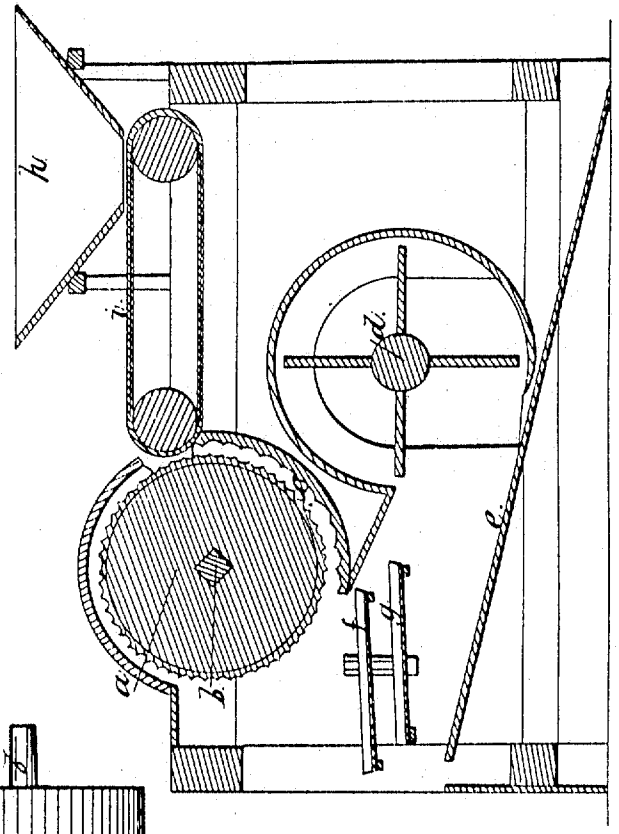
X 0007452

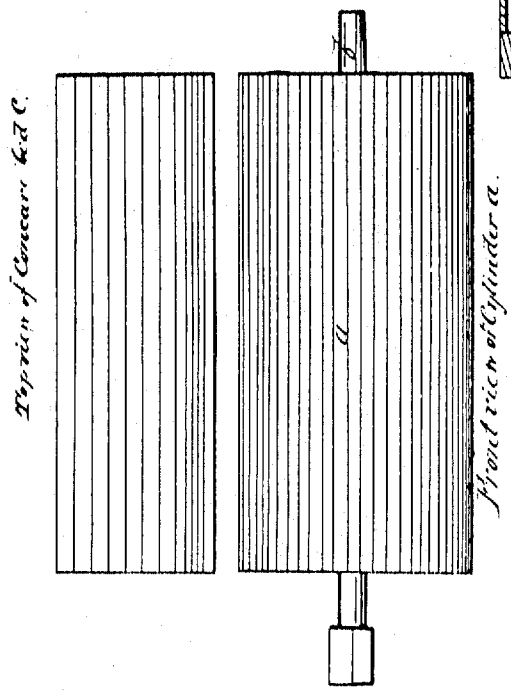
Sheet 1-2 Sheets.

T. Colloghier.

Clover Huller.

Patented Feb. 28, 1833.





