

J. J. PARKER.  
Corn Sheller.

No. 18,296.

Patented Sept. 29, 1857.

Fig. 1

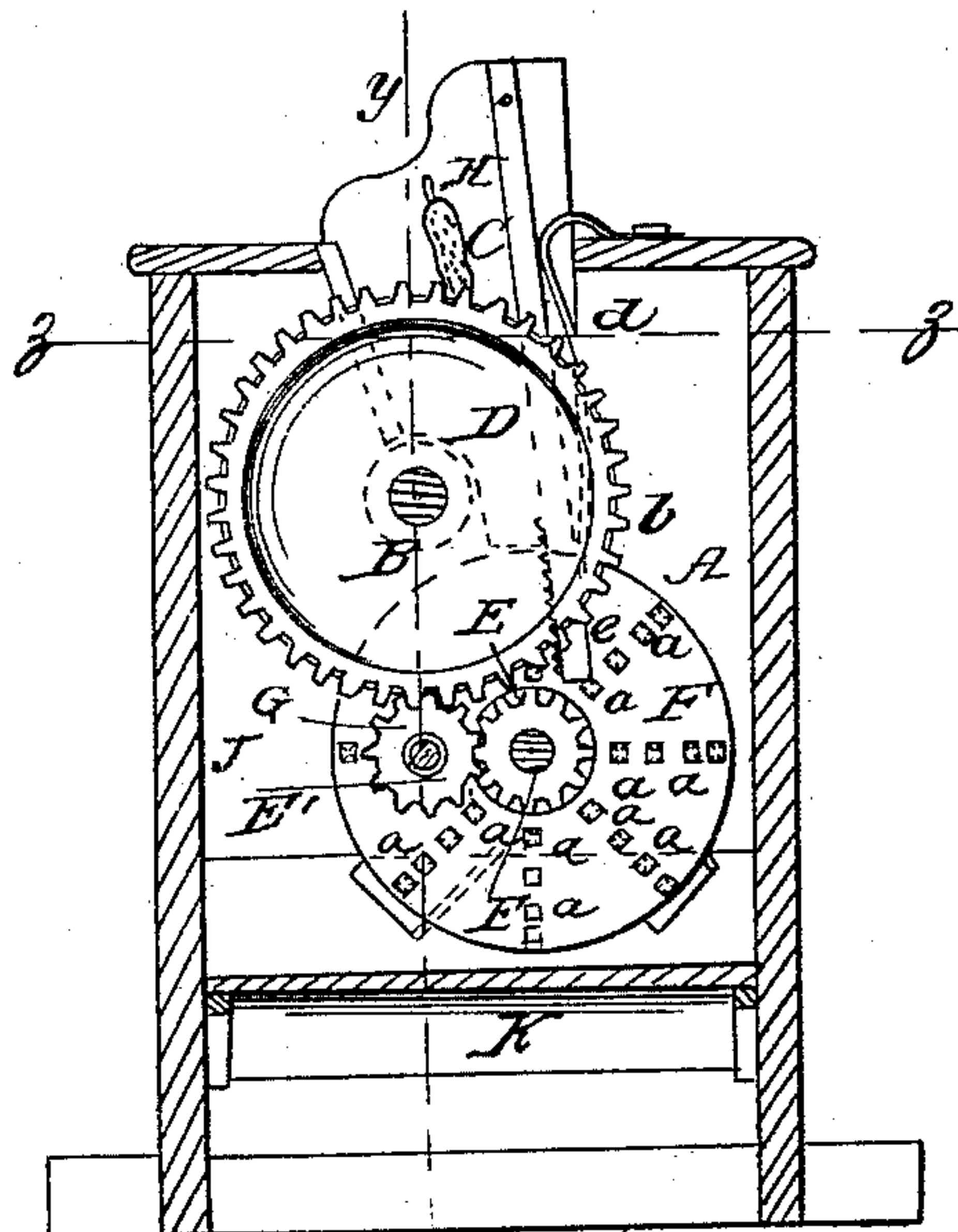


Fig. 2

