

No. 696,499.

Patented Apr. 1, 1902.

T. E. J. SCHAIBLY.  
WAREHOUSE TRUCK CASTER.  
(Application filed July 23, 1901.)

(No Model.)

2 Sheets—Sheet 1.

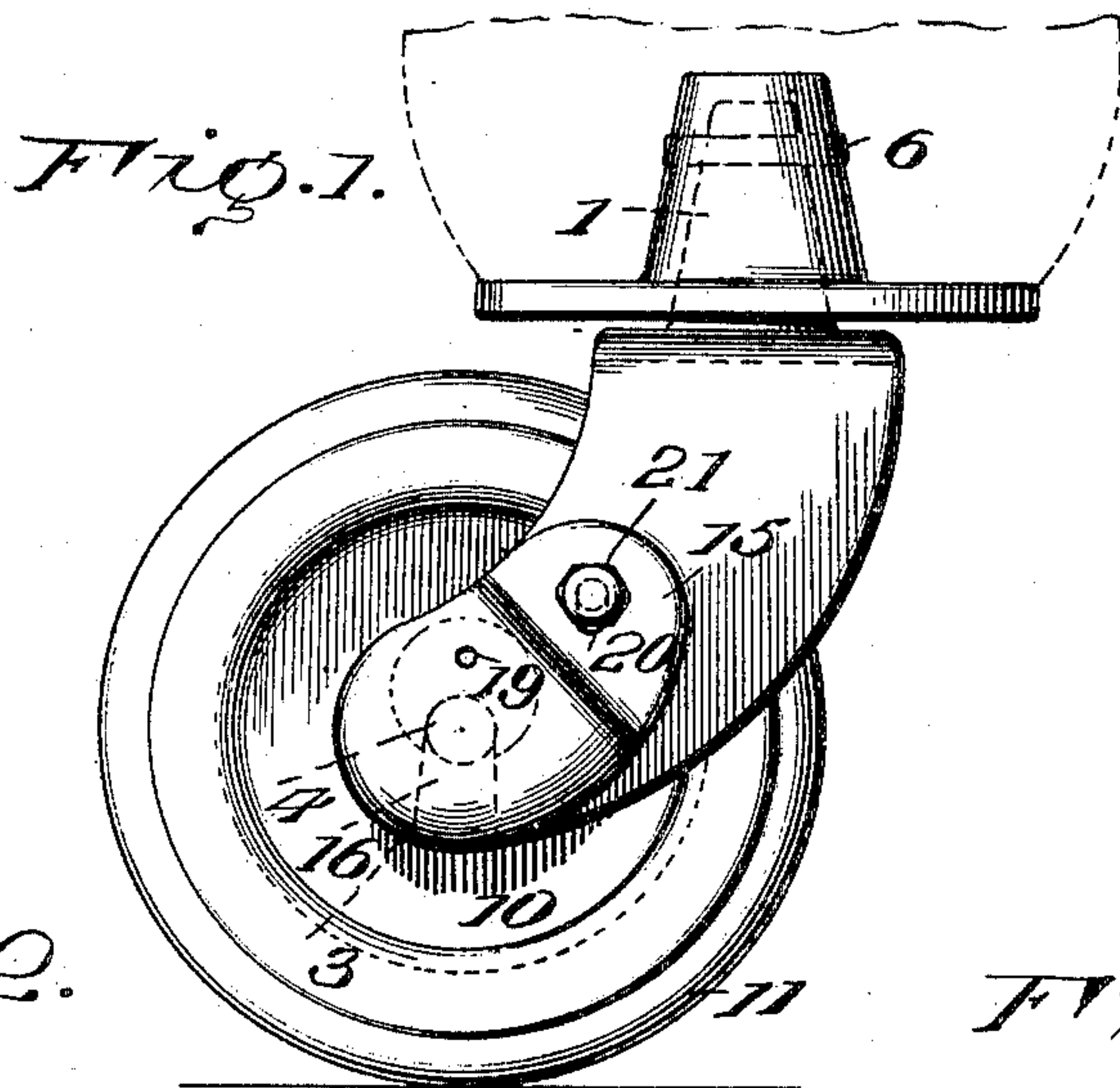


Fig. 2.

Fig. 3.

