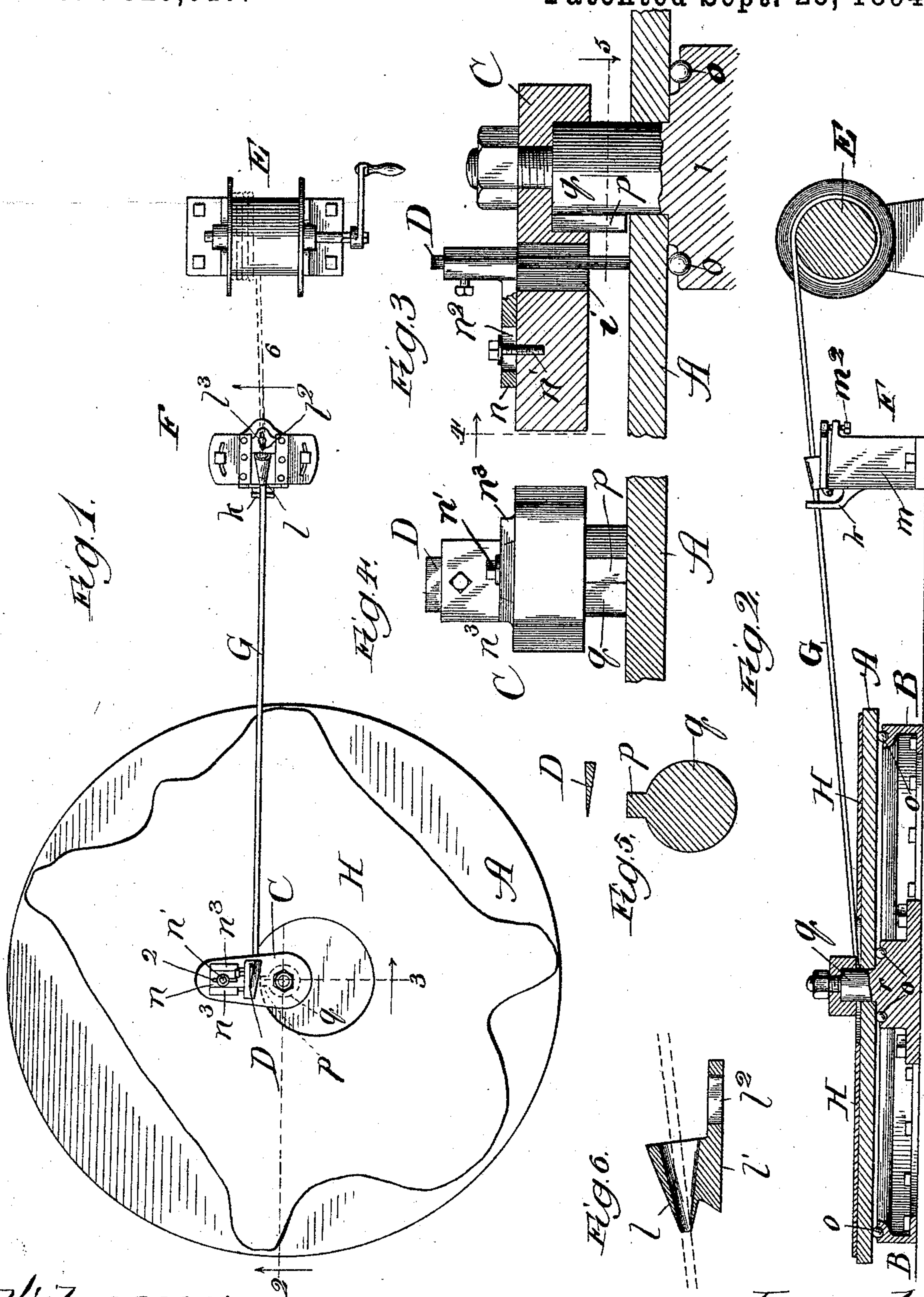


(No Model.)

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MANUFACTURE OF ROUND LEATHER BELTING.

No. 526,617.

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MANUFACTURE OF ROUND LEATHER BELTING.

SPECIFICATION forming part of Letters Patent No. 526,617, dated September 25, 1894.

Application filed April 2, 1894. Serial No. 506,093. (No model.)

To all whom it may concern:

Be it known that we, FRANK E. DRUSCHKY and LUDVIG ADOLPH SCHJERLING, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented an Improvement in the Manufacture of Round Leather Belting, of which the following is a specification.

The object of our invention is to provide an improved machine that shall, with a single operation, cut up an entire hide, with the least possible waste, into a continuous strip adapted for use as machinery-belting; and our further object is to provide, as an adjunct of the hide cutting machine, a trimming attachment for reducing the strip, fed to it as it is cut from the hide, to a rounded shape in cross-section, thereby the better to adapt it for use as belting in sewing and type-writing machines and similar machinery of the lighter class.

Referring to the accompanying drawings—Figure 1 is a plan view of our improved machine, illustrating it as in operation upon a hide. Figs. 2 and 3 are enlarged sections taken, respectively, at the lines 2 and 3 on Fig. 1 and viewed as indicated by arrows. Figs. 4 and 5 are sections taken, respectively, at the lines 4 and 5 on Fig. 3 and viewed as indicated by arrows. Fig. 6 is a section taken at the line 6 on Fig. 1, viewed in the direction of the arrow, and enlarged.

