

J. A. Wagener.
Harvester & Thresher.

N^o 28427

Patented May 22, 1860.

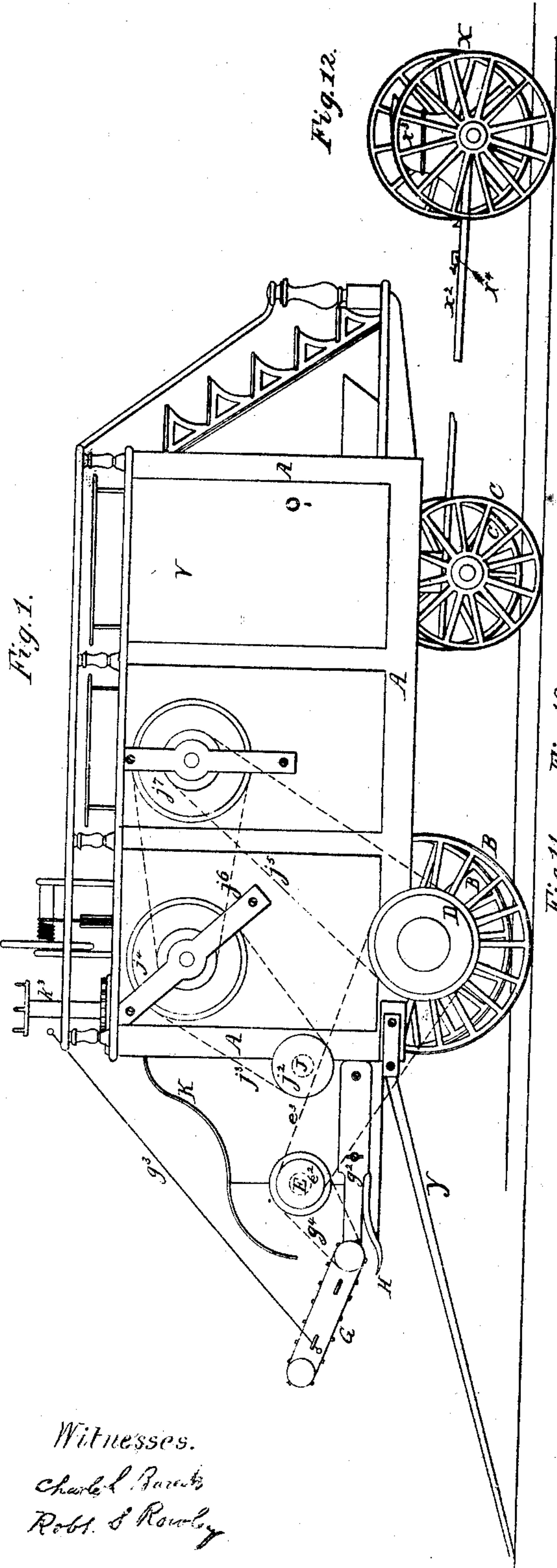


Fig. 12.

