

W. H. FITZGERALD.
COMBINED ICE AND ROLLER SKATE.
APPLICATION FILED MAR. 11, 1908.

916,289.

Patented Mar. 23, 1909.

2 SHEETS—SHEET 1.

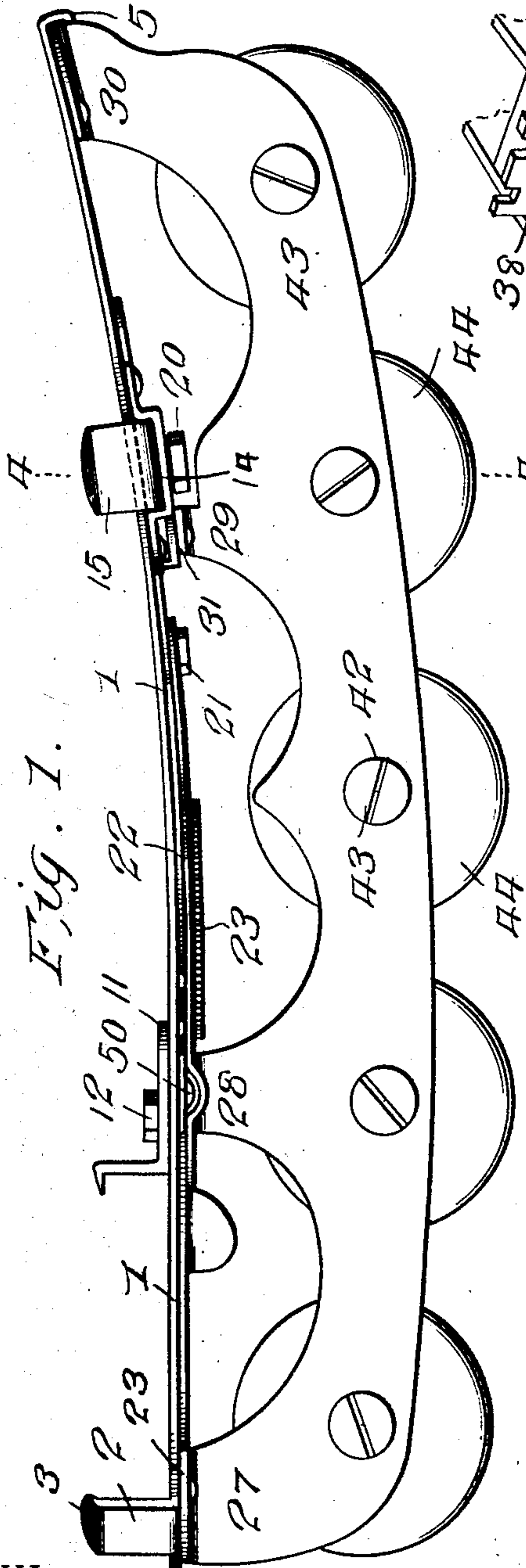


Fig. 1.

