W. O. WEST.

PLOW.

APPLICATION FILED DEC. 11, 1909.

1,006,325. Patented Oct. 17, 1911.

Fig. 1.

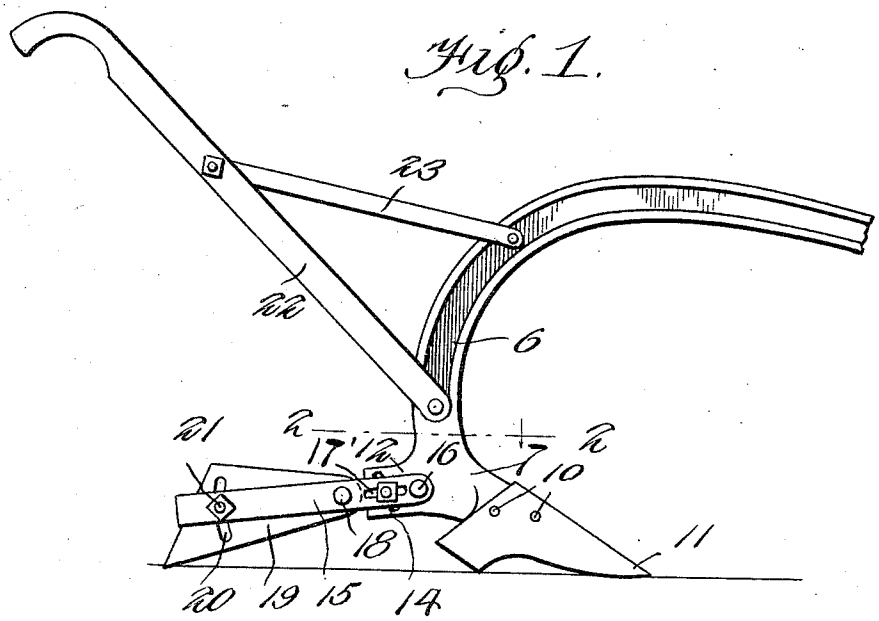


Fig. 2.

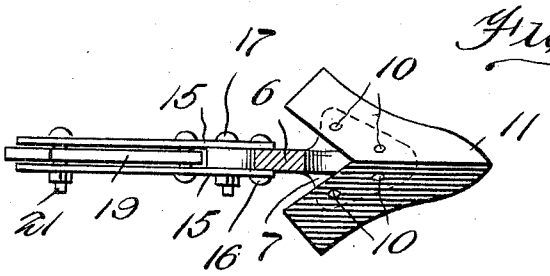


Fig. 3.

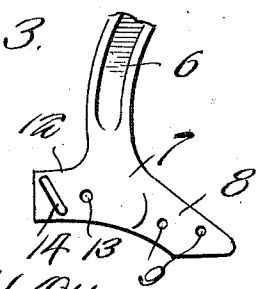
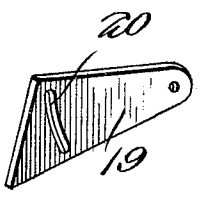


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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PLOW.

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To all whom it may concern:

Be it known that I, WILLIAM O. WEST, a citizen of the United States of America, residing at Detroit, in the county of Red River and State of Texas, have invented new and useful Improvements in Plows, of which the following is a specification.

This invention relates to plows, and it has particular reference to that class of plows which are known as subsoilers.

The invention has for its object to construct a device of the class referred to which shall be simple and efficient in operation and which shall be provided with adjustable guiding means for the purpose of guiding the plow in a straight line; a further object of the invention being to provide the guiding means with a cutting blade which will be useful for the cutting of roots and the like.

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 drawing 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 invention may be resorted to when desired.

In the drawing,—Figure 1 is a side elevation of a subsoiler plow constructed in accordance with the invention. Fig. 2 is a sectional view taken on the plane indicated by the line 2—2 in Fig. 1. Fig. 3 is a side elevation, showing the plow foot detached. Fig. 4 is a perspective view of the adjustable cutting blade.

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

The beam 5, which is preferably made of cast iron, steel or other suitable material, is curved downwardly at its rear end to form the standard 6 upon the lower end of which is formed a foot 7 including a blade-supporting member or frog 8 of approximately inverted V-shape in cross section, said frog being provided with apertures 9 for the passage of connecting members, such as bolts or rivets 10, whereby the subsoiler blade 11 is secured in position. The foot 7 has a rearwardly extending heel 12 provided with a transverse aperture 13 and with an inclined slot 14 divergent from said aperture. Guide blades 15 are secured adjacent to the sides of the heel by means of a pivotal member 16, said blades being capable of being secured at various adjustments by means of a bolt 17 extending through the inclined slot 14, and through horizontal slots 17′ in the blades. It is obvious that when the bolt 17 is tightened, the parts will be securely retained in adjusted position, because any readjustment involves the displacement of the bolt longitudinally of the slot 17′ and vertically of the slot 14, being in planes at an angle to one another. The blades 15 are apertured for the passage of a pivotal member or pin 18 upon which an approximately triangular cutting member 19 is pivotally mounted between said blades, said cutting member being provided with an arcuate slot 20 concentric with the pivotal member 18 for the passage of a fastening bolt 21 extending through the blades 15, and whereby the cutting member 20 may be secured at various adjustments. Handles, one of which appears at 22, and reinforced by braces, one of which is shown at 23, are suitably connected with the plow for the purpose of guiding the same.

From the foregoing description, taken in connection with the drawing hereto annexed, the operation and advantages of the invention will be readily understood by those skilled in the art to which it appertains. The subsoiler is calculated to stir and agitate the soil without seriously displacing the same and requiring it to be afterwards restored to position by harrowing or otherwise. The guiding blades are capable of adjustment, as will be readily seen, and the cutting blade which constitutes a root cutter is adjustable between the guide blades independently of the latter.

It will be seen that when the plow is in use the guide blades and the cutter follow in rear of the subsoiler blade, keeping the latter true in a straight line; it will also be seen that not only is lateral swaying prevented, but the bottom of the furrow cut by the subsoiler will be scored by the cutting blade in such a manner as to loosen the dirt, thus facilitating and promoting the growth of plants.

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

1. A blade supporting plow foot having a rearwardly extending heel provided with an aperture and with a slot divergent from said aperture, blades supported adjacent to the sides of the heel and having longitudinal slots, a blade supporting pin extending through the blades and aperture in the heel, and an adjusting bolt extending through the longitudinal slots of the blades and through the inclined slot of the heel.

2. A blade supporting plow foot having a rearwardly extending heel provided with an aperture and with a slot divergent from said aperture, blades supported adjacent to the sides of the heel and having longitudinal slots, a blade supporting pin extending through the blades and aperture in the heel, and an adjusting bolt extending through the longitudinal slots of the blades and through the inclined slot of the heel; in combination with a cutting member supported pivotally between the blades, and means for securing said cutting member at various adjustments.

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

WILLIAM O. WEST.

Witnesses:
Mrs. A. M. West,
Nona Coffman.