The general construction and operation of our improved machine may be described as follows:

On a rotary horizontal table, having a central upward-extending post carrying a lateral guide stop, is loosely imposed a hide having an opening cut near its center through which to permit the stud to pass. Adjacent to the guide-stop, a cutting-tool is stationarily adjusted to extend at its cutting edge, to a suitable angle with relation to the guide-stop, the latter and the cutting-tool or knife being located within the plane of the opening in the hide. By then rotating the hide, the knife penetrates the edge of the material surrounding the opening and cuts it; and as the rotation proceeds, the severed length is crowded against the stationary guide-stop and is con-

tinuously fed between the latter and the knife, whereby the width of the strip being cut remains uniform, and by the operation of the knife against the guide-stop, the hide itself is shifted automatically to cause it to present a continuous spiral line to the knife along which its severing function is exerted. When the strip thus cut is sufficiently long to reach to a winding drum, its end is attached to the latter; and thereafter the rotation of the hide (and incidental rotation of the table by the frictional contact with it of the hide) is produced by turning the reeling device to wind upon it the strip as it is formed by the action of the cutter.

A trimming-die is interposed between the cutting and winding apparatus, and the strip, on its way to the drum, is passed through the die and shaved by it into the desired round shape.

In detail, our improvement involves the following-described construction.

A is a flat circular table mounted on a stationary annular bed B having a central post r terminating in a stud q having a rigid guide-stop p projecting laterally from it. The post r and base B are grooved circumferentially in their top portions, as shown, to receive anti-friction balls o on which the table A rests, and which cause it to present the minimum of resistance against rotation.

C is an arm removably fastened rigidly upon the stud q to extend horizontally therefrom in the direction of the guide-stop p ; and on the arm, between guides n^3 thereon, is adjustably fastened a knife-holder n , by a set-screw n' passed into the arm through an elongated slot n^2 in the holder. In the holder is rigidly, but adjustably supported in perpendicular position, to extend through an elongated slot i , the knife D, comprising a blade preferably of the form in cross-section represented in Fig. 5, and occupying the position relative to the guide-stop p as shown in that figure.

E is the drum or spool, of any suitable form, located in convenient position with relation to the table; and between the latter and the spool we provide a trimming-die device F, comprising a bed m having a plate

provided with lateral guides, hinged to one side of the base to extend over its top, and adjustable on its hinge by a set-screw m^2 (Fig 2), and the cone-frustum shaped hollow cutting-die l on a base l' fitting between the guides m' and having an elongated slot l^2 through which to fasten it in place by means of a set-screw l^3 and permit it to be adjusted lengthwise of the die. We also show, in Fig. 2, a guide k on the side of the base m adjacent to the table A, by which to direct the strip to the trimming die.

To prepare a hide H to be operated upon by our improved machine, a circular section is cut out of its center, and it is then spread upon the table A with the stud r and guide-stop protruding through its central opening. The arm C is then adjusted and the knife D is set to present its cutting edge to the circumferential edge of the hide-opening. By then turning the hide against the cutter a strip G is cut therefrom, and passed, between the knife and guide-stop, through the die l to the spool E, to which the leading end is fastened. Thereafter the strip is cut by turning the spool to wind it thereon, whereby the strain on the hide and its frictional contact with the easily rotatable table turn the latter and present the material of the hide properly to the cutter, the strip G, by being pulled between the knife and the guide-stop p , preventing variation of the width, in cutting it.

The setting of the trimming die l by its means of various adjustment, should be such as to bring its longitudinal center into proper alignment between the points of cutting and winding to prevent it from cutting into or through the strip.

By means of our improvement, a hide of any dimensions may be cut up by a single operation into a continuous length of belting of any desired width, and with the least possible waste of leather, which consists merely of the fag-ends of the hide; thereby affording great advantage over the method hitherto practiced

of forming the belting by hand, in several operations.

The spool E may be turned by machinery, if desired, instead of by hand; and the details of our machine as shown and described may, in various particulars, be departed from without thereby departing from our invention. Hence we do not limit our invention to such particular details.

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

1. In a machine for cutting hides into strips, the combination of a rotatable hide-support, and a guide-stop and a cutter near the center about which the hide is rotated and relatively supported to form a passage between them for the strip as it is cut from the hide, substantially as described.

2. In a machine for cutting hides into strips, the combination of a bed having a central post r formed with a stud q , a rotatable table having a ball-bearing support on said bed, a guide-stop p on the stud and an arm C thereon carrying a knife D presenting its cutting edge at an angle to the guide-stop and forming therewith a passage for the strip as it is cut from the hide, substantially as described.

3. In a machine for cutting hides into strips, the combination of an annular bed B having a central post r formed with a stud q provided with guide-bearing p , a table A having a ball-bearing support on said bed, an arm C supported on the stud and having a slot i , a knife-bearing n adjustably supported on the arm, and a knife D supported on the bearing to extend perpendicularly through said slot and form with the guide-stop a passage for the strip as it is cut from a hide on the table, substantially as described.

FRANK E. DRUSCHKY.

LUDVIG ADOLPH SCHJERLING.

In presence of—

SEYMOUR STEDMAN,
WILLIS MELVILLE.