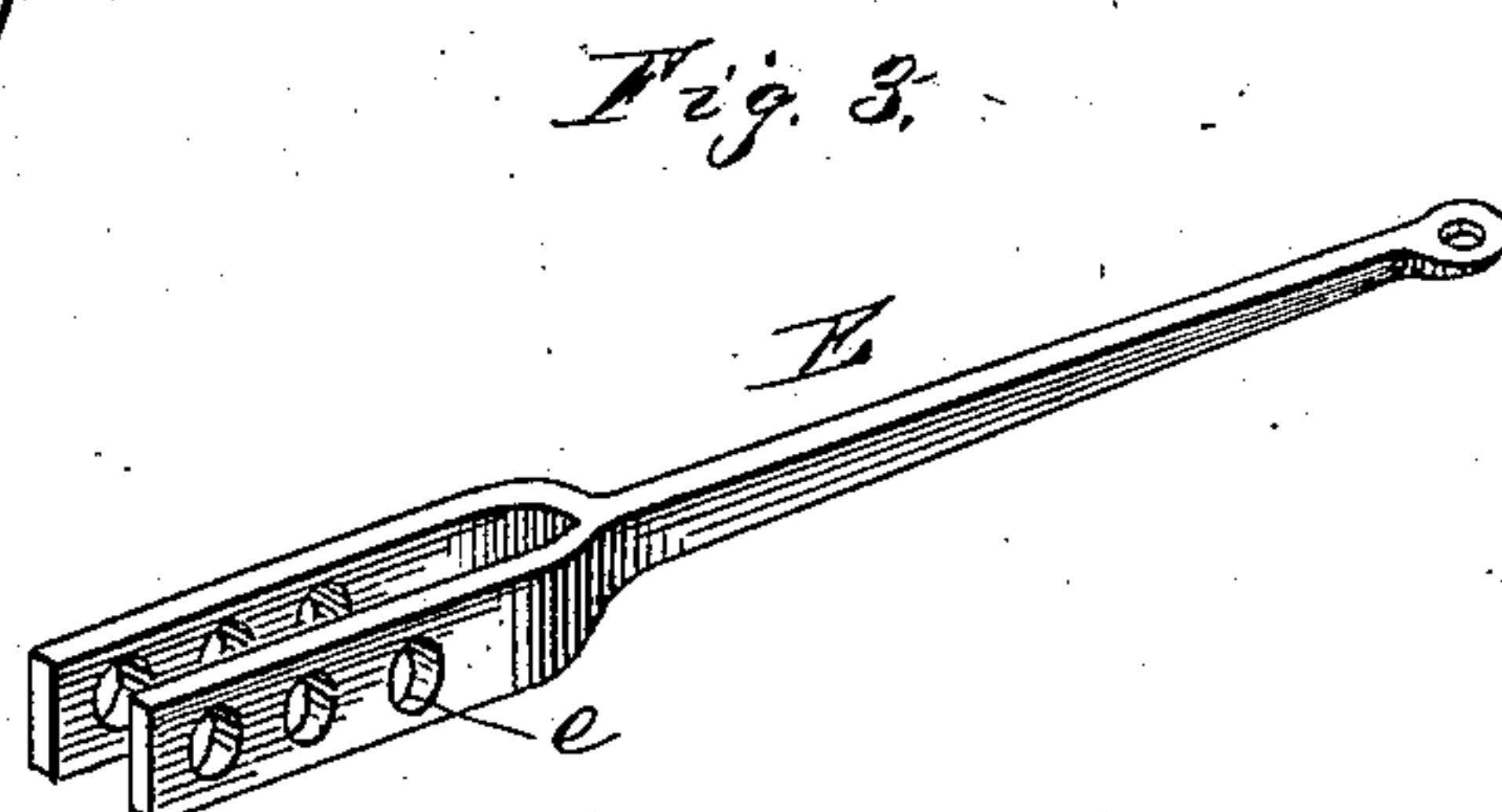
