C. H. Helms,

Shaving Leather,

No. 56,938. Patented Aug. 7, 1866.

Fig: 2.

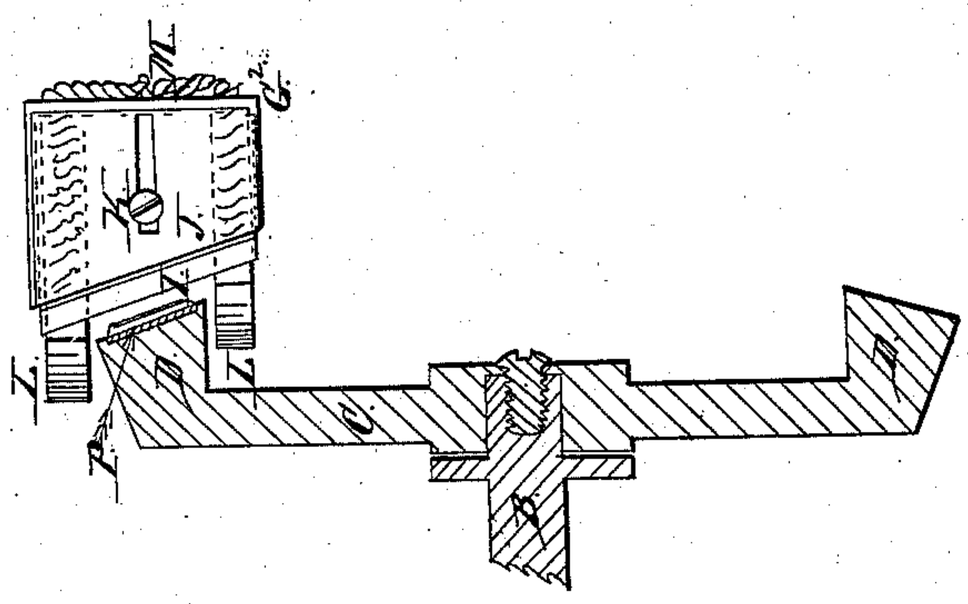
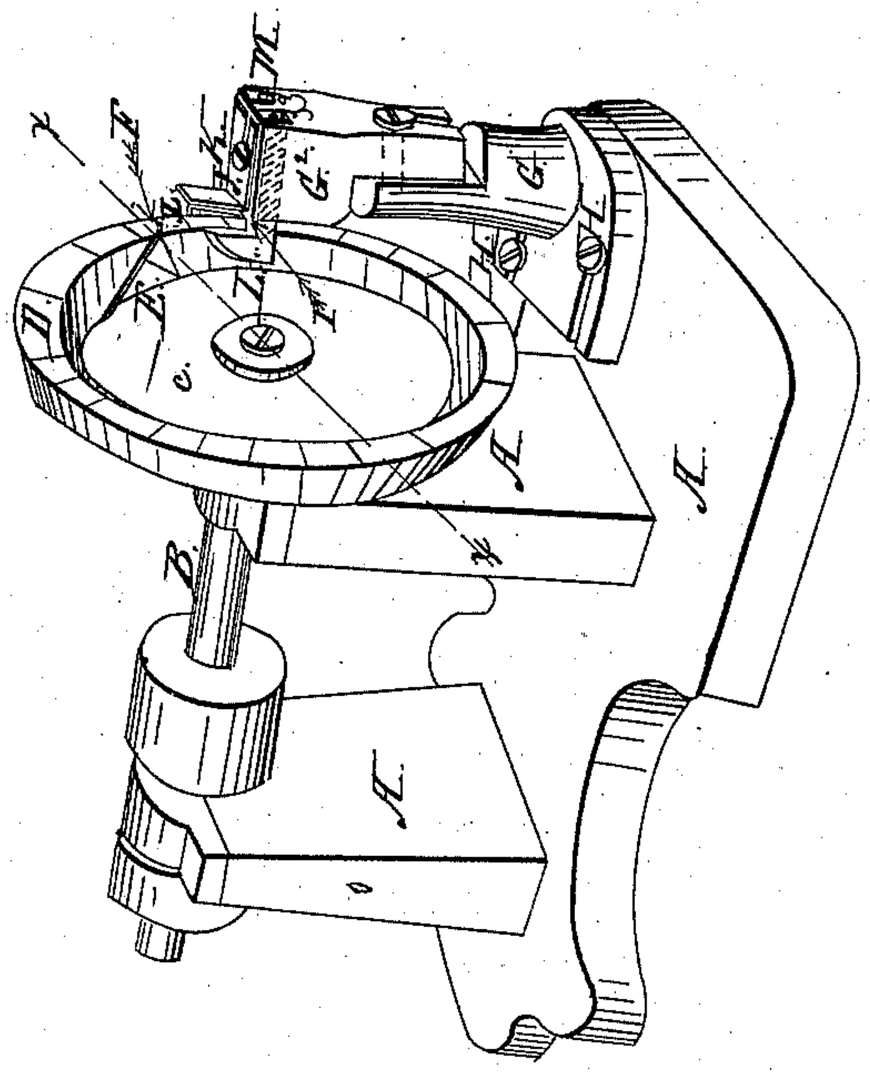


Fig: 1.



