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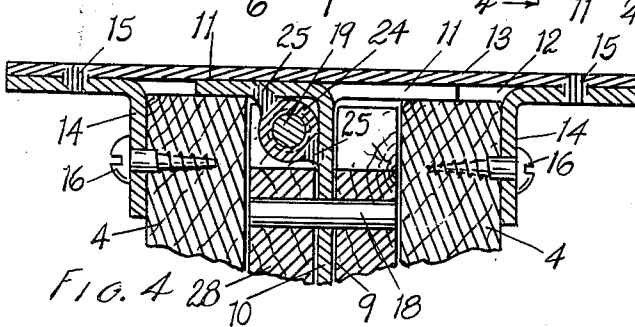
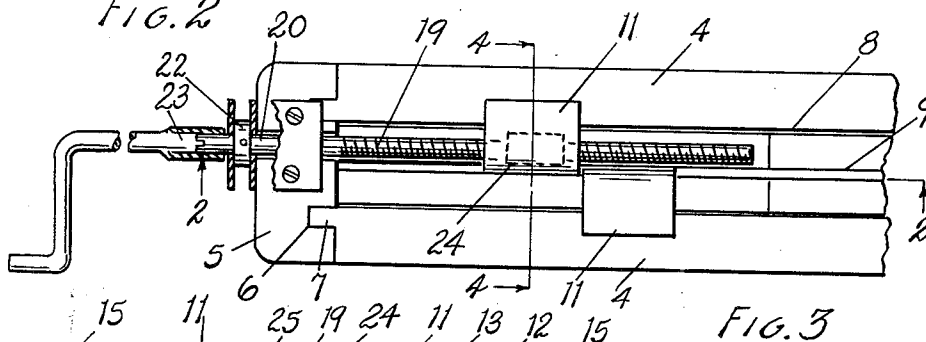
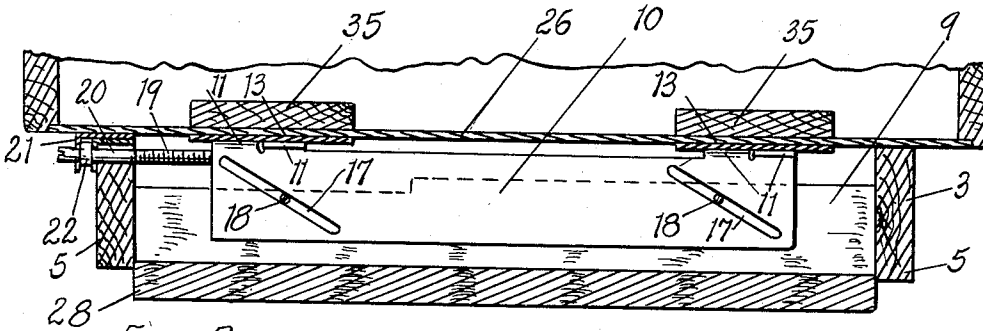
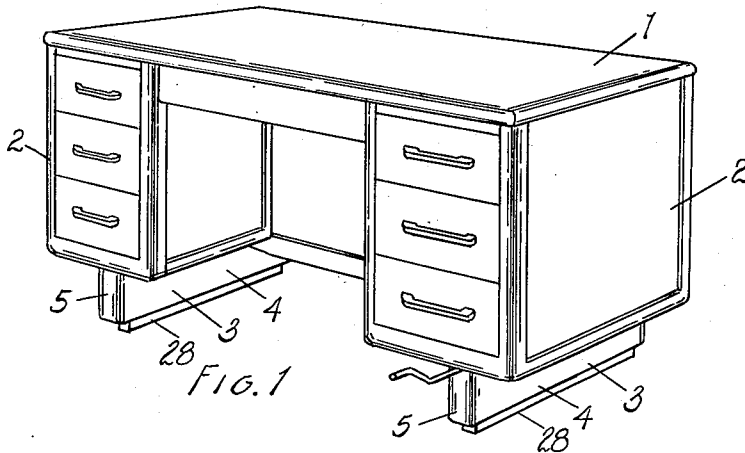
W. C. BROWN

