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F. DECKER.

Clover Seed Harvester.

No. 32,416. Patented May 28, 1861.

FIG. 1

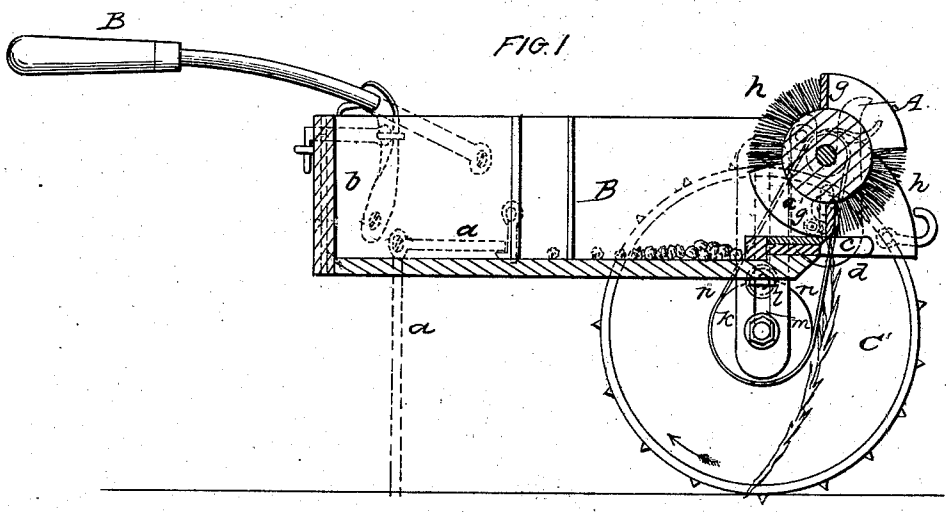
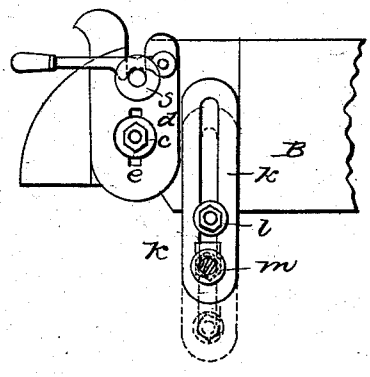


FIG. 3



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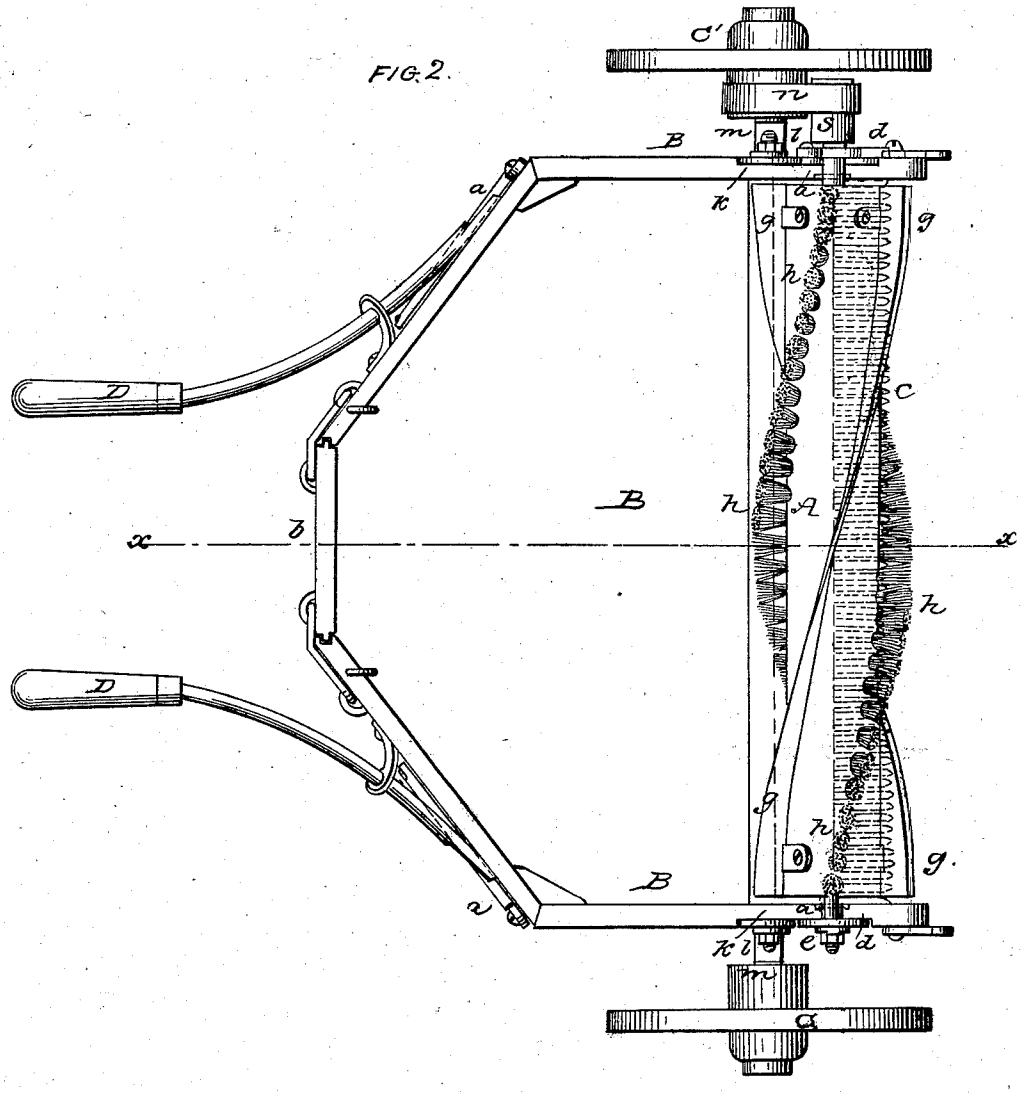
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FIG. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

FREDERICKE DECKER, OF OSTRANDER, OHIO.

