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WASTE BASKET HOLDER

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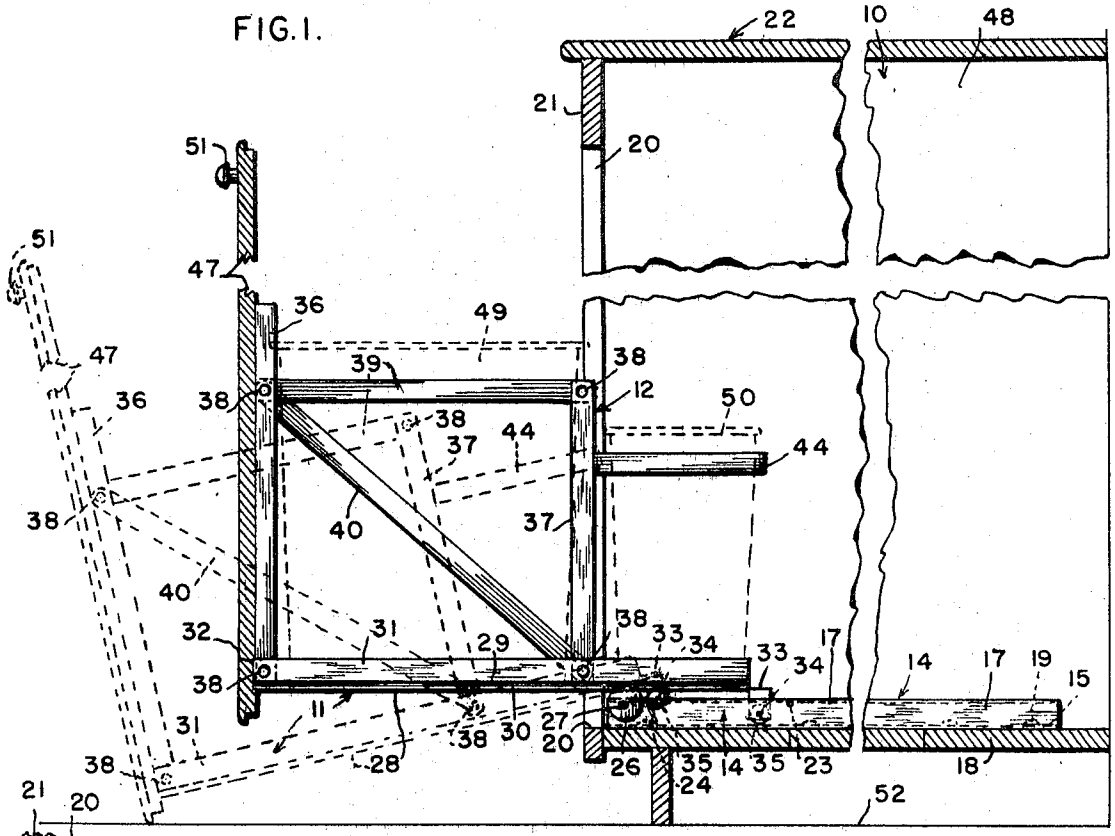
FIG. 1.



