May 12, 1942. A. BATES 2,282,697

SAFETY CARTON OPENER

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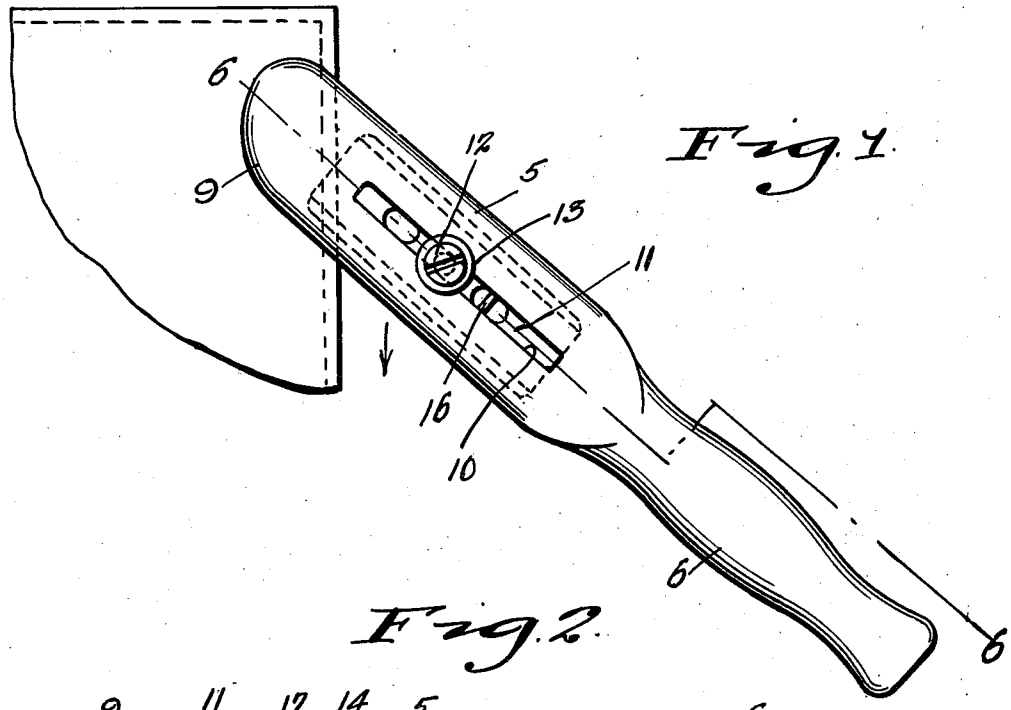


Fig. 1.

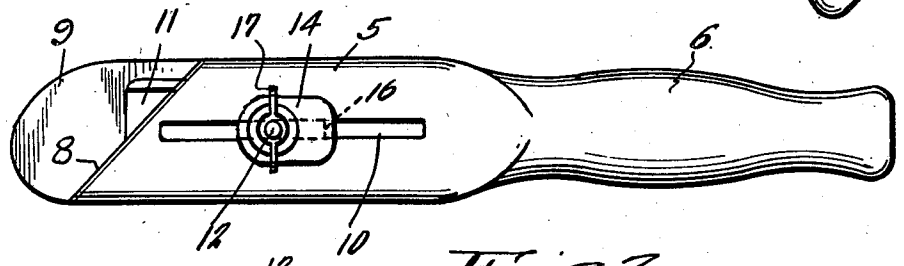


Fig. 2.

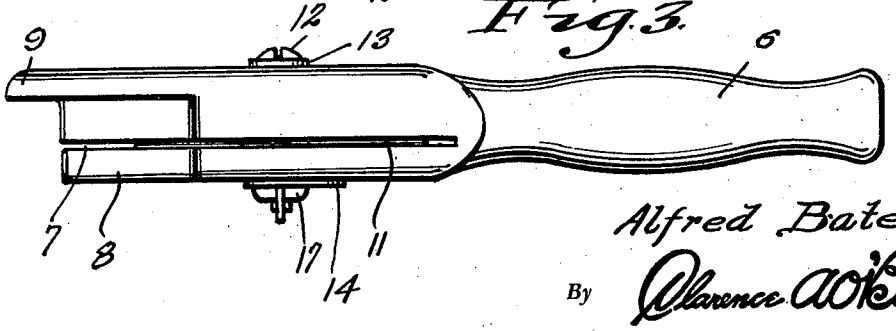


Fig. 3.

Inventor

Alfred Bates

By Clarence A. O'Brien

Attorney

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Fig. 4

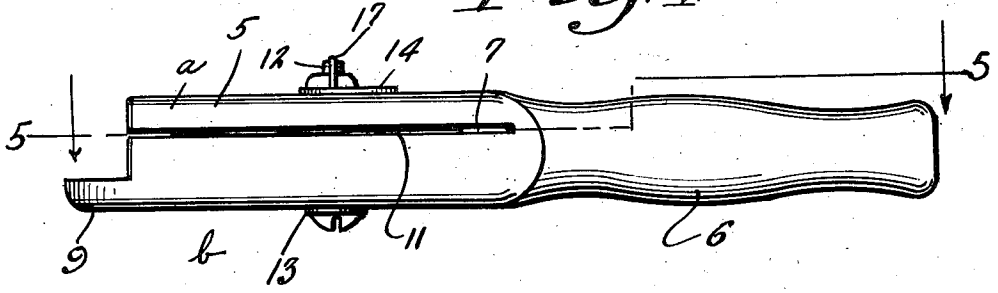


Fig. 5.

