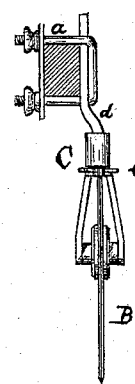
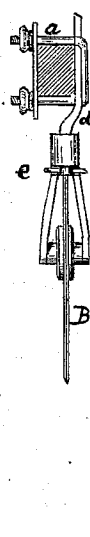
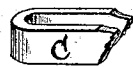
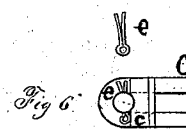
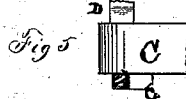
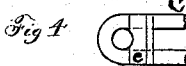
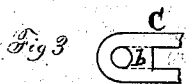
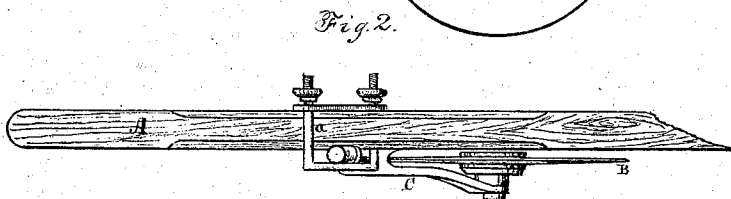
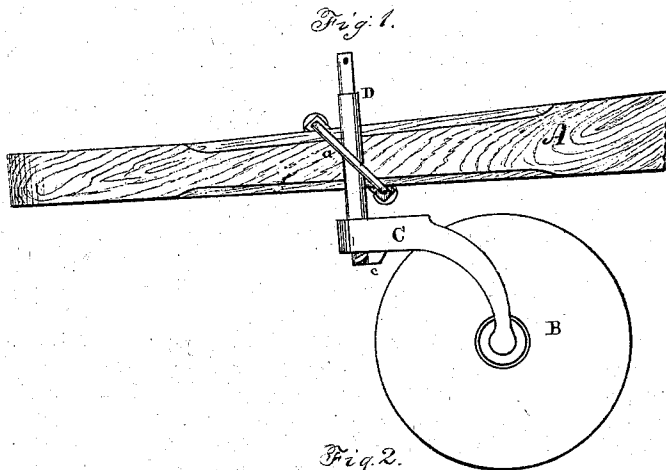


R. EMERSON.

Colters.

No. 136,647.

Patented March 11, 1873.



Witnesses

Wm. Galeotti
Jno. Faxon

Ralph Emerson Inventor.

UNITED STATES PATENT OFFICE.

RALPH EMERSON, OF ROCKFORD, ILLINOIS.

IMPROVEMENT IN COLTERS.

Specification forming part of Letters Patent No. 136,647, dated March 11, 1873.

To all whom it may concern:

Be it known that I, RALPH EMERSON, of the city of Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Colters, of which the following is a full description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side view; Fig. 2, a top view; Fig. 3, a top view of the upper end of the yoke; Fig. 4, a bottom view of the same; Fig. 5, a side view of the same with the standard inserted; Fig. 6, a bottom view of the same, showing the position of the key; Fig. 7, a detached view of the standard enlarged. Figs. 8 and 9 show the two parts of which the yoke is composed, and Figs. 10 and 11 show the colter in two positions.

My invention relates to improvement in plow or caster colters, which are adjustable both vertically and laterally.

In the drawing, A is the plow-beam; B, the colter-wheel; C, the yoke or fork having two arms, between which the colter-wheel is placed, as usual. To form this yoke with an eye for the standard in a single piece is a difficult matter. I make the yoke in two pieces, forging the two arms from a single piece or ribbon of wrought-iron bent into the proper form, which can be easily done. Between the arms I then secure, by riveting or in any suitable manner, the block or piece *b*, which may be of cast-iron or other suitable material, thus completing the eye for the standard. This mode of construction saves much expense, and the yoke so made is quite as good as though forged wholly from a single piece of wrought-iron. The block or piece *b* extends below the arms of the yoke, and this projecting part *c* forms a shoulder which, by coming in contact with the key, limits the swinging movement of the colter; the extent of the swinging movement depends on the construction or location of this shoulder. D shows the standard as seen from the front. It is bent near the lower end, as shown at *d*, Fig. 7. The shank of the standard is flat on both sides. By withdrawing the key *e*, removing the yoke, turning the standard half way around, and then replacing the

yoke, the position of the colter can be changed laterally. The yoke or fork C is secured to the standard by means of a spring-key, *e*, placed at right angles with the beam, in which position it serves as a stop against which the shoulder *c* strikes, limiting the swinging movement of the colter; and the key can be much more readily and safely removed, as occasion requires, when in this position than if placed parallel with the beam. This key is a desirable means of securing the standard to the yoke, being easily removed, and being held in place by its own elastic action without any additional key, pin, nut, or other device. That which is shown as the upper end of the standard is so formed that the colter-yoke may be secured thereto in the same manner as to the other end, the position of the standard being reversed. The parts *fg* of the standard do not have a common center line vertically, (see Fig. 7,) so that by the use of this standard four adjustments of the colter can be made, two by the use of each end, the colter being brought under the beam or away therefrom.

For many plows it will not be necessary to construct the upper end of the standard so that it can be connected with the yoke. By giving the parts *fg* of the standard a common center line the colter can be placed in three different positions only—in two by the use of the lower end of the standard, and in a third position by reversing the standard. When the standard is placed in the position shown in Fig. 10 the colter-wheel is brought under the beam; by turning the standard half way around the colter-wheel can be carried away from the beam, as represented in Fig. 11.

What I claim as new is—

1. The standard D, constructed as described, in combination with the yoke C, wheel B, and key *e*, substantially as and for the purpose herein specified.

2. The yoke C, constructed as described, and section *b*, forming the back, in combination with a standard, D, and wheel B, substantially as and for the purpose described.

RALPH EMERSON.

Witnesses:

WM. TALCOTT,
JN. FAXON.