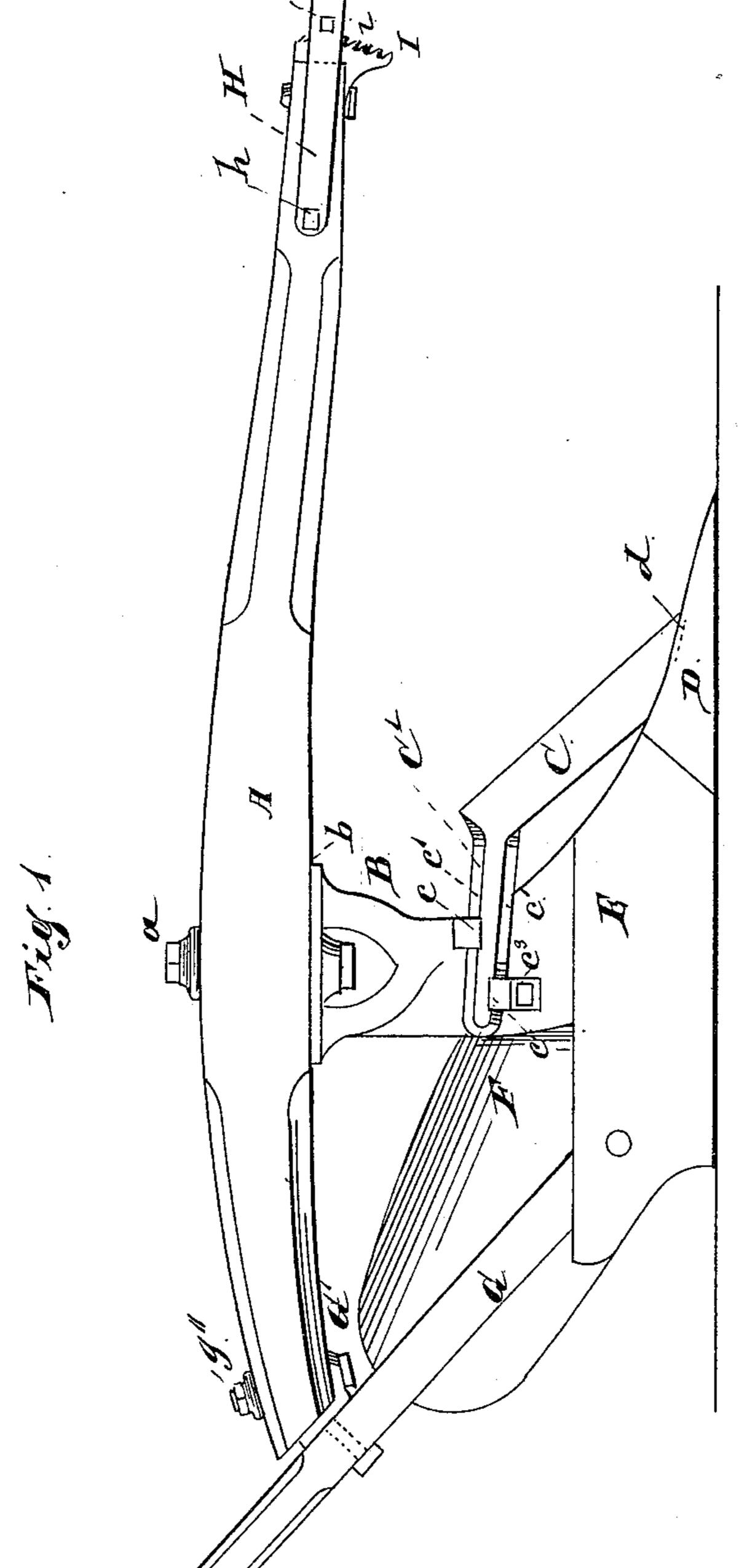
## J. F. PACKER.

PLOW.

No. 353,495.

Patented Nov. 30, 1886.

