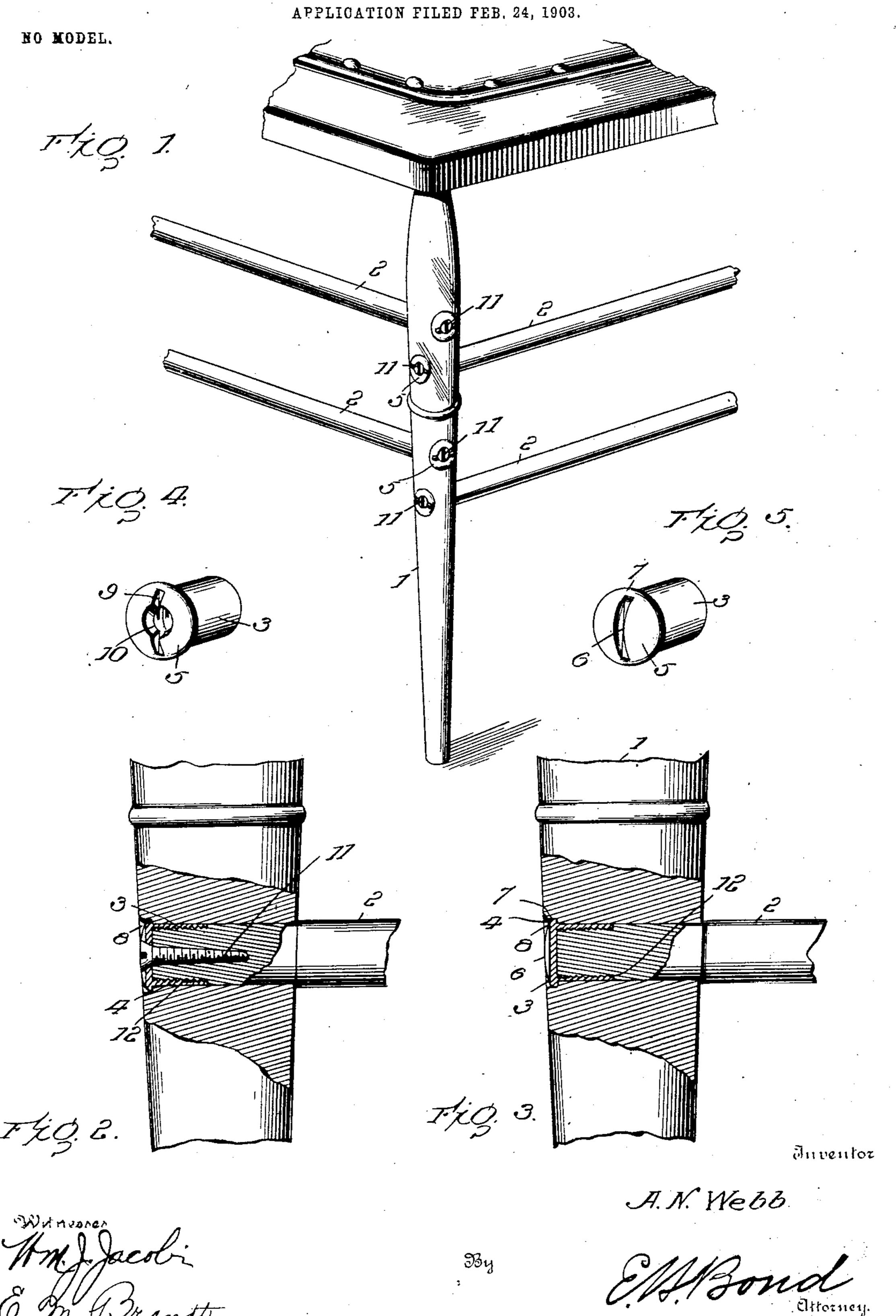
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DEVICE FOR HOLDING CHAIR RUNGS, &c.



## United States Patent Office.

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## DEVICE FOR HOLDING CHAIR-RUNGS, &c.

SPECIFICATION forming part of Letters Patent No. 751,765, dated February 9, 1904.

Application filed February 24, 1903. Serial No. 144,723. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR N. WEBB, a citizen of the United States of America, and a resident of Youngsville, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Holding Chair-Rungs, &c., of which the following is a specification.

This invention relates to certain new and useful improvements in devices designed, primarily, for securing chair rungs or rounds in place; and, while in the present instance the invention is shown as applied to such use, it is evident that the securing means hereinafter described will be found applicable to many other uses, such as stair-railings, bed-fasteners, any and all kinds of furniture, beds, and, in fact, any and all places where a wooden or metal joint or a combination of two is desired which shall be simple, yet strong and durable, and also ornamental.

