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J. CHAPMAN

3,108,329

BARBELL WEIGHT MOLD ASSEMBLY

Filed Oct. 2, 1961

FIG. 1

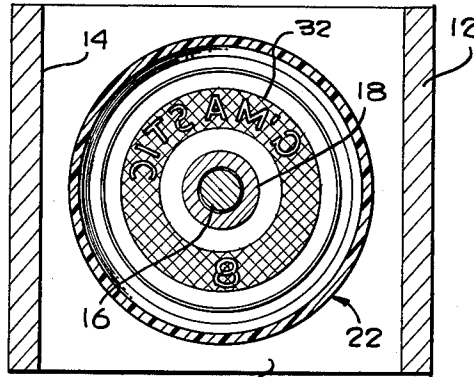
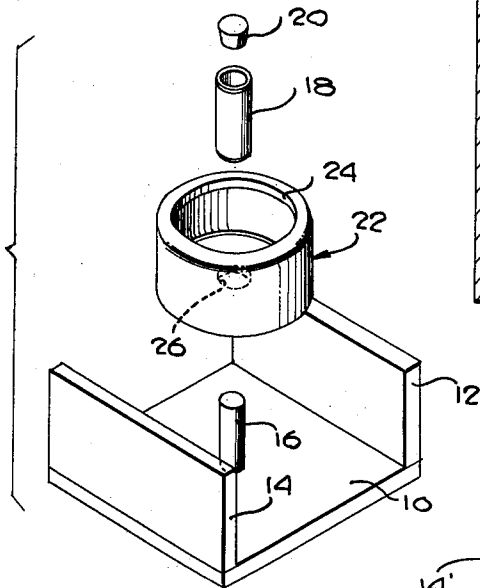


FIG. 4

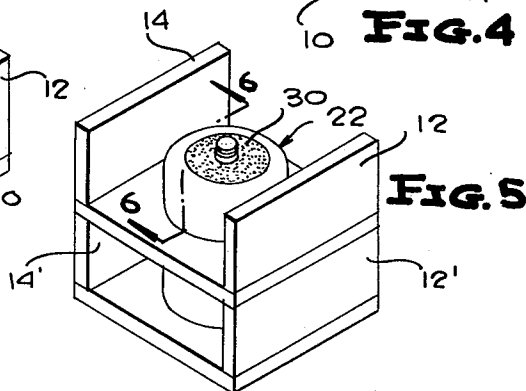


FIG. 5

FIG. 2

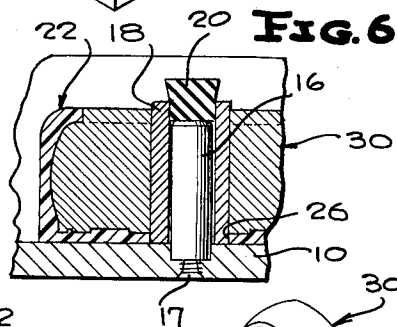
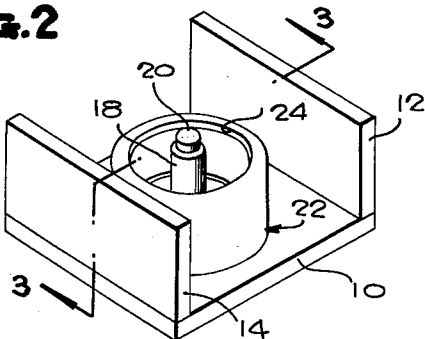


FIG. 6

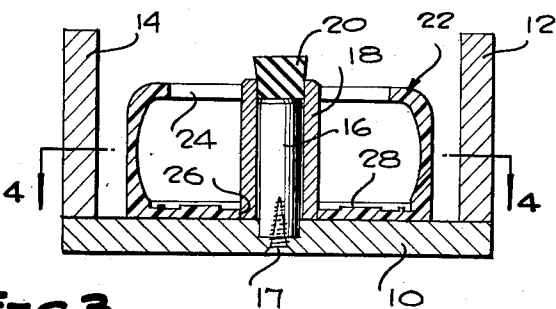
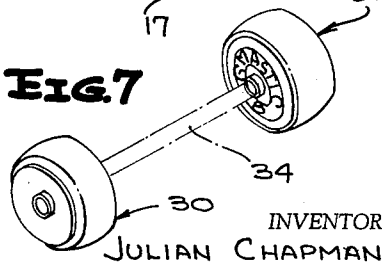


FIG. 3

FIG. 7



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BARBELL WEIGHT MOLD ASSEMBLY

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1 Claim. (Cl. 18—36)

The present invention relates to a mold assembly for forming a barbell weight, and to a method of forming a barbell weight.

A primary object of the present invention is to provide a mold assembly which enables a user thereof to mold or cast a barbell weight with ease, facility, and efficient economical production procedure.

Another object of the invention is to provide a method for casting or molding a barbell weight fabricated of relatively inexpensive material to thereby obviate a major item of expense in the production of a set of barbells, the method being adapted for the production of barbell weights in any desired size and either singly or in quantity, as desired.

