

C. C. CHAPPEL.
 PLOW COLTER.
 APPLICATION FILED MAR. 26, 1912.

1,030,718.

Patented June 25, 1912.

Fig. 1.

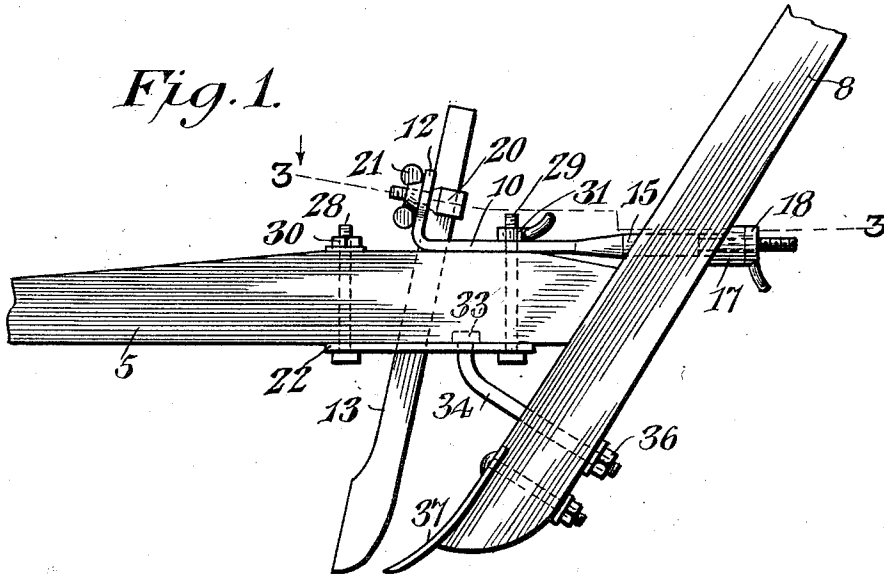


Fig. 3.

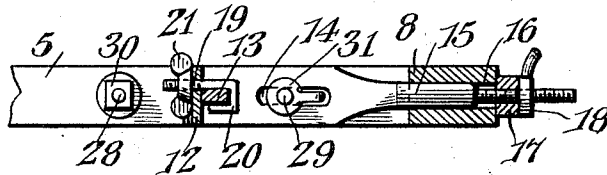
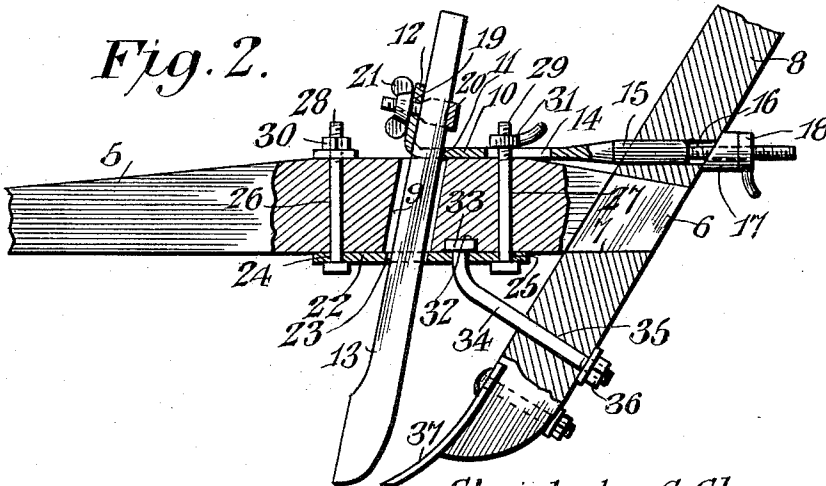


Fig. 2.



WITNESSES

Jas. F. McLaughlin
Stewart Rice.

Christopher C. Chappel, INVENTOR

BY

E. J. Siggers

ATTORNEY

UNITED STATES PATENT OFFICE.

CHRISTOPHER C. CHAPPEL, OF BONO, ARKANSAS, ASSIGNOR OF ONE-HALF TO JAMES D. STRINGER, OF BONO, ARKANSAS.

PLOW-COLTER.

1,030,718.

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To all whom it may concern:

Be it known that I, CHRISTOPHER C. CHAPPEL, a citizen of the United States, residing at Bono, in the county of Craighead and State of Arkansas, have invented a new and useful Plow-Colter, of which the following is a specification.

My invention relates to improvements in means for adjustably securing a plow-colter and has for its object to provide simple and convenient means which will effectively support the colter and at the same time permit of an easy and accurate forward and backward as well as vertical adjustment of the colter with respect to the plow-share.

Other objects and advantages of my invention will appear in the course of the following description.

In the accompanying drawings: Figure 1 is a side elevation of a plow with my improved adjustable colter fastening means applied thereto. Fig. 2 is a view similar to Fig. 1 but with parts shown in section to better illustrate my invention. Fig. 3 is a horizontal section on the line 3—3 of Fig. 1.

