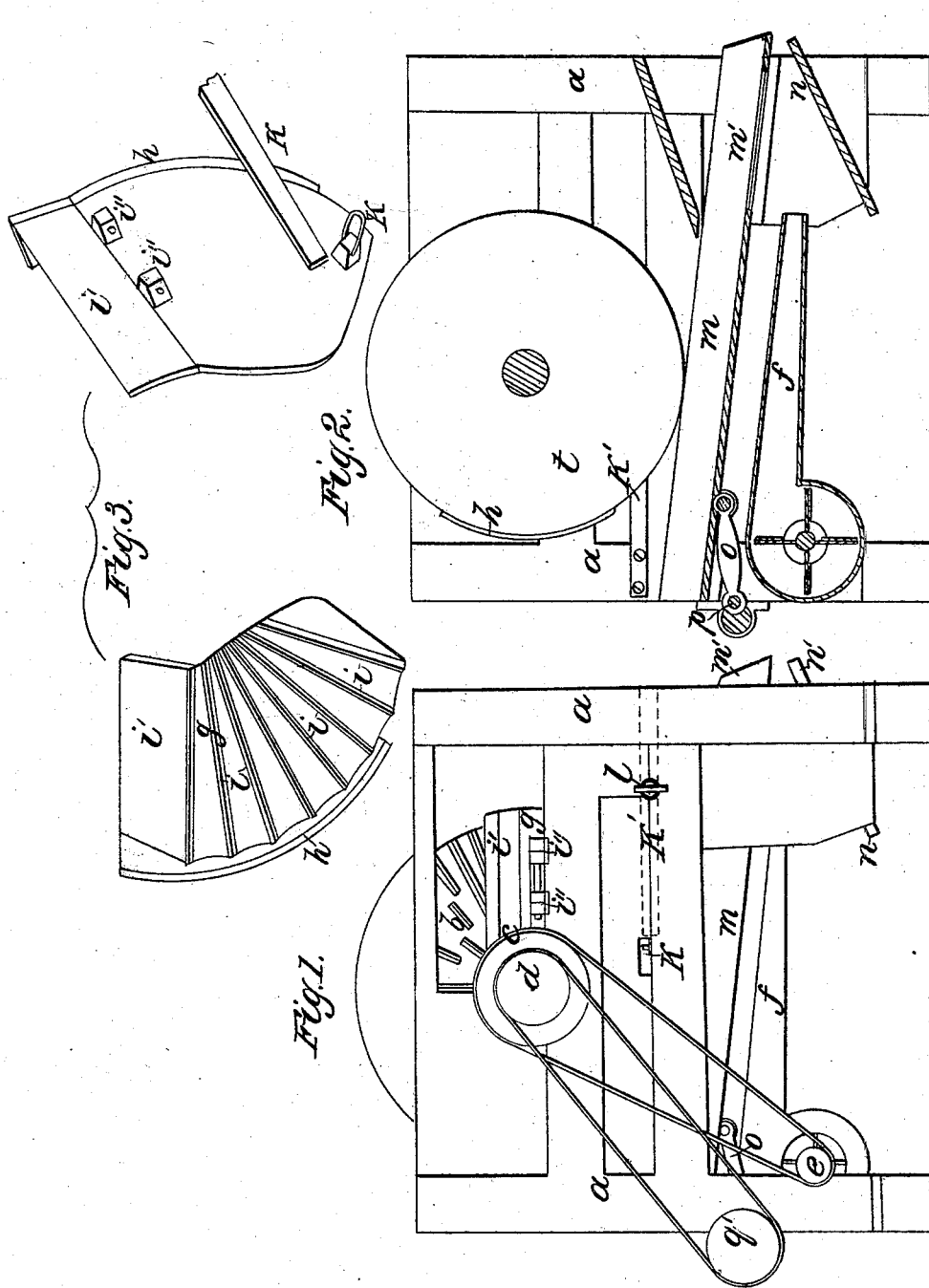


G. B. BALDWIN.
Corn Sheller and Winnow.

No. 2,718.

