

N. O. TILTON.
RICE-MORTAR.

No. 170,787.

Patented Dec. 7, 1875.

Fig. 1.

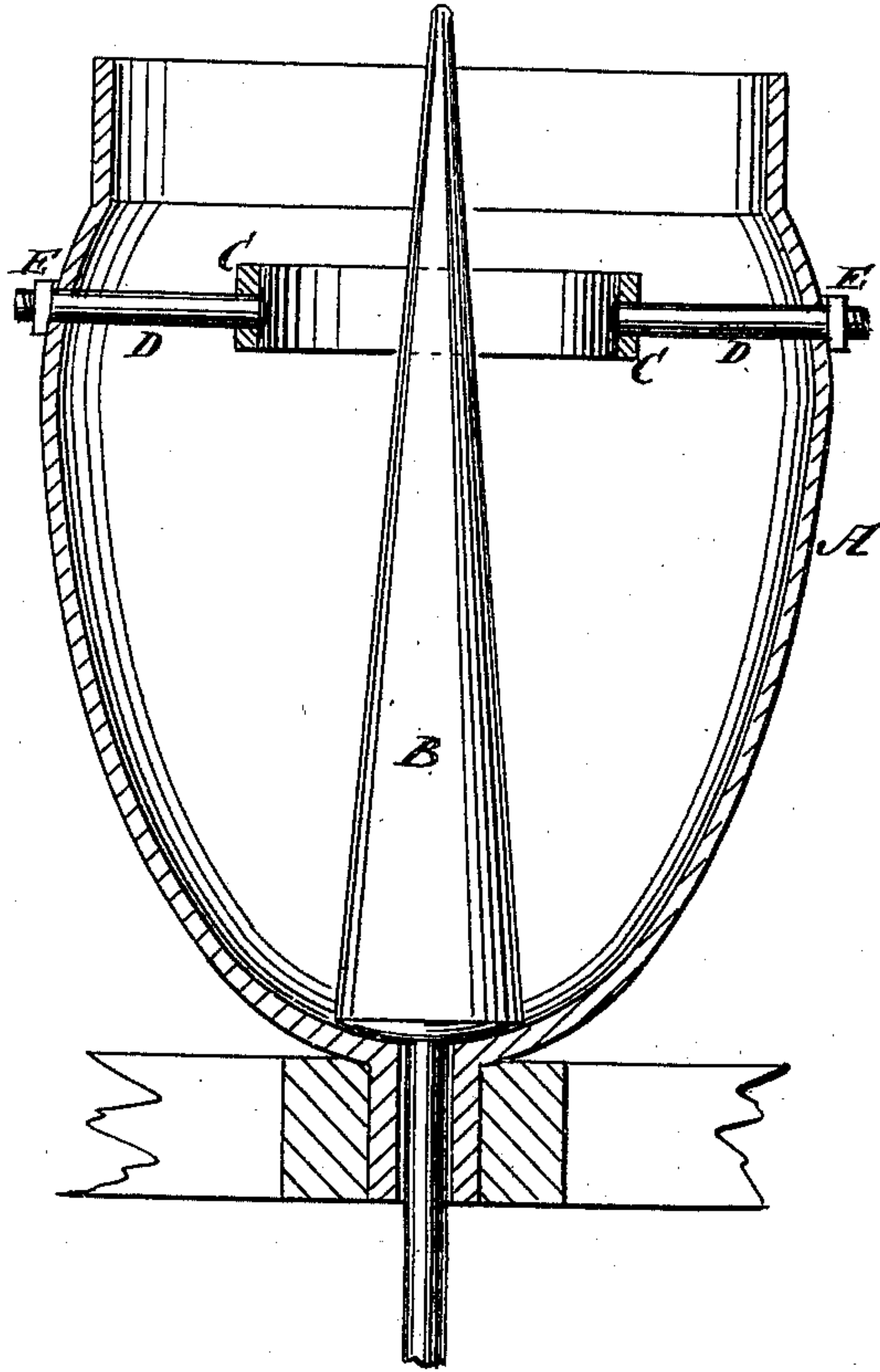
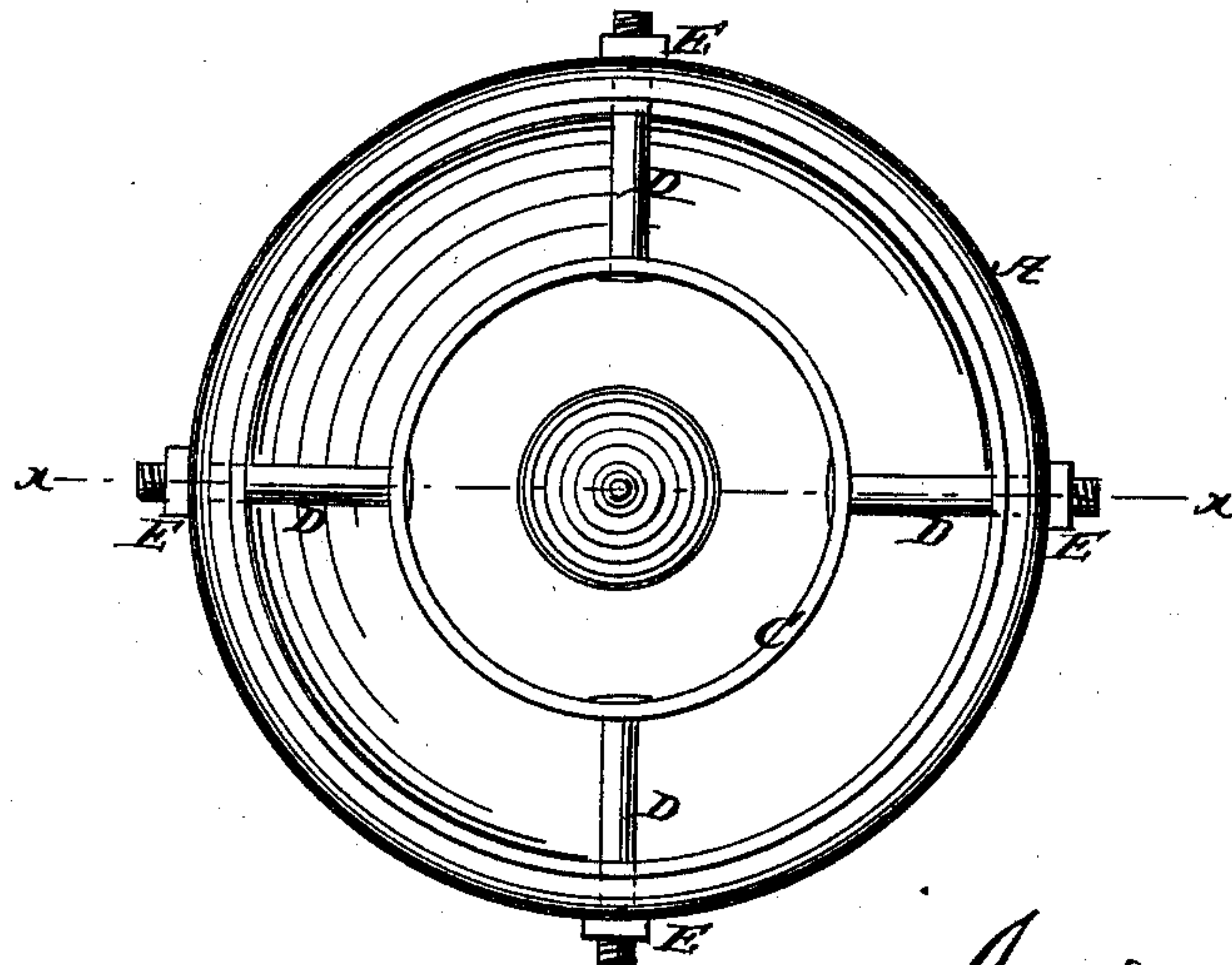


