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PAPER DISPENSING SHEET CONSTRUCTION

Filed Oct. 28, 1953

Fig 1

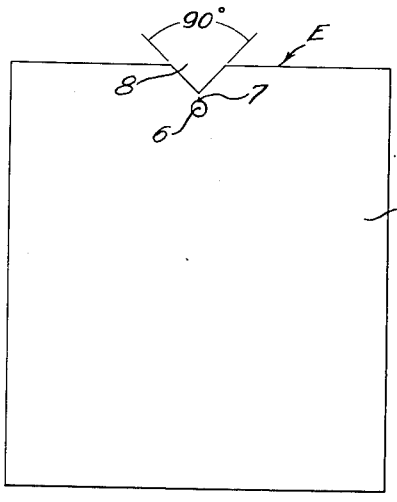


Fig 2

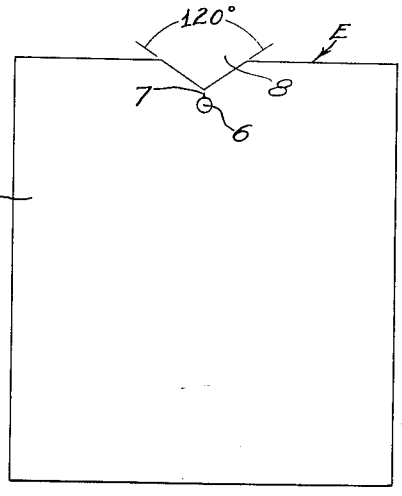


Fig 3

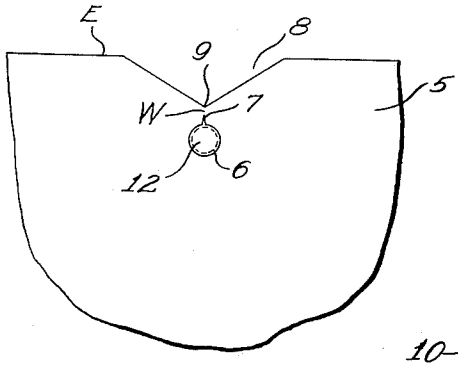
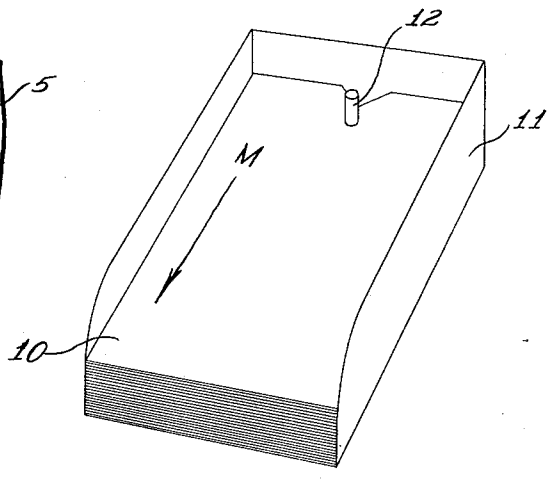


Fig 4



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PAPER DISPENSING SHEET CONSTRUCTION

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1 Claim. (Cl. 206—57)

The present invention relates to an improved form of paper sheets for use in handling food articles. It also relates to a method for cutting or forming a pack of paper to prevent individual sheets from tearing during dispensing.

In handling individual articles of food, especially on the retail level, it is customary to employ a sheet of paper to prevent the food from being touched by the bare hands. This is particularly true in handling such unwrapped fresh foods as meats, pastries, or the like. Among others, paper for this purpose has been supplied in rolls, interfolded packs, and packs with a circular perforation therethrough for retaining the pack on a pin in a dispenser. The present invention deals with an improvement in the last mentioned form; that is, in the perforated pack retained in a dispenser by means of a pin.

Hitherto, these packs of paper were merely perforated at a point adjacent an edge of the pack. An operator desiring to remove a single sheet from the dispenser retaining the pack would grasp the top sheet of the pack and pull it off the pin. Although this method is desirable from the viewpoint that only a single sheet is dispensed at one time, it has the undesirable feature that the sheet in being pulled from the pin is likely to be excessively torn or ripped. This excessive tearing or ripping causes small pieces of paper to be torn loose from the individual sheets. These small pieces of paper eventually either accumulate to an objectionable extent in the dispenser, or may be dislodged from the dispenser and contaminate the foods.

As a possible solution to this problem of excessive tearing of the individual sheets, it has been proposed that the sheets be pre-slit. Accordingly, packs of paper of this type have been formed wherein a cut or slit is incorporated in the pack, said slit extending from the circular perforation of each sheet to the outer edge. It has been found, however, that although this method eliminates the problem of tearing, it introduces a new problem in that the slits formed from the circular perforation to the edge of the paper allow the removal of more than just the top sheet of the pack. Accordingly, when an operator grasps the top sheet of a pack of paper formed in this manner, invariably more than one sheet of paper is dispensed. That is especially true with the grease proof and glassine paper sheets utilized in the butcher trade. Accordingly, the extra sheets removed along with the top sheet become a nuisance, often leading to the throwing away of these extra sheets.

We have found that it is now possible to cut or form a pack of wrapping or dispensing paper in such a manner that only a single sheet is dispensed at a time, and each sheet is easily and quickly removed from the dispenser without the accompanying tearing or ripping which heretofore had caused such a problem.

