March 6, 1956  J. J. BANKS, JR  2,737,353
HOLLOW COVER FOR SHEET MATERIAL

Filed April 9, 1952

Fig. 6.

Fig. 7.

Inventor
John J. Banks Jr.
by Rhees and Rhees
Attorneys
HOLLOW COVER FOR SHEET MATERIAL

John J. Banks, Jr., Jamaica Plain, Mass., assignor of one-half to Lawrence Feinstein, Brookline, Mass.

Application April 9, 1952, Serial No. 281,428
19 Claims. (Cl. 242—55.5)

The present invention relates to hollow covers for sheet material, and more particularly to hollow covers for toilet paper rolls and similar rolls of sheet material. It has heretofore been proposed to cover up rolls of toilet paper and the like with the aid of attractive covers. Such prior-art devices, however, have either required the use of complicated attaching mechanisms such as lining surfaces for the recesses in walls that carry the toilet-paper spindle, hinged constructions, and the like, or they have required the building-in of the toilet-paper holder into the wall itself.

An object of the present invention is to provide a new and improved cover for rolls of sheet material that obviates the necessity not only for special complicated attaching mechanisms, but, also, for building the cover into the wall. The present invention, on the contrary, provides a simple mechanism for attaching and removing the cover to and from present-day toilet-roll holders.

A further object is to provide a cover that can be used with toilet-roll holders that are entirely recessed in the wall.

Still another object is to provide a cover of the character described that is adapted for use with toilet rolls that are supported at points removed from the wall.

Other and further objects will be explained hereinafter and will be more particularly pointed out in connection with the appended claims.

In summary, the present invention relates to a hollow cover, preferably formed of plastic material, adapted to be simply applied to and removed from a roll of sheet material carried by a spindle that is either recessed in the wall or mounted upon projections extending from the wall. The cover comprises two side walls and a front wall and a rear opening through which a roll of sheet material carried by the spindle may be inserted into the hollow of the cover. Each side wall of the cover is provided with attaching elements for attaching a resilient securing member, such as an elastic band or a metallic clip for fitting over the respective ends of the spindle, in order resiliently to hold the roll in the hollow cover but permitting resilient separation of the roll from the cover for the purpose of enabling mounting of the hollow cover with the roll therein upon the wall of a room. A guiding wall is preferably provided spaced from a portion of the front wall of the cover for guiding the sheet material from the roll therebetween, the guiding wall terminating at one of its ends in a transverse opening through which the sheet material is withdrawn, and being pivoted between the side walls along an axis displaced from its other end. Preferred constructional details are hereinafter discussed.

The invention will now be described in connection with the accompanying drawings, Figs. 1 and 2 of which are respectively front and side elevations of a cover constructed in accordance with a preferred embodiment of the invention, Fig. 1 being partly broken away along the line 1—1 of Fig. 2, and Fig. 2 being partly broken away along the line 2—2 of Fig. 1, looking in the direction of the arrows, to illustrate details; Fig. 3 is a fragmentary rear view taken along the line 3—3 of Fig. 2, looking in the direction of the arrows; Fig. 4 is a section taken along the line 4—4 of Fig. 1, looking in the direction of the arrows; Fig. 5 is a view similar to Fig. 2 of a modified attaching mechanism; Figs. 6 and 7 are respectively front and side elevations of a modification, Fig. 6 being partly broken away along the line 6—6 of Fig. 7 and Fig. 7 being partly broken away along the line 7—7 of Fig. 6, looking in the direction of the arrows, to show detailed features of construction; Figs. 8 and 9 are respectively front and side elevations of still a further modification, Fig. 8 being partly broken away along the line 8—8 of Fig. 9, and Fig. 9 being partly broken away along the line 9—9 of Fig. 8, looking in the direction of the arrows; and Fig. 10 is a section taken upon the line 10—10 of Fig. 9, looking in the direction of the arrows.

Referring to Figs. 1 to 3, a cover 1, preferably molded, as by the injection-molding process, from variously colored thermoplastic materials, such as styrene and the like, in varying degrees of transparency, translucency or opacity, is shown mounted against a wall 3 of a room, such as a bathroom, to cover a roll of toilet paper 5 carried by a spindle 7. The spindle 7 is provided with reduced-diameter and portions 9 extending beyond the roll 5, at least one of which is spring-loaded (not shown), as is well-known, in order that the spindle may be mounted with its ends received within depressions 11, Fig. 3, pre-formed in the side walls of a conventional toilet-paper recess 13 in the wall 3.

