July 7. 1925.

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E. C. AMSDEN

PEDESTAL FOR SCHOOL CHAIRS AND DESKS

Filed April 14, 1924

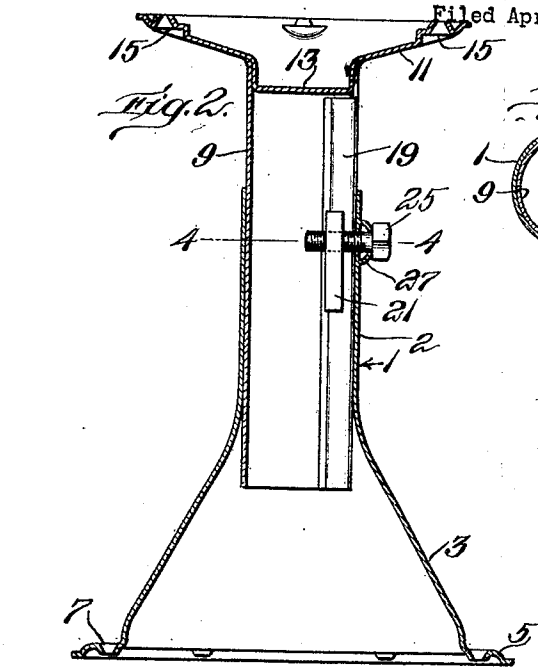


Fig. 2.

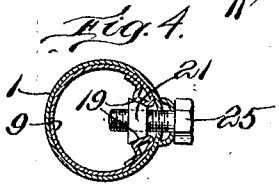


Fig. 4.

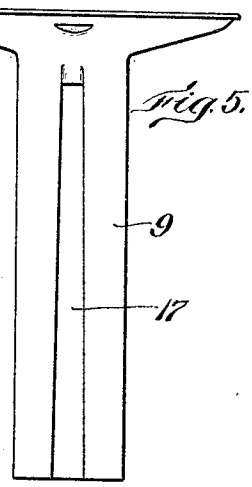


Fig. 5.

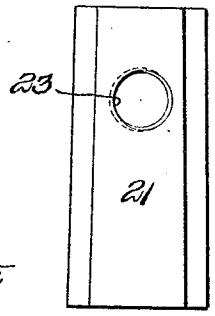


Fig. 6.

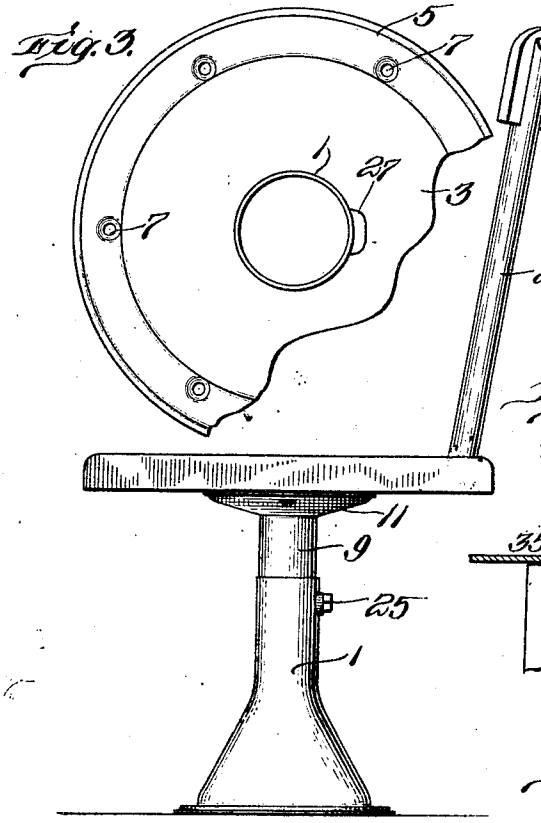


Fig. 3.



Fig. 7.

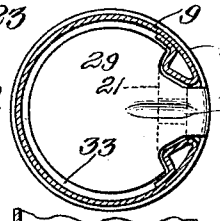


Fig. 8.

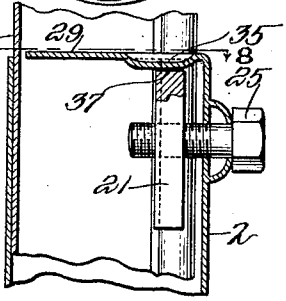
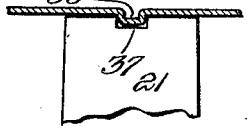


Fig. 18.

