March 12, 1963 W. P. GRIFFITHS 3,081,025

MAILBOX

Filed July 20, 1961

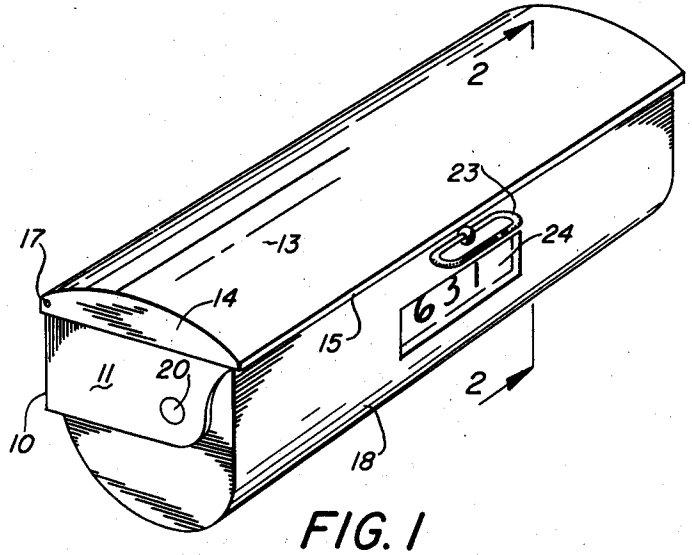


FIG. 1

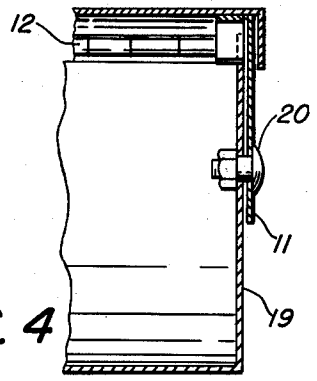


FIG. 4

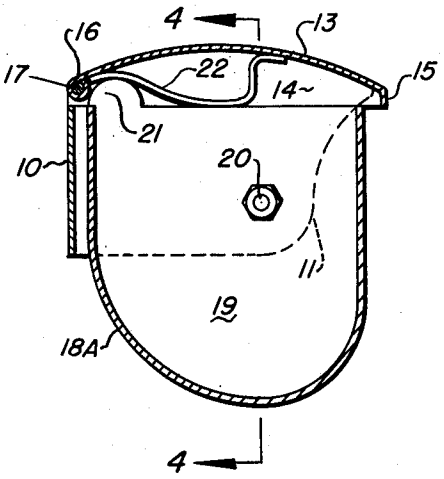


FIG. 2

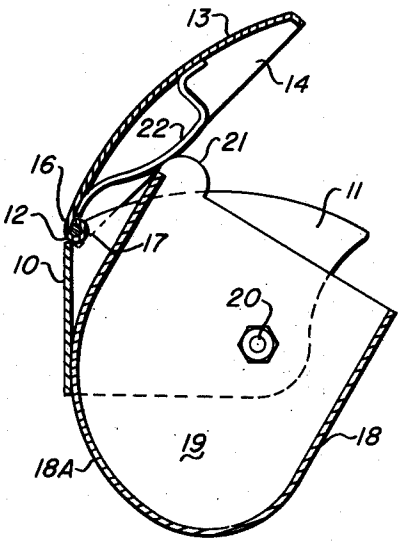


FIG. 3

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MAILBOX

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The principal object of the invention is the provision of a mailbox that may be opened by moving the body of the mailbox relative to a support therefor to automatically open a normally closed lid portion.

A further object of the invention is the provision of a mailbox of a simple and attractive construction incorporating an automatically opening lid.

A still further object of the invention is the provision of a mailbox which may be easily made and quickly assembled and which will hold a desirable quantity of mail.

A further object of the invention is the provision of a mailbox in which a movable receptacle is arranged to open a lid therefor so that the lid will hold the receptacle in open position.

A still further object of the invention is the provision of a mailbox in which a relatively movable mail holding body and closure therefor may be simultaneously actuated by a simple motion imparted the mail holding body.

The mailbox disclosed herein comprises an improvement in the art relating to mailboxes used on residences for home delivery of mail. It is well known that many and various types of mailboxes have been proposed and used and patented, and it is also known that many of these devices have included means by which part or all of the mailboxes could be opened to provide ready access thereinto. Most of the mailboxes heretofore known have utilized stationary boxes and hinged lids. Some of them have used stationary lids and hinged boxes and a few of them have incorporated mechanical devices whereby the lid or the body could be moved and access into the mailbox provided. The present invention relates to an improvement wherein a stationary mounting bracket has a lid hinged thereto and a box-like body pivoted thereto with the box-like body arranged to be tilted forwardly on its pivots whereupon the lid is automatically opened.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being the intention to cover all changes and modifications of the example of the invention herein chosen for purposes of the disclosure, which do not constitute departures from the spirit and scope of the invention.

The invention is illustrated in the accompanying drawing, wherein:

FIGURE 1 is a perspective view of the mailbox.

FIGURE 2 is a vertical section on line 2—2 of FIGURE 1 on an enlarged scale.

