A. P. HAWN.

PLOW.

APPLICATION FILED APR. 19, 1912.

1,067,111. Patented July 8, 1913.

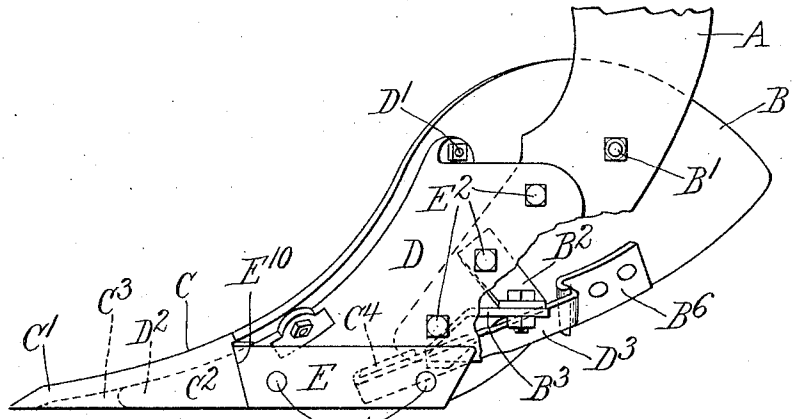


Fig. 1.

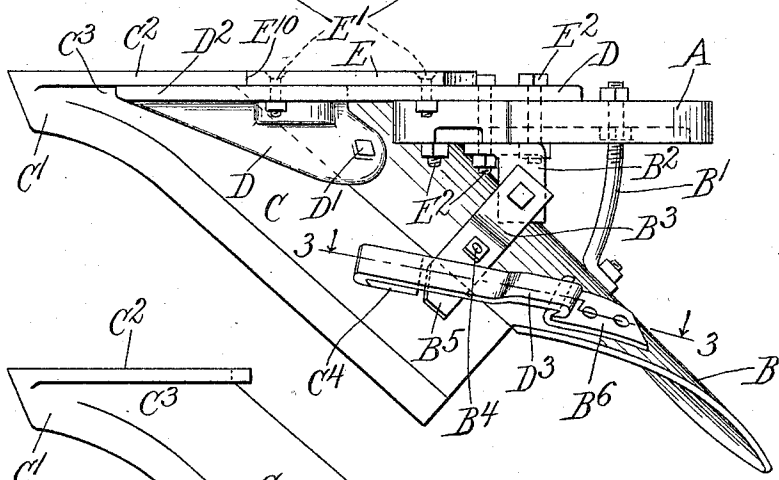


Fig. 2.

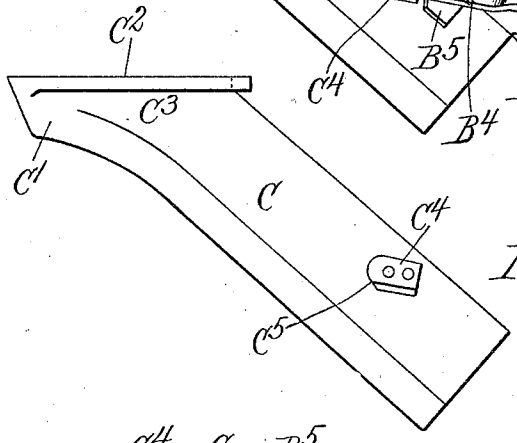
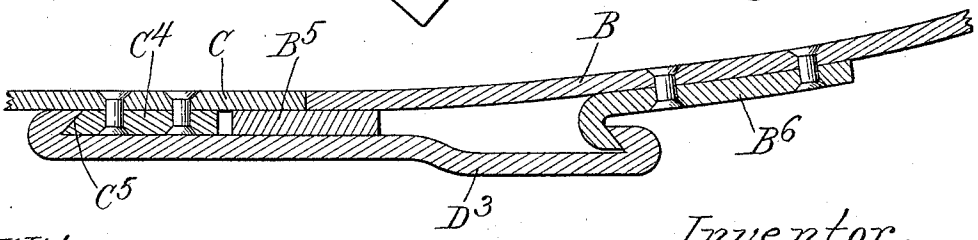


Fig. 4.

Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

ANDREW P. HAWN, OF GOODLAND, INDIANA, ASSIGNOR OF ONE-HALF TO JOHN WOLF, OF LAPORTE, INDIANA.

PLOW.

1,067,111. Specification of Letters Patent. Patented July 8, 1913.

Application filed April 19, 1912. Serial No. 691,781.

