

Thrashing Machine.

No. 95,016.

Patented Sept. 21, 1869.

Fig. 1

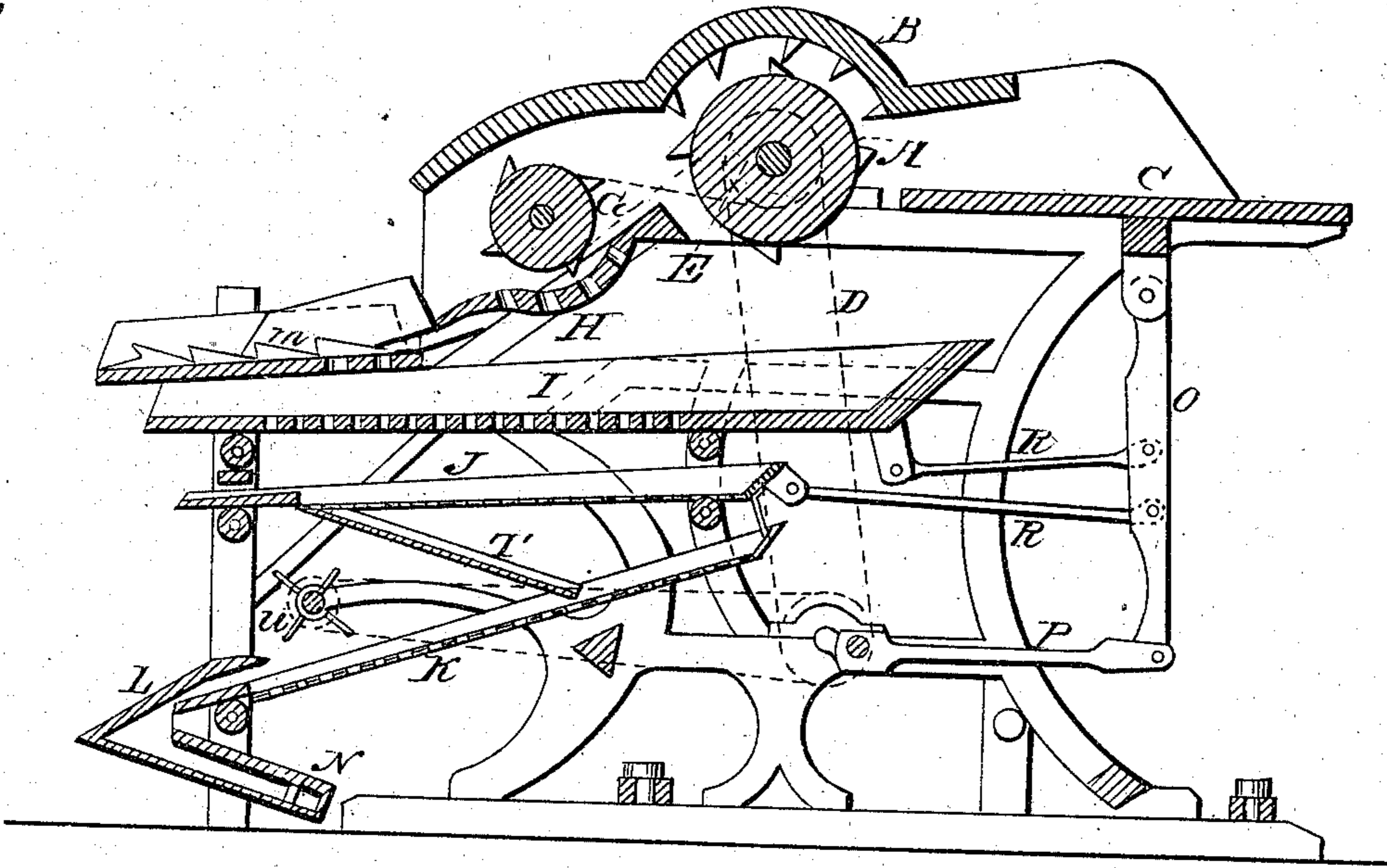
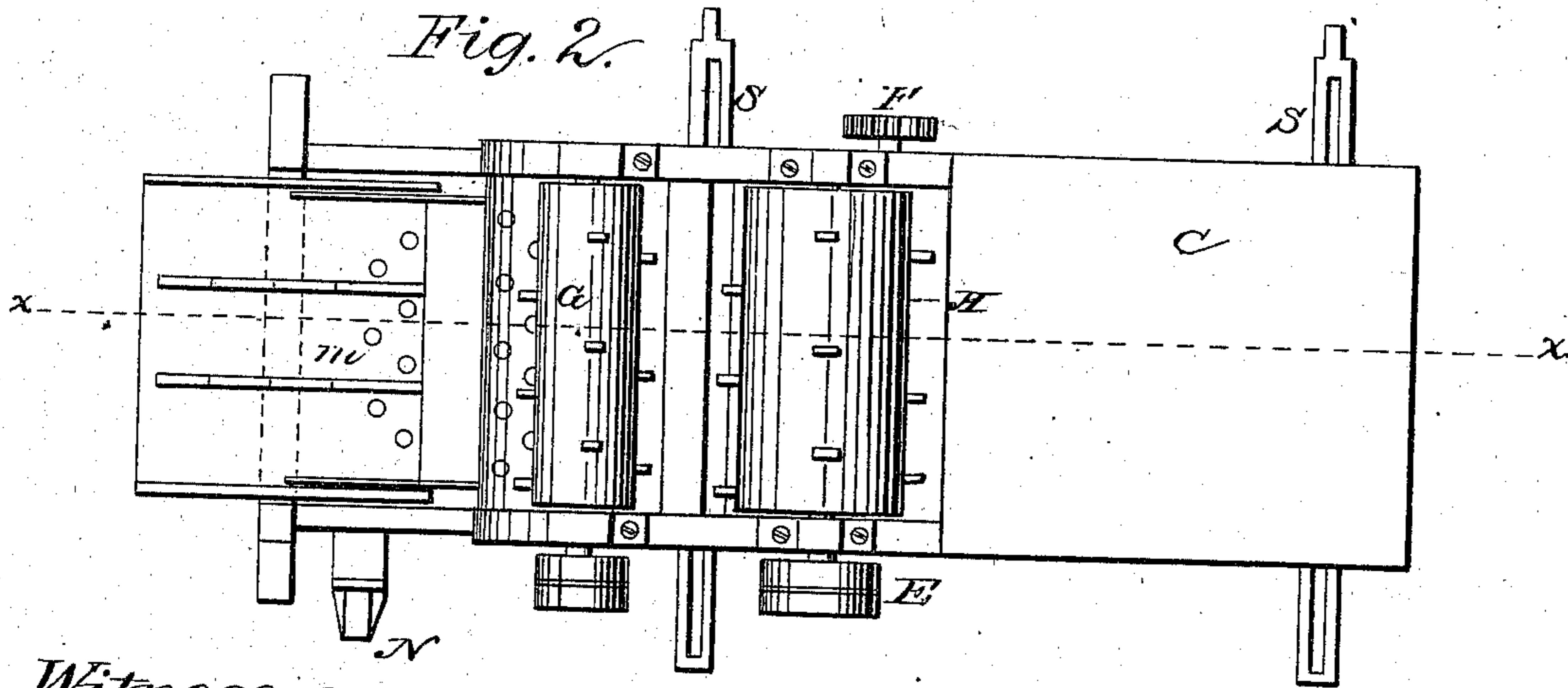