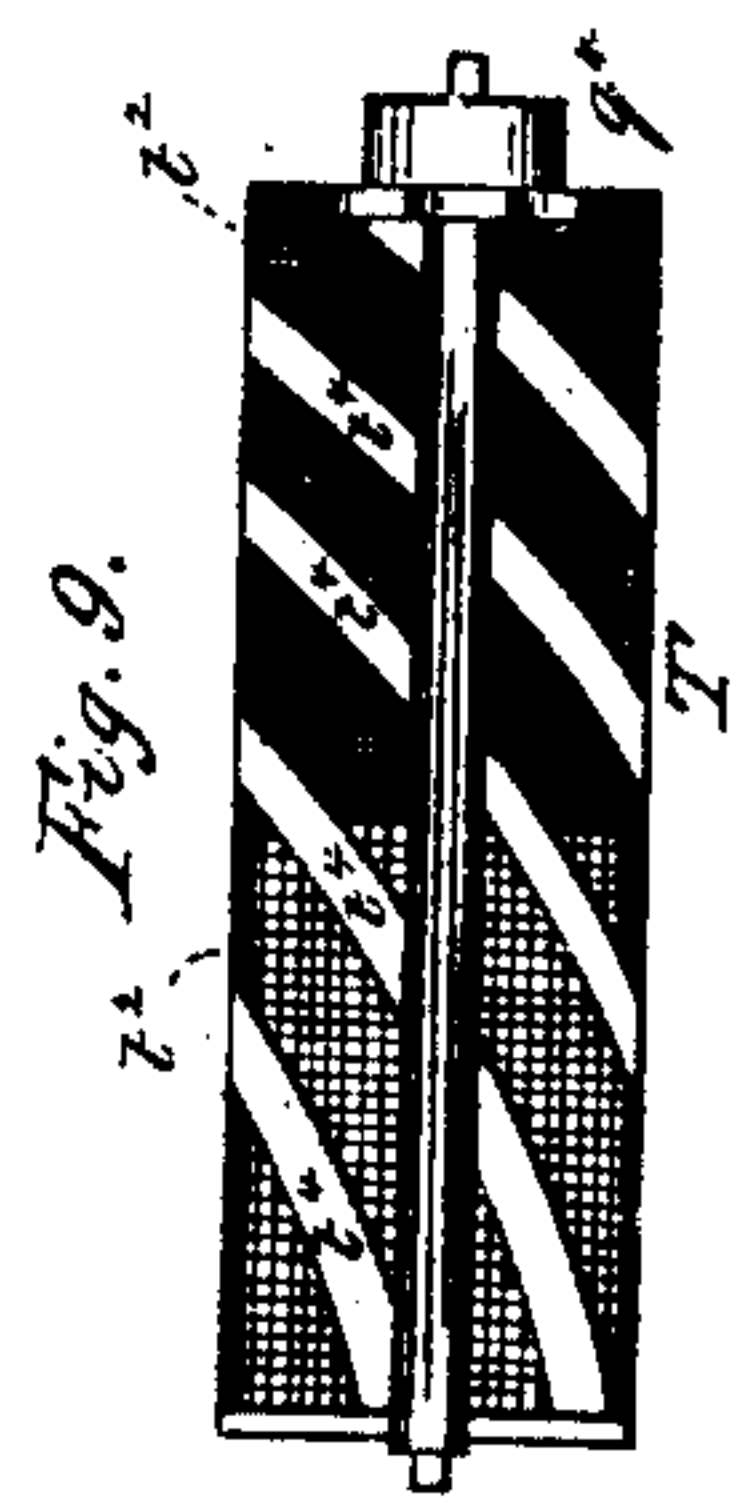
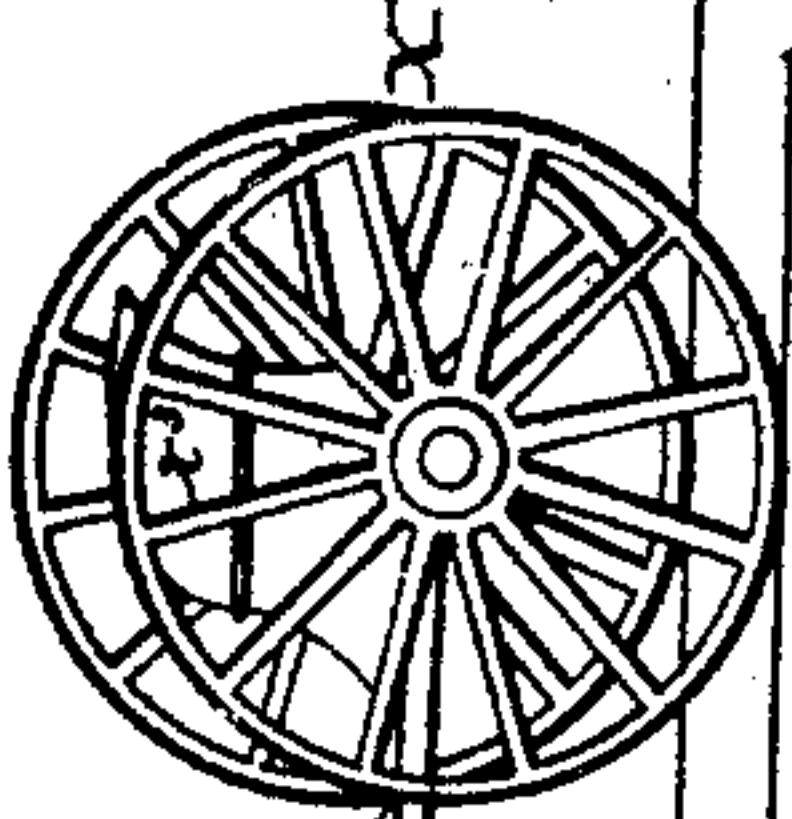


Fig. 10. Fig. 11.

