Apr. 3, 1923. 1,450,674

H. F. MARSTON

SIZE REDUCIBLE BOX

Filed Nov. 18, 1921

Fig. 1.

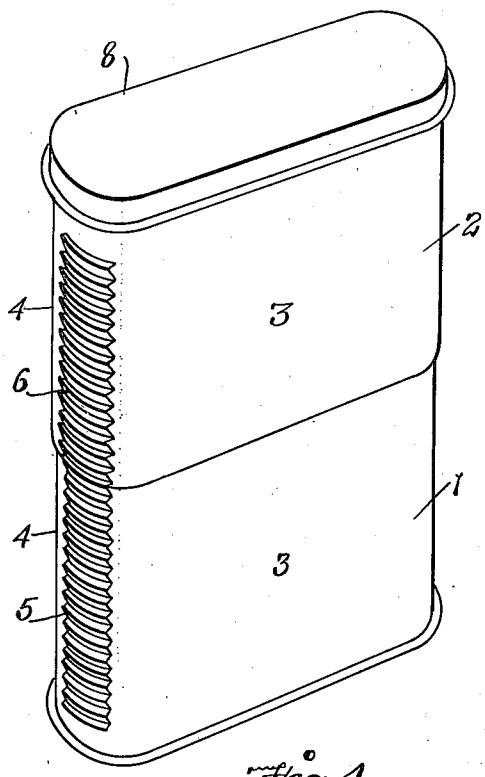


Fig. 2.

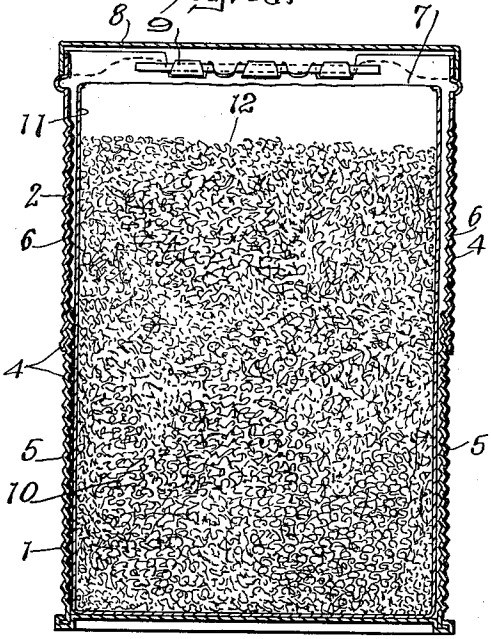


Fig. 3.

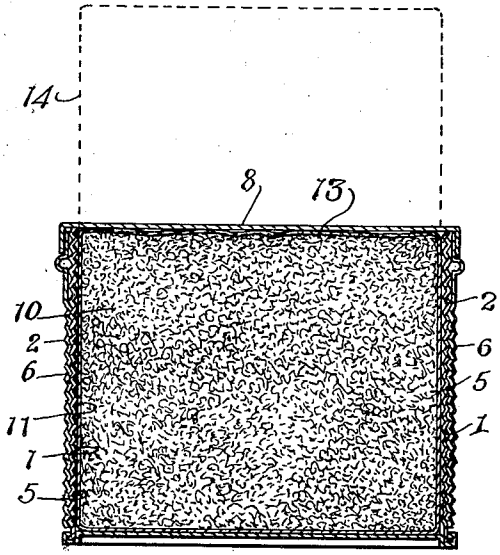
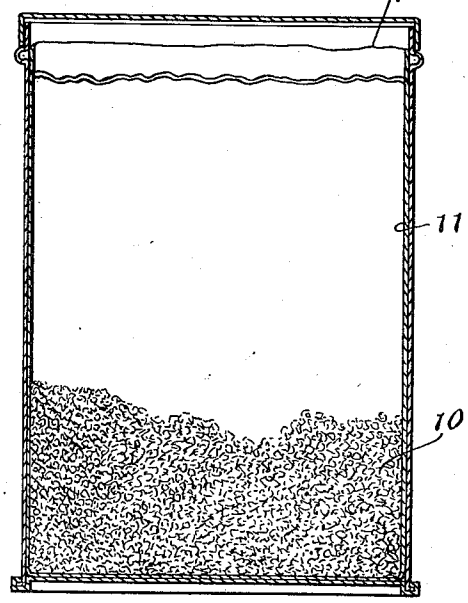


Fig. 4.



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UNITED STATES PATENT OFFICE.

HOWARD F. MARSTON, OF DAYTON, OHIO.

SIZE-REDUCIBLE BOX.

Application filed November 18, 1921. Serial No. 516,188.

To all whom it may concern:

Be it known that I, HOWARD F. MARSTON, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Size-Reducible Boxes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in size reducible boxes, more particularly such boxes designed for containing tobacco in granulated or shredded form, or so called "fine-cut," from which the user will take off quantities for his pipe or cigarette or for chewing purposes.

In the tobacco boxes now in use for these purposes the boxes are of fixed size, while the contents gradually reduce with their use, until it shortly becomes troublesome and difficult to remove the tobacco from the box due to the shallowness of the quantity and the comparatively great depth of the box. As the quantity lessens this condition becomes more and more aggravated until finally the user has to commonly resort to the use of his pencil or other instrument to reach down into the box and dig up or loosen a quantity of the tobacco.

