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I. N. JOHNSON.

TABLE ATTACHMENT FOR CHAIRS, &c.

APPLICATION FILED MAR. 16, 1908.

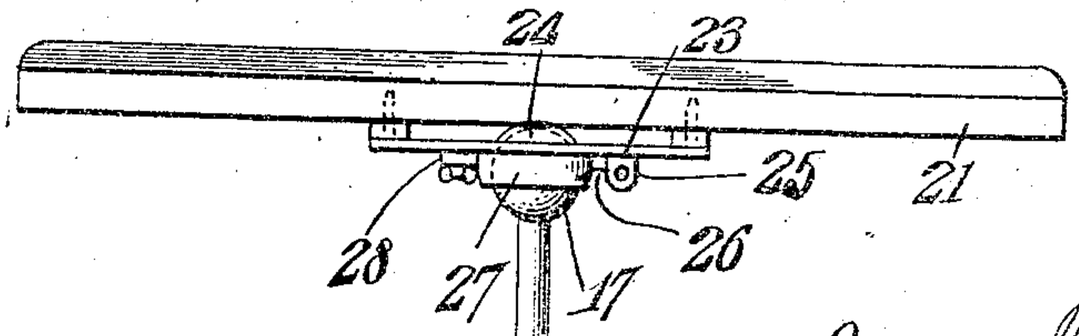


Fig. 1.

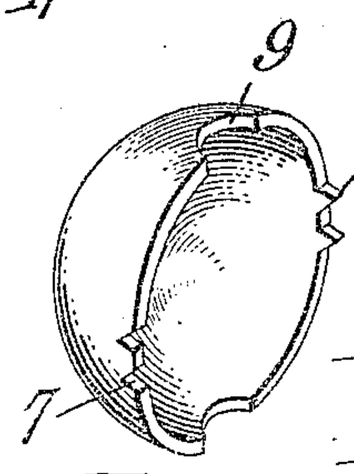


Fig. 4.

