2 Sheets—Sheet 1.

W. CLARK.

DOUBLE PLOWS.

No. 184,590. Patented Nov. 21, 1876.

Fig. 1.

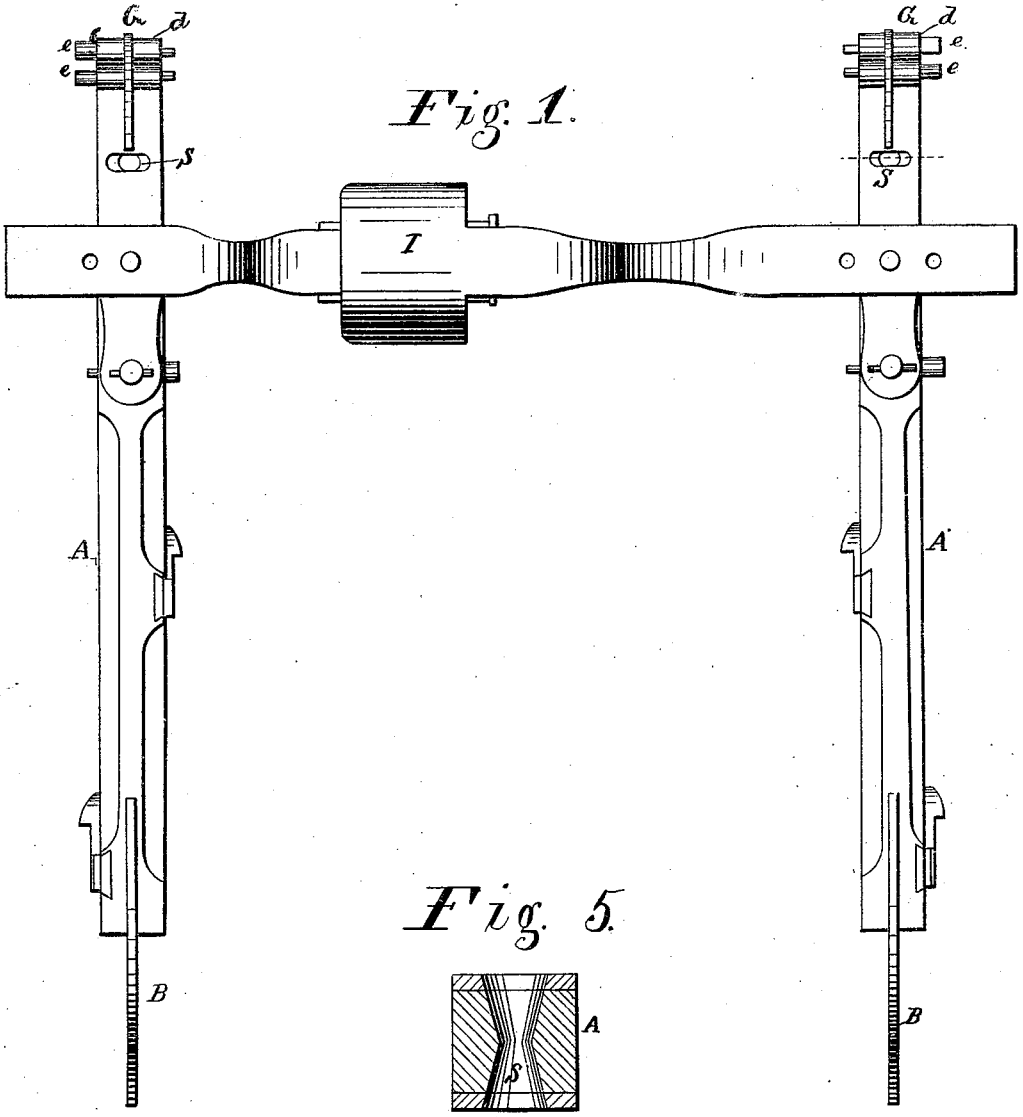

Fig. 5.

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Fig. 2.

