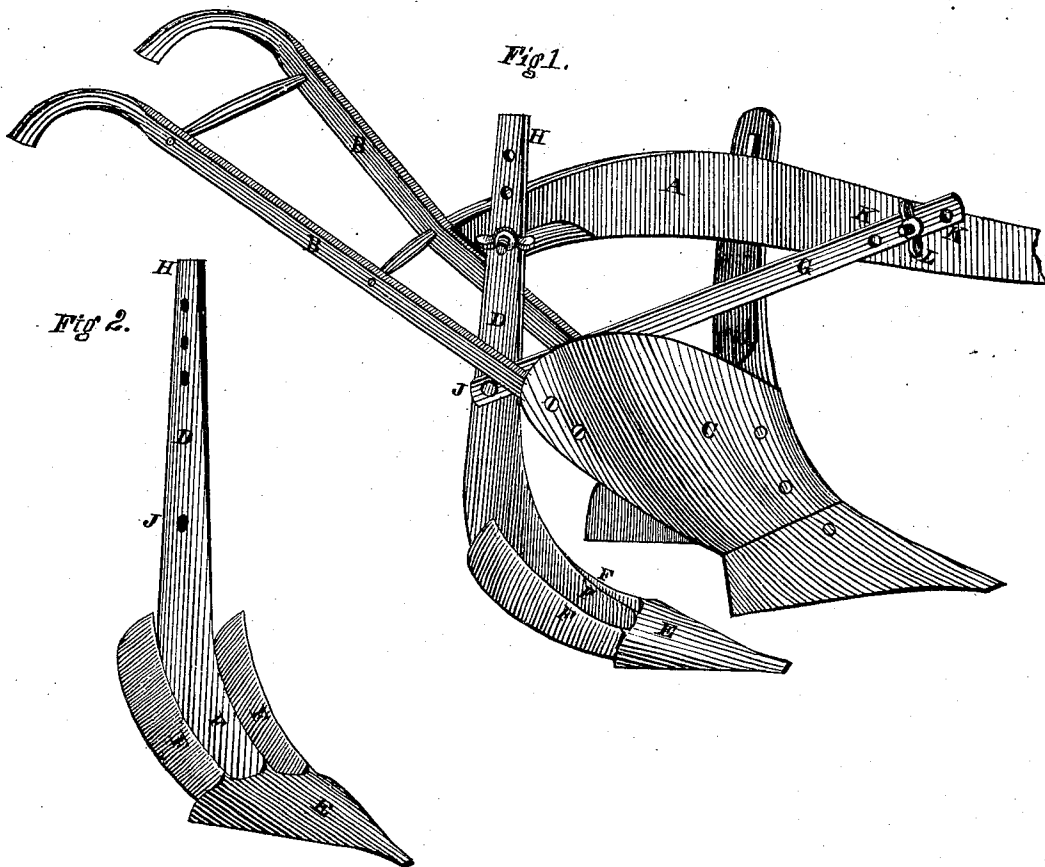


D. M. ALLEN.

Improvement in Plows.

No. 132,707.

Patented Nov. 5, 1872.



WITNESSES;

Henry Burdard
& Barbara

INVENTOR.

David M Allen

UNITED STATES PATENT OFFICE.

DAVID M. ALLEN, OF JEFFERSONVILLE, INDIANA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 132,707, dated November 5, 1872.

To all whom it may concern:

Be it known that I, DAVID M. ALLEN, of the city of Jeffersonville, in the county of Clarke and State of Indiana, have invented certain new and useful Improvements in a Subsoil-Plow, of which the following is a specification:

This my invention relates more especially to the subsoil attachment made for the purpose of breaking up and effectually pulverizing the soil at one and the same time as it passes through it, and may be used on any ordinary breaking-plow, and is so arranged as to be easily adjusted in order to cut a greater or less depth of soil.

Figure 1 is a perspective view of the plow, showing the subsoil attachment thereto. Fig. 2 is a perspective view of the subsoil-cutters, showing their general construction.

The same letters are employed in both figures in the designation of the identical parts.

In the annexed drawing, A is the beam. B B are the handles. C is the mold-board of an ordinary breaking-plow. D is the arm of the subsoil attachment device, which is bent somewhat in the form shown in the drawing so that the top part will stand nearly vertical while the point E stands horizontal. This point is made somewhat in the form of an arrow-point, except that it is made plane on the under side and thick in the center at the back, where the arm and cutters connect with it, the top part being beveled down to sharp cutting-edges both at the sides and point, leaving it in a circular form on the top. The arm D of this subsoil attachment, where it connects with the point E, is so constructed as to constitute the arm and principal cutter of the device, while the other two cutters, F F, are formed likewise on the back end of the point E, with sharp cutting-edges in front, so turned up as to correspond with the curve of the back part of the arm D. These cutters, in connection with the

point, are all provided with hard steel cutting-edges, made to stand in such a position as to tear up and cut all roots or other obstructions and thoroughly pulverize the soil as it passes through it after being raised first by the point E. These cutters, being three in number, also greatly assist the point in raising or breaking up the hard soil with a minimum of resistance. The top end of the arm D has a series of holes at H, through which a bolt with thumb-nut is made to pass in order to attach it adjustably to the rear end of the beam A. It has also another bolt-hole at J, by means of which the brace G is attached to it, which brace is also made adjustable where it connects with the beam for the purpose of regulating the depth of the cutting-point E in order to suit the nature of the soil. It is therefore evident that the plow may be used with or without the subsoil attachment; or, in other words, the attachment may be used on any common plow of suitable construction, and thereby be converted into a subsoil-plow at a very small cost, thus saving to farmers the greater part of the cost of a heavy and expensive plow not adapted to the ordinary work required on a farm.

I am aware that it is not new to attach a subsoiler to ordinary plows, and therefore I make no claim to such combination; the merit of my invention consisting in the peculiar construction of the device, as described, with curved cutting-edges side by side with the curved sharpened shank.

What I do claim as my invention, and desire to secure by Letters Patent, is—

The improved adjustable subsoiler, having the solid head E, when constructed with the curved cutting-edges F F F arranged side by side, as herein shown and described.

DAVID M. ALLEN.

Witnesses:

HENRY BURKHARD,
E. BARBAROUX.