

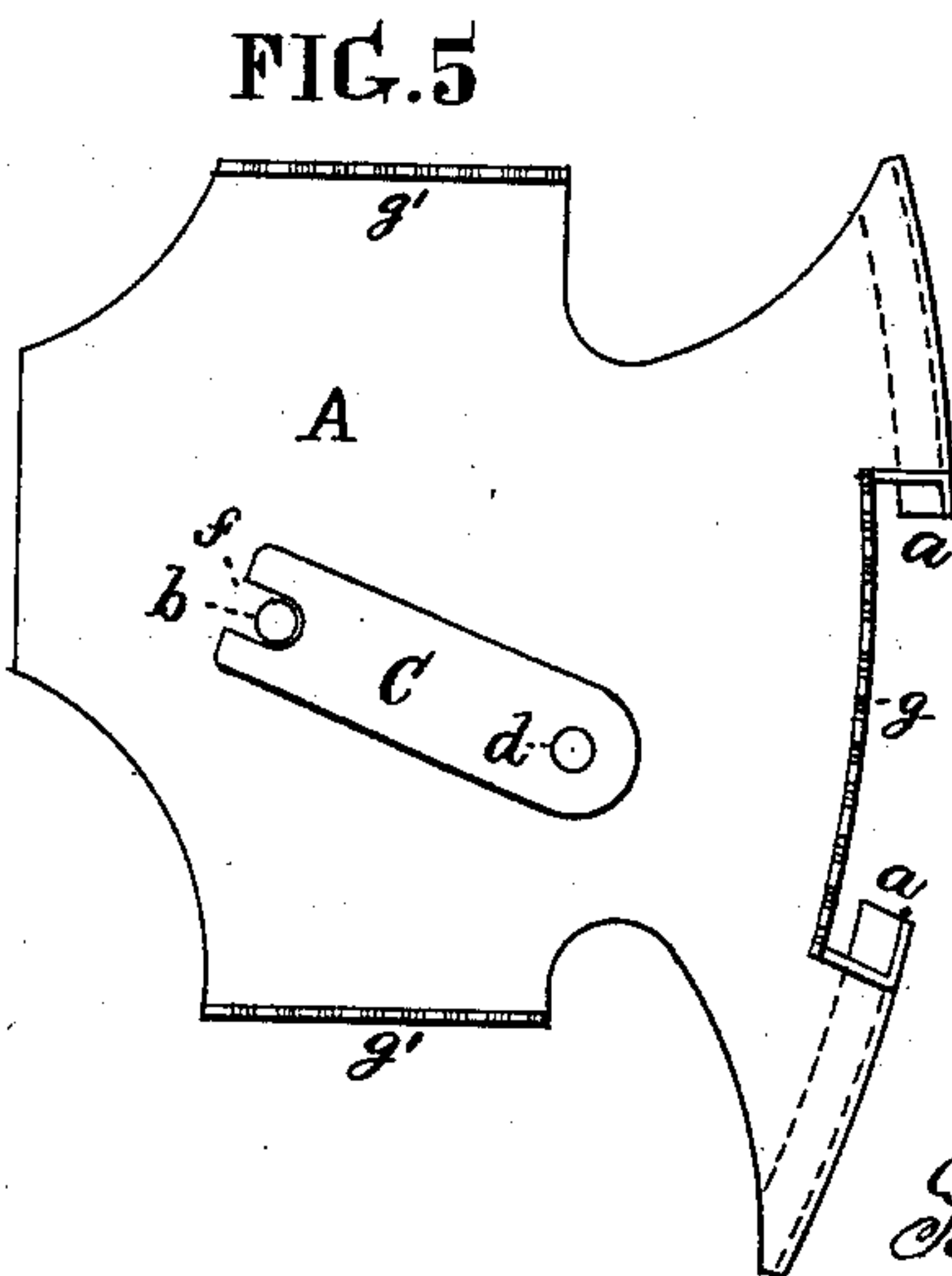