N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

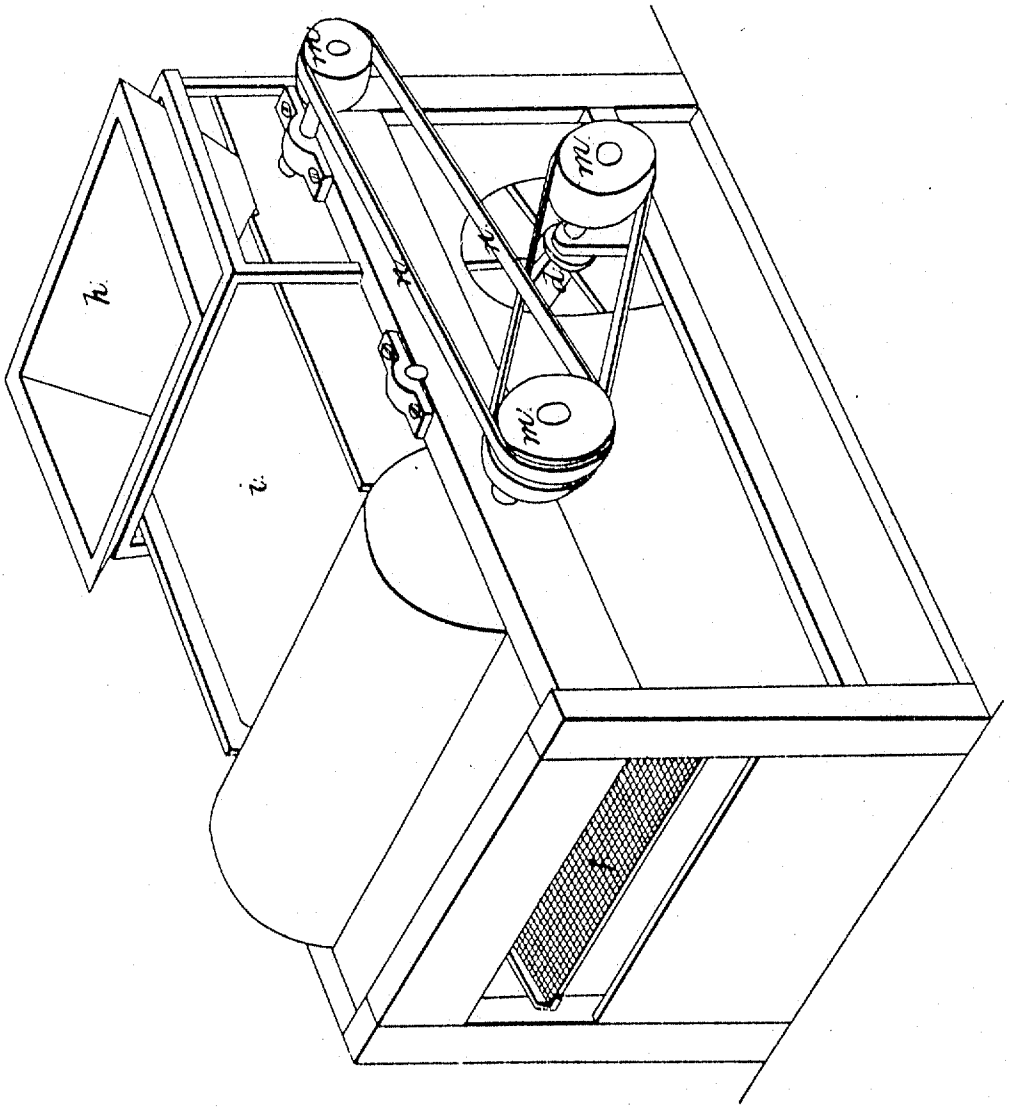
X 0007452

Sheet 2-2 Sheets.

T. Gallagher.

Clover-Huller.

Patented Feb. 28, 1833.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

Feb 28 1859

Thomas Gallagher, of Fairfield County Ohio

Letters Patent.

The Schedule referred to in these Letters Patent and making part of the same, containing a description in the words of the said Thomas Gallagher, himself of his improvement in the machine for shelling and cleaning Clover seed.

To all to whom these presents shall come.

Be it known that I Thomas Gallagher, of the County of Fairfield and State of Ohio, have invented a new & useful Machine, for shelling & cleaning Clover seed & that the following is a full & exact description of the construction & operation of the same, reference being had to the accompanying drawings forming part of this specification, & in which I have represented by the figures of the drawings, the several parts of my machine, & the manner in which I have proceeded in the construction thereof.

The nature of my invention consists in the peculiar construction & arrangement of the several parts of the machine, whereby the seed is shelled & cleaned at one operation, & delivered in a state fit for market.

To enable others skilled in the art to which my invention appertains to make & use my machine, I will proceed to describe the same with reference to the drawings.

Figure 1 is a perspective view of the machine. Figure 2 is a vertical section of the same, taken in the line x x, Fig 1. Figure 3 is a horizontal section of the same, taken in the line y y, Fig 2. Figure 4 is a vertical section of the same, taken in the line z z, Fig 2. Figure 5 is a detached view of the cylinder & its shaft. Figure 6 is a detached view of the concave. Figure 7 is a detached view of the fan.

A, is the frame of the machine, which may be made of any suitable dimensions & form, & of any suitable material, but I prefer to make it of wood, as shown in the drawings.

