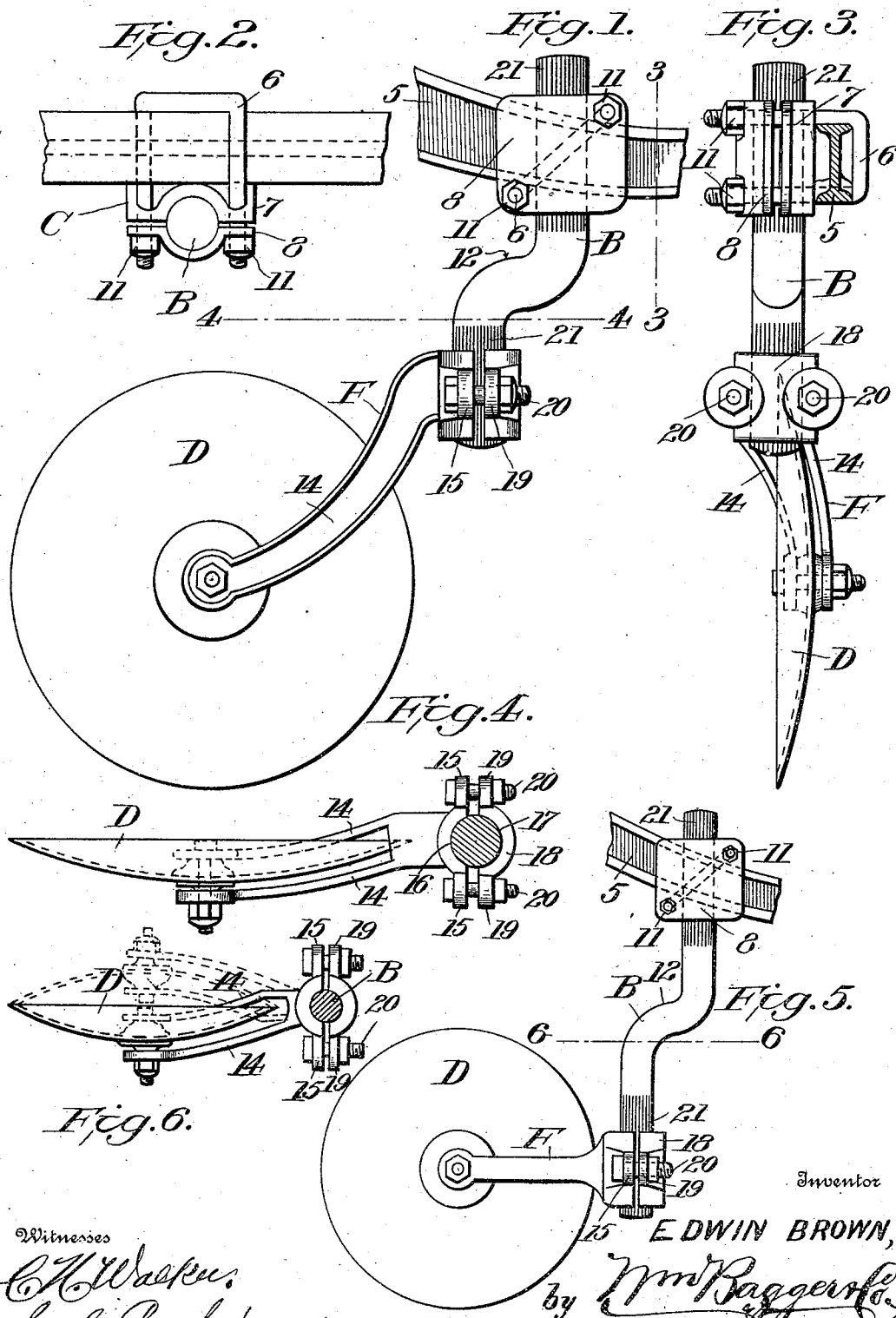


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 PLOW COLTER.
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Witnesses
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UNITED STATES PATENT OFFICE.

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PLOW-COLTER.

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To all whom it may concern:

Be it known that I, EDWIN BROWN, a citizen of the United States, residing at Attica, in the county of Fountain and State of Indiana, have invented certain new and useful Improvements in Plow-Colters, of which the following is a specification.

This invention relates to that class of plow attachments which are known as colters or jointers, and it has particular reference to that class of colters which consists of a disk supported for rotation a suitable distance in advance of the plow.

