April 25, 1950 P. T. VAN FLEET 2,505,161

CARTON OPENER

Filed June 25, 1947

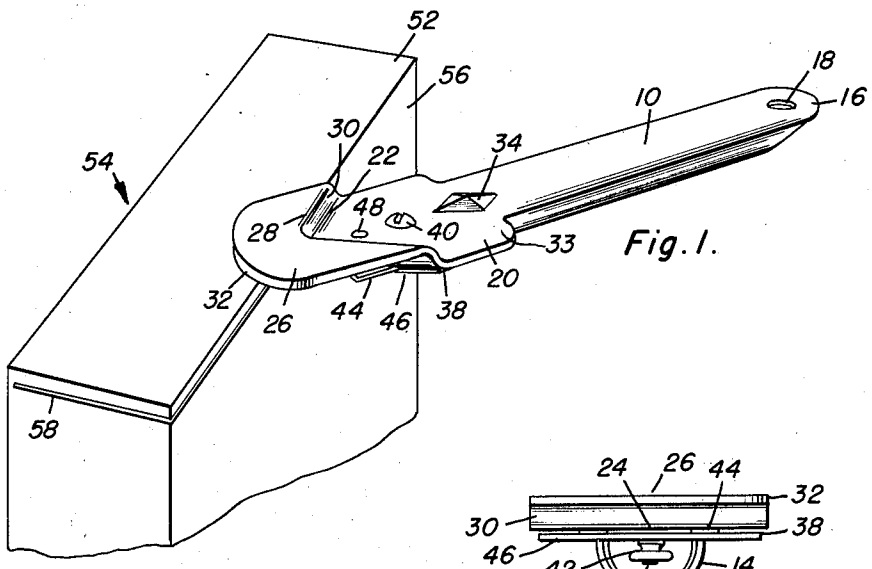


Fig. 1.

Fig. 4.

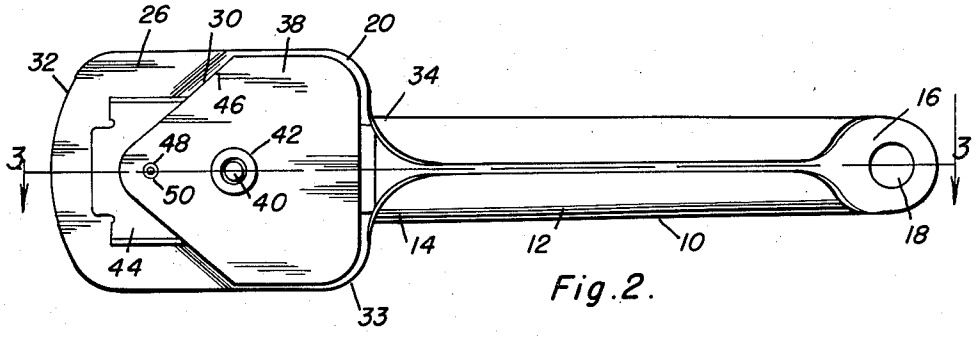


Fig. 2.

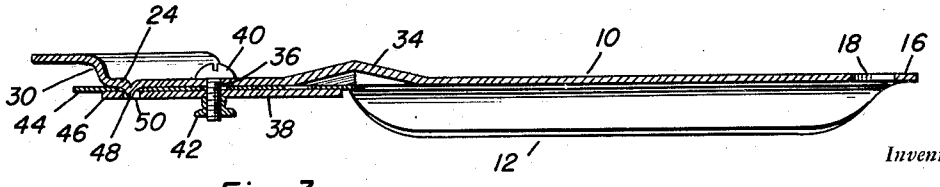


Fig. 3.

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Patented Apr. 25, 1950 2,505,161

UNITED STATES PATENT OFFICE

2,505,161

CARTON OPENER

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Application June 25, 1947, Serial No. 756,857

2 Claims. (Cl. 30—2)

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This invention relates to new and useful improvements in carton openers and the primary object of the present invention is to provide a device for removing the top from cartons and the like in a safe and convenient manner.

