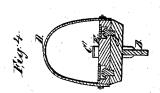
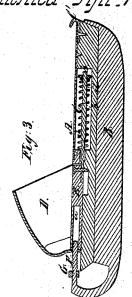
J. P. Farmer,

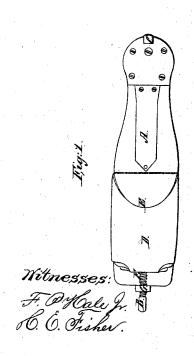
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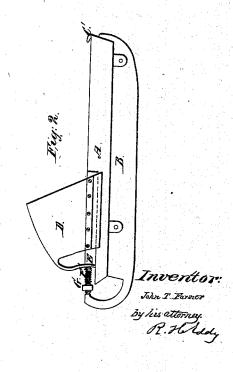
Nº 47,287.

Patented Anr. 18, 1865.









## UNITED STATES PATENT OFFICE.

JOHN P. FARMER, JR., OF CAMBRIDGE, MASSACHUSETTS.

## IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. 47,287, dated April 18, 1865.

To all whom it may concern:

Be it known that I, JOHN P. FARMER, Jr., of Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Skates; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, which-

Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 a longitudinal section, and Fig. 4 a transverse section, of a skate having my invention, the purpose of which is to fasten the skate to the foot of a person with ease and

security

In the drawings, A denotes the foot-rest, and B the runner of a skate, the front portion of the said foot-rest being recessed for the reception of a movable toe socket, D E, composed of a slider, E, and a broad strap, D, the latter being fastened to and extending over the slider from edge to edge thereof in manner as shown in Fig. 4. Such toe socket is intended to receive and go around the toe part of the shoe or boot of a person when the skate is applied thereto. The said slider E is to be secured to the part A by any suitable devices which will keep it in place and allow it to be moved longitudinally thereon. A helical retractile spring, c, arranged within a chamber, d, (formed in the foot rest A,) and around a rod, b, extended rearward from the slider E, serves to draw the toe-socket DE backward, one end of the said spring being against the front end of the chamber, while the other is fastened to the rod or bears against a head formed on its rear end.

At the heel of the skate, and rising above the same in manner as shown in the drawings, is a catch or hook, C', which, when the skate is in use, is to enterthe heel of the boot of the wearer, or to catch on or in a piece of metal

fastened thereto.

From the toe of the runner B a screw, F, projects backward and into a long passage, a, formed longitudinally in the slider E. the said screw a nut, G, is screwed.

In applying the skate to the boot of a rer-

son the toe of the boot is to be inserted into the part D, after which the skate is to be pulled backward far enough to cause the catch C to extend in rear of the heel of the boot and the latter to rest on the upper surface of the part A. On relieving the skate from the force so retracting it the reacting power of the spring c will cause the catch C to be drawn into place or to hook into the heel or in its device, destined to co operate with such catch in holding the rear part of the skate to the boot. Next, the nut G should be rotated on the screw F until such nut may abut against the toe-rest or the front end of the slider E thereof. This having been accomplished, the nut, with its screw F, will prevent the toerest from being forced forward by the skater while in the act of skating, and this will operate to prevent the detachment of the skate from his boot.

I do not claim a "cramp" combined with springs and points, as described in Letters Patent No. 40,530, dated November 3, 1863; nor do I claim in connection therewith a screw and a hook, the latter being to catch on the front of the heel of the boot and for the purpose of preventing a forward movement of

the boot on the skate; but

What I do claim as my invention or improvement in the skate hereinbefore described is as follows:

1. The combination and arrangement of the encompassing toe-strap D with the slider E, its retracting mechanism, the heel-catch C, and the foot-rest A, applied to the runner B.

2. The arrangement and combination of the screw F and the nut G with the toe part of the skate-runner and the slider E and the strap D, the whole being substantially as described.

3. The combination and arrangement of the passage a with the slider E and the screw F and the nut G, arranged at the toe part of the skate-runner, as described.

J. P. FARMER, JR.

Witnesses: F. P. HALE, Jr., R. H. EDDY.