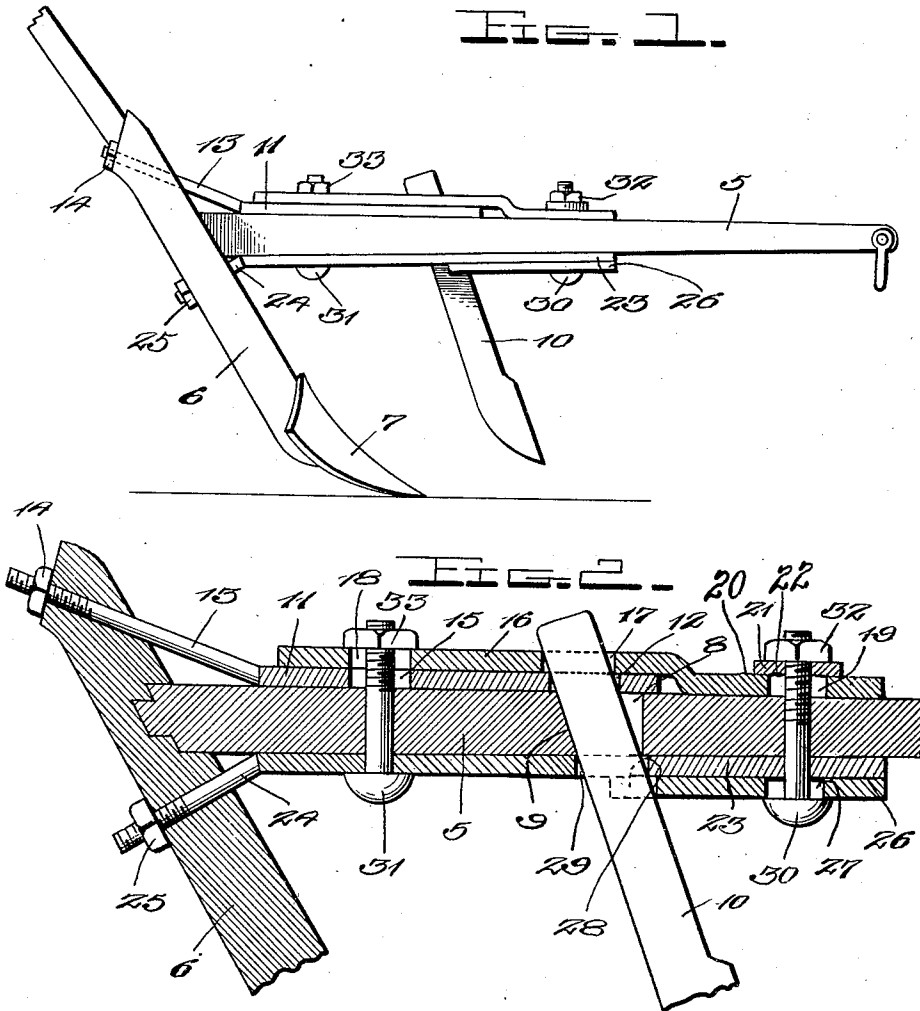


J. S. STEPHENS.
 PLOW COLTER.
 APPLICATION FILED MAR. 2, 1912.

1,050,313.

Patented Jan. 14, 1913.



Witnesses

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PLOW-COLTER.

1,050,313.

Specification of Letters Patent.

Patented Jan. 14, 1913.

Application filed March 2, 1912. Serial No. 681,079.

To all whom it may concern:

Be it known that I, JAMES S. STEPHENS, a citizen of the United States, residing at Bono, in the county of Craighead and State of Arkansas, have invented certain new and useful Improvements in Plow - Colters, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to plow colters and more particularly to means for adjusting the colter with relation to the plow point, the invention having for its primary object to provide an adjusting means for this purpose of simple, durable and efficient construction whereby the colter may be very easily and quickly adjusted and rigidly held in position.

Another and more specific object of the invention is to provide in combination with a plow beam, a standard, said beam being provided with an opening therein to receive the colter, plates mounted upon the upper and lower sides of the beam and provided with openings coinciding with the opening in the beam, and means for moving the uppermost plates to angularly dispose the colter with relation to the longitudinal axis of the plow beam.

With the above and other objects in view, the invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a plow provided with my improved colter adjusting device; Fig. 2 is an enlarged longitudinal section of the rear end of the plow beam and a portion of the standard.

Referring in detail to the drawing 5 designates a plow beam and 6 the standard thereof which is secured to the rear end of the beam in any ordinary or approved manner and is provided at its lower end with a shovel or plow point indicated at 7. The beam 5 is provided adjacent to its rear end with a vertical opening 8, the rear wall of which is inclined downwardly and inwardly

from the upper surface of the beam as designated at 9. Through this opening in the plow beam the upper end of the colter 10 is adapted to be disposed. Upon the top of the beam 5 the longitudinally movable plate 11 is arranged, said plate being provided in its forward end with an elongated rectangular opening 12 to receive the colter 10. A rod 13 is integrally formed with or secured upon the rear end of this movable plate and is disposed at a slight upward inclination from the upper surface of the plow beam, the rear end of said rod being loosely disposed through an opening in the plow standard. The extreme rear end of the rod extending rearwardly of the standard is provided with screw threads to receive a suitable adjusting nut 14 whereby said rod may be moved through the standard to slide the plate 11 upon the upper surface of the plow beam. The adjusting plate 11 is also provided adjacent its rear end with a second longitudinally extending elongated opening 15 for a purpose which will be apparent from the following description.

