

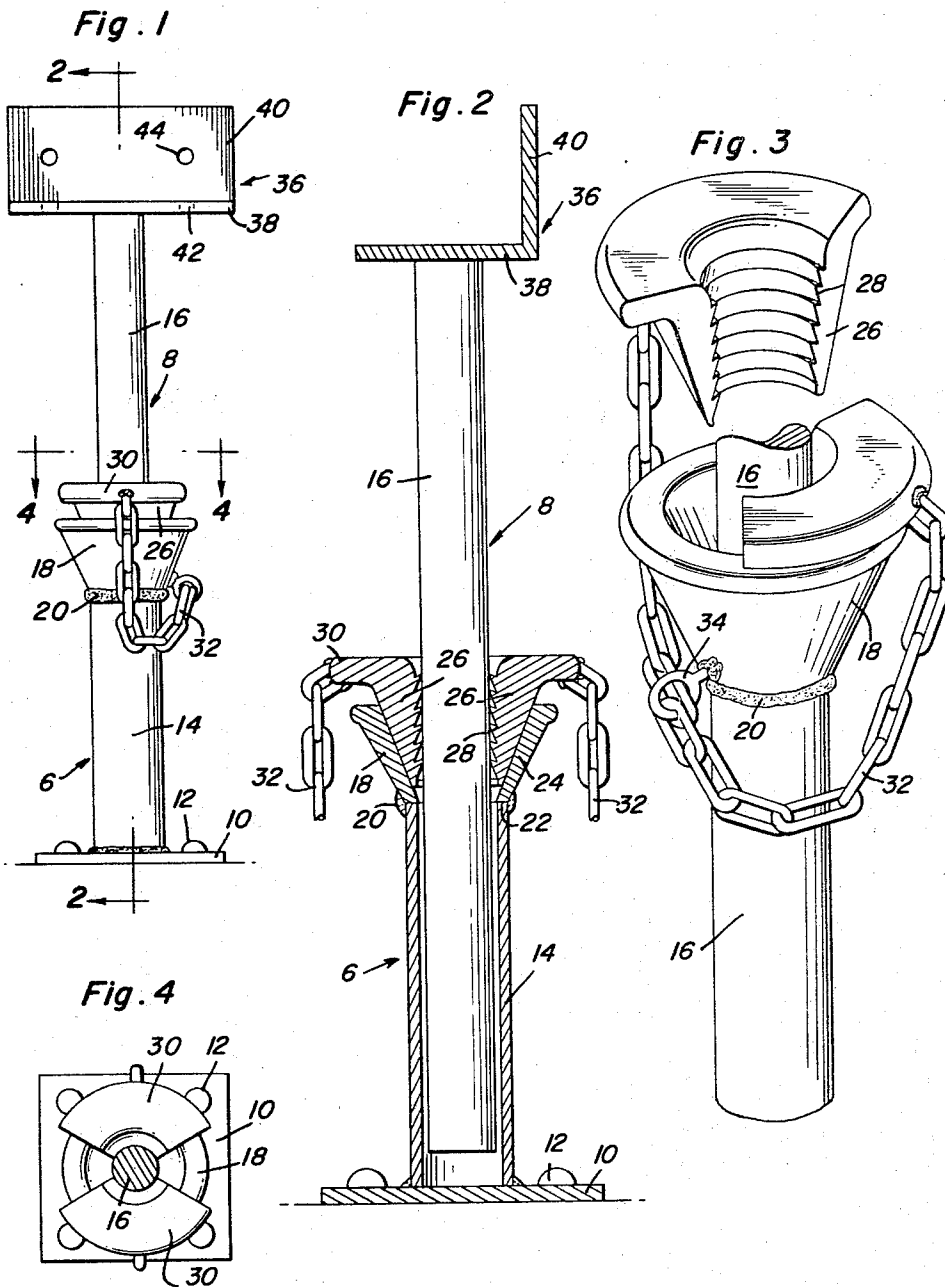
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ADJUSTABLE FORM SHORE

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ADJUSTABLE FORM SHORE

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The present invention relates to certain new and useful improvements in an adjustable jack-like device which is functionally designed and structurally adapted to be aptly and satisfactorily used when the user is called upon to shore up a concrete form while concrete is being poured into the form.

