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FLINT CARRIER AND DISPENSER

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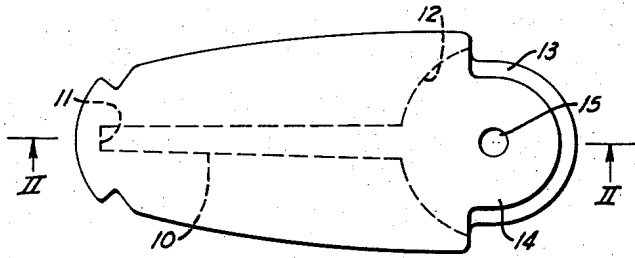


Fig. 1

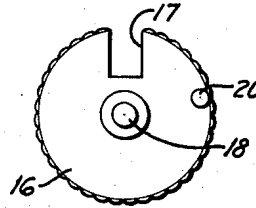


Fig. 3



Fig. 2

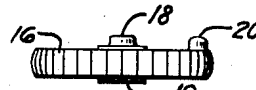


Fig. 4

Fig. 5

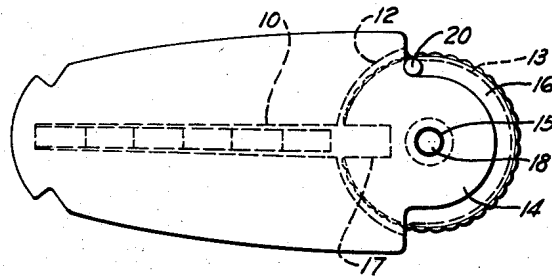


Fig. 6

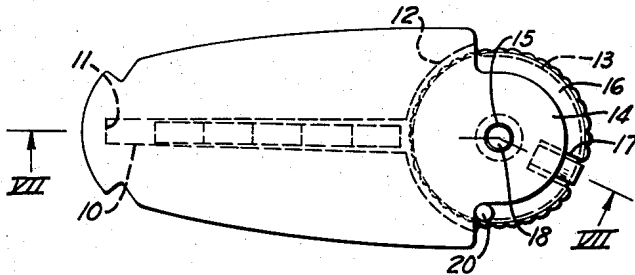
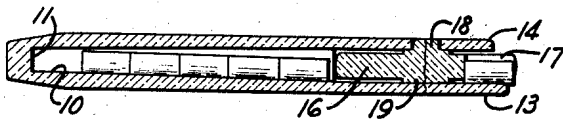


Fig. 7



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## FLINT CARRIER AND DISPENSER

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1 Claim. (Cl. 221—263)

The present invention relates to a carrier and dispenser for small cylindrical objects, such as the flints used in pocket cigarette lighters.

A particular object is to provide a carrier and dispenser of a flat shape so that it may readily be carried in a pocket or handbag so that spare flints will always be available.

One of the problems in carrying flints is that they are relatively brittle and tend to powder away, especially at the sharp edges. An advantage of the present invention is that the flints are carried in an orderly, stacked arrangement so that they cannot tumble about and become powdered.

The improved carrier also provides a very convenient method of dispensing. These flints are rather tiny objects and therefore somewhat difficult to handle. The present dispenser selects a single flint from the supply in the carrier and puts it in a dispensing position properly aligned to slip into the flint-tube of the lighter.

A further advantage of the invention is that the carrier and dispenser can be economically manufactured and is quite simple and rugged in construction, since it is preferably made of two simple pieces of molded plastic material.

These and other objects and advantages of the invention will become apparent as the description proceeds.

The present application is, in part, a continuation of application Serial No. 201,852 for Carrier and Dispenser, filed December 20, 1950.

In the drawings:

Fig. 1 is a plan view of the body of the device.

Fig. 2 is a cross-section on line II—II of Fig. 1.

Fig. 3 is a plan view of the dispensing disc.

Fig. 4 is a side elevation of the dispensing disc.

Fig. 5 is a plan view of the assembled device showing the device in closed position.

Fig. 6 is a view similar to Fig. 5 but showing the device in dispensing position.

Fig. 7 is a cross-section on line VII—VII of Fig. 6.

Referring to the drawings in greater detail, Figs. 1 and 2 show the main body of the dispenser, which is preferably cast in plastic as a single piece. A bore 10, which extends lengthwise of the body, serves as a magazine to store the flints. This bore may be cylindrical or of square cross-section, but it must be of a width to freely receive the standard-sized flint, but only slightly wider than the flint, so that the flints will be kept in a straight stacked column, and will not be permitted to tumble about and crumble their edges.

