

I. B. SANDUSKY.
Machines for Cleaning Blue-Grass Seed.
No. 212,821. Patented Mar. 4, 1879.

Fig. 1.

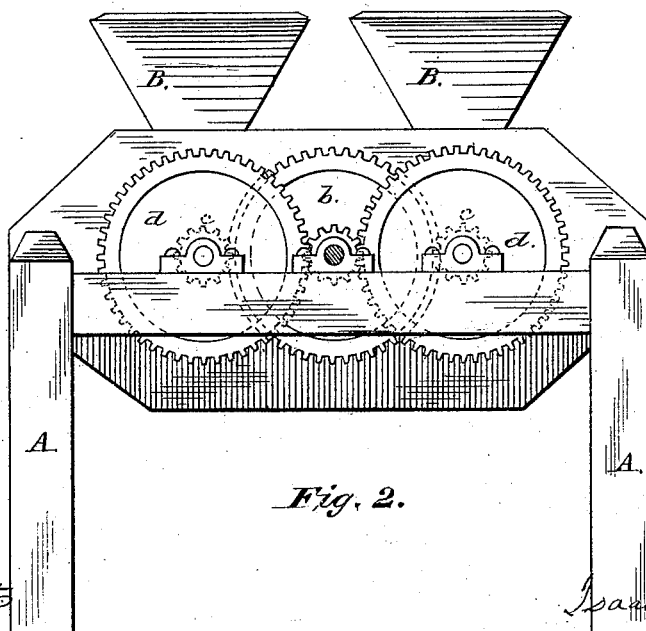
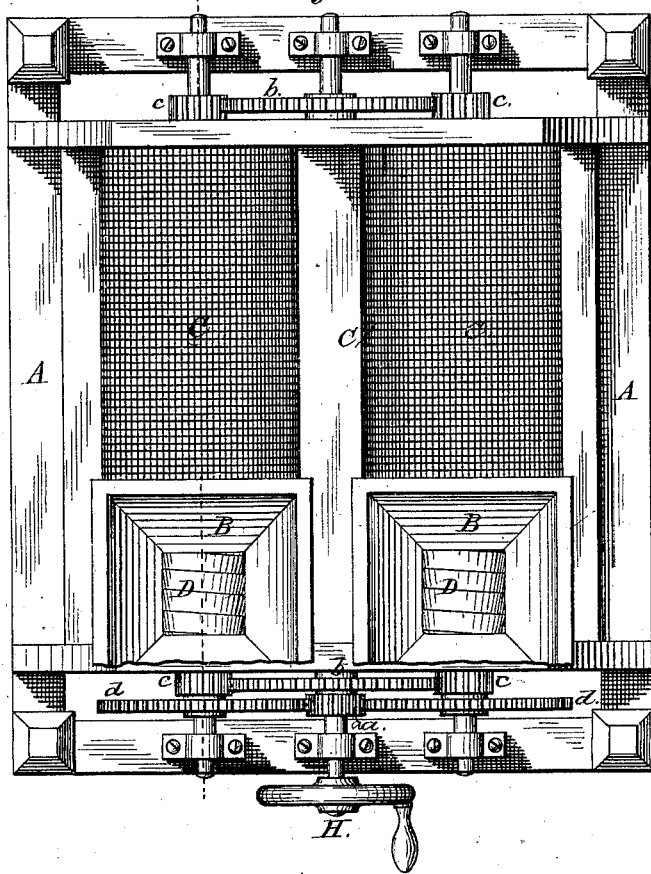


Fig. 2.

