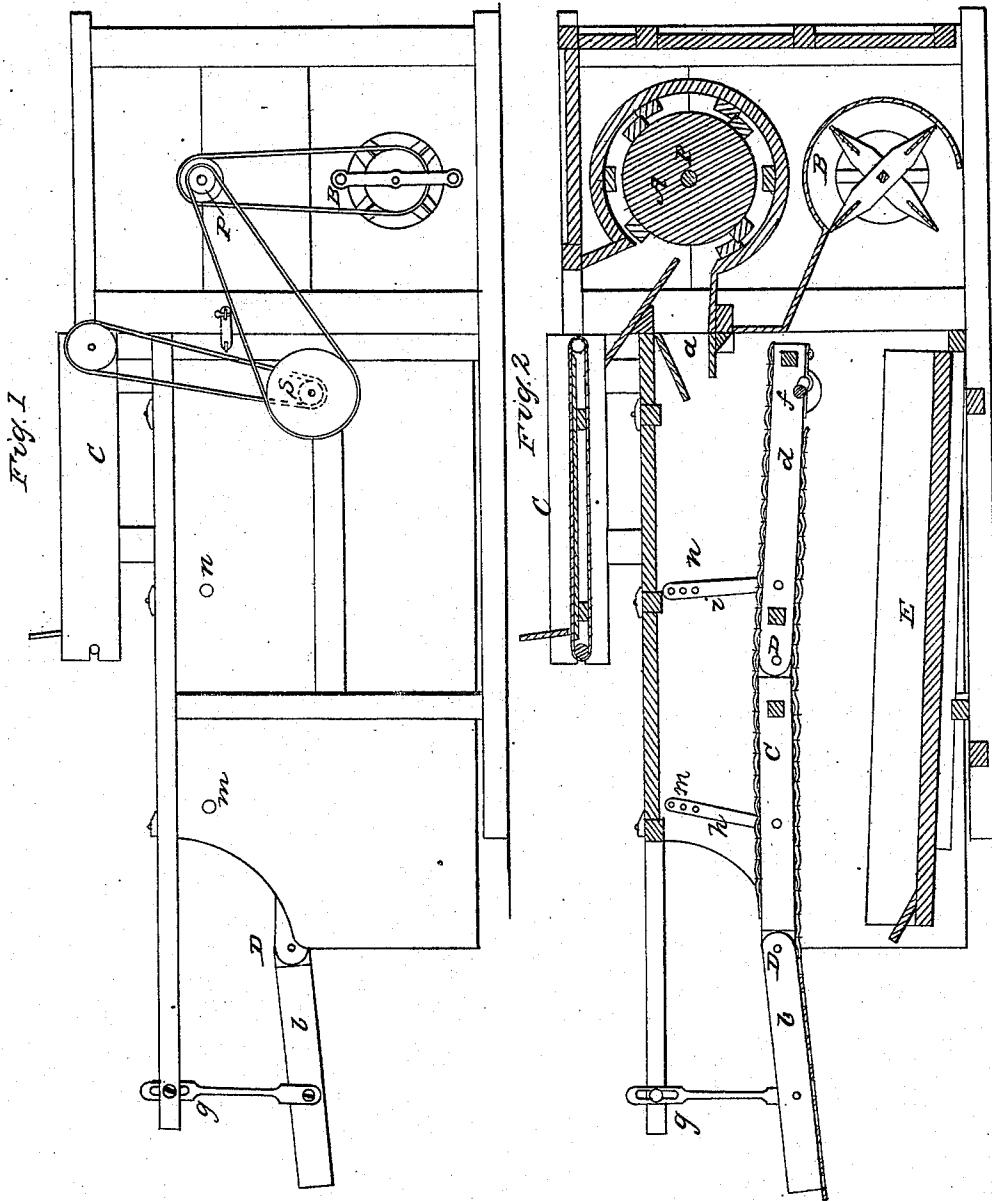


M. H. MANSFIELD.

Screen for Clover Hullers.

No. 11,459.

Patented Aug. 1, 1854.



UNITED STATES PATENT OFFICE.

MARTIN H. MANSFIELD, OF ASHLAND, OHIO.

IMPROVEMENT IN SCREENS FOR HULLING CLOVER-SEED AND CLEANING GRAIN.

Specification forming part of Letters Patent No. 11,459, dated August 1, 1854.

To all whom it may concern:

Be it known that I, MARTIN H. MANSFIELD, of Ashland, in the county of Ashland and State of Ohio, have invented a new and Improved Jointed Adjustable Screen for Clover-Hullers and Grain-Cleaners; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a side elevation of a clover-seed huller and my improved screen combined therewith, and Fig. 2 a longitudinal vertical section of the same.

Like letters designate corresponding parts in both figures.

The nature of my invention consists in constructing the screen for cleaning clover-seed and the various kinds of grain in several sections jointed together and adjustable in such a manner as to vary their relative heights and inclinations for the purpose of facilitating or retarding the passage of the straw, chaff, and other impurities over it, according to their nature or condition, substantially as hereinafter set forth.

The hopper or feeder C, hulling-cylinder A, and fan B may be of any manner of construction, since they form no part of my present invention, which is solely confined to the screen D. Said screen is formed in sections *b c d*, jointed together as represented in Fig. 2. These sections are respectively suspended (somewhere near their centers) from vibrating arms *g h i*, which are made to adjust up and down in any convenient manner. The arm *g* of the outer section, *b*, is represented as adjusted by means of a slot sliding and vibrating on a tightening-bolt. The other arms, *h* and *i*, are shown provided with series of holes, the proper ones of which are to be placed over their respective pivots *m n* for obtaining the relative heights and inclinations of the sections required. Thus in the drawings the middle section, *c*, is represented as highest and in a horizontal position, while the end sections, *b* and *d*,

are both inclined downward therefrom; but by properly adjusting the heights of the several vibrating arms those positions and inclinations of the sections may be reversed, or either of them may be made highest and inclined either way to any desirable degree. By this arrangement, when the straw, chaff, &c., are heavy or damp, their passage over the screen may be facilitated, but when light or dry their passage may be obstructed or retarded.

All the sections of the screen are caused to vibrate together by the crank *f*, secured to the section *d*, Fig. 2, (which is turned by means of a band passing from the driving-shaft *p* over a pulley, *s*, on its own shaft. The screen is represented as composed of three sections; but I do not intend to limit myself to any particular number. The last or outer section, *b*, is represented as composed of sheet metal perforated with holes of suitable size for separating the tailings from the chaff, &c. This construction of the screen is also useful in properly retaining the clover-seed or grain, so as to prevent waste, &c.

I do not claim constructing a screen in two or more parts; nor do I claim merely adjusting them to insure their proper action; but

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

Constructing a screen for cleaning clover-seed and the various kinds of grain, in several sections jointed together, when made independently adjustable at each joint, for the purpose of facilitating or retarding the passage of the straw, chaff, and other impurities over it, according to their nature or condition, substantially as herein set forth.

The above specification of my improved adjustable screen for clover-seed hullers and cleaners, &c., signed and witnessed this 4th day of February, 1854.

MARTIN H. MANSFIELD.

Witnesses:

JOHN A. MCCLUSKY,
A. C. SWINEFORD.