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CARTON OPENER

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FIG. 1.

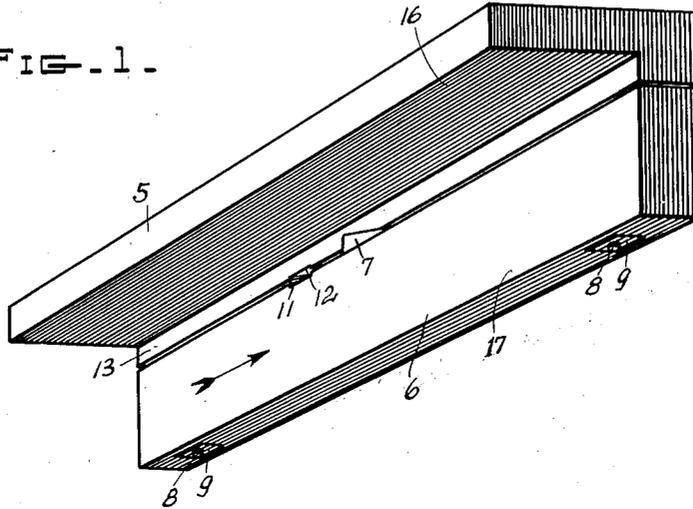
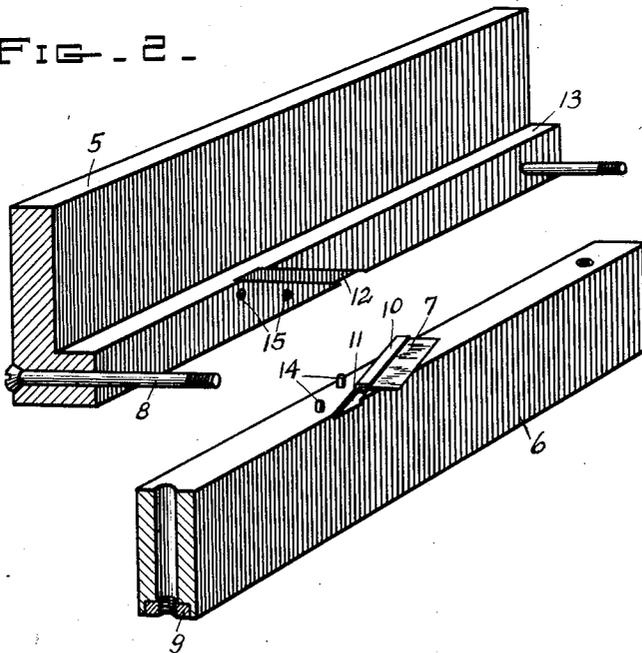


FIG. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## CARTON OPENER.

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This invention relates to an opening device or cutter especially adapted for opening cartons such as the cardboard and corrugated cartons in which various commodities are packed for shipment.

The object of the invention is to provide an efficient tool of this character which is economical to manufacture and in which a safety razor blade may be used as the cutting element.

The invention comprises a guide member having a flange thereon extending at right angles to the guide member and clamping means associated with said flange whereby a blade or cutter may be held against the flange. This flange and clamping means may be adapted to hold various types of safety razor blades therebetween in such a manner as to utilize such blades as the cutting member in the envelope opener.

In the drawings,

Figure 1 is a perspective view of a carton opener made in accordance with my invention, and

Figure 2 is a perspective view of the parts of the device shown in Figure 1, the main members being partly broken away in order to show the fastening means.

The opener consists of a main member 5 and a clamping member 6 having a cutter 7 clamped between them by bolts 8. Members 5 and 6 may be made of metal and bolts 8 threaded into one of the members but, as a light weight tool is desirable, they are preferably made of wood or fibre and the bolts threaded into nuts 9 embedded in member 6.

Different types of cutters may be used but I have shown the opener equipped with a single edged razor blade having one side of its thickened back 10 disposed in a groove 11, formed in the edge of member 6, and the other side of its back disposed in a groove 12 in the edge of a flange 13 formed along one side of member 5. Grooves 11 and 12 preferably extend across the edges of member 6 and flange 13 at an angle of approximately 45° as it is found that cutters are most effective when set at this angle. Cutter 7 may be moved along the grooves to regulate the depth of cut to be made and is rigidly secured in adjusted position by tightening bolts 8.

Preferably, a pair of dowels 14, inserted

in one of the members, extend into recesses 15 formed in the other member so that a double edged razor blade may be used in lieu of the single edged blade by inserting the dowels through the holes formed in such blades and tightening bolts 8 to clamp the blade between members 5 and 6.

In opening a carton, the end 16 of member 5 is placed on its top, with the inside face 17 of member 6 pressed against its side and with cutter 7 beyond its end, and the opener drawn along the side of the carton in the direction of the arrow. Cutter 7 will make a clean cut through the side wall of the carton, just below the top, as regulated by the depth of flange 13.

The apparatus illustrated may be modified or changed in various ways without departing from the spirit of the invention herein set forth and hereafter claimed.

I claim:—

1. A carton opener including a main member having a flange extending therefrom, said flange having an extended flat face, a clamping member having a flat face adapted to cooperate with the flat face of the flange and separably connected thereto, a cutter clamped between said flange and clamping member and means to hold the clamping member against the face of the flange, said blade extending beyond the flange at an angle thereto.

2. A carton opener including a main member having a flange extending at substantially right angles thereto, a clamping member, a cutter clamped between said flange members and clamping member in parallelism with the main member and means on said clamping member for holding the cutter against displacement, said cutter being adjustable relative to the flange and extending therebeyond at an angle thereto.

3. A carton opener including a main member, a flange on the main member having a diagonal groove, a clamping member having a diagonal groove registering with the groove in the flange, a cutter having a thickened edge disposed in the grooves, and means for clamping the cutter between said members.

In testimony whereof I have signed my name to this specification.

HENRY S. SPRINGER.