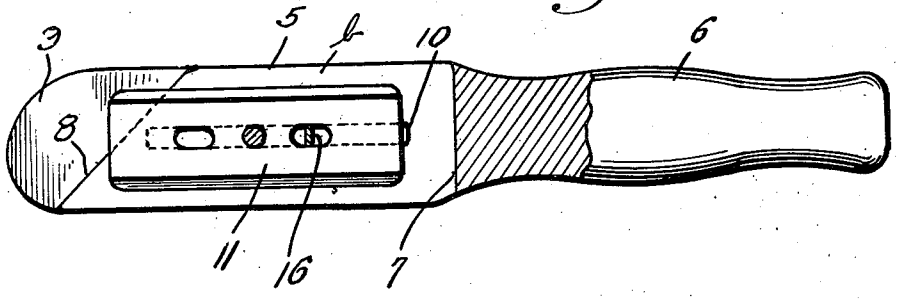


Fig. 6.

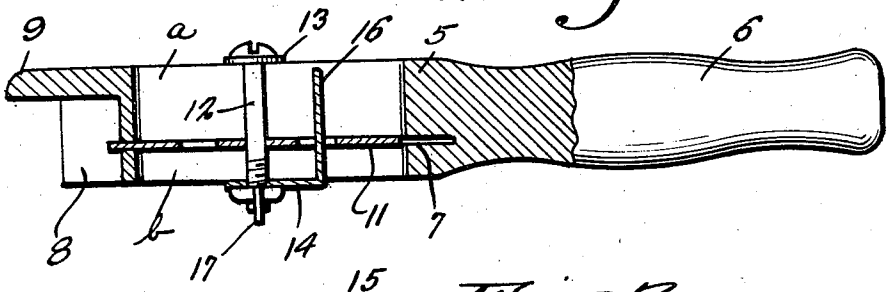
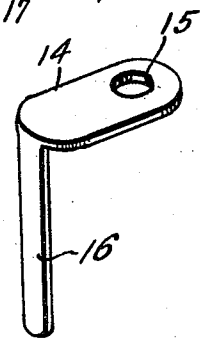


Fig. 7.



Inventor

Alfred Bates

By Clarence A. O'Brien

Attorney

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SAFETY CARTON OPENER

Alfred Bates, Elyria, Ohio

Application September 8, 1941, Serial No. 410,073

1 Claim. (Cl. 30—2)

This invention relates to new and useful improvements in carton openers and more particularly to an opener of the nature which can utilize old or new safety razor blades, or blades of similar construction.

The principal object of the present invention is to provide a carton opener employing a blade which can be extended or retracted depending upon the depth of cut to be made and which can be entirely concealed to prevent persons from becoming cut.

Another important object is to provide a device of the character stated which will be safe, simple and durable in construction, involving but a limited number of parts to the end that the cost to manufacture will be low.

Other objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:

Figure 1 represents a top plan view of the implement in use cutting a carton.

Figure 2 is a bottom plan view of the implement.

Figure 3 is a side elevational view of the implement.

Figure 4 is a side elevational view of the implement shown in inverted position, as when the blade is being extended to the desired position.

Figure 5 is a section on line 5—5 of Figure 4.

Figure 6 is a longitudinal sectional view taken substantially on line 6—6 of Figure 1.

Figure 7 is a perspective view of the detent.

Referring to the drawings wherein like numerals designate like parts, it can be seen that the body of the implement may be made of wood or some plastic material and is formed to provide a holder portion 5 and a handle portion 6. The holder portion 5 is bifurcated to divide this portion into furcations *a* and *b*, numeral 7 denoting the slit which defines these furcations. The free ends of the furcations *a*, *b* are cut off on an oblique as at 8, leaving a lip 9 on the furcation *b*. This is a guide lip which mounts the top of the carton or a side portion, as is evident in Figure 1.

A slot 10 extends downwardly through both furcations *a*, *b*.

Numeral 11 denotes a blade such as a safety razor blade and which ordinarily has three longitudinally spaced or positioned openings.

In assembling the cutter, the safety razor blade 11 is inserted into the slit 7 so that the openings in the blade are registereing with the slot 10. A bolt 12, and preferably one having a washer 13, is disposed through the slot 10 and through the intermediate opening of the safety razor blade 11.

Figure 7 shows a special detent for the blade and this consists of an oblong-shaped plate 14 having an opening 15 in one end thereof for receiving the threaded end of the bolt 12 and an elongated finger 16 extending laterally from the opposite end of the plate. The bolt 12 is disposed through the opening 15 and is equipped with a wing nut 17, after the finger 16 has been disposed through the innermost opening of the blade 11. Thus, it can be seen that the function of the bolt 12 and finger 16 is to prevent any tendency of the blade to rotate in the slit 7.

As shown in Figure 4, the blade has been extended to the position shown in Figure 5. However, by loosening the wing nut 17 and pushing on the bolt 12, the blade can be moved further outwardly or retracted entirely into the slit 7, as when it is desired that the implement be not used for some period of time.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

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

A carton opener comprising a handle having a head portion, said head portion being slit inwardly from its free end, a guide lip at the free end of the head portion, a blade for disposition in the slit, adjusting means for the blade for holding the blade in a definitely projected position, said adjusting means consisting of a bolt extending through the head portion, said head portion being formed with a slot for receiving the bolt, said bolt extending through the blade, said blade having an opening, a plate through which the bolt extends, said plate having a finger extending into the slot and through a second opening in the blade.

ALFRED BATES.