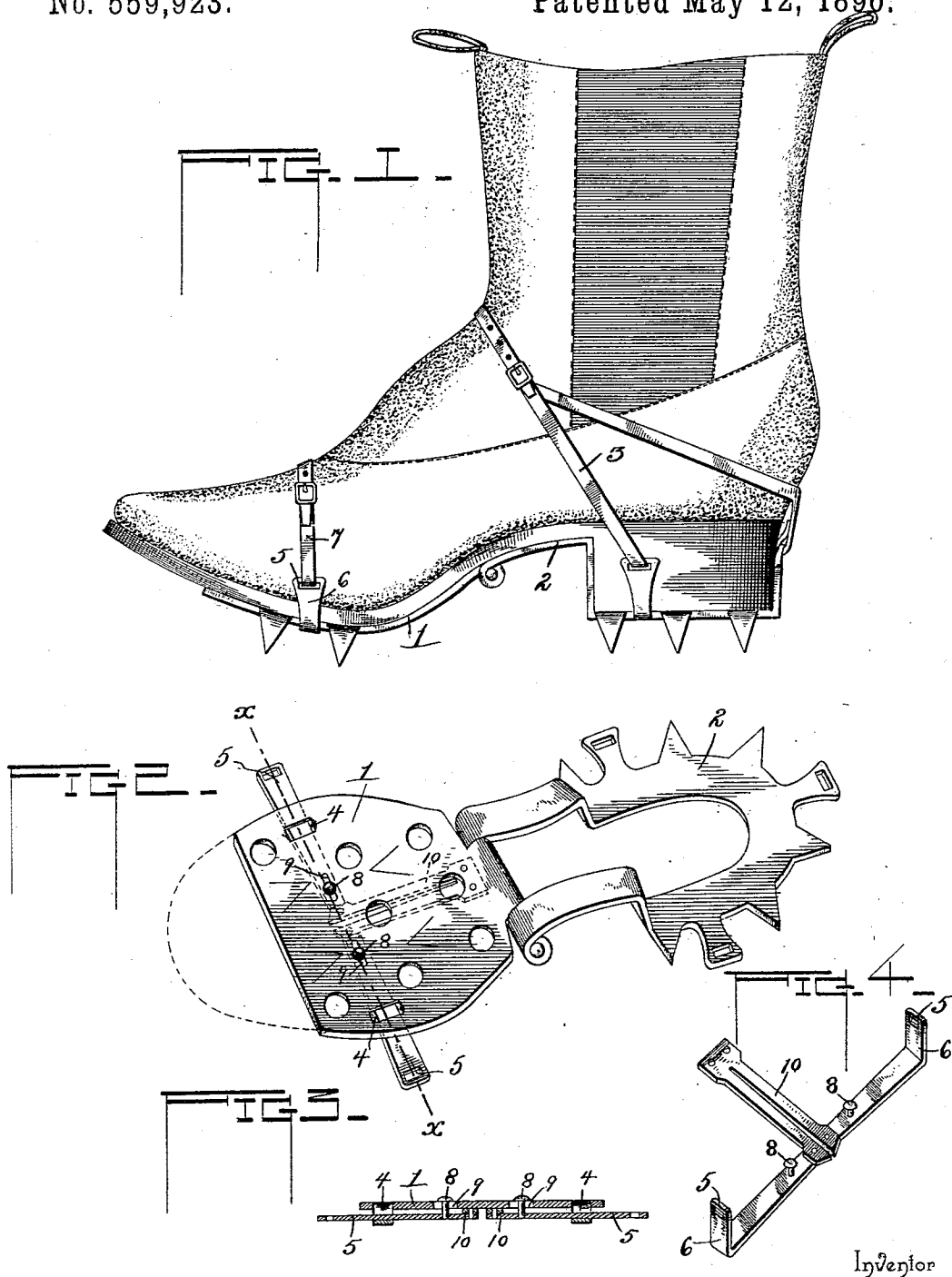


(No Model.)

J. ZANDALAZINI.
CALK FOR BOOTS OR SHOES.

No. 559,923.

Patented May 12, 1896.



