G. J. Dahl.

Gang-Plow.

No. 75871 Patented Mar. 24, 1868

Fig. 1.

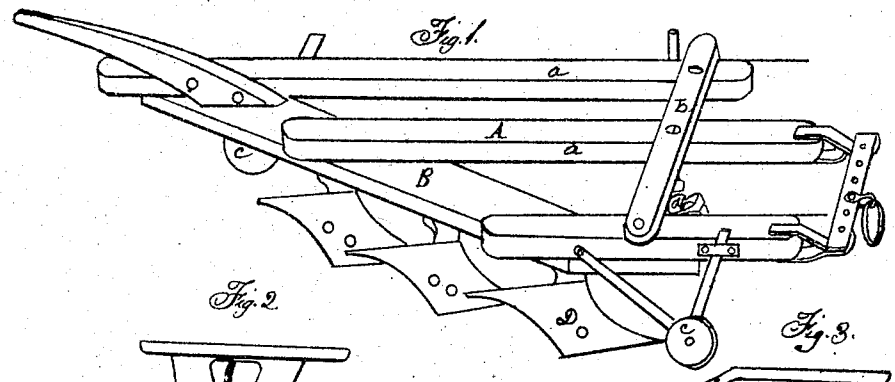


Fig. 2.

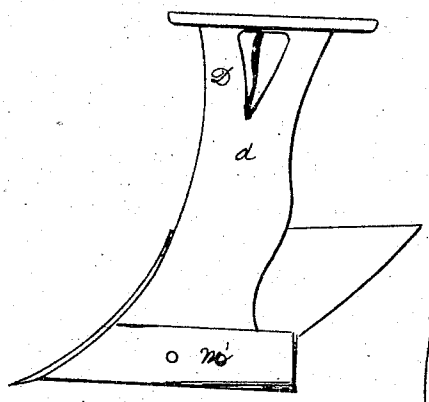


Fig. 3.

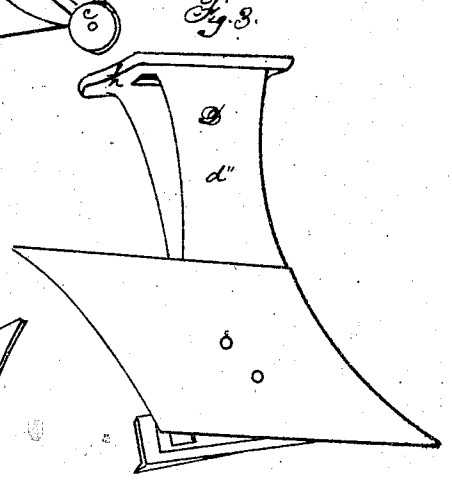


Fig. 6.

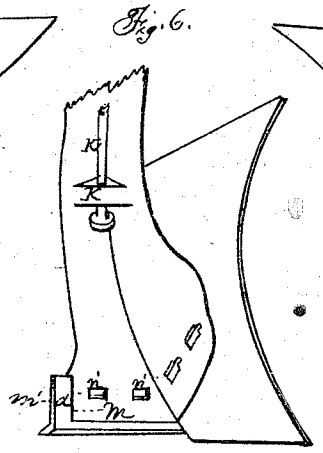


Fig. 4.

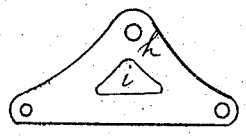
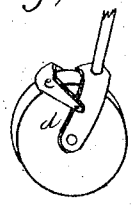


Fig. 5.



Fig. 7.



Witnesses
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United States Patent Office.

GEORGE J. DAHL, OF STOCKTON, CALIFORNIA.

Letters Patent No. 75,871, *dated March* 24, 1868.

IMPROVEMENT IN GANG-PLOUGHS.

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, GEORGE J. DAHL, of Stockton, in the county of San Joaquin, and State of California, have invented an Improved Gang-Plough; 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 accompanying drawings, and letters of reference marked thereon, making a part of this specification, of which—

Figure 1 is a perspective view.

Figure 2, a side view of the land-side.

Figure 3, a side view of the mould-board; also the method of attachment of the movable land-side.

