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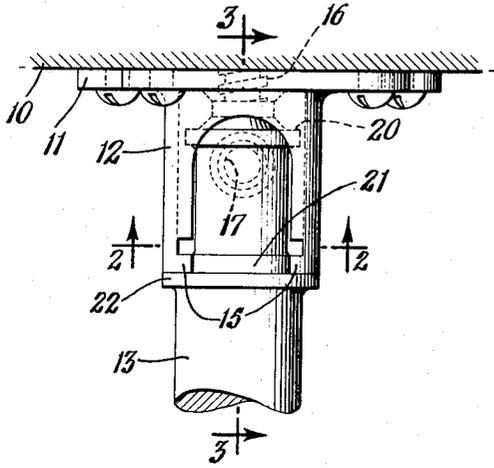
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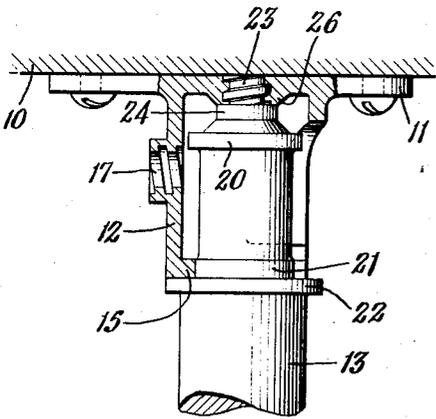
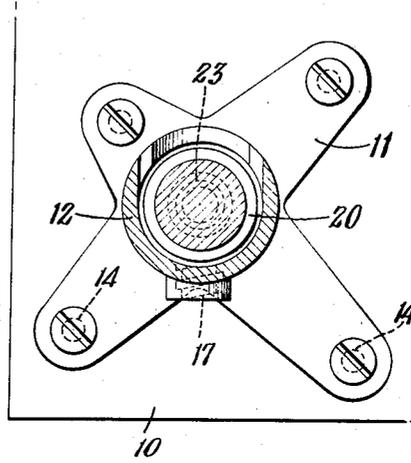
FOLDING LEG SUPPORT FOR FURNITURE

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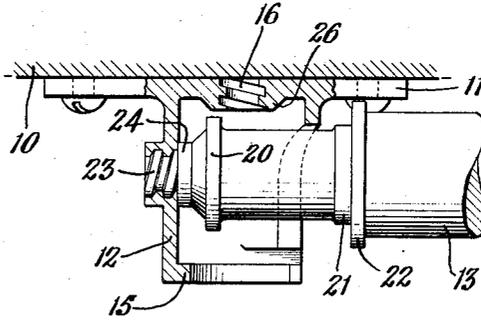
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

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## FOLDING LEG SUPPORT FOR FURNITURE

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3 Claims. (Cl. 311-99)

This invention relates to improvements in supporting members such as those of the folding type used for tables, work benches, and similar articles. More particularly it relates to such members which may be easily and inexpensively fabricated. (See my earlier inventions disclosed in U.S. Patent No. 2,606,802 and U.S. Patent No. 2,736,626.)

The members which comprise my earlier inventions may, of course, be made in a variety of ways but it is preferred that these members be produced by a die casting operation since this has been found most rapid and inexpensive. However, in employing this preferred method of fabrication, it has been found that the two threaded sections heretofore provided on the upper portion of the leg member and the relatively large number of threads per inch provided on the threaded stud of my latter invention make the parts of the abovementioned inventions difficult to produce efficiently.

It is therefore the object of the present invention to provide foldable supporting members of greatly simplified design which at the same time retain the great strength and rigidity inherent in my earlier inventions. To achieve this end, the bracket which is fastened to the object being supported is provided with a threaded aperture which is engagable by the threaded stud of my latter invention to maintain the leg member in upright or supporting position.

The invention will now be more fully described with reference to the accompanying drawings, in which:

Fig. 1 is an elevational view showing the supporting means in supporting position;

Fig. 2 is a plan view taken on line 2-2 of Fig. 1;

Fig. 3 is a vertical cross-sectional view taken on line 3-3 of Fig. 1; and

Fig. 4 is a vertical cross-sectional view showing the supporting means in folded position.

Referring to the drawings, the supporting means, which is shown in relation to the supported object 10, comprises two elements, namely, a bracket 11 having a tubular fixture 12 integral therewith, and a leg 13. The bracket 11 is provided with a number of apertures 14 through which fastening means such as screws may be driven in order to mount the bracket on the underside of the table 10. It is the bracket fixture member 11, 12 and the portion of the leg member 13 which is shown in the drawings, which are preferably formed by die casting.

The tubular fixture 12 is provided with an annular flange 15 at its lower end, and the bracket 11 is provided with a threaded aperture 16 whose center lies on the axis of the tubular fixture 12. A comparatively wide slot is furnished in one side of the tubular fixture wall and it extends from the bottom of the fixture, through the annular flange 15, almost to the point at which the fixture 12 joins the bracket 11. Disposed diametrically opposite to the slot is a threaded aperture 17. As is apparent from the drawings, the aperture 17 is located nearer to the bracket 11 than to the annular flange 15. Just above the annular flange 15 there are provided two oppositely

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disposed notches, which for a short distance effectively increase the width of the abovementioned slot, the purpose of which will be hereinafter described.

