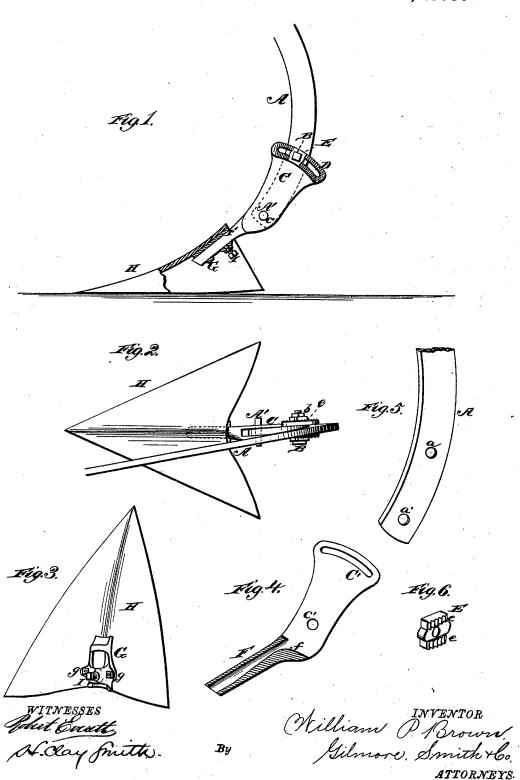
W. P. BROWN. Plow Attachment.

No. 216,146.

Patented June 3, 1879.



## UNITED STATES PATENT OFFICE.

WILLIAM P. BROWN, OF ZANESVILLE, OHIO.

## IMPROVEMENT IN PLOW ATTACHMENTS.

Specification forming part of Letters Patent No. 216,146, 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 Attachments; 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

Figure 1 is a side view of my invention; Fig. 2, a top view; Fig. 3, a rear view of the shovel; Fig. 4, a view of the boot, and Figs. 5 and 6 detail views.

My invention relates to a device for attaching the shovel, plow, sweep, or the like to the beam in gang-plows, consisting of one or more; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and par-

ticularly pointed out in the claims.

In carrying out the invention I employ an ordinary beam, the lower end of which is perforated to receive the pivotal bolt, and also perforated to receive the break-pin. This end of the beam works in receiving-jaws of the boot or trip, the upper ends of which are provided with segmental slots, as shown. The outer surface of each jaw, upon both sides of the slots, are corrugated radial, or nearly so, with the break-pin aperture below.

Within the slots operates the pivotal bolt, between the head of which and the corrugations on one side and the burr of which and the corrugations on the opposite side operate perforated washers, having corrugations, as shown, which correspond with those into which they mesh on the jaws and form a se-

The lower part of the boot forms a hollow tube, adapted to be received within the bracket-brace secured to the under inner side of the plow, as shown. This brace forms a socket, having a set-screw, which serves to hold the boot in place.

A strengthening-rib upon the inner surface of the tube adds strength to the part most as-

sailed by strain, and against which the setscrew operates.

At the junction of the jaws and tube the boot is bent to give the proper set to the plows, and the boots are made rights and lefts, so as to be ready without bending when the plow is attached.

The boot is made of metal, cast, forged, or otherwise formed, and is designed to operate with any of the devices for plowing, hilling,

cultivating, &c., generally used.

Referring to the drawings, A represents the plow-beam, perforated at a to receive the pivotal bolt B, and at a' to receive the break-pin A'. This portion of the beam operates between the jaws C of the boot, which are perforated at c' c', as shown. C' represents the slots in the jaws, and D the corrugated outer surfaces at the sides of said slots.

Washers E, having corrugated surfaces e, as shown, operate on the bolt upon each side, and serve to form a firm holding device, allowing adjustment of furrow depth at will.

The pivotal bolt B has a burr, b, and oper-

ates as shown.

The lower portion of the boot forms a hollow shank, F, which is adapted to be received within a socket-brace, G, secured to the plow or sweep H at g g, and having set-screw I, as shown. At the junction of the jaws C and shank F the boot is bent to the right or left, so as to set the plow properly; and the shank is provided with a strengthening rib, f, as shown.

I claim-

1. The combination of the adjustable boot, having tubular shank F, with strengtheningrib f, with socket-brace G g g, plow H, and set-screw I, as and for the purpose specified.

2. The adjustable removable boot described,

having the jaws C and shank F f, being bent at x to properly incline the plow, constructed

and adapted to serve as set forth.

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

WILLIAM P. BROWN.

Witnesses:

ROBERT M. BARR, H. CLAY SMITH.