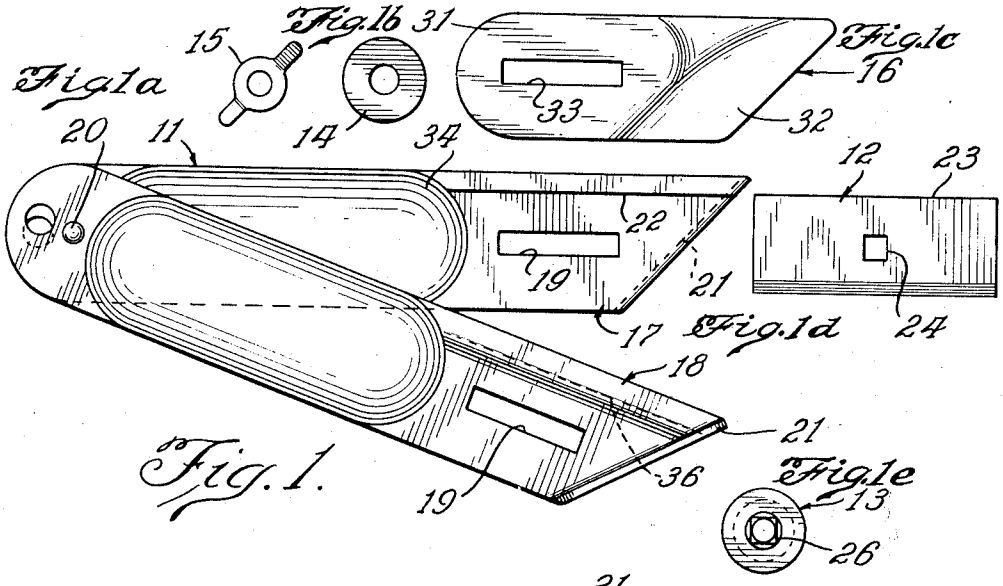
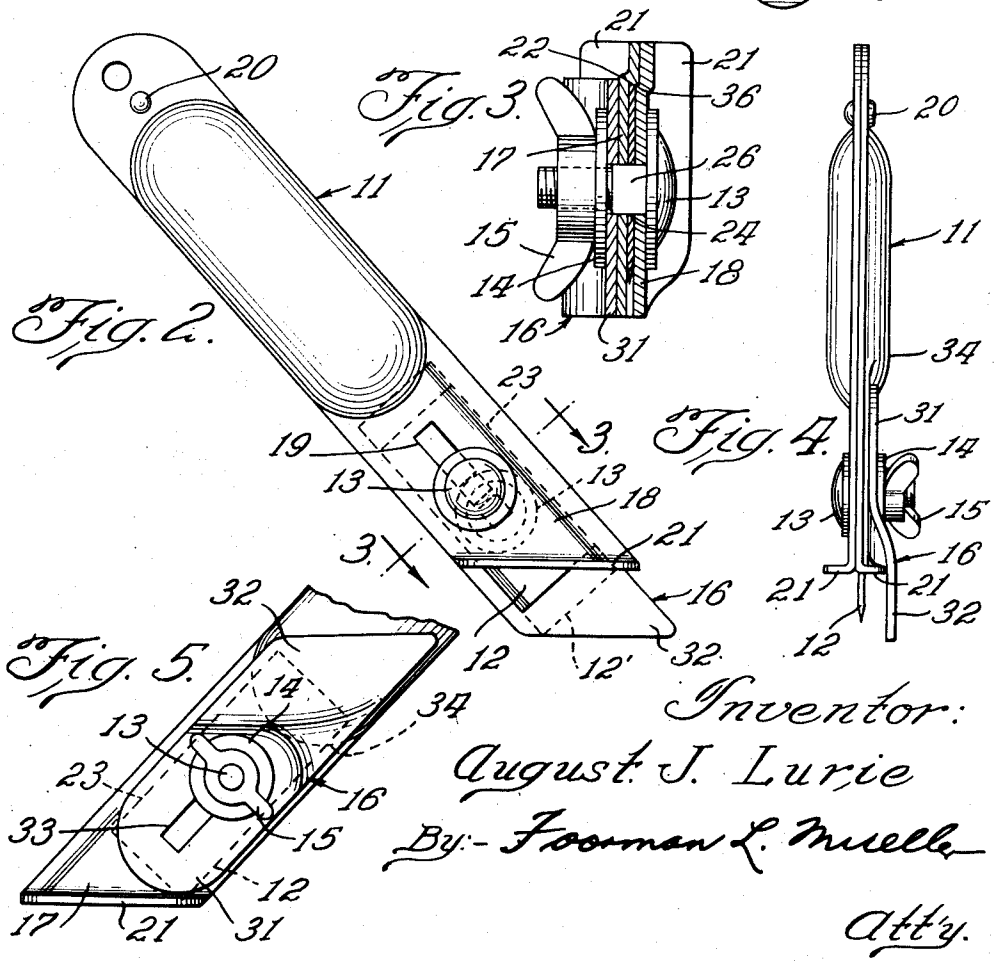
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UTILITY KNIFE

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UTILITY KNIFE

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2 Claims. (Cl. 30—2)

This invention relates in general to knives and especially to knives which are suitable for opening cartons.

