3 Sheets—Sheet 1.

H. P. GERRISH.

Corn Husker.

No. 18,332. Patented Oct. 6, 1857.

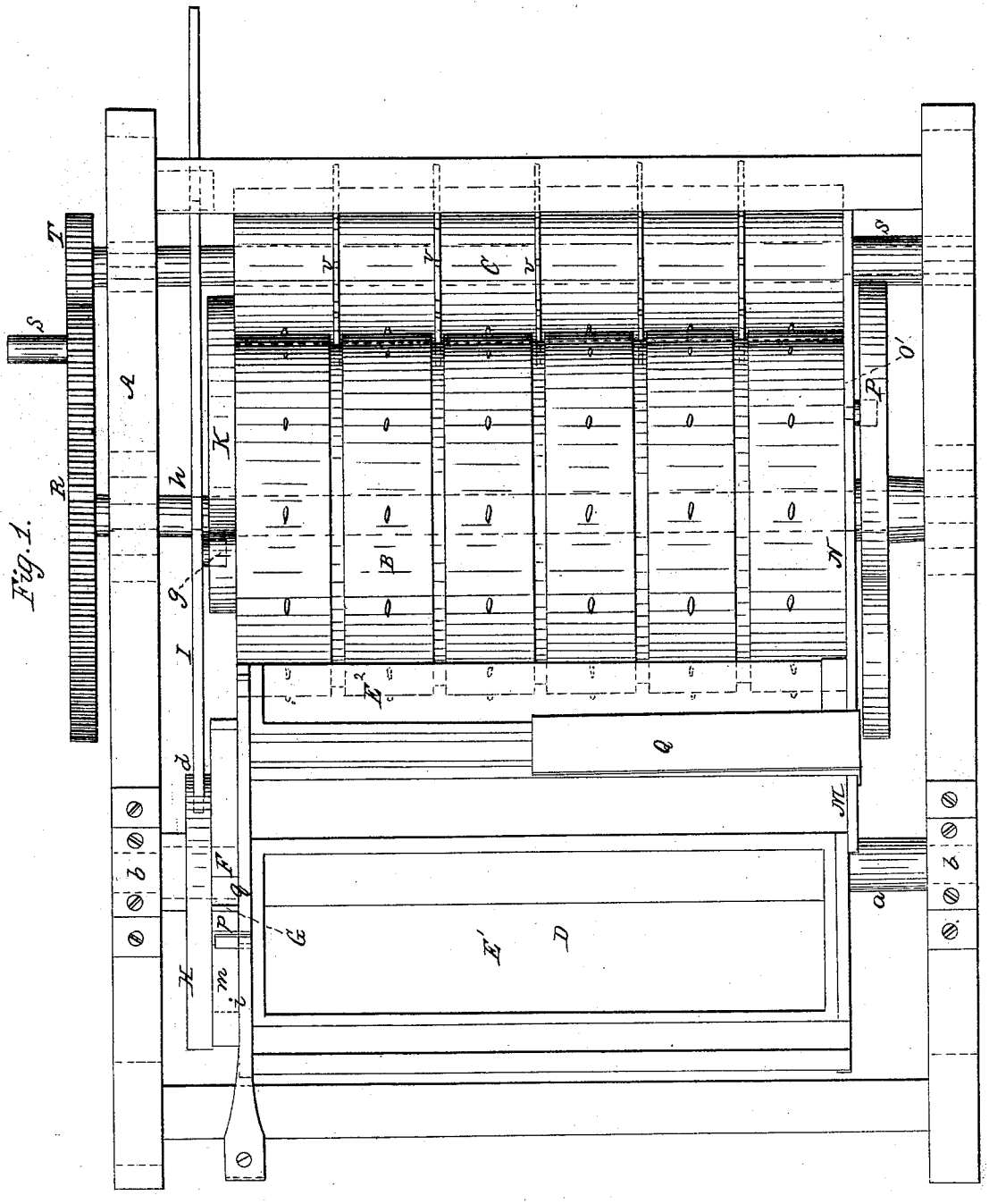


Fig. 1.

