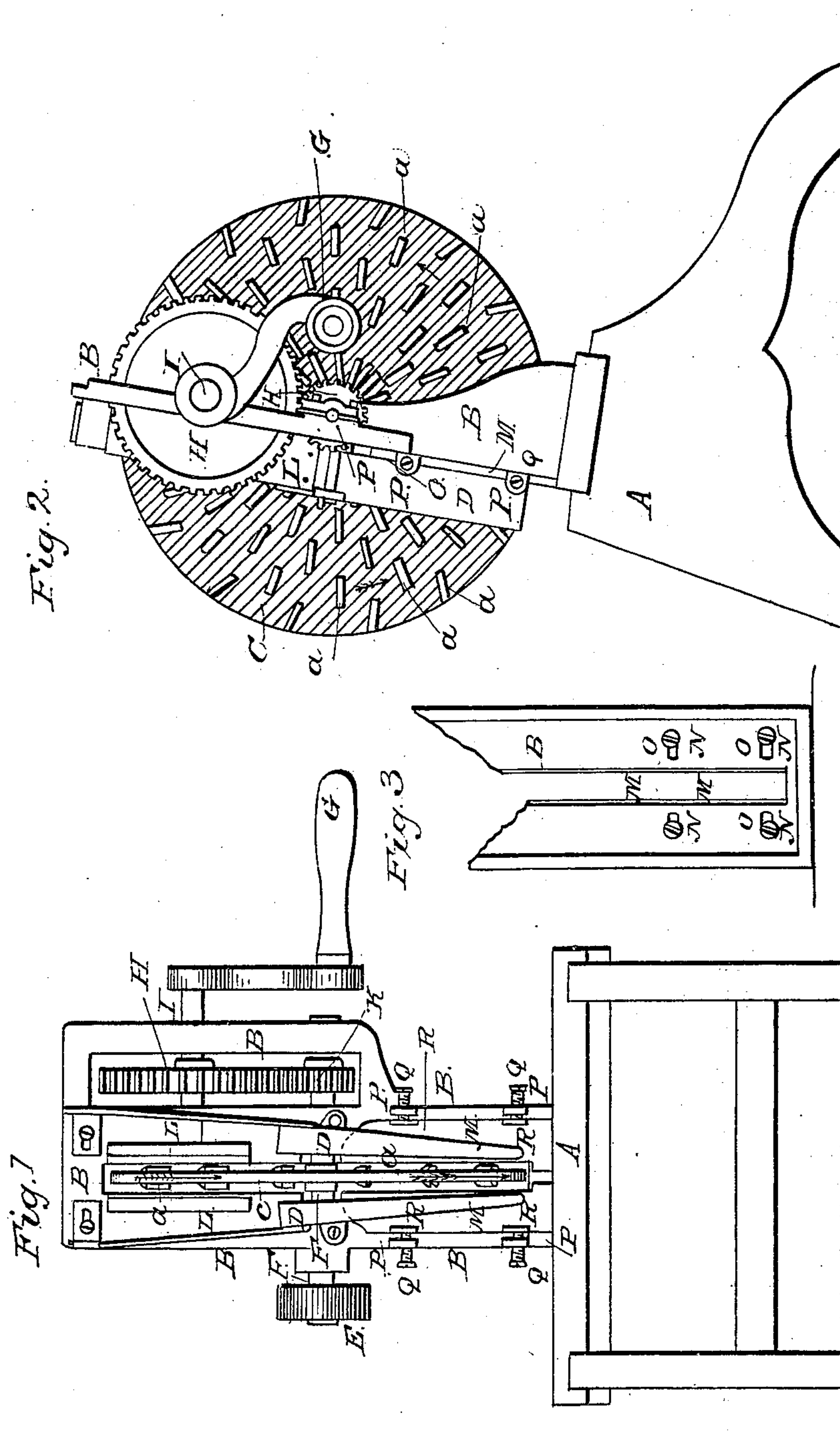


C. WILLIS.
Corn Sheller.

No. 1,952.

Patented Jan'y 27, 1841.



UNITED STATES PATENT OFFICE.

