

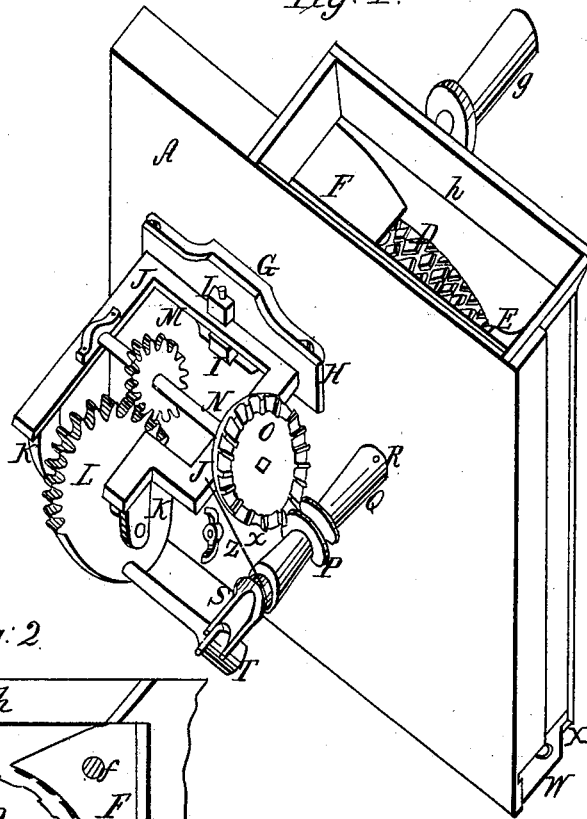
*J. C. Warner,*

*Apple Parer.*

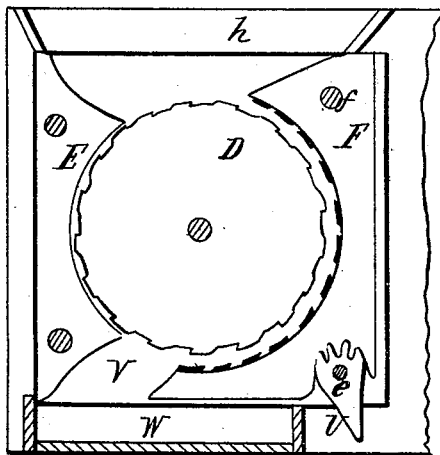
*No. 111,406.*

*Patented Jan. 31. 1871.*

*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*  
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*William D. King*

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# United States Patent Office.

DEWITT C. WARNER, OF CHICAGO, ILLINOIS.

Letters Patent No. 111,406, dated January 31, 1871.

## IMPROVEMENT IN COMBINED COFFEE-MILLS AND APPLE-PARERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, DEWITT C. WARNER, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Coffee or Spice-Mills, and combining certain parts of the spice-mill with an apple-parer, so that parts of the machinery of the one are used to operate the other without impairing the efficiency of either, of which the following is a specification.

The first part of my invention relates to the form and arrangement of the grinding apparatus of the mill. This consists of a metal wheel, a metal bar, concave on one side, making a little more than a semicircle, within which the wheel revolves.

The periphery of the wheel is cut into diamond-shaped squares of uniform size, having two cutting-edges.

The metal bar is also cut into similar squares on its concave surface.

This concave bar, which forms the opposite grinding-surface to the wheel is held by a screw at its upper end, and on which it turns when moved by an adjusting ratch at its lower end.

The wheel, fixed upon a shaft, is placed with the concave bar between two metallic plates, which are secured to the foundation-board, and through which the shaft passes, and which serve as pivot-holes for it to turn in.

The second part of my invention relates to the combination and attachment of the apple-parer, so as to be operated by the same revolving shaft as the coffee-grinder.

This shaft is extended through the foundation-board sufficiently far to allow a screw to be formed on the projecting end.

To this screw the shaft of a fork which holds the apple is fitted, or the screw may be omitted and the shaft keyed on.

This shaft is supplied with a screw-wheel.

A metallic frame, upon which three wheels, arranged for operating the knife, and which are moved by the screw-wheel of the fork-shaft, is adjusted to the fork and firmly keyed to a metal plate secured to the foundation-board, this plate having two projections corresponding with holes in the frame to which it is keyed.

The frame sustains two shafts, one of which carries two wheels, one large and one small.

The larger one, at the end of the shaft, is geared with the screw-wheel of the fork-shaft.

The smaller one, near the middle of the shaft, is geared with a larger one, which operates the knife.

A spiral spring fixed to the shaft of this larger wheel, and to the frame, returns the knife to its position after having described its curve around the apple.

A metallic rod, to one end of which the knife is fixed, passes through this wheel near its circumference, and is made fast to it by a pivot near the middle of the rod. This allows the knife to move up and down as the size of the apple varies, but is kept

pressed upon it by an adjusting spiral spring at the other end of the rod.

This spring works upon a standard fixed to the shaft of the wheel that moves the knife, and moves with it.

### Description of the Accompanying Drawing.

Figure 1 is a perspective view of the combination, coffee-mill and apple-parer attached.

Figure 2 represents the grinding apparatus of the mill with the outer plate removed.

Figure 3 is the plate with projections secured to the foundation-board, to which the frame is keyed.

### General Description.

A, fig. 1, foundation-board.

D, figs. 1 and 2, grinding-wheel.

F, figs. 1 and 2, concave bar making the fixed grinding-surface.

B, figs. 1 and 2, support to the outer plate, and inclose the wheel.

G, figs. 1 and 3, plate with projections, to which the frame of the apple-parer is keyed.

I I, figs. 1 and 3, projections of the plate G.

J J, fig. 1, frame of the apple-parer.

R, screw-end of shaft of spice-mill.

Q, shaft of the fork.

P, screw-wheel of fork-shaft.

S, fork.

X, brace to fork.

T, knife.

O, wheel geared with screw-wheel of fork-shaft.

N, shaft carrying two wheels.

M, small wheel geared with the wheel that operates the knife.

K K, shaft, on which is placed spring to return knife.

Z, thumb-screw that holds the ratch U, fig. 2.

h, hopper.

V, discharge-outlet.

W, receiving-box.

x, lip of outer plate to hold box.

H, fig. 1, a part of frame.

g, crank.

I do not claim the general construction of either the mill or apple-paring device when taken separately; but

What I do claim as new, and desire to secure by Letters Patent, is—

The combination and arrangement, in the combined coffee-mill and apple-parer herein described and shown, of the plates G and H, and the shafts Q and R, constructed substantially as and for the purpose set forth.

DEWITT C. WARNER.

Witnesses:

WILLIAM G. WHITE,

WILLIAM D. KING.