Fig. 2.



WITNESSES:

E. Wolff.
A. H. Perry

INVENTOR:

N. O. Tilton
BY *Mumford*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

NATHANIEL O. TILTON, OF SAVANNAH, GEORGIA.

IMPROVEMENT IN RICE-MORTARS.

Specification forming part of Letters Patent No. **170,787**, dated December 7, 1875; application filed September 4, 1875.

To all whom it may concern:

Be it known that I, NATHANIEL O. TILTON, of Savannah, Chatham county, Georgia, have invented a new and useful Improvement in Rice-Mortars, of which the following is a specification:

The present invention relates to that class of rice-cleaning machines having a reciprocating pestle, which are used for separating the thin skin or film which remains on the grain after the hull or rough outside shell has been removed.

The invention consists in the combination of an open centrally-located ring with the mortar and pestle, as will be hereinafter more fully described.

Figure 1 represents a vertical section of the mortar, showing the ring, taken on the line *x x*, Fig. 2; and Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

A is the mortar; B, the pestle; and C, the ring. This ring gives increased friction, and causes the rice to clean in at least one-fourth less time, and less heat is generated in the

mortar than in mortars without the ring. The grain is made brighter, and is not broken, as in the old method without the ring. This ring may be made adjustable by making it wider, and with slots or holes in the mortar. The ring C is about one-half the diameter of the mouth of the mortar, and is held in a central position by means of the bolts D, the heads of which are on the inside of the ring, while the nuts E are on the outside of the mortar.

I am aware of the patent granted to P. McKinley, April 1, 1851, for a rice-cleaning machine, in which the pestle is operated by a rod passing through the bottom of the mortar.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In combination with a rice-mortar, the ring C, supported by bolts D, substantially as described, and for the purposes set forth.

NATHANIEL OCTAVIOUS TILTON.

Witnesses:

ISAAC RUSSELL,
SOLON C. KEMON.