(No Model.)

M. B. DUNBAR.

EXTENSION SKATE.

No. 490,872. Patented Jan. 31, 1893.

Fig. 1.

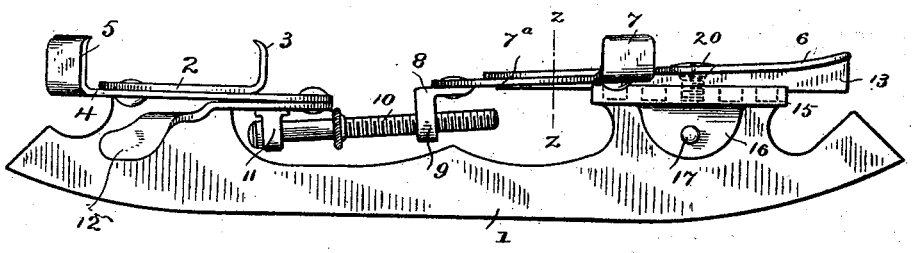


Fig. 2.

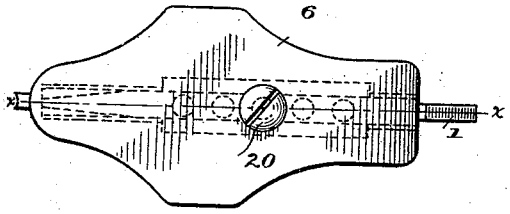


Fig. 3.

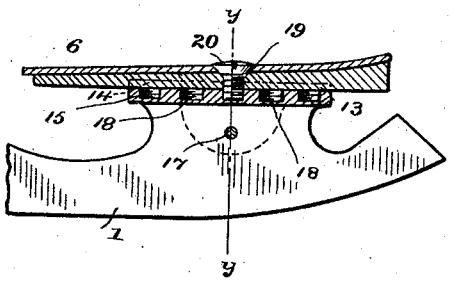


Fig. 6.

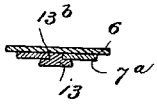


Fig. 4.

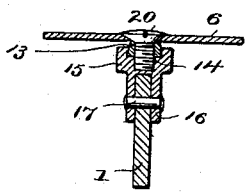
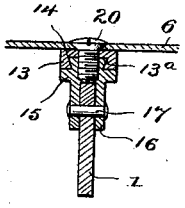


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

MARCENE B. DUNBAR, OF TORRINGTON, CONNECTICUT.

EXTENSION-SKATE.

SPECIFICATION forming part of Letters Patent No. 490,872, dated January 31, 1893.

Application filed March 22, 1892. Serial No. 425,951. (No model.)

To all whom it may concern:

Be it known that I, MARCENE B. DUNBAR, a citizen of the United States, residing at Torrington, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Extension-Skates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to simplify, cheapen and to generally improve the construction and operation of extension skates.

With these ends in view I have devised the simple and novel construction which I will now describe referring by numbers to the accompanying drawings forming part of this specification in which,

Figure 1 is a side elevation of my improved skate complete. Fig. 2, a plan view of the sole plate. Fig. 3, a longitudinal section on the line *x x* in Fig. 2. Fig. 4, a transverse section on the line *y y* in Fig. 3. Fig. 5, a similar section illustrating slight changes in the details of construction, and, Fig. 6 is a detail sectional view on the lines *z z* in Fig. 1, illustrating the manner in which the shanks of the sole clamps are held in place.

1 denotes the blade, 2 the heel plate which is rigidly secured thereto in the ordinary or any preferred manner, and is provided at its forward end with an engaging lug 3, 4 the heel slide having the usual engaging lugs 5, 6 the sole plate, 7 the sole clamps, the shanks 7^a of which are pivoted to a plate 8 having a threaded lug 9 engaged by the usual adjusting screw 10, the rear end of said screw engaging and turning freely in an eye 11 which is pivoted to the locking lever 12. These parts with the exception of the sole plate may all be of any ordinary or preferred construction and as they are not of the essence of my invention, will not be described in detail. The sole plate is provided on its under side with a rib 13 the bottom of which is straight, *i. e.* not curved to correspond with the curvature of the sole plate, and which engages a groove 14 in a plate 15 which is rigidly secured to the blade *a'*. This rib enables me to use relatively light metal for the sole plate to which it imparts the required rigidity, the rib itself resting firmly on plate 15 in which it slides when the skate is extended. If preferred the groove 14 may be formed in the rib, as in Fig. 5, and plate 15 may be provided with a rib 13^a engaging said groove, as is clearly shown in said figure. In the drawings I have shown plate 15 as provided with ears 16 which rest upon the opposite sides of the blade to which they are secured by a rivet 17 which passes through the ears and the blade. In practice the sides of the rib are made to taper outward from its base, and the sides of the groove to taper inward from its bottom so that when the rib is slid into the groove it cannot be moved except in the manner which will be presently explained. It will be seen in Figs. 1 and 6 that the use of rib 13 enables me to dispense with the button ordinarily used in this class of skates to hold the shanks of the sole clamps in place.

13^b, see Fig. 6, denotes slots at the rear end of the rib which receive shanks 7^a and retain them in place, thereby dispensing with the use of the buttons heretofore essential.

18 denotes threaded holes in plate 15, and 19 a hole through the sole plate and rib. A screw 20 passes through hole 19 and engages either of the threaded holes in plate 15. To move the sole plate therefore it is simply necessary to remove screw 20 and move the plate either forward or backward as may be required until hole 19 registers with the next hole 18 in plate 15. In the drawings I have shown plate 15 as provided with five holes, more or less may be used if preferred, I find five quite sufficient, however, in practice. It will be seen that this adjustment enables the user to lengthen the skate with very little trouble and at the same time makes the skate very strong, ss in addition to screw 20 the sole plate is held locked in position by the engagement of the rib with the overhanging groove.

Having thus described my invention, I claim:

1. The combination with a blade and a plate 15 rigidly secured thereto and provided with threaded holes, of a sole plate having on its under side a rib 13, a tongue and groove connecting said plate and said rib, slots 13^b at the rear end of the rib, sole clamps engaging said slots and connected to a plate 8 having a lug 9, an adjusting screw engaging said

lug, a hole 19 through the sole plate and rib 13, and a screw adapted to pass through the hole in the sole plate and rib and engage either of the holes in plate 15.

2. The combination with the blade having a plate 15 rigidly secured thereto said plate having threaded holes 18 and sole clamps of ordinary construction, of the sole plate having on its under side a rib, a tongue and groove connection between said plate and said rib said rib having slots 13^b at its rear ends which are engaged by the shanks of the sole clamps for the purpose set forth, and a screw passing through the sole plate and engaging either of the holes in plate 15.

In testimony whereof I affix my signature in presence of two witnesses.

MARCENE B. DUNBAR.

Witnesses:
CHAS. L. MCNEIL,
JOHN W. BROOKS.