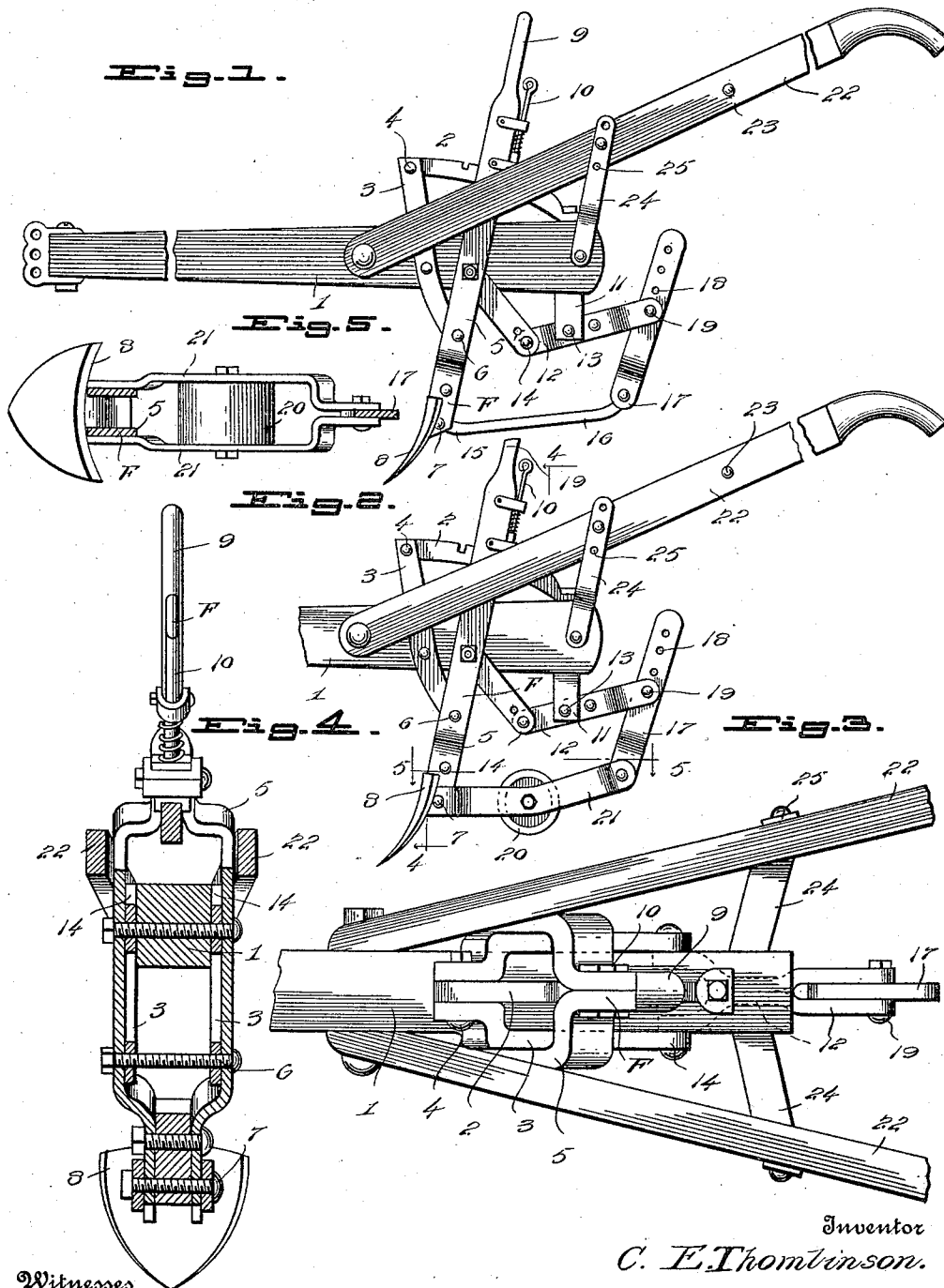


C. E. THOMLINSON.
 PLOW.
 APPLICATION FILED SEPT. 11, 1912.

1,059,785.

Patented Apr. 22, 1913.



Inventor
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Witnesses

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PLOW.

1,059,785.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed September 11, 1912. Serial No. 719,773.

To all whom it may concern:

Be it known that I, CHRISTOPHER E. THOMLINSON, a citizen of the United States, residing at Lake city, in the county of Florence and State of South Carolina, have invented new and useful Improvements in Plows, of which the following is a specification.

This invention relates to plows, and it has reference to that class of plows that are provided with a tiltable foot or standard carrying the earth engaging blade which by adjusting said foot or standard may be placed at various angles with respect to the surface of the ground.

One object of the present invention is to simplify and improve the construction and arrangement of the plow carrying foot or standard, the means for tilting said standard and the means for retaining it in adjusted position.

A further object of the invention is to provide simple and improved means for supporting and adjusting a heel plate or runner that is to be used in connection with the device, said heel plate or runner being mounted detachably so that a wheel carrying bar may be substituted therefor when desired.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the claims may be resorted to when desired.

