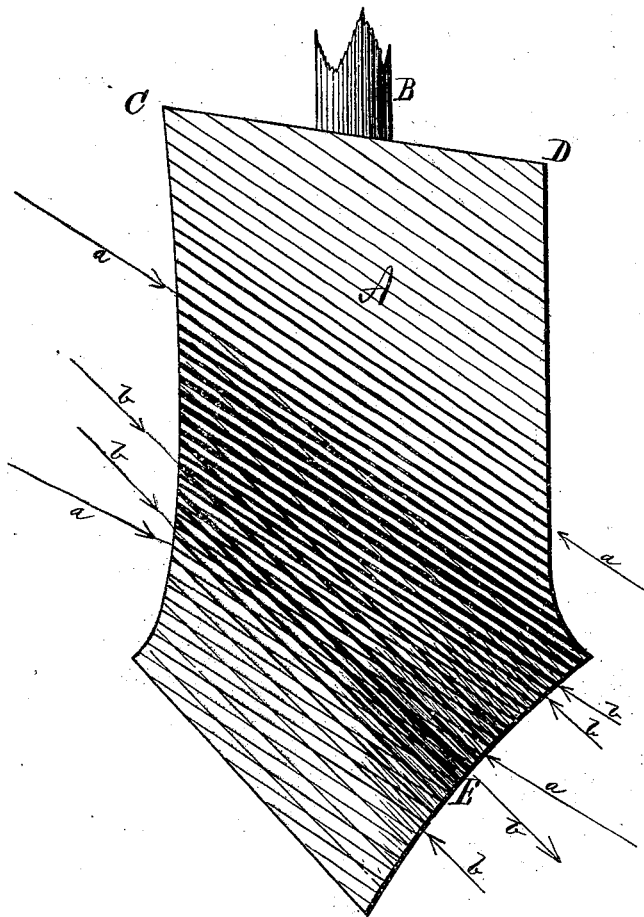


W. A. Dryden,

Cultivator Tooth.

No. 110,836.

Patented Jan. 10, 1871.



Witnesses:

Wm. R. Richards
H. B. Bergen,

Inventor,

Wm. A. Dryden,
By W. R. Richards
his Attor.

UNITED STATES PATENT OFFICE.

WILLIAM A. DRYDEN, OF MONMOUTH, ILLINOIS, ASSIGNOR TO HIMSELF
AND JOHN M. TURNBULL, OF SAME PLACE.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 110,836, dated January 10, 1871.

To all whom it may concern:

Be it known that I, WILLIAM A. DRYDEN, of Monmouth, in the county of Warren and State of Illinois, have made certain new and useful Improvements in Cultivators, of which the following is a specification.

The nature of my invention relates to improvements in cultivator-shovels; and the invention consists in curving the lower end of what is known as the "twisted shovel" in such a shape as to cause the plow to run straight and to resist the tendency common to twisted shovels of drawing off to one side, all as hereinafter fully described.

In the accompanying drawings, Figure 1 is a front elevation of my improved shovel.

A is a front view of a cultivator-shovel. B is the lower end of a cultivator-shank. The upper part of the shovel A is curved or twisted in the usual manner in the direction of the shade-lines shown thereon and parallel with the arrows *a a*, thus bringing the upper corner D forward and throwing the upper corner C back, throwing the soil in plowing off the shovel at the side C.

It is well known with plowmen that a shovel

twisted in the above manner will have a tendency to bear toward the side D, against which the plowman must offer resistance by hand. In my improvement a counter-resistance is given by curving the lower part of the shovel A in the direction shown by the shade-lines running parallel with the arrows *b b b b b*, thus producing a low part at the point E, which, together with the diagonal direction of the curve running from the point E toward the point G, will produce a resistance to the inclination of the shovel to draw over toward the side D.

I claim as my invention—

The cultivator-shovel A, when constructed, substantially as described, with a diagonal twist or curve across its lower part, for the purpose of offering a counter-resistance to the side pressure of the ordinary twisted shovels, substantially as described, and for the purpose specified.

WILLIAM A. DRYDEN.

Witnesses:

PLATT P. RICHARDS,
D. H. CLARKE.