

11.28

DRAFTSMAN

Aug. 25, 1925.

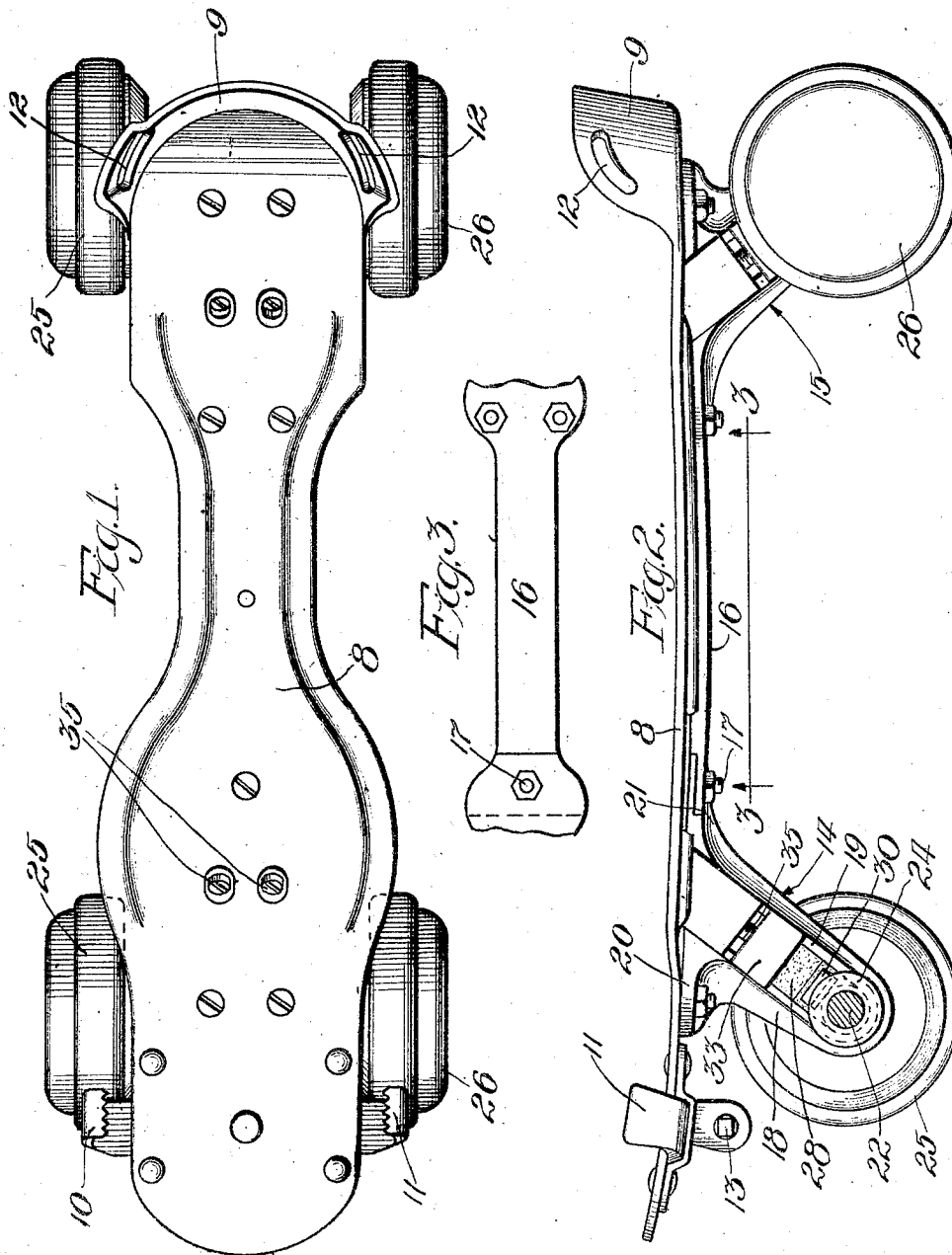
G. SCHLUESSELBURG

1,550,985

ROLLER SKATE AND THE LIKE

Filed April 9, 1923

2 Sheets-Sheet 1



Inventor:
George Schluesselburg
by *Samuel & Samuel* Attys.

