June 24, 1930. G. OLSON 1,765,608

TOWEL CABINET

Filed Nov. 29, 1926

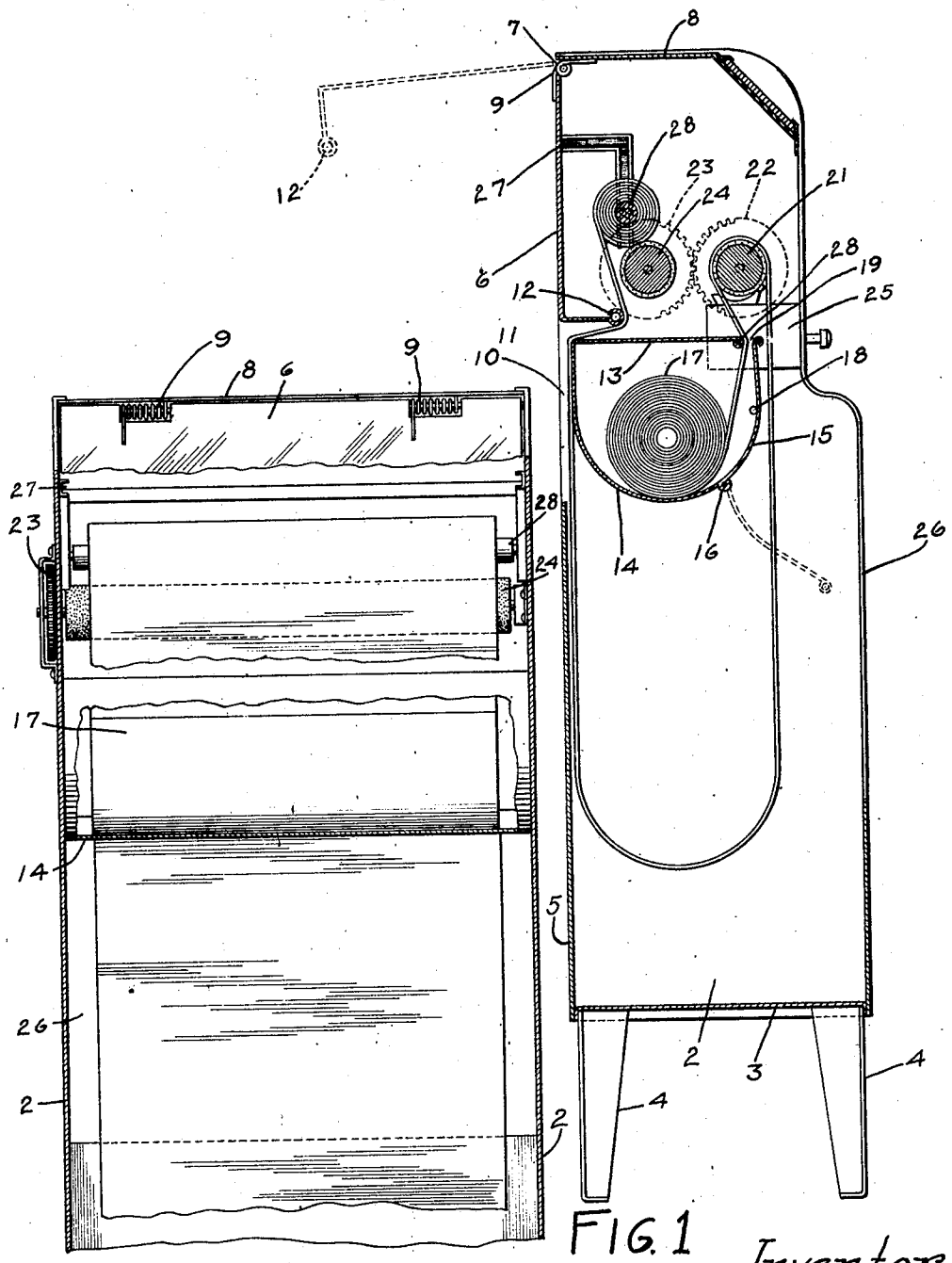


FIG. 1

FIG. 2

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Patented June 24, 1930 1,765,608

UNITED STATES PATENT OFFICE

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TOWEL CABINET

Application filed November 29, 1926. Serial No. 151,477.

