UNITED STATES PATENT OFFICE.

O. M. TRUAIR, OF MOUNT MORRIS, NEW YORK.

IMPROVED MACHINE FOR SIZING BROOM-CORN.


To all whom it may concern:

Be it known that I, O. M. TRUAIR, of Mount Morris, in the county of Livingston and State of New York, have invented a new and Improved Machine for Sizing Broom-Corn; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan of my improved machine, and Fig. 2 is a longitudinal section of the same, taken at the line $x x$ of Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists, first, in the arrangement for cutting off the butt-ends of broom-corn, and, secondly, in the arrangement for assorting and placing the different lengths in separate receptacles.

To enable others to fully understand and construct my invention, I will proceed to describe it.

A represents the bed of the machine, which is supported upon end pieces B, and is furnished with side boards C, which extend nearly its entire length. An opening is formed in the center of the bed and longitudinally thereof, which opening on one side is parallel with the frame of the machine and on the other is stepped off at equal distances and depths, forming a series of transverse openings in the bed, which increase in length from one end of the machine to the other. Placed beneath each of these openings and transversely of the machine are partitions D, which divide the openings, and thus form separate receptacles J for the different lengths of broom-corn.

Drawers of the ordinary kind may be fitted between these partitions to receive the broom-corn, or it may fall directly onto the floor, as may be desired.

The machine is furnished near each end with rollers E E', which are journalled parallel with each other, the former E in boxes attached to the side of the bed and the latter E' in the side boards. Passing around the rollers are two or more endless bands F F', which are connected together by slats b b, placed equidistant apart and secured to the bands at right angles thereto, which slats are for the purpose of moving the broom-corn along on the table and over the openings therein until it meets with an opening corresponding in length therewith.

The driving-roller E has secured upon one end a fly-wheel H, which is furnished with a wrist-pin in one of its arms, which is connected by a rod c to a treadle I, by means of which motion is imparted to the endless bands and slats.

At the front end of the machine and on the opposite side from the fly-wheel a knife e is set obliquely to cut off the butt-ends of the broom-corn.

The endless boards being put in motion in the direction of the arrow, the different lengths of the broom-corn are placed upon the inclined board d, with their butt-ends all in one direction. The slats in passing over the driving-roller take hold of the broom-corn lengthwise and crowd it down upon the knife-edge, cutting off the butt-ends and sliding it along on the bed until it is brought over an opening therein of sufficient size to allow it to fall through, when it drops into the receptacle beneath, each different length dropping into a receptacle by itself.

A series of projections f are formed on the outside of the slats, which, when the slats are passing on the under side of the bands and along the bed, fit into corresponding grooves extending longitudinally of the bed and prevent any of the broom-corn from working beneath and behind the slats.

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

The bed A, receptacles J J, rollers E E', bands F F, and slats b, furnished with projections, with the inclined board d and knife e, when combined, arranged, and operating in the manner substantially as described.

O. M. TRUAIR.

Witnesses:

FRANKLIN SHANK,

JOHN R. CARRINGTON.