Jan. 6, 1959 P. J. LACHAT 2,867,445

AUXILIARY RUNNER FOR ICE SKATES

Filed May 17, 1957

Fig. 1.

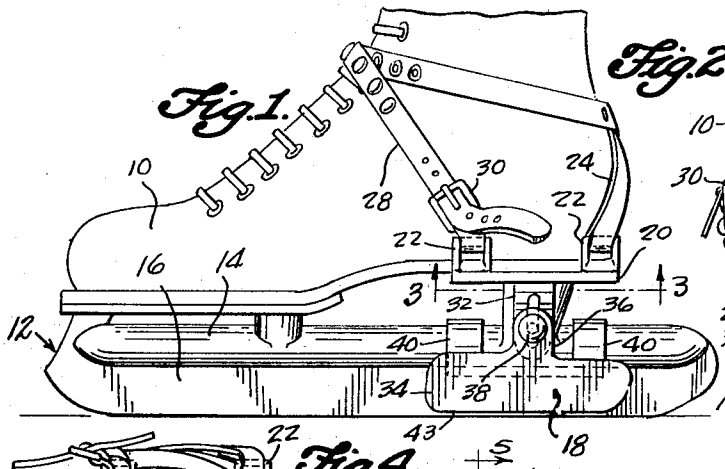
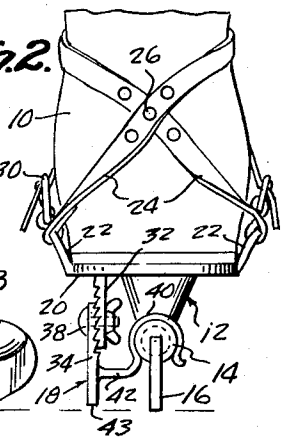


Fig. 2.



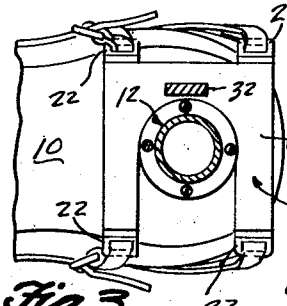


Fig. 3.

Fig. 4.

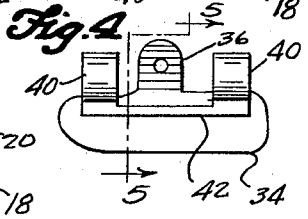


Fig. 5.

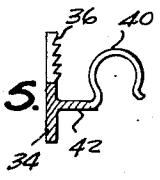


Fig. 6.

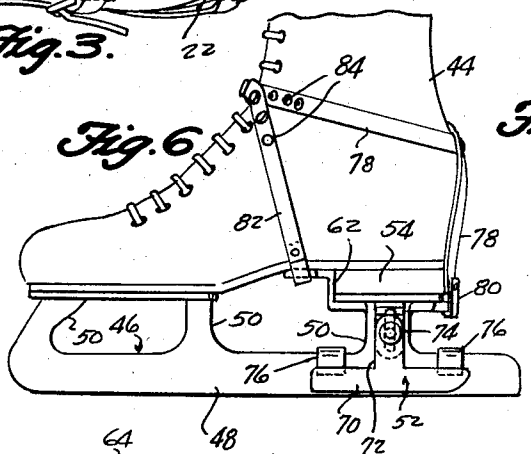


Fig. 8.

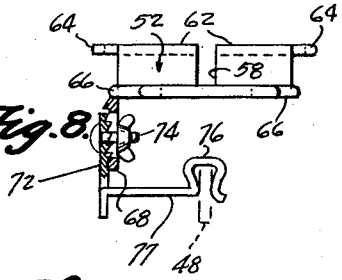


Fig. 9.

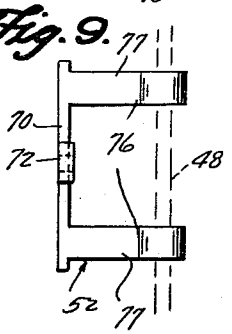


Fig. 7.