2,544,822

ADJUSTABLE BASE FOR DESKS, FURNITURE, AND THE LIKE

Filed May 4, 1946

2 Sheets-Sheet 1



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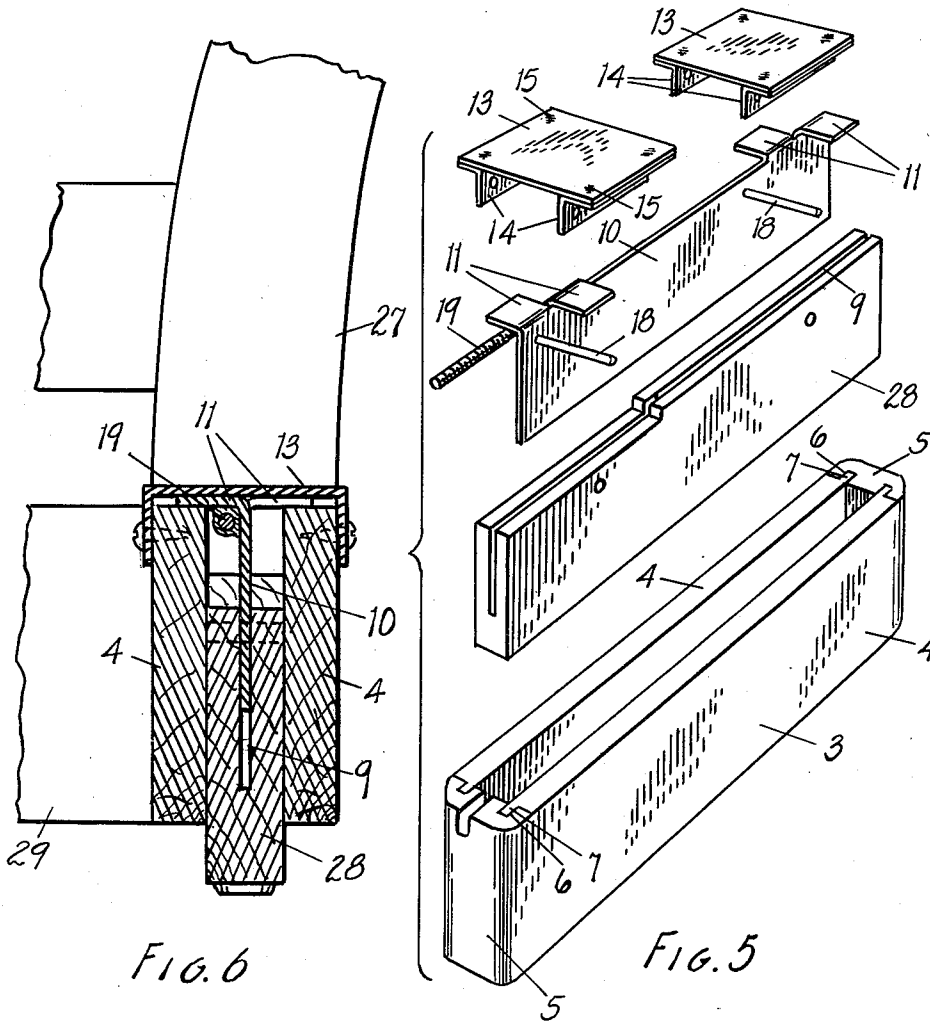
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ADJUSTABLE BASE FOR DESKS, FURNITURE, AND THE LIKE

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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ADJUSTABLE BASE FOR DESKS,
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10 Claims. (Cl. 312—253)

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This invention relates to improvements in adjustable base for desks, furniture and the like.

The main objects of this invention are:

First, to provide an adjustable support or base for desks, davenports and other furniture which permits rapid and easy adjustment of the desk or other furniture to meet the convenience or needs of the particular user.

Second, to provide a support of this character which is capable of a wide range of uses or adaptations.

Third, to provide a support having these advantages which is attractive and finished in appearance.

Fourth, to provide a structure of the character described in which the parts are simple and economical to assemble and at the same time strong and rigid, being capable of supporting relatively heavy objects.

Further objects relating to details and economies of the invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure embodying the features of the invention is clearly illustrated in the accompanying drawing, in which:

Fig. 1 is a front perspective view of a desk equipped with adjustable base members embodying my invention.

Fig. 2 is an enlarged fragmentary view mainly in vertical section on a line corresponding to line 2—2 of Fig. 3.

Fig. 3 is a fragmentary plan view of the support partially in horizontal section.

Fig. 4 is an enlarged transverse section on line 4—4 of Fig. 3.

Fig. 5 is an exploded view showing the parts in disassembled relation.

Fig. 6 is an enlarged fragmentary view partially in section corresponding to the section of Fig. 4 showing an adaptation of my invention to a chair or like article of furniture.

