March 12, 1929. R. BARR 1,704,782

FURNITURE ATTACHMENT

Filed March 23, 1926

Fig. 1.

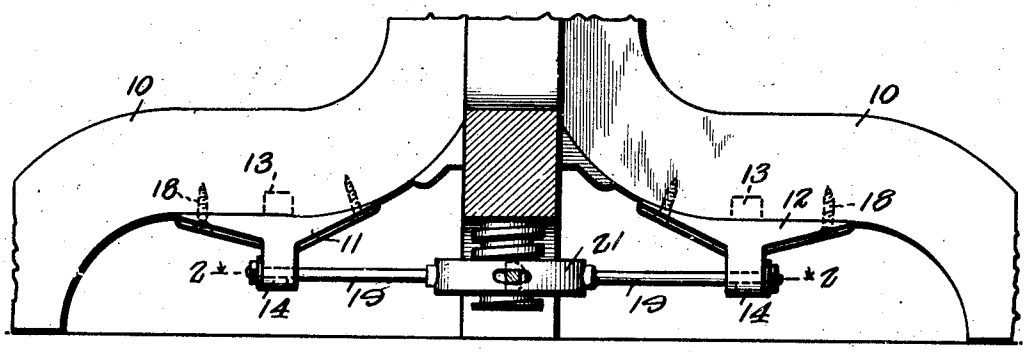


Fig. 5.

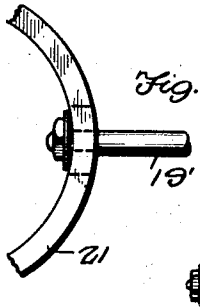


Fig. 2.

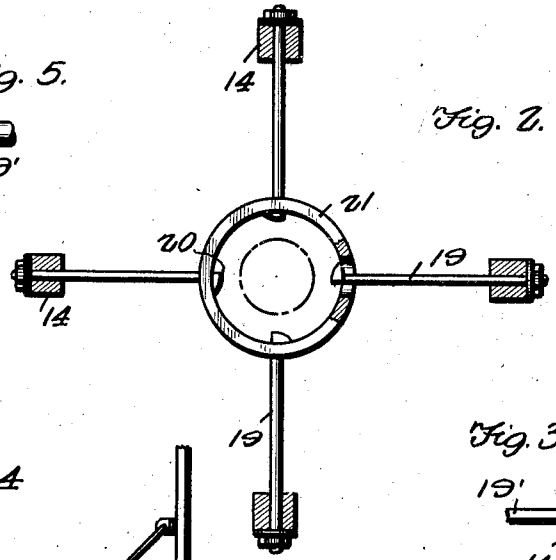


Fig. 4

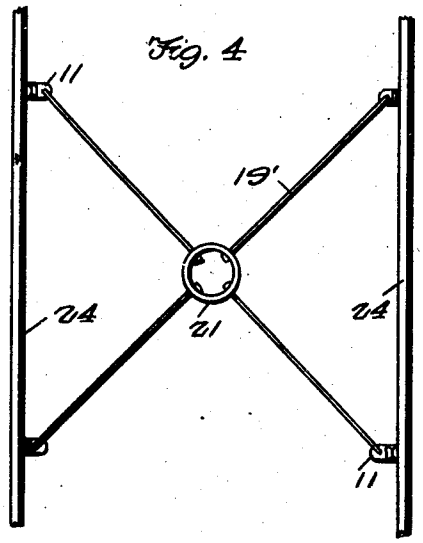
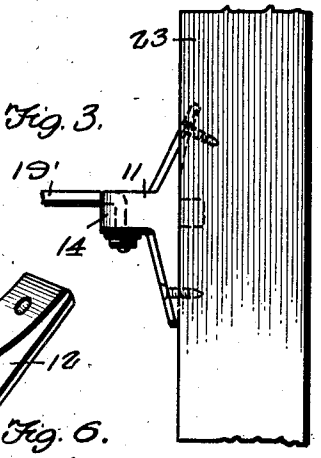


Fig. 3.



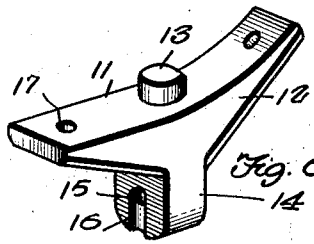


Fig. 6.

Richard Barr, Inventor

By Richard B Owen.

Attorney

Witnesses
C. E. Cunningham Jr.
E. A. Block.

Patented Mar. 12, 1929. 1,704,782

UNITED STATES PATENT OFFICE.

RICHARD BARR, OF RAVINE, PENNSYLVANIA.

FURNITURE ATTACHMENT.

Application filed March 23, 1926. Serial No. 96,812.

This invention relates to furniture attachments and has particular reference to tightening devices therefor.

An important object of the invention is to provide a device of the above character which may be mounted in association with chair legs and the like for bracing the legs and retaining same firmly in association with the chair frame.

A further object of the invention is to provide a device of this character which may be employed in connection with tables and the like so as to hold the table legs against spreading or loosening.

A still further object of the invention is to provide a tightening device for furniture which is comparatively simple and durable of construction and can be manufactured at a low cost.

Other objects and advantages of this invention will become apparent as the description progresses.

