B. Stetson,

Skate.

No. 28,042. Patented Apr. 24, 1860.

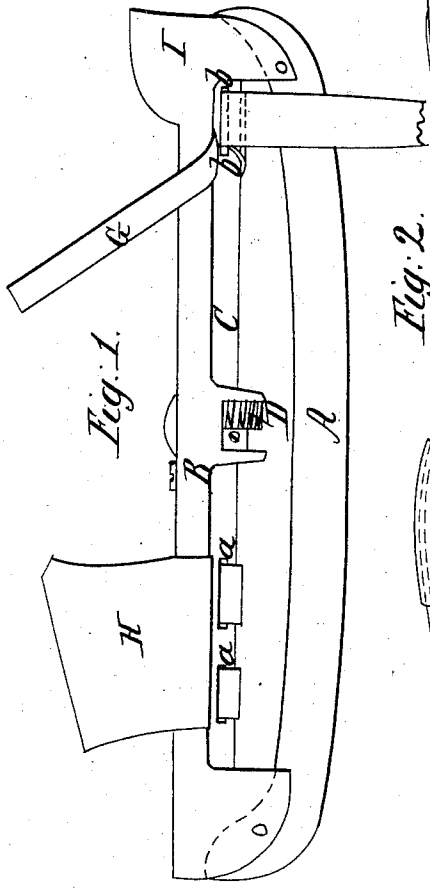


Fig. 1.

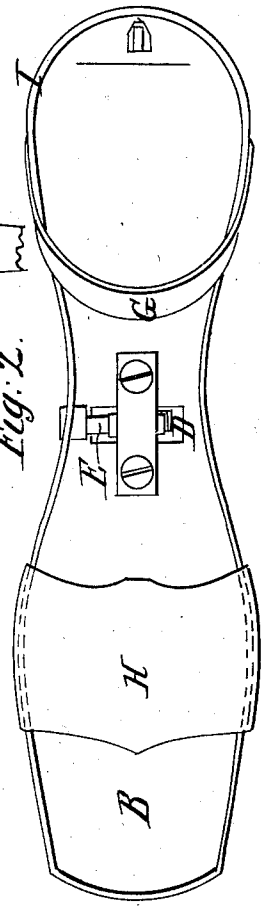


Fig. 2.

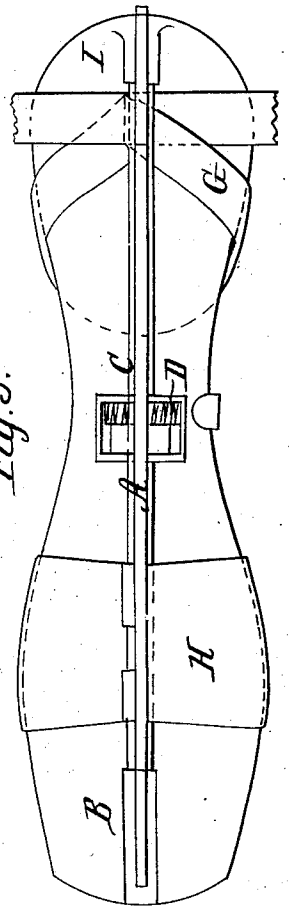


Fig. 3.

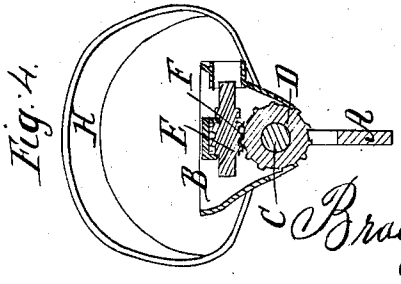


Fig. 4.

Witnesses;
F. P. Hale Jr.
Arthur Nelle

Inventor;
Bradford Stetson

UNITED STATES PATENT OFFICE.

BRADFORD STETSON, OF UXBRIDGE, MASSACHUSETTS, ASSIGNOR TO HIMSELF, AND ELMER TOWNSEND, OF BOSTON, MASSACHUSETTS.

SKATE.

Specification of Letters Patent No. 28,042, dated April 24, 1860.

To all whom it may concern:

Be it known that I, BRADFORD STETSON, of Uxbridge, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Skates; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1 is a side elevation; Fig. 2, a top view Fig. 3, an underside view, and Fig. 4, a transverse section of a skate provided with my invention.

The object of my invention is to enable a skate to be expeditiously and securely fastened to the foot or boot of a person.

In the said drawings A, denotes the runner, and B, the foot rest of a skate. In the latter or between the two, I arrange a long windlass or round shaft C, and extend the same longitudinally in the skate, the same being applied so as to be capable of having a rotary motion imparted to it transversely of its axis. At or near the middle of such windlass rod, I apply on it concentrically, a worm gear D, and arrange in the foot rest transversely and support therein, a key shaft, E, carrying a screw or worm gear, F, to engage with or work between the teeth of the said worm gear. The said windlass I form with slots, *a*, *b*, through each of which I draw the two ends or end portions of one of two broad straps, G, H, and secure such straps therein. One of these straps, viz, that marked, G, is intended to go around the instep while the other goes around the forward part of the shoe or boot of a person when the skate is applied thereto. Each strap thus is arranged in the form of a loop.

Besides, the parts above mentioned, as applied to the foot rest, I construct such foot rest with a heel abutment or vertical supporter, I, which, with the instep loop and the front loop serves to support the boot on the foot rest, or in other words prevents the skate from slipping forward on the boot. Each looped strap embraces opposite sides, edges, or parts of the foot rest and both end portions of such strap are led through the windlass in the same direction.

By applying a key or crank to the key shaft and rotating the same, the windlass will be turned so as to cause both ends or parts of each of the leather loops to be wound about it, at once, by which means, when they encompass the boot or shoe of a person, they may be expeditiously drawn closely down upon the same. The friction of the screw in the worm gear will be amply sufficient to prevent any back rotation of such screw while the skate is fastened on the foot, and no attempt is made through a crank or key to rotate the shaft of the screw.

The great utility and advantage of the above described skate, fastening, over the common mode of fastening by leather straps and buckles must be apparent to most persons and particularly to skaters.

By fastening both ends of each strap to the windlass, any amount of rotary movement of such windlass will produce double the draft on the loop, that is produced where one end only of the loop is attached to the foot rest, and the other to the windlass rod.

I claim—

1. The application of the single windlass, C, the worm gear D, and operating screw, F, and shaft, E, within the foot rest, B, of the skate, substantially in manner and so as to operate both fastening straps G, H, simultaneously as specified.

2. And I particularly claim the application of each loop to the windlass and foot rest so as not only to embrace opposite sides or parts of the foot rest, but so that both parts or end portions of the loop may wind at one and the same time on the windlass, while it may be in the act of being revolved.

BRADFORD STETSON.

Witnesses:
F. P. HALE,
GEORGE L. TAFT.