M. P. SPARKS.

PLOW.

No. 181,873. Patented Sept. 5, 1876.

Fig. 1

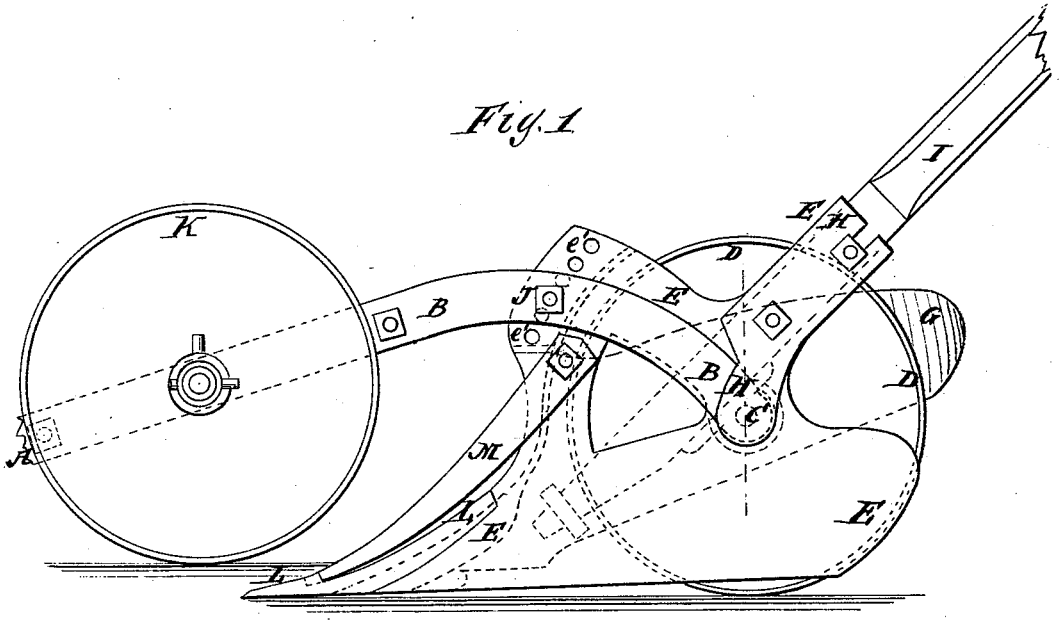


Fig. 3.

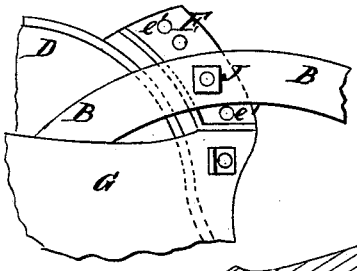
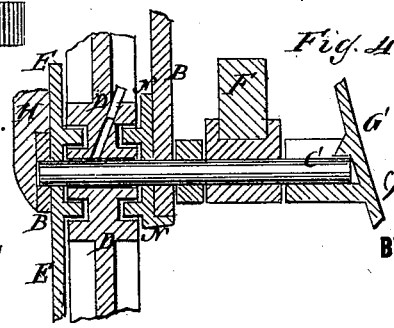


Fig. 2

Fig. 4.



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MELVIN P. SPARKS, OF SPRING LAKE, MICHIGAN.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **181,873**, dated September 5, 1876; application filed March 25, 1876.

To all whom it may concern:

Be it known that I, MELVIN P. SPARKS, of Spring Lake, county of Ottawa, and State of Michigan, have invented a new and useful Improvement in Plows, of which the following is a specification:

Figure 1 is a land-side view of my improved plow. Fig. 2 is a top view of the same. Fig. 3 is a detail view of the mold-board side of the adjusting device. Fig. 4 is a detail section taken through the line *x x*, Fig. 1.

The object of this invention is to furnish an improved plow which shall be so constructed as to greatly lessen the friction against the bottom and land side of the furrow, enable the plow to be more easily thrown out of the ground, which may be easily adjusted to work at any desired depth in the ground or to run above the ground, and which will be of much lighter draft than plows constructed in the usual way.

The invention will first be described in connection with drawing, and then pointed out in the claim.

Similar letters of reference indicate corresponding parts.

A is the plow-beam, which is made of wood, and extends back only to the cutter of the plow. To the sides of the beam A are attached wrought-iron bars B, which project in the rear of the beam A, are curved downward, and have holes formed through their ends to receive the shaft C, upon which the wheel D revolves.

The hub of the wheel D is made of a length a little less than the thickness of the beam A, so that the ends of the bars B may receive it, the plate N, and the land-side E of the plow between them.

In the ends of the hub of the wheel D are formed ring-grooves, to receive ring-flanges formed upon the plate N, placed upon the shaft C, and interposed between the wheel D and the end of the bar B. These interlocking grooves and flanges prevent sand from getting in and the oil from getting out. The lubricating-oil is introduced through a hole in the hub of the wheel D, which hole is closed with a pin.

The shaft C passes through a bearing attached to the mold-board handle F, and its end enters a socket formed upon the inner side of the mold-board G. The shaft C is kept in place, and its land-side end is covered, by the lower end of the plate H, which is bolted to the land-side E, and the side edges of which are bent inward, to rest against the outer side of the said land-side E, and thus form a socket for the end of the land-side handle I.

The upper bolt, that secures the plate H and handle I, is made long, to pass through the mold-board handle F, and thus hold the lower parts of said handles F I in their proper relative position. The upper parts of the handles F I are connected by a round, in the usual way.

By this construction the fulcrum-point, in raising the point of the plow to cause it to run out of the ground, is changed from the rear end of the land-side E to the wheel D, and is brought between the land-side E and mold-board G, so that the power of both hands may be used for this purpose.

The forward part of the land-side E projects upward between the bars B, at the rear end of the beam A, and has a series of holes, *e'*, formed through it, to receive the bolt J, which also passes through the bars B, so that, by adjusting the said bolt, the plow may be adjusted to work at any desired depth in the ground, or raised away from the ground, so that it may be supported by the wheel D and the gage-wheel K, and may be conveniently carried from place to place upon said wheels. The gage-wheel K revolves upon a journal attached to the forward part of the beam A.

L is the plow-point, which is connected with the land-side E and the mold-board G in the usual way. Upon the upper part of the point L is formed a recess, to receive the lower end of the cutter M, which cutter inclines to the rearward, and the upper end of which is bolted to the upper part of the land-side E, a little below the land-side bar B.

By this arrangement the cutter M will be firmly supported, and can be placed in such a position as to cut the sod upward, and thus require a much less expenditure of power.

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

The combination of the plow-beam A, having the curved side bars B B, with the land-side plate E, having the series of holes *e'*, and with the wheel D and wheel-shaft C, all constructed and arranged substantially as shown and described, and for the purpose specified.

MELVIN P. SPARKS.

Witnesses:
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