No. 830,813. PATENTED SEPT. 11, 1906.

J. M. WALKER.

HANGER FOR GARMENTS AND OTHER ARTICLES.

APPLICATION FILED FEB. 20, 1906.

2 SHEETS—SHEET 1.

Fig. 1

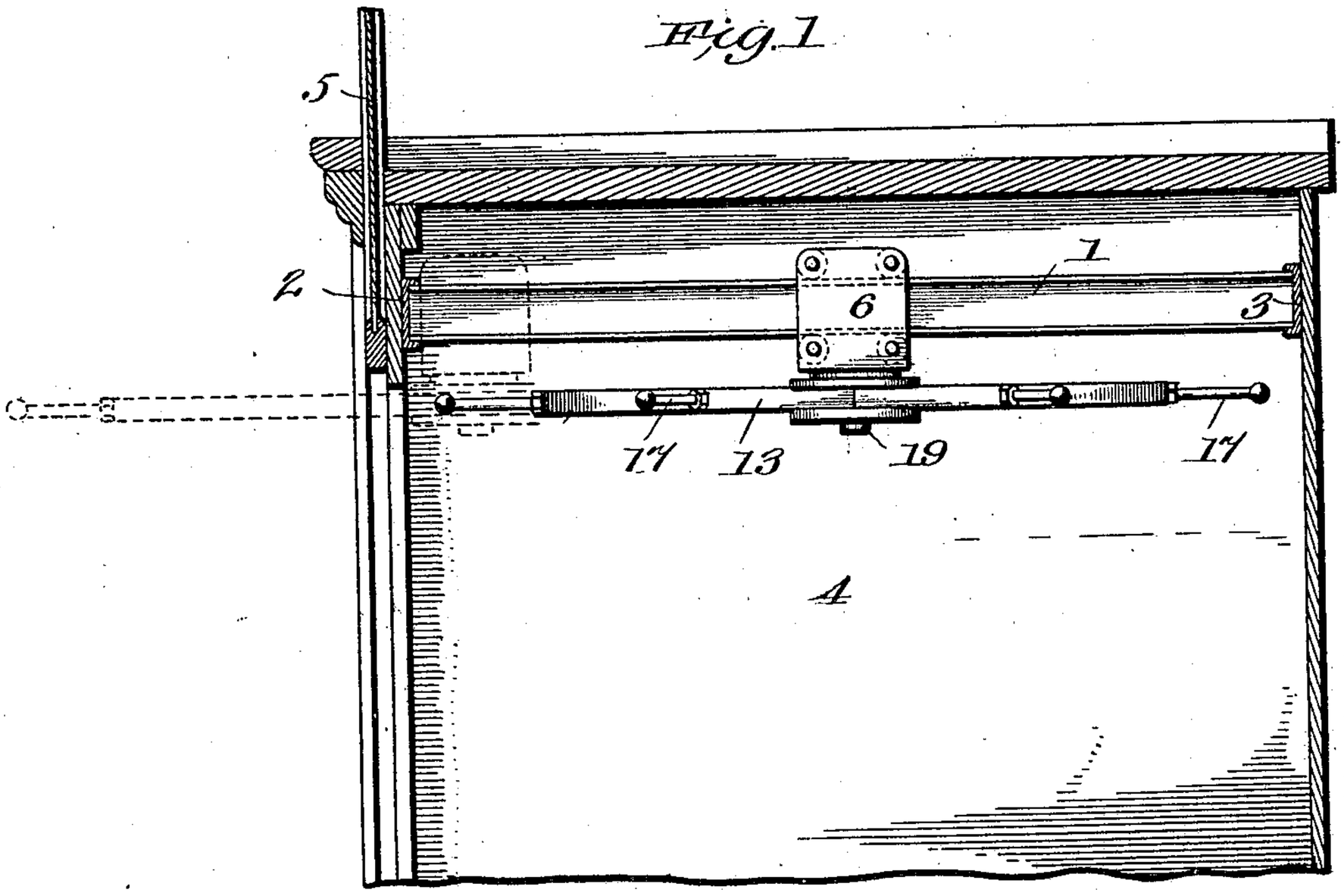
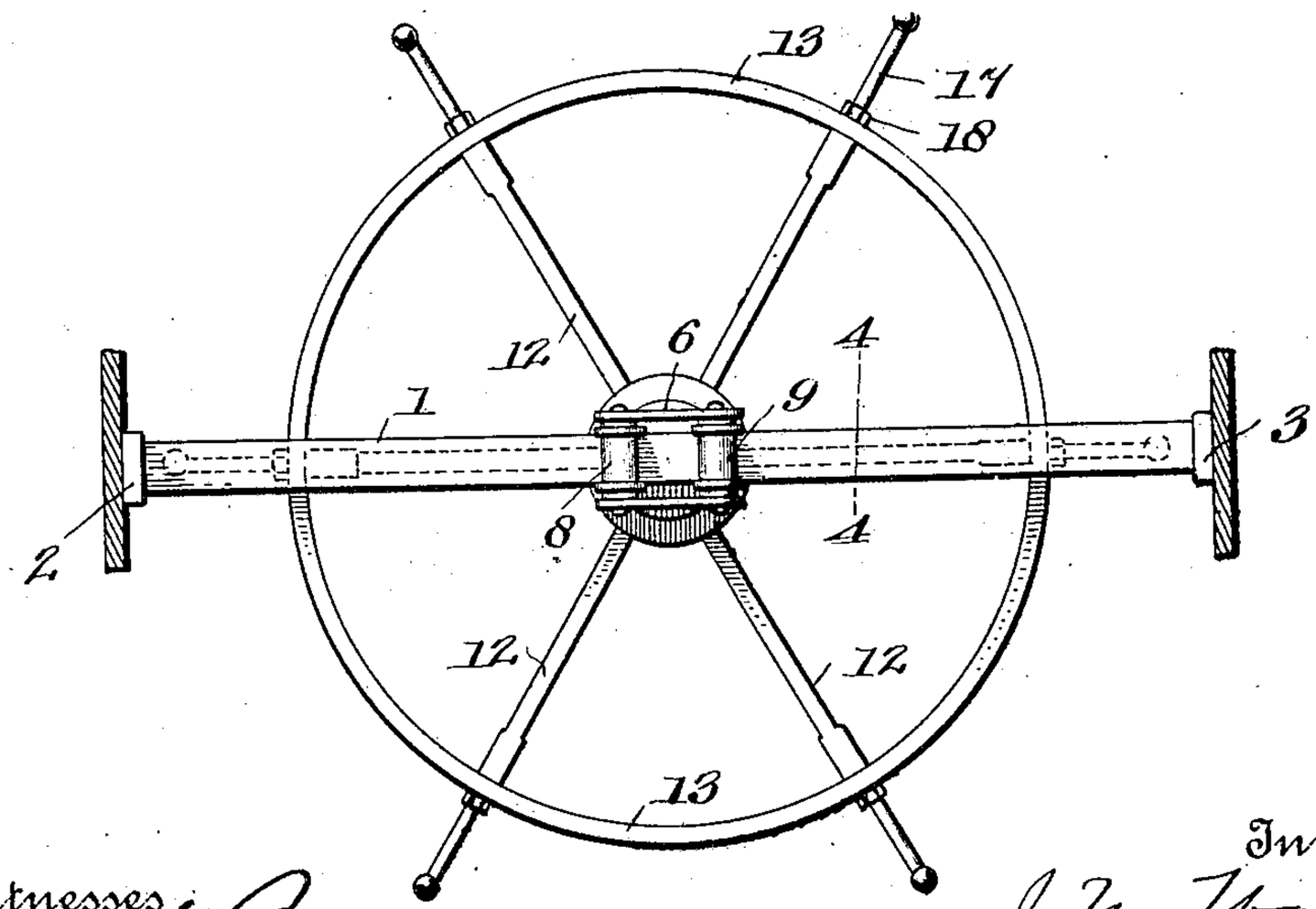