Witnesses;
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Inventor,
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UNITED STATES PATENT OFFICE.

CHARLES H. HELMS, OF POUGHKEEPSIE, NEW YORK.

IMPROVED LEATHER-CHAMFERING MACHINE.

Specification forming part of Letters Patent No. **56,938**, dated August 7, 1866.

To all whom it may concern:

Be it known that I, CHARLES H. HELMS, of Poughkeepsie, Dutchess county, and State of New York, have invented certain new and useful Improvements in Machinery for Chamfering and Scarfing Leather; and I do hereby declare that the following is a full description of the same.

The nature of my invention consists, first, in the construction of a cutter-wheel for the purpose of chamfering or scarfing the leather by making the face of the rim project over or beyond the hub, with a beveled surface, and of the width of the cutter secured therein from the back side through a throat, so that adjustable clamps may act on each side of the cutter to hold the piece of leather while being chamfered; second, in the construction of an adjustable standard, upon which the piece of leather is held while being chamfered or scarfed, and its combination with a clamp or clamps and a straight-edge or guide-plate for controlling the length of the chamfer or scarf.

But to describe my invention more particularly I will refer to the accompanying drawings, forming a part of this specification, the same letters of reference, wherever they occur, referring to like parts.

Figure 1 is a perspective view of the machine; Fig. 2 a cut section of the cutter-wheel through the line *x x*, Fig. 1, except that the point of the cutter is represented as being on a line with the guide and straight-edge on the upper end of the adjustable standard.

Letter A is the frame of the machine, which may be made of wood or metal, as circumstances may dictate. Arranged in the frame is a horizontal shaft, B, having on one end a cutter-wheel, C, the rim D of which projects over the face of the wheel some half-inch to an inch, more or less, as may be thought best, for the purpose of getting a cutting-surface of sufficient depth at right angles to the face of the wheel to admit of the proper adjustment of the cutter to shave or chamfer the piece of leather.

Through the face of the rim a throat, E, is cut, in which is secured a cutter, F, from the back side of the wheel, by means of a set-screw, so as to expose the point or edge of the cutter on the face of the rim. This face is beveled off from its inner edge to its outer edge. The object of this is to give to the edge of the cutter a more favorable action upon the leather than if it were parallel with the face of the wheel.

It will be obvious that more than one cutter is contemplated being used in the wheel from its diameter being so much greater than would be required if only one cutter was used.

Letter G is an adjustable compound standard secured to the bed of the frame by set-screws H. The lower part of the standard, G, is intended to regulate its space toward or away from the face of the cutter, and the upper half of the standard, G^2, is intended to regulate its elevation, so as to cause the cutter to make either a long tapering cut or scarfing as it is elevated above the line of the cutter-wheel axis or a short tapering cut as it is lowered to a line with the cutter-wheel axis, or a little below that line.

On the head of the upper half of the standard, G^2, is formed a straight-edge, I. The object of this straight-edge is to form a support, upon which the edge of the piece of leather rests while under the action of the cutter, and at the same time, by its near adjustment to the edge of the cutter, prevents it from taking any more than the thickness of the shaving equal to the space between the straight-edge and cutter.

To hold the leather up against the cutter, a movable guide-plate, J, is secured on the upper side of the straight-edge by means of a set-screw, K, and to clamp the leather against the guide-plate from the back side of it two adjustable clamps, L L, are arranged in grooves in the head of the upper half of the standard, G^2, so as to admit the claws or toes of the clamps to operate on the piece of leather to hold it at each side of the cutter, and so near to it as to keep the leather firm and solid while it is being shaved or chamfered.

To keep the clamps firmly up against the back of the piece of leather, and at the same time self-adjustable, springs M are attached to their ends in the groove in the head of the standard, and thus causes them to clamp or hold the piece of leather steadily and firmly without regard to any variations in thickness or inequalities of parts.

It will be obvious that various modes of applying the springs to the ends of the clamps may be adopted, and therefore do not limit myself to the precise mode I have exhibited in my drawings and model.

Having now described my invention, I will proceed to set forth what I claim and desire to secure by Letters Patent of the United States:

1. The cutter-wheel having a projecting rim with a beveled face, in combination with a cutter arranged in the said rim, substantially as hereinbefore set forth, for the purpose of chamfering or scarfing pieces of leather.

2. The combination of a standard composed of two parts, substantially as hereinbefore set forth, with a guide-plate, for the purposes as hereinbefore described.

3. The method of clamping or holding the piece of leather at its back side and back of the edge of the cutter, substantially as hereinbefore described, in combination with the cutter-wheel and guide-plate, for the purposes hereinbefore set forth.

C. H. HELMS.

Witnesses:
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