FIGURE 3 is a vertical section similar to FIGURE 2 showing the relative movement of the respective parts of the mailbox.

FIGURE 4 is a section on line 4—4 of FIGURE 2 with parts in cross section and parts broken away.

By referring to the drawings and FIGURE 1 in particular, it will be seen that a mailbox has been disclosed which comprises a mounting bracket **10** having forwardly extending apertured arms **11** on its opposite ends and portions **12** of a continuous piano hinge formed along its uppermost longitudinal edge. A lid **13** is preferably arcuate in cross section and having depending end flanges **14, 14** and a front flange **15** is provided with portions **16** of a continuous piano hinge along its rearmost longitudinal edge and which hinge portions **16** are engaged with

the hinge portions **12** on the bracket **10** so that they respectively receive a pivot rod **17** axially thereof. The lid **13** is therefore hinged affixed to the upper longitudinal edge of the bracket **10, 10** and the lid **13** is of a length sufficient that the end flanges **14, 14** overlie the spaced arms **11, 11** of the bracket **10**. A box-like receptacle open at its upper end and comprising a cross sectionally U-shaped body **18** with end pieces **19, 19** secured in the ends thereof is pivotally mounted by pivots such as bolt and nut assemblies **20, 20** positioned through the ends **19, 19** and the spaced arms **11, 11** respectively as best seen in the cross section comprising FIGURE 4. Alternately, rivets may be employed to form workable pivot members. The shape of the body member **18** is such that its rearmost lower section **18A** is curved on a radius based on the bolt and nut assemblies **20, 20** so that when the body **18** is tilted as shown in FIGURE 3 of the drawings, it will move relative to the bracket **10** between the arms **11, 11** thereof so that its open upper end moves forwardly and downwardly to provide ready access thereinto. By referring now to FIGURES 2 and 3 of the drawings, it will be seen that the end portions **19, 19** of the mailbox receptacle have upwardly extending projections **21, 21** on their rearmost upper corners and which projections **21, 21** are preferably rounded. It will also be seen that the lid **13** is provided with a pair of cams **22, 22** which may alternately comprise a single section of metal appropriately shaped and extended longitudinally of the bottom side of the lid **13**. The cams **22, 22** are arranged to provide surfaces against which the projections **21, 21** on the ends **19, 19** will engage when the mailbox is in upright position as shown in FIGURES 1 and 2 of the drawings so as to move the lid **13** upwardly on an arc based on the hinge pin **17** when the box is tilted forwardly as shown in FIGURE 3.

It will be observed that the configuration of the cams **22, 22** is such that when the lid **13** is elevated to its maximum degree the cams **22, 22** and the lid **13** act as members engaging the body **18** and holding it in open position by frictional engagement with the projections **21, 21** thereof. By referring to FIGURE 1 it will be seen that a handle **23** is pivotally affixed to the mailbox on the front thereto and that if desired a recess may be provided as indicated at **24** in which desirable indicia such as a house number or name may be positioned. It will be observed that in opening the mailbox either to place mail therein or to remove it therefrom it is only necessary to tilt the box on the pivots **20, 20** either by pulling forward with the handle **23** or pushing against the lowermost edge thereof, either action resulting in the tilting of the mailbox and the simultaneous automatic opening of the lid **13** as actuated by the cams **22, 22** and the projections **21, 21** which engage the same.

It will thus be seen that a mailbox meeting the several objects of the invention has been disclosed and having thus described my invention, what I claim is:

1. A mailbox comprising a support, said support including a generally vertically extending plate having forwardly projecting spaced ends and adapted to be secured to the vertically extending surface of a wall, a receptacle for mail extending horizontlaly between the ends of said plate, said receptacle comprising spaced front and rear walls connected together at their ends by spaced end walls, a bottom having edges connected to lower portions of said front and rear walls, pivot means connected to a central portion of each of said end walls and pivotally connecting said end walls to the ends of said support, a semi-circular cam formed on the upper rear corner of each end wall and projecting upwardly therefrom, a lid normally extending horizontally across upper edges of said front and rear wall so as to cover the top of said

receptacle, hinge means pivotally connecting said lid directly to the upper edge of the plate of said support whereby said hinge means is located above and rearwardly of said pivot means, cam means secured to the lower surface of said lid and operatively engaging said semi-circular cam, said receptacle being pivotal through an angle of less than 90° about said pivot means, a lower portion of said receptacle contacting said plate so as to function as a limit stop when said receptacle is pivoted through said angle, said semi-circular cam coacting with said cam means so as to force said lid upwardly to a position substantially parallel with the rear wall of said receptacle when said receptacle is pivoted through said angle, the weight of said lid acting through said cam and cam means to hold said lid and said receptacle in the open position after the receptacle has been moved through said angle, and the bottom of said receptacle being below the upper edges of said front and rear walls after the receptacle has been pivoted through said angle.

2. A mailbox as defined in claim 1, wherein said cam means is substantially S-shaped.

3. A mailbox as defined in claim 1, including handle means secured to the front wall of said receptacle above said pivot means.

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