

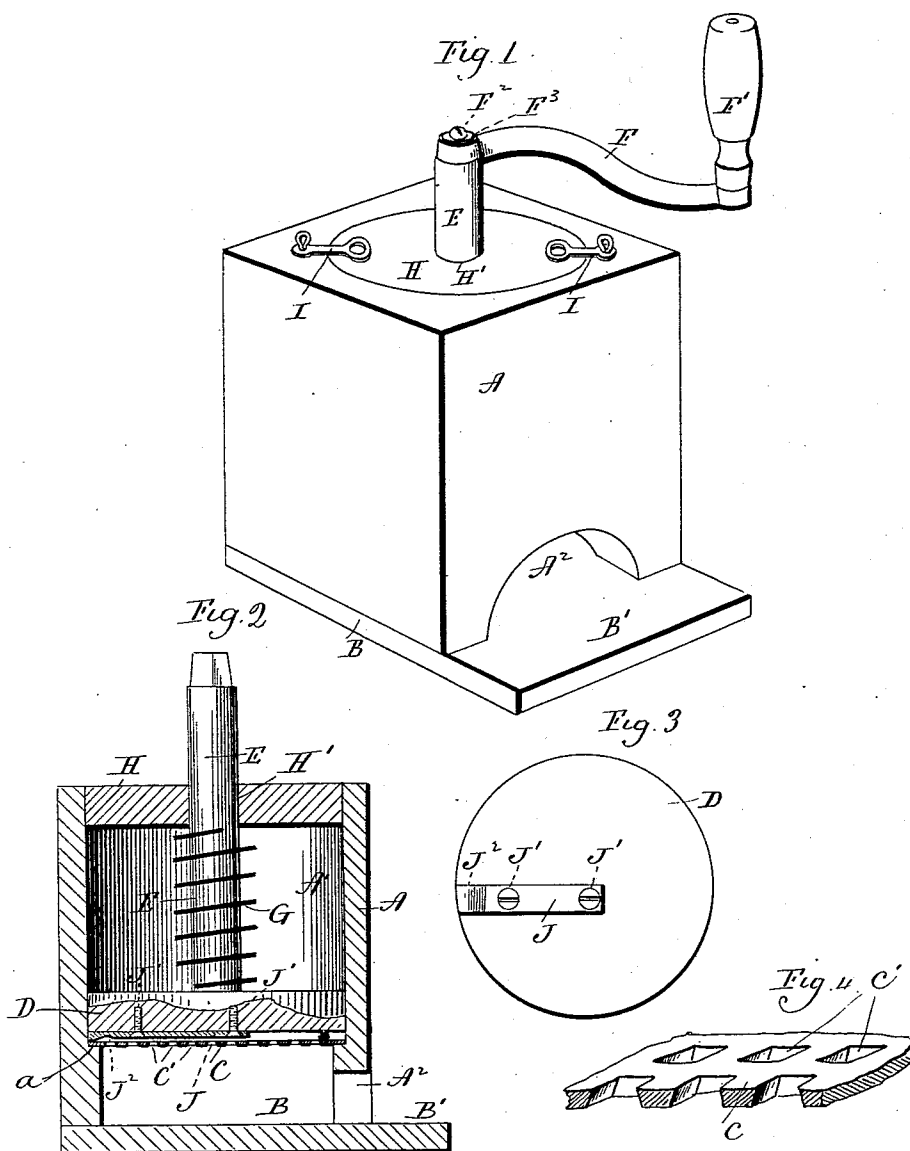
(No Model.)

W. TREWHELLA.

PORTABLE MILL FOR REDUCING CRACKERS TO POWDER.

No. 568,997.

Patented Oct. 6, 1896.



Witness.
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PORTABLE MILL FOR REDUCING CRACKERS TO POWDER.

SPECIFICATION forming part of Letters Patent No. 568,997, dated October 6, 1896.

Application filed July 29, 1896. Serial No. 600,877. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM TREWHELLA, of Meriden, in the county of New Haven and State of Connecticut, have invented a new
5 Improvement in Portable Mills for Reducing Crackers to Powder; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full,
10 clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a portable mill for reducing crackers to powder constructed in accordance with my invention; Fig. 2, a view thereof in vertical central section; Fig. 3, a detached reverse view of the grinding-disk; Fig. 4, a broken sectional view of the grinding-plate.