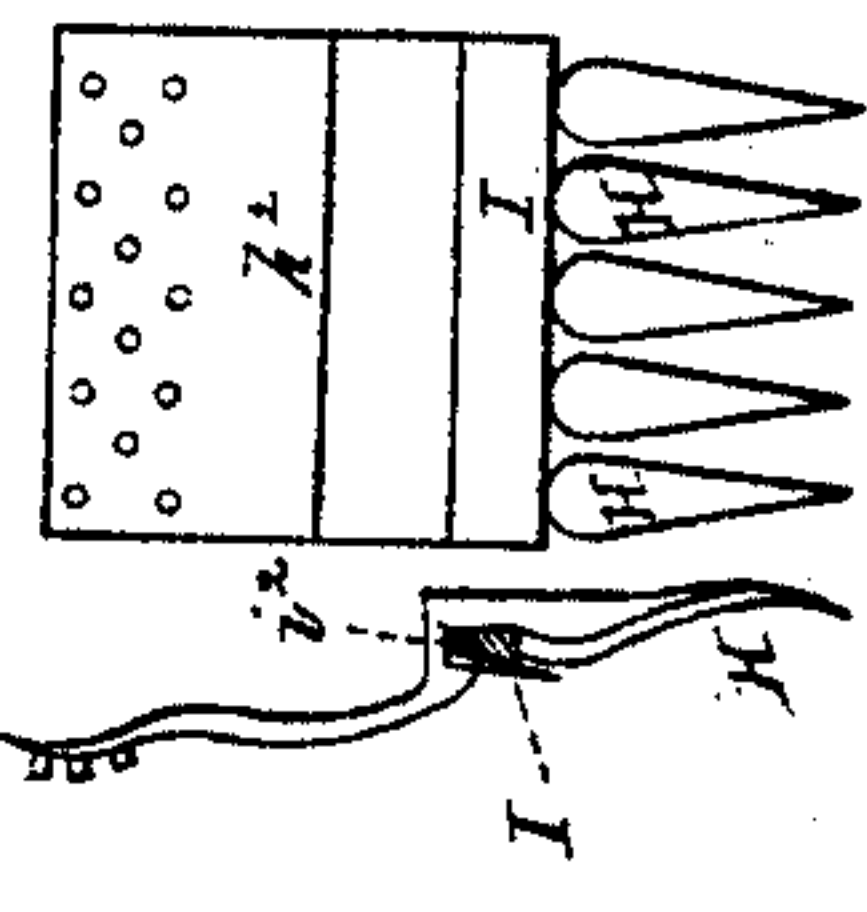


Fig. 6.