In Figs. 1-5 I illustrate my invention as it has been adapted for desks, the desk illustrated being designated generally by the numeral 1 and having two pedestals 2, 2; that is, it is a desk of the type having two stacks of drawers. It is common practice for desk users to employ adjustable chairs, the chair being adjusted to the desk, and in so doing it is impossible to best accommodate the particular user because of wide variation in height and physical characteristics so that at best the adjustment of the chair is largely a matter of compromise or makeshift. Desks equipped with this invention may be adjusted to the proper

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height for the user and the chair adjusted also, thus greatly widening the range of adaptation.

The embodiment of the invention illustrated comprises an elongated chambered base member 3 made up of side members 4, 4 and end members 5, 5 fixedly secured together. The end members are provided with mortises 6 receiving tongues 7 on the side members, these parts being glued in their assembled relation. The chamber 8 extends from end to end and is adapted to slidably receive the bar-like footpiece 28 which is supported for vertical sliding adjustment in the base member by the walls.

This footpiece has a longitudinal slot 9 opening upwardly and adapted to receive the cam plate 10 which is provided with laterally turned arms 11 on the upper edge thereof which project over the top edges of the side walls 4 and the recesses 12 defined by the upper edges of the side walls and the thrust plates 13. These thrust plates are spaced longitudinally of the base member and are supported in spaced relation to the upper edges of the side members by means of the attaching brackets 14 welded to the under sides of the thrust plates as indicated at 15 and secured to the sides of the base member by screws 16.

The cam plate is provided with diagonal cam slots 17 which are engaged by the pins 18 arranged through the foot members extending across the slot thereof, these pins constituting cam followers. The adjusting screw 19 has a journal portion 20 engaging the bearing members 21 which are spaced to receive the thrust collar 22 on the screw. The screw is adapted to receive the adjusting crank or tool 23. The screw engages a nut 24 which is welded at 25 to the cam plate so that by adjusting the cam plate the base member is raised and lowered relative to its foot piece and consequently the desk or other article of furniture supported by the base member is raised and lowered.

In the embodiment illustrated the thrust plates are spaced to correspond to the pedestal cross pieces 35, this being a common arrangement of desk pedestals, the pedestal bottom panel 26 being disposed below these cross pieces. This results in substantially direct thrust of the thrust plates on the object supported.

In the embodiment shown in Fig. 6 the numeral 27 represents uprights or legs of a piece of furniture and 29 the rear bottom cross bar thereof. The base member is arranged below the legs to receive the load therefrom. The base member is of the same structure as that described.

I have not attempted to illustrate or describe other adaptations of the invention which I contemplate as it is believed this disclosure will enable those skilled in the art to embody or adapt the invention as may be desired.

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

1. An adjustable support for desks, furniture and the like comprising an elongated base member having a longitudinal chamber therein open at the bottom, a bar-like foot piece disposed in said chamber and laterally and longitudinally supported by the walls thereof for vertical sliding adjustment, said foot piece having an upwardly facing longitudinal slot therein, longitudinally spaced thrust plates mounted on the top of said base in spaced relation to the upper edges of the side walls of the chamber providing lateral recesses, a cam plate projecting into said slot in said foot piece and having diagonal cam slots therein, said cam plate having laterally projecting arms at its upper edge engaged in said recesses in thrusting relation to said thrust plates, said foot piece having follower pins engaged in said cam plate slots, and an adjusting screw disposed longitudinally of and rotatably mounted on said base, said cam plate having a nut coacting with said screw whereby the cam plate may be longitudinally adjusted to raise and lower the base relative to said foot piece.

2. An adjustable support for desks, furniture and the like comprising an elongated base member having a longitudinal chamber therein open at the bottom, a bar-like foot piece disposed in said chamber for vertical adjustment therein, said foot piece having an upwardly facing longitudinal slot therein, longitudinally spaced thrust plates mounted on the top of said base, a cam plate slidably mounted in said base member in thrust engagement with said thrust plates and projecting into said slot in said foot piece and having diagonal cam slots therein, said foot piece having follower pins engaged in said cam plate slots, and an adjusting screw disposed longitudinally of and rotatably mounted on said base and having threaded engagement with said cam plate whereby the cam plate may be longitudinally adjusted to raise and lower the base relative to said foot piece.

3. An adjustable support for desks, furniture and the like comprising an elongated chambered base member, an elongated foot piece disposed in said base member chamber to be projected therefrom or collapsed therein, said foot piece having an upwardly facing longitudinal slot therein, longitudinally spaced thrust members on said base member, a cam plate mounted on said base member to project into said slot in said foot piece and having thrust engagement with said thrust members, said cam plate having cam slots therein, said foot piece having followers engaging said cam slots, and an adjusting member having threaded engagement with said cam plate.

