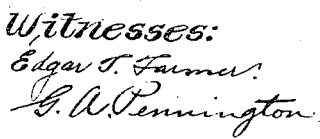


1,010,065.

2 SHEETS—SHEET 1.



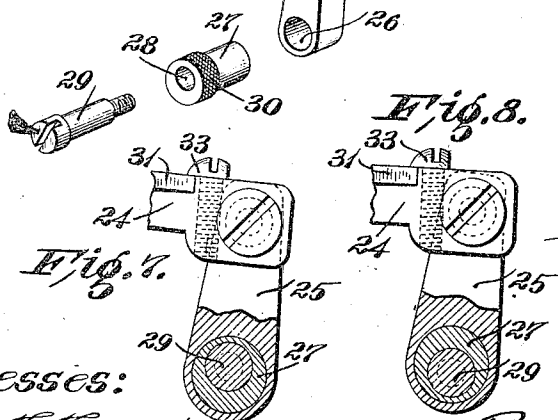
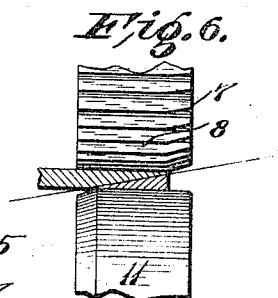
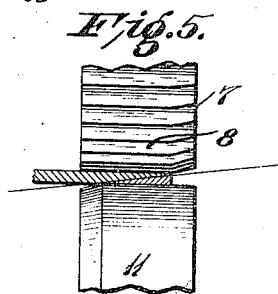
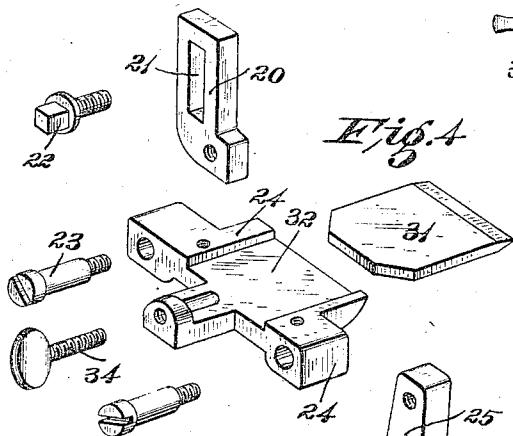
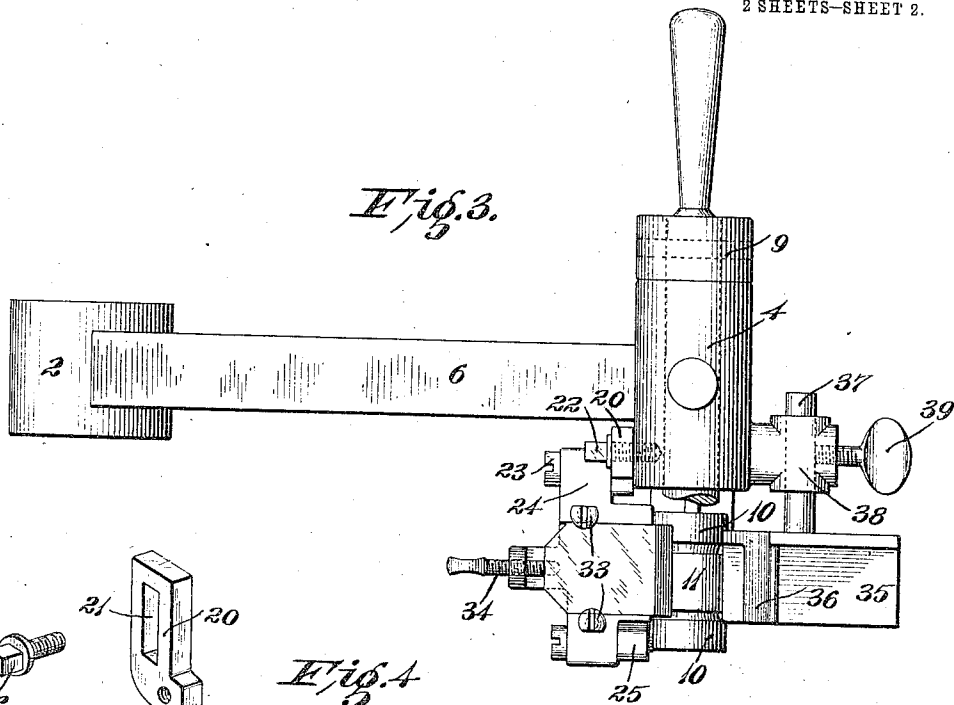
Inventor:
Quinine Medicine,
The Compound
his attys.

B. MEDALIE.
LEATHER SKIVING MACHINE.
APPLICATION FILED MAR. 14, 1911.

1,010,065.

