

(No Model.)

2 Sheets—Sheet 1.

R. H. LAHEY.
ROLLER SKATE.

No. 538,526.

Patented Apr. 30, 1895.

Fig: 1.

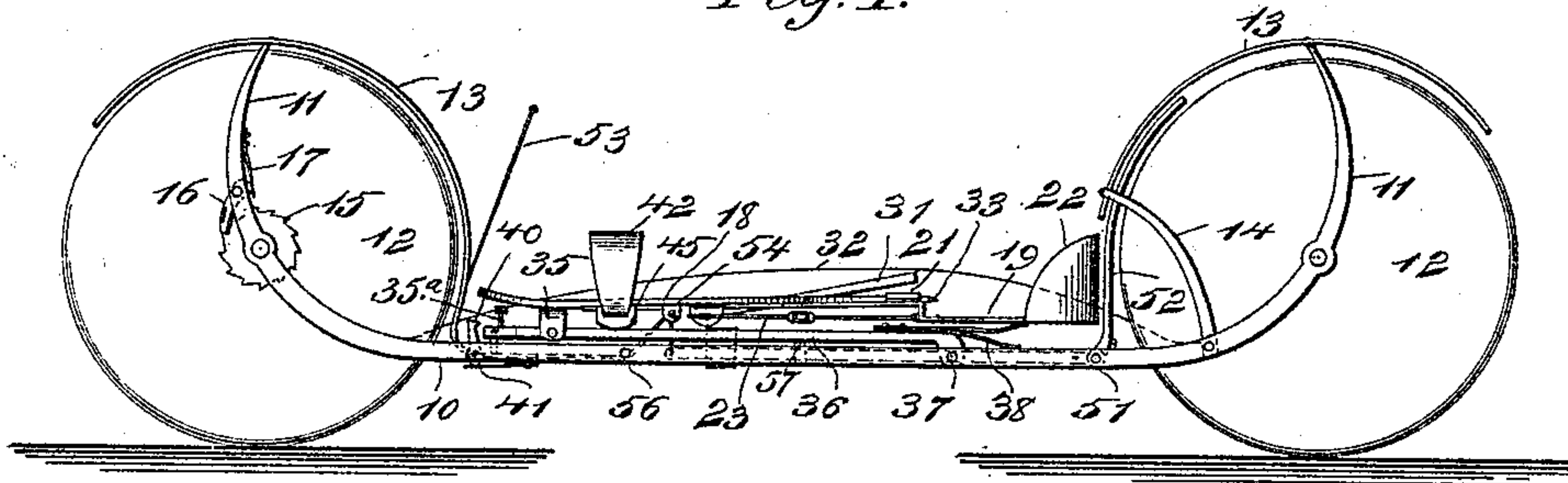


Fig: 2.

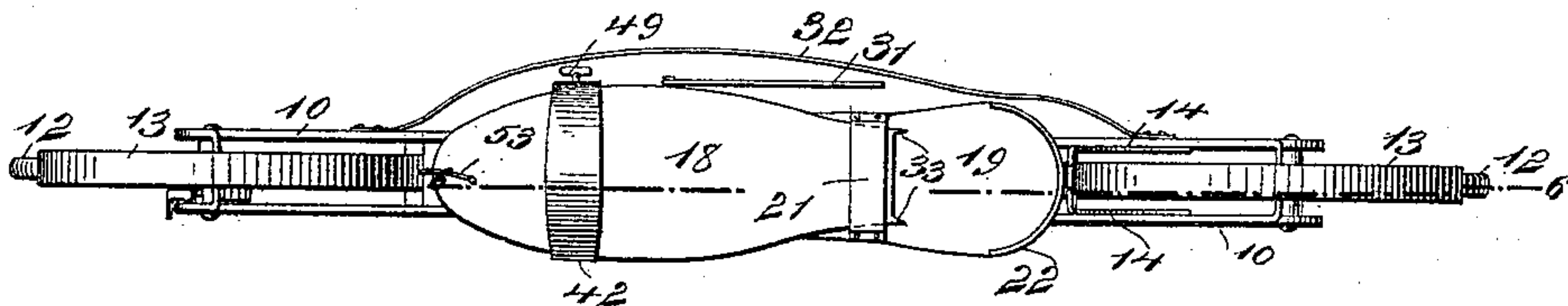


Fig: 3.

