G. L. TYLER.

Machine for Splitting and Beveling Leather.

No. 210,823. Patented Dec. 10, 1878.

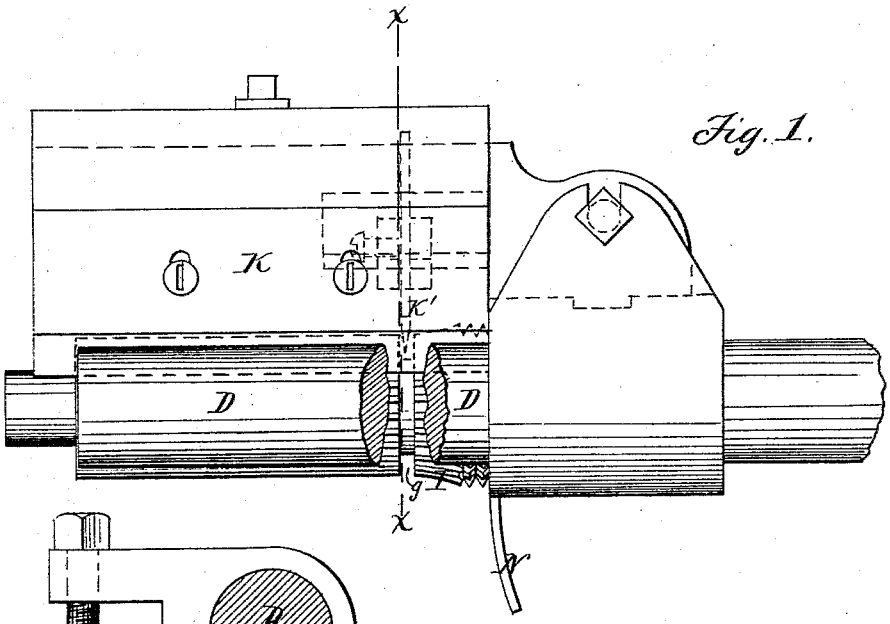


Fig. 1.

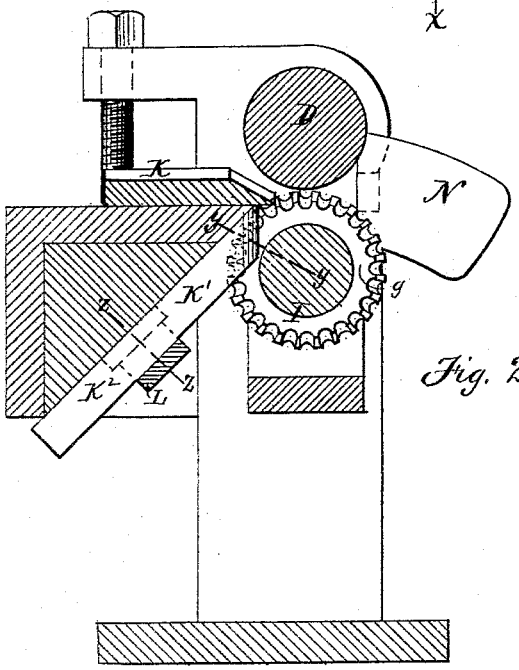
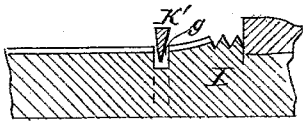


Fig. 2.

Fig. 3.



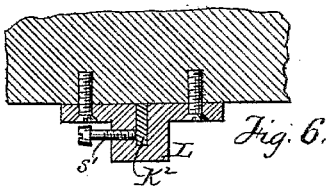


Fig. 6.

Fig. 4.

Fig. 5.

Witnesses.
E. B. Fairchild
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Geo. L. Tyler
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UNITED STATES PATENT OFFICE.

GEORGE L. TYLER, OF LYNN, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO T. W. TYLER AND C. O. BEEDE, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR SPLITTING AND BEVELING LEATHER.

Specification forming part of Letters Patent No. **210,823**, dated December 10, 1878; application filed November 11, 1878.

To all whom it may concern:

Be it known that I, GEORGE L. TYLER, of Lynn, in the county of Essex and State of Massachusetts, have invented certain Improvements in Machines for Splitting and Beveling Leather, of which the following is a specification:

This invention is an improvement on machines described in Patent No. 196,197, granted October 16, 1877, to Dancel and Smith, for machinery for splitting and beveling leather. In said machine a curved knife is employed, which, operating in connection with certain feeding and guiding devices, shaves a beveled strip from one side of a sheet or blank of material presented to the knife, such blank being, for example, a counter or heel-stiffener blank, which is thus properly beveled. The strip removed by the knife is of considerable thickness at one edge, but is reduced so gradually in cross-section that its other edge is extremely thin. The thicker portion of the strip is available for rands for boot and shoe heels; but the thin edge is of no value, and has to be trimmed off.

