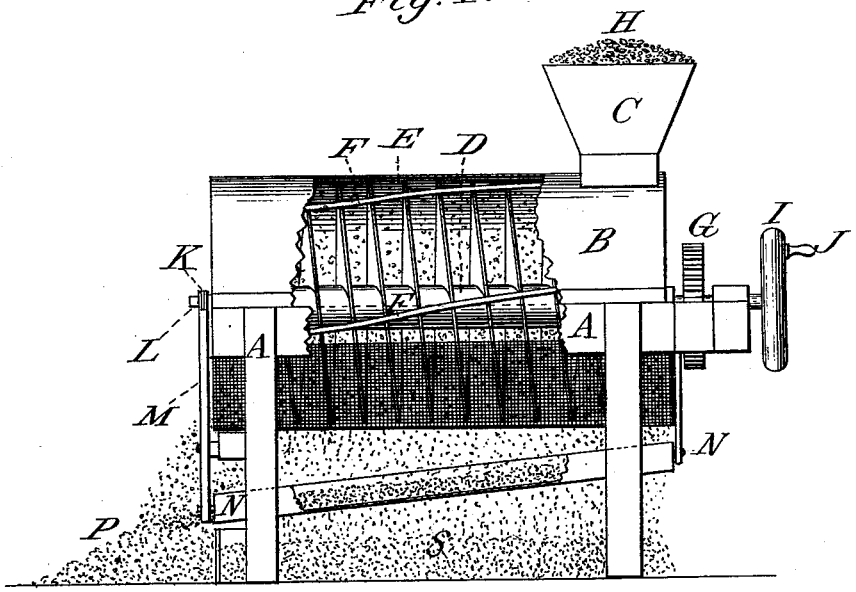
J. L. FISHER.

Machine for Cleaning Grass-Seeds.

No. 221,453. Patented Nov. 11, 1879.

Fig. 1.



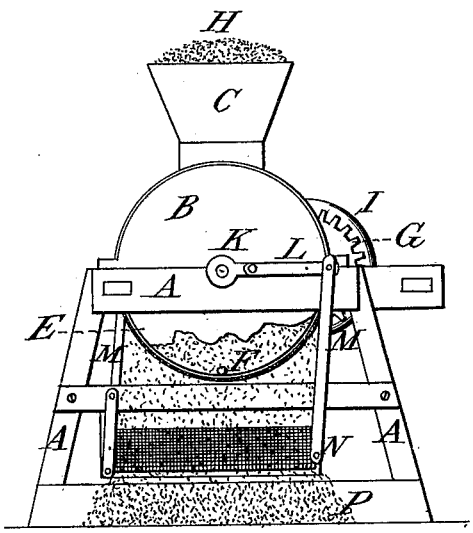


Fig. 3.

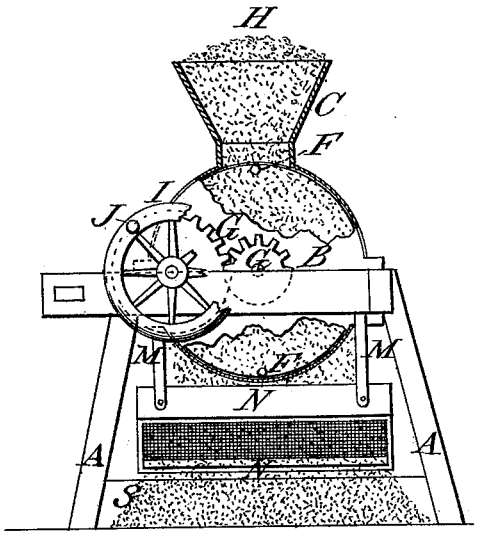


Fig. 2.

Attest:

John McMurtry
J. L. Gilmore

Inventor.
Jno. L. Fisher
per
F. A. Lehmann,
atty

UNITED STATES PATENT OFFICE.

JOHN L. FISHER, OF LEXINGTON, KENTUCKY, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO PATRICK CARROLL, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR CLEANING GRASS-SEEDS.

Specification forming part of Letters Patent No. **221,453**, dated November 11, 1879; application filed July 10, 1879.

To all whom it may concern:

Be it known that I, JOHN L. FISHER, of the city of Lexington, county of Fayette and State of Kentucky, have invented a new and useful Improvement in Machines for Cleaning Grass-Seeds, of which the following is a specification.

My invention relates to an improvement in machines for cleaning grass-seed; and it consists in the combination of a cover, a concave screen, and a shaft, having secured to it a spiral conveyer, around the edge of which are secured a number of spiral rods, arranged as will be more fully described hereinafter.

In the accompanying drawings, in which the same letters of reference indicate the same parts, Figure 1 is a side elevation of a machine embodying my invention, with a part of the top covering cut away, showing a sectional view of a part of the spiral cylinder and its mode of operation. Fig. 2 is an elevation of the front of same, giving a sectional view of the hopper, of a part of the top covering of the cylinder and the gear-wheels, and the means for applying motive power. Fig. 3 is an elevation of the rear end of same.

A is the frame-work of the machine; B, the top cover; C, the hopper; D, the shaft of the spiral cylinder; E, the spiral of sheet metal, and F the rods attached to the edges of the spiral sheets, not only for the purpose of sustaining said sheet-metal spirals in their position, but also for the purpose of more thoroughly separating the chaff and seed; G G are the gear-wheels of the motive power; H, the crude grass-seed in the chaff; I, the fly-wheel for regulating the motive power; J, the crank-handle of said fly-wheel; K, the crank at the rear end, which gives motion to the lower screen, N, by means of the arms L and M; P, chaff thrown out at the rear end of the machine; S, the cleaned seed after passing through the sieve N.

The operation of my machine is as follows: When the power is applied to the spiral cylinder after the hopper has been filled with the seed in the chaff, as at H, the spiral blade E on said shaft D, in connection with the rods F on the same, which I also attach spirally to said blade, will thoroughly beat and winnow the chaff and seed so as to separate the same and permit the seed to drop through the first or concave screen on the lower screen, N, which is kept in constant motion by means of the crank K at the rear end of the machine, which operates sieve N by means of the arms L and M, and thereby sifts the seed through the same, as seen at S, and the chaff P is emptied at the rear end of the machine, both from the screen immediately under the spiral cylinder, as well as from the end of the lower screen, N.

What I claim is—

The combination of the top B, concave screen, shaft D, carrying the spiral conveyer E, and spirally-arranged rods F, attached to the spiral conveyer at its periphery, substantially as shown and described.

JOHN L. FISHER.

Witnesses:

JOHN MCMURTRY,

J. L. GILMORE.