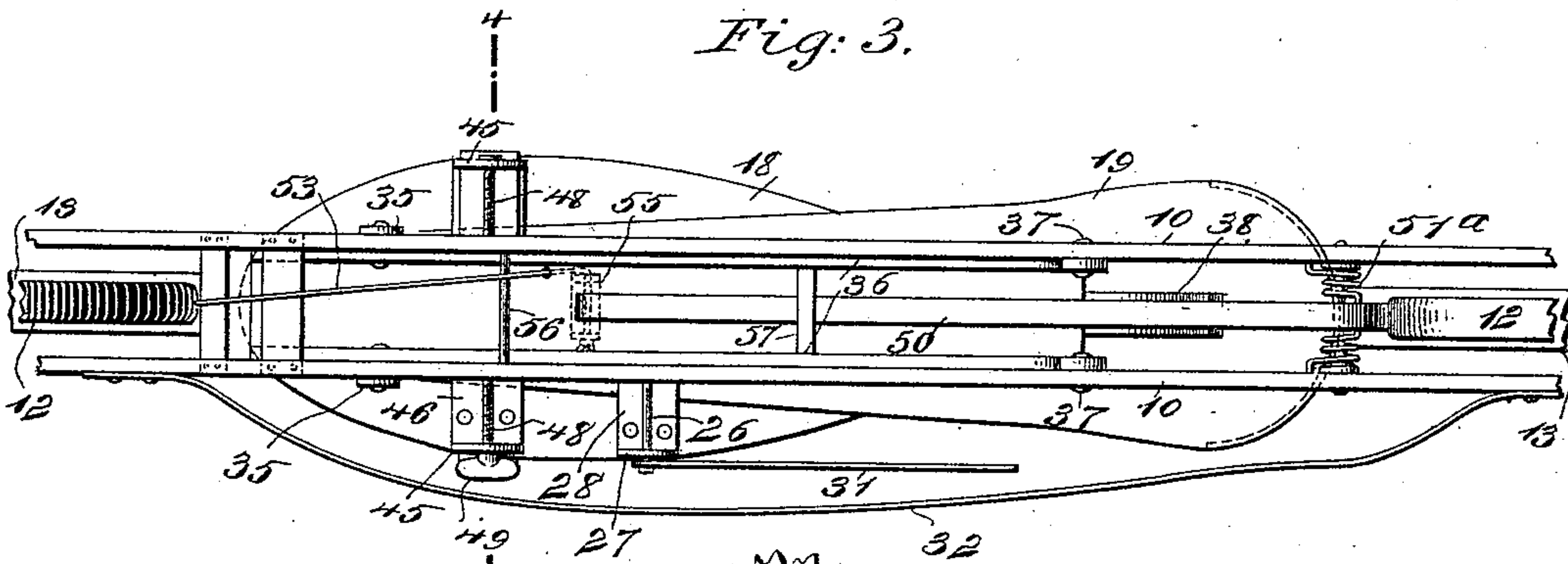
