

E. HUNTER.
Snow-Shovels.

No. 137,001.

Patented March 18, 1873.

Fig. 1.

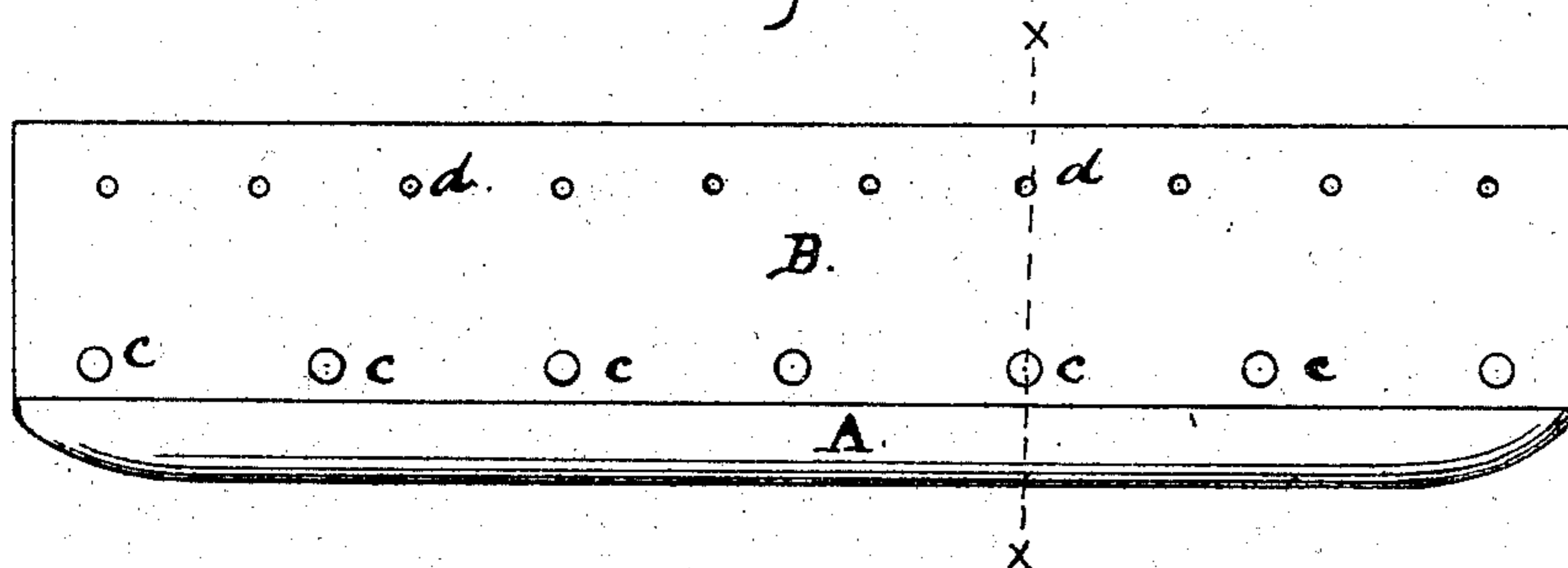


Fig. 2.

