G. W. PARSONS & W. S. FINNEY.

Improvement in Cultivators and Shovel-Plows.

No. 114,964. Patented May 16, 1871.

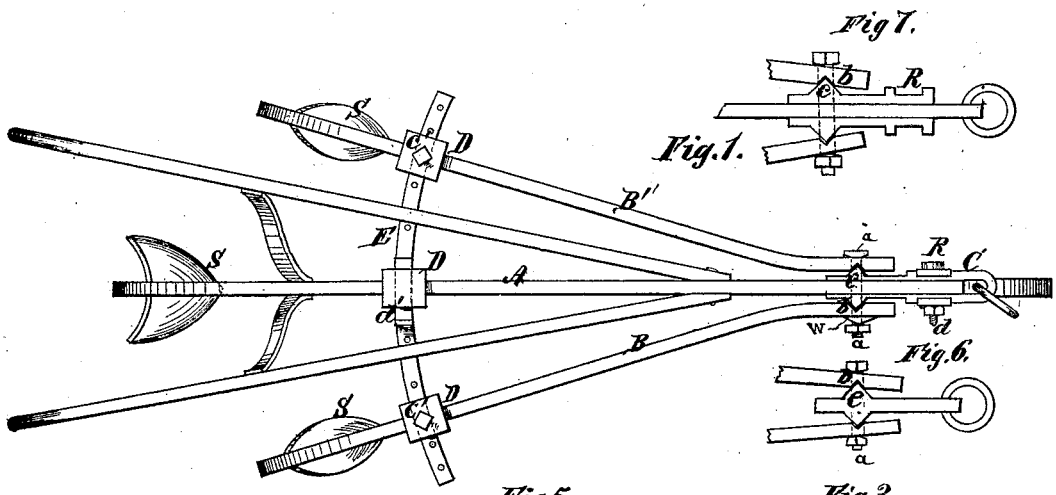

Fig. 1.

Fig. 7.

Fig. 6.

Fig. 5.

Fig. 3.

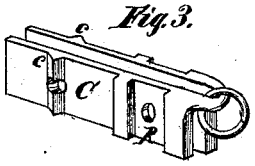

Fig. 2.

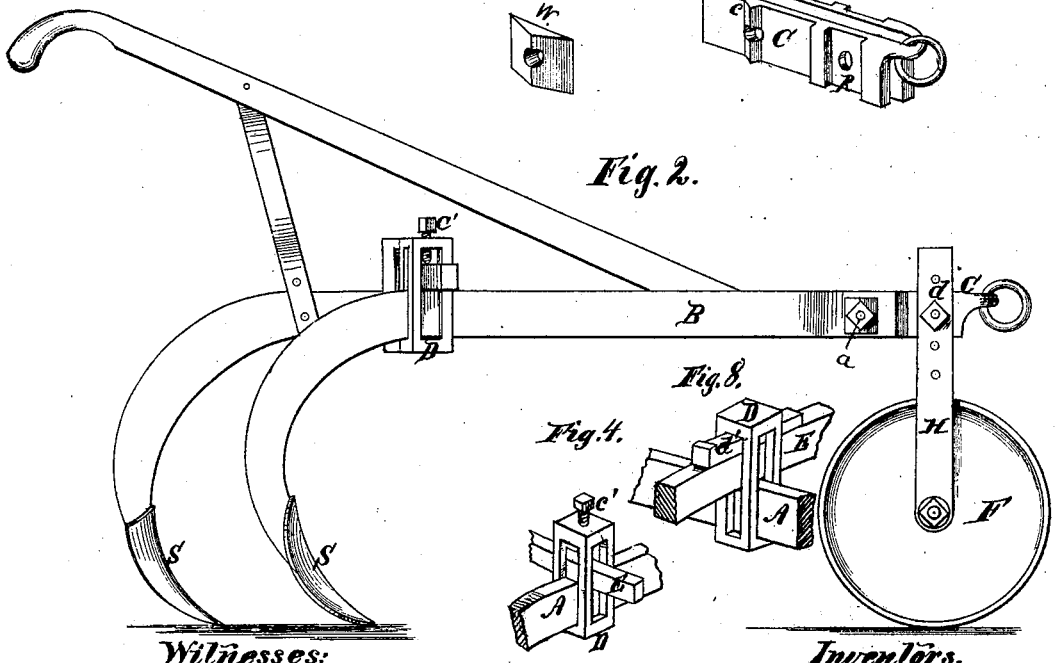

Fig. 8.

