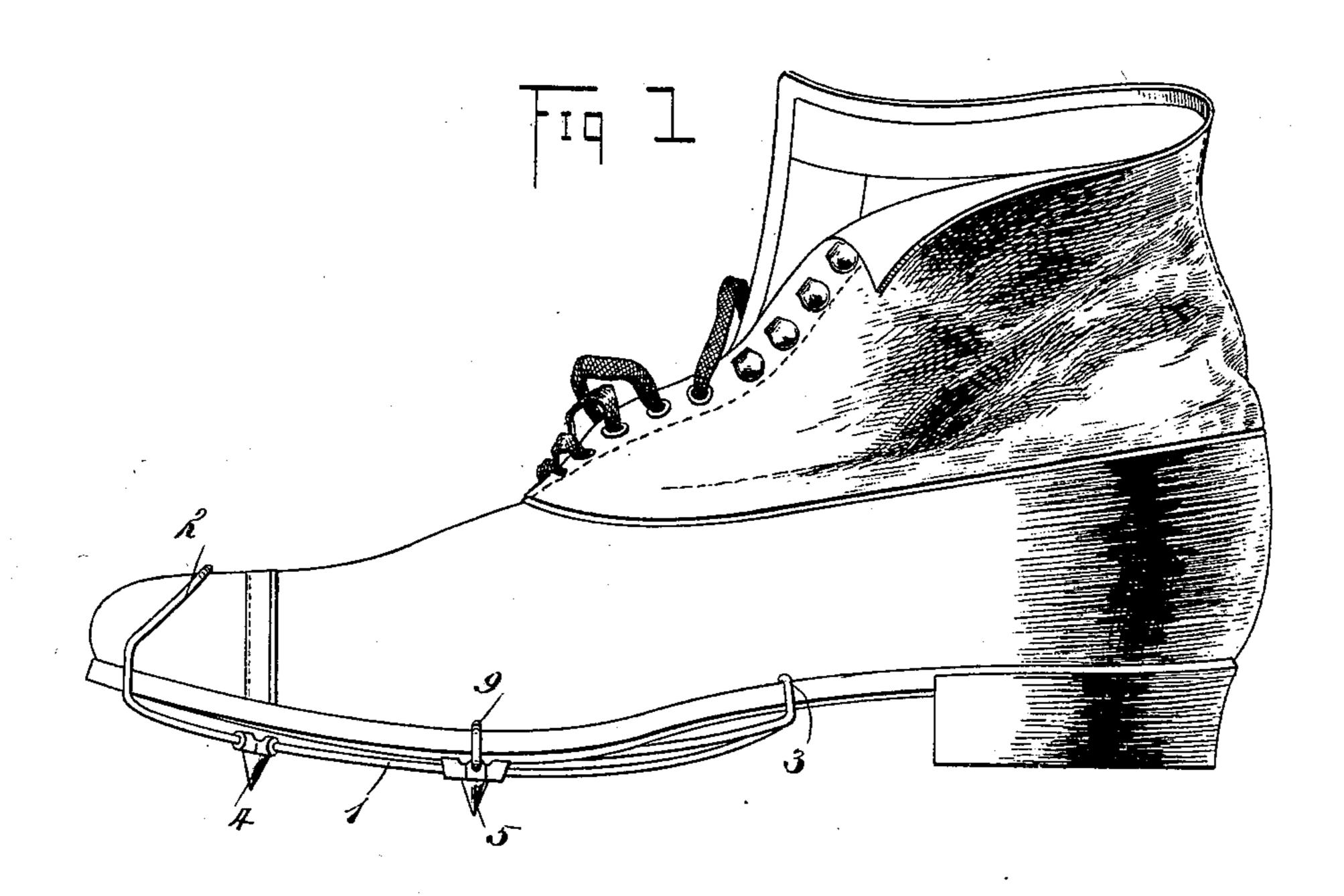
No. 618,774.