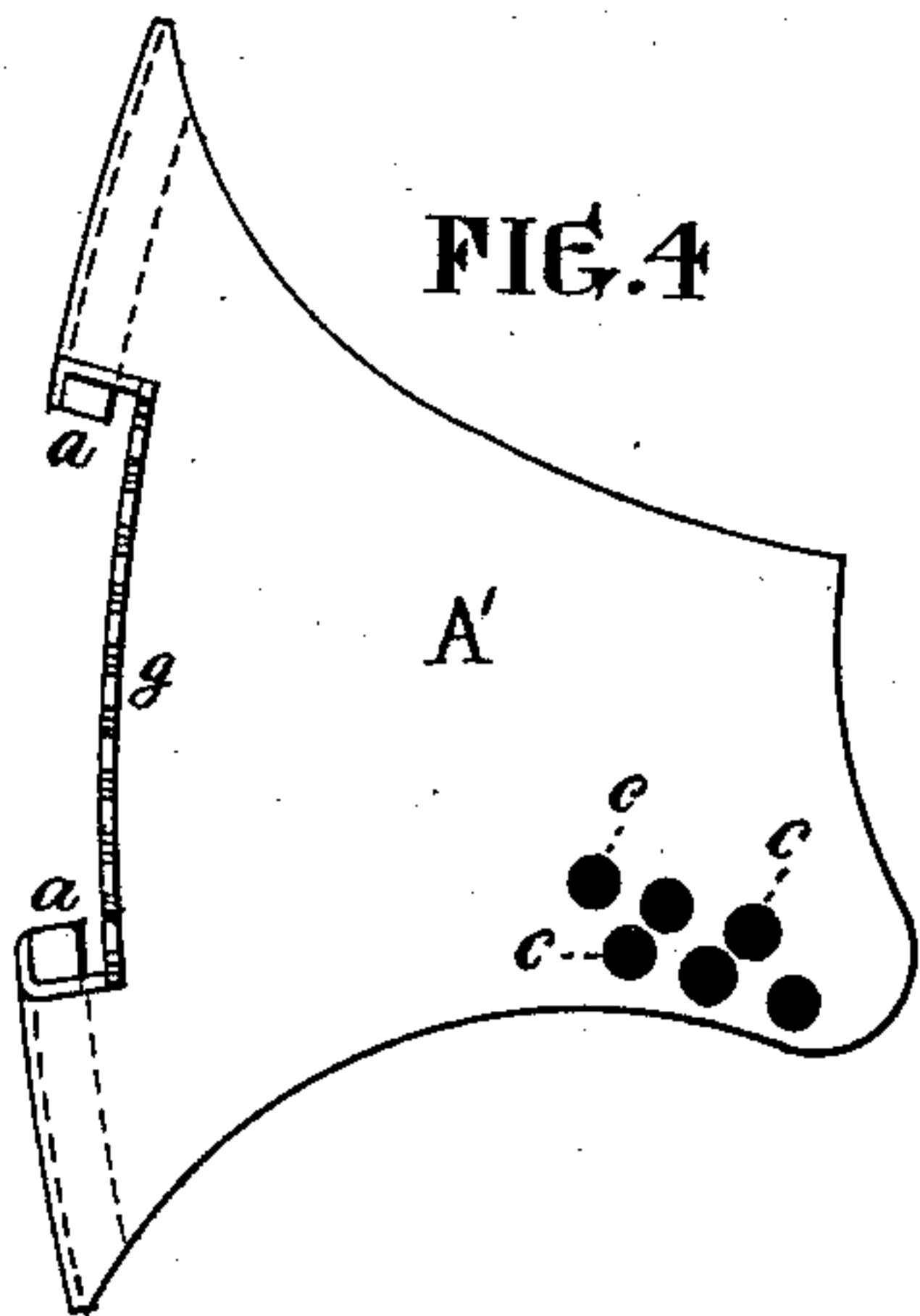
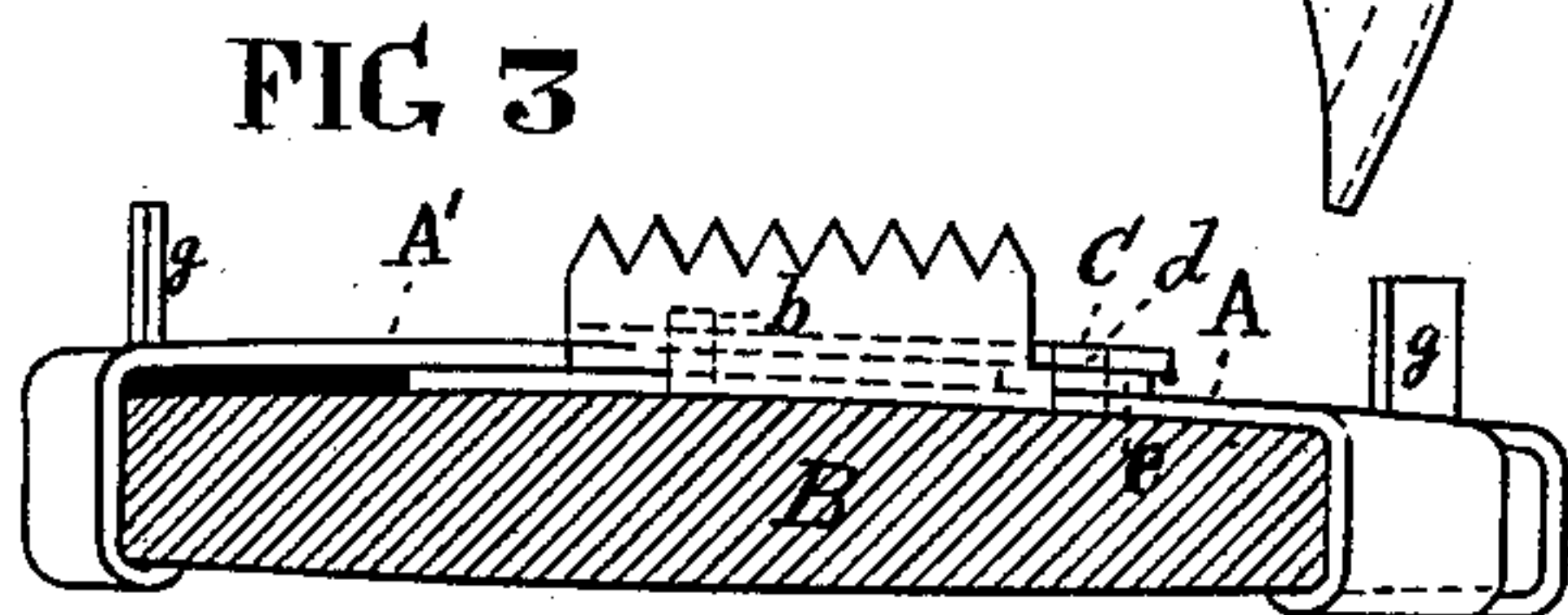