Fig. 4.

Witnesses:

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By their Attorney,

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UNITED STATES PATENT OFFICE.

GEORGE W. PARSONS AND WILLIAM S. FINNEY, OF HARRISBURG, PA.

IMPROVEMENT IN CULTIVATORS AND SHOVEL-PLOWS.

Specification forming part of Letters Patent No. **114,964**, dated May 16, 1871.

To all whom it may concern:

Be it it known that we, GEORGE W. PARSONS and W. S. FINNEY, of Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented a new and Improved Cultivator and Shovel-Plow, which is fully described in the following specification and represented by the accompanying drawings, in the different figures of which like letters represent like parts—

Figure 1 being a top view; Fig. 2, a side elevation; Fig. 3, a detached view of clevis; Fig. 4, a detached view of box-clip, and Fig. 5 detached view of triangular washer. Figs. 6 and 7 represent the devices modified so as to dispense with the clevis.

Our invention relates to an adjustable cultivator and shovel-plow combined; and it consists, first, of the device for attaching and holding the front ends of the side beams, by transverse angular ribs on the sides of the clevis (or plates or the middle beam) fitting in and forming pivotal bearings in grooves across the sides of the beams, near the front ends, so that by a single bolt through the beams they are securely held in place, and at the same time are readily adjustable laterally to change the width of the cultivator; second, of a clevis provided with angular ribs and square-shouldered recesses, in combination with the beams and wheel-standards.

A is a center beam, and B B′ side beams, of iron, curved at the back ends to receive the shovels S, and made pointed under the shovels, to be used by removing the shovels for dragging out manure from cattle-stables.

C is a clevis provided with angular ribs *c c* and recesses R R, with square shoulders.

On the inside of beams B B′ are transverse angular grooves *b b*, made to fit over the angular ribs on the clevis, as shown in Fig. 1. The front ends of the side beams are held in place by the single bolt *d*, the head of which is beveled on the inside; and between the nut which holds the bolt at the other end and the side beam a triangular washer, W, is inserted, to allow the side beams to be readily moved laterally to regulate the width of the cultivator.

D D D are box-clips of malleable cast-iron, with holes in the top for set-bolts *c′*, and are made so as to slide over the beams and receive and hold the expander and support-bar E, as seen in Figs. 1, 2, and 4.

Instead of the set-bolts *c′*, wedges *d′* may be used for holding in place the support bar and beams. When bolts are used, the common sale bolts will answer by placing the nut on the under side of the top of the clip, the ends of the bolts impinging on the top of the bar in the conical depressions *e e*. The clips are made long enough to allow the support-bar to be placed on its edge on the beams, which serve to increase the strength. Wheel F is attached at the lower ends of standards H, which are made with straight square edges, to fit closely in the recesses R R, and are securely held in place by a single bolt and by the square shoulders of the recesses.

I contemplate that the clevis may be dispensed with, and that the angular ribs *c c* and the recesses R R may be formed upon the middle beam or upon side plates, as shown in the figures; or, in cases where the wheel is not to be used, the triangular washer W may be used, instead of the ribbed plates or clevis, by inserting it between the middle and side beams.

A double-shovel plow or two-beam plow or cultivator may be made by substituting a short beam, A′, instead of beam A, as represented in figure. In all such cases the draft-ring is inserted through a hole in the end of beam A, as seen in Figs. 6 and 7. The side beams, B B′, are drawn tightly by bolt *a* against their pivotal bearing *c c* in grooves *b b*, which does not interfere with the required lateral movement of the beams to regulate the width of the cultivator, which is readily accomplished by means of the clips and expander, as described.

When it is desirable to use the middle beam and shovel alone as a single-shovel plow, the side beams are readily detached by removing bolt *a*, loosening the clips, and removing the expander E.

We claim and desire to secure by Letters Patent—

1. The device for securing the front ends of the side beams, consisting of angular ribs *c c*, in combination with grooves *b b* in beams B B′,

bolt *a*, with a beveled head, and triangular washer W, substantially as described.

2. The clevis C, provided with the angular ribs *c c* and square-shouldered recesses R R, in combination with beams A B B′ and standards H, substantially as described.

As evidence that we claim the foregoing as our invention we have hereunto set our hands in the presence of two witnesses.

GEO. W. PARSONS.
W. S. FINNEY.

Witnesses:
C. L. HERMAN,
H. F. CASWELL.