An object of the invention is to structurally, functionally and in other ways improve upon similarly constructed prior art load raising and lowering devices which pertains to the heavy-duty category of work and to provide a satisfactorily performing adaptation which aptly serves the purposes for which it is intended.

A highly significant objective of the concept is to provide a device which is not only adjustable to various heights depending on the size of the shore for the work to be performed but is such in construction that it can be used over and over, is portable for such purposes, is strong and durable, easy to use and lends itself to approved manufacturing economies and manufacturing in such variable sizes as are commonly needed and where such devices are necessary for shoring activities.

Briefly summarized the invention is characterized by a base having a hollow upright, a standard which is fitted telescopically and adjustably into the hollow portion of the upright, said standard being provided with head means on its upper end for accommodation of the component of the concrete form which is to be attached thereto and supported thereby. In addition, readily insertable and removable dogs or retaining wedges are provided and serve to position and maintain the upright in the desired position.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a view in elevation of a concrete form seating, supporting and adjusting shore constructed in accordance with the principles of the present invention.

FIGURE 2 is a view with parts in section and elevation taken on the plane of the section line 2—2 of FIGURE 1.

FIGURE 3 is a fragmentary perspective view showing the essential component parts with portions broken away and appearing in section.

FIGURE 4 is a horizontal section on the plane of the section line 4—4 of FIGURE 1.

One of the two main units of the over-all form lifting, lowering and supporting device or shore is denoted by the numeral 6 and the complementary and companion unit is denoted by the numeral 8. The unit 6 comprises a flat rectangular plate or foot 10 providing a suitable holddown member and which can in practice be secured in place by suitable fastening means 12. This base is provided with a tubular or cylindrical upright 14 which constitutes a component part of the adjustable, that is, vertically liftable and lowerable standard means. For convenience the solid telescoping rod 16 of the unit 8 which fits into the hollow of the upright may be specifically designated as the standard. On the other hand both parts 14 and 16 form a vertically adjustable standard structure. The upper end of the upright is provided with a bell-mouth collar or annulus which is denoted at

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18 and has its lower basal edge fixedly welded or otherwise joined as at 20 to the upper end 22 of the upright. The inwardly and downwardly tapering surface 24 provides a supporting and friction surface for the insertable and removable standard adjusting and clamping wedges. These wedges are sometimes referred to as jaws and in other instances as cleats. There are at least two such insertable and removable dogs and they are denoted by the numeral 26 and are arcuately shaped on exterior sides to slide wedgingly into the binding collar 18. The surfaces which engage the standard are preferably serrated to provide anti-slipping teeth 28 which bite into the surfaces of the standard. Each dog is provided with a flange 30 at its upper end to accommodate one end of the chain 32, said chain being suitably anchored by a fixed eyescrew or bolt 34 on the collar as shown in FIG. 3. The upper end of the rod or standard is provided with an adapter head which is denoted by the numeral 36 and which comprises an angle member, more particularly a horizontal flange 98 which is fixed atop the standard and a vertical companion flange 40. These flanges cooperate in providing a satisfactory cradle or seat for the timber or other component parts (not shown) of the form, that is the form in which the concrete is to be poured. These flanges are provided with holes as at 42 and 44 in FIG. 1 so that they will accommodate screws, nails or other fastenings for temporarily securing the timber to the head 36 or vice versa.

It will be evident that the device made up of the companion units 6 and 8 functions similar to a lifting and lowering jack for load hoisting purposes. It is heavy duty and the rod or standard 16 can be telescopically adjusted within the hollow portion of the upright 14 after which it can be fixed in a position to which it has been adjusted by inserting the adjusting and retaining wedges or jaws 26.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. For use when called upon to shore a concrete form while concrete is being poured in the form, a shore comprising a base provided with an upstanding hollow upright, a standard having a portion thereof telescopically and adjustably mounted in the hollow portion of said upright, said standard being provided at its upper end with a head and said head being angular in cross-section and providing seating and nailing flanges for a timber of a form, said upright being provided at its upper end with a fixed endless conical collar surrounding the standard, and insertable and removable jaws telescopically fitted within the confines of said collar in a manner to embrace an adjacent coacting portion of said standard.

