

No. 713,612.

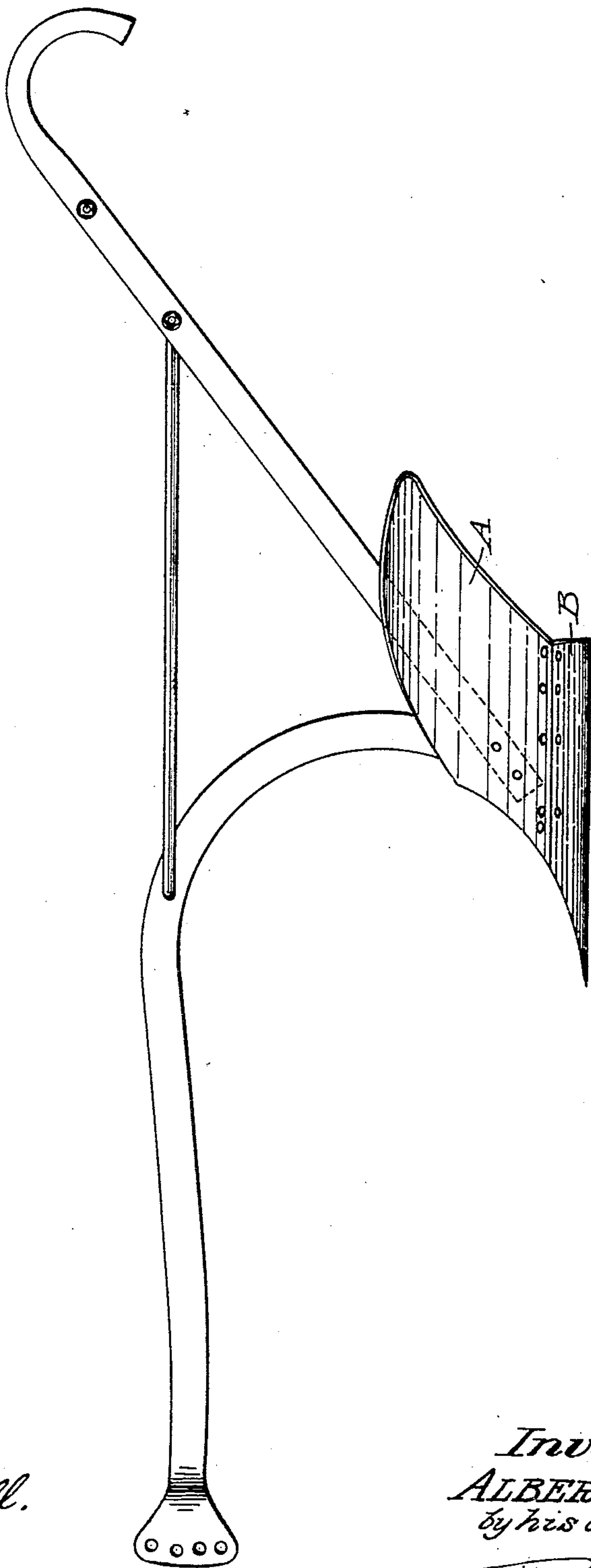
Patented Nov. 18, 1902.

A. DAVIS.  
DETACHABLE PLOWSHARE.

(Application filed Mar. 13, 1902.)

(No Model.)

2 Sheets—Sheet 1.



*Witnesses:*  
*J. G. Duwall.*  
*H. E. Randle.*

*Inventor:*  
*ALBERT DAVIS;*  
*by his attorney,*  
*Robert W. Randle*

A. DAVIS.  
DETACHABLE PLOWSHARE.

(Application filed Mar. 13, 1902.)

(No Model.)

