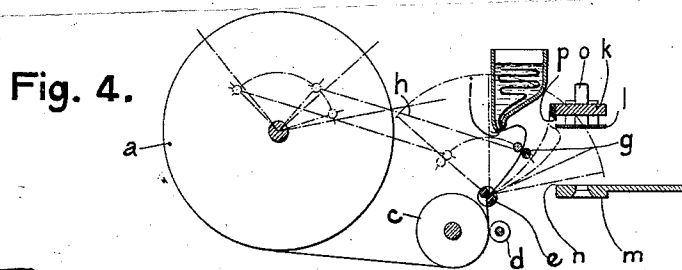
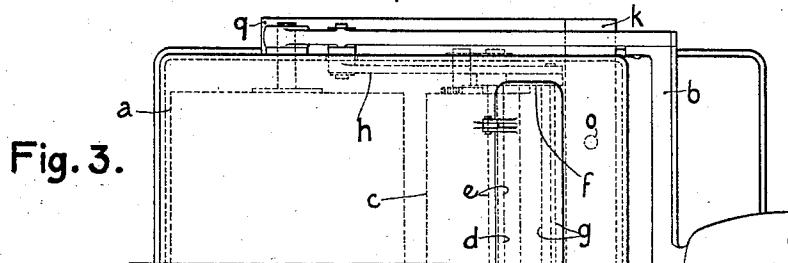
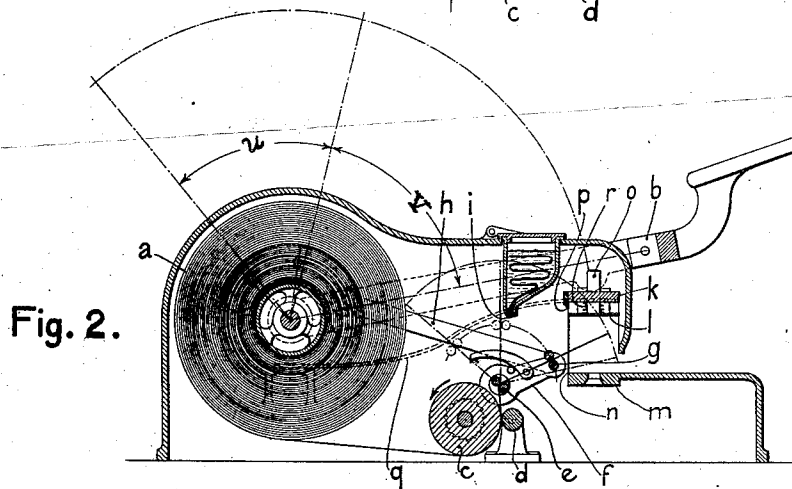
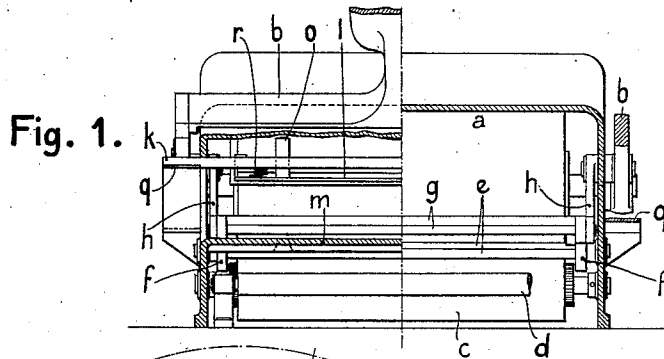


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PERFORATOR WITH A DEVICE FOR REINFORCING THE PUNCH HOLES BY ADHESIVE STRIPS
IN PAPERS TO BE FILED.

1,068,950.

APPLICATION FILED MAY 16, 1911.

Patented July 29, 1913.



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PERFORATOR WITH A DEVICE FOR REINFORCING THE PUNCH-HOLES BY ADHESIVE STRIPS IN PAPERS TO BE FILED.

1,068,950.

Specification of Letters Patent.

Patented July 29, 1913.

Application filed May 15, 1911. Serial No. 627,325.

To all whom it may concern:

Be it known that I, JOHANN MARIUS TIMM, a citizen of the Swiss Republic, and resident of Basel, Switzerland, have invented a new and useful Perforator with a Device for Reinforcing the Punch-Holes by Adhesive Strips in Papers to be Filed, of which the following is a full, clear, and exact specification.

