M.B. Contes,

MO. 98,000,

Patenten San. 11. 1870.

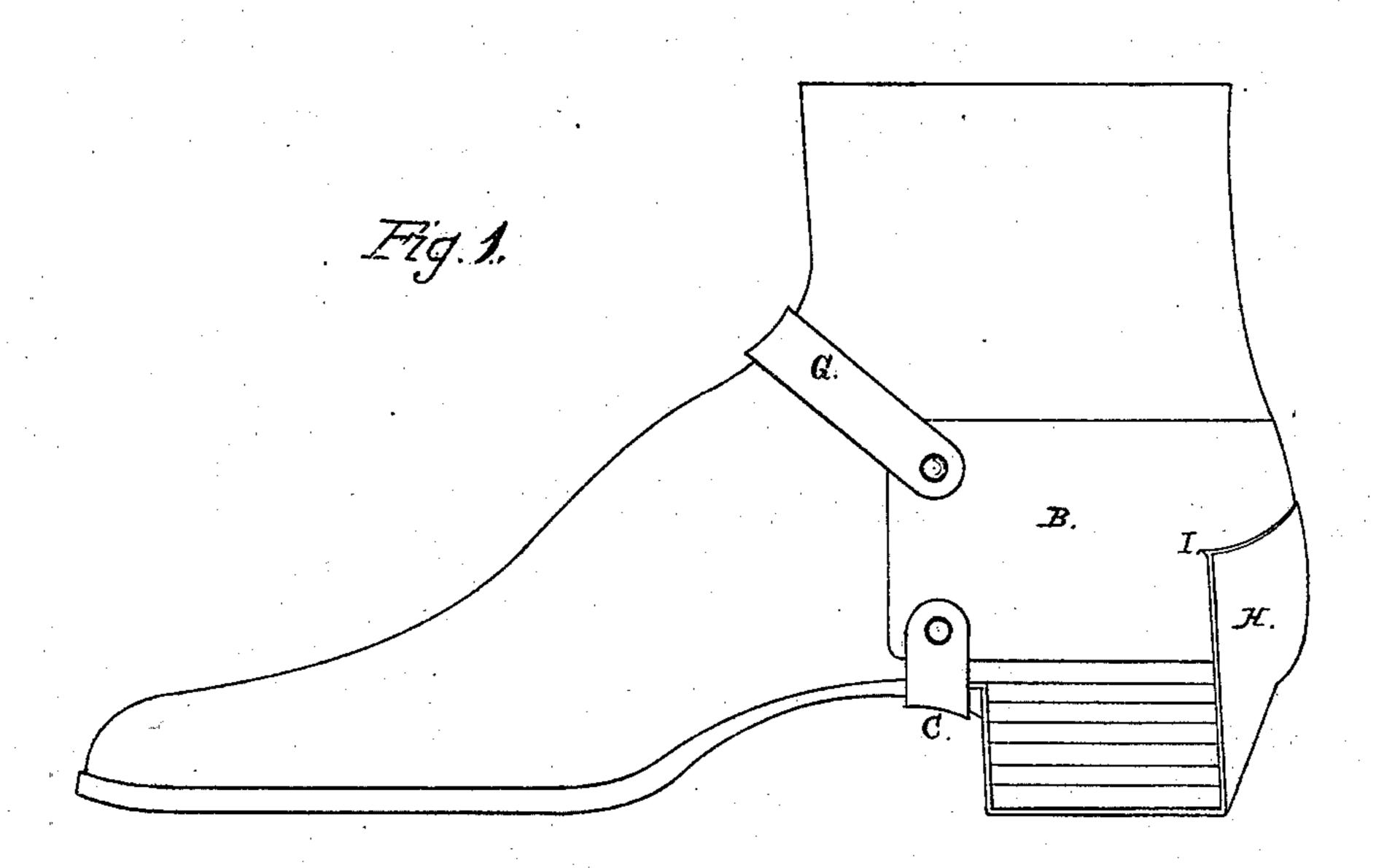
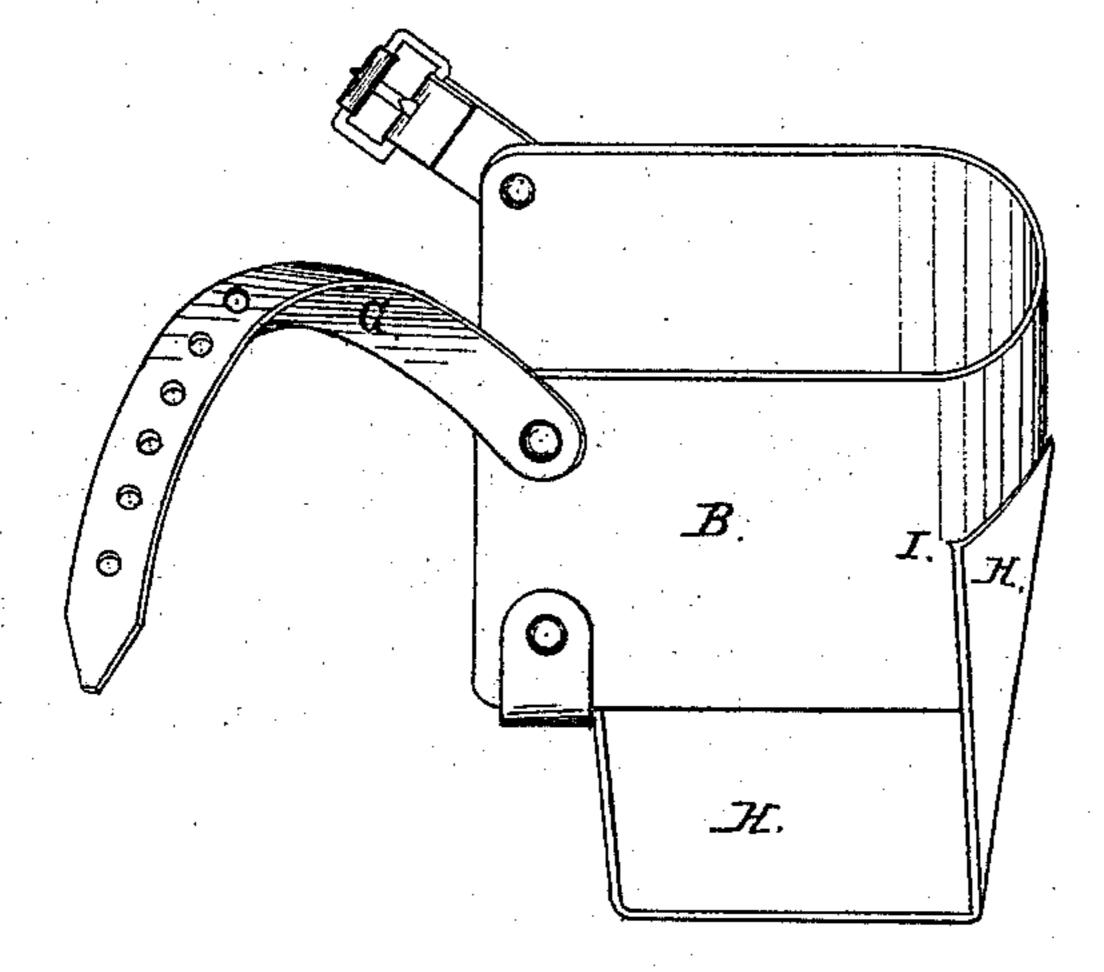