20 My invention relates to an improvement in culinary utensils, and more particularly to a portable mill for reducing crackers to powder, in which form they are used in many branches of cookery, the object being to produce a simple, compact, and convenient device capable of being produced and sold at a small cost and in which crackers or fragments of crackers may be reduced to the required powdered form very speedily.

30 With these ends in view my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention I employ a
35 box or body A, which may be varied in form, as required, but which, as shown, is rectangular in exterior form and constructed with a cylindrical chamber A' and provided at its lower end with a foot or standard B, extending outward in front of it in the form of a shelf B'. The said box or body is also constructed with a discharge-opening A², leading laterally and forwardly out of its lower end and over the shelf B'. Within the cylindrical chamber A' and somewhat below the center thereof I locate a fixed grinding-plate C, filled with square perforations C', which are larger at their lower than at their upper ends. This plate may be produced in one
40 way by taking a suitable disk of sheet metal and punching the holes in it from its lower face upward with a tapering punch of square

cross-section. By forming the holes larger at their lower than at their upper ends they clear themselves very readily of the powdered
55 cracker. As shown, the said plate is supported upon an annular horizontal shoulder a, formed within the chamber A'. The crackers and fragments to be powdered are forced downward upon the said plate by means of a
60 thick grinding-disk D, preferably formed of wood and made just enough smaller in diameter than the diameter of the chamber A' to rotate freely therein, the said disk being rigidly secured to the lower end of a spindle
65 or shaft E, the upper end of which projects above the box A and is squared for the reception of the inner end of a horizontally-arranged handle-arm F, furnished with a vertically-arranged handle F'. The handle-arm
70 F is removably secured to the squared upper end of the shaft by means of a screw F². The disk D is forced down upon the crackers by means of a spiral spring G, encircling the spindle E, impinging at its lower end upon
75 the grinding-disk and at its upper end against the under face of a disk-shaped cover H, adapted in diameter to fit snugly within the upper end of the chamber A' and having a central aperture H' for the upward passage
80 through it of the spindle or shaft E. The said cover is held down in position against the tendency of the spring to push it upward by means of horizontally-arranged buttons
85 I I, mounted in the top of the box and arranged to swing over and away from the cover. The lower face of the grinding-disk D is furnished with a radially-arranged metal knife J, having square edges and consisting of a long narrow strip or bar of metal. This
90 knife is secured in place by screws J' J'. The outer end of the knife extends to the very edge of the disk and is constructed with a clearance-finger J², having an inwardly-extending upwardly-inclined inner face and operating to draw or rake inward all the cracker fragments and powdered cracker which are thrown to the edges of the fixed plate C. In the absence of this finger the mill would be clogged by the accumulation of fragments
100 and powder around the edge of the plate, inasmuch as the rotation of the grinding-disk D itself tends to throw the fragments outward in the same way that the upper mill-

stone of a flouring-mill tends to throw the flour outward.

A device constructed in accordance with my invention will be found very convenient by all cooks, as it enables crackers to be perfectly powdered at very short notice and is very convenient to use.

It is apparent that in carrying out my invention some changes from the form and construction herein shown and described may be resorted to, and I would therefore have it understood that I do not limit myself to the exact device set forth, but hold myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

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

1. In a portable mill for reducing crackers to powder, the combination with a box containing a cylindrical chamber, of a fixed perforated metallic grinding-plate located within the said chamber, in a horizontal plane, a grinding-disk located above the said plate, and coacting therewith, a spindle or shaft to the lower end of which the said disk is secured, means for pressing the disk downward against the plate, a handle applied to the spindle for rotating it, and a knife applied to

the lower face of the disk, extending outward to the edge thereof, and having its outer end formed with a clearing-finger.

2. In a portable mill for reducing crackers to powder, the combination with a box having a cylindrical chamber, of a horizontally-arranged fixed grinding-plate located within the said chamber, and formed with perforations which are larger at their lower than at their upper ends, whereby they clear themselves readily of powder, a grinding-disk located above the said plate, a knife applied to the lower face of the said disk, extending outward to the edge thereof, and constructed at its outer end with a clearing-finger, a spindle having the disk secured to its lower end, a disk-shaped cover located within the upper end of the chamber and having the spindle projecting upward through it, and a spring interposed between the cover and disk for forcing the latter downward upon the crackers.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM TREWHELLA.

Witnesses:

WILLIAM F. KERR,
WILLIS I. FENN.