(No Model.)

C. B. STEANE.

PLOW.

No. 301,297. Patented July 1, 1884.

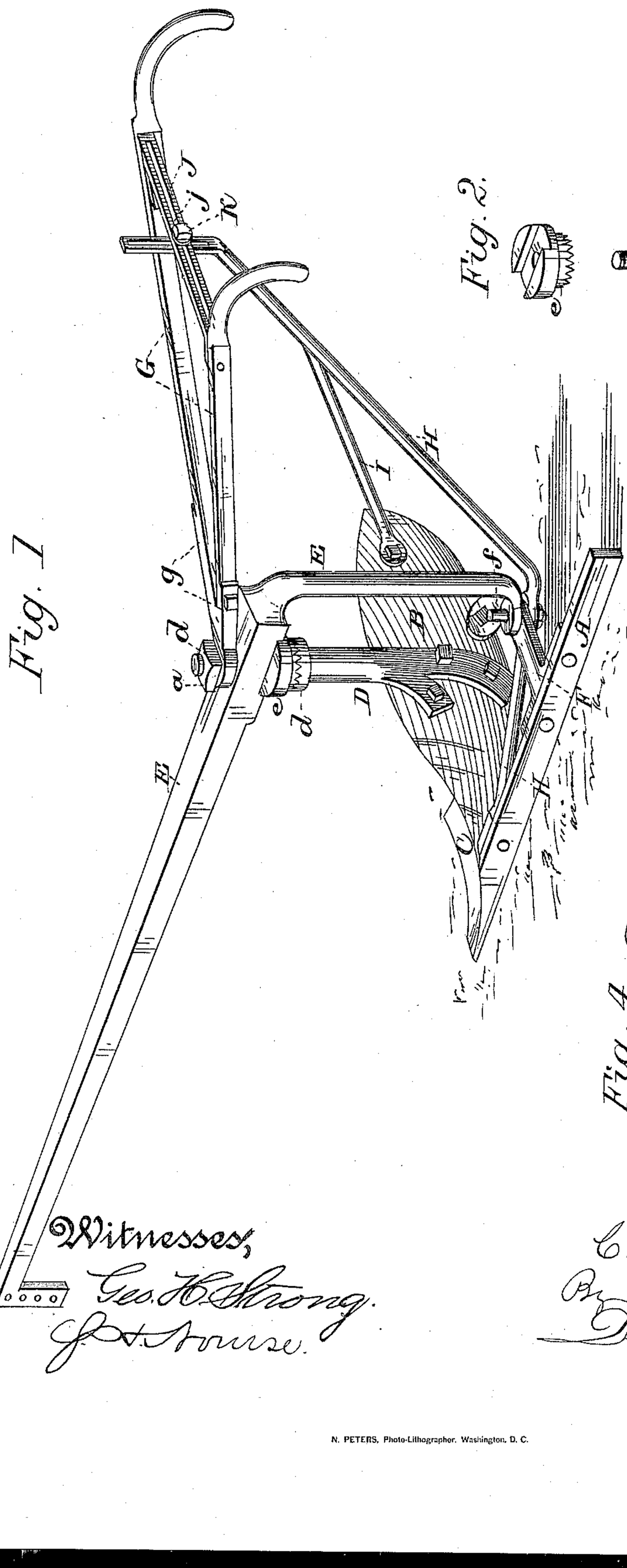

Fig. 1.

Fig. 2.

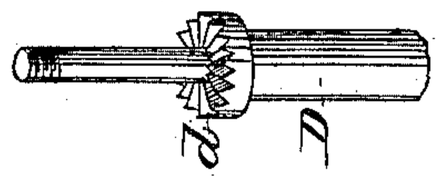

Fig. 3.

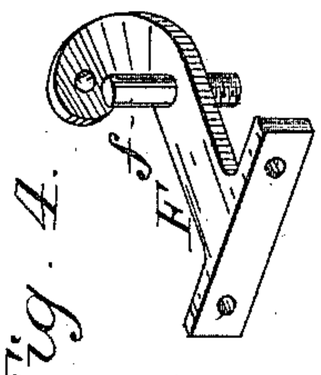

Fig. 4.

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UNITED STATES PATENT OFFICE.

CHARLES B. STEANE, OF PLEASANTON, CALIFORNIA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 301,297, dated July 1, 1884.

Application filed April 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. STEANE, of Pleasanton, county of Alameda, and State of California, have invented an Improvement in Plows; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the class of plows, and especially to that class adapted for use in vineyards and other places where rows are planted, wherein it is necessary to get near the plants or vines without injuring them.

My invention consists in a peculiar pivoted beam adapted to be turned in a horizontal plane to an angle with the plow-bottom and line of travel, in peculiarly-adjustable handles and in the means for bracing and supporting them, and in the general connection and relation of the standard, beam, and landside, all of which, with the object to be gained, I will hereinafter fully describe by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of my plow. Fig. 2 is a view of the notched flange *e*. Fig. 3 is a view of a portion of the standard D. Fig. 4 is a view of the arm F.