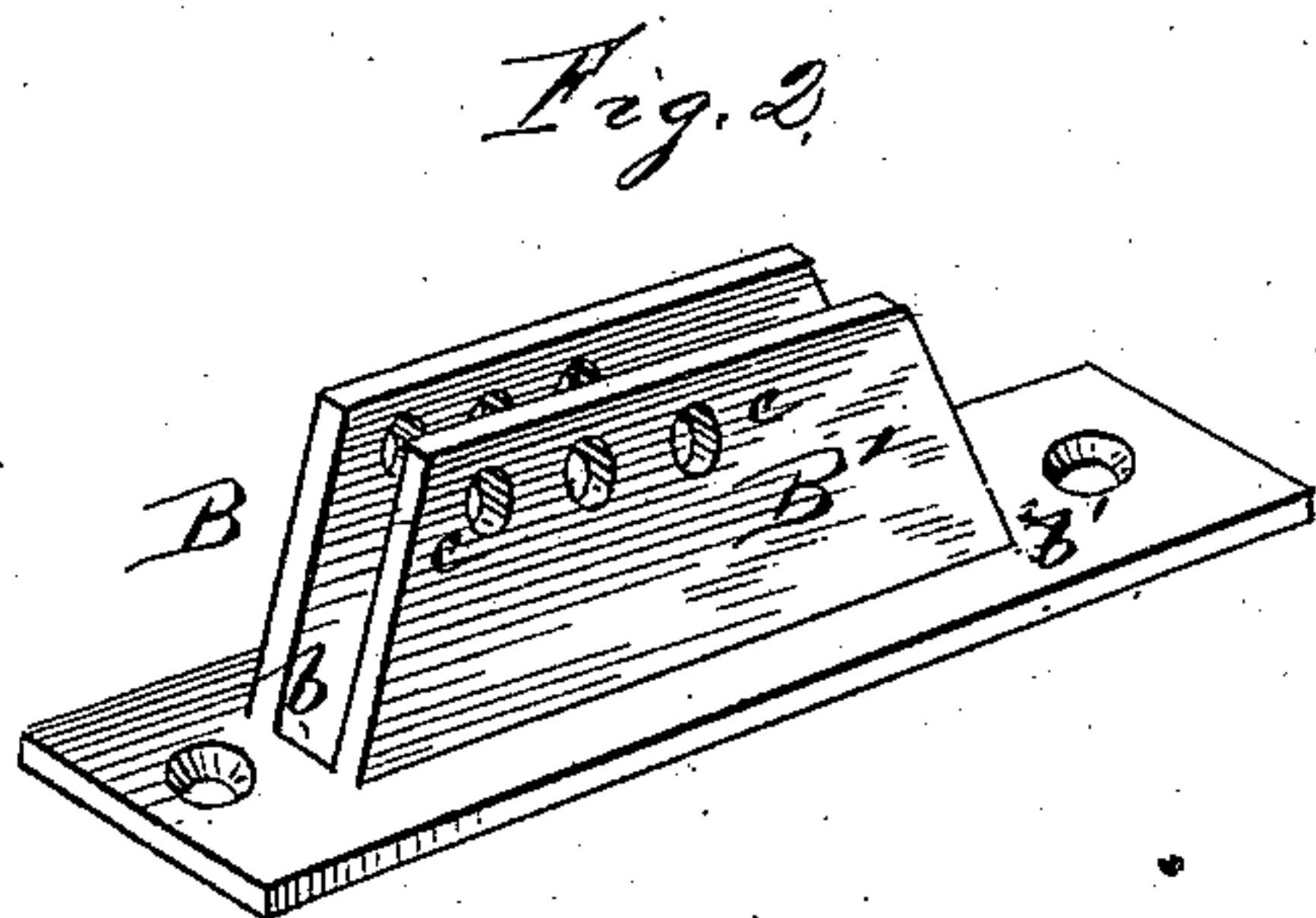
