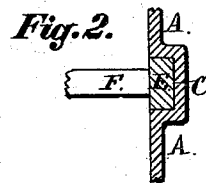
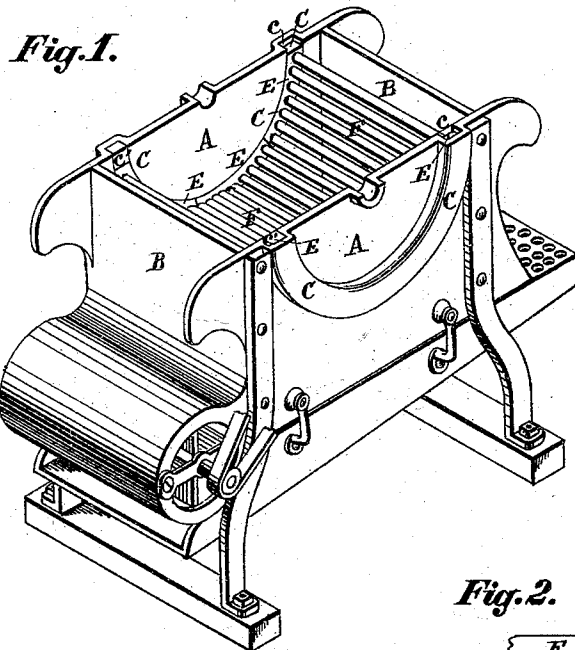


W. S. REEDER.
CORN-SHELLER.

No. 172,171.

Patented Jan. 11, 1876.



ATTEST:

Robert Burns.
H. T. Ganner.

INVENTOR:

William S. Reeder
By *Knights Bros.*
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM S. REEDER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. 172,171, dated January 11, 1876; application filed April 6, 1874.

To all whom it may concern:

Be it known that I, WILLIAM S. REEDER, of St. Louis, St. Louis county, Missouri, have invented a certain new and useful Improvement in Corn-Shellers, of which the following is a specification:

The class of corn-shellers to which my improvement applies is known as cylinder corn-shellers; and my improvement relates to the manner of supporting the barred concave in the side pieces of the machine; and consists in forming grooves in the side plates for the reception of the segmental end plates of the concave, (the wrought-iron bars or grate being connected by the said segmental end bars into which the grate-bars are cast.)

Heretofore the concave has been held in place by lugs or ribs cast upon the inner face of the side plates, and projecting therefrom. These projections have been found to interfere with the efficient working of the machine, because the said lugs or ribs formed impediments to the ears in their passage through the machine, and to the shelled corn in escaping between the bars of the concave. The segmental end bars of the concave also formed a ledge, on which the shelled corn collected, and this deposit prevented, to some extent, the proper operation of the machine.

These difficulties are overcome by my improvement, in which grooves or channels are cast in the side plates, which grooves are made sufficiently deep to receive the whole thickness of the end or segmental bars of the concave, so that the exposed faces of the same are just flush with the inner faces of the side plates, and consequently there is no projection to check the passage of the ears or cobs between the cylinder and concave, or the passage of the shelled corn through the latter.

In the drawings, Figure 1 is a perspective view, showing my invention. Fig. 2 shows the

position of the bar in the groove by transverse section.

The case of the machine has side plates A A and ends B. In the sides are cast curved channels or grooves C, in the form of the arc of a circle, so that the curved end bars E of the concave may be inserted endwise into the open end *c* of the grooves, and each section of the concave pushed forward to form the whole concave, as shown, the end section resting against the ends of the grooves at *c'*. This arrangement admits of the easy insertion and removal of the concave without taking the machine apart. F F are the bars of the concave. The bars F F are of wrought metal, and are cast into the curved bars E E.

Nothing is broadly claimed as new in the manner of sliding the sectional concave into or out of the machine, as this has been practiced heretofore; but the novelty of my improvement consists in the provision of the channels or grooves C, cast in the side plates, and of sufficient depth to receive the whole of the segmental bars E, so that the exposed face of the said bars is flush with the inner face *a* of the sides A, resulting in leaving no impediment to the free passage of the ears of corn, the shelled corn, or the cobs, as set forth, the shelling-surface of the concave extending all across from side to side.

I claim as my invention—

The segmental bars E and bars F of the concave, in combination with the plates A A, having open-topped grooves or channels C C, said grooves being of such a depth that the face of the bars E will be flush with the inner face of the plates, substantially as and for the purpose set forth.

WILLIAM S. REEDER.

Witnesses:

SAML. KNIGHT,
ROBERT BURNS.