

S. D. SAYER.

Plow.

No. 102,162.

Patented April 19, 1870.

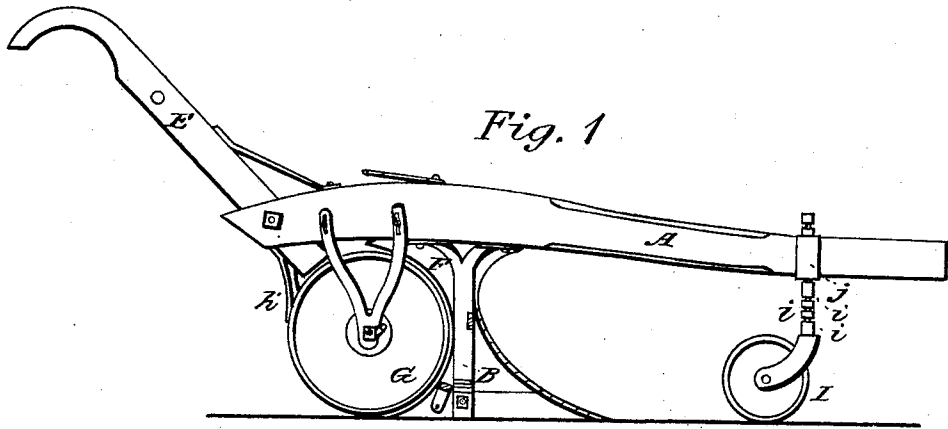


Fig. 1

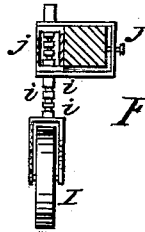


Fig. 4

Fig. 2

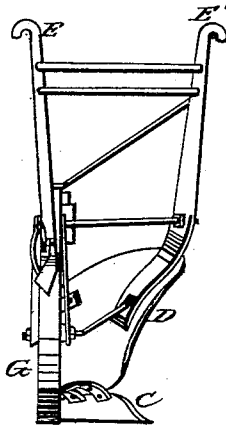
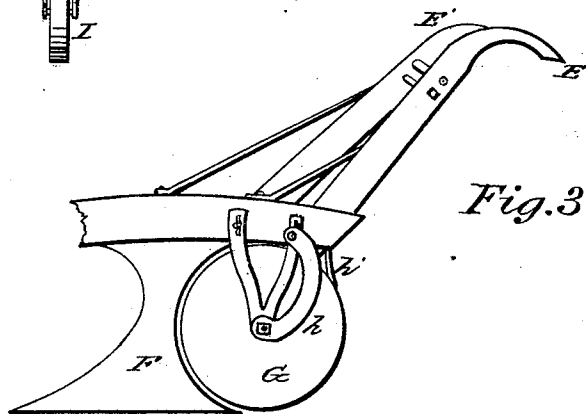


Fig. 3



Witnesses:

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United States Patent Office.

SAMUEL D. SAYRE, OF ROCKFORD, ILLINOIS.

Letters Patent No. 102,162, dated April 19, 1870.

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, SAMUEL D. SAYRE, of Rockford, in the county of Winnebago and State of Illinois, have invented new and useful Improvements in Plows; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

This invention relates to that class of plows which is provided with a bearing-wheel beneath the rear end of the beam, and consists in the combination and arrangement of the various parts, as will be fully described hereinafter.

In the drawings—

Figure 1 represents a side elevation of my improved plow, with the mold-board and one of the handles cut away;

Figure 2 represents a side elevation;

Figure 3, a side elevation of the rear end of the plow, the reverse of fig. 1; and

Figure 4, a transverse section of the plow-beam, with the caster-wheel and its connections.

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

A represents the plow-beam;

B, the standard;

C, the share;

D, the mold-board; and

E E', the handles.

These parts are all constructed in any of the usual well-known forms, and need not, therefore, be particularly described here.

F represents the land-side, which is preferably constructed of steel, the front edge of which conforms to the shape of the forward edge of the share and mold-board.

Its rear edge is made semicircular, as shown in fig. 3, for the purpose of receiving the wheel G. Its upper edge is bent at right angles and bolted to the plow-beam. By means of the latter construction the strength of the plow is much increased.

The wheel G turns upon suitable bearings, supported by adjustable hangers attached to the plow-beam, as shown. It should be made as large as possible, and its lower edge should be flush with the lower edge of the land-side.

h h represent adjustable scrapers, the former of which cleans the face and the latter the edge of the wheel.

I represents a caster-wheel, the standard of which is provided with the grooves *i i*.

This standard passes through the socket *j* of the iron J, and is secured at any desired height by means of a pin which passes through a proper orifice in the socket, and rests in any one of the grooves, as shown in fig. 4.

The iron J is constructed square in form and surrounds the plow-beam, as shown. The area inclosed by its sides is made somewhat larger than the transverse sectional area of the plow-beam, in order to permit its easy adjustment longitudinally upon the beam. It is secured at any desired point by means of set-screws, to give it the required strength. The plow is provided at proper parts with suitable braces.

The manner of operating my improved plow is as follows:

In passing to and from the field the caster-wheel is lowered, and the plow is borne upon its wheels. When the field is reached the caster-wheel is raised entirely out of the way, if the ground be unsuitable, and sufficiently far to permit the plow to enter the ground the desired depth, if the ground be level. After the proper adjustment the plow is used in the usual manner.

Some of its advantages are as follows:

By placing the surface of the bearing-wheel in line with the surface of the land-side it will be found that the friction of the latter is much decreased; vines and grass, also, are drawn down by the wheel out of the way. The scrapers prevent the wheel from becoming clogged in wet and muddy soil. The combination of the caster-wheel in front with the bearing-wheel in rear enables the plow to be much more easily handled than when a rigid wheel is used in front.

The specific construction shown is exceedingly desirable, as it combines great strength with simplicity and efficiency.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The combination and arrangement of the beam A, standard B, share C, mold-board D, handles E E', land-side F, wheel G with its adjustable hinges, scrapers *h h*, and caster-wheel I, with iron J, as described, for the purpose set forth.

This specification signed and witnessed this 13th day of November, 1869.

SAMUEL D. SAYRE.

Witnesses:

G. W. FORD,

STEPHEN INMAN.