J. CLAY.
PLOW.

No. 414,376.

Patented Nov. 5, 1889.

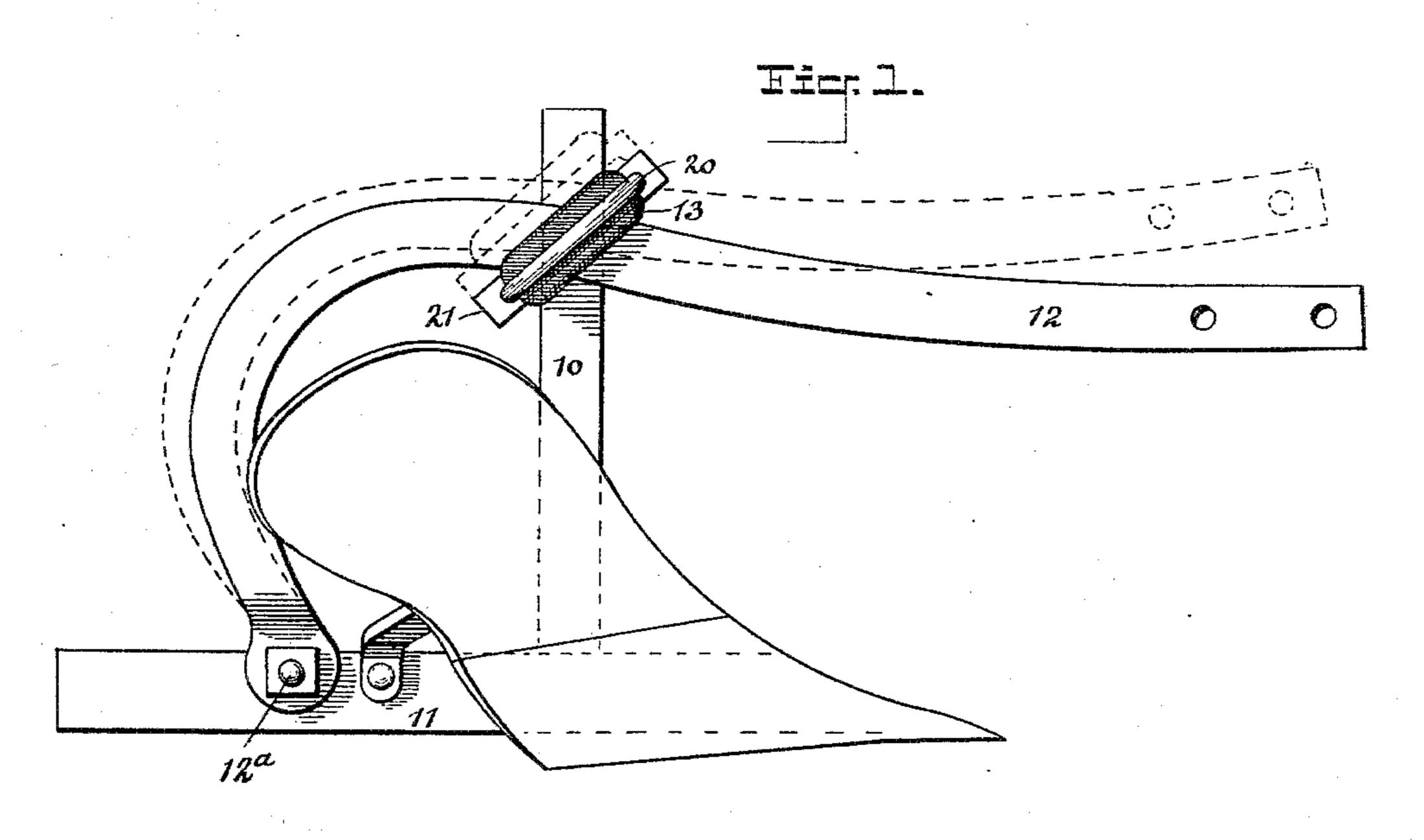
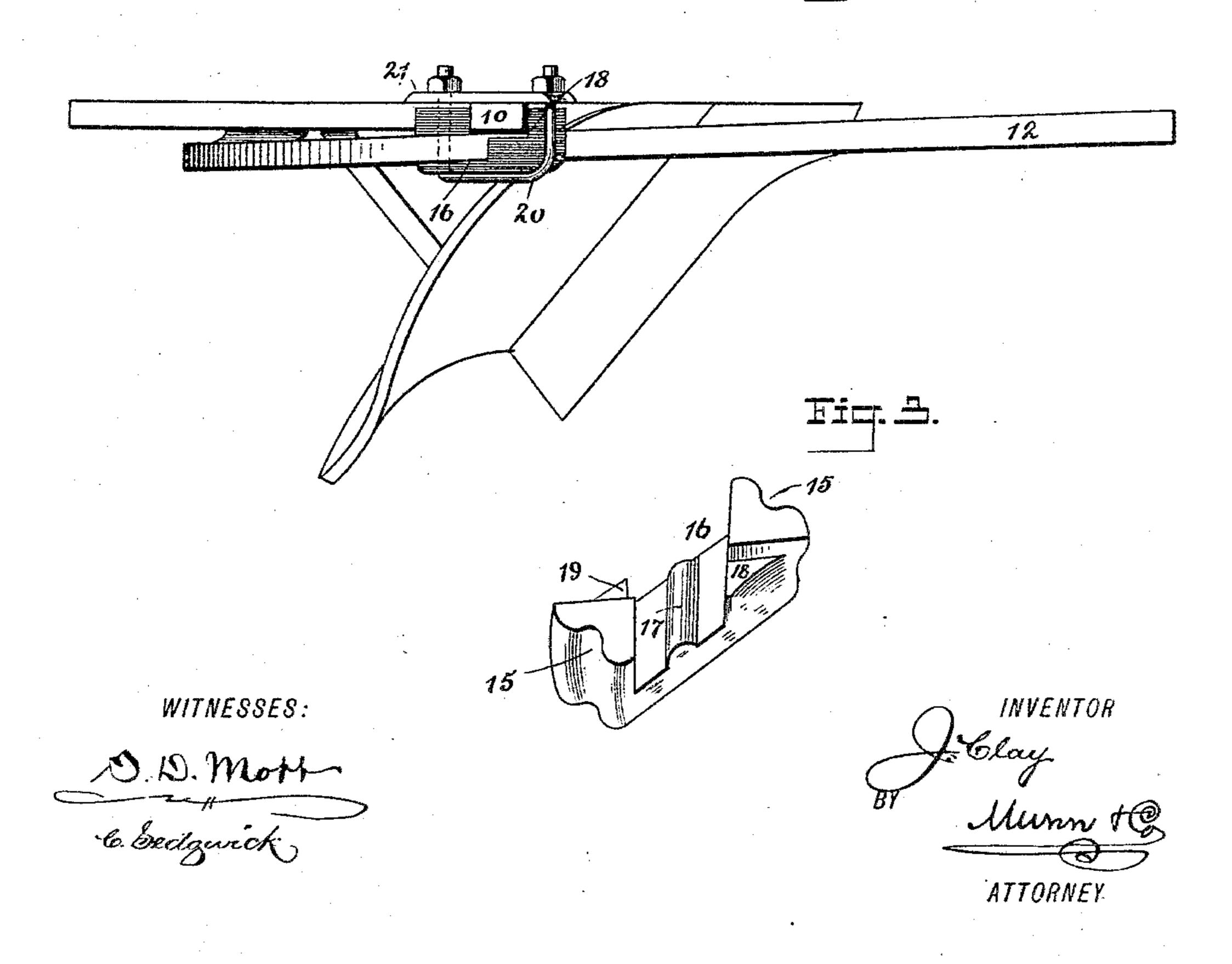


