(No Model.)

G. S. BRIGGS.

PLOW COLTER.

No. 313,651. Patented Mar. 10, 1885.

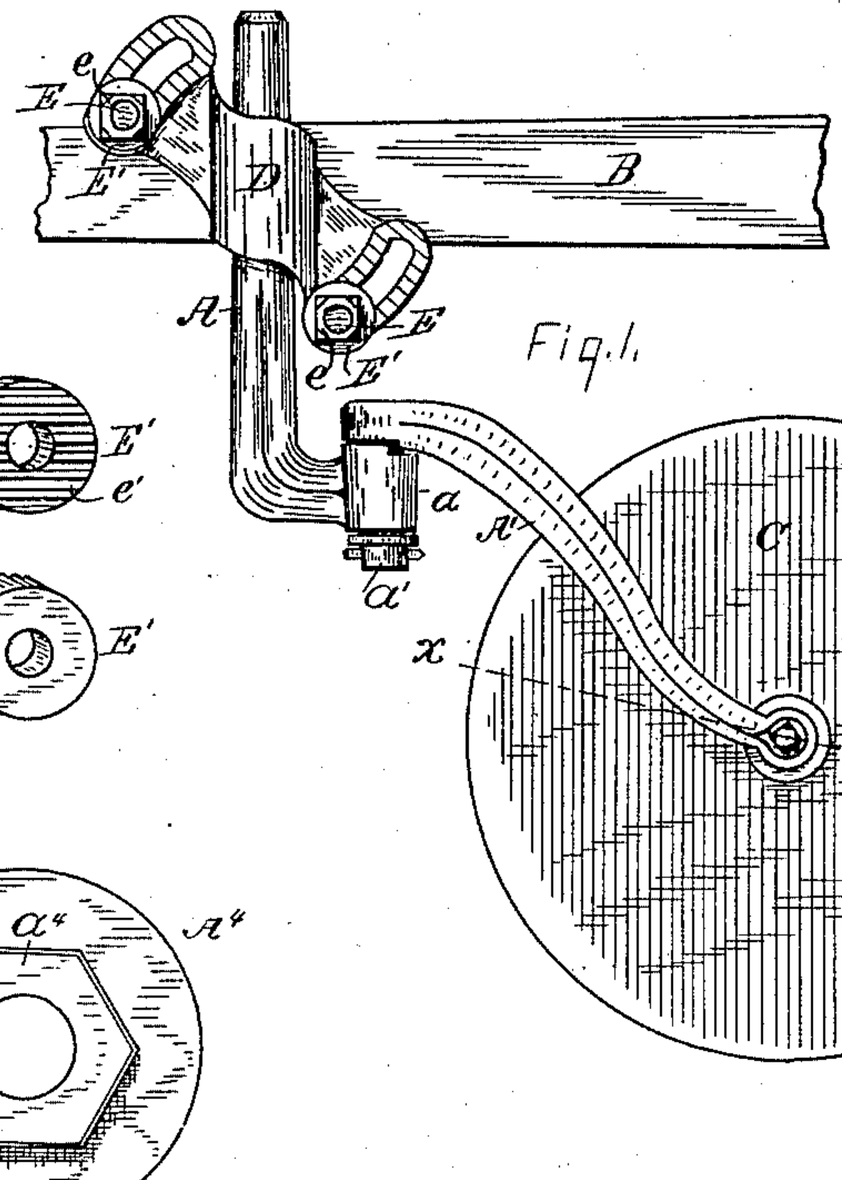


Fig. 1.

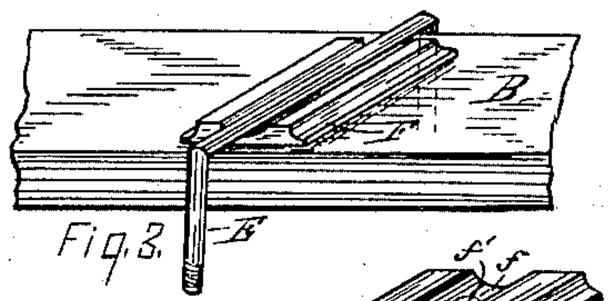


Fig. 3.

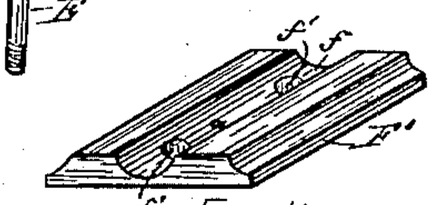


Fig. 4.