A plate 16 is arranged upon the adjusting plate 11 and is provided with an opening 17 to coincide with the opening 12 in said adjusting plate and to receive the upper end of the colter 10. The rear end of this upper plate 16 is also provided with an opening 18 to register with the opening 15 in the rear end of the adjusting plate. The forward end of the plate 16 is provided with a rectangular longitudinally extending opening 19, and the upper surface of the plate around the edges of said opening is grooved as indicated at 20. This grooved surface is adapted to receive the ribs 22 of a washer plate 21.

Upon the under side of the plow beam 5 a longitudinally disposed plate 23 is arranged, and upon the rear end of said plate a connecting rod 24 is formed which extends through an opening in the plow standard and connects said plate thereto, a suitable securing nut 25 being threaded upon the end of said rod. Beneath this plate 23 at its inner end the plate 26 is ar-

5 ranged, the forward end of said plate being provided with a longitudinal slot or opening 27. The rear end of the plate 26 is notched or recessed as indicated at 28 to receive the forward edge of the colter 10, said bottom plate 23 being provided with an opening 29 through which the colter is disposed.

10 Front and rear bolts 30 and 31 respectively are disposed through vertical openings in the plow beam and through the ends of the upper and lower plates 16 and 23. The forward bolt 30 extends through the opening 27 in the plate 26, said plate being longitudinally movable upon the bolt 15 whereby the inner edge of the recess 28 in the rear end of said plate may be maintained in close frictional contact with the edge of the colter 10. The upper end of this bolt 30 extends through the slot 19 in the forward end of the upper plate 16, the washer 21 being provided with a central opening to receive said bolt. Upon the upper end of the bolt 30 a nut 32 is threaded 20 to rigidly clamp the washer plate 21 upon the grooved edge of the opening 19. The rear bolt 31 extends through the rear end of the lower plate 23 and through the registering openings 15 and 18 in the upper plates 11 and 16 respectively. This bolt also has a suitable nut 33 threaded upon its upper end whereby said plates may be rigidly held in position against relative movement.

35 From the above the construction and manner of operation of my improved colter adjusting device will be fully understood. When it is desired to change the position of the lower end of the colter with relation to the plow point or shovel, the nut 14 on 40 the rear end of the rod 13 is turned to move the sliding plate 11 forwardly or rearwardly upon the upper surface of the beam 5, it being understood of course, that the nuts 32 and 33 on the upper ends of the bolts 30 and 31 have first been loosened. In this sliding movement of the plate 11, the uppermost plate 16 will also be moved upon the upper ends of said bolts, the slots in the 50 ends of said plates being of sufficient length to permit the rear edge of the colter 10 to engage with the inclined wall 9 of the opening in the beam so that said colter may be disposed at a forward inclination. As the opposite ends of the slots 12 and 17 in the plates 11 and 16 respectively engage upon 55 opposite edges of the colter, it will be readily seen that when the nuts 32 and 33 have been tightened, said colter is rigidly held in its position in the beam. In the manner 60 above described, the colter may be very easily and quickly adjusted to the desired position.

The device is comparatively simple in

construction, may be inexpensively manufactured and will efficiently perform the functions for which the same is devised.

While I have shown and described the preferred construction and arrangement of the various elements, it will be understood 70 that the invention is susceptible of considerable modification without departing from the essential feature or sacrificing any of the advantages thereof.

Having thus described the invention what is claimed is:— 75

1. The combination with a plow beam and standard, said beam having an opening therein provided with a rear inclined wall, of superposed plates longitudinally movable 80 upon the upper surface of the beam and having coinciding openings, a longitudinally disposed plate fixed upon the lower surface of said beam and also having an opening coinciding with the opening in the beam, 85 a colter adapted to be disposed through the opening in the beam and the openings in said plates, the longitudinal edges of said colter bearing upon the end walls of the openings in the plates, a plate longitudinally slidable upon said lower plate having 90 a notch in one end to receive the colter, said latter plate being provided with an elongated opening in its other end, the uppermost plate of said superposed plates also having an elongated opening in one end, a bolt disposed through the beam, the opening in said upper plate and the opening in the lower 95 slidable plate, said upper superposed plates being provided with additional openings, 100 and a bolt disposed through the beam and the latter openings of the superposed plates to secure said superposed plates upon the beam and to permit of the relative longitudinal movement of the lower superposed 105 plate.

2. The combination with a plow beam and standard, said beam being provided with an opening having a rear inclined wall, of superposed plates mounted upon the upper 110 surface of the beam and having openings to coincide with the openings in the beam, a colter adapted to be disposed through said openings in the beam and plates, a plate arranged upon the lower 115 surface of the beam and rigidly fixed thereto, a plate slidably mounted upon said latter plate and provided with a recess in one end to receive the edge of the colter, means for longitudinally moving the lower one of 120 the superposed plates upon the upper surface of the beam, the upper plate being provided with an offset end extending beyond the end of the lower plate and closely engaging upon the beam, said offset end of the plate being provided with an opening, 125 said slidable plate which is arranged beneath the plate on the bottom surface of the

beam being also provided with an opening,
a bolt disposed through said openings and
the bottom plate and through the beam, and
a nut threaded upon the upper end of the bolt
5 to hold the offset end of said upper plate
closely upon the beam and to rigidly secure
said lower sliding plate against movement.

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

JAMES S. STEPHENS.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
