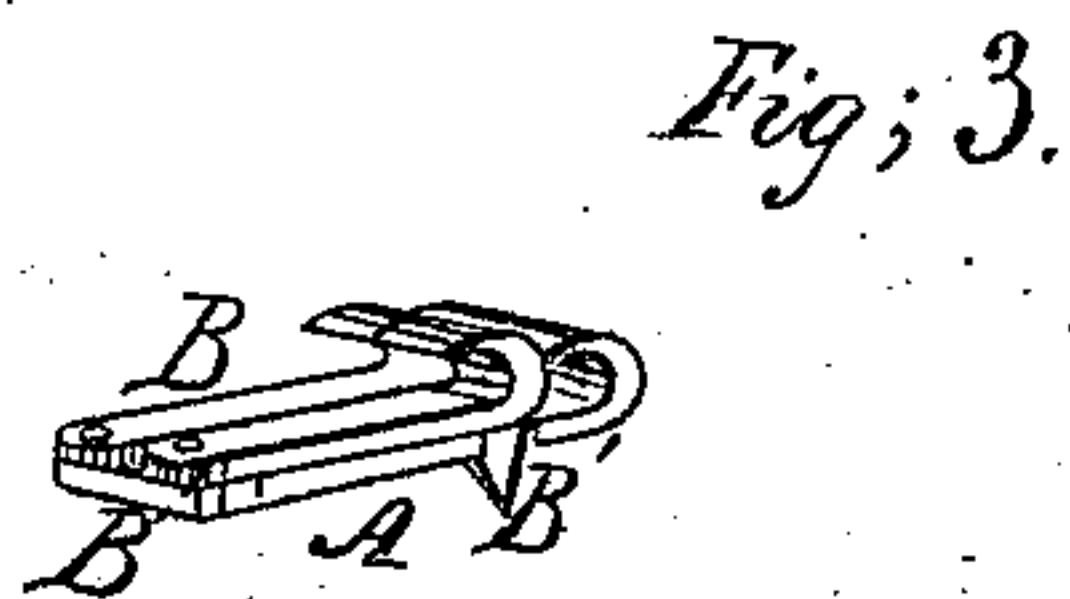
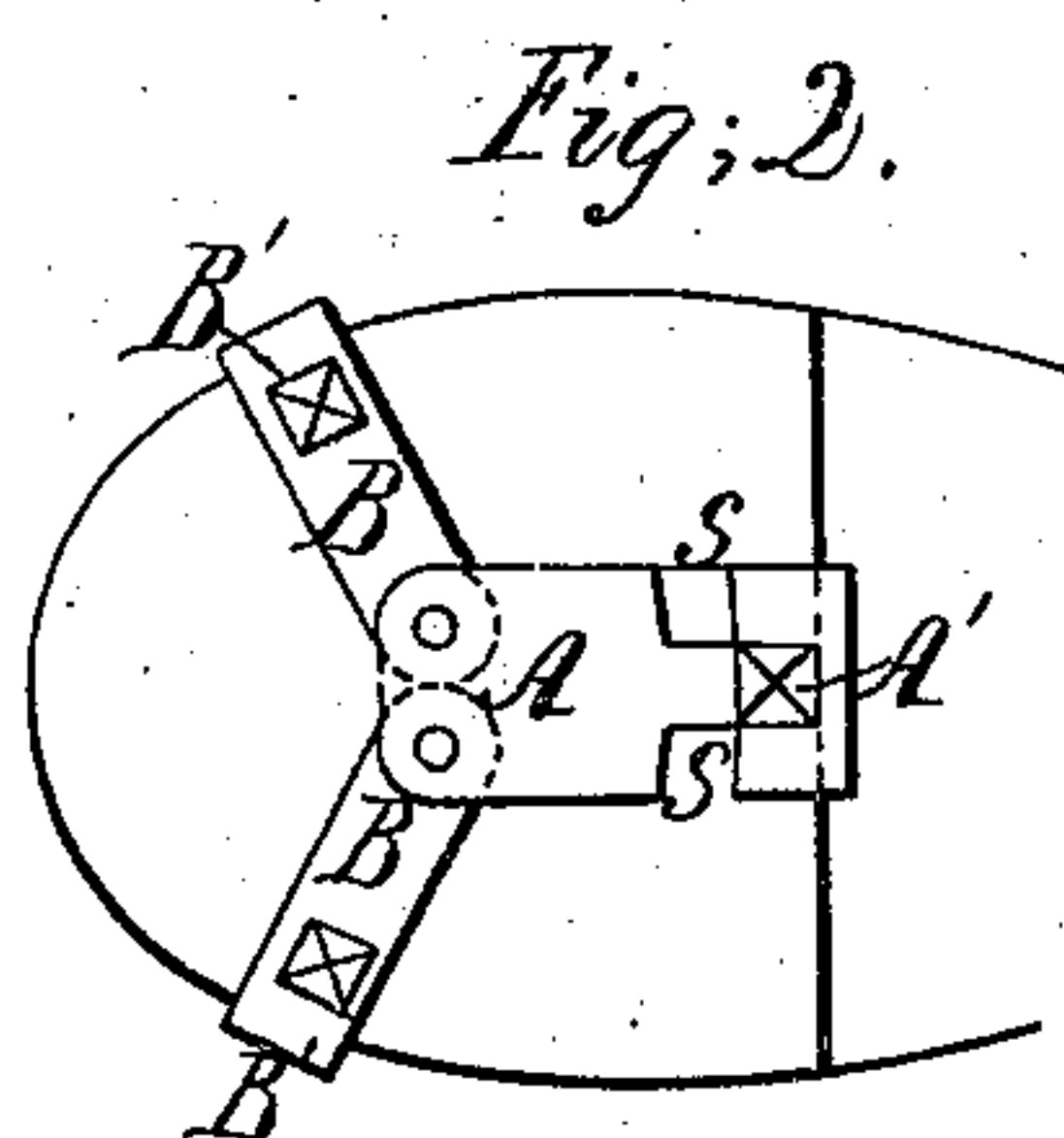
