2 Sheets—Sheet 1.

C. D. READ.
Corn-Shellers.

No. 199,744. **Patented Jan. 29, 1878.**

Fig 3.

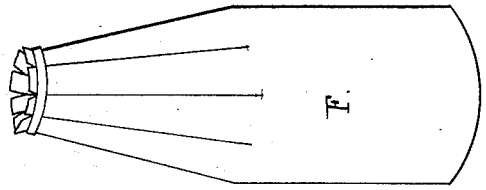
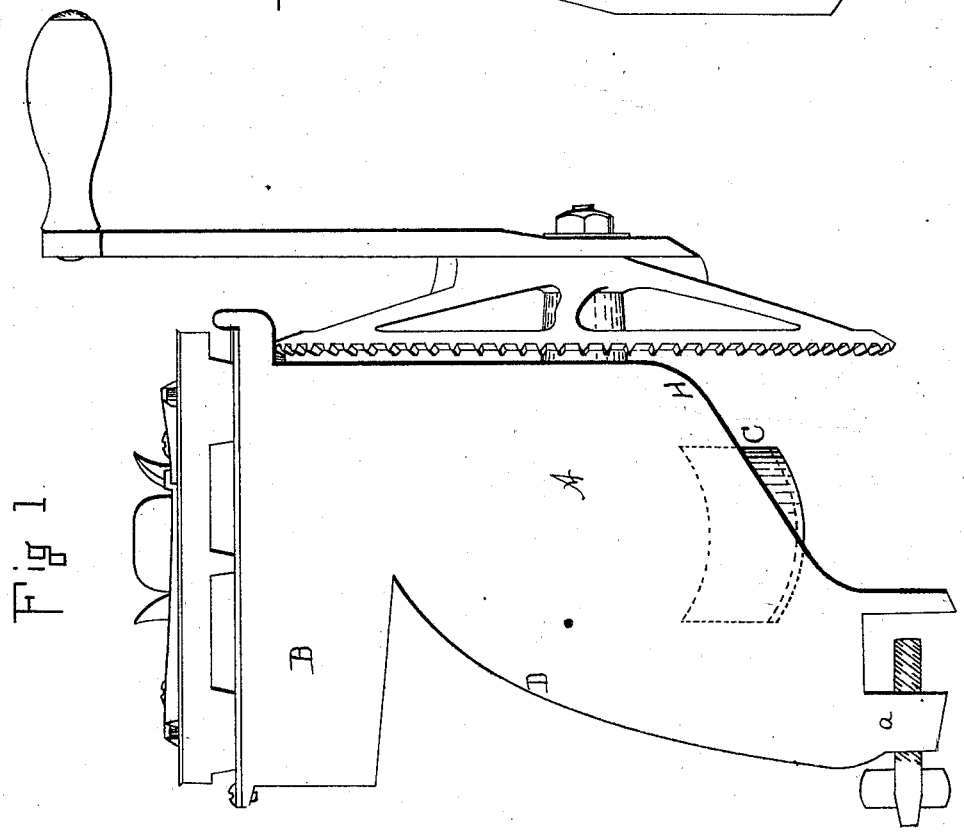


Fig 1



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2 Sheets—Sheet 2.

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No. 199,744. Patented Jan. 29, 1878.

