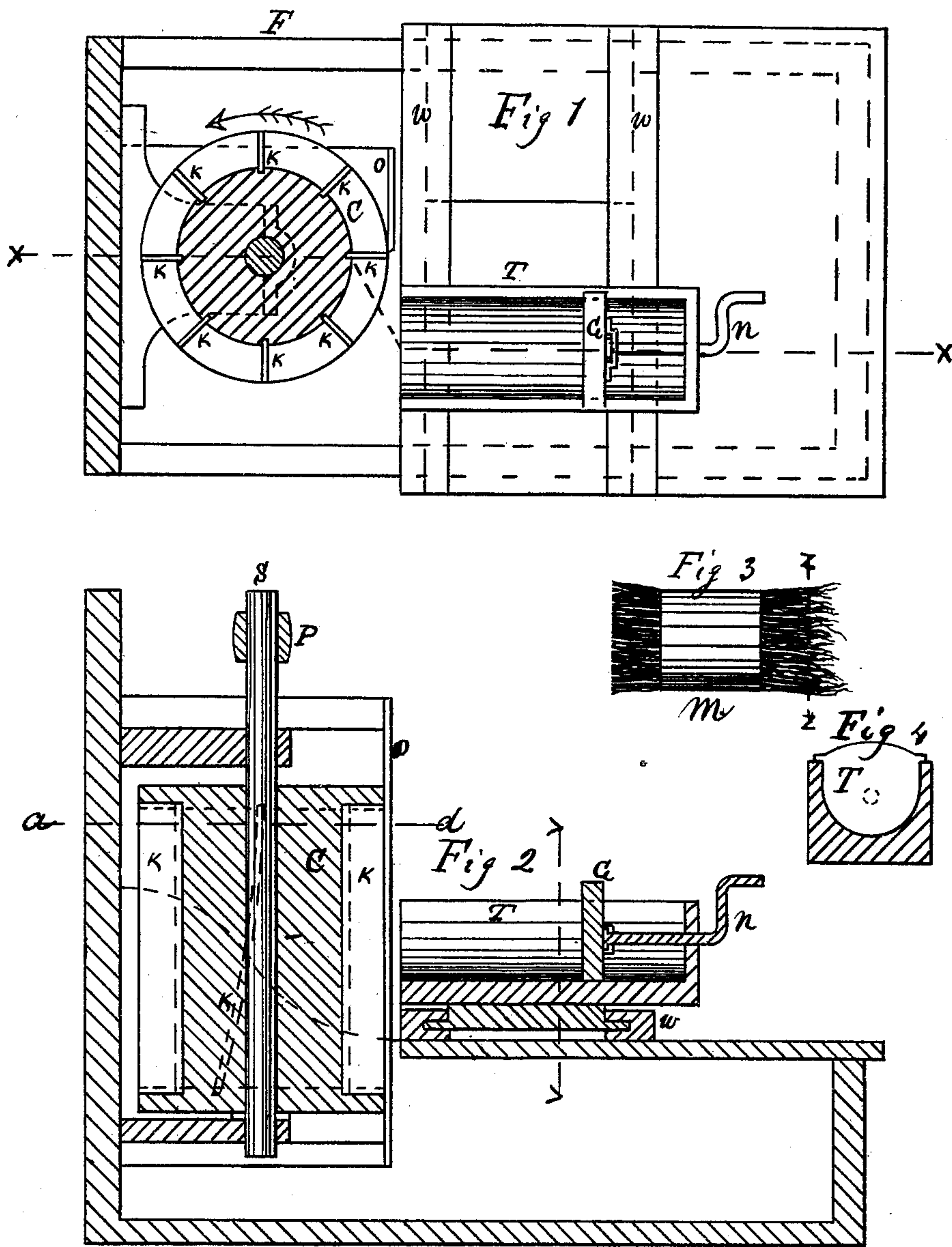


E. B. WHITING.
Brush-Machine.

No. 204,642.

Patented June 4, 1878.



Witnesses.
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ENOCH B. WHITING, OF ST. ALBANS, VERMONT.

IMPROVEMENT IN BRUSH-MACHINES.

Specification forming part of Letters Patent No. **204,642**, dated June 4, 1878; application filed December 5, 1877.

To all whom it may concern:

Be it known that I, ENOCH B. WHITING, of St. Albans, county of Franklin, and State of Vermont, have invented certain new and useful Improvements in Machines for Putting Up and Trimming Rolls of Brush-Fiber, and in the bundled article; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to put the stock up in rolls in such a manner that the fiber shall be kept straight and compact, especially when the rolls are subdivided transversely, their ragged ends being trimmed by a device hereinafter described.

The common practice is to tie the stock into rolls with one or more bands of strings—a mode which is frequently objectionable, as it tends to crook and twist the fiber. The ragged ends of the rolls are then trimmed by hand—an operation necessarily tedious, besides being imperfect in execution.

My improvement consists in substituting for the strings, which must be separately tied, a single wrapper of strong paper, whose width is nearly equal to the length of the fiber around which it is wrapped. The entire roll can then be subdivided into as many lengths as desired without disturbing the position of the fiber, as it is compactly held by that portion of the paper wrapper which remains around each length, thus securing greater dispatch and perfection in the preparation of the stock.

By presenting alternately the ragged ends of the roll, which is held horizontally in a trough which moves upon ways, to a cutter-head revolving rapidly upon a vertical shaft, they are trimmed instantaneously and perfectly.

In the drawings, Figure 1 is a plan view with section of the cutter-head on line *a d* of Fig. 2. Fig. 2 is a vertical section on line *x x* of Fig. 1. Fig. 3 represents a roll of brush

stock or fiber with one end trimmed, *z z* showing the line to which the ragged ends are to be trimmed. Fig. 4 is a vertical section of the trough *T* in Figs. 1 and 2.

Similar letters indicate corresponding parts.

C is the cutter-head, in which are fixed knives *k k*. It revolves on a vertical shaft, *S*, in the direction of the arrow, Fig. 1, power being applied to the pulley *P*, Fig. 2. On the front of the cutter-head is a stationary knife, *O*, with its cutting-edge close to the knives *k k*. *T* is a trough, into which the stock is horizontally laid while being trimmed. *G* is the gage, which is adjusted by the screw *n*, or otherwise.

The operation is as follows: The stock having been formed into rolls, as above described, has both ends uneven, as at *z z*. The gage *G* having been set to the desired length, the roll *m* is placed in the trough *T* with one end against the gage *G*, the other end and ragged end projecting a short distance from the trough. The trough containing the roll *m* thus placed is then moved back and forth in the ways *w w*, thereby bringing the projecting or ragged ends of the roll into contact with the revolving knives of the cutter-head *C*, which instantly cuts or trims the same perfectly smooth, as shown at one end, Fig. 3. After one end of the roll is thus trimmed the gage is advanced and the operation is repeated for the other end.

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

1. As a new article of manufacture, a roll of brush-fiber having a paper wrapper, as described.

2. The rotary cutter-head *C*, having knives *k*, in combination with the cutter *O*, arranged as shown, and the trough *T*, having a movable gage, *G*, and sliding on ways *w*, substantially as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ENOCH B. WHITING.

Witnesses:

JOHN SHEARER,

W. C. HARRINGTON.