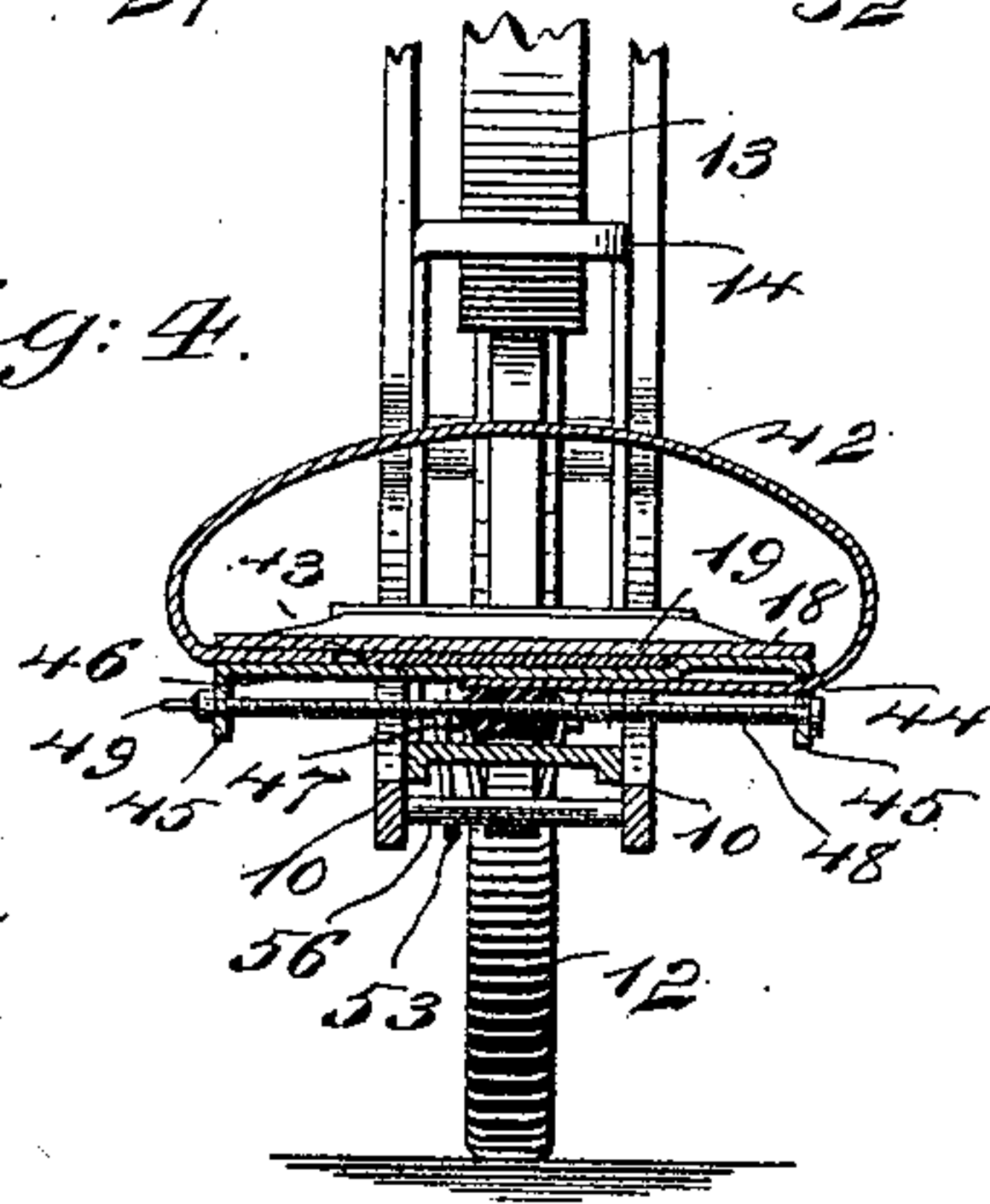