11.28

Aug. 25, 1925.

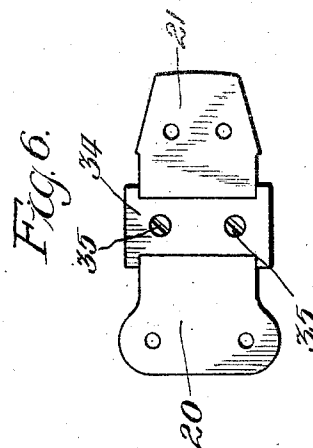
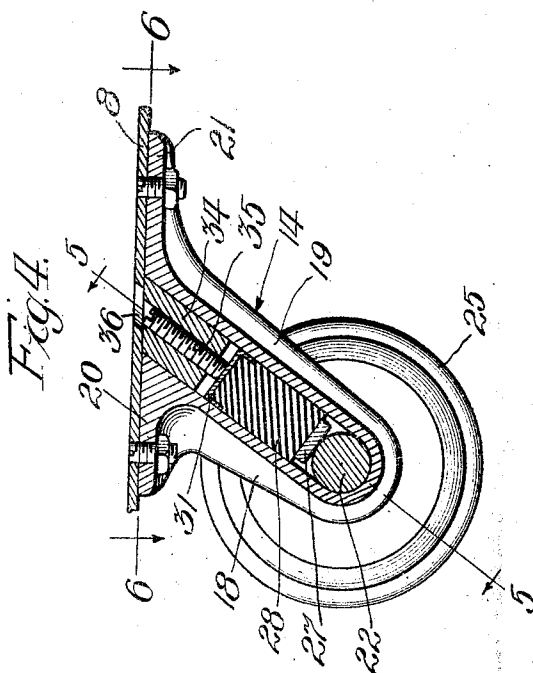
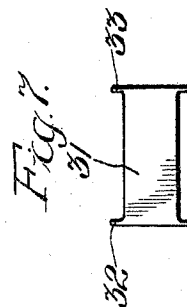
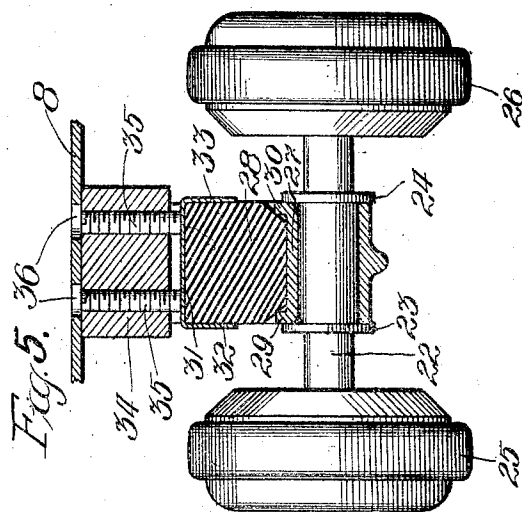
G. SCHLUESSELBURG

1,550,985

ROLLER SKATE AND THE LIKE

Filed April 9, 1923

2 Sheets-Sheet 2



Inventor:
George Schlüsselburg
by *Sammy & Sammy* Attys.

11.28

Patented Aug. 25, 1925.

1,550,985

UNITED STATES PATENT OFFICE.

GEORGE SCHLUESSELBURG, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO P. T. HARMON, OF CHICAGO, ILLINOIS.

ROLLER SKATE AND THE LIKE.

Application filed April 9, 1923. Serial No. 630,745.

To all whom it may concern:

Be it known that I, GEORGE SCHLUESSELBURG, a citizen of the German Republic, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Roller Skates and the like, of which the following is a specification.

This invention has to do with certain improvements in roller skates and like articles. The present invention has reference particularly to certain improvements in the form and construction of the hangers by which the rollers and shafts are connected to the platform.