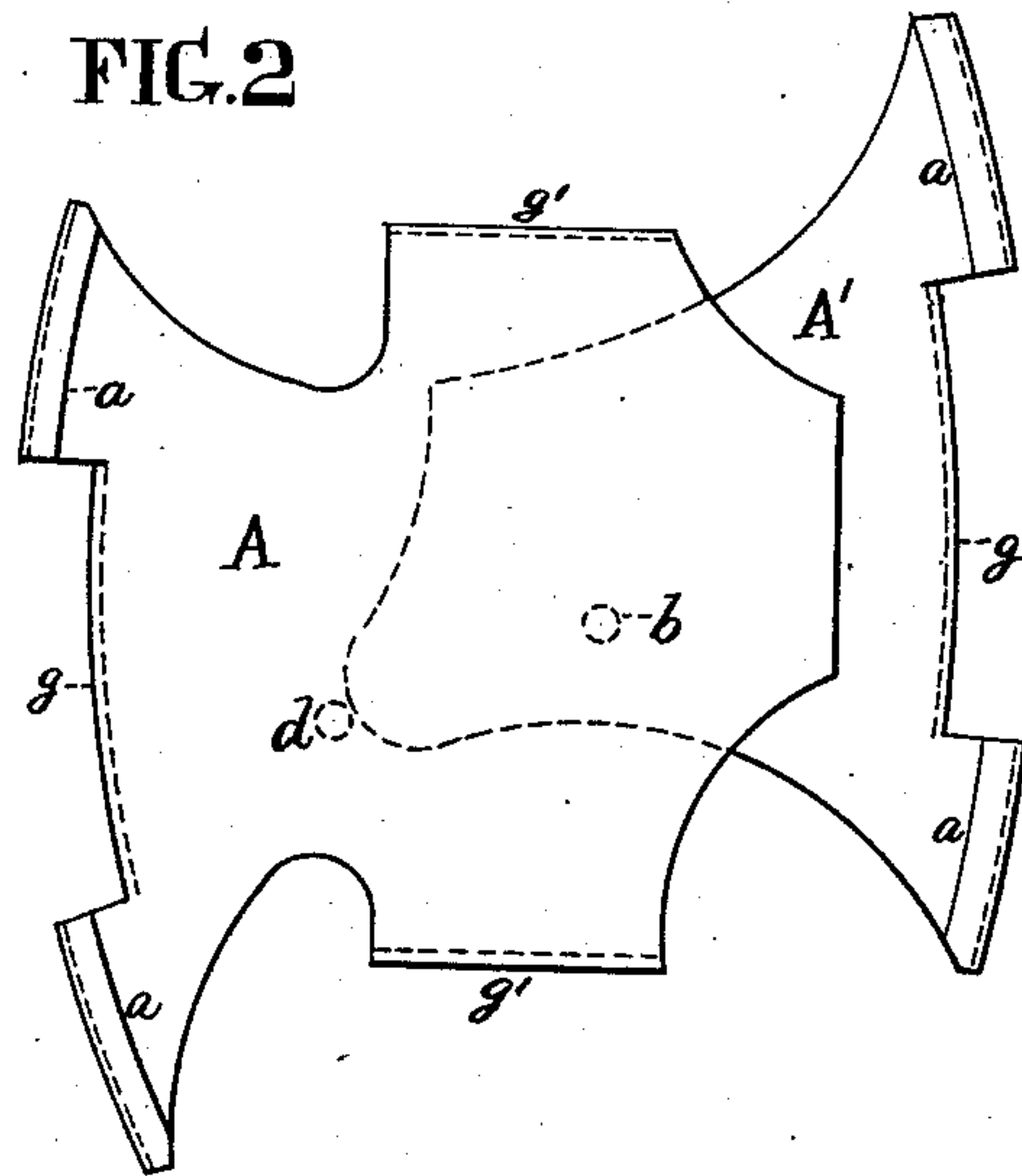
