(Model.)

E. GOTT.

LEATHER SKIVING MACHINE.

No. 264,874. Patented Sept. 26, 1882.

Fig. 1.

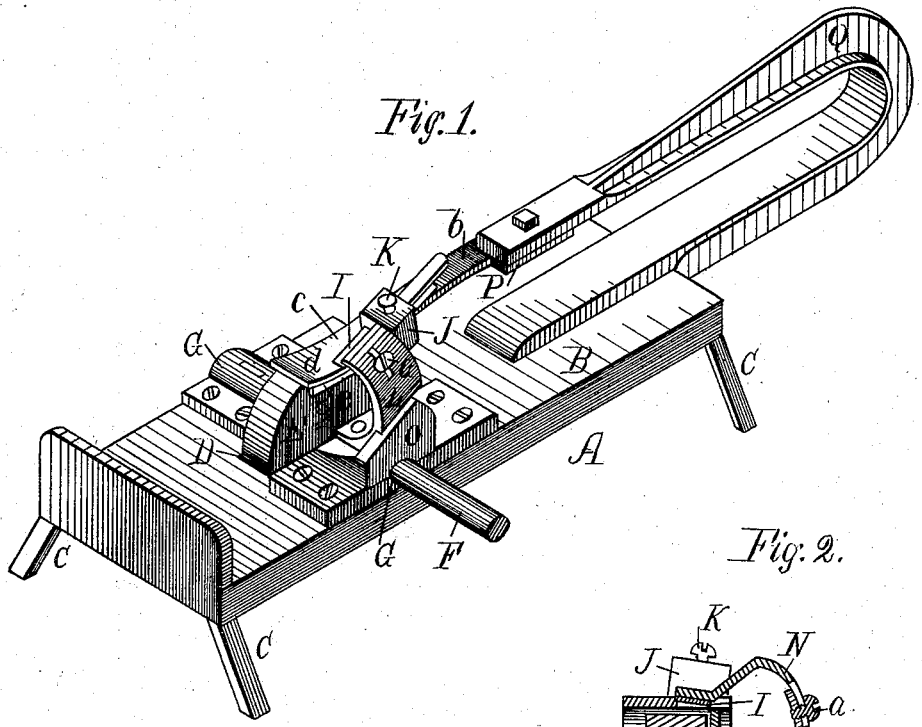


Fig. 2.

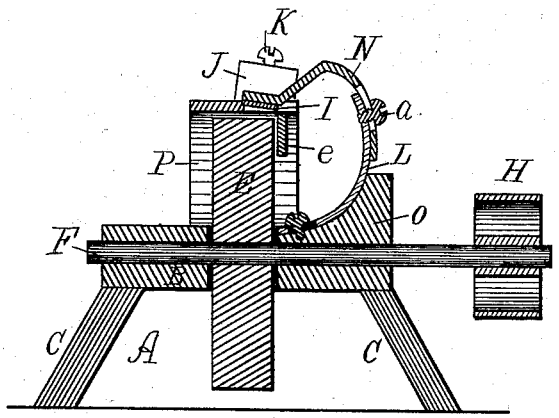
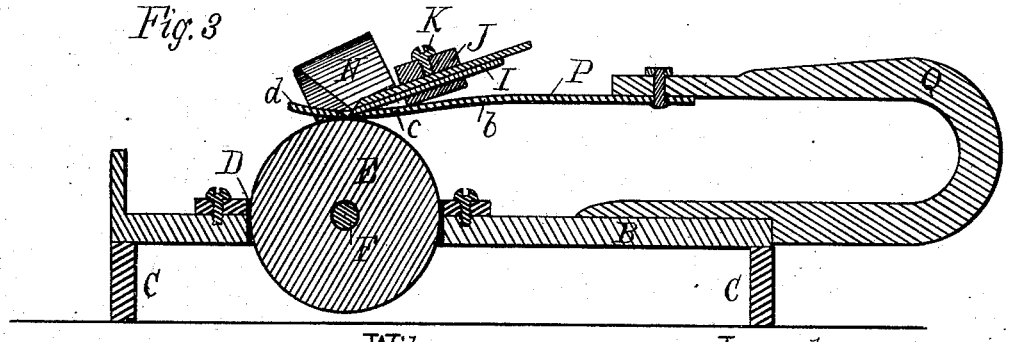


Fig. 3



Witnesses.
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UNITED STATES PATENT OFFICE.

ERASTUS GOTT, OF NEWTON, MASSACHUSETTS.

LEATHER-SKIVING MACHINE.

SPECIFICATION forming part of Letters Patent No. 264,874, dated September 26, 1882.

Application filed May 10, 1880. Renewed August 18, 1882. (Model.)

To all whom it may concern:

Be it known that I, ERASTUS GOTT, a citizen of the United States, residing at Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Leather-Skiving Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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 letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to leather-skiving machines which are provided with a feed-wheel, a spring forcing the leather against said wheel, and a device or devices for adjusting the position of the skiving-knife. The said invention consists in certain improvements in the construction and combination of the aforesaid parts, as will be hereinafter set forth.

