T. SPACIE.

ROLLER SKATE.

APPLICATION FILED JULY 20, 1909.

964,705. Patented July 19, 1910.

Fig. 2.

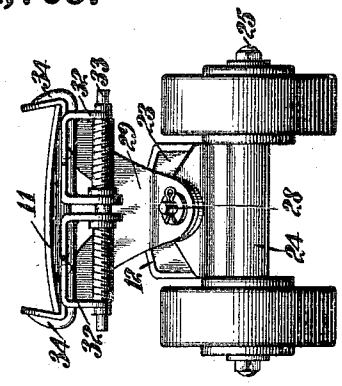


Fig. 4.

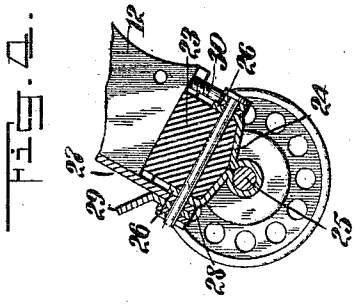


Fig. 1.

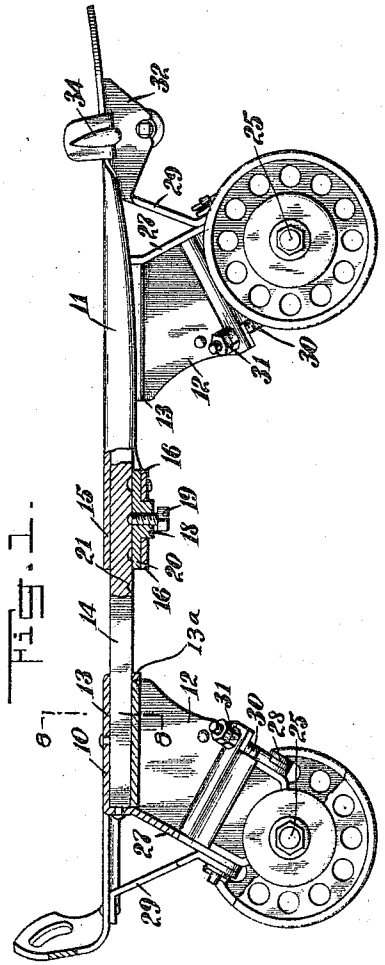


Fig. 6.

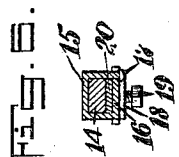


Fig. 7.

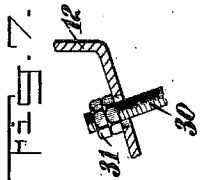


Fig. 5.

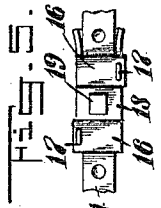


Fig. 8.

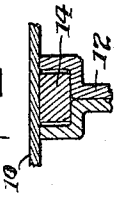
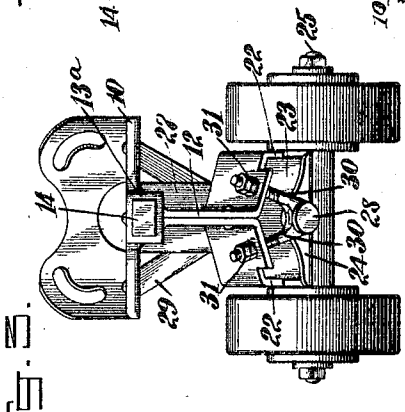


Fig. 3.



WITNESSES

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ROLLER-SKATE.

964,705. Specification of Letters Patent. **Patented July 19, 1910.**

Application filed July 20, 1909. Serial No. 508,562.

To all whom it may concern:

Be it known that I, THOMAS SPACIE, a citizen of the United States, and a resident of Chicago, Hydepark, in the county of Cook and State of Illinois, have invented a new and Improved Roller-Skate, of which the following is a full, clear, and exact description.

