

March 21, 1961

A. K. WIGLEY

2,976,100

ARTICLE STORAGE ASSEMBLY

Filed Feb. 25, 1959

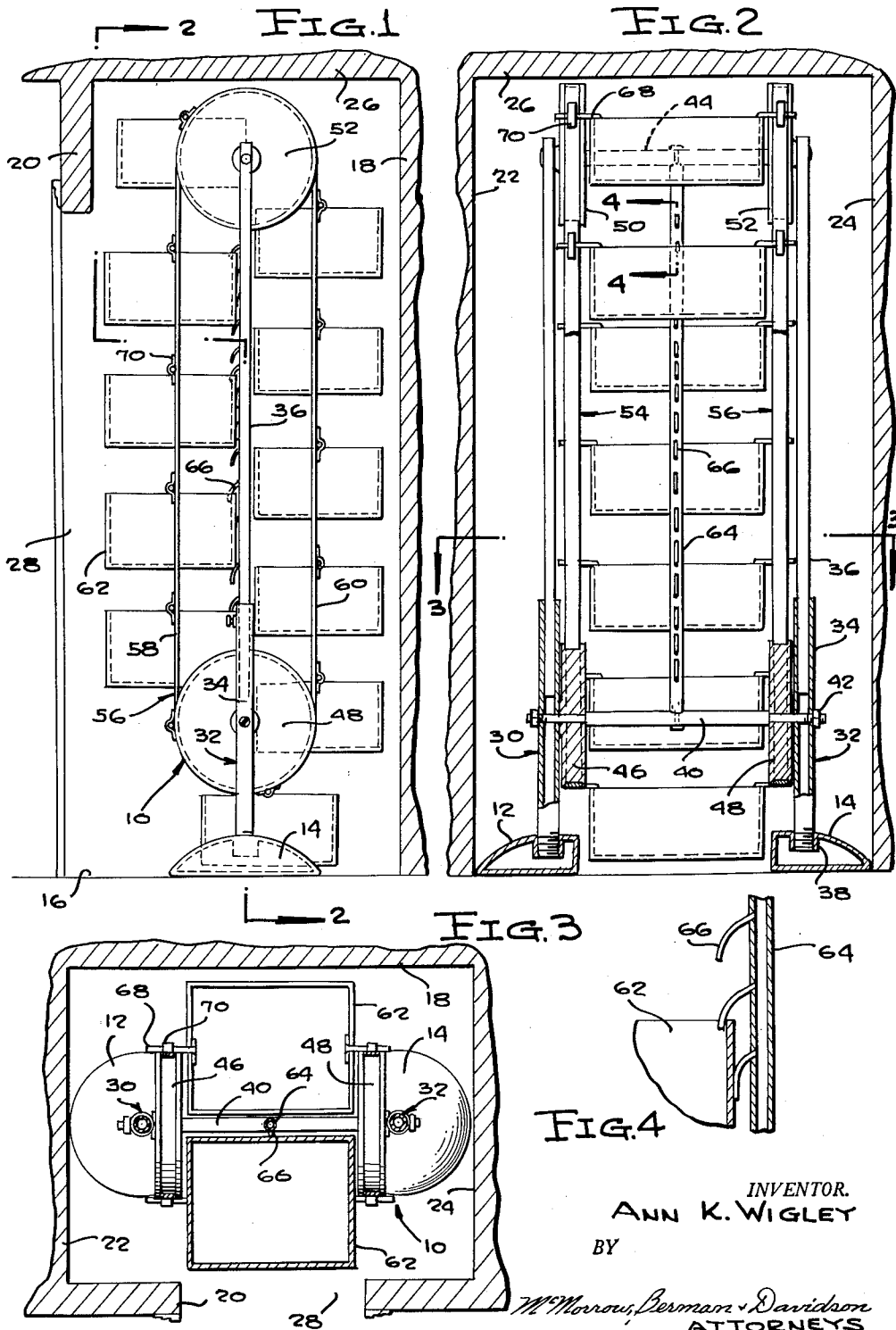


FIG. 4

INVENTOR.
ANN K. WIGLEY
BY

McMurray, Berman & Davidson
ATTORNEYS

1

2,976,100

ARTICLE STORAGE ASSEMBLY

Ann K. Wigley, 712 Mississippi Ave., Clarksdale, Miss.

