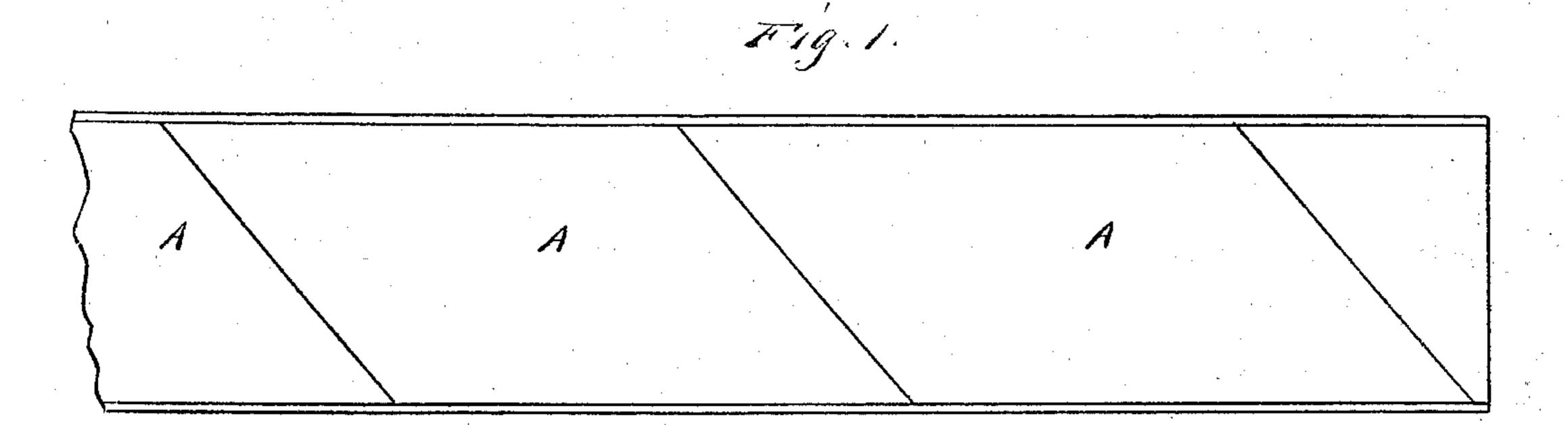
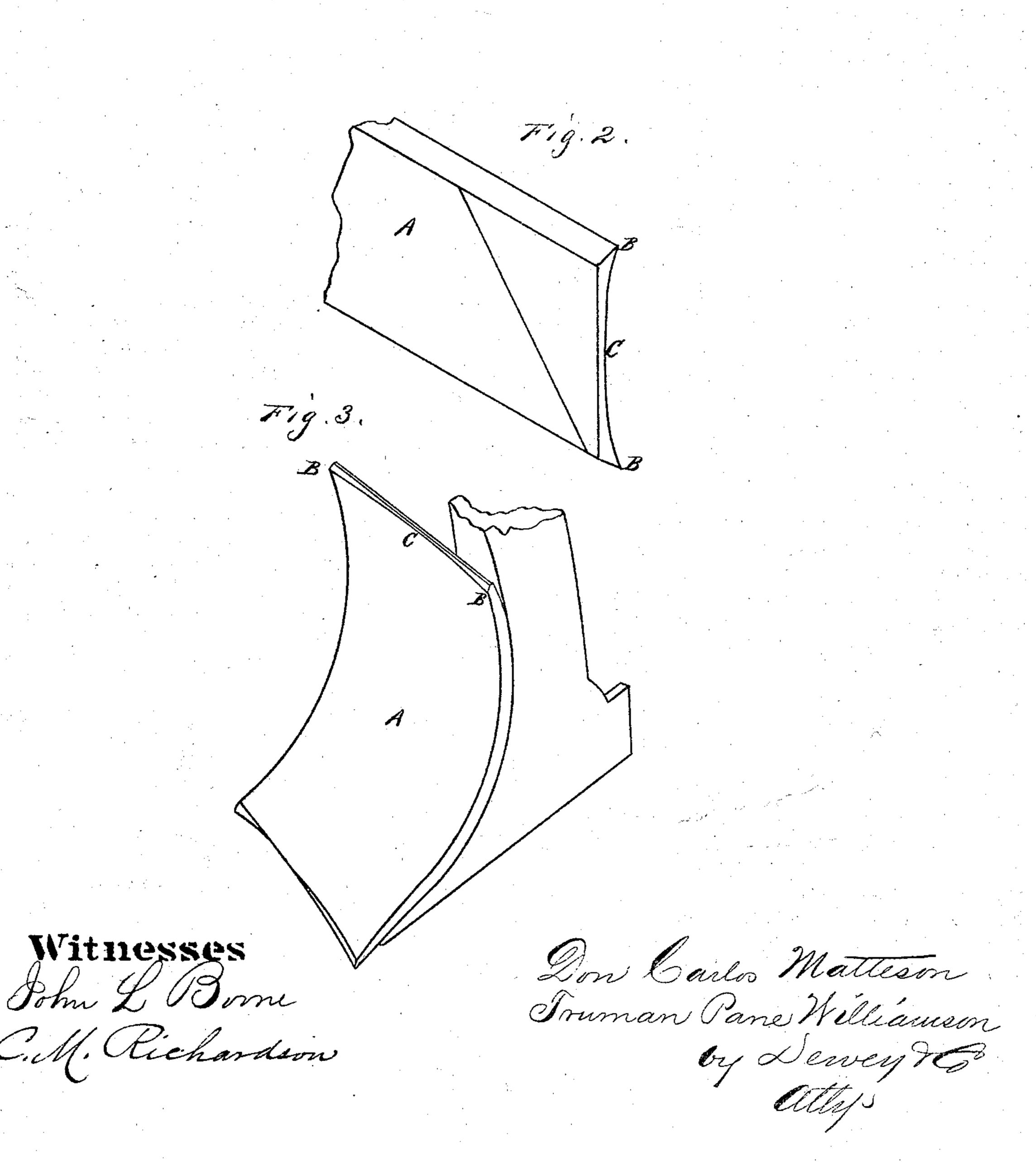
DON C. MATTESON & T. P. WILLIAMSON. Moldboards for Plows.

