E. OLDENBUSCH

BOOK RACK.

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952,839. Patented Mar. 22, 1910.

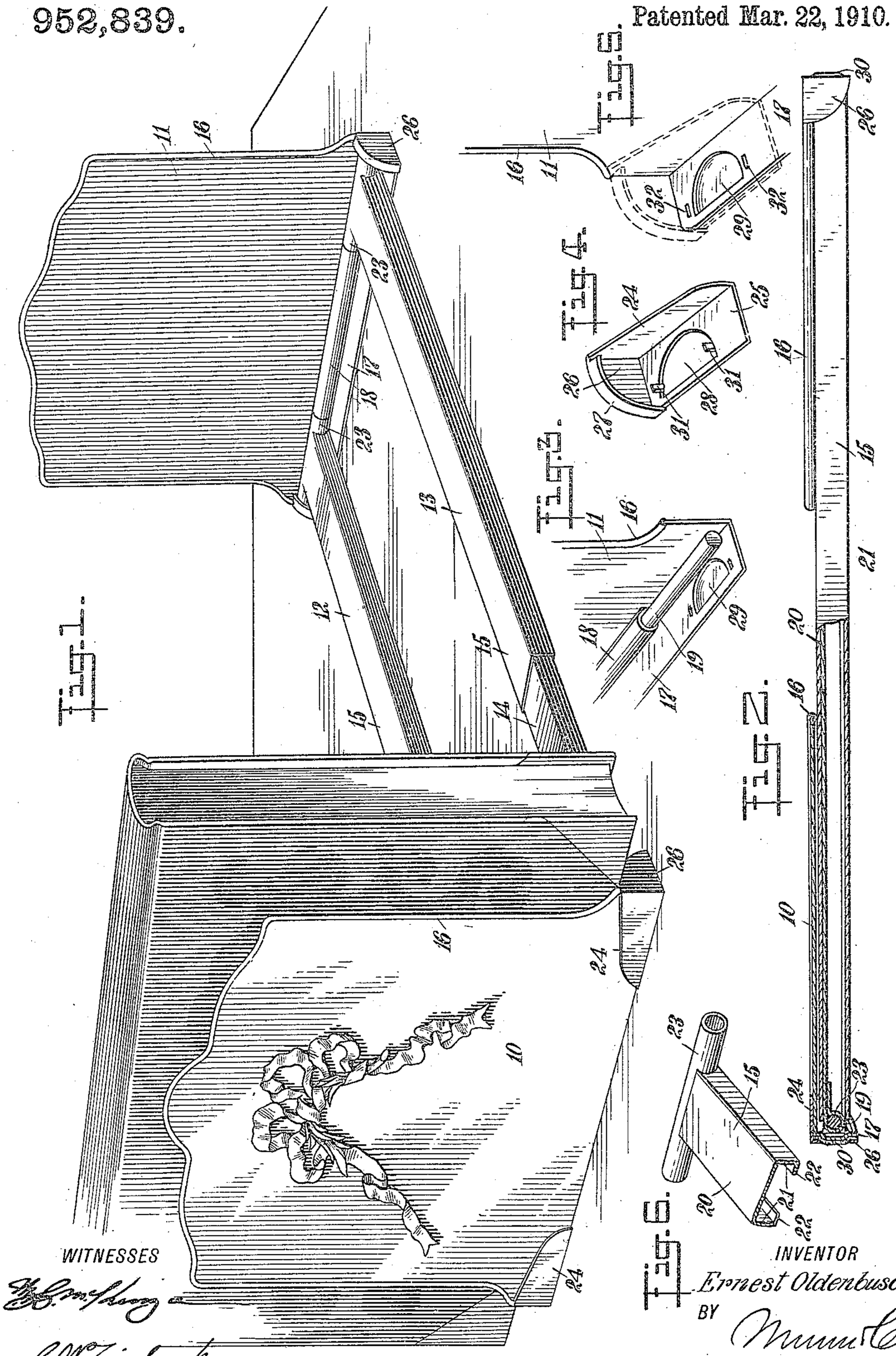

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

FIG. 5.

WITNESSES

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BOOK-RACK.

952,839. Specification of Letters Patent. Patented Mar. 22, 1910.

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To all whom it may concern:

Be it known that I, ERNEST OLDENBUSCH, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Book-Rack, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in book racks, and more particularly to that type of book rack in which there are provided a base or supporting member and one or more end plates adapted to extend substantially vertically therefrom.

In its preferred form, my improved book rack has two separate end plates foldable into engagement with the base, and this base is formed of telescoping members relatively movable to vary the total length of the book rack.

The main object of my invention is to render the book rack simple and durable in form and inexpensive to manufacture, by constructing all, or approximately all of the parts of sheet metal.

A further object is to reduce to a minimum, the liability of scratching a polished table top or other surface upon which my improved book rack may be used.

