

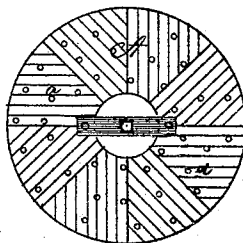
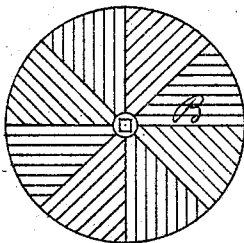
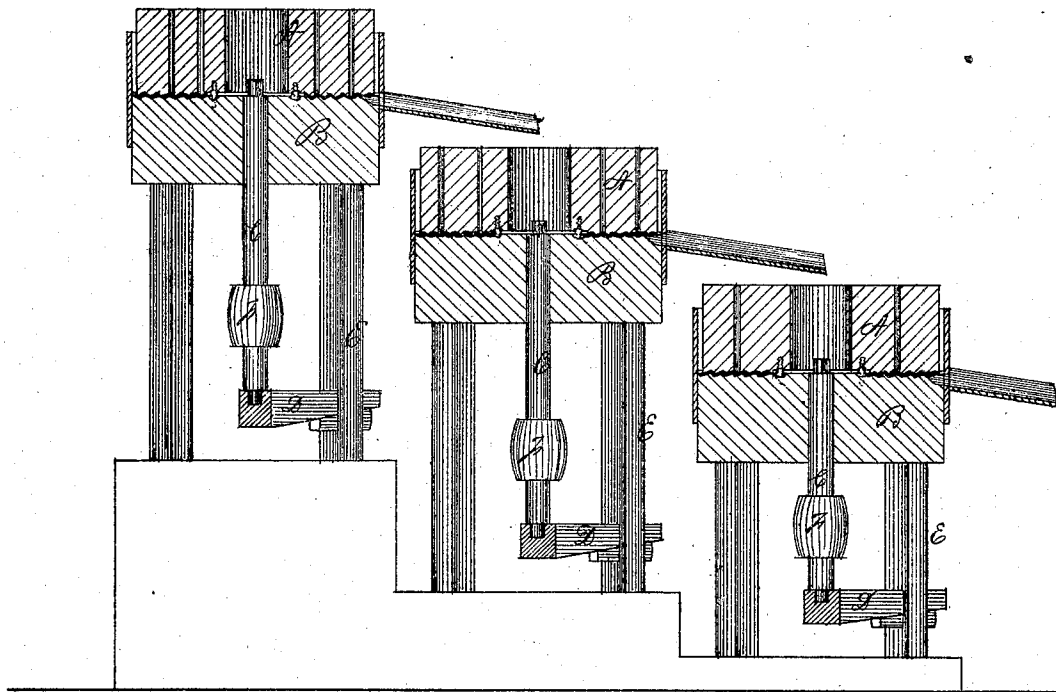
LEROY E. LEE'S

PATENTED AUG 22 1871

118251

Improved Apparatus for Hulling, Cleaning

and Polishing Rice -



Inventor

Witnesses -

H. M. Jenkins
E. H. Levy

Leroy E. Lee

UNITED STATES PATENT OFFICE.

LEROY E. LEE, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-HALF HIS RIGHT TO LOUIS GERTIES, OF SAME PLACE.

IMPROVEMENT IN RICE-HULLING AND POLISHING-MACHINES.

Specification forming part of Letters Patent No. 118,251, dated August 22, 1871.

To all whom it may concern:

Be it known that I, LEROY E. LEE, of the city of New Orleans and State of Louisiana, have invented a new, useful, and improved Apparatus for Hulling, Cleaning, and Polishing Rice; and I hereby declare the following to be a full, clear, and exact description and specification of the same, reference being had to the annexed drawing constituting a part thereof.

The improvements embraced in my device consist in the application of one, two, three, or more vertical wooden cylinders, revolving horizontally, either above or beneath corresponding stationary wooden cylinders, all of which are provided with grooves upon their proximate working surfaces, similar in all respects to those which are made upon the proximate working or rubbing surfaces of any corn or wheat-mill. In fact, my apparatus consists of a series or succession of one, two, or more mills, differing from the ordinary corn or wheat-mill in the particulars that, while in the latter the work is done with stone cylinders with grooved working surfaces, in my mills the cylinders are of wood, with grooves precisely similar to those of a corn or wheat-mill; and in addition thereto I perforate the running plates with numerous holes, into and through which I place corn-shucks or other equivalent suitable material, to act as a brush, during the rapid revolutions of the running plate or plates, to clean and polish the rice at the same time the process of hulling is proceeding. Furthermore, as the process of hulling and polishing continues, I provide a fan or fans, which operate to blow away the hulls which have been separated from the rice as the whole is being discharged from the first mill to the second, and from the second to the third, and so on.

My device will be more clearly understood by reference to the drawing, on which the similar letters refer to the similar parts thereof.

A represents the upper running plates or cylinders, which are of wood, and provided on their lower surfaces with a series of grooves of almost any desired form of cross-section, but similar to those of any corn or wheat-mill, as aforesaid. B represents the under plates, which are stationary, and which are likewise provided with grooves upon their upper working surfaces similar to

those of the upper running plates. C shows the vertical shafts, resting in steps supported upon the "bridge-trees" D, which latter are supported by the frame E. Upon the vertical shafts C are placed pulleys F, for the reception of belting for the transmission of rotary motion thereto from any machinery or motive power provided for that purpose. Upon the upper extremities of these vertical shafts are attached rigidly the running plates, which will be revolved thereby when motion is given to them in the manner above described. Through all the running plates are bored numerous holes, into and through which are placed corn-shucks or any suitable equivalent material to serve the important purpose of polishing the rice, and in assisting the running plates to free it from the hulls and fibrous coating by which it is covered when taken directly from the stalk.

The operation of cleaning is effected by means of fans operated in any convenient manner, which blow away the light hulls and fibrous coating which have been loosened or separated from the rice by the mills aforesaid as the same is being discharged from one mill to another, as before mentioned.

I believe that in order to perform effectually the entire operation of hulling, cleaning, and polishing it will be necessary to have at least two, or perhaps three, sets of mills. I propose to use at least two sets, or perhaps three, as shown in the drawing.

I have demonstrated by actual experiment the utility of my invention. It performs the work for which it is designed and intended in the most thorough and satisfactory manner; and

Having described it, what I desire to secure by Letters Patent is the following:

The arrangement herein shown of the burs A A' A'', each provided with brushes a a, and the burs B B' B'', provided with furrows, in combination with the shafts C, levers D, and spouts F F' F'', all constructed and operating as shown and described, for the purpose set forth.

LEROY E. LEE.

Witnesses:

L. I. OLMSTEAD,
E. H. LEVY.