

No. 849,641.

PATENTED APR. 9, 1907.

A. E. SADLER.
CLEANING APPARATUS.
APPLICATION FILED JUNE 1, 1906.

FIG. 1.

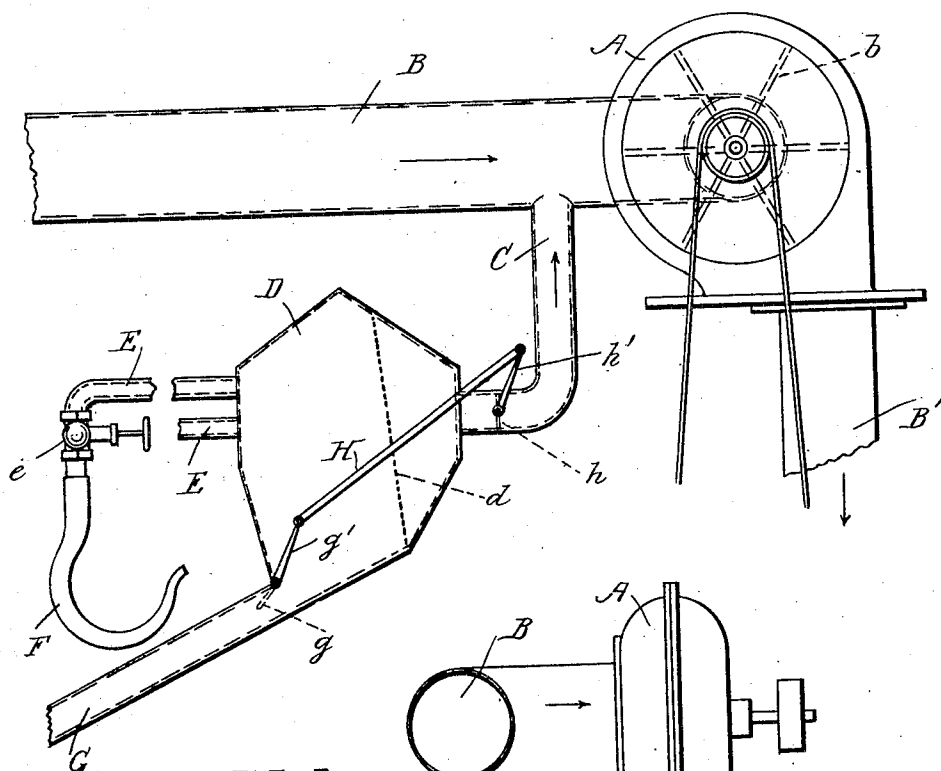
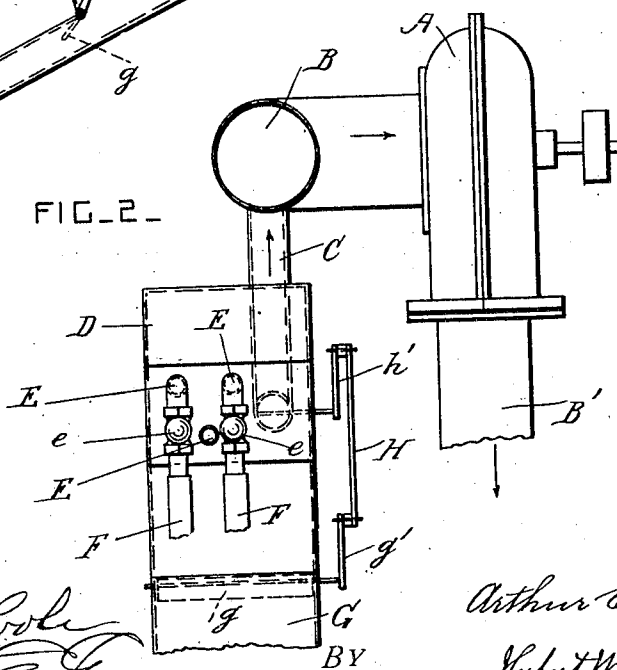


FIG. 2.



