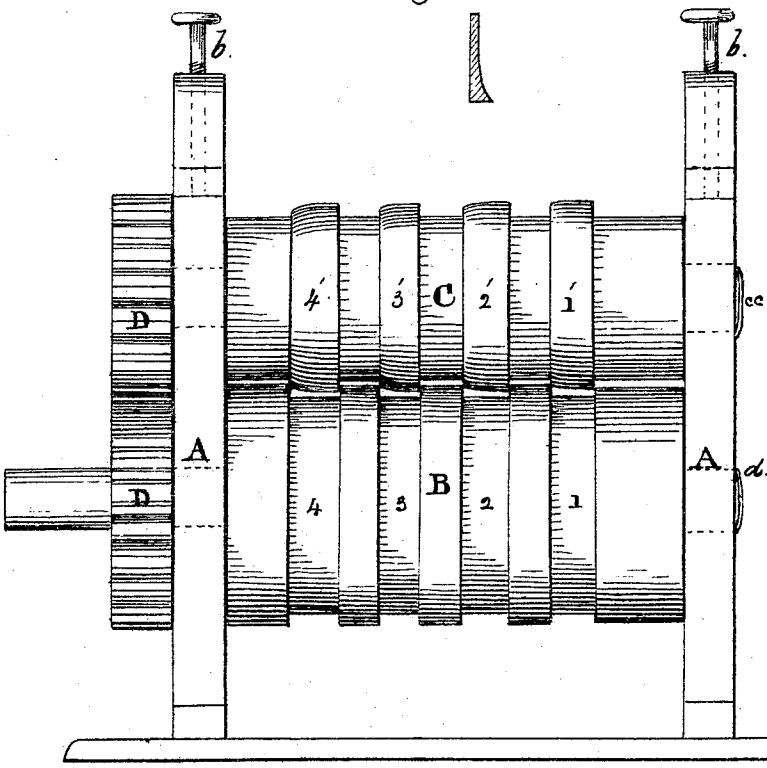
Jas. Duff, Henry Roberts, & Gilbert D. Nourse.

[65.]

Impt in the Manufacture of Plow-Landsides.

No. 118,848. Patented Sep. 12, 1871.

Fig. 1.



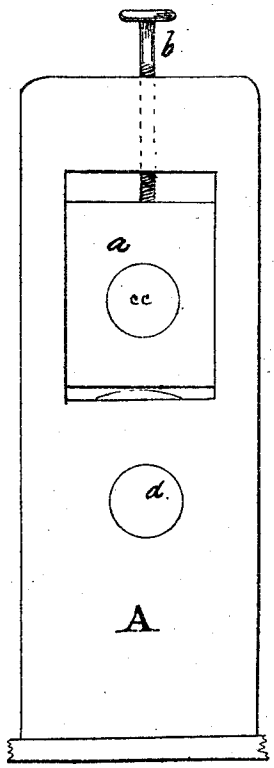


Fig. 4.

Fig. 3.

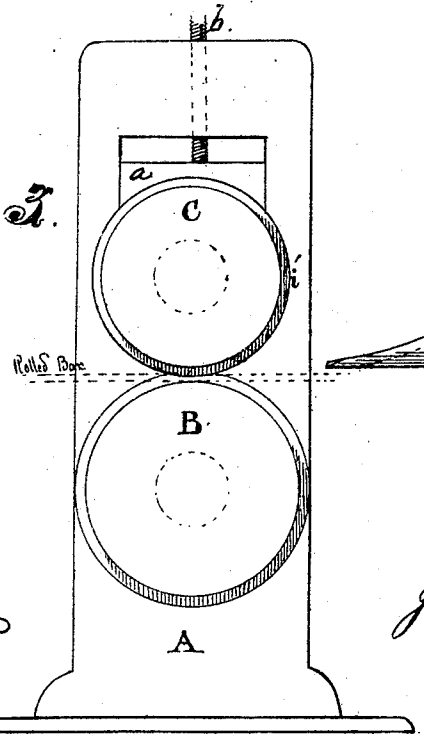
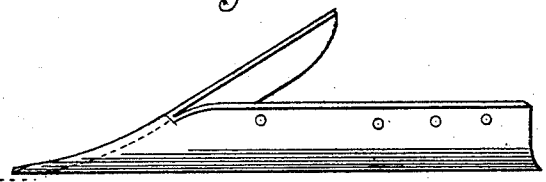


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES DUFF, OF PEORIA, ILL., AND HENRY ROBERTS AND GILBERT D. NOURSE, OF ST. LOUIS, MO., ASSIGNORS TO L. G. PRATT & CO., OF PEORIA, ILL.