In a related patent, Number 2,128,151, issuing on an application with which the present application is copending, I have disclosed a very satisfactory carton opener in which a blade projects an adjustable distance beyond a guide surface with a second guide surface perpendicular to the first guide surface so that the blade is adapted to slit a carton such as a heavy corrugated carton all around its top to remove the top in the easiest possible manner. This carton opener has proved satisfactory for the purpose for which it was intended. Because of the fixed and elongated nature of the guides, however, it is hardly suitable for general purposes. In fact, there are some cartons which because of certain construction, adapting them for use in display, cannot be used with the form of knife illustrated in my patent mentioned.

An object of the present invention is to provide a knife of general utility which may be adapted easily to serve as a carton opener and function in that respect in a manner comparable to the carton opener of my patent above noted.

A further object is to provide a knife of this character which is provided primarily in stamped out inexpensive parts, and is sturdy, compact, and adjustable so that it may be conveniently carried in the pocket and yet made ready for use in a moment for various types of cutting operations.

According to the illustrated form of the invention, this object is attained by providing an elongated knife handle having the blade projected adjustably from the end thereof, and having a small guide surface on the end perpendicular to the blade with an adjustable side guide that can be swung to project perpendicularly beyond the small guide surface or can be swung to a position entirely out of the way.

Additional objects and advantages in the invention will be apparent from the following description and from the drawing in which:

Figure 1 is an exposed view of the form of the knife portion for illustration;

Figs. 1*a*, 1*b*, 1*c*, 1*d* and 1*e*, are detail illustrations of removable elements of the knife;

Figure 2 is a side view of the assembled knife;

Figure 3 is a sectional view taken approximately on the line 3—3 of Figure 2;

Figure 4 is a front view of the knife shown in Figure 2;

Figure 5 is a fragmentary view showing the far side of the knife of Figure 2 and showing the blade withdrawn and the side guide turned to its inactive position.

Although this invention may take various forms, only one has been chosen for illustration. In this form the knife includes the handle indicated generally by the numeral 11, a blade 12, a bolt 13 for clamping the blade with the handle, a washer 14 and a thumb nut 15 for cooperation with the bolt 13, and a side guide 16 all of which are assembled in the drawing in a manner which is readily apparent and is described below.

The handle 11 includes two complementary halves 17 and 18 which are pivotally secured together by a rivet or the like 20. Each half is provided with a slot 19, and with a guide flange 21 diagonally disposed at the end of the handle. The handle half 17 is provided with an elongated shoulder 22 against which the back edge 23 of the blade is adapted to rest. The blade is provided with a square hole 24 which is of substantially the same width as the width of the slots 19 and which is positioned to coincide with these slots with the blade resting approximately against the shoulder 22. The bolt 13 is provided with a square shank 26 which is of a size to fit fairly snugly within the slot 19 and the hole 24 so that it will not turn therein with the thumb nut 15 tightened so that it will aid the shoulder 22 in preventing blade 12 from turning. At the same time, when nut 15 is loose, slot 19 will permit the blade 12 to be moved longitudinally of the knife handle 11 so as to project the blade any desired distance beyond the guide flanges 21 or to conceal it entirely within the handle 11 when it is desired to carry the knife with the utmost safety.

As thus described, the knife is very useful for general purposes and also for opening cartons or the like since adjustment of the blade 12 will cause the knife to cut to any desired depth in cutting through the cartons. However, when it is desired to cut the top off of a carton in a uniform manner, that can be done much more conveniently if a side guide is provided so that the knife will not only cut to a desired depth, but will also be uniformly spaced from the sides or top of the carton a distance approximately corresponding to the thickness of the carton wall so that the blade will run just inside of the wall. On the other hand, if such a side guide were rigidly positioned for this purpose, it would be in the way when the knife is being used for other purposes. According to the preferred form of the

present invention, the side guide is nevertheless provided for in such a manner that it may be moved to an out of the way position with great ease.

