

May 26, 1953

J. N. PROCTER
DEVICE FOR MOISTENING ADHESIVE
LABELS AND FOR FEEDING SHEETS
Filed Dec. 28, 1949

2,639,688

FIG. 1.

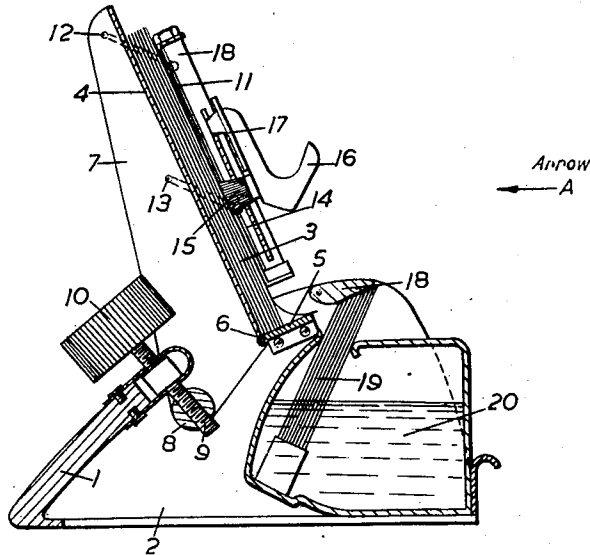
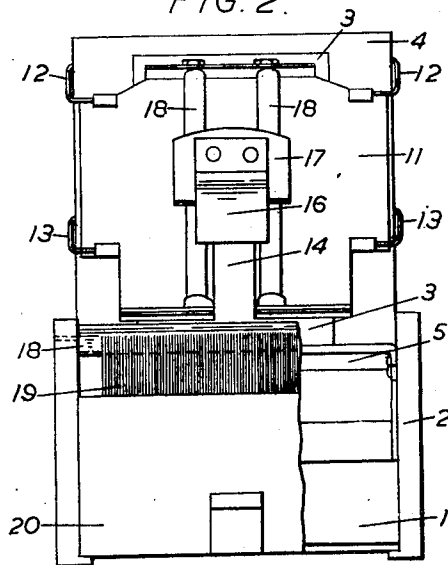


FIG. 2.



Inventor
Jack Napier Procter

By
Munn, Liddy & Glaccum
Attorneys

UNITED STATES PATENT OFFICE

2,639,688

DEVICE FOR MOISTENING ADHESIVE
LABELS AND FOR FEEDING SHEETS

Jack Napier Procter, London, England, assignor
to Samuel Jones & Co., Limited, London, Eng-
land

Application December 28, 1949, Serial No. 135,492
In Great Britain December 29, 1948

3 Claims. (Cl. 118—236)

1

This invention is primarily concerned with improvements relating to devices for moistening adhesive labels and the like (hereinafter termed labels) and has for its object to provide simple but effective devices of this kind.

It is found that the front or top sheet of a stack can be separated and fed from the remainder by a simple frictional pressure engagement if the edge of the stack is rested against a plate and the sheet is moved towards the plate so that its edge bends or curls out from the remainder of the stack and moves along the plate towards a moistening element. The angle at which the plate lies is critical for different stacks of labels and for the same labels under different conditions of humidity or atmospheric or other factors.

The invention is accordingly characterised by means under the control of an operator for adjusting the angle of the stack relatively to the plate.

Since the feeding of sheets from a stack for other purposes can also be carried out in the same way, the sheet feeding method and apparatus in themselves form important parts of the invention.

The frictional pressure can be applied by an operator's fingers (preferably wearing a rubber thimble) or by a mechanical engaging and sliding or rolling device, the pressure upon which is preferably controlled or adjustable by the operator. Skill is quickly acquired, the operator making the necessary adjustment of the angle to suit her own manipulation of any particular pack and enabling her to move the labels one at a time across the plate and over the damping element.

The back plate stands in its forward position approximately at right angles or at an angle slightly less than a right-angle to the bottom plate, but its position is angularly adjustable to suit requirements. Generally it will be sufficient if the adjustment permits of the back plate being tilted through quite small angles from the right-angle position, so that the angle through which the end of the sheet bends or curls can be adjusted from about 85° up to about 100°.

