

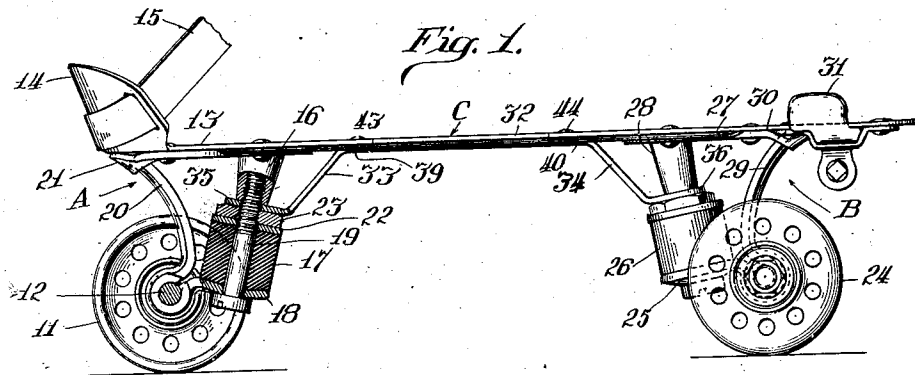
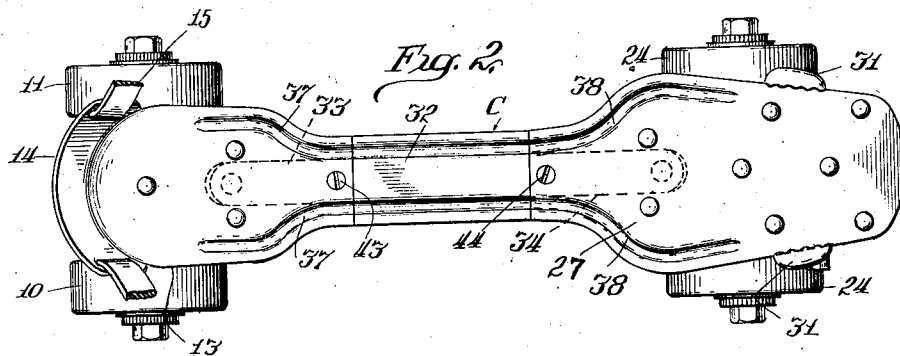
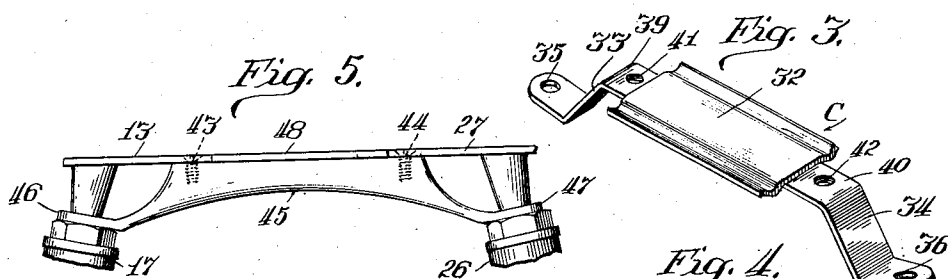
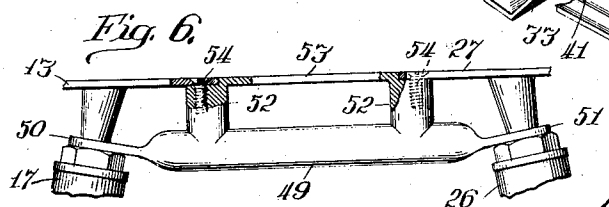
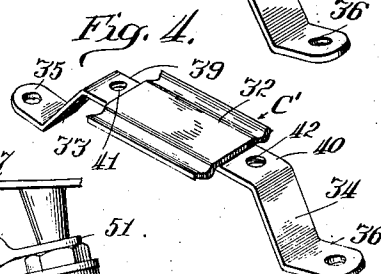
June 23, 1925.

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G. J. ERTL

ROLLER SKATE

Filed April 17, 1924



Inventor.

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UNITED STATES PATENT OFFICE.

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ROLLER SKATE.

Application filed April 17, 1924. Serial No. 707,072.

To all whom it may concern:

Be it known that I, GEORGE J. ERTL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvement in Roller Skates, of which the following is a specification.

