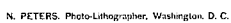


**Corn Sheller.**

Patented May 2, 1848.



# UNITED STATES PATENT OFFICE.

JOHN R. WARRINGTON, OF DAMASCOVILLE, OHIO.

## CORN-SHELLER.

Specification of Letters Patent No. 5,548, dated May 2, 1848.

*To all whom it may concern:*

Be it known that I, JOHN R. WARRINGTON, of Damascoville, in the county of Mahoning and State of Ohio, have invented a new and useful Improvement in Machines for Shelling Corn, called the "Buckeye Corn-Shellor," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

The nature of my invention and improvement consists in a new construction of a cast-iron bed plate for containing a series of newly constructed self adjusting cast iron strippers for stripping the corn from the cob having an opening in the center for the escape of the cob and a series of inclined planes for conducting the shelled corn to an inclined screen affixed to a bench—the bed plate being covered by a dome shaped curb for preventing the grain escaping above.

Figure 1 is an isometrical view of the machine; Fig. 2 a longitudinal section. Fig. 3 is a plan of the bed plate. Fig. 4 is a perspective view of one of the strippers. Fig. 5 is a top view of the dome and strippers showing the circle formed by the coming together of their edges when not in operation.

Similar letters in the several figures refer to corresponding parts.

The bench A, curb B, tube D, may be made and arranged in the usual, or in any convenient way.

The bed plate E is cast circular (but may be cast of other form) with radial flanges and holes for the insertion of screws, or other fastenings, by which it is secured to the top of the bench, having a round opening *e* in the center for the cob to pass through placed over a corresponding opening in the bench, and having radial grooves or inclined planes *e'* with parallel guides, or sides, in which the self adjusting, or sliding, strippers F are placed, inclining upward from the central opening to the periphery of the bed plate at an angle of forty or fifty degrees, or any suitable angle, at which the strippers (after being pushed back over the said inclined planes by the insertion of a large ear of corn) will be caused by their own gravity to slide down toward the center and resume their former positions after the cob shall have passed through the central opening *e*. There may be five or any convenient number of said

radial inclined planes, each provided with a cast iron stripper. Between these inclined planes there are other inclined planes *e''* inclining in a contrary direction—that is to say inclining back and downward from the central opening *e* in the bed plate to the periphery thereof for the purpose of conducting the grains of corn, when stripped from the cob, to openings G in the bench through which they descend to the inclined screen C attached to the under side of the bench below the shelling apparatus. The conducting tube D for conducting the cob from the bed plate to the receiver is secured in the circular opening in the bench and passes through the screen with which its lower end is connected.

The sliding self adjusting strippers F or shellers for stripping the corn from the cob are made of cast iron of a triangular form, concave on the side that strips the corn from the cob. Straight on the opposite side or back and straight on the base, which is cast on to a rectangular or other shaped bar F' which lies in the inclined groove *e'*, having a knob or cog *f* cast on the under side of said bar near the middle thereof which strikes against the bed plate and arrests the downward sliding movement of the strippers at the desired point in order to bring the edges of the concave sides of the strippers near together, forming a circle as seen at *e* Fig. 5, through which the ear of corn is to be forced. The upper end of the bar F' passes through an opening in the curb B a little larger than the bar, having sufficient room to play freely therein, the curb serving as a guide. The concave side of the stripper should be perpendicular and parallel with the axis of the opening through which the ear of corn is to pass lengthwise. The apex should be brought to an edge proper for stripping the corn from the cob without cutting it.

Operation: The strippers being all down in the grooves of the bed plate in the position represented in Fig. 1, the operator takes an ear of corn and inserts it (small end downward as seen at the dotted lines 2, 2, Fig. 2.) into the circular space *e* formed by the circle of concave strippers and drives it vertically downward by means of a mallet or other suitable implement, the strippers F receding up the inclined planes *e'* (when the cob is of a conical form) as the cob descends the strippers taking off the grains of corn

which fall upon the reversed inclined planes  $e^2$  Fig. 3 of the bed plate and  $e^2$  dotted lines Fig. 2 and are conducted by them to the openings G in the bench A around the bed plate through which they descend to the inclined screen  $c$  arranged below the bench, which separates the chaff from the grain, the former passing through the meshes of the screen and the latter passing off at the lower end of it, while the cob passes down through the tube. When the cob is large it will force the strippers to recede from the center, rise up the inclined planes, and in-

crease the diameter of the central opening  $e$  to that of the cob. The cob having been driven through the tube the strippers will return to their former positions in the bed.

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

The combination of the passages G for the shelled corn, inclined screen C, and the tube D for the cobs as described.

JOHN R. WARRINGTON.

Witnesses:

WM. P. ELLIOT,

A. E. H. JOHNSON.