One of the objects of the invention is to provide an improved form of hanger which is of such construction and arrangement that the shocks caused by slight obstructions in the path of travel of the rollers will be transmitted through the hangers in the most direct manner possible. In this connection, a further object is to make provision for so supporting the axles and rollers that the forces caused by encountering obstructions will be transmitted in a direction which is substantially the same as the resultant of the horizontal and vertical components of such force.

In connection with the foregoing, a still further object of the invention is to provide a cushion support for the axle in order to cushion the riding qualities of the skate, and, in this connection, a further object is to so arrange this cushion support that it will be effective in substantially the direct line of resultant forces previously mentioned.

A further object of the invention is to provide an arrangement whereby the resiliency of the cushion support can be easily adjusted from time to time by simply tightening or loosening one or more set screws which are readily accessible. This will make it possible to easily adjust the riding qualities of the skate so as to meet the conditions imposed by the surface on which the skate is riding, as well as the weight supported by the skate.

A further feature of the invention is to provide a hanger arrangement such that the two hangers at the front and rear of the skate are directly joined together and will operate more or less as a unit without hav-

ing to pass the entire amount of the stress through the platform itself.

A further object is to simplify the form and construction of the hangers, and to generally improve them and their operation.

Other objects and uses of the invention will appear from a detailed description of the same, which consists in the features of construction and combination of parts herein-after described and claimed.

In the drawings:

Figure 1 shows a plan view of a skate embodying the features of the present invention.

Fig. 2 shows a side view corresponding to Fig. 1, one of the rollers being broken away so as to better reveal the form and construction of the hanger;

Fig. 3 is a fragmentary bottom plan view taken on the line 3—3 of Fig. 2, looking in the direction of the arrows;

Fig. 4 shows a vertical section through one of the hangers;

Fig. 5 is a section taken on the line 5—5 of Fig. 4, looking in the direction of the arrows;

Fig. 6 is a plan view of the top end of the hanger itself, being taken on the line 6—6 of Fig. 4, looking in the direction of the arrows; and

Fig. 7 is a detail view of one of the pressure plates of the hanger.

Referring first to Figs. 1 and 2, I have shown the features of the present invention as being incorporated within a skate having the platform 8. This platform is illustrated as having the usual rear heel guard 9 and front toe clips 10 and 11. The heel guard can be secured to the foot by a strap passed through the slots 12, and the toe clips can be manipulated towards and from each other by a key set onto the pin 13, in accordance with the usual practice.

The front and rear brackets or hangers are designated by the numerals 14 and 15 in their entirety. The hanger 15 is provided with a longitudinally extending lug or strip 16 which reaches along beneath the platform 8 to the front hanger 14. The front portion of the lug 16 is connected into the hanger 14, so that these two elements work together and are joined together and cause the two hangers to operate substan-

tially as a unit. The connection of these parts is brought about by means of a nut or bolt 17 reaching through the platform 8, and for this purpose the front end of the lug 16 may be undercut beneath the hanger 14, as is clearly evident from examination of Fig. 3.

Each of the hangers is of U-shaped form having the parallel side arms 18 and 19, and the upper ends of such arms terminate in the lugs 20 and 21 respectively which are attached to the platform by screw bolts or in any other convenient manner. Examination particularly of Fig. 3 shows that the arms of the front bracket 14 reach upwardly and towards the rear, whereas, the arms of the rear bracket 15 reach upwards and towards the front of the skate.

An axle 22 is located in the lower portion of each bracket. Each of these axles has the flanges 23 and 24 which ride at the sides of the bracket arms 18 and 19 so as to keep the axle itself properly centered within the bracket and to guide the up and down movements of the axle within the bracket. The wheels 25 and 26 are journaled upon the ends of each of the axles. Inasmuch as the present invention does not concern itself particularly with the form and construction of these wheels and the wheel bearings, I have not illustrated and will not describe the same in detail in this case.

