C. AMAZEEN.

Leather-Skiving Machine.

No. 200,682. Patented Feb. 26, 1878.

FIG. 1.

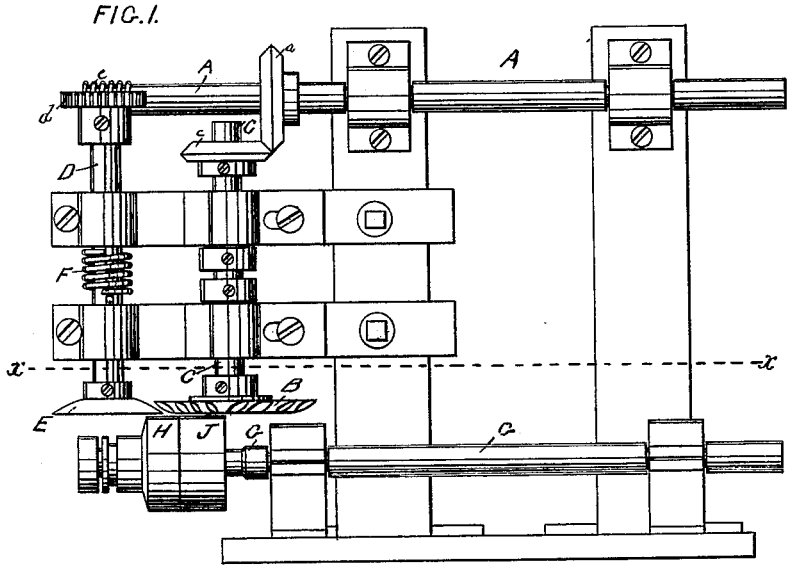

FIG. 2.

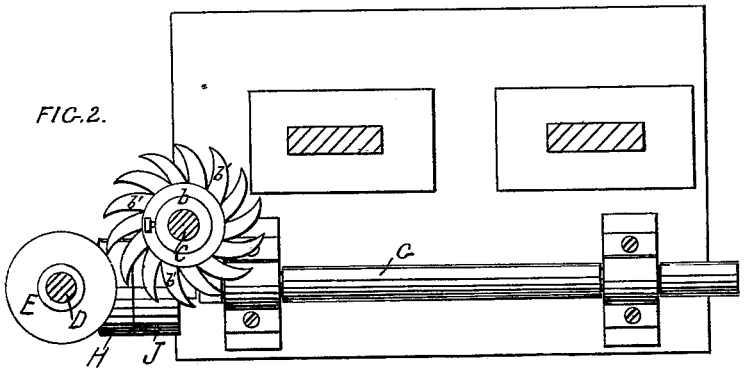

FIG. 4.

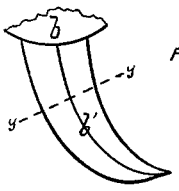

FIG. 3.

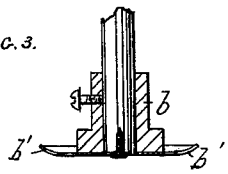

FIG. 5.

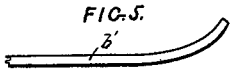

FIG. 6.

WITNESSES.

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UNITED STATES PATENT OFFICE

CHRISTOPHER AMAZEEN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LEATHER-SKIVING MACHINES.

Specification forming part of Letters Patent No. **200,682**, dated February 26, 1878; application filed June 1, 1877.

To all whom it may concern:

Be it known that I, CHRISTOPHER AMAZEEN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Skiving-Machines, which improvements are fully set forth in the following specification and the accompanying drawings.

The best method known to me of applying my invention is shown in the drawings, in which A indicates the main shaft of the machine, by which power is applied to revolve the cutter B by means of the bevel-gear *a c* and the shaft C, to the lower end of which the cutter B is attached, and also to revolve the feed-disk E by means of the worm *e*, pinion *d*, and the shaft D, to the lower end of which the feed-disk E is attached, F being a spring arranged to force the disk E toward the roll H. Upon a suitable shaft, G, are two rolls, H and J, the roll H serving as a support for the leather to be fed to the cutter by the feed-disk, and the roll J serving as a supporting-surface for the edge to be skived.