In the absence of the cover 1, the left-hand portion of the toilet roll 5, as viewed in Fig. 2, would extend beyond the wall 3 of the room, permitting access to the paper, while the right-hand portion of the roll 5 would be contained within the recess 13 in the wall 3. There are several disadvantages, however, residing in leaving the roll 5 so exposed. Among these disadvantages are unsightly appearance, susceptibility to the unravelling of undesired lengths of paper and the collection of dirt or soot and the like. Covers have therefore been proposed, but, as before stated, they are not adapted for easy attachment and removal by the unskilled housewife or other user.

The cover 1 of the present invention, on the other hand, is easily applied to cover the roll 5 and mount upon the wall 3, and easily separated from the wall 3. The preferably substantially parallel side walls 15 of the cover 1, illustrated as vertically disposed, are connected by a front wall 17, the upper and lower portions of which, as viewed in Figs. 1 and 2, converge toward each other. A substantially centrally disposed transverse opening 19, shown horizontal, of length at least equal to the width of the roll 5, receives the free end 21 of the paper of the roll 5. The rear opening of the cover 1 has substantially the same dimensions as those of the opening of the wall recess 13, being preferably slightly smaller. A flange 23 extends about the cover 1 in a plane slightly displaced from the plane of the rear opening, shown displaced to the left in Fig. 2, so that it abuts against the wall 3 when the cover is applied to the recess 13. The free edges of the side walls 15 are each provided with upper and lower inclined slot apertures 25 for receiving and retaining a resilient securing member 27. In Figs. 2 and 3, the resilient securing member 27, is shown in the form of a resilient band attached by hooks at its ends within the slots 25. The intermediate portion of the band is free to stretch outward and fit over the reduced ends 9 of the spindle 7, thereby resiliently to draw the cover over the opening of the recess 13 with the portions of the cover walls extending between the flange 23 and the cover rear opening,
to the right as viewed in Fig. 2, fitting within the recess 13, and the flange 23 engaging the wall 3. Intermediate the attaching elements 25, notches 29 are provided in the free edges of the side walls 15 to prevent binding of the side edges against the spindle before the flange 23 should engage the wall 3 of the room. In order to insure proper feeding of the paper through the transverse front-face opening 19, a guiding wall 31 is provided terminating at its lower end in an outwardly curving section 33 passing through the transverse opening 19, and being pivoted, as by integral pins 37, between the side walls 15 along an axis disposed substantially parallel to the transverse opening 19 and displaced downwardly from its upper end. The curving portion 33 causes the free end 21 of the paper from the roll 5 to project outward, thereby to facilitate grasping it. The upper edge bounding the transverse opening 19 may be serrated, as shown at 35, Figs. 1 and 4, in order to assist in cleanly tearing the paper. The pivoting of the guiding wall 31 along the axis disposed from its upper end not only permits play in the withdrawing of the paper 21 from the opening 19, thereby reducing the tendency to tear the paper, but it also adapts the holder for use with rolls of different sizes. If, for example, a roll larger than that illustrated in the drawings were used, it would bear against the lower portion of the guiding wall 37, pivoting it outward, and thus permitting operation with the larger roll.

A flange 25 may be provided in the upper portion of the front wall 17, to assist in withdrawing the free end 21 of the rolled paper. Similarly, a viewing opening 41, on one or both of the side walls 15 may be provided, in those cases where the cover is translucent or opaque, to permit determination of the amount of paper left on the roll, without necessitating removal of the cover 1.

The manner in which the cover 1 is assembled is as follows. The spindle 7 carrying the roll 5 is withdrawn from the recess 13, as by compressing the spring-loaded end of the spindle and withdrawing the spindle and roll from the recess, as is presently done in replacing new rolls of paper. The resilient securing members 27 are then fitted over the end portions 9 of the spindle 7, the spring-loaded spindle end is again compressed, and the spindle is re-inserted in the depressions 11 within the recess 13, the side wall of the cover adjacent the spring-loaded spindle end being held away from the spindle in opposition to the action of its resilient securing member 27. When the spindle is seated within the depressions 11 in the recess 13, the cover 1 is released and snaps into the mounted position of Fig. 2. The reverse process is followed in removing the cover. It is thus apparent that anyone, no matter how unskilled, can apply and remove the cover of the present invention at will without any tools or special parts. The present-day toilet-roll recesses 13, moreover, need no modification in order that they be suited for use with the present invention.

