

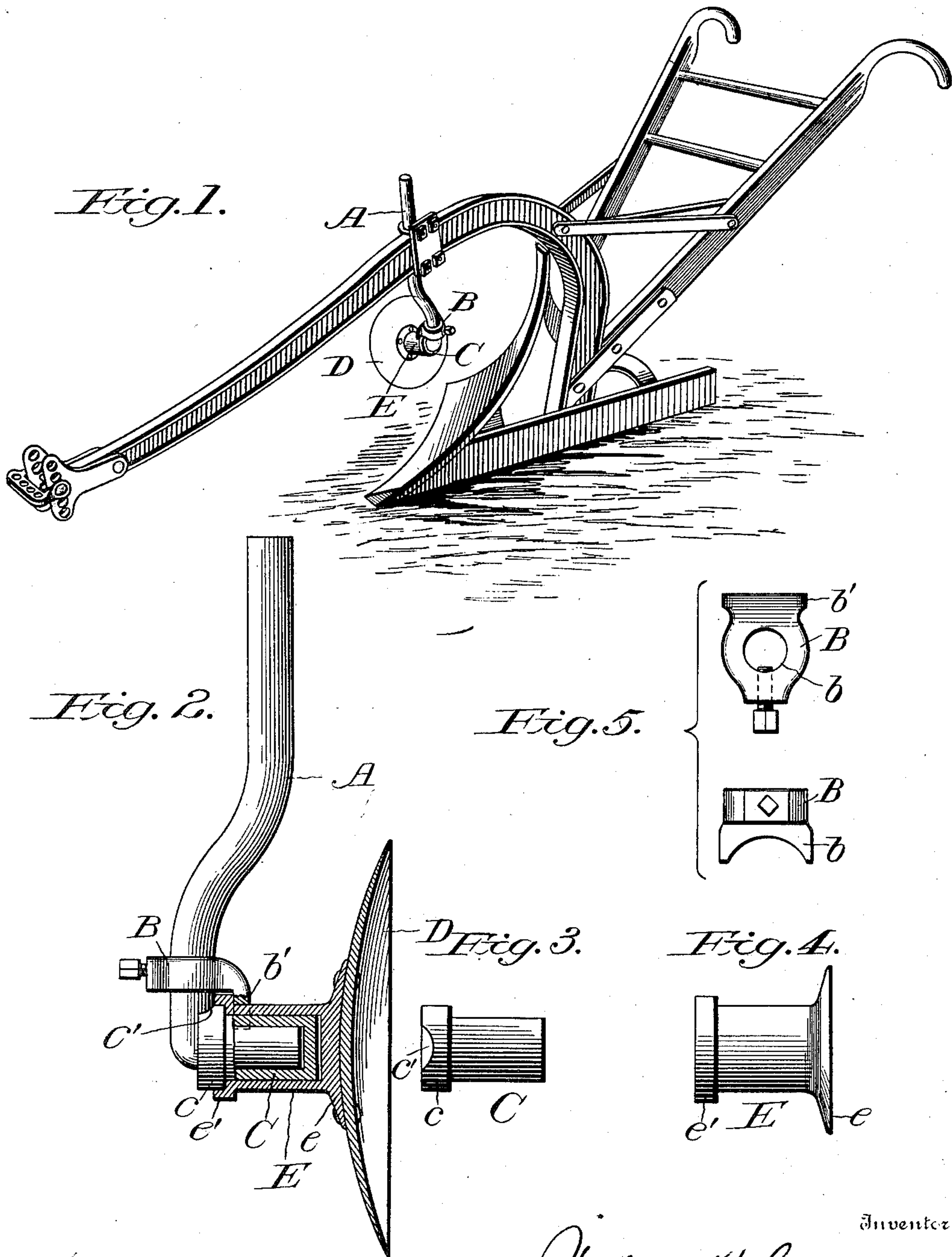
No. 736,695.

PATENTED AUG. 18, 1903.

W. R. CRIFFIELD.
PLOW JOINTER OR ROLLING COLTER.

APPLICATION FILED APR. 2, 1903.