Fig. 9.

Fig. 10.



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UNITED STATES PATENT OFFICE.

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PEDESTAL FOR SCHOOL CHAIRS AND DESKS.

Application filed April 14, 1924. Serial No. 706,372.

To all whom it may concern:

Be it known that I, EUGENE C. AMSDEN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Pedestals for School Chairs and Desks, of which the following is a specification.

The invention to be hereinafter described relates to pedestals for supporting school chairs, desks and the like.

It is desirable to vary the elevation of the chair or desk in order that it may be adapted to the size of the person using the same. The aim and purpose of the present invention, therefore, is to provide a simple and efficient pedestal for this purpose.

In carrying the invention into practical effect, a pedestal is provided comprising a pair of members, one adapted to rest upon the floor, and the other having means for supporting the chair or desk and adapted for adjustment longitudinally with respect to the floor member. One of the members is expansible transversely thereof, and simple and efficient means is provided for adjusting the expansible member into secure gripping relation with the other member.

If the aforesaid securing means should become released, it is desirable that the supporting member shall not drop a substantial distance. Therefore, means is also provided for automatically checking the drop of the supporting member in respect to the floor member on release of the securing means.

The character of the invention may be best understood by reference to the following description of one good form thereof shown in the accompanying drawing, wherein:

Fig. 1 is a side elevation of a pedestal embodying the invention, and in the present instance supporting a chair;

Fig. 2 on an enlarged scale is a vertical section through the pedestal;

Fig. 3 is a plan of the post, a portion thereof being broken away;

Fig. 4 is a horizontal section taken on line 4—4 of Fig. 2;

Fig. 5 is an elevation of the adjustable support member;

Fig. 6 is a front face view of the wedge member;

Fig. 7 is an end view of the member shown in Fig. 6;

Fig. 8 is a horizontal section taken on line 8—8 of Fig. 9;

Fig. 9 is a vertical section of a modified form of construction in which the post is provided with a cap; and

Fig. 10 is a sectional detail showing the interlocking relation of the cap with the wedge member.

Referring to the drawing, the pedestal shown therein as one good form of the invention, comprises a hollow post 1 having a cylindrical portion 2 and downwardly flared portion 3 with an outstanding flange 5 projecting therefrom provided with holes 7 at intervals adapted to receive screws for securing the post to the floor. This post may be formed of sheet steel or other suitable material. The cylindrical portion 2 and the flared portion 3 may be formed from separate pieces which may be welded together.

Telescoping with the post, and in the present instance, projecting therein, is a sleeve 9 having at the upper end thereof a support, in the present instance, in the form of a dished plate 11 having an extruded portion 13 fitted into the sleeve, and welded or otherwise secured thereto. Adjacent the periphery of the dished plate are countersunk portions 15 adapted to receive screws for securing the chair or desk to the dished plate. The sleeve and dished plate may be formed of sheet steel or other suitable material.

The sleeve has a slot 17 extending longitudinally thereof, and the marginal portions of the sleeve adjacent the slot are reversely bent and welded or otherwise secured to the body of the sleeve to provide a pair of strong jaws 19, as will be noted in Fig. 4. The edges of the jaws diverge with relation to each other toward the center of the sleeve.

Suitable means may be provided for expanding the sleeve into secure gripping engagement with the inner surface of the post. This means, in the present instance of the invention, comprises a wedge member or element 21 having a tapped hole 23 for receiving a screw bolt 25 entered through a hole in a nub 27 on the post.

The construction is such that after the sleeve has been adjusted to the elevation desired, the screw bolt 25 may be tightened, thereby causing the head of the nut to press against the nub 27 and draw the wedge

member in between the jaws 19 so as to expand the sleeve circumferentially into secure frictional gripping relation with the inner surface of the post.