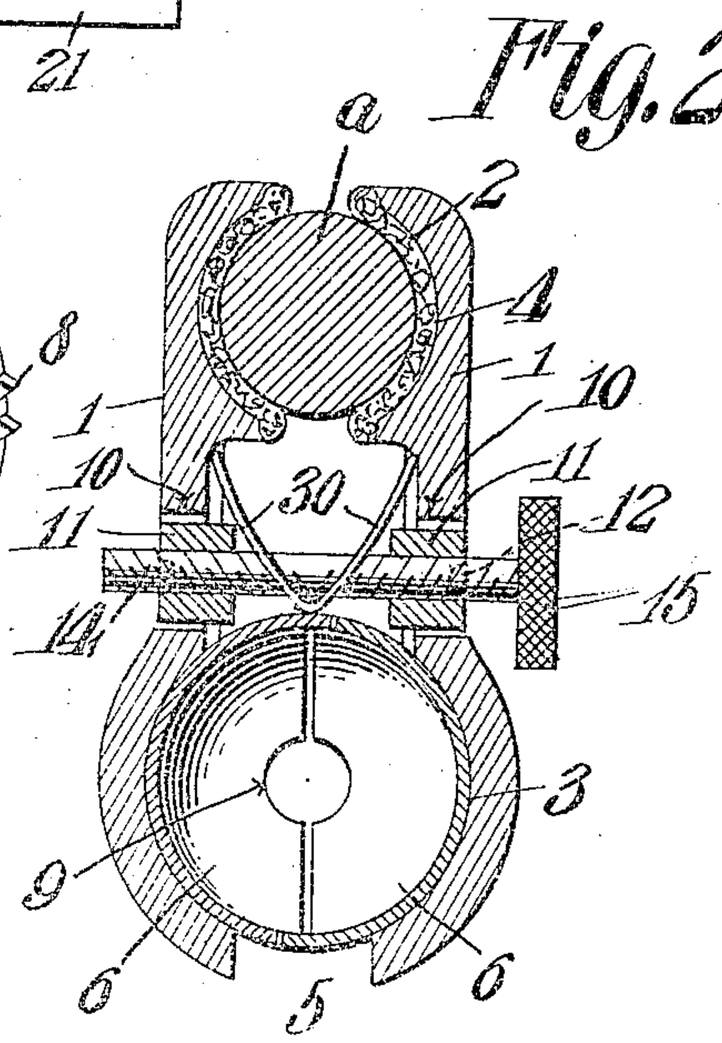
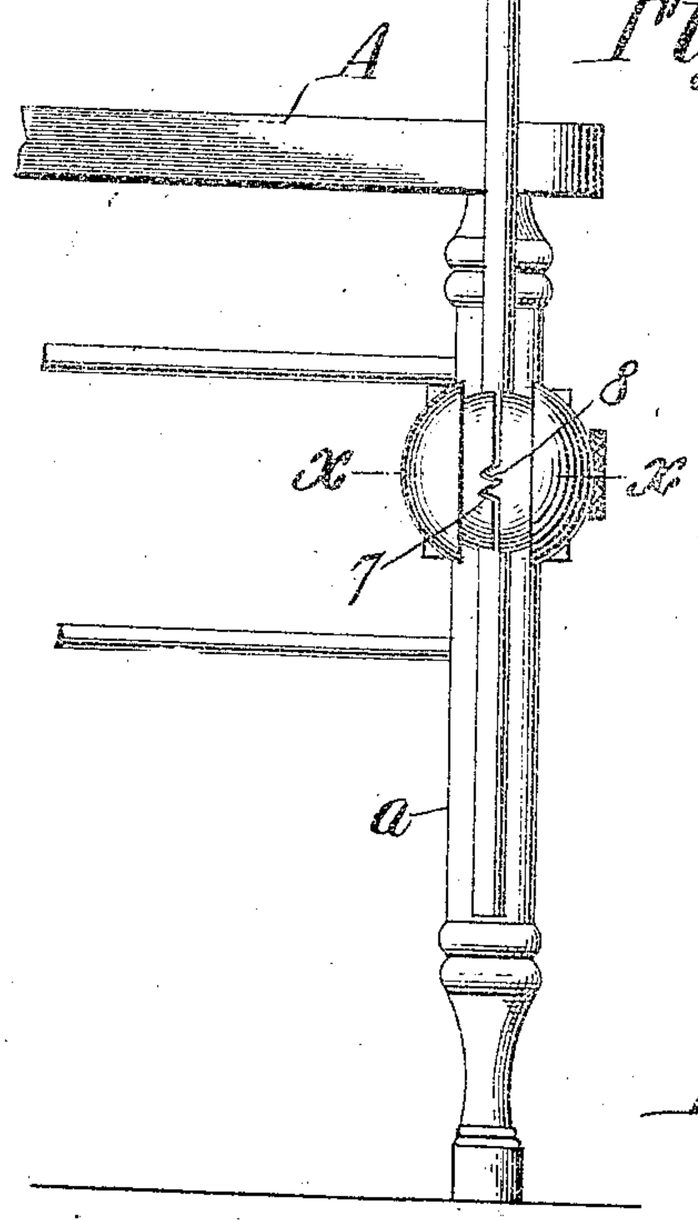


Fig. 2.



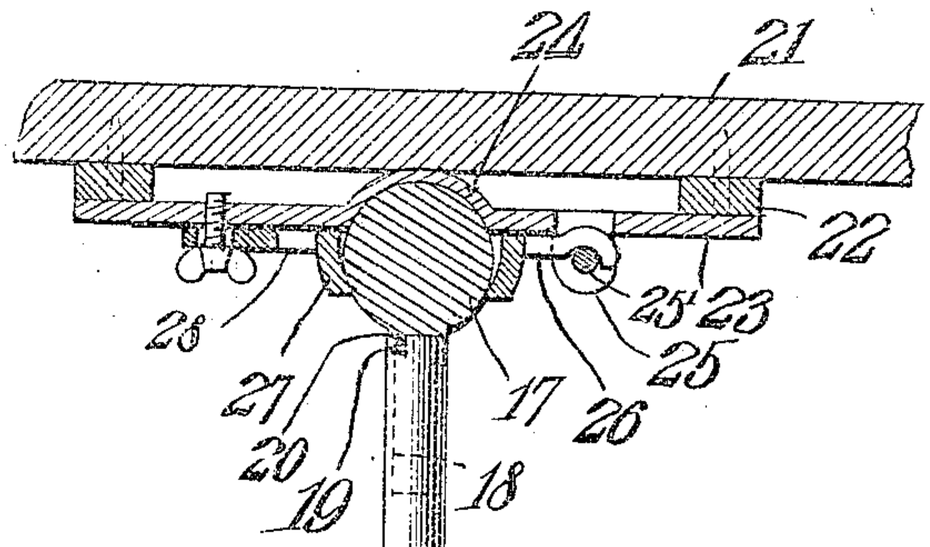
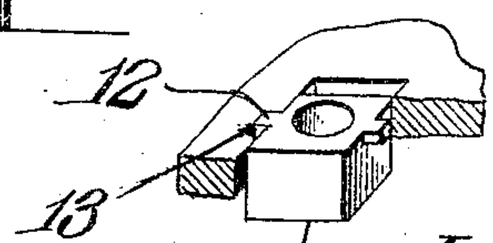