My invention relates to the type of cabinet known as a floor cabinet having legs to rest upon the floor of the wash room or other place where the cabinet may be placed in distinction from the wall cabinet that is fastened to an upright wall. The object of my present invention is to provide a floor cabinet of such construction that the loop of clean towel depending below the clean roll in position to be grasped by the user will be enclosed on three sides by the walls of the cabinet and hence be protected in a large degree from accumulating dust and dirt that may be in the air of the room where the cabinet is located.

A further object is to provide a floor stand cabinet adapted to roll up the soiled end of the towel with the clean portion of the towel in convenient position to be used. A further object is to provide a floor stand cabinet in one piece, that is the casing and stand instead of being separately formed as in some cases is made as one member, thus effecting a considerable saving in expense of construction.

A further object is to provide a floor cabinet equipped with means for conveniently filling or loading the cabinet, that is taking out the roll of soiled towel and placing a roll of clean towel in the cabinet.

A further object is to provide a cabinet of substantial construction and one which will present a neat ornamental appearance in the room where it is placed.

The invention consists generally in various constructions and combinations, all as hereinafter 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 floor cabinet embodying my invention.

Figure 2 is a vertical sectional view taken on a line at right angles substantially to the section line of Figure 1 and showing the interior arrangement of the cabinet.

In the drawings, 2 represents the side walls of the cabinet having a floor 3, supporting legs 4. 5 represents a rear wall of the cabinet and 6 is an upper section of said wall hinged at 7 to the top 8 and normally held in its vertical closed position by suitable springs 9. The lower portion of this hinged section 6 forms a gate for the upper rear portion of the cabinet, is separated from the wall 5 by an opening 10. The lower portion of section 6 has an inwardly turned flanged part 11 terminating in a roll or looped edge 12 which contacts with the soiled web of towel as will hereinafter appear. 13 is a horizontal partition extending across the upper portion of the cabinet near the hinged section 6 and a wall 14 extends downwardly from the rear edge of the partition 13 and is forwardly and upwardly curved and is provided with a section 15 that is hinged at 16 and normally forms the forward wall of a clean roll compartment beneath the partition 13. The section 15 is adapted to swing forwardly and downwardly to the position indicated by dotted lines in Figure 1 and where the insertion is permitted of a clean roll or towel 17 that is adapted to lie loosely on the curved lower portion of the wall 14 and roll back and forth thereon as the web of clean towel is unwound. A stop 18 limits the upward movement of the section 15 which may be frictionally held in its raised position and the upper edge of the section 15 is separated by a gap 19 from the forward edge of the wall 13 that is shown supported on a suitable transverse rod but any other supporting means may be provided if preferred. The web of clean towel is extended up through the gap 19 and over a feed roll 21 that is mounted in bearings in the side walls of the cabinet and has a gear 22 meshing with a similar gear 23 on the shaft of a second feed roll 24.

A suitable finger manipulated stop device 25 controls the movement of the feed rolls. This stop device I make no claim to, however, in this application and have not thought it necessary to illustrate or describe it in detail.

The feed rolls 21 and 24 are of substantially the same size having preferably sanded peripheral surfaces which engage the web

of towel so that when a pull is exerted on the towel the feed rolls will be revolved and the movement of the feed roll 21 will be transmitted through the gear to the other feed roll 24. The web of clean towel after being carried up through the gap 19 and over the feed roll 21 is brought down between the hinged section 15 and the front of the cabinet.

A comparatively large opening 26 is provided through which the loop of clean towel is visible to the user and when a person wishes to use the towel, the hand can be thrust through this opening in the front of the cabinet and the web of towel grasped and drawn forward to a convenient using position. When the web of towel is released it will drop back within the cabinet and be covered and concealed except to a person standing in front of the cabinet. The loop of clean towel will depend as shown in Figure 1 below the clean roll and being enclosed on three sides by the walls of the cabinet will be protected from the accumulation of dust or dirt that may be in the room where the cabinet is placed.

