

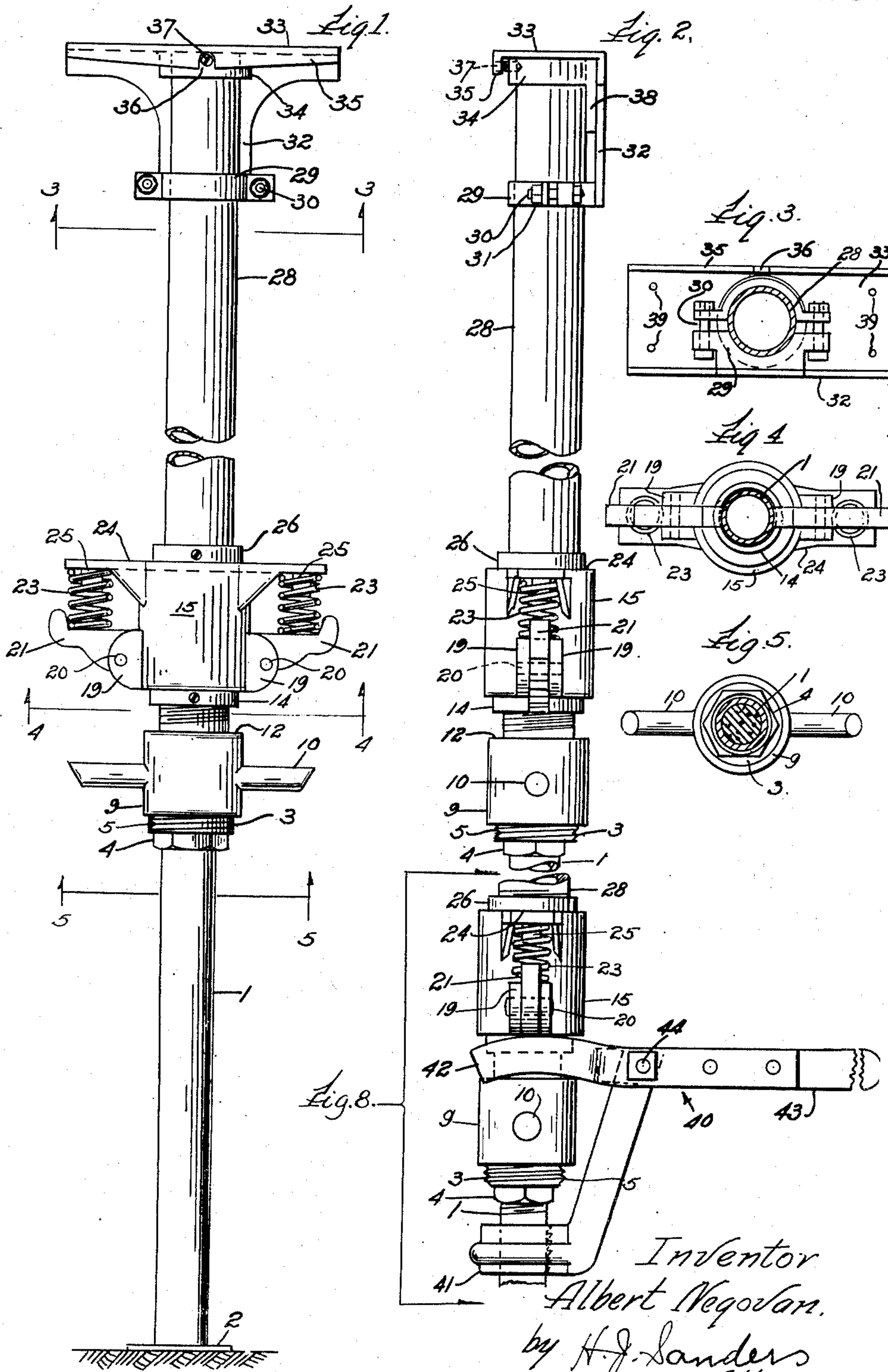
Feb. 6, 1951

A. NEGOVAN
ADJUSTABLE SHORE

2,540,752

Filed Feb. 11, 1949

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 6.