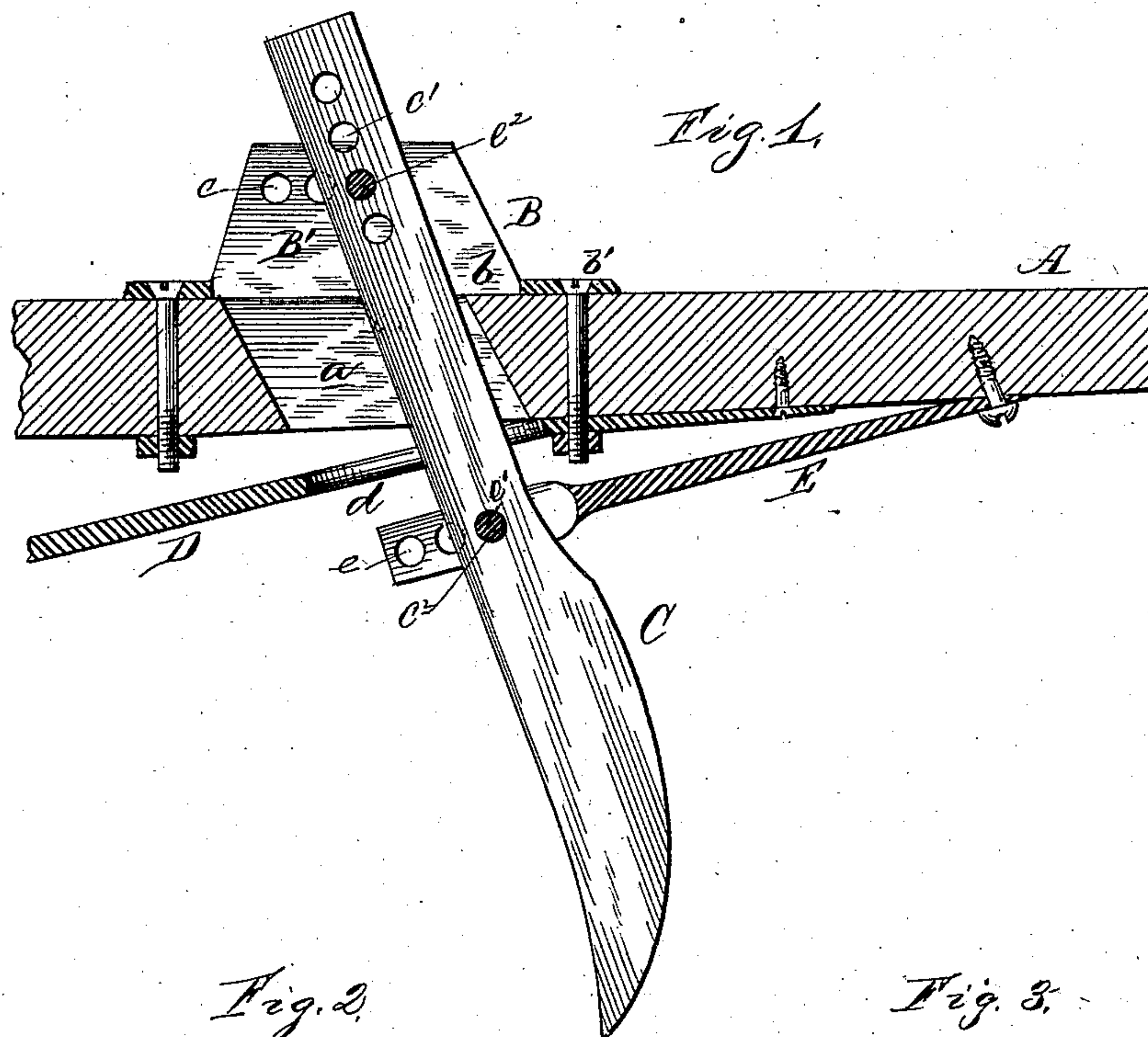