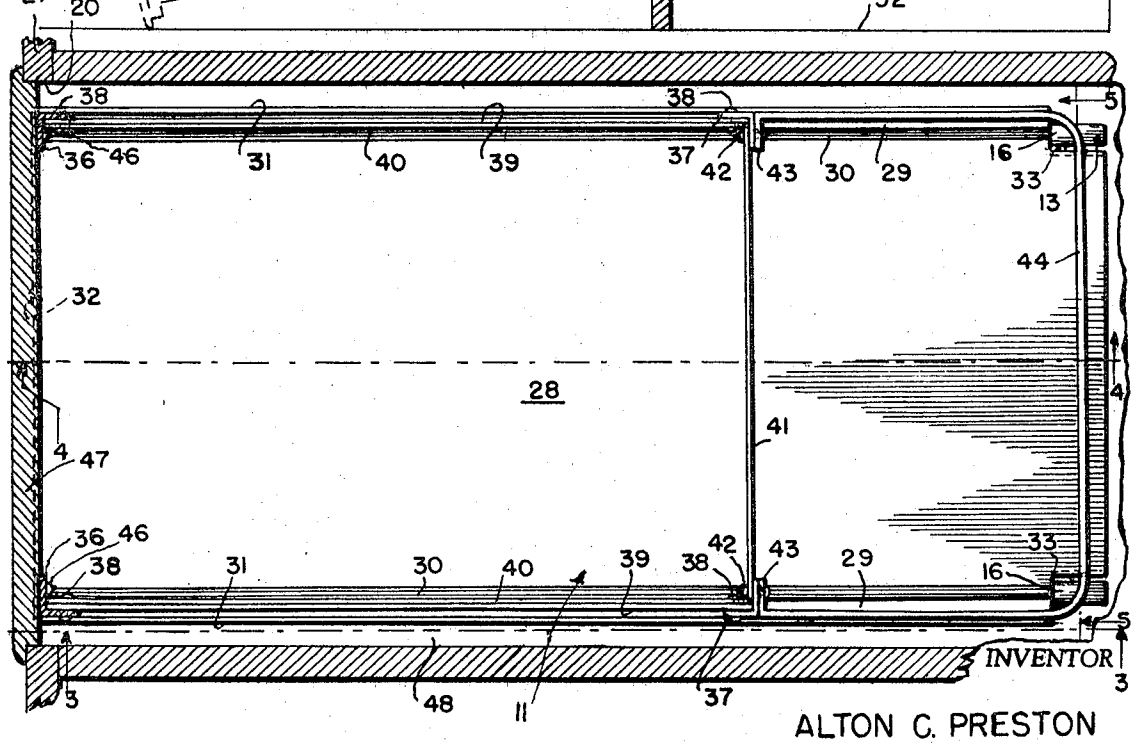


FIG. 2.

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FIG. 3.

