J. H. McNASH.

Improvement in Peanut and Bean-Shellers.

No. 131,768. Patented Oct. 1, 1872.

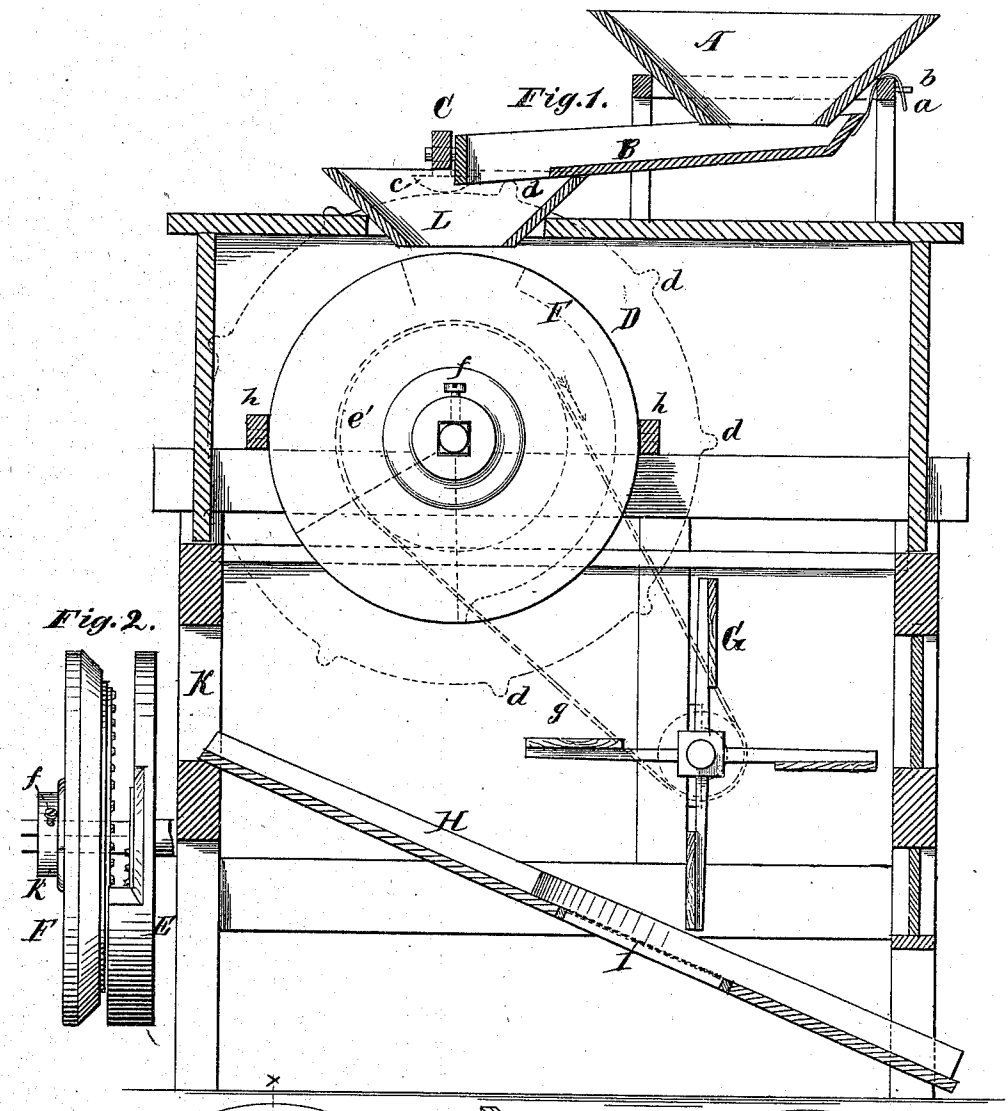

Fig. 1.

Fig. 2.

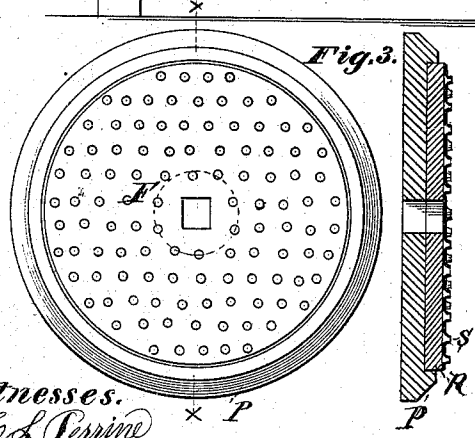

Fig. 3.