(No Model.)

W. RICHARDS.
PLOW COLTER.

No. 302,031.

Patented July 15, 1884.



Witnesses
W. Johnson
L. Hills

Inventor
William Richards
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Atty.

UNITED STATES PATENT OFFICE.

WILLIAM RICHARDS, OF PENNSBOROUGH, WEST VIRGINIA.

PLOW-COLTER.

SPECIFICATION forming part of Letters Patent No. 302,031, dated July 15, 1884.

Application filed September 13, 1883. Renewed June 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RICHARDS, a citizen of the United States of America, residing at Pennsborough, in the county of Ritchie and State of West Virginia, have invented certain new and useful Improvements in Plow-Colters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in a means for attaching plow-colters to the plow-beam; and it consists in the construction and combination of the parts, as will be hereinafter more fully set forth, and pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a longitudinal sectional view. Fig. 2 is a detailed view of the casting which is attached to the upper part of the plow-beam, and Fig. 3 is a detailed view of the brace-rod which is secured to the under part of the plow-beam.

In the accompanying drawings, A represents a plow-beam, which is provided with a slot, *a*, having inclined sides, above which slot is secured the casting B, which is provided with a central slot, *b*, and a bed-plate, *b'*, also with upwardly-projecting side wings, *B'*, which are provided at their upper portion with perforations *c*. This casting B is made of a single piece, and is provided at its lower end with perforations, which pass through the bed-plate *b'*, for the reception of bolts, by means of which the casting is firmly attached to the plow-beam. The upwardly-projecting plates *B'* form side walls, which extend upwardly on a line with the sides of the slot *a*, formed in the plow-beam. The colter C is of ordinary construction, and is provided at its upper end with perforations *c'*, and at a point below the beam with a perforation, *c''*.

D represents a brace, which is provided with a central opening, *d*, which passes over and around the stem of the colter. This brace is attached at its forward end to the

plow-beam by means of the bolt which passes through the forward end of the casting B, and it is also secured near its extreme end to the plow-beam by a pin. The rear end of this brace D is attached to the standard of the plow in any suitable manner.

Below the brace D, which passes over the colter, is another brace, E, which is secured at its forward end to the plow-beam by a suitable staple or other equivalent connecting means, and its rear end is bifurcated and provided with transverse perforations *e*, through which passes a suitable bolt, *e'*, by means of which this brace is attached to the colter. The side wing of the casting B is also provided with a bolt, *e''*, which passes through the perforations *c c'* in the side wings and upper end of the colter. By means of the perforations *e*, the colter may be adjusted at different angles, and its depth may also be adjusted by placing the bolt *e''* in the different vertical perforations *e'*. The angle of the colter may also be adjusted by placing the bolt *e'* in the different perforations *e* in the brace E. By providing the plow-beam on its upper side with upwardly-projecting side wings which are on a line with the inner side of the slot *a*, the colter will be held securely within the same, and all lateral movement will be prevented.

I am aware that prior to my invention numerous devices have been provided for attaching a colter to plow-beams, so that the colter may be adjusted at different angles and depths, and I lay no broad claim to such invention; but

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

1. The combination of the beam A, provided with a slot, *a*, having inclined and parallel front and rear ends, the casting B, provided with upwardly-extending side wings, with a series of perforations, parallel with the plow-beam, and the brace-rod E E, having bifurcated end with perforations, bolts *e' e''*, and colter with perforations *c' c''*, the parts being organized substantially as shown, and for the purpose set forth.

2. In combination with the plow-beam A, having longitudinal slot *a*, and casting B,

secured above said slots, and provided with side wings, B', with perforations and base *b*, and brace D, with opening *d*, a brace-rod, E, with bifurcated end provided with transverse
5 perforations, and colter C, provided with perforations *c'* *c*² and connecting-bolts *e'* *e*², substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM RICHARDS.

Witnesses:

C. R. BROWN,
WM. TIMMONS.