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

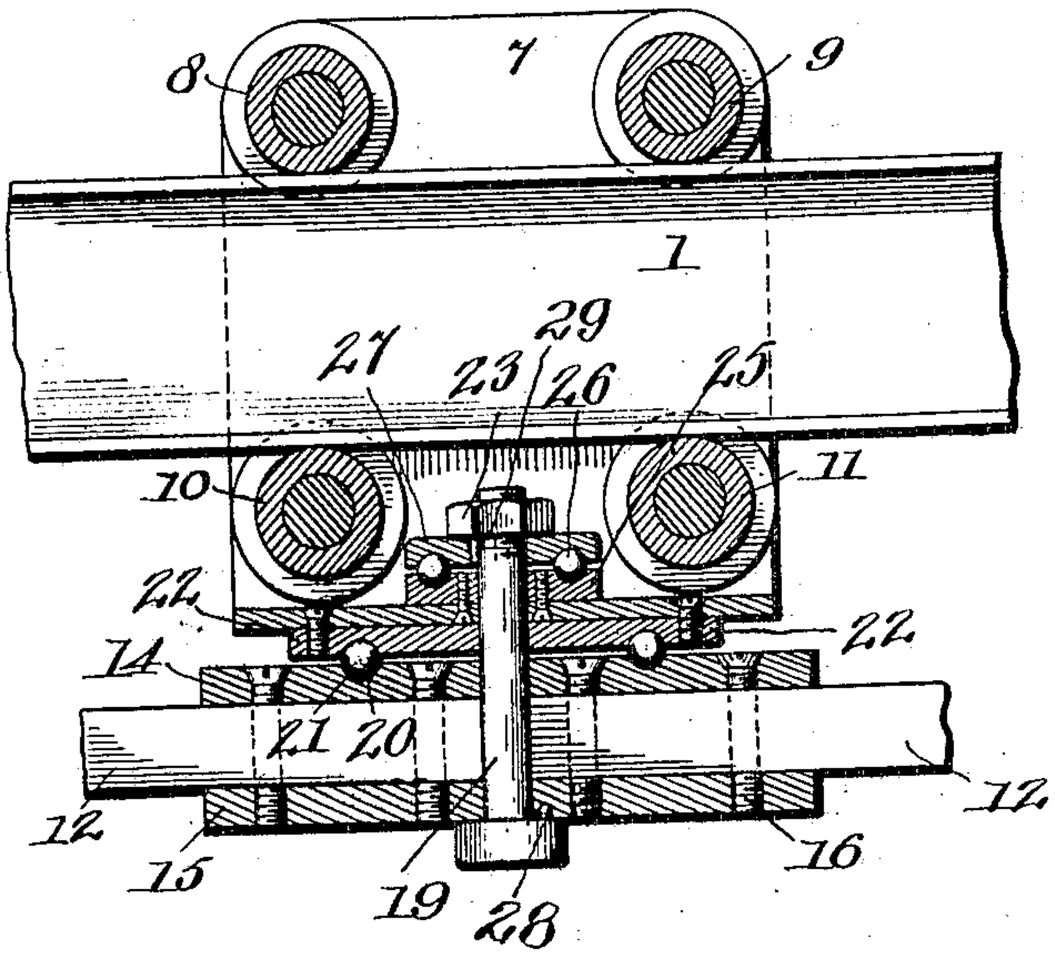


Fig. 4.

