J. E. PARMENTER.

Skates.

No. 221,603. Patented Nov. 11, 1879.

Fig. 1.

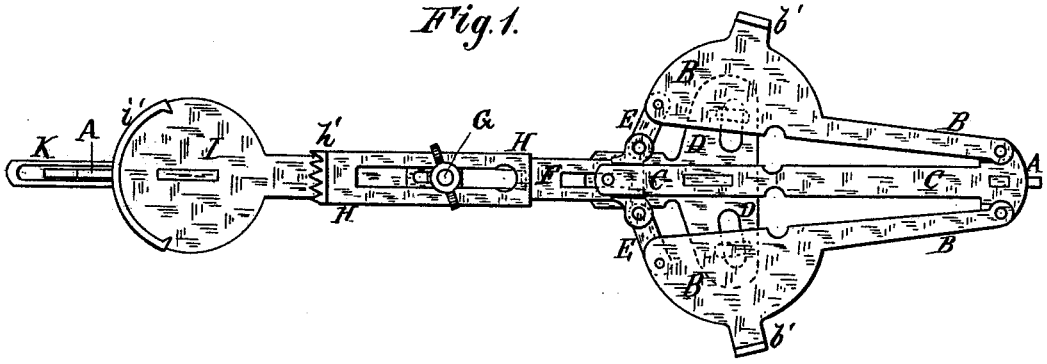


Fig. 2.

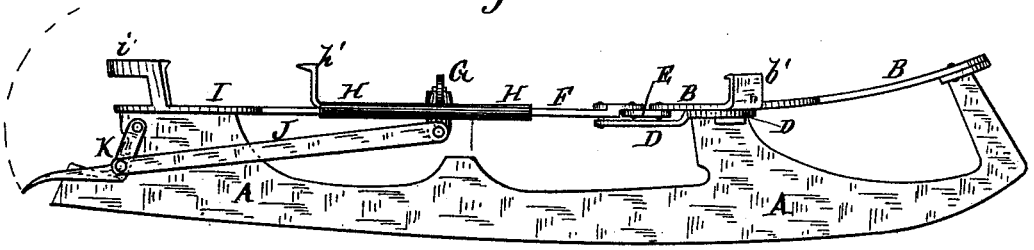
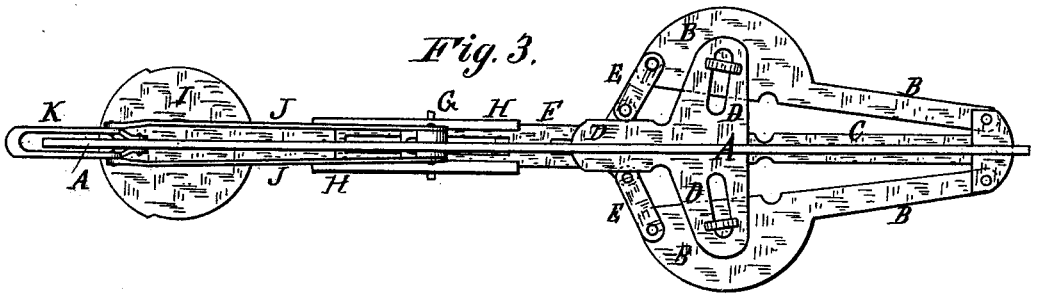


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN E. PARMENTER, OF FORT PEMBINA, DAKOTA TERRITORY.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. **221,603**, dated November 11, 1879; application filed May 8, 1879.

To all whom it may concern:

Be it known that I, JOHN E. PARMENTER, of Fort Pembina, in the Territory of Dakota, have invented a new Improvement in Skates, of which the following is a specification.

Figure 1 is a top view of one of my improved skates, shown with the parts expanded ready to be applied to a boot. Fig. 2 is a side view of the same. Fig. 3 is a bottom view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish skates which shall be so constructed that they can be very easily and quickly attached to and detached from the boots, and which at the same time shall be neat, strong, and durable, and not liable to become accidentally unfastened.

The invention consists in the combination of the stationary central piece, the two pivoted side pieces provided with the claws, the slotted supporting-plate, the pivoted connecting-bars, the slotted sliding bar, the slotted sliding bar provided with the claw, the heel-plate provided with the claw, the hand-screw, the two pivoted connecting-bars, and the double bent lever with each other and with the blade or runner of the skate, as hereinafter fully described.

A represents the blade or runner of the skate. The ball-plate of the skate is made in three parts, B C B, the central part, C, being a narrow strip attached at its forward end to the toe of the runner, and near its rear end to the ball-projection of the said runner. The forward ends of the side parts, B B, are pivoted to the toe of the runner, and their rear parts rest upon a plate, D, attached to the ball-projection of the said runner, and with which they are connected by pins passing through slots in the said plate D. The rear parts of the side parts, B B, are made semicircular in form, and upon their outer edges are formed claws *b'* to clasp the side edges of the boot-sole.

To the rear end of the parts B are pivoted the forward ends of two short connecting-bars, E, the rear ends of which are pivoted to the lugs formed upon the forward end of the sliding bar F. The forward end of the bar F slides between the rear ends of the part C and plate D, and is slotted longitudinally to receive the rivet that connects the said ends and serves as a guide to the said bar. The rear part of the bar F is slotted longitudinally to receive the hand-screw G, that connects it with the slotted sliding bar H, the side edges of which are bent down to fit around the side edges of the bar F and keep the said bars F H in line with each other.

Upon the rear end of the sliding bar H is formed a claw, *h'*, to clasp the front of the heel of the boot.

By this construction the parts B B H may be adjusted, as the width of the sole and the size of the heel may require, by loosening the screw G and sliding the bars F H upon each other.

The rear part of the bar H slides upon a forwardly-projecting tongue formed upon the forward edge of the heel-plate I, attached to the rear part of the runner A, and which has a curved flange or claw, *i*, formed upon its rear edge to rest against the rear side of the boot-heel.

To the head of the screw G are pivoted the forward ends of two connecting-bars, J, which pass back upon the opposite sides of the rear part of the runner A, and their rear ends are pivoted to the bent lever K at its angle. The lever K is made double to receive the rear end of the runner A. The forward end of the bent lever K is pivoted to the runner A close to the heel-plate I.

With this construction, by turning the free end of the heel-lever K up against the heel-plate I, the clasps *b' b'* will be drawn against the edges of the sole and the claw *h'* against the heel of the boot, and will lock the skate firmly and securely to the boot; and by turning the free end of the said heel-lever K down into the position shown in Fig. 2 the skate will be released, so that the skates can be very easily and quickly attached to and detached from the boots.

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

The combination of the stationary piece C,

the pivoted side pieces, B, provided with the claws b', the slotted supporting-plate D, the pivoted connecting-bars E, the slotted sliding bar F, the slotted sliding bar H, provided with the claw h', the heel-plate I, provided with the claw i', the hand-screw G, the two pivoted connecting-bars J, and the double bent lever K, with each other and with the blade or runner A, substantially as herein shown and described.

JOHN E. PARMENTER.

Witnesses:
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