H. L. HERVEY.

Harvester Cutter.

No. 14,453. Patented March 18, 1856.

Fig: 1.

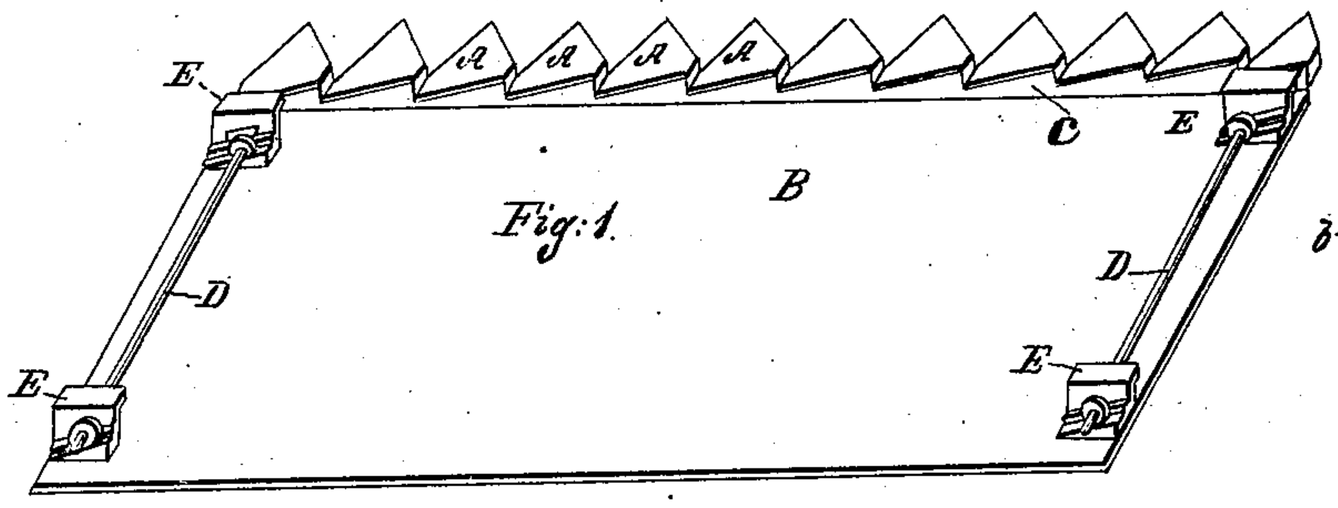


Fig: 2.

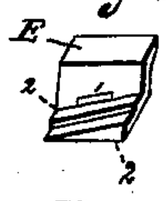


Fig: 4.

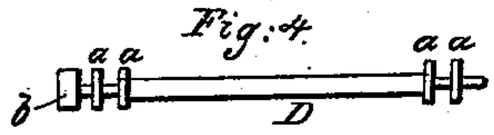
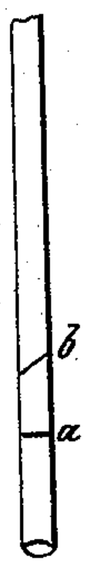


Fig: 3.

Fig: 5.



UNITED STATES PATENT OFFICE.

HORACE L. HERVEY, OF QUINCY, ILLINOIS.

IMPROVEMENT IN HARVESTER-CUTTERS.

Specification forming part of Letters Patent No. **14,453**, dated March 18, 1856.

To all whom it may concern:

Be it known that I, HORACE L. HERVEY, of the city of Quincy, county of Adams, and State of Illinois, have invented a new and useful Improvement in Grain, Grass, Hemp, and Flax Harvesters; and I hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to letters of reference marked thereon.

Figure 1 is a section showing a perspective view of the improvement. Fig. 2 is a section showing one of the blocks containing a slot and inclined planes. Fig. 3 is an end view of the same block. Fig. 4 is a view of one of the arms of the cutting-bar provided with friction-rollers. Fig. 5 is a view of a stalk of grain, showing the manner of cutting it off.

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

In the construction of my invention, Fig. 1, letter A represents the knives or cutters; B, the floor for the purpose of receiving the grain. C is the cutter-bar; D, the cutter-bar arms working in the slots, and are provided with friction-rollers to work upon the inclined planes contained in the blocks E. E are the blocks, provided with slots to guide the cutter-bar.

Fig. 2 is one of the blocks E for the arms to work in, and is provided with slots for the purpose to guide the cutter and for the arms D to work in. It is also provided with inclined planes 2 for the friction-rollers to move upon.

Fig. 3 is an end view of the block E.

Fig. 4 is a view of one of the arms of the cutter-bars C, and is provided with the friction-rollers *a b* on end of cutter-bar C.

Fig. 5 is a stalk, showing the manner of cutting it off. *a* is the manner it is cut by harvesters at the present time. *b* is our manner of cutting the stalk.

In the construction of cutters A the cutter-bar C is formed of a series of inclined planes, and the cutters or knives A are fastened to them in any known manner. These inclined planes are set at or near an angle of forty-five degrees, or any angle between a horizontal line and the above given angle.

In the operation of my machine the bar C, by the means of the inclined planes in blocks E and friction-rollers *d*, is made to move at an angle from a horizontal line when it is moved backward and forward, and by that means is made to cut the grain off at an angle, as is represented at *b* in Fig. 5.

I may find in the use of my cutters that a straight knife or cutter may be used, placing it on a straight cutter-bar, the cutter-bar operating as described herein, thereby giving to the knife the inclined cut, which is the great point in my invention which I desire to secure.

Having described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

Furnishing the cutter-bar with a series of inclined blades or knives, in combination with the inclined blocks E and rollers *d*, or their equivalents, for giving to said cutters or cutter-bar an oblique cut.

HORACE L. HERVEY. [L. S.]

Witnesses:

T. G. CLAYTON,

J. C. CLAYTON.