Other objects and advantages will be set forth hereinafter and the scope of the invention particularly defined in the claims.

Reference is to be had to the acompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which--

Figure 1 is a perspective view of a book rack constructed in accordance with my invention, the parts being in operative position; Fig. 2 is an edge view of the book rack, the ends being in folded position and a portion being broken away to show the device in longitudinal section; Fig. 3 is a perspective view of one corner of an end member and the pintle carried thereby; Fig. 4 is a perspective view of one of the reinforcing and cushion-carrying corner pieces; Fig. 5 is a perspective view of a corner of the end member showing the corner piece in dotted lines; and Fig. 6 is a perspective view of one of the telescoping sections of the base member and its pintle sleeve.

In the book rack illustrated, I provide two end members 10 and 11, and two base members 12 and 13. Each base member is formed of two telescoping sections 14 and 15, and one end member 10 is pivotally secured to one end of each of the base sections 14, 14, and the other end member 11 is pivotally secured to both of the base sections 15, 15. Each end member includes a sheet metal body portion cut to any desired form and stamped, bent, embossed or decorated to present any desired artistic design. The upper and side edges of the plate may be treated in any suitable manner, to prevent said edges from injuring or cutting objects contacting therewith. As shown, a narrow bead, strip or binding 16 is secured upon said edges and presents a rounded or smooth surface. At its lower edge, each end plate presents a base flange 17, extending at substantially right angles to the body of the plate and from one side edge to the other.

Within the angle between the body of the plate and its base flange, there is soldered or otherwise rigidly secured, a tube or sheet metal sleeve 18, the ends of which are disposed at a considerable distance from the side edges of the plate. Extending through this tube or sleeve, or at least, extending out from the ends of the sleeve, is a rod constituting two pintle pins 19, at opposite ends of the tube and each extending from the end of the tube approximately to the side edge of the plate, and spaced from the body and from the flange of the plate a distance substantially equal to the thickness of the metal forming the sleeve or tube 18. This sleeve or tube may be omitted, if desired, or may be replaced by two short tube sections. The chief functions of the tube are to support the pintle pins, properly space them in regard to the end plates and flanges, and to constitute stops for the pintle sleeves hereinafter referred to.

As previously stated, the base is formed of two members, each including two telescoping sections. Each section is formed of sheet metal and is substantially channel-shaped or rectangular in cross section, as shown more particularly in Fig. 6. The web 20 of the channel is uppermost, so as to present a flat supporting surface for the books, and the flanges 21 of the channel extend downwardly at any desired angle in respect to the web. Each flange 21, particu-

larly on the sections 15, carries at its lower edge, an inwardly-directed flange 22. Each base section 14 extends into its corresponding base section 15, and the inwardly-directed flanges 22 of the latter prevent the two sections from having movement in respect to each other, except a longitudinal one. These inwardly-directed flanges on all of the sections reinforce the lower edges of the side flanges 21 and reduce the liability of injury to objects by coming into engagement with the sharp edge of the metal.

One end of each base section is provided with a pintle sleeve adapted to receive the corresponding pintle pin of the end member. This pintle sleeve is preferably formed of a tube or sheet metal sleeve 23, extending transversely of the end of the base section and of substantially the same diameter and material as the tube or sleeve 18. Each pintle sleeve is adapted to slip onto the end of its corresponding pintle and come into engagement with the end of the sleeve 18. The outer end of the pintle sleeve should then come closely adjacent the side edge of the end plate. The sleeve is so connected to the base section, that the lower surface of the latter will engage with and rest upon the base flange 17, when the parts are in open or operative position, and the upper surface of the base section will engage with the inner surface of the end plate when the parts are in folded or collapsed position. Thus, the end plate may lie parallel to the base, as indicated in Fig. 2, or may swing upwardly and outwardly to a position at right angles thereto, as indicated in Fig. 1. Further outward movement of the end plate is prevented by the base flange 17.

For preventing injury to a highly polished table top or to any other surface upon which it is desired to support the book rack, I preferably provide cushions or pads of soft material at the corners of the rack. To support and secure these cushions in place and also to hold the pintle sleeves from moving outwardly along their pintle pins, I provide a reinforcing corner piece stamped from sheet metal and of substantially the form shown in Fig. 4. This reinforcing corner piece includes a side wall 24, adapted to engage with the outer surface of the end plate at the lower corner of the latter, a bottom wall 25 adapted to engage beneath the base flange 17 adjacent the end of the latter, and an end wall 26 adapted to engage with the end of the pintle sleeve for preventing outward longitudinal movement of the latter. The end of the end wall 26 may be curved, so that it will not present any sharp corner, and it may have an inwardly-directed flange 27 to protect the sharp edge of the metal. The side wall 24 may be soldered or otherwise rigidly secured directly to the outer surface of the body of the end member, but the bottom wall 25 is preferably spaced from the base flange 17 and a sheet of cushioning material is introduced therebetween. The bottom wall 25 preferably is provided with an opening 28, and the base flange 17 has a portion 29 stamped downwardly to project or partially project through the opening 28. The piece of cushioning material 30, preferably felt, which is placed between the flange 17 and the bottom wall 25, is forced down through the opening 28 by the projection 29, so that the lower surface of the felt is held below the surface of the bottom wall 25. Thus, with the book rack in an open position, as shown in Fig. 1, the entire weight will rest upon the portions of the felt extending through the openings 28 in the four corner pieces. For aiding in the holding of the corner pieces in position, each may have lugs 31, which extend up through the felt and through the openings 32 in the base flange, and the upper ends of the lugs may be soldered in place or bent over, as desired.