Witnesses:

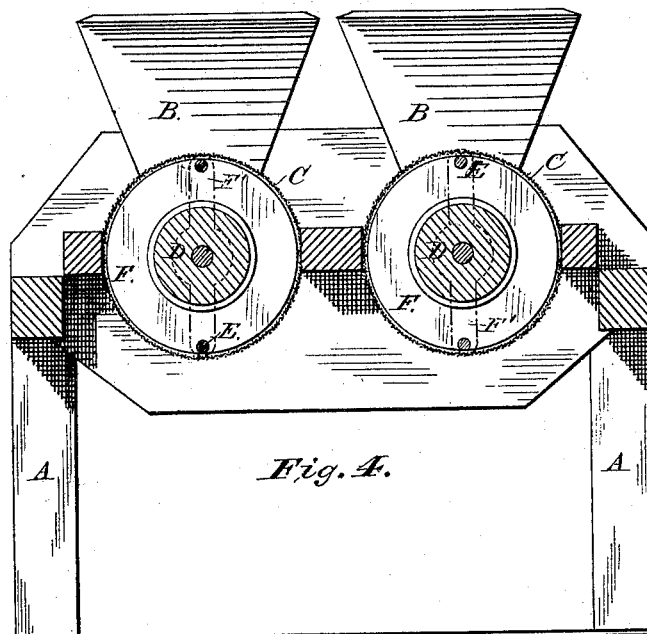
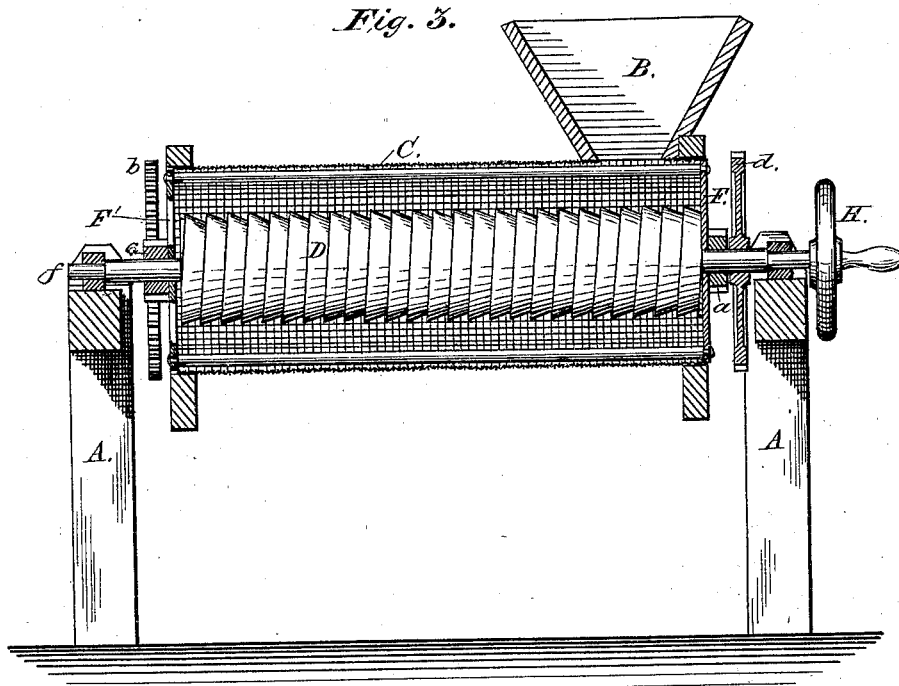
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Inventor:

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Witnesses:

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UNITED STATES PATENT OFFICE.

ISAAC B. SANDUSKY, OF LEXINGTON, KENTUCKY.

IMPROVEMENT IN MACHINES FOR CLEANING BLUE-GRASS SEED.

Specification forming part of Letters Patent No. 212,821, dated March 4, 1879; application filed December 17, 1878.

To all whom it may concern:

Be it known that I, ISAAC B. SANDUSKY, of the city of Lexington and State of Kentucky, have invented an Improved Machine for Cleaning Blue-Grass Seed, of which the following is a specification:

My machine is designed for cleaning grass and other seeds, more particularly blue-grass seeds; but it may be modified in such a manner, without essential change of the parts and combinations of parts which I claim as of my invention, as to become capable of cleaning various sorts of grain and other vegetable products.