The drawings accompanying this specification represent in Figure 1 an isometric elevation of a machine for skiving leather which embodies my invention, while Fig. 2 is a vertical cross-section, and Fig. 3 a vertical and longitudinal section, of the same.

Reference being had to the drawings, it will be seen that A represents the frame of the machine, which in this instance is represented as a flat tablet or bed-plate, B, erected upon legs C C, &c., and formed at its front end with a longitudinal opening, D, to receive the feed-wheel, which is shown at E. This feed-wheel is a circular flat disk secured to a horizontal shaft, F, mounted in bearings G G, and disposed transversely of the tablet B, such shaft being provided at one end with the usual pulley, H, by which it is put in motion, and the periphery of the wheel, which is practically flat, being toothed or abraded in any suitable manner in order to exert sufficient drag upon the leather to feed the latter under the action of the knife.

The knife is shown at I as a flat blade in the form of a chisel, secured within a stock, J, by a clamp-screw, K, and so disposed with respect to the periphery of the feed-wheel that its edge shall preferably stand slightly in rear of the highest point of such periphery—that is, of a vertical line drawn through the axis of the wheel—while the longest plane of the knife stands generally at a tangent of an acute angle to the periphery of said wheel.

The knife-stock J in this instance is attached to a curved bar, L, whose upper end is formed into a grooved or socketed head, N, to receive the knife, while the body of the stock is practically an arc of a circle, and is supported upon an abutment, O, erected upon the tablet B or one of the journal-boxes of the shaft F, and so disposed transversely of the periphery of the feed-wheel that the slope or angle of the cutting-edge of the knife with respect to the said periphery may be varied to determine the length of the scarf cut by such knife, as occasion may require. It may be desirable or necessary to provide for movement or adjustment between the knife and the bar, and, in fact, I have thus presented it in the accompanying drawings, in order to vary the height of the knife-edge with respect to the feed-surface of the wheel—that is to say, the knife-stock is represented as a separate piece from the bar and secured to the latter by a set-screw or bolt, *a*.

P in the drawings represents a plate-spring secured at its base to a standard or post, *q*, erected upon the tablet B, either in rear or to one side of the feed-wheel, the free end *b* of this spring resting upon or immediately over the periphery of the feed-wheel, and being disposed to one side of the knife until it passes in front of the latter, when it widens into a head, *c*, of a width greater than that of the periphery of the wheel.

The head *c* of the spring P preferably slopes to an edge in front of that of knife, and the two are situated closely together, in order that the pressure of the spring upon the leather fed by the wheel shall be brought as closely as possible to the knife-edge to enhance the effective action of the feed and prevent any tendency to doubling of the leather at this point.

The portion *d* of the head of the spring P, which extends in front of the knife, may be independent of the body of the spring and secured to the latter by a set-screw, in order that the width of the throat in front of the knife may be varied; but as this adjustment is effected by the knife itself, the latter construction would be unnecessary.

The spring P is adapted to bear upon or rest immediately over the periphery of the feed-wheel at two points—one in advance of and the other in rear of the cutting-edge of the knife—the former serving to seize and introduce the edge of the leather between the spring and wheel and to preserve and present the leather in a smooth condition, free from wrinkles, to the knife, while the bearing serves to draw the leather between the wheel and knife.

In lieu of a single spring executing the dual function, as explained, two springs may be employed, of equal or different powers; or the portion of the spring in advance of the knife may be independent of the body and secured to it by any suitable means; but I have found the single spring, as herein shown, to operate successfully.

The gage to guide the edge of the leather in its due relation to the knife is shown at *e* simply as a lip depending from the under side of the front end of the spring P and to one side of the feed-wheel.

It is very important in machines of this character that the pressure which serves to maintain the leather in contact with the feed shall exert its function as closely as possible to the edge of the knife and permit of passage of the shaving, in order, as before stated, to prevent wrinkling of the leather, and present it to the action of the knife in a smooth condition. By the employment of the spring as a medium for insuring contact of the leather and feed I am enabled to exert a pressure upon the former as closely to the knife-edge as may be desired.

The machine, being durable and effective, can be manufactured at comparatively small cost.

I claim—

1. In combination with feeding-wheel E and a skiving-knife, the curved bar Q and the spring P, supported thereby, said spring being recessed on one side to allow the action of said knife, substantially as shown.

2. In combination with a feed-wheel and a pressure-spring, the curved bars L and N, which support the skiving-knife, one of said bars being arranged to slide over the other, so as to give said knife a curvilinear adjustment, substantially as set forth.

3. The combination of knife-stock J, screw K, fixed plate L, slotted movable plate N, and screw *a* with the feed-wheel, pressure-spring, and skiving-knife, whereby a double adjustment of the latter may be effected without interfering with the action of said spring or wheel.

In testimony whereof I affix my signature in presence of two witnesses.

ERASTUS GOTT.

Witnesses:
F. G. SIMPSON,
H. E. LODGE.