April 16, 1929. C. J. TRAVERS 1,709,446

BASE

Filed Aug. 31, 1927

Fig. 1

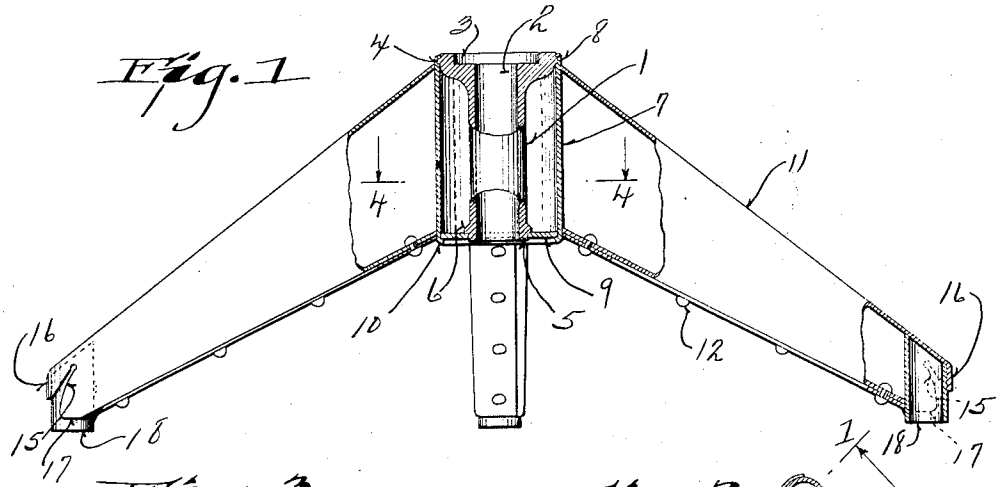


Fig. 3

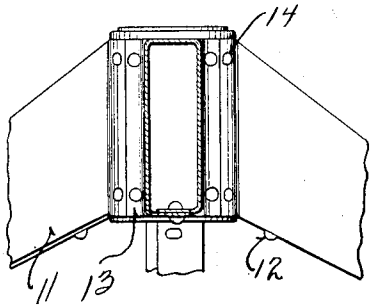


Fig. 2

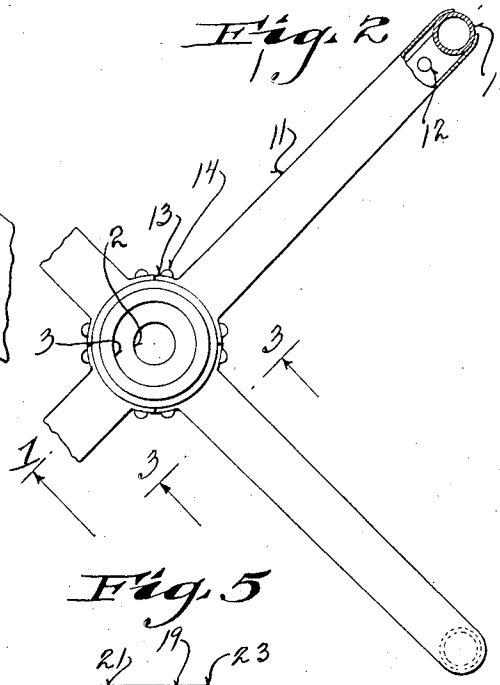


Fig. 4

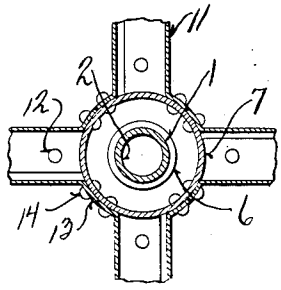
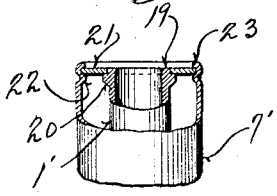


Fig. 5



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UNITED STATES PATENT OFFICE.

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BASE.

Application filed August 31, 1927. Serial No. 216,691.

This invention relates to bases.

Objects of this invention are to provide a novel form of base, such for instance as a base for an article of furniture, or, in fact, any device that has to be supported, such as a table, chair, stand, or other article, and which may be wheeled, if desired, and which is formed wholly of metal and which is so made that thin sheet metal may be employed and may be formed in a tubular structure to secure the maximum lightness and strength.

Further objects are to provide a novel form of base which is made of sheet metal and metal tubing, and which nevertheless is so formed that it may be very readily constructed by ordinary machine shop methods.

Further objects are to provide a base which is so constructed that it may receive a spindle or similar member of a swivel chair, pedestal, or a table, to form a complete base, or made high enough to receive a spider to make a complete table base or like article, and which may also receive rollers, and which is extremely rigid and will stand an excessive amount of abuse without distortion.

Embodiments of the invention are shown in the accompanying drawings in which:

Figure 1 is a sectional view approximately on the line 1—1 of Figure 2;

Figure 2 is a fragmentary plan view of the structure shown in Figure 1 with parts broken away;

Figure 3 is a sectional view on the line 3—3 of Figure 2;

Figure 4 is a sectional view on the line 4—4 of Figure 1;

Figure 5 is a fragmentary view of a modified form of construction.

