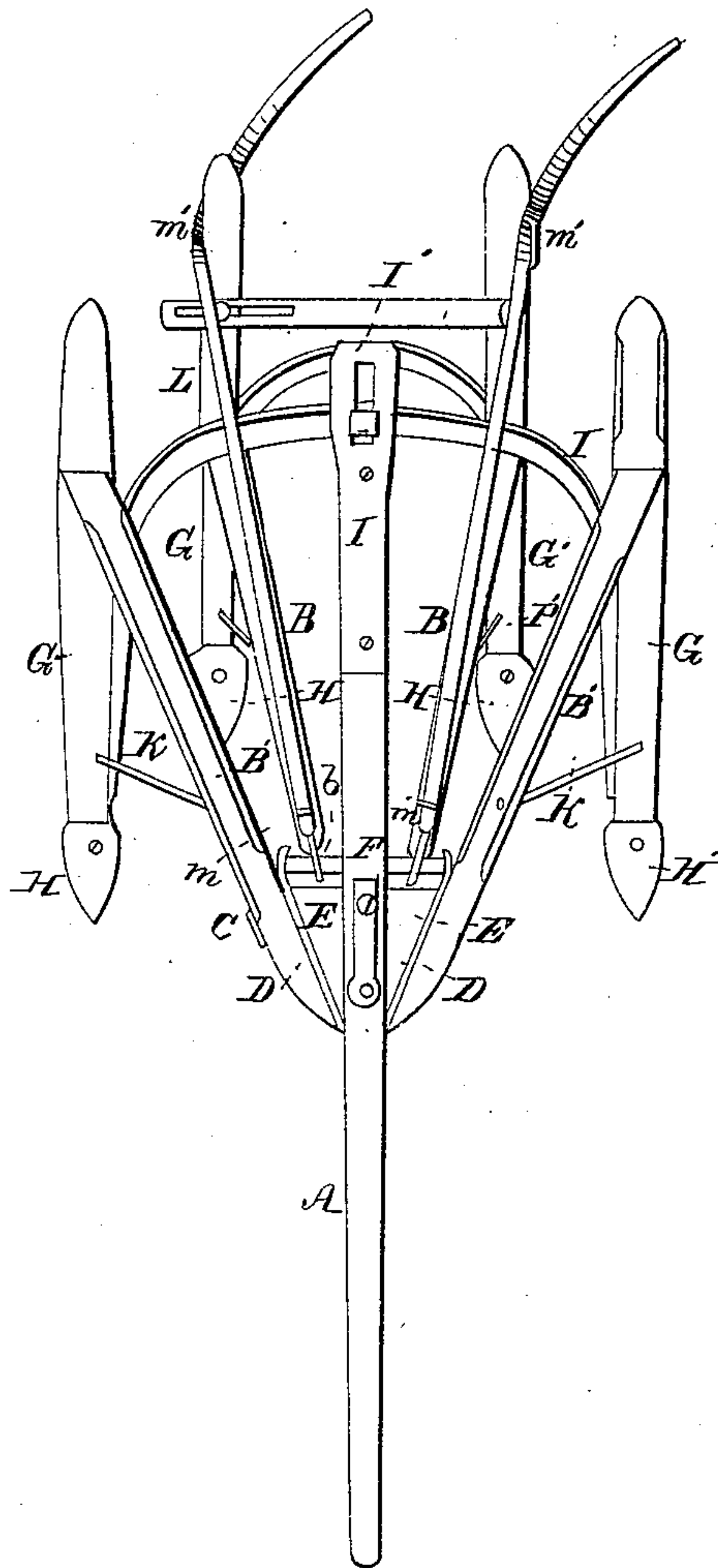


THOMPSON & COLLIER.

Cultivator.

No. 83,111.

Patented Oct. 13, 1868.



WITNESSES:

O. B. Lerner
Louis Brodner

INVENTOR:

J. J. Thompson
J. J. Collier
per Frederick & Co.
attorneys

United States Patent Office.

J. J. THOMPSON AND V. F. COLLIER, OF RICHWOOD, OHIO.

Letters Patent No. 83,111, dated October 13, 1868.

IMPROVEMENT IN CULTIVATORS.

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

To all whom it may concern:

Be it known that we, J. J. THOMPSON and V. F. COLLIER, both of Richwood, in the county of Union, and State of Ohio, have invented a new and useful Improvement in Cultivators; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, which is made a part of this specification, and which represents a plan of a cultivator illustrating our invention.

The subject of this invention is a two-horse cultivator, having four shovels, two being made to operate at each side of a row of corn, in order to completely cultivate the row by one passage of the machine across the field.

The outer shovels are stationary, but the inner ones are movable, and are attached to bent handles, which enable the attendant to control the inner shovels and guide the machine while walking at one side of the row.

In order that others skilled in the art to which our invention appertains may be enabled to fully understand and use the same, we will proceed to describe it in detail.

A may represent the tongue or draught-pole, and B' B' two beams, which are attached to said tongue by means of the bolt C.

D D are metallic plates, which, being clamped between the beams B' B' and wedge-shaped bracing-blocks E E, sustain the strain applied to the rod F, which has its ends fitted in apertures in the projecting parts of plates D D.

The beams B' B', which diverge rearward, as shown, have attached to them the vertically-inclined stocks G G, which carry the outer stationary shovels H' H'.

The backward extension or continuation of the tongue A forms the rigid centre-piece of the implement, and the plate I, which is attached to the rear extremity of said tongue, is bent up vertically, as seen at I', and the part I' affords attachment for the metallic brace J, which forms a rigid connection between the

stocks G G. The stocks may be additionally strengthened by the stay-rods K K, which connect them to the beams B' B'.

B B are horizontal beams, attached by staples *b b* to the rod F, which, passing through the tongue A, has its ends held by the plates D D, as before explained.

Attached to the beams B B are vertically-inclined stocks G' G', which carry the inner shovels H H. The handles L L are fastened by staples at *m m m' m'*, or otherwise, to the beams B' B' and stocks G' G'. The attachment of the inner beams B B to the rod F by the staples *b b*, admits of said beams being moved laterally by means of the handles L L, so that the shovels H H may be properly guided by the attendant to avoid uprooting plants, and prevent collision with obstacles.

The handles L L are moved laterally at their rear ends, as shown, in order that the driver may walk at one side of the row, while managing the implement and the team.

The stocks G' G' are connected together by the braces N N', which keep them at the proper distance asunder, and cause them to move together. Braces P P may be used to connect the stocks G' G' with the beams B B.

Having thus described our invention,

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

The combination, in a quadruple plow or cultivator, of the inner movable beams B B, staples *b b*, rod F, plates D D, outer stationary beams B' B', tongue A, plate I, and handles L L, all applied in the manner and for the purpose set forth.

To the above specification of our improved plow, we have signed our names, this, the 1st day of June, 1868.

J. J. THOMPSON.
V. F. COLLIER.

Witnesses:

N. P. WESTHEIMER.
RICHARD TYLER,
O. W. ROSETT.