Fig: 4.



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Fig. 5.

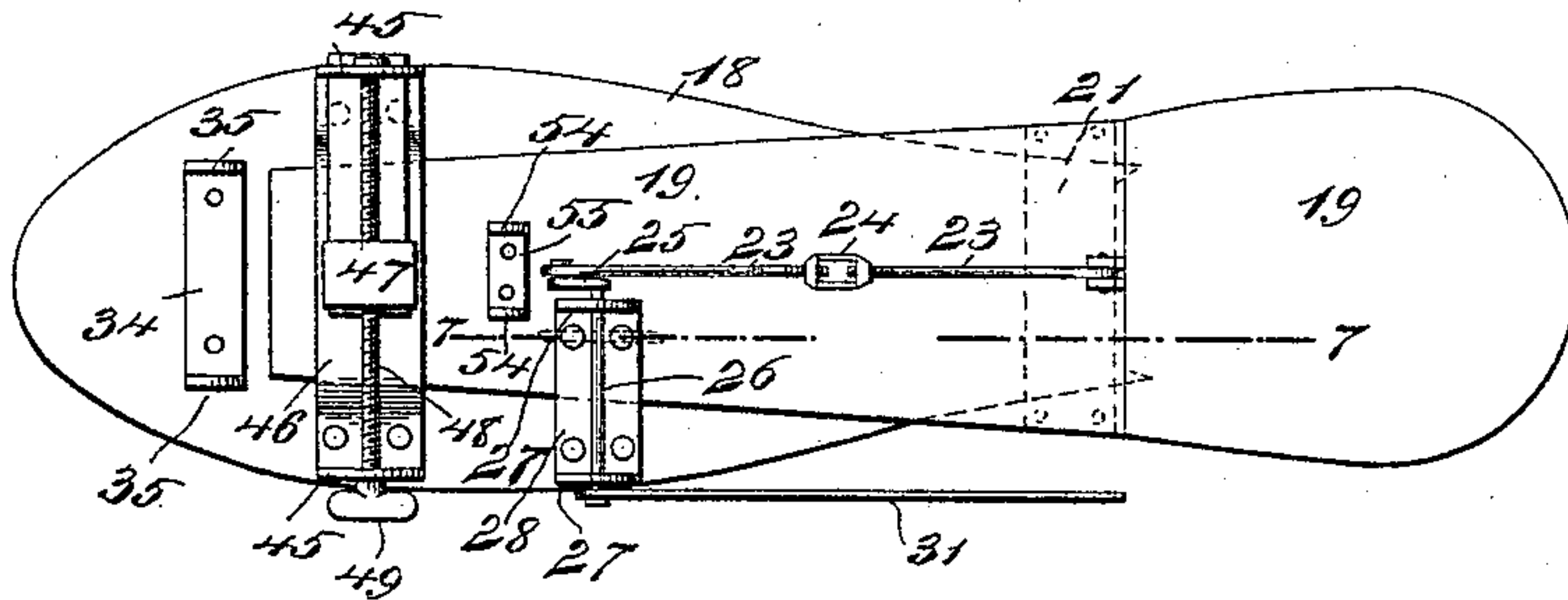


Fig. 6.