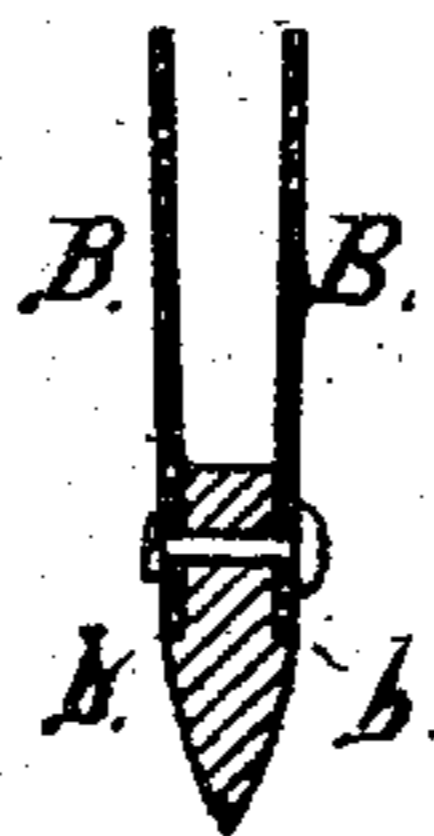
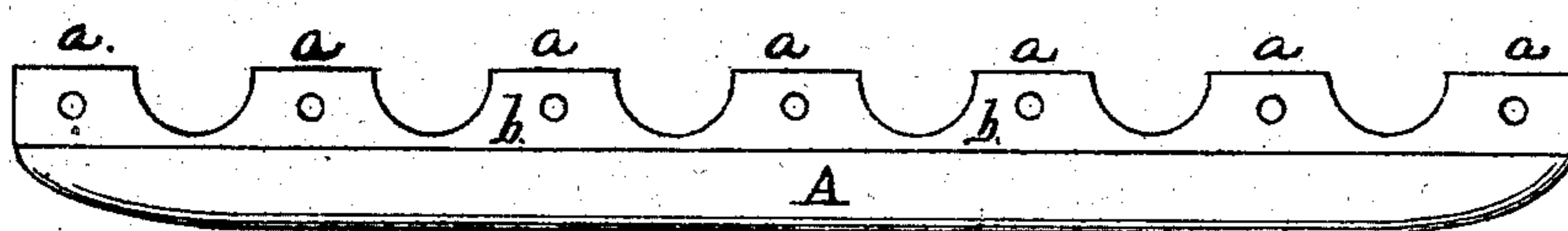


Fig. 3.



Witnesses:
W. T. Purris
Thos. Jewell

Inventor:
Edward Hunter
By C. B. Towles. Att.

UNITED STATES PATENT OFFICE.

EDWARD HUNTER, OF NORWICH, CONNECTICUT.

IMPROVEMENT IN SNOW-SHOVELS.

Specification forming part of Letters Patent No. 137,001, dated March 18, 1873.

To all whom it may concern:

Be it known that I, EDWARD HUNTER, of Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Tips or Shoes for Snow-Shovels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing, which forms part of this specification:

Figure 1 is a plan view. Fig. 2 is a cross-section, as indicated by the dotted line *xx* of Fig. 1. Fig. 3 is a view of the wrought or malleable iron core detached from the sheet-metal plates.

Like letters in all figures of the drawing indicate like parts.

This invention relates to a tip or shoe to be put onto the edge of a snow-shovel to protect it from wear, and consists in the combination of a wrought or cast iron core with sheet-metal plates, constructed and applied to the shovel, as will be hereinafter more fully explained.

A is the core, having projections *a* on the back edge, and shoulders *b b* on the sides, to receive the sheet-metal plates B B, which come squarely against the shoulders and flush with the surfaces of the sides of the core. The projections *a* are provided with holes, by which the core is securely fastened by rivets *c* to the plates. The core may have its back edge straight or solid across, but the projections are preferable as lessening the weight and cost

of the tip. The tip, as thus constructed, is very easily attached to the shovel, the sides of which are tapered enough toward the edge to allow the plates to slip on over it until the back edge of the core comes squarely against the edge of the shovel, when the plates—which are provided with holes *d* near their back edges—are fastened with tacks, screws, or any suitable means that will accomplish it. The durability of a wooden snow-shovel is thus very much increased by the attaching of a tip to its edge, and snow that has become compacted or frozen to the sidewalks can be much more readily removed without injury to the shovel.

The advantages of this improved tip are, that the cutting into the edge of the shovel and the constructing of the tip with wings or arms to attach it, as heretofore, is dispensed with, the tip not only protecting the edge fully from wear, but the sides also for a suitable distance above.

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

A tip or shoe for a wooden snow-shovel, consisting of a wrought or cast iron core, in combination with sheet-metal plates, substantially as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 6th day of February, 1873.

EDWARD HUNTER.

Witnesses:

E. H. TIFT,
SOLOMON LUCAS.