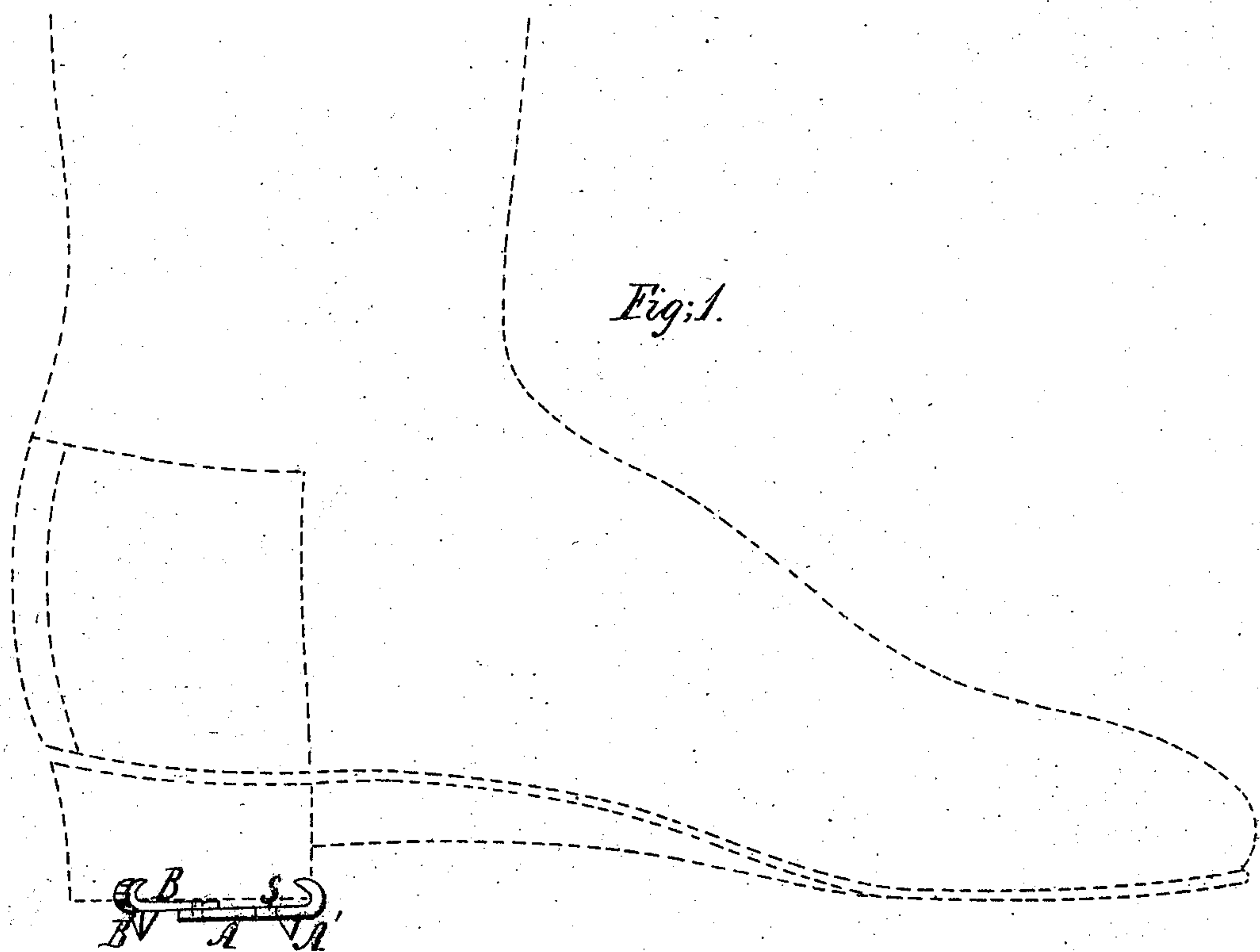


