W. J. WELLING.
Plow-Jointer.

No. 210,588. Patented Dec. 3, 1878.

Fig. 1.

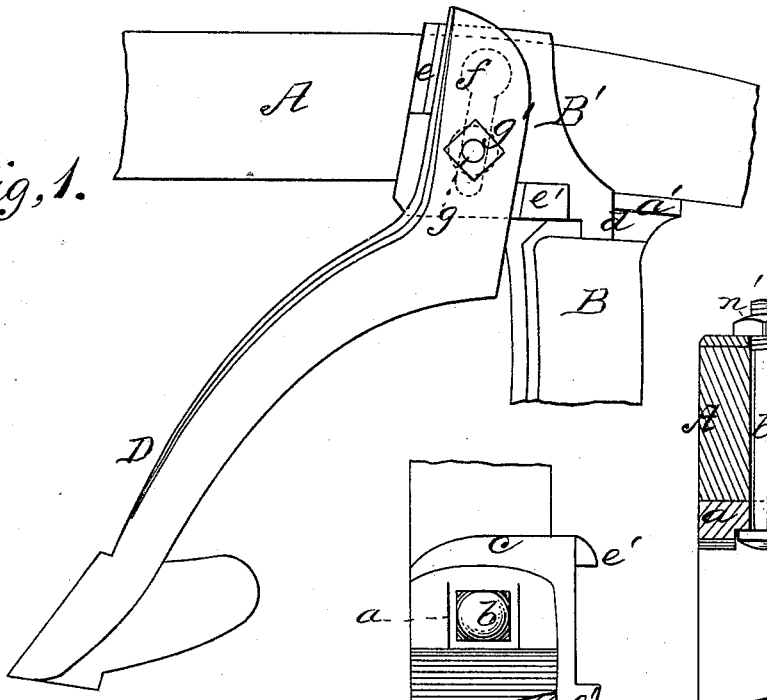


Fig. 2.

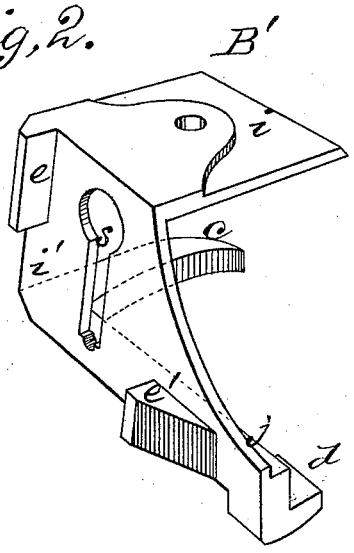


Fig. 4.

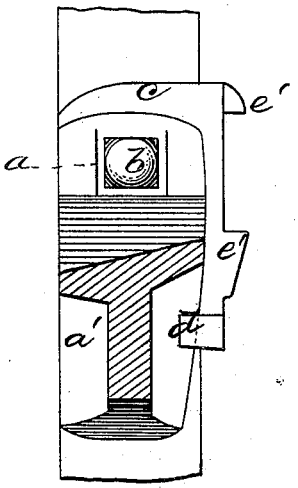
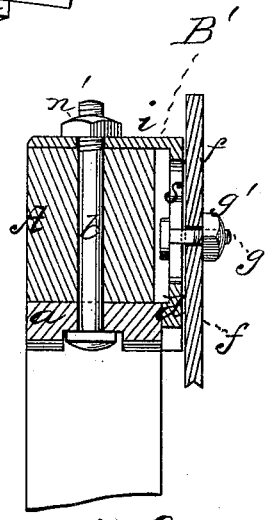


Fig. 3.



WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM J. WELLING, OF NILES, MICHIGAN.

IMPROVEMENT IN PLOW-JOINTERS.

Specification forming part of Letters Patent No. **210,588**, dated December 3, 1878; application filed November 9, 1878.