Fig. 2.



Witnesses.

Inventor.

## Anited States Patent Office.

WILLIAM B. COATES, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, FOR ONE-HALF, TO JOSEPH LEEDS, OF SAME PLACE.

Letters Patent No. 98,668, dated January 11, 1870.

## IMPROVED ICE-CREEPER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM B. COATES, of the city of Philadelphia, in the State of Pennsylvania, have invented an "Improved Ice-Creeper;" and I do hereby declare that the following is a full and exact description thereof.

My object is to make a better and surer ice-creeper than now used.

The nature of my invention consists in an improved ice-creeper, so arranged as to be quickly adjusted to the foot, the sole and heel being partially or entirely covered with woollen cloth, which adheres to the ice, and prevents slipping on icy pavements.

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

In reference to the drawings, and letters of reference marked thereon, forming a part of this specifica-

tion—
Figure 1 is a side elevation of my ice-creeper, adjusted on a boot.

Figure 2 is a section of heel-stay, showing the slit I. Figure 3 is a top view of heel-stay, showing the heel-strap C.

Figure 4 is a perspective view of my "improved ice-creeper."

In manufacturing the ice-creeper, leather, cotton cloth, or other suitable materials will be used. Riveting and sewing can be used in connection if desired.

In manufacturing the ice-creeper, I shall use leather or other equivalent material, and will sew or rivet the parts together, as may seem most desirable.

I construct the creeper with a heel-stay, B, having a transverse slit at the back part, I, for securing the upper end of the heel-cloth H, the lower end being attached to the heel-strap C.

At each upper corner, a strap and buckle, G, are secured, so as to reach over the instep and be buckled.

The strip of woollen cloth is put through the slit I, and pinned or sewed down flat on the cloth below the lower edge of heel-stay B, and the other end is wrapped around the heel-strap C, and pinned or sewed on to the cloth, to the right of the heel-strap.

The woollen cloth should be rather coarse, (and if ribbed, the better,) as this adds to the non-slipping tendency of the foothold.

The creeper is put on the heel first, with heel-strap under the hollow of the foot, near the heel, and the two long straps buckled over the instep.

The leather portion of my ice-creeper will last for some years, and the woollen strips can be renewed when required, though they will not want renewing as frequently as some might imagine.

This creeper can be furnished cheaply, and will not be required to be taken off the heel when the wearer enters a house or walks on a carpet.

I disclaim the invention of an "ice-sandal," extending around the heel and sole of the foot.

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

The ice-creeper, when made of heel-stay B, heel-strap C, and strap and buckle G, the heel-stay being provided with a slit, I, in which one end of a strip of woven woollen cloth, H, is secured, the other end being fastened to the heel-strap C, the whole constructed for the purposes set forth and as described.

WILLIAM B. COATES.

Witnesses:

JOSEPH LEEDS, JOHN T. HOUGHTON.