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PAPER AND CARDBOARD CUTTING MACHINE AND THE LIKE

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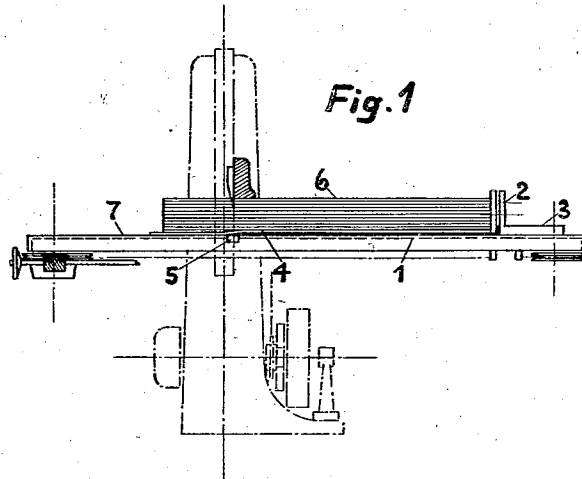
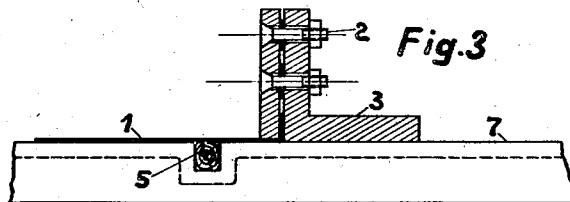
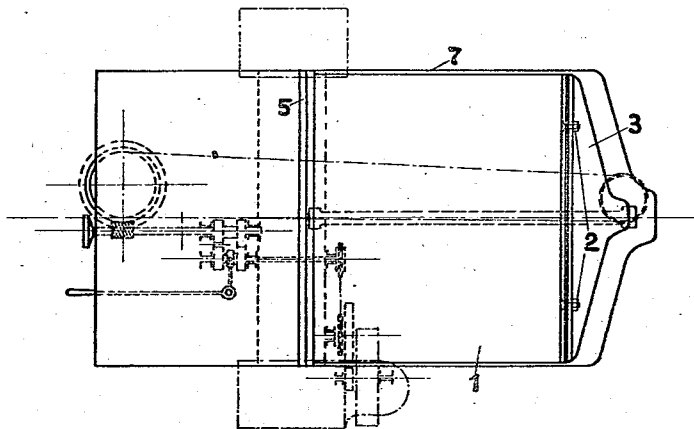


Fig. 2



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PAPER AND CARDBOARD CUTTING MACHINE OR THE LIKE

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This invention refers broadly to paper- and card-board cutting machines and the like, and it is particularly intended to provide means in combination with such machines for the movement of the pile of leaves as a unit, and for automatically truing the pile in the cutting plane, so that no parts of the pile will project or recede from said cutting plane, and the invention is further intended to facilitate and simplify the manipulation of devices of this kind, and to obtain a sharply defined plane at the outside of the pile without any complicated and difficult corrections. In connection therewith it is a further important object of this invention to so improve the feeding of the pile that the movement of the stop or follower may be facilitated and accelerated, and a considerably increased output may thereby be produced. With the means disclosed by the previous art and intended for instance to impart to the stop automatically a reciprocating and feeding movement, the pile of sheets to be cut could only be moved in the forward direction, while it was left behind during the return movement of the stop, and had to be pushed back by hand until it was caused to engage and impinge against the stop. This was not only a very difficult and troublesome operation, but it also failed to yield accurate results. Nor was it possible with this arrangement to connect or secure the pile to the stop, inasmuch as the pile should be perfectly loosely supported, in order to produce a smooth and accurate cut.

Now, in accordance with this invention these drawbacks are overcome by combining with the stop a supporting plane for the pile upon which the pile is retained, so as to be carried along with the stop in the return movement thereof. This supporting surface may comprise a piece of sheet metal secured to the stop which is preferably roughened on its upper surface and polished at the bottom surface. The invention is shown by way of exemplification upon the accompanying drawing as applied to a cutting machine, embodying this invention in Figure 1 in side view and in Figure 2 in plan view. Figure 3 rep-

resents on an enlarged scale a sectional view through a part of the cutting machine.

The stop 3 is operated in the usual manner by means of the quick-acting stop operating wheel. By means of screws 2 and a pressure-plate or washer 3^a the stop is connected to a plate 1 of sheet metal which is bent angularly and rests on the cutting table with one of its legs. Upon the sheet metal plate 1 the cutting card-board 4 is disposed which is commonly employed for the saving of the cutting bars 5 and for the purpose of facilitating the manipulation of the pile 6. The plate 1 is preferably of such length that even the longest kind of pile will be supported upon the plate with substantially two thirds of its length, while one third of the length of the pile projects therefrom. In view thereof the pile 6 will rest with perfect safety upon the plate 1, so that it may be carried along with the plate 1 in its movement. The sheet metal plate 1 may be of but limited thickness, thus for instance about one-eighth of an inch (0.3 millimeters). In view of the small thickness this sheet-metal plate will not interfere with the cut, even in case its front edge should happen to be positioned shortly beyond the cutting plane, as shown for instance in Figure 1 of the drawing.

As a material for the plate 1 a brass-sheet may preferably be employed having a substantially rough upper surface and a polished under surface. By this means the friction which otherwise occurs between the cutting card-board 4 and the table 7 in the movement of the pile is reduced, and by means of the rough upper surface of the plate 1 the pile will be moved along with the stop with perfect safety even in the case of an irregular, jerking movement of the stop.

When inserting the pile, the stop 3 is moved forwardly to such an extent that the front edge of the sheet metal plate 1 is flush with the front edge of the table 7. In this position the "saddle" has reached approximately the cutting knife. The pile is now placed in front on the plate and then the stop is returned in the known manner either by hand or by machine. The stop 3 now carries the plate 1 and the latter the pile, whereby it is

brought into its rear position. As soon as the pile is withdrawn below the knife to the extent to which it has to be cut off, the stop is stopped and the cutting device operated.

5 Inasmuch as various modifications may be made in the construction and arrangement shown within the principle and scope of this invention, the invention should not be limited to the specific structure shown and described, except as appears from the appended
10 claim.

I claim:—

In a paper and card board cutting machine, the combination with a cutting table and an
15 upright truing and supporting stop movably disposed on said table of a thin supporting plate for receiving a pile of papers to be cut, having a rough upper surface and a substantially polished lower surface, the inner end
20 of the plate being angularly secured to the stop so that the plate extends in parallelism with and rests on the table and is movable with said stop substantially as and for the purposes set forth.

25 In testimony whereof I affix my signature.
KARL STEGMANN.

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