The present invention has for its object to provide a rolling colter of simple and improved construction, which shall be applicable to, and capable of being used in connection with plows of any well-known and approved construction, whether they be of the conventional share and mold-board type or of the rotary-disk pattern; the invention being also equally applicable to plows adapted to right-hand or to left-hand work.

Further objects of the invention are to provide a rolling colter which may be easily and quickly adjusted according to the nature of the work that is to be performed.

Further objects of the invention are to simplify and improve the construction and operation of this class of devices.

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 claim.

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 invention may be resorted to when desired.

In the drawing—Figure 1 is a side elevation of a rolling colter constructed in accordance with the principles of the invention, showing also a portion of a plow-beam to which the same is attached. Fig. 2 is a top plan view of the beam and fastening device. Fig. 3 is a sectional view taken through the beam on the plane indicated by the line 3—3, in Fig. 1, and showing the invention in front elevation. Fig. 4 is a horizontal sectional view taken on the plane

indicated by the line 4—4, in Fig. 1. Fig. 5 is a side elevation illustrating a slightly modified form of the invention. Fig. 6 is a horizontal sectional view taken on the plane indicated by the line 6—6, in Fig. 5.

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

Secured upon the plow-beam 5, by means of a U-shaped clip 6, which straddles the beam obliquely, as shown, is a box or casing C, which is composed of two half boxes or members 7, and 8, the meeting faces of which are provided with vertical grooves or recesses 9, combining to form a bearing for the upper end of a shank B, which is fitted and held securely in the box or casing by tightening the nuts 11, upon the clip or yoke 6, the arms of which extend through the flanges formed upon the members 7 and 8 of the box or casing. The shank B is formed with a shoulder 12, constituting a crank whereby the lower end of said shank is offset laterally with respect to the upper end of said shank; it being obvious that by partly rotating the shank in the box or bearing C, the position of the lower end of said shank may be changed or shifted to the right or left, front or rear as may be required.

The colter consists of a disk D, which is dished or concave in one side as shown, said disk being supported for rotation in a holder or carrier consisting of a fork F, which is bent or curved laterally as shown, so as to conform to the shape or curvature of the disk. Said fork may also be curved downwardly as shown in Fig. 1, or the tines of the fork may be extended in an approximately horizontal plane, as indicated in Fig. 5 of the drawings. The fork F is provided at the convergence of its side members or tines 14 with laterally extending flanges 15, between which is formed a vertical groove or recess 16, which coöperates with a similar groove or recess 17, in a detachable cap 18 to constitute a bearing for the lower end of the crank or shank B; the cap 18 being provided laterally with extending flanges 19, which are perforated for the passage of fastening members, such as bolts 20, which also extend through the flanges 15, upon the fork F, thus enabling said fork to be clamped and held very securely in any position to which it may be adjusted upon the lower end of the shank B. The upper and lower extremities of said shank have been shown

as being provided with longitudinal grooves or serrations 21, enabling said shank to be gripped and held very securely by the members constituting the boxes or bearings for said crank.

From the foregoing description taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood by those skilled in the art to which it appertains.

It will be readily seen that the shank or crank may be rotated or adjusted in the bearing whereby it is mounted upon the plow-beam, so as to place the lower end of the shank adjacent to the right or left-hand side of the beam as may be desired, and any desired distance in advance of the plow within the limits of the throw of the crank or offset of the shank. In like manner the fork which carries the disk constituting the colter is capable of adjustment upon the lower end of the shank so as to place the colter at any desired angle. It is very obvious that a right-hand or left-hand disk may be used at will; if a fork is used the tines of which extend in a horizontal plane

as illustrated in Fig. 5, it is capable of being reversed and thus changed or converted from a right-hand to a left-hand implement or vice versa.

The general construction of the improved implement is extremely simple and inexpensive and it is capable of being easily adjusted and manipulated according to the circumstances and conditions of the work that is to be performed.

Having thus described the invention, what is claimed is—

A device of the character designated, comprising a cranked shank, beam-attaching means for said shank, a fork, means for connecting the latter detachably and reversibly to said shank, a dished colter, having a bolt passing through its center journaled in the prongs of the fork, said prongs being curved laterally and following closely the contour of the dished colter.

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

EDWIN BROWN.

Witnesses:

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