2 Sheets—Sheet 2.

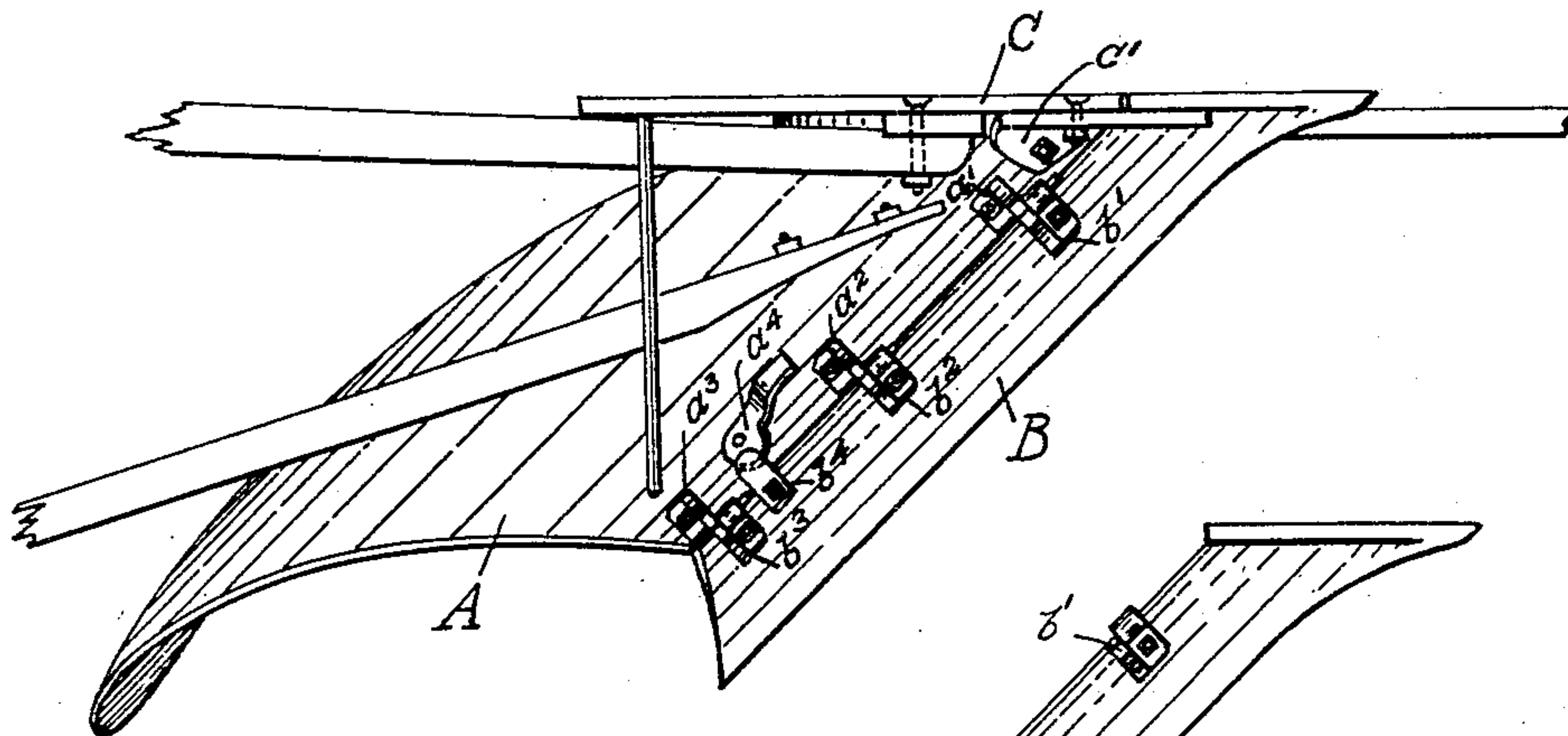


Fig. 2.

