

W. BEACH.

Corn Sheller.

No. 5,982.

Patented Dec. 26, 1848.

FIG. 1.

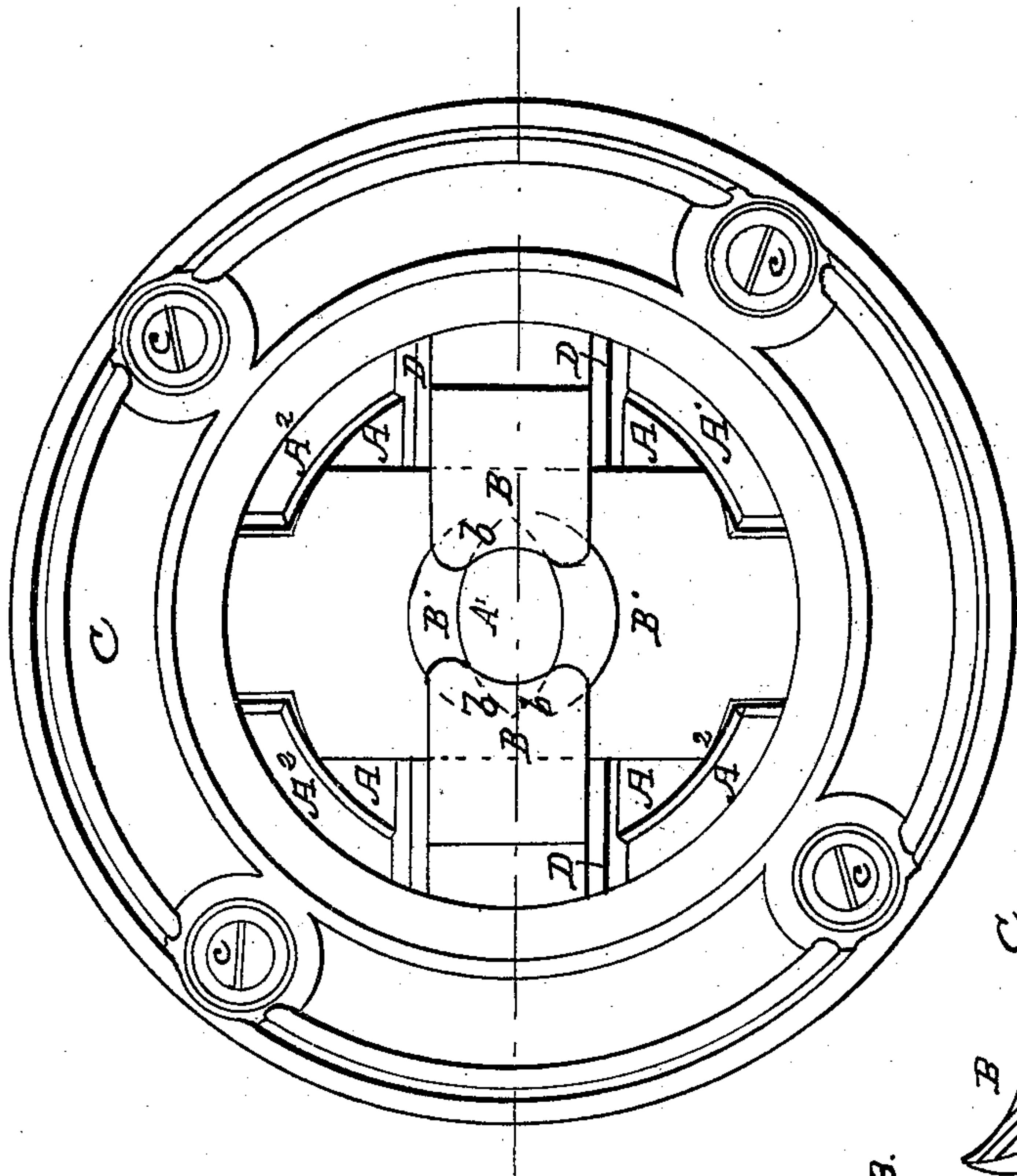


FIG. 2.