No. 14,527.

PATENTED MAR. 25, 1856.

W. H. TOWERS.  
CREEPER.



# UNITED STATES PATENT OFFICE.

WILLIAM H. TOWERS, OF PHILADELPHIA, PENNSYLVANIA.

CREEPER TO PREVENT SLIPPING ON ICE, &c.

Specification of Letters Patent No. 14,527, dated March 25, 1856.

*To all whom it may concern:*

Be it known that I, WILLIAM H. TOWERS, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Creepers for Preventing the Boots and Shoes of Persons from Sliding Over Slippery Surfaces; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this specification.

Figure 1, is a side elevation of a boot represented by dotted lines, with the improved "creeper" attached. Fig. 2, is a view of the under part of the heel portion of ditto. Fig. 3, is a perspective view of the "creeper" detached from the heel and folded to a convenient bulk for carrying in the pocket of the wearer.

Similar letters in the figures refer to corresponding parts.

The nature of this invention and improvement consists in jointing to a metallic plate, having calkins or pins projecting from its lower surface, and whose front end is bent in the form of a segment of a circle and driven into the front part of the heel of the boot or shoe, two diagonal plates similarly shod on the lower surfaces and bent at their outer ends, in such a manner as to enable the sharpened edges of their bent ends to be forced into the sides of the body of the heel, on either side of the same, by the act of forcing the said outer ends of the diagonal or wing plates, backward on their joint pins, on lines eccentric with the side curves of the heel, so as to form such a toothed "creeper" for the heel as will prevent slipping, and will have a tendency to more firmly secure itself by the act of planting the foot in walking, and be easy of attachment and detachment to and from the boot or shoe.

The plates A, B, may be made of malleable iron, steel, or other suitable material, and the front one (A) extends from the front part of the heel of the boot or shoe, back to near the center of the same, being provided at its front end, which is bent and attached to the front part of the heel as before stated—with a steel calkin or pin A'.

Secured firmly thereto, and the ends of the other plates B, are attached to the back end of this plate A, side by side, by pins on which they move, so as to enable the outer ends, whose edges are turned up in the form of a segment of a circle—corresponding with the front end of the plate A, and like it provided with steel calkins or pins B', to be forced into the body of the heel of the boot or shoe, or between the layers of leather forming the same, by the act of moving said ends back on the segments of a circle, eccentric with the circling sides of the heel on which they are caused to move by the peculiar situation of the centers or pins, securing their inner ends to the plate A, in relation to the back portion and sides of the heel.

When the use of the "creepers," is not required on the boot or shoe, they may be readily detached therefrom and folded to the form represented in Fig. 3, the spaces, in the side of the plate A, enabling the pins or calkins B', of the diverging plates B, to be brought side by side, to reduce the creepers into a convenient bulk to be carried in the pocket of the wearer.

A similar arrangement of plates to the "creeper" above described may be applied to the upper surface of skates, for preventing the foot slipping over the same, in which case the several parts will be altered to accomplish the object desired to be effected.

What I claim as my invention and desire to secure by Letters Patent is—

Forming the "creeper" of three plates, having calkins or pins on their lower surfaces and bent at their outer ends, and jointed together at their inner ends, and in such relative position to the sides and back portion of the heel of the boot or shoe for which they are designed, as will enable their outer ends to move eccentric with the curves of the said side and back portion to secure the "creeper" to the heel and their security of attachment to be increased by the act of planting the foot of the wearer, in walking, as herein set forth.

W. H. TOWERS.

Witnesses:

CHARLES D. FREEMAN,  
SAMUEL P. HALL.