

T. HARDING.
Cultivator Tooth.

No. 105,570.

Patented July 19, 1870.

Fig. 1.

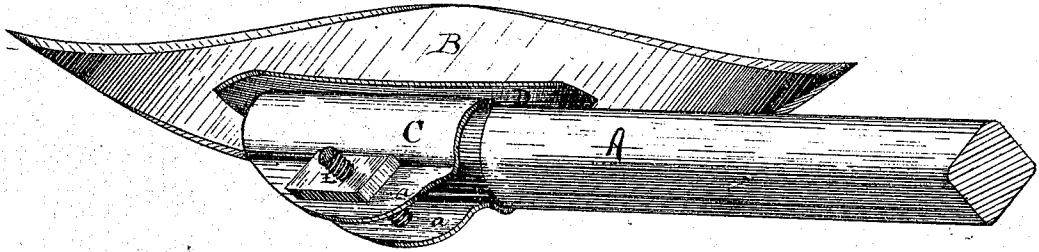
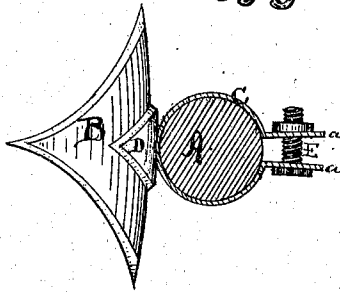


Fig. 2.



WITNESSES.

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THOMAS HARDING, OF LA FAYETTE, INDIANA.

IMPROVEMENT IN SHOVEL-TEETH FOR CULTIVATORS.

Specification forming part of Letters Patent No. 105,570, dated July 19, 1870.

To all whom it may concern:

Be it known that I, THOMAS HARDING, of La Fayette, in the county of Tippecanoe and State of Indiana, have invented a new and useful Improvement in Shovel-Teeth for Cultivators, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a plan view of the same.

It is well known that in operating an ordinary cultivator it is sometimes advantageous to set certain of the teeth or shovels oblique to the line of progression, so that the earth shall be thrown toward the hill or row of corn, while at other times the same teeth may require to be set perpendicular to the line of progression.

I am aware that various devices have been made whereby the tooth might be adjusted at an angle oblique to the line of progression; but I am not aware that such an adjustment has been accomplished by means of clamping-straps attached rigidly to the tooth and tightened by a bolt outside of the standard.

That others may fully understand my invention, I will particularly describe it.

A is the standard or brace, to which the tooth B is attached. At its upper end the standard A is secured to the frame of the machine.

The tooth B is made in the usual manner, and is provided at its back with a clamping-

strap, C. This strap is rigidly secured to the backing-plate D, or directly to the tooth, if the same is made sufficiently strong, and is open at the rear, the two ends *aa* being turned outward, so as to be about parallel with each other, and a clamping-bolt, E, passes through both of them. When the ends *aa* are forced toward each other by the bolt E the straps C are forced upon the standard A, clamping it on all sides firmly and securely. By relaxing the clamping-bolt the tooth may be adjusted at any angle to the line of progression; or it may be removed from the standard.

The tooth B is made double-pointed, so that it may be reversed when one point becomes dull; and it will be observed that the tooth may be reversed without removing any rivets, screws, or bolts, but simply by relaxing the bolt E.

It will also be observed that the standard A is not penetrated or weakened by the attachment of the shoe.

Having now described my invention, what I claim as new is—

A drill or shovel tooth for cultivators, &c., provided with a clamping-strap, C, rigidly attached to said tooth, and clamp-bolt E outside of and behind the standard A, substantially as set forth.

THOMAS HARDING.

Witnesses:

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