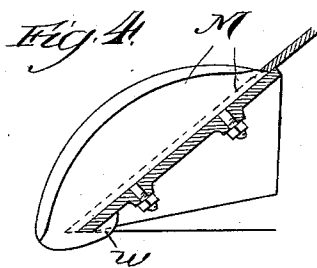
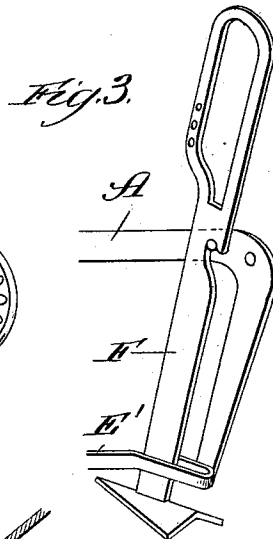
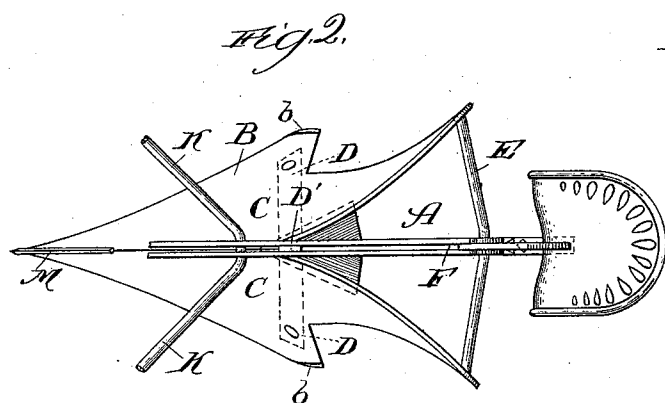
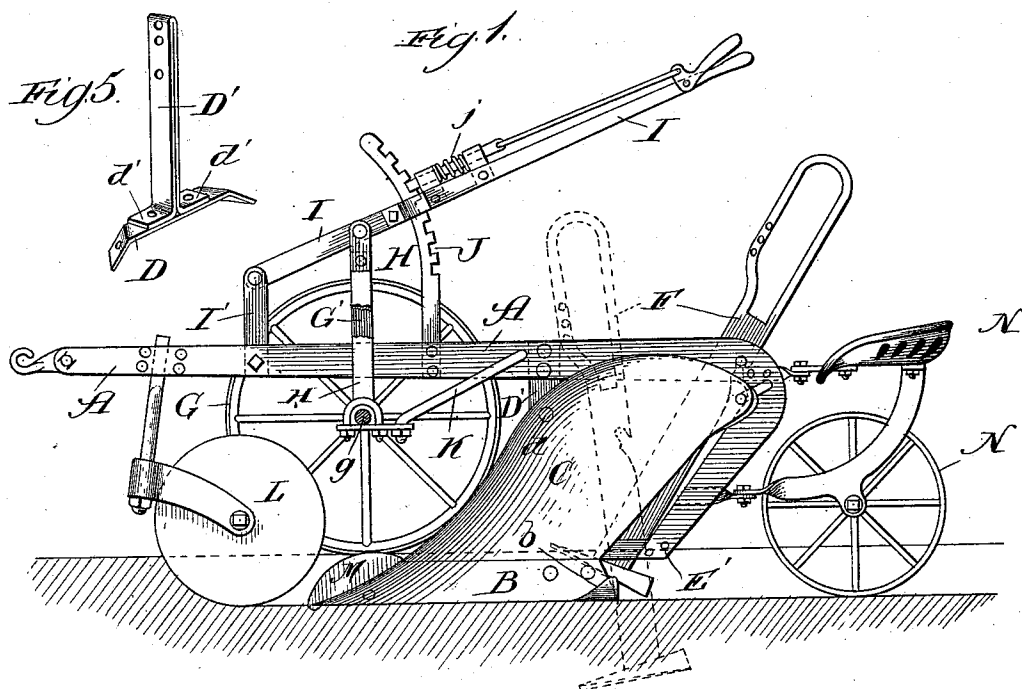


(No Model.)

C. ATKINSON.
PLOW.

No. 466,591.

Patented Jan. 5, 1892.



Witnesses:
Chas. Chyford,
Efford & White.

Inventor,
Charles Atkinson,
By Banning & Banning,
Attys.

UNITED STATES PATENT OFFICE.

CHARLES ATKINSON, OF CHICAGO, ILLINOIS.

PLOW.

