No. 28,834.

PATENTED JUNE 26, 1860.

E. D. CLARK.

MILL.

Fig. 1.

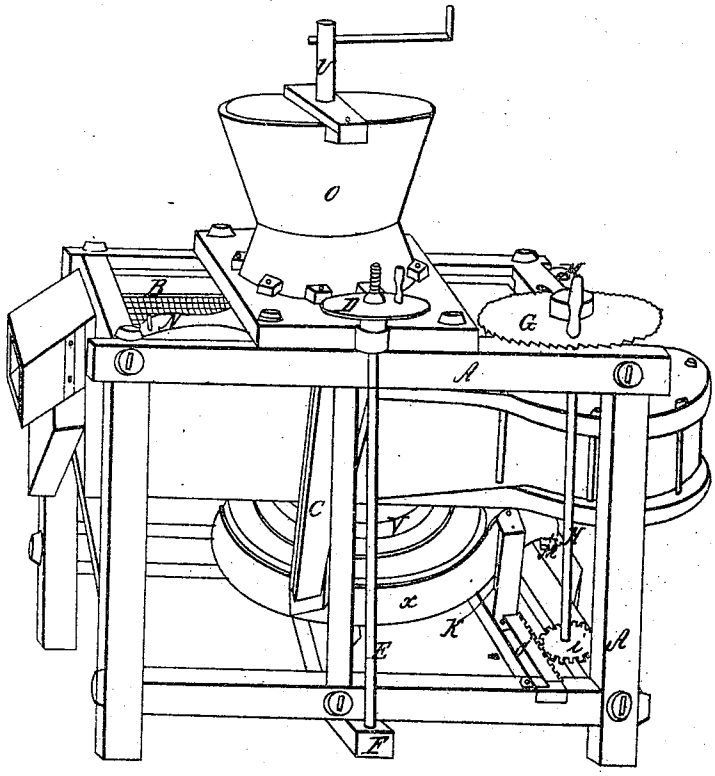
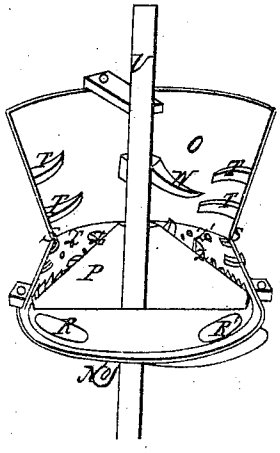


Fig. 2.



Witnesses;
A. W. Morse
V. E Davis

Inventor;
E. D. Clark

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

E. D. CLARK, OF EARLVILLE, NEW YORK.

MILL.

Specification of Letters Patent No. 28,834, dated June 26, 1860.

To all whom it may concern:

Be it known that I, E. D. CLARK, of Earlville, in the county of Madison and State of New York, have invented a new and useful Improvement in Mills or Devices for Crushing Corn in the Ear and Cleaning and Separating the Same; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1 is a perspective view of my improved mill. Fig. 2 is a sectional elevation of the hopper.

Similar letters of reference denote like parts in both figures.

To enable others skilled in the art to fully understand and construct my invention I will proceed to describe it.

The nature of my invention consists in the arrangement of the devices hereinafter described.

In the accompanying drawings A represents the frame of a mill which is of ordinary construction.

B represents a fanning mill not unlike a common separator; O, the hopper; C, a spout for the discharge of the corn and cobs suitably crushed for an ordinary grinding mill.

D, represents a hand wheel; E, a rod; F, a bridge tree. These parts are so arranged and combined with shaft U, as that by turning hand wheel D, the parts represented in Fig. 2, by letters U, W, and P, may be adjusted as circumstances may require.

G represents a ratchet wheel; H, the shaft; *i*, a pinion; *j*, a rack. On the inner end of rack *j*, is a friction pulley K, which is held in contact with belt X, by the device represented by letters G, H, *i*, and *j*.

M represents the upper end of a shaft; M′, the lower end. To said shaft is attached a blower and eccentric, the service performed by this device is to operate the fanning mill B.

V, represents a drum attached to shaft U. To said shaft is also attached nut P, represented in Fig. 2. By the application of power to shaft U the parts above described are put in operation.

When it is desirable to separate the corn from the cobs a shifter represented by letter N in Figs. 1, and 2, can be so adjusted as to discharge the contents of hopper O, into fanning mill B, where a separation of the corn from the cobs will take place, or the contents of the hopper may be discharged into spout C, through opening R′ in an unseparated state. When this operation takes place it is not desirable that the mill B should be operated, which may be prevented by so adjusting friction pulley K as that it shall not be in contact with belt X.

The internal arrangement of hopper O as shown in Fig. 2 consists of cutters T, and W, above throat S, so arranged that when the mill is in operation the cutter W, passes between cutters T, cutting the cobs and preparing them for the action of crushers L, L′, on the outer surface of nut P and on the inner surface of hopper O.

Great advantages are derived by the use of cutters above the throat of hopper O as it will be seen that much less power will be required to operate the mill than would be required if the ears of corn were allowed to pass into the lower part of the hopper in an unbroken state, thereby performing a greater amount of work with less power than any mill known to the subscriber.

Having described my invention I do not claim any of the parts therein separately or in the abstract irrespective of the arrangement as shown and described; but

I claim—

So combining a fanning device with a mill for crushing and shelling corn, as that by the movement of shifter N the contents of hopper O, may be discharged into mill B, or through spout C, the parts composing said mill being arranged substantially as described and for the purposes set forth.

E. D. CLARK.

Witnesses:

A. W. MORSE,

S. E. DAVIS.