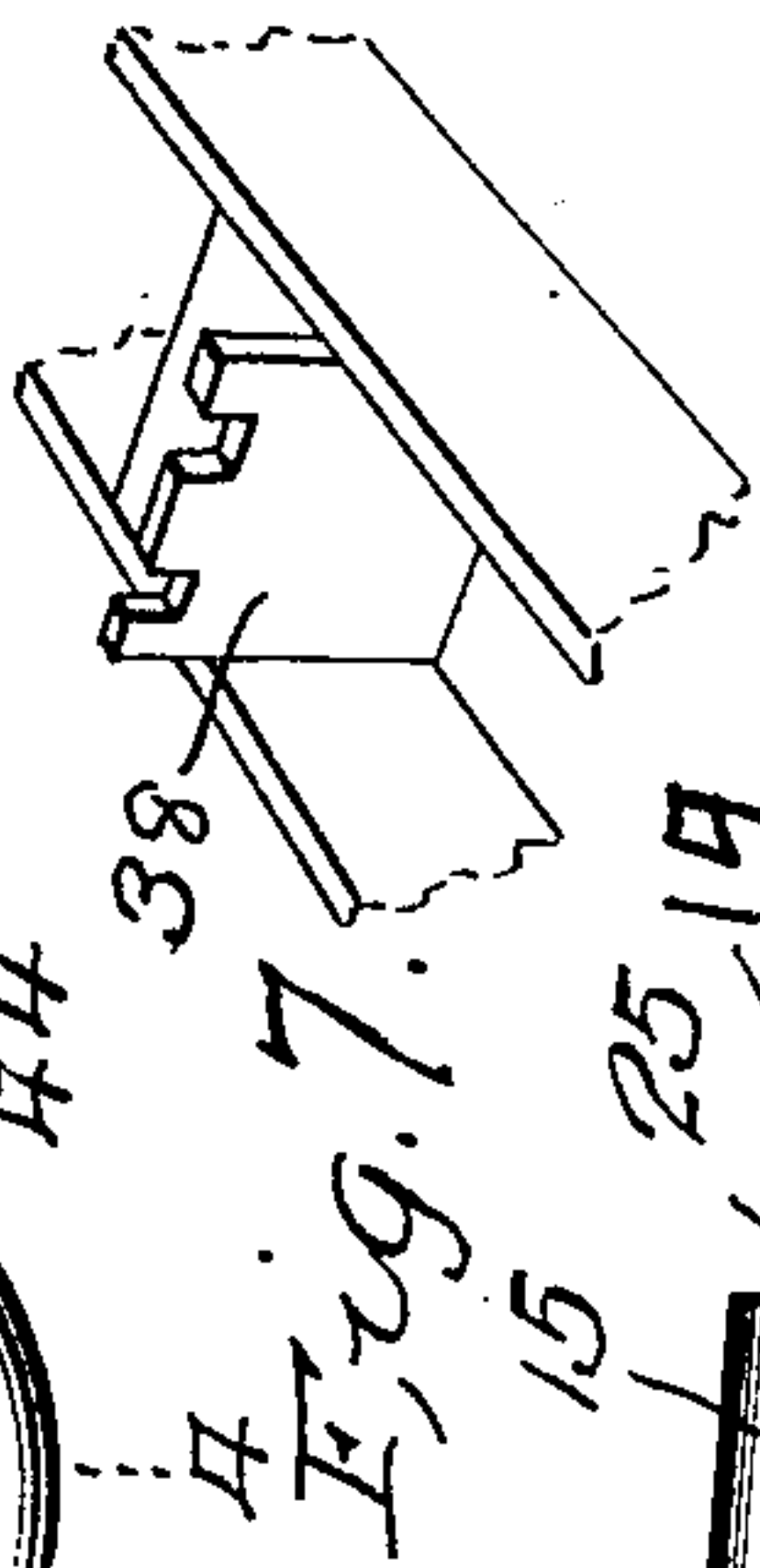


Fig. 7.