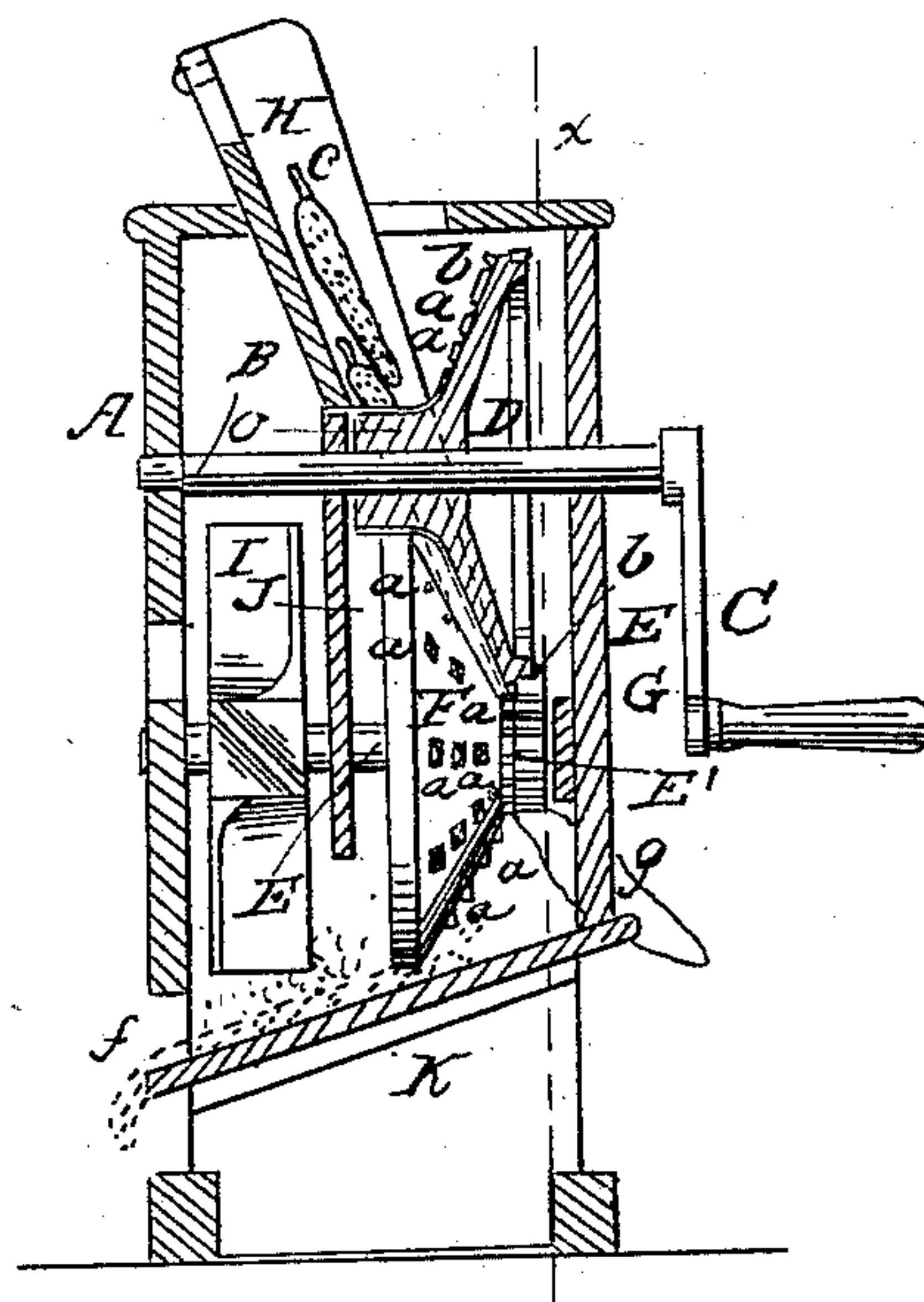
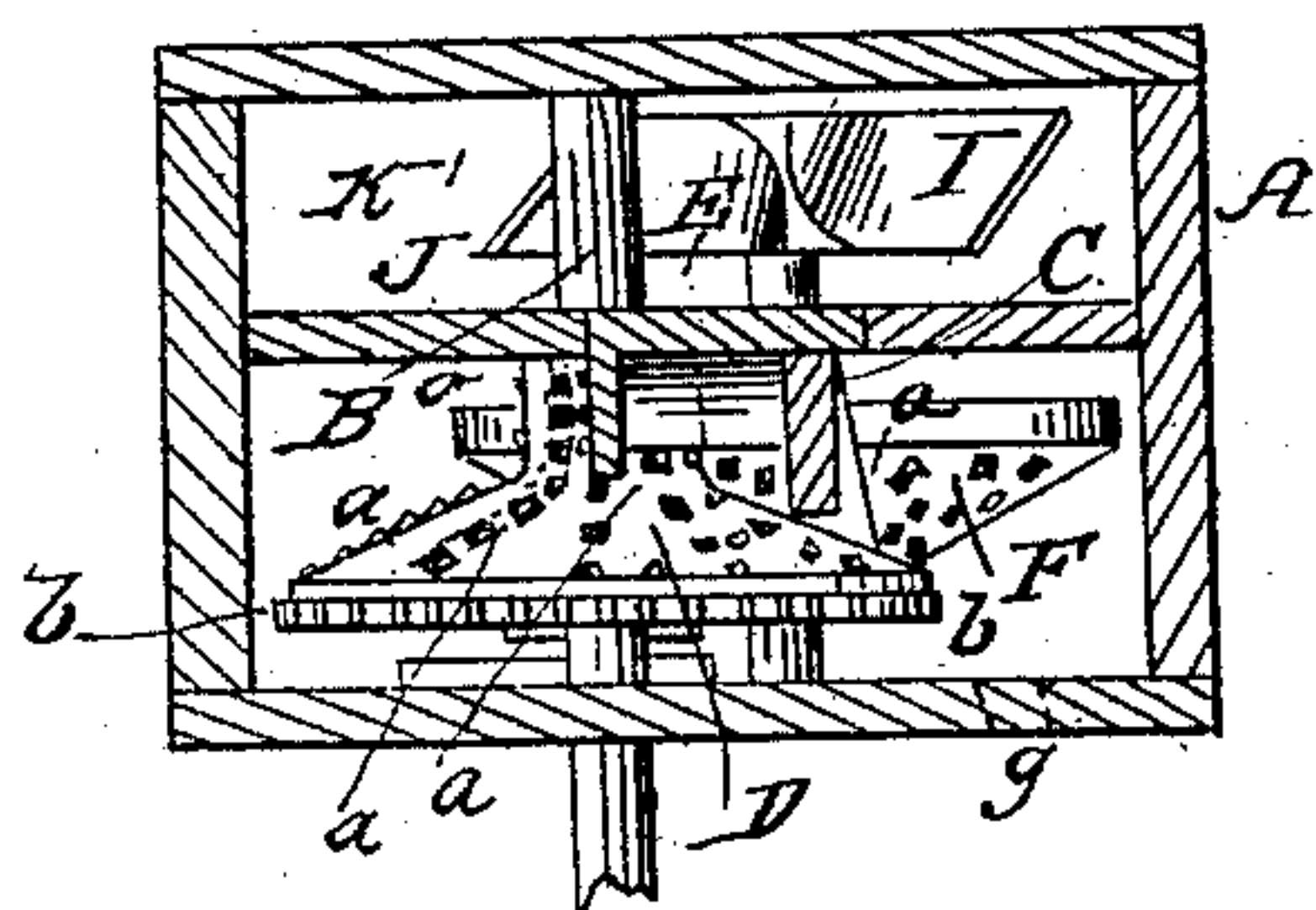


