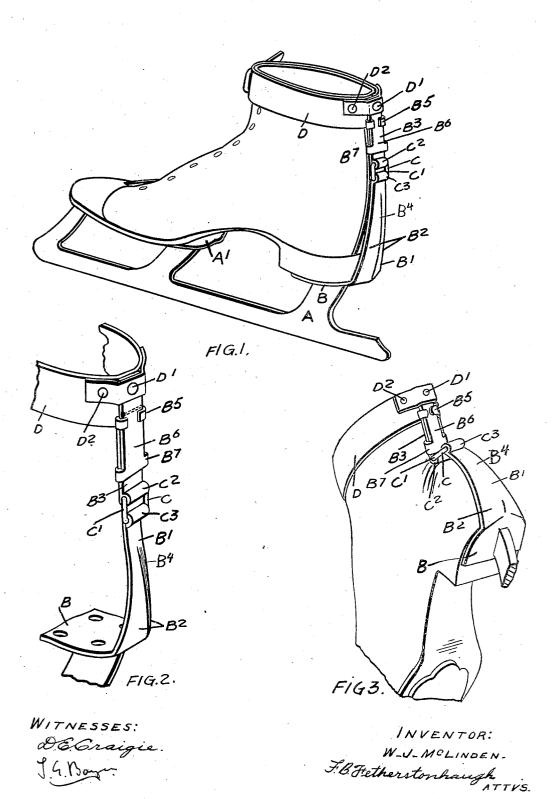
## W. J. McLINDEN. ANKLE SUPPORT.

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943,703.

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## UNITED STATES PATENT OFFICE.

WILLIAM JOHN McLINDEN, OF OWEN SOUND, ONTARIO, CANADA.

## ANKLE-SUPPORT.

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Specification of Letters Patent. Patented Dec. 21, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM JOHN Mc-LINDEN, of the town of Owen Sound, in the county of Grey, in the Province of Ontario, 5 Canada, have invented certain new and useful Improvements in Ankle-Supports, of which the following is the specification.

My invention relates to improvements in ankle supports particularly adapted to skates, and the object of the invention is to devise a form of ankle support adapted to both skate and boot, which will not only effectually support the ankle but also allow of a natural freedom of movement or bend 15 of the foot and boot from front to back during the exercise of skating and which is so necessary for the comfort of the skater, especially in preventing any straining or undue pressure on the foot.

A further object is to protect the back of the boot particularly in hockey playing.

A still further object is to so construct the ankle support that a hockey player may be enabled to stand or run on the toe of the 25 skates without interfering with the efficiency of the support to the ankle.

A yet further object is to make the device strong, durable and if necessary form part

of the skate itself.

To effect these objects I have constructed my ankle support of a bottom plate attached to or forming portion of the heel plate of the skate, an upwardly extending standard concaved in form to fit the contour of the back 35 of the heel portion of the boot and provided with a hinge intermediate of its length, and a plate slidably connected to the top of the standard and permanently secured to the top of the boot and an ankle strap extending 40 around the same, the parts being arranged and constructed as hereinafter more particularly explained.

Figure 1, is a perspective view of a skate and boot secured thereto provided with my improved ankle support. Fig. 2, is an enlarged detail of the ankle support. Fig. 3, is an enlarged detail showing the skate, boot and ankle support in the position which it would assume when a hockey player is 50 standing or running on the toes of his skates.

In the drawings like letters of reference

indicate corresponding parts in each figure.

A is a skate, which is provided with the usual sole plate A'. The sole plate is secured 55 to the sole of the shoe in the usual manner.

prefer to form as part of my ankle support. Attached to the plate B or forming part thereof is the standard B', which extends from the plate to the top of the boot. The 69 standard is curved longitudinally to fit the longitudinal curve of the heel portion of the boot and is also curved, concaved or hol-lowed laterally to fit the lateral contour of the heel portion forming substantially lat- 85 erally extending curved wings B2 at the lower portion of the standard. Intermediate of the length of the standard I provide a double hinge C, which comprises a metal loop C' fitting into the upper and lower eyes 70 C<sup>2</sup> and C<sup>3</sup> forming portion of the upper and lower portions B<sup>3</sup> and B<sup>4</sup> of the standard B'. The upper portion B<sup>3</sup> is formed with ears B5 forming a guide-way.

B° is a plate forming part of the standard 75 and slidably held in the guide-ways B°. The plate  $B^6$  is also provided with ears  $B^7$ , which at each side straddle the edge of the upper portion B<sup>3</sup> of the standard. The plate Bo is secured to an ankle strap D and the 80 top of the boot by a central rivet D' and side rivets D<sup>2</sup>. The ankle strap is provided with the usual buckle, which is not necessary

here to describe.

Having now described the principal parts 85 involved in my invention I shall briefly describe its utility. The standard B' forming part of the plate B effectually holds the back or heel portion of the boot in an upright position and thereby stiffens the boot 90 from top to bottom and thus serves as an efficient ankle support. The bottom portion of the standard being curved and provided with wings B2 as hereinbefore described is not only greatly strengthened but fits the con- 95 tour of the boot very securely, thereby adding very much to the rigidity of the boot and the efficiency of the support.

In skating it is well known that the foot has a bending movement from front to rear, 100 which the boot as well as the skate must permit in order that the skater may skate with perfect freedom. If the standard B' were rigid from top to bottom such a movement of the foot would be prevented or at least 105 there would be a great strain on the shoe and on the instep or front portion of the ankle. This is effectually obviated by the use of the sliding plate B5 as well as the double hinge C, which permits of all possible movement 110 of the foot from front to rear even to the B is the heel plate on the skate, which I | extent of permitting of a hockey player

standing on his toes as will be readily seen on reference to Fig. 3.

What I claim as my invention is:

1. An ankle support comprising a heel plate, a standard connected at one end to said plate and adapted to extend up the back of a shoe, a double hinge intermediate the length of the standard, and means carried by the upper end of the standard adapted to secure the same to the top of the shoe.

2. An ankle support comprising a heel plate, a standard connected at one end to said plate and adapted to extend up the back of a shoe, a double hinge located intermediate of the length of the standard, a plate slidably connected to the top of the standard.

ard above said hinge and a strap carried by

said plate.

3. In combination with a skate and its heel plate, of a standard extending upwardly 20 from the rear of the plate, a double hinge located intermediate the ends of said standard, a plate slidably connected with the upper end of the standard, said plate and the upper end of the standard having lugs 25 thereon bent over each other to form a sliding connection, and a strap carried by said plate.

WILLIAM JOHN McLINDEN.

Witnesses:

B. Boyd, R. Cobain.