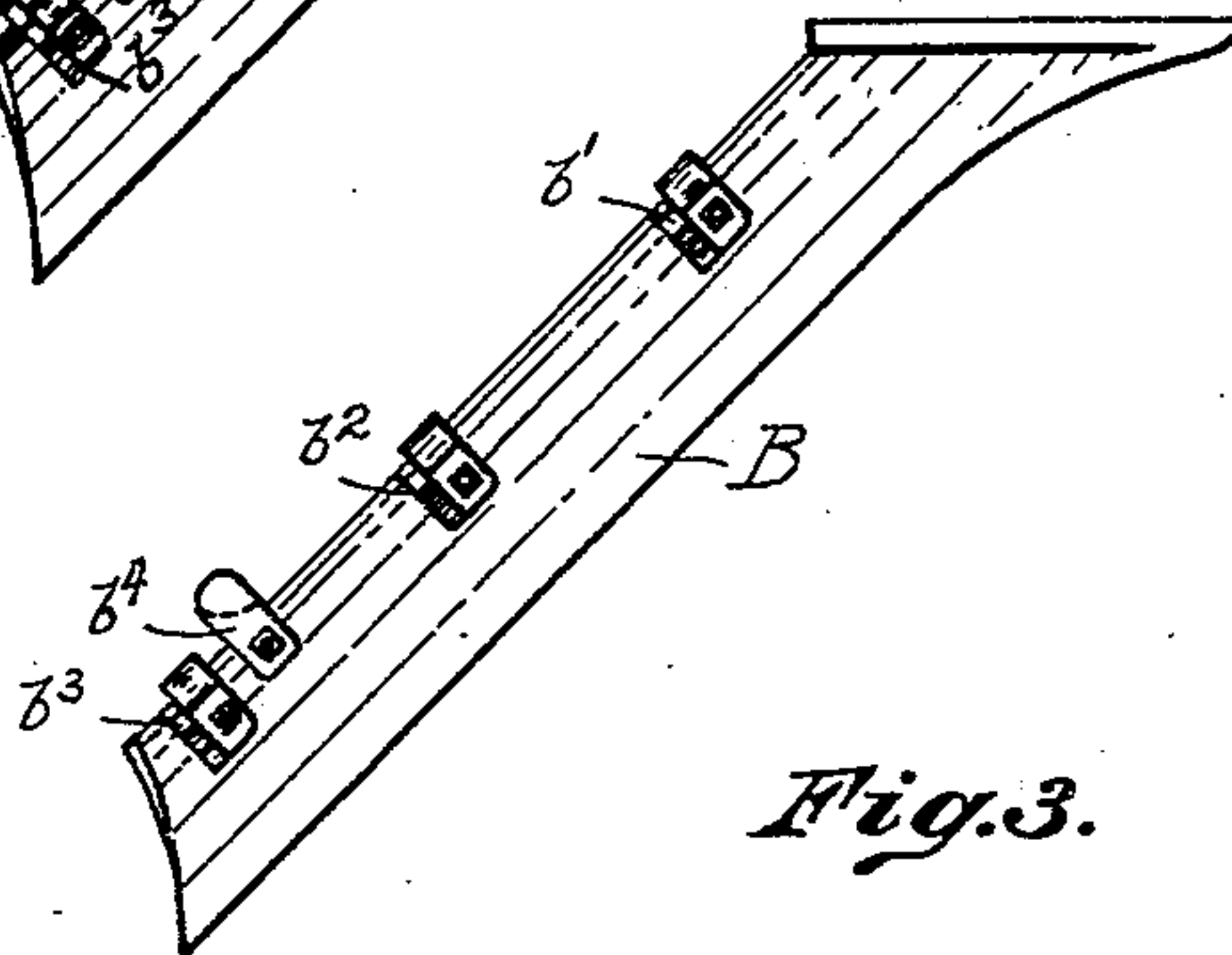


Fig. 3.