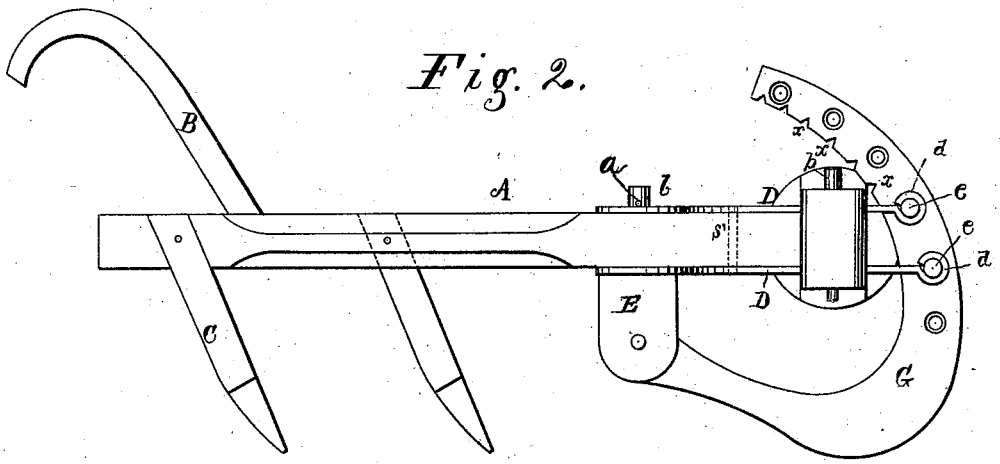


Fig 3

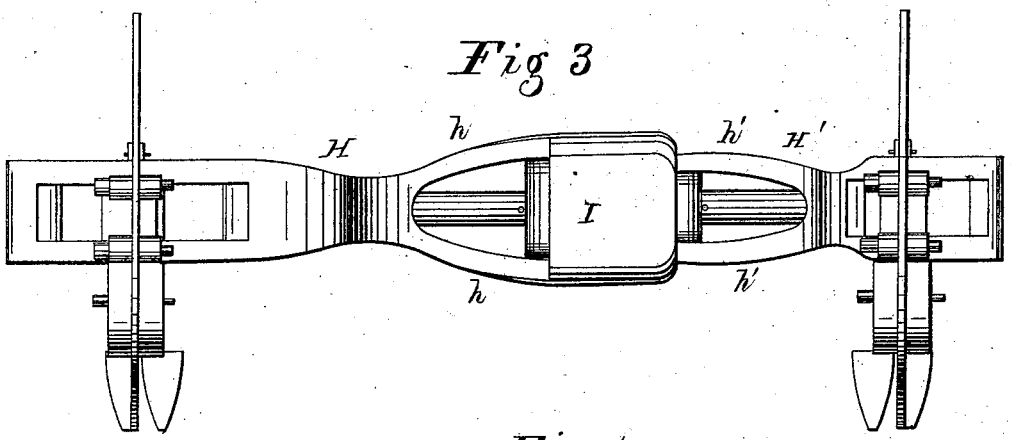
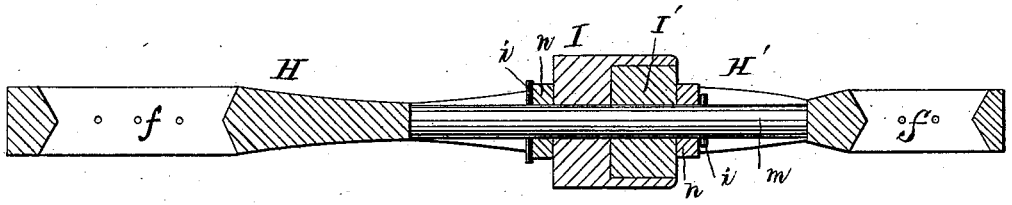


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE

WILLIAM CLARK, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN DOUBLE PLOWS.

Specification forming part of Letters Patent No. **184,590**, dated November 21, 1876; application filed May 18, 1876.

To all whom it may concern:

Be it known that I, WILLIAM CLARK, of the city of St. Louis, in the county of St. Louis, and in the State of Missouri, have invented certain new and useful Improvements in a Double Plow; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of the devices for coupling two plows or cultivators, and in the clevis for the same, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view of a double plow or cultivator embodying my invention. Fig. 2 is a side elevation, and Fig. 3 a front view, of the same. Fig. 4 is a horizontal section of the coupling. Fig. 5 is a section of the front end of the plow-beam.

A A represent two ordinary plow-beams, provided with handles B and standards C in any of the known and usual ways. At the front end of each plow-beam B are top and bottom plates D D, which are held to the beam at their rear ends by a pin or shank, *b*, passing upward from a head or block, E, through them, and fastened by a key, *a*, on top. The head or block E is slotted at its lower end, and has pivoted in it the rear end of a curved metal bar, G. This bar extends forward for a suitable distance, and is then curved upward and backward, said curved portion being perforated, and passing up through the slotted front ends of the plates D D. The extreme ends of said plates are bent to form eyes *d d*, through which pins *e e* pass, said pins also passing through two of the holes in the curved bar G.

The bars G G act as runners or shoes, and in connection with the plates D they form clevises, to which the team is to be hitched. The rear edges of the curved portions of said bars are formed with notches *x x* for that purpose. By changing the pins *e* in different holes on the bars they are adjusted up or down, as required, to regulate the depth at which the plows are to work, or run clear from the ground, if desired.

The two plow-beams are connected by means of a coupling formed of two bars, H and H′. Both of these bars are, at their outer ends formed with horizontal slots *f f*, through which the plow-beams are passed, the ends of the slots being beveled or inclined from the center toward both front and rear, as shown in Fig. 4. The inner end of the bar H forms two arms, *h h*, with a cup, I, at their extreme ends all made in one piece. The inner end of the bar H′ forms similar arms *h′ h′*, with a head or plunger, I′, on their outer ends, all also made in one piece. The head or plunger I′ is inserted in the cup I, and a rod, *m*, is passed through them. On each end of this rod, between the respective arms of the coupling-bars, is placed a washer, *n*, and these washers are held close up to the cup and head, respectively, by pins or keys *i i* passed through the rod.

The bars H H′, constructed and joined together, as described, form a universal joint or coupling between the two plow-beams, and they may be either straight or arched, as desired. The center joint I I′ gives the plows their vertical or perpendicular motion. The plow-beams are held in the coupling-bars by means of pins *p p*, which are passed through either one of a series of holes in the coupling ends, and through either one of two holes, *s* and *s′*, in the plow-beam. The hole *s′* is straight, and when the pin is passed through the same the plows have thereby only a lateral or side motion; but when passed through the hole *s* the plows also, in addition to the former motions, have an oblique, slanting, or rocking motion, which is caused by said hole being made smaller in the center and wider at both top and bottom, as shown in Fig. 5.

With my invention one person is enabled to manage two plows or cultivators at once, either to straddle a row or go between two rows, as may be desired.

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

1. The combination, with a plow-beam, A, of the top and bottom plates D D, slotted at their front ends, and formed with the eyes *d d*, the pivoted curved bar G perforated and notched as described, and the pins *e e*, substantially as and for the purposes herein set forth.

2. The combination of the slotted coupling-bar H with arms *h h* and cup I, the slotted coupling-bar H′ with arms *h′ h′* and head I′, the rod *m*, washers *n n*, and pins *i i*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of April, 1876.

WILLIAM CLARK.

Witnesses:
DAVID H. NATION,
E. C. LITTLE.