The side walls of the cabinet in the upper portion thereof have guides 27 adapted to receive the ends of a take-up roll 28, the roll being thrust into the guides when the hinged section 6 is lifted and this is done in filling the cabinet. The attendant first placing the roll of clean toweling in its receptacle on the wall 14, then passing the loose end of the clean web up over the feed roll 21 and thence downwardly and up between the wall 14 and the rear of the cabinet and the section 6 having been raised, convenient access is had to the take-up roll 28 to wind a portion of the loose end of the towel thereon. Then when the roll is released it will drop down by gravity into contact with the take-up feed roll 24 so that when this roll is revolved through the movement of the roll 21, a corresponding movement will be imparted to the roll 28 and the soiled portion of the towel wound thereon at the same rate of speed that the clean web is unwound from the clean roll.

When the hinged section 6 is closed as indicated by full lines in Figure 1, the rolled end 12 will engage the web of towel and press inwardly thereon and create sufficient tension to cause the web to be wound snugly on the take-up roll and also to keep it flat during the winding operation. The web of soiled towel will also slide over the rear portion of the wall 14 and be subjected to a certain degree of tension or pull thereby. This wall also serves as a means for straightening the web or keeping it flat during the winding operation.

When the cabinet has been filled with the roll of clean toweling and the loose end connected to the take-up roll the section 6 will be closed and then the cabinet may be pushed back against the wall where the opening 10 will be concealed as well as the guides in which the take-up rolls 28 are inserted. This construction provides a convenient means for filling the cabinet, that is placing the clean towel therein and connecting its loose end with the take-up roll and also provides an inexpensive supporting means for the clean web allowing convenient access thereto and also permitting the user to conveniently reach the web of clean towel and at the same time this web or loop is to a certain extent concealed and is afforded substantial protection from dust and dirt by the walls of the cabinet.

The material used in the construction of the cabinet and the partitions and walls may be anything suitable for the purpose. Thin sheet metal may be employed or any other material.

In filling the cabinet, the attendant will move it out from the wall to expose the opening in the rear and then place the bolt of clean towel on its support in the upper part of the casing and stretch the web of clean towel up over the clean towel feed roll and allow it to depend within the cabinet in the unobstructed space that is provided below the bolt of clean towel. In this position the depending web of clean towel will be in the rear of the opening 26 in the front of the cabinet and visible through this opening and be in position to be conveniently grasped by the user standing in front of the cabinet. The attendant will then stretch the end of the loose web up in the rear of the bolt of clean towel, the opening in the rear wall allowing convenient use of the hands in threading the towel web upwardly to the take-up roll. The end of the web having been wound on the take-up roll, the gate 6 being raised to its dotted line position to expose the take-up roll and a sufficient length of loop having been provided below the clean bolt of towel, the cabinet may be pushed back against the wall and is ready for use.

The person using the towel will pull the loose web through the opening in the front of the cabinet and if, for any reason, when this loop is released it does not fall back within the cabinet, the operation of the take-up roll during the feeding movement of the clean web will draw or pull the soiled portion of the towel back into the cabinet where the web will assume the looped depending position shown in Figure 1. I am thus able to provide a loop of clean towel within convenient reach of the user and through the operation of the clean and soiled towel feed rolls, I may wind up a length of soiled towel corresponding to that length of clean towel delivered with each downward pull of the user on the depend-

ing clean web. The opening in the back of the cabinet is of particular advantage as it allows ready access to the web and the take-up roll and this opening is substantially closed when the cabinet is moved back to its usable position against the wall.

It will be noted that the cabinet is made in one piece, that is the casing and the supports therefor are built together instead of having a casing and an independent supporting stand. Thus I am able to effect a considerable saving in the cost of construction. The soiled towel web is easily accessible at the back of the cabinet when it is pulled away from the wall as during the loading or filling operation.