It is the object of my invention to overcome this prevalent and objectionable condition, to which end my invention consists:—

First, and generally, in making my improved box of two sections which are adjustable with reference to each other so that the mouth of the box can be lowered as the contents are withdrawn, whereby there will be no condition when the contents cannot be readily reached from the mouth of the box.

Second, and more specifically, in combining with such reducible box a frangible lining or carton for containing the tobacco contents, such frangible element being reducible in size, as by cutting or tearing off portions thereof, as the box is reduced in size with the progressive removal of the contents.

Third, in providing the two sections of the box with serrated portions which will secure the sections against dropping or pulling apart and yet will permit the sections to slide on each other to allow of reducing the size of the box as the contents lessen.

These several objects are carried into effect by that form of my invention which I have selected for illustration in the accompanying drawing.

In these drawings—

Fig. 1 is a perspective view of my improved box when of normal size;

Fig. 2 is a vertical sectional view of such box also in normal size, and showing the enclosed carton of normal size also;

Fig. 3 is a like sectional view showing the box in reduced size and likewise the carton, in full lines, reduced in size; and

Fig. 4 is a vertical sectional view of a present style of tobacco box showing the contents reduced below accessibility by the fingers, with the carton and box still of full size.

In the drawings the numeral 1 indicates the base section of my improved box and 2 the top section. These sections are preferably of the wide and thin type shown having broad sides 3 and narrow ends 4. But they may be of cylindrical or other shapes.

The surface 5 of section 3 is serrated, as by being struck up, and the surface 6 of section 2 is complementarily serrated, while one section is fitted within the other so that the two sections have a sliding relation and the serrated surfaces will act to hold the sections in adjusted positions and yet permit of the movement of one section on the other, thus forming a sort of yieldable lock or frictional grip.

When the sections are distended, as shown in Figs. 1 and 2, the box is of normal size and the contents substantially flush with the mouth of the box, as shown at 7 in Fig. 2. But as the contents are removed by lifting the lid 8 which is secured to the upper section by a hinge 9, the upper line of the contents will be lowered and before the lid is closed the user will press the sections together and reduce the size of the box so that the mouth 7 will continue to be approximately in line with the top of the contents.

The contents are indicated by the numeral 10 and the carton or enclosing wrapper is indicated at 11 and is usually made of paper. As the contents are lowered the user will preferably remove the upper empty portion of the carton which is, as stated, frangible and may be torn or cut off. The mouth of the upper section being lowered to agree with the surface of the contents, as suggested by the contents line 12, the frangible carton can readily be torn or cut off and thus made to agree with the reduced size of the box.

As the use progresses and the contents grow less the carton will be also reduced in size until the minimum size box is reached, as shown in Fig. 3. This minimum is of a depth which will readily enable the user to extract the remaining quantity of the contents, as with the fingers, without further reducing the size of the box. In this figure I have shown the carton reduced to the line indicated at 13, from its original size indicated by the dotted lines 14. This progressive reduction of the size of the carton corresponding with the reduction of the size of the box is preferable, though in some cases the user may prefer to merely withdraw the contents, reduce the size of the box, and crowd into the box the unfilled surplus portions of the carton.

It will now readily be understood that with my invention the box is reducible in size progressively with the lessening of the contents and that the enclosing carton is likewise reducible in size. The advantages in use are distinct and real as this reducibility of the size of the box keeps the contents so near the mouth of the box as to enable the user to remove the last quantity of the contents quite as readily as at any other time. Again, there is the advantage of a box that constantly lessens in size so that during the period of consumption of say, the last half of the contents, the box is only half the size it was in the beginning, which not only facilitates the removal of the contents, as stated, but lessens the inconvenience of carrying the box in one's pockets.

I have particularly described my box with reference to use for containing tobacco, but it is obvious that it has other uses, such as for soap, candy, etc.

A further utility of the serrations 5 and 6 is that of affording match-striking surfaces. These surfaces are very effective for that purpose.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A size-reducible box comprising a base section broader than it is thick and having a surface on its narrow side with alternate grooves and ridges and a top section fitting over the base section and having a similar surface on its narrow side, the ridges of one section being spaced apart to fit into the grooves of the other section to hold the sections in a plurality of adjusted positions but allowing telescopic movement of the sections in both directions, said sections when united forming a box of extreme size when the serrations are least overlapped and forming a box of minimum size when said serrations are most overlapped.

2. A size-reducible box comprising a base section broader than it is thick and having on its narrow side alternate grooves and ridges and a top section having a hinged cover, said top section fitting over the base section and having also similar narrow and broad sides, the narrow sides being provided with alternate grooves and ridges to fit into the grooves and ridges of the other section to hold the sections in a plurality of adjusted positions, said sections forming a box of extreme size when the serrations are least overlapped and forming a box of minimum size when said sections are most overlapped, said sections being movable back or forth as desired.

In testimony whereof, I affix my signature.

HOWARD F. MARSTON.