Filed Feb. 25, 1959, Ser. No. 795,375

5 Claims. (Cl. 312—268)

The present invention relates to storage assemblies generally and in particular to a storage assembly for installation in a closet or other enclosure in a residence.

Residences are presently provided with closets for the storage of wearing apparel and appurtenances. The ceilings of such closets are generally of the same height as the ceilings of the rooms of the residence and are usually provided with one or more overhead shelves. The space above such shelves is generally wasted as access to the area is awkward for an occupant of the room adjacent the closet.

An object of the present invention is to provide an article storage assembly for installation in a closet or other enclosure in a residence which lends itself to the efficient utilization of all of the space within the closet.

Another object of the present invention is to provide an article storage assembly for installation in a closet or other enclosure in a residence which lends itself to the storage of articles of clothing and appurtenances with optimum accessibility to an occupant of the residence.

A further object of the present invention is to provide a storage assembly for installation in a closet or other enclosure in a residence which lends itself to construction in such size as to completely fill a closet or enclosure without wastage of space therein, one simple in structure, economical to manufacture and assemble, and one which is highly effective in action.

These and other objects and advantages of the present invention will be fully apparent from the following description when taken in conjunction with the annexed drawing, in which:

Figure 1 is an elevational view of the article storage assembly of the present invention, viewed from the side, the assembly being shown installed within a closet with portions of the walls of the closet being shown broken away;

Figure 2 is a view taken on the line 2—2 of Figure 1; Figure 3 is a view taken on the line 3—3 of Figure 2; and

Figure 4 is a view, on an enlarged scale, taken on the line 4—4 of Figure 2.

Referring in greater detail to the drawing, in which like numerals indicate like parts throughout the several views, the reference numeral 10 designates the article storage assembly of the present invention, the assembly comprising a pair of base members 12 and 14 arranged in laterally spaced relation and supported upon a floor 16 within a closet having a back wall 18, a front wall 20 and side walls 22 and 24 extending between and secured to the complementary ends of the back wall 18 and front wall 20. The back, front, and side walls 18, 20, 22, and 24 rise from the floor 16 and with a ceiling 26 form the confines of a closet in a residence.

The front wall 20 of the closet is provided with an access opening 28, as shown in Figures 1 and 3.

The base members 12 and 14 are arranged in laterally spaced relation and spaced from the back wall 18, the front wall 20 and the side walls 22 and 24. Standards 30 and 32 rise from the base members 12 and 14, respectively, and each is formed from a lower tubular section

2

34 telescopically receiving an upper section 36. The lower end portion of each of the sections 34 is threaded and is threadedly received within a socket 38 provided in the adjacent base members 12, 14, as shown in Figure 2, with reference to the base member 14. The standard 30 is positioned adjacent to and spaced from the closet side wall 22 and the other standard 32 is similarly positioned with respect to the other closet side wall 24.

A first horizontally disposed shaft 40 extends between the standards 30 and 32 at a point inwardly of and spaced above the lower end of the standards, or substantially midlength of the adjacent section 34. The ends of the shaft 40 project through the sections 34 and are provided with external threads receiving nuts 42 for securement of the shaft 40 to the standards 30 and 32.

A second horizontally disposed shaft 44 extends between the standards 30 and 32 adjacent the upper ends of the latter and has its ends fixedly secured to the standards 30 and 32, the shaft 44 being shown in dotted lines in Figure 2.

Mounted upon the portion of each shaft 40 and 44 inwardly of each of the standards 30 and 32 are pulleys 46, 48, 50, and 52, over which are trained vertically disposed endless belts 54 and 56 arranged in side by side spaced relation and each movable about the shafts 40 and 44 as axes.

