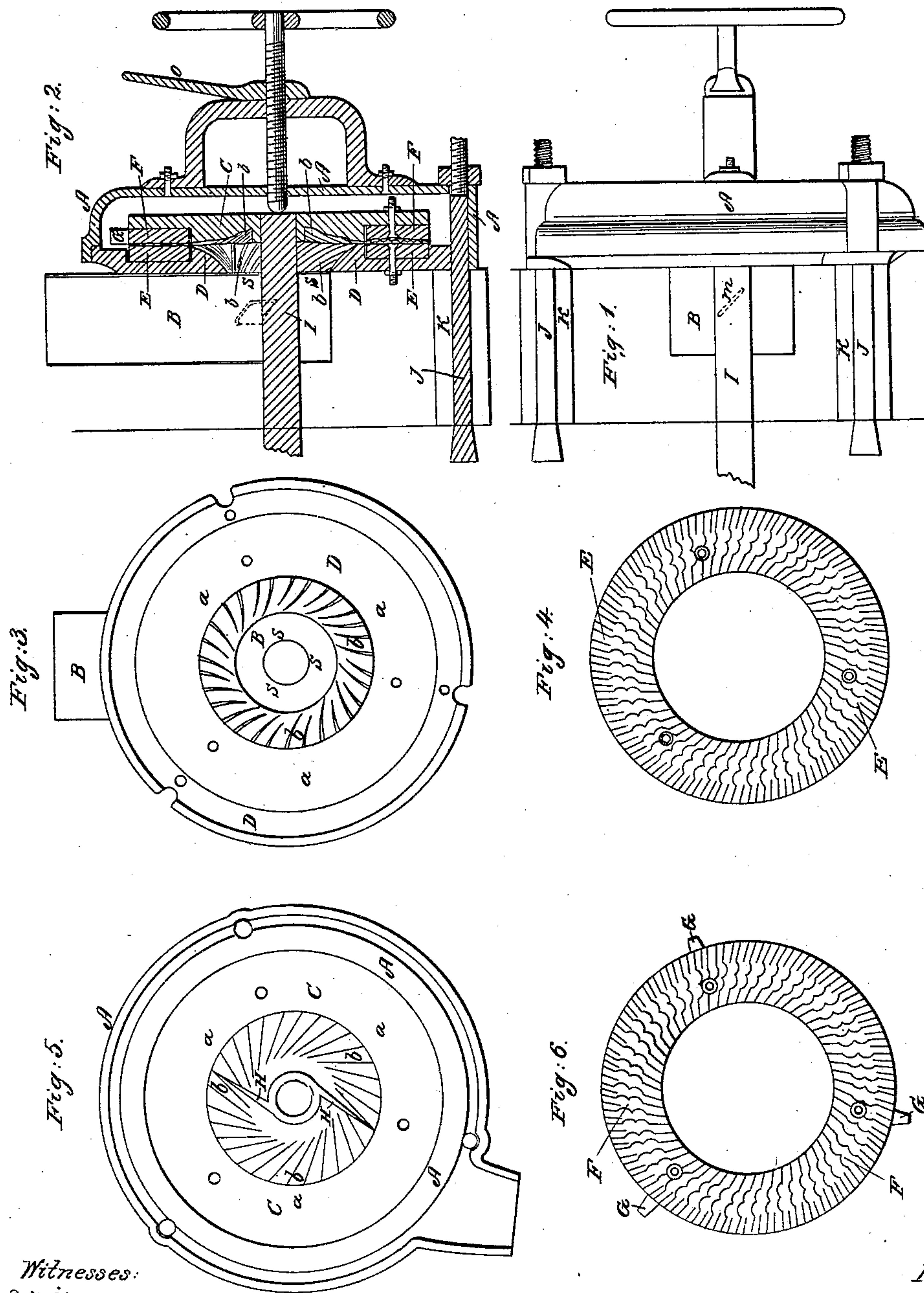


N. BURR.

Flour Mill.

No. 29,462.

Patented Aug. 7, 1860.



Witnesses:  
D. W. Alexander  
W. H. Hughes.

Inventor:  
Nelson Burr.

# UNITED STATES PATENT OFFICE.

NELSON BURR, OF BATAVIA, ILLINOIS.

## PORTABLE MILL.

Specification forming part of Letters Patent No. 29,462, dated August 7, 1860; Reissued February 6, 1872, Nos. 4,741 and 4,742.

*To all whom it may concern:*

Be it known that I, NELSON BURR, of Batavia, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Portable Mills; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure (1) is a side elevation; Fig. (2) a sectional view. Fig. (3) is an inside view of the stationary plate; Fig. (5) an inside view of the revolving plate lying in the shell. Figs. (4 and 6) represent the rings or grinding surfaces.

The nature of my invention consists in constructing the revolving and stationary plates with circular chambers in order to admit the grinding rings or surfaces also in the employment and arrangement of other devices the peculiarities of which will be hereinafter fully described.

To enable others skilled in the art to make and use my invention I will now describe its construction and operation.

(A) represents the shell or outside covering to the two plates.

(B) is the grain receiver or hopper.

(D) is the stationary plate, and (C) the revolving plate.

(I) is a shaft which passes through the lower portion or receiver (B), also through the stationary plate (D) and is secured to the revolving plate (C).

(M) is a spiral wing or shaft (I), inside of receiver (B), for the purpose of agitating and conveying the grain through the opening (S) in the stationary plate and from thence to the grinding surfaces, by the drift (b).

(a) are circular chambers in both the stationary and revolving plates.

(E and F) are rings or grinding surfaces,

which may be taken out and replaced in the chamber (a), as often as they become dull or worn out at a very small expense.

(H H) represent wings in the drift on revolving plate (C) for the purpose of gathering the grain before it enters the grinding surfaces.

(N) is the regulating gage, provided with the thumb screw (o) for the purpose of holding the gage to its proper place.

The operation of my machine is as follows: The grain is placed into the receiver (B) and is agitated according to the velocity of the shaft (I) by the wing (M), being conveyed through the openings (S), thence to the grinding surfaces (E F). It is ground either coarse or fine as you have regulated the plates and then discharged at the spout (P).

It will be seen that in constructing a mill as set forth above I entirely overcome the objection so much urged against iron mills to wit—the great expense necessary to keep them in repair. My rings or grinding surfaces may be replaced whenever worn out for a very small sum, thus rendering the mill in all respects as good as when first purchased, and as it is designed to grind either flour, meal, or feed for horses, it will be found to possess great advantage for family use.

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

The combination of plates (C and D), spiral wings (H H), adjustable grinding surfaces (E and F) and receiver (B), the whole being constructed substantially as and for the purpose specified.

NELSON BURR.

Witnesses:

E. S. SMITH,  
L. H. GRIMES.