Patented July 16, 1842.



UNITED STATES PATENT OFFICE.

CYRUS B. BALDWIN, OF CINCINNATI, OHIO.

CORN-SHELLER.

Specification of Letters Patent No. 2,718, dated July 16, 1842.

To all whom it may concern:

Be it known that I, CYRUS B. BALDWIN, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Machine for Shelling and Win-
5 nowing Corn, and that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a side elevation; Fig. 2, a section; Fig. 3 parts detached.

In an oblong frame (*a*) formed of four posts with the necessary cross ties I hang a
15 vertical runner or wheel (*b*) having teeth projecting from one fan; this wheel is made and driven like those in common use of a similar description the bearings being in the upper cross ties of the frame; on the end of
20 the shaft opposite the driver are fixed two pulleys (*c*, *d*), the largest of which (*c*) is connected with a pulley on the shaft of the fan wheel marked (*e*) which is placed in the lower and front end of the frame; this fan
25 is constructed in the usual manner having a case surrounding it, and a trunk (*f*) for directing the blast toward the riddle or sieve hereafter described.

The stationary plate (*g*) is in form the
30 segment of a circle, about one quarter, having a flange (*h*) on its outer edge (*g'*) which extends from the top down about two thirds the length of the plate more or less and projects over the edge of the wheel; on the face
35 of the plate (*g*) ribs (*i*) are cast all converging toward a point near the center of the circle, two or three of these ribs being below the lower end of the flange so that the cob will be easily freed from the machine; the
40 space between the ribs is hollowed out so as to free the cob and allow it to turn radially with the wheel as it falls, thus preventing its tendency to fly off toward its periphery; the upper edge of the plate is turned out-
45 ward so as to form a hopper (*i'*) into which the ears of corn are put; on the back of this stationary plate (*g*) above the cross tie when the plate is in place, are cast two projections (*i''*) and on the cross tie is screwed a piece
50 of iron the end of which next the plate is of the same shape as these projections (*i''*) and stands between them, a rod passing through all and forming a joint; the lower end is thus allowed a vibratory motion to
55 and from the wheel; it is prevented from coming in contact with the wheel by means

of a wire staple (*k*) which is attached to a projection on the lower end of the plate and embraces a pin on the frame; the plate is pressed forward by means of a spring (*k'*) 60 which bears against its lower end; this spring is attached to the rear post and its force is regulated by means of a set screw (*l*) passing through the lower cross tie just forward of it. The wheel is boxed in
65 around the sides and top except where the hopper projects; under this wheel is placed a shoe (*m*) slightly inclined downward at the rear end where there is a riddle (*m'*) attached formed of straight wires running
70 lengthways for carrying off the cobs while the corn sifts through; below the riddle is a screen-board (*n*) slanting forward against which the wind from the fan impinges blowing the hulls and chaff out of the machine
75 behind, while the clean corn is conducted down under the fan.

The shoe and riddle which are connected together are supported by ledges on which they move; these are attached to the posts of
80 the frame and may have friction rollers placed between them and the shoe if desirable; a pitman (*o*) is attached to the shoe near the forward end which is connected with a crank (*p*) on a shaft running across
85 the front end of the machine; on the end of this shaft is a pulley (*q*) which is connected by a band with the pulley (*d*) on the wheel-shaft.

When this machine is put in operation the
90 corn is dropped into the hopper and falls against the wheel when it is instantly shelled passing by the several ribs of the stationary plate, the hollows between the ribs facilitating the operation, till it falls onto the
95 riddle, which together with the shoe being shaken in a longitudinal direction throws the cob out of the machine, the corn at the same time falling through and down the screen board, a current of wind being kept
100 up by the fan it is cleaned from the chaff and other light stuff.

What I claim is my invention and desire to secure by Letters Patent is—

The stationary plate (*g*) constructed in
105 the manner described, in combination with the shelling wheel (*b*) as herein set forth.

CYRUS B. BALDWIN.

Witnesses:

J. J. GREENOUGH,
J. H. GODDARD.