In the drawings,—Figure 1 is a side elevation of a plow constructed in accordance with the invention. Fig. 2 is a side elevation, showing a wheel carrying frame substituted for the heel plate or runner. Fig. 3 is a top plan view. Fig. 4 is a sectional view taken on the line 4—4 in Fig. 2. Fig. 5 is a sectional detail view taken on the line 5—5 in Fig. 2.

Corresponding parts in the several figures are denoted by like characters of reference.

Bolted or otherwise secured upon the beam 1 is the rear end of an arcuate rack bar 2, the forward end of which is spaced above the beam and secured between the upper ends of a pair of brackets 3 that are secured adjacent to opposite side faces of the beam by means of a transverse bolt 4. The brackets 3 extend downwardly from the beam and serve to support the pivoted foot or standard F which is composed of two side bars 5 that are suitably connected and spaced apart, the said side bars being positioned adjacent to opposite sides of the beam and adjacent to the outer faces of the bracket members 3 with which they are pivotally connected by means of a transverse pivot bolt 6. The side bars 5 of the plow foot are offset outwardly from each other intermediate their upper and lower ends to include between them the beam 1 and the brackets 3. The lower ends of the side bars 5 are suitably spaced apart to admit between them a bolt 7 by means of which the earth engaging blade 8 may be mounted on the foot. The extreme upper ends of the side bars 5 are welded together to form a handle 9, whereby the plow foot may be manipulated. The handle is provided with a spring actuated stop member engaging the rack bar 2 for the purpose of retaining the foot and related parts in position at various adjustments, it being obvious that the rack bar 2 is concentric with the pivot bolt 6.

A clip 11 which is secured upon and extends downwardly from the rear end of the beam supports a lever 12 which is fulcrumed on a pin or bolt 13 extending transversely through the clip. The front and rear ends of the lever 12 are bifurcated, the forward end being connected with the side bars 5 of the plow foot by means of links 14, the intermediate portions of the side bars 5 being spaced outwardly from the side faces of the plow beam sufficiently to admit the forward ends of the links 14. Pivotaly mounted between the lower extremities of the side bars 5 of the plow foot is the forward end of a nose 15 of a heel plate or runner 16, the rear end of said heel plate or runner being pivotally connected with the bifurcated lower end of a

connecting bar 17. Said connecting bar is provided with a plurality of apertures 18 to enable it to be adjustably connected with the bifurcated rear end of the lever 12 by means of a pin or bolt 19.

It will be seen that by rocking the foot bar F about its fulcrum which is formed by the pivot bolt 6, the earth engaging blade 8 which is carried by the plow foot may be tilted to various angles with respect to the surface of the ground. It will, furthermore, be seen that when the handle at the upper end of the plow foot is rocked in a rearward direction, the lower end of the plow foot will be moved upward and forward. At the same time, the links 14 connecting the plow foot with the lever 12 will throw the rear end of said lever in an upward direction, exerting a lifting action by means of the connecting bar 17 on the rear end of the heel bar or runner, corresponding to the upward movement of the forward end which is connected with the lower end of the plow foot. The heel plate or runner will thus be preserved in an approximately horizontal position and its location with respect to the earth engaging plate will not be disturbed. It is obvious that when the upper end of the plow foot is tilted in a forward direction the operation is reversed.

Under some circumstances it is desired to use in place of the heel plate or runner a supporting wheel 20, as illustrated in Fig. 2. This wheel is mounted in a frame comprising side members 21, the forward ends of which are pivotally connected with the lower end of the plow foot and the rear ends of which are pivotally connected with the lower end of a connecting bar 17'. The frame bars 21 are slightly curved upwardly at their front and rear ends so as to avoid contact with the ground which is engaged by the wheel 20. This device may be very easily and quickly substituted for the heel plate or runner when desired.

The improved plow is provided in the usual manner with handles 22 connected to-

gether by a rung 23 and connected adjustably with the plow beam by means of braces 24 having apertures 25 for the passage of a connecting bolt.

Having thus described the invention, what is claimed as new, is:—

1. A plow beam, an arcuate rack bar having its rear end secured on top of the beam, brackets secured upon and extending upwardly and downwardly from the sides of the beam, the upwardly extended ends of said brackets being connected with the forward end of the rack bar, a plow foot comprising spaced bars pivoted upon the downwardly extended ends of the braces, the upper ends of said side bars being welded together to form a handle, a spring actuated stop member on said handle engaging the rack bar, a clip secured upon and extending downwardly from the plow beam, a lever fulcrumed on said clip, links connecting the forward arm of said lever with the plow foot, a heel plate connected pivotally at its forward end with the plow foot, and a connecting bar connecting the rear end of the heel plate with the rear arm of the lever fulcrumed on the downwardly extending clip.

2. A plow beam, brackets secured on the sides of the beam and having downwardly extended ends, a plow foot comprising spaced side bars pivoted on the downwardly extended ends of the brackets, a furrow engaging element, such as a runner, having its front end pivotally connected with the lower end of the foot, a suitably supported lever, a link connecting said lever with the rear end of the furrow engaging element, and links connecting the lever with the plow foot to tilt said lever when the plow foot is tilted.

In testimony whereof I affix my signature in presence of two witnesses.

CHRISTOPHER E. THOMLINSON.

Witnesses:

W. F. FENEGAN,

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