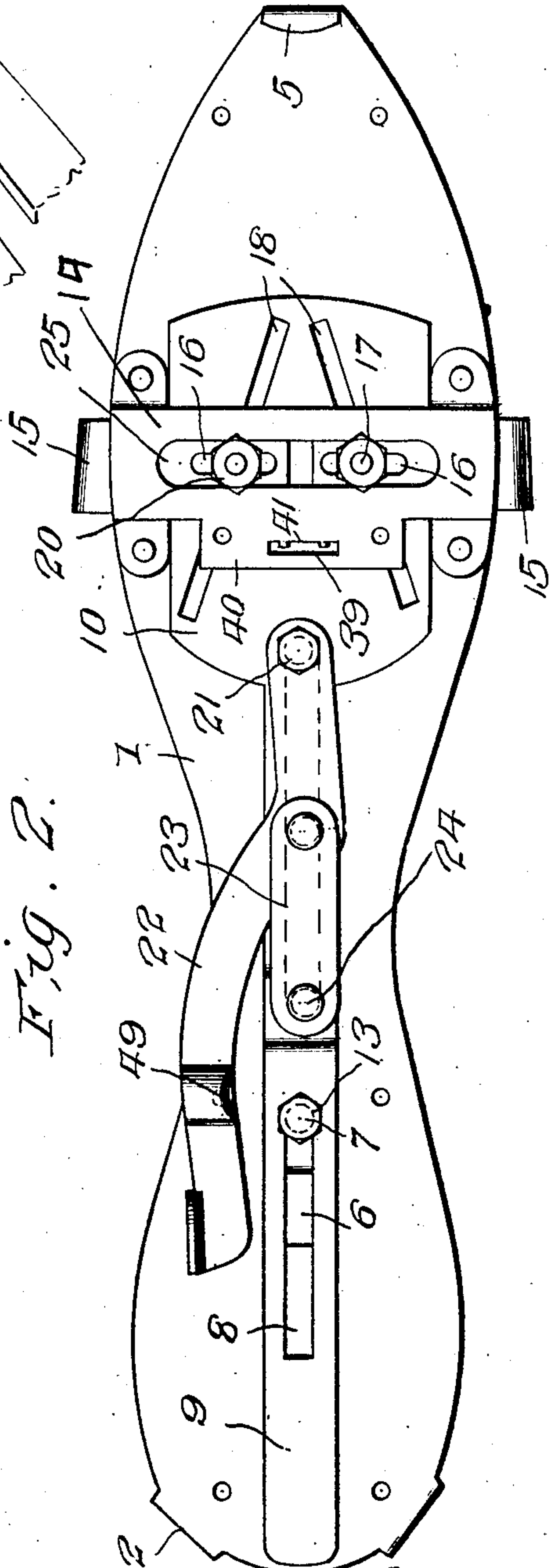


Fig. 2.

WITNESSES:

Thos. W. Riley
E. J. Head.