H. P. GERRISH.

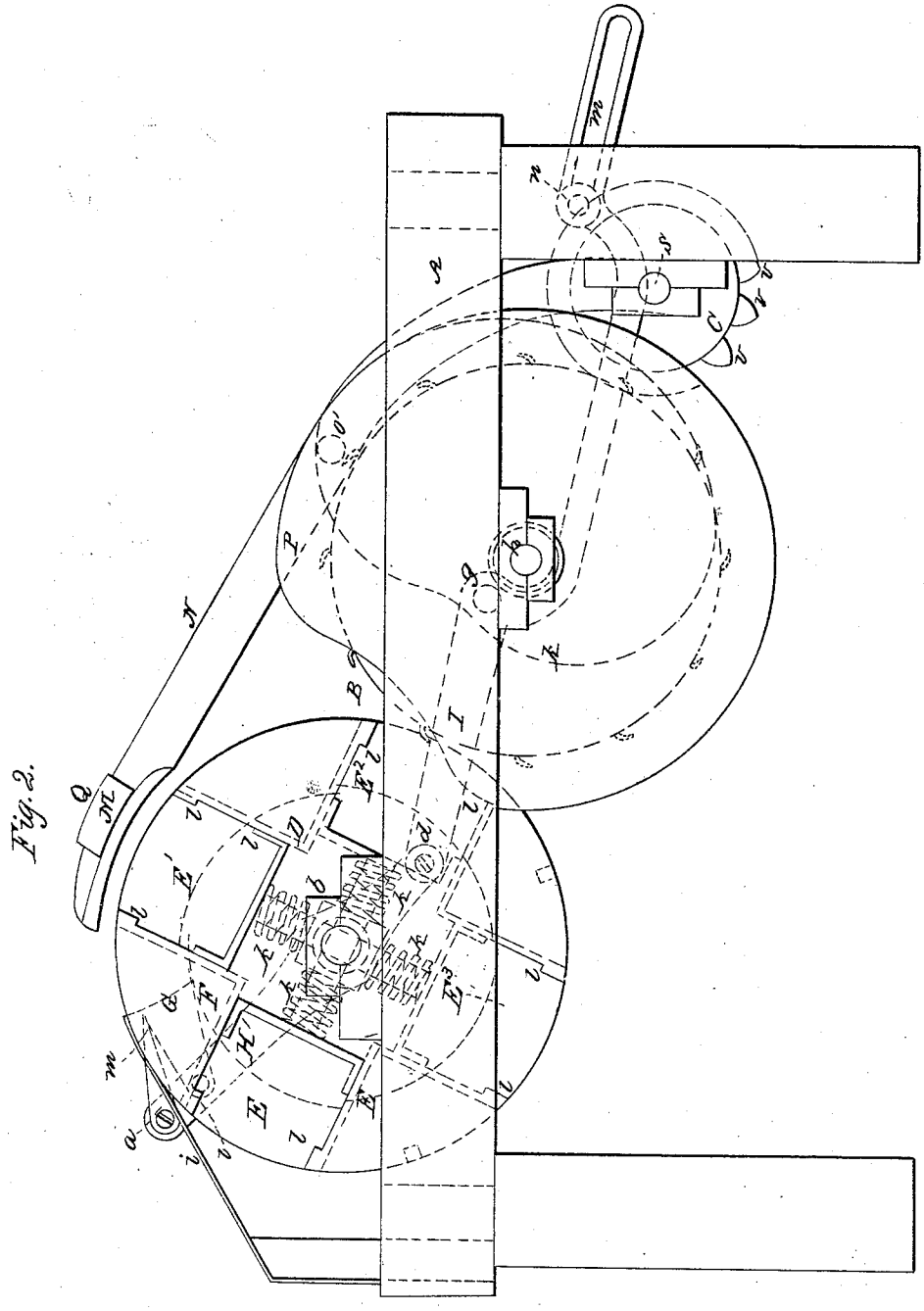
Corn Husker.

3 Sheets—Sheet 2.

No. 18,332.

Patented Oct. 6, 1857.

Fig. 2.



3 Sheets—Sheet 3.

H. P. GERRISH.

Corn Husker.

No. 18,332.

Patented Oct. 6, 1857.

