

H. Z. Baker,

Cutting Leather.

No. 111,900.

Patented Feb. 21, 1871.

Fig. 1

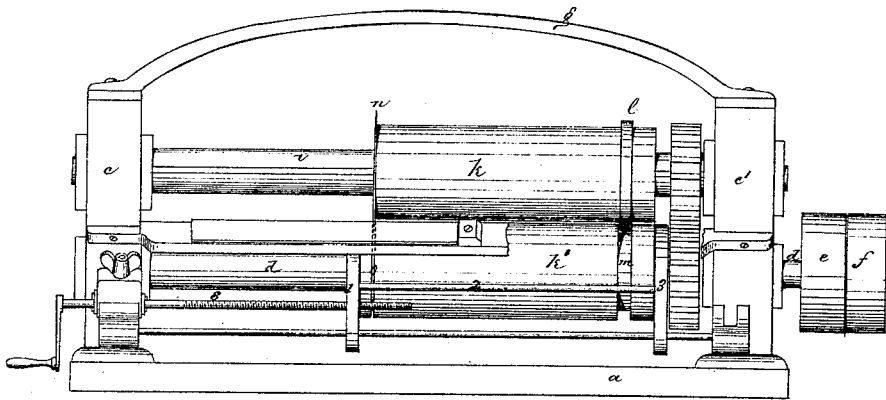


Fig. 2

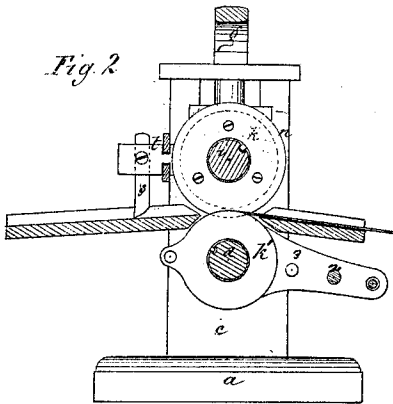
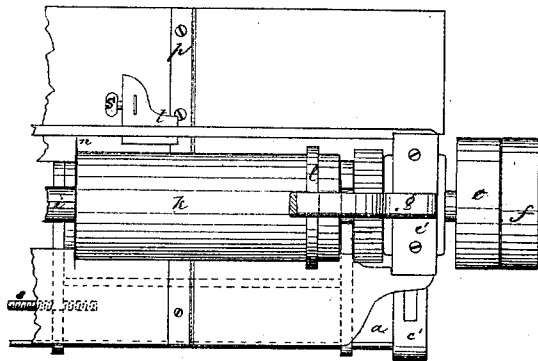


Fig. 3.



Witnesses:

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HORACE Z. BAKER, OF PAWTUCKET, RHODE ISLAND.

Letters Patent No. 111,900, dated February 21, 1871.

IMPROVEMENT IN MACHINES FOR CUTTING LEATHER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HORACE Z. BAKER, of Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and improved Machine for Cutting Leather; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation, and

Figure 2 is a transverse vertical section, and

Figure 3 a top view.

This invention has for its object the cutting of leather from sides or other large pieces into small pieces or strips for belting and other purposes; and

It relates to a machine in which a pair of parallel rolls is employed, one having a circumferential cutting-flange or knife, and the other a circumferential groove, the former of which fits into the latter, the function of said knife and groove being to cut off from a piece of leather that part of the same that is passed between the rollers and travels through the groove under the knife.

Referring to the drawing—

a is a bed-plate, of suitable dimensions, from the ends of which rise standards *c c'*.

d is a shaft mounted in the standards *c c'*, parallel with the bed-plate, extending beyond the standard *c'*, and bearing on its projecting portion a fast-pulley, *e*, for the driving-belt, and a loose-pulley, *f*, upon which to shift the belt when the shaft *d* is required to be stopped.

g is a bent rail secured to and connecting the tops of the standards *c c'*.

i is a second shaft mounted in the standards *c c'*, and parallel with the shaft *d*.

k k' are rolls loosely placed on the shafts *d i*, and furnished with splines that enter longitudinal grooves in the shafts, by which construction the rolls are made to revolve when the shafts turn, the latter being geared together. The rolls are fitted with screws in such manner that they may be moved lengthwise along the shafts.

On one of the rolls is a peripheral flange, *l*, and in a corresponding location on the other roll is a peripheral groove, *m*, into which the flange *l* enters, the flange and groove serving to connect the two rolls so that they move together and always preserve the same relative position.

On the other end of the upper roll is an annular knife, *n*, which enters a groove, *o*, formed in the lower roll to receive it.

A gauge, *p*, is secured to the bed-plate by the side of the rolls. The side of the leather off which the strip is to be cut is to be placed against the gauge *p*, and its front to be pressed against the knife *n*, by which it is immediately cut. As the leather is fed the strip that is cut off passes between the rolls, its width being determined by moving the knife and rolls toward or from the gauge by means of a screw, *s*, working through the arm 1 of the frame 1 2 3, which embraces the roll *k*.

The leather is guided in its progress by the gauge, and is fed to the rollers over an inclined plane.

The upper shaft is held down by springs placed above its journals within the standards *c c'*, which springs enable the upper roll to yield enough to accommodate any thickness of leather, the compressibility of the springs being governed by set-screws *r*, which pass through the tops of the box and standard and bear upon the upper ends of the springs.

The foregoing arrangement is adapted only to cutting stiff leather. Soft leather, if pressed against the annular knife, would sink into the groove *o*, and wrinkle and refuse to pass through. Accordingly, for cutting soft leather, the annular knife is dispensed with, and in its stead an upright knife, *s*, is fixed in a block, *t*, placed so as to slide between rails *u* that are attached to the standards in front of the rolls, the latter, in this case, being brought near enough together to answer as drawing-rolls to draw the leather against the knife.

Having thus described my invention,—

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

1. The combination of the longitudinally-sliding rolls *k k'*, the former provided with the circular knife *n* and tongue *l*, and the latter with grooves *o m*, into which the knife and tongue work, all as and for the purpose specified.

2. The combination of the rolls *k k'*, knife *n*, and groove *o*, with the adjusting-screw *s'* and frame 1 2 3, as and for the purpose specified.

HORACE Z. BAKER.

Witnesses:

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