

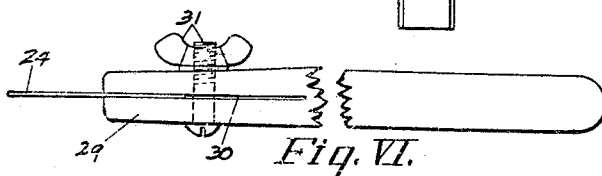
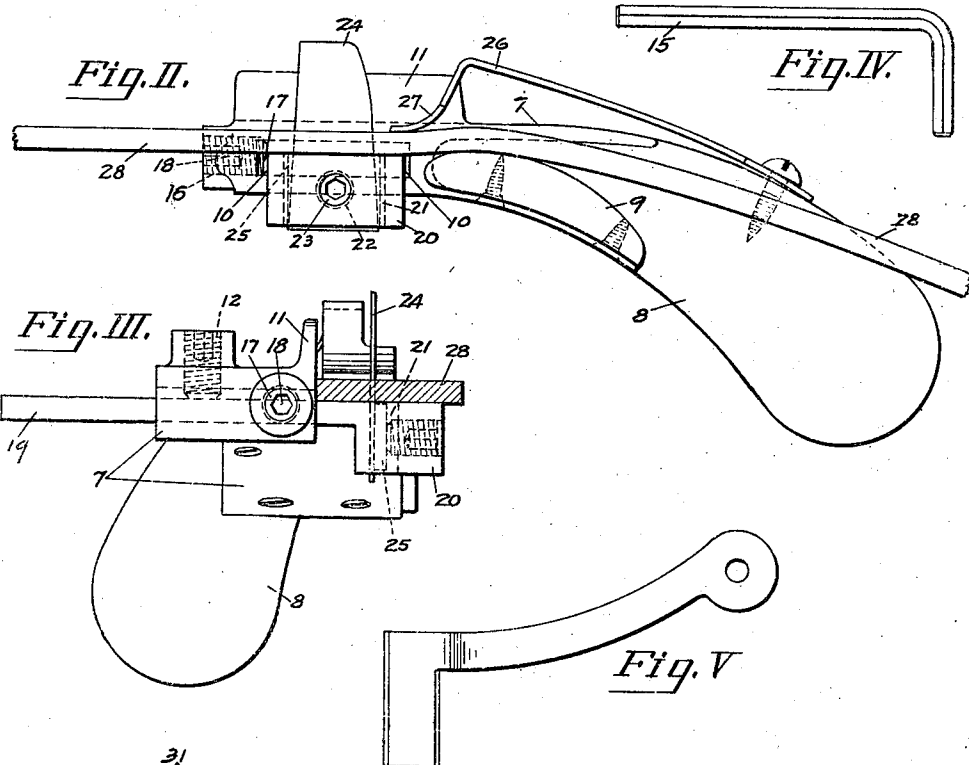
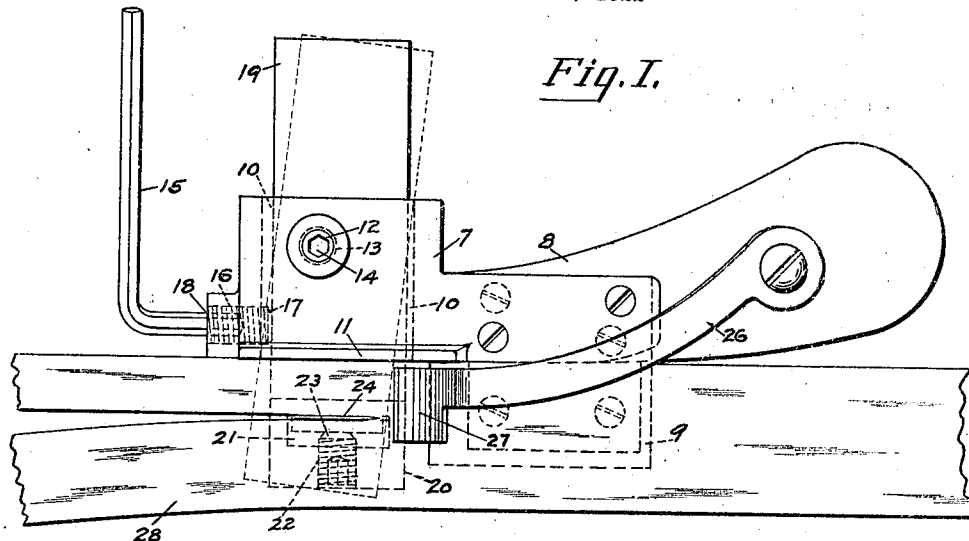
July 31, 1923.

