

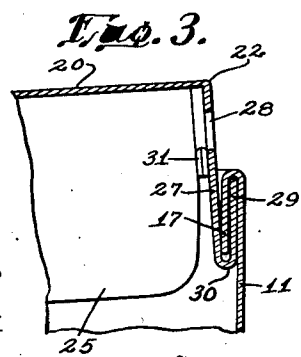
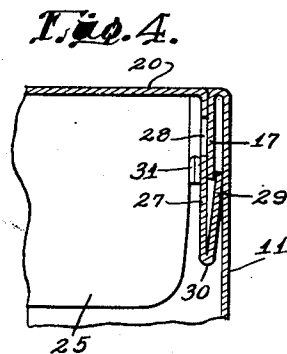
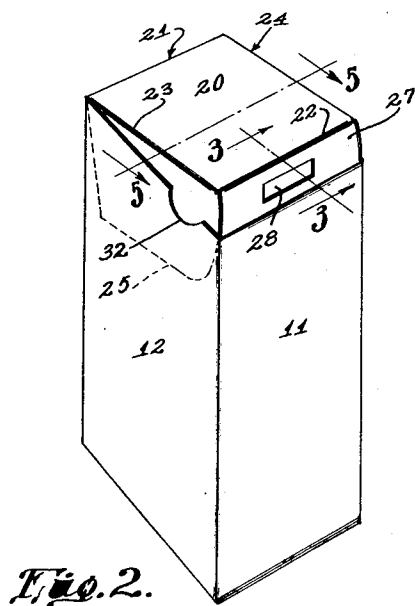
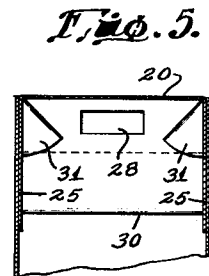
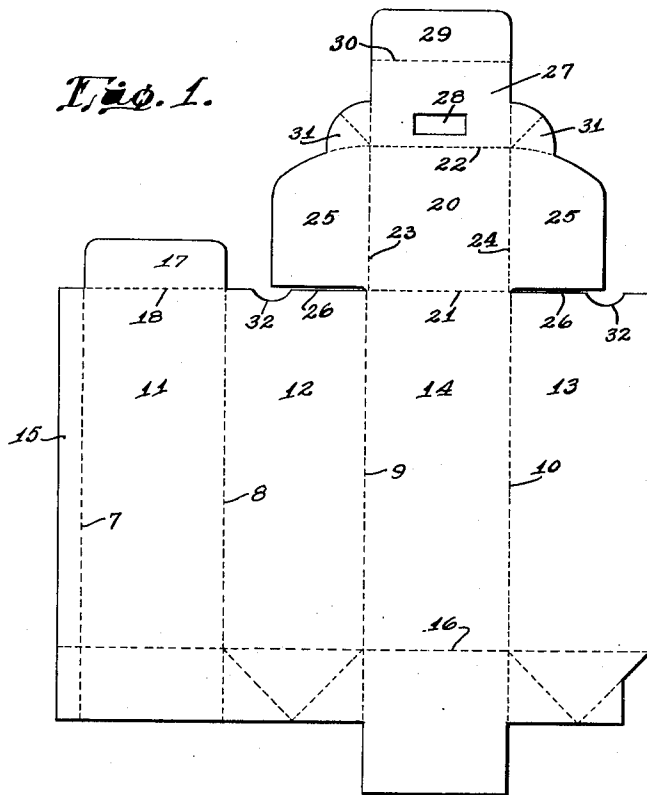
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PAPER RECEPTACLE

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2,567,017

PAPER RECEPTACLE

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My invention relates to receptacles made of paper or other foldable sheet material adapted for use as containers for either liquids or dry material in powdered, granulated or comminuted form. In its preferred form, the container is made from a one-piece blank of sheet material.

An object of the invention is to provide a novel and practical form of container having a hinged or movable top panel carrying a sanitary pouring spout with a pour opening which is closed and sealed when the top panel is in its lowered position.

A further object of the invention is to provide a novel means forming an interlocking connection between the swinging top panel and the container body. By this means, the height to which the top may be raised, is governed and limited.

Other objects of the invention will appear hereinafter.

Referring to the accompanying drawings which illustrate a preferred form of the invention:

Fig. 1 is a view of a one-piece flat blank of sheet material adapted to be folded for forming the container;

Fig. 2 is a perspective view of the container with the top panel in its lifted position to expose the pour opening;

Fig. 3 is a fragmentary sectional view at the line 3—3 on Fig. 2, on an enlarged scale;

Fig. 4 is a view similar to Fig. 3 but showing the top panel in its lower position for closing and sealing the pour opening; and

Fig. 5 is a fragmentary sectional view at the line 5—5 on Fig. 2.

Referring to Fig. 1, the flat blank of paper or other sheet material is provided with fold lines indicated on the drawing by dotted or broken lines, at which the blank is adapted to be folded for completing the container. The fold lines may consist of weakened lines, scores, creases, perforations or other means defining the lines along which the blank is folded. These include parallel fold lines 7, 8, 9, 10 extending from the top to the bottom of the blank and at which the blank is folded to form the rectangular, tubular body of the container comprising a front panel 11, side panels 12 and 13 and a rear panel 14. A narrow strip 15 adjoining the panel 11 along the fold line 7 provides a side seam flap which, when the container is folded, is adhered to the panel 13 by glue or other adhesive. A horizontal fold line 16 at the lower end of the side panels, defines the bottom edges of the container, the blank being extended below said line

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to provide bottom flaps or panels which are folded inwardly and adhered together by glue or cement to form the bottom of the container.