The invention has for its objects, among others, to provide a simple and efficient means of connection between the rung and the leg or the other articles to be joined; and it consists, primarily, of a hollow metallic screw fitted to a socket in the one part and receiving the screw-threaded end of the other part, the exposed portion of the hollow screw being made plain or ornamental, as may be desired. In some instances a screw is employed, screwing into the rung and serving to hold the hollow screw in place. This second screw, however, is not indispensable and under some circumstances need not be employed.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a portion of a chair, showing the rungs secured to the leg by my improved means. Fig. 2 is an enlarged detail view of a portion of the leg and rung, the same being broken away and parts shown in section. Fig. 3 is a similar view showing a like construction with the supple-

mental screw not employed. Fig. 4 is a perspective view of the hollow screw removed. Fig. 5 is a similar view of the screw employed of the form shown in Fig. 3.

Like numerals of reference indicate like 55

parts throughout the several views.

Referring now to the details of the drawings, 1 designates one of the members, and 2 the other member to be joined thereto. In this instance the member 1 is represented as 60 the leg of a chair, and 2 the rung.

3 is a hollow screw or casting provided upon its interior with screw-threads 4, said threads being what are known as "wood-screw" threads, being larger than the threads used 65 on metal, making the same substantial and of sufficient strength to hold the article to which it is applied securely in place. As seen in Fig. 5, this hollow screw has a head 5, which may be of any desired contour and made 7° plain or ornamental, as may be preferred, and it is provided with a slit or slot 6 for the reception of a screw-driver or other implement by which it may be turned. A shoulder 7 is formed upon the inner side of the head, as 75 seen best in Fig. 3, to engage the bottom of a socket formed in the leg to limit the inward movement of the screw, as will be readily understood from Fig. 3. This socket 8 is formed in the outer face of the leg and is of such 80 depth that when the screw is screwed into its proper extent the outer face of the head of the screw will be beneath or flush with the outer face of the leg. As seen in Figs. 2 and 4, the hollow screw has its head 5 provided with the 85 slit or slot 9 and, further, with the central opening 10 for the reception of a wood-screw 11, (seen in position in Figs. 1 and 2,) which screws into the end of the rung after the hollow screw has been screwed up and serves to prevent 90 separation of the parts from any cause.

In applying the fastener to a chair or any other article of furniture or device where it can be employed to advantage the mode of attaching is very simple. It always goes on 95 the outer side of the chair-leg. The chair-leg being provided with the usual hole for the reception of the rung and the rung made to fit the same, the end portion of the rung is provided with the screw-threads 12, and the 100

outer wall or surface of the chair-leg is by any suitable tool formed with the socket or countersink 8. The rung is then forced into the opening and the hollow screw inserted into the 5 hole from the outside of the chair, and the rung being pressed into the hole the hollow screw, by means of a screw-driver or any other implement, is secured into place. The rung is made a snug fit for the opening, and by ap-10 plying a drop or two of oil to the end of the rung it will enter the hole easily and also harden the threads. In case the strength is not considered sufficient or in places where greater strength is required the screw 11 is 15 applied by screwing through the center of the head of the hollow screw, as seen in Fig. 2.

The device is simple in its nature and can be

applied by unskilled workman.

The head of the hollow screw may be made 20 of any desired shape, and it can be screwed in flush with the outer face of the leg or not, and it may or may not be covered with putty or any other material, so as to be entirely hidden from view.

The one end of the rung being in position and fastened, as above described, the other end is screwed in in the same manner, and both screws being right-handed by screwing up the second screw tends to tighten the first.

The hollow screw may be tapered or not, as may be deemed most expedient. Its size will vary according to the character of the article

to which it is to be applied.

From the above it will be seen that I have 35 devised a simple and cheap novel form of attachment for securing chair-rungs to their legs, and while the structural embodiment of the invention as herein disclosed is what I at present consider preferable it is evident 40 that the same is subject to changes, variations, and modifications without departing from the spirit of the invention or sacrificing any of its advantages. I therefore do not wish to restrict myself to the exact configuration and 45 details of construction herein disclosed, but reserve the right to make such changes, variations, and modifications as come properly within the scope of the protection prayed.

What I claim as new is—

1. The combination of one member, as a 50 chair-leg, having an opening therethrough and a socket at its outer end communicating with said opening, of another member as a chairrung having threaded end disposed within said opening, and a hollow screw having a head 55 fastened in said socket with its threaded portion engaging means of the rung and having a head covering the end of the rung, and means seated within said head and engaged in said rung substantially as shown and de- 60 scribed.

2. The combination with one member as a chair-leg having an opening entirely therethrough, and a socket at the outer end of said opening with shoulder, of another member as 65 a chair-rung inserted in said opening and having threaded end, a hollow screw in said opening engaging the threaded end of the rung, and having a head covering the end of the rung and seated in said socket beyond the 70 outer face of the leg and formed with a shoulder engaging the shoulder within said socket, and a screw engaged in said rung and having its head received within the head of said screw substantially flush with the outer face thereof, 75 as shown and described.

3. In a chair, the combination with a leg and a rung, of a hollow nut seated within the leg and having interior threads to engage the end of the rung, a head with a shoulder and 80 with a slot, and a central opening intersecting said slot and countersunk to receive the head

of a screw.

Signed by me at Youngsville, Pennsylvania, this 19th day of February, 1903.

ARTHUR N. WEBB.

Witnesses:

ROBERT A. HODGES, G. H. BATES.