No.151,143.

Patented May 19, 1874.





UNITED STATES PATENT OFFICE.

DON CARLOS MATTESON AND TRUMAN P. WILLIAMSON, OF STOCKTON, CAL.

IMPROVEMENT IN MOLD-BOARDS FOR PLOWS.

Specification forming part of Letters Patent No. 151,143, dated May 19, 1874; application filed December 13, 1873.

To all whom it may concern:

Be it known that we, Don Carlos Matteson and Truman P. Williamson, of Stockton, San Joaquin county, State of California, have invented Improvements in Mold-Boards for Plows; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention or improvement without further invention or experiment.

The object of our invention is to manufacture, for plows, mold-boards better in quality and at less cost than has heretofore been done.

In the drawings, Figure 1 represents a steel plate or bar of any convenient length, but long enough to make several mold-boards, and as wide as it is desired the horizontal width of the mold-board should be when finished. Fig. 2 is a perspective view of a section of the same piece of steel shown in Fig. 1. Fig. 3 represents the mold-board finished and attached to the plow-standard, except that the horizontal edges are not sharpened.

Similar letters of reference indicate corre-

sponding parts.

A is the piece of steel which forms the moldboard. B B are the thick edges of the same, and C shows its thin or middle part. Fig. 3 shows the said piece of steel after it is formed into a mold-board, and Figs. 1 and 2 show it before it is entirely so formed.

Our improvement is very simple. We first form the piece of steel shown in Figs. 1, 2, by rolling it, in any ordinary rolling-mill, between rollers properly shaped to press the steel as it passes between them into the desired shape, which is thin in the middle and thick at the edges, as shown at B C B in Figs. 2 and 3. This piece of steel can be rolled of

any desired length and thickness. We usually roll it about twelve feet long and from one quarter to five-sixteenths of an inch thick in the middle, and from a half to three-fourths of an inch thick at its edges. This long piece of steel is then easily cut by heavy shears, or otherwise, into pieces, as shown by A A, Fig. 1; and each of these pieces, when properly curved, which is quickly done by a press, forms a perfectly-shaped mold-board, as shown by A in Fig. 3, with its vertical edges thick and central parts thin. By extending the said extra thickness upward the entire length, or even over half of the entire length of the vertical edges, measuring from each point upward, and making the other parts of the mold-boards thinner, their strength is greatly increased without any increase in the weight of steel used. In this respect our improvement applies to cast cast-steel mold-boards as well as to those made of rolled cast-steel.

Our invention is especially valuable when applied to reversible mold-boards which are reversed, as occasion requires, so that their horizontal edges are alternately used at the bottom, such as are shown in Letters Patent No. 62,766, granted to us March 12, 1867, and reissued November 3, 1868.

What we claim, and desire to secure by Let-

ters Patent, is—

As a new article of manufacture, a reversible plow having its vertical cutting-edges B B thicker than the vertical center of the plate, substantially as shown and described.

In witness whereof we hereunto set our

hands and seals.

DON CARLOS MATTESON. [L. s.]
TRUMAN PAUL WILLIAMSON. [L. s.]
Witnesses:

HERBERT E. HALL, Ed. Kalisher.