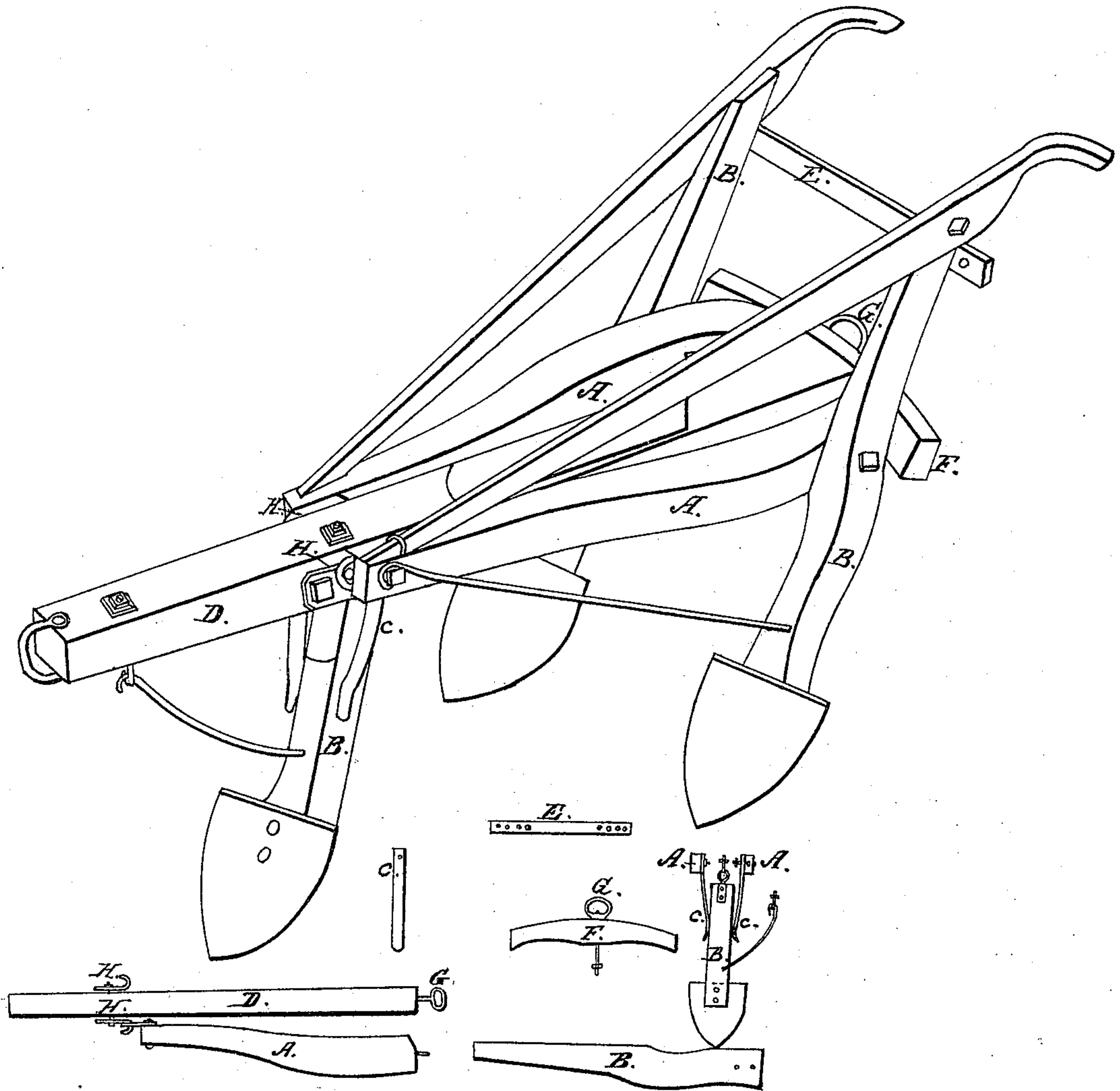


E. S. TICHENOR.

Cultivator.

No. 36,180.

Patented Aug. 12, 1862.



Witnesses:

James M Stout
Wm Plough

Inventor.

Edwin S Tichenor

UNITED STATES PATENT OFFICE.

EDWIN S. TICHENOR, OF JACKSONVILLE, NEW YORK.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 36,180, dated August 12, 1862.

To all whom it may concern:

Be it known that I, EDWIN S. TICHENOR, of Jacksonville, in the county of Tompkins and State of New York, have invented a new and useful Improvement upon a Shovel-Plow or Corn-Cultivator; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

This machine or implement is constructed with a center beam, D, and two side beams, A A, with handles attached; also, three upright standards, B B B, with shovels or blades attached; also, a cross-piece, F, attached to back end of center beam, D, by a thumb-screw, G, for the purpose of adjusting the machine, as regards width. This cross-piece F is to hold the back end of side beams to their places and at the same time letting them rotate on their pivots, which are in the back ends of side beams. The side beams, A A, have attached to them at the front end two springs, C C, which bear upon the front standard, B, for the purpose of guiding or steadying the same, which is hung with a hinge-joint. The side beams, A A, are connected with the center beam, D, with loose joints at H H, which allow the side beams to rotate in connection with the pivots in back end of said side beams. There is also a cross-piece, E, which is hung on pivots in the back standards directly under the handle, the use of which is to hold the back standards to their place, at the same time allowing them

to rotate in connection with the pivots in back end of side beams and loose joints in front ends of side beams. The object of the pivots and loose joints and springs is to give the machine a varying or guiding motion, so that it can be guided without lifting any of the shovels or blades out of the ground, as is necessary with those without a rotary motion.

The working of this implement or improvement is as follows: By pressing the handles to the right or left the standards are caused to rotate on the pivots and loose joints, thereby throwing the shovels or blades off their center and causing the implement to move diagonally across the space to the right or left, as desired. The springs work in concert with the side beams and back standards, keeping the front standard directly in the center between the back standards.

I am aware that hinged and oscillating bars and frames for supporting cultivator-teeth have been used, and therefore I do not claim them; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The combination of the springs C C, or their equivalents, with the hinged tooth of a cultivator, substantially as above described, for the purpose set forth.

EDWIN S. TICHENOR.

Witnesses:

J. M. STOUT,
W. C. DEAN.