NO MODEL.



Witnesses

E. H. Walker
James W. Bevan

Inventor

William H. Criffield

By

Eugene W. Johnson

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM R. CRIFFIELD, OF WALLA WALLA, WASHINGTON.

PLOW-JOINTER OR ROLLING COLTER.

SPECIFICATION forming part of Letters Patent No. 736,695, dated August 18, 1903.

Application filed April 2, 1903. Serial No. 150,835. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. CRIFFIELD, a citizen of the United States, residing at Walla Walla, in the county of Walla Walla and State of Washington, have invented new and useful Improvements in Plow-Jointers or Rolling Colters, of which the following is a specification.

This invention relates to certain new and useful improvements in the construction of plow-jointers or rolling colters.

The object of my improvement is to provide an attachment for plows, cultivators, or other agricultural implements which may be readily attached and when properly secured in place will assist in turning the soil, stubble, weeds, and sod in advance of the plow-cultivator or other digger.

The invention consists in the construction and combination of the parts and comprises a dished or concave disk, a hub attached to project from the convex side thereof, a skein which is placed over the spindle of a standard and means for holding the hub-carrying disk in rotatable engagement with the skein and said skein in non-rotative engagement with the spindle, as will be hereinafter set forth.

In the accompanying drawings, Figure 1 is a perspective view showing the invention applied to a plow. Fig. 2 is a side elevation of the standard, the colter, its hub, and a part of the skein being shown in section. Fig. 3 is a plan view of the skein; Fig. 4, a side elevation of the hub, and Fig. 5 plan and side views of the hub-engaging device which is carried by the standard.

The standard A may be of any suitable construction for attachment to a plow-beam or the frame of a cultivator to which the standard is clipped or secured in any suitable manner, and the lower portion of the standard or bar is bent, preferably as shown, so that its lower end will project at right angles from the upright portion.

The standard A has placed thereon a hub-retainer B, provided with an aperture *b* for the passage of the standard, and at one side a downward-extending portion *b'*, shaped to be concave on its under side and positioned

considerably beyond the standard. The hub-retainer is clamped or held in frictional engagement with the standard by a bolt or set-screw, as shown. The bent end of the standard carries upon the projecting end a skein C, made up to present at one end a shoulder *c*, having therein a recess *c'*, within which lies the standard above its bent end to hold the skein against rotation. The skein is preferably made of steel, cast-iron, or other hard material, and provides a smooth bearing-surface for the hub.

A disk D, which is concave on one side and convex on the other, is riveted or otherwise secured to a flange *e*, formed integral with the outer end of the hub E, and upon the other end of said hub there is formed a circumferential collar *e'*, which will fit snugly over the shoulder of the skein, and the collar on the hub is engaged by the depending portion of the retainer carried by the standard.

The construction shown provides means whereby the disk and its attached hub can be readily attached and removed. The contacting and wearing surfaces of the hub and skein can be made of hard metal, while the standard may be of malleable iron. By simply loosening the set-screw and raising the retainer the parts can be separated either to remove the disk or to apply lubricating material between the skein and hub.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a standard the end thereof being at an angle with the body portion, of a skein having a recess at one end to engage the standard and prevent rotation of the box on the standard, a disk-carrying hub, and means attached to the standard to engage the hub when placed upon the skein, substantially as shown.

2. In combination with a standard the lower end thereof being positioned at an angle with the portion which is connected to a plow-beam, a skein constructed to overlies the projecting portion of the standard and engage a vertical portion thereof to prevent rotation of the skein on the projecting portion of the standard, a disk-carrying hub for rotatable

engagement with the skein, and a hub-re-
tainer having an aperture therethrough, a set-
screw for holding the hub-retainer in engage-
ment with the standard and a depending semi-
5 circular portion for engagement with the
disk-carrying hub, substantially as shown.

In testimony whereof I have hereunto set

my hand in the presence of two subscribing
witnesses.

WILLIAM R. CRIFFIELD.

Witnesses:

JOEL BURKER,

J. G. THOMAS.