It is to be understood that the present invention is not limited to the particular attaching devices 25 and resilient members 27 shown in Figs. 1, 2 and 3, or in the other embodiments of the invention. Other types of attaching elements such as posts and the like, and other types of resilient members such as springs, clips and the like, may also be employed. As an illustration, a somewhat simpler resilient securing member is shown in Fig. 5. It comprises a metal-wire clip formed of two preferably normally contacting co-planar loops 43, hooked at their free ends within the attaching aperture slots 25. The cover 1 is mounted over the recess 13 merely by forcing the resilient loops 43 to fit over the spindle end portions 9, as by pushing over 1 against the recess 13. The cover is equally easily removed, merely by pulling it from the wall.

Not all toilet-roll holders, however, are mounted within recesses that contain the spindle. Frequently, the spindle is mounted upon projections that extend from the wall containing the recess, as is shown at 11' in Fig. 6. In view of the substantial portion of the roll 5 that then protrudes from the wall 3, as shown in Fig. 7, it is preferable, from both the aesthetic and mechanical points of view, that the front wall of the cover curve substantially circular are substantially concentric with the roll.

Since the ends of the spindle 7 are displaced forward of the wall 3, to the left as shown in Fig. 7, the intermediate notches 29 must be extended from the proportions shown in Fig. 2 into a horizontal slot, Fig. 7, that will accommodate the range of distances that spindles are conventionally mounted in front of recessed walls. Since the spindle 7 mounts within the side walls 15' of the cover, the attaching elements 25 can no longer be placed along the free edges of the side walls as in Figs. 2 and 5. Instead, attaching apertures 25', Fig. 7, are formed immediately the side walls, preferably along a wall of the viewing aperture 41. Resilient securing members, such as the elastic band 27 of Fig. 7, may then be secured within the apertures 25' and fitter over the ends of the spindle to draw the cover over the roll end into engagement with the wall 3 surrounding the recess 13. A flange may be provided as in the case of the cover of Figs. 1 to 5, but it is preferred with the type of cover illustrated in Figs. 6 and 7, that the rear opening of the cover be slightly larger than the recess opening in order that the edges bounding the rear opening of the cover engage the wall 3 and do not seal edges that are, except as all other respects the cover of Figs. 6 and 7 is similar to that of Figs. 1 to 5, the same numerals illustrating the same parts.

There are, however, still other types of toilet-roll supporting devices that do not cooperate with wall recesses at all. In Figs. 8 and 9, the spindle 7, on the contrary, is shown supported by projections 11" extending from a solid flat wall surface 3. In this case, the complete roll 5 is supported away from the wall. Whereas in the cover of Figs. 6 and 7 the distance from the front wall to the rear opening of the cover had to be at least greater than the radius of the roll in order to cover the same, the same dimension in the cover of Figs. 8 and 9 must be greater than the diameter of the roll. Except for the longer flat upper and lower portions of the front face and the longer slot 29", moreover, the cover of Figs. 8 and 9 is substantially the same as that of Figs. 6 and 7. The additional detail of Fig. 10, illustrating the attachment of the resilient member 27, indeed, applies both to the cover of Figs. 8 and 9 and to the cover of Figs. 6 and 7.

While the invention has been described as applied to toilet rolls and toilet-roll wall recesses or supporting devices, it is to be understood that this is but a preferred application of the invention and that it is equally applicable to cover other types of sheet material.

Further modifications will occur to those skilled in the art and all such are considered to fall within the spirit and scope of the invention as defined in the appended claims.

