

United States Patent Office.

HUGH SELLS, OF VIENNA, CANADA.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. 122,740, dated January 16, 1872.

To whom it may concern:

Be it known that I, Hugh Sells, of Vienna, in the county of Elgin, in the Province of Ontario and Dominion of Canada, have invented a new and useful Improvement in Corn-Shellers; and I do declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and making part hereof, in which—

Figure 1 is a perspective view of my improved corn-sheller; and Fig. 2 is a cross-section on the line x x in Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of this invention relates to an improved and simplified machine for shelling corn; and it consists in the peculiar arrangement of a corrugated segment or concave plate with relation to a toothed drum rotating in an iron box or frame in such a manner that said concave will press the corn-ears against the drum, yielding to their inequalities of size, and in the construction, arrangement, and operation of its various parts, as more fully herein-

after set forth.

In the drawing, A represents a suitable frame, to which are secured the end plates of a cast-metal case, B, in the side plates of which the serrated cylinder C is journaled, whose shaft C' is provided with a suitable fly-wheel and crank, as shown. D is a segment, serrated on its concave face, and provided at each end with two projecting lugs, a, which are inserted in the slots b of the side plates before the latter are bolted to place. Between the slots a vertically-slotted lug, c, is cast on the side plates, whose slot receives a single leafspring, E, so disposed as to engage with the rear faces of the projecting lugs a of the con-

cave segment D and press the latter as near the cylinder C as the slots b will permit, which space is gauged to the thickness of the smallest corn-cobs. The segment is carried up above the upper studs and slightly curved to form a throat for convenience in feeding the ears of corn to the cylinder, which ears should, if possible, be laid in longitudinally parallel with the axis of the cylinder, so that in the rotation of the latter the ear will be rolled down while held up to the cylinder by the segment, through the springs, with sufficient pressure to insure the stripping of the grains from the cob. It will be noticed that the springs are so disposed that the segment may give way to the larger ears fed into the machine and avoid crushing them. In all cases the shelling action is continuous over the entire serrated surface of the segment, except where unusually large ears are to be shelled, for which provision is made by forcing back the upper part of the segment by means of an eccentric, F, pivoted to each side plate so as to bear upon and press back the upper studs a, and thus enlarge the throat of the sheller to receive them.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. The combination of the lever eccentrics F with the studs a of the segment D, as and

for the purpose set forth.

2. The combination of the segment D, provided with the lugs a, the slot b, and lugs c of the side plates, the eccentric lever F and the spring E, all constructed, arranged, and operating substantially as described and shown.

HUGH SELLS.

Witnesses:

H. F. EBERTS, Myron H. Church.

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