

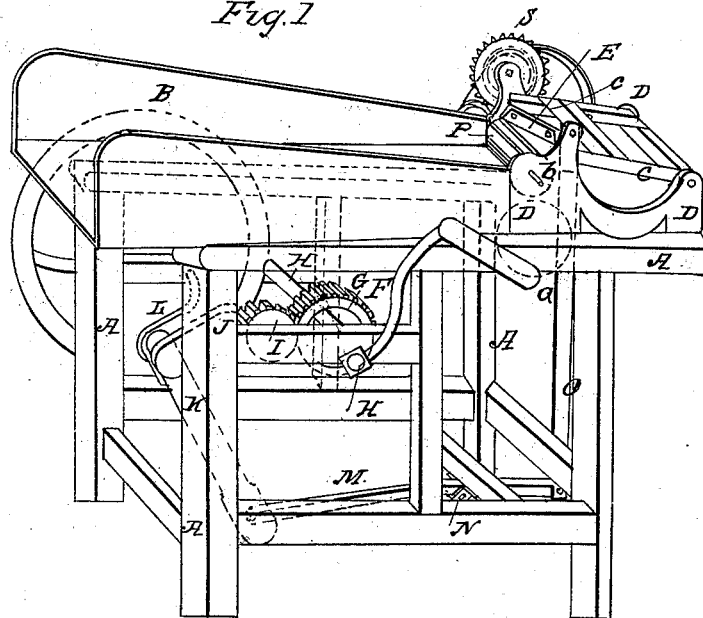
J. W. WEBB.

Straw Cutter.

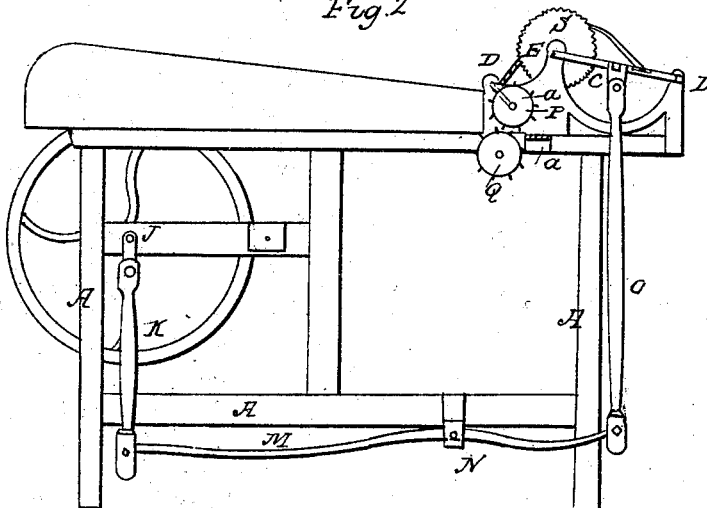
No. 2,697.

Patented July 2, 1842.

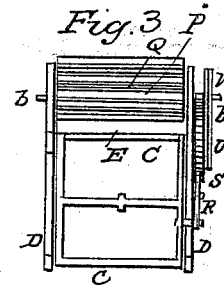
*Fig. 1*



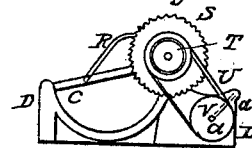
*Fig. 2*



*Fig. 3*



*Fig. 4*



# UNITED STATES PATENT OFFICE.

JOS. W. WEBB, OF MOUNT MORRIS, NEW YORK.

## STRAW-CUTTER.

Specification of Letters Patent No. 2,697, dated July 2, 1842.

*To all whom it may concern:*

Be it known that I, JOSEPH W. WEBB, of Mount Morris, in the county of Livingston and State of New York, have invented certain Improvements in the manner of Constructing a Machine for Cutting Straw and other Articles of a Like Nature; and I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawings Figure 1, is a perspective representation of my machine; Fig. 2, a vertical section thereof from end to end, through its center, Fig. 3 a top view of the frame carrying the cutting knife, and Fig. 4 an end view of the gearing by which the feeding is governed.

In each of these figures like parts are designated by the same letters of reference.

A, A, is the frame of the machine, supporting a cutting box B, of the usual construction.

C, C, is a vibrating frame, hung upon gudgeons in the cheek pieces D, D, which are attached to the main frame A. The vibrating frame, and the cheek pieces will be best made of cast iron; and the whole frame may, in fact, be made of that material.

E, is the cutting knife attached to the inner end of the vibrating frame, and made to stand obliquely, so that one end of it shall first come into contact with the straw, in a manner common in such cutting machines.

The vibrating frame C, C, is moved in the following manner. F is a winch which gives motion to a cog wheel G, on the shaft H; the wheel G, gears into the smaller wheel I, on a crank shaft J, a shackle bar K, carried by the crank L, operates the vibrating lever M which has its fulcrum at N; the connecting rod O, is attached at its lower end to the lever M, and at its upper to the vibrating frame C, by suitable joint pins, and thus motion is given to this frame, and to the knife E, which cuts against a bar of iron, a, on the end of the cutting box.

The straw, &c., is to be fed to the knife by means of feeding rollers P, and Q; the

lower roller Q is stationary, while the upper roller P, is allowed to vibrate up and down to adapt itself to the varying thickness of the material to be cut. The manner of regulating the feed is shown most distinctly in Fig. L. R is a pawl upon the vibrating frame which acts upon a ratchet wheel, S. Attached to this ratchet wheel, is a whirl T, carrying a band U, which embraces a whirl V, on the shaft of the upper feeding roller P. The gudgeons of this roller are received within curved slots a, a, in the cheek pieces D, D, the center of the wheel S, being that also of the curved slots; as the roller P, rises and falls it will therefore preserve the same distance in its axis from the center of S, and the band U, will remain equally tight. The gudgeons b, b, of the roller P, may be allowed to extend out through the cheek pieces D, D, for the purpose of being borne down by a spring, or by weights, with any degree of force that may be necessary to the feeding. The place of the pawl R, may be varied, to regulate the length of straw to be cut, or the same may be effected by a regulating crank, or by varying the fulcrum of the lever M.

Having thus fully described the manner in which I construct and operate my machine for cutting straw what I claim therein as new, and desire to secure by Letters Patent is—

The manner in which I have combined and arranged the vibrating frame C, with its cutting knife, and the lever M, with its connecting rods, so as to effect the cutting by their conjoint action in the manner described. I also claim the special arrangement of the feeding apparatus, consisting of the pawl on the vibrating frame, operating upon the ratchet wheel, and its whirl, and upon the whirl upon the gudgeons of the upper feed roller which rise and fall in the curved slots, in the manner described.

JOSEPH W. WEBB.

Witnesses:

THOS. P. JONES,  
CLEMENT. T. COOTE.