April 29, 1930. G. A. STEINER 1,756,928

TOWEL CABINET

Filed Feb. 14, 1927 2 Sheets-Sheet 1

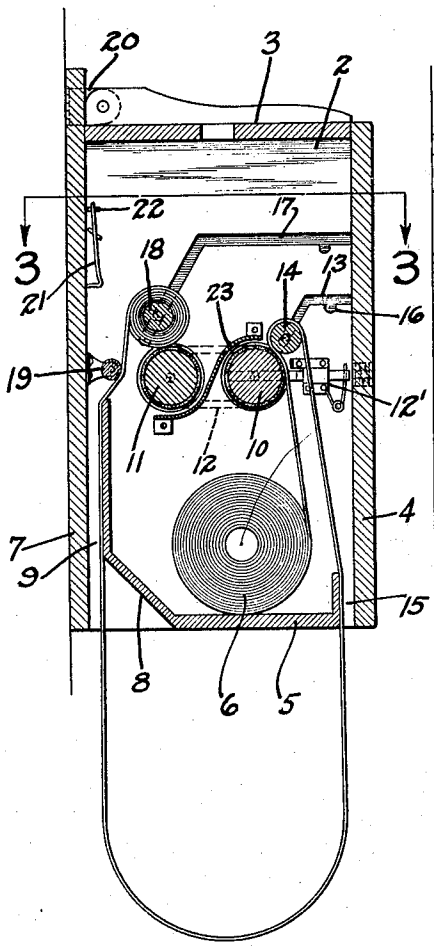



FIG. 1

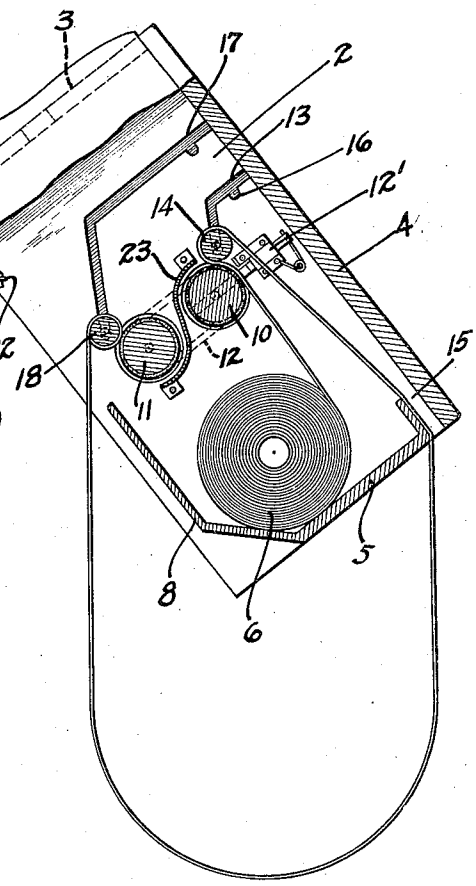



FIG. 2