A further object is to provide a barbell weight which is simple in structure, one sturdy in construction and having long life characteristics, and one which is economically feasible.

These and other objects and advantages of the invention will be fully apparent from the following description of a preferred embodiment or form of the invention, when considered with the annexed drawing, in which:

FIGURE 1 is a perspective exploded view of the assembly of the present invention,

FIGURE 2 is a perspective view of the components shown in FIGURE 1, shown in assembled condition,

FIGURE 3 is a sectional view taken on line 3—3 of FIGURE 2,

FIGURE 4 is a sectional view taken on line 4—4 of FIGURE 3,

FIGURE 5 is a perspective view of the assembly in a condition of use,

FIGURE 6 is a fragmentary sectional view taken on line 6—6 of FIGURE 5, and

FIGURE 7 is a perspective view of a barbell constructed by the use of the mold assembly of the present invention and according to the method of the present invention.

With reference to the drawing in detail, in which like numerals indicate like parts throughout the several views, the mold assembly of the present invention comprises a base 10 adapted to rest upon a supporting surface. From opposite ends of the base 10 rise walls or uprights 12 and 14. Centrally of the base 10 is a vertical post 16 having its lower end secured to the base 10 by a wood screw 17, or other conventional means.

The assembly provides a sleeve or bushing 18 of a diameter to be slidably received on the post 16 and of a length greater than the height of the post 16, so that when the bushing 18 is demountably received on the post 16 the portion of the bushing 18 adjacent the upper end thereof is above the upper end of the post 16.

A resilient plug 20 is provided for closing the upper end of the bushing 18.

A ring mold, designated generally by the numeral 22, is provided and is fabricated of a resilient material, such as rubber, plastic, or the like. The mold 22 has its

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upper end open, as at 24 in FIGURES 1, 2, and 3, and has a closed lower end wall 28 provided with a central hole 26.

As shown in FIGURES 5, 6, and 7 and represented by the numeral 30, a barbell weight is cast or molded in the space between the bushing 18 and the interior of the mold 22. This is accomplished by first placing the bushing 18 on the post 16, closing the open upper end of the bushing 18 with the plug 20, and then pouring into the mold 22 a settable material in unset condition, and finally after tamping or otherwise making certain that the mold 22 is filled, smoothing the material flush with the open upper end of the mold 22, as shown in FIGURE 6.

Suitable indicia, as at 32 in FIGURE 4, is provided in the inner surface of the mold end wall 28, so that this indicia is transferred or formed in the barbell weight 30, as shown in FIGURE 7.

After the mold cavity has been filled, the assembly is moved to a place of curing or setting of the weight material. One assembly may be stacked on another, as in FIGURE 5, with the walls or uprights 12', 14', forming supports for the base 10 of the upper assembly.

After the material in the mold has set, cured, or hardened according to its composition, the mold 22 is manually stripped from the material and the formed weight is removed from the assembly, retaining the bushing 18 therein. The weight thusly provided is then attachable to a bar 34, as in FIGURE 7. The provision of the plug 20 is to prevent any of the settable weight material from entering the bushing 18 while filling the mold 22.

The settable material may be chosen from any suitable material such as a cementitious material, ceramic material, or the like, as desired and found expedient. No limitation on the choice of material is intended by the words above describing the invention.

An important feature of the invention resides in the relative dimension of the hole 26 in the closed lower end wall 28 of the mold 22. The hole 26 is proportioned so that the sleeve or bushing 18 is a snug and sealing fit therein. As a matter of practicality, the material from which the mold 22 is fabricated permits the stretching of the hole 26 about the lower end portion of the bushing 18 when the bushing 18 has been inserted into the mold and over the peg 16.

While the above description embraces a base 10, uprights 12 and 14, and post 16 as being separate parts secured together, the assembly also contemplates the construction of base, walls or uprights, and post as being molded of any suitable material such as nylon or the like.

The present invention will be seen to provide a barbell weight of inexpensive material, efficiently and economically produced, using the mold and method of the present invention. Obviously the invention is not to be construed as limited to barbell weights of any particular size or shape, and many changes and modifications may be made in the invention without departing from the spirit of the invention as set forth in the appended claim.

What is claimed is:

A barbell weight mold assembly comprising a base, a post rising from said base centrally of the latter, a bushing demountably received on said post and having

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one end resting upon the adjacent part of said base and having the other end above the upper end of said post, a resilient ring mold arranged concentrically about said bushing and having one end open and having the other end closed and resting upon said base, a limited inward overlapping edge on the upper open end of said ring mold, said closed bottom end of said mold having an aperture, the edge of said aperture sized to sealingly receive the lower end of said bushing, said bushing adapted to be retained within and united with settable material to be inserted within the ring mold in unset condition,

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and plug means removably closing the upper end of said bushing.

References Cited in the file of this patent

UNITED STATES PATENTS

495,667	Dunning	Apr. 18, 1893
2,101,015	Anderson	Dec. 7, 1937
2,558,823	Crowley et al.	July 3, 1951
2,980,966	Praeg	Apr. 25, 1961