(No Model.)

J. S. HEATH.

COMBINED SEEDING AND DRILLING MACHINE.

No. 324,321. Patented Aug. 11, 1885.

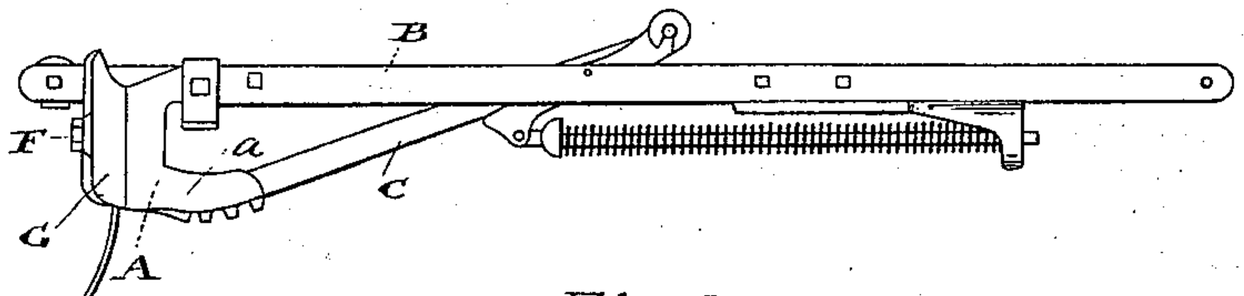

Fig. 1.

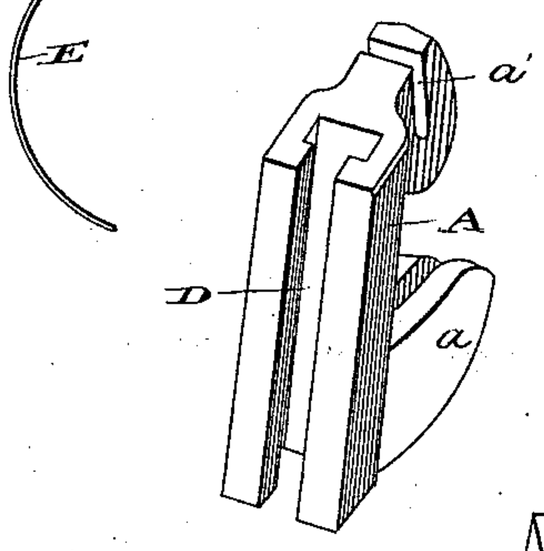

Fig. 2.

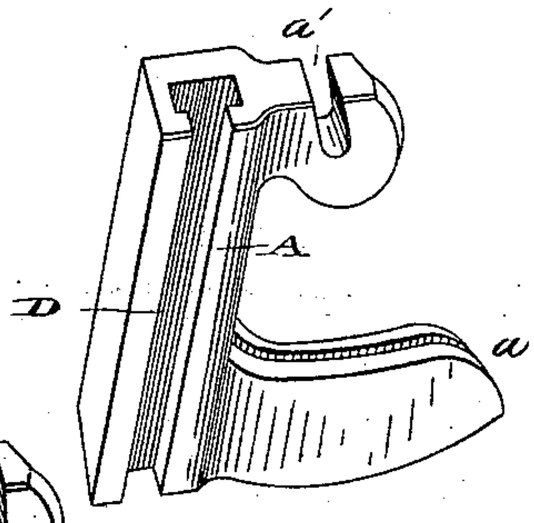

Fig. 3.