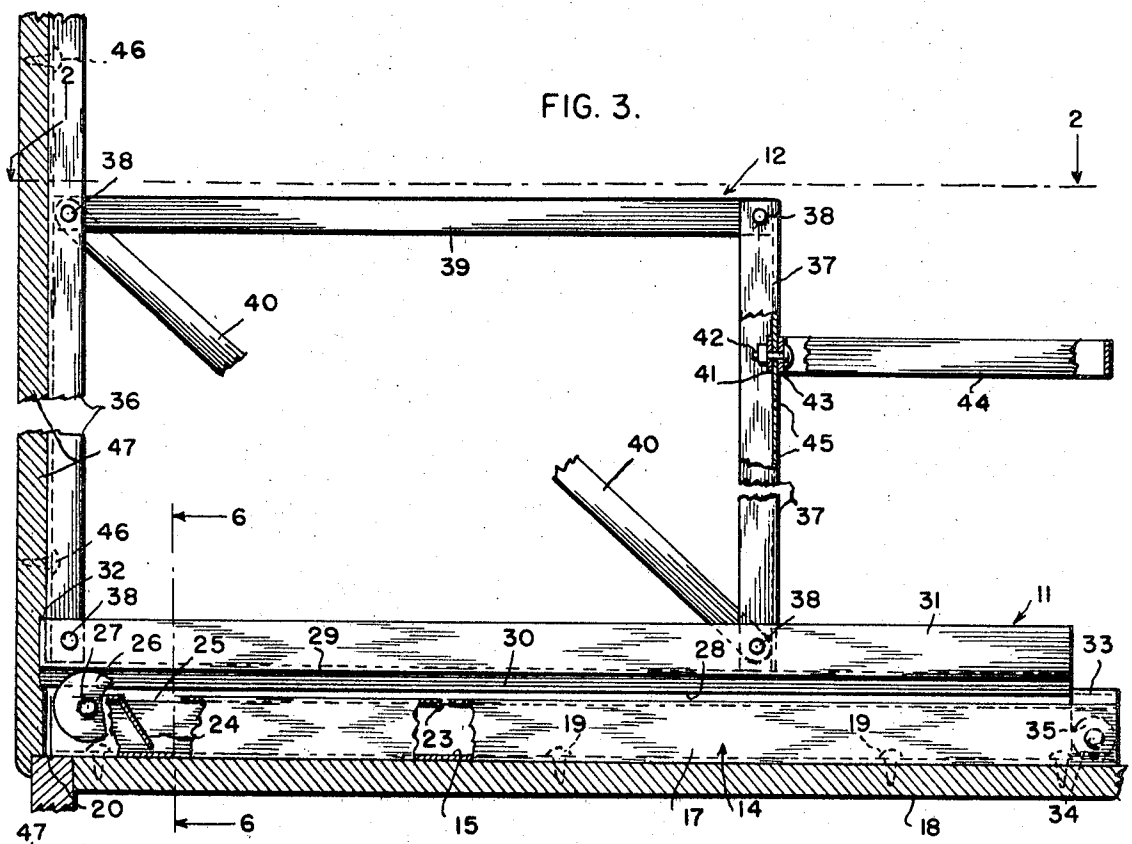

FIG. 4.

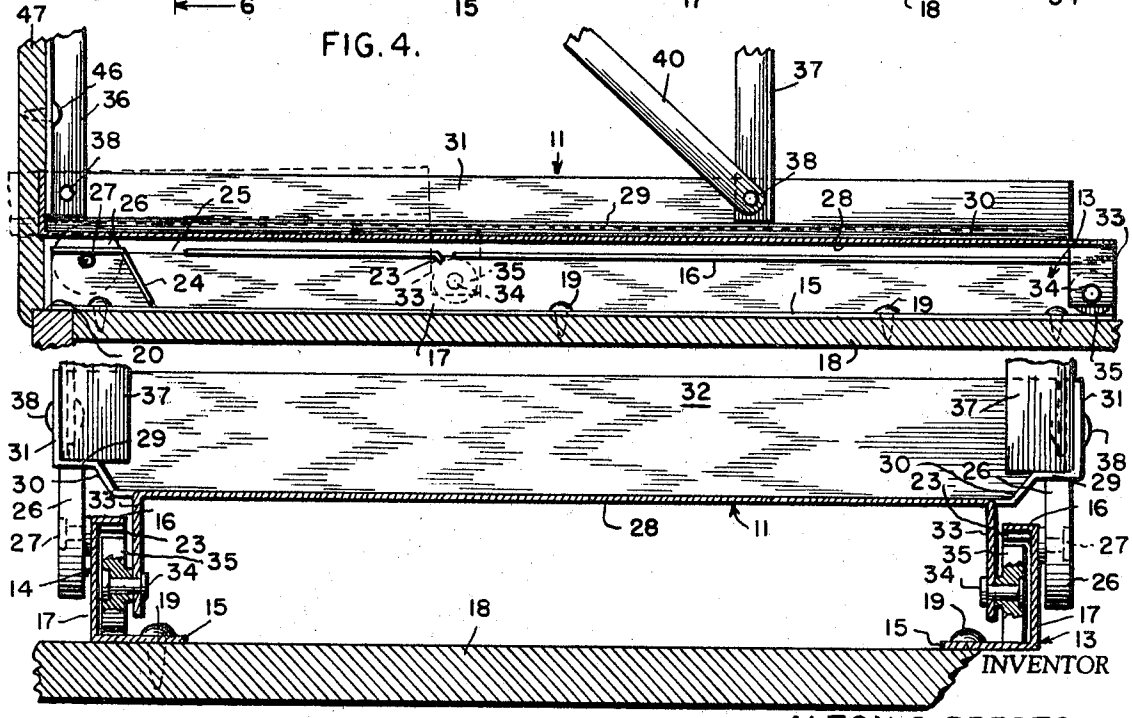

FIG. 5.

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FIG. 6.