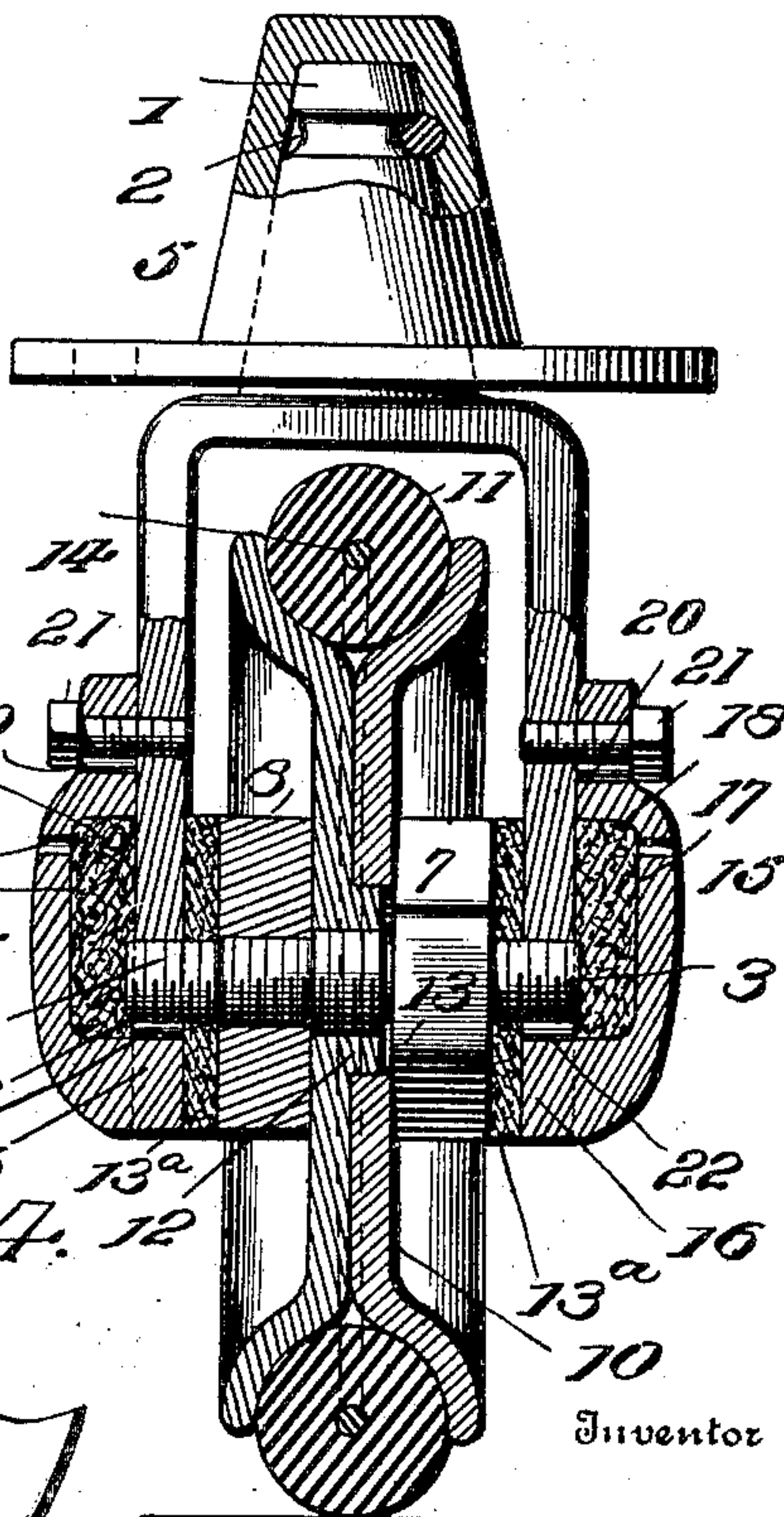
