

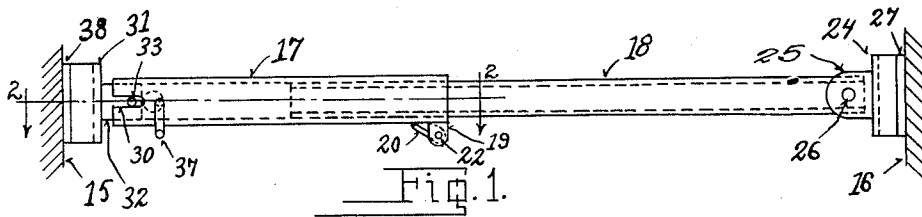
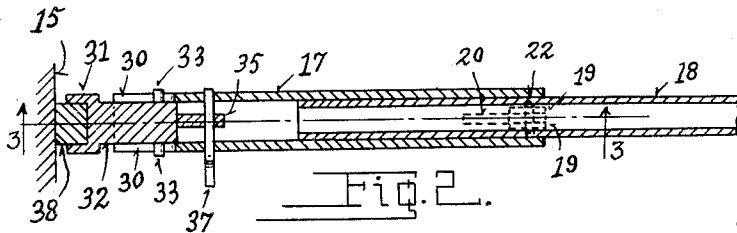
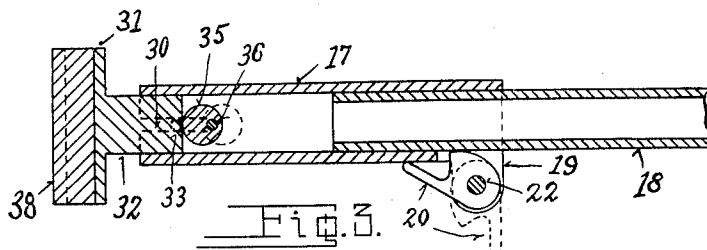
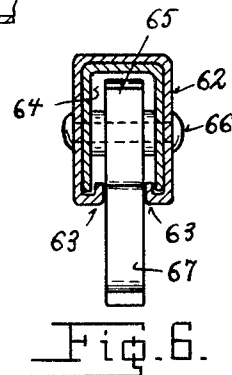
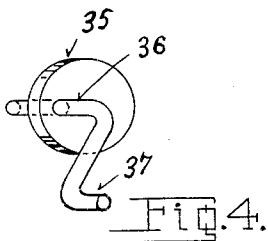
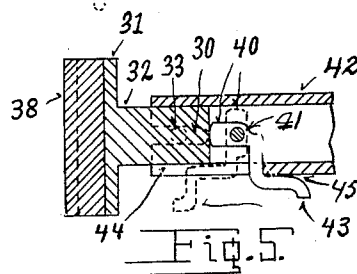
April 1, 1930.

K. H. WHITNEY

1,752,472

SUPPORTING BAR

Filed March 8, 1928



Inventor

Karl H. Whitney,
C. W. Miles.

C. W. Miles.

Attorney,

UNITED STATES PATENT OFFICE

KARL H. WHITNEY, OF KIRKSVILLE, MISSOURI, ASSIGNOR TO WHITMANIS MANUFACTURING COMPANY, OF KIRKSVILLE, MISSOURI, A CORPORATION OF MISSOURI.

SUPPORTING BAR

Application filed March 8, 1928. Serial No. 260,153.

My invention relates to improvements in supporting bar adapted to support clothing in closets and to support window hangings relative to window or door frames, and for similar purposes. One of its objects is to provide a supporting bar adjustable as to length comprising a plurality of sections telescopically relatively adjustable, and means operable to thrust the end sections axially of the supporting bar firmly into engagement with supporting abutments to retain the bar in position. Another object is to provide in combination with the adjustable sections of a supporting bar improved means operable to relatively thrust two of said bar sections so as to elongate the bar axially thereof. Another object is to provide in combination with telescopically axially adjustable bar sections a locking means to lock the bar sections to an adjusted position slightly less than the distance between the abutments to be employed to support the bar, and means operable to later thrust the end sections of the bar firmly into engagement with the supporting abutments. My invention also comprises certain details of form and arrangement and combination of components, all of which will be fully set forth in the description of the accompanying drawings, in which:

Fig. 1 is a side elevation of a supporting bar embodying my improvements.