Fig. 3.

Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

ISAAC N. JOHNSON, OF TIPTON, INDIANA.

TABLE ATTACHMENT FOR CHAIRS, &c.

No. 890,656. Specification of Letters Patent. Patented June 16, 1908.

Application filed March 16, 1908. Serial No. 421,336.

To all whom it may concern:

Be it known that I, ISAAC N. JOHNSON, a citizen of the United States, residing at Tipton, in the county of Tipton and State of Indiana, have invented a new and useful Table Attachment for Chairs, &c., of which the following is a specification.

This invention relates to attachments for chairs and the like, its object being to provide a table or book rest having means for adjustably connecting it to and supporting it from a chair.

A further object is to provide novel means for holding the table in any desired position relative to the chair, said means being easily operated and designed to firmly secure the table.

Another object is to provide a table top which is adjustable relative to its support, said support being also adjustable relative to the chair or other structure to which it is attached.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is an elevation of the device in position upon a chair, a portion of the chair being shown. Fig. 2 is an enlarged section on line *x*—*x*, Fig. 1. Fig. 3 is an enlarged section through a portion of the table top and showing the connection between it and the adjustable standard. Fig. 4 is a detail view of one of the members of the standard gripping ball. Fig. 5 is a detail view of one of the nuts of the clamping screw and showing a portion of the adjoining part of one of the clamping plates.

Referring to the figures by characters of reference, A designates a chair or other suitable supporting structure, the leg *a* of which is designed to be engaged by two oppositely disposed gripping plates 1—1. Each of these plates has jaws 2 and 3 at its opposite ends respectively, the jaws 2 having their working faces preferably covered with a lining 4 of a suitable soft material. The jaws 3 have their inner or working faces concave and conforming substantially with the contour of a gripping ball 5 formed of oppositely disposed similar semi-spherical sections 6 each of which is preferably concavo-convex and has diametrically opposed projections and recesses 7 and 8 respectively whereby when the sections are assembled with their open faces toward each other the projections on one section will project into the recesses 7 in the other section and thus prevent independent rotation of the parts. Each ball section also has two substantially semi-circular recesses 9 in its edge which are diametrically opposed and the corresponding recesses of the two sections are designed to register when the ball sections are assembled in the manner heretofore described.

Each plate 1 is provided between its jaws 2 and 3 with an elongated angular aperture 10 and mounted to swing within each of these apertures is a nut 11 having trunnions 12 extending in opposite directions from its outer end and bearing within recesses 13 in the plate 1. Each nut is therefore capable of swinging upon these trunnions toward either of the jaws 2 and 3. Mounted within the two nuts is a clamping screw 14 having right and left hand threads engaging the respective nuts so that when the screw rotates in one direction the nuts, and of course the plates 1, will be drawn toward each other and when the screw is rotated in the opposite direction the plates will be free to move apart. A head 15 is located at either or both ends of the screw so that the same can be readily turned. The recesses 9 are designed to receive a standard 16 which may be either solid or tubular and is preferably metal. The upper end of this standard has a ball thereon which can be formed therewith or, as shown in Fig. 3, can be made of wood or other like material and connected thereto in a suitable manner. In Fig. 3 this ball which has been indicated at 17, has a stem 18 which enters the end of the standard and a lug 19 projects from this stem and engages a notch 20 in the end of the standard to hold the ball and stem against accidental rotation relative to the standard.