To all whom it may concern:

Be it known that I, WILLIAM J. WELLING, of Niles city, in the county of Berrien and State of Michigan, have invented a new and valuable Improvement in Plow Jointers and Fastenings; 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 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my invention. Fig. 2 is a perspective view of the fastening-plate. Fig. 3 is a vertical transverse section of the attachment, and Fig. 4 is a bottom view of the same.

This invention has relation to improvements in means for fastening the standards of a plow and its colter to the beam.

The object of the invention is mainly to devise a fastening that will hold the plow to the beam in such a manner as to allow the plow-beam to swing to the right or left without in any way changing the position of the fastening device or loosening the same, by which means the colter and plow will at all times be maintained in the same relative position for working to the best advantage.

The nature of the invention consists in a certain novel arrangement and construction of the parts of the fastening-plate, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates an ordinary plow-beam, to the under side of which is secured the plow-standard B. This latter has at its upper end a T-head, that affords a broad flat bearing, *a'*, to the standard against the beam aforesaid. In the front arm of this bearing is formed a countersunk opening, *a*, for the reception of a bolt, *b*, extending up through the beam. B' indicates the fastening-plate, the same being of angular form in cross-section. One of its wings, *i*, extends entirely across the top of the beam, and the other, *i'*, which may be called the cheek-plate, extends down the side thereof, and is provided with a ledge, *j*, at right angles to it, upon which the edge of the beam may rest, as shown in Fig. 2, and also with a hook-like prong, *c*, at its front edge, that passes under the beam and conforms to the shape of the front rounded edge of the bearing *a'*. This cheek-plate has at its lower edge, near its rear end, a spur, *d*, extending under the bearing *a'*, binding thereon and griping it to the beam, and is provided in its face with a key-hole slot, *s*, and on its face with the parallel flanges or stops *e e'*. The stops *e e'* are arranged in nearly vertical positions, the one at the top and the other at the bottom of the cheek-plate *i'*, and are sufficiently far apart to receive between them the shank *f* of the colter D, which is provided with an opening, through which projects a bolt, *g*, by means of which and a nut, *g'*, the said shank is secured to the fastening-plate. This bolt is passed into plate B' by introducing its head into the large upper end of slot *s* and pressing it down into its narrower portion, when it will be secured to the said plate.

Plate B is secured to the beam by means of bolt *b*, extending up through its horizontal wing *i*, and a nut, *n'*, forcibly applied, the said bolt extending through the bearing *a'* of the standard and through the beam, and serving, also, to secure the former to the latter.

By loosening nut *g'* the shank of the colter may be raised or lowered, according to the penetration which the same is desired to have into the ground.

The spur *d*, in addition to its other functions, serves to prevent the fastening-plate from being twisted by torsional action produced by the forward movement of the colter in plowing.

The shank or standard of the colter is curved to the front, its rear edge being concave and front edge convex, in order to afford room between it and the front of the plow for the passage of the furrow-slice, which by this means is effectually prevented from becoming jammed.

I am aware that a colter-holder provided with a rear flange having a cross-rib and slotted top flange, combined with a standard having a grooved head and a plow-beam, is not new; hence I make no claim to such devices.

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

1. In a colter-fastening, the angular plate B', having in its horizontal wing a bolt-hole, on its vertical wing the key-hole slot *s*

and stop-flanges *e e'*, and upon its front and rear edges, respectively, the hook-prong *c* and catch-spur *d*, substantially as specified.

2. The combination, with the beam A, standard B, and through-bolt *b*, of an angular metallic fastening-plate, B', having its horizontal branches *i* extending over and across the said beam, and provided with a hole for the passage of said bolt, and its vertical branches *i'* extending down the cheek of the said beam, and provided with a key-hole slot, *s*, the stop-flanges *e e'*, the hook-prong *c*, extending across the beam and embracing the front end of the standard-bearing, and the spur *d*, extending over and bearing upon the flange of said bearing, the colter-shank *f*, the bolt *g*, and nut *g'*, all arranged and operating as set forth.

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

WILLIAM J. WELLING.

Witnesses:
ALSON H. WELLING,
GEO. W. KENDALL.