S. Springstead,

Weeding Implement.

No. 96,740. Patented Nov. 9. 1869.

Fig. 1.

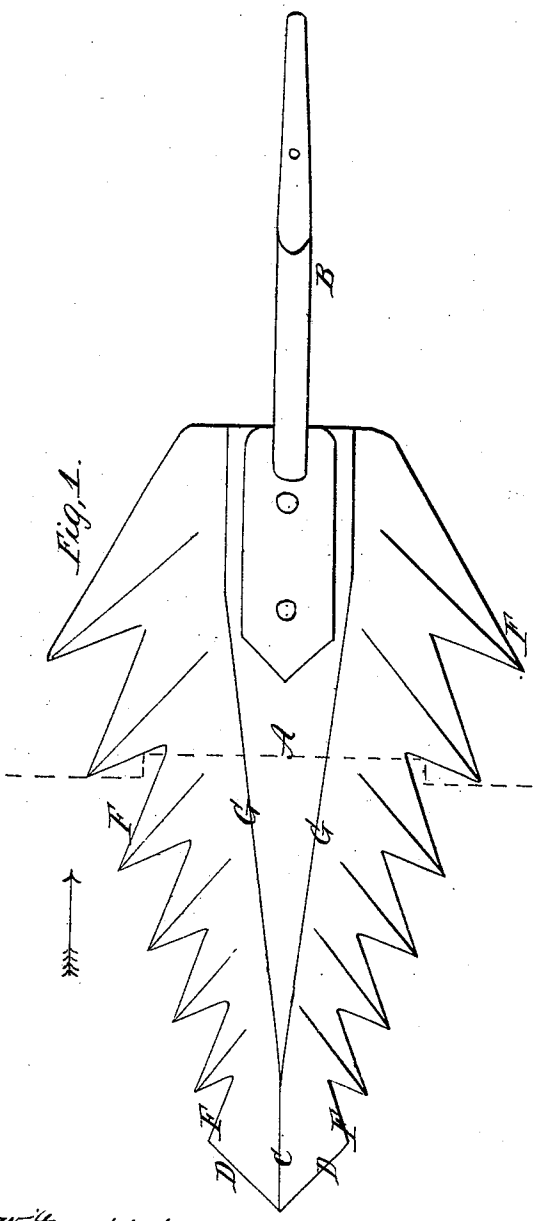
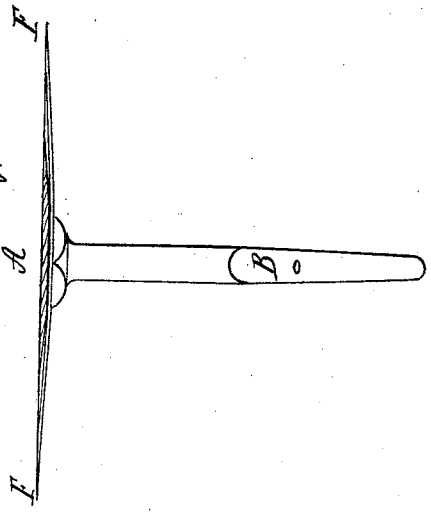


Fig. 2.



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SPENCER SPRINGSTEAD, OF WESTCHESTER, NEW YORK.

Letters Patent No. 96,740, *dated November* 9, 1869.

IMPROVEMENT IN WEEDING-IMPLEMENT.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SPENCER SPRINGSTEAD, of Westchester, in the county of Westchester, and State of New York, have invented a new and useful Improvement in Propelling Weeder; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 is a plan view of the inside face of this improvement.

Figure 2 is a transverse section, the observer being supposed to be looking in the direction of the arrow, fig. 1.

Similar letters indicate corresponding parts.

This invention relates to that class of weeding-implements which is pushed or thrust forward by the operator, instead of being drawn backward, as is the case in using the ordinary hoe.

It consists in a blade of a general conical or tapering form, each side having lateral, dart-shaped teeth, gradually diminishing in length toward the point of the blade, and whose axes are inclined in a forward direction at an angle of about forty-five degrees with the axis of the blade, the point of the blade consisting of a broad tooth, whose forward edges form in front nearly a right angle with each other, when they recede, on each side, in lines about parallel with the rear edges of the lateral teeth. Each tooth is bevelled, and sharpened, to make sharp cutting-edges.

The letter A designates the weeder.

It is secured to a handle, B, in any proper manner, at an angle of forty-five degrees, more or less.

The point C of the blade, or rather its front tooth, has double edges, D D, each inclined backward at an angle of about forty-five degrees, more or less, with the axis of the blade.

From the line of its greatest diameter, the sides of the front tooth recede, as at E E, toward the front edges of the first lateral teeth on each side of the blade.

From this part of the blade, the lateral teeth commence and occupy the whole space from thence back to the rear of the blade, each tooth increasing in length and breadth as the series progresses toward the rear, and increasing also in their distances from the axis of the main blade; and, furthermore, the several lateral teeth, owing to the general tapering form of the main blade, have their forward edges of less length than their rear edges.

The lateral teeth are designated by the letter F. Their front and rear edges are sharpened so that the weeder can be operated with good effect, both when it is propelled straight forward, and when it is pushed in directions parallel with the axes of the lateral teeth, or sidewise.

The main blade has its greatest thickness between the lines G G, whose forward parts converge toward the front, and from those lines the top surface of the blade is reduced in thickness toward each side, each lateral tooth, as well as the front tooth, having a double bevel on its surface, beginning at its axis, and proceeding toward its edges, but the bottom or under surface of the blade is left flat or in the same uniform plane, as shown in fig. 2.

My weeder is operated by propelling or pushing it against weeds which are to be cut, either directing its motion in a straight line or in lateral directions.

Its narrow front or point enables the gardener to start the implement with ease, and its gradually-expanding sides, provided with teeth which increase in length successively, enable him to cover a great breadth in the thrust or cut made by the implement.

The weeder may be stamped out of sheet-steel, and ground down to form the various bevels of the blade and teeth.

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

1. My improved propelling weeder, having a tapering blade A, with lateral teeth on each edge F, made and arranged substantially as described.

2. The front tooth C, in combination with the lateral teeth F, substantially as described.

This specification signed by me, this 4th day of September, 1869.

S. SPRINGSTEAD.

Witnesses:

E. F. KASTENHUBER,

C. WAHLERS.