INVENTOR

W. H. Fitzgerald

BY

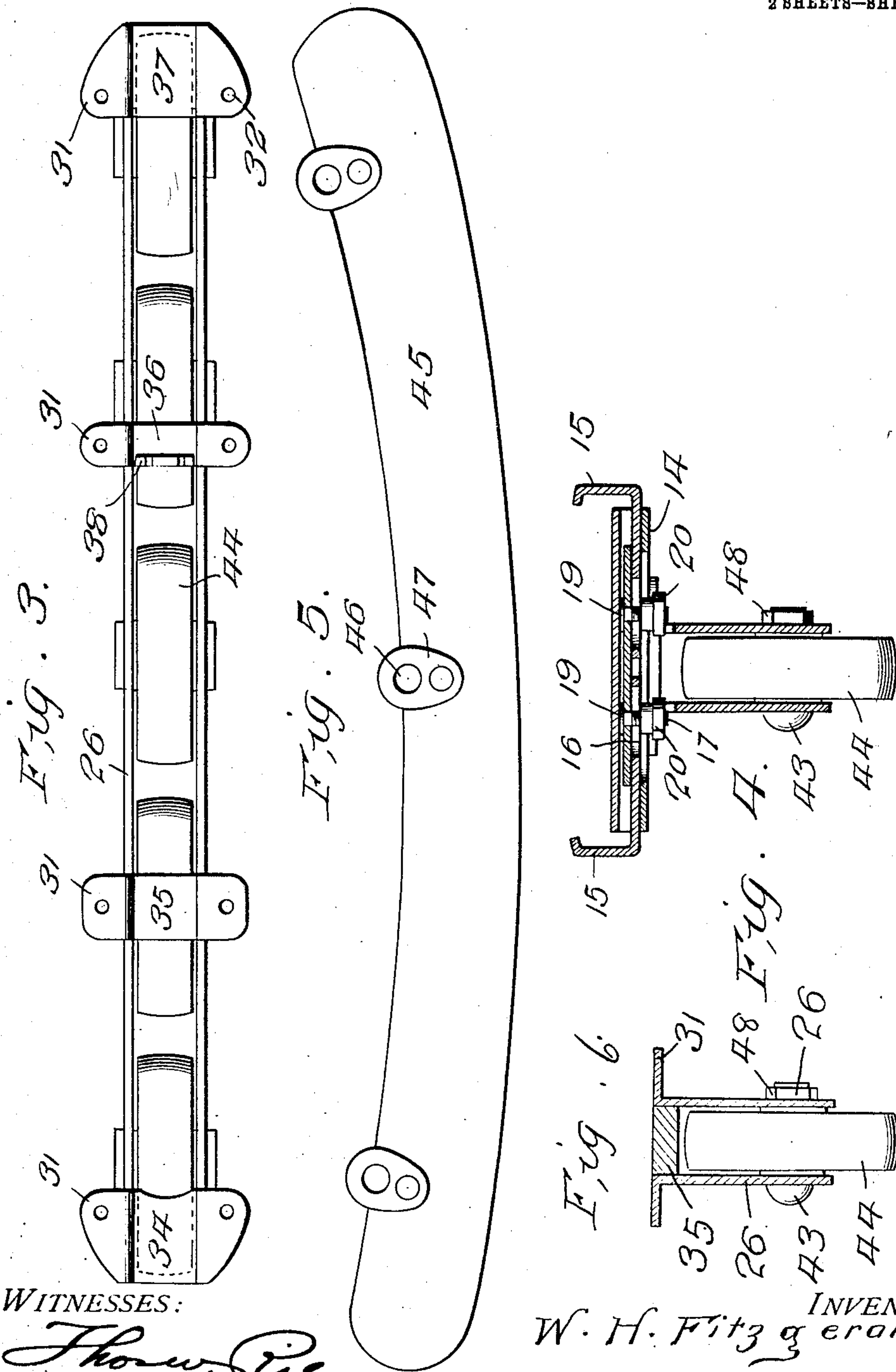
W. J. Fitzgerald & Co.
Attorneys

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WITNESSES:

Thomas Riley
& F. H. Lead

INVENTOR
W. H. Fitzgerald

BY
W. J. Fitzgerald & Co
 Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM HENRY FITZGERALD, OF BROOKLYN, NEW YORK.

COMBINED ICE AND ROLLER SKATE.

No. 916,289.

Specification of Letters Patent.

Patented March 23, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM HENRY FITZGERALD, 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 a Combined Ice and Roller Skate; 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 new and useful improvements in skates, and has primarily for its object to provide a novel device of this character which may be readily converted into roller or ice skates as may be desired.

It is also an object of the invention to provide novel means for affixing to the body of the skate the traction mechanism.

It is also an object of the invention to provide in combination with a device of this character a novel clamping means that may be readily adjusted to compensate for the various sizes of shoe soles to which the skate is to be applied.

It is also an object of the invention to provide a novel device of this character which will be simple in construction, efficient in practice and comparatively inexpensive to manufacture.

With the above and other objects in view the invention consists of the details of construction and in the novel arrangement and combination of parts, to be hereinafter referred to.

In describing the invention in detail reference will be had to the accompanying drawings, which form a part of this specification, wherein like characters of reference denote corresponding parts in the several views, and in which,

Figure 1 is a view in side elevation of the skate embodying this invention arranged to be employed as a roller skate, Fig. 2 is a bottom plan view of the skate with the traction means omitted illustrating the clamping means employed. Fig. 3 is a view in top plan of the traction retaining means detached. Fig. 4 is a sectional view taken on the line 4—4 of Fig. 1, Fig. 5 is a view in elevation of the runner employed when the device is used as an ice skate. Fig. 6 is a sectional view illustrating a detail of the invention; and Fig. 7 is a view in perspective

illustrating an additional detail of the invention.

In the drawings 1 denotes the body of the skate formed of suitable material and of proper contour, having projecting from its heel portion the upstanding lugs 2, the free end portions 3 of which are bent inwardly to contact with the heel of the shoe of the user. It is to be observed that these lugs are formed integral with the body 1. The toe portion of the body is provided with an angular depending lug 5, the function of which will be hereinafter set forth. The body at approximately the instep portion thereof is provided central of its width with an elongated slot 6 through which passes a screw 7 which also extends through a slot 8 in an elongated extension 9 of the clamping-plate 10.