Accordingly, the primary object of the present invention is to provide a pack of paper sheets having a perforation therethrough for retaining said pack on a pin in a dispenser, said pack of sheets being cut in such a manner as to cooperate with the perforation to facilitate the removal of single sheets without excessive tearing or ripping of said sheets.

Other objects and advantages of the instant invention will be apparent to those skilled in the art from the following disclosure and discussion of the annexed sheet of drawings.

On the drawings:

Figure 1 is a plan view of one embodiment of the present invention showing the angle of the notch which is cut in the edge of the paper;

Figure 2 is similar to Fig. 1 and shows another embodiment of the present invention;

Figure 3 is an enlarged fragmentary view showing the novel manner in which the paper packs and individual sheets of the instant invention are cut; and

Figure 4 is a perspective view showing a pack of paper cut in accordance with the present invention in position in a dispenser for holding the paper.

As shown on the drawings:

In Figs. 1, 2 and 3 a sheet of paper **5**, which may be wax paper, glassine paper, or any other type of paper which is used in dispensing and handling food, has a circular perforation **6** on the longitudinal axis of the sheet and closely adjacent the edge E. This perforation or hole **6** may be placed at any point near or adjacent an edge of the sheet, depending upon the position of the retention pin in the dispensing mechanism in which the paper is to be used. Preferably, however, since most dispensers for this type of paper have the retaining pin so positioned as to receive paper which has the perforation located on the longitudinal axis of the sheet and adjacent the edge thereof, it is most desirable to form the perforation in such a position. Accordingly, in the present disclosure as shown in Figs. 1, 2 and 3, the circular perforation **6** is located on the center line of the paper adjacent an end edge of said sheet. A slit **7** starting from and in communication with the circular perforation **6** extends a short distance from said perforation toward and perpendicular to the edge E of the sheet. A V-shaped notch, shown generally at **8**, is formed on the edge of the sheet. The apex **9** of said notch extends inwardly toward the circular perforation and the slit **7**. The apex **9**, however, does not make contact with the slit **7**, but rather terminates in a close juxtaposed relation to the terminus of slit **7** and alined therewith. Accordingly, only a small width of paper indicated at W, remains between said apex and said terminus of the slit. This small width of paper remaining between the apex **9** and the terminus of the slit **7** is sufficient to retain the entire pack upon a retaining pin, but will allow the removal of individual sheets from the retaining pin. Further, said remaining width is sufficiently small to prevent the tearing of small bits of paper from the sheet, as has heretofore occurred with non-notched sheets. That is, the pre-tear or slit **7** is sufficient to facilitate easy removal of a single sheet from the top of the pack by pulling the sheet off the pin, but will not cause excessive tearing of the paper. Further, the slit or pre-tear **7** is not sufficiently long to allow the removal of more than one sheet at a time, as opposed to the prior methods of preslitting the paper wherein said slit extended from the perforation to the edge of the sheet.

The angle and depth of the notch **8** can vary considerably depending upon the weight and type of paper employed. If a comparatively thin and lightweight paper is used, such as tissue, or a light weight waxed paper, it is preferable to form the notch in a comparatively narrow and deep manner, such as is shown in Fig. 1. As shown in Fig. 1, the angle of this notch is preferably in the range of about 90°. However, this may vary as noted above.

If, on the other hand, a relatively heavy or strong, tear-resistant quality of paper is employed, it is preferable to employ a relatively wide V-notch with the apex of said notch more closely adjacent the terminus of the slit **7**. As shown in Fig. 2 the angle of the notch which would most often be employed with a heavier paper is in the range of about 120°. However, as noted previously, this may vary to a great extent depending upon the properties of the paper employed.

In Fig. 4, a pack of individual sheets of paper, such as glassine paper or other grease proof paper used by butchers, has been pre-cut in accordance with the present invention as shown in Figs. 1, 2 and 3. The pre-cut pack of paper **10** is held in the dispenser **11** by means of the retaining pin **12** inserted through the circular perfora-

tions of each individual sheet of the pack. Accordingly, when an operator desires a single sheet of the paper, he merely needs to place his hand upon the top of the pack, exert a slight amount of pressure to establish a sufficient frictional gripping force between the paper and his hand, and to move his hand with a sufficient minimum amount of force in the general direction indicated by the arrow M. In this manner, then, the operator is capable of removing a single sheet of the glassine or other type of paper with no tearing or shredding of individual small pieces of paper to clog up the dispenser, or possibly contaminate the food products.

It will thus be apparent to those skilled in the art that we have provided a new and novel method of forming packs of paper for use in dispensing food products, wherein said pack of paper is retained in a dispensing means by a retaining pin, and one sheet at a time may be dispensed without the excessive tearing or ripping of the individual sheets of paper as was heretofore encountered.

It will be understood that various modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

We claim as our invention:

In a substantially rectangular sheet of paper of the class described, the combination of a single circular aperture in said sheet, said aperture being closely adjacent an edge thereof, a slit extending from and in communication with said aperture and extending toward and perpendicular to said edge, a V-shaped notch on said edge of said sheet, the apex of said notch being in close juxtaposed relation to the terminus of said slit and in line with said slit, and said notch describing an angle of from about 90° to 120°.

References Cited in the file of this patent

UNITED STATES PATENTS

460,769	Barron	Oct. 6, 1891
1,477,581	Mayer	Dec. 18, 1923
1,883,108	Thompson	Oct. 18, 1932

FOREIGN PATENTS

871,385	France	Jan. 15, 1942