

J. K. PITTS.

Plow-Couplings.

No. 135,360.

Patented Jan. 28, 1873.

Fig. 1.

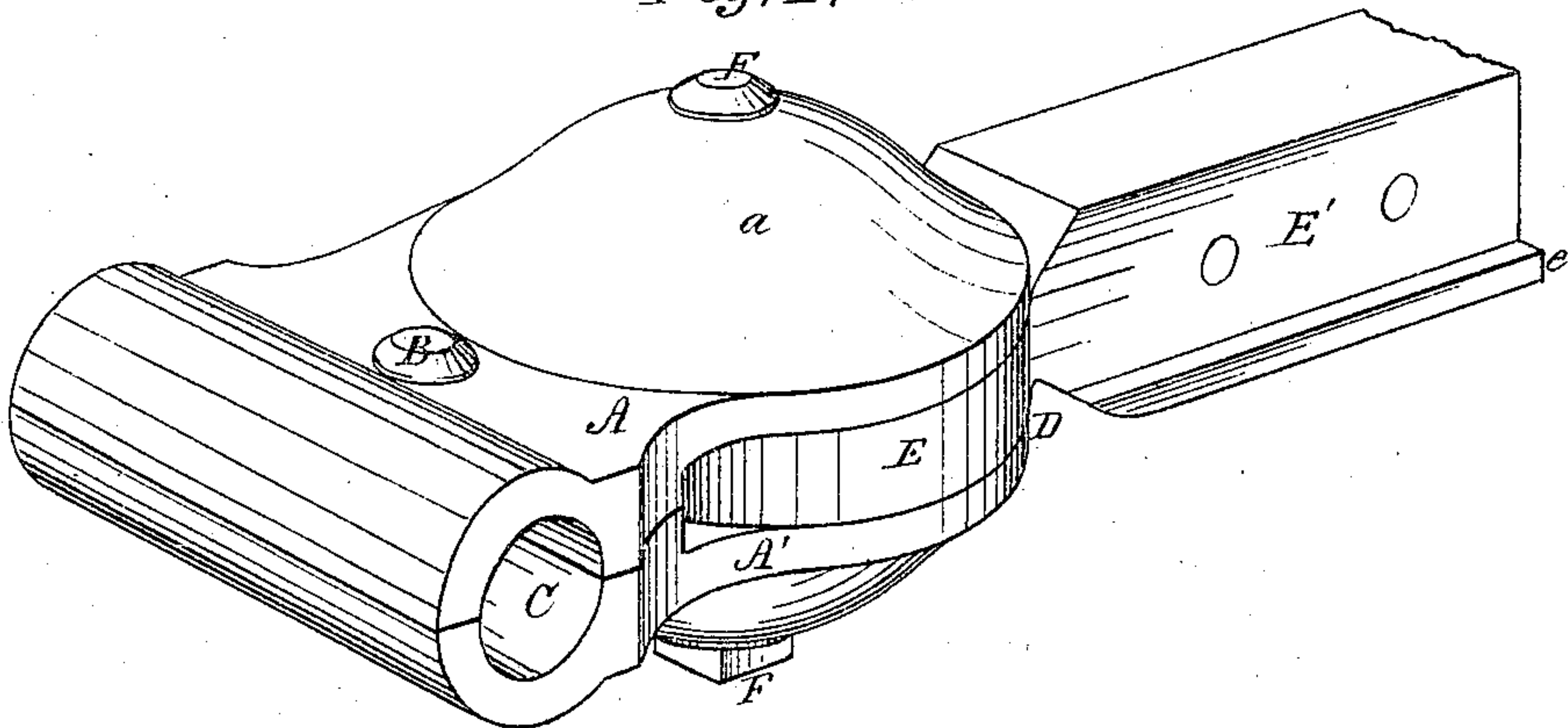
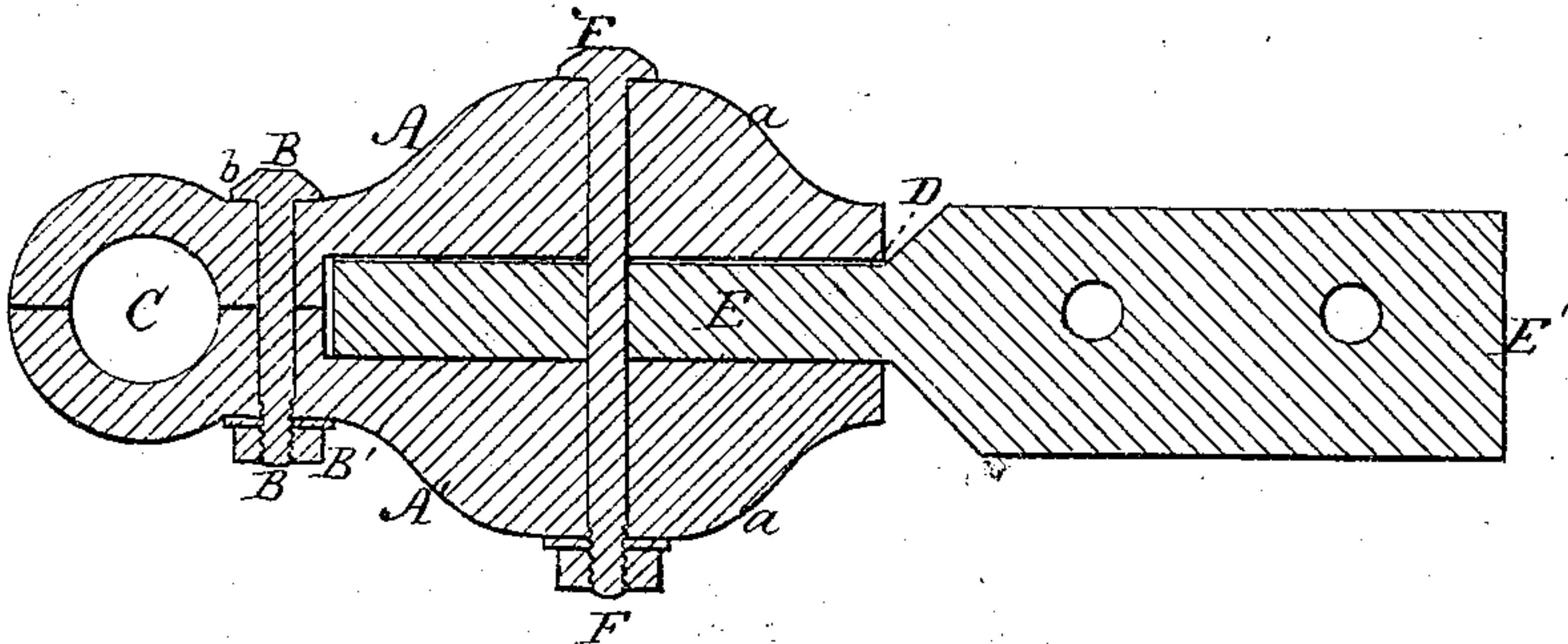