If the screw bolt is properly adjusted, the sleeve will be securely held in the post. It is desirable that means may be provided automatically to check downward movement of the sleeve in case the screw bolt should not be properly tightened. To accomplish this, in the present instance of the invention, the sleeve slot 17 is tapered upwardly, and the wedge member 21 is tapered upwardly longitudinally thereof. The consequence is that if the sleeve should not be expanded into tight gripping engagement with the post, downward movement of the sleeve will be checked by longitudinal wedging of the tapered member 21 in the tapered slot 17. Slight downward movement of the sleeve from any of its elevations will cause expansion thereof into secure gripping relation with the post. Thus, a person seated in the chair will be relieved from shock which otherwise would be experienced on dropping of the dished plate down into engagement with the upper end of the post.

By forming the member 21 with a transverse taper and a longitudinal taper, and forming the sleeve slot 17 with a longitudinal taper, simple and efficient means is provided for expanding the sleeve into secure gripping relation with the post either by manual adjustment of the screw bolt, or automatically on release of the screw bolt.

The pedestal is shown herein as supporting a chair 29, but it may be employed to support a school desk if desired.

The means for securing the sleeve to the post of the pedestal is contained within the sleeve with the exception of the inconspicuous head of the screw bolt. Thus, a pedestal is provided which has a neat appearance.

Since the post has a substantial diameter, and the sleeve and post have portions of substantial length in telescopic engagement, they present ample surfaces for gripping relation which will be effective in securely holding the sleeve in its positions of adjustment when the sleeve is circumferentially expanded by means of the wedge member in the sleeve slot.

Under some circumstances it may be desirable to provide means to prevent paper or other materials from being slipped through the sleeve slot into the post. Referring to the modification shown in Figs. 8, 9 and 10, in the present instance, this means is in the form of a cap 29 connected to the post by a neck 31. This cap is somewhat smaller than the post, leaving an annular space 33 through which the sleeve may project. The neck extends through the sleeve slot. The neck may be strengthened by a rib 35 pressed therefrom and this rib may project into a notch 37 in the upper end of the wedge member 21 to prevent the latter from rocking out of line with the sleeve slot.

It will be understood that the invention is not limited to the specific embodiment shown, and that various deviations may be made therefrom without departing from the spirit and scope of the appended claims.

What is claimed is:—

1. A pedestal of the character described comprising, in combination, a pair of telescoping members, one having a base adapted to rest on the floor and the other being adjustable longitudinally thereof and having a top adapted to serve as a support, one of said members having a longitudinal slot therein, an element entered between and for engagement with edges of the slotted member at said slot, and adjustable means for causing said element to act on and press said edges away from each other in a circumferential direction and thereby enlarge the slotted member into tight frictional engagement with the other member.

2. A pedestal of the character described comprising, in combination, a member having a base adapted to rest on the floor, a sleeve member in telescopic relation with said base member, one of said members having a longitudinal slot therein that it may expand circumferentially, a wedge element entering said slot and having diverging faces for engagement with edges of said slotted member at said slot, and a bolt for adjusting said wedge element transversely to the axis of the sleeve member to cause said diverging faces to press said edges away from each other in a circumferential direction and thereby expand the slotted member uniformly throughout the circumference thereof into tight frictional engagement with the other member.

3. A pedestal of the character described comprising, in combination, a hollow post having a base adapted to rest on the floor, a sleeve in said post having a tapered longitudinal slot therein, said sleeve being vertically adjustable in said post, a wedge member entered into the sleeve slot, and a screw bolt on the post for adjusting the wedge member to expand the sleeve into gripping relation with the inner surface of the post, said slot and member being operable automatically to check downward movement of the sleeve in the post on loosening of the screw bolt.

4. A pedestal of the character described comprising, in combination, a hollow post having a base adapted to rest on the floor, a sleeve in said post having means at the top thereof adapted for supporting a chair, said sleeve having a longitudinal slot therein permitting expansion and contraction of the sleeve, the marginal portions of the sleeve at the edges of the slot having reverse bends

providing strong jaws, a wedge member entered between said jaws, and means carried by the post for forcing the wedge member between said jaws thereby to expand the sleeve into secure gripping engagement with the inner surface of the post.

5. A pedestal of the character described comprising, in combination, a hollow post having a base adapted to rest on the floor, a sleeve in the post having means at the top thereof for supporting a chair, said sleeve having a longitudinally tapered slot permitting expansion and contraction of the sleeve, a member entered into said slot and tapered transversely and longitudinally, and a screw bolt on the post for causing said member to expand the sleeve into tight gripping relation with the post, the longitudinal taper of the member and the taper of the slot cooperating automatically to check downward movement of the sleeve on release of the screw bolt.

