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## UNITED STATES PATENT OFFICE

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### BOX CUTTER

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6 Claims. (Cl. 30-2)

This invention relates to cutting devices, and more particularly to an improved device for cutting hat boxes and the like down to reduced sizes

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Hats are frequently supplied by the manufac- 5 turer to the retailer in boxes accommodating two or more hats. In order to use such boxes for packaging a single hat, such as for delivery thereof to the house of the customer, it is desirable to cut the box to one-hat size. This invention 10 contemplates an improved device for this purpose.

Further, it is an object of this invention to provide a cutter which will be well-adapted to cutting down boxes, and which will be reliable and 15 easy to use, as well as sturdy and inexpensive to manufacture.

It is also an object of this invention to provide an improved device for making a cut which will be parallel to any guide surface, and which will 20 employ an ordinary razor blade as its knife.

Other objects and advantages of the invention will be apparent from the appended specification and claims.

In the drawing:

Fig. 1 is a perspective view of an improved hat box cutter of the invention;

Fig. 2 is a side elevational view of the cutter in operation upon a hat box;

Fig. 3 is a fragmentary top perspective view of 30 the blade holding portion thereof in opened condition as for blade changing purposes:

Fig. 4 is a fragmentary front view showing a handle portion of the device; and

Fig. 5 is a fragmentary side view showing application of a guard device to the blade holder portion.

The drawing illustrates a preferred embodiment of the invention wherein a top guide plate 10 is slidably mounted upon and adjustably fastened to a pair of parallel rods 12-12 by means of set screws 14-14. The top guide 10 has a laterally extending smooth bottom bearing surface 16 which is perpendicular to the rods 12-12. A blade holder 18 is disposed in slidable 45 relation upon the other ends of the rods 12-12 in perpendicular relation thereto and is adjustably fastened thereto by means of set screws 19-19; the blade holder extending laterally from the said rods in a direction opposite from the 50 direction of extension of said top guide. The blade holder 18 comprises a top plate 20 and a bottom plate 22, and a razor blade 24 is arranged to be rigidly held between the top and bottom plates 29-22 by means of a machine 55 and useful to employ. Although only one em-

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screw 26 which is carried by bottom plate 22 so as to project through the central hole of the blade 24, and thence through a hole 28 in top plate 20. A wing nut 30 engages the screw 26, so as to clamp the top and bottom plates 20-22 tightly together upon the razor blade 24. A stud 32 projects upwardly from bottom plate 22 through one of the side holes of the razor blade 24, and into a recess 34 in top plate 20. Thus, the attitude of the razor blade relative to the holder and the extent of its projection edgewise therefrom is rigidly determined, as is most clearly shown in Fig. 3.

A handle plate 36 is adjustably positioned on rods 12-12 by means of set screws 37-37 and is positioned between the top guide 19 and the blade holder 18. As shown in Fig. 4, the handle plate 36 is formed with a thumb-fitting undulating top surface 38. Thus, the device is adapted to be gripped within one hand of the user as

illustrated by Fig. 2 so that the ball of the thumb rests within one of the troughs of the surface 38 while the heel of the thumb rests in another trough of the surface 38; thereby giving the thumb a firm yet comfortable purchase upon the 25

handle plate 36 to enable the user to pull upon the device so as to draw it around the box to be cut, as shown in Fig. 2.

In operation, the distance between top guide 10 and blade holder 18 is adjusted to equal the new height desired for the hat box, and the distance between handle 36 and blade holder 18 is adjusted to equal a comfortable hand span. Then, the cutter may be grasped with the fingers

- of the user under the blade holder 18, and his 35 thumb over handle 36, as is shown in Fig. 2. The device may then be placed in position on an upturned hat box such as is shown at 39, with the top guide 10 resting on the upturned 40 bottom of the box and the projecting edge of
  - blade 24 engaging its side. The cutter may then be manually moved around the periphery of the box so as to cause the cutting edge of the blade 24 to sever the side wall of the box in a plane
  - parallel to the bottom thereof. As shown in Fig. 5, a spring clip guard device 42 is preferably provided to be slip-fitted upon the blade holder 22 when not in use so as to enclose the cutting edge of the blade 24.
  - Thus, the invention provides a mechanically simple and easily handled device which is readily adjustable to produce variously dimensioned boxes, and which employs a readily available cutting edge device and is otherwise convenient

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bodiment of the invention has been illustrated and described in detail, it will be understood that other embodiments thereof may occur to those skilled in the art such as will nevertheless be within the scope of the present invention and the appended claims.

What is claimed is:

1. A box outter comprising a pair of rods, a top guide plate fastened near one end of said rods, a bladeholder with a handle portion fastened to the said rods near their other ends, and a handle plate adjustably fastened to said rods between said top guide plate and said bladeholder; said top guide plate, said handle plate, and said bladeholder all being disposed substantially perpendicularly to said rods.

2. A box cutter comprising a pair of rods, a top guide plate fastened near one end of said rods, a bladeholder with a handle portion fastened to the said rods near their other ends, a blade carried by said bladeholder and extending from said bladeholder at one side thereof, and a handle plate adjustably fastened to said rods between said top guide plate, and said bladeholder; said top guide plate, said handle plate, 25 and said bladeholder all being disposed substantially perpendicularly to said rods, said top guide plate extending in a direction diametrically opposite from the direction of extension of said handle plate and said bladeholder. 30

3. A cutter comprising frame means, a top guide adjustably mounted upon said frame means adjacent one end thereof, a bladeholder adjustably mounted upon said frame means adjacent its other end, and a handle plate adjustably 35 fastened to said frame means between said top guide plate and said bladeholder, said top guide plate and said handle plate and said bladeholder all being disposed to extend substantially perpendicularly from said frame means. 40

4. A box cutter comprising a pair of rods arranged in parallel relation, an end guide adjustably fastened upon said rods extending between and slidably mounted upon said rods, means for locking said guide upon said rods in adjusted positions thereon, a bladeholder similarly mounted upon said rods, and a handle member adjustably fastened to said rods between said guide and said bladeholder.

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5. A box cutter comprising a pair of rods, a top guide plate fastened near one end of said rods, a blade holder with a handle portion fastened to the said rods near their other ends, and a handle plate adjustably fastened to said rods between said top guide plate and said blade holder; said top guide plate, said handle plate, and said blade holder all being disposed substantially perpendicularly to said rods, said handle plate being 15 formed with an undulating top surface for traction gripping by the hand of the user.

6. A box cutter comprising a pair of rods, a top guide plate fastened near one end of said rods, a blade holder with a handle portion 20 fastened to the said rods near their other ends, a blade carried by said blade holder and extending from said blade holder at one side thereof, and a handle plate adjustably fastened to said rods between said top guide plate and said blade holder; said top guide plate, said handle plate, and said blade holder all being disposed substantially perpendicularly to said rods, said top guide plate extending in a direction diametrically opposite from the direction of extension of said handle plate and said bladeholder, said handle plate being formed with an undulating top surface for traction gripping by the hand of the user.

#### BRONISLAUS J. BARAN.

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