

UNITED STATES PATENT OFFICE

CHARLES W. ONEAL, OF SHOP SPRING, TENNESSEE.

IMPROVEMENT IN PLOW-COUPPLINGS FOR DOUBLE SHOVELS.

Specification forming part of Letters Patent No. 187,665, dated February 20, 1877; application filed October 14, 1876.

To all whom it may concern:

Be it known that I, CHARLES W. ONEAL, of Shop Spring, in the county of Wilson and State of Tennessee, have invented a new and valuable Improvement in Plow-Couplings for Double Shovels; 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 annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of this invention. Fig. 2 is a side view of the same.

This invention has relation to cultivating-plows; and it consists in the construction and novel arrangement, in combination, of the straight and laterally bent beams, the clevis-bolt pivoting the same together at their ends, and the links connecting the beams and handles at different levels, so as to keep the two branches parallel, as hereinafter fully shown and described.

In the accompanying drawings, the letter A designates the bent beam of the plow, and B the straight beam. As usually arranged the former is on the right, and the latter on the left. The straight beam B extends to the rear for a certain distance, and then is curved downward to form the crook or standard C, to which the shovel D is bolted. The beam is preferably made of bar-iron of less thickness than breadth in the vertical direction.

The beam A is not designed to extend so far to the rear as its fellow. It is also curved downward at its rear end to form a standard, C, for the attachment of a shovel, D. The horizontal portion of this beam is laterally bent, first outward from the clevis end, which is straight, and then inward at the point *a*, whence the beam extends to the rear in a direct line, as shown at *b*. Hence the clevis end *c* and the rear end *b* of this beam are parallel, and in the direction of the draft, and these parts are connected by the intermediate laterally oblique portion *d*. The clevis ends of the two beams are laterally joined and connected by the transverse bolt *e* of the clevis E, so that the beams have free vertical motion with refer-

ence to each other, and some lateral play. In rear of the bend *a* of the beam A a perforation, *g*, is made through the latter for the passage of the eyebolt *h*, whereby the handle F of this side is secured to said beam. G indicates a vertical brace, which serves to keep the handle in the proper angular position with relation to the beam.

In the straight beam B, opposite the perforation *g*, a similar perforation, *g'*, is formed for the passage of an eyebolt, *h'*, whereby the handle F of this side is secured to the beam. A vertical brace, G, also serves to keep this handle in the proper angular position. K represents a link, which is provided with eyes *k* at each end, to engage with the eyebolts *h*, and serves to connect the beams in a flexible manner, and at the same time to keep them a certain distance apart, so that the straight beam will be held parallel with the straight portions *b* and *c* of the bent beam.

Near the grasping portions, at the upper ends of the handles F, eyebolts *h'* are passed through suitable perforations in said handles, and connected by means of a link-bar, K', having looped ends to connect with the eyes of said bolts. The link K' is at a higher level than the link K and the clevis-pin *e*, and serves therefore, in connection therewith, to keep the shovel-standards and the handles parallel with each other, whether they be held upright or in an inclined position.

As the single-tree is centrally swung with relation to the straight beam, the shovel of the laterally-bent beam will be thrown well to the side. Therefore the horse will tread in the center of the row, between the hills, in cultivating, and the corn will not be injured. The flexible nature of the plow enables the operator to incline the shovels readily from side to side, as may be necessary in running near the plants.

The parts of this plow are readily disconnected when any portion needs repair. All that is necessary is to remove the clevis-pin and the eyebolts.

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

The plow having the long straight rudder-beam B in line with the draft, and the short

laterally-bent beam A, having its clevis and rear ends parallel with the beam B, the handles F, connected to the parallel portions of said beams, the links K K', and the clevis-pin e, whereby the clevis ends of the straight and bent beams are pivoted together, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

C. W. ONEAL.

Witnesses:

W. R. DAVIES,
A. M. MAJOR.