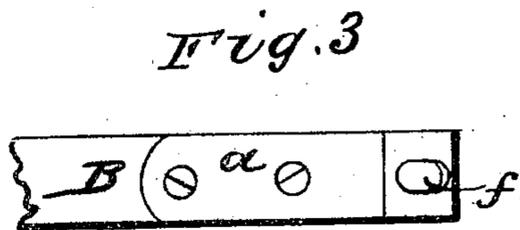
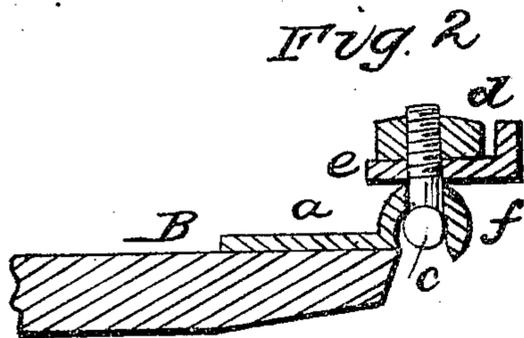
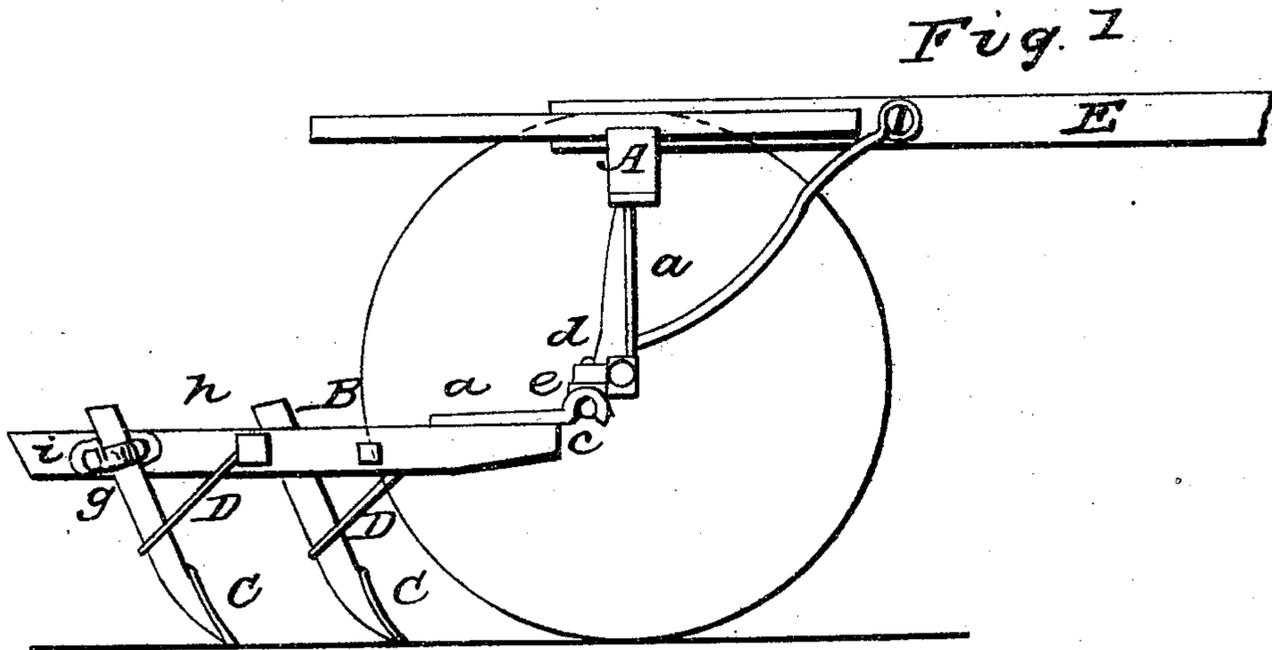


L. M. HOLLAND.
Cultivator Coupling.

No. 76,634.

Patented April 14, 1868.



Witnesses

James E. Fitch
Jesse Gepp.

Inventor

L. M. Holland, per his
attorney G. B. Fowler.

United States Patent Office.

LEWIS M. HOLLAND, OF GALESBURG, ILLINOIS.

Letters Patent No. 76,634, dated April 14, 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 I, LEWIS M. HOLLAND, of the city of Galesburg, in the county of Knox, and State of Illinois, have invented a new and useful Improvement in Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation.

Figures 2 and 3 are views in detail of coupling-device.

Like letters in the different figures of the drawings indicate like parts.

My invention relates to the coupling of the shovel-beams with the axle of the cultivator by means of socket-plates and screw-pivots, so as to allow the beams to be readily moved in any position that may be desired.

To enable any one skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the front cross-beam of the cultivator, to which is attached the axle *a*. The axle will project sufficiently downwards from the beam, on both ends thereof, to allow the beam to clear the top of the corn without injury thereto.

B is the shovel-beam, another of which will be attached to the opposite end of the axle. Fig. 1 only shows the side view of one beam.

In order that the beams may vibrate freely from the point of their attachment to the axle, I provide the beams with socket-plates *a*, and suspend them from a plate of the axle by means of screw-pivots *b*, having cross-pieces *c* fitting properly in the sockets, and thence fastened to the plate by screw-nuts *d*. The socket-plates are bolted or screwed on the top side of the beams, at the end thereof, the plates being cast at the end to nearly a circular shape, the hollow of it forming the socket. The ends of the screw-pivots are cast with round cross-pieces, *e*, at right angles, and inserted through oblong slots, *f*, of the hollow or socket of the plate, the round cross-pieces fitting loosely, but snugly, in the sockets, (see figs. 1 and 2.) The pivots are then inserted through holes in the plates *e* of the axle, suitably cast with the same to receive the pivots, whence they are fastened by the screw-nuts *d*, as herein referred to, and can be tightened or loosened, as occasion may require, for a free movement of the beams.

It will thus be seen that the process of coupling the beams by the screw-pivots and socket-plates is at once simple, and will allow the beams to be moved with facility by the operator in whichever direction he may desire, when cultivating the ground.

C C are the shovels, with their shanks held to the sides of the beam by plates *g*, which clasp them, the ends of the plate passing through holes in the beam, and fastened on the opposite sides by screw-nuts *h*, a plate, *i*, first being placed between the sides of the beam and the shanks. By tightening or loosening the screw-nuts, the shanks can be slipped up or down, and the shovels thus gauged to suit the depth of ground desired. The shanks are braced by the braces D D. E is the tongue. Suitable handles will be attached to the rear ends of the beams for the guidance of the machine by the operator.

Claim.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

Coupling the shovel-beams B with the axle of the cultivator by means of the screw-pivots *b*, with cross-pieces *e* fitting in the sockets of the plates *a*, substantially in the manner and for the purpose as herein set forth.

LEWIS M. HOLLAND.

Witnesses:

W. H. PRESCOTT,
M. T. CHAPMAN.