The belts 54 and 56 each have a front flight adjacent to and inwardly of the access opening 28 in the front wall 20 of the closet and a rear flight adjacent to and spaced from the back wall 18 of the end closet. These flights are labeled 58 and 60 in Figure 1 with respect to the belt 56.

A plurality of open top receptacles 62 are arranged in superimposed spaced relation with the open top facing upwardly and are positioned between and are connected for movement with the complementary front flights 58 and the complementary rear flights 60 of the belts 54 and 56. The group of receptacles 62 on the front flights 58 of the belts 54 and 56 are in registry with the access openings 28.

A fixed post 64 is positioned between the group of receptacles 62 on the front flights 58 and the groups of receptacles 62 on the rear flights 60. The post 64 is secured by bolts to the shafts 40 and 44 intermediate the ends of the latter.

A row of resilient fingers 66 project from and are carried by one side of the post 64 with each finger 66 having the portion adjacent the free end projecting outwardly and downwardly, as shown in Figure 4. The fingers 66 are selectively engageable with and releasable from the adjacent portion of the open top of the receptacle 62 in the group of receptacles 62 on the front flights 58 of the belts 54 and 56 when the receptacles 62 on the front flights execute traveling movement downwardly along with the belts 54 and 56 as carried by the pairs of pulleys 46 and 48, 50 and 52.

A rigid pin 68, disposed horizontally, projects outwardly from each of the side walls of each of the receptacles 62 and is freely rotatable within the opening through a trunnion piece 70 carried on each of the belts 54 and 56 adjacent the upper end of each of the receptacles 62.

In operation, the assembly 10 is assembled within the closet in a residence in which it is to be employed with the base members 12 and 14 supported upon and secured to the floor 16 and with the standards 30 and 32 adjacent to and spaced from the closet side walls 22 and 24. The receptacle 62 may be used to hold various and sundry articles of clothing and appurtenances as desired with the contents of each receptacle 62 readily accessible by the application of a downwardly directed force to the front flight 58 of either of the belts 54 or 56. Upward movement of the front flight 58 of each belt 54 and 56

is prevented by the engagement of one or another of the fingers 66 in the open top of one or more of the receptacles 62. Also, the engagement of a finger 66 in the receptacle open top prevents tilting movement of the receptacle from its upright position as an article is being taken out of or replaced in the receptacle.

It will be seen therefore that the article storage assembly of the present invention provides optimum storage space in a closet with all of the articles stored therewithin readily accessible to a user thereof.

What is claimed is:

1. In an article storage assembly, a pair of vertically disposed endless belts arranged in side by side spaced relation and each movable about vertically spaced axes, said belts having complementary front and rear flights, a plurality of open top receptacles arranged in superimposed spaced relation with the open top facing upwardly positioned between and connected for movement with the complementary front flights and the complementary rear flights of said belts, a fixed post positioned between the group of receptacles on the front flights of said belts and the group of receptacles on the rear flights of said belts, and a single row of resilient fingers projecting from and carried by one side of said post, said fingers each having the portion adjacent the free end projecting outwardly and downwardly and being selectively engageable with and releasable from the adjacent portion of the open top of the group of receptacles on the complementary front flights of said belts as the latter group execute their downward movement.

2. In an article storage assembly, a pair of vertically disposed endless belts arranged in side by side spaced relation and each movable about vertically spaced horizontally disposed shafts, said belts having complementary front and rear flights, a plurality of open top receptacles arranged in superimposed spaced relation with the open tops facing upwardly positioned between and connected for movement with the complementary front flights and the complementary rear flights of said belts, a post positioned between the group of receptacles on the front flights of said belts and the group of receptacles on the rear flights of said belts, and having the ends secured to said shafts intermediate the ends thereof, and a single row of resilient fingers projecting from and carried by one side of said post, said fingers each having the portion adjacent the free end projecting outwardly and downwardly and being selectively engageable with and releasable from the adjacent portion of the open top of the group of receptacles on the complementary front flights of said belts as the latter groups execute their downward movement.

