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CUTTER, PARTICULARLY ADAPTED FOR THE
USE IN CUTTING WALL COVERINGS
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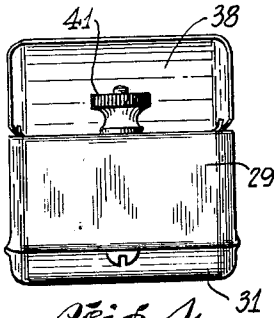


Fig. 4.

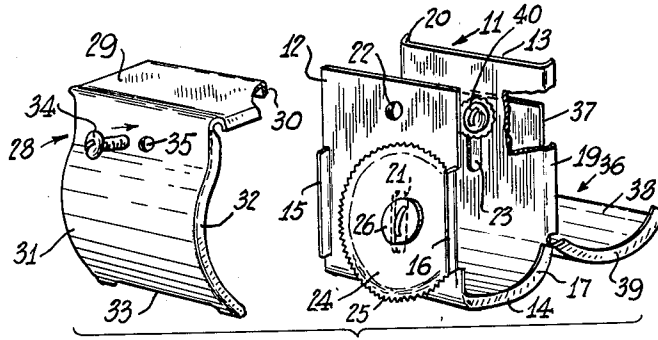


Fig. 5.

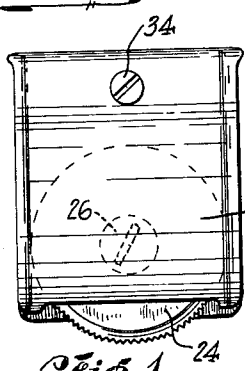


Fig. 1.

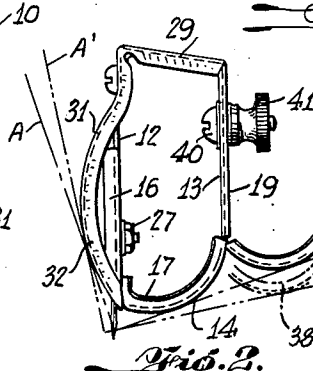


Fig. 2.

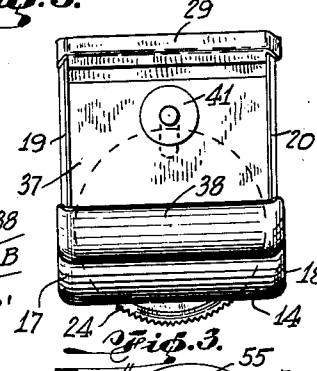


Fig. 3.

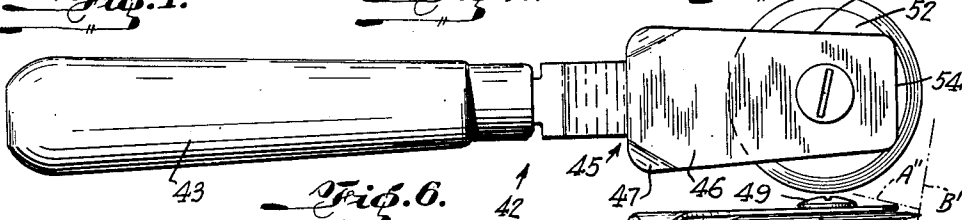


Fig. 6.

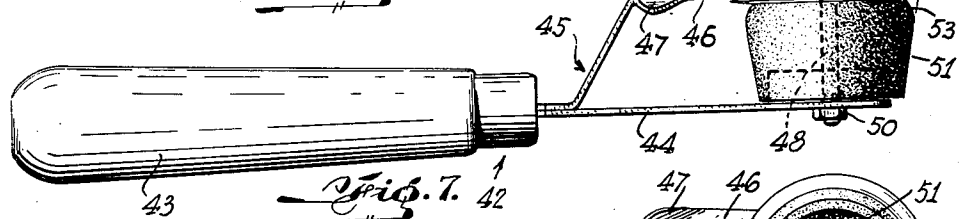


Fig. 7.