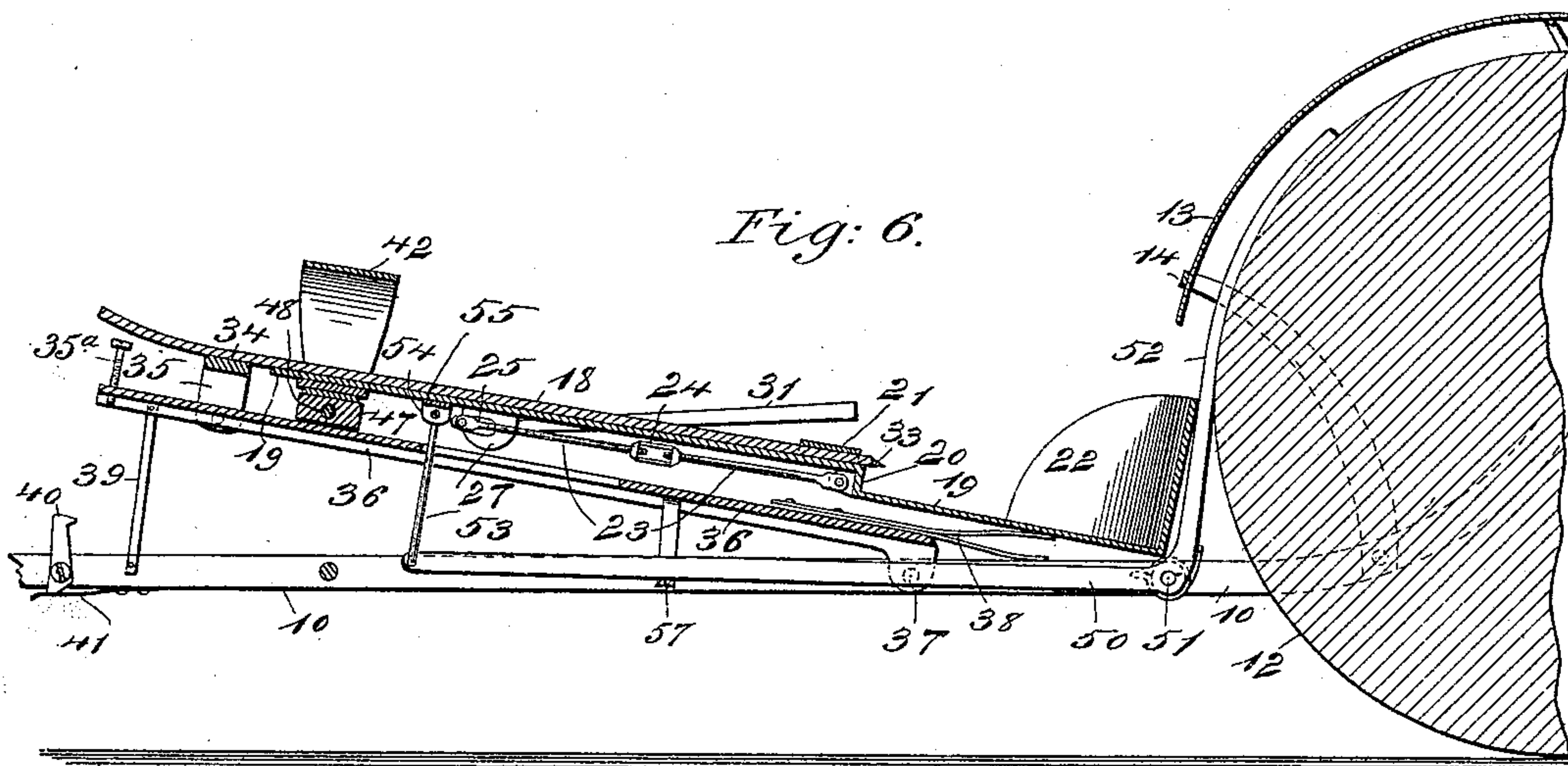
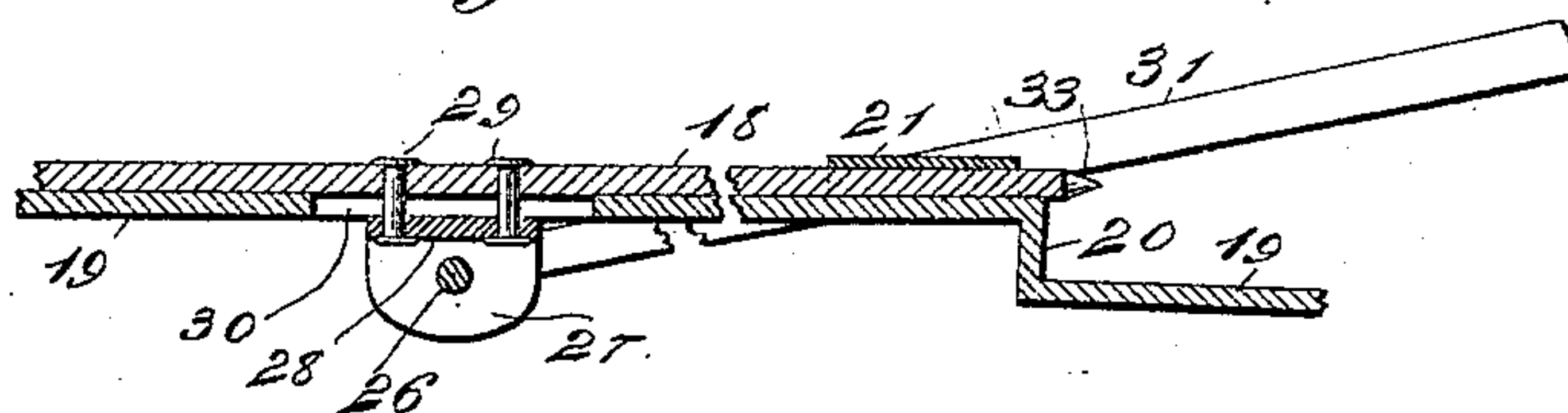


Fig. 7.



