C a horizontal plate, a, is the within-described invention to operate on a large scale, several cylinders U may be used, and an engineer employed to drive the machine from place to place, as may be required in the operation of harvesting.

As any form of traction-engine may be used, a proper kind would suggest itself to an intelligent machinist or engineer. No particular

one therefore is herein described, it being unnecessary.

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

Patent, is—
The cylinder C, one or more, provided with a perforated plate, a, flexible tube or tubes d,

and made to communicate with a steam-boiler, A, by means of the tubes fg D, substantially as and for the purpose set forth.

Witnesses:

JOHN K. LANE,

I. U. LANE.