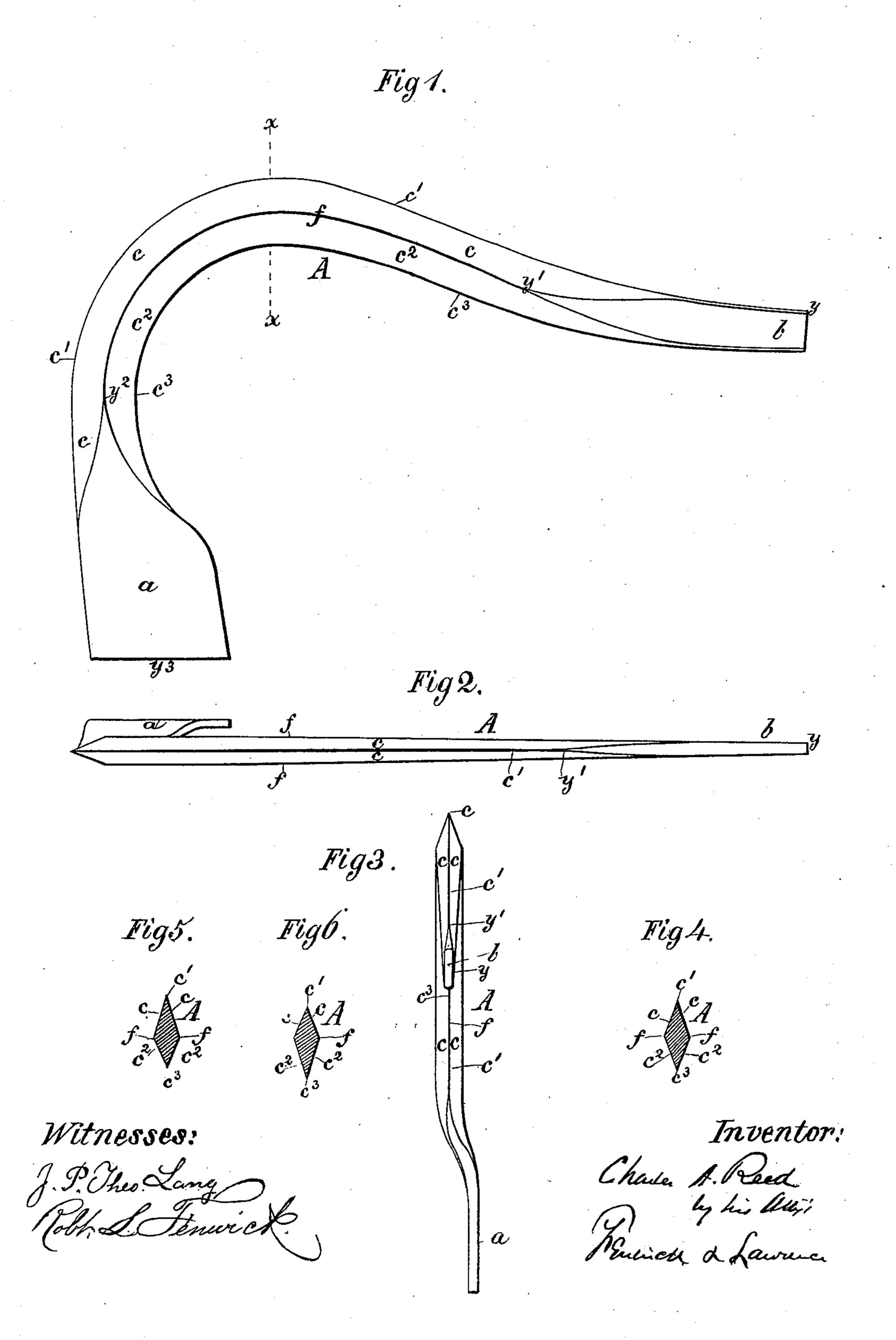
## C. A. REED.

PLOW BEAM.

No. 303,544.

Patented Aug. 12, 1884.



## United States Patent Office.

CHARLES A. REED, OF DUBUQUE, IOWA.

## PLOW-BEAM.

SPECIFICATION forming part of Letters Patent No. 303,544, dated August 12, 1884.

Application filed May 15, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. REED, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented a new and useful Improvement in Plow-Beams, of which the following is a specification.

My invention consists in a plow-beam having the peculiar construction in cross-section shown in the drawings, and hereinafter de-

scribed and specifically claimed.

In the drawings, Figure 1 is a side elevation, Fig. 2 a top view, and Fig. 3 a front view, of my improved plow-beam; and Figs. 15 4, 5, and 6 are cross-sections of three different forms of beams in the line x x of Fig. 1.

My plow-beam A, before being bent into the form shown, is rolled or otherwise produced from a round or polygonal bar of metal, 20 either steel or iron, so as to have a greater vertical than horizontal thickness, and between its flattened and laterally-deflected foot portion a and the clevis-attaching portion b it may be similar in shape to the figure shown 25 in either of the cross-sections, Figs. 4, 5, and 6. The oblique upper and rear sides, c, of that portion of the angular beam which form the upper and rear sharp angle, c', may be equal to or longer than the lower sides,  $c^2$ , 30 which form the lower and front sharp angle,  $c^3$ . If the said sides are unequal, their proportions may be about one and three-eighths inch to one and one eighth inch—that is, the lower and front oblique sides are, say, one-fourth to three-35 eighths of an inch less in length than the upper and rear oblique sides at any point between x x and y', or x x and  $y^2$ . From the point indicated by dotted line x x, the beam extends forward in nearly the same form as 40 shown in Figs. 4, 5, or 6, until it begins to diminish in thickness, when it begins to take the flattened form included between y and y', and as shown in Figs. 1, 2, and 3 of the drawings; and from said point x x it also extends 45 rearward and downward in exactly the same form shown in either Figs. 4, 5, or 6, until it begins to diminish in thickness, when it takes the wide flattened form included between  $y^2 y^3$ , as shown in Figs. 1, 2, and 3.

The beam, in its curvatures and bend or deflection, does not differ, essentially, from well-known plow-beams, while in its transverse section or form and in distribution of its metal, whereby the requisite strength with lightness of structure is secured, it is new and superior 55 to beams heretofore contrived.

The beam shown and described might be modified as follows: The sides forming the sharp angle at the bottom of the beam might be shorter than the sides forming the sharp 60 angle at the top of the beam, as illustrated in Fig. 5; or the sides forming the top and bottom angles of the beam might be, as shown in Fig. 6, just the reverse of those shown in Fig. 5. The construction shown in Figs. 1, 2, and 65 4 I believe to be the best, as it more equally distributes the metal and gives great strength and lightness, while by the beveled surfaces the dirt will be shed both on top and beneath the beam.

I do not claim plow-beams having forms and constructions such as are shown in Letters Patent numbered, respectively, 267,061 and 158,725.

What I claim as my invention, and desire to 75 secure by Letters Patent, is—

1. The plow-beam A, having a greater vertical than horizontal thickness, and its portion which is between the flattened clevis-attaching end and the foot-piece of the standard 80 constructed with oblique upper sides and oblique under sides, the upper sides starting from the middle or thickest part of the beam and meeting and forming an angle at the top of the beam, and the lower sides starting from 85 said thickest portion and meeting and forming an angle at the bottom of the beam, substantially as described.

2. The plow-beam having the angular form described, curved and provided with the flat 90 front portion and flat deflected foot portion, substantially as described.

CHARLES A. REED.

Witnesses:

M. R. BASKERVILLE, CHAS. ARMSTRONG.