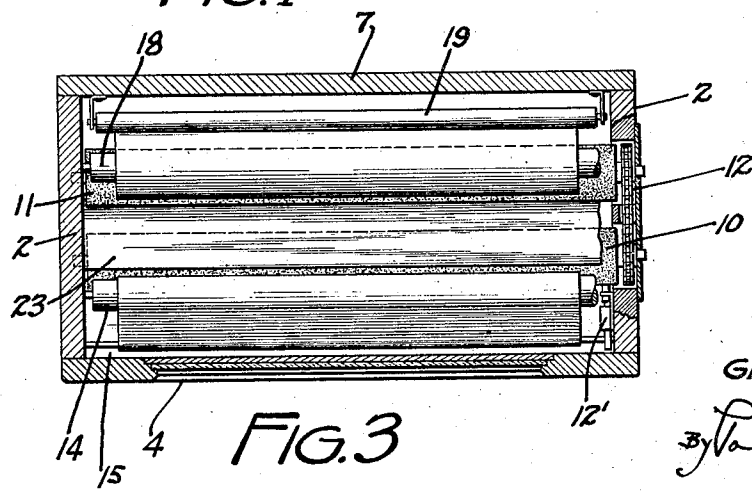



FIG. 3

Inventor
GEORGE A. STEINER
By Paul, Paul & Woods
ATTORNEYS

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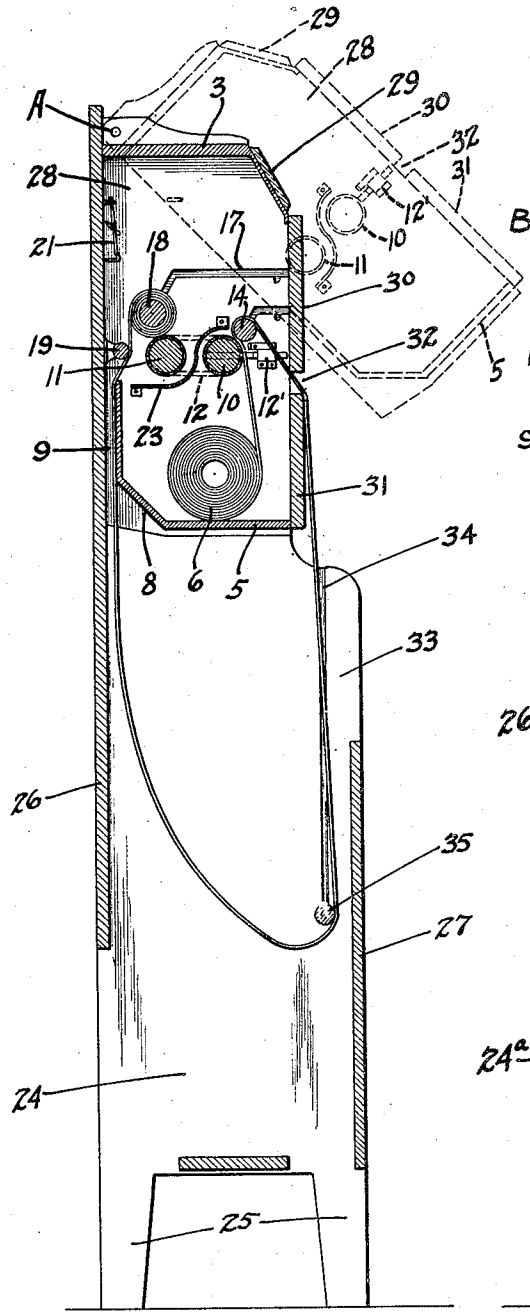