I claim as my invention:

1. A towel cabinet comprising a casing having an opening in the front thereof, a support for a supply of clean towel within said casing, a feed roll above said support, over which a web of clean towel may be stretched and depend within said casing, a second feed roll in the rear of said first named roll and intergeared therewith for simultaneous movement, the rear of said casing having an opening and a door therefor, the side walls of said casing having guides and a take-up roll adapted to be inserted into said guides through the opening in said rear wall, the web of towel as it passes upwardly being stretched to and wound on said takeup roll, said takeup roll resting by gravity upon said second feed roll, said clean towel support having a rear wall adapted to contact with and smooth the web of towel, and means above said wall to engage the web of towel and press it forwardly in advance of said wall, and hold said takeup roll in engagement with said second feed roll.

2. A towel cabinet having therein an inner compartment for holding a towel supply, and a door for said inner compartment through which the towel supply may be deposited, a feed roll above said door and over which a towel web may extend and thence be passed downwardly within the cabinet and beneath and back of said inner compartment and a take up roll to receive the web as it passes upwardly back of said inner compartment said cabinet having an opening extending in front of said web and through which the towel web may be pulled forward for use and when the take up roll is operated the web may be drawn upwardly and into the casing.

3. A towel cabinet comprising an upper section and a chamber below the same, and also having an intermediate compartment for supporting a towel supply, a door for said compartment openable to the front of the cabinet and having means to limit its closing motion leaving an opening through which the towel web may pass, a feed roll in the upper section over which the web may extend and thence hang downwardly to form a loop in said chamber below said compartment and extend back of said compartment, a take up roll above the intermediate compartment, the walls of said intermediate compartment protecting the towel supply from contamination by any portion of the depending loop of toweling as it passes around said towel supply, said cabinet having an opening extending in front of the downwardly looped towel web to permit access to the web as it hangs in the cabinet.

4. A towel cabinet comprising an outer casing having an intermediate compartment within the walls of the casing for holding a supply of toweling, a feed roll above the intermediate compartment and over which a web of toweling may be passed from said intermediate compartment and hang down in a loop within the lower part of the cabinet and pass up back of said intermediate compartment, a door in the rear of the upper part of the cabinet, a take up roll, the upper portion of the cabinet having guide slots for said take up roll which slots open to the rear of the cabinet and are closed by said door, the walls of the intermediate compartment protecting the towel supply from contamination by the depending loop of toweling said cabinet having an opening through which the depending loop of toweling may be conveniently reached as it hangs in said cabinet and the toweling pulled through said opening for use, the toweling being adapted to be pulled back into the casing by the operation of the take up roll.

5. A towel cabinet having an opening in its front and also having an intermediate compartment for surrounding and supporting a towel supply, said intermediate compartment having a door openable toward the front of the cabinet for the insertion of a towel supply, feed rolls geared together above said intermediate compartment and means having a rounded edge overlapping the rear of said intermediate compartment for tensioning the toweling as it passes upwardly back of said intermediate compartment to said feed roll.

6. A towel cabinet having an intermediate compartment therein, feed rolls mounted in said cabinet one behind the other above said compartment, a take up roll resting on the rear feed roll, the intermediate compartment having a gap through which a web of toweling may be passed from the supply to the front feed roll and depend within the cabinet downwardly to form a loop extending rearwardly of the intermediate compartment to said take up roll, said cabinet having an opening in its front and the walls of the intermediate compartment

being adapted to protect the towel supply from contamination as the loop of toweling extends downwardly underneath and rearwardly of the intermediate compartment.

7. A towel cabinet comprising a casing having an opening in its front and provided with a clean towel compartment, said compartment having a door opposite said opening normally closing the front of said compartment, the front and rear walls of said compartment being spaced from the corresponding walls of the cabinet, a pair of feed rolls mounted above said compartment and having a driving connection between them, one of said feed rolls forming a delivery roll and over which a web of clean towel may be stretched from said compartment and depend between the front of said compartment and the front of the casing a soiled towel take up roll mounted to contact with the second feed roll and to be driven thereby, the construction being such that a web of towel may depend from said delivery roll downwardly between said door and opening looped under said towel compartment, thence extended upwardly between said compartment and the rear wall of the cabinet to said take up roll.

In witness whereof, I have hereunto set my hand this 18th day of November, 1926.

GOTTFRID OLSON.