Resting on the body above the slot 6 is an angular movable member 11 which is intended to bind against the inner edge of the heel of the shoe when the clamping means is operated. This movable member 11 is angular as is clearly shown in the drawings and has passed therethrough the screw 7 hereinabove referred to and is held thereto by a binding nut 12. This movable member 11 is adjustable within the slot 8 by loosening the nut 12 as is apparent, it being understood, of course, that the head 13 of the nut binds against the outer surface of the extension 9.

Transversely of the inner end surface of the sole portion of the body is secured a guideway 14 for the sole clamping members 15 which extend partly therein. The inner ends of the clamping members 15 are slotted as at 16 and through these slots pass clamping screws 17 which also pass through converging slots 18 in the clamping-plate 10 hereinbefore referred to. The heads 19 of these screws 17 are interposed between the clamping-plate 10 and the body 1. It is believed to be obvious that by loosening and tightening the nuts 20 the clamping members may be easily adjusted.

Pivotaly secured to the body 1 by the screw 21 is an angular clamping operating lever 22 which has secured thereto intermediate its length the end of a link 23, the opposite end portion of the link being secured at 24 to the extension 9 of the clamping-plate. It will thus be seen that by an outward movement of the lever 22 the movable member 11 and the clamps 15 will be released and

that by an opposite movement they will be caused to engage the shoe of the user.

In order to permit the movement of the extension 9 it is provided adjacent the plate 10 with an elongated slot 23 through which the screw 21 of the lever 22 passes. The guideway 14 is also provided with an elongated slot 25 to permit movement of the latch members 15, it being understood that the screws 17 pass therethrough.

The traction means comprises two spaced bars 26 which are provided with upstanding portions 27, 28, 29 and 30 having their free portions 31 bent at right angles and provided with perforations 32, through which are adapted to pass screws for securing said bars 26 to the under surface of the body. The bars 26 are held in their separated position by the blocks 34, 35, 36 and 37. The block 36 is provided with upstanding lugs 38 which are intended to pass through the opening 39 in a rearwardly projecting extension 40 carried by the guide-way 14. One of the edges of the opening 39 is provided with teeth 41 adapted to pass between the lugs 38 and the block 36. By this means an effective attachment of the bars 26 to the body 1 is afforded.

In applying the bars 26 to the body 1 the block 37 is inserted between the body 1 and the angular depending lug 5 hereinbefore referred to. The spaced bars 26 are provided with alining apertures 42, through which bolts or shafts 43 pass to form axles for the wheels 44. When it is desired to employ the invention as a roller skate any number of these wheels may be employed, but as illustrated in the drawings it has been found best in practice that five be used and that the lower edges of the wheels be arranged in a segmental plane.

When it is desired to use the device as an ice skate the bolts 43 are withdrawn and the wheels 44 removed, the ice runner 45 is then inserted between the spaced bars 26 so that the perforations 46 of the ears 47 carried by the runners will register with certain of the openings 42 of the bars 26 when the bolts 43 are passed between the openings of the bars and the openings of the ears.

It may be well to state that clamping nuts 48 are employed in conjunction with the bolts 43. In order that the clamping means may be held in operative position the lever 22 is provided with an interrupted portion 49 which is adapted to spring over one of the securing screws 50 of the spaced bars 26.

I claim:

1. In a skate, the combination of a body having an angular depending lug at its toe, clamping means carried by the body, spaced bars engaging the body, a block interposed between the bars engaging the angular lug, and traction means held between the spaced bars.

2. In a skate, the combination of a body and clamping means for the body, said clamping means including a guide-way having an opening, spaced bars secured to the body, blocks interposed between the bars, certain of said blocks having lugs extending within the opening of the guide-way, and traction means carried between the bars.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM HENRY FITZGERALD.

Witnesses:

CHAS. F. VOLKMANN,
GEO. H. BUTLER.