The feed-disk E is made rough upon its lower surface, so that it will seize upon the leather and press it upon the roll H; and this first part of my invention consists in the combination of the supporting cylinder or roll H with the disk E, arranged together so that only the lower surface of the disk, near its periphery, shall press upon the periphery of the roll, the roll being below the disk.

It is obvious that both the disk and roll may be moved positively, or that either one may be so moved. One or the other should have a roughened bearing-surface; and in this machine this surface is the lower surface of the disk, the leather to be skived being fed in with the rough side uppermost.

The other parts of my invention consist in the combination of a cylindrical cutting surface or bed with a cutter, the cutting-edges of which revolve on an axis at right angles to the axis of the cylindrical bed, and in such a way as to cut the material supported by the cylinder in a direction lengthwise of the cylinder, substantially, the cutting-edge, when acting, being practically at a tangent with the cylinder, the main purpose of the contrivance being to bring the material line by line, or little by little, to the action of the cutter.

The third part of my invention consists in the combination of a feed and a revolving cutter, so arranged that the action of the cutter shall tend to pull the material acted upon away from the feed in a direction across the line of feed.

My cutter consists of a hub, *b*, from which projects one or more radial blades, *b'*. These blades are bent slightly upward at their extremities, so as to give the required bevel to the edge of the leather; and in practice I have found a blade of the shape shown in the drawings to be the best for this purpose. They may either be cast in the same piece with the hub, or may be made separately and fastened to the hub, as shown in the drawings, or in any other convenient way. This cutter is fastened upon the end of a shaft, C, which is caused to revolve rapidly, so that each knife, as it revolves, will cut a small strip of leather from the edge of the piece, and this shaft I arrange so that the knives on the cutter will cut the edge of the leather at right angles to the feed.

Instead of presenting a flat surface of leather to the revolving cutter, I feed the leather over a roll, by means of which only a curved surface will be presented to the revolving cutters.

The number of knives may be made less or more than is shown, depending somewhat upon the speed at which the cutter-shaft revolves. In practice, it revolves at the rate of about five hundred times a minute with from nine to twelve knives.

In order that my apparatus may be used with leathers of different thicknesses the cutter is made adjustable on its shaft by means of the set-screw through the head of the cutter.

The operation of this machine is as follows: One end of the piece to be skived is inserted between the disk E and roll H. With its edge projecting the desired distance over the roll J, it is guided by the operator as it is fed forward by the roll and disk; and as it passes between the cutter B and the roll J, the blades of the cutter, revolving rapidly, cut off each a small piece, the direction of the cut

being substantially at right angles to the line of motion of the part held between the disk and the roll H. In thin stock this is an essential feature, as the action of the knife-edge upon the stock would tend to ruck it up, and thus cut through instead of skiving the leather, were it not that this action is across the line of feed. The workman holds the front end of the stock down, thus curving the stock over the roll J.

The rolls H and J may be one cylinder, instead of two, as shown; but in that case the supporting-roll J must revolve; otherwise it is not essential that this supporting-surface should be a complete cylinder, nor that it should revolve.

In Fig. 3 is shown a sectional view of my cutter; and in Figs. 4, 5, and 6, detail views of the knife, Fig. 4 being an enlarged plan, Fig. 5 a side view, and Fig. 6 a section through the line *y y* in Fig. 4.

I am aware of the patent to Bullock, No. 158,901, of 1875, and disclaim the mechanism therein shown.

What I claim as my invention is—

1. The feeding device above described, consisting of the supporting-roll H and the feeding-disk E, the roll being below the disk, and only the lower surface of the disk, near its edge, in contact with the periphery of the roll, all as described.

2. The combination of a revolving cutter and a cylindrical bed, arranged with the axis of the cutter at right angles to the axis of the bed, substantially as and for the purpose described.

3. The combination of a feeding device and a revolving cutting device, both substantially as above described, the cutting-edge, when making a cut, moving away from the feed and in a direction across the line of the feed, as set forth.

4. The improved cutter above described, consisting of the hub *b*, provided with a series of radial blades, *b'*, each bent slightly upward, substantially as specified.

CHRISTOPHER AMAZEEN.

Witnesses:
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