

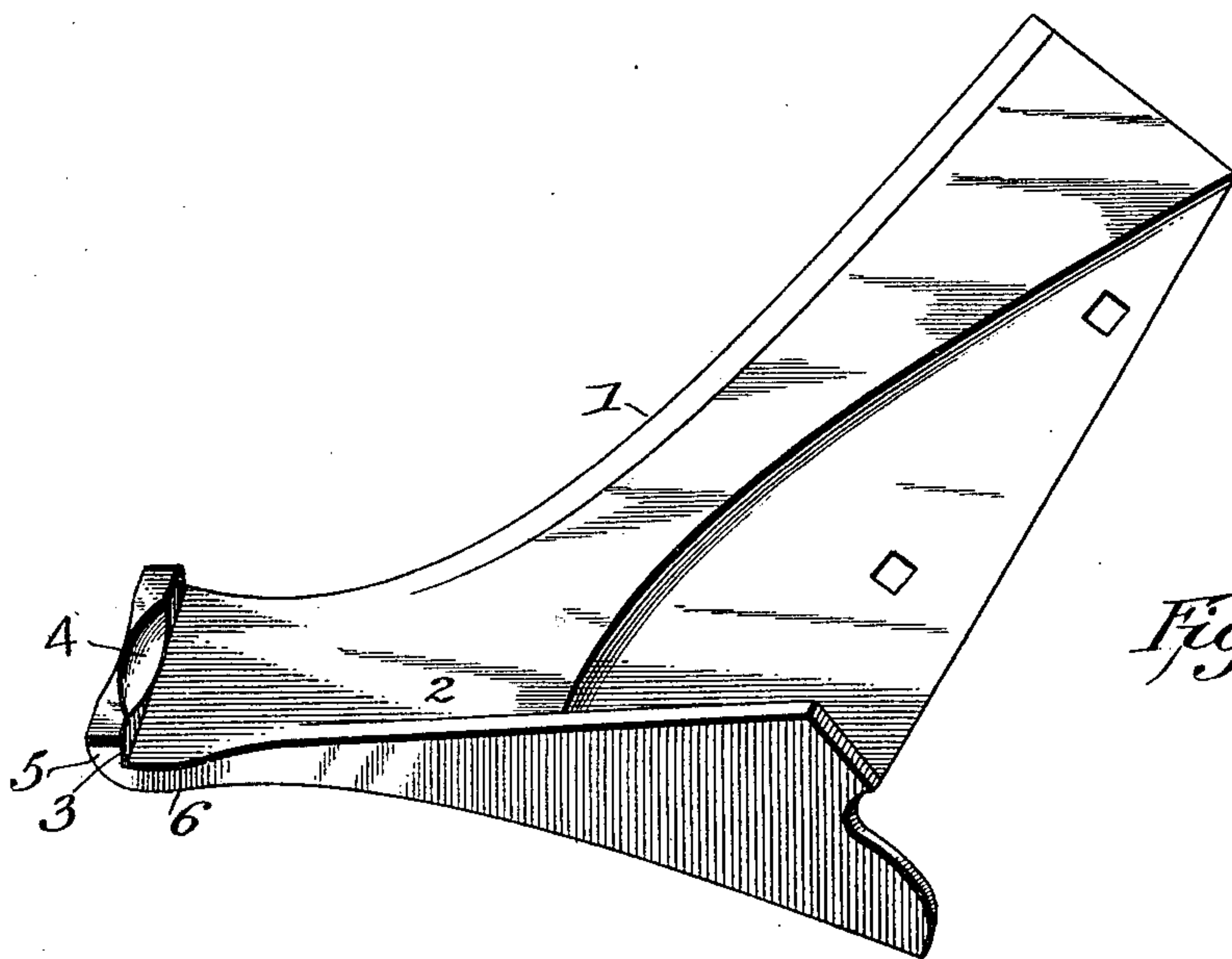
No. 632,071.

Patented Aug. 29, 1899.

