E. Hubbard.

Shovel Tip.

No. 111,939. Patented Feb. 21, 1871.

FIG 1

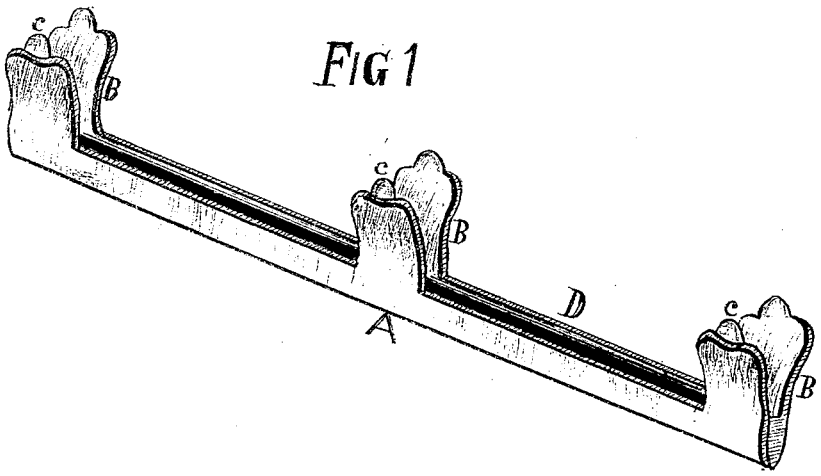

FIG 2

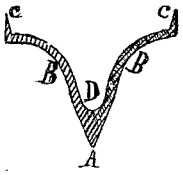

FIG 3

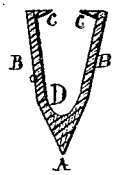

FIG 4

Witnesses { R. Bickford
George Laring

Inventor
Eber Hubbard

UNITED STATES PATENT OFFICE.

EBER HUBBARD, OF SENECA FALLS, NEW YORK.

IMPROVEMENT IN SNOW-SHOVEL TIPS.

Specification forming part of Letters Patent No. **111,939**, dated February 21, 1871.

To all whom it may concern:

Be it known that I, EBER HUBBARD, of Seneca Falls, county of Seneca and State of New York, have invented a new and useful Improvement in Snow-Shovel Tips; and that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the figures and letters thereon.

The object of my invention is to make a simple, cheap, durable, and easily-applied tip or edge to snow-shovels.

My invention consists of an iron casting, rendered malleable in the usual manner, and made complete in one single piece, constructed in such a manner as to be attached to the wooden part of the shovel without the use of rivets, screws, or nails, or the necessity of boring any part of the same.

The manner of constructing this snow-shovel tip or point is shown in Figure 1, being a perspective view, in which—

A is the front or forward edge of the tip. B B B show the flanges or arms, more or less in number, as may be found desirable, which are made to clasp the front edge of the wooden portion of the shovel, a part on the upper and a part on the under side of the same. They are to be cast curved, as shown in the cut, for the sake of drawing easily from the molds, and, after being made malleable, can be straightened and brought to the desired position by a single blow in a simple machine made for the purpose. These flanges are provided with points or teeth C C C, set at right angles to the flanges, which are designed to be driven into the wood of the shovel, all at one blow of a machine made for the purpose, to hold the tip on, thus obviating the necessity for using screws, nails, or rivets.

The base of the tip may be made slightly concave, as shown at D, to admit the wooden end of the shovel, and also to lighten the weight of the casting, but not so much as to weaken it beyond its necessary strength.

Fig. 2 shows a sectional or end view, with the flanges or arms B B and the points or spurs C C in position as cast; and Fig. 3 shows their position after being malleated, straightened, and ready to be applied to the shovel. Fig. 4 shows the tip applied to the shovel.

Having thus described my invention, I claim and desire to have secured by Letters Patent—

A malleable-iron snow-shovel tip, made with flanges or arms furnished with points or spurs designed to be driven into the wooden shovel, for the purpose of holding the tip to the shovel in such a manner as to obviate the necessity of using nails, screws, bolts, or rivets for that purpose, substantially in the manner as and for the purposes set forth and described.

Witness my hand and seal this 29th day of December, 1870.

EBER HUBBARD. [L. S.]

Witnesses:
R. BICKFORD,
WM. CLARK.