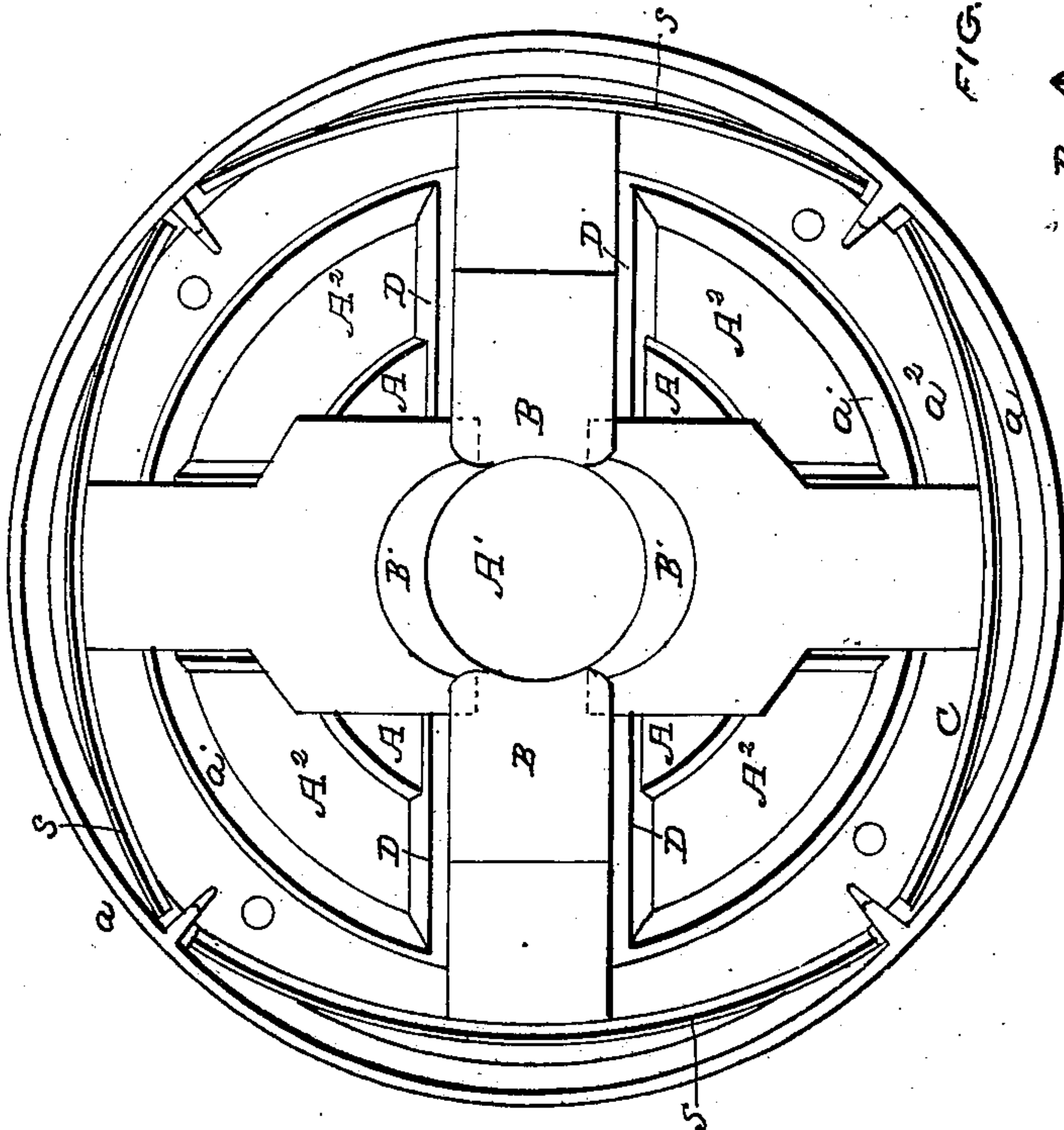
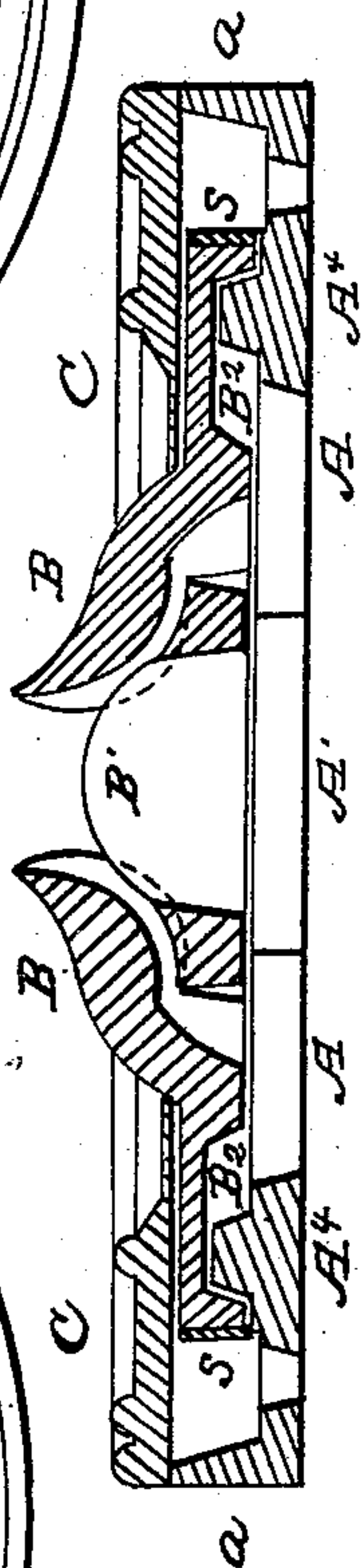


FIG. 3.