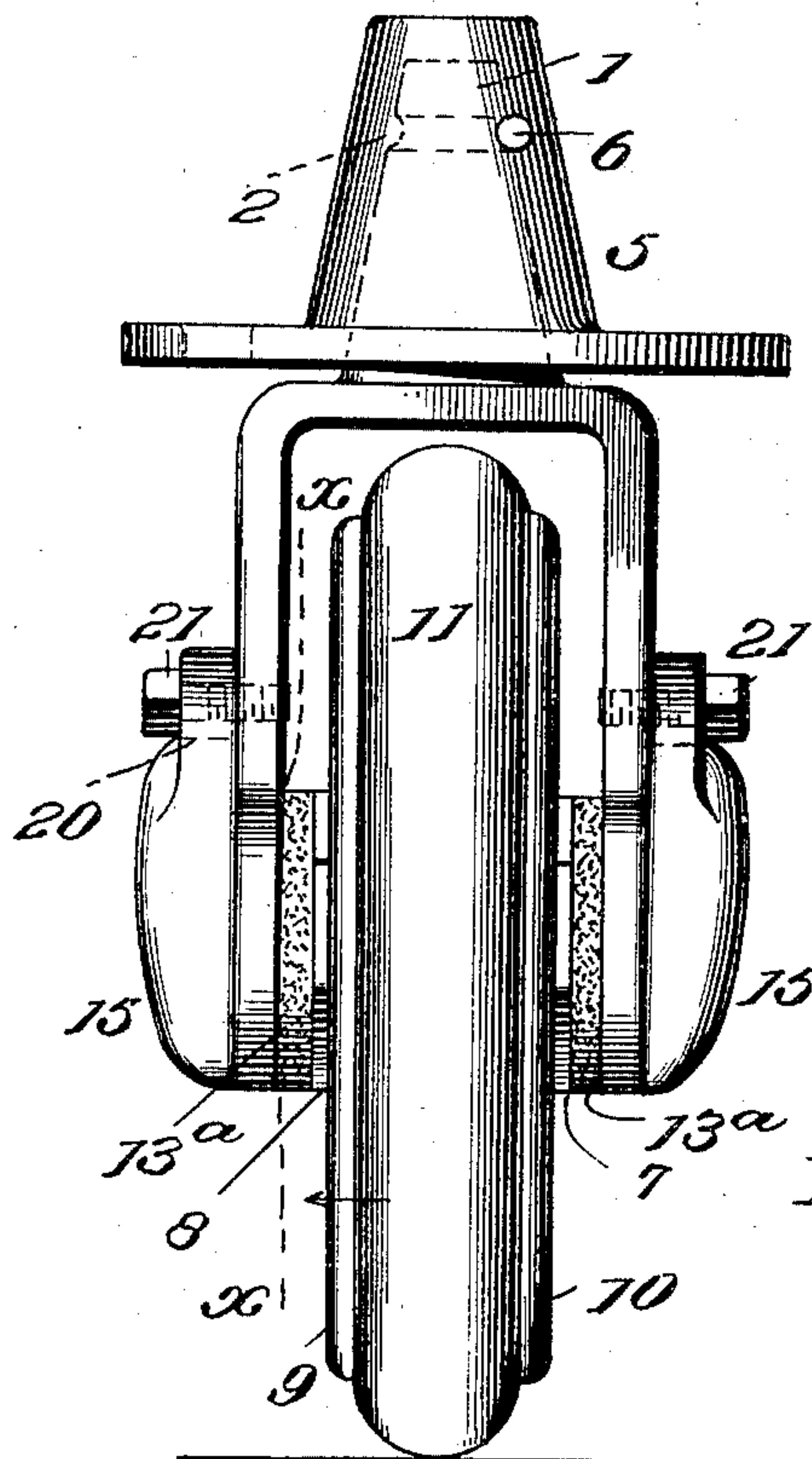
