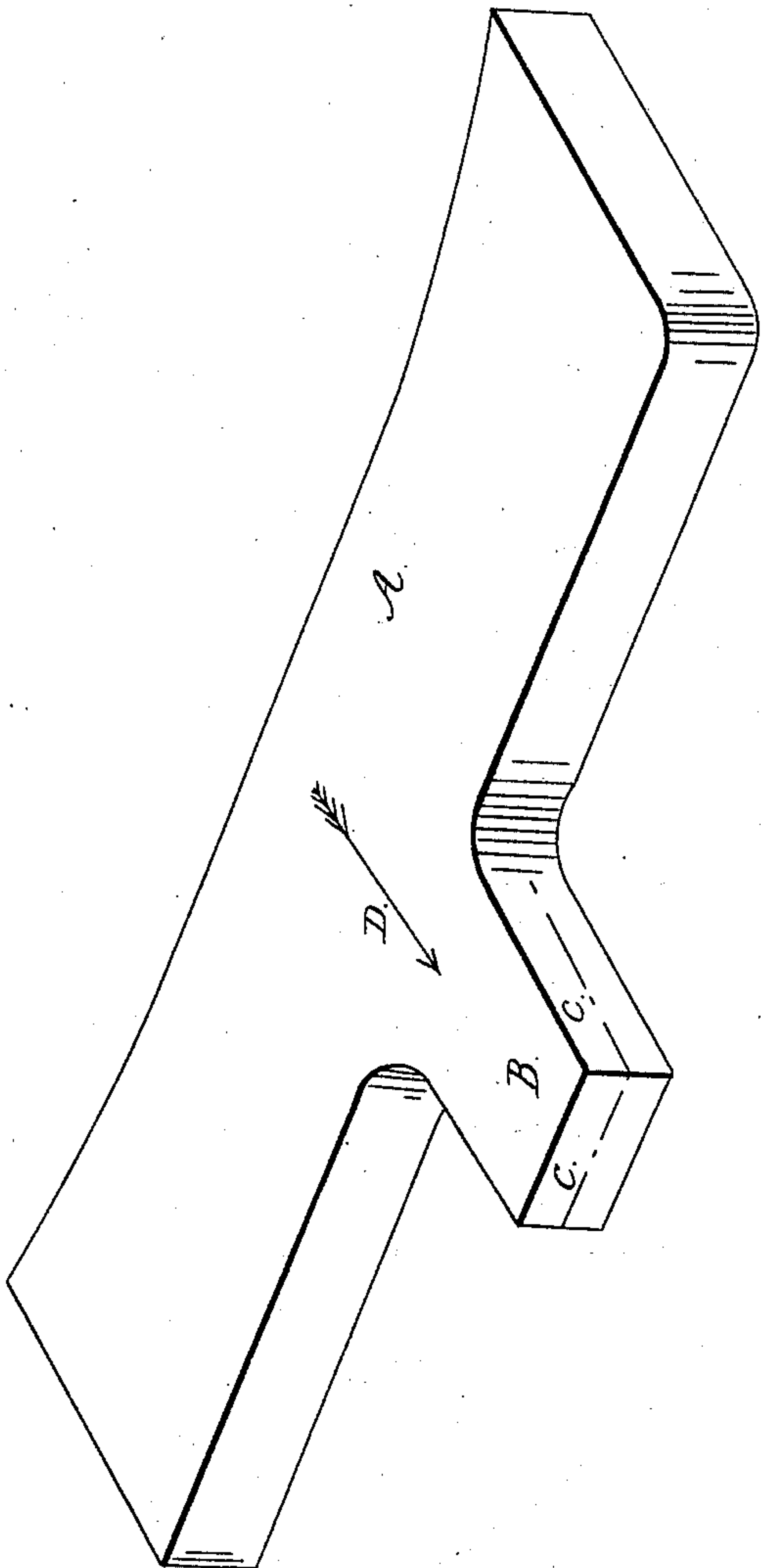


H. M. Myers.

Making Shovels.

N^o 78,679.

Patented Jun. 9, 1868.



Witnesses.
John Johnston.
A. C. Johnston.

Inventor.
H. M. Myers.
By his attorney
James F. Johnston.

United States Patent Office.

HENRY M. MYERS, OF ALLEGHENY CITY, PENNSYLVANIA..

Letters Patent No. 78,679, dated June 9, 1868; antedated June 5, 1868.

IMPROVEMENT IN THE MANUFACTURE OF SHOVELS.

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, HENRY M. MYERS, of the city and county of Allegheny, in the State of Pennsylvania, have invented a new and useful Improvement in the Manufacture of Shovels, (the same being an improvement upon the inventions for which I obtained Letters Patent bearing date February 5, 1867, and May 14, 1867;) and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in forming blanks for shovel-blades and the handle-straps, so that said blades and handle-straps may be drawn or "plated" out to the desired size and thickness by drawing or plating out the iron or steel lengthways of the blade and strap, without any cross-action in the drawing or plating process.

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

In the accompanying drawings, which form part of my specification, A represents the part of the blank for forming the shovel-blade, the length, breadth, and thickness of which must correspond to the length, breadth, and thickness of the straps desired.

Blanks made from cast steel are formed by the use of metal moulds, which moulds must correspond to the size and forms of the blank desired. The molten cast steel is pounded into the metallic mould, and then manipulated in the manner common to moulding articles of cast steel. Blanks of wrought iron are formed by the forging process.

The part B of the blank is split or divided, as indicated by the red line, C, which splitting or dividing is performed by heating the part B, and then, with ordinary tools, divided, which operation is well known to the skillful shovel-maker. After the part B is divided, the whole blank is then heated to the proper degree for being drawn or rolled out. The heated blank is passed back and forward between suitable rolls, in the direction indicated by the arrow marked D, until the shovel-blade and handle-straps are sufficiently drawn out, after which the shovel is finished in the ordinary manner.

When the blade and straps are "plated out" under the steam-hammer, the blank is moved back and forward in the direction indicated by the arrow D, so that the drawing action of the rolls will always be in a line parallel to the longitudinal plane of the blade and handle-straps of the shovel.

By forming the blank so that the blade and straps can be drawn out in the manner described, the blade and straps are not so liable to break and crack transversely, and the shovel-blade will wear smooth and evenly.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention, is—

A blank, for the manufacture of shovel-blades, made of steel or iron, of the form, and with the tang portion split, substantially as herein described, and for the purpose set forth.

H. M. MYERS.

Witnesses:

JAMES J. JOHNSTON,
A. C. JOHNSTON.