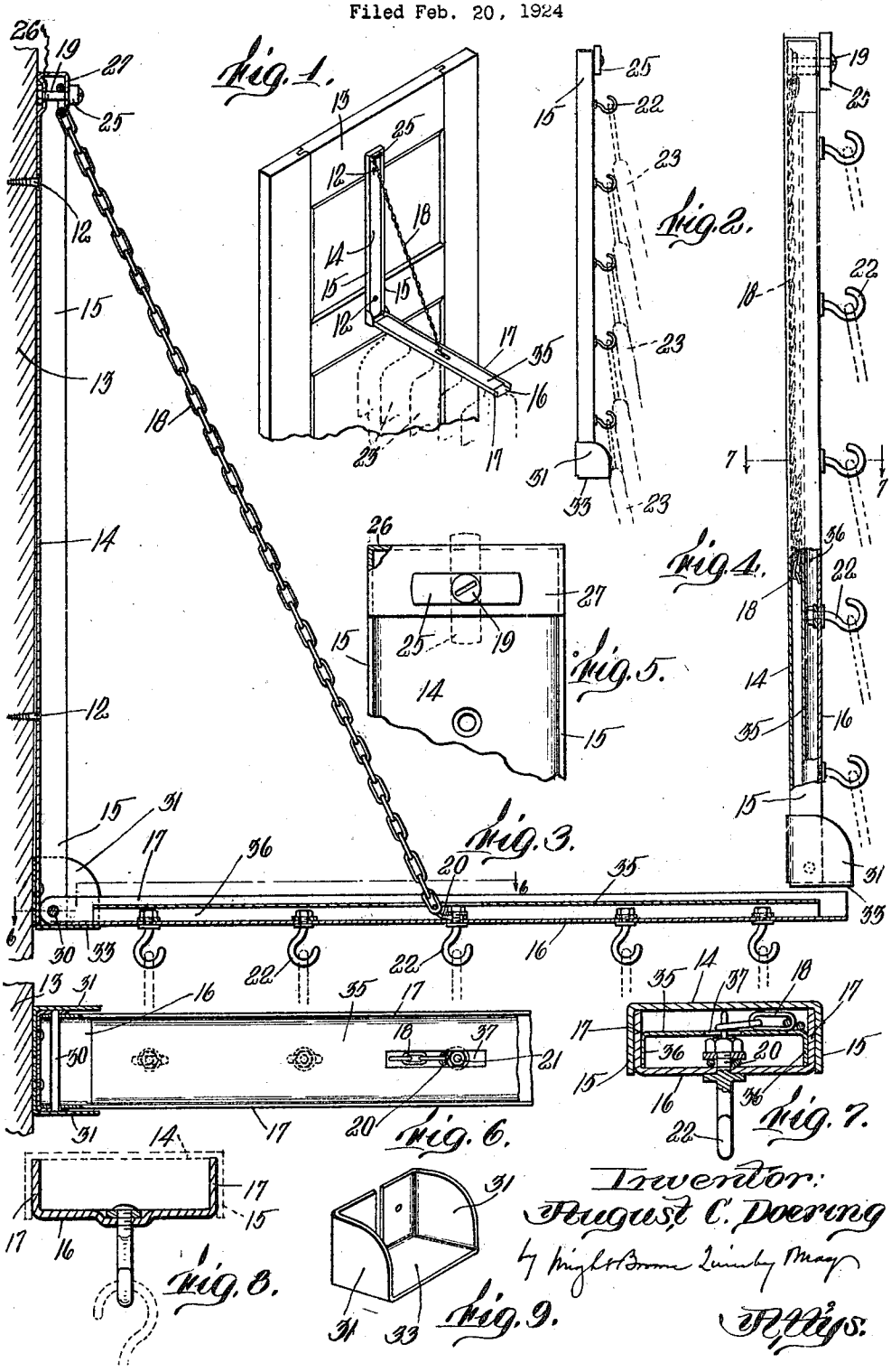
Jan. 13, 1925. 1,522,873

A. C. DOERING

FOLDING GARMENT RACK

Filed Feb. 20, 1924



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Patented Jan. 13, 1925. 1,522,873

UNITED STATES PATENT OFFICE.

AUGUST C. DOERING, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO DORAK MAKERS, INC., OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

FOLDING GARMENT RACK.

Application filed February 20, 1924. Serial No. 694,129.