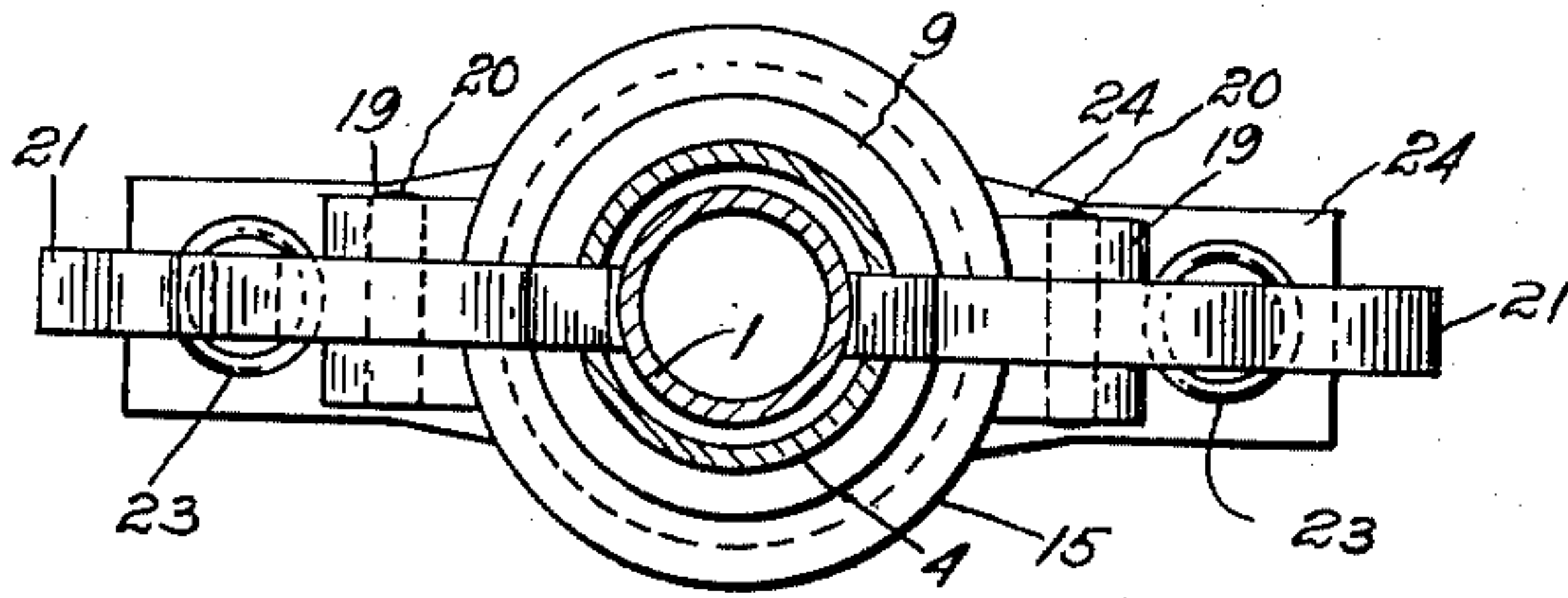
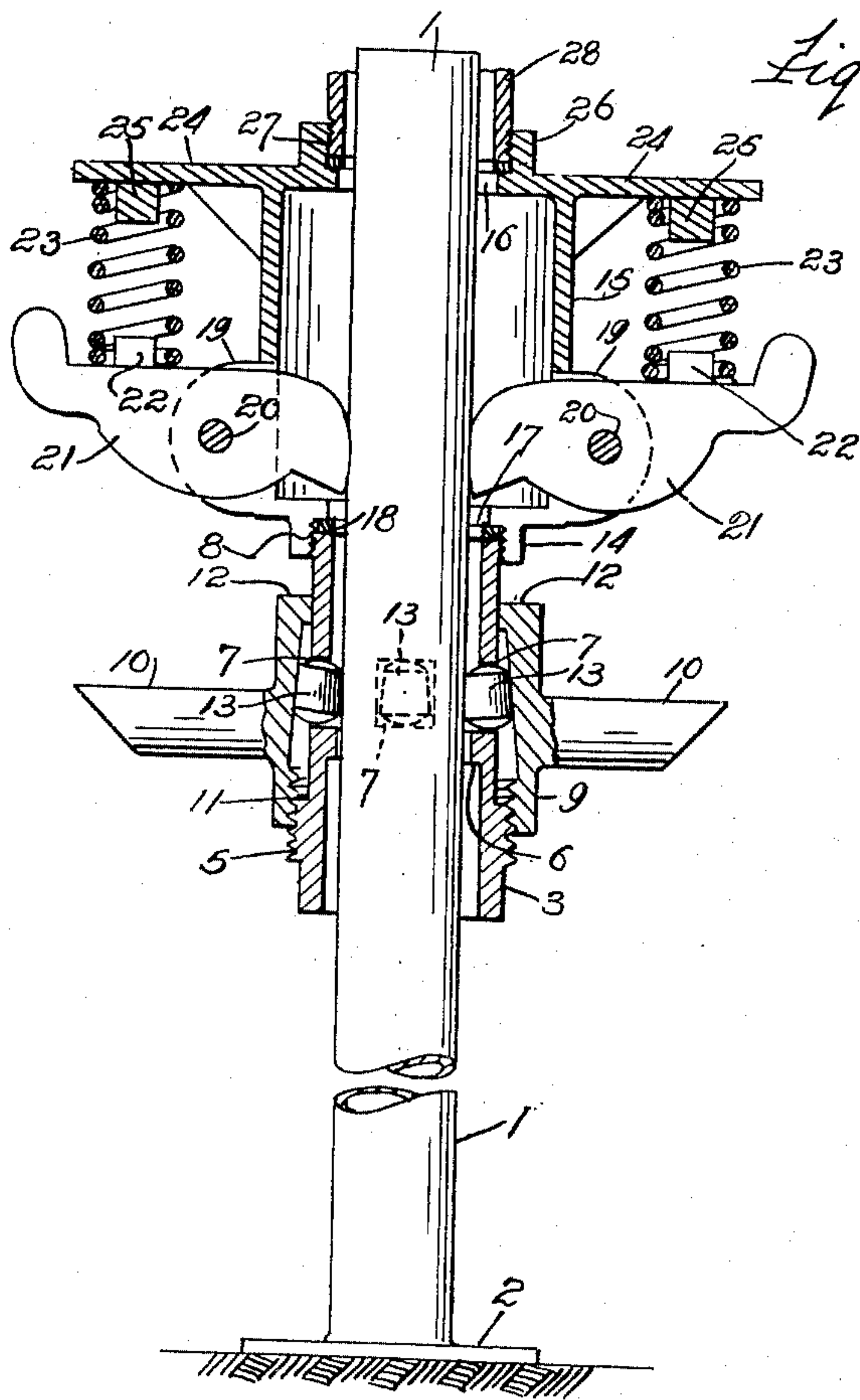


