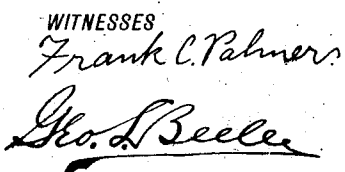


APPLICATION FILED JULY 22, 1912.

Patented May 13, 1913.



UNITED STATES PATENT OFFICE.

THOMAS SPACIE, OF BLUE ISLAND, ILLINOIS.

ROLLER-SKATE.

1,061,951.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed July 22, 1912. Serial No. 710,911.

To all whom it may concern:

Be it known that I, THOMAS SPACIE, a citizen of the United States, and a resident of Blue Island, 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.

This invention relates to roller skates, and has particular reference to a construction adapted to possess the maximum degree of strength and reliability, together with the minimum cost of production.

Another object of the invention is to construct a roller skate adapted for the widest range of adjustability and yet in every position of adjustment to maintain the maximum strength.

The foregoing and other objects of the invention will hereinafter be fully described and claimed and illustrated in the drawings accompanying this specification in which like characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a side elevation with certain parts in section; Fig. 2 is a front elevation; Fig. 3 is a vertical transverse section on the line 3—3 of Fig. 1; Figs. 4 and 5 are detail views of parts of the hanger; Fig. 6 is a detail view of the set screw retainer and guide; Figs. 7 and 8 are detail views of parts of the anchor; Fig. 9 is a sectional detail on the line 9—9 of Fig. 1; Fig. 10 is a detail of one of the claws; and Fig. 11 is a sectional detail on the line 11—11 of Fig. 1.

Referring particularly to the drawings I show at 12 a main foot or sole plate and at 13 a heel plate, said plates being adapted to be coupled together by means of a rib or bar 14, and each of the plates is adapted to be provided with a pair of rollers or wheels in any approved manner.

The bar 14 is substantially straight and rectangular in cross section, and is secured rigidly and permanently to the heel plate 13, longitudinal relative movement between the bar and heel plate being prevented by means of a lug 13' fitting into a socket or cross groove 14^a in the upper surface of the bar. The front portion of the bar is adjustable with respect to the sole plate 12

and is adapted to be clamped in any position of adjustment by any suitable means. As herein illustrated the rear end of the sole plate is bent downwardly at a substantially right angle forming a lug 15 having a substantially T-shaped hole 15^a, the main portion of which hole slidably fits the bar 14, but the upper portion of the hole being extended laterally as shown in Fig. 3. The bar is prevented from lateral displacement by the lug 15 and by any suitable number of additional lugs 16 struck downwardly from the sole plate 12. As a means for securely clamping the bar and sole plate together in adjusted position, I provide a novel form of guide 17 shown in detail in Fig. 6, and provided at its rear end with a T-head 18 adapted to pass rearwardly through the upper portion of the hole 15^a and drop into the bottom of said hole, bringing the lugs 18' into interlocking engagement with the rear wall of the lug 15. When the bar 14 is introduced into the hole 15^a it will secure the head 18 of the guide 17 in said hole 15^a. By this means the guide will be held from longitudinal displacement with respect to the sole plate. As an additional means for increasing the stability of the connection between the guide 17 and lug 15, the bottom of the lug 15 is provided with a finger 15' adapted to be received in a hole 18^a, as shown in Fig. 1. The sides of the guide 17 consist of flanges 19 extending upwardly parallel to each other and of a distance apart substantially equal to the width of the bar 14, and the front end of the guide is deflected upwardly with respect to its rear end so as to cause the front ends of the flanges 19 to snugly embrace the sides of the bar 14. The flanges 19 serve also to house the nut 20 of the set screw 21 passing through the bottom of the guide 17. The upper end of the screw impinges against the bottom of the bar, clamping the parts in position. The nut 20 constitutes a substantial threaded means of engagement for the screw threads, whereby the strain of the screw is relieved from the body of the guide 17.