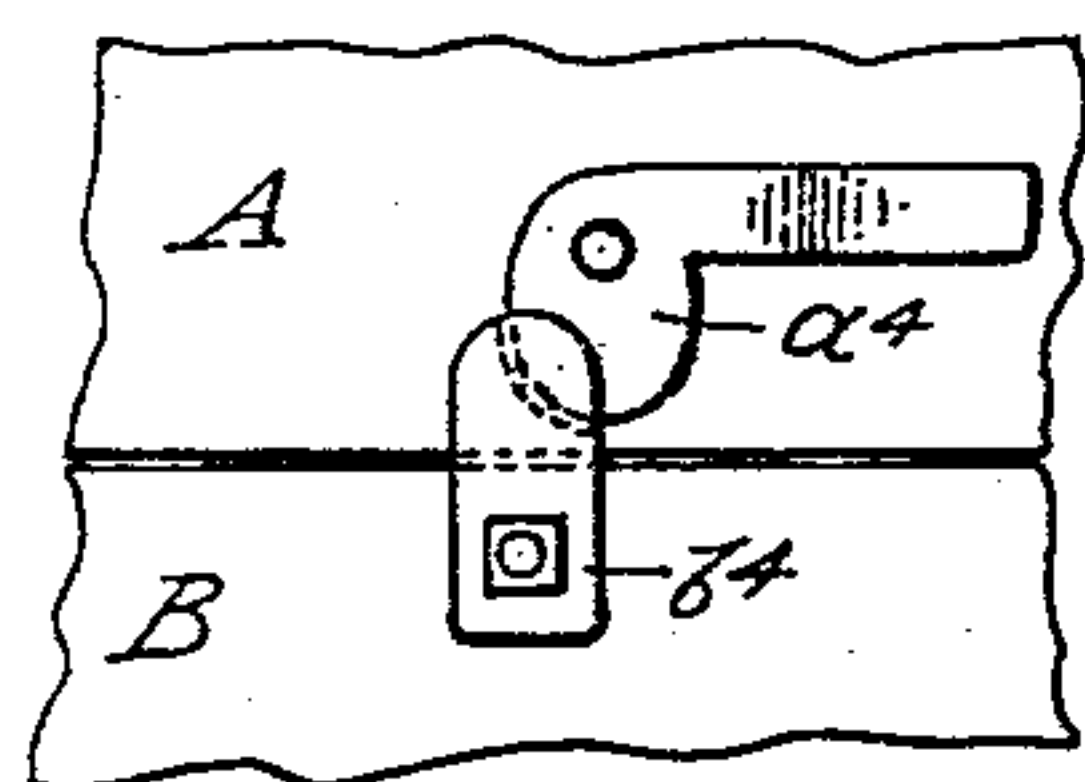


Fig. 4.