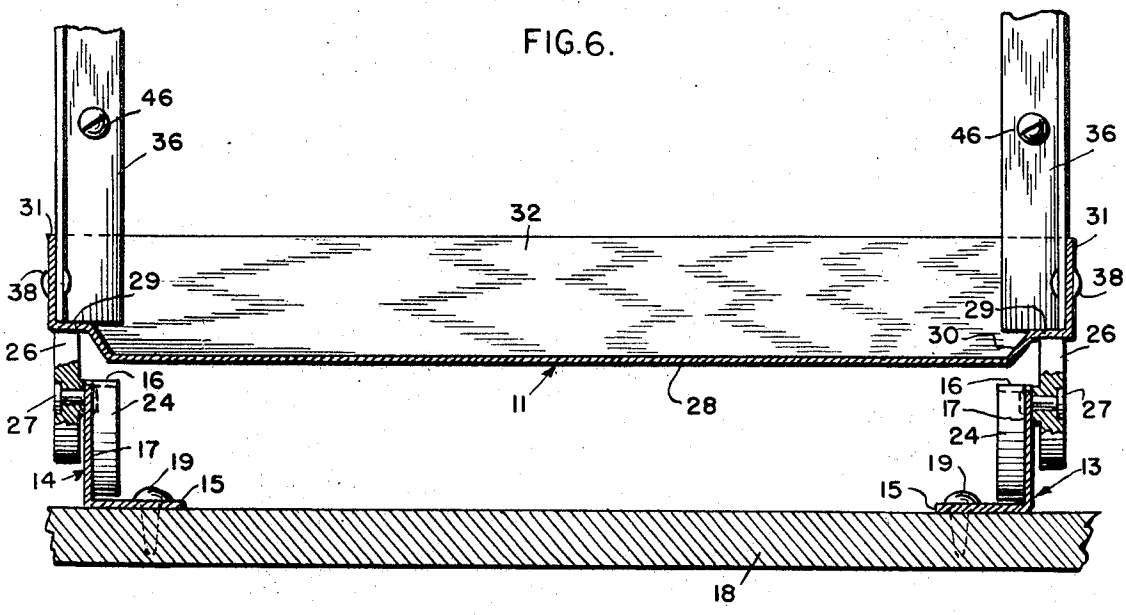


FIG. 7.

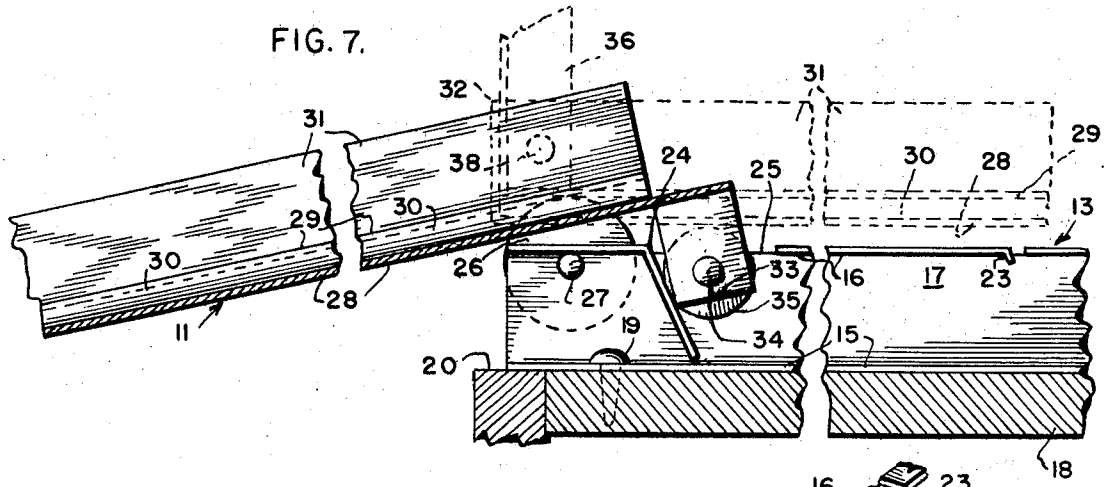


FIG. 8.

