

H. SHAW.
Cotton Seed Huller.

No. 96,736.

Patented Nov. 9, 1869.

Fig. 1.

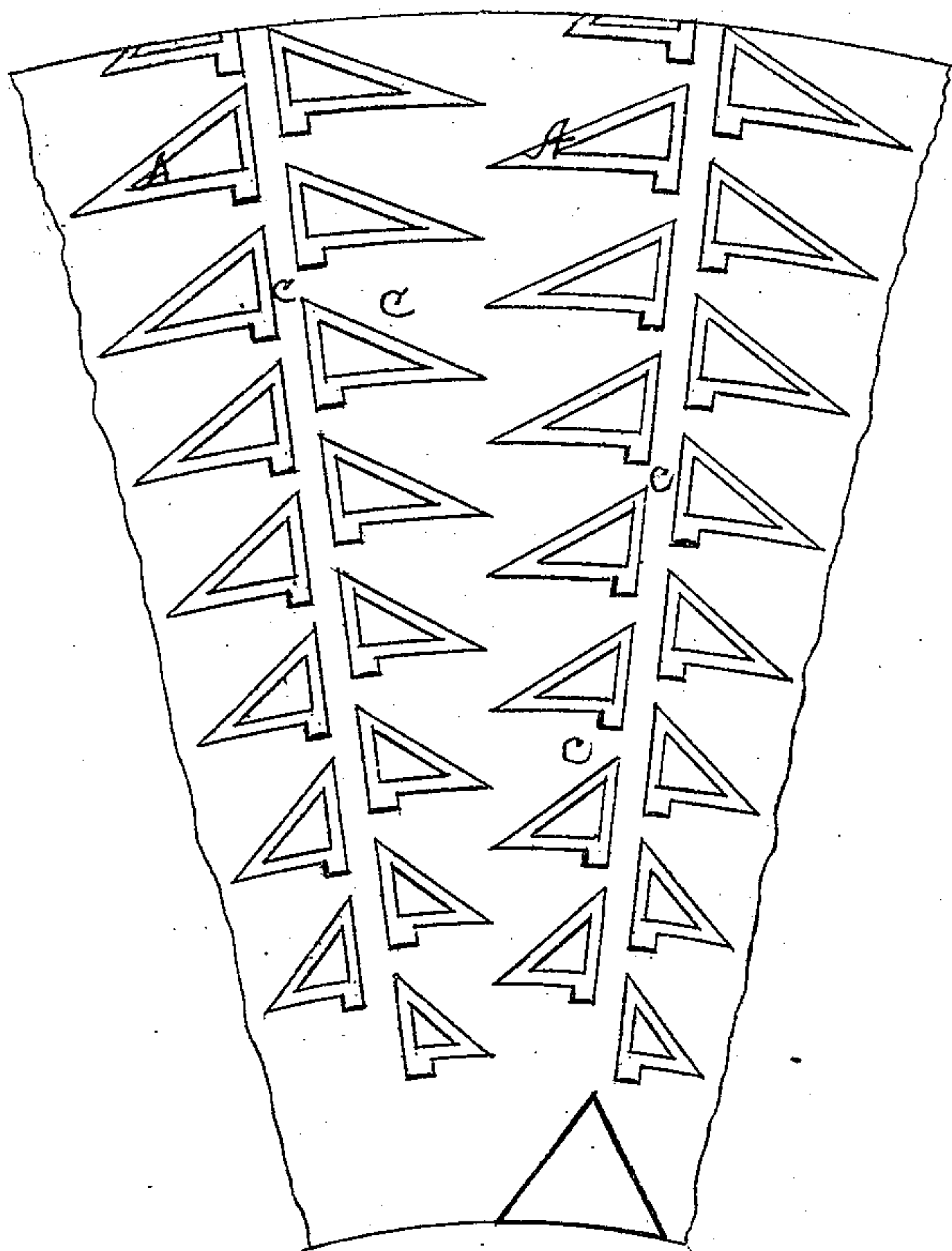
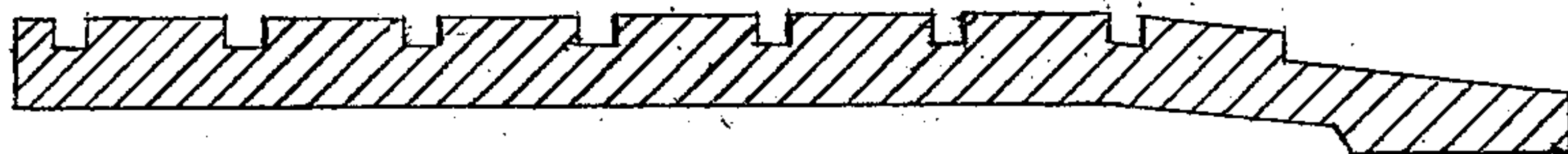