The cooperating portion of the leg 13 is shown formed with an upper collar 20 and a lower collar 21 separated therefrom by a smooth cylindrical surface. The diameter of the collar 20 is greater than the width of the slot in the fixture 12 and greater than the internal diameter of the annular flange 15, thus allowing the leg 13 to move freely within the tubular fixture without the leg and fixture coming apart. The diameter of the collar 20 is, however, smaller than the increased width of the slot at the location of the abovementioned notches, thus allowing the cooperative portion of the leg to be moved into and out of the fixture at that point. The diameter of the lower collar 21 is such, that when the leg is in object supporting position, the collar 21 fits snugly within the annular flange 15, thus aiding the rigidity of the members.

Just below the collar 21 is an enlarged collar 22 which aids the rigidity of the parts when in object supporting position. Above the collar 20, the leg 13 is provided with an axially projecting threaded stud 23 which may be threaded into either the aperture 16 in the bracket 11, or the aperture 17 in the tubular fixture 12. Between the stud 23 and the collar 20, a smaller collar 24 is provided which together with the boss 26 surrounding the aperture 16 controls the degree of movement of the leg 13 into the tubular fixture 12 when the parts are arranged in an object supporting position. The collar 24 also serves to abut against the internal side wall of the fixture 12 to control the degree of movement of the leg into the fixture when the parts are arranged in folded position.

In assembling the components, the bracket is fastened to the table as mentioned above. Thereafter, leg 13 is inserted into the tubular fixture 12 by slipping the collar 20 through the widened portion of the slot in the fixture. When this is accomplished the leg may be arranged in either an upstanding supporting position or in a folded position. If it is desired to arrange the leg in an object supporting position, it is held so that the threaded stud 23 is aligned with the aperture 16 and raised until the stud contacts the threads of the aperture. Rotation of the leg 13 will cause the stud to be threaded into the aperture until the collar 24 abuts the boss 26 at which time the collar 22 abuts the lower end of the fixture 12 thus forming a rigid connection between the leg and the object supported thereby.

To move the leg to folded position, the leg is rotated in the opposite direction until the threaded connection is broken. At this time the leg can be swung counterclockwise (from the position illustrated in Fig. 3 to that shown in Fig. 4) so that the smooth cylindrical surface separating collars 20 and 21 moves between the lips of the slot formed in the socket. With the leg in horizontal folded position, the stud 23 is moved into alignment with the internally threaded aperture 17 and turned therein until the collar 24 abuts the side wall of the fixture to thus lock the leg securely in folded position.

The invention has been shown and described in preferred form only and by way of example, but many variations and modifications may be made therein and in its mode of application which will still be comprised within its spirit. It is understood, therefore, that the invention is not limited to any specific form or embodiment, except insofar as such limitations are specified in the appended claims.

What is claimed is:

1. Folding leg means for supporting tables or like objects comprising, a bracket mounted on the underside of the object being supported, a tubular fixture integral with said bracket and surrounding a threaded aperture dis-

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posed in said bracket, said tubular fixture having a threaded aperture in one side thereof, a slot disposed oppositely of said aperture and extending downwardly to the bottom of said fixture and an annular flange at the bottom of said fixture, and a leg member having a collar adjacent the upper end thereof of diameter greater than the width of the slot in said fixture and greater than the internal diameter of said annular flange, and a stud projecting axially from the top of said leg member adapted to be threaded into the aperture in said bracket when said leg is in object supporting position, the same stud being adapted to be threaded into the aperture in said fixture when said leg member is in folded position.

2. Supporting means in accordance with claim 1 wherein the slot in said fixture is increased in width near the bottom of said fixture, said increased width being substantially equal to the diameter of the collar of said leg member and running for a distance substantially equal to the length of said collar, whereby said leg member and said tubular bracket may be disassembled.

3. Folding leg means for supporting tables or like objects comprising, a bracket mounted on the underside of the object being supported, a tubular fixture integral with said bracket and surrounding a threaded aperture disposed in said bracket, said tubular fixture having a threaded aperture in one side thereof, a slot disposed oppositely of said aperture and extending downwardly to the bottom of said fixture, and an annular flange at the

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bottom of said fixture, and a leg member having an upper collar adjacent the upper end thereof of diameter greater than the width of the slot in said fixture and greater than the internal diameter of said annular flange but smaller than the internal diameter of said tubular fixture, a lower collar spaced from said upper collar of diameter substantially equal to the internal diameter of said annular flange and adapted to fit snugly within said annular collar when said leg member is in object supporting position, the diameter of the leg portion between said collars being smaller than the width of the slot in said fixture, and a stud projecting axially from the top of said leg member adapted to be threaded into the aperture in said bracket when said leg is in object supporting position, the same stud being adapted to be threaded into the aperture in said fixture when said leg member is in folded position.

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