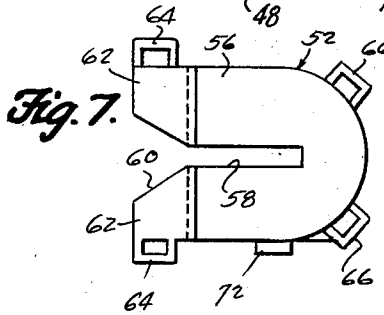
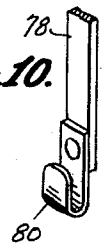


Fig. 10.



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AUXILIARY RUNNER FOR ICE SKATES

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4 Claims. (Cl. 280—11.12)

This invention relates to ice skates, and more particularly to an auxiliary runner or blade, attachable to a conventional ice skate, as for example, the type including a tubular blade, the type in which there is a heel on the shoe, etc.

Among important objects of the invention are the following:

To provide a device which will not interfere with normal skating activities;

To effect contact between the device and the ice whenever one's ankle weakens to an extent that causes the shoe and skate to collapse inwardly a predetermined extent beyond their normal vertical positions;

To permit the device to be applied or removed with maximum speed or ease, so that it can be taken off the skate when one has learned to skate well enough to no longer require aid in counteracting the ankle weakness which normally is encountered by novices; and

To form the device at low cost while yet providing a strong, rugged attachment to the ice skate.

Other objects will appear from the following description, the claims appended thereto, and from the annexed drawing, in which like reference characters designate like parts throughout the several views, and wherein:

Figure 1 is a side elevational view of an ice skate equipped with an attachment according to the invention;

Figure 2 is a rear end elevational view of the skate and attachment;

Figure 3 is an enlarged section on line 3—3 of Figure 1;

Figure 4 is a side elevational view of the attachment per se, as seen from the inside;

Figure 5 is a transverse section on line 5—5 of Figure 4;

Figure 6 is a side elevation of a modified form applied to a skate;

Figure 7 is an enlarged top plan view of the modified device per se;

Figure 8 is a rear elevational view of the modified device per se, on the same scale as Figure 7, partly in section;

Figure 9 is a top plan view of the modified device on the same scale as Figure 8 with the base plate removed, the skate blade being shown in dotted lines; and

Figure 10 is an enlarged, fragmentary perspective view of one of the holding straps.

Referring to the drawings in detail, a conventional shoe skate includes a shoe **10** and ice skate **12** having a tube **14** rigid with a runner or blade **16**.

The auxiliary runner **18** includes a base plate **20** having at each side a pair of upwardly projecting ears **22**. To the rear ears are connected straps **24** crossed in back of the shoe (Figure 2) and adjustably connected together at their point of crossing by snaps **26**. In front of the shoe the straps are again crossed and have distal end portions **28** connected removably to buckles **30** on short straps connected to the front ones of the ears **22**.

Rigid with and depending from base plate **20** at one side of blade **16** is a connecting plate **32**. The plate **32** has a serrated or toothed outer surface and a horizontally extending blade **34** is formed medially between its ends with an upwardly projecting tongue **36** having teeth meshing with the teeth of plate **32** in selected positions to which blade **34** is vertically adjusted in respect to the surface of the ice. A connecting bolt **38** extends through an opening of tongue **36** and through a vertical slot of plate **32**. A wing nut on the bolt is tightened to fixedly connect the plate **32** and tongue **36**.

Rigid with blade **34** is a means for supporting the same in predetermined, laterally spaced relation to runner **16**. This includes spring clamps **40** of inverted U shape embracing and gripping the tube **14** and integral with a laterally projecting rib rigid with blade **34**. The blade **34** has a lower edge **43** that extends parallel to the blade **16** just above the ice (Figures 1 and 2).

In Figures 6–9 a shoe **44** is connected with an ice skate **46** having a blade **48** connected by longitudinally spaced connecting portions **50** to the shoe.

The auxiliary runner **52** is mountable on the heel **54** of the shoe. It includes a base plate **56** having a forwardly opening slot **58** provided with a flared entranceway **60** for receiving the rear connecting portion **50**. The entranceway **60** is formed in an upwardly offset front part or abutment **62** integrally formed on the plate **56**.

