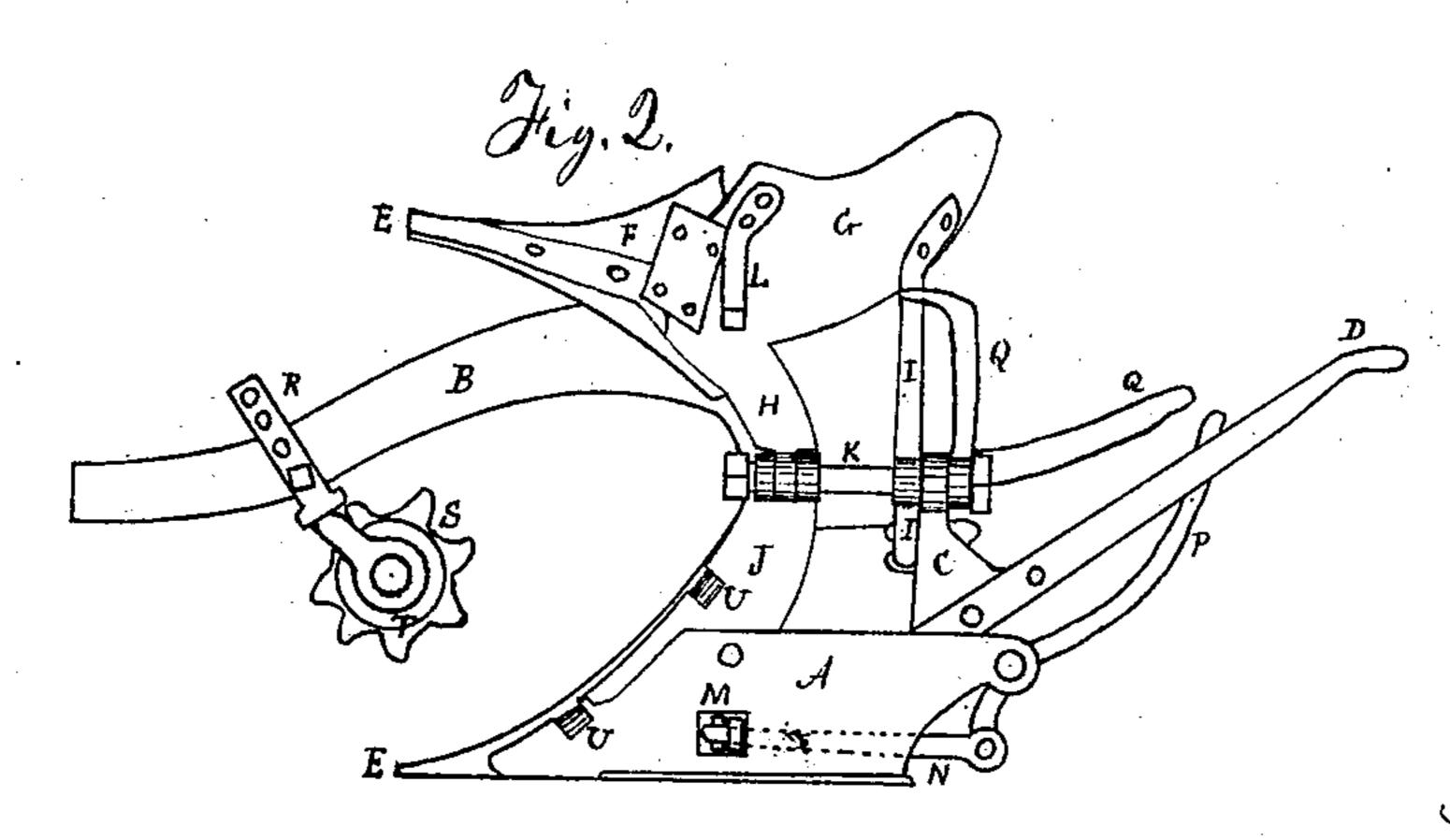
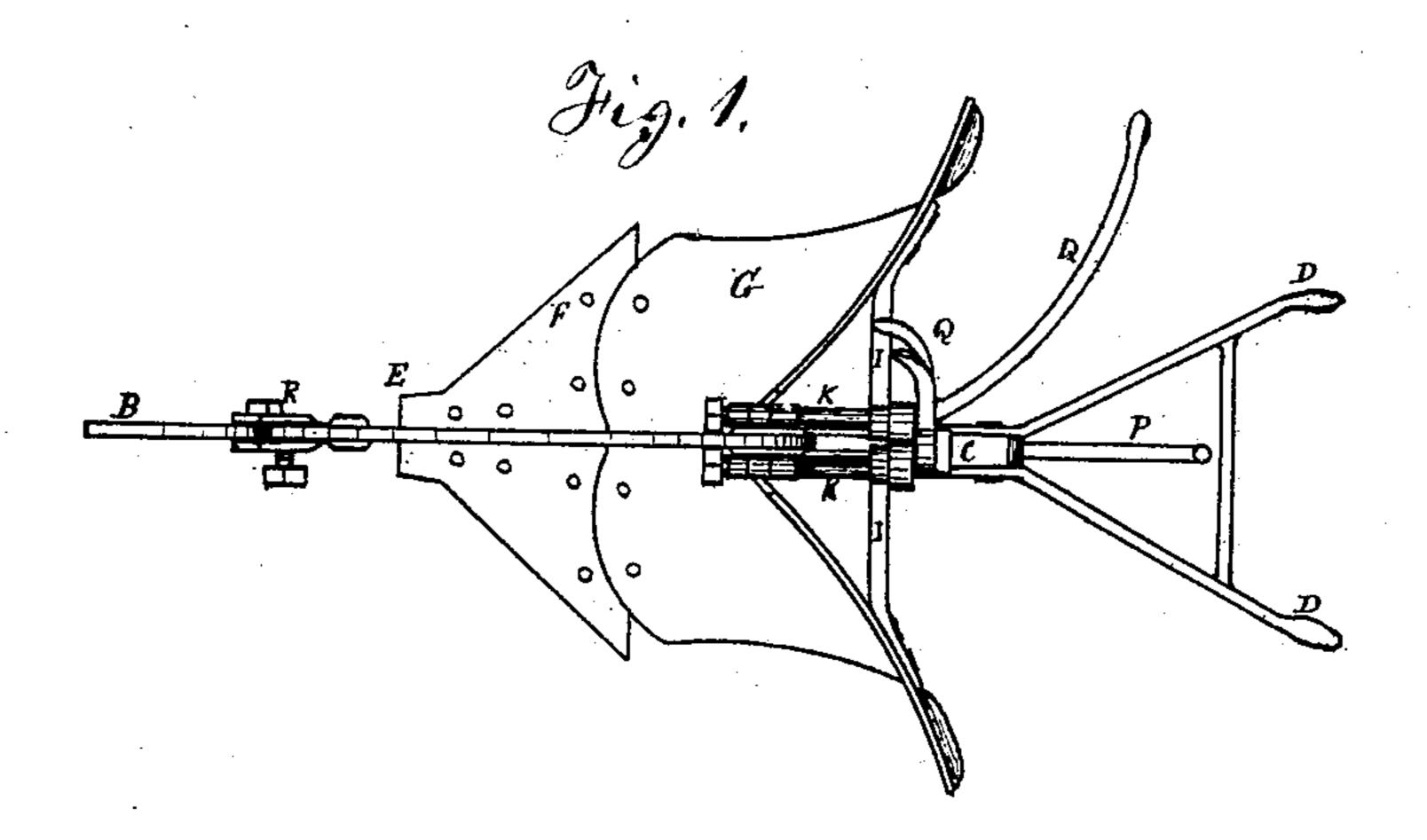
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Anited States Patent Office.