What is claimed is:
1. A hollow cover provided with two side walls and a front wall and a rear opening through which a roll of sheet material carried by a spindle may be inserted into the hollow of the cover, resilient securing members being attached between two points of each of the side walls on opposite sides of the spindle, each securing member having a resilient region disposed intermediate the respective said points for resiliently receiving and engaging the respective ends of the spindle in order resiliently to hold the roll in the hollow cover but permitting resilient separation of the roll from the cover for the purpose of enabling mounting of the hollow cover with the roll therein upon the wall of a room.
2. A hollow cover provided with two side walls and a front wall and a rear opening through which a roll of sheet material carried by a spindle may be inserted into the hollow of the cover, each of the side walls of the cover being provided with a pair of attaching elements disposed on opposite sides of the spindle between which are attached securing members, each securing member
having a resilient region disposed intermediate the respective said pair of attaching elements for resiliently receiving and engaging the respective ends of the spindle in order resiliently to hold the roll in place intermediate the respective said pair of attaching elements of the roll from the cover for the purpose of enabling mounting of the hollow cover with the roll therein upon the wall of a room.

3. A hollow cover for a roll of sheet material carried by a spindle the ends of which extend beyond the roll having, in combination, side and front walls and a rear opening, a resiliently resilient region disposed intermediate the respective said pair of attaching elements of the roll from the cover for the purpose of enabling mounting of the hollow cover with the roll therein upon the wall of a room.

4. A hollow cover for a roll of sheet material carried by a spindle the ends of which extend beyond the roll having, in combination, side and front walls and a rear opening, a resiliently resilient region disposed intermediate the respective said pair of attaching elements of the roll from the cover for the purpose of enabling mounting of the hollow cover with the roll therein upon the wall of a room.

5. A hollow cover for a roll of sheet material carried by a spindle the ends of which extend beyond the roll having, in combination, side and front walls and a rear opening, a resiliently resilient region disposed intermediate the respective said pair of attaching elements of the roll from the cover for the purpose of enabling mounting of the hollow cover with the roll therein upon the wall of a room.

6. A hollow cover for a roll of sheet material carried by a spindle the ends of which extend beyond the roll having, in combination, side and front walls and a rear opening, a resiliently resilient region disposed intermediate the respective said pair of attaching elements of the roll from the cover for the purpose of enabling mounting of the hollow cover with the roll therein upon the wall of a room.

7. A hollow cover for the opening of a wall recess containing a roll of sheet material carried by a spindle, in order to engage the respective ends of the roll and mount the roll therein upon the wall of a room.

8. A hollow cover for the opening of a wall recess containing a roll of sheet material carried by a spindle, in order to engage the respective ends of the roll and mount the roll therein upon the wall of a room.

9. A hollow cover for the opening of a wall recess containing a roll of sheet material carried by a spindle, in order to engage the respective ends of the roll and mount the roll therein upon the wall of a room.

10. A hollow cover for the opening of a wall recess containing a roll of sheet material carried by a spindle, in order to engage the respective ends of the roll and mount the roll therein upon the wall of a room.
2,787,358

7

roll, and a pair of attaching elements disposed on each of the side walls on opposite sides of the spindle to each of which is attached a resilient securing member, each securing member having a resilient region disposed intermediate the respective said pair of attaching elements for resiliently receiving and engaging the respective ends of the spindle, thereby resiliently to draw the cover over the roll with the latter received through the said rear opening and with portions of the spindle near its ends received within the said rear slots.

11. A hollow cover for a roll of sheet material carried by a spindle mounted between members projecting from a wall having, in combination, side walls provided with slots, a front wall connecting the side walls and provided with a transverse opening of length at least equal to the length of the roll, and a rear opening, the distance between the foremost portion of the front wall and the plane of the rear opening being greater than the radius of the roll, and means disposed on each of the side walls to which is attached a resilient securing member adapted to lateral the roll over the roll with the latter received through the said rear opening and with portions of the spindle near its ends received within the side-wall slots, a front wall connecting the side walls and provided with a transverse opening of length at least equal to the length of the roll, and a rear opening, the curvature of the front wall being substantially parallel to the curvature of the roll and the distance between the foremost portion of the front wall and the plane of the rear opening corresponding at least to the distance that the roll is moved in front of the said projecting members, aperture means disposed on each of the side walls receiving and attaching thereto a resilient securing member adapted to fit over an end of the spindle, each securing member having a resilient intermediate region for resiliently receiving and engaging the respective ends of the spindle, thereby resiliently to draw the cover over the roll with the latter received through the said rear opening and with portions of the spindle near its ends received within the horizontally disposed side-wall slots, a curved guiding wall spaced from the upper portion of the front wall for guiding the paper from the roll therebetween, the guiding wall terminating at its lower end in an outwardly curving portion passing through the front wall transverse opening and being pivoted between the side walls along a substantially horizontal axis displaced from its upper end, and a finger aperture disposed in the front wall opposite the guiding wall.