6. A pedestal of the character described comprising, in combination, a hollow post adapted to rest upon the floor, a supporting sleeve in the post having a tapered longitudinal slot, and a member carried by the post and entered into the slot, said member and slot being operable automatically to expand the sleeve into secure gripping relation with the hollow post on slight downward movement of the sleeve in the post.

7. A pedestal of the character described comprising, in combination, a pair of members, one adapted to rest upon the floor and the other adapted to support a chair, one of said members being expansible and having a tapered longitudinal slot, and an element on the other member entered into the slot and adapted automatically to expand the slotted member into secure gripping relation with the other member on slight downward movement of the support member.

8. A pedestal of the character described comprising, in combination, a hollow post, an expansible sleeve in the post having a longitudinal slot therein, said post having a cap at the upper end thereof connected to the post by a neck projecting through the slot, a wedge member in the post entered into the sleeve slot, and a bolt on the post projecting through the slot into the wedge member for pressing the latter in the slot to expand the sleeve into secure gripping engagement with the inner surface of the post.

9. A pedestal of the character described comprising, in combination, a hollow post, an expansible sleeve in the post having a longitudinal slot therein, said post having a cap at the upper end thereof connected to the post by a neck projecting through the slot, a wedge member in the post entered into the sleeve slot, and a bolt on the post projecting through the slot into the wedge member for pressing the latter in the slot to expand the sleeve into secure gripping engagement with the inner surface of the post, said neck having a rib projecting downward therefrom, and said wedge member having a notch receiving the rib to prevent the wedge member from rocking out of line with the slot.

10. A pedestal of the character described comprising, in combination, a hollow post, an expansible sleeve in the post having a longitudinal slot therein, means co-operating with said slot to expand the sleeve circumferentially into secure gripping engagement with the inner surface of the post, and a cap in the sleeve having a neck projecting from the cap through the sleeve slot to the upper end of the post thereby to prevent materials from passing through the sleeve slot down into the post.

11. A pedestal of the character described comprising, in combination, a hollow post, an expansible sleeve in the post having a longitudinal slot therein, a wedge member in the post entered into the sleeve slot, a bolt on the post projecting through the slot into the wedge member for pressing the latter in the slot to expand the sleeve into secure gripping engagement with the inner surface of the post, and a cap in the sleeve and carried by the upper end of the post for preventing materials from passing through the sleeve slot down into the post, said cap and wedge member being formed to prevent rocking of the wedge member on the bolt.

12. A pedestal of the character described comprising, in combination, a pair of telescoping tubular members, one adapted to rest upon the floor and the other having a support, adjustable means cooperating with the telescoping members to hold the support member at different elevations in respect to the other member, and means by which the support member will, on release of the adjusting means, be arrested automatically after slight downward movement from any of its elevations.

13. A support for school chairs, desks or the like comprising two mutually telescoping tubular metal members, the outer member being provided with a hole adapted to receive the shank of a bolt, the inner member having a vertical slot and having the metal at the edges of said slot turned inward and backward to form a wedge shaped opening, a wedge, and a bolt in said hole for drawing said wedge into said opening to expand said inner member into gripping engagement with said outer member.

14. A support for school chairs, desks or the like comprising two mutually telescoping tubular metal members, the outer member being provided with a hole adapted to receive the shank of a bolt, the inner member having a vertical slot, the edges of said slot being divergent with relation to each

other towards the center of said member to form a wedge shaped opening, a wedge, and a bolt in said hole for drawing said wedge into said opening to expand said inner member.

15. A support for school chairs, desks or the like comprising two mutually telescoping tubular metal members, the outer member being provided with a hole adapted to receive the shank of a bolt, the inner member having a vertical upwardly narrowing tapered slot, the edges of said slot being divergent with relation to each other towards the center of said member to form a wedge shaped opening, a wedge, and a bolt in said hole for holding said wedge in said opening.

16. A support for school chairs, desks or the like comprising two mutually telescoping tubular members, the outer member being provided with a hole adapted to receive the shank of a bolt, the inner member having a vertical upwardly narrowing tapered slot, a wedge adapted to force the edges of said slot apart and a bolt in said hole to hold said wedge from vertical movement whereby the drawing of said wedge into said slot will expand said inner member to grip firmly said outer member.

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