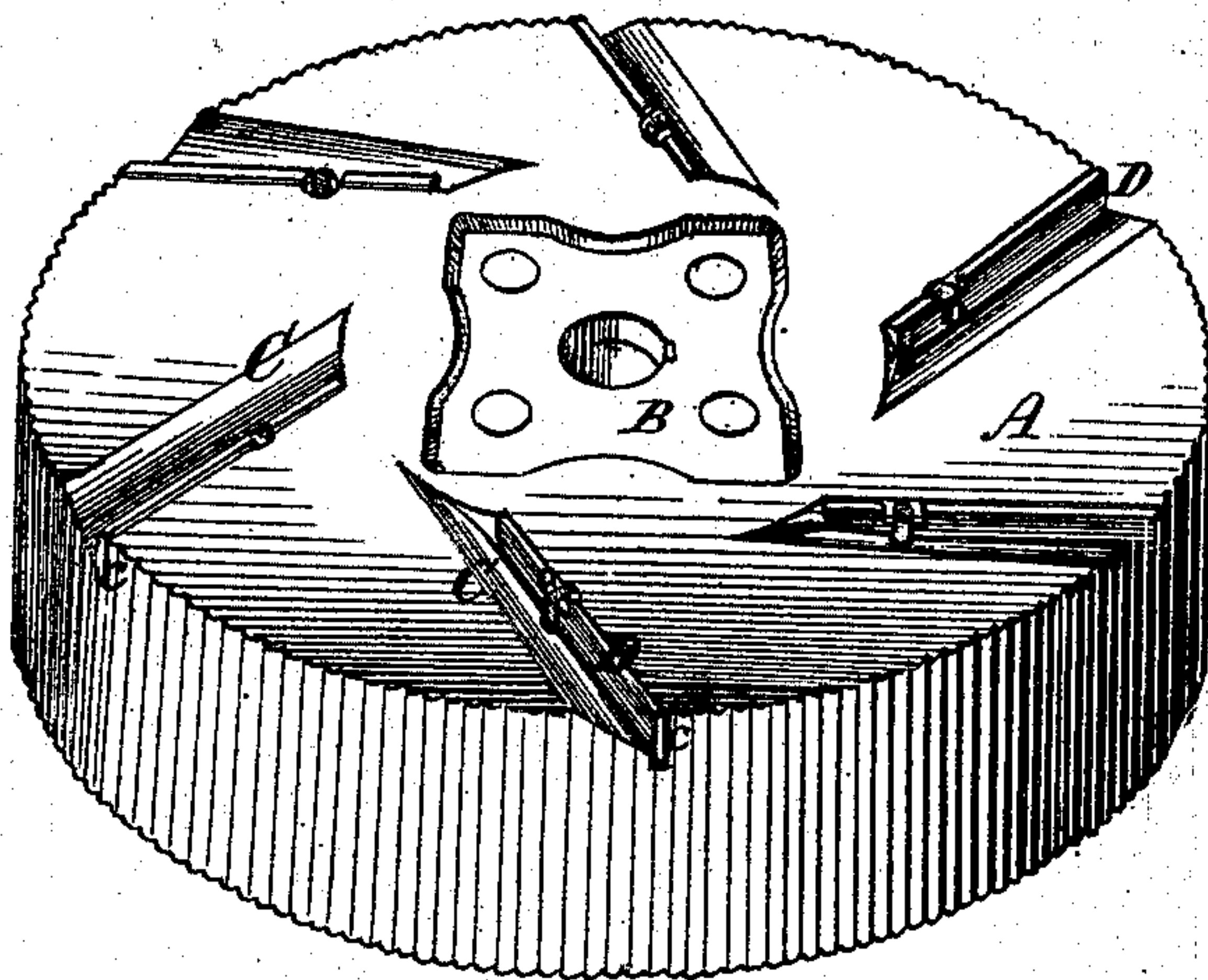


A. BERTELSON.  
Hulling-Machines.

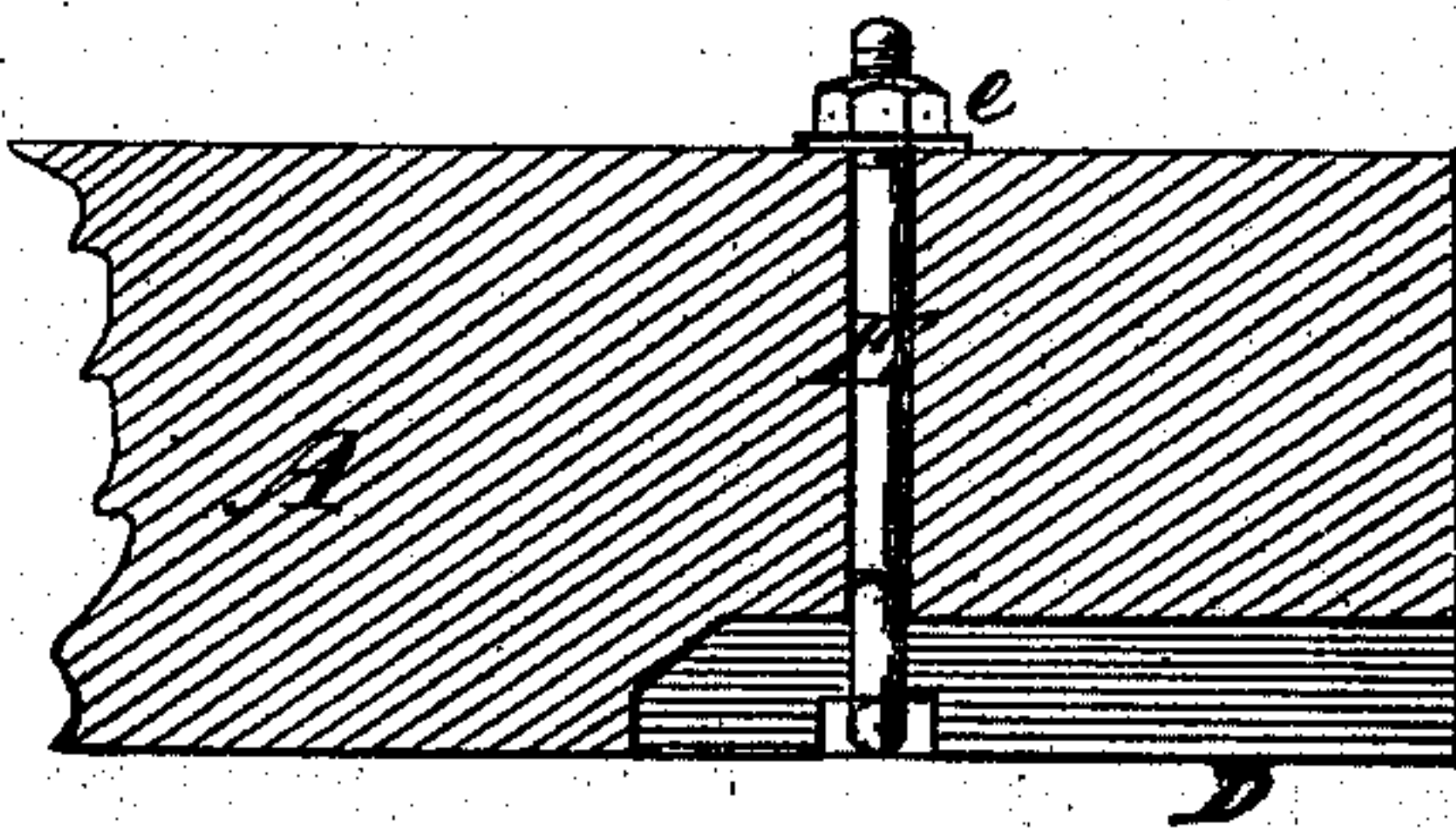
No. 139,758.

Patented June 10, 1873.

*Fig. 1.*



*Fig. 2.*



Witnesses.  
A. Ruppert.  
W. Bradford

A. Bertelson  
Inventor  
P. Edw. C. E. C. C.



# UNITED STATES PATENT OFFICE.

ANDREW BERTELSON, OF WEST SALEM, WISCONSIN.

## IMPROVEMENT IN HULLING-MACHINES.

Specification forming part of Letters Patent No. **139,758**, dated June 10, 1873; application filed April 24, 1873.

*To all whom it may concern:*

Be it known that I, A. BERTELSON, of West Salem, in the county of La Crosse in the State of Wisconsin, have invented a certain Improvement in Hulling-Machines, of which the following is a specification:

This invention relates to that class of hullers composed in the main of a revolving stone and a fixed perforated case encircling the stone, which is dressed on its edge and has grooves formed in its bottom to create a blast for the twofold purpose of spreading the grain evenly between the stone and case and retarding its descent to the bed-plate. My improvement consists in lining the vertical edges of the grooves in the bottom side of the stone with metallic plates to prevent wearing away of the stone along these edges caused by kernels of grain getting between it and the bottom plate. To prevent wear at these points is quite important, from the fact that the stones used for this purpose are of comparatively soft material.