Fig. 7.



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UNITED STATES PATENT OFFICE

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ADJUSTABLE SHORE

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3 Claims. (Cl. 248—354)

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This invention relates to adjustable shores of the type generally used in building construction. One object is to provide a shore having two separate and independent locking means for releasably retaining the shore in adjusted position under load thus assuring a high degree of efficiency and safety in use. A further object is to provide a shore of the type under consideration that may with ease and facility be set to the work and as easily released when desired.

A further object is to provide a shore of the aforementioned type that is of light weight, readily portable and that is very easily assembled and placed in use by one operator and as readily disassembled for shipping, repair or replacement when necessary.

A still further object is to produce a shore of high efficiency having few parts, that is very durable construction, that is inexpensive to manufacture, positive in operation, wear resistant, that may be depended upon to retain an adjusted position and that is so constructed as to distribute the weight of the load equally throughout its structure.

With the foregoing and other objects in view the invention consists in the combination and arrangement of parts hereinafter fully described and pointed out in the claims.

In the drawings:

Fig. 1 is a view in front elevation of a shore in accordance with the instant invention.

Fig. 2 is a side elevational view of the same with the lower portion of the tubular standard omitted.

Figs. 3, 4 and 5 are cross sectional views taken respectively on the lines 3—3, 4—4 and 5—5 of Fig. 1.

Fig. 6 is an enlarged inverted plan view partly in horizontal section of the tubular standard and associated locking mechanism.

Fig. 7 is a vertical approximately central sectional view through the locking mechanisms with the associated tubular standard in elevation, and,

Fig. 8 is a fragmentary view of the shore showing the application of a jack adjusting-lever that may be employed in making adjustments.

The reference numeral 1 denotes a tubular standard or pipe preferably of metal of uniform diameter throughout and provided with a base plate 2, said standard extending freely through an elongated tapered yoke 3, the lower end of said yoke being the larger, this end being preferably hexagonal in exterior shape for wrench engagement; the yoke immediately above said end 4 having its wall thickened somewhat and formed

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exteriorly with a few screw threads 5, said yoke at a point spaced a short distance from said threads formed with an inner flange 6 of but slightly greater diameter than the diameter of the standard 1.

The yoke at the upper side of the flange 6 is formed with a plurality of preferably slightly oblong perforations 7 of a common size, four in number, in a common horizontal plane spaced equally one from the other, the yoke terminating a short distance above the perforations 7, this termination provided exteriorly with screw threads 8. Received about the yoke 3 is a nut 9 provided with handles 10 and formed interiorly at its lower end only with screw threads 11 for engagement with the threads 5 of the yoke, the bore of the nut being diminished from its threaded to its non-threaded end, the latter end thickened to form the annulus 12 for engagement with the upper end of the yoke 3. Received in the perforations 7 are the tapered roller bearings 13 that, as the nut 9 is rotated in one direction, are bound thereby tightly against the standard 1.