FIG. 4

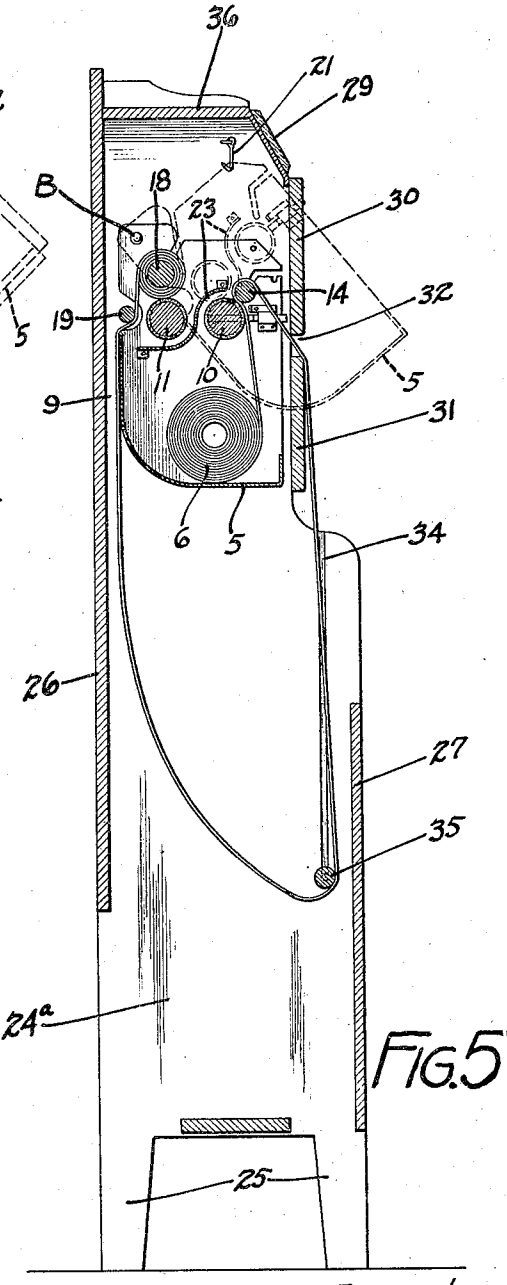



FIG. 5

Inventor
GEORGE A. STEINER
By Parker, Paul & Woods
ATTORNEYS

Patented Apr. 29, 1930 1,756,928

# UNITED STATES PATENT OFFICE

GEORGE ADOLPH STEINER, OF SALT LAKE CITY, UTAH

## TOWEL CABINET

Application filed February 14, 1927. Serial No. 168,021.

My invention relates to a cabinet of the wall type, that is one that is fastened to an upright wall or other support, and the object of my present invention is to provide a simple inexpensive means of mounting the cabinet so that convenient access may be had to the mechanism therein for the purpose of removing the soiled towel roll when the clean supply is exhausted and stretching or passing the loose end of clean web to the takeup roll during the operation of loading or equipping the cabinet and adapting it for further use. This cabinet is similar to the one shown and described in the application of Frank G. Steiner, Serial Number 96,273 filed March 20th, 1926, except in the relative arrangement of the feed rolls and the manner of hinging the casing. This invention instead of being fastened to an upright wall or support to form what is known as a wall cabinet may be embodied in a floor or stand type of cabinet, if preferred.

Other objects of the invention will appear from the following detailed description. The invention consists generally in various constructions and combinations all as herein described and particularly pointed out in the claims.

In the accompanying drawings forming a part of this specification

Figure 1 is a vertical sectional view through a towel cabinet embodying my invention;

Figure 2 is a similar view showing the cabinet swung outwardly from the back thereof or the upright support whereon the movable portion of the cabinet is mounted;

Figure 3 is a sectional view on the line 3—3 of Figure 1;

Figure 4 is a vertical sectional view through a floor or stand type of cabinet illustrating how my swinging or pivoted casing may be mounted thereon; and

Figure 5 is a similar view illustrating the casing pivoted within the upper portion of the floor stand and adapted to swing outwardly.

In the drawing 2 represents the side walls of the cabinet, 3 the top thereof, 4 a door which may be opened to allow access to the interior of the cabinet and 5 is a shelf or support in the lower portion of the cabinet whereon the supply of clean towel 6 is placed, 7 represents the back of the cabinet secured by suitable means, not shown, to a wall or other upright support. A guard 8 is preferably provided forming a continuation of the shelf 5 and extending vertically in the rear portion of the cabinet being separated from the wall 7 by a narrow gap or passage 9. 10 and 11 represent delivery and takeup feed rolls arranged preferably one in advance of the other and having a driving connection 12 between them for simultaneous movement. These rolls are preferably of the same diameter and consequently will have the same peripheral speed and their surfaces are roughened or sanded as indicated in the drawing or equipped with rubber or other suitable material which will adhere or cling to the towel web and cause the revolution of the rolls when a pull is applied to the web in engagement with a roll. A suitable stop device 12′ is provided which normally prevents revolution of the feed rolls but is adapted to be manipulated by the finger of the user to trip the lock and allow the revolution of the rolls and the feed of a limited portion of the towel web. The side walls of the cabinet have guides 13 therein and a pinch roll 14 is adapted to fit into said guides and contact with the surface of the delivery feed roll 10 and when the web of towel is stretched around this pinch roll, it will be held thereby against the surface of the delivery feed roll 10 and from that point the web depends preferably through a gap 15 at the front of the cabinet to form a depending loop in position to be grasped and pulled by the user of the cabinet. This will be done immediately upon the manipulation of the stop device 12′ to release the delivery feed roll. A notch 16 is preferably provided in the guide 13 wherein the pinch roll may be placed preparatory to stretching the clean web thereover.