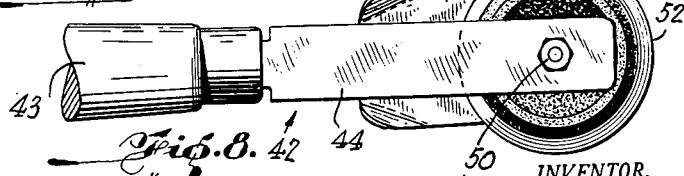


Fig. 8.

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CUTTER, PARTICULARLY ADAPTED FOR THE USE IN CUTTING WALL COVERINGS

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2 Claims. (Cl. 30—292)

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This invention relates generally to cutting devices, and more particularly to wall-paper cutters having circular cutting blades.

When wall-paper is affixed to a wall it is necessary to trim the edges of the various panels in order to form a butt joint which will give a desired flat appearance, and also to trim the edges of the paper adjacent to the wood work, such as door frames, window frames, base boards and ceiling mouldings. In effecting such trimming of wall-paper it is desirable that the cutting blade be prevented from cutting into the wall itself to thereby protect the wall from damage, and also to increase the period during which the blade retains its sharpness. If penetration of the wall by the cutting blade is to be avoided, the paper in the immediate area being cut must be spaced from the wall to thereby permit penetration of the paper alone. Finally, in trimming the edges of wall-paper adjacent to wood work of various kinds it is desirable that the wood-work be used as a guide for the cutting blade without contacting the latter, which contact would dull the cutting edge. Because of the various cross-sections found in wood work, it is desirable that provision be made for adjustment of the blade position relative to the guide member engaging the adjacent wood work.

It is therefore an object of this invention to provide a wall-paper cutting or trimming device having a rotatable cutting blade which will not penetrate or otherwise damage the underlying wall surface, and which is guided by contact of the device with an adjacent length of wood work or trim with the blade itself being protected against dulling contact with such wood work.

Another object is to provide a wall-paper cutting or trimming device in which the cutting blade is supported relative to the wall by a laterally disposed rounded member so that the paper may stand away from the wall in the immediate cutting area, and in which the cutting blade may be disposed in several spaced positions relative to the woodwork or trim used as a guide.

A further object of this invention is to provide a wall-paper cutting or trimming device which will efficiently perform the trimming operation without damaging the paper or the underlying wall, and in which the cutting blade is shielded from contact with hard dulling members during such trimming.

Finally, an object of this invention is to provide a wall-paper trimming or cutting device having the above advantages, and yet being simple and sturdy in construction, to thereby permit the widest possible use thereof.

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With these and other objects and advantages which will appear as the description proceeds in view, this invention consists in the combination, arrangement and details of construction of the several parts of the device hereinafter described and illustrated in the accompanying drawing, and then more particularly defined in the appended claims.

In the accompanying drawing, wherein like reference numerals indicate like parts:

Figure 1 is a front elevation of a preferred embodiment of a device constructed according to this invention;

Figure 2 is a side elevation of the device illustrated in Figure 1, and showing an alternate adjusted position thereof partly in broken lines;

Figure 3 is a rear view of the cutting device illustrated in Figure 1;

Figure 4 is a top plan view of the wall-paper cutting device shown in Figure 1;

Figure 5 is an exploded perspective view, partly broken away, of the several parts making up the wall-paper cutting device illustrated in Figures 1 through 4;

Figure 6 is a front elevation of a modified form of wall-paper cutting device constructed according to this invention;

Figure 7 is a top view of the modified form of cutting device illustrated in Figure 6; and

Figure 8 is a fragmentary rear view of the modified form of cutting device shown in Figures 6 and 7.

Referring to the drawing, and initially to Figures 1 through 5 thereof, a preferred embodiment of a wall-paper cutting device constructed according to this invention is there shown and generally indicated by the reference numeral 10. The wall-paper cutting device 10 includes a substantially U-shaped bracket 11, which is formed with a front wall 12, a rear wall 13, and an arcuate bottom wall 14 connecting the lower edges of the front and rear walls 12 and 13, respectively. The front wall 12, of the U-shaped bracket 11, is formed with forwardly extending flanges 15 and 16 formed along portions of the opposite side edges thereof. The opposite side edges of the curved bottom wall 14 are bent upwardly around a substantial radius as at 17 and 18. The opposite side edges of the rear wall 13, of the bracket 11, are bent rearwardly to provide the guide flanges 19 and 20. An elongated slot 21, extending parallel to the side edges of the front wall 12, is formed therethrough, adjacent the lower end thereof. A tapped opening 22 is also formed through the front wall 12, and is positioned adjacent the top edge thereof. Final-

ly, an elongated slot 23 is formed through the rear wall 13, and extends parallel to the opposite side edges of the latter.