A is the landside, B the mold-board, and C its point or share. D is the standard. The lower end of the standard is bolted to the back of the mold-board at about its vertical central line. Near its top is a notched flange or disk, *d*. E is the beam. Near its rear end it is fitted over the top of the standard, and is adapted to turn or pivot thereon in a horizontal plane. Under it is a notched flange or disk, *e*, into which it is fitted by means of a short tongue on the beam and a corresponding recess or groove in the flange. The toothed flange *e* rests upon and engages with the toothed flange *d*. The rear end of the beam is bent downwardly and forwardly at its bottom, and fits over a vertical pin, *f*, on an arm, F, bolted to the landside and mold-board. The pin *f* is in the same vertical plane with the top of the standard, so that the two pivot-points of the beam being in the same plane, the beam may turn horizontally to any inclination with the plow-bottom and line of travel.

G are the handles. To the forward end of these is bolted a forked iron, *g*, in which is made a socket, adapting it to fit over and pivot on the top of the standard. The top of the standard is threaded, and receives a nut, *a*, which, when screwed down, effectively secures the beam and handles, and when loosened allows them to be turned on their pivots. When screwed down, the notched disks *d e* engage and hold the beam firmly. When loosened, they turn on each other readily. The front end of the forked piece *g* is rounded top and bottom, and fits between the beam and nut, whereby a rocking bearing is formed, in order that the handles may have a vertical adjustment, as I shall presently explain.

H is a rod or bar, the lower end of which passes under the arm F, receiving the pin or bolt *f*, and thence extends forward and sidewise, and is bolted to the inner surface of the landside. Its upper end is bent to a vertical position and is slotted, as shown.

I is a branch bar or rod extending between the rear top of the mold-board and the bar H.

J is a cross-bar between the handles, and provided with a longitudinal slot, *j*. A bolt, K, passes through this slot and through the slotted end of the bar H.

Having described the construction of my plow, I shall now explain the object in view. When the plow has to pass near the vines, the line of travel of the horse and driver is so close as to injure them. To avoid this I loosen nut *a* and swing the beam horizontally on its pivots to an angle with the plow-bottom, away from the vines, and I swing the handles in a similar direction, the bolt K being also loosened. Then the line of travel of the horse and man is sufficiently removed to prevent injury to the vines, while the plow-bottom may travel as close to them as desirable. When I desire to raise or lower the handles, I loosen nut *a* and bolt K and move the handles vertically, the rounded bearing on the front of the handles and the slotted end of bar H permitting the movement. By tightening up bolt K and nut *a*, the handles are set where needed. The pivoted front end of the handles and their slotted cross-bar permit the side adjustment of the handles.

My object in bending down and pivoting the rear lower end of the beam is to strengthen and steady the draft by applying it to both top and bottom of the plow, and the advan-

tage of the bar H is that it braces the handles by connecting them firmly with the landside—a result which is improved by the branch bar I to the mold-board.

It will be observed that the standard is not in a vertical plane with the landside, and consequently the beam is more in the center of the plow. By these means I gain a central draft; but the principal object of this arrangement is as follows: When plowing near the vine to throw the earth away from it, some provision must be made to avoid injury to the shoot which is left on the stem of the vine, and furnishes the next year's growth. This shoot is high enough to allow the landside to pass under it; but when the standard is flush with the landside it is obvious that both it and the beam would strike the shoot and break it; but by moving the standard over out of line with the landside both standard and beam will pass by the shoot and the landside will pass under it. The brace-bar H is also placed to one side, and will avoid the shoot.

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

1. In a plow, a beam pivoted on the top of the standard, and having a downwardly-turned rear end pivoted to the plow below, whereby the beam may be turned in a horizontal plane to an angle with the plow-bottom and line of travel, substantially as described.

2. In a plow, landside A, having arm F, with pin *f*, and the standard D, in combination with the beam E, pivoted on the top of the standard, and having a downturned rear end pivoted on pin *f*, substantially as described.

3. In a plow, the combination of the standard D, the handles G, pivoted on its top, and having the slotted cross-bar J, and bolt K, and the brace and support rod or bar H, bolted to the plow below and receiving the bolt K above, substantially as described.

4. In a plow, the combination of the standard D, the handles G, pivoted on its top by their forward end, and adapted to have a horizontal and vertical play on their pivot, as described, the slotted cross-bar J, having bolt K, and the brace and support rod or bar H, bolted to the plow below, and having a vertically-slotted upper end adapted to receive the bolt K, substantially as described.

5. In a plow, the landside A, having arm F, and the standard D, in combination with the handles G, secured to the standard, and the support and brace-bar H, bolted below to the arm F and landside and above to the cross-bar of the handles, substantially as described.

6. In a plow, the landside A, having arm F, the mold-board B, and the standard D, in combination with the handles G, secured to the standard, the support and brace-bar H, bolted to the landside and arm F at its lower end and to the cross-bar of the handles at its upper end, and the branch bar I, extending from the bar H to the mold-board, substantially as described.

7. The combination, in a plow, of the standard D; the beam E on its top, and nut *a*, and support rod H, bolted to the plow below, and having the vertically-slotted upper end, the handles G, having a forked iron, *g*, at their forward end, said iron being provided with an eye fitting over the top of the standard, and having rounded top and bottom surfaces bearing against the nut *a* and beam, as described, and the horizontally-slotted cross-bar J between the handles, having bolt K, adapted to pass through the vertically-slotted end of bar H, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

CHARLES B. STEANE.

Witnesses:
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