Fig. 2.



Attest

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HENRY SHAW, OF CINCINNATI, OHIO.

Letters Patent No. 96,736, dated November 9, 1869.

IMPROVEMENT IN THE GRINDING OR HULLING-PLATES FOR GRINDING OR HULLING-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY SHAW, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented a certain new and useful Improvement in Hulling-Surfaces for Cotton-Seed Hullers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a plan of a sector of a plate, showing my improvement aforesaid.

Figure 2 is a vertical section through the bases of the projections in one of the radial lines.

The hulling-mill, with which it is intended the improved hulling-surfaces herein shown and described shall be used, is constructed as follows:

The hulling-plates are each rigidly attached by bolts to a back or supporting-plate, of the kind shown in the Letters Patent of the United States granted to me on the 17th day of August, 1869, for "improvement in grinding-mills," and numbered 93,913.

One of the supporting back plates, with its attached hulling-plate, is fixed permanently in a vertical position to the frame-work of the mill.

The other back plate, with its accompanying hulling-plate, is rigidly attached to a revolving shaft, that passes through the centre of both plates and supporting-backs.

Cast as a portion of the revolving back or supporting-plate, there is a tube, which passes through both hulling-plates and the fixed back plate, and which fits over the said revolving shaft.

Upon the periphery of this tube, there is an endless screw, whose function is to feed or carry the cotton-seed from the hopper into the hulling-plates.

The hopper is fixed upon the frame, behind the stationary back plate, and the cotton-seed passes from it between the threads of the endless screw.

The revolving shaft has a set-screw at each end, by which to regulate the distance at which the hulling-plates shall be from each other.

The portion of the frame to which the stationary plate is attached, is so formed as to act as a cover or case around the periphery of both the stationary and revolving plates, and prevent the escape of the material, except at one place, on the lower portion of said cover or case, which place is so constructed as to form a spout, through which the material passes.

I will now proceed to describe my improved hulling-surface.

As will be seen from the drawings, the projections are right-angled triangles, with the addition of a stem as an extension to their respective bases. Their interiors may be concave, as shown in the drawings, fig. 1, and where the projections are sufficiently large to permit them to be made in that way, will be useful. All the edges, outer and inner, afford cleaning-surface. In form, they also resemble the figure 4, with the stem cut short. They are placed in rows or lines radially, while the stem of each base is pointed to the centre of the plate.

The rows of projections are arranged in pairs, each pair being so placed that the radial lines formed by the bases of their respective projections are parallel.

Between each two projections in a row, there is a space, which is uniform.

The spaces between any two projections in a row are not immediately opposite a space between two projections in the adjacent row of the pair, but the base of a projection is always opposite a space between any two projections in the adjacent row of a pair.

The sides, other than the base upon each projection, are increased in length as the projections approach the periphery.

The projections in different rows that are adjacent, present to each other their acute angles opposite their respective bases, and are so arranged, with respect to each other, that those angles would just touch or cross a radial line drawn between them.

The hulling-surface, shown and described, will also answer well as a dress for grinding-mills, and the same machine, whether known as huller for cotton-seed or grinding-mill, having operative plates with this surface, will answer both purposes.

When used as a cotton-seed huller, the plates must be further removed from each other than when used as a grinding-mill, which change may be made by the set-screws, before referred to.

Having thus described my invention,

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

An improvement in the grinding or hulling-plates for grinding or hulling-mills, consisting in the dress composed of the projections and recesses, shown and described, when arranged as shown and described.

HENRY SHAW.

Witnesses:

JAMES MOORE,
S. S. MORRIS.