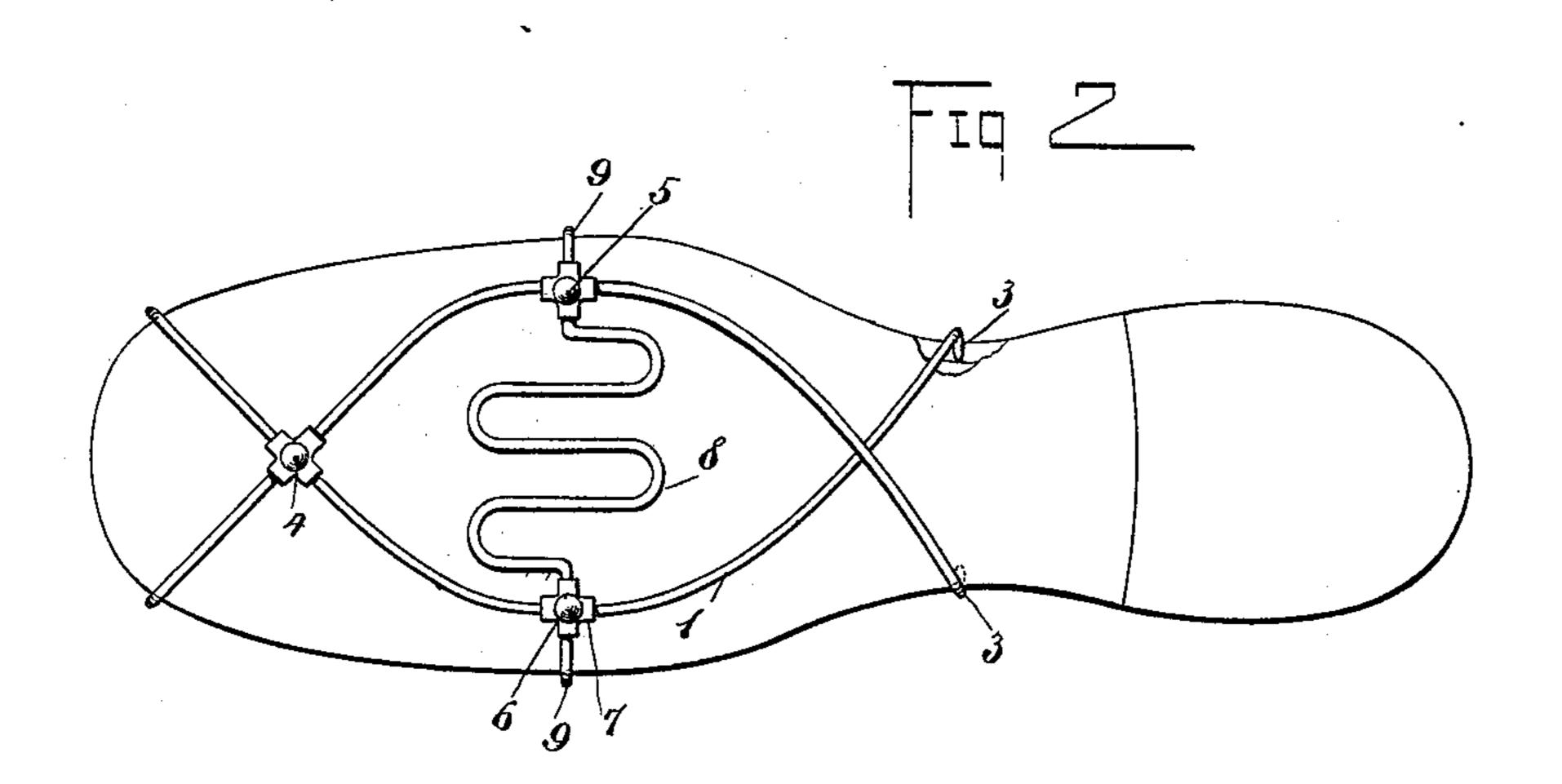
Patented Jan. 31, 1899.

## C. G. BLANDFORD. ICE CREEPER.

(Application filed Mar. 7, 1898.)

(No Model.)





WITNESSES:

Chelchener

Contactor

INVENTOR

& S. Blandford.

BY

MULLINE

ATTORNEYS.

## United States Patent Office.

CHARLES GIBB BLANDFORD, OF SING SING, NEW YORK.

## ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 618,774, dated January 31, 1899.

Application filed March 7, 1898. Serial No. 672,942. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GIBB BLAND-FORD, of Sing Sing, in the county of Westchester and State of New York, have invented new and useful Improvements in Ice-Creepers, of which the following is a full, clear, and exact description.

This invention relates to devices designed to be attached to shoes to prevent slipping; to and the object is to provide a device of this character that may be easily attached to or detached from a shoe.

I will describe my invention, and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a side view of a shoe, showing 20 my invention as applied thereto; and Fig. 2 is an inverted plan view thereof.

Referring to the drawings, 1 designates a wire crossed near the toe portion of a shoe and also crossed near the shank portion of the shoe. The forward portion of the wire is bent upward, forming a loop, as at 2, to engage over the toe of the shoe, and the free ends are provided with hooks 3 to engage over the sole of the shoe at the shank. A spike 4 is connected to the wire at its crossed portion near the toe and spikes 5 6 are connected to the bowed portions of the wire. Each spike has a cruciform base 7, the members of the base being tubular, so that the wire may pass through the same. A sinuate wire 8 is extended through the base of the spikes 5 and

6, and the ends of this wire are made in hook form, as at 9, to engage over the edge of the sole. The sinuate portion of the wire 8 forms a spring to keep the hooks 9 in engagement 40 with the sole.

The manner of attaching the invention to a shoe is clearly shown in the drawings.

While I have shown three spikes in the drawings, it is obvious that a greater or less 45 number may be employed.

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

1. A wire having hook ends to engage with 50 the sole of a shoe, and also having a loop to engage over the toe of a shoe and spikes on said wire, substantially as specified.

2. A wire having hook ends to engage the sole of a shoe, and also having a loop to engage over the toe of a shoe, a sinuate wire extended between outwardly-bowed portions of the first-named wire and having hook ends, and spikes secured to the wires, substantially as specified.

3. A shoe-spike holder, consisting of wire having hook ends to engage the shank of a shoe and also having means for engaging at the toe portion of a shoe, a sinuate wire connected to outwardly-bowed portions of the 65 first-named wire and having hook ends, and spikes secured to the wires, substantially as specified.

CHARLES GIBB BLANDFORD. Witnesses:

PEIRRE REYNOLDS, EDWIN J. BRINNER.