The blank is extended above the front panel 11 to form an integral tab 17 connected to the panel along a horizontal fold line 18 which defines the upper edge of the panel, said tab being folded downwardly and inwardly as shown in Figs. 3 and 4, for a purpose hereinafter described.

A rectangular top panel 20 is defined by fold lines 21, 22, 23, 24, the lines 23 and 24 being extensions respectively, of the fold lines 9 and 10 and the line 21 defining the adjoining edges of the top and rear panels 20 and 14. The top panel 20 is formed with, or has connected thereto along the fold lines 23 and 24, wings 25 which in the formed container are folded downward between the side panels 12 and 13 and bear with a resilient pressure against the inner surfaces of said panels. The blank is formed with slits 26 which separate the wings 25 from the top edges of the side panels and permit said wings to be folded.

The blank is extended upwardly beyond the fold line 22 to provide a flap 27 which in the formed container is folded downward and serves as a pouring spout and is provided with a pour opening 28. The flap 27 is extended to provide a tab 29 which folds upwardly and outwardly along the fold line 30.

Referring to Figs. 2 and 3 which illustrate the completed container with the pour spout in open position, it will be seen that the top panel 20 which hinges at the line 21, is inclined upwardly to expose the pour opening 28. The wings 25 extend downwardly between the side panels and bear against the inner surfaces of said panels while the spout flap 27 extends downwardly behind the front panel 11. The up-turned tab 29 on the spout flap 27 extends upwardly between the front panel 11 and the down-turned tab 17. The top panel is thus hooked to or interlocked with the front panel.

The interlocking tabs 17 and 29 govern the height to which the top panel may be lifted, and prevent it from being raised above the normal open position shown in Fig. 3 in which the pour opening 28 is fully exposed to permit the dispensing of the contents of the container. The interlocking tabs 17 and 29 also maintain an effective seal between the swinging top and the front panel while the side wings 25 provide a seal between the top and side panels.

Referring to Fig. 1, the blank is formed with corner pieces 31 in the form of sectors extending between the flap 27 and wings 25, said corner

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pieces folding inwardly when the blank is folded, in the form of fan folds (Fig. 5). These serve to seal the corners uniting the wings 25 and flap 27 and also serve to apply outward pressure both to the top flap 27 and the wings 25 and thus assist in sealing the container top and body. When the top panel 20 is in its downward position, it is flush with the top edges of the container body, the spout flap 27 being entirely concealed and positioned within the outline of the container. This simplifies storage problems as compared with constructions having exposed or protruding spouts, and requires a minimum amount of storage space. The spout surface surrounding the pour opening is also covered and thereby protects the contents of the container against dust and other contaminating material.

The side panels 12 and 13 are formed with thumb and finger recesses 32 which, in the closed container, expose areas of the wings 25. This insures a good grip of the top at said areas for opening the spout.

Modifications may be resorted to within the spirit and scope of my invention.

I claim:

1. A receptacle formed of foldable sheet material comprising a tubular body, a top hinged at its rear edge to said body, and a spout flap depending from the front edge of said top and formed with a pour opening, said top being movable upward about its hinge from a closed position in which the pour opening is below the rim of the said body, to a lifted position in which the pour opening is exposed, said spout flap and receptacle body being formed with interlocking tabs by which the upward movement of the cover section is limited, said interlocking tabs including an up-turned tab comprising an up-turned lower end portion of the depending spout flap positioned below the spout opening, and a down-turned tab extending downwardly from the upper edge of the front wall of the receptacle behind the up-turned tab in position to cover the pour opening while the said top is in closed position, the upper edge of the up-turned tab being spaced below the upper edge of said front wall and the lower edge of the down-turned flap being spaced above the lower edge of said flap and up-turned tab, thereby permitting said up-and-down movement of said top, said tabs being free for relative up-and-down movement in sliding contact with each other and in sliding overlapped relation throughout the movement of the top from its closed position to its said lifted position.

2. A receptacle formed from a blank of foldable

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sheet material, comprising a tubular body including front, side and rear panels, a top panel hinged to the rear panel for up-and-down swinging movement, wings depending from the side edges of the top panel and lying against the inner faces of the side panels, and a spout flap depending from the front edge of the top panel and extending downward behind the front body panel, said flap having an end portion up-turned to form a locking tab, the front panel of said body having a down-turned tab interlocking with said up-turned tab and thereby limiting the upward movement of the top panel, said tabs being in overlapping sliding contact throughout the said up-and-down movement of the top panel, said flap being formed with a pour opening in position to be exposed when the top panel is swung upward and closed when the top is swung downward.

3. A receptacle formed of sheet material and comprising a body having a front panel, a top panel having a flap depending therefrom behind said front panel, the lower portion of the flap being up-turned and forming a locking tab up-turned in position to lie against the inner surface of said front panel, said flap having a pour opening above said tab, said top being movable up and down for lifting and lowering said flap to and from a position in which the pour opening is exposed above the front panel, and a down-turned tab integral with the front panel and extending downward from the upper edge of the panel behind said up-turned tab in interlocking relation thereto, the upper edge of the up-turned tab being spaced below the upper edge of the front panel and down-turned tab and the lower edge of the down-turned tab being spaced above the lower edge of the up-turned tab, thereby permitting and limiting the upward movement of the top panel.

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