

J. T. RAFTERY.
Plow-Handles.

No. 138,434.

Patented April 29, 1873

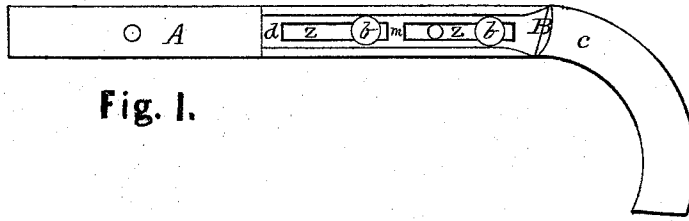


Fig. 1.

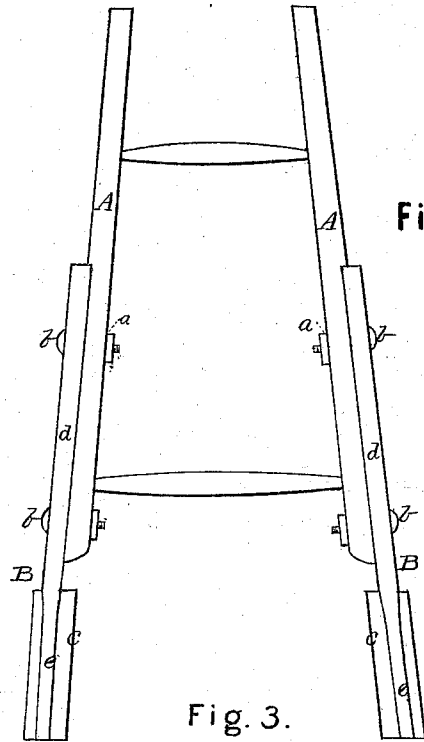


Fig. 2.

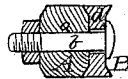


Fig. 3.

WITNESSES.

Phil. C. Mosier.
C. B. Steele.

INVENTOR.

J. T. Raftery
Chipman Mosier &
Attys

UNITED STATES PATENT OFFICE.

JOHN T. RAFFERTY, OF EL DARA, ILLINOIS.

IMPROVEMENT IN PLOW-HANDLES.

Specification forming part of Letters Patent No. **138,434**, dated April 29, 1873; application filed September 7, 1872.

To all whom it may concern:

Be it known that I, JOHN T. RAFFERTY, of El Dara, in the county of Pike and State of Illinois, have invented a new and valuable Improvement in Extension Plow-Handle; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side view of my invention. Fig. 2 is a top view of my invention. Fig. 3 is a sectional detail, transverse.

This invention has relation to means for adjusting the handles of a plow to the height of the man or boy operating the same; and it consists in the construction and novel arrangement of the metallic adjustable slotted handles, as hereinafter described.

In the accompanying drawing, the letter A designates the ordinary plow-handles, which may be made of straight short pieces of wood, without the usual curved ends. These handles are perforated at the points *a a* for the passage of the screw-bolts *b b*, which secure thereto the adjustable handles. The outside edges of the pieces A are beveled preferably to correspond with the concave inner sides of the shanks of the adjustable handles. These metallic handles B B are usually made of malleable cast-iron, and consist each of a han-

dle, *c* and *a*, shank *d*, adapted to lie alongside the outer face of the upper end of the wooden bar A. The inner face of said shank is therefore preferably made with edge flanches or concave to clasp, as it were, the face of the bar A, thus tending to keep the handles in line therewith, and to prevent looseness occurring from undue strain on the bolts. The shanks are provided with central longitudinal slots *z z*, through which the bolts *b b* pass. Two slots are preferred, one for each bolt, as a vertical strengthening-tie, *m*, is thus obtained in the casting, at about the middle of the shank, serving to prevent the leverage or strain from widening the slots. The curved portion *e*, which is designed to be grasped in the hand of the operator, should be rounded in cross-section, and is preferably made by riveting convex pieces of wood to the sides of a flat tang, *e*, at the end of the shank.

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

The metallic adjustable slotted handles B having incasements *c*, in combination with the fixed plow-shanks A and bolts *b*, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN T. RAFFERTY.

Witnesses:

THOMAS GRAY,
J. S. ROBERTS.