In the accompanying drawing forming a part of this specification and in which like numerals are employed to designate corresponding parts throughout the same:

Figure 1 is a side elevation of the lower portion of a chair frame, a portion thereof being broken away showing my improved device mounted in association therewith,

Figure 2 is a horizontal sectional view taken on the line 2—2 of Figure 1,

Figure 3 is a side elevation showing a portion of my improved device mounted in association with a table leg,

Figure 4 is a top plan view showing the device used in connection with the side boards of a bed,

Figure 5 is an enlarged top plan view showing a modified form of the device, and

Figure 6 is a perspective view of one of the bracket members used in connection with my device.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 10 generally indicates the legs of a conventional type of chair usually employed in offices. These legs are of angular formation and secured at their inner ends by suitable brackets, each of the legs extending radially from the center post of the chair. It is apparent that the entire weight of the structure and person sitting therein will be imposed upon the post and the adjacent connecting ends of the legs will have a tendency to sag downwardly. To overcome this, I provide a tightening device to be readily associated with the legs to prevent spreading thereof and ultimate collapse of the chair.

Referring now more particularly to the structure embodying my invention, the numeral 11 generally indicates a securing bracket embodying a longitudinal base plate 12 curved at one end so as to conform to the lower edge of the chair legs. The contacting face of the longitudinal base plate 12 is provided with a lug 13 of circular cross section extending from the central portion of the base plate and adapted to seat in a suitable recess formed in the leg so as to prevent lateral movement of the bracket. The opposite side of the base plate is provided with a boss 14, an opening 15 being formed transversely in the boss and a groove 16 being formed in one face thereof and communicating at one end with the bore so as to receive a suitable retaining member to be described more fully hereinafter. The plate 12 is provided adjacent its extremities with apertures 17 adapted to receive wood screws 18 for securely mounting the plate upon chair legs and the like.

In using my improved apparatus in association with chairs, a bracket 11 is secured to each leg of the chair, as shown to advantage in Figure 1. The bosses 14 project downwardly, and longitudinal adjusting rods 19 are mounted through the transverse bores in these bosses, the outer extremities of the rods being threaded for the application of nuts thereto. The inner ends of the rods are provided with heads 20 of substantially semi-circular formation to permit convenient connection with a central retaining member 21.

This retaining member 21 is preferably in the form of a circular ring provided with a plurality, in the present instance four, elongated slots 22 through which the inner ends of the rods 19 are mounted. The retaining rods 19 are preferably square in cross section adjacent the heads 20 so that the rods will be held against rotation while the nuts, on the outer ends of the rods, are being adjusted. As clearly shown in Figure 1, the retaining ring 21 is preferably large enough to easily accommodate the adjusting screw of the chair so that this screw may be vertically movable through the ring.

With reference to Figure 3, wherein a modified application of the device is illustrated, the clamp 11 is shown secured to the vertical leg of a table, designated by the

numeral 23, the inner side of the leg in this instance being slightly recessed to receive the curved portion of the bracket. A particular form of retaining rod 19′ is employed in this application of the attachment, the outer end of the rod being provided with an angular extension adapted to fit the bore 15 of the bracket which assumes a vertical position. The inner ends of these rods 19′ are also threaded to permit application of nuts thereto. These rods are adjusted at the inner ends within the retaining ring 21 so that the legs of the table or similar article may be braced in position.

Still another application of the attachment is shown in Figure 4, this form employing rods 19′ similar to those employed in connection with tables and the like, the brackets 11 being secured in suitable spaced relation to the side boards 24 of a bed to prevent distortion of these members.

It can be readily seen that my improved attachment may be very readily employed upon various articles of furniture so as to firmly brace the supporting members and materially prolong the life of the article. The attachment, while comparatively simple in construction is very durable and may be conveniently attached to the furniture.

It is to be understood that the form of my invention herewith shown and described is to be taken as the preferred example of the same and that various changes as to the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A furniture attachment comprising, in combination, a plurality of connecting rods threaded at their outer ends and provided with heads at their inner ends, a ring member provided with openings receiving the inner ends of the rods, bracket members each including a retaining plate, a lug formed on the inner side of the retaining plate, and a shoulder extending from the outer side of the plate provided with an opening therethrough, receiving the outer end of the respective rod.

2. A furniture attachment comprising, in combination, a plurality of rods provided at their outer ends with angular extensions, the extensions being screw threaded, a ring provided with a plurality of openings receiving the inner ends of the rods, heads on said ends of the rods engaging the inner sides of the ring and brackets each including an attaching plate, a lug formed on one side of the plate engageable in a socket formed in the leg of a chair or the like, a boss formed on the opposite face of the retaining plate having a transverse opening and a longitudinal communicating groove respectively receiving the end of the respective rod and the angular extension thereof.

3. A device of the class described comprising an annular retaining member having slots formed therein, rods fitted at their inner ends through the slots and radiating from the said member, the said rods being provided at their said inner ends with heads engaging the inner side of the member and the said inner ends of the rods being squared at their portions which engage in the slots whereby to restrain the rods from rotative movement, a plurality of brackets attachable to members to be braced, each bracket having a portion apertured to accommodate the outer end of a respective one of the rods, the outer end of each rod being threaded, and a nut adjustably threaded onto the outer end of each rod and coacting with the said portion of the respective bracket.

In testimony whereof I affix my signature.

RICHARD BARR.