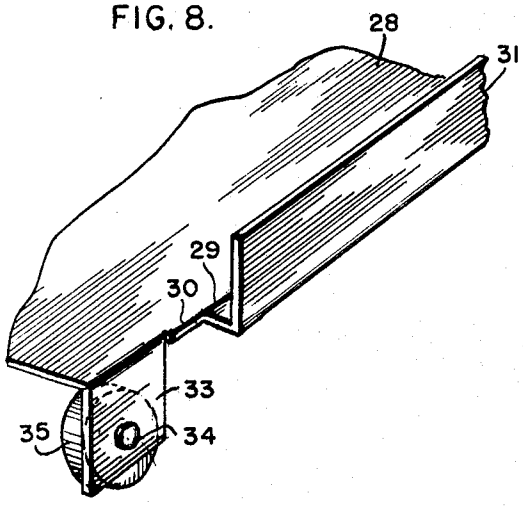
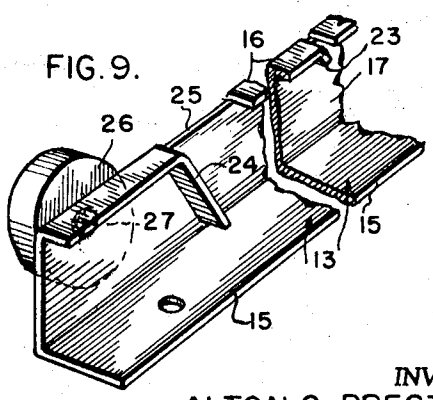


FIG. 9.



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3,524,692

WASTE BASKET HOLDER

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Int. Cl. A47b 88/02, 88/18
U.S. Cl. 312—322 9 Claims

ABSTRACT OF THE DISCLOSURE

A waste basket holder including a tray supported by tracks for movement relative to a cabinet compartment between a retracted position within the cabinet and an extended position outwardly of the cabinet. A rack attached to the tray cooperates therewith in supporting a waste basket and a second receptacle for holding extra bags. The rack is secured to a closure panel of the cabinet which closes an opening of the cabinet through which the tray and rack move between extended and retracted positions and provides a means for manipulating the tray and rack. A slight rocking movement of the tray and rack during movement from a fully closed to an open position causes rollers of the tray to ride against upper rails of the tracks and to engage stops to obstruct movement of the rack and tray before a fully opened position is reached. A slight rocking movement of the tray and rack in an opposite direction permits the rollers to pass under the stops and move on to engage ramps at forward ends of the tracks to enable the rack and tray to swing downwardly when in a fully opened or extended position.

BACKGROUND OF THE INVENTION

This invention relates to the art of reciprocating racks or holders supported for movement relative to a cabinet between a closed or storing position in which the rack or holder and its contents are concealed within the cabinet and an open position outwardly of the cabinet and in which the contents of the rack or holder are accessible to the user.

The prior art discloses holders or racks mounted for travel into and out of a cabinet compartment and supported by rollers traveling in or on tracks.

SUMMARY

A primary object of the present invention is to provide a holder for a waste basket mounted for movement on tracks between a retracted position, concealed within a cabinet, and an extended open position, and wherein the weight of the holder and its contents will cause it to rock slightly during its movement toward an open position, so that rollers which engage the tracks will strike stops to interrupt outward movement of the holder before it has reached a fully open position.

Another object of the invention is to provide such a structure wherein the holder can be manually rocked slightly in the oppossite direction by an upward force exerted thereon to permit the rollers to pass under the stops, to enable the holder to then be moved to a more fully extended position.

Still a further object of the invention is to provide ramps formed in the tracks and disposed to be engaged by the rollers as the holder reaches a fully open position to enable the holder to rock downwardly and into a position to permit the waste receptacle supported thereby or the contents thereof to be readily removed from the holder.