Figure 1 is a perspective view of my improved hulling-stone, showing its bottom side. Fig. 2 is a vertical section, showing one of the metallic-lining bars, and the manner of securing it.

The same letters of reference are used in both figures in indicating identical parts.

The stone A, dressed on its vertical side or edge, as shown, is provided with the usual bushing B in its eye for the attachment of the spindle. In the bottom side of the stone are formed a number of tangential grooves, C,

tapering in depth from the face of the stone to their vertical edges *c*, which, forming abutments, create blasts of air on the revolution of the stone, the currents of air being drawn in through the eye of the stone to flow toward its circumference and act as heretofore indicated. The vertical edges *c* of the grooves are lined with steel plates or bars D, which are secured by eye-bolts E hooked over a recessed portion of the bars and fastened by a nut, *e*, upon the upper side of the stone, suitable holes being drilled through the stone for the reception of the eye-bolts. The bars D can thus be readily detached and shortened as the diameter of the stone diminishes by dressing.

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

1. A hulling-stone, A, of the character described, having in its bottom side grooves C, the vertical edges *c* of which are lined with detachable metal bars D, substantially as specified.

2. The combination of the hulling-stone A, having grooves C *c* in its bottom side, metal bars D and eye-bolts E *e*, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANDREW BERTELSON.

Witnesses:

A. S. DANIELS,  
PARDON CONES.