The table top 21 may be of any preferred construction and is preferably provided on its bottom face with cleats 22 to which a plate 23 is connected, said plate having a socket 24 in its lower face designed to receive the ball 17. This plate has ears 25 formed thereon and connected by a pin 25′ detachably engaged by a hook 26 extending from a ring 27. The inner face of the ring is rounded transversely as indicated in Fig. 3 so as to surround and bear upon the lower half of the ball and support the same. A tongue 28 ex-

tends from the ring at a point diametrically opposite the hook 26 and this tongue has a wing bolt 29 for engagement with plate 23. When the bolt is tightened it will force the tongue 28 toward the plate 23 and therefore cause ring 27 to press the ball 17 tightly into socket 24. The parts are thus bound together so tightly that it will be practically impossible to move the table top 21 and the standard 16 independently of each other. However, by loosening the bolt the ring 27 can be loosened whereupon the ball 17 can be moved within socket 24 until the table top has assumed any desired angle relative to the standard.

To fasten the attachment to the legs of a chair or other structure the screw 14 is turned until the jaws 2 are moved apart a sufficient distance to permit the insertion of the leg *a* therebetween. The standard 16 is inserted between the ball sections 6 and after it has been adjusted to a desired elevation and inclination the screw 14 is rotated so as to draw the plates 1 toward each other. Jaws 2 will therefore bind upon the chair legs and the jaws 3 bind upon the ball sections 6. It will be seen that the chair leg and the standard will be simultaneously gripped. By mounting the nuts 11 upon the pivots they are free to adjust themselves to the changing angles of the plates 1 during the tightening or loosening of the parts. It is to be understood that ball sections 6 can be made solid if preferred and various other changes may be made in the construction of the device without departing from or sacrificing the advantages thereof.

As shown in Fig. 2 a bow spring 30 is arranged between the plates 1 and straddles the screw 14. The ends of the spring bear against the plates close to the jaws 2 so as to hold them spread apart normally, and the jaws 3 gripped upon the ball 5. When the device is detached from a chair or other support the ball 5 will thus be held in position.

What is claimed is:

1. The combination with a standard having a ball thereon, a table top mounted upon the ball, and means carried by said top for clamping the ball to secure the top and standard against independent movement; of oppositely disposed standard engaging members, clamping plates, each of said plates having jaws for engaging said members and a support respectively, and means mounted within the plates for adjusting the jaws relative to each other.

2. The combination with a standard and a table top adjustably mounted thereon; of oppositely disposed clamping plates, each plate having a jaw adjacent each end, semispherical standard engaging devices mounted between the jaws at one end of the plates, members pivotally mounted within the plates, and an adjusting screw mounted within said members for shifting the plates relative to each other.

3. The combination with a standard and a table top, and a universal connection between said top and standard; of oppositely disposed clamping plates, each plate having a jaw adjacent each end, one set of jaws constituting support engaging means, semispherical standard engaging members interposed between the other jaws, nuts pivotally mounted within the plates, and an adjusting screw engaging the nuts for shifting the plates relative to each other.

4. The combination with a standard and a table top adjustably mounted thereon; of oppositely disposed standard engaging members, clamping plates, each of said plates having jaws for engaging said members and a support respectively, and means mounted within the plates for adjusting the jaws relative to each other.

5. The combination with a standard and a table top adjustably mounted thereon; of oppositely disposed standard engaging members, clamping plates, each of said plates having jaws for engaging said members and a support respectively, means for adjusting the jaws relative to each other, and elastic means interposed between the plates for holding the jaws at one end of the plate normally yieldingly upon the standard engaging members.

6. In a device of the character described a clamping and supporting attachment comprising oppositely disposed standard engaging members, clamping plates having jaws at the ends thereof for binding upon said members and a support respectively, nuts mounted to rock within the plates, an adjusting screw engaging said nuts for shifting the plates toward or from each other, and yieldable means interposed between the plates for holding the jaws at one end thereof normally in engagement with the standard engaging members.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ISAAC N. JOHNSON.

Witnesses:
LEWIS KITTLEY,
PRESTON P. PARNELL.