IMPROVEMENT IN CLOVER-HARVESTERS.

Specification forming part of Letters Patent No. **32,416**, dated May 28, 1861.

To all whom it may concern:

Be it known that I, FREDERICKE DECKER, of Ostrander, in the county of Delaware and State of Ohio, have invented a new and Improved Clover-Harvester; and I do hereby declare 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 longitudinal section through my improved machine, taken in the vertical plane indicated by the red line *x x* in Fig. 2. Fig. 2 is a plan view of the machine complete. Fig. 3 is a detailed view, representing the adjustable plates on one side of the machine.

Similar letters of reference indicate corresponding parts in the three figures.

This invention relates to a novel means for adjusting the gathering apparatus of a clover seed or head harvester, whereby the machine may be made to gather from short or tall clover on the side of a hill and on very ununiform land, as will be fully explained hereinafter.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, A represents a cylinder, made either of wood or iron, which has its end bearings in the sides of a body, B. This body B is constructed of a bottom and sides, across the front end of which extends the cylinder A, above referred to. This body B is mounted on wheels C C′ at its front end, and it is furnished with handles D D, projecting from its rear end, and also two pivoted legs, *a a*, for supporting the rear end of this body when the machine is not in immediate use; but when the machine is in use the legs *a a* are hooked up out of the way, as represented in dotted lines, Fig. 1. The horizontal shape of the body is represented in Fig. 2, and the ledges or side-boards surrounding the sides and rear part of this body B should extend up a sufficient distance from the bottom to prevent the gathered clover-heads from falling out. The tail-board *b* is tongued and grooved into the stationary boards on each side of it, so that this tail-board can be lifted up when it is desired to discharge the gathered heads from the body B, and the heads may then be removed from the cart by depressing the rear end of the machine.

Along the front part of the bottom board of the body B the common gathering-fingers *c* are arranged, and as these fingers gather the stems of clover between them the spiral knives *g g* on cylinder A sever the heads from the stems, while the spiral brushes *h h*, which are arranged between the spiral knives *g g*, sweep the heads back into the body B. The heads are thus alternately operated, first by the knives, then by the brushes, as the machine is drawn along through the clover. The shaft *a′* of this cutting and brushing cylinder A has its end bearings in plates *d d*, which are bolted to the sides of body B, and, as before described, near the front end of this body, by bolts *e e*, which pass through vertical slots *e′ e′* in said plates *d d*. These slotted plates may now be adjusted vertically, so as to set the edges of the knives *g g* at the proper distance from the surfaces of the gathering-fingers *c c* to effect the perfect operation of these knives *g g* and brushes *h h* upon the clover-heads. By this adjustment of the cylinder A provision is made for the wearing away of the edges of the knives and the ends of the brushes.

Just behind the plates *d d*, and let into the outside surfaces of the side boards of the body B, are vertical plates *k k*, which extend from the top edge of the side boards, to which they are secured, some distance below the bottom of the body B, as shown in Figs. 1 and 3 of the drawings. These long plates *k k* are slotted in a direction with their length, and they are bolted securely to the body B by bolts *l l*, which pass through the slots, which bolts, on being loosened, will allow the plates *k k* to be adjusted in a direction with their length, raised or depressed.

To the lower ends of plates *k k* the short axles *m m* are securely fixed, and these axles *m m* carry the wheels C C′, of which C′ is a driving-wheel for the knife and brush cylinder A; and for this purpose a belt, *n*, is passed over the inside hub portion of driving-wheel C′, and also over a pulley, *s*, which is on one end of the shaft *a′* of cylinder A. Thus as the wheel C′ is rotated the cylinder will also be rotated with a faster or slower motion, according to the diameters of the pulleys over which the belt *n* passes.

Now, from this description of my improvement in clover-harvesters it will be seen that by raising or depressing either one of the plates *k k* one side of the machine may be elevated

higher than the other side, and by adjusting both plates equally the gathering apparatus may be set nearer to or farther from the ground, so as to gather from either short or tall clover. Then, again, in adjusting the cylinder-shaft *a'*, by means of the plates *d d*, for setting the knives and brushes at the desired distance from the fingers *c c*, the driving-belt *n* may be kept under proper tension by means of the adjustable plates *k k*.

I do not claim the cylinder of brushes and knives operating in conjunction with fingers *c c*, for these are old devices for gathering clover-seed pods; but,

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The arrangement of the slotted adjustable plates *d d* with the cylinder A, fingers *c*, separately adjustable plates *k k*, and axles *m m*, as and for the purposes herein shown and described.

FREDERICKE DECKER.

Witnesses:
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JAMES EATON.