Referring to the drawings, which illustrate the preferred embodiment of my invention, 5 designates the horizontally-disposed beam of the plow. The rear end of the plow beam is provided with a tenon 6 fitting into a mortise 7 in the plow standard 8, the latter being preferably forwardly inclined, as illustrated, with respect to the beam. The beam 5 is provided with a slightly-forwardly inclined vertical slot 9, which is located a short distance in advance of the point of juncture of the beam with the standard, and passes through said beam from its upper to its lower face.

Mounted on the upper face of the beam 5, and of a corresponding width, is an elongated, adjustable plate 10 provided with a longitudinally-extending slot 11 which is adapted to be moved over and with respect to the slot 9 for a purpose to be hereinafter explained. The adjustable plate 10 has its outer or free end turned up at the front end of the slot 11 and inclined slightly forwardly to coincide with the inclination of the slot 9, and form a support or rest 12 for the upper end or shank of a colter 13. At one side of the slot 11, the plate 10 is provided with a second longitudinally-extending slot 14, and beyond the last-mentioned

slot, the plate is reduced in width and is formed into a rounded extension 15, which extends through a horizontal opening 16 in the standard 8 located just above the mortise 7. The terminal of the extension 15 projects through the standard and is provided with a washer 17, against which bears a handle nut 18, by means of which the forward and backward movement of the adjustable plate 10 is readily effected.

To one side of the vertical center of the support 12 is an opening 19 through which passes the threaded shank of a hook-bolt or clamp 20, which engages the rear face of the shank of the colter 13 and holds it firmly in position against the support 12 by means of a wing-nut 21. As is readily apparent, the vertical adjustment of the colter can be readily accomplished through the wing-nut 21.

Secured to the lower side of the beam 5 is an elongated bottom plate 22, which corresponds in width to that portion of the beam. The bottom plate is provided with a centrally-disposed, longitudinally-extending slot 23, which, as shown, is centrally arranged beneath but is shorter than the slot 9, yet is of sufficient length with respect to the cross-sectional area of the colter to allow a reasonable amount of play so as to serve as a fulcrum for the forward and backward adjustment of the colter. At each side of the said slot 23 are holes 24 and 25 respectively, which register with vertically-disposed holes 26 and 27, respectively, which pass completely through the beam. Through the respective registering holes 24 and 26 and 25 and 27 are passed the vertical shanks of bolts 28 and 29 respectively. Bolt 28 is suitably held in position by means of a nut 30, while the end of the shank of bolt 29 passes through the slot 14 in the adjustable plate 10 and is held in position by means of a handle nut 31.

Positioned in a depression 32 located in the under face of the beam 5, between the slot 23 in the bottom plate 22 and the bolt 29, is the head 33 of a bolt 34. As illustrated the bolt head 33 is held in position by means of the bottom plate, while its shank passes through holes in the plate. The shank of the bolt is curved around and then inclined downwardly and passed through a downwardly-inclined opening 35

through the standard 8 on the opposite or outer side of which it is secured in position by means of a nut 36.

My improved adjustable colter securing means will be found very efficient in service, for the support 12 will afford a wide bearing for the shank of the colter when it is forced against the support by reason of the pressure of the earth against the cutting edge of the colter when the plow is being drawn forward. Further by this arrangement a more accurate adjustment of the active part of the colter toward and away from the plow-share 37 can be obtained without the necessity of notching the colter, which it is my object to avoid.

With the bolt 34 and plate 10 arranged as shown and previously described, the beam 5 and standard 8 are very effectively braced. Furthermore, the bottom plate 22 will be held in position when the handle nut 31 is released to move the adjustable plate 10, and as the shank of the bolt 34 is arranged beneath the head of the bolt 29, the latter will not fall out of place should it be entirely released as it will contact with the shank of the bolt 34 and be supported thereby.

What I claim is:

1. In combination with a plow, the beam of which is provided with a slot extending through said beam from its upper to its lower face, a colter positioned in said slot, said slot being of sufficient width in cross section with respect to said colter to permit of a vertical as well as a forward and backward movement of said colter, a longitudinally-adjustable plate mounted on the upper face of said beam, said adjustable plate being provided with a slot through which said colter extends, an upwardly-extending sup-

port at the front end of said adjustable plate contiguous said slot and forming a rest for the front edge of said colter, a hook bolt carried by said support and engaging the rear edge of the colter for securing the latter in adjusted vertical positions, means for moving said adjustable plate longitudinally of said beam to move the cutting part of said colter forwardly or backwardly, and means for locking said adjustable plate to the beam in the desired position.

2. In combination with a plow, the beam of which is provided with a slot extending through said beam from its upper to its lower face, said slot having a forward inclination, a rigidly mounted plate bolted to the underside of the beam, a bolt having its head connected to said plate and then passed through the plow standard below the beam, a longitudinally movable plate mounted on the upper side of the beam, said plate having two spaced slots, the front slot receiving the upper end of the colter while the rear slot has passed through it one of the bolts that connects the rigid plate to the bottom of the beam, said plate also having its front end bent upwardly and clamped to the upper end of the colter and its rear end passed through the plow standard above the beam and provided with means substantially as described for moving the plate along the beam and carrying the colter in its movement.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHRISTOPHER C. CHAPPEL.

Witnesses:

B. E. LAMB,
T. R. SANDERSON.