UNITED STATES PATENT OFFICE.

WALDREN BEACH, OF BALTIMORE, MARYLAND.

CORN-SHELLER.

Specification of Letters Patent No. 5,982, dated December 26, 1848.

To all whom it may concern:

Be it known that I, WALDREN BEACH, of the city and county of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in the Corn-
Sheller, of which the following is a full, clear, and exact description, reference being had to the annexed drawings of the same, making part of this specification, of which—
Figure 1 is a top view, showing the strippers or teeth collapsed; Fig. 2 is a top view—the annular cover being removed—and the strippers expanded; Fig. 3 is a vertical section on the line *x x* of Fig. 1.

The same letters in the several figures refer to corresponding parts.

The nature of my invention and improvement consists in constructing the slides with turned up lips, or radial strippers of the expansive cornsheller, of such a form that the upper strippers will overlap and break the joints between the lower strippers, and thus form a continuous edge on the upper end of the hole through which the cob is driven to strip the corn from it, whether the hole be expanded as in driving a large cob through it or contracted, as in driving a small cob.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

The base of the machine is composed of a circular plate of metal having a central opening *A'* for the cobs to pass through and, four other openings *A² A² A² A²* for the shelled corn to pass through. On the upper edge of the base a rim *a* is formed, and concentric therewith another, or inner rim *a'* is also formed; between these rims the four springs *s, s, s, s* are placed, against which the outer ends of the strippers rest. These springs are for the purpose of pressing the strippers *B, B, B', B'*, against the cob during the operation of stripping or shelling the corn therefrom.

At four equidistant points notches are formed in the inner rim in length equaling the width of the grooves or guides in which the strippers slide. These notches thus located in the rim are for the purpose of allowing the shanks or outer ends of the strippers *B B B' B'* to slide back into the groove against the springs.

The two upper strippers *B B* are each cast of a form resembling a curved wedge or slide with a turned up edge or lip whose butt or large end lies in a horizontal position while its tapered or small end is curved upward and is made concave on the side next the center which comes in contact with the cob. Said tapered end or lip passing between the cob and grain, as the cobs are forced through the central opening and stripping or forcing the grains of corn from it. The two lower strippers *B' B'* which are arranged at right angles to the two upper strippers *B B* are made nearly of a similar form except that they are made somewhat wider. They are all cast with shanks that slide horizontally on the bed plate between guides or ribs *D* and have depressions, or cavities *B²* (Fig. 3) on the under side to admit corresponding projections, or stops *A⁴* rising from the bed plate *A* and over which they move back and forth and by which their movement is regulated. Each of the strippers forms a segment of the perimeter of the central opening through which the cobs are driven, the segments or curves of the lower strippers meeting when the hole is collapsed as shown by the dotted lines *b b b b* Fig. 1; but when the hole is expanded the lower strippers *B' B'* recede from each other leaving a space between their ends through which the corn on the cob would escape unshelled or into which it would lodge and prevent the strippers from closing, if it were not prevented by the overlying upper teeth or strippers *B B* which cover and break this joint; thus forming a continuous curved edge and rendering it impossible for the corn to get into said joints or escape being shelled when the cob is driven through the hole formed by the meeting of the teeth as described. The springs *S* are covered and the strippers held down in their places by the annular cover *C* which is secured to the base by the screws *c c c c*, which screws also secure the machine to the bench on which it is placed by passing through the base into the same.

The operation of shelling corn by means of this machine, is the same as it is on all others constructed upon this principle—the cob being forced through the expansive central aperture *A'* by blows made with a mal-

let, or otherwise, which several modes being well known it is not deemed necessary to describe them here.

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

Forming and arranging the teeth or slides
B B with turned up lips for stripping the
corn from the cob called strippers as herein
described, so that the vertical joints between
10 one pair of opposite strippers B' B' shall
be broken and covered by the other pair

B B in all positions of the same, whether collapsed to form the smallest, or expanded to form the largest hole, or at any intermediate point.

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In testimony whereof I have hereunto signed my name before two subscribing witnesses this 17 day of November, 1847.

WALDREN BEACH.

Witnesses:

WM. P. ELLIOT,

WM. F. PURCELL.