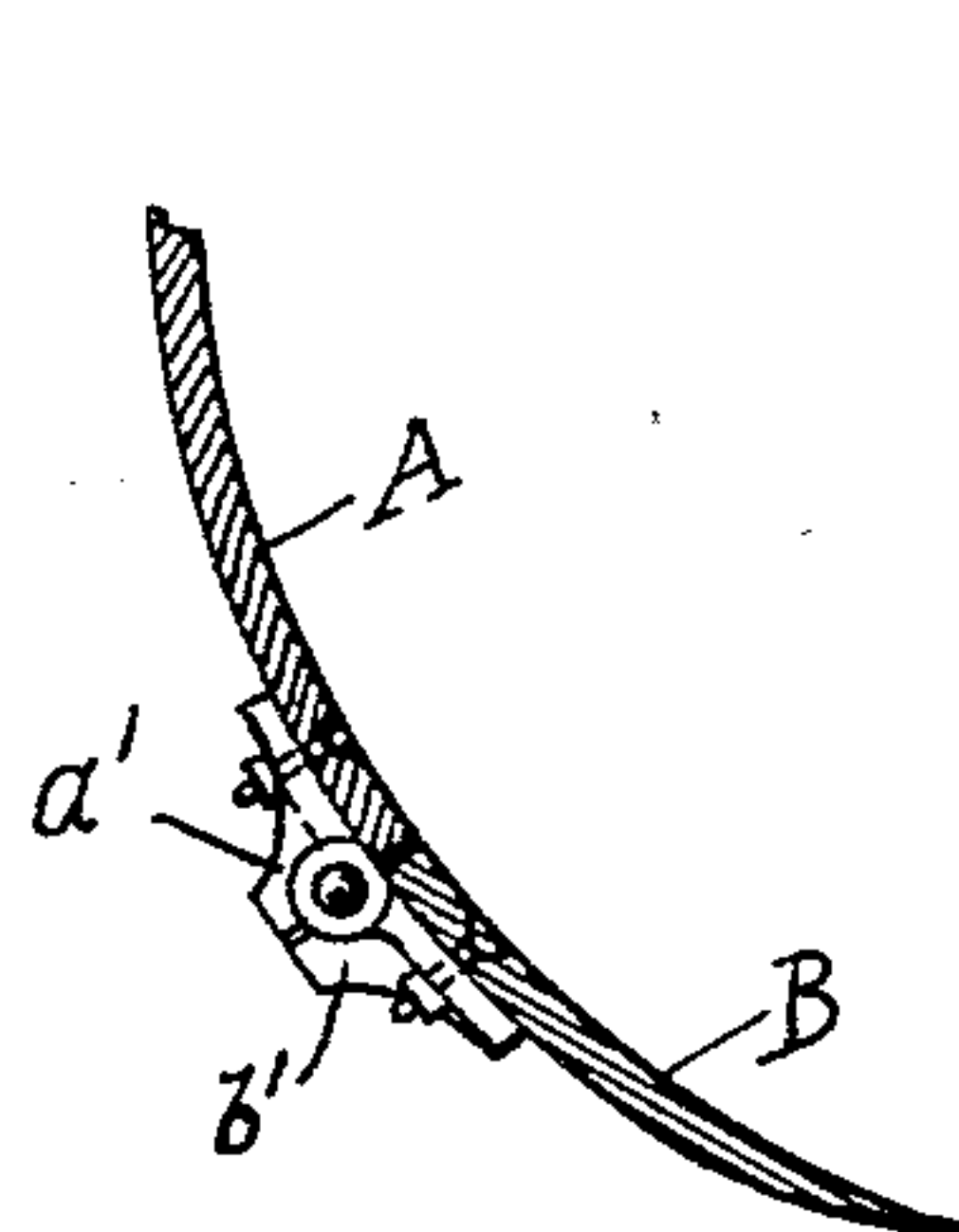


Fig. 5.