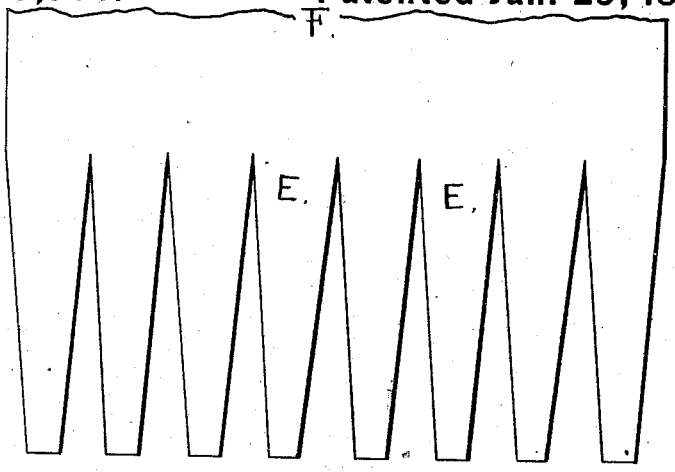

Fig. 4

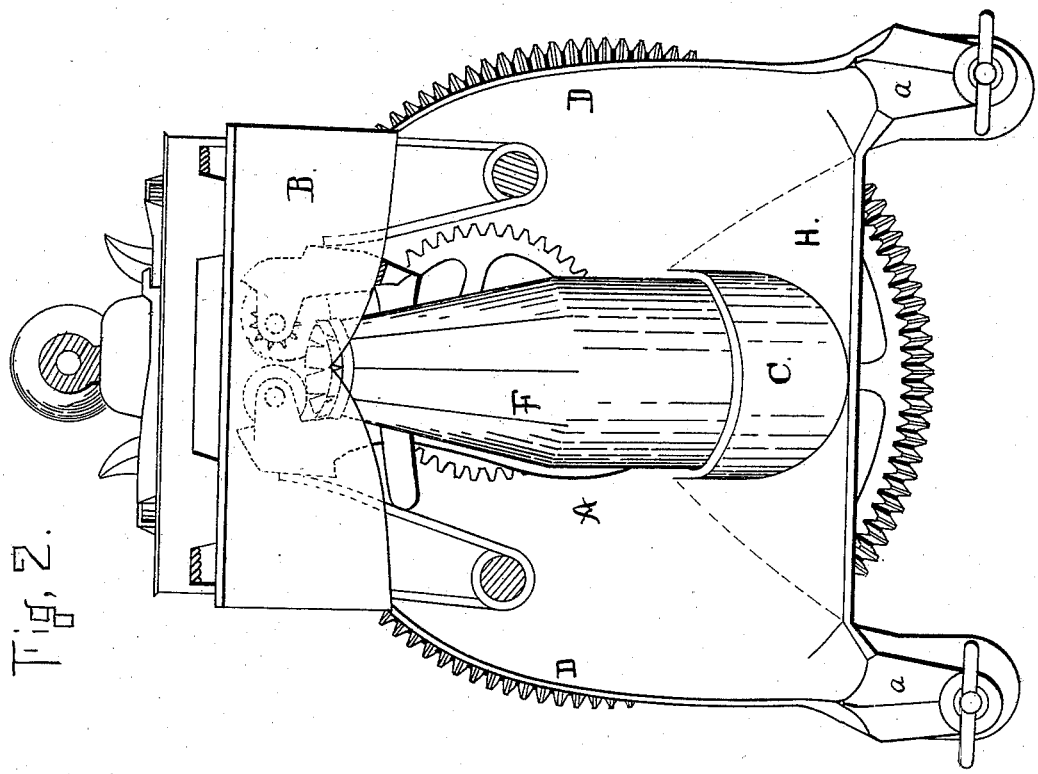

Fig. 2.

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UNITED STATES PATENT OFFICE.

CALVIN D. READ, OF AYER, MASSACHUSETTS.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. **199,744**, dated January 29, 1878; application filed May 16, 1877.

To all whom it may concern:

Be it known that I, CALVIN D. READ, of Ayer, county of Middlesex, and State of Massachusetts, have invented certain Improvements in Machines for Shelling Corn; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a side view of the machine; Fig. 2, a front view of the machine, showing the improvement; Fig. 3, a view of the separating-tube F detached; Fig. 4, a view of the blank before its formation into a tube.

Like letters designate corresponding parts in all of the figures.

The special purpose of my invention is to more thoroughly separate the cob from the shelled corn.

My invention consists in an improved construction of the frame of the sheller, and in forming out of sheet metal or other suitable material a flexible tube, and attaching it to a corn-sheller in such manner as to separate the cob from the corn in the operation of shelling; and I will set forth the said improvement definitely in the following specification.

I will first describe the construction of the frame on and within which the separating-tube F is supported. The body A thereof consists of an upright concave plate of cast-iron, with two lateral clamping-supports, *a a*, at its lower edge, for attaching the machine to the edge of a box or other suitable support, and with a lateral overhanging ring or short cylinder, B, at the top, within which are arranged the principal shelling parts, and also a short open cylinder, C, cast in and through the inclined overhanging bottom H of body A, in such position to the clamping-supports *a a* as to stand vertical, and outside of and in a line with the side of the box on which the machine is attached, and beyond the line of the clamp-supports.

The outwardly-extended vertical concave sides D D of body A are for the purpose of conducting the shelled corn into the box.

On the inside and near the bottom of cylinder C is cast a ledge or shoulder, for a rest to the separating-tube F. All of this frame is cast in one piece.

The flexible tube F is made of sheet metal, or it may be made of any elastic substance, or rigid, with yielding covering-plates. In forming it out of sheet metal, thin sheet-steel (represented in Fig. 4) is cut wide enough, when made into a tube, to just fill the inside of cylinder C in body A, and it is cut long enough to nearly reach up to the relieving-rolls, and narrow tapering pieces are cut out of its upper edge, leaving tines or fingers E E, so that after being made in tubular form the upright fingers E E of the tube are bent inwardly, so as to contract it, making a small opening at the top. The upper ends of the said fingers are bent outwardly, forming a tunnel-shaped opening for the better entrance of the cob.

An elastic band may be used or not on the top of tube F. If not used, the fingers E E are tempered, so as to retain their elasticity; or the fingers may be made separately and riveted onto a tube.

The flexible part of the tube F is for the purpose of expansion and contraction to suit the different-sized cobs, and to prevent the corn from following the cob down through it, thereby effectually separating the cob and corn in shelling.

The tube F is left open a little on the side when formed, and is sprung into cylinder C, and is held in place by its expansion. It is placed in a vertical position directly under the relieving-rolls, so that in the operation of shelling the cob passes down through the said tube outside, and the shelled corn inside of the box on which the machine is attached.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The cob-separating tube F, having its upper part constructed with spring-sections turned inward, and at their upper extremity a little outward, to produce a taper form of tube somewhat flaring at the upper end, substantially as and for the purpose herein specified.

2. In a corn-sheller, a frame, A, constructed

with an inclined corn-discharging bottom, H, a cob-discharging tube, C, and clamp-supports *a a*, the bottom H being arranged to extend past the line of the tube C, and the clamp being formed at the lower edge of said bottom, so that the corn will be discharged into, and the cobs be discharged outside of, a receptacle, to which the machine is attached by the said clamps, substantially as and for the purpose herein specified.

CALVIN D. READ.

Witnesses:

JAMES R. GRAY,

GEO. H. HILL.