A. O. BEMENT.

Plow Attachment.

No. 212,429. Patented Feb. 18, 1879.

Fig. 1

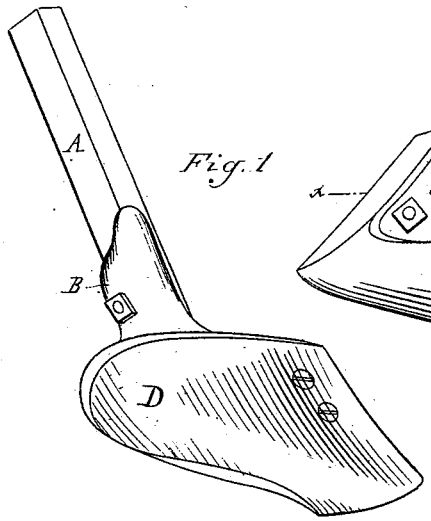


Fig. 3

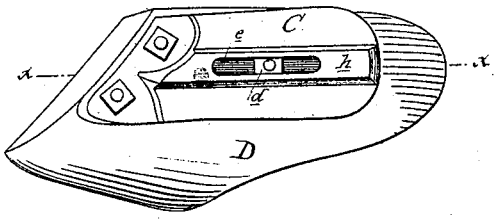


Fig. 2

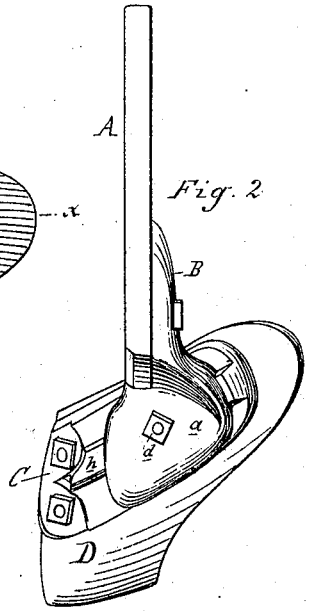


Fig. 4

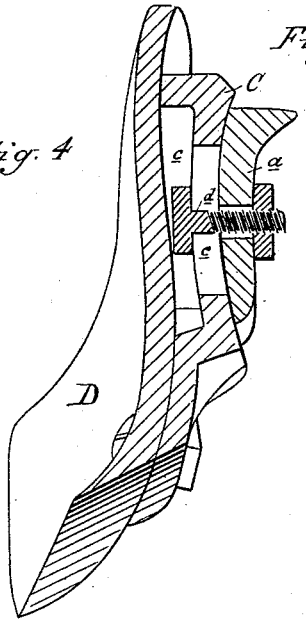


Fig. 5

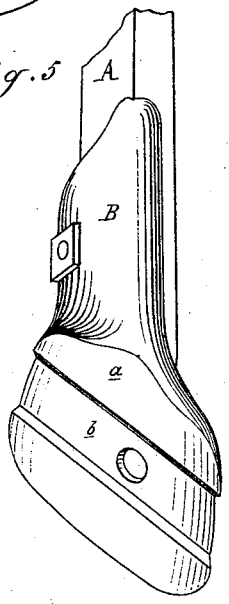
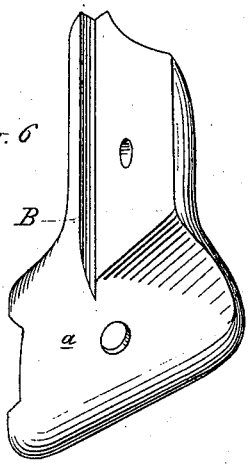


Fig. 6



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UNITED STATES PATENT OFFICE.

ARTHUR O. BEMENT, OF LANSING, MICHIGAN.

IMPROVEMENT IN PLOW ATTACHMENTS.

Specification forming part of Letters Patent No. **212,429**, dated February 18, 1879; application filed December 7, 1878.

To all whom it may concern:

Be it known that I, ARTHUR O. BEMENT, of Lansing, in the county of Ingham and State of Michigan, have invented an Improvement in Attachments to Plows, of which the following is a specification:

The nature of this invention relates to certain new and useful improvements in devices for adjustably securing jointers to rigid or adjustable beam-plows.

The invention consists in adjustably securing the jointer to its standard, so that it may be adjusted to its proper position with relation to the point and land-side of the plow whether the beam to which the standard is attached is set to cut wider or narrower furrows, or for two or three horses. At the same time the standard has a vertical adjustability to secure a greater or less cut to the jointer, the parts being constructed and arranged to operate substantially as more fully hereinafter described.

Figure 1 is a perspective view of the jointer and arm from the front. Fig. 2 is a like view from the rear. Fig. 3 is a like view from the rear of the jointer, detached from the arm. Fig. 4 is a section on the line *x x* in Fig. 3. Fig. 5 is a perspective from the front of the arm and the plate by means of which connection is made between said arm and the jointer. Fig. 6 is a perspective view of the rear of said plate, detached from the arm.

In the accompanying drawings, which form a part of this specification, A represents a standard, designed to be secured, in the usual manner, by clamp to a plow-beam, so that it may be vertically adjustable as the ordinary colter. To the lower end of this arm is bolted the plate B, in such manner that the arm rests against the inner corner made by the flange and side of the plate, as shown. The lower end of the plate terminates in the grooved bearing-surface *a*, such surface and the bottom of the groove *b* being slightly convex in form in cross-section.

C is a plate, bolted to the rear side of the colter D, the contiguous side thereto conforming to the shape of the rear side of the colter. A recess, *c*, is formed between the plate and colter by cutting away the front of the plate sufficiently therefor to receive the head of the bolt *d*, which is inserted through the slot *e* in said plate before the latter is secured to the jointer. The rear side of the plate is cast with a projecting rib, *h*, of corresponding size to the groove *b* on the plate B, and the rear surface of the plate and rib is slightly concave in cross-section to fit the convex surface of the plate B.

It will be seen that the convexity of the plate B and the concavity of the plate C, when the two parts are secured together by the bolt *d*, allow the jointer to work in a segment of a circle, which keeps the point of the jointer-blade in the same relative position to the plow, when the beam, if an adjustable-beam plow, is swung to or from the land.

It will also be seen that this attachment may be employed upon a plow with either a rigid or an adjustable beam, and the position of the jointer determined at will by the bolt and slot and curved parts hereinbefore referred to, and at the same time may be vertically adjusted for deep or shallow furrows.

What I claim as my invention is—

The combination, with the standard A, of the casting B, secured to its lower end, and having groove *b* and bolt-hole, the jointer D, the plate C, secured to the rear of the jointer, and having rib *h* and slot *e*, and the bolt *d*, constructed and arranged substantially as and for the purpose set forth.

ARTHUR O. BEMENT.

Witnesses:

SYLVESTER M. MILLER,

GEO. F. GILLAM.