The upper portion of the cabinet is preferably provided with guides 17 adapted to receive a soiled towel takeup roll 18. These guides extend to a point within the cabinet adjacent the takeup feed roll 11 so that when

the web of towel is wound on the roll 18 its convolutions will contact with the roll 11 and the roll 18 will thereby be revolved when the feed rolls are operated to wind up the same length of towel on the roll 18 that is pulled off the supply by the hand of the user. A tension roll 19 is preferably provided to exert a slight pull on the towel web and serve to smooth out any wrinkles or folds that may be therein before the web reaches the takeup roll.

To allow convenient access of the attendant in loading the cabinet to the interior rear portion thereof, I provide hinges 20 with horizontal pivots connecting the upper rear portion of the cabinet with the back thereof or with the upright wall upon which the cabinet may be mounted. These hinges allow the main portion of the cabinet to be swung forwardly as indicated in Figure 2 providing a considerable gap between the lower portion of the cabinet and the corresponding portion of the rear wall so that the attendant can reach up easily in the rear of the cabinet, remove the soiled towel roll from its guides with the accumulation of soiled towel thereon or this may be done when the front door is opened and before the cabinet is tilted, if preferred, but in loading the web of towel to the takeup roll the attendant by swinging the casing outwardly to the position shown in Figure 2 can have very convenient access to the takeup roll and wind the end of the loose web thereon. Generally he will want to use both hands in doing this and I, therefore, prefer to provide a hook device 21 pivoted on the wall 7 and adapted to engage an eye 22 on the swinging portion of the cabinet so that when this cabinet is swung forward to its inclined position, the hook may be engaged with the eye and the cabinet held in its tilted position until the loading operation is completed. When this has been done the attendant will then disengage the hook from the eye and allow the cabinet to swing by gravity back to its vertical usable position. To prevent contact of the clean with the soiled towel or contamination of the delivery roll from the soiled towel feed roll, I prefer to provide a curved plate 23 interposed between the feed rolls and extending across the cabinet from side to side.

In Figures 4 and 5 I have shown my invention applied to a floor or stand type of cabinet and referring to these figures, 24 represents the sides of the cabinet having suitable supporting legs 25, 26 the back thereof and 27 a front wall which is adapted to close the lower portion of the cabinet. The back 26 extends above the side walls of the cabinet and at a point indicated by Letter A, I may pivot a casing 28 in substantially the same manner as the casing shown in Figures 1 and 2 is pivoted to the upright wall. This casing is adapted to swing outwardly to the position indicated in dotted lines in Figure 4 and within the casing, I arrange the clean towel supply and the soiled towel roll and the feed rolls for acting on the web of towel all as shown and described with reference to Figures 1, 2 and 3 of these drawings. I will, therefore, designate these parts by the same reference numerals as employed in the previous figures. The front of the casing 28 has preferably a suitable mirror 29 mounted thereon and beneath this mirror, I provide doors 30 and 31 having a gap or opening 32 between them through which the web of clean towel is stretched to a point where it can be conveniently grasped by the user standing in front of the cabinet, an opening 33 being provided in the cabinet front above the wall 27 so that the user of the towel can see the clean web and easily reach forward to grasp it. The doors 30 and 31 are capable of opening to allow access to the interior of the casing 28 and permit the convenient removal of the soiled towel roll through the guides provided for the purpose and also allow the convenient insertion of the clean towel supply in the lower part of the casing.