A journal block 27 works within each bracket and rests upon the top surface of the axle at a point between the flanges 23 and 24. A cushioning block 28, preferably of rubber or similar material, is located between the arms of each bracket and rests up on the bearing plate 27 thereof. The lower portion of each cushioning block 28 is preferably tapered, as clearly shown in Fig. 5, so that the same can rest between the upturned end fingers 29 and 30 of such bearing plate 27. A cap plate 31 rests upon the top portion of each of the cushioning blocks 28, the plate 31 having its end portions 32 and 33 turned down along the sides of the cushioning block so as to embrace the same in the manner clearly shown in Figs. 2 and 5.

A thrust block 34 is located between the upper portions of the bracket arms 18 and 19, and as clearly shown in Fig. 4, the top surface of the thrust block itself is formed on such an angle that it can rest flat against the under surface of the platform 8. A pair of set screws 35 is placed in each of the thrust blocks 34, the lower ends of these set screws working against the plate 31, so as to exert a thrust thereon. When the bracket or hanger is secured to the platform the thrust exerted by the screws 35 will cause the block 34 to react against the under surface of the platform, so that the thrust is thus transmitted directly to the platform itself.

In line with the set screws 35 there are formed the holes 36 in the platform, so that the set screws can be readily adjusted from the top of the skate and without having to remove the bracket or hanger.

With this arrangement the thrust exerted on each end of the cushioning block can be regulated independently of the other end, and after all of the parts have been assembled, so that the operation of the device can in this way be adjusted in order to make both of the rollers on the axle operate to the best advantage. In this way the tendency of the axle to deflect upwardly on one end or the other in an improper manner is eliminated.

The cushioning block 28 permits the axle to move in the lower portion of the hanger as the necessities of the travel of the skate dictates. One end or the other of the axle can be forced upwardly a slight amount, causing the axle to deflect with respect to the lower portion of the hanger, but, nevertheless, under the control of the pressure as exerted by the aforementioned set screws.

In turning a curve it is natural for the skater to bear down with a greater amount of pressure on the inside of the platform, the slight deflection of the platform and hangers thus occasioned is made possible by the presence of the yieldable blocks. Furthermore, examination of the device will show that by causing the front and rear hangers to slope away from each other any deflection of the axles within the hangers will bring about a change of their angular position with respect to each other, so that they will no longer travel in exact parallelism. As a result of this fact in turning a curve the two axles will be naturally turned with respect to each other to the best advantage in order to cause the skate to turn around a circle.

While I have herein shown and described only a single embodiment of the features of the present invention, still I do not limit myself to the same, except as I may do so in the claims.

I claim:

1. In a roller skate the combination of a platform, and a hanger extending downwardly from the under surface thereof, said hanger including a slotted bracket, means for securing the upper portion of said bracket rigid with respect to the under surface of the platform, a transverse axle extending through the lower portion of the bracket slot and free to move up and down therein, rollers on the ends of the axle, a bearing block working in the slot of the bracket and resting against the upper face of the axle, a block of yieldable resilient material within the slot of the bracket and above the bearing block thereof, a pressure plate within the slot of the bracket resting against

- the upper surface of the block of yieldable material therein, a thrust block within the slot of the bracket between the pressure plate and the under surface of the platform, and a set screw threaded through the thrust block and against the pressure plate, there being an opening in the platform in alignment with said set screw, whereby the same may be adjusted from above the platform, substantially as described.
2. In a roller skate the combination of a platform, a hanger extending downwardly from the under surface of the platform at each end thereof, said hangers slanting away from each other at substantially equal angles with respect to the platform, each hanger including a bracket having a transverse downwardly reaching slot, means for securing the bracket rigid with respect to the under surface of the platform, a transverse axle extending through the lower portion of bracket slot and free to move up and down therein, rollers on the ends of the axles, and resilient means within each bracket slot between the axle therein and the under surface of the platform, whereby the axles are free to adjust themselves within the bracket slot, and whereby as the platform is tilted the axles are twisted with respect to each other to take a curve, substantially as described.

GEORGE SCHLUESSELBURG.