SPECIFICATION forming part of Letters Patent No. 466,591, dated January 5, 1892.

Application filed January 7, 1891. Serial No. 376,942. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ATKINSON, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented a new and useful Improvement in Plows, of which the following is a specification.

The object of the present invention is to improve in various particulars, as hereinafter set forth, upon the constructions shown in my two former patents, No. 189,912, dated April 24, 1877, and No. 322,573, dated July 21, 1885; and the invention consists in the features and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a longitudinal elevation of a plow embodying my improvements, one of the supporting-wheels being removed; Fig. 2, a plan view of the share, part of the beam, and driver's seat; Fig. 3, a perspective view of the subsoiler; Fig. 4, a detail view showing the fin and manner of attaching same to share, and Fig. 5 a detail of the standard of the plow.

The beam A is made double, as shown in Fig. 2, in order to afford space through which the subsoiler, &c., may pass.

The plowshare B is made double and its wings at their extreme edges are turned up substantially perpendicularly, forming cutting edges or points *b*, which cut into the under side of the sod, facilitating the turning of the same. The mold-boards C rise, as shown, from the double share. A bridge D extends across from one side of the share to the other, being rigidly secured thereto. To this is secured the standard D'. This standard is made double, as shown, passes between two parts of the beam, to which it is bolted, and is bent outward at the lower end to form feet *d'*, by means whereof it is fastened to the bridge D, as shown in Fig. 5. The plow is attached to this standard by means of bolts *d*. Braces E E' are also provided, the former extending from the rearward end of the beam to the ends of the mold-boards. The brace E' is attached to the lower end of the beam and extends therefrom to the rearward ends of the shares. The two parts of this brace run parallel for a short distance from the beam, forming a socket or guide to receive the subsoiler F. (See Fig. 3.) This subsoiler

is made and operated in the usual manner and requires no further description.

The wheels G are connected by an axle *g*. From about the middle of this axle a tongue G' passes up freely through the double beam. Braces H extend from each end of the axle, are fastened to the upper end of the tongue, and, extending up above the same, form a socket *h*, in which is pivoted a lever I. This lever is fulcrumed in a support I', attached to the beam. The lever is made double from the fulcrum to the socket formed by the braces H to insure greater strength, and from the socket rearward is made of but a single thickness of metal attached to the double part by a lap-joint. By this construction the rearward part of the lever is brought to one side of the longitudinal center line of the beam, thereby avoiding any interference with the quadrant J or the subsoiler. By means of this lever the depth at which the plow is to work is controlled, the lever being held in any desired position by means of the catch *j* engaging with the notches in the quadrant. Braces K extend from the beam to the rearward side of the ends of the axle.

A colter L, consisting of a circular disk of metal, is supported just in front of the plow and serves to open the sod or soil.

An important feature of my invention is the fin-guide M. This consists of a metal plate, preferably of the form shown in the drawings. It is provided with a hook *w'*, which engages with the lower end of the share, as shown, Fig. 4. A groove is formed in the two parts of the share where they come together, and in this groove the fin rests, being held in place by screw-stems passing through the shares and nuts upon such stems. This fin, following directly in the line of the colter and in the groove cut by it, does not act to cut the soil in any wise, but serves merely to guide the plow and steady it.

At the rear of the plow I hinge a seat N for the driver, supported upon a single wheel N'. This construction is very light and simple and renders it easier to mount and dismount.

I claim—

1. The combination of a double beam, wheels G, connected by an axle *g*, a tongue G', extending upward from the axle through the

beam, braces H, extending from the ends of the axle to and above the upper end of the tongue, forming a socket, and a lever I, connected to the beam and pivoted in the socket, substantially as described.

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2. The combination of a double beam, a double plow, a brace D, extending across the interior of the plow, and a standard D', secured to the beam and the mold-boards of the
10 plow and provided with feet d', secured to the brace D, substantially as described.

3. The combination of a double beam bent at an angle and extending down at its rearward end to a point near the surface of the
15 ground, a subsoiler moving up and down between the parts of the double beam, and a

brace E', extending from the wings of the plow and secured to the lower end of the double beam and bent to form a socket wherein the subsoiler works, substantially as described. 20

4. The combination of wheels G, connected by an axle, a double beam, a tongue G', braces H, a lever pivoted between such braces, and braces K, extending from the beam to the
25 rearward side of the ends of the axle, substantially as described.

CHARLES ATKINSON.

Witnesses:

GEORGE S. PAYSON,
THOMAS A. BANNING.