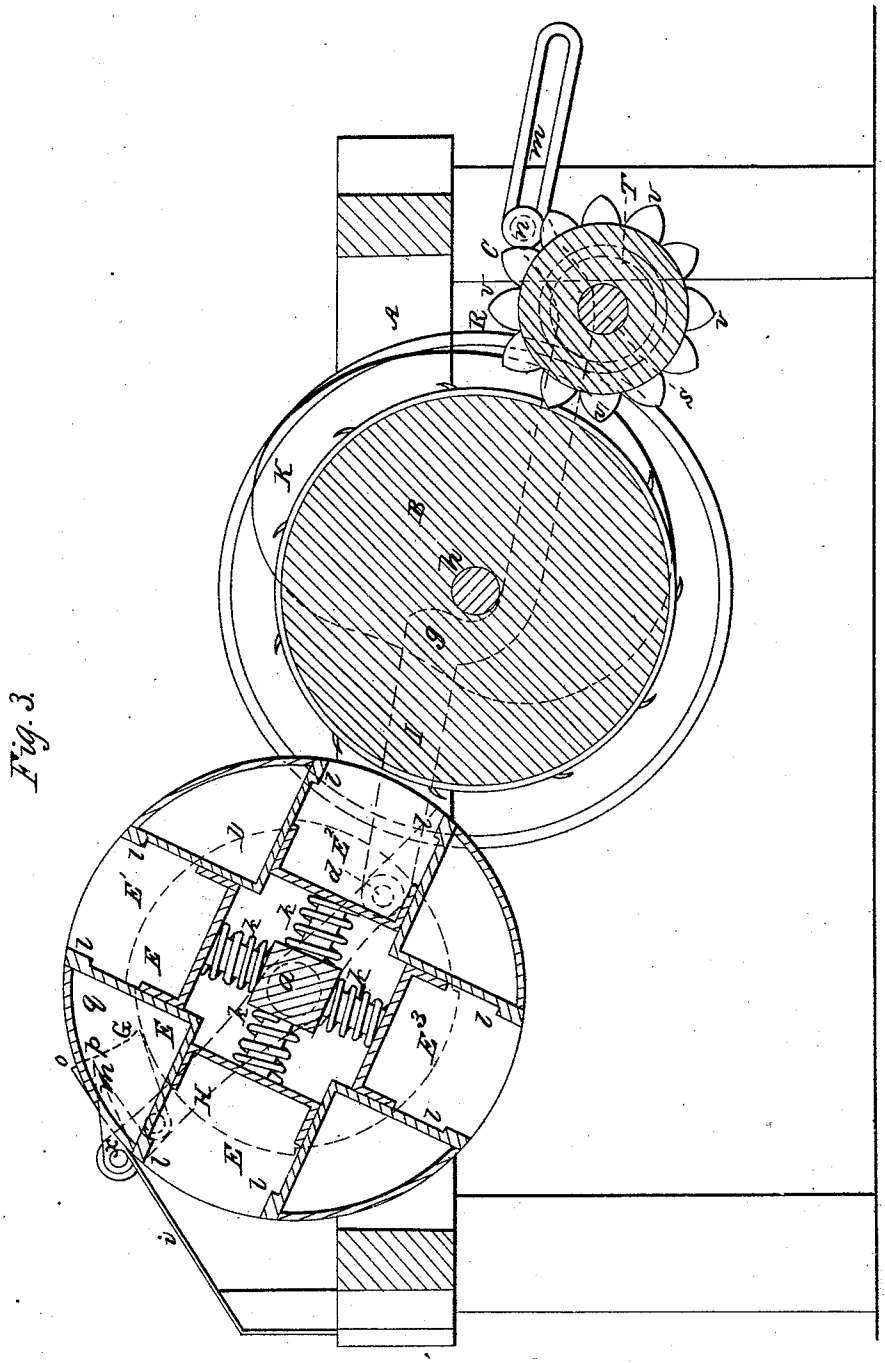


Fig. 3.

UNITED STATES PATENT OFFICE.

HARLAN P. GERRISH, OF SANDOVAL, ILLINOIS.

CORN-HUSKER.

Specification of Letters Patent No. 18,332, dated October 6, 1857.

To all whom it may concern:

Be it known that I, HARLAN P. GERRISH, of Sandoval, in the county of Marion and State of Illinois, have invented certain new and useful Improvements in Corn-Husking Machines, which improvements I do hereby declare to be fully described in the following specification and represented in the accompanying drawings, to which the specification and letters refer.

Figure 1. of the drawings, represents a top view of my machine. Fig. 2, a side elevation of it. and Fig. 3, a vertical. central, and longitudinal section of it.

A, in the drawings, represents the frame of the machine; B, the husking cylinder; C, the clearing cylinder. At one end of the machine, and contiguous to the husking cylinder. I place a feeding cylinder D, fixed upon a shaft *a*, and made to revolve in suitable bearings *b b*. Upon said cylinder and at suitable distances apart, I arrange four or any other proper number of long troughs or boxes, E. E′, E². E³, said boxes being inserted into the sides of the cylinder. and bearing or resting upon springs *k*, (extending from the shaft *a*, up to and against the bottoms of the troughs,) as seen in Figs. 2 and 3. Stops *l*, *l*, prevent the trough from falling out from the cylinder. These troughs are for holding the ears of corn to be husked. and presenting them in succession to the action of a knife M, and the husking cylinder B. and the springs are to allow the troughs to spring in or out so as to admit of and hold to the operation of the husking cylinder ears of corn of different sizes.