The side guide 16 in its active position is seen best in Figure 4. Thus it has a shank portion 31 and a guide portion 32 which is offset with respect to the shank portion 31 so that when the shank portion 31 rests against the flat portion of the handle 11, the guide portion 32 will extend out around the guide flange 21 and project perpendicularly therefrom (Fig. 4). The shoulder portion of the side guide intermediate the guide portion 32 and the shank portion 31 conforms generally to the diagonal guide flange 21, and such shoulder is positioned below such flange when the side guide is in active position. The shank portion 31 is provided with a slot 33 which is preferably of the same dimensions as the slots 19, and with the shank 26 of the bolt 13 of the same width as the slots in these various elements it will normally prevent turning of the side guide 16 which fits over the shank when the ring nut 15 is in tightened position. When the side guide 16 would be in the way, however, then nut 15 may be loosened so that the shank portion 31 of the side guide can be moved slightly endwise of the bolt 13 so as to clear the square shank 26 thereof. The side guide 16 will then be free to turn and it may be rotated to the position shown in Figure 5 in which the guide portion 32 will fit fairly snugly over a bulged portion 34 of the handle 11 thus being completely out of the way. At the same time the blade 12 may be withdrawn within the handle to be completely hidden therewithin, or if the knife is to be used without the side guide, the blade may be left projecting as seen in full lines in Figure 2, or it may even project further as indicated by the dotted lines 12' in Figure 2.

The illustrated form of the knife is not only very convenient because of the wide variety of purposes for which it may be used, but it is also very economical to manufacture. The more complicated parts, namely, the handle halves 17 and 18, and the side guide 16 may be formed by stamping them from sheet metal. It may be noted in this connection that the handle half 18 is preferably formed with a depressed portion 36 so that the shoulder 22 may be deeper than the thickness of the blade 12 without preventing the blade 12 from being tightly clamped between the handle halves 17 and 18.

The assembling operation of the knife is extremely simple with the halves spread apart as seen in Figure 1. The blade 12 is put in place, and afterwards the handle halves are pivoted into alignment and the bolt 13 passes through the handle halves and through the blade 12 therebetween. The side guide 16 and the washer 14 are then successively applied over the projecting end of the bolt 13 and when the blade 12 and side guide 16 are in proper positions the nut 15 is tightened to clamp the various parts in these desired positions. When the side guide 16 is in active position as shown in Figure 2, the knife is very convenient for almost all general purposes.

Although I have illustrated and described my invention in its preferred embodiment, it is understood that the invention is not limited thereby, but is limited only by the scope of the appended claims.

I claim:

1. A knife for opening cartons and for miscellaneous purposes including an apertured blade, a handle for said blade including a pair of corresponding members carrying the blade therebetween, each having a bulging gripping portion at one end, a guide flange extending laterally therefrom at the other end, and a flat portion intermediate the bulging gripping portion and the guide flange having an elongated slot therein, said members being secured together with the flat portions of each correspondingly positioned and together forming a thin flat portion in said knife, an adjusting screw extending through the aperture in said blade and through the corresponding elongated slots for adjusting movement of the blade longitudinally of the slots and said thin flat portion, and a guide member for complementary action with one of said guide flanges having a flat mounting portion at one end and an offset guide portion at the other end, said flat mounting portion being slotted to receive said screw and said offset portion being of such a configuration and size that said guide member may be rotated at least 180° on said screw at said flat portion in the knife and said offset portion will lay over the bulging portions of one of the handle members in a position as not to interfere with normal gripping of the handle of the knife.

2. A knife for opening cartons and for miscellaneous purposes including an apertured blade, a handle for said blade including a pair of corresponding members, each having a bulging gripping portion at one end and a flat portion intermediate the bulging gripping portion and the other end thereof having an elongated slot therein, said members being secured together with the flat portions of each correspondingly positioned and together forming a thin flat portion in said knife, an adjusting screw extending through the aperture in said blade and through the corresponding elongated slots for adjusting movement of the blade longitudinally of the slots and said thin flat portion, and a movable guide member having a slotted flat mounting portion at one end and an offset guide portion at the other end adapted to receive said screw and being adjustably mounted on the flat portion of one of said handle members for adjustable movement to provide a cutting guiding surface for said blade at said other end of the one handle member, said guide member and the offset portion thereof being of such a configuration and size that said member may be rotated on said screw at the thin flat portion from a guiding position through at least 180° and said offset portion will lay over the bulging portion of said one handle member in a position so as not to interfere with normal gripping of the handle in the knife.

AUGUST J. LURIE.