April 29, 1930. F. G. STEINER 1,756,766

TOWEL CABINET

Filed March 31, 1926 2 Sheets-Sheet 1

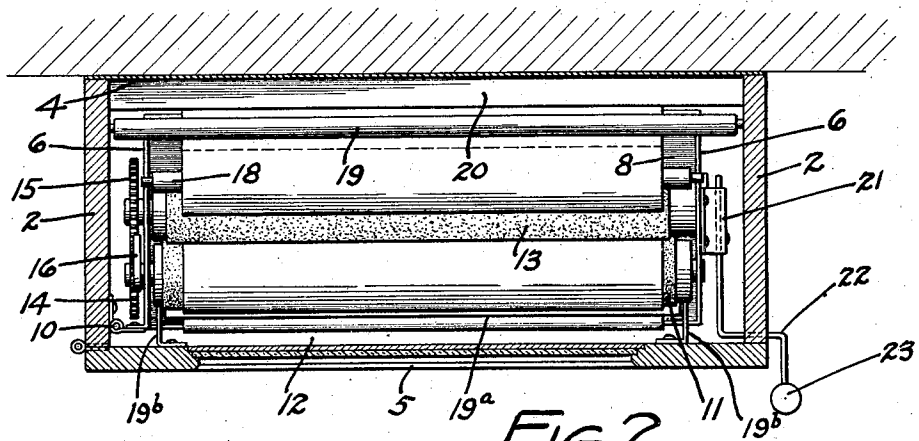


FIG. 2

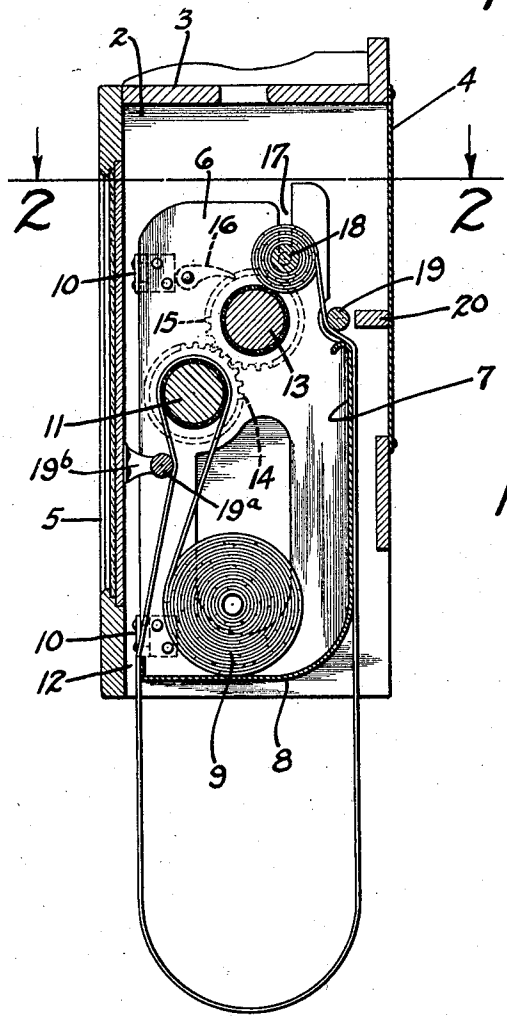


FIG. 1

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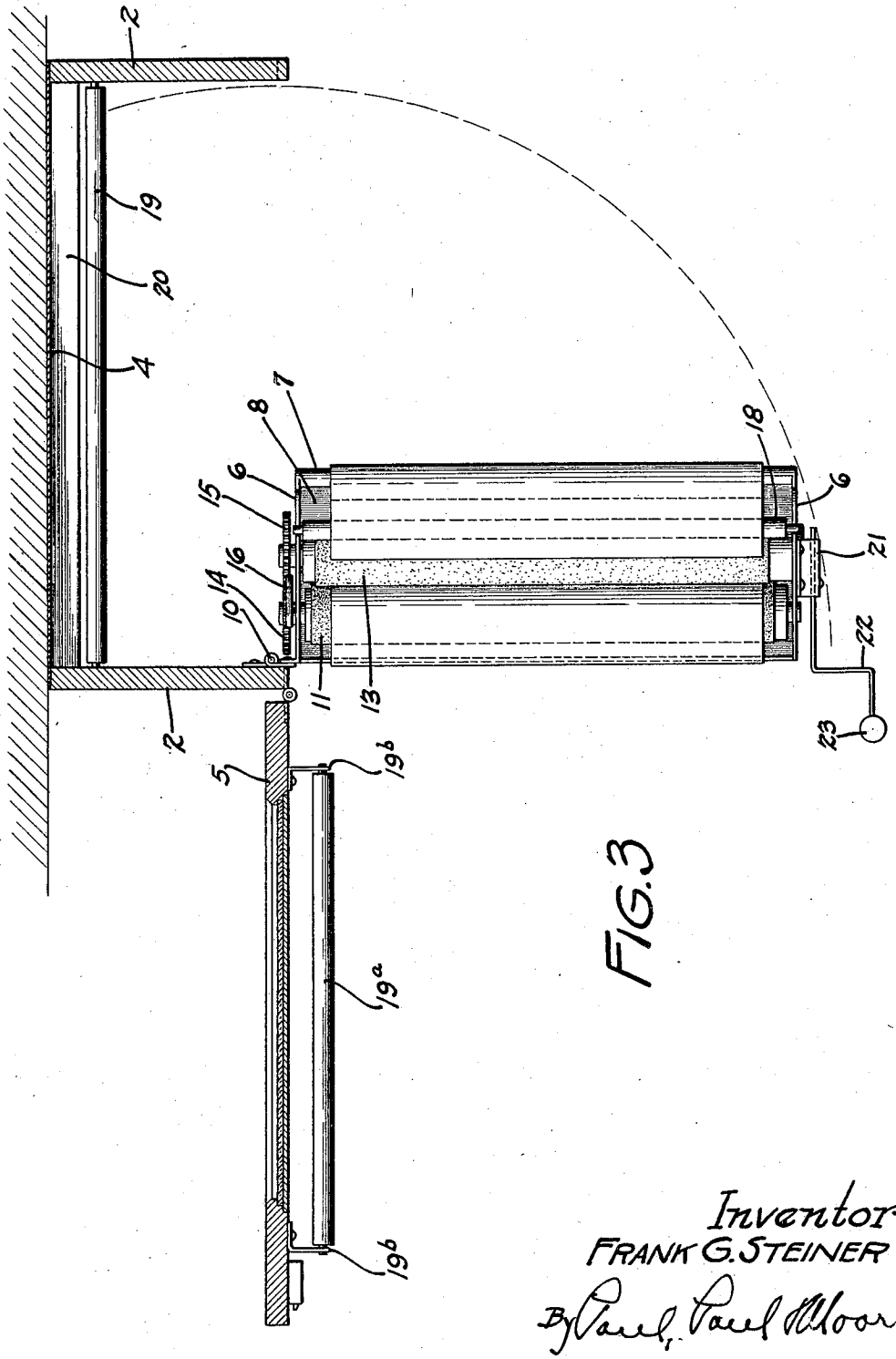


FIG. 3

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Patented Apr. 29, 1930 1,756,766

UNITED STATES PATENT OFFICE

FRANK G. STEINER, OF CHICAGO, ILLINOIS, ASSIGNOR TO STEINER SALES COMPANY, OF SALT LAKE CITY, UTAH, A CORPORATION OF UTAH

TOWEL CABINET

Application filed March 31, 1926. Serial No. 98,771.

This cabinet relates to that class in which a long continuous web or band of towel is unrolled from a roll or fold deposited in the cabinet, a certain amount being delivered to the user with each pull on the clean web and simultaneously the used or soiled portion of the towel web is wound upon a takeup roll.

A primary object of this invention is to provide a construction of cabinet which will permit the convenient stretching of the loose end of the towel web upwardly in the cabinet in the rear of the clean roll and feed rolls to the takeup roll, this work being performed by the laundry man or person delivering the towel or by the janitor in charge of the washroom where the cabinet may be located and obviously, a structure must be provided which will allow the filling or loading of the cabinet by the laundry man or janitor with the least amount of labor and expenditure of time. Any device of this kind which would require considerable time and labor in the operation of installing a clean roll in the cabinet would obviously be fatal to the successful use of such a device. A cabinet of this kind must not only be simple and inexpensive in construction, and easy and convenient of operation by the user, but it must also be adapted for quick, convenient loading or filling with a clean towel.

The invention consists generally in various constructions and combinations all as hereinafter described and particularly pointed out in the claim.

In the accompanying drawings forming part of this specification,

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

Figure 2 is a sectional view on the line 2—2 of Figure 1;

Figure 3 is a horizontal sectional view through the cabinet showing the front door opened and the operating mechanism of the cabinet swung outwardly to a position where the clean roll or fold of towel can be easily and quickly installed.

In the accompanying drawing, 2 represents the side walls of the cabinet, 3 the top thereof, 4 the rear wall, and 5 a front door hinged at one side and having a suitable locking device by means of which access to the interior of the cabinet can be prevented except by an authorized person.