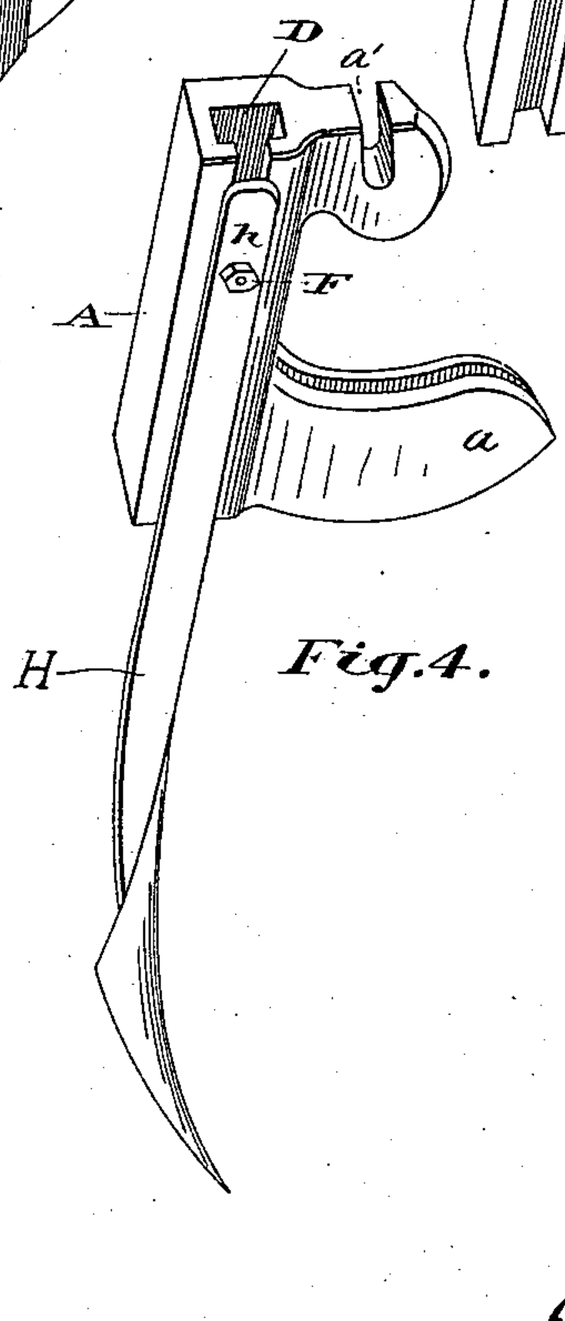

Fig. 4.

Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES S. HEATH, OF BRANTFORD, ONTARIO, CANADA, ASSIGNOR TO JESSE OLDFIELD WISNER, WAREHAM SHELDON WISNER, AND EDWARD LYMAN GOULD, OF SAME PLACE.

COMBINED SEEDING AND DRILLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 324,321, dated August 11, 1885.

Application filed February 6, 1885. (No model.) Patented in Canada October 24, 1883, No. 17,693.

To all whom it may concern:

Be it known that I, JAMES SAMUEL HEATH, of the city of Brantford, in the county of Brant, in the Province of Ontario, Canada, pattern-maker, have invented certain new and useful Improvements in a Combined Seeding and Drilling Machine, of which the following is a specification.

The object of the invention is, first, to devise a simple means for detachably connecting the hoe or cultivator-tooth to the drag-bar; secondly, to connect a spring-tooth with a drag-bar of a seeding-machine; and it consists, essentially, in a head-block, which may be connected in the ordinary manner to the end of the drag-bar, a T or dovetailed slot being made in the head-block to permit the insertion of the head of the bolt connecting the hoe or cultivator-tooth to the said block.

Figure 1 is a side view of a drag-bar provided with my improved head-block, and showing a spring-tooth attached thereto. Fig. 2 is an enlarged detail in perspective of my improved head-block, showing the slot cut in it to receive the head of the bolt used in connecting the spring-tooth to the head-block. Fig. 3 is a perspective view of my improved head-block, showing the location of the slot when made to connect an ordinary drill-hoe or cultivator-tooth. Fig. 4 is a view showing a cultivator-tooth attached to my improved head-block.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is my improved head-block pivoted to the end of the drag-bar B, and connected to the locking-stud by the brace C, which engages a slot in the arm *a*. The head-block A has a transverse slot, *a'*, which receives the pivot-bolt of the drag-bar and allows it to be readily removed.

It is not necessary to enter into an explanation of the particular locking device shown, as I do not wish to confine myself to any particular form of locking device, as any form might be adapted to work in conjunction with my improved head-block.

D is a T-slot made in the head-block A. When formed, as shown in Fig. 2, to receive the head of the bolt for connecting the spring-hoe, it is made in the rear of the block; but when made to receive the bolt used to connect to the block an ordinary drill-hoe or cultivator-tooth it is made, as shown in Fig. 3, in the side of the block.

I have chosen a T form for my slot; but it will of course be understood that a dovetail or any other form which would permit the free longitudinal movement of the bolt without permitting it to slip through the front of the slot would answer the purpose of my invention.

E is a spring-tooth made substantially in the shape shown. The spring-tooth E has a bolt-hole made in its top end to permit the insertion of the bolt F, the head of which fits into the slot D.

G is a cap made to fit over the top end of the spring-tooth E, in order to clamp against the back end of the block A when the bolt is screwed up.

In Fig. 4, H is an ordinary drill-hoe provided with the ordinary projection, *h*. Through this projection a hole is made to permit the insertion of the bolt F, the head of which fits into the slot D, which in this particular instance is made in the side of the head-block instead of the rear end.

What I claim as my invention is—

1. In a seeding-machine, the combination, with the drag-bar and suitable locking mechanism, of independent interchangeable head-blocks having dovetailed recesses, and a recess to receive the pivot of the drag-bar, as set forth.

2. The interchangeable head-blocks A, having dovetailed sockets D and transverse slots *a'*, constructed and adapted to serve with drag-bar B, suitable locking mechanism, and implements, as E H, as set forth.

3. The head-block A, having dovetailed recess D, arm *a*, and slot *a'*, combined with the drag-bar B, brace C, tooth E, bolt F, and cap G, as and for the purposes set forth.

Brantford, January 3, 1885.

JAMES S. HEATH.

In presence of—
WILL M. ISMOND,
JAMES WILKES.