

No. 821,757.

PATENTED MAY 29, 1906.

F. M. SMITH.
ROTARY PAPER TRIMMER.
APPLICATION FILED OCT. 13, 1905.

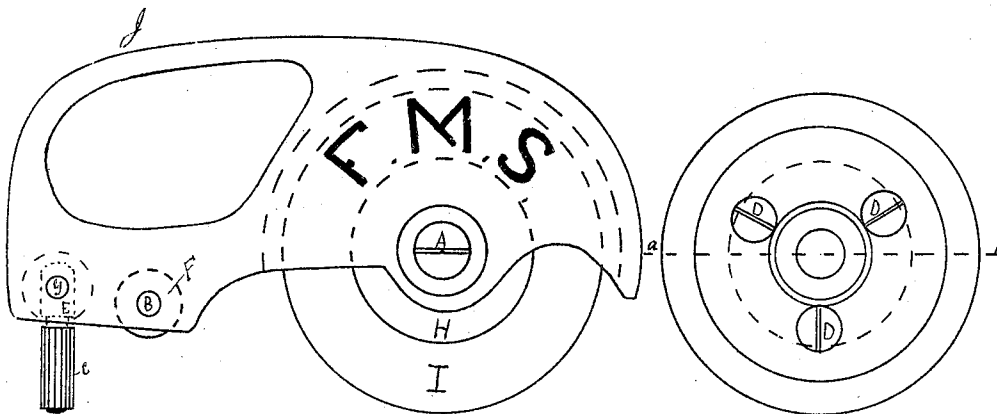


Fig. 1.

Fig. 2.

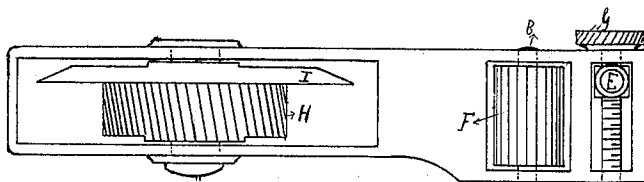


Fig. 5.

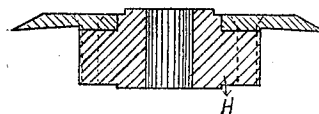


Fig. 3.

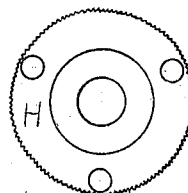


Fig. 4.

Witnesses
L. R. Smith
W. Sweet

Inventor
F. M. Smith

UNITED STATES PATENT OFFICE.

FRANCIS M. SMITH, OF WOODSTOCK, CANADA.

ROTARY PAPER-TRIMMER.

No. 821,757.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed October 13, 1905. Serial No. 282,565.

To all whom it may concern:

Be it known that I, FRANCIS MICHAEL SMITH, a citizen of the Dominion of Canada, residing at the city of Woodstock, in the county of Oxford and Province of Ontario, Canada, have invented certain new and useful Improvements in Rotary Paper-Trimmers, of which the following is a specification.

My invention relates to improvements in rotary paper-trimmers in which a rough or tooth edged cylinder operates in conjunction with a circular knife and a small cylinder which acts as a guide for the knife, and a small traveler which follows the rough or tooth edged cylinder; and the objects of my invention are, first, to provide a rotary paper-trimmer with a circular knife and a rough or tooth edged cylinder combined in such a way that there is no possibility of slipping; second, to provide a rotary paper-trimmer with a small cylinder which revolves on a pivot, which pivot is made to shift from side to side by means of a small set-screw, this cylinder being used as a guide and to put on light and heavy cuts; third, to provide a rotary paper-trimmer with a small traveler which follows the circular knife. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the entire machine. Fig. 2 is an elevation of the knife and the rough or tooth edged cylinder. Fig. 3 is a section of Fig. 2 on line *a b*. Fig. 4 is an elevation of the rough or tooth edged cylinder. Fig. 5 is a plan of the bottom of the machine.

Similar letters refer to similar parts throughout the several figures.

The curved plate J constitutes the framework of the machine. The circular plate I is the knife of the rotary trimmer, to which is attached the rough or tooth edged cylinder H by means of the small screws D. In the center of the circular knife I and the rough or tooth edged cylinder H is a small bolt or axle running through the frame and on which the knife I and the rough or tooth edged cylinder H runs. The circular knife I cuts along the edge of a paper-board on which a steel plate is firmly set, thus acting as a pair of shears. The machine is guided along the paper-board by the small cylinder C revolving on the pivot E. This pivot is

made to shift from side to side by means of the small set-screw G, which runs across the frame J, making the knife I run closely on the edge. Following the rough or tooth edged cylinder H on the paper-board is the small traveler F, which revolves on the pin B, which runs across the frame J.

The mode of operating the machine which embodies my invention is as follows: Place paper on an ordinary paper-board with a front edge perfectly straight, on which a steel strip having a perfectly straight edge is let in and screwed fast on the top of the board, projecting a little over the front edge. Paste the paper and fold the same up evenly and pull the paper over the edge of the board, until the selvage is clear of the edge of the steel. Then place a strip of wood on the paper and place the trimmer on the strip with the knife I and the guide G passing down over the front edge of the board, touching the steel, and the rough or tooth edged cylinder H and the small traveler F on the top of the strip. Then with a shove, like using a carpenter's plane, the machine is put in motion along the edge of the paper-board, thus cutting the selvage off, making a perfectly clean and even edge.

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

1. The combination in a paper-trimming machine of a circular knife having a rough or tooth edged cylinder attached by means of screws, and a small cylinder or traveler running on the same level and following the rough or tooth edged cylinder, and a small cylinder or guide running behind the knife on a small pivot said pivot being attached to a small set-screw, all substantially as set forth.

2. The combination in a paper-trimming machine of a circular knife having a rough or tooth edged cylinder attached and a small cylinder or guide running behind the knife on a small pivot, said pivot being attached to a small set-screw, all substantially as set forth.

Dated at the city of Woodstock, in the county of Oxford and Province of Ontario, this 23d day of September, 1905.

F. M. SMITH.

In presence of—

H. E. COSFORD,
R. C. WEST,