

S. E. ASTBURY.  
 ROLLER SKATE.  
 APPLICATION FILED JULY 6, 1909.

955,037.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 1.

Fig 1.

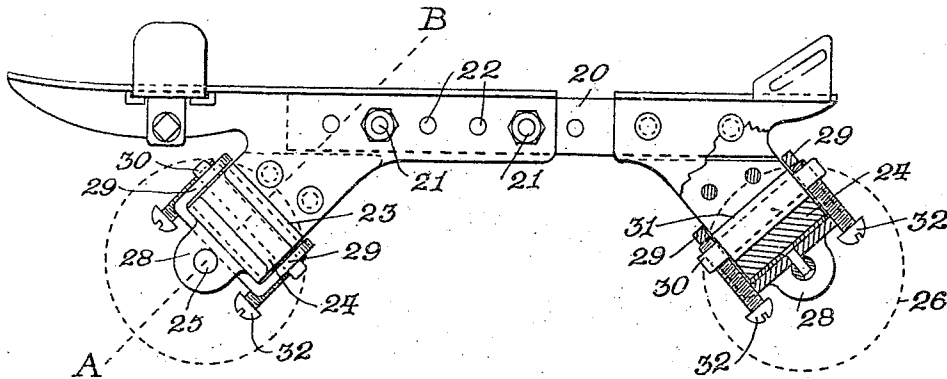


Fig 2.

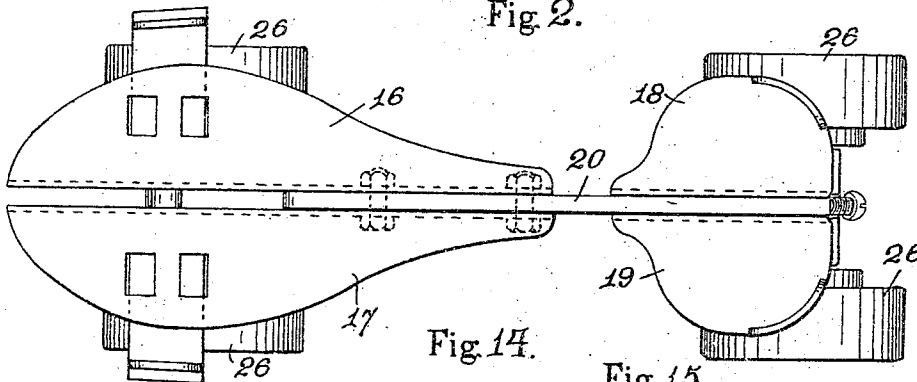


Fig 14.

Fig 15.

Fig 3.

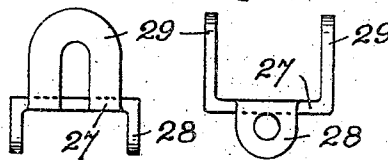
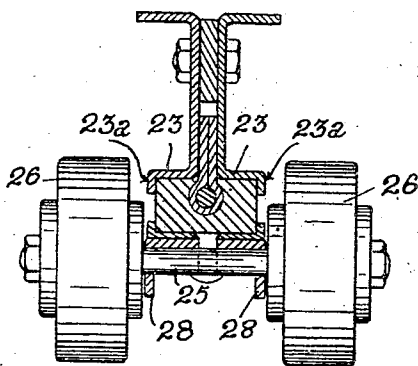
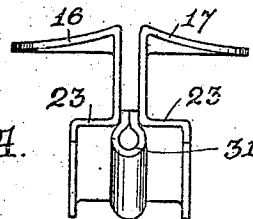


Fig 4.



Witnesses:

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Inventor

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 2 SHEETS—SHEET 2.

Fig. 5.

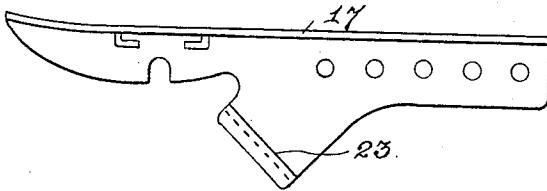


Fig. 8.

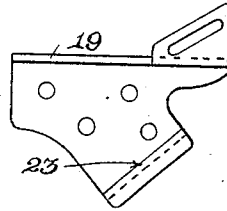


Fig. 6.