The bore 10 is closed at the end 11, and at the opposite end opens into a semi-circular notch 12. The radius of notch 12 is such as to closely receive the dispensing disc which is described below. The depth of notch 12 is substantially the same as the width of the opening of the bore 10.

A pair of ears 13 and 14 project from the body beyond the notch 12. The ear 13 is of a radius substantially the same as that of the dispensing disc, while ear 14 is of smaller radius than the dispensing disc. Ear 13 is pref-

erably imperforate, but the ear 14 is formed with a round opening 15 which is adapted to receive a pintle formed on the dispensing disc.

The dispensing disc 16 is also preferably molded from a single piece of plastic. It is formed with a serrated edge and is of such a thickness as to fit closely between the ears 13 and 14, and its periphery corresponds with the curvature of the semi-circular notch 12. A cut-out 17, formed in the edge of the disc 16, is of a size and shape to receive a single flint and forms a dispensing pocket. A projection 18 extending from one side of the disc fits in the opening 15 to form a pintle about which the disc may be rotated.

A slightly raised seat 19 extends from the disc 16 opposite the pintle 18. The seat 19 serves to raise the main portion of this side of the disc from the ear 13, thereby reducing the frictional resistance to rotation of the disc.

A projection 20 near the edge of the disc 16 serves as a stop to accurately position the disc both in the closed position of Fig. 5 and in the dispensing position of Fig. 6.

After the body and the disc have been formed as indicated above, the disc 16 is snapped into position between the ears 13 and 14 with the pintle 18 fitting into opening 15, as clearly shown in Fig. 7. The disc can then be easily rotated from the closed position of Fig. 5 to the dispensing position of Fig. 6.

It will be clear from the above description that the carrier is only slightly thicker than the diameter of the flints and is therefore a very small, flat object that will be quite convenient to carry either in a man's pocket or a lady's handbag.

When the carrier is in the carrying position as shown in Fig. 5, the flints in the magazine are kept in an orderly end-to-end position and therefore they can not tumble about and become powdered. In this position the dispensing disc 16 keeps the flints from coming out of the magazine.

When it is desired to use a flint the carrier is turned to the vertical position with the disc 16 downward, and the disc 16 is turned to bring the dispensing pocket into registry with the magazine 10. A flint now drops into the pocket. The dispenser is then turned to the horizontal position and the dispensing disc 16 is rotated to the dispensing position of Fig. 6. The flint may be readily engaged with the fingers or be permitted to fall directly into the flint tube of a cigarette lighter.

It is believed that the above description has made it clear that the flint carrier and dispenser of the present invention is simple and economical to manufacture. It is convenient to carry and use, and it keeps the flints in orderly position so that they are well preserved.

According to the provisions of the patent statutes, I have explained the principle of my invention and have illustrated and described what I now consider to represent its best embodiment. However, I desire to have it understood that, within the scope of the appended claim, the invention may be practiced otherwise than as specifically illustrated and described.

I claim:

1. A portable carrier and dispenser for lighter flints which comprises: a flat one-piece body formed with a magazine slightly wider than the diameter of a flint and of a length to receive a plurality of flints, the magazine being closed at one end and open at the other, the body being formed with a semi-circular notch communicating with the open end of the bore, a pair of semi-circular ears extending from the end of the body having the semi-circular notch, one of the ears being formed with a bearing opening, the other ear being imperforate, a flat dispensing disc pivotally mounted between the ears and fitting into the semi-circular notch of the body, the dispensing disc having a radially extending pocket of a size adapted to re-

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ceive a single flint, the dispensing disc having a pintle extending from one of its flat sides and projecting into said bearing opening, the other flat side of the disc being formed with a raised seat which engages the imperforate ear of the body, one of the semi-circular ears being of substantially smaller radius than the dispensing disc to expose the periphery of the disc for easy operation, the other semi-circular ear being of substantially the same radius as the dispensing disc to serve as a loading platform to support the flint being dispensed, the dispensing disc being movable from a loading position where the dispensing pocket is alined with the magazine, to a dispensing

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position, where the disc closes the magazine, but where the dispensing pocket is accessible for removal of a flint.

References Cited in the file of this patent

UNITED STATES PATENTS

1,223,189	Mann -----	Apr. 17, 1917
1,891,817	Hildebrand -----	Dec. 20, 1932
2,151,993	Sears -----	Mar. 28, 1939
2,352,319	Harris -----	June 27, 1944

FOREIGN PATENTS

141,474	Great Britain -----	Apr. 22, 1920
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