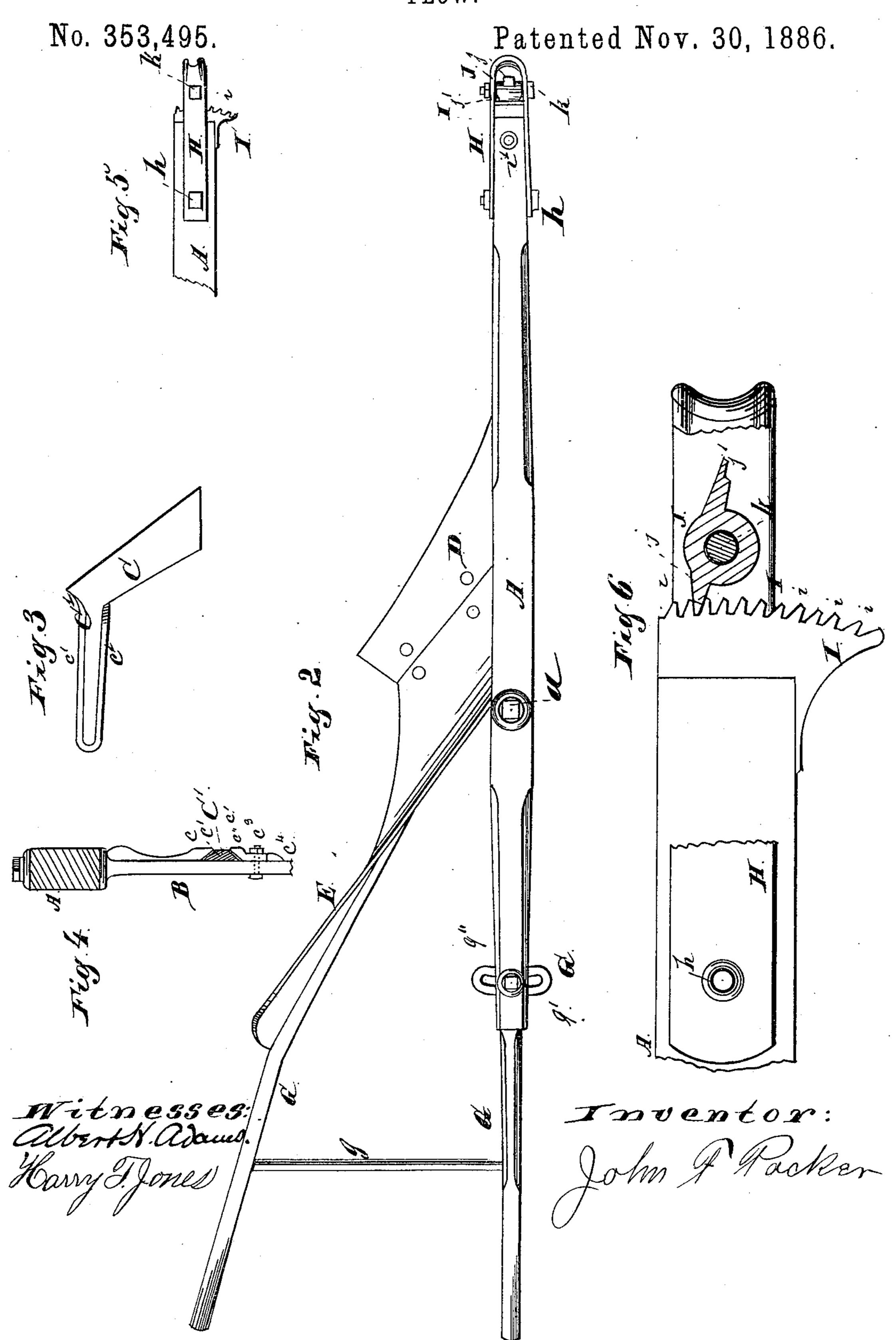


Witnessesses! Alberts Carams.

Inventor: John Packer

## J. F. PACKER.

PLOW.



## · United States Patent Office.

JOHN F. PACKER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE DAVID BRADLEY MANUFACTURING COMPANY, OF SAME PLACE.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 353,495, dated November 30, 1886.

Application filed October 28, 1884. Serial No. 146,708. (No model.)

To all whom it may concern:

Be it known that I, John F. Packer, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Plows, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation; Fig. 2, a top or plan view; Fig. 3, a side elevation of the colter; Fig. 4, a detail showing colter arm and clamps; Fig. 5, a side elevation of the forward end of the plow-beam; Fig. 6, a detail partly in section, showing the lock for the clevis.

This invention relates to certain improvements in the manner of attaching the clevis, and has for its objects to enable the clevis to be readily changed for the draft required and locked firmly in the position at which it is set.

The objects of my invention I accomplish in the manner and by the means hereinafter described and claimed, and illustrated in the accompanying drawings.

In the drawings, A represents the plow-25 beam, made of wood or other material, as usual.

B is the standard, the upper end of which has a flange or support, b, on which the under surface of the beam rests when the parts are together, and, as shown, the beam and standard are secured together by a bolt, a, which passes through the beam and through the flange b. This standard B on its outer face is provided with a lug or projection, c, the under face of which is formed beveling, and this lug or projection may be cast with the standard or be secured thereto in any firm manner.

C is the colter-blade, having its forward side provided with a cutting edge, as usual, and this blade has a rearward extension or arm, 40 C', one side of which on both edges is formed beveling to correspond with the bevel on the under face of the lug c, or nearly so, and these beveled edges c' of the arm, as shown, extend the full length of the arm to facilitate manufacture; but they might be of a less length properly located in relation to the locking lugs or clamps. The upper beveled edge c' passes underneath the lug or clamp c, and the lower beveled edge c' is engaged by the beveled face of a movable lug or clamp, c", which is attached to the face of the standard by a bolt or screw,

 $c^3$ , and this lug or clamp c'' is located, in relation to the arm or extension C', so as to be, when in position, near the outer end of the arm, as shown in Fig. 1. The lug c forms a 55 fulcrum, and the lug c'' the power by which, when the lug or clamp c'' is forced down by the screw or bolt  $c^3$ , the outer end of the arm or extension C' will be raised.