Releasably engaging the screw threads at the upper end of the yoke 3 is the interiorly threaded surface of the annular extension 14 desirably integral with the lower end of the carriage 15 the body portion of which is cylindrical and of a materially greater diameter than the standard 1 that extends freely through perforations 16, 17 in the cylinder end walls, a gasket 18 being disposed upon the upper end of the yoke between same and the shoulder formed at the juncture of the extension 14 and the perforation 17.

The cylindrical body portion of the carriage 15 and the extension 14 are slotted in alignment with each other and extending outwardly from the walls of said slots are ears 19 in pairs, each pair of ears having fulcrumed between its members, upon a pin 20 carried thereby, a jaw 21, the free ends of said jaws being upturned, the inner ends of said jaws being cam-shape for releasable sharp impingement with the standard 1 to anchor same firmly against movement in one direction relative to the carriage, the top edges of said jaws being flat and each carrying a lug 22 upon the opposite side of pin 20 with relation to the jaw inner ends, each lug receiving one end of a stout expansion coil spring 23 which at its opposite or upper end abuts against a rib 24 extending from the upper end of the cylindrical body 15; said springs receiving lugs 25 carried by said ribs, said springs yieldingly forcing the outer ends of jaws 21 away from said ribs.

A second annular extension 26 of carriage 15

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similar to the extension 14 is formed with threads 27 in engagement with the screw threads of the pipe 28 that telescopically receives the upper end of the standard 1, said pipe 28 having adjustably and removably secured to its upper end by sectional yoke 29, bolts 30 and nuts 31, the shank 32 of platform 33, said sectional yoke carried by said platform shank, said platform formed with a depending annulus 34 of a diameter to snugly receive the upper end of pipe 28, said platform formed with a downturned flange 35 formed with a recess 36 for a headless screw 37 carried by the annulus 34, said screw when partly disposed in the flange recess 36 preventing a rotative movement of the platform upon the pipe, said annulus formed with a shank 38 disposed between the pipe 28 and platform shank 32 to space said members properly apart. The platform is formed with small perforations 39 to receive nails or like fastening means to permit the platform to be secured to the work.

In operation the shore is placed beneath the load to be raised with the base plate 2 resting upon the ground or other support. The handles 10 are now moved in rotary manner to loosen the grip of the tapered roller bearings 13 upon the standard. The free ends of the jaws 21 are now manually raised to release the jaw inner ends from binding engagement with the standard and the pipe 28 with the two locking mechanisms raised about the standard 1 to the desired point into contiguity with the load and further like adjustment is effected by applying the jack adjusting-lever 40, the jaw 41 obtaining purchase upon the standard and the load-engaging end 42 engaging the locking mechanism which is raised thereby as the handle 43 is used to operate the device upon its fulcrum 44 and so raise the gripping mechanism, the end 42 of the lever engaging the lower end of the body portion of the carriage 15 to effect the lift. When the carriage is released from the lift device the springs 23 will force the jaws 21 into binding engagement again with the standard and the weight of the load upon the platform will increase the bite of the jaws. The handles 10 are now moved to lower the nut 9 to bind the tapered roller bearings firmly against the standard again.

What is claimed is:

1. In an adjustable shore, two telescopically as-

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sociated shore parts, a carriage secured to the outer shore part freely receiving the inner shore part, jaws carried by said carriage in releasable gripping engagement with said inner shore part, a tapered yoke carried by said carriage freely receiving said inner shore part, a tapered nut adjustably carried by said yoke, and bearing means connecting said nut and yoke for positive gripping engagement with said inner shore part when said nut is adjusted upon said yoke in one direction.

2. In an adjustable shore, two telescopically associated tubular shore parts, a carriage secured to the outer shore part freely receiving the inner shore part, jaws carried by said carriage yieldingly gripping said inner shore part when said carriage is moved in one direction and positively gripping said inner shore part when said carriage is urged in the opposite direction, a yoke carried by said carriage freely receiving said inner shore part, and releasable gripping means for said inner shore part operatively associated with said yoke.

3. In an adjustable shore, two telescopically associated tubular shore parts, a carriage secured to the outer shore part freely receiving the inner shore, jaws carried by said carriage yieldingly gripping said inner shore part when said carriage is moved in one direction and positively gripping said inner shore part when said carriage is urged in the opposite direction, a tapered yoke carried by said carriage freely receiving said inner shore part, a tapered nut adjustably carried by said yoke, and tapered bearings connecting said nut and yoke for positive gripping engagement with said inner shore part when said nut is adjusted in one direction.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,782,903	Markham	Nov. 25, 1930

FOREIGN PATENTS

Number	Country	Date
456,467	Great Britain	Nov. 10, 1936