A cutting blade 24 of circular configuration, and formed with a serrated cutting edge 25 is rotatably mounted upon the front surface of the front wall 12. Such rotatable mounting is achieved by the bolt 26 extending through the center of the cutting blade 24 and through the elongated slot 21 of the front wall. The bolt 26 is locked in adjusted position along the slot 21 by the nut 27 threaded upon the inner end thereof. The adjustment of the axis of the rotating cutting blade along the slot 21 provides for the regulation of the extension of the serrated cutting edge 25 below the arcuate bottom wall 14 of the bracket 11.

A guide member 28 is provided for preventing contact of the cutting blade 24 with the piece of wood work or trim along which the wall-paper is being cut. The guide member 28 includes a top portion 29 which extends between the top edges of the front wall 12 and the rear wall 13 of the bracket 11. The top wall 29 of the guide member is provided with a depending flange 30 formed along the rear edge thereof for engagement over the top edge of the rear wall 13. A forwardly bowed guide wall 31 depends from the forward edge of the top wall 29 and is adapted to overlie the front surface of the front wall 12 of the bracket 11 in forwardly spaced relation to the rotatable cutting blade 24. The opposite side edges of the guide wall 31 are bent rearwardly as at 32 and at the lower end thereof engage the outer side of the flanges 15 and 16 formed on the front wall 12. The lower edge of the guide wall 31 is formed with a cut out 33 through which the cutting edge 25 of the cutting blade loosely projects. The guide member 28 is secured in position upon the bracket 11 by the screw 34 which extends through the opening 35 formed adjacent the top of the guide wall 31, which is threadedly received by the tapped opening 22 in the front wall 12 of the bracket.

An adjustable supporting member 36 includes an upstanding plate 37 which is slidably disposed against the rear surface of the rear wall 13 of the bracket, with the side edges of the plate 37 engaging within the rearwardly extending flanges 19 and 20. An arcuate bottom portion 38 extends rearwardly from the lower edge of the plate 37, and is formed with upwardly bent side edges 39. The supporting member 36 is adjustably secured to the bracket by the bolt 40 extending loosely through the elongated slot 23 formed in the rear wall 13, and the nut 41 threadedly receiving the bolt 40 and adapted to be tightened thereon, in order to secure the plate 37 in adjusted position on the rear surface of the rear wall 13.

In operating the wall paper cutting device described above, the guide wall 31 is placed against the piece of wood work or trim, along which it is desired to cut the paper, and the arcuate bottom wall 14, and arcuate rearwardly extending portion 38 of the supporting member, are rested upon the paper attached to the wall. The cutting blade 24 will then cut the paper as the device is moved along the piece of wood work or trim. Referring specifically to Figure 2, the effect of the adjustability of the supporting member 36 relative to the rear wall 13 of the bracket is illustrated. The right angularly related lines A and B represent the molding or other wood work along which the paper is being cut, and the surface of the wall, respectively. With the arcuate

bottom portion of the supporting member 36 is the position illustrated by the full lines, it will be seen that the cutting blade would sever the paper along a line immediately adjacent to the intersection of the planes A and B. If the locking nut 41 is loosened, and the arcuate bottom portion 38 of the supporting member 36 lowered to the position shown in broken lines, and indicated by the numeral 38', the bracket will be rocked upon the arcuate bottom wall 14 thereof, and the cutting blade will then cut the paper along a line which is spaced substantially from the intersection of the line A' and B', which once again represent the moulding and the wall, respectively. Therefore, by adjusting the position of the arcuate bottom portion 38 of the supporting member, vertically upon the rear wall 13, the position of the cutting blade relative to the plane drawn through the contacting portion of the bowed wall 31 of the guide member, may be changed. Furthermore, the curved configuration of the bottom wall 14 of the bracket 11 makes it possible for the wall-paper to stand away from the wall in the immediate area of cutting, so that the cutting blade 24 may be raised, by adjustment along the slot 21, to thereby prevent penetration of the cutting blade into the wall while cutting the paper.