2. For use when called upon to shore a concrete form while concrete is being poured in the form, a shore comprising a base provided with an upstanding hollow upright, a standard having a portion thereof telescopically and adjustably mounted in the hollow portion of said upright, said standard being provided at its upper end with a head and said head being angular in cross-section and providing seating and nailing flanges for a timber of a form, said upright being provided at its upper end with a fixed endless conical collar surrounding the standard, and insertable and removable jaws telescopically fitted within the confines of said collar in a manner to embrace an adjacent coacting portion of said standard, and wherein the jaws are disposed diametrically opposite each other

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and have arcuate cooperating jaw faces to conformingly embrace the coating surface portions of said standard, said faces being provided with anti-slipping teeth.

3. The structure defined in claim 2 and wherein each jaw is provided at its upper end with an outstanding flange, and a safety retaining chain connected at one end to said flange and anchored on said collar.

4. In a shore of the class described, a base plate, a hollow cylindrical upright joined integrally at its lower end to said base plate and rising perpendicularly therefrom, an endless rigid collar fixed to the upper end of said upright, said collar being of truncated conical form with the truncated lower end affixed to the upper end of said upright, and with the inner annulus of said collar providing friction binding surfaces, an insertable and removable and adjustable rod having a lower portion fitting telescopically into the hollow portion of said upright, said rod constituting a standard and being provided on the upper end thereof with a rigid angular timber seating and fastening member, and a pair of diametrically opposite insertable and removable clamping jaws, said jaws being chained to said collar and said jaws having diametrically opposite toothed surfaces engageable with diametrically opposite sides of said standard.

5. In a shore of the class described, a base plate, a hollow cylindrical upright joined integrally at its lower end to said base plate and rising perpendicularly therefrom, an endless rigid collar fixed to the upper end of said upright, said collar being of truncated conical form with the truncated lower end affixed to the upper end of said upright and with the inner annulus of said collar providing friction binding surfaces, an insertable and removable and adjustable rod having a lower portion fitting telescopically into the hollow portion of said upright, said rod constituting a standard and being provided on the upper end thereof with a rigid angular timber seating and fastening member, and a pair of diametrically opposite insertable and removable clamping jaws, said jaws being chained to said collar and said jaws having diametrically opposite toothed surfaces engageable with diametrically opposite sides of said standard, each jaw being of tapered wedge-like form and having an outer convex surface coating with the inner periphery of said collar, an inward arcuate surface, said arcuate surface being provided with the aforementioned teeth and conforming to an adjacent segmental surface of said standard.

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6. An adjustable support comprising an upstanding hollow upright, a base defined at the lower end of said upright, a standard having a portion thereof telescopically and adjustably mounted in the hollow portion of said upright, a supporting head defined at the upper end of said standard, said upright being provided at its upper end with a fixed endless conical collar surrounding the standard, and insertable and removable jaws telescopically fitted within the confines of said collar in a manner to embrace an adjacent coating portion of said standard.

7. The structure defined in claim 6 and wherein said jaws are disposed diametrically opposite each other and have arcuate cooperating jaw faces to conformingly embrace the coating surface portions of said standard, said faces being provided with anti-slipping teeth.

8. In a shore of the class described, a base, a hollow cylindrical upright integral with said base and rising vertically therefrom, an endless rigid collar fixed to the upper end of said upright, said collar being of truncated conical form with the truncated lower end affixed to the upper end of said upright and with the inner annulus of said column providing friction-binding surfaces, an insertable and removable and adjustable rod having a lower portion fitting telescopically into the hollow portion of said upright, said rod constituting a standard and being provided on the upper end thereof with a seating member, and a pair of diametrically opposite insertable and removable clamping jaws, said jaws being chained to said collar and said jaws having diametrically opposite toothed surfaces engageable with diametrically opposite sides of said standard.

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