The invention has reference to improvements in roller skates of the character disclosed in Letters Patent Number 917,499, granted to me April 6, 1909, wherein a resilient member, such as a rubber block, is interposed between the supporting plate of the foot plate and a plate carried by the roller spindle, and the supporting plate and the roller spindle plate pivotally connected to admit of the foot plate rocking from side to side relatively to the roller spindle and against the action of the resilient member.

The present invention contemplates the provision of adjustable hangers between the supporting plate and a pivot pin of the roller spindle plate, and resides in certain other special features of construction and combination of parts as will be hereinafter pointed out in the annexed claims.

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

Figure 1 is a side view of a roller skate partly in central vertical section, embodying my improvements; Fig. 2 is a front end view of the skate; Fig. 3 is a front end view of the rear or heel section of the skate; Fig. 4 is a central vertical longitudinal section, showing the connection between one of the supporting plates and the roller spindles; Fig. 5 is an inverted plan of the connection between the front and rear sections of the skate; Fig. 6 is a cross-section through said connection; Fig. 7 is a fragmentary cross-sectional view of one of the supporting plates at the point of application of one of the hangers; and Fig. 8 is a cross-section on the line 8—8 of Fig. 1.

The foot plate of the skate is constructed in two sections, a heel section 10 and a toe section 11, each section having a supporting plate 12 downwardly and outwardly inclined, and each supporting plate constructed of a double thickness of metal, with the two thicknesses spread apart at the top to form a socket 13, the same receiving one end of an extension bar 14, serving to adjustably connect the two sections of the foot plate together. The heel section of the foot-plate is downwardly turned at its forward end, as indicated at 13^a, and provided with an opening in register with and forming the entrance of the adjacent socket 13. The extension bar in the form of the invention shown is fixed in the socket 13 of the rear or heel section of the skate and extending through the tubular inner end 15 into the socket 13 of the toe section of the skate. The tube 15 is of angular cross-section to conform to the bar 14 and is integrally formed with the toe end of the foot plate by bending the edges of the sheet metal of which this plate is made downwardly and providing each downwardly-bent portion or flange with a cross strap 16 and riveting the end of each cross strap to the opposite flange, the flanges being provided with projections 17 fitting within corresponding openings in the strap 16 for this purpose, as clearly shown in Figs. 5 and 6. The straps 16 are spaced apart and receive between them a correspondingly-shaped boss or projection 18 formed on a nut 20, the latter seating on the inside of the straps and is provided with a set-screw 19 adapted to engage in any one of a number of recesses 21 formed on the under side of the extension bar 14, thus adapting the two sections of the skate to be rigidly secured together in different positions of adjustment.

At the foot of each supporting plate 12 the two thicknesses of metal of which it is made are oppositely bent, as shown in Fig. 3, with the extremities of the oppositely-turned portions turned downwardly to provide depending flanges 22, the same embracing at opposite sides a resilient member in the form of a block of rubber 23. The resilient member seats on a plate 24 which is bent about and secured to the roller spindle or supporting member 25 and is provided with upwardly-turned flanges 26 arranged to embrace the member at the front and rear. From both the heel and toe sections of the foot plate a tongue 27 is cut out and turned downwardly in contact with the outer edges of the adjacent supporting plates 12, the lower end portions of the tongues receiving a centrally-arranged pivot pin 28 which passes through the flanges 26 of the roller

spindle plate 24. The pivot pin also passes through a brace 29 at the outer side of the supporting plate and through hangers 30 at the inner side of the supporting plate, the braces 29 being attached to the outer end portions of the foot plate, supporting the same from the pivot pins. The hangers 30 have threaded shanks and pass through the oppositely-turned portions of the supporting plates 12, where they are provided with lock nuts 31 adapting the angle of pressure on the blocks 23 to be varied. The brace 29 at the toe end of the foot plate is extended forwardly with downwardly-turned flanges 32, in which is journaled an adjusting screw 33 operatively connected to clamping jaws 34 for the toe end of the shoe.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. The combination in a skate, of a foot-plate, a supporting plate secured to the foot-plate, a roller spindle plate, a resilient member interposed between said plates, a pivot-pin carried by one of the said plates, means supporting one end of the pivot-pin from the foot-plate, and hangers connected to the opposite end of the pivot-pin and diverging and connected to the other plate.