It will be noted that all of the parts of my improved book rack, with the exception of the pintles, are formed of sheet metal, cut and bent to the desired form. The base members being of channel shape are capable of supporting the weight of very heavy books, and the end plates being formed integral with the base flanges 17, resist any outward pressure.

Various changes may be made in the construction of the several parts within the scope of the appended claims, without departing from the spirit of my invention, and all of the features of my invention may be incorporated in a single construction, or constructions may be designed which will embody only a portion of the features without embodying all.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A book rack having a sheet metal end wall terminating at its lower edge in a base flange, a pintle pin supported adjacent the angle of intersection between said end wall and said base flange, and a base member pivoted to said pintle pin.

2. A book rack having an end wall provided with a base flange, a pintle pin supported at one end adjacent the angle of intersection of the wall and said flange, a base member having a pintle sleeve encircling said pintle pin, and means on said end wall for preventing longitudinal movement of the pintle sleeve.

3. A book rack, comprising an end wall, a pintle pin secured thereto adjacent the lower edge, and a base member formed of sheet metal and terminating in a pintle sleeve encircling said pintle pin.

4. A book rack having an end wall, a pin-

tle pin secured thereto adjacent the lower edge, and a base member formed of a substantially channel-shaped sheet metal strip having at one end thereof a transverse pintle sleeve encircling said pintle pin.

5. A book rack, including an end wall having a tube secured thereto adjacent the lower end, a rod extending through said tube and having its ends constituting pintle pins, and a base formed of two separate members, each having a pintle sleeve in engagement with its corresponding end of said rod.

6. A book rack, including an end wall having a tube secured thereto adjacent the lower end, a rod extending through said tube and having its ends constituting pintle pins, a base formed of two separate members, each having a pintle sleeve in engagement with its corresponding end of said rod, and reinforcing corner pieces for retaining said sleeves against longitudinal movement on said rod.

7. A book rack, including two end walls and a base, said base being formed of two members, each including two telescoping sheet metal channel-shaped sections, the two sections of each base member being pivoted to the opposite end walls.

8. A book rack, comprising an end wall having a base flange, a reinforcing corner piece secured to said end wall and having a portion extending beneath said base flange, and a cushioning material secured in place between said end wall and said corner piece and exposed below the latter for supporting the book rack.

9. A book rack, comprising an end wall having a base flange with a downwardly-extending projection thereon, a corner piece having a portion extending beneath said flange and having an aperture receiving said projection, and a cushioning material above said corner piece and below said projection.

10. A book rack comprising two end walls, each having a base flange extending substantially at right angles thereto, the two base flanges extending toward each other, a base having opposite ends thereof hinged to said end walls above said base flanges, and means carried by said base flanges for engaging with a surface to support the book rack.

11. A book rack having two sheet metal end walls and a base formed of a plurality of channel members hinged to one end wall, and a plurality of channel members hinged to the other end wall and telescoping with the first-mentioned channel members.

12. A book rack having two sheet metal end walls and a base formed of a plurality of channel members hinged to one end wall, and a plurality of channel members hinged to the other end wall and telescoping with the first-mentioned channel members, each of said channel members being formed of sheet metal and having a hinge sleeve rigid therewith at one end.

13. A book rack having two sheet metal end walls, each provided with a base flange, the two base flanges extending toward each other, and a base formed of a plurality of members, each having two telescoping sections, one end of each section being hinged to its corresponding end wall above the base flange of the latter, and said base flanges having depending means for supporting the book rack.

14. A book rack having two sheet metal end walls, each provided with a base flange, the two base flanges extending toward each other, and a base formed of a plurality of members, each having two telescoping sections, one end of each section being hinged to its corresponding end wall above the base flange of the latter.

15. A book rack having a sheet metal end wall terminating at its lower end in a base flange, a pintle pin carried by said end wall, and a base member substantially channel-shaped in cross section and having a hinge sleeve extending transversely thereof to close the end of the channel and adapted to receive said pintle pin.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERNEST OLDENBUSCH.

Witnesses:
CLAIR W. FAIRBANK,
JOHN P. DAVIS.