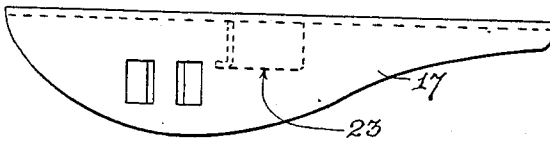


Fig. 9.

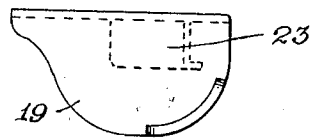


Fig. 7.

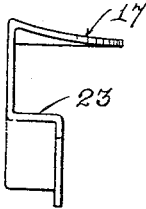


Fig. 10.

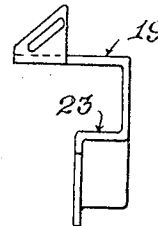


Fig. 11.

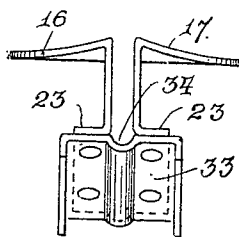


Fig. 12.

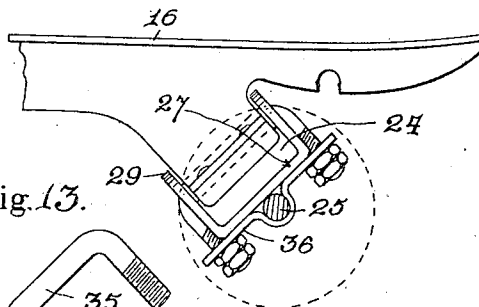
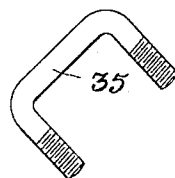


Fig. 13.



Witnesses.

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# UNITED STATES PATENT OFFICE.

SAMUEL ENOCH ASTBURY, OF WOLVERHAMPTON, ENGLAND.

## ROLLER-SKATE.

955,037.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed July 6, 1909. Serial No. 506,103.

*To all whom it may concern:*

Be it known that I, SAMUEL ENOCH ASTBURY, a subject of the King of Great Britain, residing at 168 Penn road, Wolverhampton, England, have invented certain new and useful Improvements in Roller-Skates, of which the following is a specification.

This invention relates to improvements in roller skates, and its object is to provide an improved construction of framework; and also improved means for carrying the roller devices. I attain these objects by the mechanism illustrated in the accompanying drawings, in which:—

Figure 1 is a side view, and Fig. 2 a plan view of my invention, showing such parts of a skate as are necessary to explain this my said invention. Fig. 3 is a sectional view on line A—B (Fig. 1), showing more particularly the means for carrying the rollers spindle. Fig. 4 is a front view of the fore part of the frame, showing only a portion of the two angle plates and the hole formed to accommodate the connecting pin. Fig. 5 is a detached side view, Fig. 6 a plan view, and Fig. 7 an end view, of one of the side pieces of the fore part of the frame; Fig. 8 is a detached side view, Fig. 9 a plan view, and Fig. 10 an end view of one of the side pieces of the rear part of the frame. Fig. 11 shows modified means for the accommodation of the connecting pin by which the roller carrying device is secured to the frame. Fig. 12 shows this modified arrangement in general. Fig. 13 is a detail view of the modified connecting pin. Fig. 14 is a front view, and Fig. 15 a side view in detail of the member which carries the rollers spindle, and which is secured to the frame.

It will be seen throughout that the general or chief feature of this my invention consists in the construction of the frame by means of plates upon which angle parts are formed, for connection to each other and for connecting thereto the parts carrying the roller devices.

Referring to Figs. 1 to 10, I have shown a form of frame which may be adjusted in length from toe to heel, when desired. In this case two angle plates 16 and 17 form right and left hand portions of the sole plate of the skate, while 18 and 19 similarly form the right and left hand portions of the heel plate of the skate. Between these several parts is secured the girder 20 by means of

bolts 21 which pass through holes 22 formed in the aforesaid plates and girder, so that a variation in length can be obtained when desired. The lower part 23 of the plates is again bent angularwise to receive and support the rubber blocks 24 both for the front and rear axle devices. The axle 25 for the rollers 26, is carried by the member 27 which is made of sheet metal having turned down ears 28 to receive the said axle, and also up-turned ears 29 which take over and embrace the longitudinal pin 30. A bearing 31 is formed through which the body part of the pin 30 passes; and this bearing is made of doubled sheet metal, and riveted between the vertical sides of the plates 16 and 17, and 18 and 19. In the ends of the pin 30 are screw holes to receive the thrust pins 32 by which the member 27 is firmly held up against and also compresses the indiarubber block 24. I further form upon the flanges 23 the turned down flanges 23<sup>a</sup>, by which I obtain a still better support to the rubber.

