

W. BARTON.
Clover Huller.

No. 525.

Patented Dec. 20, 1837.

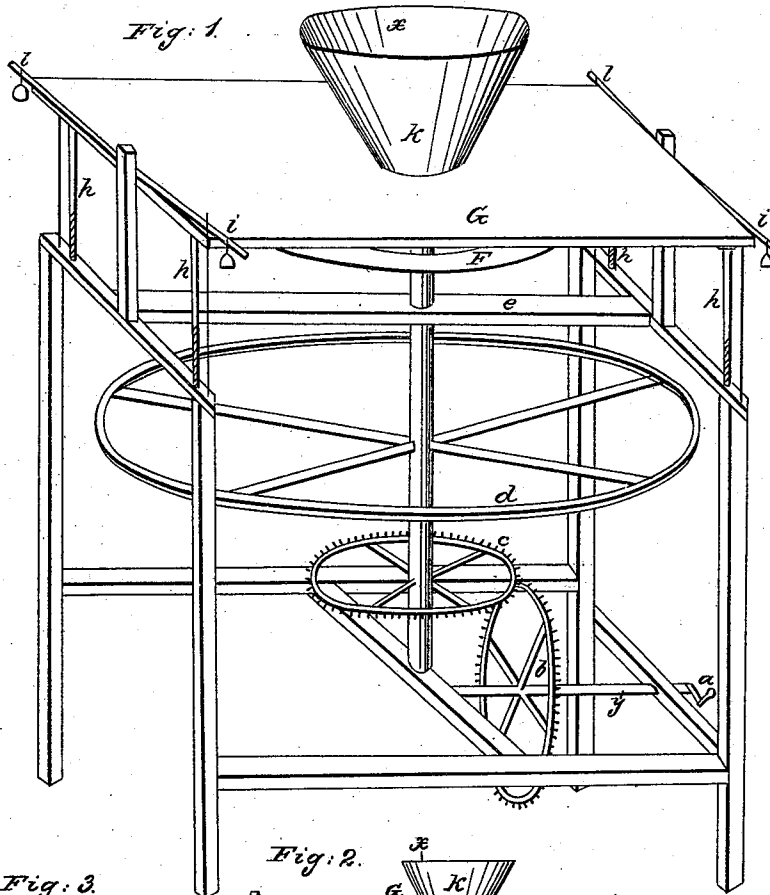
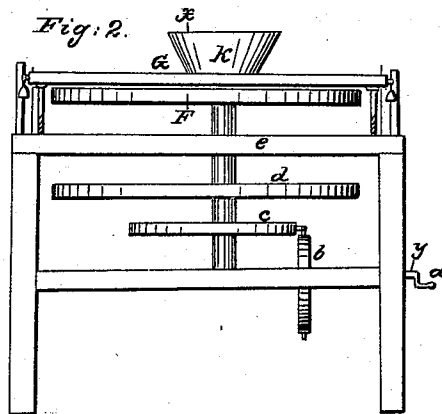
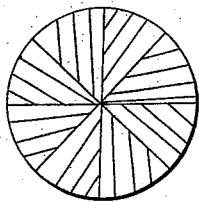


Fig. 3.
Runner.



UNITED STATES PATENT OFFICE.

WM. M. BARTON, OF JEFFERSON COUNTY, TENNESSEE.

MACHINE FOR HULLING CLOVER-SEED.

Specification of Letters Patent No. 525, dated December 20, 1837.

To all whom it may concern:

Be it known that I, WILLIAM M. BARTON, of the county of Jefferson, and State of Tennessee, have invented a new and useful Machine to Take Clover-Seed Out of Chaff; and I do hereby declare the following is a full and exact description.

The nature of my invention, consists in providing a wooden runner on the upper end of an upright shaft, with the upper surface cut in furrows, and a square wooden cap, with the lower surface cut in furrows in a similar manner to the runner, the furrows diverging from the center. The cap lies upon the runner, a hole is cut in the center of the cap in which is placed a hopper. The cap has four temper-screws placed under it, to raise it as much above the runner, as may be necessary. The cap has also four levers provided for it, and weights to the same which are suspended near each corner of the cap.

To enable others to make and use my invention, I will proceed to describe by reference to the drawing, its construction and operation.

The machine may be propelled by steam, water, or horse power, or by hand. It is put in a square frame, and if propelled by hand, let a crank as represented in the drawing (Figure 1) at (*a*) be fixed upon the end of a horizontal shaft (*y*) upon which shaft is a vertical cog-wheel (*b*) which turns another cog-wheel (*c*) which is made upon an upright shaft and runs horizontally; above the cog-wheel (*c*), parallel with, and upon the same shaft, is a balance wheel (*d*), above the balance wheel, is a collar beam (*e*) through which the upright shaft passes and which supports the upper end of the shaft. The above described gearing is best adapted to propel the machine by hand, other gearing may however be substituted to suit the propelling power. Upon the top of the upright shaft is firmly fixed a wooden runner (*F*) true and level, this runner is made of the firmest hardest wood, the upper surface of the runner is cut in furrows as represented in Fig. 3 in such a manner, as that when the chaff is put in the hopper, it is forced out between the runner and cap (*G*) above it; and while rubbing between them, the seed (which are of various sizes) slips out of the hull in which nature formed it. The

position of the runner is better represented in the vertical section, but a part of it may be seen in the perspective drawing Fig. 1 at *F*. The cap (*G*) is a square block of wood the under surface of which is cut in furrows similar to the furrows in the runner. The cap is loose, its weight resting upon the chaff between it and the runner, and should any gravel get with the chaff between the cap and runner, the cap will rise and let out the obstruction; the cap is prevented from turning around by studs fixed in the frame and passing through the cap near the four corners. There are four temper screws (*h, h, h, h*) in the frame, upon the heads of which the cap is supported, when there is no chaff between the cap and runner; by these screws, the cap may be raised or lowered as may be required. There are four levers (*i, i, i, i*) one end of these levers is fastened in an upright post, which stands between the temper screws; pins in the cap at a proper distance from the corner of the cap, serve as fulcrums for the levers, and weights are swung near the ends of the levers, which may be moved so as to operate like steelyards, and increase or diminish the weight of the cap. In the center of the cap, a hole is cut in which the hopper (*h*) is placed. The nature of the cap being such that permits it to give sufficient weight on it, it can hull both large and small seed at the same time without mashing the large, or leaving the small unhulled. When the chaff is put in the hopper, it rests upon the center of the runner, a tooth or spindle is fixed in the runner near its center reaching up nearly to the top of the hopper, the top of which is seen in the drawing at (*x*), the use of this is to prevent the chaff from choking in the hopper, by stirring the chaff as the runner turns.

What I claim as my invention, in the machine for cleaning clover seed, above described, and desire to secure by Letters Patent is—

The making of the runner and cap out of wood and furrowed in the manner above described.

WILLIAM M. BARTON.

Witnesses:

WM. R. CASWELL,
JOS. N. SHANNON.