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UNITED STATES PATENT OFFICE.

RICHARD H. LAHEY, OF CANADICE, NEW YORK.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 538,526, dated April 30, 1895.

Application filed July 5, 1894. Serial No. 516,592. (No model.)

To all whom it may concern:

Be it known that I, RICHARD H. LAHEY, of Canadice, in the county of Ontario and State of New York, have invented a new and Improved Roller-Skate, of which the following is a full, clear, and exact description.

My invention relates to improvements in roller skates; and the object of my invention is to produce a skate which may be conveniently and firmly applied to the foot, which affords an elastic and easy support for the foot, which is provided with a ratchet device to prevent the wheels from turning backward, and which is also provided with a brake adapted to be actuated automatically or by the use of a hand line or cord.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the skate embodying my invention. Fig. 2 is a plan view thereof. Fig. 3 is a broken inverted plan of the skate. Fig. 4 is a cross-section on the line 4 4 of Fig. 3. Fig. 5 is an inverted plan of the foot piece or rest of the skate. Fig. 6 is a broken longitudinal section on the line 6 6 of Fig. 2; and Fig. 7 is a detail longitudinal section on the line 7 7 of Fig. 5, showing particularly the mechanism for fastening the skate to the foot.

The skate is provided with a frame, consisting essentially of the parallel bars 10 which are connected by suitable cross pieces and which are turned up at the ends, as shown at 11, so as to extend above the tops of the wheels 12 to which they are journaled, and form supports for the guards 13 extending over the upper and inner edges of the wheels, the forward guard being also secured to the lower portion of the frame while the rear guard is held by a brace 14, as shown in Fig. 1. The wheels may be provided with ball bearings or with bearings of any suitable kind, and the front axle has a ratchet wheel 15 thereon, see Fig. 1, which is engaged by a pawl 16 pivoted on the frame of the skate, and the pawl is pressed by a spring 17 and may

be held either in or out of engagement with the ratchet wheel.

The skate is provided with a foot-rest consisting of the front portion 18 and the heel portion 19, these being slidable in relation to each other to enable the rest to be easily fastened to the foot, and the heel portion 19 has a shoulder 20 adapted to come opposite the breast of the heel, and this part of the foot-rest is also provided with a keeper 21 which extends across the front part 18 of the foot-rest and thus serves to guide the two parts in relation to each other, and the front end of the heel portion 19 of the foot-rest is also held in another keeper carrying the strap-fastening attachment which will be hereinafter described.

The heel portion 19 is also provided at its back end with a flange 22 against which the heel of the foot may rest. To the shoulder 20 of the heel piece is pivoted a connecting rod 23 which extends forward and connects, by means of the turn buckle 24, with a similar rod, and this is pivoted to the crank 25 of a transverse shaft 26 which turns in ears 27 and the clip 28, this being riveted, by rivets 29, to the top plate 18 of the foot-rest, and the heel piece 19 is slotted, as shown at 30 in Fig. 7, to provide for the movement of the rivets 29.

The shaft 26 has at one end a lever 31 by which it may be moved, this lever being protected by a guard 32 secured to the frame of the skate, see Figs. 2 and 3, and by turning the lever the heel piece 19 may be moved backward and forward and, when moved forward, it brings the heel into contact with the spurs 33 on the top plate 18 of the foot-rest and the spurs, entering the heel, hold the heel in place. If desired, holes may be made in the heel to receive the spurs 33.

The foot-rest has, near the front end and on the under side of the top plate 18, a clip 34 with depending ears 35 which are pivoted to the levers 36, these being connected together by cross plates, and the levers are fulcrumed at their rear ends on the skate frame, as shown at 37. At the front end of the levers 36 is a set screw 35^a which limits the tilting of the foot rest, the toe of which strikes the set screw. The levers 36 are pressed down by springs 38 which are secured

to the levers and which also serve as cushions for the heel piece 19. The levers are adapted to tilt, as shown in Fig. 6, but are prevented from tipping up too far by a strap 5 39 which is secured to one of the levers and to the frame 10. The levers are held down by a latch 40 on the frame 10, see Fig. 6, which is pressed into engagement with the levers by a spring 41, but which may be very 10 easily released.