1,463,312

T. M. DILLINGER

LEATHER CUTTER

Filed March 22, 1922



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UNITED STATES PATENT OFFICE.

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LEATHER CUTTER.

Application filed March 22, 1922. Serial No. 545,332.

To all whom it may concern:

Be it known that I, THOMAS M. DILLINGER, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented a new and useful Improvement in Leather Cutters, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to leather cutting devices as a class.

The object of my invention is to provide a manual cutting device with an adjustable knife and a spring clamp to press the material to position, adapted to cut leather or other material of varying thickness in strips of desired widths. These objects, as well as other advantages, I attain by the construction, combination and arrangement of parts illustrated in the accompanying drawings which form a part hereof.

Fig. I is a top plan view of the device with a strip of material in cutting position.

Fig. II is a side elevation of same on the cutting side.

Fig. III is a front elevation.

Fig. IV is a detail view of locking key.

Fig. V is a detail view of spring guide for material.

Fig. VI is a plan view of grip-holder for holding the knife while being sharpened.

Like characters refer to like parts in the views.

The device has a metal frame 7 rigidly secured to a handle 8 which has a curved side support 9. The frame has a transverse rectangular opening 10 through its forward part, a vertical guide 11 on its upper part, a threaded locking pin or set screw 12 mounted in a vertical threaded aperture 13 in the upper part of the frame, extending downwardly to the opening 10. The pin 12 has a longitudinal recess 14 in its outer part, with a series of faces in said recess, adapted to receive and engage a key 15 provided with corresponding faces about it and near one end thereof. In the forward end of the frame are a like horizontal aperture 16, extending to the opening 10, and a pin 17 with opening 18. A cutting knife carrier 19 has a flat rectangular plate slidable through and within the frame 7, with an integral block 20 on one end, having a vertical, transverse opening 21 through the same. The block 20 has in its forward part a horizontal aperture

22, extending to the opening 21. This opening and pin 23 are similar to those in the frame. A vertical cutting knife 24 is placed within the block opening 21. A flat holding piece 25 may be employed to engage the knife on one side and receive the engaging pin or set screw 23 on its opposing side. The knife is retained in desired position pressed between the piece 25 and the opposite interior face of the block 20 in its opening 21. A curved spring clamp 26 is rigidly secured at one end upon the upper surface of the handle 7. The clamp 26 extends outwardly and downwardly with a rearwardly curving free end 27 formed to rest upon material passing over the upper surface of the block 20 and opposite and transversely to the cutting edge of the knife 24. Material, for example, a leather strip 28 is shown in position for cutting and partly cut. In Fig. V is shown another spring clamp similar to the clamp 26 but with a larger free end which may be required for material of greater width. A grip holder 29 may be provided to hold the knife, such as here used, when the same is to be sharpened. It consists of a handle with a split 30 from one end, in which to insert the knife 24, and fastening means 31 to secure it in place. The setting pin or screw 12 is positioned to act as a pivot for the carrier 19 in a manner to allow a radial movement of its outer end carrying the knife. The setting pin 17 is positioned to engage the edge of the carrier between the position of the pivotal pin 12 and knife 24 and allow the carrier to be moved radially to the rear until the knife cutting edge is in a parallel plane of travel with the face of the opposing guide 11.