Rotary motion is given to the feeding cylinder as follows: Upon one end of it, is placed a ratchet wheel F, against the teeth of which a pawl G. operates. This pawl extends from the upper end of a lever H, turning upon the shaft *a*. and jointed at its lower end to a long sliding arm I, as seen at *d*. The other end of this arm is provided with a long slot *m*, into which a pin *n*, extending from the frame of the machine, enters, said pin and slot allowing the arm to slide freely to and fro. Upon the shaft *h*, of the husking cylinder, a cam. K, is placed, said cam rotating with the cylinder. A pin *g*, from the sliding arm I. extends into the groove of said cam, and as the cam is rotated a reciprocating longitudinal movement is imparted to the arm. When the arm moves forward. the lever H, is turned upon the shaft *a*, in such manner as to cause the pawl G to push against and rotate the feeding cylinder. As the arm I moves in the oposite direction, the pawl is drawn over the ratchet wheel sufficiently to let the pawl trip into or against the next tooth of said wheel. Just as the pawl has finished its forward movement a tooth *o*, of a spring *i*, springs into a notch *p*. on the end plate *q*, of the cylinder D, and holds the cylinder stationary during the back motion of the pawl. At and during the time the cylinder is thus stationary, one of the troughs will have been brought opposite to, and against the hooks of the husking cylinder. where it holds its ear of corn until the feed cylinder next begins to rotate, when said ear will have been stripped of its husks. At the same time one ear is held here. another is in the stationary trough at the top of the machine, and under the operation of the knife M. which severs the butt or stock and attached portions of husk from the ear. When the pawl G after its back movement, commences to move forward, a wedge *m*. passes under the tooth of the spring *i*, and lifts it from its slot. after which the cylinder is rotated its proper distance, said wedge turning loosely on a pin *x*, and sliding freely over the spring when the pawl moves back. The knife M, by which the butts or stalks are removed from the ears of corn, is attached to a long arm N, said arm turning upon the shaft *s*, of the clearing cylinder. A pin *o′* extends from this arm into the groove of a cam P. which is placed upon the shaft *h*, of the cylinder B, and as the cylinder and cam rotate, the knife receives a. vertical reciprocal motion, it descending and cutting off the stalk of the ear, at each time the cylinder stops (as before described.) A spring Q, extends from the top of the knife, which as the blade descends, strikes upon and holds down the ear of corn in such manner as to prevent its being tipped by the knife.

The clearing cylinder operates in connection with the husking cylinder essentially as does the clearing cylinder of the husking machine patented by H. P. Gerrish. on the 4th day of November, A. D., 1856. But instead of making the teeth of said cylinder of wire, as in said patented machine. they are here made of thin angular plates, having their outer points rounded off, as seen

in the drawings, at *v*, *v*. When the teeth are made of wire or with sharp pointed or saw teeth, the husks are liable to become attached to and clog said teeth, but making them with plates with rounded points as shown. they will not become clogged, and will thoroughly clear the hooks of the husking cylinder from its husks.

The ears of corn to be husked, are placed successively upon or into the husking troughs. as the feeding cylinder rotates, and in the proper position for the knife to cut the stalk off, just in rear of where the husks are attached to said stalk. Thus when the cylinder stops during each rotation time is given to place one husk in one trough E. another in the trough E′, being cut by the knife M, and a third in the trough E^2, being husked by the hooks on the cylinder B, before the feed cylinder again moves. After being husked the ear falls from the trough under the machine.

I would remark that I do not confine my invention to the particular number of troughs described nor to placing them around a cylinder, as they may be arranged upon an endless belt or in any other suitable manner, while the construction and operation of the troughs themselves remains as described.

A gear wheel R, and crank S, may be applied to the shaft of the cylinder B. and a gear pinion T, to the shaft of the cylinder C, to give motion to the cylinders or any other suitable method can be employed for operating them.

What I claim as of my invention is as follows:

1. I claim the feeding cylinder D. or its equivalent, made with a series of spring troughs. E, E′. E^2, E^3, for holding the blades of corn successively to the action of the knife and husking cylinder as set forth.

2. I also claim causing said cylinder to stop at each time the ear is brought against or to the action of the husking cylinder in manner and for the purpose as described.

In testimony whereof I have hereto set my signature this sixteenth day of February A. D. 1857.

H. P. GERRISH.

Witnesses:

FRANCIS GOULD,

DAVID D. DANA.