March 2, 1926. 1,575,365

A. K. JOHNSON

SKATE

Filed Feb. 18, 1925

Fig. 1.

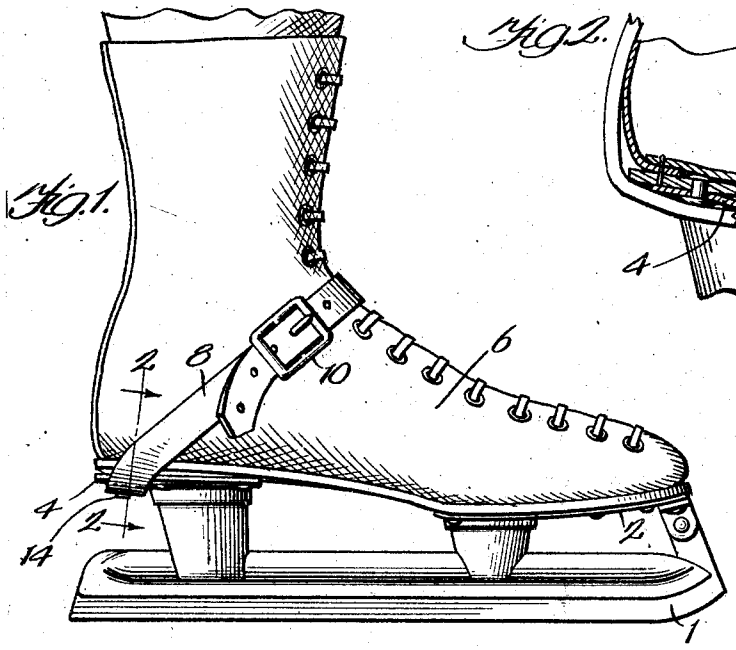


Fig. 2.

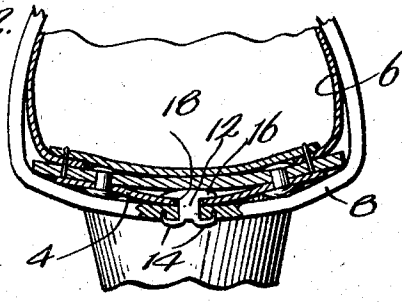


Fig. 3.

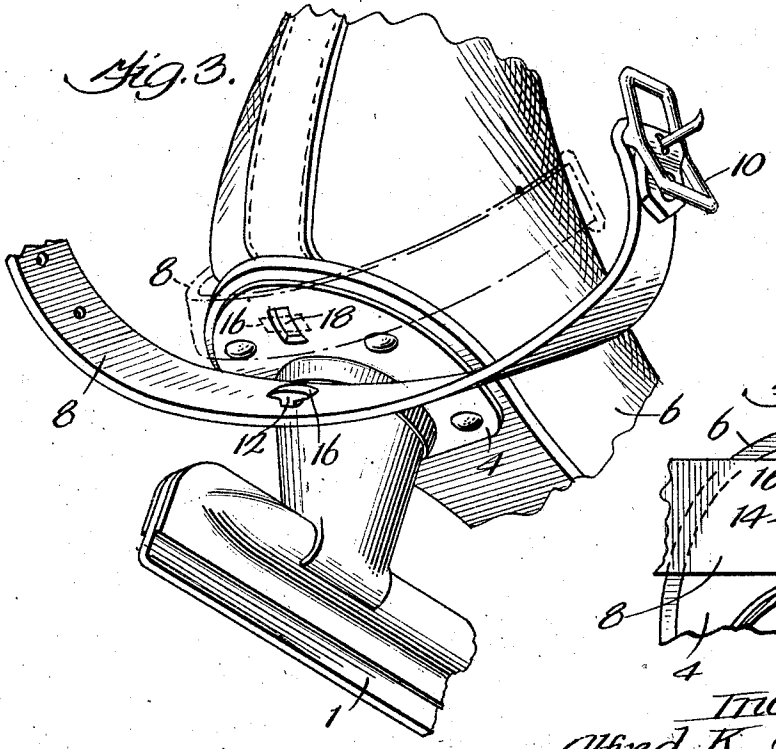
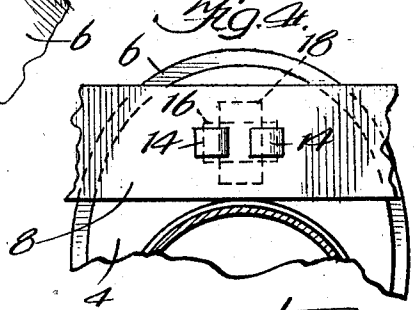


Fig. 4.



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By Cleaver & Cox Attys.

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UNITED STATES PATENT OFFICE.

ALFRED K. JOHNSON, OF CHICAGO, ILLINOIS.

SKATE.

Application filed February 18, 1925. Serial No. 9,904.