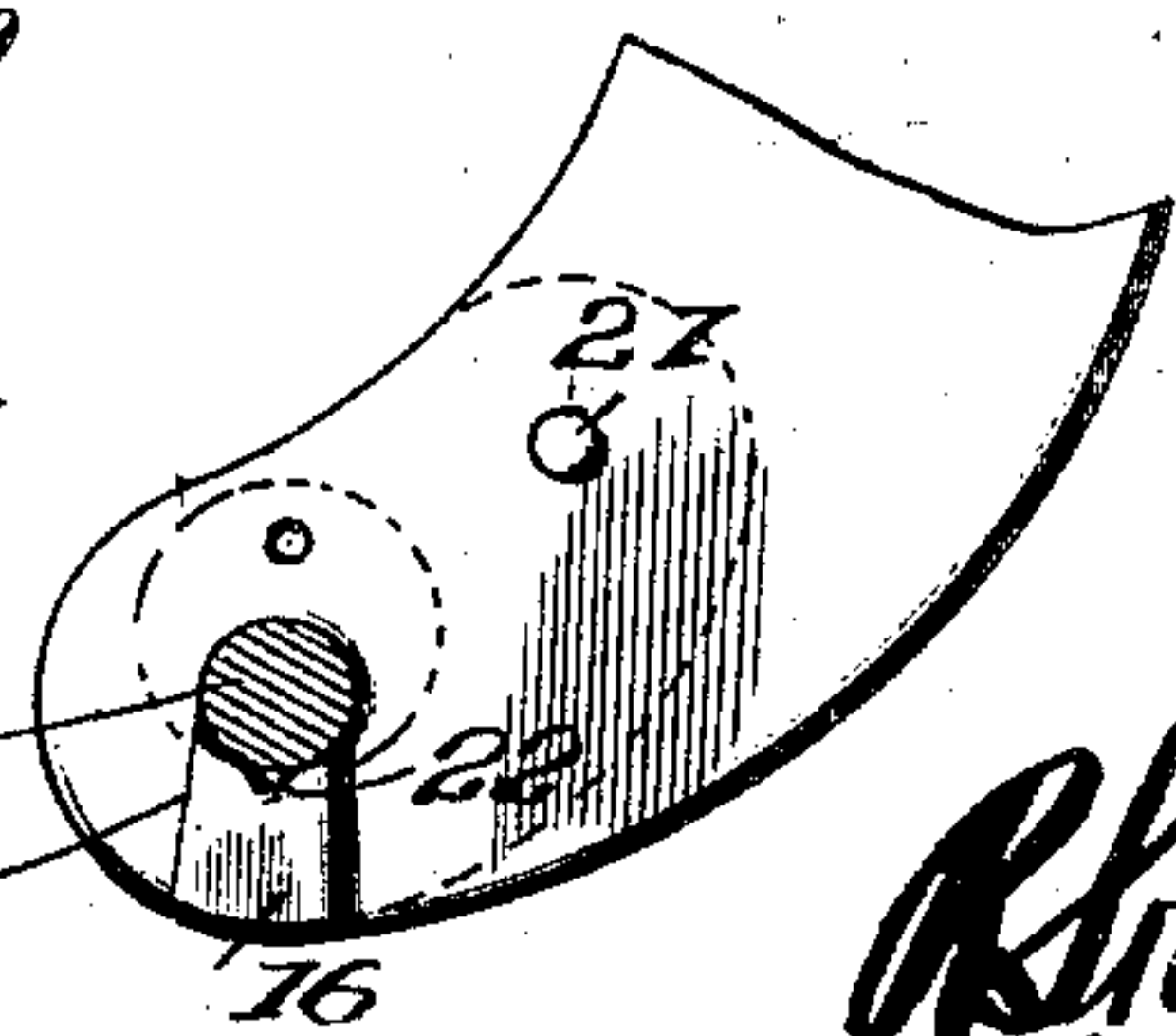