3. In an article storage assembly, a pair of base members arranged in lateral spaced relation and adapted to be supported on a floor surface, a standard rising from each base member, a first horizontally disposed shaft extending between said standards inwardly of and spaced from the lower ends thereof and having its ends fixedly secured to said standards, a second horizontally disposed shaft extending between said standards adjacent the upper ends thereof and having its ends fixedly secured to said standards, a pair of vertically disposed endless belts arranged in side by side spaced relation and each movable about said shafts as axes, said belts having complementary front and rear flights, a plurality of open top receptacles arranged in superimposed spaced relation with the open tops facing upwardly positioned between and connected for movement with the complementary front flights and the complementary rear flights of said belts, a post positioned between the group of receptacles on the front flights of said belts and the group of receptacles on the rear flights of said belts and having its ends secured to said shafts intermediate the ends thereof, and a row of resilient fingers projecting from and carried by one side of said post, said fingers each having the portion adjacent the free end projecting outwardly and downwardly and being selectively engageable with and releasable from the ad-

jacent portion of the open top of said group of receptacles on the complementary front flights of said belts as the latter group execute their downward movement.

4. The combination with an upstanding enclosure including a floor, a back wall rising from said floor, a front wall rising from said floor, and a side wall rising from said floor and extending between and secured to the complementary ends of each of said front and back walls, said front wall being provided with an access opening, of an article storage assembly comprising a pair of base members arranged in lateral spaced relation within said enclosure and spaced from said back, front, and side walls and supported upon said floor, a pair of vertically disposed endless belts arranged in side by side spaced relation positioned above and supported by said base members and each movable about vertically spaced axes, said belts having complementary front and rear flights, a plurality of open top receptacles arranged in superimposed space relation with the open top facing upwardly positioned between and connected for movement with the complementary front flights and the complementary rear flights of said belts, a fixed post positioned between the group of receptacles on the front flights of said belts and the group of receptacles on the rear flights of said belts, and a single row of resilient fingers projecting from and carried by one side of said post, said fingers each having the portion adjacent the free end projecting outwardly and downwardly and being selectively engageable with and releasable from the adjacent portion of the open top of the group of receptacles on the complementary front flights of said belts as the latter group execute their downward movement.

5. The combination with an upstanding enclosure including a floor, a back wall rising from said floor, a front wall rising from said floor, and a side wall rising from said floor and extending between and secured to the complementary ends of each of said front and back walls, said front wall being provided with an access opening, of an article storage assembly comprising a pair of base members arranged in laterally spaced relation within said enclosure and spaced from said back, front, and side walls and supported upon said floor, a standard rising from each of said base members and positioned adjacent to and spaced from the adjacent side wall, a first horizontally disposed shaft extending between said standards inwardly of and spaced from the lower ends thereof and having its ends fixedly secured to said standards, a second horizontally disposed shaft extending between said standards adjacent the upper ends thereof and having its ends fixedly secured to said standards, a pair of vertically disposed endless belts arranged in side by side spaced relation and each movable about said shafts as axes, said belts having front flights adjacent to and inwardly of the access opening in said front wall and rear flights adjacent to and spaced from said back wall, a plurality of open top receptacles arranged in superimposed spaced relation with the open top facing upwardly positioned between and connected for movement with the complementary front flights and the complementary rear flights of said belts, the group of receptacles on the front flights of said belts being in registry with said access opening, a fixed post positioned between the group of receptacles on said front flights of said belts and the group of receptacles on said rear flights of said belts, and a row of resilient fingers projecting from and carried by one side of said post, said fingers each having the portion adjacent the free end projecting outwardly and downwardly and being selectively engageable with and releasable from the adjacent portion of the open top of the group of receptacles on said front flights of said belts as the latter group execute their downward movement.

References Cited in the file of this patent

UNITED STATES PATENTS

194,813

Ferguson

Sept. 4, 1877