13. The hollow cover claimed in claim 6 and in which each resilient securing member comprises a resilient band having a portion thereof free to stretch over an end of the roll.

14. The hollow cover claimed in claim 6 and in which each resilient securing member comprises a metallic clip for resiliently clipping over an end of the spindle.

15. A hollow cover for a roll of sheet material carried by a spindle the ends of which extend beyond the roll having, in combination, side walls and a rear opening, a pair of attaching elements disposed on each of the side walls on opposite sides of the spindle to each of which is attached a resilient securing member, each securing member having a resilient region disposed intermediate the respective said pair of attaching elements for resiliently receiving and engaging the respective ends of the spindle, thereby resiliently to draw the cover over the roll with the latter received through the said rear opening, a transverse opening in the front wall of length at least equal to the length of the roll through which the sheet material may be fed, and a guiding wall spaced from a portion of the front wall for guiding the sheet material from the roll therebetween, the guiding roll terminating at one of its ends in the transverse opening and being secured between the side walls at a region displaced from its other end.

16. A hollow cover for the opening of a wall recess containing a roll of sheet material carried by a spindle mounted within the recess having, in combination, side walls, a front wall connecting the side walls, and a rear opening of dimensions substantially the same as the dimensions of the recess opening, a pair of attaching elements disposed on each of the side walls to which is attached a resilient securing member, each securing member having a resilient region disposed intermediate the respective said pair of attaching elements for resiliently receiving and engaging the respective ends of the spindle, thereby resiliently to draw the cover against the wall containing the recess opening in order to cover the same, a transverse opening in the portion of the front wall for guiding the paper from the roll therebetween, the guiding wall terminating at one of its ends in the transverse opening and being secured between the side walls at a region displaced from its other end.

17. A hollow cover for the opening of a wall recess containing a roll of sheet material carried by a spindle the ends of which extend beyond the roll and mounted within the recess having, in combination, substantially parallel side walls, a front wall connecting the side walls and provided with a transverse opening of length at least equal to the length of the roll through which the sheet material may be fed, a rear opening of dimensions substantially the same as the dimensions of the recess opening and an outwardly curving portion passing through the front wall transverse opening and being secured between the side walls along an axis displaced from its upper end.

18. A hollow plastic cover for the opening of a wall recess containing a roll of toilet paper carried by a spindle the ends of which extend beyond the roll and mounted within the recess having, in combination, substantially parallel side walls, a front wall connecting the side walls and provided with a transverse opening of length at least equal to the length of the roll through which the paper may be fed, a rear opening of dimensions substantially the same as the dimensions of the roll, a flange extending about the cover in a plane slightly displaced from the plane of the rear opening, and lower means disposed along the edges of each of the side walls receiving and attaching thereto a resilient securing member, each securing member having a resilient region disposed intermediate the said upper and lower means for resiliently receiving and engaging the respective ends of the spindle, thereby resiliently to draw the cover over the recess opening with the portions of the
cover walls extending between the flange and the rear opening fitting within the recess and the flange engaging the wall containing the recess, a guiding wall spaced from the upper portion of the front wall for guiding the paper from the roll therebetween, the guiding wall terminating at its lower end in an outwardly curving portion passing through the front wall transverse opening and being secured between the side walls at a region displaced from its upper end and disposed substantially parallel to the transverse opening, and a finger aperture disposed in the front wall opposite the guiding wall.

19. The hollow cover claimed in claim 18 and in which the free edges of the side walls are provided with notches disposed intermediate the said upper and lower means for assuring the engagement of the flange against the wall containing the recess before the said side-wall edges should bear against the spindle near its ends.

References Cited in the file of this patent

UNITED STATES PATENTS

1,029,490  Connors et al.  June 11, 1912
2,114,628  Carruthers  Apr. 19, 1938
2,177,430  Greiser  Oct. 24, 1939
2,275,787  Medoff  Mar. 10, 1942
2,579,201  Pendergast  Dec. 18, 1951