Fig. 2.



Witnesses:

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Letters Patent No. 95,016, dated September 21, 1869.

IMPROVEMENT IN THRESHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, F. A. GEISLER, of Bristol, in the county of Bristol, and State of Rhode Island, have invented a new and useful Improvement in Threshing-Machines; and I hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to new and useful improvements in machines for threshing grain, and winnowing or cleaning it at the same time, being that class of threshing-machines known as "separators," and consists in the peculiar construction and arrangement of parts hereinafter described.

In the accompanying plate of drawings—

Figure 1 represents a vertical sectional elevation of the machine through the line xx of fig. 2.

Figure 2 is a top or plan view.

Similar letters of reference indicate corresponding parts.

A is the cylinder, which revolves beneath the concave B, both being provided with suitable teeth, for separating or loosening the grain from the heads.

C represents the apron, from which the grain is fed to the machine.

The cylinder is revolved by means of a belt, D, which passes over a pulley, E, on the end of the cylinder-shaft, from a pulley or band-wheel on the end of the driving-shaft.

The driving-shaft is connected immediately with the horse-power by means of the cog-wheel or pinion F.

Another band from the pulley E drives the straw-catcher or cylinder G, which is made to revolve in an opposite direction from the main cylinder, and which catches the straw, and carries beneath it, over the bed or open concave H, through which the grain drops on to the sieve I, from whence it falls on to the sieve J, and from thence on to the screen K; from thence it drops into the receiving-box L, and is discharged from the spout N, cleaned, and ready for market.

The straw is carried from the machine over the perforated apron M, which is connected with the coarse sieve I, and partakes of its motion.

All the sieves and the screen K are given a longitudinal motion, by means of the bar O, which is pivoted to the under side of the feeding-apron C.

The driving-shaft has a crank formed on it, to which the pitman P is attached at one end. To the other end, the bar O is attached, as seen in the drawing.

The sieves are connected with the bar by the rods R, and the screen K is connected with the sieve J, so that when the bar O is vibrated by the pitman P, all the sieves, with the screen and straw-apron, are given a longitudinal motion, or are thereby shaken with sufficient violence to thoroughly separate the grain from the chaff.

S S are sliding slotted bars, attached to the lower timbers of the machine-frame by bolts or screws, so that they may be moved back and forth, for supporting the horse-power, when being transported from place to place with the machine.

The sieves and screen rest upon friction-rollers, as seen in the drawing, so that the friction produced by their movement is very slight.

T is an apron, which carries the grain which falls from the sieve J on to the upper part of the screen.

Between the sieve J and the screen K there is a fan-blower, marked U, which receives motion from the driving-shaft, and presses a current of air over the screen, to drive off the light chaff and dust from the grain.

These machines may be made of any desired size, so as to adapt them to any description or amount of power, and may be driven by steam or water, as well as by horse-power, when that method is found most desirable or convenient.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The vibrating-bar O, and the method of shaking the sieves, and screen, and the straw-apron, substantially as herein shown and described, for the purposes set forth.

2. The bars S S, in combination with a threshing-machine, substantially as and for the purposes described.

3. Giving motion to the sieves of a threshing-machine by means of a crank on the driving-shaft, substantially as set forth.

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