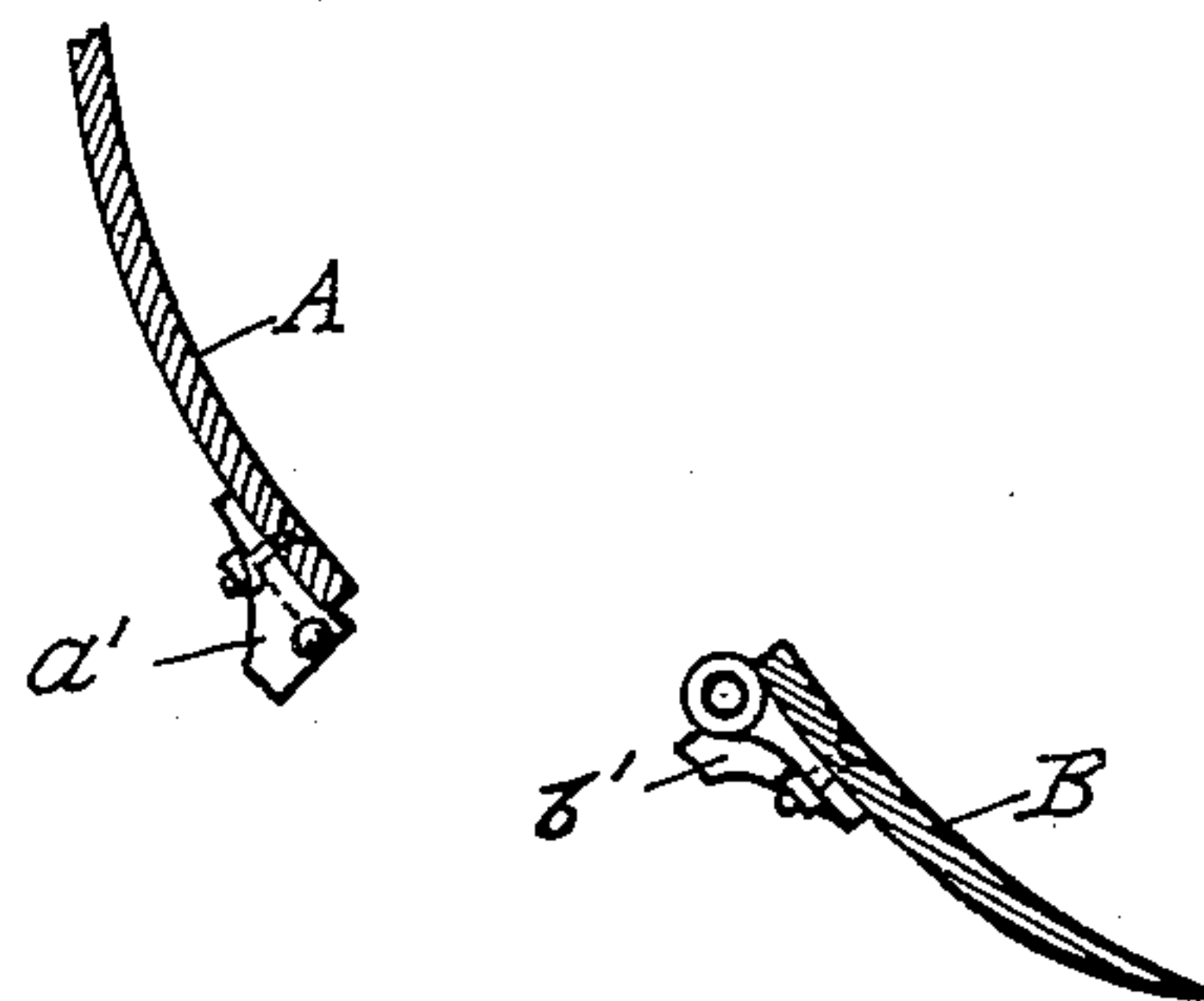


Fig. 6.

Witnesses:

J. C. Buwall.  
R. G. Hande.

Inventor:

ALBERT DAVIS,  
by his attorney,  
Robert W. Hande.



# UNITED STATES PATENT OFFICE.

ALBERT DAVIS, OF INDEPENDENCE, KANSAS.

## DETACHABLE PLOWSHARE.

SPECIFICATION forming part of Letters Patent No. 713,612, dated November 18, 1902.

Application filed March 13, 1902. Serial No. 97,987. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT DAVIS, a citizen of the United States, residing at Independence, in the county of Montgomery and State of Kansas, have invented and produced new and useful Improvements in Detachable Plowshares, of which the following is a specification.

My invention relates to improvements in plows, and more particularly to the plowshare with means for easily and quickly detaching the share from the plow; and the object of my invention is to provide a new method and means for attaching and detaching plowshares.

Another object is to provide means for saving time and labor in removing and replacing plowshares and to reduce to a minimum the wear and breakage of bolts as now used.

Another object is to provide new and useful improvements in plows which will increase the efficiency of the plow and which can be manufactured and sold at a comparatively low price.

Other objects and advantages will appear from the following specification and from the drawings forming a part thereof.

Referring now to the drawings, Figure 1 is a side elevation of a complete plow equipped with my improvements. Fig. 2 shows the under side of a portion of a plow, showing my invention in connection therewith and the manner in which it is attached thereto. Fig. 3 is a detail view showing the share detached from the plow and a portion of my improvements. Fig. 4 shows an enlarged detail of the locking members. Fig. 5 shows a cross-section through one of my securing members; and Fig. 6 is a cross-section same as shown in Fig. 5, except the parts are separated.

Similar letters of reference denote and refer to like parts throughout the several views.

A designates the moldboard, and B represents the plowshare. These parts it is frequently desirable to disconnect from each other for repairs and the like. These parts I am aware are old, and I show them simply to illustrate my improvements for quickly and easily attaching and detaching these parts, as will appear hereinafter.