Referring now to Figures 6, 7, and 8, wherein a modified form of the wall-paper cutting device is illustrated, such modified form is generally indicated by the reference numeral 42. The cutting device 42 includes a handle 43 from which the straight elongated member 44 extends. A second member 45 also extends from the handle 43 and is provided with an off-set portion 46 extending parallel to and spaced apart from the member 44. The off-set portion 46 of the member 45 is formed with an increased width, relative to that of the member 44, and the corners thereof, disposed closest to the handle 43 are bent downwardly towards the member 44 as at 47. A shaft 48 extends between the spaced apart portion 46 and the member 44 adjacent the free ends thereof. The shaft 48 is formed of a bolt 49 and a nut 50 threaded thereon. A supporting roller 51 is rotatable upon the shaft 48 and has a truncated conical configuration. A cutting blade 52, of circular configuration, is also rotatably disposed upon the shaft 48 and abuts against the end of wider diameter of the roller 51. The cutting blade 52 is formed with a smooth cutting edge, as seen in Figure 6. The edge of the roller 51 immediately adjacent to the cutting blade 52 is rounded as at 53 in order to permit the wall paper to stand away from the wall in the immediate area of cutting. As seen in Figure 6, the shaft 48 is positioned a greater distance from the end edge 54 of the off-set portion 46 than it is from the side edge 55 thereof. This specific positioning of the shaft relative to the end edge 54 and the side edge 55 of the off-set portion 46 results in a structure which provides for the spacing of the cutting edge of the blade 52 relative to mouldings or similar trim along which the paper is being cut. In Figure 7, the wall is represented by the line B'', and the moulding or trim by the line A''. When the cutting device is disposed in the position illustrated by Figure 7, relative to the wall and moulding, the end edge 54 of the off-set portion 46 will space the cutting edge from the intersection of the planes indicated by the lines A'' and B''. If the cutting device is operated with the side edge 55 engaging against the moulding, then the cutting edge

of the blade 52 will be disposed closer to the intersection of the molding and the wall. Therefore, by changing the position of the handle 43 relative to the wall, in using the cutting device illustrated in Figures 6 through 8, an effect can be achieved, with respect to the position of the cutting blade, which is equivalent to the effect achieved by the adjustment of the position of the arcuate portion 38 relative to the bracket in the device illustrated in Figures 1 through 5. The contour of roller 51 may be varied from that shown in Fig. 7, such as round-edged, spherical etc.

Having thus described two modifications of wall paper cutting devices constructed according to this invention, it is to be understood that such specific modifications are merely illustrative, and that changes and modifications may be effected therein without departing from the scope of this invention as defined in the appended claims.

What I claim is:

1. A wall-paper cutting device for cutting the edges of paper along trim fixed on the wall, said device comprising a rotatable circular blade having a cutting edge, means supporting said blade, said means being movable over the paper and being adapted to prevent penetration of the blade into the underlying wall, guide means engageable with the trim for movement therealong and adjustably spacing said blade relative to the trim to thereby shield the cutting edge against dulling

contact with the trim, said supporting means including a tapered roller having its portion of greater diameter disposed adjacent to said blade and rotatably concentrically therewith, said guide means including a flat member disposed outwardly of said cutting blade and having the end edge thereof disposed closer to the cutting edge of said blade than the distance between the side edges and said cutting edge positioning said cutting edge closer to the trim when the side edge of said member is engaged with the latter than when the end edge of said member is engaged with said trim.

2. A wall-paper cutting device according to claim 1, wherein a shaft is supported at one end by said member, and said cutting blade and said roller are rotatable on said shaft, and wherein the edge of said roller adjacent to said blade is rounded to thereby permit the paper to stand away from the underlying wall in the immediate area of the cutting action.

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