IMPROVEMENT IN THE MANUFACTURE OF PLOW LANDSIDES.

Specification forming part of Letters Patent No. 118,848, dated September 12, 1871.

To all whom it may concern:

Be it known that we, JAMES DUFF, of the city and county of Peoria and State of Illinois, and GILBERT D. NOURSE and HENRY ROBERTS, both of St. Louis, in the county of St. Louis and in the State of Missouri, have invented a new and useful Improvement in the Manufacture of Plow Landsides; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a cross-section of plow landside. Fig. 2, a front or side view of roller devices for giving the required curved shape to the bottom edge of landside. Fig. 3, a transverse vertical section of the same; Fig. 4, an end view, and Fig. 5, a perspective view of landside.

Like letters in the various figures of the drawing indicate like parts.

Our invention relates to the manufacture of plow landsides; and consists of a plate of wrought-steel or wrought-iron raised or thickened along one edge throughout its length, which raised portion graduates into a thinner and flat portion of the plate by an easy concave curvature commencing at the angle of the plate, as will be hereinafter more fully described.

Cast-iron landsides of this shape have been used; also cast-steel landsides; but we are not aware that such have been manufactured before of rolled steel or wrought-iron.

A represents two standards, each with two journals or bearings for heavy rollers, the upper journal in each standard being adjustable so as to bring the upper roller nearer to the lower one by means of the usual sliding journal-boxes *a* and screws *b*. B, a heavy horizontal steel or chilled cast-iron roller, having sunk on its surface several circular grooves, 1 2 3 4, of the width and thickness of the intended landside bar, Fig. 1. This roller is mounted in proper bearings *d* in the standards. C, a horizontal roller, of same material and size, having circumferential projections 1′ 2′ 3′ 4′, each corresponding in width, and fitting into one of the opposite grooves in the adjoining roller B, parallel and close to which it is mounted by means of the pivot *c c* in the adjustable bearings *a*. The face of each of the ribs 1′ 2′ 3′ 4′, commencing with 1′, are each more and more conformed to the ultimate curve and thickness of the resulting land-side bar to be formed by their pressure until the rib 4′ and its corresponding groove 4 exactly represent, by the configuration of the opening left between them, the cross-section of the rolled bar or land-side, Fig. 1. D D, cog-wheels, one on the end of either roller B C, gearing together and operating the rollers. To one of the wheels or the spindle of one of the rollers is applied motive power.

The operation of this machine for the production of this new article of manufacture is as follows: The steel or wrought-iron bar at a high heat is introduced into the first groove 1 in revolving roller B, and receives the first pressure and a slight curve on its upper face from the impact of the rib 1′. On its passage through the revolving rollers it is introduced a second time into the groove 2, and this process is continued until the final and exact shape is impressed by the groove 4, rib 4′, when the operation is complete.

Having thus fully described our invention, what we claim therein as new, and desire to secure by Letters Patent, is—

A plate of wrought-steel or wrought-iron of the shape, in cross-section, substantially of that herein described and shown—that is to say, a plate or bar raised or thickened along one edge throughout its length, which raised portion graduates into the thinner and flat portion of the plate by an easy concave curvature commencing at the angle of the plate, said plate to be used in the manufacture of landsides of plows, as set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 25th day of April, A. D. 1871.

GILBERT D. NOURSE.
HENRY ROBERTS.
JAS. DUFF.

Witnesses to NOURSE and ROBERTS:
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H. W. WELLS.