The skate is fastened to the foot by means of a toe strap 42, one end of which is fastened to the top plate 18 of the foot-rest, between the plate and the clip 46, as shown at 15 43 in Fig. 4, and the other end extends beneath the opposite edge of the foot-rest and through a slot 44 in one of the depending ears 45 on the ends of the clip 46 which extends beneath the foot-rest, is secured thereto 20 and serves also as a keeper to receive the front end of the heel piece 19, as shown clearly in Fig. 4. This lower end of the toe strap is fastened to a nut 47 which turns on the screw 48, this being journaled in the 25 ears 45 and having a thumb piece 49 by which it may be turned and, by turning the screw, the nut may be moved and the tension of the toe strap regulated.

The skate is provided with a brake having 30 a lever 50 which is arranged longitudinally between the bars 10 and is fulcrumed, as shown at 51, the lever having an up-turned end 52 which extends opposite the rear wheel and acts as a shoe to stop the motion of the 35 said wheel. The pivot of the brake is provided with a spring 51^a which normally holds the brake loose.

The brake may be actuated by simply tilting the foot so as to depress the rear end of 40 the foot-rest and thus force the shoe against the wheel, or it may be operated by means of a cord 53, one end of which is secured to one of the ears 54 on the clip 55 on the under side of the foot-rest and from here a cord extends 45 through the end of the lever 50, up through the opposite ear 54, thence down beneath a cross rod 56, see Figs. 1 and 4, and thence up over the front end of the foot-rest and through the front guard 13, see Fig. 1, where it may 50 be conveniently grasped. The brake lever 50 is also raised by a keeper 57 which is carried by the levers 36, see Figs. 3 and 6, and embraces the brake lever.

It will be seen that by pulling up the cord 55 the lever 50 is raised and the brake applied.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. A roller skate comprising the frame, the rollers journaled at the end thereof, a longi- 60 tudinally extending lever 50 pivoted at its rear end to the frame near the rear wheel as shown at 51, and having an upward extension 52 forming a brake arm, longitudinally extending levers 36 pivoted at their rear ends 65 in front of the pivot 51 as shown at 37 and having a loop or bracket 57 extending under the lever 50, a latch 40 for connecting the front ends of the levers 36 with the main frame and a foot rest pivoted at the forward end to the 70 forward ends of the levers 36, substantially as described.

2. A skate comprising the main frame and its supporting rollers, a brake lever extending longitudinally of the frame and pivoted 75 at its rear end thereto near the rear wheel as shown at 51, a brake arm 52 extending up from the rear end of said lever, levers 36 pivoted to the frame at 37 in front of the pivot 31 and provided at their rear ends with 80 springs 38, and on their under side with a bracket or loop 57 extending under lever 50, a foot rest pivoted at its forward end to the forward ends of levers 36, and resting at its rear end on the said springs 38, a set screw 85 35^a to limit the movement between the forward ends of the foot rest and levers 36, and a latch for connecting the forward ends of the levers and frame, substantially as described.

3. The combination with the skate frame, 90 the levers 36 pivoted at their rear ends thereto to swing up therefrom at their forward ends, a foot rest pivoted at its forward end to the forward ends of levers 36 to swing up at its rear end, said foot rest having a heel support 95 19, a foot portion 18 sliding toward and from the heel support and provided with penetrating points 33 at its rear ends, a bracket 28 below the forward extension of the heel rest and connected with the foot portion 18 by the slot 100 and pin connection 30, 29, a transverse shaft 26 journaled in ears 27 on the bracket and having a crank 25 at its inner end, an adjustable rod 23, 24 pivoted to the crank shaft and part 20 of the heel portion 19, a lever 31 on 105 the outer end of the crank shaft and an adjustable toe strap 42, substantially as described.

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Witnesses:

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