My invention relates to an improvement in the construction of roller skates, and its object is to provide a roller skate which, while having the rigidity of structure and reliability necessary to insure safety for the skater, may, through the removability of a single element of the skate, which element will be supplied in different lengths, be fitted to feet of different sizes. Thus the retailer may reduce his stock of skates by keeping on hand a number of these removable elements or bridge pieces of different lengths and yet be able to fit any customer regardless of the size of the foot. Or if a child outgrows his skates they may be lengthened in a similar manner. Or in the case of skates kept at roller skating rinks the skates may be fitted to the users by the same simple substitution, so that the rink keeper will not have to carry a large number of sizes of skates in order to meet all requirements.

The invention is illustrated, in a preferred embodiment, with certain suggested modifications, in the accompanying drawing, wherein

Fig. 1 is a view, in side elevation, with certain parts in section, of a skate constructed in accordance with my invention.

Fig. 2 is a plan view of the skate.

Figs. 3 and 4 are views, in perspective, of connecting sections or bridge pieces of two lengths.

Fig. 5 is a fragmentary view, in elevation, of a modified form of bridge piece, and

Fig. 6 is a similar view showing another modification.

It is realized that further modifications might be made in the matter of structural details and it is my intention to cover by patent all modified embodiments of the inventive idea within the scope of the appended claims.

Referring first to Figs. 1 to 4 inclusive, the skate is composed of a rear section or truck A, a forward section or truck B and a connecting section or bridge element C or C'.

In the form of skate shown in the drawing,

the rear truck comprises a pair of rollers 10, 11, revoluble on an axle structure 12; a heel plate 13, preferably provided with an upturned flange 14 at its rear end slotted for a fastening strap 15 and provided with a depending, internally threaded socket 16; a rubber buffer block 17 supported on a bracket 18 on the axle structure and fastened thereto by a screw bolt 19, or equivalent device, extending into socket 16; and an arm 20 on the axle structure, the upper end of which extends into a socket 21 on the under side of the heel plate, a washer 22 being arranged above the buffer block and held thereto by a lock nut 23.

The front truck B is similarly constructed and comprises rollers 24, an axle structure 25, a buffer block 26, toe plate 27 with a depending socket piece 28, and a forwardly and upwardly extending support 29 on the axle structure which engages a socket 30 on the under side of the toe plate. The parts are held together, as in the case of the corresponding parts of the rear truck, with a screw bolt 19 which, in this case, enters the socket piece 28. The toe plate is provided with clamping clips 31 of usual construction for engaging the sole of a shoe.

The connecting member or bridge piece C or C' is preferably in the form of an arch and preferably consists of an instep plate 32 which is in alignment with the heel and toe plates above referred to, with its end edges abutting against the edges of said heel and toe plates, respectively, and of diagonally disposed members 33, 34. The ends 35, 36 of member 33, 34 are bent outwardly so that they will extend between the socket pieces 16 or 28 and the lock nuts 23 and are perforated for the screw bolts 19. Preferably the heel and toe plates are formed on their under sides with pairs of ribs 37, 37 and 38, 38. Members 33, 34 have horizontal portions 39, 40 which lie between these ribs and are formed with threaded perforations 41, 42 for screws 43, 44 serving to fasten the bridge member, at these intermediate points, to the heel and toe plates, the end of the bridge member being, obviously, clamped between the axle structures and socket pieces 16, 28 when the screw bolts 19 are tightened.

The skate thus constructed has all the rigidity and reliability of the ordinary roller skate which is a matter of importance to insure the safety of the skater. At the same

time, it is a very easy matter to lengthen or shorten the skate by substituting a longer or shorter bridge member. This can be done by merely removing screw bolts 19 and screws 43, 44.

A modification of the form of the bridge member is shown in Fig. 5. The part here is a casting consisting of an arch shaped portion 45 with flattened ends 46, 47 and a flanged or widened upper portion 48 to align with the heel and toe plates 13, 27.

The construction of the bridging member is somewhat different in Fig. 6. It consists of a substantially horizontal portion 49 with flattened ends 50, 51 to extend between the buffer blocks and the socket pieces on the heel and toe plates 13, 27, and of studs 52, 52 extending upwardly from the horizontal portion 49 and connected by an integral instep plate 53. Screws 54 extend through the heel and toe plates into studs 52.

I claim:

1. A roller skate comprising, in combination, separately formed forward and rear sections, provided respectively with rollers, an intermediate connecting section for connecting said forward and rear sections without capacity for relative movement, and means for rigidly but removably uniting the forward and rear sections with the connecting section whereby, through substitution of a longer or shorter connecting section, the skate may be fitted to feet of different lengths.