In the accompanying drawings, forming part of this specification, Figure 1, Sheet 1, is a plan view of a machine embodying my improvements. Fig. 2, Sheet 1 is an end elevation, showing the gearing operating the several moving parts. Fig. 3, Sheet 2, is a longitudinal section of one of the cylinders, of which there may be two, four, or more, according to circumstances, with the form of gearing shown in Fig. 2 continued according to the number of cylinders. Fig. 4 is a transverse vertical section of the machine.

A is a frame, of suitable form and strength, on which are supported the parts of the machine. Care two or more wire-gauze cylinders, which, for the purpose of cleaning blue-grass seed, may be made of No. 16 gauze. Their open ends are closed by rotating heads F F', in the manner hereinafter described. The material to be cleaned is introduced through a hopper, B.

Journalled in suitable bearings on the frame, and revolving within the cylinder C, is a spiral conductor, D, which may be made in any suitable form or of any material adapted for the purpose. In use, I prefer to make it somewhat larger in proportion to the gauze cylinder than as it is shown in the drawings.

Mounted upon the shaft *f* of the conductor D in such a manner as to revolve freely thereon are the heads F F', closing respectively the upper and lower ends of cylinder C.

The head F' has an opening or openings in it, as shown in Fig. 3, to permit the discharge of the tufts or clots of fuzz and other large impurities.

Connecting the heads are two or more beating-bars, E, secured to said heads rigidly, at

points as near as practicable to the outer circumference of said heads, so as to pass very near to the surface of the wire cylinder C in the revolution of said heads. These bars serve to beat and stir violently the material as it is urged along by the conductor D.

These beater-bars are geared to revolve at a much higher speed than that of the conductor D by a certain arrangement of cogged wheels connected to the same driving-shaft which imparts motion to conductor D.

On the driving-shaft H are rigidly secured a small pinion, *a*, and a large pinion or gear-wheel, *b*. Another gear-wheel, *b*, exactly similar to this, is rigidly secured upon shaft H, at the opposite end. These wheels *b* intermesh at either end of the machine with pinions *c*, which are formed in one piece with, or otherwise rigidly secured to, the loosely-rotating heads F F', so that motion and power are imparted equally at both ends to the heads and the beaters which they carry.

The small pinion *a* communicates a slow motion, through gear-wheel *d*, to the conductor D.

The operation of my machine is as follows: The blue-grass seed, (which has already been passed through the machine patented by me February 19, 1878, No. 200,410,) in the condition in which it is fed into this machine, contains a large amount of fuzz or fur not to be separated by the machine described in said patent, which merely separates the straw and fibers from the crude material. When the seed is passed into the apparatus forming the subject of the present description, it is slowly fed or forced along by the conductor D, while the beaters act rapidly upon it, driving the seed through the meshes of cylinder C, and rolling the fuzz separated from the seed into clots, balls, or small wads; and these, refusing to pass through the gauze, are eventually discharged through the open head F'.

An exhaust-fan may be applied to this machine or to the other; and the seed may be passed through either or both machines as many times as may be required.

This machine may be used either in connection with, or independently of, the machine described in my patent referred to.

Having thus described my invention, I claim—

1. The combination of the perforated cylin-

inder C, the conductor D, and the thrashers or beaters E, substantially as described.

2. The combination of the cylinder C, the conductor D, and the thrashers or beaters E, arranged to revolve more rapidly than the conductor, substantially as described.

3. The combination of the cylinder C, the spiral conductor D, the beaters E, and the heads F F', to which said beaters are secured, substantially as described.

4. The combination of the cylinder C, the

shaft carrying the conductor D and provided with the gear-wheel *d*, the loosely-rotating heads F F', provided with the pinions *c*, and the driving-shaft H, provided with pinion *a* and gear-wheels *b*, substantially as set forth.

In witness whereof I have hereunto set my hand this 17th day of December, 1878.

ISAAC B. SANDUSKY.

Witnesses:

E. R. LEWIS,

A. S. TAYLOR.