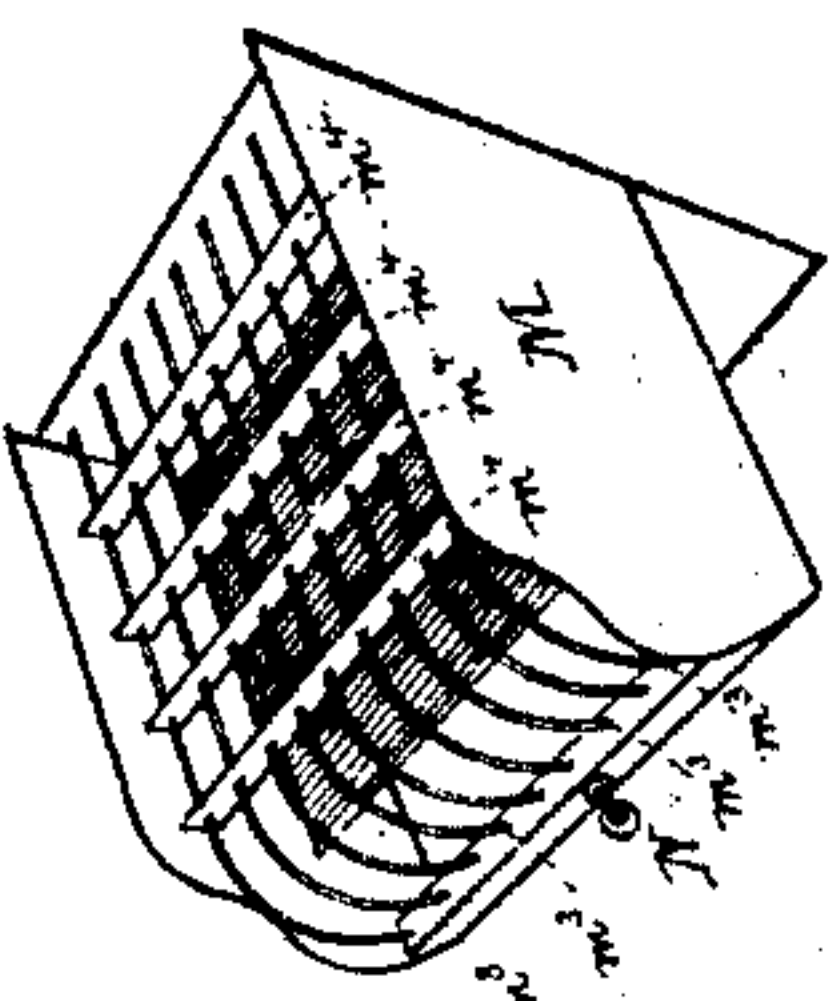
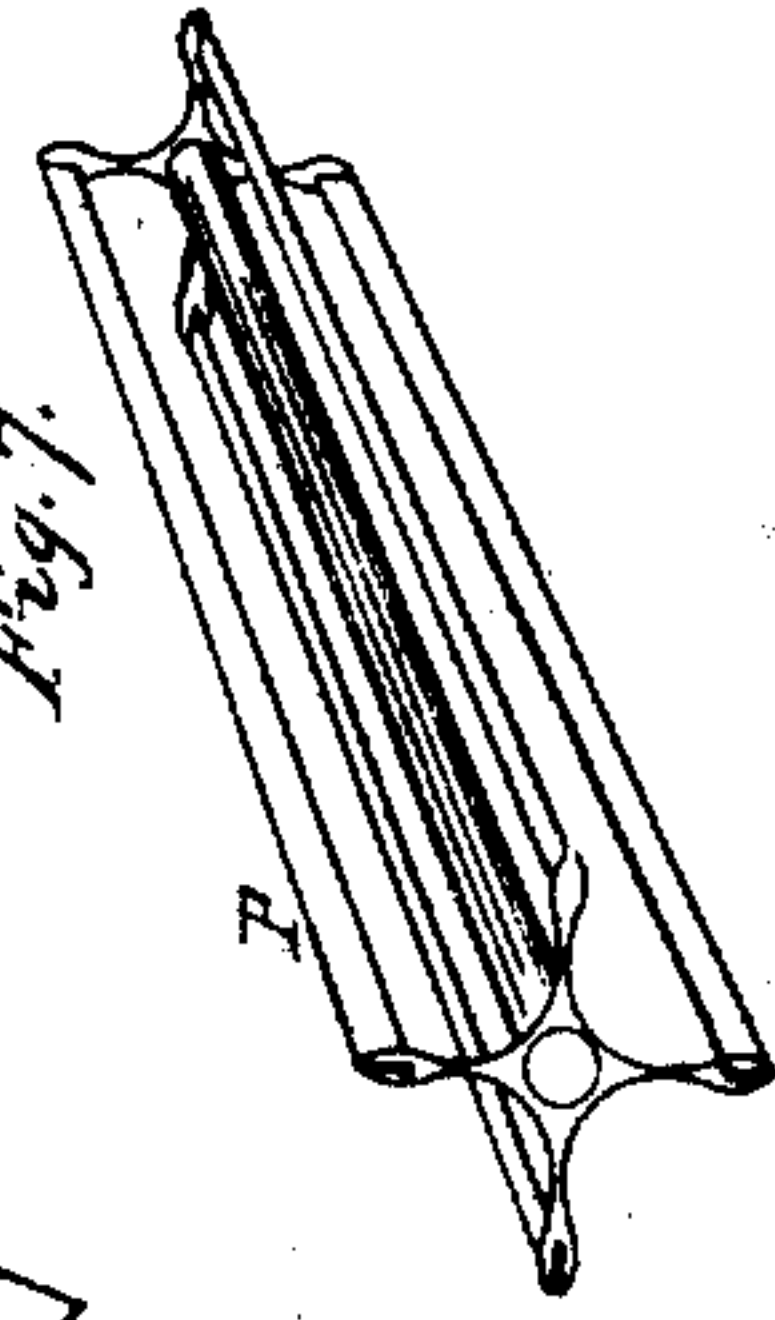


Fig. 7.



