J. C. Pearl.

Cultivator.

No. 95,831. Patented Oct. 12, 1869.

Fig: 1

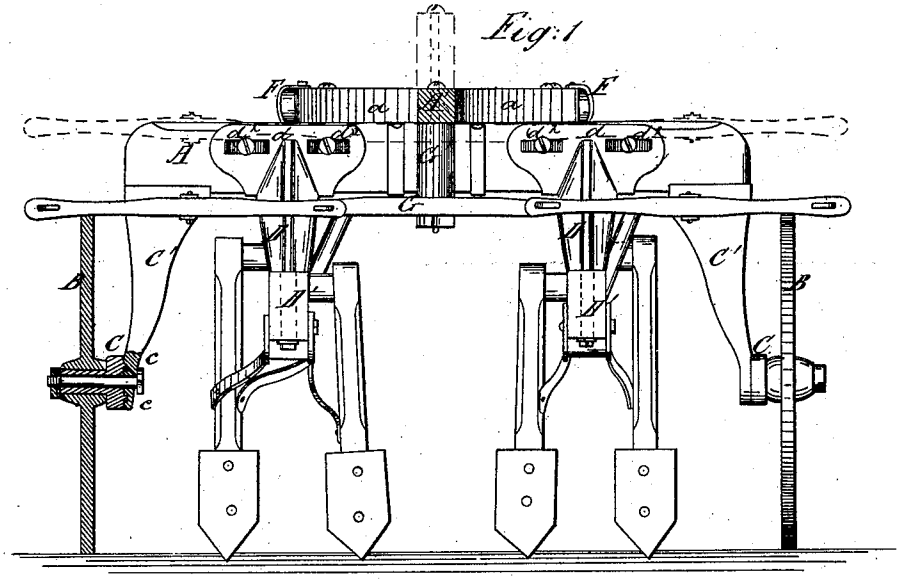


Fig: 3

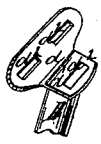


Fig: 2

Witnesses
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Inventor.
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UNITED STATES PATENT OFFICE.

JOHN C. PEARL, OF MENDOTA, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **95,831**, dated October 12, 1869.

To all whom it may concern:

Be it known that I, JOHN C. PEARL, of Mendota, La Salle county, Illinois, have invented a new and useful Improvement in Cultivators; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents a front elevation (showing one of the wheels in sections) of a cultivator embodying in its construction my improvement. Fig. 2 represents a perspective view thereof. Fig. 3 represents a perspective view of one of the standards to which the plows are attached.

The same letters refer to like parts in the figures.

My invention relates to cultivators; and my improvements consist, first, in the construction of the standards to which the two beams of the shovel-plows are attached; secondly, in the construction of the axles; thirdly, in the construction and arrangement of the clevises upon the rear end of the tongue-braces, to which the plows are to be hooked; and, lastly, in the arrangement of the whiffletree, it being adjustable to deep or shallow plowing.

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

A in the drawings represents a strong cross-beam of suitable length, to which the several parts of the machine are to be attached. The tongue A′ is secured to it in the usual manner, with braces *a a* diverging from it from the point where the whiffletree is attached, and extending a little distance beyond the beam to the rear, as clearly shown in Fig. 2.

B B represent two wheels, upon which the machine is mounted. They revolve upon the axles C C, which are to be secured to the standard C′ C′, fastened to the ends of the cross-beam. These axles are flanged thimbles of the necessary dimensions, having upon the outer face of their flanges two short projections, *c c*, which, when the thimble is placed against the outer face of the standard, recede into the recesses therein, thus preventing it from turning. The wheels are to be placed upon these thimbles, when the whole is secured by suitable bolts passing through the perforations in the standards and the thimbles, and receiving upon their outer ends nuts for holding the wheels upon the thimbles and these to the standards.

D D represent two standards, which are secured to the cross-beam A, extending downward therefrom. They may be constructed, as clearly shown in the drawings, with a flange, *d*, in line with the main portion, and a flange, *d′*, at right angles thereto, by which they are attached to the front and under side of the cross-beam, the bolts for that purpose passing through the slots d^2 in the flanges, by means of which they can be adjusted laterally, to adapt the plow to any width the rows of corn or other grain may be apart. The lower portion of the standard is in the form of a spindle, upon which a sleeve, D′, is placed, revolving freely thereon and held in position thereon in any approved manner. These sleeves are to be constructed with two parallel sides, to fit between metal straps fastened to the ends of the plow-beam, and have two or more perforations, d^3, one above the other, for the reception of bolts by which the plow-beams are attached to them. Thus a universal joint is formed, admitting of the movement of the plows in any direction, and by means of the vertical series of holes in the sleeves they can be set for deep or shallow plowing, as circumstances may require.

E E represent beams extending from the standards to which they are attached to the rear, carrying near their outer ends each two shovel-plows, in the usual manner. By the hooks E′ E′ they may be hooked onto clevises upon the rear end of the tongue-braces.

F F represent the straps or clevises just mentioned, which are capable of turning upon the bolts by which they are held to the tongue-braces. The upper jaw of each is elongated, and the pointed end turned down at an angle. When the clevis is secured, this end hooks into one of a series of holes, *f*, in a plate, F′, which is fastened, one upon each tongue-brace, under the jaw of each clevis, whereby these can be adjusted sidewise, bringing the plows nearer together or throwing them farther apart.

G represents the whiffletree, which may be constructed in any approved style. It is to be so attached to the tongue as to be adjustable. To this end I use a thimble, G′, of suitable length, through which the bolt which holds it to the tongue passes, said thimble to

be placed between the tongue and the whiffletree, when this is to be used low, and on top of the tongue at other times, when the whiffletree is raised, so as to lie against the under surface of the tongue.

The brace *g*, connecting with cross-beams A, can, by turning up one side or the other, be used in either position of the whiffletree.

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

1. The standards D, with sleeves D′, when constructed and arranged substantially as shownand described, for the purpose set forth.

2. The axles C, when constructed and arranged substantially as shown and described.

3. The clevises F, when constructed as shown and described, in combination with the plates F′, both arranged to operate as and for the purpose set forth.

4. The combination, with the whiffletree, of the thimble, whereby the former may be raised or lowered, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN C. PEARL.

Witnesses:
D. D. KIBBEY,
JONELL HIGGINS.