Other parts of the invention are embodied in typical forms of label moistener which will now be described by way of example with reference to the accompanying drawings.

In the drawings:

Fig. 1 is a central sectional side elevation, and Fig. 2 is a front view in the direction of arrow A.

As illustrated, the device comprises a rather massive body including a back part 1 and side walls 2. The labels 3 are supported against a

2

back plate 4 with their lower edges resting against the feed plate 5. The plate 5 is securely fixed in the body and the back plate hinged to it at 6, so that the desired angular adjustment can be readily performed. For this purpose wings 7 integral with the back plate carry a cross member 8 engaged by a screw 9 rotatably carried on the body part 1 and provided with an adjusting knob 10.

10 A retaining plate 11 carried from the wings 7 by parallel links 12, 13 rests on the front of the stack of labels, being easily raised for insertion of a fresh stack. An open slot 14 gives access to the outer surface of the front or top label for feeding. This may be done simply by a finger, pressing on the label at a point near the top of the slot and drawing the finger down. As shown, however, there is a mechanical feed device comprising a laminated rubber brush or pad 15 hingedly carried with the operating handle 16 upon a slider 17 which slides upon the tubular guides 18 and is lightly spring-pressed towards its upper position. The guides may, for example, be slotted and contain light springs urging the slider 17 upward.

In either case, the front or top label bends or curls outwardly on the feed plate 5 and is moved forward between a weighting bar 18 and moistening brush 19 carried in the water reservoir 20. It is sufficient to feed the label forward until its front edge projects in front of the brush, so that it can be gripped by the fingers and the rear of the label pulled through.

As soon as the operating handle is released the slider returns to its upper position.

As already explained, the angle between the back plate and the feeding plate is critical for the best feeding action with a particular label pack under given conditions. The correct adjustment can be instantly made by moving the knob 10. It is also found desirable for the operator to be able to control the forward pressure during the downward movement, and the operating handle is shaped to allow of this. Further, it may be desirable to permit a very small preliminary upward movement if the operator desires it, to loosen the front label from the stack before the bending or curling action begins. When a slider is used the position to which it is returned may be such as to permit of this if desired.

The effective angle can be found as the back plate is tilted backwardly or forwardly from the right-angle position relatively to the feeding plate, and is seldom more than about 10 degrees from the right-angle position.

3

If desired, the device may be used for applying moist adhesive to suitable paper instead of moisture to adhesive-coated paper.

In the illustrated example, the stack of labels is supported in a substantially upright position. This is not essential. Indeed the stack may, if preferred, be arranged almost flat.

I claim:

1. A label moistening device including a support for a stack of labels permitting frictional engagement of the surface of the front or top label, said support comprising a back plate for said stack, and a fixed plate on which the lower edge of the stack may rest, said back plate having its lower edge hinged to one edge of said fixed plate, means manually operable to move the back plate for the purpose of adjusting the angle of the back plate relatively to said fixed plate through a small range of angles including a right angle, and a label moistening element in the path of a label moved out from the stack across said fixed plate in contact with the latter.

2. A label moistening device including a support for a stack of labels permitting frictional engagement of the surface of the front or top label, said support comprising a stationary part, a back plate for the stack and a fixed plate on the stationary part and on which fixed plate the

4

lower edge of the stack may rest, said back plate having its lower edge hinged to the rear edge of the fixed plate, cooperative means on the stationary part and said back plate manually operable to move the back plate for the purpose of adjusting the angle of the back plate relatively to said fixed plate through a small range of angles including a right angle, and a label moistening element on said stationary part in the path of a label moved downwardly from the stack across said fixed plate in contact therewith.

3. A label moistening device as set forth in claim 2, wherein said manually operable means comprises a cross-member on the back plate, and a screw mounted on said stationary part in threaded engagement with said cross-member.

JACK NAPIER PROCTER.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
348,021	Kelsey	Aug. 24, 1886
985,429	McArdle et al.	Feb. 23, 1911
1,051,726	Gammeter	Jan. 28, 1913
1,411,029	Isham	Mar. 28, 1922
1,517,649	Morehouse	Dec. 2, 1924
1,872,945	Hebig	Aug. 23, 1932