Inventor

Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH ZANDALAZINI, OF SCRANTON, PENNSYLVANIA.

CALK FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 559,923, dated May 12, 1896.

Application filed July 19, 1895. Serial No. 556,544. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ZANDALAZINI, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Calks for Boots or Shoes, of which the following is a specification.

The purpose of this invention is to provide simple and effective means for securing anti-slipping and similar devices to boots and shoes, whereby the side wings or vertical extensions which engage with the edges of the sole can be adjusted to a greater or less distance apart, according to the size and last of the boot or shoe to which the device is to be attached.

The improvement consists of laterally-adjustable arms slidably connected with a sole-plate, having their outer ends bent so as to engage with the edges of a sole, means for securing the arms to the plate and limiting them in their movements, and a cleft spring having positive connection with the sole-plate and with the inner ends of the arms to automatically clamp the bent ends of the said arms against the edges of the sole, as will appear more fully hereinafter.

The improvement also consists of certain details of construction and novel combinations of the parts, which hereinafter will be more particularly set forth, illustrated, and finally claimed.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a shoe having the invention applied. Fig. 2 is a detail view of the device. Fig. 3 is a transverse section on the line X X of Fig. 2. Fig. 4 is a detail view of the arms and the spring-plate operatively connected therewith and disassociated from the sole-plate.

Corresponding and like parts are referred to in the following description and indicated

in the several views of the drawings by the same reference-characters.

The invention is to be applied to an anti-slipping or analogous device, which in its construction comprises a sole-plate 1, and, as it will be generally employed in connection with an anti-slipping attachment, the improvement is illustrated in this connection. The heel-plate 2 has a shank portion which is hinged or pivotally connected to the sole-plate, and suitable attaching-straps 3 are employed for connecting the device to the foot about as shown.

Loops 4 are provided near the edges of the sole-plate in transverse alinement and are formed by depressing or punching a portion from the body of the plate, the said depressed part being separated from the body by parallel slits. Arms 5 are slidably mounted in the loops 4 and have their outer ends bent vertically, as shown at 6, and apertured to receive the strap 7, which extends over the front portion of the foot. Headed studs 8 are applied to the inner ends of the arms and operate in transverse slots 9 in the sole-plate, the slots and loops being in transverse alinement, so as to direct the arms in their movements. A spring-plate 10 is cleft at its front end and is riveted or otherwise firmly attached at its rear end to the inner portion of the sole-plate, and the front terminals of its members are secured to the inner ends of the arms 5 and serve normally to hold the arms in a retracted position. This spring-plate is sufficiently stout to cause the bent ends or vertical portions 6 of the arms to grip the edges of the sole and serves to center the attachment when in position. The strap 7 supplements the action of the spring-plate 10 and guards against accidental displacement of the device when properly applied to the foot. The operating parts are located on the lower side of the sole-plate, thereby preventing projecting portions on the top side of the sole-plate and obviating annoyance, inconvenience, and possible injury.

Having thus described the invention, what is claimed as new is—

1. In an anti-slipping or similar device to be attached to a boot or shoe, the combination with a sole-plate, of arms in transverse alinement and slidably connected with the

sole-plate, and having their outer ends bent vertically so as to engage with the edges of the sole, and a spring-plate rigidly secured at one end to the sole-plate and having its front end cleft forming members which are secured to the said arms, substantially as shown for the purpose described.

2. The combination with a sole-plate having integral loops near its edges in transverse alinement, of arms slidably mounted in the said loops, and a spring-plate having its front end cleft forming members which are secured to the inner ends of the arms, and having its opposite end attached in a positive manner to the sole-plate, substantially as described.

3. In combination, a sole-plate having integral loops near its edges and transverse

slots in the same straight line, arms having their outer ends bent vertically to engage with the edges of a sole and having their inner portions slidably mounted in the said loops, headed studs secured to the inner portions of the arms and operating in the transverse slots of the sole-plate, and a spring-plate secured at its rear end to the inner portion of the sole-plate and having its front end cleft forming members which have positive connection with the inner ends of the said arms, substantially as shown for the purpose described.

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