Fig. 2.



## United States Patent Office.

JOHN CLAY, OF SEDALIA, MISSOURI.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 414,376, dated November 5, 1889.

Application filed March 5, 1889. Serial No. 301,942. (No model.)

To all whom it may concern:

Be it known that I, John Clay, of Sedalia, in the county of Pettis and State of Missouri, have invented a new and useful Improvement in Plows, of which the following is a full, clear,

and exact description.

My invention relates to an improvement in plows, and has for its object to provide a means whereby the beam may be elevated or depressed without being removed or heated in a convenient and expeditious manner; and a further object of the invention is to provide an attachment to a plow capable of accomplishing such result which will be simple and durable in construction and applicable to any form of plow.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth,

20 and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of a plow having the improvement applied, and Fig. 2 is a plan view of the same. Fig. 3 is a perspective view of the clamp, looking upon the inner side.

In carrying out the invention an upright 10 is rigidly secured to the inner face of the share-bar or landside 11 in any approved manner, preferably so that the outer face of said upright will be flush with the similar face of the landside. The upright 10 extends perpendicularly above the beam and is ordinarily attached to the landside between the center and the toe, as indicated in dotted lines, Fig. 1.

The heel of the plow-beam 12 is pivoted or adjustably held in contact with the inner side of the share-bar or landside to the rear of the upright or standard by a bolt 12<sup>a</sup> passed through said landside and beam, which bolt

45 is provided with a suitable nut.

The upright 10 is of sufficient height to project beyond the plow-beam when said beam is elevated as far as possible, and the beam is rigidly held in contact with the upright by a readily-detachable cleat 13, illustrated in detail in Fig. 3.

The cleat usually consists of a block of

metal having a cylindrical outer edge 14, in which a central longitudinal groove 15 is formed. In the inner face of the block a diag-55 onal recess 16 is produced, provided with a central diagonal rib 17 upon the base-wall, when the side face of the plow-beam is concaved, which rib is capable of neatly fitting in such concavity. When the concavity is omitted 60 from the beam, the rib is dispensed with.

The cleat is completed by producing a recess 18 and 19, respectively, in the diagonally-

opposite corners of the inner face.

In operation, when the cleat is removed 65 from the beam, the latter may be raised or lowered any desired distance by reason of the pivotal heel-connection. When the beam has been located at the desired point upon the upright or standard 10, the cleat is made to 70 tie the two securely together. This is effected by placing the cleat diagonally upon the beam at the front in such manner that the beam will fill the diagonal recess 16, whereupon one arm of the cleat will extend 75 over and the other under the beam, the wall of the upper end recess 18 being in contact with forward edge of the upright and the lower recess 19 in contact with the rear edge, as best shown in Fig. 2. A yoke 20, having 80 threaded ends, is then fitted in the outer groove 15 of the cleat, and the said threaded ends of the yoke are passed through apertures in a strap-plate 21, placed diagonally upon one face of the upright, and the beam, the up- 85 right, the cleat, and plate are all rigidly bound together by suitable nuts screwed upon the projecting ends of the yoke.

It is obvious that the attachment is capable of attachment to any plow, and that the 90 cleat may be quickly removed, the beam adjusted, and the cleat replaced by any person

of ordinary intelligence.

I desire it to be distinctly understood that other forms of cleats may be employed than 95 that shown without departing from the spirit of the invention.

If in practice it is found desirable, the share-bar or landside may be provided with a collar around the aperture through which the roc bolt 12<sup>a</sup> passes, and the aperture in the heel of the beam is in this event made large enough to receive the said collar, whereby all strain is taken off the bolt.

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

1. The combination, with the standard 10 and landside 11 of a plow, of the beam 12, having its heel pivoted to the landside, the grooved cleat 13, engaging the beam and standard, and the yoke 20, substantially as herein shown and described.

standards, comprising a block having the diagonal recess 16 and the recesses 18 and 19 in the diagonal opposite corners of its inner face,

substantially as described.

15 3. The combination, with a share-bar or

landside, a standard secured to the same at a right angle thereto, and a plow-beam pivoted at the heel to the landside, capable of sliding upon the upright, of a cleat provided with a diagonal recess to receive the beam, 20 and end recesses to receive opposite side edges of the standard, a yoke embracing the cleat, and means, substantially as shown and described, for clamping the yoke and standard, as and for the purpose specified.

JOHN CLAY.

Witnesses:

CHRISTOPHER C. CLAY, JOHN W. HARTSHORN.