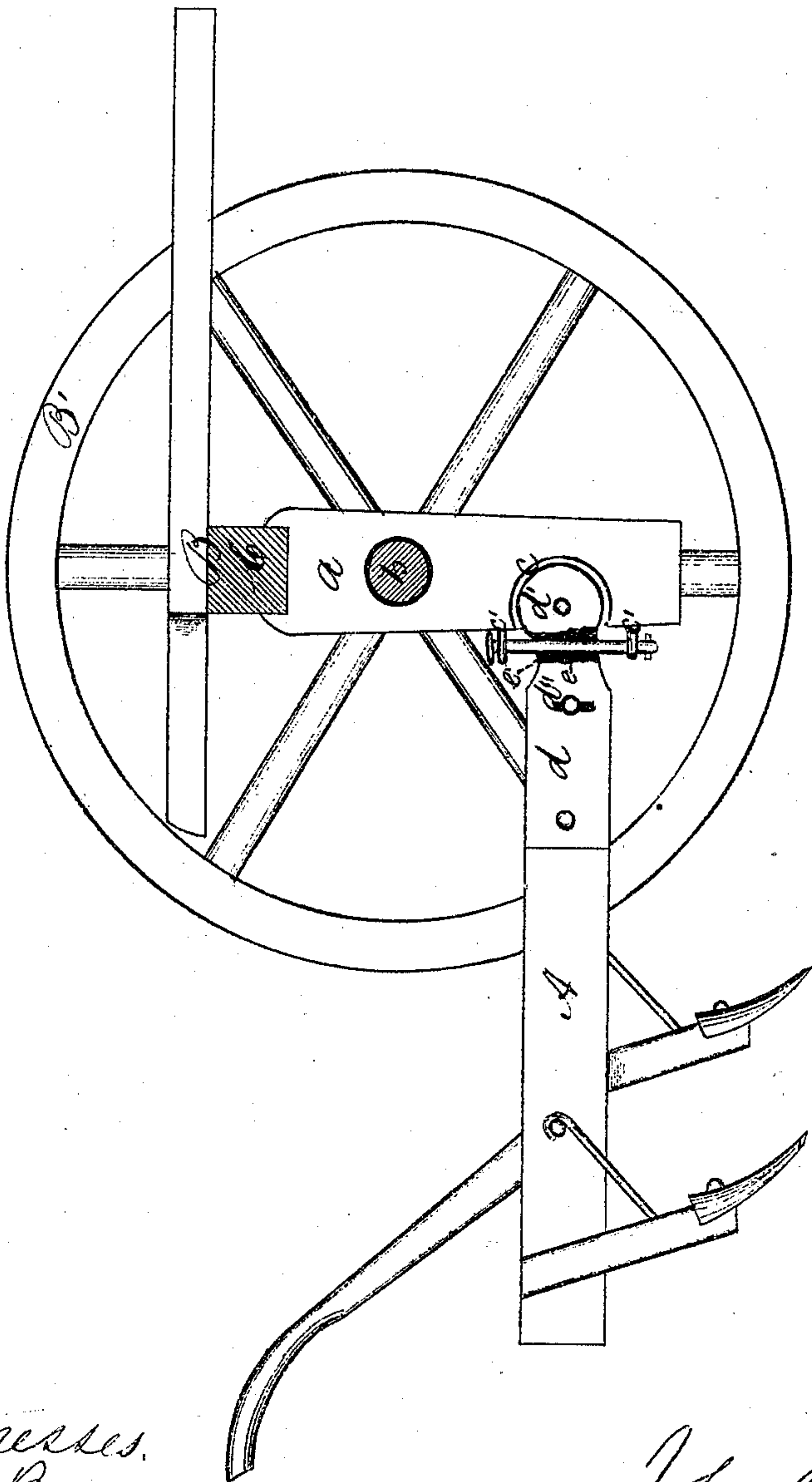


J. P. Letz,

Wheel Cultivator.

No. 98604.

Patented Jan. 4. 1870.



*Witnesses.
C. O. Brown
S. J. Robert*

*John P. Letz Inventor
By Geo. E. Brown
Atty.*

UNITED STATES PATENT OFFICE.

JOHN P. LETZ, OF LACON, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 98,604, dated January 4, 1870.

To all whom it may concern:

Be it known that I, JOHN P. LETZ, of Lacon, in the 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 same, reference being had to the accompanying drawing and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section, showing one-half of the cultivator.

This invention relates to a cultivator composed of two or more complete plows, each having beam, shares, and handles, and of a frame-work mounted on two wheels, to which said plows are attached.

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

Similar letters in the drawing refer to like parts.

The invention consists in the mechanism for fastening the ends of the plow-beams to the said frame, such mechanism being a sheet-metal plate, of oblong or other convenient form, pivoted at one end near the forward extremity of the plow-beam, and provided with a neck and circular head at its other end, which head fits into a rounded recess in the block of the frame-work, to which the plow-beam is immediately secured, said plate having an aperture in its neck, through which passes a bolt, held also in staples in the said block, thus uniting the latter and the plow-beam by a flexible joint.

In the drawing, A are the plow-beams, and B the frame-work, supported upon wheels B'

B'. The wheels run upon short axles *b b*, each of which is supported in blocks *a a'*, secured, near its ends, to the cross-beam C. The blocks, by means of nuts and set-screws passing through slots in the cross-beam, are adjustable lengthwise of the latter, more or less. Rounded recesses *c* are made parallel with the beam C, transversely of the blocks *a*, near their lower ends. Staples *c' c'* are driven into the blocks *a*, one just above and the other just below the recesses *c*. In said recesses fit the circular heads *d'* upon the ends of the metallic plates *d*, pivoted at their rear ends near the forward extremities of the plow-beams A. Slots *d''* may be made crosswise of the plates *d*, through which slots pins passing into the plow-beams serve to limit the play of the plates. An orifice, *e'*, is made through the neck *e* of each plate, through which a bolt extends, placed in the staples *c'*. Said bolts unite the plow-beams with the blocks *a* in such manner that the beams may be moved from side to side or up and down on the bolts as pivots. The recesses protect the heads of the plates, and, both being rounded, do not wear each other away like sharp corners.

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

The plate *d*, provided with the circular head *d'* and orifice *e'*, in combination with the rounded recesses *c* and bolts and staples, in the manner and for the purpose described.

JOHN P. LETZ.

Witnesses:

S. J. McFADDIN,
E. W. QUINCY.