W. P. BROWN.

Plow and Cultivator Coupling.

No. 216,145. Patented June 3, 1879.

Fig. 1.

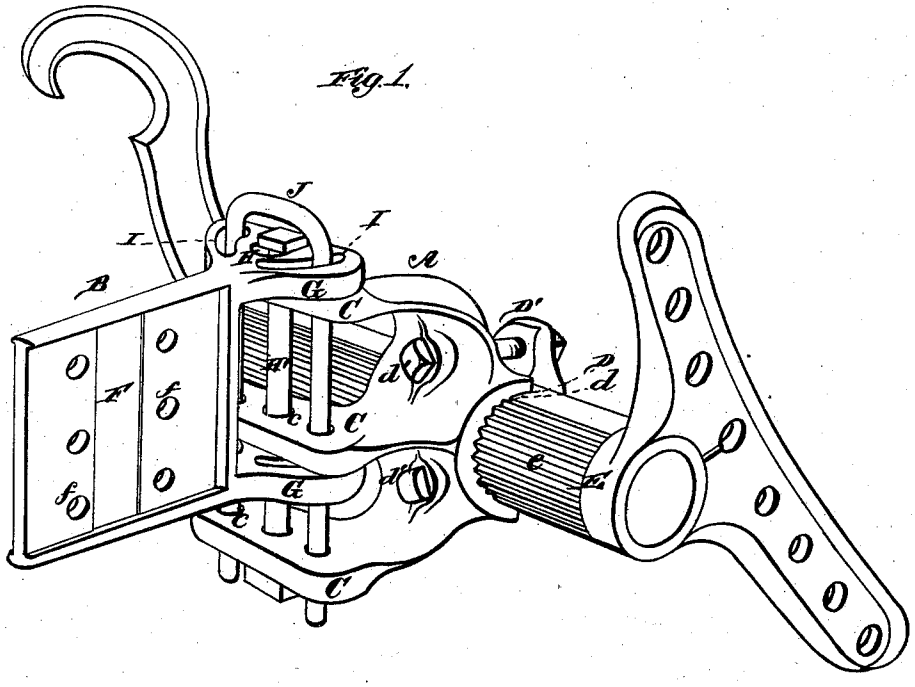


Fig. 2.

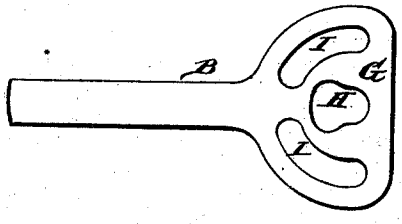
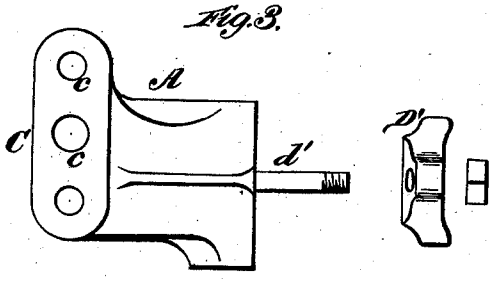


Fig. 3.



WITNESSES

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WILLIAM P. BROWN, OF ZANESVILLE, OHIO.

IMPROVEMENT IN PLOW AND CULTIVATOR COUPLINGS.

Specification forming part of Letters Patent No. **216,145**, dated June 3, 1879; application filed March 29, 1879.

To all whom it may concern:

Be it known that I, WILLIAM P. BROWN, of Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Plow and Cultivator Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to a device for coupling plow-beams for gang-plows on cultivators to the axle or draft; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth.

It has long been a desideratum to prevent plows, when in gangs, from swaying to one side or the other. This swaying is due to the plow having the greatest friction seeking the line of draft, those having less friction being forced outward from the said line of draft. This action of the plows is due to unequal ground, different qualities of soil, obstructions, and the like. The line of draft is in the wake of the pivotal bolt which secures the coupling to the axle or other part of the cultivator.

The object of this invention is to prevent this swaying of the plows by changing the line of draft, and at the same time having two points of draft, to prevent the possibility of a "pry" between said two points and any plow by allowing greater play to the main or center point.

Referring to the drawings, A represents the fixed bracket, and B the plow-casting.

The casting A has three horizontal arms, C, each having three holes or perforations, *c*, to receive devices which will be described, and a horizontal semicircular recess, D, corrugated at *d*, as shown. This casting is secured by bolts *d'* and clip D' to the sleeve E, corrugated at *e*, which is loosely hung on the axle.

The casting B has a vertical plate, F, perforated at *f*, and to this is secured the plow-beams. Two arms, G, are adapted to embrace two of the arms C, to which they are secured, and allow vertical adjustment of the beams as the connection is made above or below.

The arms C of the casting B have each a central aperture, H, of greater diameter than the bolt H', which operates therein, which bolt is naturally the center of draft. Each arm has also two curved slots, I, to receive the staple J, as shown.

It will be observed that in use the line of draft is directly in the wake of the center bolt H'.

If one of the side plows of the gang passes through denser or heavier soil, the greater friction tends to swing that side toward the line of draft. This will be allowed to a slight extent when the same side of the staple-bolt J takes up the line of draft and relieves the center bolt H' and stops the swaying. At the same time, if necessary, the plows may be swung far away from the line of draft to avoid obstructions, &c., the enlarged central hole, H, and curved slots I allowing the action.

The purpose of the corrugated articulating surfaces *d e* is to prevent the bracket from turning on the sleeve, and any kind of roughness or unevenness may be employed.

I claim—

1. The casting A, having three arms, C, to allow vertical adjustment of the plow-beams, and having the semicircular recess D, corrugated at *d*, constructed and adapted to serve as set forth.

2. The casting B, having plate F *f*, arms G, having central enlarged aperture, H, and slots I, combined with the bracket A C *c* and bolts H' J, as set forth.

3. The staple-bolt J, combined with the bracket A and B, adapted to change the line of draft, as specified.

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

WILLIAM P. BROWN.

Witnesses:

R. M. BARR,

H. CLAY SMITH.