C represents the landside, and this member is bolted to the framework of the plow and

to the moldboard in the usual manner and is constructed in the usual manner, except that the frog  $c'$  must not extend forward far enough to interfere with my improvements.

$a'$ ,  $a^2$ , and  $a^3$  represent the male hinge members, consisting of a flat surface to contact with the inner surface of the moldboard and secured thereto by bolts, each provided with a lug extending out therefrom and each provided with a forwardly-extending pin at right angles thereto.

$b'$ ,  $b^2$ , and  $b^3$  represent the female hinge members, consisting of a flat surface to contact with the inner surface of the share B and secured thereto by bolts, each provided with a lug extending out therefrom and each provided with a hole extending therethrough at right angles thereto.

The pins in  $a'$ ,  $a^2$ , and  $a^3$  are adapted to fit into and enter the holes in  $b'$ ,  $b^2$ , and  $b^3$ , respectively. It will be seen that  $a'$  and  $b'$ ,  $a^2$  and  $b^2$ , and  $a^3$  and  $b^3$  each form a detachable hinge.

As seen in Fig. 2, the parts A and B are attached together by the hinges just described, and it will now be apparent that should the share B be moved forward parallel with the meeting line of A and B that the pins of  $a'$ ,  $a^2$ , and  $a^3$  will be withdrawn from the holes in  $b'$ ,  $b^2$ , and  $b^3$ , respectively, and that the share will be released from its connection with the moldboard A, as shown in Fig. 3. When the moldboard A and the share B are united, as shown in Fig. 2, it is apparent that the forward movement of the plow in the soil will tend to keep the parts of the hinges together in the manner shown; but in order to guard against an accidental displacement or separation of moldboard A and share B, I provide a lock which consists of the lug  $b^4$ , bolted to the share B and projects inward and slightly upward therefrom and over the edge of moldboard A, as shown, and opposite to lug  $b^4$  on A and near the edge thereof I pivotally mount a small lever  $a^4$ , which is secured to moldboard A by a bolt passing through one side of the enlarged end thereof in such a manner that when the handle portion of lever  $a^4$  is lying parallel with the share B the enlarged end of lever  $a^4$  will pass under lug  $b^4$ , and thus the share will be secured to the plow, as shown in Fig. 2. If it



should be desired to remove the share B, I have only to press the handle of lever  $a^4$  at right angles to the share B, which will withdraw the enlarged portion of lever  $a^4$  from engagement with lug  $b^4$ , and the share can then be removed in the manner heretofore described.

My invention is perfectly adapted to accomplish the results for which it is intended, and it is evident that changes in and modifications of the specific construction herein shown and described may be made and that analogous parts may be used to accomplish the same results without departing from the spirit of my invention or sacrificing any of its many advantages, and the specific construction of the details of my invention in which novel features are embodied may be variously changed without altering the essential principles which are claimed as new.

Having now fully shown and described my invention and the best mode for its construction to me known at this time, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a detachable plowshare, the combination of separable hinges arranged along the meeting edges of the moldboard and plow-

share consisting of the male members  $a'$ ,  $a^2$ , and  $a^3$ , and the female members  $b'$ ,  $b^2$ , and  $b^3$ , all substantially as shown and described and for the purposes set forth.

2. In combination with the moldboard and the share of plows, of separable hinges placed at the meeting edges thereof, one member of the hinge being secured to the moldboard and the other member of the hinge being secured to the share, and the locking members  $a^4$  and  $b^4$ , the former pivotally mounted on the under side of the moldboard and the latter secured to the under side of the plowshare, all substantially as shown and described.

3. In a detachable plowshare, a plurality of hinges one portion of the hinges being secured to the share and the other portion of the hinge being secured to moldboard, all held in place by a locking device, substantially as shown and described.

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

ALBERT DAVIS.

Witnesses:

G. C. ERNSBERGER,  
O. V. DOLLISON.