F. D. WILKS.

BELT TRIMMING MACHINE.

APPLICATION FILED NOV. 12, 1918.

1,316,751.

Patented Sept. 23, 1919.

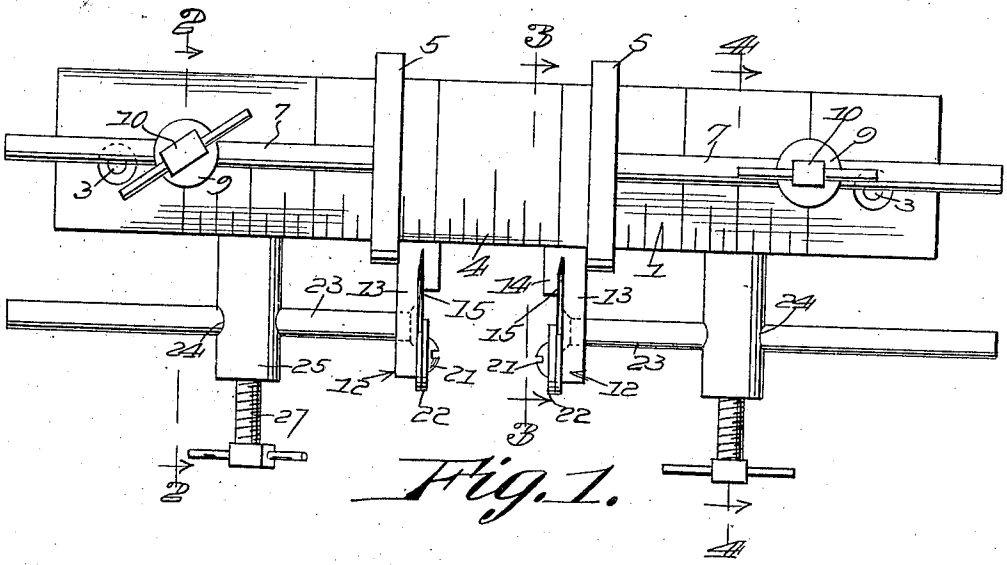


Fig. 1.

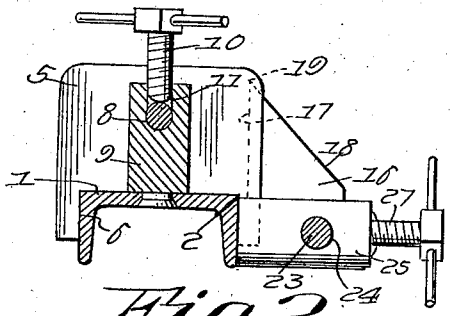


Fig. 2.

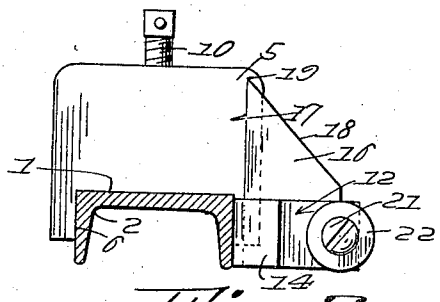


Fig. 3.

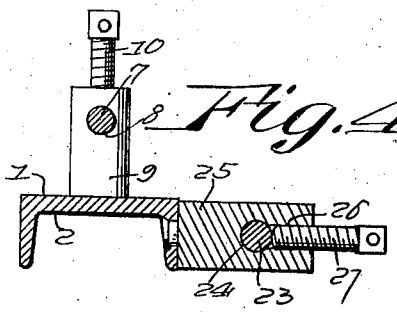


Fig. 4.

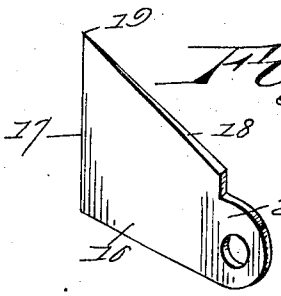


Fig. 5.

Frank D. Wilks,
Inventor

By Geo. P. Kimmel.
Attorney

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK D. WILKS, OF NEPHI, UTAH.

BELT-TRIMMING MACHINE.

1,316,751. Specification of Letters Patent. Patented Sept. 23, 1919.

Application filed November 12, 1918. Serial No. 262,178.

To all whom it may concern:

Be it known that I, FRANK D. WILKS, a citizen of the United States, residing at Nephi, in the county of Juab and State of Utah, have invented certain new and useful Improvements in Belt-Trimming Machines, of which the following is a specification.

This invention has reference broadly to improvements in measuring instruments and more particularly relates to a belt trimming machine.

The invention has for its primary aim and object to provide a device of the above mentioned character designed for cutting and trimming bands, belts, traces and other pieces of leather or other material, the component parts being adjustable so that the band, et cetera, may be cut or trimmed the desired width, or else the main piece of leather or other material being cut may be severed into a plurality of belts, et cetera, of different predetermined widths.

It is an equally important object of this invention to provide a device of the above mentioned character wherein coöperative guiding and cutting means are adjustably mounted on a graduated base plate and positioned so that the band or uncut strips may be drawn between the guiding means and over the cutting means for insuring the cutting of the main band into a plurality of strips.

More particularly the present invention embraces the provision of a device of the above mentioned character wherein the guiding plates and the cutters and holders are of improved construction and are mounted so that they may be slid relative to each other on the base plate to occupy predetermined positions of adjustment while acting in conjunction with the connection or mounting for the guiding plates and the cutter holders is improved clamping means for releasably retaining the parts in predetermined position of adjustment.