Fig. 3





# UNITED STATES PATENT OFFICE.

J. J. PARKER, OF MARIETTA, OHIO.

## CORN-SHELLER.

Specification of Letters Patent No. 18,296, dated September 29, 1857.

*To all whom it may concern:*

Be it known that I, J. J. PARKER, of Marietta, in the county of Washington and State of Ohio, have invented a new and Improved  
5 Corn-Sheller; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

10 Figure 1, is a longitudinal vertical section of my improvement, (x) (x) Fig. 2, showing the plane of section. Fig. 2, is a transverse vertical section of ditto, (y) (y) Fig. 1, showing the plane of section. Fig. 3, is a  
15 horizontal section of ditto (z) (z) Fig. 1 showing the plane of section.

Similar letters of reference indicate corresponding parts in the several figures.

By my improved arrangement of the bevel  
20 faced wheels in connection with the placing the fan upon one of the shafts of said wheels, I am enabled to furnish a compact and efficient sheller, capable of being worked by hand which at the same time separates the  
25 cob and clears the chaff from the corn. This I accomplish by causing the rotation of those shelling wheels in the same direction but with different velocities so that the grain is twisted from the cob in a manner similar to  
30 that of the hand, while advantage is taken of the increased velocity of one of the shelling wheels to produce the requisite blast of air from the fan to clean the shelled corn, without the intervention of boards and pulleys  
35 or other extraneous appliances.

A represents a rectangular case or box of proper dimensions and B represents a shaft which passes through its upper part. To one end of the shaft B there is attached a  
40 crank C, and upon the shaft B within the case or box A there is hung a shelling wheel D, having a conical side provided with teeth (a) and neck o as clearly shown in Figs. 2 and 3. The teeth (a) are formed in radial  
45 rows upon the conical face or surface of the sheller, the rows being at equal and suitable distances apart. Below the shaft B, there is a shaft E, which also passes through the case or box A. The shaft E also has a shell-  
50 ing wheel F hung upon it, constructed similarly to the wheel D, but hung upon its shaft in a reverse position to the wheel D, so that the upper part of the conical face or surface of the wheel F will be opposite to the lower  
55 part of the conical face or surface of the wheel D, as shown more particularly in Fig.

2. The periphery of the wheel D, at the base of the conical portion is cogged as shown at (b) and these cogs gear into a pinion G, on a small shaft E' within the case or box A, 60 said pinion G, gears into a pinion E'' on the shaft E, of the shelling wheel F, see Figs. 1 and 2.

The shelling wheels may be constructed of cast iron and of any proper size. 65

Through the top of the case or box A there passes an inclined spout H, one side of which (c) is rendered elastic by a spring (d) see Fig. 1. The lower end of the elastic side (c) is provided with a corrugated plate (e) on 70 its inner surface also shown in Fig. 1.

On the shaft E there is hung a fan or blower I, between which and the shelling wheels D, F, there is placed a partition or dividing board J which extends up- 75 ward to the top of the case or box A, and extends downward a short distance below the shaft E, see Figs. 1 and 2.

K is an inclined board which may be considered as forming the bottom of the box 80 or case A, a space (f) being allowed between the depressed end of said board and the side of the case or box A, see Fig. 2. At the lower part of the side of the case or box over the elevated end of the board 85 K there is an opening (g) shown by dotted lines in Figs. 2 and 3.

The operation will be readily understood. Power is applied to the machine by turning the crank C, and the two shelling wheels 90 D, F, are made to rotate at different velocities by means of the gearing (b) G, E''. The ears of corn are dropped through the spout H, between the shelling wheels D, F, both of which rotate the ear and shell 95 the corn therefrom, the cob being pressed or kept between the conical surfaces of the wheels while being acted upon by them in consequence of the elastic side (c) of the spout H, the corrugated plate (e) bearing 100 against the ears. The shelled corn passes down the inclined board K and out through the space (f) and falls into a proper receptacle placed upon the floor or ground to receive it, the chaff and light foreign sub- 105 stances being blown from the corn by the blast generated by the rotation of the fan or blower I. The cobs pass out from the case or box A, through the opening (g) at the side of the box or case opposite to the 110 space (f). The shelled corn and cobs therefore are discharged from the case or box

at opposite sides and are kept distinct and separate from each other.

By the above invention, the ears will be shelled in a perfect manner, and with but  
5 little labor as not much power is required to operate the machine. The corn also will be cleansed from dust, chaff, and light impurities. The implement is simple, economical to manufacture, and not liable to get  
10 out of repair.

I am well aware that a sheller consisting of a face wheel working against a vertical bur wheel patented to Peck has been suggested as a corn sheller, but its efficiency  
15 for shelling corn is questionable neither is there any provision for cleaning the corn

by fan or otherwise. Neither do I claim the mere combination of a sheller and fan irrespective of the arrangement I have discovered; but

20

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

The necked shelling wheel D, when arranged and operating in connection with  
25 the shelling wheel F and elastic side C, of spout H and spring *d*, in the manner and for the purposes set forth.

J. J. PARKER.

Witnesses:

LEO W. DODGE,

THOS. W. EWART.