Each pair of rollers 22 are mounted upon an axle 23 connected to an anchor 24, and each anchor is in turn secured to the heel

and sole plates by means of a hanger 25. Each hanger 25, as shown in this instance, comprises a pair of braces 26 and 27 which serve not only to form a means for connecting the anchor but also as part of the means for securing the bar 14 to the respective foot portions 12 and 13. The brace 26 is preferably formed with a pair of upper perforated ears 26' bent at an angle to the main portion of the brace and spaced to form a guide slot 26^a for the bar 14, and is furthermore provided at its lower end with a perforated ear 26''. The brace 27 likewise is formed at its upper end with a pair of perforated ears 27' and at its lower end with an ear 27''. Adjacent the upper end the brace 27 is formed between the ears 27' with an upwardly projecting tongue 28 adapted to be received in a transverse vertical slot 28^a of the guide 17, whereby the bar 14 when lying between the ears 27' will hold the guide 17 in interlocked relation with the upper end of the brace 27. The braces 26 and 27 through their upper ears are rigidly connected to the respective foot portions by means of rivets or the like. Each of said anchors 24 comprises what may be termed a cradle 29 and a cap 30. The cradle is formed with a series of perforated ears 31 bent downwardly from the main portion thereof and is also provided with a pair of upwardly extending side flanges 32 having perforated ears 33. The axis of the holes in the ears 33 lies in a plane substantially at right angles to the axis of the holes in the ears 31. The axle 23 passes through the ears 31 and is thereby held in position in any well known or approved manner. The cradle between the flanges 32 is adapted to support cushioning devices 34, which devices are retained in place by means of downwardly extending lips 35 of the cap 30, as shown in Fig. 9. The cap is provided adjacent its ends with transverse slots 30^a, each of which is adapted to receive an ear 33 of the cradle and one of the downwardly extending ears of the hanger 25. A hinge pin 36 is passed through the aligned holes in said ears below the cap 30 and through or between the cushioning means 34, whereby all of these parts just described are held permanently together but in a manner to provide any desired lateral rocking movement between the two parts of the anchor due to the resiliency of the cushioning means 34. The front hinge pin 36' is longer than the rear corresponding pin and constitutes a brace for the clamp screw 37 having the usual threaded connection through right and left threads with the claws 38'. The screw 37 is provided with a central circumferential groove 37' into which the front end of the pin 36' extends, and the screw 37 is embraced by a clevis 38 which lies within said groove 37' and is connected with the pin 36' by a cotter 39. The pin 36', therefore,

by reason of its rigid relation to the hanger constitutes an effective supporting means for the screw 37.

The skate made in accordance with this invention is practically all of sheet metal and possesses the maximum elements of strength as well as cheapness for this reason. The other parts, not of sheet metal, may be bought in large quantities cheaply in open market. It is to be understood, furthermore, that the relative sizes and proportions of the several parts of this skate may be variously constructed as to form and dimensions, without departing from the spirit of the invention.

Claims for the skate roller supporting mechanism and the skate clamp are not made herein but constitute the subjects matter for two divisional applications filed by me on December 28, 1912, Serial Nos. 739,064 and 739,065, respectively.

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

1. In a roller skate, a sole plate having a downwardly extending rear lug, a heel plate, an extension bar rigidly secured to the heel plate and extending through said lug beneath the sole plate, and means for securing the bar and sole plate adjustably together, said means including a guide having a T-head passing through said lug and secured therein by said bar.

2. In a roller skate, a sole plate having a downwardly extending lug at its rear end, an extension bar passing through said lug beneath the plate, a hanger brace secured to the lower surface of said plate, and means to secure the bar in adjustable relation to the sole plate, said means including a guide having one end interlocked with the aforesaid lug and its other end interlocked with said brace, and a screw passing through said guide into contact with said bar.

3. In a roller skate, the combination of a sole plate having a downwardly extending rear lug with a T-shaped hole, an extension bar passing through said hole beneath the plate, a guide having a rear T-head interlocking with said lug in said hole and held therein by said bar, said guide including a pair of upwardly extending side flanges embracing the sides of the bar, a set screw operative through the bottom of the guide into contact with the bar, and means to secure the front end of said guide in position.

4. In a roller skate, the combination of a sole plate having a downwardly extending rear lug with a T-hole therein, said lug being provided with a finger extending upwardly at the bottom of said hole, a guide having a T-head interlocked with said lug and having a hole to receive said finger, a bar extending through said lug hole and securing the guide therein, said guide includ-

ing a pair of flanges embracing the sides of
the bar and being provided with a trans-
verse slot adjacent its front end, and a
hanger brace secured to the bottom of said
5 plate and having a tongue interlocking in
said transverse slot.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

THOMAS SPACIE.

Witnesses:

GEO. L. BEELER,

PHILIP D. ROLLHAUS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
