(No Model.)

A. BALL.

PLOW BEAM.

No. 246,363. Patented Aug. 30, 1881.

Fig. 1.

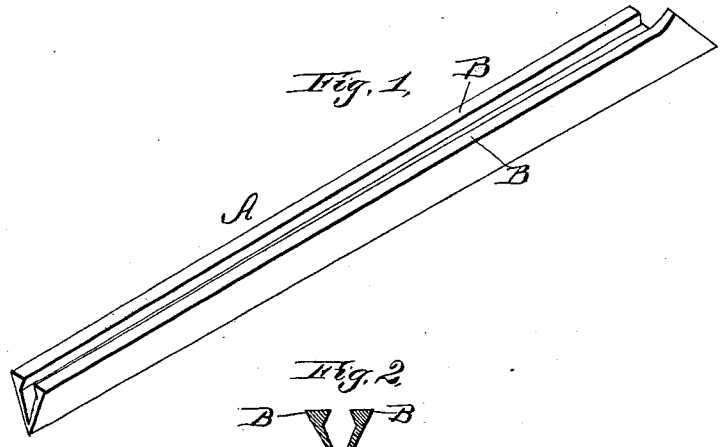
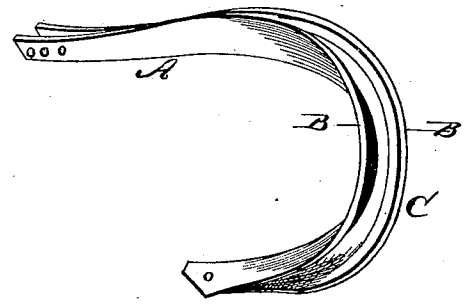


Fig. 2.



Fig. 3.



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Witnesses:
William J. Peirce
Frederick W Bond

Per
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UNITED STATES PATENT OFFICE.

ALBERT BALL, OF CANTON, OHIO.

PLOW-BEAM.

SPECIFICATION forming part of Letters Patent No. 246,363, dated August 30, 1881.

Application filed February 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALBERT BALL, residing at Canton, in the county of Stark and State of Ohio, and a citizen of the United States, have invented new and useful Improvements in Plow-Beams, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 of the drawings is a perspective view of the bar before bent into shape to form the plow-beam. Fig. 2 is a transverse sectional view thereof, and Fig. 3 is a perspective view of the beam constructed in accordance with my invention.

The present invention has relation to certain new and useful improvements in that class of plow-beams composed of a V-shape bar of metal bent into the proper form for attaching thereto the mold-board and landside.

Previous to my invention the above class of plow-beams were simply of V shape in cross-section, the vertex of such section being on the lower or anterior side of the beam, and the open part on the upper or posterior side, having no further means of strengthening the beam than the special V-shape form hereinbefore referred to.

It is the object of my invention to materially increase the strength and durability of this class of metal plow-beams at that point where the greatest strain is made, giving the beam stiffness and rigidity. These objects I attain by the construction shown in the drawings and hereinafter described.

In the accompanying drawings, A represents the metal plow-beam bent in the form shown in Fig. 3, the bar from which the beam is formed being in cross-section of a V shape, as shown in Fig. 2.

Unlike the V-shape metal plow-beams heretofore in use, the interior of the sides thereof are formed or constructed with strengthening-flanges B.

In the manufacture of the beams I prefer to form the blank V-shape bar with the flanges, so that the bars may be sold in the market ready to convert by suitable means into the beams for connecting thereto the mold-board and landside, the metallic bar forming both the beam and standard, the flanges B giving strength and firmness to the beam, thus adding to its durability. In the process of bending the V-shape bar into the proper form to make the beam the sides thereof are flared outward to further increase its strength, as shown in Fig. 3.

The flanges B, it should be noticed, are not only formed on the interior sides of the bar, but at the farthest point from the vertex of the bar or beam, to give strength at that point, where it is most required.

The mold-board, share, and landside are attached to the standard portion of the beam in a manner similar to that shown in my patent of January 3, 1871.

Another important feature of my invention is the increased thickness of the bar or beam from its vertex to its outer edges, as fully shown in Fig. 2, whereas in other beams of the class to which my invention relates the sides are of uniform thickness throughout their width. This further adds to the strength of the beam, giving it great stiffness against any strain which may be brought to bear on it.

It will be seen that every provision is made in the construction of this class of V-shape plow-beams to render them strong and durable.

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

1. A metal plow-beam of V-shape form in cross-section, the sides thereof having upon their interior strengthening-flanges, substantially as and for the purpose set forth.

2. A metal plow-beam of V-shape form in cross-section, the sides thereof increasing in thickness from its vertex to its outer edges, substantially as and for the purpose specified.

3. A metal plow-beam of V shape in cross-section, having its sides increasing in thickness from its vertex to its outer edges, the interior of the sides of said beam being formed with strengthening shoulders or flanges, substantially as and for the purpose set forth.

As evidence that I claim the foregoing I have hereunto set my hand, in the presence of two witnesses, this 21st day of February, A D. 1881.

ALBERT BALL.

Witnesses:

FREDERICK W. BOND,

WILLIAM J. PIERO.