Referring to Figures 1 to 4, it will be seen that the base comprises a central sleeve 1 which may be formed of cast metal, if desired, and which is provided with a central aperture 2, and preferably with a recessed upper portion 3. It is provided with a small outwardly projecting flange 4 at its upper end and is provided with a downwardly extending annular flange 5 at its lower end, such downwardly extending flange also carrying a small laterally projecting flange 6.

In making this base, the central sleeve is slipped into the tubular member 7, as shown in Figure 1, and it is to be noted that the member 7 is preferably formed of seamless steel tubing. Its upper end is slightly thinned, as indicated by the reference character 8, to provide a shoulder against which the flange 4 rests in assembling the device. The upper end of the cylinder 7 or tube, is turned over to lock the flange 4 in place and consequently to definitely hold the central sleeve 1 in correct relative position. Thereafter, a washer 9 of metal is slipped over the flange 5 and against the flange 6. The bottom edge of the tube 7 is turned inwardly, as indicated at 10, to thus lock the bottom washer 9 in place.

Prior to the assembling of the central sleeve and the tubular shell, a plurality of tubular legs 11 are formed of pressed sheet metal. The sheet metal is folded into a closed rectangular cross sectional contour with overlapping bottom edges. These bottom edges are secured by rivets 12. The upper portion of the legs 11 are provided with outwardly turned flanges 13 which are secured by rivets 14 to the shell or tube 7. The legs 11 radiate from the shell 7 and extend downwardly in a slanting manner. Further, it is to be noted that these legs are of tapered formation and are smallest at their lowermost ends. Their outer or lowermost ends are provided with notches 15 which provide flaps 16 and 17. Small tubular members 18 having tapered upper edges are slipped into place with their tapered upper edges contacting with the inner upper surface of the legs. Thereafter the flaps 17 are folded around the members 18, as shown in Figures 1 and 2, and the flaps 16 are bent down and folded around such members. The members 18 are then brazed to the flaps to retain them in position.

The members 18 provide means for the reception of the spindles of casters or for the reception of any suitable type of feet, and it is to be understood that the expression "feet receiving members" is intended to include casters, padded feet, or any other suitable type of feet, as desired.

If desired, the construction may be slightly modified by using a washer at the upper portion in place of the flange integral with the sleeve 1. As shown in Figure 5, the sleeve 1′ may be provided with an upper flange 19 and with a laterally extending flange 20 for positioning an upper washer

21. Further, the shell 7′ may be provided with a beaded portion 22 for positioning the washer and may have its upper edge folded over as indicated at 23, to lock the washer in place. Under these conditions, the metal of the shell 7′ need not be thinned out at its upper end but may be of the same thickness throughout.

In this connection, it is to be noted that although it is preferable to thin the metal for the upper edge of the shell 7 for the construction shown in Figure 1, that nevertheless it is within the scope of this invention to use metal of the same thickness for the entire shell 7, although this does not provide for the ease of positioning and assembling as well as the construction first described.

It will be seen that a very light, strong, and rigid all-metal base has been provided which may be very cheaply made by simple processes.

Further, it is to be noted that the tubular construction followed throughout both for the central body portion and for the legs and feet receiving members, secures the maximum strength for a given weight of material.

Although the invention has been described in considerable detail, such description is intended as illustrative rather than limiting as the invention may be variously embodied and as the scope of such invention is to be determined as claimed.

I claim:

1. A base comprising a central spindle receiving sleeve, a cylindrical metal shell surrounding and supporting said sleeve, and a plurality of tubular downwardly extending arms formed of pressed sheet metal secured to and radiating from said shell, said arms being an elongated rectangle in cross section with their longer sides extending vertically, and vertically disposed tubular members secured to the lower ends of the arms.

2. A base comprising a central spindle receiving sleeve, a cylindrical metal shell surrounding and supporting said sleeve, and a plurality of tubular downwardly extending arms formed of pressed sheet metal secured to and radiating from said shell, said arms being an elongated rectangle in cross section with their longer sides extending vertically, and having overlapping lower edges riveted together.

3. A base comprising a spindle receiving sleeve having a laterally projecting portion at its upper and lower ends, a metal shell surrounding said sleeve and having its upper and lower edges turned over said laterally projecting portions of said sleeve, and a plurality of rectangular sheet metal arms radiating from and secured to said shell.

4. A base comprising a spindle receiving sleeve having a laterally projecting portion at its upper and lower ends, a metal shell surrounding said sleeve and having its upper and lower edges turned over said laterally projecting portions of said sleeve, and a plurality of rectangular sheet metal arms radiating from and secured to said shell, said arms terminating in downwardly opening tubular members.

5. A base comprising a central spindle receiving sleeve, a cylindrical shell surrounding said sleeve and supporting said sleeve, a plurality of sheet metal arms radiating from and secured to said shell, said arms being of rectangular cross section and having their outer ends notched to provide flaps, cylindrical members inserted in said outer ends, the flaps of said arms being wrapped about said cylindrical members and secured thereto.

6. A base comprising a metal shell, a plurality of tubular downwardly extending arms formed of pressed sheet metal radiating from said shell, said arms being an elongated rectangle in cross section with their longer sides extending vertically, and vertically disposed tubular members secured to the lower ends of the arms.

In testimony that I claim the foregoing I have hereunto set my hand at Port Washington, in the county of Ozaukee and State of Wisconsin.

CHARLES J. TRAVERS.