Thomas Sheehan's Plow.

105134 PATENTED JUL 5 1870

Fig. 1.

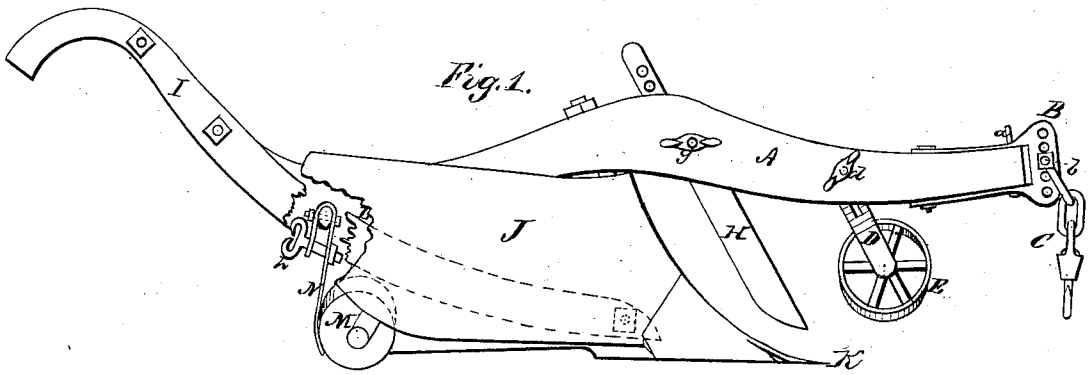


Fig. 2.

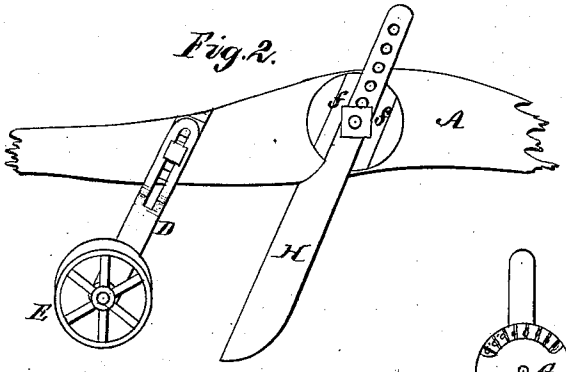


Fig. 3.

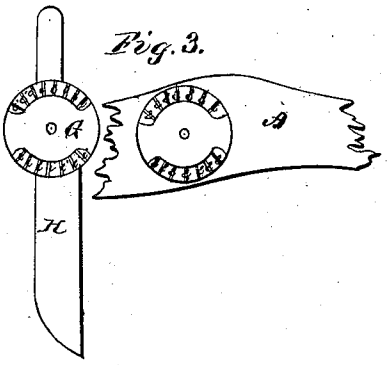
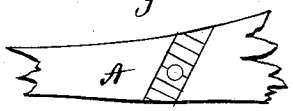


Fig. 4.



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THOMAS SHEEHAN, OF DUNKIRK, NEW YORK.

Letters Patent No. 105,134, *dated July* 5, 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, THOMAS SHEEHAN, of Dunkirk, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the employment of an eccentric roller, in the manner hereinafter described. Also, in the arrangement of a slotted toothed bar in the beam, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of my plow, taken on the mold-board side;

Figure 2 is a side view of the front end of the plow-beam on the landside;

Figure 3 shows the mode of attaching and securing the adjustable colter; and

Figure 4 is a view of that portion of the plow-beam to which the adjustable gauge-wheel is attached.

A represents the plow-beam, having at its front end an adjustable clevis, B.

This clevis is pivoted on the upper and lower sides of the plow-beam, a suitable distance from the end, and secured by means of a bolt, *a*, which passes through the clevis and the plow-beam, as seen in fig. 1.

There are three holes through the end of the plow-beam, so that the bolt *a* can be changed to throw the clevis either exactly in the center or slightly to either side, as may be deemed necessary.

In the clevis B is secured the draft-chain C, by means of the bolt *b*, said chain being capable of vertical adjustment, as the clevis has a series of holes for that purpose, as shown in the drawings.

At a suitable point on the landside side of the plow-beam is an inclined recess or groove, in which is placed a slotted bar, D, secured by means of a bolt passing through said slotted bar and through the plow-beam, the bolt being fastened by a thumb-nut, *d*, on the mold-board side.

Upon the inner side of the slotted bar D are formed ratchet-teeth, which fit in corresponding teeth in the inclined recess on the plow-beam, so that, when the nut *d* is tightened, the said bar will be held firmly and securely in its place.

At the lower end of the bar D is pivoted a wheel, E, which is raised or lowered by means of the slotted bar D, for the purpose of regulating the depth at which the plow behind it is to work.

On the same side of the plow-beam as the bar D, and a short distance in rear thereof, is a circular recess, in which are ratchet-teeth *e e*.

In this circular recess is placed a circular disk, G, provided on its inner side with corresponding ratchet-teeth *i i*, which engage with the teeth *e e* in said recess.

On the face or outer side of the disk G are flanges *f f*, placed parallel, and forming a groove in which the shank of the colter H is placed.

This shank is provided with a series of holes, through either one of which a bolt is passed, said bolt passing through the center of the disk G and through the plow-beam, being secured or fastened on the mold-board side by means of the thumb-nut *g*.

It will be observed that the colter H is thus capable of a twofold adjustment—first, up and down, by means of the holes in its shank; and, second, by means of the disk G, it can be placed at any angle desired from the plow-beam, as said disk is held by the bolt in any position, the teeth *e e* and *i i* preventing any possibility of its turning while the plow is in operation.

The beam A is in rear of the colter-holder, G, constructed in any suitable manner for the attachment of the handles I I, mold-board J, point K, and land side L.

The steel plows now in use are not hardened, for the solid plate of steel cannot be tempered, but by the process described in my patent above mentioned, I am enabled to temper the mold-board point and side lining, as I term it, "steelifying" them, and making them very hard.

In the rear portion of the plow, between the mold-board and landside, are suitable ears or projections for pivoting an eccentric roller, M, which runs along in the furrow made by the plow.

This roller keeps the plow stirring through the ground without the aid of a man's hand, thereby reducing the draft to nearly one-half of what it is without said roller.

It is well known that, when a plow gets stuck in heavy sod or hard ground, by stirring the plow a little with the hand, it will relieve the horses and reduce the draft. This is just what the eccentric roller does all the time.

Above the roller M is secured a spring-scraper, N, which is moved and held closer to or further from the roller by means of the thumb-screw *h*, for the purpose of keeping the same clean.

Having thus fully described my invention,

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

1. The arrangement, within an inclined toothed re-

cess, of the plow-beam A, of the slotted toothed bar D, and wheel E, said bar being adjusted substantially as and for the purposes herein set forth.

2. An eccentric roller, arranged substantially as described, for the purpose of imparting a rocking motion to the plow.

3. The combination of the eccentric roller M and adjustable spring-scraper N, arranged as described, and operating substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS SHEEHAN.

Witnesses:

F. S. EDWARDS,

WM. BOOKSTANE.