Front ears **64** and rear ears **66** on the base plate are connected to straps in a manner to be made presently apparent.

Integral with one side of the base plate is a depending mounting plate **68** having teeth on its outer surface. A blade **70** is integral with an upwardly projecting tongue **72** toothed to mate with the teeth of plate **68**. Plate **68** and tongue **72** are connected by a bolt **74** extending through a slot of plate **68**. Downwardly opening clamps **76** are integral with laterally extending arms **77** rigid with plate **72**.

Connected to ears **66** are straps **78** crossed in back of the shoe and having hooks **80** engaged with the ears **64**, **66**. The straps are crossed as at **82** in front of the shoe and are adjustably connected by snaps **84**.

In both forms the blade **34** or **70** will not contact the ice when one is skating properly, that is, with the ice skate and shoe perfectly upright. Beginning skaters, however, tend to weaken in the ankles causing the shoes to bend inwardly. In this situation, the blades of the auxiliary devices will immediately contact the ice to prevent any more than a slight inward bending of the ankle. Discomfort is reduced and the necessity for a beginner to take frequent rests is eliminated. Further, one quickly learns to maintain the runner of the ice skate in perfectly vertical position. Then, when the device is no longer needed, it may be removed.

It is believed clear that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles of operation and the means presently devised to carry out said principles, it being considered that the invention comprehends any minor change in construction that may be permitted within the scope of the appended claims.

What is claimed is:

1. The combination, with an ice skate of the shoe skate type, said ice skate including a shoe and a runner permanently attached thereto, of an auxiliary runner attachment comprising a base plate formed separately from and underlying the shoe, said base plate being centered between opposite sides of the shoe; straps on the plate connected about said shoe; an auxiliary blade extending horizontally below one side of the base plate; and means spaced

laterally from the midwidth portion of the base plate and connecting the blade and base plate, said means comprising a plate rigid with and depending from the base plate, a tongue extending upwardly from the blade, and a bolt connecting the tongue and plate.

2. The combination, with an ice skate of the shoe skate type, said ice skate including a shoe and a runner permanently attached thereto, of an auxiliary runner attachment comprising a base plate formed separately from and underlying the shoe, said base plate being centered between opposite sides of the shoe; straps on the plate connected about said shoe; an auxiliary blade extending horizontally below one side of the base plate; and means spaced laterally from the midwidth portion of the base plate and connecting the blade and base plate, said means comprising a plate rigid with and depending from the base plate, a tongue extending upwardly from the blade, and a bolt connecting the tongue and plate, the plate and tongue having meshing teeth to interengage the same in selected positions of vertical adjustment of the blade.

3. The combination, with an ice skate of the shoe skate type, said ice skate including a shoe and a runner permanently attached thereto, of an auxiliary runner attachment comprising a base plate formed separately from and underlying the shoe, said base plate being centered between opposite sides of the shoe; straps on the plate connected about said shoe; an auxiliary blade extending horizontally below one side of the base plate; means spaced laterally from the midwidth portion of the base plate and connecting the blade and base plate, said means comprising a plate rigid with and depending from the base plate, a tongue extending upwardly from the blade, and a bolt connecting the tongue and plate; and means extending laterally from the blade for engaging said runner to hold

the blade at a predetermined distance laterally from the runner.

4. The combination, with an ice skate of the shoe skate type, said ice skate including a shoe and a runner permanently attached thereto, of an auxiliary runner attachment comprising a base plate formed separately from and underlying the shoe, said base plate being centered between opposite sides of the shoe; straps on the plate connected about said shoe; an auxiliary blade extending horizontally below one side of the base plate; means spaced laterally from the midwidth portion of the base plate and connecting the blade and base plate, said means comprising a plate rigid with and depending from the base plate, a tongue extending upwardly from the blade, and a bolt connecting the tongue and plate; and means extending laterally from the blade for engaging said runner to hold the blade at a predetermined distance laterally from the runner, comprising a pair of clamps of inverted U shape adapted to embrace the runner, and at least one connecting member rigid with and extending between the blade and clamps.

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