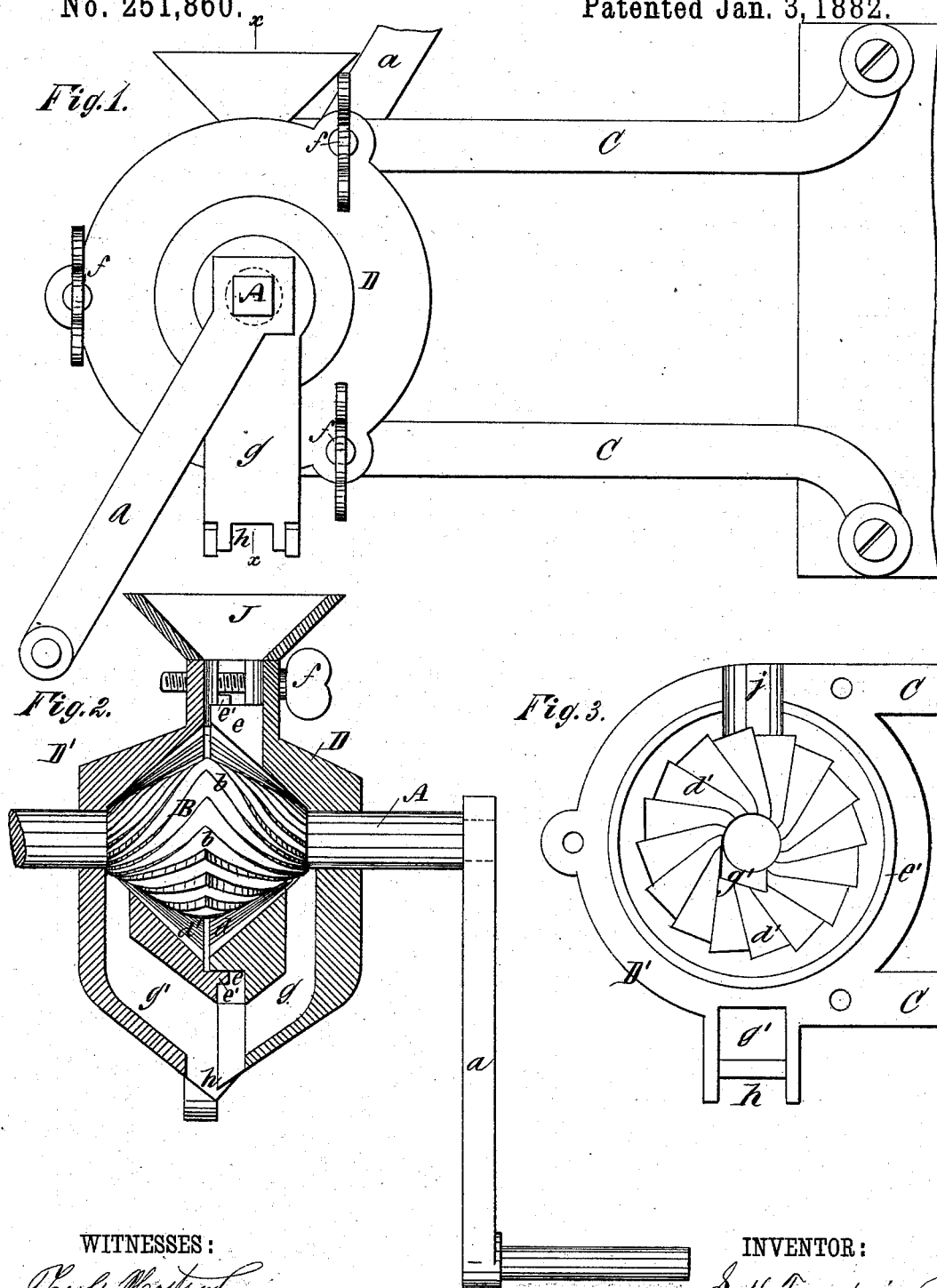


(No Model.)

S. H. FOUNTAIN.  
COFFEE MILL.

No. 251,860.

Patented Jan. 3, 1882.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

SETH H. FOUNTAIN, OF AMITE CITY, LOUISIANA.

## COFFEE-MILL.

SPECIFICATION forming part of Letters Patent No. 251,860, dated January 3, 1882.

Application filed August 16, 1881. (No model.)

To all whom it may concern :

Be it known that I, SETH H. FOUNTAIN, of Amite City, in the parish of Tangipahoa, in the State of Louisiana, have invented a new and Improved Coffee-Mill, of which the following is a full, clear, and exact description.

My invention relates to such mills as are usually turned by hand for grinding coffee, spices, and similar things; and it has for its object to provide a mill of this character which will require less power to operate it than those of ordinary construction, and one which will prevent all loss of the material passing through it.

In the accompanying drawings, Figure 1 is a side elevation of my improved mill. Fig. 2 is a section of the same, taken on the line *xx*; and Fig. 3 is a face view of one part of the casing.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the spindle, which is provided at its ends with the cranks *a a*. Upon this spindle is formed the burr B, which is preferably of prolate-spheroidal form, and is regularly grooved so as to form the spiral ridges *b b*, which come to a point at the largest periphery of the burr and gradually diminish in size, but not in number, as they reach the smallest periphery at the ends of the burr.

The burr B is inclosed by the grinding-casing, which is formed of the parts D D', which are formed with conical chambers grooved upon the inside to form the spiral edges *d d'*, and which are placed upon the spindle from opposite directions, and meet immediately over and around the largest periphery of the burr. The edges *d d'* are also regularly formed in the chambers of the casing—that is, they diminish in size, but not in number, from the largest part to the smallest part of the chambers. The edge of the part D' is formed with the lip *e'*, which fits, when the parts are in place, over the reduced outer edge, *e*, of the part D, and thus

forms a tight joint. The part D' is preferably cast with the bracket-arms C C for securing the mill in convenient position for use. The part D is secured to the part D' by the set-screws *fff*, and the fineness or coarseness of the grind of the mill may be regulated by these screws. The parts D D' of the casing are formed with the discharge-openings *g g'*, which lead from the smallest part of the chambers and meet at the single outlet *h* at the bottom of the casing. At the top, parts of the casing are cut away, as shown at *j* in Fig. 3, to form the hopper-throat J, through which the material to be ground is fed to the mill at the largest periphery of the burr.

It will be understood that owing to the ridges of the burr and of the casing being large at the point of entrance of the material, the kernels will be only broken at that point, and that the main grinding will be done at the smallest periphery of the burr where the leverage is greatest, thus rendering the mill very easy of operation.

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

1. In a coffee-mill, the combination of a burr having a prolate-spheroidal form and spiral ridges, gradually decreasing in size as they reach the smallest peripheries at the ends of said burr, with a correspondingly-ribbed grinding-casing, having a throat over the largest periphery of the burr, and an outlet at each end where the ridges are smallest, whereby the grain will first be broken and afterward be mainly ground at the small ends of burr, as described.

2. The parts D D' of the casing, formed with the discharge-openings *g* and *g'*, leading from the smallest ends of the chambers, in combination with the burr B and the hopper-throat J, substantially as and for the purposes set forth.

SETH HAMPTON FOUNTAIN.

Witnesses:

F. P. MIX,  
D. A. VERNON.