Another object of the invention is to provide a unique construction of tracks for movably supporting the holder tray and wherein the formation of the ramps provide

openings through which the rollers may pass for disconnecting the tray and rack from the tracks or for connecting said parts thereto.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, illustrating a presently preferred embodiment thereof, and wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a fragmentary side elevational view, partly in vertical section, showing the holder in open position relative to a cabinet in which it is mounted;

FIG. 2 is an enlarged horizontal sectional view, taken substantially along a plane as indicated by the line 2—2 of FIG. 3, and showing the holder in a closed position;

FIG. 3 is a vertical sectional view, partly in side elevation and partly broken away, taken substantially along a plane as indicated by the line 3—3 of FIG. 2;

FIG. 4 is a fragmentary vertical sectional view, taken substantially along a plane as indicated by the line 4—4 of FIG. 2;

FIG. 5 is an enlarged fragmentary cross sectional view, taken substantially along a plane as indicated by the line 5—5 of FIG. 2.

FIG. 6 is an enlarged fragmentary cross sectional view, taken substantially along a plane as indicated by the line 6—6 of FIG. 3;

FIG. 7 is a fragmentary longitudinal sectional view, illustrating certain of the parts in a fully extended position of the holder;

FIG. 8 is a fragmentary perspective view of one rear corner of the holder tray, and

FIG. 9 is a fragmentary perspective view looking toward the inner side of the forward end of one of the tracks.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring more specifically to the drawings, the waste basket holder in its entirety and comprising the invention is designated generally **10** and includes a tray **11**, a basket rack **12** and tracks **13** and **14**.

The tracks **13** and **14** each includes a bottom flange or rail **15**, a top flange or rail **16** and an outer vertical side wall **17** which is disposed at right angles to the flanges **15** and **16**. The bottom flanges **15** rest on a cabinet bottom or floor **18** and are secured thereto by fastenings **19**, so that the tracks **13** and **14** are disposed in spaced apart parallel relation to one another and with the flanges **15** and **16** thereof projecting inwardly from the walls **17**, as best seen in FIG. 5. The flanges **15** are substantially wider than the flanges **16** and the fastenings **19** engage therethrough remote from the walls **17**.

Forward ends of the tracks **13** and **14** are disposed adjacent an opening **20** in a front wall **21** of the cabinet **22**. As best seen in FIGS. 3, 4, 7 and 9, the top rail **16** of each track has a struck out downwardly extending portion **23**, forming a stop as will hereinafter be described. The stops **23** are located nearer the forward ends than the rear ends of the track. Each top rail **16** has a second struck out portion **24** disposed between the stop **23** and the forward end of the track and which extends downwardly and rearwardly at an incline to adjacent the bottom flange **15**, to form a ramp and an opening **25** in the top rail, for a purpose which will hereinafter be described. A roller **26** is journaled on a stub shaft **27** which is supported by the wall **17** of each track. The rollers **26** are thus disposed on the outer sides of the walls **17**, and extend substantially above the level top rails **16** and are located at the forward ends of the tracks and forwardly of the ramps **24**.

The tray **11**, which is of substantially the same length as the tracks **13** and **14**, as seen in FIGS. 3 and 4, includes

a bottom **28** which extends from end to end thereof and which has upwardly offset corresponding side edge portions **29** which are disposed above and substantially parallel to an intermediate portion of the bottom and which are connected thereto by upwardly and outwardly inclined portions **30**. The tray **11** includes side walls **31** which extend upwardly from the outer edges of the portions **29** and which are disposed at right angles thereto, and a front wall **32** which extends across the forward end of the tray between forward ends of the side walls **31**. As best seen in FIGS. 2, 5, 7 and 8, the tray portions **29** and **30** extend from the front wall **32** to adjacent the rear end of the bottom **28**. Beyond the rear ends of said portions **29** and **30**, the tray **11** has downwardly extending substantially parallel extensions **33** which are struck out from the bottom **28**. Each of the extensions **33** supports a stub shaft **34** on which is journaled a roller **35**. The rollers **35** are disposed on the outer sides of the extensions **33**, spaced apart a proper distance to engage the tracks **13** and **14** between the flanges **15** and **16** thereof and outwardly with respect to the fastenings **19**, as seen in FIG. 5.

