To all whom it may concern:

Be it known that I, Louis H. Gaffney, a citizen of the United States, and a resident of Terry, in the county of Prairie and State of Montana, have invented a certain new and useful Improvement in Leather-Cutting Machines, of which the following is a specification.

My present invention relates generally to leather cutting machines, and more particularly to machines for cutting leather in harness making, although it is to be understood that it may be used for cutting leather in other instances, as for trimming hides, or may be used in connection with materials of various natures other than leather and for various purposes in the cutting of such other material.

In the accompanying drawings illustrating the means and mechanism preferred in the carrying out of my invention, and which form a part of this application:

Figure 1 is a top plan view;
Fig. 2 is a partial end elevation;
Fig. 3 is a partial side elevation, parts being broken away and in section;
Fig. 4 is a vertical sectional view taken substantially on line 4-4 of Fig. 3;
Fig. 5 is a detail perspective view of the cutter carriage removed, and
Fig. 6 is a detail perspective view of a fragmentary portion of the guide strip of the cutter board.

Referring now to these figures, my invention contemplates the provision of an enlarged rectangular cutter board 10, having graduations along its rear edge as at 11, extending lengthwise thereof, and preferably supported in elevated position, as by means of vertical end supports 12, one of which is seen, for instance, in Fig. 4, by means of which the cutter board may be supported in either secured or unsecured relation at the desired point of use.

At its front side, as best seen in Fig. 4, the cutter board 10 is slightly raised as at 13, adjacent a cutter groove 14, the latter of which is formed by means of an adjacent guide strip 15 paralleling the said side of the cutter board and provided at spaced points with angular extensions 16, projecting beneath the cutter board and apertured at 17 for the reception offastening members 18 by which the guide strip 15 is secured to the cutter board, said guide strip having slots 19 therethrough and in the upper surfaces of the extensions 16, for the reception of gage arms 20, the extensions 16 having threaded openings 21 in which thumb screws 22 operate for engagement with the gage arms 20 to secure the latter in adjusted position.

These gage arms 20 which are graduated, as seen in Fig. 1, in particular, have their outer ends connected to a gage bar 23 parallel to the grooved edge of the cutter board 10, in order to gage, for instance a strip of material disposed on the cutter board 10, to be cut.

At its ends the cutter board 10 is provided with forwardly projecting arms 24, the forward extremities of which support the pivot 25 of the curved end arms 26 of a presser frame including a presser board 27 connecting the said arms 26 and adapted, in operative position as seen in Fig. 4, to overlie the cutter board 10 particularly adjacent the grooved edge of the latter, in parallel relation, and exert a firm and even pressure downwardly upon the material to be cut, disposed upon the upper surface of the cutting board.

The rear ends of the end arms 26 of the presser frame are preferably connected by a handle bar 28, extending at its center through bearing brackets 29 secured to the rear side edge of the presser board 27, the latter having a longitudinal rib 30 forming a guide for the cutter carriage.

The rib 30 just mentioned is located upon the upper surface of the presser board 27, and the cutter carriage consists of a sliding block 31 having a lower groove 31a receiving the rib 30, one side face of the block 31 being in the same vertical plane with the forward side edge of the presser board 27 and the forward side edge of the cutter board 10, the block 31 having at said side a rectangular projection or lug 32 and a threaded opening 33 below said lug, the latter for the reception of a clamping screw 34.

The cutter 35 consists of a blade having a lower curved cutting edge 36, and an upper longitudinal slot 37, through the latter of which the clamping screw 34 extends, in order that the cutter 35 may be secured in desired vertical adjustment, for use in connection with goods to be cut of varying thicknesses. The projection or lug 32 also enters the slot 37 above this clamping screw 34.
The upper wall of the groove 31 of the block 31 is, however, provided with a recess 40 extending lengthwise for a portion only of its length, and positioned to receive therein a stop pin 41 projecting upwardly from the guide rib 30 as seen in Figs. 1 and 3, and which stop pin engages the inner end of the recess 40 before the cutter 35 has reached the extreme end of the cutter board 10 toward which it is movable in the cutting operation, in order to prevent engagement of the cutting edge with the end arms 24 and 25 of the cutter board and presser frame respectively. It is obvious that, by adjusting the guide bar 23, toward and away from the cutter board 10 a distance readily ascertainable by the graduated gage arm 20, strips of material of corresponding width may be readily cut from material disposed on the cutter board 10 and held in proper position with the forward edge thereof against the guide bar 23, by the pressure of the presser frame held downwardly thereagainst, the cutting operation simply involving the movement of the cutter carriage in its guided relation upon the upper surface of the presser frame, with the lower edge of the cutter 35 in the groove 14, as seen in Fig. 4.

In this manner, leather and other material may be readily and quickly cut into strips with clean sharp edges, without danger of fraying or mutilation, and with perfect safety to the operator, all in addition to the increased speed at which the operation may be accomplished.

It is to be observed, furthermore, that my invention provides for this purpose a construction which is simple, strong, and durable, which may be readily transported from place to place and utilized at any desired point, and which will effectively and efficiently operate to carry out the foregoing objects.

I claim:

1. In a device of the character described, a cutter board having forwardly projecting arms at the ends thereof, a presser frame having end arms pivotally connected to the end arms of the cutter board, and including a presser board between its said end arms moveable above the cutter board in parallel relation thereto, said presser board having an upper longitudinal rib, a carriage slidably engaging the rib in guided relation and movable on the presser board, a knife depending along the forward side edges of the presser board and cutter board and having a lower cutting edge, and means to adjustably secure the said knife to the carriage.

2. In a device of the character described, a cutter board having forwardly projecting arms at the ends thereof, a presser frame having end arms pivotally connected to the end arms of the cutter board, and including a presser board between its said end arms moveable above the cutter board in parallel relation thereto, said presser board having an upper longitudinal rib, a carriage slidably engaging the rib in guided relation and movable on the presser board, a knife depending along the forward side edges of the presser board and cutter board and having a lower cutting edge, and means to adjustably secure the said knife to the carriage, said carriage having a handle whereby it may be manually moved with respect to the presser frame, and said presser frame including a handle bar extending between and connecting the said end arms whereby pressure may be applied thereto in its movement toward the surface of the cutter board.

3. In a machine of the character described, a cutter board, a presser frame moveable with respect thereto, and in parallel relation thereto, having a guide, a knife carriage slideable on the guide longitudinally of the cutter board and in parallel relation to one side edge thereof, said presser frame having a guide rib, and said carriage including a body and handle, the former of which has a groove receiving the guide rib of the presser frame, and one wall of which is recessed partly therealong, and a stop pin projecting from the rib of the presser frame, for movement into the recess to limit movement of the carriage with respect to the presser frame.

LOUIS H. GAFFNEY.

Witnesses:

Wm. G. Armstrong,

H. K. Campbell.

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