This portion of the cabinet is adapted to be mounted on an upright wall where the towel delivery mechanism can be conveniently manipulated by a person standing in front of the cabinet. Within this stationary portion of the cabinet, I provide a movable section comprising side walls 6 having a rear connecting wall 7 between them forming the back of the inner or movable section of the cabinet and having a horizontal extension 8 at the bottom of the inner section upon which the roll or fold of clean towel 9 is placed. This inner section is hinged at 10 to one of the side walls of the cabinet at the front thereof and is adapted to swing outwardly through the front of the cabinet to the position indicated in Figure 2 by full lines when the door 5 of the cabinet is opened. When this front door is opened by the janitor or laundry man, the clean roll or fold of towel 9 can be easily placed in the bottom of the inner section where it will lie loosely as indicated in Figure 1, rolling back and forth to allow the convenient unwinding of the clean web as the towel is used. Above this roll, at the front of the cabinet, I provide a delivery feed roll 11 having a roughened surface over which the clean web of towel is carried to depend through a gap or passage 12 provided between the inner section and the front door of the cabinet. This web depends below the cabinet within convenient reach of the user who will grasp the web and drawing downwardly thereon deliver a predetermined length of clean towel in position for convenient use.

A second or takeup feed roll 13 is mounted in the side wall 6 of the inner section and a gear 14 on the spindle of the delivery feed roll 11 meshes with a similar gear 15 on the spindle of the roll 13 so that the rolls will have the same peripheral speed and be operated simultaneously but in opposite directions. Backward movement of the rolls is prevented by a suitable dog 16.

The side walls of the cabinet are provided

with vertical slots or guideways 17 adapted to receive a takeup roll 18 on which the loose end of the towel web is wound, the takeup roll sliding down by gravity in the guideways 17 so that the web of towel thereon will contact with the peripheral surface of the roll 13 and when the roll 13 is revolved through its driving connection with the roll 11 a corresponding movement will be imparted to the takeup roll 18 to wind up the soiled web of towel thereon. This web will slide along the rear wall 7 and is guided and a slight tension is put thereon by means of a roll 19 that is supported in the side walls 2 of the stationary portion of the cabinet and preferably has a narrow shelf 20 in the rear thereof which has the function of preventing the web from being passed up in the rear of the guide roll 19. A stop device 21 is provided in connection with the takeup roll 13 and is provided with an operating lever 22 having a suitable finger-piece 23. This stop device or feed control is adapted to be manipulated with one hand by the user of the towel while the other hand grasps the web of towel and pulls downwardly when the feed control is released. This feed control is similar to the one shown and described in the application of Gottfrid Olson, filed December 19, 1925, Serial No. 76,528 and I make no claim to the same herein.

In Figure 3 I have shown the cabinet in position for loading, the front door having been opened and the inner section swung outwardly on its hinges to a position at right angles substantially to the stationary portion of the cabinet, and in this position the person loading or filling the cabinet can conveniently place the clean roll of towel therein and having passed the loose end of the web over the delivery roll and downwardly through the bottom of the cabinet may easily and conveniently stretch or extend this loose web up in the rear of the swinging section and wind the end on the takeup roll so that when the cabinet is closed and the user draws downwardly on the depending web, a corresponding portion of the web will be wound on the takeup roll and the clean portion of the web will be separated such a distance from the soiled portion as indicated in Figure 1 that there will be no possibility of infection or contamination of the clean portion by contact with the part of the web that has been used.

When the swinging section has been equipped or loaded with the clean towel, it will be swung back to its normal position in the cabinet and in so doing the web of towel will contact with the guide roll 19 with sufficient pressure to cause a slight tension on the web and then when the door 5 is closed, the cabinet is ready for use and such use may continue until the clean roll is entirely exhausted.

A roll 19[a] is mounted on the door 5 by suitable means such as brackets 19[b] in position to contact with the towel web and draw it snugly around the feed roll 11 when the door is closed and aid in holding the web on the delivery feed roll with sufficient friction to drive both the rolls when the user pulls on the towel web.

I claim as my invention:

A towel cabinet comprising an outer section with side walls and an opening in its front and bottom portions, a horizontally swinging door hinged to one side of the outer section having a pressure roller thereon and a horizontally swinging inner section hinged to the same said wall of the outer section said inner section being adapted to receive a clean towel supply, delivery and take up feed rolls mounted in the upper portion of said inner section and having a driving connection between them the construction being such that the web of clean towel may be stretched from the clean towel supply in the inner section up over said delivery roll and from thence be looped downwardly through the opening in the bottom of the outer section, thence carried upwardly in the rear of said rolls, a take up roll whereon the loose end of the towel roll may be wound for contact with said take up feed roll and adapted to be revolved thereby, said inner section being adapted to swing outwardly on its hinges to a position at substantially right angles to said outer section thereby exposing both the front and rear of said inner section for convenience in stretching the towel web to said delivery feed roll and from thence to loop the towel below the inner section, thence upwardly to a take up roll.

In witness whereof, I have hereunto set my hand this twenty sixth day of March 1926.

FRANK G. STEINER.