2. The combination in a skate, of a foot plate, a downwardly and outwardly inclined supporting plate secured to the foot plate, a roller spindle plate, a resilient member interposed between the two plates, a longitudinal pivot pin carried by the roller spindle plate, a tongue extending from the foot plate and connected to the outer end of the pivot pin, and hangers connected to the inner end of the pin and having threaded shanks connected to the supporting plate.

3. The combination in a skate, of a foot plate, a supporting plate secured to the foot plate and downwardly and outwardly inclined, the supporting plate constructed of two thicknesses of material oppositely turned at their lower portions and provided with depending flanges at the extremities, a roller spindle plate having upwardly-turned flanges, a rubber block seated on the roller spindle plate and engaged at the front and rear by the flanges thereof and engaged at opposite sides by the flanges of the supporting plate, a tongue extended from the foot plate at the outer side of the supporting plate, a brace arranged between the foot plate and the lower end of the tongue, a pin passing through the flanges of the roller spindle plate and through the tongue and brace, and adjustable hangers connecting the inner end of the pin to the oppositely-turned portions of the supporting plate.

4. The combination in a skate, a foot plate, a supporting member, a supporting plate attached to the foot plate, a plate attached to the supporting member, a resilient member interposed between the supporting plate and the plate of the supporting member, a tongue extending from the foot plate, a pin carried by the plate of the supporting member and extending at one end through the tongue, and adjustable hangers connected to the opposite end of the pin and to the supporting plate.

5. The combination in a skate, of a foot plate, a downwardly and outwardly inclined supporting plate, a supporting member for the skate having a plate, an elastic device interposed between the plate of the supporting member and the supporting plate, a brace connected to the foot plate and downwardly and inwardly inclined, a pin carried by the plate of the supporting member and passing at one end through the brace, and a hanger connecting the opposite end of the pin to the supporting plate.

6. The combination in a skate, of a foot plate composed of a toe and a heel section, with one of said sections having an extended tubular portion, supporting plates secured to the respective sections of the foot plate, each supporting plate constructed of a double thickness of material, with the said thicknesses of material spread apart at their upper portions to provide sockets, and a bar adjustably connecting the two sections of the foot plate together, with one end of the bar passing into and secured to one of said sockets and passing through the tubular extension into the other socket.

7. The combination in a skate, of a foot plate constructed of toe and heel sections, with one of said sections having the edges at the inner portion thereof turned downwardly to provide flanges, each of said flanges having a cross strap extended to and riveted to the opposite flange, with the straps spaced apart, a nut seated on the inner side of the cross straps and having a projection fitting between them, a bar secured to one of the sections of the foot plate and passing into the other section thereof over the nut, and a set screw threaded into the nut to secure said other section and bar together.

8. The combination in a skate, of a foot plate composed of a heel section and a toe section, with one of said sections provided with a tubular extension having spaced cross straps at the bottom thereof, a nut seated on the cross straps and having a projection fitting between them, a bar secured to one section of the foot plate and passing into the tubular extension of the other, and a set-screw threaded through the nut and adapted to bear on the bar.

9. The combination in a skate, of a foot plate, a supporting member for the skate having a plate, a supporting plate secured to the foot plate, a resilient device inter-

posed between the plate of the supporting member and the supporting plate, a downwardly and inwardly inclined brace extended from the foot plate and having forwardly extended portions having downwardly turned flanges, a clamping device for the shoe having a clamping screw journaled in said flanges, and a pin carried by the plate of the supporting member, having hangers at one end connecting it to the supporting plate and passing at its opposite end through the brace.

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

THOMAS SPACIE.

Witnesses:
EDGAR ERNEST MARX,
SIMON F. FOGG.