Among the other aims and objects of the present invention may be recited the provision of the device of the above mentioned character, wherein the number of parts are comparatively few, the construction simple, the cost of production low, and the efficiency high.

Other objects in full, as well as the nature, characteristic features and scope of this invention will be more readily apparent from the following description taken in connection with the accompanying drawings and pointed out in the claim, forming a part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a top plan view of the device,

Fig. 2 is a transverse section taken on the line 2—2 of Fig. 1 in the direction in which the arrows point,

Fig. 3 is a transverse section taken on line 3—3 of Fig. 1 in the direction in which the arrows point,

Fig. 4 is a transverse section taken on line 4—4 of Fig. 1 in the direction in which the arrows point, and,

Fig. 5 is a perspective detail of one of the cutters.

Similar characters of reference are employed in all of the above described views to indicate corresponding parts.

Referring now more particularly to the accompanying drawings there is provided an attaching base plate 1 the under surface of which is channeled longitudinally as indicated by the numeral 2 for disposition on a suitable main support (not shown) and the base plate is also formed near the respective ends with openings 3 through which are adapted to pass suitable fastening means (not shown) for the anchoring of the base plate in position. One face of the plate preferably the upper, is provided with graduations 4 for a purpose which will presently appear.

With a view toward providing the improved means for guiding a band, belt, trace or other piece of leather or other material, (not shown), a pair of guides in the form of transversely disposed plates 5 are employed and have their lower edges bifurcated or recessed as at 6 and straddled about and resting on the base in opposed relation with respect to each other and also designed for sliding movement over the base plate for a purpose which will presently appear. Rods 7 have their inner ends rigidly connected centrally of the rear faces of the plates and project therefrom being slidably arranged through horizontal bearing openings 8 provided in vertical supporting posts 9 which in turn are carried by the base plate near the respective ends thereof. Suitable clamps which may be and preferably are in the form of set screws 10 are adjustably mounted in the threaded passages 11 provided in the posts 9 to communicate with the open-

ing 8 while the inner ends of the screws are designed to frictionally engage the rods 7 to hold the guide plates in various positions of adjustment on the base plate.

As intimated, improved cutting means has been employed for coöperating with the guiding means and in reducing this feature of the invention to practice a pair of oppositely disposed holders generally designated by the numeral 12 are provided and positioned laterally of one side edge and substantially flush with the upper face of the base plate. Each holder consists of a plate like body 13 formed at its inner edge with a flange 14 which is spaced from the body so as to consequently provide a vertically disposed groove 15. Cutters in the form of blades 16 are arranged in the grooves in such a manner that the straight sharpened edges 17 face the adjacent edge of the base plate while the upper edges are cut diagonally as at 18 from the rear edges toward the front edges to provide points 19. Ears 20 project from the rear edges of the blade near the lower edges and are engaged by clamps preferably in the form of screws 21 which latter are passed through the ears and carry washers 22 and these washers are held against the ears when the screws are anchored in the holders for removably fastening or clamping the cutters in the holders. Rods 23 have their inner ends anchored centrally of the body 13 of the holders and project from the rear faces thereof being slidably disposed through the horizontal bearing openings 24 provided in the posts 25 which in turn project laterally from the inner side edge of the base plate near the respective ends thereof. These posts are also formed in their outer ends with inwardly extending threaded bores 26 while clamps in the form of set screws 27 are adjustably mounted in the bores and designed for frictionally engaging the rods 23 for clamping the holders and consequently the cutters in predetermined adjusted positions relative to and between the guides as indicated in Fig. 1.

In use, assuming that the parts have been assembled in the manner described and illustrated in the drawings, the set screws 10 are loosened to permit of the proper predetermined adjustment of the guides 5 and these screws are subsequently tightened to clamp the guides in the proper position. The set screws 27 are also loosened to permit of the proper adjustment of the holders as well as the blades 16 between the guides such as indicated in Fig. 1 whereupon the screws 27 are tightened. An uncut strip of leather or other material (not shown) is now drawn between the guides 5 so as to be engaged and cut by the blades 16, thereby separating the outer portions containing the rough and unfinished edges from the medial portion which forms a band, belt or trace (not shown). It is also to be understood that if the piece of material (not shown) has previously cut straight side edges then the cutters may be adjusted so as to insure of the provision of three bands, belts or traces in a single operation. By adjusting the cutters relative to the guide 5 the side portions of the piece of material (not shown) may be of equal width or else of different predetermined widths. It will also be appreciated that one of the holders and cutters may be used in conjunction with the guides the other being disconnected by merely loosening the set screw and removing the rod 23 from the bearing post.

It is believed in view of the foregoing description that a further detailed description of the operation of the invention is entirely unnecessary. Likewise it is believed that the advantages of the invention will be readily apparent.

Still further embodiments of the invention than those herein especially defined may be resorted to as conditions or preference may dictate, as may be in keeping with the hereto appended claim.

Having thus fully described the invention, what is claimed as new, and desired to be secured by Letters Patent, is:

A device of the character described including a graduated base plate, opposed vertically and laterally disposed bearing posts carried respectively by the upper and one of the side faces of the plate, rods horizontally slidable through the posts, guides carried by the adjacent ends of the rods in the vertical posts and positioned on the upper face of the plate, holders carried by the adjacent ends of the other rods and positioned laterally of the side edge of the plate and also arranged between the guides, cutting blades, means for detachably fastening the cutting blades in the holders so that the cutting edges face the plates, and means mounted in the lateral posts and engageable with the rods for consequently holding the guides and holders in predetermined positions of adjustment.

In testimony whereof, I affix my signature hereto.

FRANK D. WILKS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."