

B. M. ROOT.
Corn Sheller.

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BENJAMIN M. ROOT, OF MOUNT JOY, PENNSYLVANIA.

CORN-SHELLER.

SPECIFICATION forming part of Letters Patent No. 239,552, dated March 29, 1881.

Application filed January 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN M. ROOT, a citizen of the United States, residing at Mount Joy, Lancaster county, Pennsylvania, have invented new and useful Improvements in Corn-Shellers, of which the following is a specification.

My invention relates to certain new and useful improvements in corn-shellers.

It has for its objects to render the ear spring-compressor adjustable, in order that ears of different sizes may be pressed with equal force against the shelling mechanism.

It also has for its object to render the pitman which operates the screens adjustable.

With these ends in view my invention consists in providing the chute or hopper with an adjustable hook-rod and the spring flap or presser with a ring and chain, whereby the flap may, while operated by the usual spring-pressure devices, be regulated in its approach to the shelling-wheels, as will be hereinafter explained.

In order that those skilled in the art may know how to make and use my invention, I will proceed to describe the same, referring by letters to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of an ordinary corn-sheller with my improvements added, and Fig. 2 is a front or end view of the same.

Similar letters indicate like parts in both figures of the drawings.

Such parts as are made in the usual manner I have not specially explained, as their construction and operation are well understood.

A is the usual frame, within which are properly mounted and run the usual rotary shelling devices, B C, by means of any suitable kind of power.

C' represents the screening or separating devices, which are shaken or reciprocated by a pitman, D.

The feed troughs or hoppers E E are made in the usual way with vibrating or flap tops F, the inner ends of which are armed with the usual shelling spurs or teeth G.

The usual spring-pressure device, consisting of spring and thumb-screw H I, is shown at

Fig. 1; but in combination with these I employ an adjustable rod, J, which is formed with a hook at K. This rod is secured in position through the sides of the troughs E, and is rendered vertically adjustable by means of nuts *a a* above and below the trough, in an obvious manner.

A chain or strap, L, is secured by a ring or hook to the lower end of the flaps F, and is adapted to fasten over the hook K of the rod J, from which construction and arrangement it will be seen that while the flaps F may be regulated by the usual spring devices, H I, they may be independently adjusted by the hook, rod, and chain, to accommodate different-sized ears, and held at certain distances away from the wheel B. While this is a simple arrangement and economic of construction, it is very desirable and efficient.

In all ordinary shellers the screens or separators are operated by a pitman extended from a crank-shaft having its bearings in suitable boxes secured to each side of the frame, and the reciprocation of the screens is predetermined and limited. I have found it very desirable to render this part of a corn-sheller adjustable also, and with this object in view I substitute for the ordinary independent boxes, which are secured to the sides of the frame, a double box, M, and a short shaft, N, which extends to about the middle of the machine, and to which is keyed a driving-wheel, O, to the face of which is pivoted, by a wrist-pin, *b*, the pitman D. The opposite end of the shaft is provided with a suitable pinion, P, to which motion is imparted in the usual manner. The face of the driver O is provided with a series of screw-holes at varying distances from the center to receive the wrist-pin *b*, and thus the pitman D may be so connected as to have a greater or less extent of motion.

In order to stiffen or strengthen the bearings M of the shaft N, I extend an arm, Q, therefrom and secure the same to the opposite side of the frame, as clearly shown at Fig. 2. The bearing M may be made in one or two parts, as may be thought most desirable or economical.

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

In a corn-sheller, as described, the hook-

arm J, extending through the top and bottom of the chute, and provided with nuts *a a*, in combination with the chain L, which is secured to the flap F, whereby the adjustment
5 of the latter is effected, as set forth and described.

In testimony whereof I have hereunto set my

hand in the presence of two subscribing witnesses.

BENJAMIN M. ROOT.

Witnesses:

F. G. PENNELL,
E. M. TREXLER.