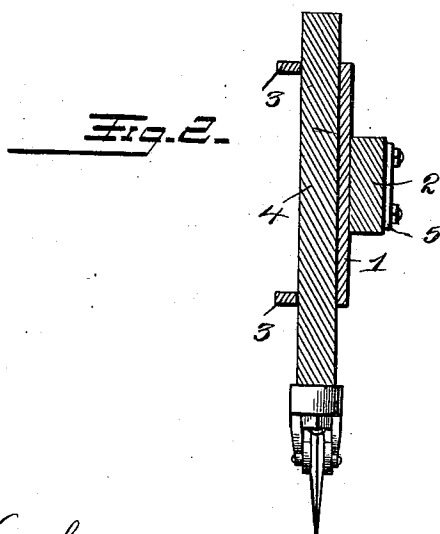
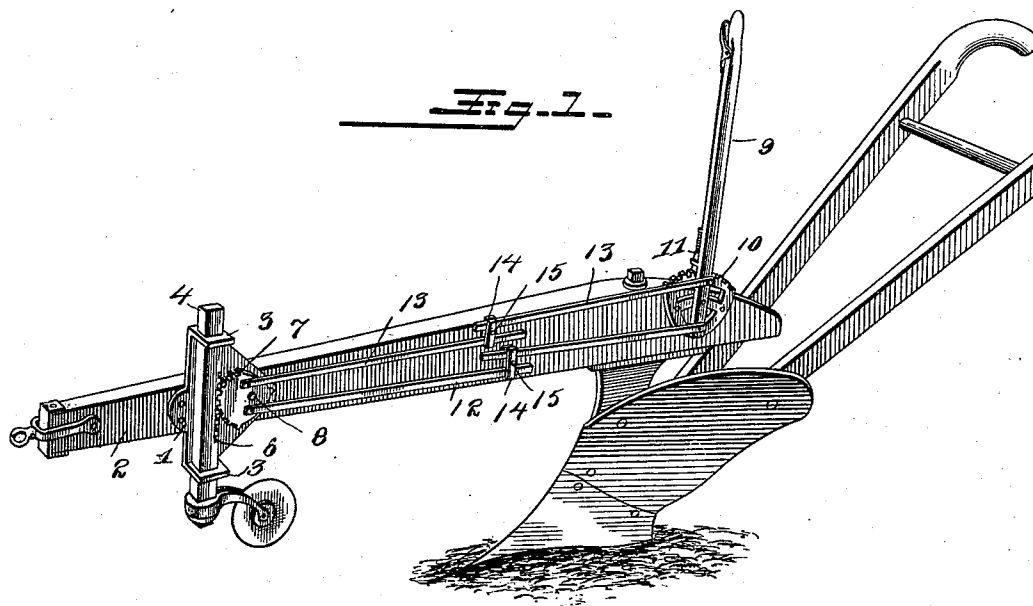


(No Model.)

S. A. MILES.
COLTER ATTACHMENT.

No. 556,360.

Patented Mar. 17, 1896.



Witnesses

A. J. Loerth.

J. F. Riley

Inventor

Stephen A. Miles,

By *his* Attorneys,

Chowles

UNITED STATES PATENT OFFICE.

STEPHEN A. MILES, OF CRAIN, ILLINOIS.

COLTER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 556,360, dated March 17, 1896.

Application filed October 2, 1895. Serial No. 564,422. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN A. MILES, a citizen of the United States, residing at Crain, in the county of Jackson and State of Illinois, have invented a new and useful Colter Attachment, of which the following is a specification.

The invention relates to improvements in colter attachments.

The object of the present invention is to improve the construction of colter attachments and to provide a simple and inexpensive device adapted to be readily applied to any ordinary plow and capable of enabling a colter to be readily raised and lowered without interfering with the operation of the plow, to regulate the depth of cut, and to clear the colter of any obstruction to avoid injury to it.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a colter attachment constructed in accordance with this invention and shown applied to a plow. Fig. 2 is a transverse sectional view.

Like numerals of reference indicate corresponding parts in both figures of the drawings.

1 designates a bracket-plate secured to a plow-beam 2 and provided at its top and bottom with horizontal arms 3, having openings and forming a vertical guide for an adjustable colter-shank 4. The bracket-plate is secured to the plow-beam by bolts arranged in pairs and connected by clip-plates 5, located on the opposite plate of the plow-beam from that on which the bracket-plate is mounted.

The colter-shank 4 is capable of vertical movement to raise and lower a colter, preferably a rotary one, and it is provided at its rear edge with a series of teeth 6, forming a rack-bar of the colter-shank and meshing with a toothed segment 7. The segment is preferably in the form of a quadrant and is mounted pivotally on the bracket-plate by a bolt 8, and it is connected above and below the pivot 8 with an operating-lever 9, located at the back of the plow. The operating-lever 9 is fulcrumed near its lower end on a segmental racket 10 and is provided with a spring-actuated detent 11 for engaging the same and is connected by a pair of connect-

ing-rods 12 with the toothed segment or sector. Each connecting-rod 12 is composed of front and rear sections 13, having their inner ends overlapping and adjustably secured together by clamps 14, composed of two sections and connected by a bolt 15 or other suitable fastening device. By constructing each connecting-rod of two sections or portions it may be increased or diminished in length to enable the mechanism to be readily adjusted to suit the plow to which it is to be applied.

It will be seen that the colter attachment is simple and comparatively inexpensive in construction, that it is adapted to be readily applied to any ordinary plow, and that it will enable a colter to be readily raised or lowered to adjust the same to effect the proper depth of cut and to avoid contact with stone, stumps, or other obstructions which might injure the colter. It will also be apparent that the adjustment of the colter may be made while the plow is in motion and without interfering with the operation thereof.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any advantages of this invention.

What I claim is—

In a device of the class described, the combination of an attachment-plate designed to be mounted on a plow-beam and provided with arms having openings and forming a guide, a vertically-movable colter shank or bar arranged in said openings and provided at its rear edge with teeth, a toothed segment pivoted to the attachment-plate and meshing with the shank or bar, an operating-lever designed to be mounted at the back of the plow adjacent to the handle-bars and fulcrumed intermediate of its ends, and a pair of connecting-rods extending from the segment to the operating-lever and pivoted to those parts above and below the pivots thereof, said connecting-rods being capable of adjustment to adapt the device to plows of different sizes, substantially as described.

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

STEPHEN A. MILES.

Witnesses:

SAMUEL CORRUTHER,
FRANK CHEW.