WILLIAM HARLOW TYLER, OF CONNEAUTVILLE, PENNSYLVANIA.

Letters Patent No. 90,895, dated June 1, 1869.

IMPROVEMENT IN PLOWS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM HARLOW TYLER, of Conneautville, Crawford county, in the State of Pennsylvania, have invented certain new and useful Improvements in Right and Left-Hand, or Double Side-Hill Plows; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

The nature or essence of my invention consists in arranging two separate and independent plow-points, shares, and mould-boards, to vibrate on a horizontal axis or axes, arranged over the landside, in such a way and manner that they can be used either as a double plow, turning furrows in opposite directions at the same time, or either side turned up, so as to plow a single right or left-hand furrow, as desired; and in arranging a sliding bolt, in or over the landside, in combination with the braces which connect the vibrating points, shares, and mould-boards to the landside, so as to lock them in position for use in plowing; and in arranging a pronged lever to vibrate and lock the mould-boards, points, and shares, and fix them in position to plow a single furrow; and in making the revolving cutter jagged, or toothed.

Figure 1 is a plan, or top view of a plow, with my improvements arranged to turn a furrow each way at

the same time.

Figure 2 is an elevation of one side, showing the plow arranged to turn a single right-hand furrow.

In these drawings—

A is the landside; B, the beam; C, the rear standards; and D D, the handles; which may all be constructed and fastened together as shown in the drawing, or in such other manner as will answer the purpose.

The beam, landside, and standard may be made by casting them all in one piece, or in separate pieces. If made of wrought-iron, they may be in separate pieces, and riveted together, as shown in the drawing.

The point E and share F may be made separate, or in one piece, and fastened to the mould-board G in

some convenient manner.

This mould-board is provided with two arms H and I, by which it is hinged to the stand J and standard C, so as to vibrate freely, and may be turned down, as shown in fig. 1, or up, as shown in fig. 2 of the drawing, the rod K passing through the arms and stands, and forming the pivot on which the mould-board vibrates, and by removing either of the rods K, one of the mould-boards, with its share and point, may be taken off, so as to make a single plow.

The mould-board G has a third arm, or brace, L, fastened to it, and fitted to enter the hole M in the landside, and receive the end of the sliding bolt N, which locks the mould-board in position for plowing.

The bolt N is fitted in the landside, as shown by dotted lines, and extends out at the rear, and is worked by the lever P, pivoted in the upper corner of the landside for that purpose, and its upper end may be fastened back by a hook, or link on the bar, between the handles.

To turn up either of the mould-boards, I arrange the pronged lever Q, to vibrate on a bolt in the standard C, with a fork on each prong, to pass on to the arms I of the mould-board, and the prongs and forks are fixed just far enough apart, so that when one mould-board is up, and the other down, the forks will both pass on to the arms I I, and hold up the mould-board that is raised, while the plow is used to turn a single furrow.

I fit a clevis, R, to the beam, with a swing, or caster-frame in its lower end, to carry the rotating jagged, or toothed coulter, or cutter S, which is fitted to turn freely in the caster-frame, and is provided with a flange, T, on each side, so that it may be set or adjusted to govern the depth of the furrow, if desired.

If necessary or desirable, a sub, or false coulter may be applied to the standard J, by making two notches U U in the front edge of the standard, for the lugs V V of the sub, or false coulter W, fig. 3, which may be applied or removed, when desired.

I claim—

1. In combination with a beam and landside, the separate and independent plow-points, shares, and mould-boards, arranged to vibrate on horizontal axis or axes, substantially as described.

2. The sliding bolt, arranged in or over the landside, in combination with the braces which connect the vibrating points, shares, and mould-boards to the

landside, substantially as described.

3. In combination with the vibrating mould-boards and their appurtenances, the pronged lever Q, for vibrating and locking the mould-boards, substantially as described.

4. Also, making the revolving cutter, or coulter jagged or toothed, substantially as described.

5. Also, the removable sub-coulter W, described. WILLIAM HARLOW TYLER.

Witnesses:

C. T. HOLMAN, H. J. LANE.