2. A roller skate comprising, in combination, separately formed forward and rear sections provided, respectively, with rollers, the forward section having a toe plate and the rear section a heel plate, a connecting section provided with an instep plate aligning with the toe and heel plates and adapted to hold the front and rear section in spaced relation without capacity for relative movement, and means for rigidly but removably uniting the forward and rear sections with the connecting section whereby, through substitution of a longer or shorter connecting section, the skate may be fitted to feet of different lengths.

3. A roller skate comprising, in combination, separately formed forward and rear sections provided, respectively, with rollers, the forward section having a toe plate and the rear section a heel plate, a connecting section provided with an instep plate aligning with and having it opposite edges abutting the edges of the toe and heel plates, and means for rigidly but removably uniting the forward and rear sections with the connecting section whereby, through substitution of a longer or shorter connecting section, the skate may be fitted to feet of different lengths.

4. A roller skate comprising, in combination, separately formed forward and rear

sections, provided respectively with rollers, an intermediate connecting section in the form of an arch adapted to engage at its end and at points intermediate its ends with said forward and rear sections, and means for rigidly but removably uniting the forward and rear sections with the connecting section whereby, through substitution of a longer or shorter connecting section, the skate may be fitted to feet of different lengths.

5. A roller skate comprising, in combination, separately formed forward and rear sections provided, respectively, with rollers, the forward section having a toe plate and the rear section a heel plate, a connecting section in the form of an arch provided with an instep plate aligning with and having its opposite edges abutting the edges of the toe and heel plates, and means for rigidly but removably uniting the forward and rear sections with the connecting section whereby, through substitution of a longer or shorter connecting section, the skate may be fitted to feet of different lengths.

6. A roller skate comprising, in combination, separately formed forward and rear sections provided, respectively, with rollers, the forward section having a toe plate and the rear section a heel plate, a connecting section in the form of an arch having a widened portion aligning with the toe and heel plates, and means for rigidly but removably uniting the forward and rear sections with the connecting section whereby, through substitution of a longer or shorter connecting section, the skate may be fitted to feet of different lengths.

7. In a roller skate, the combination of a rear truck comprising a pair of rollers, an axle structure on which the rollers are mounted and a heel plate; a forward truck comprising a pair of rollers, an axle structure, and a toe plate; a bridging member between said trucks for holding them in spaced relation without capacity for adjustment, and means for removably connecting the bridging member to said axle structures and to said heel and toe plates.

8. In a roller skate, the combination of a rear truck comprising a pair of rollers, an axle structure on which the rollers are mounted and a heel plate; a forward truck comprising a pair of rollers, an axle structure and a toe plate, a bridging member between said trucks, and means for removably connecting the bridging member to said axle structures and to said heel and toe plates, said bridging member being provided with an instep plate in alignment with and abutting against the edges of the heel and toe plates, respectively.

9. In a roller skate, the combination of a rear truck comprising a pair of rollers, an axle structure on which the rollers are

mounted and a heel plate; a forward truck comprising a pair of rollers, an axle structure, and a toe plate formed with a depending stud, a bridging member between said trucks and engaging at points intermediate its ends with said heel and toe plates, and screws to enter said studs for removably connecting the ends of the bridging member to said axle structures and heel and toe plates.

10. In a roller skate, the combination of a rear truck comprising a pair of rollers, an axle structure on which the rollers are mounted and a heel plate; a forward truck comprising a pair of rollers, an axle structure and a toe plate formed with a depending stud, a bridging member between said trucks, screws to enter said studs for removably connecting the ends of the bridging member to said axle structures and heel and toe plates; and means for making intermediate connections between the bridging member and said heel and toe plates, respectively.

11. In a roller skate, the combination of a rear truck comprising a pair of rollers, an axle structure on which the rollers are mounted and a heel plate; a forward truck

comprising a pair of rollers, an axle structure and a toe plate formed with a depending stud, a bridging member of arched configuration between said trucks, screws to enter said studs for removably connecting the ends of the bridging member to said axle, structure and heel and toe plates; and means for making intermediate connections between the bridging member and said heel and toe plates, respectively.

12. In a roller skate, the combination of a rear truck comprising a pair of rollers, an axle structure on which the rollers are mounted, a heel plate formed with a depending stud; a forward truck comprising a pair of rollers, an axle structure, and a toe plate formed with a depending stud; a bridging member of arch configuration provided with an instep plate aligning with and abutting against the edges of the heel and toe plates, respectively, screws to enter said studs for removably connecting the ends of the bridging member to the axle structure and heel and toe plates, and means for making intermediate connections between the bridging member and said heel and toe plates, respectively.

GEORGE J. ERTL.