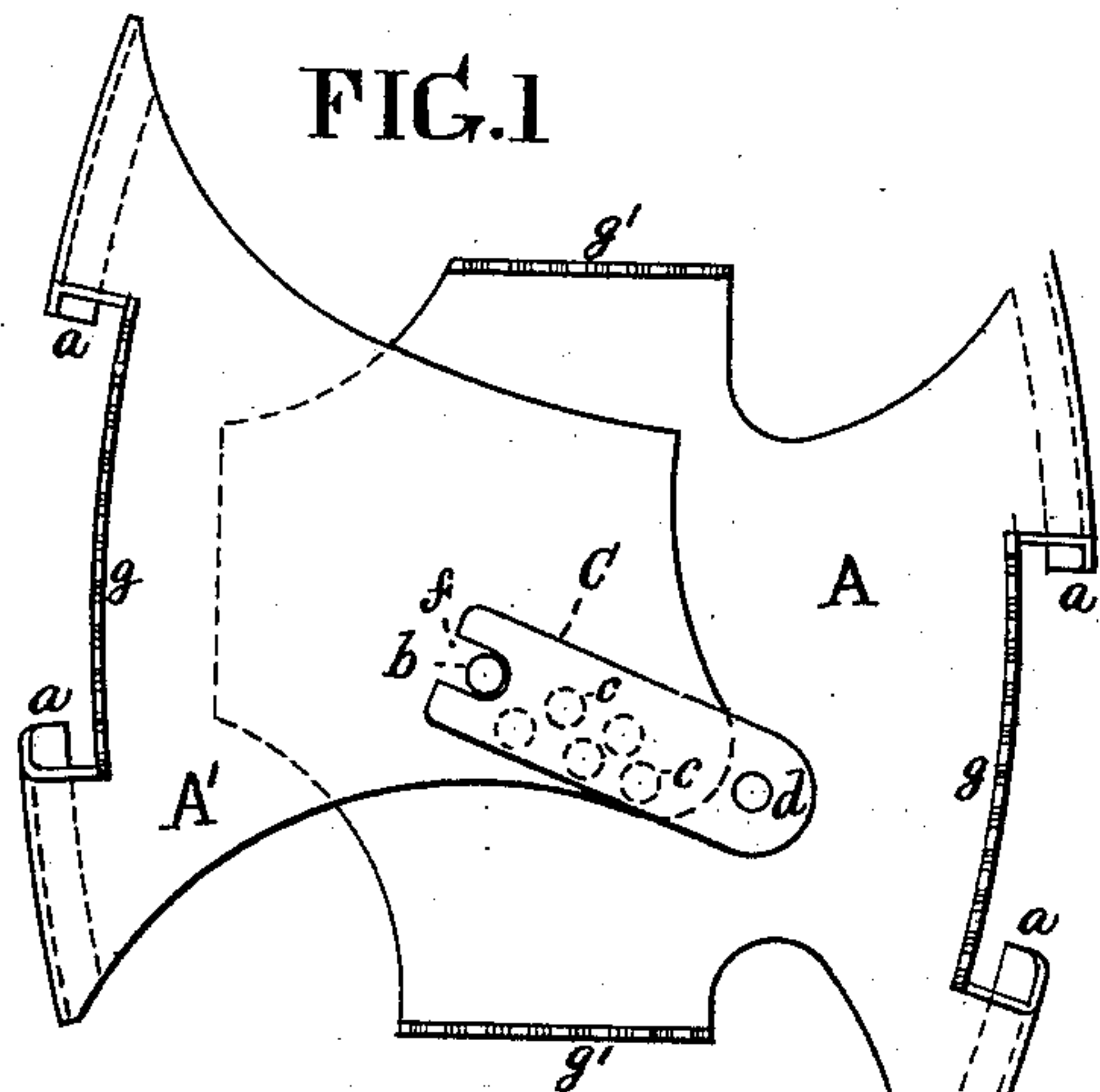
(No Model.)