To all whom it may concern:

Be it known that I, AUGUST C. DOERING, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Folding Garment Racks, of which the following is a specification.

The invention relates to a rack adapted to be secured to a vertical wall or other support, and to hold a group of garments, either projecting outward from the wall, and spaced apart so that each garment is conveniently accessible, the garments occupying a maximum space; or bunched together against the wall to occupy a minimum space, when accessibility to any garment without disturbance of others is not a desideratum.

The object of the invention is to provide a simple, strong and durable rack structure, composed chiefly of sheet metal, and adapted to be attached as a unit to a support, to securely hold a group of garments in either of the positions above indicated, and to permit the convenient transference of the group from either position to the other.

Of the accompanying drawings forming a part of this specification,—

Figure 1 is a perspective view, showing a rack embodying the invention attached to a door and adjusted to hold the garments of a group spaced apart,

Figure 2 is an edge view, showing the rack adjusted to hold the garments bunched together.

Figure 3 is a longitudinal section, showing the rack adjusted as shown by Figure 1.

Figure 4 is an edge view, showing portions in section, the rack being adjusted as shown by Figure 2.

Figure 5 is a fragmentary front view, showing the upper portion of the fixed holder.

Figure 6 is a section on line 6—6 of Figure 3.

Figure 7 is a section on line 7—7 of Figure 4.

Figure 8 is a view similar to Figure 7, showing a modification.

Figure 9 is a perspective view of the reinforcing member hereinafter described.

My improved rack includes an elongated holder adapted to be secured, as by screws 12, to a vertical support such as a wall or door 13, and provided with a recess which is open at the front side. The holder is made of sheet metal, and includes a back portion 14, adapted to receive the screws 12, and longitudinal stiffening flanges 15, projecting outward from the back portion, and forming opposite sides of a recess. The holder also includes a transverse upper flange 26 forming the upper end of the recess and provided with an extension 27 which overhangs the upper end of the recess and forms a seat for the movable fastener hereinafter described, and a transverse lower flange 33 forming the lower end of the recess. The back 14, the flanges 15 and 26, and the extension 27, are made from a single sheet metal blank. The bottom flange 33 is a part of another blank and is provided with angular ears 31 (Figure 9) bearing on the lower ends of the back 14 and side flanges 15, so that the lower end portion of the holder is reinforced and outward bending of said lower ends is prevented. The ears 31 may be electrically welded or riveted to the lower end portion of the holder. To the lower end of the holder is hinged an elongated sheet metal arm, adapted to be raised against the holder, and extended horizontally therefrom, the arm being provided with a channel which is open at its ends.

The arm is also composed of sheet metal and includes a body portion 16 and longitudinal side flanges 17, projecting from the inner side of the body portion, said body portion and flanges forming a channeled arm.

A flexible tether 18, which may be a chain, is secured to the upper end of the holder, as by a bolt 19, engaged with an end ring or link of the chain, and to the mid-length portion of the arm, as by a hook 20, engaged with the other end link, the hook being in this instance engaged with the shank of a garment-supporting member or hook 22, which is fixed to the body portion 16 of the arm, as shown by Figure 3.

The member 22 is one of a row of members fixed to the arm, and adapted to support a group of garments 23, indicated by dotted lines in Figure 1. If the garments are coats, or the like, they may be directly supported by ordinary coat hangers, hung upon the members 22. Said members are rigidly attached to the arm and project from the outer side thereof.

The arrangement is such that when the arm is lowered, it is supported horizontally by the holder and the tether, so that the garments depend freely at the same height, and are spaced apart, with either garment conveniently accessible, the arm having a maximum projection from the support 13. When the arm is raised, the garments depend at different heights and are bunched together, as indicated by Figure 2, so that the group occupies a minimum space, each garment below the highest being overlapped by the garment above it.

The arm may be releasably secured to the holder in the raised position described, by any suitable means, preferably a button 25, bearing on the extension or seat 27 at the upper end of the holder, and pivoted to turn on the bolt 19, the button overlapping the higher end of the arm when the latter is raised.

The recess of the arm opens into the recess of the holder when the arm is raised, so that a chamber is formed in which the tether is stored, the tether being looped or folded when the arm is raised.

The flanges 17 of the arm are interengaged, as shown by Figure 7, with the flanges 15 of the holder when the arm is raised, so that the arm is supported against edgewise displacement, or against strains tending to tip it edgewise.

