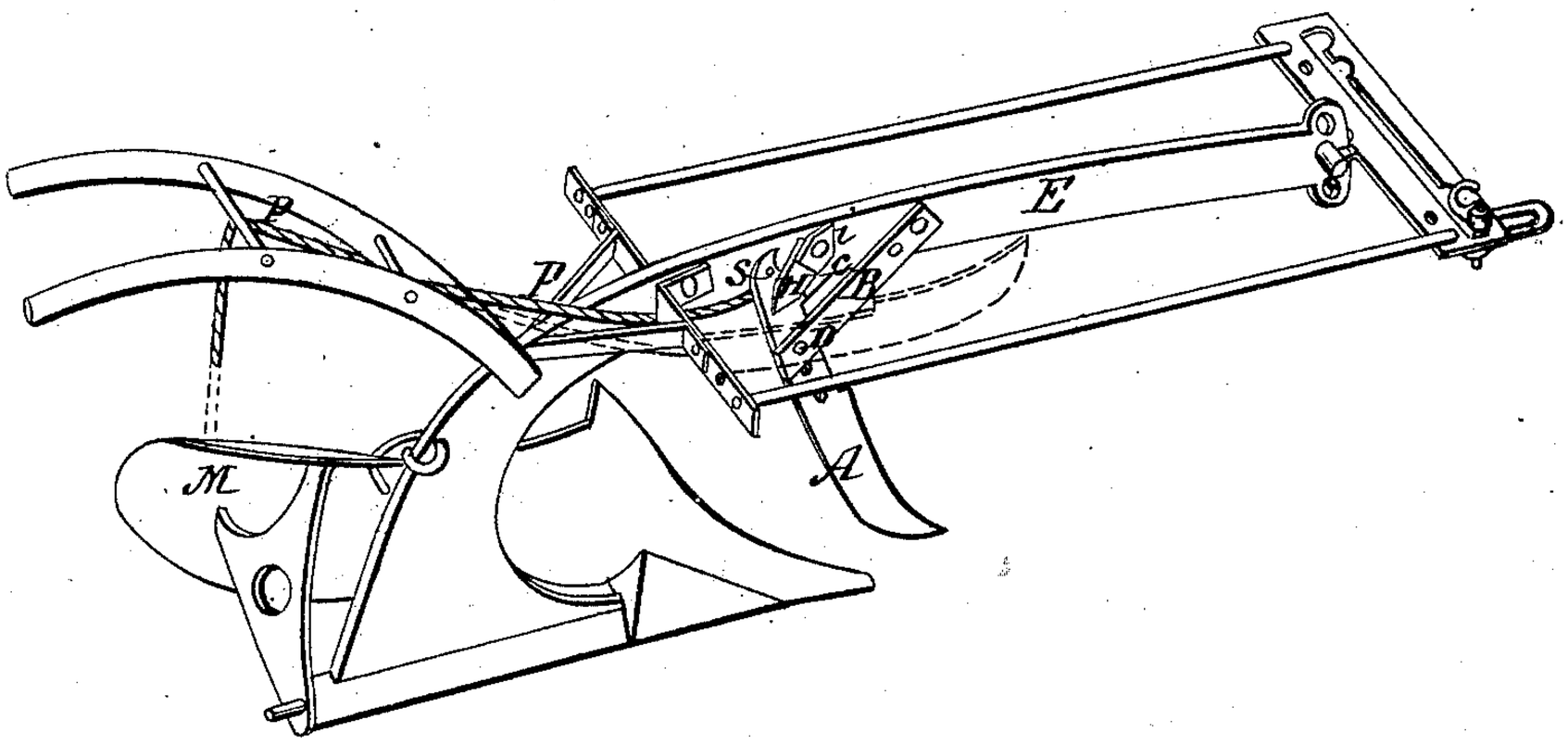
L. D. BURCH.

Side-Hill Plow.

No. { 650, / 31,654. }

Patented Mar 12, 1861.



Witnesses.

Edmund Shaw.

Charles Hart.

Inventor.

L. D. Burch.

UNITED STATES PATENT OFFICE.

LYMAN D. BURCH, OF SHERBURNE, NEW YORK.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **31,654**, dated March 12, 1861.

To all whom it may concern:

Be it known that I, LYMAN D. BURCH, of Sherburne, in the county of Chenango and State of New York, have invented a new and useful Improvement in Plows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had the annexed drawing, and to the letters of reference marked thereon, making a part of this specification.

Figure 1 is a perspective view of my improved plow.

To enable others to fully understand and construct my invention, I will proceed to describe it.

The nature of my said invention consists in combining a colter, A, with the beam of a plow by means of bridle-pieces B and C, and the parts in connection with them or their equivalents in such a manner that the colter may be changed from one side of the plow-beam to the other or opposite side by moving it from an upright into a horizontal position and allowing said colter to slide on rod D.

The end and design of this invention is to bring the colter into a proper position for opening the ground in advance of the share, and in such relative relation to the share of a reversible plow as circumstances may require. My improved mode of hanging the colter is equally and alike applicable to the ordinary or common plow.

The means which I have employed to accomplished the results above set forth consist of two bridle-pieces, B and C. One of said pieces is not shown in the drawing. It is, however, attached to the opposite side of beam E, and is constructed like the one shown.

My said colter A is in form like the ordinary colters. It has, however, one or more perforations, as seen at S, for the purpose of adjusting it to various heights. Its weight may be much less than the ordinary colter, from the fact of its being supported at an intermediate point, and also at its upper end by means of guide H and bolt *i*. The perforations above referred to are above the center, the object of which is to keep the lower end in position to enter the ground, and at the same time allow it to turn freely on pivot D, (which said pivot is its axis of oscillation.) Should a stone or other obstruction enter between the point of the plow and the end of said colter, it will at once rise and allow it to pass out, and then resume its former position.

When the landside M is shifted, colter A may also be shifted to the opposite side of the beam from which the mold-board is located. It will thus be seen that my adjustable colter may be brought into action in the same relative position with respect to the point of the plow on either side of the beam.

To enable the plowman to adjust the colter in a lateral direction—or, in other words, to shift it from one side of the beam to the other—I connect a cord or other equivalent device to the upper end of said colter, as seen at N, and extend said cord to a convenient point to be reached by the plowman, thereby enabling him to shift the colter without taking hold of it with his hand.

Greater advantages are derived by my adjustable and controllable colter, not only in connection with a reversible plow, but also when used with the ordinary braking-plow, as it will be readily seen that when any obstruction enters between the point of the plow and the end of the colter it will at once pass out, whereas if said colter were rigid the plow would be instantly thrown out of the ground. Important advantages are derived by the side adjustment and the means employed to accomplish said adjustment, the holder of the plow being in position to change the colter from side to side without letting go of the handles of the plow. This arrangement is clearly shown in dotted lines, as seen at P P. I do not claim, broadly, a colter capable of side adjustment.

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

The perforated colter A, nearly balanced on its axis of oscillation, braced and supported at its upper end, so constructed and arranged as that it may be adjusted vertically and laterally by an attendant, and at the same time oscillate sufficiently to allow stone or other obstructions to pass freely between the point of the plow and the lower extremity of the colter, substantially in the manner and for the purposes set forth.

The above specification of my improvement in plows signed and witnessed this 10th day of May, 1860.

LYMAN D. BURCH.

Witnesses:

A. W. MORSE,

S. E. DAVIS.