10 The invention relates to perforators punching simultaneously two holes in papers to be filed in binders of the Shannon or other similar type with devices for reinforcing the margin of the sheet of paper by adhesive strips and has for its object to provide a means whereby with one motion of a hand lever the reinforcing strip is turned down by a swinging motion of another lever, guiding the continuous adhesive strip, flat, straight and even onto the margin of the sheet, then affixed and severed as well as perforated together with the sheet of paper, while the return motion of the hand lever actuates the feed of the continuous adhesive strip.

The improved apparatus is shown in the accompanying drawings, in which:

Figure 1 is a cross-section on a broken line of the apparatus. Fig. 2 is a corresponding longitudinal section. Fig. 3 is a plan of one half of the apparatus. Fig. 4 is a diagram showing the position of the adhesive strip during and at the completion of moistening.

35 Upon the outer ends of the spindle of an easily revolving paper-roll *a* is freely mounted a forked lever *b*. The outer end of the paper roll is passed between the feed roller *c* and the roller *d* yieldingly pressed against *c* and then through the axis of oscillation *e* of a lever *f* from which latter it projects over a guide *g* corresponding to the size of the reinforcing strip required. The lever *f* is connected to the forked lever *b* by a link *h* articulated at *g*. From the lower part *i* of the paste box projects a wick or wiper of the same width as the paper roll.

50 In the position of the forked lever *b* and lever *f* as shown in Fig. 2, the reinforcing strip will have been moistened by reason of its passing in a curved position along the projecting wick during the motion of the forked lever in the arc *v*. After the moistening, the paper stretches out flat by

reason of its elasticity and then lies under the perforating device. In this position the forked lever is resting on the outer ends of the traverse *k* which project through the casing of the apparatus, so that when 60 further pressing down the forked lever simultaneous motion is imparted to the perforating device and the lever *f* in such a manner that the reinforcing strip will first be turned down on to the edge or margin 65 of the sheet placed on the die-plate *m* and finally pressed on the said sheet by the spring-buffer plate *l* connected with the traverse *k*. To insure that the reinforcing strip is flat upon the sheet, it is advantageous to have the die-plate slightly above the fulcrum *e* of the lever *f* so that the paper first comes against the edge *n* of the die-plate and of the sheet, whereupon the plate 70 *l* of the perforating device presses the strip on the sheet. The perforating dies *o* and the cutter *p* are fixed to the traverse *k*. By further pressing down the forked lever *b* after the plate *l* has come down on the strip, the traverse *k* approaches the plate *l* and 80 causes the cutter *p* to sever the attached strip from the roll and the perforating dies or punches to pass through the perforated bottom plate *l* and so perforate the strip and the sheet. The short motion which the 85 lever *f* would have to make during the last stage is compensated by the springiness of the lever mechanism parts. On releasing the forked lever *b*, the springs *q* lift the traverse *k*, which carry said lever back into the position shown in Fig. 2, while at the same time the springs *r* reestablish the distance between the traverse and its bottom plate *l*. By again pressing down the lever *b* 95 sheets can be perforated without being provided with a reinforcing strip. Only when turning the lever *b* back into the farthest position rearward through the arc *u*, the lever *f* will cause a ratchet device to rotate the feed roller *c* sufficiently so as to advance 100 the paper over the guide *g* in the lever *f* for a length corresponding to the width of another strengthening strip.

What I claim is:

105 In a perforator with a device for reinforcing the punch holes by adhesive strip in papers to be filed, a spindle carrying at least a rotatable roll of a continuous reinforcing strip, a pair of feed rollers between which is passed the end of the said roll, an 110

oscillating lever through the axis of which
is further passed the said roll end and pro-
vided with a guide over which the adhesive
end of the reinforcing strip can project to
5 a determined extent, a ratchet device operat-
ing to actuate the feed rollers by the said
oscillating lever, a hand lever articulated
on the said roll spindle and connected with
the oscillating lever by a link bar, a cutting
10 device and a perforating device both con-
trolled by the said hand lever in such a
manner that by moving the hand lever in
one direction the adhesive end of the rein-
forcing strip will at first be turned down
15 by the oscillating lever onto the margin of
the paper sheet to be punched, then pressed

on the said paper margin and finally severed
from the continuous strip and punch simul-
taneously with the paper sheet, while by
moving the hand lever in the reverse direc- 20
tion the ratchet device will move the feed
roller in order to advance again a further
length of the reinforcing strip over the
guide on the oscillating lever.

In witness whereof I have hereunto signed 25
my name this third day of May 1911, in the
presence of two subscribing witnesses.

JOHANN MARIUS TIMM.

Witnesses:

AMAND RITTER,
ARNOLD ZUBER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."