

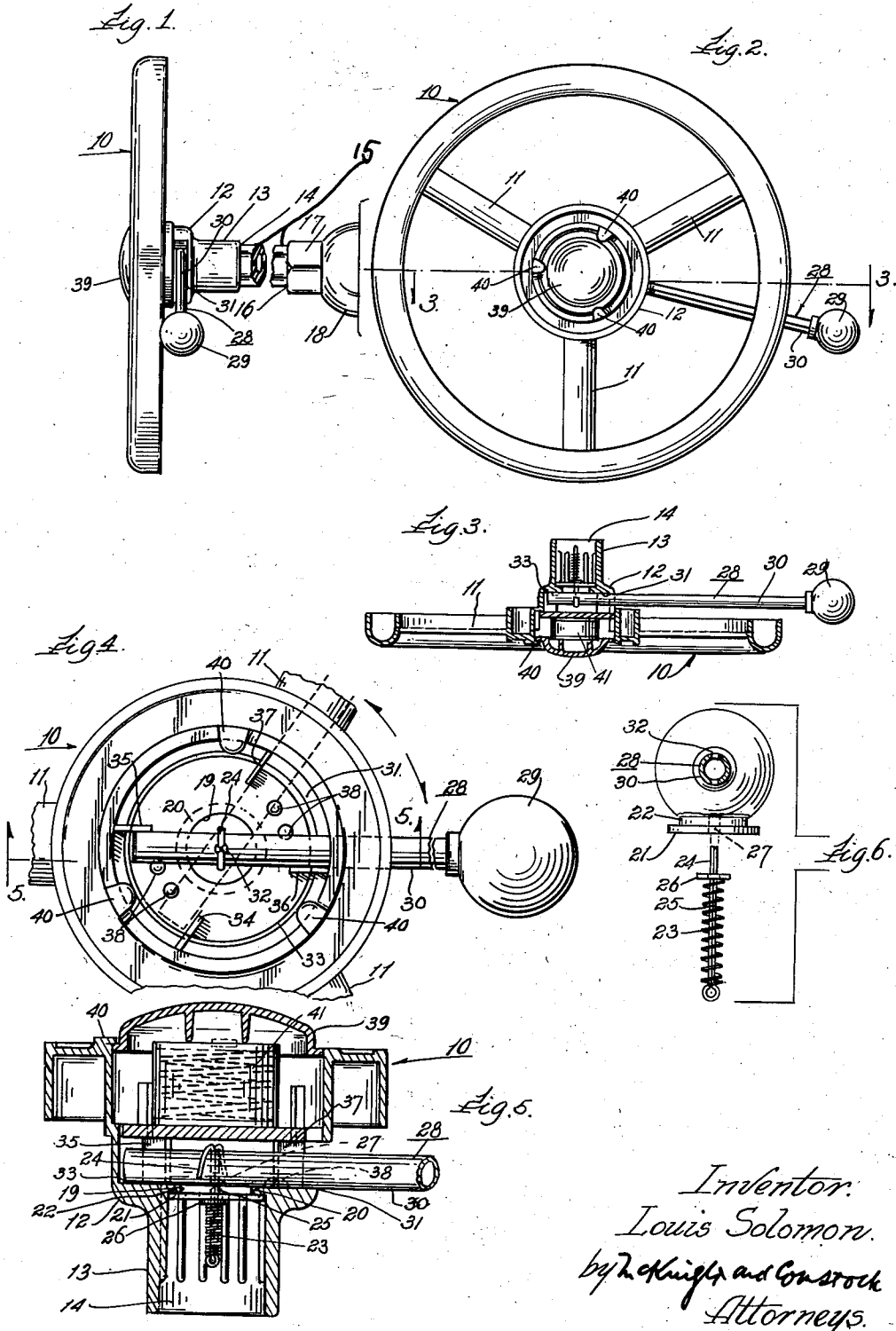
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GEAR SHIFT FOR TOY STEERING WHEELS

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GEAR SHIFT FOR TOY STEERING WHEELS

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1 Claim. (Cl. 46—1)

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This is an improvement on the gear shift on the toy set forth in my Patent No. 2,486,219 of October 25, 1949 on Toy Steering Wheel and Gear Shift.

Among the objects of my invention is to provide an improved gear shift construction for a toy removably attachable to the instrument panel of an automobile so as to simulate the steering and gear shifting of the automobile, without danger to the car or the user of the toy.