My invention consists in providing the machine with a trimming-knife arranged to trim off the thin edge of the strip cut by the curved knife, and thus convert said strip into a suitably-formed rand while the strip is being shaved from the sheet, said trimming-knife also aiding to guide the sheet or blank of material in its passage through the machine.

The invention also consists in the provision of a groove in the roller which supports and presents the material to the knife, the edge of the trimming-knife projecting into said groove, so that the periphery of the roller on either side of the groove will support the shaved strip while it is being trimmed, and prevent the strip from being deflected by the trimming-knife without being trimmed, all of which I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a top view of said patented machine, showing my improvements in dotted lines, the upper or gage roll being partially broken away. Fig. 2 represents a section on line *x x*, Fig. 1. Fig. 3 represents a section on line *y y*, Fig. 2. Fig. 4 represents a cross-section of the strip before it is trimmed, and Fig. 5 represents a similar section after trimming.

Similar letters of reference indicate like parts in all the figures.

In the drawings, K represents the curved shaving or splitting knife, located on a suitable support.

The feeding mechanism consists of a corrugated supporting-roller, I, enlarged at one end to correspond to the curvature of the knife K, and a gage-roller, D, to keep the material down upon the roller I. N represents the edge-gage. These parts are constructed and arranged substantially as in said patented machine.

In operation, the feeding mechanism presents the sheet or blank to the knife K. The gage N guides the edge of the blank, and the knife cuts a beveled strip, *s*, from the under side of the blank, said strip passing under the knife K, while the blank passes over the same.

For a more detailed description of the parts enumerated and their operation, I refer to the above-named patent.

The strip *s* is of considerable thickness at one edge, and gradually diminishes in thickness in cross-section, so that its other edge is very thin, as shown in Fig. 4, the thick edge of the strip being a part of the edge of the blank or sheet that bears against the edge of the gage N during the operation.

K^1 represents the trimming-knife, which constitutes the chief part of my improvement. This knife is rigidly attached to a suitable support under the shaving-knife K, and is arranged to trim the thin edge from the strip *s* as it passes from the shaving-knife, and leave said strip in the form in cross-section represented in Fig. 5, the strip being thus adapted for use as a rand.

The edge of the trimming-knife extends downwardly from the under side of the shaving-knife, as shown in Fig. 2, and is preferably inclined backwardly.

The feed-roller I is provided with a narrow peripheral groove, *g*, immediately opposite the trimming-knife K^1, and the latter is so arranged that a portion of its cutting-edge projects into

the groove, so that the strip *s*, as it passes under the shaving-knife K, is supported by the roller I on each side of the trimming-knife, and close to the point where the strip *s* is cut, this support preventing the strip from yielding or bending as it is pressed against the trimming-knife, and enabling the latter to easily cut the strip.

It will be seen that by the employment of the trimming-knife the strip *s* is adapted for use while it is being shaved from the sheet without a separate trimming operation after it is detached from the sheet, such as would be necessary if the trimming-knife were not employed. Moreover, the trimming-knife, after it has commenced to cut the strip *s*, has a tendency to keep the blank or sheet of material in contact with the edge-gage N, or, in other words, it prevents the blank from moving laterally away from said gage, thus co-operating in guiding the blank, as will be readily seen.

The knife K^1 is preferably provided with a shank, K^2, which is secured by a set-screw, S′, in a slotted lug, L, attached to the bed or support on which the knife K is supported. The slotted lug and set-screw enable the knife K^1 to be readily adjusted to compensate for its wear.

I claim as my invention—

1. In combination with the curved shaving-knife adapted to shave a beveled strip, *s*, of the form shown from the side of a sheet of material, the trimming-knife arranged to separate the thin edge from the beveled strip, and adapt said strip for use as a rand, suitable feeding mechanism being employed to propel the material against the knives.

2. The combination of the trimming-knife with the shaving-knife and the grooved feed-roller, as set forth.

3. The combination of the trimming-knife with the shaving-knife, grooved feed-roller, and edge-gage, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE L. TYLER.

Witnesses:
LYMAN F. CHASE,
CHESTER WITHAM.