S. R. MORTON & C. G. BARTO.

ICE CREEPER.

No. 302,013.

Patented July 15, 1884.



Witnesses.

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UNITED STATES PATENT OFFICE.

SAMUEL R. MORTON, OF PHILADELPHIA, PENNSYLVANIA, AND CHARLES
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ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 302,013, dated July 15, 1884.

Application filed May 12, 1884. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL R. MORTON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, and CHARLES G. BARTO, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented a new and useful Improvement in Ice-Creepers, of which the following is a specification.

The nature of our invention will be understood by the following description and claims appended thereto.

On the accompanying drawings, which make a part of this specification, Figure 1 is a face view of our improved ice-creeper. Fig. 2 is an inside view of the same. Fig. 3 is an edge view. Figs. 4 and 5 are respectively face views of clasp-plates A and A'.

Like letters of reference in all the figures indicate the same parts.

A and A' represent metallic plates, each of which has hook-clasps *a a* at one edge, whereby they are adapted to clasp the shoe-sole B at its opposite edges, the plates being held firmly together at their inner edge when connected by means of the pivot *b* of the plate A and one of the series of perforations *c* of the plate A', the perforations being but a short distance apart in order to connect the plates with shoe-soles of various widths. The plates are connected by means of a pivot, as described, in order that they may automatically swing around in either direction until the hook-clasps *a* all bind alike upon the edges of the sole B with the same degree of tightness irrespective of the shape of the soles. The hook-clasps of each plate are arranged in opposite directions from the widest part of the sole, as seen in Figs. 1 and 2, and thereby prevent the plates slipping either backward or forward.

C is a plate-spring, the heel of which is connected to the plate A by means of the pivot *d*, there being a washer, *e*, interposed between it and the plate. The spring is turned partly around, so as to be out of the way in connecting the two plates together by means of the pivot *b* of the plate A and the proper perforation *c* of the plate A', and then it is swung back to its normal position and connected with the pivot *b* by means of the notch *f* on its resilient end, so that said end is brought to bear upon the flat face of the plate A' to hold it securely in connection with the plate A.

The plates A and A' have serrated projections *g* at their outer edges, adapted to bite into the ice; and the plate A is provided with like projections *g' g'* at its inner end, to take hold of the ice at the middle of the sole B, and thus the foot is protected against slipping either laterally or longitudinally.

The accompanying drawings represent the left-foot creeper; that for the right foot would be in reverse order.

We claim as our invention—

1. In an ice-creeper, the combination of the metallic plates A and A', having at their outer edges clasp-hooks *a*, and serrated projections *g* at the middle part of the sole B, a pivot, *b*, and series of perforations *c*, and spring C, substantially as and for the purpose set forth.

2. The combination of the plate A, having serrated projections *g' g'*, with the plate A', the two plates being held upon the edges of the sole B by means of hook clasps *a*, and together by means of the pivot *b*, perforations *c*, and spring C, substantially as described.

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Witnesses:

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