Fig. 2 is a central horizontal section taken on line 2—2 of Fig. 1.

Fig. 3 is a vertical section taken on line 3—3 of Fig. 2.

Fig. 4 is a perspective view of the thrusting member shown in Figs. 1, 2, and 3 detached.

Fig. 5 is a view similar to Fig. 3 illustrating a modification thereof.

Fig. 6 is a sectional detail illustrating a modification.

The accompanying drawings illustrate modifications of my invention. As illustrated in Figs. 1, 2, 3, and 4, the supporting abutments 15 and 16 may be the walls of a room, closet, or bath room, or may be the sides of a window frame or door frame, or any similar rigid members between which it is desired to detachably mount and support one of my supporting bars for the purpose of supporting clothing, draperies, or any other articles. The main sections 17 and 18 of the bar are preferably tubular and of metal, and one sufficiently larger than the other so that one, the bar 18 for instance, may telescope for a portion of its length within the other section 17. Where the bars 17 and 18 telescope, a pair of ears or projections 19 are formed on the section 17, and a locking cam or latch member 20 is pivotally attached to the ears 19 by means of a journal pin 22. When in the full line position Figs. 1 and 3 the cam member 20 serves to lock the section 18 rigidly to the section 17, against movement axially thereof. In the dotted line position of the cam member 20, shown in Fig. 3, the section 18 is unlocked from section 17, and free to be adjusted axially thereof.

A metal shoe member 24 is provided with two ears 25 pivotally attached to the end of section 18 by means of a pivot pin 26. The member 24 is channel shaped and receives a block of soft rubber, cork, or similar resilient material 27, which bears against and is held in frictional engagement with one of the abutments 15 or 16.

The end of the section 17, opposite to where the ears 19 are attached, is slotted inwardly from the end upon opposite sides at 30. A channel shaped shoe member 31 has a shank 32 which is telescopically adjustable within the end of the section 17, and is provided with studs 33 projecting therefrom into the slots 30 to guide said shank 32 and prevent it from turning relative to section 17. An eccentric or cam 35 is mounted upon an axle 36 journaled in opposite sides of the section 17, and provided outside of the section 17 with a hand crank 37, by means of which the axle 36 and member 35 are rocked from one position of adjustment to another. The face of the cam 35 is in engagement with the end of the shank 32, and serves to force the shank 32 and shoe member 31 outwardly relative to section 17 and toward one of the supporting abutments. A block of soft rubber, cork or similar yielding material 38 is held in place in the channel of member 31 and is adapted to be thrust into frictional engagement with one of the supporting abutments to hold the

supporting bar firmly in its adjusted position relative to the supporting abutments. If desired the slots 30 may be extended inwardly to the point where the axle 36 is journaled, so as to enable both the shank 32 and the axle 36 with the cam 35 thereon to be introduced from the end of section 17, or removed therefrom.

If desired the shank 32 may be made longer and the members 19, 20 and 22 applied to adjustably lock the shank 32 relative to the bar section 17, while the cam member 35, and its axle may be shifted into position to engage and thrust against the inner end of bar section 18 to force the shoes into engagement with the supporting abutments 15 and 16.

In the modification Fig. 5 the bar is the same as heretofore described except that in place of the cam 35, axle 36 and hand crank 37, a cam lever 40 is mounted upon an axle 41 journaled at opposite ends in the walls of section 42 corresponding to the section 17 of Figs. 1, 2, and 3. The handle 43 of the lever 40 projects through a slot 44 in the lower side of the section 42. In the full line position Fig. 5 the cam lever 40 has thrust the shoe 31 toward a supporting abutment, and is locked in this position relative to section 42 by reason of being slightly past a dead center position, while the free end of the handle 43 engages the exterior of section 42 at 45 to prevent further movement past dead center. When the cam 40 is in its dotted line position Fig. 5, the shoe 31 is in its retracted position.