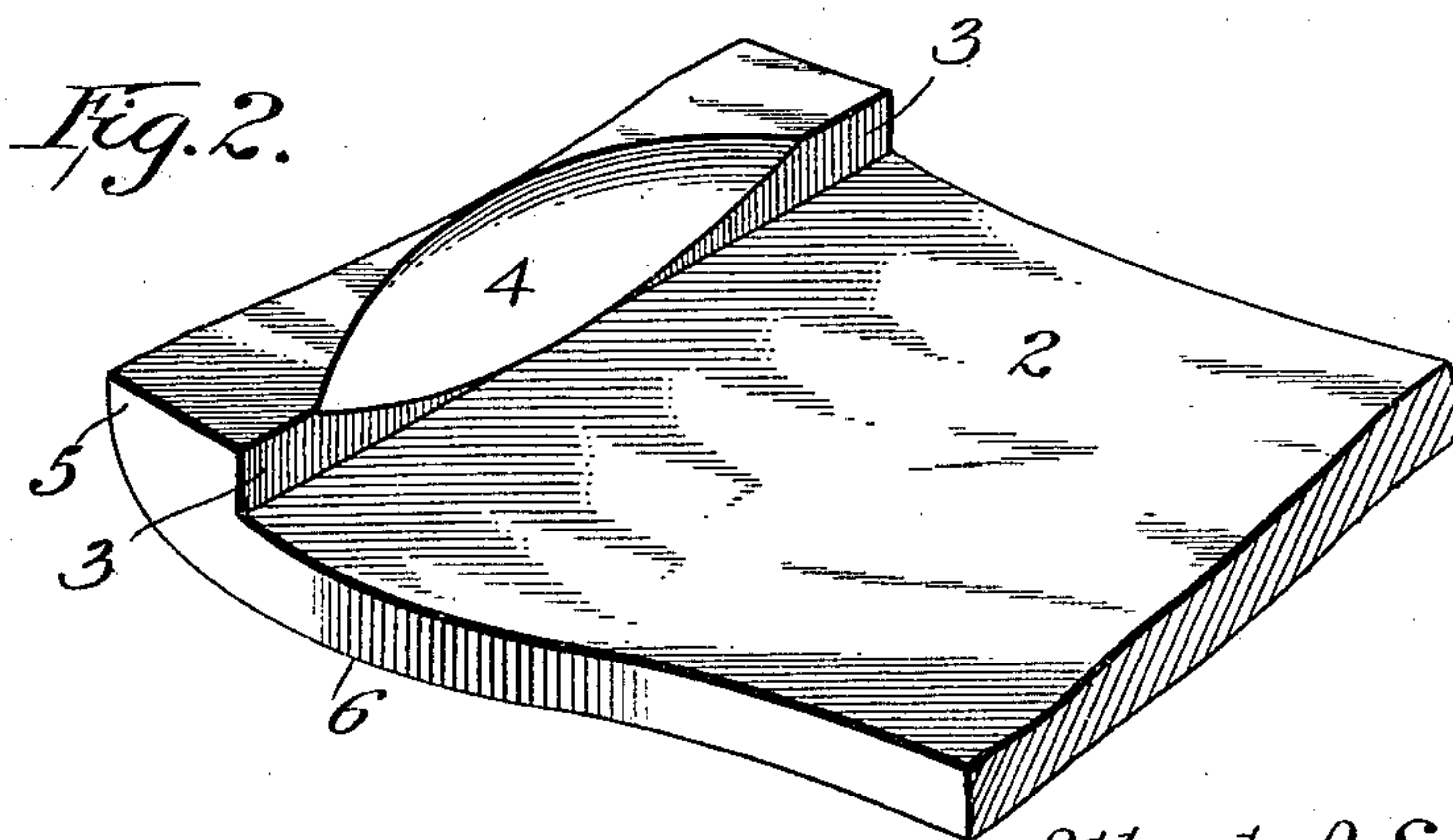
A. A. SUBER.  
PLOW POINT.

(Application filed Sept. 2, 1898.)

(No Model.)



*Fig. 1.*



*Fig. 2.*

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# UNITED STATES PATENT OFFICE.

ALBERT A. SUBER, OF DESHLER, OHIO.

## PLOW-POINT.

SPECIFICATION forming part of Letters Patent No. 632,071, dated August 29, 1899.

Application filed September 2, 1898. Serial No. 690,134. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT A. SUBER, of Deshler, Henry county, Ohio, have invented certain new and useful Improvements in  
5 Plow-Points; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the  
10 accompanying drawings, and to the numerals of reference thereon, which form a part of this specification.