In this type of cabinet, the web of towel after being used and released by the user, will frequently hang down on the outside and present an unsightly appearance particularly if the towel is badly soiled. I, therefore, prefer to provide guides 34 in the side walls of the cabinet and to receive a vertically sliding element 35, preferably cylindrical in form, around which the web of towel passes as it is stretched to the rear of the cabinet and upwardly to the soiled towel roll. This roll or element 35 is weighted sufficiently so that when it has been raised in the guides 34 by the pull of the user of the towel on the web, it will, when the towel web is released, drop down by gravity in the guides and pull the soiled web back into the cabinet where it will be substantially invisible to anyone walking or standing in front of the cabinet. The forward tilting of the casing has, of course, the same function as described with reference to the other figures, namely to provide a space in the rear of the cabinet and allow the attendant to easily and conveniently reach in and stretch the loose end of the towel web upwardly to the takeup roll. The advantage of this type of cabinet lies in the fact that in some places it is impracticable to mount the casing on the wall. Sometimes the walls are faced with marble and the building owners object to having holes made therein to receive a supporting means for the towel cabinet and in such a case, I may mount the tilting casing upon a floor stand so that the necessity of fastening the casing to the wall is entirely avoided.

In Figure 5 I have shown a similar arrangement except that the side walls 24ª of the cabinet extend to the top thereof and it

is provided with a closed top 36 beneath which a space is formed for the pivoting of the casing proper at a suitable point such as B to the side walls of the cabinet. The front of the floor stand is open as described with reference to Figure 4 so that the casing may be readily pulled out to the dotted line position and convenient access had to the rear thereof. In other respects, the casing shown in Figure 5 corresponds substantially to the one illustrated in Figure 4 except that I have shown a middle floor or support for the clean towel supply. This, however, is such an obvious modification that I have thought detailed description unnecessary and no additional reference figures are needed. In this view, I will indicate the corresponding parts of the operating mechanism of the cabinet by the same reference numerals as those used in the previous figures.

I claim as my invention:

1. A towel cabinet comprising a casing having its upper rear portion connected by horizontal pivots to an upright support and adapted to swing outwardly thereon to a loading position inclined to the vertical, delivery and takeup feed rolls mounted in said casing and having a driving connection between them and provided with peripheral surfaces adapted to adhere to a towel web, a pinch roll mounted in said casing and around which a web of clean towel may be stretched for contact with said delivery feed roll, the loose end of said web depending in position to be grasped by the user, the tilted position of said casing exposing its open back for the convenient passing upwardly of the loose end of the towel web, a takeup roll mounted in said casing and whereon the end of the web is wound for winding contact with the surface of said takeup feed roll, and means for holding said casing in its inclined loading position.

2. A towel cabinet adapted to stand upon the floor and having a back wall extending upwardly a considerable distance above its side walls, a casing having horizontal pivots on the upper portion of said back wall and adapted to swing forwardly and upwardly on said pivots to provide an unobstructed space between said casing and said back wall, delivery and takeup feed rolls mounted in said casing and having roughened surfaces, whereby, when a clean towel web is loaded in the cabinet, it may be stretched to contact with said delivery feed roll, the front of said casing having doors therein with a gap or opening between them through which the web of clean towel depends downwardly in position to be grasped by the user, the loop of towel below said casing being stretched backwardly and up between said casing and said back wall in the rear of the towel supply, a soiled towel takeup roll mounted in the upper portion of said casing and whereon a web of towel may be wound for contact with said takeup feed roll, the pulling down of the clean towel web revolving said delivery feed roll to feed a length of clean towel and the operation of said delivery feed roll revolving said takeup feed roll to wind up the soiled towel simultaneously.

3. A towel cabinet comprising a relatively stationary back portion, side walls and a front portion pivoted at the upper end of the side portions to the back portion on horizontal pivots a side wall having slots therein closed by the front portion, towel rolls having pivots movable in the slots the lower end of the pivoted casing having a support for a towel supply, the support extending upwardly on both sides to hold the towel supply when the casing is tilted, and means to hold the casing in tilted position while the cabinet is being loaded with the toweling.

In witness whereof, I have hereunto set my hand this twenty seventh day of January, 1927.

GEORGE ADOLPH STEINER.