WITNESSES:

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CLEANING APPARATUS.

No. 849,641.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed June 1, 1906. Serial No. 319,708.

To all whom it may concern:

Be it known that I, ARTHUR E. SADLER, a citizen of the United States, residing at Cuthbert, in the county of Mitchell and State of Texas, have invented certain new and useful Improvements in Cleaning Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to pneumatic apparatus for cleaning cotton-gin houses; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the apparatus. Fig. 2 is an end view of the apparatus.

A is a pneumatic elevator, such as frequently used in cotton-gin houses for raising the cotton and distributing it.

B is the suction-pipe of the pneumatic elevator, and B' is its delivery-pipe.

A fan *b* is inclosed in the fan-casing of the pneumatic elevator and is revolved so as to draw air and the cotton through the suction-pipe.

All of the above-mentioned parts are of any approved construction.

In order to remove the fine material and dust which accumulates around the cotton-gins in the gin-house, an auxiliary suction-pipe C is provided and is connected to the main suction-pipe B of the pneumatic elevator.

D is a separating-chamber connected to the suction-pipe C and provided with a wire screen *d*.

E are suction-pipes connected to the chamber D on the opposite side of the screen from the pipe C. These pipes are of any desired length, and they are carried to various parts of the gin-house and are provided with stop-valves *e* of any approved construction.

F are hose pipes or nozzles formed of flexible material, such as canvas or leather, and secured to the pipes E.

G is a chute for discharging the dust from the separating-chamber. A pivoted valve

g is provided for closing the said chute, and *h* is a similar pivoted valve for closing the auxiliary suction-pipe C. The valve *g* is provided with an operating-lever *g'*, and the valve *h* is provided with an operating-lever *h'*. H is a coupling-rod arranged between the two said operating-levers, so that when one valve is open the other valve is closed.

The dust-discharge valve is normally closed and a current of air is drawn through the auxiliary suction-pipe, the separating-chamber, and the pipes connected to it. The hose-pipes are moved around the cotton-gins to suck up all the dust and other particles of matter. This dust is separated from the air by the wire screen, and it accumulates in the lower part of the separating-chamber. The dust-discharge valve is opened periodically to let the dust slide out of the separating-chamber by gravity, the valve *h* being closed at the same time to stop the current of air through the separating-chamber. In this manner the separating-chamber can be operated without stopping the action of the pneumatic elevator.

What I claim is—

1. The combination, with a pneumatic elevator provided with a suction-pipe, of an auxiliary suction-pipe connected to the said suction-pipe, a separating-chamber connected to the said auxiliary suction-pipe and provided with a screen, a flexible pipe connected to the said separating-chamber, a stop-valve for controlling the current of air through the said flexible pipe and auxiliary suction-pipe without affecting the air-current in the said elevator suction-pipe, and means for removing the dust from the said chamber.

2. The combination, with a pneumatic elevator provided with a suction-pipe, of an auxiliary suction-pipe connected to the said suction-pipe, a separating-chamber connected to the said auxiliary suction-pipe and provided with a screen, pipes connected to the said separating-chamber and provided with stop-valves, flexible pipes connected to the said pipes, and means for removing the dust from the said chamber.

3. The combination, with a pneumatic elevator provided with a suction-pipe, of an

auxiliary suction-pipe connected to the said suction-pipe, a separating-chamber connected to the said auxiliary suction-pipe and provided with a screen, a flexible pipe connected to the said separating-chamber, a
5 dust-discharge valve at the lower part of the said chamber, a valve in the said auxiliary suction-pipe, and means for connecting the

said valves so that when one of them is closed the other one is opened. 10

In testimony whereof I have affixed my signature in the presence of two witnesses.

ARTHUR E. SADLER.

Witnesses:

W. H. BADGETT,
W. J. SKUYYS.