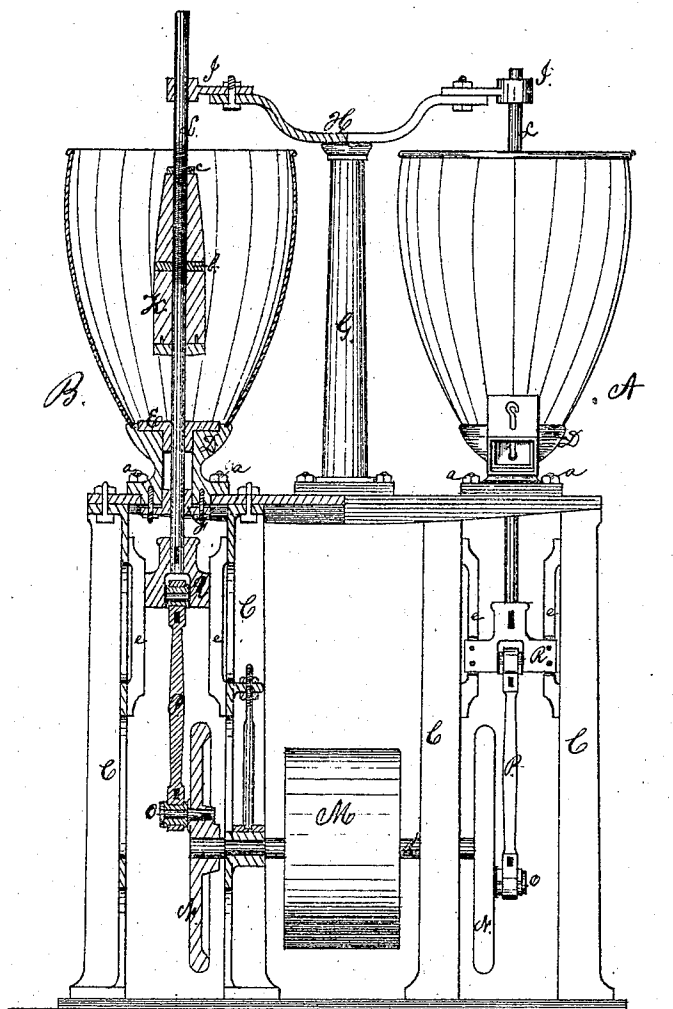


A. H. SIEWERD.
Improvement in Rice Pounding-Machines.
No. 131,572. Patented Sep. 24, 1872.



WITNESSES -

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UNITED STATES PATENT OFFICE.

ADOLPH H. SIEWERD, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN RICE-POUNDING MACHINES.

Specification forming part of Letters Patent No. 131,572, dated September 24, 1872.

To all whom it may concern:

Be it known that I, ADOLPH HENRY SIEWERD, of the city of New Orleans, and State of Louisiana, have made certain Improvements in Machines for Pounding Rice; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the drawing annexed constituting a part of this specification.

My improvement relates to that class of machines in which the operation of removing the cuticle from rough rice is effected by means of a pestle working within a mortar upon a vertical shaft, which is made to pass through the bottom of said mortar.

It is well known to those who are familiar with the construction of the above-mentioned class of rice-pounders that the mortar is usually composed of a sheet-iron cup resting upon and properly secured to a bottom-rest of solid iron, which is bored through its center, and through which the pestle-shaft is made to work. This mortar-base is provided with a wide flange, by which means it is firmly placed upon and secured by bolts to a bed-plate, constituting the upper portion of the frame supporting the whole device. The mortar, composed as above described, is necessarily ponderous and cumbersome to handle whenever it is required to remove the same from the bed-plate, upon which it rests, for the purpose of rebushing the parts worn by friction of the pestle-shaft. In cases where rebushing is impracticable it is necessary to renew entirely the mortar-base, and this operation becomes expensive, and often requires a considerable period of time.

To obviate the objectionable difficulties above enumerated is the object of one of the improvements of my present improved device. This improvement consists in boring out the mortar-base with a perforation of greater diameter than that of the pestle-shaft, and likewise in recessing both the top and the bottom of said mortar-base, and introducing within the upper recess thus formed an independent steel plate, of a form to fit closely therein, and bored through its center to admit therein the working of the pestle-shaft. At the bottom of the mortar-base I introduce a stuffing-box or gland, as will be seen by reference to the drawing. These parts when worn may be easily removed

and replaced by others, which may be kept already prepared at a comparatively trifling expense, and at a great saving of time. My second improvement to the class of hullers herein considered consists in providing a guide for the upper end of the pestle-shafts employed. It is common to employ two machines upon one frame, and of this kind is the device which is illustrated and described in this specification and accompanying drawing. In this case, therefore, two guides are required, and these are placed upon and supported by a column, as will be seen by reference to the drawing.

To the drawing reference must now be made, in order to understand more clearly the nature of my invention.

On the drawing, A shows an external side view of one pounder, and B a vertical section of the other. These hullers are supported upon the frame C, the upper part of which constitutes the bed-plate for the mortars. To this bed-plate the mortars are secured by the bolts *a*, which pass through the flanges of the mortar-bases D. E is the independent steel base-plate introduced within the mortar at the top of its base, while F is the stuffing-box introduced at the bottom thereof. These two parts constitute the first part of my improvement, and are exceedingly important and useful for the reasons already stated. My second improvement, which is but little less important and useful than the above, consists of the column G, placed upon the frame C, and supporting the cross-frame H, to the outer ends of which are secured the guides I, for the purposes, as above stated, of preventing all unnecessary vibration to the pestle-shafts working within the mortars. K is the pestle, and L the pestle-shaft, upon which the former is screwed, as above stated. The said pestle is furthermore secured to the pestle-shaft, and prevented from turning thereon by means of the key-nut *b* and the jamb-nut *c*. M is a pulley, to which motion is imparted by means of a belt from any suitable motive power which may be accessible. The pulley M is placed upon the shaft *d*, to the outer ends of which are secured the balance crank-wheels N. Crank-pins O are inserted in the said wheels N, to which in turn are secured the lower ends of the pitmen P. The upper ends of the said pitmen P are connected to the cross-heads R, which

work in suitable slides *c*. To the said cross-heads R are also attached the lower extremities of the pestle-shafts aforesaid; and thus it will be perceived how motion is transmitted from the pulley M to the said pestle-shafts. The bottom of the pestle is provided with a steel-face plate, which may be easily removed when worn out or rendered useless.

Having described my invention, what I desire to secure by Letters Patent is—

1. The plate E and stuffing-box F, arranged

below the adjustable pestle, substantially as described, and for the purposes set forth.

2. The column G, cross-head H, and guides I, in combination with the adjustable pestle, substantially as described, for the purposes set forth.

A. H. SLEWERD.

Witnesses:

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