

E. Behr,

Skate,

N^o 32,731.

Patented July 2, 1861.

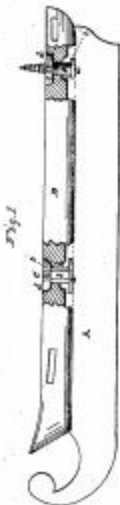


Fig. 3



Witness
James Smith
John D. Smith

Edward Behr
1861

UNITED STATES PATENT OFFICE.

EDWARD BEHR, OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF AND H. C. MANGELS,
OF BROOKLYN, NEW YORK.

SKATE.

Specification of Letters Patent No. 32,734, dated July 2, 1861.

To all whom it may concern:

Be it known that I, EDWARD BEHR, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Constructing Skates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a side view of my improved skate, in which portions of the stock are broken away to exhibit the fastening which secures the skate iron to the stock. Fig. 2, is a transverse section through the heel fastening of the skate of Fig. 1. Fig. 3, is a bottom view of a finished skate. Fig. 4, is a perspective view of the heel stud, detached from the skate iron.

Similar letters of reference indicate corresponding parts in the several figures.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A, represents a skate iron which is made in the most improved shape; B, is the solid wooden stock to which the skate iron is to be attached. A longitudinal groove is formed in the middle of the bottom of the stock B, extending from the toe to the heel part thereof. In this slot the upper edge of the skate iron is to be neatly fitted and rigidly secured. For this purpose flat circular headed studs are used, each of which consists of an enlarged circular flat head *a*, a stem *b*, and a reduced portion *c*, having a male screw formed on it to receive a nut *d*. In the heel stud the stem projects up some distance above the screw portion *c*, and has a gimlet pointed wood screw-thread cut on it, which portion is screwed into the heel of the boot in attaching the skate thereto, otherwise both studs are constructed in the same manner. When the studs are thus formed a slot *g*, is cut vertically through the center of the circular portion *a*, and stem *b*, which is wide enough to admit the top edge of the skate iron.

If it is desirable, elevations *h*, *h*, as represented in Fig. 1 of the drawings, may be formed on the upper edge of the skate iron A, at the points where the studs will be arranged which will elevate the stock B, somewhat. These studs, both, are riveted to the skate iron at the points *h*, *h*, by transverse

rivets *i*, *i*, so that one half of the head *a*, will be on one side of the skate iron and one half on the opposite side; and the studs will fit down firmly on the edge of the skate iron. The slot which is formed through the lower end of each stud should be cut a considerable distance in the stem *b*, and the rivets *i*, *i*, should secure the studs rigidly to the skate iron. The length of the studs from the bottom of their heads, to the top of their metal screw portions *c*, *c*, should be equal to the thickness of the skate stock, at the front part and also at the heel part thereof.

Now in attaching the skate iron A, having the studs, above described, riveted to it to the wooden stock B, recesses are cut into the bottom of the stock for receiving the heads *a*, *a*, and the stems of the studs are passed up through holes cut through the stock and the heads *a*, *a*, are driven into their recess flush with the bottom of the stock so that a smooth bottom surface is left on the skate. The nuts *d*, *d*, are now screwed down tightly on the screw portions *c*, *c*, of the studs and are let into circular recesses formed in the stock so that the top of the stock will present a smooth surface. This secures the skate iron to the stock, and as the bottom of the stock rests upon the enlarged portions *a*, *a*, of the studs the stock will have a good and firm bearing surface and the pressure put upon the skate will not be altogether upon the narrow edge of the skate iron as hitherto. The advantages attending this mode of attaching the skate iron to the stock are not merely that a stronger skate can be made thereby, but in the manufacture of the skate irons it is desirable that they should be flat and have no elevations on their surfaces, that they may be put upon a stone and ground properly. This cannot be done well and expeditiously where the studs are formed on the irons previously to grinding. In my invention the irons are finished before the studs are secured to them, and then these slotted studs which are easily made can be slipped on the irons and riveted thereto in a short time and with very little labor therefore my improved skates can be made stronger and for less cost than the skates which are at present in the market.

I am aware that it is not new to form the skate iron and screw studs in one piece, or

to weld the studs to the skate iron, and I do not therefore claim such as new, or as my invention, but

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

The employment of the detachable slotted

screw studs when made and applied as set forth for the purpose specified.

EDWARD BEHR.

Witnesses:

M. M. LIVINGSTON,
JAMES LAIRD.