D is the plow-point, of any of the usual 60 forms, except that its upper face, in line with the colter end, is provided with a recess or slot, d, into which the end of the colter-blade C is forced and held by the action of the clamp or  $\log c''$  in raising the arm or extension C'. 65 This mode of attaching the blade C furnishes a firm support therefor its entire cutting length, as the end of the blade is firmly held in the slot or recess d, while its upper end is held by the arm or extension C', clamped between the 70 lugs or projections c and c'', the result being that the colter-blade has a firm support, and at the same time is readily removed for the purpose of repairs, as all that is necessary to be done is to loosen the clamp or  $\log c''$ , which 75 allows the lower end of the blade to be raised from the recess d and the brade withdrawn by withdrawing the arm or extension C' from between the clamps or lugs c c'', and when the repairs are made the blade can be replaced by 80 inserting the arm or extension beneath the locking clamps or lugs and forcing the point into the recess d by drawing down the lug or clamp c''.

E is the landside, of any of the usual forms 85 of construction.

F is the mold-board, formed as usual.

G are the handles, the inner one of which is attached to the mold-board on the inside, as usual, and the outer one of which is attached 90 to the end of the plow-beam by a clamping-plate, G', in which is a slot, g', to receive a bolt, g'', passing through the beam, and, as shown, the handles are connected together by a cross-piece, g. The attachment of the inner 95 handle to the plow-beam by the plate G', having the slot g', enables the plow and handles to be set at different inclinations to the beam, to do which all that is necessary is to loosen the bolts a and g'' and turn the plow as required, and then draw the bolts tight.

H is the clevis, of a U or yoke shape, as

usual, and pivotally attached at its rear end to the beam by a bolt, h, passing through the beam and the side straps of the clevis, so that the forward end of the clevis can be raised and lowered vertically to suit the draft.

I is a rack attached to the forward end of the plow-beam by a bolt, i', which passes through flanges or plates extending rearwardly from the rack, and between which the forward end of the plow-beam passes. The forward edge of the rack I is provided with ratchet-teeth i its entire length, and the rack I, as shown, depends below the under face of the plowbeam.

J is a cylinder or thimble, located between the straps of the clevis forward of the rack-bar I, and mounted on the stem of a bolt, k, which passes transversely through the clevis. This thimble J has on one side a lip, j, and on the 20 opposite side a thumb piece, j', and the lip jis arranged in such relation to the teeth i of the rack as that it will engage with the teeth when turned down, and at the same time the under face of the teeth is arranged in such re-25 lation to the arc of the circle described by the end of the lip j as that such lip can be turned up to clear the teeth. The thimble J, located between the arms of the clevis, can be clamped and firmly held in position by the bolt k, but 30 is free to turn on the bolt when the nut thereof is loosened, and the clevis is adjusted in any desired position by loosening the nut of the bolt k, so as to release the thimble J, then turn-

ing the thimble through the piece j', to release the lip j from the notch i, with which it is engaged, then raising or lowering the forward end of the clevis as may be required for the line of draft, then throwing the lip j down to engage with the notch i for the required ad-

40 justment, and then locking the thimble by setting down the nut of the bolt k; and when the

thimble is thus locked the engagement of the lip j with the notch i of the rack will lock the clevis to the plow-beam in a firm manner, and so that it cannot be raised by the action of the 45 draft, as when the locking-lip j is down and engaged with the notch i it cannot be thrown out of engagement by the draft, as the draft will not act on the thimble J, which is firmly held by the clamping-bolt k.

The device is exceedingly simple, and by its use the clevis can be attached to the plow-beam and adjusted in any desired position without any liability of being changed or affected by the draft. The use of the clamps or lugs c c'' 55 enables a colter to be rigidly attached in position, and the use of the thimble J and rack I enables the clevis to be adjusted and locked firmly in any position desired for the draft, both of which features are desirable for the 60 proper operation of the plow. The lower end of the clamp c'' is supported on a ledge,  $c^4$ , cast or formed with the standard B, by which a firm bearing is provided for the clamp in being drawn down to place to raise the arm C', en- 65 abling a light bolt or screw to be used for this purpose. A pin could be used in the place of the ledge for this purpose.

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

1. The clevis H and rack I, in combination with the thimble J, having the lip j, substantially as and for the purpose set forth.

2. The clevis H and rack I, in combination with the thimble J, having lip j and clamping- 75 bolt k, substantially as and for the purpose specified.

JOHN F. PACKER.

Witnesses:

ALBERT H. ADAMS, HARRY T. JONES.