CHARLES WILLIS, OF CHELSEA, MASSACHUSETTS.

METHOD OF CONSTRUCTING CORN-SHELLERS WHERE A DISK IS USED BY ADAPTING ADJUSTABLE PLATES THERETO TO REGULATE THE FEEDING.

Specification of Letters Patent No. 1,952, dated January 27, 1841.

To all whom it may concern:

Be it known that I, CHARLES WILLIS, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented new and
5 useful Improvements in Machinery for Separating the Kernels of Indian Corn from the Cob, usually denominated "Corn-Shellers," and that the following is a full and exact description of the same, which
10 taken in connection with the accompanying drawings hereinafter referred to composes my specification, setting forth and exhibiting the principles of construction of my improvements by which they may be
15 distinguished from other inventions of a like character and such parts or combinations therein as I claim and for which I solicit Letters Patent.

Figure 1 represents a front view of a
20 corn sheller with my improvements. Fig. 2 is a side elevation, and Fig. 3 exhibits the back of a portion of the frame, which supports the shelling plate.

Like most other machines of this nature,
25 mine is supported on a suitable wooden frame A, Figs. 1 and 2.

B is the cast iron or metallic frame, resting and secured on the above and to which the operative parts, viz, the double
30 rotary circular plate C and holding spouts D, D, are secured. The double rotary plate is to be put in motion by means of a belt from any driving power passing over and around a pulley E on one end of the shaft
35 F of said rotary plate, or it may be revolved by hand, applied to the handle of a crank G, communicating a rotary movement through a cogged wheel H (on the same shaft I with the crank), engaging with a
40 geared pinion K on the shaft F. The holding spouts D, D with their springs L, L, are arranged as usual, with the exception, that in my machine, they are constructed of metal, the spouts being of cast iron and the
45 springs of steel.

My main improvement consists in placing, in the rear of each holding spout, a metallic or other proper plate M, Figs. 1 and 2, each of said plates forming the rear
50 side of the spout. These plates are confined to the front face of the frame B, by screws N, N, Fig. 3, passing through elongated slots O, O, formed in the front plate of the frame B, and screwed into the plate M.

Bars or projections P, P, are cast on the frame B, through which screws Q, Q pass and abut against one of the side edges of

the plate M, or suitable projections R, R therefrom as seen in Figs. 1, and 2. By these screws the distance of the opposite
60 side, or edge of each of the plates M, in apposition with the circular plate C, from the teeth of the plate, is regulated at pleasure. On loosing the confining screws N, N, Fig. 3, and turning up the screws Q, Q, the
65 plate M is advanced toward the shelling plate C and when set to a proper distance therefrom, it may be then secured by turning up the screws N, N. This arrangement of adjusting plates enables us to easily adapt
70 the machine to shell corn of different kinds whether with large or small kernels. The difficulty experienced in other machines for shelling corn, viz, that of the cob catching and being torn in pieces, owing to too great
75 a distance, between the side of the revolving sheller plate C, and the edge of the surface adjacent to the same, against which the cob is borne during the operation, is entirely and completely obviated in mine, by having
80 an adjusting plate M, the distance of whose edges in contiguity with the cutting teeth A, A, A, of the rotary corn sheller C, can be regulated by screws as above described, or in a similar manner thereto; and fur-
85 thermore, the danger of breaking kernels of corn, by making the distance between the adjusting plates and the teeth of the rotary plate too small, is completely removed.

I construct my circular rotary plate C, 90 with teeth a, a on each side, see Figs. 1, and 2, thereby forming a double machine, which can be operated with a good saving of labor and expense, when compared with the single machines. 95

Having thus described my invention I shall claim therein—

The movable plates placed in the rear of the holding spouts and capable of being adjusted by screws, to such distances from
100 the teeth of the rotary circular plate, as may be desirable, the whole being arranged and operating substantially as herein above set forth.

In testimony that the above is a true de- 105 scription of my said invention and improvement I have hereto set my signature this second day of December in the year of our Lord eighteen hundred and forty.

CHARLES WILLIS.

Witnesses:

CALEB EDDY,
EZRA LINCOLN, Jr.