

ALVARADO JONES.

Improvement in Harrows.

No. 124,586.

Patented March 12, 1872.

Fig 1.

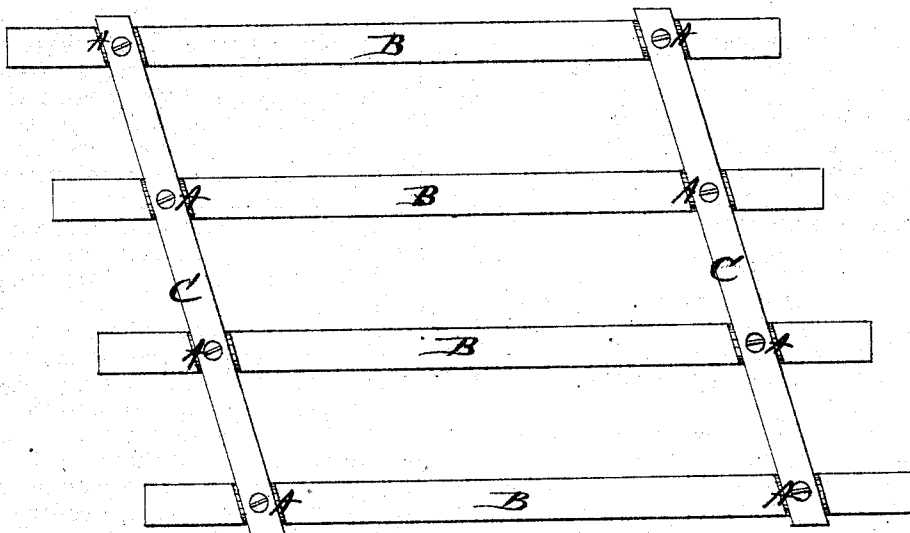


Fig 2.

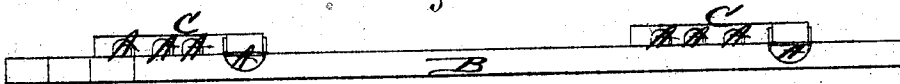
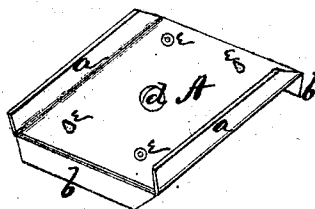


Fig 3.



Witnesses.

Jas. E. Hutchinson
L. L. Everett

Inventor.

Alvarado Jones.
per Alexander Mason

Atty.

UNITED STATES PATENT OFFICE.

ALVARADO JONES, OF RANDOLPH, WISCONSIN.

IMPROVEMENT IN HARROWS.

Specification forming part of Letters Patent No. 124,586, dated March 12, 1872.

To all whom it may concern:

Be it known that I, ALVARADO JONES, of Randolph, in the county of Dodge, and in the State of Wisconsin, have invented certain new and useful Improvements in Harrow; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in a plate inserted between the bars and slats of a harrow-frame where the two pieces of wood are joined together, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view, and Fig. 2 a side view of a harrow-frame with plates; and Fig. 3 is an enlarged perspective view of the plate.

A represents a metallic plate of suitable dimensions to be used between the bars B B and slats C C of a harrow-frame. The opposite edges *a a* of the plate A are turned up to fit on the sides of the slat, while the other two edges *b b* are turned down to fit on the sides of the bar. In the center of the plate A is a hole, *d*, through which a bolt may be passed to fasten the bar and slat together. And on both sides of said plate are projections *e e* or points, one or more, which will be pressed into the bars and slats and hold the frame very firm.

The advantages of using these plates are that the timbers are left full size—no halving together; consequently no weaker at the joints than at other places. The plates with the flanges keep the bars and slats from splitting. Also, great convenience in making and repairing, as the bars and slats will all be got out of the same size for harrows of that size; and farmers can, by taking out a few bolts, insert a new bar without the necessity of applying to a mechanic.

The plates A A may be made of cast or wrought iron, or any other suitable material.

I am aware that a metallic plate having two of its edges turned upward, and the other two of its edges turned downward, has been used as a railroad chair, and that a similar plate has been used for connecting a plow-shank with a plow-beam; hence I do not, broadly, claim such to be my invention.

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

A harrow-frame, consisting of the beams B and C and the metallic plates A, all secured together by bolts, and constructed substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of June, 1871.

ALVARADO JONES.

Witnesses:

J. G. SOUTHWELL,
STEPHEN V. R. SHEPHERD.