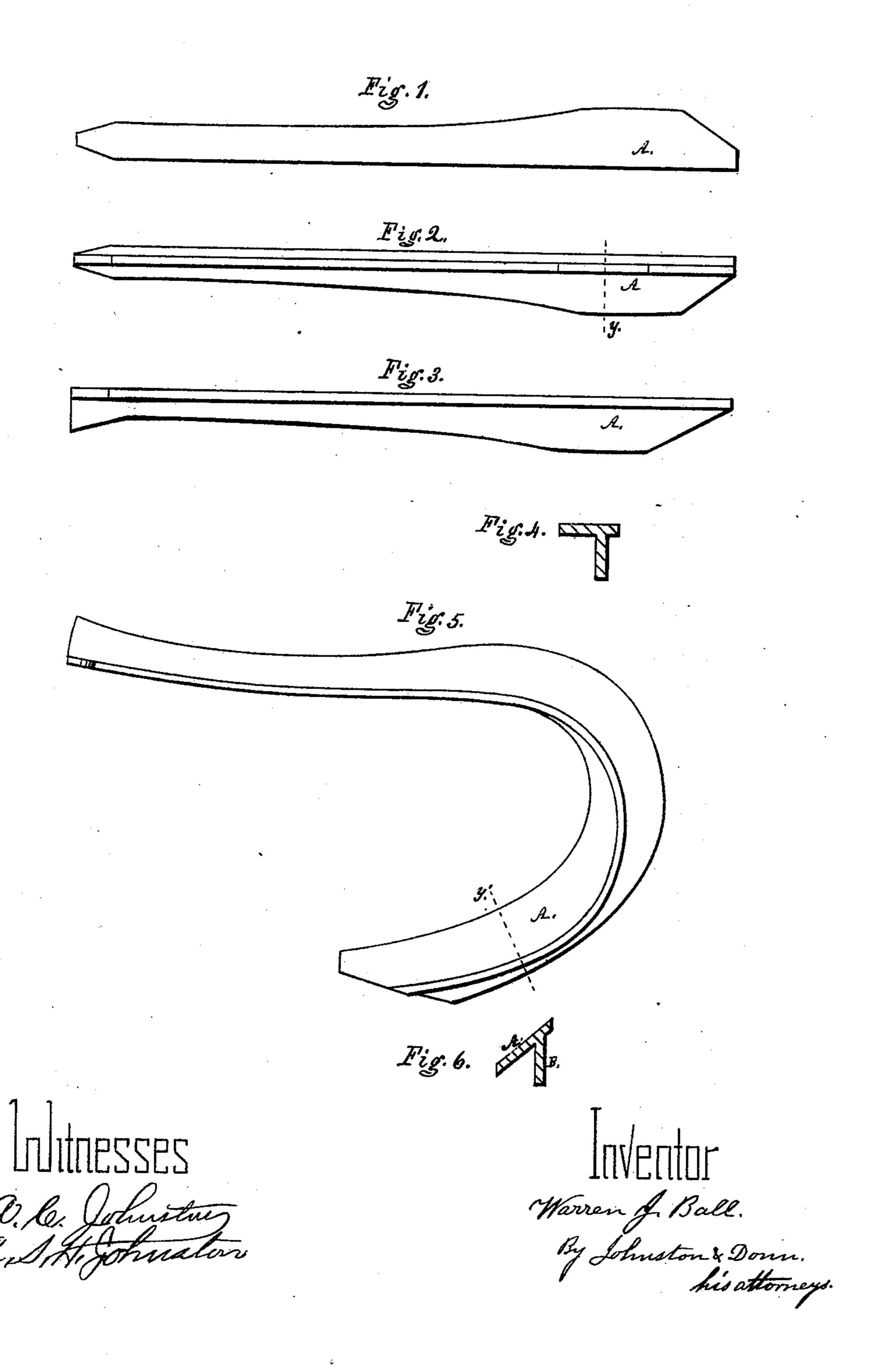
W. J. BALL. Plow-Beam.

No. 214,986.

Patented May 6, 1879.



## UNITED STATES PATENT OFFICE.

WARREN J. BALL, OF CANTON, OHIO.

## IMPROVEMENT IN PLOW-BEAMS.

Specification forming part of Letters Patent No. 214,986, dated May 6, 1879; application filed January 14, 1878.

To all whom it may concern:

Be it known that I, WARREN J. BALL, of Canton, in the county of Stark and State of Ohio, have invented a new and useful Improvement in Plow-Beams; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in the class of plow-beams adapted for the support of the mold-board, land-side, and share; and consists in the peculiar form of the beam, as hereinafter described.

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, Figure 1 is a side view of the blank, representing the under side of the beam prior to being bent. Fig. 2 is a side view of the beam, representing the upper side of the beam prior to being bent. Fig. 3 is a side view of the beam prior to being bent. Fig. 4 is a transverse section of the beam, at line y of Figs. 1, 2, and 3, prior to being bent. Fig. 5 is a side elevation of the beam after being bent into the form. Fig. 6 is a transverse section at line y' of Fig. 5.

The plow-beam is constructed of iron or steel. The blank bar in form is represented in cross-section in Fig. 4, said bar being formed by means of suitable rolls, the construction and form of which I leave to the skill of the roll-turner and the mechanic skilled in the art of rolling iron or steel. The bar, of which Fig. 4 is a cross-section, is cut into suitable lengths,

and by the shearing process is given the form shown in Figs. 1, 2, and 3. The blank thus formed is then bent, by means of a suitable bending-machine, (such as is described in my application for Letters Patent bearing even date with this application,) into the form represented in Fig. 5, whereby the wide flange or part A is given the form represented in Fig. 6, by which form a suitable bearing is obtained for the attachment of the mold-board, share, and land-side of the plow, enabling the constructer of the plow to give the desired land.

A plow-beam constructed as hereinbefore described will greatly simplify the construction of plows, diminishing the labor and expense connected therewith, at the same time providing a plow-beam of great strength.

I am aware that a cast-iron plow-beam adapted for the support of the mold-board, point, and land-side is old, and such I do not desire to claim, broadly, as my invention; but,

Having thus described my improvement, what I claim as of my invention is—

As a new article of manufacture, the plowbeam A B, bent from a single bar of metal, in the form herein shown and described, with its flange A increasing in width toward the rear of the beam, and at an angle thereto, said flange forming a bearing for the mold-board and share, and the vertical portion B a bearing for the land side, as specified.

WARREN J. BALL.

Witnesses:

A. C. Johnston, A. S. H. Johnston.