The side and end flanges of the holder bounding the recess therein and the channelled form of the arm impart stiffness to these parts, so that although they are made of sheet metal, they are not deficient in strength and stiffness. The lower ends of the holder flanges 15 overlap the inner ends of the arm flanges 17 and are utilized as members of a hinge which is completed by a pintle 30, inserted in orifices in said ends. A simple hinge is thus provided, involving the employment of only one member, the pintle, in addition to the holder and arm. The ends of the pintle are covered by the ears 31 as shown by Figure 6.

The reinforcing member formed by the lower flange 33 and ears 31 is adapted to supplement the hinge pintle 30 and the tether 18 in supporting the arm horizontally.

As shown by Figure 3, the shanks of the hooks 22 extend through the body portion 16 of the arm, into the arm recess, and are secured within the recess by suitable fastening means. To brace the side flanges 17 of the arm against inward bending, and further to conceal the inwardly projecting ends of the shanks and the fastening means, and prevent the tether 18 from being caught by the same, I provide a partition 35, which is of sheet metal and provided with flanges 36, contacting with the arm flanges 17, as shown by Figure 7. Said partition is sufficiently spaced from the back portion 14 of the holder to provide a storage chamber for the tether, the partition being provided with a slot 37, through which the tether passes.

It will now be seen that the rack is adapted to be secured as a single part or unit to a vertical support, by the operation of screwing the holder to the support, and that the arm and any load thereon, are firmly supported in both the raised and the extended positions of the arm.

The partition 35 may be omitted as shown by Figure 8.

I claim:

1. A folding clothes rack comprising an elongated sheet metal holder including a back adapted for attachment to a support, and longitudinal side flanges forming opposite sides of an elongated recess; a channeled sheet metal arm including a body having garment-supporting hooks and longitudinal flanges forming opposite sides of a longitudinal channel; a hinge pintle connecting the lower ends of the holder flanges with the inner ends of the arm flanges, the arm and its flanges being adapted to enter the recess of the holder when the rack is folded; and an angular reinforcing member fixed to the lower end of the back and including a transverse flange forming the lower end of the holder recess, and ears bearing on the outer sides of the holder flanges and on the ends of said pintle, to prevent outward binding of the holder flanges and endwise displacement of the pintle.

2. A folding clothes rack comprising an elongated sheet metal holder adapted to be secured to a support and provided with side and end flanges bounding a recess in the holder, a sheet metal arm including a body portion having longitudinal side flanges forming opposite sides of a longitudinal channel and adapted to enter the recess of the holder, and a partition having longitudinal side flanges bearing on the side flanges of the body portion, so that the partition prevents inward bending of the said body flanges, the lower ends of the side flanges of the holder overlapping the inner ends of the side flanges of the arm; a hinge pintle connecting the overlapping ends of said flanges; a flexible tether secured to the holder and the arm, and passing through a slot in the arm partition; garment-supporting hooks having shanks extending through the body portion of the arm and provided with fastening means concealed by said partition; and a movable fastener pivoted to the upper portion of the holder and adapted to engage the outer end of the arm when the rack is folded, the said partition being located within the channel of the arm, so that a space is formed for the storage of the tether when the rack is folded.

3. A folding clothes rack comprising an

elongated sheet metal holder including a back adapted for attachment to a support, longitudinal side flanges forming opposite sides of an elongated recess, a transverse upper flange forming the upper end of said recess and having an extension overhanging the recess and forming a fastener seat, and a transverse lower flange forming the lower end of said recess and having ears bearing on the lower ends of said side flanges, so that outward bending of said lower ends is prevented; a sheet metal arm including a body portion having longitudinal side flanges forming opposite sides of a longitudinal channel and adapted to enter the recess of the holder and a partition having longitudinal side flanges bearing on the side flanges of the arm, so that inward bending of said flanges is prevented, the lower ends of the side flanges of the holder overlapping the inner ends of the side flanges of the arm; a hinge pintle connecting the overlapping ends of said flanges and confined between the ears of the said lower flange; a flexible tether secured to the holder and the arm and passing through a slot in the arm partition; garment-supporting hooks having shanks extending through the body portion of the arm and provided with fastening means concealed by said partition; and a movable fastener pivoted to the upper end of the holder and movable on said seat to engage the outer end of the arm when the rack is folded, the said partition being located within the channel of the arm, so that a space is formed for the storage of the tether when the rack is folded.

In testimony whereof I have affixed my signature.

AUGUST C. DOERING.