Patented Nov. 28, 1911.

2 SHEETS—SHEET 2.



Witnesses:

Edgar T. Farmer

G. A. Pennington

Inventor:

Benjamin Medalie
By *Conrad Davis*,
his Attys.

UNITED STATES PATENT OFFICE.

BENJAMIN MEDALIE, OF ST. LOUIS, MISSOURI, ASSIGNOR TO AMERICAN SHOE
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OF MISSOURI.

LEATHER-SKIVING MACHINE.

1,010,065.

Specification of Letters Patent.

Patented Nov. 28, 1911.

Application filed March 14, 1911. Serial No. 614,499.

To all whom it may concern:

Be it known that I, BENJAMIN MEDALIE, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Improvement in Leather-Skiving Machines, of which the following is a specification.

This invention relates to skiving machines and it has for its principal objects to produce a simple and efficient machine for splitting and skiving or beveling strips or pieces of leather and similar fibrous materials, to provide for initially adjusting the cutting knife for a certain thickness of material and the automatic compensation of the knife for variations in the thickness of material passed through the machine, and to attain certain advantages hereinafter more fully appearing.

The invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings which form part of this specification and wherein like symbols refer to like parts wherever they occur, Figure 1 is a rear elevation of a skiving machine embodying my invention; Fig. 2 is a side elevation; Fig. 3 is a top plan view with the feed roller removed; Fig. 4 is a view illustrating the details of the knife holder and its adjusting elements detached; Figs. 5 and 6 are fragmentary views illustrating the action of the feed rollers and change in the angularity of the cutting knife for different thicknesses of material; and Figs. 7 and 8 are fragmentary views illustrating the action of the adjusting eccentric for the knife holder.

The machine may be mounted on any suitable stand and comprise a frame of any suitable construction. As illustrated in the drawings, the frame comprises a horizontal member 1 which may be bolted or otherwise secured on a work-bench; and at its opposite ends it is provided with rounded notched portions 2 which may be fitted over parallel horizontal bars of a skeleton supporting frame (not shown) and clamped in position in any desirable manner. The frame further comprises an upright member 3 on whose upper end is attached, integrally or otherwise, a horizontal member 4 which is bored to provide a bearing for a shaft 5.

The upright member 3 is braced by inclined members or stays 6 which are secured to or integral with the horizontal member 1.

On one end of the shaft 5 is fixed a feed roller 7 whose peripheral face is corrugated or serrated, as at 8. On the opposite end of the shaft 5 may be fixed a crank 9, or any other suitable device or gearing for rotating the shaft.

Journalled in a yoke 10 beneath the feed roller 7 is a cooperating roller or idler 11 whose peripheral portion may be smooth, as shown, or corrugated or serrated, as desirable. The yoke 10 is mounted on a shank 12 which slides in a vertical bore in the end portion 13 of a bracket 14 which projects laterally from the upright member 3 of the frame. To prevent the shank 12 from turning in the bore of the bracket, it is provided with a groove 15 into which a pin or spline 16 on the portion 13 projects.

Interposed between the top of the bracket portion 13 and bottom of the yoke 10 is a spring 17 adapted to press the work or strip of material between the rollers 5 and 11. The lower end portion of the shank 12 is reduced, as at 18, and screw-threaded to receive jam nuts 19. By adjusting the nuts on the screw-thread portion 18, the normal distance between the pair of cooperating feed rollers 5 and 11 may be varied for different thicknesses of work.

Mounted on the rear of the shaft-bearing portion 4 of the frame is a vertically adjustable member 20 which is provided with a slot 21 and secured by a pair of binding screws 22. Pivoted to a screw stud 23 secured to the lower end portion of this member 20 is a knife-holder or table 24. The knife-holder is pivoted at its opposite side to a link 25 whose lower end is perforated, as at 26 (see Fig. 4), to receive an eccentric 27 which is provided with a bore 28 to receive a supporting stud 29 secured to the yoke 10. The eccentric may be provided with a knurled portion 30, or be arranged otherwise to receive a wrench for manipulating it.

The portion of the eccentric 27 which fits the perforation 26 in the link 25 is of a length slightly greater than the thickness of the link 25 so that, when the screw-stud 29 is tightened, the eccentric 27 is also

tightened against the yoke, while the link 25 is free to pivot on said eccentric. The cutting blade or knife 31 is mounted in a recessed upper portion 32 of the holder 24 and it is held in place by two locking screws 33. The rear edge portion of the knife blade 31 bears against an adjusting screw or stop 34. By adjusting the screw 34, the cutting edge of the knife may be adjusted with respect to the feed rollers 5 and 11.

