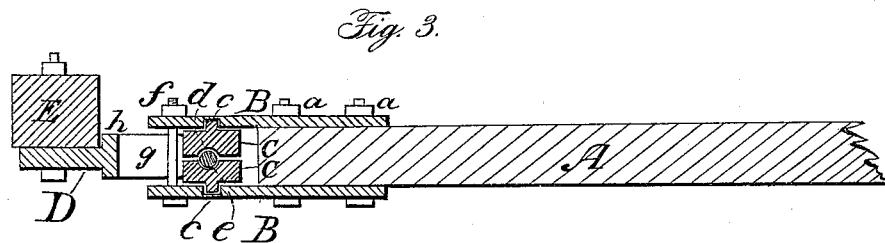
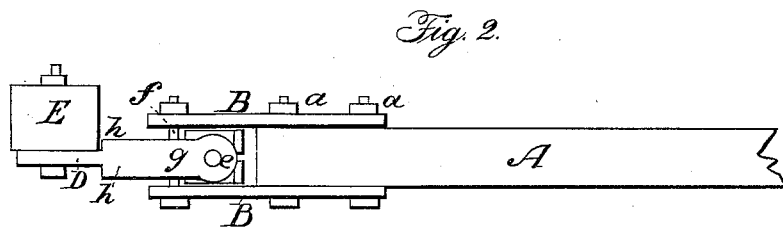
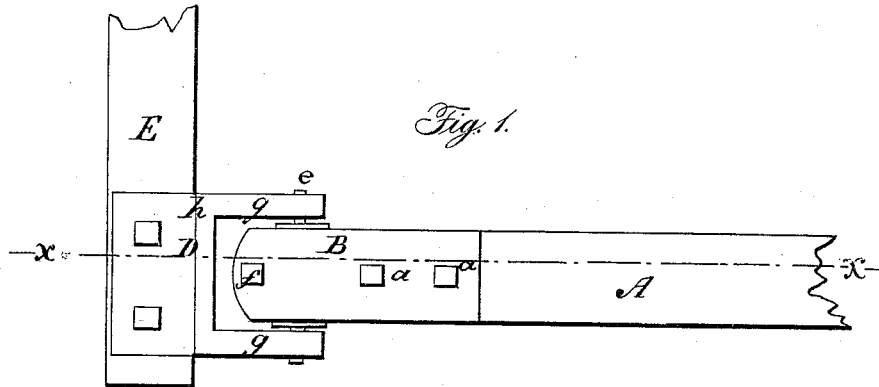


W. S. WEIR, Jr.
Wheel Cultivator.

No. 53,205.

Patented Mar. 13, 1866.



Witnesses:

Wm. Brewin
Thos. Tusch

Inventor:

W. S. Weir
By *Wm. M. Co.*
attys

UNITED STATES PATENT OFFICE.

W. S. WEIR, JR., OF MONMOUTH, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 53,205, dated March 13, 1866.

To all whom it may concern:

Be it known that I, W. S. WEIR, JR., of Monmouth, in the county of Warren 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 thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a plan or top view of the same; Fig. 3, a horizontal section of the same, taken in the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved joint for connecting plow-beams to the frames of cultivators, in order to admit of the plows having a vertical and lateral movement.

A represents a plow-beam, and B B two metal plates, which are secured one to each side of the beam, at its front end, by screw-bolts *a a*. These plates B B project some distance in front of the beam A, and have each a circular hole, *b*, made in their inner surfaces to receive cylindrical projections *c* at the outer sides of plates C C, which are placed between the plates B B, and are provided with grooves *d*, one in the inner surface of each, to receive a journal, *e*, which is clamped between C C by means of a screw-bolt, *f*, which passes through the outer parts of the plates B B, as shown clearly in Fig. 3, the bolt *f* also retaining the projections *c* in the holes *b* in plates B.

The inner surfaces of the plates C C do not come in contact, the journal *e* being of such a size as to prevent it, and consequently said journal will always have a proper bearing between C C, and at the same time be allowed to turn freely therein, while the cylindrical projections *c* will be allowed to turn freely in the holes *b* in plates B B.

The upper and lower ends of the journal *e* are fitted in ears or arms *g g*, which project from the upper and lower ends of a flat plate, D, having two shoulders, *h h*, one at each side. Either of these shoulders is made to abut against a pendant, E, at the front part of a cultivator-frame, and the plate D secured to said pendant by bolts *i i*.

By means of the two shoulders *h* the plate D may be adjusted to either side of the pendant E, and the two plows of a cultivator placed nearer together or farther apart, as may be desired.

It will be seen from the above description that the plows may be adjusted vertically in consequence of the projections *c* of the plates C C turning in the holes *b* in the plates B, and that the lateral movements of said plows are allowed in consequence of the plates C C turning on the journal *e*; and it will further be seen that all unnecessary play of the journal *e* in the grooves *d* of the plates C, as well as the projections *c* in the holes *b* of plates B, is avoided by screwing up the nut of screw-bolt *f*.

The arrangement is extremely simple and efficient, admitting of a perfect freedom in the working of the plows both vertically and laterally.

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

The combination, with the plate D, ears *g g*, and journal *e*, of the grooved bearing-plates C C, cylindrical projections *c c*, plates B B, and screw-bolt *f*, all constructed and arranged to operate in the manner and for the purpose specified.

The above specification of my invention signed by me.

W. S. WEIR, JR.

Witnesses:

ELIAS WILLITS,
W. A. DRYDEN.