7324X

J. BEVIER.

Thrashing and Grinding Machine.

Patented Dec. 11, 1832.

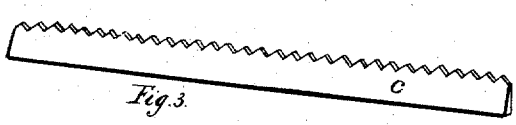


Fig. 3.

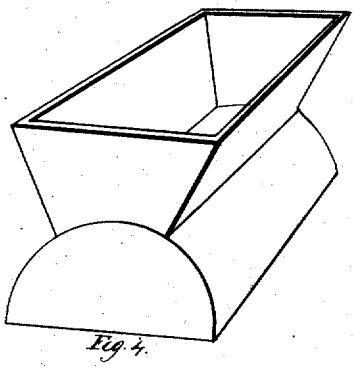


Fig. 4.

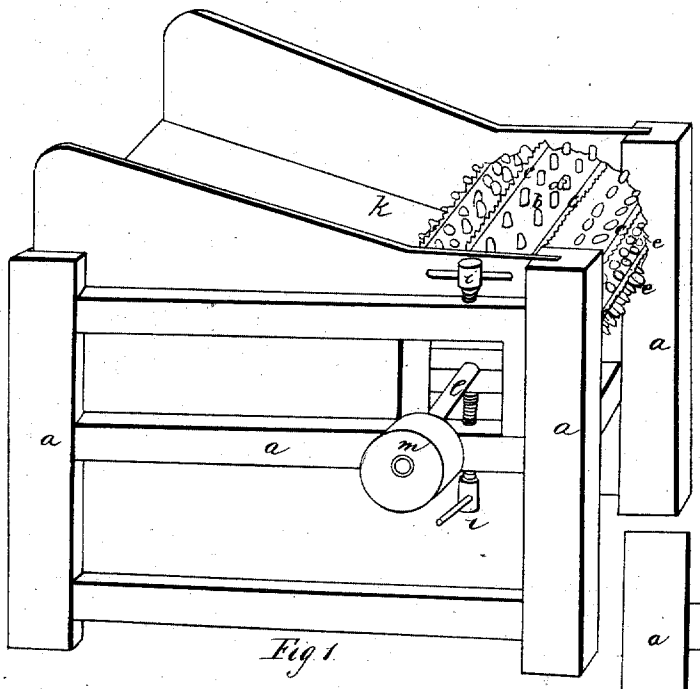


Fig 1.

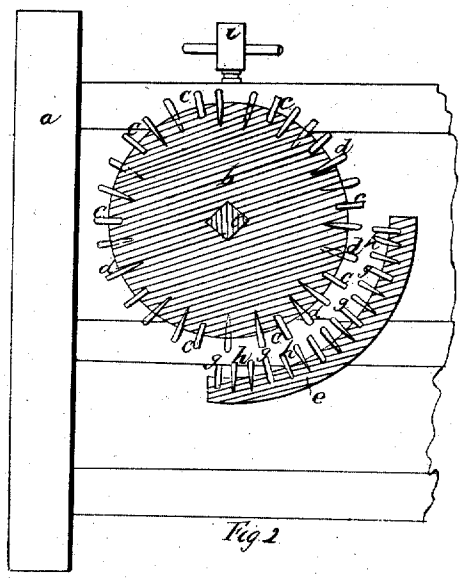


Fig 2.

N. PETERS, Photo-Lithographer, Washington, D. C.

The schedule referred to in these Letters Patent, and making part of the same, containing a description in the words of the said Jesse Bevier himself of his improvement in the Machine for threshing Grain, shelling Corn & grinding Apples.

To all to whom these presents shall come. Be it known that I. Jesse Bevier, of Jerusalem, in the County of Cayuga & State of New York, have invented a new and useful improvement in the machine for threshing wheat & all other kinds of grain & seed, & for the shelling of corn and grinding Apples; and that the following is a full and exact description of the construction & operation of the said Machine as invented or improved by me.

This Machine is constructed by a frame of wood of a size to suit the power to be applied, but a size suitable to be drawn by two horses, is two feet & six inches wide, about 3 feet long, & from two feet to 30 inches high with a cylinder of iron or wood long enough to fill the width of the frame, with bars of iron from one and a half to two inches wide, & about three eighths of an inch thick, the bars are to be let edgeways into the cylinder about half the width of the bar & the outer edge chamfered down on one side to the thickness of one eighth of an inch thick, with the surface of the bars smooth or teeth of, about like hand saw teeth; those bars to be placed on the cylinder from five to seven inches apart round the surface of the cylinder, & between each two bars two straight rows of iron spikes, drove or pushed into the cylinder from one end to the other, from two to three inches apart in each row, & the rows about one inch apart: the spikes in the second row to stand opposite to the space of the first, & so on interchangably round the surface of the cylinder; the spikes may be round or square, & from one fourth to three eighths of an inch in diameter, & must extend about as far from the surface of the cylinder as the bars on the cylinder; the size of the cylinder must be proportioned to the velocity to be given.

A twelve inch cylinder should be rotated so to give about two revolutions in a minute: a bottom is formed for a concave of iron or wood, on which is placed square bars of iron from five eighths to three

Drawing —

four thousandth inch in diameter, or flat bars set up edgeways from two to three inches apart beginning about as high as the centre of the cylinder, & passing under the bottom of it, about one fourth way around, & near enough to suit the grain to be thrashed, with from two to four straight rows of round or square spikes to be drove or fastened between each two concave bars; the spikes in each row about three fourths of an inch from each other, and each two rows to be about the same distance apart. The spikes in the concave may be about the same size of the spikes in the cylinder. If the spikes in the cylinder or concaves are of a large size, the outer ends may be nearly sharp; those in the concave may extend about as high as the surface of the concave bars, & the spikes in each second row to stand opposite the open in the first; the cylinder being suspended by friction or plain boxes so as to raise it from or let it near the concave as occasion may require by means of nuts & screws; the concave may be stationary, or may be constructed as to spring down when hard pressed from one fourth to one half an inch

An inclined plane or box is placed on the back part of the frame the forward part of which comes close to the first bar of the concave, to conduct the grain or corn in between the cylinder & concave.

The shaft of the cylinder extends thro' side of the frame far enough to admit of a small wheel made fast, to apply a band from a drum or wheel to put the machine in motion. The grain is drawn in by the bars & spikes on the cylinder over the surface of the concave bars, & over and between the spikes in the concave.

A machine for grinding apples may be of a size to suit the power to be applied, but a size suitable to be drove by one horse, may be from one & ten thirds as wide as the machine above described; with the bars & spikes of the cylinder & concave of a kind & about half as far from the surface of the cylinder & concave as described in the above machine. With the machine put hopper covered over, & a hopper high & plain over the cylinder so as to conduct the apples in between the cylinder & concave. What is claimed by this improvement, is the bars & spikes of the cylinder, acting upon the grain, over the concave of bars &

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ver x between the spikes in the concave at the same time, while the application of the machine in grinding apples.

Witnesses
John Shaw Jr.
Morgan Shaw

Jesse Buonia

Syd. W. Gh.

(1000 wds)

Patented December 11. 1832.