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SCHOOL FURNITURE.

APPLICATION FILED OCT. 19, 1916.

1,292,470.

Patented Jan. 28, 1919.

FIG. 3

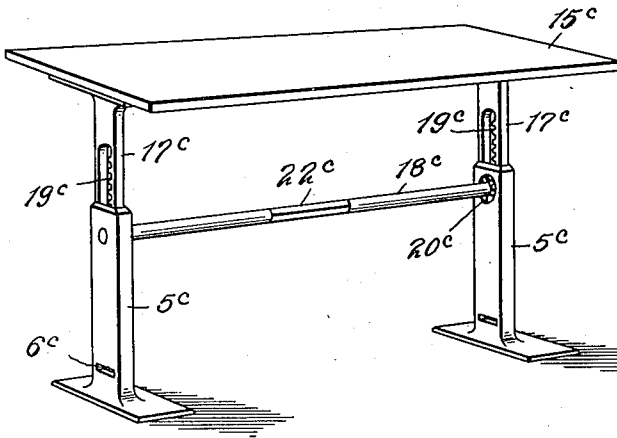


FIG. 1

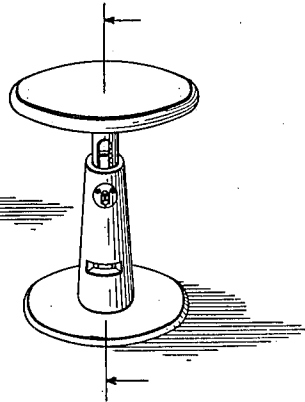


FIG. 2

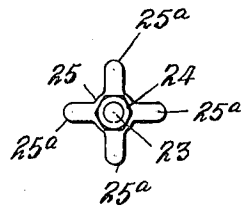
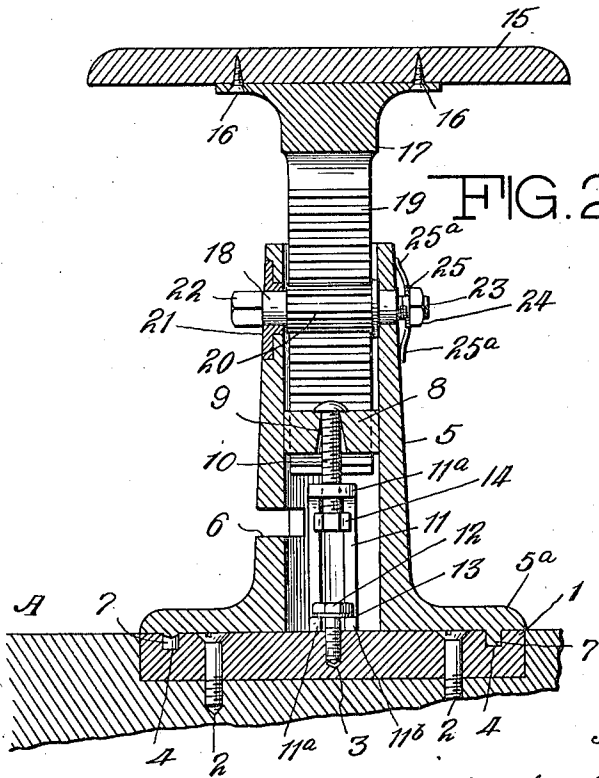


FIG. 4

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SCHOOL FURNITURE.

1,292,470.

Specification of Letters Patent.

Patented Jan. 28, 1919.

Application filed October 19, 1916. Serial No. 126,511.

To all whom it may concern:

Be it known that we, HENRY A. HUBSCHMITT, Jr., and RICHARD D. SPAIN, citizens of the United States, residing in Passaic, in the county of Passaic and State of New Jersey, and residing in Montclair, in the county of Essex and State of New Jersey, respectively, have invented certain new and useful Improvements in School Furniture, of which the following is a specification.

The present invention relates to certain new and useful improvements in the construction of supporting pedestals or standards for articles of school furniture and the like, the object of the invention being to provide a standard which embodies novel features of construction whereby it is normally held rigidly in a fixed position upon the floor, but can be easily and quickly detached from the floor, leaving a perfectly smooth floor surface which can be used for school exercises, dancing, or the like.

Further objects of the invention are to provide a supporting pedestal or standard of this character which is comparatively simple and inexpensive in its construction, which can be readily placed in position or removed therefrom, which provides for vertical adjustment of the supporting member, and which can not be easily broken by the rough handling to which such devices are ordinarily subjected when in use.

With these and other objects in view, the invention consists in certain novel combinations and arrangements of the parts as will more fully appear as the description proceeds, the novel features thereof being pointed out in the appended claims.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a perspective view of a school seat or stool constructed in accordance with the invention.

Fig. 2 is an enlarged vertical sectional view through the same, on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of a school desk or table embodying the invention,