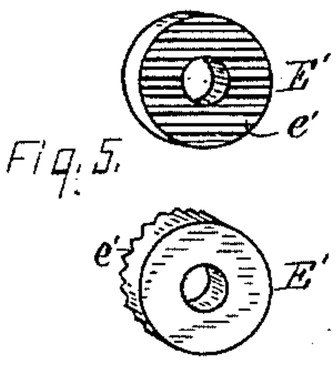
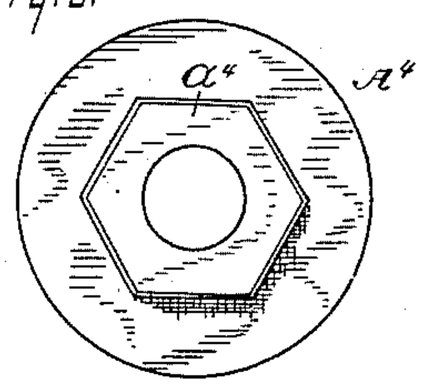


Fig. 5.

Fig. 6.



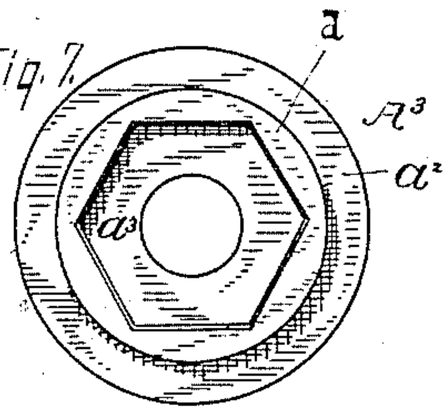
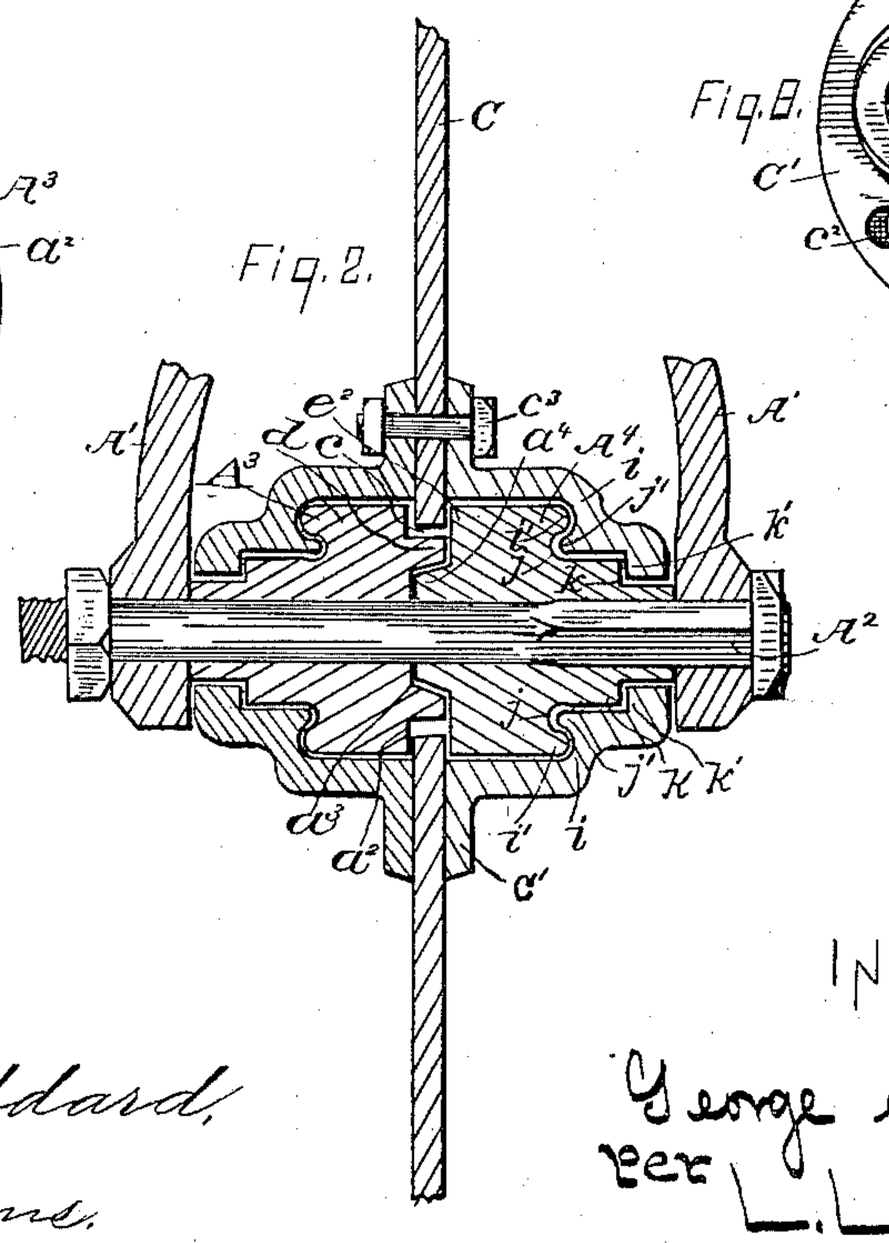


Fig. 7.