A child greatly enjoys imitating the movements of his father in driving an automobile. It is always a great temptation for the child to take hold of the steering wheel and thus possibly cause injury and damage. With my device the child may copy the movements of his father or other driver in both steering the car and in shifting of the gears. This will satisfy the child's desire for play, and at the same time afford him instruction, to some degree, in driving.

My toy is also adapted to be attached to other surfaces such as a bath tub, so that the child may imagine that he is driving a motor boat with desired turns and gear shiftings. My toy may also be removably attached to the floor so that the child may stand and imagine he is driving a tractor. There are other uses for my toy, of a similar nature, which may afford the child safe play and constructive education.

My improved gear shift has its construction housed within the hub rather than my previous construction which was attached to the exterior of the hub by a strap.

My invention also contemplates such other objects, advantages and capabilities which will later more fully appear, and which are inherently possessed by my invention.

While I have shown in the attached drawings preferred embodiments of my invention, yet it is to be understood that the same are susceptible of modification and change without departing from the spirit of my invention.

Referring more particularly to the drawings, Fig. 1 is a side elevational view of my steering wheel with the post broken away; Fig. 2 is a front elevational view; Fig. 3 is a detailed section-view on line 3—3 of Fig. 2; Fig. 4 is an enlarged view of the hub with the cap removed to show the shifting means; Fig. 5 is a detailed sectional view on line 5—5 of Fig. 4 and Fig. 6 is a sectional view of the disassembled parts shown therein.

Referring now to the embodiment selected to illustrate my invention, I provide a steering wheel 10, circular in shape and having spaced spokes

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11. The hub 12 has a reduced portion 13 with an opening 14 therein to removably receive the upper end of post 15. The lower end of post 15 is removably fitted in opening 16 of upper portion 17 of suction cup 18.

There is an opening 19 between the bottom of hub 12 and the reduced portion 13 surrounded by a circumferential flange 20. A disc 21 has a raised central portion 22, so that when disc 21 is positioned against flange 20, central portion 22 is within opening 19. A coiled spring 23 is placed on the legs 24 of cotter pin 25 and a metal washer 26 is also positioned on said legs 24 at the top of coiled spring 23. The legs 24 extend through a central opening 27 in disc 21.

A gear shift lever 28 has a knob 29 on the outer end of rod 30. The inner end of rod 30 extends through slot 31 in the side wall of hub 12 into the interior of hub 12. Adjacent the inner end of rod 30 there is a hole 32 through which extend the legs 24 of cotter pin 25. The legs 24 are peened over to hold the inner end of said rod 30 within hub 12.

Extending upwardly from the floor 33 of hub 12 are spaced partitions or stops 34 and 35 and opposite thereto spaced partitions 36 and 37. Rod 30 in one position bears against partitions 34 and 37 and when moved as far as possible in the opposite direction bears against partitions 35 and 36. Between partitions 34 and 35 and also between partitions 36 and 37 the floor 33 of hub 12 has a pair of spaced raised portions or knobs 38 which temporarily resist the movement of rod 30 and which may be over-ridden by the exertion of greater force on rod 30, thus simulating the feeling to the user of shifting from one gear to another.

A cap 39 is adapted to close the open top of hub 12 and to be removably held in position by integral spaced clip members 40 on the hub. A collapsible bellows 41 is positioned within the hub 12 and is contacted by a downwardly extending portion of cap 39.

Having thus described my invention, I claim:
A gear shift for a toy steering wheel adapted to be removably attached to any substantially flat surface of sufficient area to receive it, comprising a wheel having a hub, said hub having a floor, an open top and side walls with an opening therethrough, a gear shift lever with its inner portion extending through said opening into said hub, said gear shift lever having a hole therethrough adjacent its inner end, a disc positioned below the floor of said hub, a cotter pin having a pair of legs extending through said disc and

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said floor of said hub, a coiled spring mounted on said cotter pin below the floor of said hub, the legs of said cotter pin extending through said hole in said gear shift lever and peened over on said upper shift lever, a pair of upper and lower stops extending above said floor of said hub positioned at an angle opposite another pair of upper and lower stops extending above said floor of said hub so that the gear shift in one extreme position bears against the lower stop of one pair and the upper stop of the other pair, and in the other extreme position bears against the lower stop of one pair and the upper stop of the other pair, said floor having a pair of raised portions between each pair of upper and lower stops over

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which said gear shift lever may ride to simulate the feeling of actual gear shifting, and a removable cover for the open top of said hub.

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

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