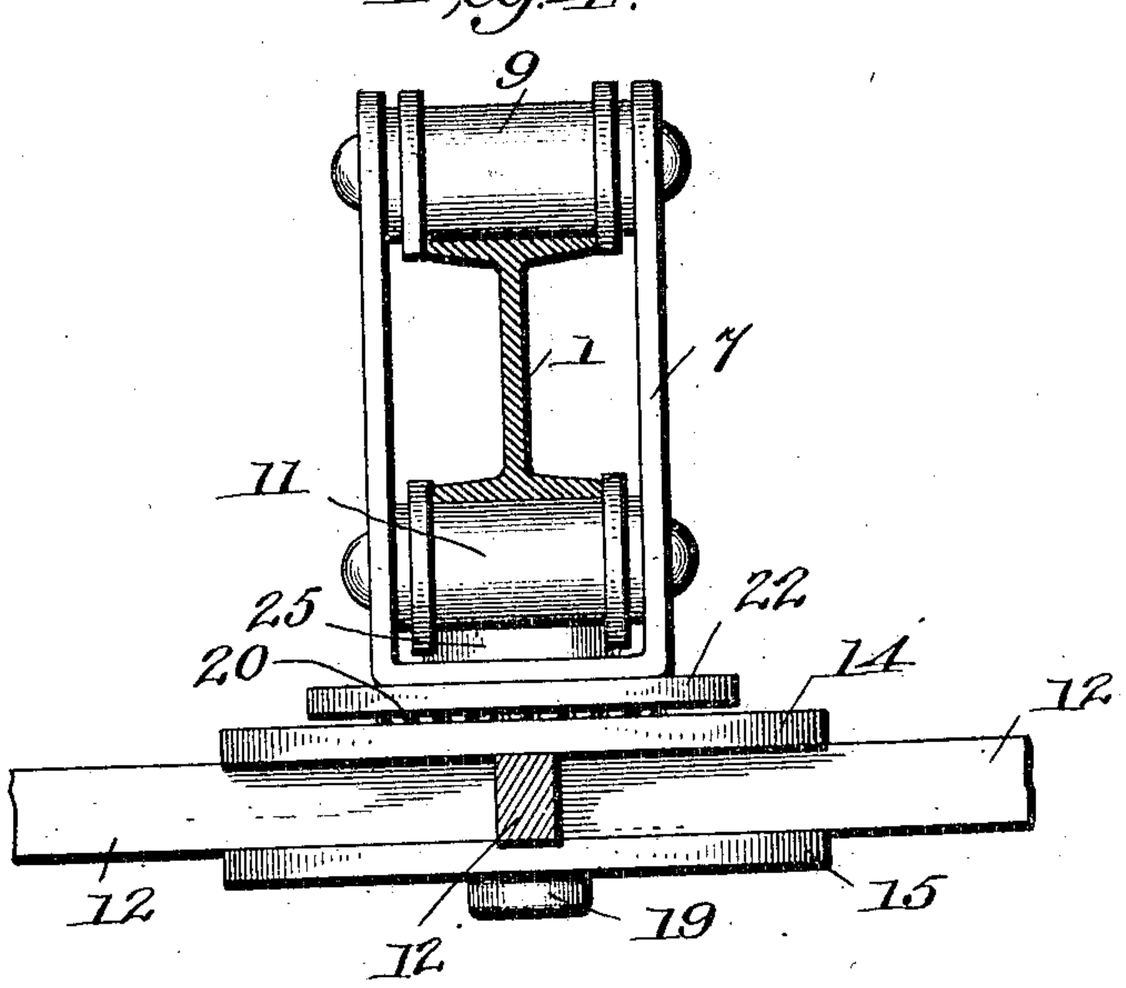
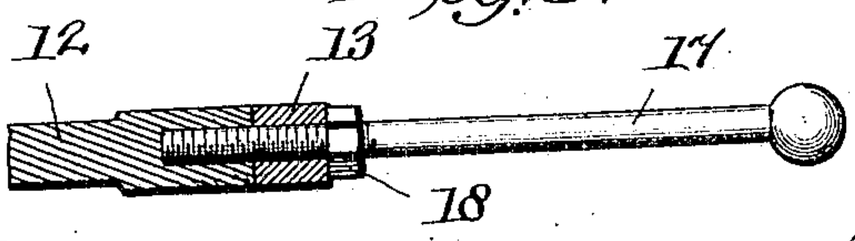


Fig. 5.



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UNITED STATES PATENT OFFICE.

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HANGER FOR GARMENTS AND OTHER ARTICLES.

No. 830,813. Specification of Letters Patent. Patented Sept. 11, 1906.

Application filed February 20, 1906. Serial No. 302,036.

To all whom it may concern:

Be it known that I, JAMES MILLER WALKER, a citizen of the United States, residing at Augusta, in the county of Richmond and State of Georgia, have invented certain new and useful Improvements in Hangers for Garments and other Articles, of which the following is a specification.

The principal object of this invention is to provide a hanger for supporting garments or other articles for display purposes or for storage, or both, such as will be easy to manufacture and efficient in the work for which it is designed.

With the foregoing object in view my said invention consists in the novel combination and arrangement of parts hereinafter described, and more particularly pointed out in the accompanying claims.