Fig. 2.



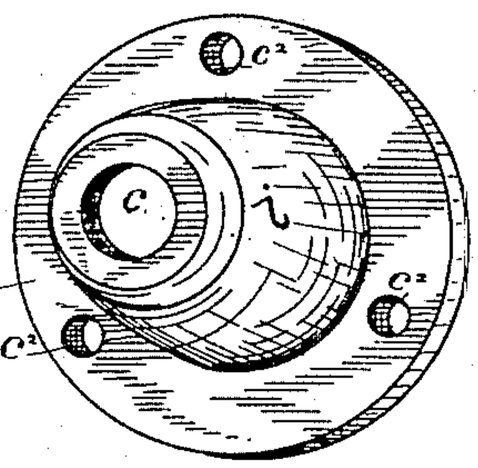


Fig. 8.

WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE S. BRIGGS, OF ROCKFORD, ILLINOIS.

PLOW-COLTER.

SPECIFICATION forming part of Letters Patent No. 313,651, dated March 10, 1885.

Application filed March 15, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. BRIGGS, of Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Plow-Colters and their Attachments, of which the following is a specification.

The purpose of this invention is so to construct the bearings of a colter that the dirt will be excluded therefrom, and that a more effective lateral support will be given to the colter as the bearings become worn by friction, thereby preventing, to a great extent, the vacillating motion of the same.

Reference being had to the accompanying drawings, which form a part of this specification, it will be seen how my invention can best be made and used.

Figure 1 represents a view of a colter with my improvement clamped onto a plow-beam. Fig. 2 represents a sectional view in the line *x x* of Fig. 1. Fig. 3 represents a back side and top view of the beam shown in Fig. 1. Fig. 4 shows an inner clamping-plate. Fig. 5 shows front and back side views of a corrugated washer. Figs. 6 and 7 give an end view of the larger ends of the two sleeves shown in Fig. 2. Fig. 8 shows one-half of a combined hub and strengthening-disk removed from the sleeve A^3 of Fig. 2.

C represents the colter proper; A′ A′, the ends of the yoke which support it.

A^2 shows the bolt passing through the ends of the yoke and the other parts and securing them together.

A^3 and A^4 are sleeves of an improved form fitting interiorly the bolt, which should have a short square neck to prevent the sleeve A^4 from revolving, and extending from the middle of the bolt aforesaid to the yoke at each side. These sleeves are a stationary axis, whereon the colter-hub revolves. The exterior corners of their outer ends are cut away, so as to form an abrupt vertical shoulder at *k* and an S-shaped shoulder at *j* and *i′*. The exterior corner of the larger end of sleeve A^3 is cut away, forming, with the exterior corner of sleeve A^4, (marked e^2,) the transverse groove *c*.

d is a cylindrical elevation, having in its center the hexagonal depression a^3.

a^4 is a hexagonal elevation, the exact counterpart of a^3. The hub *i* and the strengthening-disk *c′* should be cast in one piece. The interior of the hub should be the exact counterpart of its corresponding sleeve. The strengthening-disk *c′* should be secured firmly to the colter by bolts, one of which is shown at c^3.

A represents a colter-stem; B, a plow-beam of any size, of either wood or iron; E, a clamp; F, a clamping-plate that may be used on the back side of the beam under the clamp; but the clamp can be used with entire success without it.

F′ represents an inner clamping-plate, to be used on the colter-bearing side of the plow-beam.

D shows an outer clamping-plate, having in each end a transverse slot curved and of the proper width to receive the arms of the clamp E. The curve of the slots is an arc, so that, the end of either arm being held, the other arm will move up or down in its slot freely.

Immediately behind the letter D on the back side of the outer clamping-plate is a vertical semicircular groove. By raising the lower arm of clamp E in Fig. 1, the clamp will fit the smallest beam. By raising the upper arm it will fit the largest beam. The front face of the clamping-plate about the slots is corrugated to receive the corrugated faces of the washers E′.

e e are the nuts to secure the plate to its clamp.

I put these parts together in this manner: Place the flat side of the inner clamping-plate, F′, against the side of the beam B with the groove *f* vertical. Place the stem A into the groove aforesaid. Then place the groove in the back of clamping-plate D, against the stem A. Place the arms of the clamp E through the slots in said plate D, so that the upper arm shall rest against the top and the lower against the bottom of the beam B. Pass the arms of clamp E through the washers E′, adapting the corrugated faces to those

on the face of plate D. Turn on the nuts *e e*, and the colter-stem will be held securely in place.

I claim as new and desire to secure by Letters Patent—

The combination, with the rotating colter C and the combined hubs and disks *i c'*, of the non-rotating sleeves or journals A^3 A^4, having S-shaped shoulders, substantially as set forth.

GEO. S. BRIGGS.

Witnesses:
E. S. CHAMBERLAIN,
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