# J. S. FOSTER.

## Corn-Sheller.

No. 167,326. Patented Aug. 31, 1875.

Fig. 1.

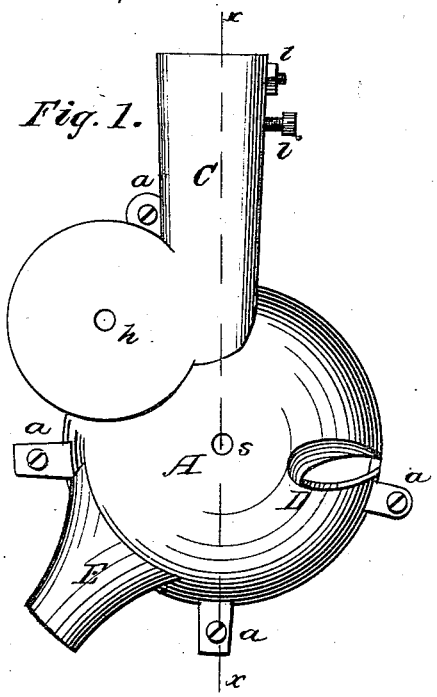



Fig. 2.

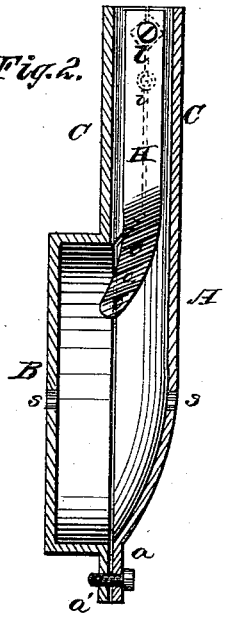



Fig. 3.

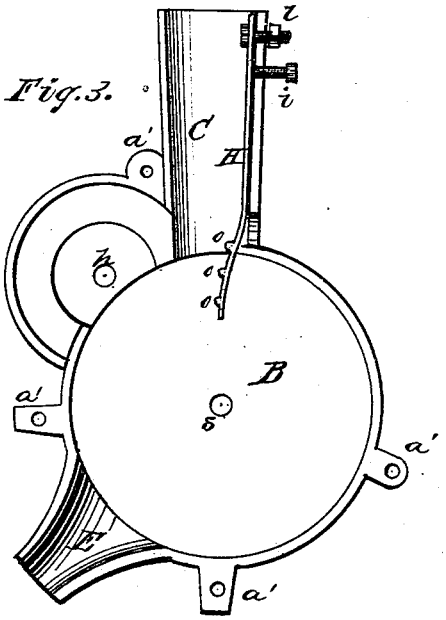
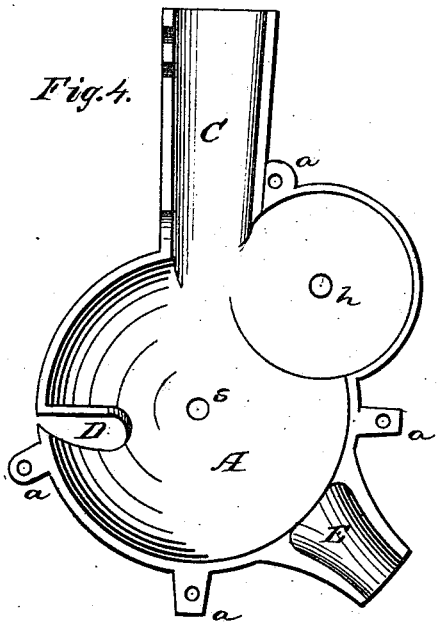



Fig. 4.

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. **167,326**, dated August 31, 1875; application filed July 30, 1875.

*To all whom it may concern:*

Be it known that I, JOSEPH S. FOSTER, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Corn-Shellers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in an improved arrangement of the spring and spout in that class of corn-shellers in which the frame is made of iron and incloses the gearing and working parts, and in which one side of the frame or case forms a separator for separating the cobs from the shelled corn.

In the annexed drawing, Figure 1 is a side elevation. Fig. 2 is a vertical transverse section taken on line *x x* of Fig. 1, and Figs. 3 and 4 are inside views of the sides A and B of the case or frame.

The case or frame is made in two pieces, A and B, which are held together by bolts passing through lugs *a a'*. The projections C C, from the pieces A B, form the spout through which the ears of corn are fed to the working parts. The case A B incloses the working parts, which consist of a disk-wheel armed with pointed teeth, and having two journals, which pass through the openings or bearings *s s* in the parts A B. This disk has its teeth on the side facing the piece A, while on the side facing the part B is cast a large gear-wheel. The other working part in the case is a wheel having ribs on its face and two journals, which latter pass through the openings *h h* in the case. A small pinion is cast on the side of this wheel next to, and so that it is inclosed in the part B of the case. The large gear-wheel on the disk meshes into this pinion, so that the disk and ribbed wheel work together. One of the journals of the disk-wheel passes through the case B, and a crank and handle are attached to it for actuating the disk and ribbed wheel. One of the journals of the ribbed wheel passes through the case A and has a fly-wheel rigidly fastened to it. The case A has an opening, D, in its side, from which the cobs are ejected after the shelling is done. The case A is made so that at the bearing *s* it is about three inches from the teeth on the disk, and from the bearing to the circumference it gradually approaches the disk, so that at its circumference it is only about half an inch from the disk. The open projection E on the under side of the frame is for the corn to pass out after it is shelled. To the lugs *a'* are fastened any suitable legs for supporting the frame in an upright position. The sides of the spout C are made smooth and straight, and without any recesses or indentations, so that the ears of corn, when put into the spout, will fall directly into the working parts. On the top of the spout is secured a curved spring, H, by means of a bolt, *l*. The set-screw *i* is to give the desired tension to said spring. The spout C is made deep enough in the direction in which the spring moves that there will be room enough for the spring H to spring back for the largest ears without its touching the top of the spout. The lower end of the spring is provided with ribs *o o*, which are designed to keep the ears from passing through too rapidly, and before the corn is all off the cob.

By placing the spring in the top of the spout the bolt and set-screw for holding and adjusting the spring H come in between the two halves of the spout, and thus the holes for holding said bolt and set-screw can be cast, which will save the cost of drilling; also, as the spring H lifts during the shelling, all parts of the spout below it are smooth and straight, so that there is nothing to retard or hold the ears back. This is an advantage over those shellers in which the spout has a recess in its side to receive the spring, as there is always a space between the spring and recess, by which the ears are retarded in their way to the shelling-wheels.

I do not claim the placing of a spring in the top of the spout of a corn-sheller as new; nor do I claim the ribs on the spring; but

What I claim is—

The combination of the case A B with spout C, having smooth and straight interior sides, the ribbed spring H, placed in the top of the spout, and the bolt *l* and set-screw *i*, passing through holes cast in the edges of the two halves of the spout, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own, I have affixed my signature in presence of two witnesses.

JOSEPH S. FOSTER.

Witnesses:

GEO. B. LONGSTREET,

CHAS. A. COBB.