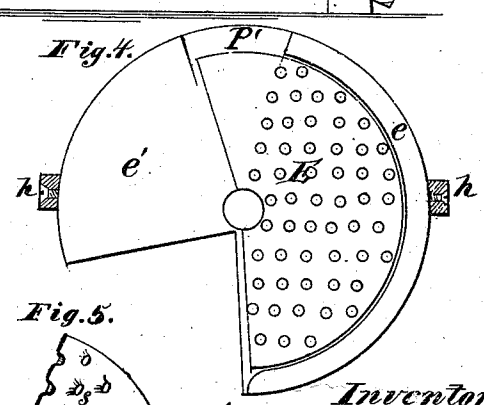

Fig. 4.

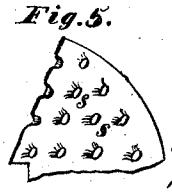

Fig. 5.

Witnesses.

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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

JAMES H. McNASH, OF WAVERLY STATION, VIRGINIA.

IMPROVEMENT IN PEA-NUT AND BEAN SHELLERS.

Specification forming part of Letters Patent No. **131,768**, dated October 1, 1872.

To all whom it may concern:

Be it known that I, JAMES H. McNASH, of Waverly Station, in the county of Sussex and State of Virginia, have invented a new and useful Improvement in Pea-Nut and Bean Shellers, of which the following is a specification:

This invention relates to that class of apparatus which is employed for shelling pea-nuts, beans, &c.; and it consists in the manner of constructing the hulling-disks—one in a fixed position while the other revolves—and in further details of construction hereinafter fully described.

In the drawing, Figure 1 is a vertical longitudinal section of the machine; Fig. 2 is a view of the hulling-disks, (seen from above,) and shows their relative position; Fig. 3 shows the revolving disk, together with a section of the same; Fig. 4 shows the fixed disk; and Fig. 5 is a portion of the punched metal abrading plate.

The frame-work of the apparatus is of the usual construction, having hopper A, chute B, auxiliary hopper L, and fan G. Chute B is provided with straps *a*, and upon the hopper-frame are pegs *b*, whereby the angle of inclination of chute B can be changed at the will of the operator, so as to perfectly control the feed. Vibratory motion is imparted to chute B by means of arm C, pivoted to the main frame at one end and to chute B at its middle, while the free end of the arm is provided with projection *c*, which is struck at regular intervals by the projections *d* upon the fly-wheel D, (shown in dotted lines in Fig. 1,) causing the rise and fall of arm C. D is a fly-wheel attached to the shaft, which carries the hulling-disk. It is provided in any suitable manner with projections *d*, which are arranged at intervals upon its periphery, and have the functions above stated. In some respects the construction of disks E and F are identical. Such points may be briefly stated, after which the distinctive features will be enumerated. That portion of the disks marked P, Fig. 3, is cast of metal, and of the configuration shown in the drawing, having a central opening for the passage of the shaft, and a raised rim for the reception and retention of the wooden disk R, to which the metal plate S is screwed. The plate S is of sheet metal punched or punctured in such a manner as to present upon the reverse numerous rough ragged points to form the abrading surface. Disk E, Fig. 4, (shown in dotted lines, Fig. 1,) is the fixed disk. The part marked P′ may be of wood or metal, as is preferred. A little more than half of this disk is provided with the abrading surface—one-fourth, lettered *e′*, is smooth, and about one-fourth of the disk is cut away or depressed to furnish a point of exit for the bean or nut from between the disks. The raised rim of the casting or portion marked P has an additional height (marked *e*, Fig. 4,) for one-half the circumference of this disk, said raised portion corresponding with that half of the disk which carries the abrading surface. The disk is held in a vertical position between the cross-bars *h* of the main frame, and is secured in place by bolts, screws, or other suitable means. The revolving disk F fits loosely upon its shaft, and is provided with box *k* and set-screw *f*, so that it can be properly adjusted and caused to revolve with such space between it and disk E as occasion may require. The disk F must be constructed and adjusted upon its shaft, so that it shall at all times revolve in a plane parallel to disk E. That part of the disk marked P should be of metal, for, if of wood, it will be liable to become warped and useless. G is a fan of ordinary construction, receiving its motion from the shaft of the hulling-disk by means of suitable belts and pulleys. H is an incline, which may be a sieve, or may be provided with sieve I in some part of its length. Upon this incline the nuts, beans, &c., fall, and are conducted off, while the husk is carried out through opening K by the blast from fan G.

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

The combination of the hopper A, vibrating chute B, fixed disk E, revolving disk F, and fan G, constructed and operating substantially as and for the purpose set forth.

To the above I have signed my name this 23d day of February, A. D. 1872.

JAMES H. McNASH.

Witnesses:

JAMES L. NORRIS,

WM. J. PEYTON.