My invention relates to a plow-point, and has especial relation to the extreme forward  
15 end or what I shall hereinafter designate the "nose" of the plow-point.

The object of the invention is to provide a self-sharpening nose to the point in which the cutting edge shall be regular and in which the  
20 wear is properly compensated for by reason of a reduction of metal at the point of minimum wear and a consequent maximum body of metal at the points of greatest wear, with an angular lateral reinforcement at the ex-  
25 treme land side point of the nose to thereby prevent fracture of the same when in impact with an immovable obstacle—as, for instance, fixed stones, roots, or stumps.

The essential requirements of a plow-point  
30 are that the usual wear shall tend to grind the nose to a cutting edge in contradistinction to wearing it blunt, and, further, that the cutting edge of the nose shall be free from irregularities, such as notches or corruga-  
35 tions, to thus obviate the difficulty of engaging with roots, tufts of grass, &c. I have provided for these requirements in the novel features shown in the drawings, in which it will be seen that at the extreme point of the  
40 nose there is a reinforcement upon the under side of a considerable degree, which reinforcement is reduced in the center in approximately circular formation, whereby the wear upon the corners of the nose simply tend to  
45 straighten the cutting edge of the center, and thereby maintain a straight cutting edge at substantially a right angle to the line of travel of the plow. I have also reinforced the land side corner of the nose by an angled brace  
50 portion, thereby greatly strengthening the extreme point of the nose, and in a manner

to present a smooth surface and to facilitate the retraction of the plow.

In the drawings, Figure 1 is an isometric view showing the under side of the plow- 55 point. Fig. 2 is a like view showing the nose.

1 designates the part known as the "point," which is usually separable from the plow proper. The nose 2 has formed upon and across its under side a reinforcement 3, which 60 gradually diminishes in thickness from the cutting edge and the sides toward the center backward to the plane of the body of the nose at the rear portion of the reinforcement, as at 4. In other words, the reinforced por- 65 tion may be regarded as a rib rectangular in cross-section and at its middle having a segment of a sphere cut from the angle formed by the bottom and rear of the rib. If preferred, the radial lines of the cut-away por- 70 tion may, as an equivalent, be straight to form a section of a cone instead of a sphere; but I prefer the curved form. With this construction, the wear being the greatest upon the outer edges, the maximum amount of the 75 metal is provided at these points, and the center is crowning, thereby wearing evenly with the points of the extreme edges and always insuring a straight and regular cutting edge without the usual rounding of the point at 80 the lateral edges. It will be observed that by reason of the crown formation of the reduced portion the center of the nose maintains a uniform proportionate thickness relatively with the thickness of the extreme edges to 85 insure a straight cutting-face until the point is entirely worn out.

In order to reinforce the extreme land side angled points 5 to provide for greater rigidity and strength and to withstand impact with 90 fixed objects, as stones, roots, or stumps—I provide an angled brace 6, cast integral with the nose, which being at an angle with the body of the nose presents a smooth surface upon the side without offering any impedi- 95 ment to the withdrawal of the point from the furrow and allows the extreme point 5 of the nose to project somewhat beyond the normal width of the nose for a proper clearance of the furrow. 100

It will be seen from the foregoing that I have provided for the wear of the cutting



edge of the nose in a straight line with a reinforcement of the extreme angled point of the nose to prevent breakage.

What I claim as my invention, and desire  
5 to secure by Letters Patent, is—

1. A plow-point provided at the under side of its nose with a transverse reinforcement having a reduced portion between the ends thereof.
- 10 2. A plow-point provided at the under side of its nose with a reinforcement, and at the land side corner of the nose with an integral angled brace portion.
3. A plow-point provided at the under side

of its nose with a transverse rib having a con- 15  
cavity between the ends thereof.

4. A plow-point provided at the under side of its nose with a transverse rib having a sloping concavity therein.

5. A plow-point provided at the under side 20  
of its nose with a transverse rib having in its rear edge and between the ends thereof, a sloping concavity.

ALBERT A. SUBER.

In presence of—

F. M. DOTSON,  
WILBER A. OWEN.