To all whom it may concern:

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

My invention relates to skates and is particularly concerned with the ankle strap and means by which it may be detachably attached to the skate. Some skaters have weak ankles and require an ankle strap to brace them. Others who have stronger ankles do not require such extra bracing, and one object of my invention is to provide a construction by which the owner of a pair of skates shall have the option as to whether or not an ankle strap shall be used. Also, as a result of my invention in making the strap detachable it is possible for the user when through skating to detach the two straps from the skate, then buckle them together and use them as a convenient means for carrying the skates. Furthermore, with my invention it is possible for the skates to be sold with or without straps thus making it possible for the dealer to make a reduced price to a customer who does not require the straps. The bracing effect of a strap on the ankle is very much greater when the strap is non-shiftable than when it is shiftable crosswise of the skate. The support to the foot and ankle is greatly increased when the strap is stationary at the point where it is fastened to the skate. One of my objects is to provide a fastening means which will permit the straps to be detached but will hold the strap stationary and prevent it from shifting crosswise of the skate when the tension on the strap is varied due to the movements of the foot of the wearer.

I accomplish my objects in the manner illustrated in the accompanying drawings in which

Figure 1 is a side elevation of a skate showing the strap attached and strapped to the ankle of the user.

Figure 2 is an enlarged sectional detail on the line 2—2 Figure 1.

Figure 3 is a perspective view showing the rear portion of the skate and shoe, the heel plate socket, the strap and the fastener on the strap by which it is detachably secured to the heel plate. In full lines the parts are shown separated; in dotted lines the strap is shown in fastened position.

Figure 4 is a bottom plan view of the strap and heel plate showing the parts assembled.

Like numerals denote like parts throughout the several views.

In the form illustrated the skate has a runner 1 provided with a sole plate which in the present case is formed in two parts—a front section 2 and a rear section 4. The latter is sometimes referred to as a "heel plate". The shoe 6 is supported upon sole plate section and in the present case is permanently attached, although this fact is immaterial.

The ankle strap 8 is provided with the usual buckle 10 which may be of any desired form. Between its ends the strap is provided with means by which it may be detachably attached to the plate. In the form shown a stud 12 is riveted or otherwise secured to the strap. In the illustrated case it has prongs 14 which project through the strap and whose ends are then bent over and forced part way into the body of the strap. The stud has an elongated head 16 which has lateral projections extending from the body of the stud and forming means by which the strap is anchored to the heel plate. The heel plate has an elongated slot 18. The relative sizes and shapes are such that when the head of the stud is placed lengthwise of the slot it will be able to enter it, and when turned crosswise will be unable to pass out through it. The parts are so arranged that when the stud head is crosswise of the slot the strap will be crosswise of the skate, and hence in acting position. The head of the stud is spaced from the strap a distance slightly greater than the thickness of the metal of which the heelplate is made, thus enabling the stud to be rotated when its head is in the slot.

The operation will now be readily understood. If the strap is detached and it is desired to attach it, it will first be brought to a position approximately lengthwise of the skate and the head of the stud will be inserted through the slot in the heel plate. The strap will then be given a quarter turn whereupon the head of the stud will lie crosswise in the slot, thus preventing its re-

moval. The strap will then be securely held to the skate and may be used in the ordinary fashion. To detach the strap the reverse operation will be proceeded with, the strap being given a quarter turn to bring the stud head lengthwise of the slot after which it may be withdrawn.

As previously mentioned, as a result of this invention the strap may be instantly applied to the skate or removed from it and the skate may be used with or without the strap; also it is possible for a dealer to sell a pair of skates with or without straps, thus enabling him to reduce the charge to buyers who do not wish to acquire the strap. Furthermore if a strap breaks another one may be instantly substituted.

It will also be observed that the fastening means holds the strap stationary and prevents it from shifting lengthwise of the strap, that is, crosswise of the skate. This gives the maximum supporting effect hereinabove referred to.

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

1. A skate having a foot supporting plate, a strap, and means for detachably attaching the strap to the plate and preventing lengthwise movement of the strap relatively to the plate, said means being interfitting parts consisting of but two elements, manually manipulatable, one element being part of the strap and the other part of the plate.

2. A skate having a foot supporting plate having a slotted portion and a strap having a headed pin adapted to enter the slot to detachably attach the strap to the plate.

3. A skate having a foot-supporting plate, and a strap having a headed pin rigidly fastened to it, the plate having a slot for receiving the shank of the pin and detachably holding the parts together and preventing relative shifting of the parts in the direction of the length of the strap.

4. A skate having a foot supporting plate, a strap, and means for detachably attaching them together, one of the parts having an elongated slot, and the other having a stud with an elongated head whereby the two parts may be assembled when in one relative position and will engage when in a different relative position.

5. A skate having a foot supporting plate with an elongated slot therein, and a strap having a stud with an elongated head capable of being retained in the slot when the head is crosswise of it, the strap being then in operating position, the head being removable from the plate when rotated approximately 90 degrees in the plane of the plate.

In witness whereof, I have hereunto subscribed my name.

ALFRED K. JOHNSON.