In the modification Fig. 6, the bar section 62 corresponds to the bar section 17 of Fig. 1, and is constructed by bending a piece of sheet metal into a bar which is tubular or channel shaped in cross section, preferably with upturned edges 63. The bar section 64 is also bent from sheet metal to tubular or channel shaped cross section, and of dimensions to telescope into the end of the bar section 62. An actuating lever 65 having a handle 67 corresponding to the actuating lever 40 and 43 of Fig. 5 is pivotally mounted upon a transverse pin 66, and preferably engages the end of the shank section 32 to force the shoes into engagement with the supporting abutments 15 and 16. If desired the shank 32 may be made longer and clamped to bar section 62 by a clamp 20, and the lever 65 and 67 made to engage the inner end of section 64 to thrust the shoes against the abutments. The handle 67 projects out through the open channel between the members 63.

The sections 17 and 18 are telescopically overlapped for a sufficient distance to provide for supporting near the center of the supporting bar any amount of weight liable to be suspended therefrom, and also to provide for adjusting the total length of the supporting bar within a considerable range of adjustment. The coarse adjustment is made between the bar sections 17 and 18, and the

final thrust of the shoes against the abutments is effected by means of the cam 35 or cam 40 acting against the end of the shank 32.

The tubular sections 17 and 18 may be of circular cross-section, or of rectangular or other cross-sectional pattern as may be desired.

The apparatus herein shown and described is capable of considerable modification within the scope of the claims without departing from the spirit of my invention.

What I claim is:

1. In combination with supporting abutments, a supporting bar comprising a first bar section, a second bar section adjustable telescopically relative to said first bar section, means to lock said bar sections rigidly in their relative adjusted positions, a shoe member having a resilient abutment engaging face attached to the free end of said first bar section, a shoe member having a resilient abutment engaging face movable endwise relative to the free end of said second bar section, and lever mechanism located between and supported by opposite walls of said second bar section and operable to increase and decrease the distance between said shoe members to engage and disengage said shoe members from said abutments.

2. In combination with supporting abutments, a supporting bar comprising a first tubular bar section, a second tubular bar section slidably telescopically adjustable relative to said first bar section, means to lock said bar sections rigidly in their relative adjusted positions, a shoe member having a resilient abutment engaging face attached to the free end of said first bar section, a shoe member having a resilient abutment engaging face movable endwise relative to said second bar section, and lever mechanism interposed between opposite walls of said second bar section and between said second bar section and the shoe member attached thereto and operable to increase and decrease the distance between said shoe members to engage and disengage said shoe members from said supporting abutments.

3. A supporting bar comprising a first bar section having a shoe member at one end thereof, a second bar section having a shoe member at one end thereof, a telescopic joint intermediate of said shoe members, an actuating lever located intermediate of the side walls of one of said telescopic joint members and pivotally supported upon a pivot pin mounted transversely of said telescopic joint and supported at opposite ends in the side walls of one member of said telescopic joint, said actuating lever serving to engage the opposite telescopic joint member and forcibly adjust said telescopic joint members endwise thereof to cause said shoes to be engaged with and disengaged from supporting abutments.

4. A suporting bar comprising a plurality
of metal bar sections each having a top wall
and two spaced side walls and adapted to be
relatively adjusted telescopically, a shoe mem-
ber attached to the free end of each bar sec-
tion, a lever supporting axle supported in
the side walls of one of said telescopic joint
members and spanning the intermediate space
between said side walls, a lever mounted upon
said axle intermediate of said side walls and
having engagement with the opposite tele-
scopic joint member and operable to forcibly
adjust said telescopic joint members end-
wise of said bar section.
In testimony whereof I have affixed my
signature.

KARL H. WHITNEY.