Referring to Figs. 11, 12 and 13 it will be seen that I may modify the form of bearing to receive the body part of the pin 30, that is to say, I may provide the plate 33 having the groove 34, and rivet said plate to the two main frame plates 16 and 17, and in which case the pin 30 lies in the said groove 34, when being tightened by the pins 32. In this case also I may use a modified pin as shown at 35 of a staple like shape, whose two ends are screwthreaded, and in which the cross plate 36 is used to embrace and secure the axle 25, and the whole together. Furthermore, the plate 33 being riveted to the flanges 23, will provide that the weight upon the skate is transferred to the rollers by the flanges 23, and at the same time give great rigidity to the structure.

The forms shown in Figs. 1 to 4 and in Figs. 11 and 12 have features in common in respect to the construction of the lower part of the frame, in that in both cases side frame-plates are employed having laterally extending lower portions. In Figs. 3 and 4 these portions are formed integral with said plates, while in Figs. 11 and 12 they are rigidly attached thereto, or, rather, to the short flanges thereon, and these laterally extending portions in both cases have down turned edges to grip the rubber block.

Although I have shown and described the main plates of the frame as being divided into front and rear parts where adjustabil-

ity in length is desired, still where no such adjustability is required, the girder 20 merely serves as a distance piece and the front and rear plates on both sides are  
5 formed as one continuous piece.

In the construction thus described it will be seen that the plates forming the sole and heel surface are divided down the center, and each formed in one with the vertical  
10 walls or webbing of the frame, and also the flanges giving support to the rubber cushions are formed in one therewith, and consequently the usual form of tang riveting is dispensed with.

15 What I claim as my invention and desire to secure by Letters Patent is:—

1. In a roller skate, a frame comprising a central girder and a pair of plates disposed on opposite sides of the girder and secured  
20 thereto, said plates being bent to form the sole and heel surfaces of the skate, the frame sides, and the supports for the skate trucks.

2. In a roller skate, a frame comprising a central girder and pairs of angular sole  
25 and heel plates located upon opposite sides of the girder and adjustably connected thereto, to vary the length of the frame.

3. In a roller skate, a frame comprising a central girder and pairs of angular sole and  
30 heel plates located upon opposite sides of the girder, and adjustably connected thereto, to vary the length of the frame, said plates being provided with supports for the skate trucks.

35 4. In a roller skate, a frame including a pair of spaced plates, each provided with a laterally extending flange at its lower edge; a bearing connected with said plates and arranged centrally between the same; a pin

in said bearing; a hanger having upwardly  
40 extending ears engaging said pin, said hanger having also downwardly extending ears in a plane at right angles to the upwardly extending ears; an axle supported in  
45 said downwardly extending ears; and a rubber block interposed between the hanger and the flanges.

5. In a roller skate, a frame including a pair of spaced plates; a central girder arranged between the upper portions of said  
50 plates and connected thereto; a truck; a pin on which the truck is hung; and a bearing plate for said pin connecting the lower portions of said frame plates and maintaining  
55 said portions in spaced relation to each other.

6. In a roller skate, a frame including a pair of spaced plates; a truck; a pin upon which the truck is hung; and a plate having  
60 a central bearing portion for the pin and having extensions from said bearing portion secured to and connecting the lower portions of said frame plates.

7. In a roller skate, a frame including a pair of plates having laterally extending  
65 lower flanges; a truck; a pin upon which the truck is hung; and a plate connecting the lower portions of the frame plates and having a bearing portion centrally disposed  
70 with relation to said frame plates.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SAMUEL ENOCH ASTBURY.

Witnesses:

J. BERNARD HAYWARD,  
W. GOODWIN.