Witnesses.
Charles A. Parents
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UNITED STATES PATENT OFFICE.

J. A. WAGENER, OF PULTNEY, NEW YORK.

IMPROVEMENT IN HARVESTING-MACHINES.

Specification forming part of Letters Patent No. 28,427, dated May 22, 1860.

To all whom it may concern:

Be it known that I, JEPHTHA A. WAGENER, of Pultney, in the county of Steuben, in the State of New York, have invented a new and useful Machine for Harvesting, Thrashing, Cleaning, and Bagging Grain, &c.; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a view of the machine complete and ready for operation. Fig. 2 is a view of the machinery without the inclosure. Fig. 3 is a view of the machinery in the center. Fig. 4 is a view of the cylinders set with spiral knives on their peripheries. Fig. 5 is a view of two cylinders with teeth set for shelling grain. Fig. 6 is a shoe to separate the grain from the chaff. Fig. 7 is a fan that operates in connection with the shoe. Fig. 8 is a conveyer that carries the grain from under the shoe to the elevators. Fig. 9 is a revolving screen with spiral worm inside. Fig. 10 is a surface view of the beds of the cylinders, Figs. 4 and 5. Fig. 11 is a side or end view of Fig. 10. Fig. 12 is a view of wheels to which the teams or power is attached and connects, and is a part of Fig. 1.

In order to enable others not skilled in the construction to make and use my invention, I will proceed with the description of the construction and operation of the machine.

A A A is the frame that receives the machinery, and is supported on the wheels B B and C C.

B B are driving as well as carriage wheels.

DD are pulleys or gear attached to the wheels B B, that give motion to the machinery.

E E are cylinders set with spiral knives.

F F F F are spiral knives, which project enough from the periphery of the cylinders to sever the heads of the grain only from the stalks or straw.

G is an inclined apron provided with slats running with velocity over two pulleys, compressing the tall heads of grain to that of the smaller ones, and discharging them to the cylinders set with spiral knives.

H are teeth attached to the adjustable frame K, and prevent the straw from moving while the heads are severed by the spiral knives.

I is a straight knife on the base of teeth H, which acts in concert with spiral knives F F F F and severs the heads from the straw.

i^2 is a spring placed between the teeth H and straight knife I, to cause a continuous and elastic shear to the edges F F F F, acting in concert with edge I.

J J are cylinders to shell the grain from the heads, and set in the frame K, in the rear of E E, on the bed h^2 .

K is an adjustable frame, and is raised and lowered by the ratchet k^2 , and is operated by the shaft k^3 , and supports the canvas G, cylinder E E, teeth H, knife I, thrashers J J, bed h^2 , spring i^2 , and revolving canvas L, and is elevated and depressed by the shaft k^3 , so as to reach all growths of grain at the will of the operator.

M N O P Q form the separating machinery, which receives the grain and separates the chaff from it, discharging the chaff through space W and the grain into reservoir Q, which is carried by the conveyer q^2 into the elevators q^3 , which are carried around the shafts q^2 and q^4 , carrying the grain from reservoir Q into revolving screen on shaft T, constructed with a spiral worm inside, t^4 , which separates the large and small substances from the grain, and acts in the case R and discharges the grain through the spout n^2 , which is bagged in room S, opened or closed by the door V.

x are wheels which carry the pole x^2 , seat x^3 , and attachments for the teams x^4 . The pole x^2 is connected to the axle-tree, on which wheels C C act, thus forming a part of Fig. 1.

a is the tiller-wheel on deck, which controls the direction of the machine by connections of chain passing over pulleys c c^2 c^3 , attached to tongue of wheels C C. The shoe of mill is made with two tiers of slats inclined, m^4 , and two tiers of cross-rods, m^3 , thus giving the chaff a backward flight with the blast of wind from fan P, while the grain gets a forward throw by the slats m^4 , and works on the pivot N, supported on the cross-bar n^2 , and is supported in the rear by straps n^3 , attached to cross-bar n^4 , substantially for the purpose intended.

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

The revolving canvas G, acting in concert with cylinders E E, spiral knives F F F F, and straight knife I, adjusted on spring i^2 , set on the base of the teeth H, substantially as and for the purpose described and set forth.

Witnesses: JEPHTHA A. WAGENER.

GEORGE F. NILES,

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