It will now be seen that the device is adjusted to cut material in strips of a desired width in the manner now to be described. The cutting knife, with properly keen edge, is first secured in the carrier 19 by first loosening the pin 23 with the key 15. The knife is placed in vertical position between the face of the interior of the block 20 and the piece 25, engaging the opposing surface of the knife, the key is again used to drive the pin 23 against the piece 25 and the knife is secured in a desired position within the block 20. The carrier 19 is then inserted in the frame opening 21 until a space of the desired width of material to be cut is attained between the cutting edge of the knife

and the opposing face of the frame and its guide 11. The pin 12 is then driven against the upper surface of the carrier 19 to secure it in the position to which it is set. The pin 17 is driven against the outer edge of the carrier 19 to adjust and secure it, and to provide a parallel alignment between the face of the guide 11 and cutting edge of the knife. Both pins are operated as may be required to adjust the carrier to this position and secure it there rigidly. It is well known that in sharpening a knife of the kind described, a bevelled cutting edge may be made which is not central with the body of the knife. It is therefore necessary to adjust the cutting edge itself into a path of travel having a plane parallel with that of the opposing guide face. It is for this reason that the pin 12 is arranged to act as a pivot and the carrier is first set forward beyond where it should be and then a careful adjustment is made by forcing the carrier rearwardly by the pin 17 until the cutting edge of the knife is in the desired position as stated. This fine adjustment is highly essential in cutting such narrow strips as lacing, used for belts and the like. It is assumed that the outer or side edge of the leather is cut evenly, and this edge is inserted against the guide 11 with the end edge against the cutting edge of the knife 24, the clamp 26 having its end 27 resting upon the upper surface of the leather. The handle 8 is grasped firmly with a thumb upon the clamp 26 which is depressed sufficiently to cause the leather to feed horizontally over the block surface against the knife. The part of the leather lapping beyond the knife is held rigidly in the other hand, while the hand grasping the handle draws the device forward with the knife cutting from the material a strip of predetermined width. This operation is repeated as often as required. It is obvious that the knife may be set to cut material of a very narrow width or of greater widths and insure extreme accuracy in the cutting so that opposing cut edges are in parallel alignment. It will also be observed that material, which is very thin or of considerable thickness, may be easily drawn over the support and kept in a horizontal plane on the carrier block by proper pressure on the spring clamp. While there are other cutters intended to perform like cutting, I contend that none has therein the combinations of parts, or certain parts which my device has, to accomplish the knife adjustment, feed, smoothness and accuracy of operation here shown. My device is extremely simple, economical in construction and easily and quickly operated manually. It is in these

respects, as well as others, distinctly new and useful.

I claim:

1. In a cutting device, the combination of, a frame having a transverse horizontal opening and a vertical guide face, a knife carrier extending through and slidable in said frame opening, the carrier having a vertical knife secured in same, a vertical set pin positioned in the frame to allow it to engage the carrier beyond the guide face and act as a pivot for the carrier, and a horizontal set pin positioned in the frame to allow it to engage the edge of the carrier and move same radially until the cutting edge of the knife is arranged along a path of travel in parallel alignment with the opposing guide face, and the two pins to secure the carrier rigidly in such position.

2. In a cutting device, the combination of, a frame provided with a horizontal opening through it, a vertical guide face and vertical and horizontal setting pins movable in the frame into and out of its said opening, with a carrier slidable within said frame opening and provided with a vertical cutting knife and means to secure the cutting knife therein, said carrier and frame being arranged to allow the carrier to be adjusted with the knife cutting edge in parallel alignment with the frame guide face and there secured by said frame pins, also with a spring clamp rigidly secured at one end and having its free end adjustable downwardly upon material passing over the surface of the carrier toward the cutting edge of the knife.

3. In a cutting device, the combination of, a frame provided with a horizontal opening through it, a vertical guide face and vertical and horizontal setting pins movable in the frame into and out of its said opening, with a carrier slidable within said frame opening and provided with a vertical cutting knife and means to secure the cutting knife therein, said carrier and frame being arranged to allow the carrier to be adjusted with the knife cutting edge in parallel alignment with the frame guide face and there secured by said frame pins, also with a spring clamp rigidly secured at one end and having its free end adjustable downwardly upon material passing over the surface of the carrier toward the cutting edge of the knife, and a curved support adjacent to the carrier positioned to support material being fed upon the carrier toward the cutting edge of the knife.

THOMAS M. DILLINGER.

Witnesses:

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