The rack **12** includes a pair of front uprights or posts **36** and a pair of rear uprights or posts **37**. Each of the posts **36** and **37** is of right angular shape in cross section, as seen in FIG. 2. The lower ends of the front posts **36** are secured in the front corners of the tray **11** by fastenings **38** and the lower ends of the rear posts **37** are secured to the side walls **31** by additional fastenings **38** and are located nearer the rear end than the forward end of the tray **11** and between said side walls **31**. The ports **36** extend to above the level of the posts **37**. The rack **12** includes side braces **39** which extend between the longitudinally aligned front and rear posts **36** and **37** and which are connected thereto by additional fastenings **38**, with the braces **39** preferably being secured to the upper ends of the rear posts **37**. Diagonal braces **40** extend between the connections of the members **39** to the posts **36** and the connections of the rear posts **37** to the walls **31** and are secured to the posts **36** and **37** by the fastenings **38** located at said points. A cross brace **41** extends between the rear posts **37** and is connected thereto by fastenings **42** which additionally attach inturned ends **43** of a substantially U-shaped bail **44** to the posts **37**, for positioning said bail rearwardly of the posts **37** and above the rear portion of the bottom **28**. The posts **37**, as seen in FIG. 3, are provided with vertically spaced openings **45** for selectively receiving the fastenings **42** for mounting the cross brace **41** and bail **44** at different levels above the tray **11**. The front posts **36** are secured by fastenings **46** to the inner side of a panel **47** which forms a closure for the opening **20** when the holder **10** is in a fully retracted position, as seen in FIG. 2, with all the parts thereof housed within the compartment **48** of the cabinet **22**.

A waste basket or receptacle **49** is detachably supported on the bottom **28** within the rack **12**, between the four corner posts **36** and **37**, and a small open top receptacle **50** is embraced by the bail **44** and is supported on the rear part of the bottom **28**. The receptacle **50** is adapted to hold spare bags to be used for lining the waste receptacle **49**.

When it is desired to apply trash or garbage to the receptacle **49**, the knob **51** of the closure **47** is grasped for pulling the tray **11** and rack **12** outwardly from the closed position of said parts, as seen in FIGS. 2 and 3, to an open position thereof, as seen in full lines in FIG. 1. The two flat edge portions **29** of the bottom of the tray engage and ride on the rollers **26** and, during the initial movement of the tray **11** outwardly from its position of FIGS. 2 and 3, the rollers **35** carried by the tray **11**, ride on the bottom rails **15**. At some point in the outward travel of the tray **11** from its position of FIGS. 3 and 4, depending upon the weight of the contents of the receptacle **49**, and before the rollers **35** reach the abutments **23**, the tray and parts supported thereby will rock slightly in a counterclockwise direction, as seen in FIGS. 2 and 3, about the rollers **26** as a fulcrum to cause the rollers

35 to swing upwardly slightly and into engagement with the undersides of the top rails **16** against which said rollers **35** thereafter engage. The rollers **35** will strike the abutments **23**, upon reaching their dotted line positions of FIG. 4, to interrupt further outward movement of the tray **11** until an upward force is exerted on the knob **51** to rock the tray clockwise about the transversely aligned rollers **26** to swing the rollers **35** downwardly and back into engagement with the bottom rails **15**, so that said rollers may then pass under the stops **23**. The rollers **35** are shown in FIG. 1, after having passed under the stops **23** and while still in engagement with the bottom rails **15**, and in this position of the tray **11** and rack **12**, the receptacle **49** is in an exposed position outwardly with respect to the front cabinet wall **21**, so that waste material can be deposited within said receptacle, after which the panel **47** can be pushed inwardly to return the tray **11**, rack **12** and parts supported thereby to their stored positions of FIGS. 2, 3 and 4.

If it is desired to remove the contents from the receptacle **49** and to place another liner bag therein from the receptacle **50**, the tray and rack may be pulled outwardly from their full line positions of FIG. 1 to their dotted line positions. In the dotted line positions of the parts, the rollers **35** have engaged and ridden part way up the ramps **24** and the tray is rocked further in a counterclockwise direction so that the front edge of the panel **47** may rest upon the floor **52**. From this dotted line position, the rollers **35** may pass upwardly through the openings **25** by lifting upwardly on the rear end of the tray, for completely detaching the tray and rack from the tracks, and the afterdescribed operation can be reversed for applying the tray to the tracks.