Another important object of the present invention is to provide a carton opener including novel and improved guide means engaging the upper face and side face of a carton for assuring a correct cut thereof.

A further object of the present invention is to provide a carton opener embodying a double-blade holding member including means formed therewith for engaging and retaining the blade in a cutting position without movement.

A still further aim of the present invention is to provide a carton opener that is simple and practical in construction, strong and reliable in use, neat and attractive in appearance, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of a portion of a pasteboard carton, and showing the present invention applied thereto in use;

Figure 2 is a bottom plan view of the present invention;

Figure 3 is a longitudinal vertical sectional view taken substantially on the plane of section line 3—3 of Figure 2; and

Figure 4 is an end view of the present invention.

Referring now to the drawings in detail wherein, for the purpose of illustration, there is disclosed a preferred embodiment of the present invention, the numeral 10 represents a handle or shank preferably formed from a rectangular strip of suitable material having its longitudinal side edges 12 turned inwardly to provide a greater gripping portion for the same. The corners of the strip are rounded, as at 14, to prevent any harmful edges protruding from the device. Projecting outwardly from substantially the center of the handle at the rear end thereof is an integral ear 16 having an aperture 18 receiving

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suitable fastening means for attaching or suspending the handle from a supporting surface.

Integrally formed with the handle at the forward end thereof is a substantially flat, trapezoidal head 20 having its forward side edges 22 converging to a rounded point 24.

The numeral 26 represents an angular guide and guard member having a V-shaped notch at one end 28, the edges of which are integrally formed with the outwardly turned flanged portion 30 of the head. The outer edge 32 of the guide member and the rear corner 33 of the head are preferably rounded to prevent sharpened corners at the end ends of the device.

To strengthen, reinforce or brace the handles to the head, there is provided a substantially diamond shaped protuberance 34 at the juncture of the handle with the head.

Extending through aligned apertures 36 in the head 20 and substantially the center of a substantially trapezoidal retaining plate 38 is a bolt 40 having a nut 42 threadingly engaged on one end.

Interposed between the head 20 and the plate 38 and held thereto by the bolt and nut is a double edged cutter or razor blade 44 having one portion spaced parallel beneath the guide 26. As shown best in Figure 2, the forwardly converging edges 46 of the retaining plate are disposed opposite the V-shaped flanged portion 30 of the head.

In order to hold the blade and the retaining plate in position to the head and guide, there is provided a substantially conical lip or detent 48 in the head that extends through aligned apertures 50 in both the blade and the plate 38.

In practical use of the device, one face of the guide member 26 bears upon the upper face 52 of the carton 54, one inclined side of the flanged portion 30 bears against the side face 56 of the carton, and one forward free edge of the blade 44 extends into the carton to provide a slit 58 thereabout as the handle is moved about the carton with its axis at an inclined angle with the axis of the carton.

In view of the foregoing description taken in conjunction with the accompanying drawings, it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention, the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A carton opener comprising a substantially rectangular strip of material having its longitudinal side edges turned inwardly to provide a handle, a head integrally formed at one end of the handle, an angular guard integrally formed with said head and having an outer leg portion spaced outwardly from and parallel to said head, an adjustable plate opposing one face of said head, a cutter interposed between said plate and said head, said cutter having one end spaced parallel to the outer leg portion of said guard, a detent formed in said head engaging aligned apertures in said cutter and said plate, and a reinforcing protuberance between said head and the handle.

2. A carton opener comprising an elongated substantially rectangular strip of bendable material having its longitudinal side edges folded inwardly to provide a hand grip, a flat extension integrally formed with the forward end of said strip and having forwardly converging side edges, a guard having a substantially V-shaped notch in one end, the edges of said guard adjacent said notch being turned downwardly to provide a substantially V-shaped flange, said V-shaped flange being integrally formed with the converging side edges of said extension, a clamping plate conforming to the shape of said extension, means adjustably securing said clamping plate to said extension, and a cutter clamped between said plate and said extension, said cutter having a forward portion spaced relative to said guard.

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