Figure 4 is a plan view of the head-piece.

Figure 5 is a view of the tenon-hooks used to attach the land-side.

Figure 6 is a rear view of the standard, showing the attachment of both land-side and mould-board; also the brace *k'* and bolt *k*.

Figure 7 is a perspective view of the caster-wheel and scraper.

This invention, which I denominate "The Samson," consists of a frame of peculiar construction, to which are attached, in any suitable manner, standards of novel shape, said standards bearing mould-boards and land-sides, the whole forming an efficient gang-plough, of great strength, as well as cheapness of construction and ease of manipulation, as will hereinafter more fully appear.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the frame, consisting of a single plank, B, of a length and thickness suited to the number of ploughs it may be desired to use, and to the angle at which it is to be drawn. The plank should be wide enough to cover and jut over the tops of the standards attached to it. *a a*, &c., represent wooden bars, of varying lengths, suitably fastened to the plank B, and extending forward, in the line of the draught, at any desired angle with said plank. *b* represents a cross-bar, connecting said bars *a* in front. The frame A is provided with two adjustable wheels, *c*, for regulating the depth at which the ploughs are to run, one placed at the right-hand front corner, and the other at the rear, while at the left-hand front corner is a caster-wheel, *d*, by means of which the frame may be turned with ease whenever desired. A scraper, *e*, is connected with the caster-wheel *d*, for the purpose of keeping it always clear of dirt.

D represents the standard used in this plough, the same having two sides *d' d''*, connected at an angle of from twenty-two to thirty degrees. This angle, I have found, permits the plough to pass with great ease through the soil, while, at the same time, but little strain is brought upon the mould-board attached to one side of the standard, only sufficient, in fact, to invert the cutting of earth which has been gently lifted by the forward part of said mould-board.

The standard is made of cast iron, and is provided with a head-piece, *h*, nearly of the shape of an isosceles triangle, the line drawn from the apex of which, perpendicular to the base, being one-half the length of said base. A bolt passes through a hole at each corner of the head-piece, fastening the same to the plank B of the frame, the longest side of said head-piece being in the direction of the line of draught, by which arrangement the strain of the draught is most firmly resisted, and great lateral strength is enabled to be given to the land-side of the standard. The head-piece is cast with an open space, *i*, at its centre, thus lightening without weakening it, and at the same time making room for the passage of a bolt, *k*, from the brace *k'*, placed between the two sides of the standard, for the purpose of strengthening it, up through the plank B, said bolt being intended to aid in the attachment of the standard to the plank, and being required only in very stiff adobe lands, where immense strength of fastening is necessary.

The mould-board side *d''* of the standard extends at the top from the front lug to the side lug of the head-piece, and from the top, by two slight curves, one running into the other, to the mould-board bed, the heel extending back sufficiently far for the requirements of the mould-board. This construction adds greatly to the strength of the standard, and furnishes a strong and sufficient support for the mould-board when such support is most required.

The land-side *d* of the standard is provided at its bottom with an offset, *m*, for the reception of an adjustable land-side, *m'*, the latter being furnished with tenon-hooks *n n*, which enter the orifice *n' n'* in the offset *m*. The adjustable land-side is then drawn back to the full extent of the orifice, and is then held in place by the mould-board, which closely fits its curved end. The land-side may be readily removed from the standard by simply detaching the mould-board.

In connection with the plough, I generally use the reversible steel mould-board, having two sharp edges; but I make no claim to any particular form of mould-board.

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

1. A plough-standard, constructed substantially as shown and described.
2. The orifices *n n* of the offset *m*, as and for the purpose set forth.
3. The tenon-hooks *n' n'* of the adjustable land-side *m'*, as and for the purpose set forth.
4. The head-piece *h* of the standard D, constructed as described, and made with the central opening *i*, as and for the purpose set forth.
5. The adjustable land-side *m'*, in combination with the standard D, arranged in the manner described.
6. The scraper *e*, in combination with the caster-wheel *d*, as and for the purpose set forth.
7. A series of ploughs, constructed and operating as set forth, in connection with a frame of the kind described.

GEORGE J. DAHL.

Witnesses:

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J. B. WEBSTER.