The bottom portions **30** are inclined upwardly and outwardly so as not to rub on the rollers **26** and obstruct movement of the tray **11** thereon.

The tray **11**, rack **12** and tracks **13** and **14** are preferably formed of sixteen gauge sheet metal.

While the holder **10** is primarily adapted for use in a kitchen cabinet, it will be readily apparent that it can be applied to cabinets located elsewhere, as in a bathroom or utility room.

Various modifications and changes are contemplated and may obviously be resorted to, without departing from the function or scope of the invention.

I claim as my invention:

1. A waste basket holder comprising a pair of tracks adapted to be secured in a cabinet in spaced apart parallel relation to one another and in alignment with an access opening of the cabinet, each of said tracks including a bottom rail and a top rail, said tracks having forward ends located adjacent said access opening, rollers journaled on said tracks in transverse alignment with one another and adjacent to said forward ends, said rollers extending above said top rails, an elongated tray having a forward end and a rear end, a pair of rollers carried by and disposed beneath the rear end of the tray and in transverse alignment with one another and positioned for engagement in said tracks, said tray including a bottom having side edge portions engaging on the track rollers, a rack supported by and extending upwardly from said tray and adapted to embrace a waste receptacle supported by said tray, said tray rollers engaging said bottom rails for supporting the rear end of the tray in its retracted position within the cabinet and during its initial travel toward an extended position outwardly through the access opening, said tray and rack fulcruming about the track rollers during travel thereof toward and extended position for causing the rear end of the tray to be elevated whereby the tray rollers will engage and roll on the undersides of said top rails.

2. A waste basket holder as in claim **1**, at least one of said top rails having a depending stop positioned to be engaged by the roller of the track of said rail and after the rollers have been rocked upwardly and into engage-

ment with the top rails for interrupting outward travel of the tray and rack in a partially extended position thereof.

3. A waste basket holder as in claim 2, said tray rollers being of a diameter sufficiently less than the spacing between the top and bottom rails whereby the tray and rack may be rocked on track rollers for swinging the tray rollers downwardly onto the bottom rails for movement beneath said stop and to a fully extended position.

4. A waste basket holder as in claim 3, said tracks having downwardly and rearwardly inclined ramps disposed to be engaged by the tray rollers as the tray and rack approach a fully extended position, said tray rollers riding upwardly on said ramps for elevating the rear end of the tray to cause the tray to assume a fully extended position inclined downwardly and outwardly from the cabinet.

5. A waste basket holder as in claim 4, said ramps constituting struck out portions of the top rails defining openings therein through which the tray rollers are movable for detaching the tray from the tracks.

6. A waste basket holder as in claim 1, said tracks having downwardly and rearwardly inclined ramps disposed to be engaged by the tray rollers as the tray and rack approach a fully extended position, said tray rollers riding upwardly on said ramps for elevating the rear end of the tray to cause the tray to assume a fully extended

position inclined downwardly and outwardly from the cabinet.

7. A waste basket holder as in claim 6, said ramps constituting struck out portions of the top rails defining openings therein through which the tray rollers are movable for detaching the tray from the tracks.

8. A waste basket holder as in claim 1, said side edge portions of the tray bottom being upwardly offset relative to an intermediate portion thereof and being connected to said intermediate portion by upwardly and outwardly inclined portions of the tray bottom.

9. A waste basket holder as in claim 1, each of said tracks including an outer side wall, and said top and bottom rails extending inwardly from said side walls.

References Cited

UNITED STATES PATENTS

2,644,737	7/1953	Davis	312—348 X
2,690,371	9/1954	Woing	312—348 X
2,872,271	2/1959	Niedringhaus et al.	312—333 X
3,053,582	9/1962	Wenger	308—3.8

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U.S. Cl. X.R.

312—270