In order to more fully describe my said invention, reference will be had to the accompanying drawings, which illustrate one embodiment thereof, and in which—

Figure 1 is a vertical cross-section of the upper portion of a cabinet, showing my improved hanger in side elevation within the said cabinet; Fig. 2, a top plan view of the said hanger; Fig. 3, an enlarged detail sectional view through the trolley and ball-bearing pivot connections of the hanger with portions in elevation; Fig. 4, an enlarged detail view, partly in elevation and partly in section, taken along the line 4 4, Fig. 2, with the radial supporting-arms broken away; and Fig. 5 an enlarged detail view, partly in section and partly in elevation, showing manner of connecting the handles to the radiating arms and circular rim.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention I provide a suitable support 1, preferably in the form of a metallic I-beam, and which may be supported in any suitable way. In the form of my invention illustrated this I-beam is supported at its ends in brackets 2 and 3, which are made fast to the front and rear, respectively, of cabinet 4, having a vertically-sliding glass door 5. The specific structure or form of this cabinet forms no part of my invention, and it may therefore be of any desired shape or form.

Upon the I-beam 1 is adapted to travel a trolley 6, comprising in the case shown a preferably metal frame 7, U-shaped in cross-section and provided with roller-bearings, the latter consisting of two flanged rollers 8 and 9, journaled in the frame 7 near the upper end thereof and adapted to rest upon the upper edge of the I-beam 1, as shown, and a second pair of flanged rollers 10 and 11, journaled in the sides of the frame 7 directly beneath the rollers 8 and 9, respectively, and located a sufficient distance from the latter rollers to engage the I-beam 1 when the rollers 8 and 9 are resting thereon. The rollers being thus spaced apart on each side of the I-beam prevent the frame of the trolley from tilting in any direction. All of said rollers are preferably of metal.

The rack or portion from which the articles are adapted to be suspended or hung consists in the case shown, among other parts, of a plurality of arms 12, which radiate from a common center and terminate at their outer ends in a circular rim 13. These arms are clamped at said center between two metal hub-plates 14 and 15 by screws or bolts 16. In continuation of the outer end of each of the arms 12 I provide a handle 17, screw-threaded at one end where it passes through the circular rim into the end of the radial arm. (See Fig. 5.) A nut 18 on said screw-threaded portion holds said parts together. This rack is pivotally secured to the trolley 6 for rotation in a horizontal plane, and the pivotal connection is so arranged that there will be no tilting of the said rack, due to inequality of the weight suspended from different sides thereof. It is a further object of this pivotal connection to reduce the friction thereof to a minimum, permitting the rack to be easily turned or rotated. This pivot connection consists, among other parts, of a pivot-bolt 19, the head of which engages the hub-plate 15, while the shank of said bolt passes upward through a central opening in said plate 15 and through a central opening in plate 14. Between the yoke of the trolley-frame and the upper plate of the hub I provide a ball-bearing consisting of a plurality of balls 20, adapted to travel in an annular raceway 21 in the upper face of the plate 14 and in a similar raceway in the lower face of a plate 22, made fast to the lower face of the yoke of said trolley-frame.

In order to further reduce the friction of the pivot, I provide a second ball-bearing between the inner face of the yoke of the trolley-frame and the nut 23 on the upper end of the pivot-bolt. This ball-bearing consists of a metal plate 25, made fast to the inner face

of the yoke of the trolley-frame, a series of balls 26, and an upper bearing-plate 27, which engages the nut 23 of the pivot-bolt. The balls 26 are adapted to travel in annular raceways in the plates 25 and 27, respectively.

A lug or pin 28 on the head of the bolt 19 extends into an opening in the plate 15, while the plate 27 is made to rotate with the bolt 19 by means of the key 29.

The articles to be supported are suspended from the arms 12 or rim 13, or both.

In Fig. 1 the apparatus is shown in full lines within a cabinet, in which position the articles suspended from the rack may be completely inclosed in the cabinet, If it is desired to inspect these articles or to remove any from the rack or place others upon the rack, the cabinet-door is first opened and then the supporting-rack is pulled forward to the position shown in dotted lines in Fig. 1. In this latter position by merely rotating the supporting-rack any of the articles thereon may be readily inspected, removed therefrom, or others placed on said rack. After this is done the rack may again be pushed back into the cabinet. Owing to the fact that the supporting-trolley travels upon rollers, the rack may be pulled into and out of the cabinet with the least possible exertion, and owing to the ball-bearing pivotal connection above described the rotation of the rack in a horizontal plane may also be accomplished with the least possible exertion. Moreover, the arrangement of the trolley and pivotal connection shown absolutely prevents any tilting of the rack due to inequality of weight on different sides of said pivot. Also since all of the parts may be of metal the device may be very light and durable.