B, is the hopper, which is made of wood, & is secured to the top of the frame A, in the manner shown in the drawings. The hopper is made with a bottom, C, which is inclined downwards, & has a slot, a, cut through it, for the purpose of allowing the seed to pass through it, & fall upon the cylinder D. The hopper is also made with a slide, b, which is fitted to the bottom C, & is provided with a thumb screw, c, by means of which the slide may be adjusted, so as to regulate the quantity of seed which is allowed to pass through the slot a, & fall upon the cylinder D.

The cylinder D, is made of wood, & is secured upon a shaft, E, which is supported in bearings, d, d, attached to the frame A, in the manner shown in the drawings. The cylinder is made with a number of projections, e, e, which are arranged in rows around the cylinder, & are made of a triangular form, as shown in the drawings. The cylinder is also made with a number of grooves, f, f, which are arranged in rows around the cylinder, & are made of a triangular form, as shown in the drawings. The grooves f, f, are arranged in such a manner that they will receive the projections e, e, of the cylinder, when the cylinder is revolved in the machine.

The concave G, is made of wood, & is secured to the frame A, in the manner shown in the drawings. The concave is made with a number of projections, g, g, which are arranged in rows around the concave, & are made of a triangular form, as shown in the drawings. The concave is also made with a number of grooves, h, h, which are arranged in rows around the concave, & are made of a triangular form, as shown in the drawings. The grooves h, h, are arranged in such a manner that they will receive the projections g, g, of the concave, when the concave is revolved in the machine.

The fan H, is made of wood, & is secured upon a shaft, I, which is supported in bearings, i, i, attached to the frame A, in the manner shown in the drawings. The fan is made with a number of blades, j, j, which are arranged in rows around the fan, & are made of a triangular form, as shown in the drawings. The fan is also made with a number of grooves, k, k, which are arranged in rows around the fan, & are made of a triangular form, as shown in the drawings. The grooves k, k, are arranged in such a manner that they will receive the blades j, j, of the fan, when the fan is revolved in the machine.

The shaft E, is provided with a pulley, l, & the shaft I, is provided with a pulley, m, which pulleys are connected by a belt, n, in the manner shown in the drawings. The shaft E, is also provided with a pulley, o, which is connected by a belt, p, with a pulley, q, on the shaft of the fan H, in the manner shown in the drawings.

The operation of my machine is as follows. The seed is placed in the hopper B, & the slide b, is adjusted so as to regulate the quantity of seed which is allowed to pass through the slot a, & fall upon the cylinder D. The cylinder is revolved in the machine, & the seed is carried by the projections e, e, of the cylinder, & is thrown against the concave G, & is shelled by the action of the projections e, e, of the cylinder, & the projections g, g, of the concave. The seed is then carried by the blades j, j, of the fan H, & is thrown against the grooves k, k, of the fan, & is cleaned by the action of the blades j, j, of the fan, & the grooves k, k, of the fan. The seed is then delivered in a state fit for market.

I claim the construction & arrangement of the several parts of the machine, whereby the seed is shelled & cleaned at one operation, & delivered in a state fit for market, as described.

Thomas Gallagher

Witnesses

7452X

chaff & dust from the seed as they are carried forward by the action of the cylinder & concave. The use of the wind to assist in this separation is described in the specification; it is directed by the action of the wind upon the fans or wheels. The claims are of two descriptions, a combination and one distinct & independent of the other. The first is upon the apparatus for producing the current of air, & the second upon the cylinder & concave. The latter is described as consisting of the cylinder & concave, as they have been used in machines for separating cotton from the seed, & as they are described in the Patent office. The object of the latter, is to separate the chaff from the seed, after they have been separated by the operation of the cylinder & concave. In the detail use of the machine it is intended to have a board fixed nine inches, in height as the shelving apparatus the use of which will be to prevent the chaff mixing with the seed. The staves is deposited in the hopper of the machine, & when in operation is carried by the feeder to the influence of the cylinder & concave. When the above machine is worked by horse power it is operated by bands or gearing from a driving head affixed to the wheels of the feeder, by which from a pulley will be seen by the side the bevil pinion is obtained to turn the machine is turned by water power. I claim as my own invention in the above described machine, the external & internal construction, the feeder, cylinder & concave & wind board. I also claim to have improved the fan & shelving apparatus, so as to conduce to the operation of the machine. And I claim as my invention the result of the united operation of the whole machine.

Given under my signature at Savannah this 8th day of February 1828.

Thomas Jennings

Test. Witnesses
Wm. Williams of Vernon
& Conliet

Drawings

[illegible]