Fig. 4.



Witnesses

*John Hurie*  
*Gladys L. Thompson*

Inventor

*T. E. J. Schaibly*

*R. H. Racey*

Attorneys

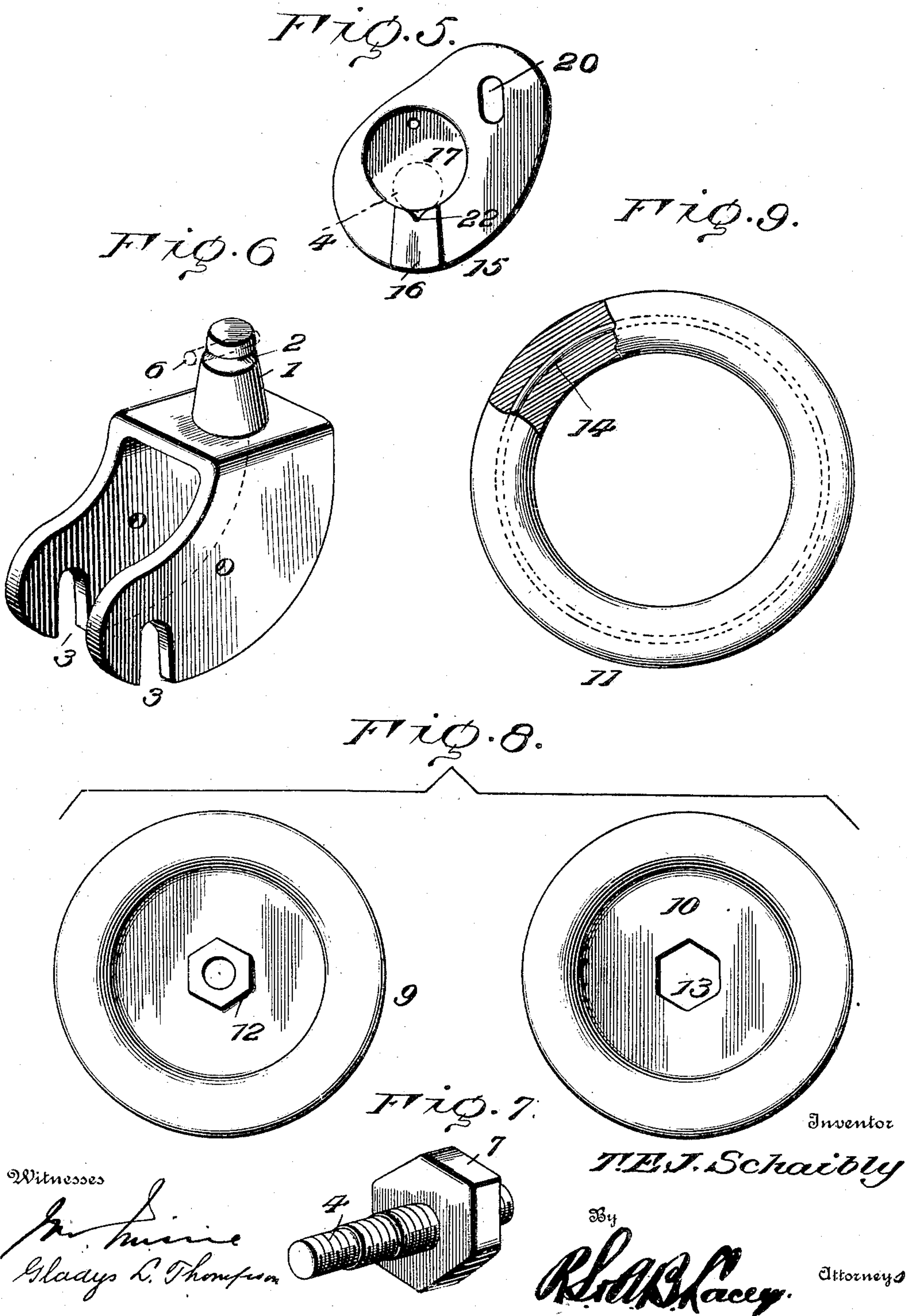
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# UNITED STATES PATENT OFFICE.

THEOBALD E. J. SCHAIPLY, OF BROOKLYN, NEW YORK.

## WAREHOUSE-TRUCK CASTER.

SPECIFICATION forming part of Letters Patent No. 696,499, dated April 1, 1902.

Application filed July 23, 1901. Serial No. 69,407. (No model.)

*To all whom it may concern:*

Be it known that I, THEOBALD E. J. SCHAIPLY, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Warehouse-Truck Casters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a caster for trucks and like carriers requiring a heavy and strong rolling support capable of withstanding hard usage, the purpose being durability, easy and noiseless running, and self-lubrication.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a caster embodying the invention. Fig. 2 is a front view. Fig. 3 is a view similar to Fig. 2, parts being broken away. Fig. 4 is a section on the line X X of Fig. 2 looking in the direction of the arrow. Fig. 5 is a detail view of the inner side of a cap-plate. Fig. 6 is a detail perspective view of the caster-frame. Fig. 7 is a detail view of the axle. Fig. 8 is a detail view of the parts of the caster-wheel as seen from the inner side. Fig. 9 is a detail view of the tire.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The frame of the caster is forked at its lower end and is provided at its upper end with a tapering stem 1, having an annular groove 2 near its upper end. The forked sides curve and have notches 3 extending upward a short distance from their lower edges to receive the ends of the axle 4. A tapering socket 5 receives the tapering stem

1 and has an outer flange at its lower end to support the socket in the timber of a truck or other article to which the caster may be applied. A pin 6 is supported in an opening provided in the socket 5 and entering the groove 2 of the stem, so as to hold the latter in place without interfering with the free rotation of the frame to admit of the caster-wheel adapting itself to the direction of movement of the truck or other device supported by means of the caster.