To all whom it may concern:

Be it known that I, ANDREW P. HAWN, a citizen of the United States, and a resident of the city of Goodland, county of Newton, and State of Indiana, have invented certain new and useful Improvements in Plows, of which the following is a specification.

My invention relates to plows and has for its object to provide an improved structure especially adapted for easy attachment and removal of the share to the mold board.

The invention is illustrated in the accompanying drawings wherein,

Figure 1 is a land side elevation; Fig. 2 is a bottom view; Fig. 3, a horizontal detailed section along the line 3—3 of Fig. 2; Fig. 4 is a bottom view of the plow share.

Like parts are indicated by the same letter in all of the figures.

A is a standard depending from the plow beam not here shown.

B is a mold board secured to the arm by means of the rod B^1 and the projection B^2 which is secured to the cleat B^3 and attached to the mold board at B^4 and projects beyond the same at B^5.

B^6 is a hook secured to the back of the mold board.

C is the share having the toe C^1 and a land side face C^2 within which is the toe recess C^3. Secured to the share is the block C^4 undercut and rounded at its outer edge as indicated at C^5.

D^3 is a lock link having a hook at each end engaging respectively the undercut end C^5 of the block C^4 and the end of the hook B^6.

D is a frog secured to the mold board at D^1 and provided with a point D^2 to be received into the recess of the plow share point. To this block is secured the land side E which has the forward inclined edge E^{10} engaging the rear inclined edge of the land side C^2 of the plow share. The land side E is secured by the bolts E^1 E^1 to the frog and the frog is secured by the bolts E^2 E^2 to the arm A.

It will be understood that the particular form, size, proportion and arrangement of these several parts may be greatly varied without departing from the spirit of my invention.

The use and operation of my invention are as follows: When the parts are constructed and arranged substantially as shown they may be assembled as indicated. To remove the plow share for sharpening or otherwise, it is only necessary with a hammer to drive the lock link free from the hook. It will be observed that the under-lock end of the hook B^6 is placed at an angle to the length of the lock link and that the end of the block C^4 is curved as indicated at C^5. By driving the end of the link toward the plow share, having reference to Fig. 2, the disengagement is easily effected, because the link can swing on the curved end of the block as a pivot. The plow share when in position is prevented from moving backwardly by the engagement of its toe recess with the point of the frog, and by the engagement of its rear edges with the forward edges of the land side and the mold board. It is prevented from rising by the engagement of its rear undercut land side edge with the overhanging forward edge of the land side and it is prevented from displacement by the engagement of its rear surface with the frog and the cleat. In all these engagements it is securely held by the lock link. The lock link is readily driven into position by bringing its end over the curved end of the block and then hammering its other end down along the inclined edge of the hook. The parts are preferably so arranged that the engaging surfaces will be brought snugly and tightly together at the moment when the link has been driven into position as indicated in Fig. 2.

I claim:

1. The combination with a plow having a mold-board and removable plow share, of means comprising members projecting outwardly from the share and the mold-board, and a removable hook member engaging each of said outwardly projecting members to hold the share rigidly in position.

2. The combination with a plow having a mold-board and removable plow share of a lug projecting forwardly from the mold-board and overlying and supporting the plow share, members having inclined hook surfaces projecting outwardly from the share and the mold-board, and a removable hook member engaging each of said outwardly projecting members and resting upon the outwardly projecting lug to hold the share rigidly in position.

3. The combination with a plow having a mold-board and removable plow share, of means comprising members projecting out-

wardly from the share and the mold-board, and a removable hook member engaging each of said outwardly projecting members to hold the share rigidly in position, one of said outwardly projecting members having its inclined surface inclined to the axis of the hook, and one of the hook members on the hook being similarly inclined to slidingly engage the hook member to clamp the share and mold-board together when the hook is forced along the inclined part of the projecting member.

4. The combination with a plow having a mold-board and removable plow share of a lug projecting forwardly from the mold-board and overlying and supporting the plow share, members having inclined hook surfaces projecting outwardly from the share and the mold-board, and a removable hook member engaging each of said outwardly projecting members and resting upon the outwardly projecting lug to hold the share rigidly in position, one of said outwardly projecting members having its inclined surface inclined to the axis of the hook, and one of the hook members on the hook being similarly inclined to slidingly engage the hook member to clamp the share and mold-board together when the hook is forced along the inclined part of the projecting member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANDREW P. HAWN.

Witnesses:

JOSHUA R. H. POTTS,

ARTHUR A. OLSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."