While I have shown my invention as applied to a particular form of cabinet, I do not desire to confine it to this application, as it may be used in a number of different ways in stores, warerooms, and other places. Also the specific form of the rollers herein shown may be varied and other modifications may be made without departing from the spirit of the invention.

Having thus described my invention, what I claim is—

1. A hanger for garments and other articles, comprising a supporting-beam, a trolley adapted to travel on said beam and comprising a substantially U-shaped trolley-frame, and bearings mounted in said frame to engage the upper face of said beam and also to engage the lower face of said beam; a supporting-rack comprising a plurality of radiating arms, and means to pivot said rack to said trolley for rotation in a horizontal plane, and against tilting out of said plane.

2. A hanger for garments and other articles, comprising a supporting-beam; a trolley adapted to travel on said beam and comprising a trolley-frame substantially U-shaped in cross-section, a set of flanged rollers journaled in said frame and spaced apart horizontally to engage the upper face of said beam at different points thereon, a set of similar rollers mounted in said frame under the aforesaid rollers, spaced apart horizontally and adapted to engage the lower face of said beam at different points thereon; a supporting-rack comprising a plurality of radiating arms, and means to pivot said rack to said trolley for rotation in a horizontal plane and against tilting out of said plane.

3. A hanger for garments and other articles, comprising a supporting-beam; a trolley adapted to travel on said beam and comprising a frame, a set of rollers journaled in said frame and spaced apart horizontally to engage the upper face of said beam at different points thereon and a set of similar rollers beneath the aforesaid rollers spaced apart to engage the lower face of said beam at different points thereon; a supporting-rack comprising a plurality of arms radiating from a common center, a pair of hub-plates and means coöperating therewith to support the inner ends of said arms, a pivot connection having ball-bearings and securing said supporting-rack to said trolley for rotation in a horizontal plane and against tilting out of said plane due to an inequal distribution of weight on said rack.

4. A hanger for garments and other articles, comprising an I-beam, a trolley-frame substantially U-shaped in cross-section, a set of flanged rollers journaled in said frame and spaced apart horizontally to engage the upper face of said I-beam at different points thereon, a set of similar rollers mounted in said frame respectively under the aforesaid rollers and adapted to engage the lower face of said I-beam at different points thereon, a supporting-rack comprising a plurality of arms radiating in a horizontal plane from a common center, a pair of hub-plates and means coöperating therewith to support the inner ends of said arms, a circular rim in which said arms terminate at their outer ends, a plurality of handles radiating from said rim and passing through the same into said arms to hold said rim and arms together, a pivot-bolt passing through said hub-plates and through the yoke of said trolley-frame to allow said rack to rotate in a horizontal plane, a bearing-plate rigidly secured to the lower face of the yoke of said trolley-frame, balls between said plate and one of said hub-plates, a bearing-plate made fast to the upper face of the yoke of said trolley-frame, a second bearing-plate mounted thereabove, balls between said plates, and a nut on said bolt adapted to engage the last-mentioned bearing-plate.

5. The combination with a cabinet, of a hanger for garments and other articles, com-

prising an I-beam supported horizontally within said cabinet, a trolley-frame substantially U-shaped in cross-section, a set of flanged rollers journaled in said frame and spaced apart horizontally to engage the upper face of said I-beam at different points thereon, a set of similar rollers mounted in said frame under the aforesaid rollers, spaced apart horizontally and adapted to engage the lower face of said I-beam at different points thereon, a supporting-rack comprising a plurality of arms radiating in a horizontal plane from a common center, a pair of hub-plates and means coöperating therewith to support the inner ends of said arms, a circular rim in which said arms terminate at their outer ends, a plurality of handles radiating from said rim and passing through the same into said arms to hold said rim and arms together, a pivot-bolt passing through said hub-plates and through the yoke of said trolley-frame to allow said rack to rotate in a horizontal plane, a bearing-plate rigidly secured to the lower face of the yoke of said trolley-frame, balls between said plate and one of said hub-plates, a bearing-plate made fast to the upper face of the yoke of said trolley-frame, a second bearing-plate mounted thereabove, balls between said plates, and a nut on said bolt adapted to engage the last-mentioned bearing-plate.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES MILLER WALKER.

Witnesses:
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LEO P. MCCARTHY.