Fig. 4 is a detail view of the clamping nut and spring washer which is employed for locking the parts in an adjusted position.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, which illustrate one embodiment of the invention, the numeral 1 designates a base plate which is embedded in the floor A so as to be flush therewith, said base plate being rigidly secured in position by suitable fastening members such as the screws 2. The center of the base plate 1 is formed with a threaded opening 3, while a series of depressions 4 is provided in the edge portions of the plate. A tubular standard 5 is formed with a flared foot 5^a which is adapted to rest upon the base plate 1, said standard having a transverse slot 6 in one side thereof, and the foot 5^a being provided with downwardly projecting positioning lugs 7 which are adapted to engage the depressions 4 of the base plate. A cross bar 8 extends across the interior of the tubular standard 5 at an intermediate point in the length of the latter, said cross bar being formed with a downwardly flared opening 9 through which a clamping screw 10 extends, the head of the screw bearing against the top of the cross bar 8, while the lower end thereof is received within a ring 11^a at the upper end of a link member 11. This link member 11 is preferably formed with spaced and parallel vertical arms which terminate at their lower ends in laterally extending claws 11^b which are engaged by a fastening screw 12 which is threaded in the central opening 3 of the base plate. As illustrated, a washer 13 is interposed between the head of the screw 12 and the claws 11^b. A nut 14 is threaded upon the clamping screw 10 in such a manner as to be readily engaged by a wrench or tool inserted through the transverse slot 6 in the side of the tubular standard. When this nut 14 is tightened and brought into a firm engagement with the ring 11^a at the upper end of the link member 11, the tubular stand-

ard is rigidly clamped in position upon the base plate 1. When this nut 14 is removed the tubular standard 5 can be bodily lifted from position, after which the screw 12 and link member 11 can be removed, leaving the floor with a perfectly smooth surface which is free from all projections and can be useful for assemblies, dancing, or the like.

The supported element, such as the seat 15, is secured by suitable fastening members 16 to the upper end of a stem 17 which is slidably received within the tubular standard 5. This standard 17 is bifurcated so as to straddle the cross bar 8 and a transverse shaft 18, one of the arms of the bifurcation being provided upon the inner face thereof with a series of transverse teeth 19. A pinion 20 is rigidly applied to the transverse shaft 18 in such a manner that the teeth thereof mesh with the rack teeth 19 on one side of the bifurcation, and clear the opposite side of the bifurcation. One end of the transverse shaft 18 is journaled within a bearing plate 21 embedded in the standard 5, and terminates in a polygonal head 22, while the opposite end thereof terminates in a threaded stem 23. A nut 24 is fitted upon the threaded stem 23 and a washer member 25 is arranged under the nut, said washer member being formed with a series of radially extending and inwardly deflected spring arms 25^a adapted to frictionally engage the side of the standard 5. When the nut 24 is loosened, the shaft 18 and pinion 20 can be readily rotated by applying a wrench to the polygonal end 22 of the shaft, and the stem 17 thereby moved up or down to set the seat 15 or other supported member at any desired elevation. The parts are then locked in position by tightening the nut 24.

Fig. 3 illustrates a slight modification which is especially adapted for the support of desks and tables where two spaced standards are preferably employed. These standards 5^c are shown as rectangular in formation, and the stems 17^c upon which the desk or table 15^c is supported also have a rectangular formation. A single transverse shaft 18^c connects the standards 5^c and is journaled therein, said shaft carrying the pinions 20^c which mesh with the racks 19^c of the respective bifurcated stems 17^c. The middle portion of the transverse shaft 18^c has a polygonal formation, as indicated at 22^c, so that by rotating the shaft the two stems 17^c can be simultaneously raised and lowered. The sides of the tubular standards are formed with the transverse slots 6^c through which wrenches can be inserted for loosening the nuts of the clamping bolts when it is desired to remove the standards from the base plates, exactly as in the previous instance. When the standards are clamped in position, rigid supports are provided for

the seats, tables, or other articles of furniture, although when it is desired the standards can be detached from the base plates, leaving a perfectly smooth floor surface which is free from projections and can be used for school exercises, assemblies, dancing or the like.

Having thus described the invention, what we claim as new and desire to secure by Letters Patent, is:—

1. The combination with a floor plate provided with an upwardly projecting headed stud, of a tubular standard adapted to be fitted removably upon the floor plate, the base of the tubular standard receiving the headed stud of the floor plate, a link loosely suspended within the tubular standard and provided at its lower end with a laterally swinging claw for detachably engaging the shank of the headed stud, and means for tightening the link to draw the standard firmly into position.

2. The combination with a floor plate provided with a headed stud projecting upwardly therefrom, a tubular standard adapted to be detachably secured to the floor plate, the base of the tubular standard receiving the headed stud, a cross bar in the tubular standard, a loosely pendent link within the tubular standard, the lower end of the link being provided with a lateral claw adapted to be swung laterally into and out of engagement with the headed stud, and a clamping bolt connecting the upper end of the link to the cross bar, said clamping bolt enabling the bolt to be tightened to draw the standard firmly into position.

3. The combination with a floor plate provided with an upwardly projecting headed stud, of a tubular standard having an opening in one side thereof and adapted to be secured to the floor plate, the base of the tubular standard receiving the headed stud, a cross bar arranged within the tubular standard above the side opening thereof, a clamping bolt extending downwardly within the tubular standard from the cross bar, a link member loosely pendent from the clamping bolt and provided at its lower end with a laterally projecting claw adapted to be swung laterally into and out of engagement with the shank of the headed stud, and a nut fitted upon the clamping bolt and adapted to be engaged by a tool inserted through the before mentioned side opening of the standard, said nut enabling the link to be tightened to draw the standard firmly against the floor plate.

4. The combination with a floor plate provided with an upwardly projecting stud, of a tubular standard adapted to be detachably secured to the floor plate and having an opening in one side thereof, the base of the tubular standard receiving the stud of the floor plate,

a cross bar extending across the tubular standard above the side opening thereof, an upright clamping bolt extending downwardly from the cross bar, a link member
5 loosely pendent from the clamping bolt, and constructed at its lower end to detachably engage the stud of the floor plate, and a nut fitted upon the clamping bolt and arranged

to be engaged by a tool inserted through the before mentioned side opening of the stand- 10
ard, said nut providing a means for tightening the link to draw the standard into a firm engagement with the floor plate.

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