The axle 4 is provided near one end with a flange 7, preferably formed therewith, and the middle portion is screw-threaded to make positive connection with a member of the wheel and the clamp-nut 8. The caster-wheel is composed of the two parts or disks 9 and 10, which have their edge portions oppositely curved to form a seat when the two parts are together to receive the tire 11. The part 9 is formed with an angular boss 12, which is internally threaded to make screw-thread connection with the axle 4, and the part 10 is formed centrally with an angular opening 13 to receive the angular boss 12, so as to prevent turning of the parts when brought together and clamped. When assembling the parts, the disks 9 and 10 are placed together with the tire 11 between their outer deflected edge portions and are slipped upon the axle, the disk 9 being screwed home upon the axle 4 until the disk 10 is forced against the flange 7, after which the nut 8 is screwed upon the axle to lock the disks and clamp them between it and the flange 7. The boss 12, fitting in the opening 13, prevents relative turning of the disks. The end portions of the axle projecting beyond the nut 8 and flange 7 form journals or trunnions which enter the notches 3 in the forked sides of the caster-frame. The parts are constructed to leave a space between the inner sides of the fork members and the parts 8 and 9 when the caster-wheel is in place, and these spaces are occupied by washers 13<sup>a</sup>, of felt or like absorbent material, so as to obviate noise and retain a lubricant.

The tire 11 is preferably of rubber and is made heavy in order to withstand wear and is reinforced by a metal ring 14, embedded therein. This tire, with the metal ring 14 in place, is practically non-stretchable, hence the



necessity and advantage of constructing the wheel of sections which are separable to admit of placing the tire between their oppositely-deflected edge portions. The tire is prevented from lateral displacement by being seated in the annular groove formed by the deflected edge portions of the disks 9 and 10 when united or clamped.

Cap-plates 15 are secured to the outer sides of the fork members of the caster-frame and have offstanding bearing-lugs 16 at their lower ends to enter and close the lower ends of the notches 3, the upper ends of the bearing-lugs being depressed to form a snug fit against the journals or trunnions of the axle 4. The inner sides of the cap-plates 15 are recessed, as shown at 17, to receive felt or absorbent material 18, saturated with a lubricant, the oil being supplied to the absorbent material through openings 19, formed in the plates 15 and in communication with the upper ends of the depressions 17. An oblong opening 20 is formed in the upper end of each cap-plate to receive the fastening 21, employed for securing each cap-plate to the respective fork side of the caster-frame. The elongated openings 20 provide for vertical adjustment of the cap-plates to take up wear between the axle and the fork sides, thereby preventing rattling and unsteady movement. A groove 22 is formed in the upper end of each bearing-lug 16 to distribute the oil upon the journals and direct it to the washers or absorbent material 13<sup>a</sup>.

Having thus described the invention, what is claimed as new is—

1. In a caster-frame having notches in its forked sides, a caster-wheel having the ends of its axle fitted in the said notches, and cap-plates secured to the forked sides and provided with bearing-lugs to close the open ends of the notches and prevent displacement of the caster-wheel, substantially as set forth.

2. In a caster, a forked frame having its sides notched in their edges, a caster-wheel having its journals fitted in the said notches, cap-plates having offstanding lugs to enter and close the open ends of the said notches, and means for adjustably connecting the cap-

plates to the caster-frame, substantially as set forth.

3. In combination, a forked caster-frame, a caster-wheel journaled in the fork members thereof, absorbent washers placed between the sides of the caster-wheel and the adjacent sides of the fork members, cap-plates attached to the outer sides of the said fork members, and absorbent washers between the cap-plates and the fork sides, substantially as described.

4. In combination, a forked caster-frame, a caster-wheel journaled in the fork members thereof and having its journals extending through the outer faces of the said fork members, cap-plates attached to the fork members and recessed at their inner sides to form oil-chambers, the recesses being in communication with the bearings of the fork members for supplying lubricant thereto, and absorbent material in the said recesses and extending across the journal-bearings of the caster-wheel, substantially as described.

5. In combination, a forked frame having its sides notched, a caster-wheel having its journals fitted in the said notches, plates secured to the forked frame and having offstanding lugs to close the open ends of the notches and having recesses in their inner sides, and grooves in the ends of the said lugs in communication with the said recesses, substantially as set forth.

6. In combination, a forked frame having its sides notched, a caster-wheel having its journals fitted in the said notches, absorbent material between the forked sides and the caster-wheel, cap-plates secured to the said forked sides and having bearing-lugs closing the open ends of the notches and grooved in their ends, said plates having their inner sides recessed, and absorbent material fitted in the recesses of the cap-plates, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THEOBALD E. J. SCHAIPLY. [L. S.]

Witnesses:

CHARLES A. JOHNSON,  
LOUIS V. JOHNSON.