4. An adjustable support for desks, furniture and the like comprising an elongated chambered base member, an elongated foot piece disposed in said base member chamber to be projected therefrom or collapsed therein, a cam member slidably mounted on said base member having lifting engagement with said base member, a cam slot in said cam member, said foot piece having a follower engaging said cam slot, and an adjusting member having threaded engagement with said

cam member, said slot being vertically inclined and providing upper and lower walls engageable with said follower, the lower wall of the slot constituting means engageable with the follower to prevent displacement of the foot piece from the chambered base member when the chambered base member and foot piece are lifted above the floor.

5. An adjustable support for desks, furniture and the like comprising a chambered base member, a foot piece disposed in said base member for vertical adjustment therein, a cam piece slidably mounted on said base member in lifting engagement therewith, one of said pieces having cam slots therein, the other of said pieces having followers coacting with said slots whereby the base member may be raised and lowered relative to the foot piece by the adjustment of the cam piece, and an adjusting screw rotatably mounted on said base member and supported against axial movement thereon, said cam piece being provided with a nut coacting with said screw, said cam slots being vertically inclined and providing upper and lower walls engageable with said followers, the lower walls of said slots constituting means engageable with said followers to prevent displacement of the foot piece from the chambered base member when the chambered base member and foot piece are lifted from the floor.

6. An adjustable support for desks, furniture and the like comprising a chambered base member, a foot piece disposed in said base member for vertical adjustment therein, a cam piece slidably mounted on said base member in lifting engagement therewith, one of said pieces having cam slots therein, the other of said pieces having followers coacting with said slots whereby the base member may be raised and lowered relative to the foot piece by the adjustment of the cam piece, and a screw adjusting means for said cam piece, said cam slots being vertically inclined and providing upper and lower walls engageable with said followers, the lower walls of said slots constituting means engageable with said followers to prevent displacement of the foot piece from the chambered base member when the chambered base member and foot piece are lifted from the floor.

7. An adjustable support for desks, furniture and the like comprising a chambered base member, a foot piece disposed in said base member for vertical adjustment therein, a cam member slidably secured to said base member for sliding adjustment in a horizontal line, said foot piece having a fixed follower secured thereto and coacting with said cam member whereby the base member may be raised and lowered relative to the foot piece by the adjustment of the cam member, said foot piece having a vertically disposed slot open at the top of the foot piece and extending longitudinally of the foot piece, said cam member having a portion thereof of a plate-like shape vertically disposed and projecting downwardly into said slot and relatively thin as compared to its vertical dimensions, and an adjusting means for said cam member.

8. An adjustable support for desks, furniture and the like comprising a chambered base member, a foot piece disposed in said base member for vertical adjustment therein, a cam member mounted on said base member in lifting engagement therewith and in supported engagement with said foot piece whereby the base member may be raised and lowered relative to the foot piece by the adjustment of the cam member,

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said foot piece having a vertically disposed slot open at the top of the foot piece and extending longitudinally of the foot piece, said cam member having a portion thereof of a plate-like shape vertically disposed and projecting downwardly into said slot and relatively thin as compared to its vertical dimensions, and an adjusting screw rotatably mounted on said base member and supported against axial movement thereon, said cam member being provided with a nut coacting with said screw.

9. An adjustable support for desks, furniture and the like comprising a chambered base member, a foot piece disposed in said base member for vertical adjustment therein, a sliding piece having a cammed portion mounted on said base member in horizontal sliding and lifting engagement therewith and with the cammed portion thereof in supported engagement with said foot piece whereby the base member may be raised and lowered relative to the foot piece by the adjustment of the sliding piece, said foot piece having a vertically disposed slot open at the top of the foot piece and extending longitudinally of the foot piece, said sliding piece having a portion thereof of a plate-like shape vertically disposed and projecting downwardly into said slot and relatively thin as compared to its vertical dimensions, and a screw adjusting means for said sliding piece.

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sions, and a screw adjusting means for said sliding piece.

10. An adjustable support for desks, furniture and the like comprising a chambered base member, a foot piece disposed in said base member for vertical adjustment therein, a sliding piece mounted on said base member in lifting engagement therewith and in supported engagement with said foot piece, said piece having cooperative cam and follower portions whereby the base member may be raised and lowered relative to the foot piece by the adjustment of the sliding piece, and an adjusting means for said sliding piece, said cam and follower portions including vertically spaced parallel guiding walls inclined to the vertical and a follower guidingly mounted between said guiding walls.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
401,368	Piper	Apr. 16, 1889
1,006,974	Moore et al.	Oct. 24, 1911
1,794,798	Sarr	Mar. 3, 1931