

(No Model.)

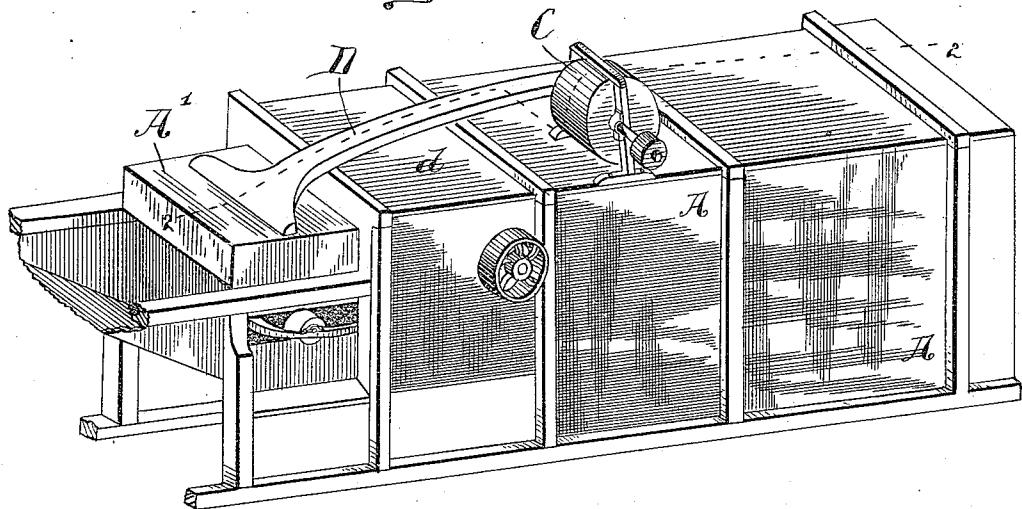
G. E. & S. T. STERLING.

DUST COLLECTOR FOR THRASHING MACHINES AND SEPARATORS.

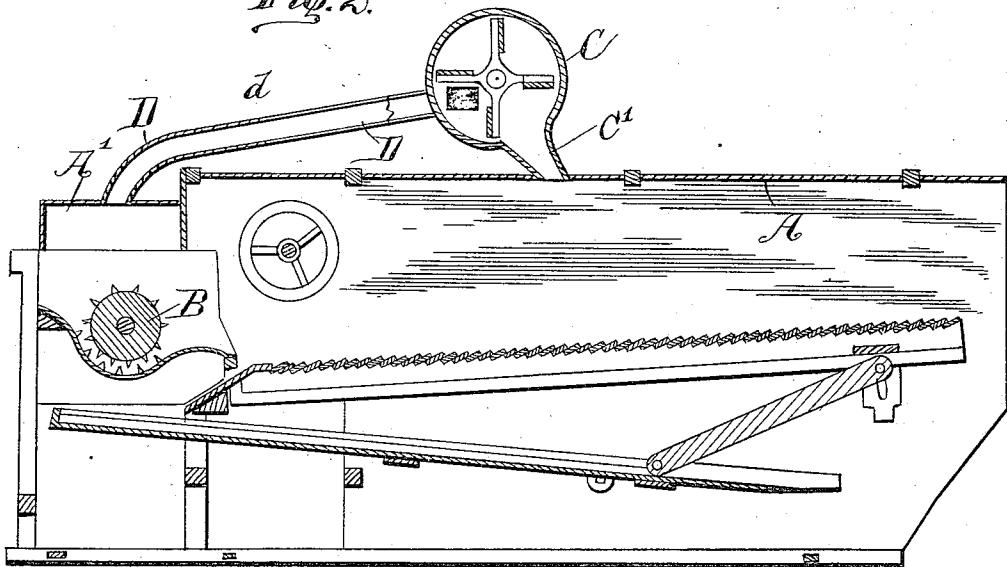
No. 428,424.

Patented May 20, 1890.

*Fig. 1.*



*Fig. 2.*



WITNESSES.

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# UNITED STATES PATENT OFFICE.

GEORGE E. STERLING AND SIDNEY T. STERLING, OF CAMDEN, INDIANA.

## DUST-COLLECTOR FOR THRASHING-MACHINES AND SEPARATORS.

SPECIFICATION forming part of Letters Patent No. 428,424, dated May 20, 1890.

Application filed September 29, 1888. Serial No. 286,766. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE E. STERLING and SIDNEY T. STERLING, citizens of the United States, residing at Camden, in the 5 county of Carroll and State of Indiana, have invented certain new and useful Improvements in Dust-Collectors for Thrashing-Machines and Separators, of which the following is a specification.

10 The object of our said invention is to provide a means whereby the dust usually produced by the beater or thrashing-cylinder of a thrashing-machine may be conveyed away from the point where produced to among the 15 thrashed straw inside the machine, instead of being permitted to rise into the faces of the operators. This object is accomplished by attaching to the thrashing-machine at some appropriate point a suction-fan, from which 20 a tube or spout shall lead to a point over the beater of the thrashing-machine, where it is attached to the cap usually located over said beater, or is developed into a hood or tunnel like end, and from which a second spout or 25 tube shall lead through the top of the thrashing-machine, through which the dust shall be discharged onto or among the straw, for purposes also hereinafter more fully described.

Referring to the accompanying drawings, 30 which are made a part hereof and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of the body of a thrashing-machine provided with our invention, and Fig. 2 a longitudinal sectional view of the same on the dotted line 2 35 in Fig. 1.

In said drawings the portions marked A represent the body of the thrashing-machine; B, the thrasher-cylinder or beater; C, the exhaust or suction fan, and D the tube or spout leading from above the beater to said fan.

The thrashing-machine and its beater or thrasher-cylinder may be of any ordinary or desired construction. A removable cap A', 40 to be placed above the beater, is shown, and this cap is also a common feature of such machines.

The exhaust or suction fan C is in itself only an ordinary fan. It is preferably located

directly on top of the body A of the thrashing-machine in position where it can be driven by a belt from a pulley on one of the shafts of said machine. Its discharging-chute C' or tube leads through the top of the machine above the oscillating or vibrating straw-floor, 55 so that the dust from said fan is discharged on the straw on said floor when the machine is in operation. This, as will be readily understood, reduces to a minimum the disagreeable effects of the dust, as it is mixed with 60 the straw, and thus largely prevented from flying about.

The tube or spout D, as before stated, leads from the fan C to a point above the beater B, and the end above said beater is extended so 65 as to cover nearly or quite the length of said beater, and is thus better adapted to draw in the dust produced by said beater in thrashing the grain. Where a cap A' is used, as shown, it is desirable to secure the end of 70 this spout to said cap. We prefer to joint said spout, as shown at d, so that the cap and lower end of said spout can be removed from the machine without disturbing the fan.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with a thrashing-machine, of an exhaust or suction fan mounted upon said machine, having its discharging orifice or tube communicating with the interior of said machine above the straw-conveying floor thereof, and a spout leading from said fan to a point in proximity to the beater or thrasher-cylinder, whereby the dust produced 80 by said beater is conveyed to and discharged among the straw inside the machine when the machine is in operation, substantially as described, and for the purposes specified.

In witness whereof we have hereunto set 90 our hands and seals, at Camden, Indiana, this 24th day of September, A. D. 1888.

GEORGE E. STERLING. [L. S.]  
SIDNEY T. STERLING. [L. S.]

Witnesses:

W. W. SINEE,  
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