In front of the feed rollers is a supporting bracket or work-guide 35. This work-guide preferably comprises a horizontal shelf portion and a right angular upstanding side from which projects a guard 36 adapted to keep the fingers of the operator from moving into contact with the feed rollers. This work-guide or bracket 35 is mounted on a shank 37 which is slidably fitted in a horizontal bore in a supporting bracket 38 at the front of the member 4 and is secured by a set-screw 39. By this arrangement, the work-shelf 35 may be adjusted with respect to the feed rollers so as to guide strips of leather to be beveled or skived at different widths.

In beveling or skiving the edge portion of a strip of leather, the cutting knife is adjusted at an angle (see Figs. 1, 2 and 5). The adjustment is effected by moving the knife-holder supporting member 20 up and down, and also by turning the eccentric 27 on which the supporting link 25 for the knife-holder is pivoted. Also, the nuts 19 are adjusted on the shank 12 to space the idler 11 from the feed roller 5 the proper distance for a given thickness of work, allowing for a certain amount of pressure upon the work between the rollers by the spring 17. A strip of leather is placed on the supporting shelf or guide 35 and moved into contact with the feed rollers and the upper roller 5 which grips the work is rotated in the direction of the arrow, by turning the crank 9, whereupon the strip is carried between the rollers and against the cutting edge of the knife-blade 31. The knife being set at an angle, the leather is split on a bevel as indicated by the diagonal line shown in Fig. 5. Should a thicker piece of leather be fed between the rollers, the yoke carrying the roller 11 will yield against the pressure of the spring 17, and the knife-holder being pivoted to the supporting member 20 and link 25 which is pivoted on the yoke, the knife will be tilted to a greater angle (see Fig. 6). Thus, it will be seen that the knife may be adjusted in the first instance to any desirable angle; and it automatically accommodates itself to any variation in the thickness of the leather passed through the machine. So, too, in some cases, the knife blade instead of being tilted at an angle, may be set with its cutting edge parallel with the axes of the feed rollers for

the purpose of splitting a strip of leather straight across, instead of beveling or skiving the edge portion.

Obviously, the device admits of considerable modification without departing from my invention. Therefore, I do not wish to be limited to the specific construction and arrangement shown.

What I claim is:

1. A skiving machine comprising a horizontally journaled fixed feed roller, a horizontally journaled idler resiliently supported in coöperative relation to said feed roller vertically thereunder, a cutting knife, a knife holder extending transversely at the rear of said feed roller and idler in the plane of their meeting peripheral portions and pivoted on one side to a fixed support and pivoted at its opposite side to the resilient support for said idler, whereby the position of the knife is automatically varied to compensate for various thicknesses of work which is passed between said feed roller and said idler.

2. A skiving machine comprising a horizontally journaled fixed feed roller, an idler resiliently supported in coöperative relation to said feed roller, a cutting knife approximately in the plane of the meeting peripheral portions of said feed roller and idler, a holder for said knife pivoted at one side to an adjustable normally stationary support which is movable in a direction transversely with respect to the axes of said feed roller and idler, said holder being pivoted at its opposite side to an adjustable member on the resilient support for said idler, whereby the knife may be adjusted at different angles initially for a certain thickness of work and whereby, also, said knife automatically accommodates itself for different thicknesses of work which is passed between the feed roller and idler.

3. A skiving machine comprising a horizontally journaled feed roller, a coöperating feed roller beneath said first mentioned roller, said second mentioned roller being journaled on a vertically movable spring-pressed support, a knife arranged with its cutting edge in coöperative relation to said feed rollers so as to receive the work endwise, a knife-holder pivoted at one side to a vertically adjustable normally stationary support and pivotally and adjustably secured at its opposite side to the spring-pressed support for the lower feed roller, so that said knife holder may be set initially at different angles for a given thickness of work and automatically compensates for a variation in the thickness of the work, and means for adjusting the knife on its holder with respect to the feed rollers.

4. A skiving machine comprising a supporting frame, a horizontally-disposed shaft journaled in said frame, a feed roller fixed

on said shaft, a vertically movable yoke
mounted under said feed roller, an idler
 journaled in said yoke, said yoke having a
shank portion which is slidably fitted in a
5 lateral bracket extension on said supporting
frame, a spring interposed between said
yoke and said lateral bracket extension, an
adjustable stop on said shank adapted to
bear against the under side of said lateral
10 bracket extension, a vertically adjustable
member on the supporting frame, a knife
holder pivoted to said member at one side

of said feed roller and idler, and a link ad-
justably and pivotally mounted on said yoke
and pivotally connected to said knife holder 15
at the opposite side of said feed roller and
idler.

Signed at St. Louis, Missouri, this 9th day
of March, 1911.

BENJAMIN MEDALIE.

Witnesses:

G. A. PENNINGTON,
PAULINE AMBERG.