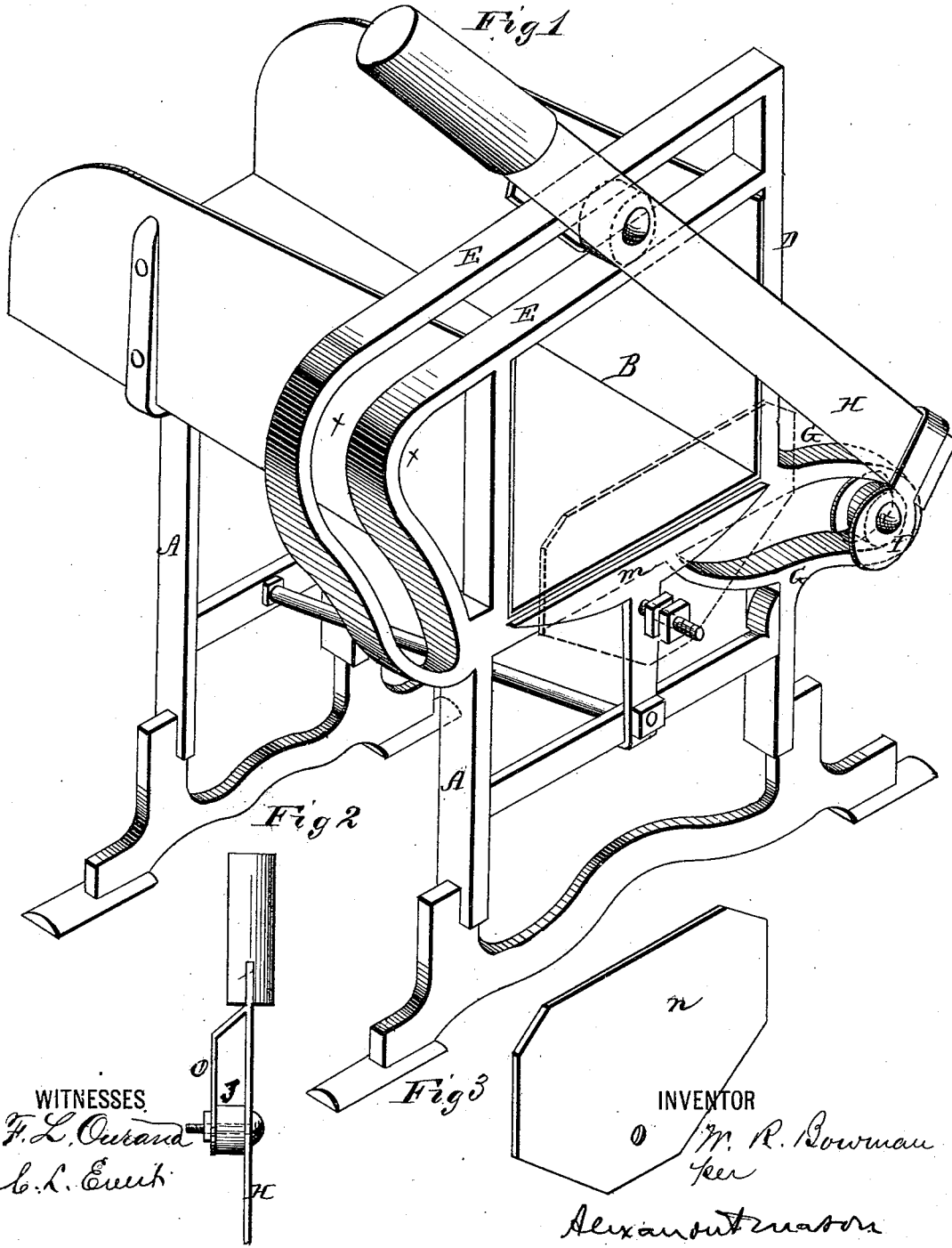


W. R. BOWMAN.  
Straw-Cutter.

No. 166,585.

Patented Aug. 10, 1875.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN STRAW-CUTTERS.

Specification forming part of Letters Patent No. 166,585, dated August 10, 1875; application filed December 16, 1874.

*To all whom it may concern:*

Be it known that I, W. R. BOWMAN, of Danville, in the county of Boyle, and in the State of Kentucky, have invented certain new and useful Improvements in Straw - Cutter or Kitchen - Carver; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the peculiar construction and arrangement of the several parts of this straw-cutter, as will be hereinafter described.

In the annexed drawings, making part of this invention, Figure 1 represents a perspective view of my machine; Fig. 2, a portion of the knife; and Fig. 3, a view of the regulating-shield.

In the figures, A represents the frame of the machine, which may be made either of wood or metal, in any of the known ways. B represents the straw-box, which is not peculiar in its construction. The mouth of this box is surrounded with an iron frame. E E represent two iron bars, one of which may form a portion of the frame, but the other separated a short distance from it, and both being bent, as seen. These bars are equidistant from each other at all points, and form a long curved loop. At the lower corner of the box, diagonal to the loop above, are two bars, G G, one of which may also be a portion of the frame. These bars are also separated a short distance from each other, and form a slightly-curved loop, but not as long as the one above. The knife H, which is made nearly straight, is connected into these loops by suitable devices at or near each of its ends, as follows: An arm, *o*, projects from the handle down the knife, and a bolt with a friction-wheel, J, surrounding it passes through the knife through the long slot and through the arm *o*. A nut then confines it in place. The lower end of the knife has a strap of metal passing over it and

through the ends of this strap; and through the knife and slot also passes a bolt with friction-wheel I around it. A nut confines it in place. When pressure is brought upon the knife-handle the knife moves toward the operator, and at the same time its cutting-edge moving downward. When the roller J passes around the curve *xx* in the loop the knife moves from the operator, its cutting-edge still moving downward. The rear or lower friction I first moves upward in its loop, and when the wheel J turns downward in its loop the wheel I moves backward in its loop.

By this arrangement it will be seen that the knife has two movements, making a forward and backward draw-cut at each stroke. A suitable shield is provided in front of the box to regulate the length of the straw cut. In front of the frame, at its lower side, is a spring-plate, which sets out a little from the mouth of the box, so that the edge of the knife can pass down between it and the frame. This is for the purpose of guaranteeing a clear or clean cut at each stroke of all of the straw in the throat of the box.

The advantages of this cutter are readily perceived, as it will cut with great ease on account of its double draw-stroke, and then it is cheap and durable.

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

In combination with the frame A and box B, the angular bars E E, having curves *xx*, the bars G G, and the knife H, having strap O and roller J at its upper part and roller I at its lower part, and connected thereby to the bars E and G, respectively, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of October, 1874.

W. R. BOWMAN.

Witnesses:

REED S. NICHOLS,  
J. S. CHRISMAN.