Fig. 2.



Witnesses,  
Edmund Masson  
John R. Young

Inventor,  
James K. Pitts, by  
Prindle and Co., his Attys.



# UNITED STATES PATENT OFFICE.

JAMES K. PITTS, OF McLEAN, ILLINOIS.

## IMPROVEMENT IN PLOW-COUPPLINGS.

Specification forming part of Letters Patent No. 135,360, dated January 28, 1873.

*To all whom it may concern:*

Be it known that I, JAMES K. PITTS, of McLean, in the county of McLean and in the State of Illinois, have invented certain new and useful Improvements in Plow-Couplings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of my device as seen from above, and Fig. 2 is a vertical central section of the same upon a line extending from front to rear.

Letters of like name and kind refer to like parts in each of the figures.

My invention is an improvement upon a class of devices used for connecting the forward ends of plow-beams to or with the main axle or other equivalent portion of the supporting-frame of a cultivator; and it consists in the peculiar construction and combination of parts by means of which greater strength, durability, and efficiency of operation are secured, and the cost of the device lessened, substantially as is hereinafter specified.

In the annexed drawing, A and A' represent two plates of metal, having the general form in plan view shown, and connected together at their transverse centers and near their forward ends by means of a bolt, B, provided upon one end with a head, b, and upon its opposite threaded end with a nut, B'. The forward end of the combined plates is enlarged vertically, and has the exterior form of a horizontal cylinder, while in and through said end is provided a cylindrical opening, C, which corresponds in diameter to the like feature of the cultivator-axle, immediately within its supporting or ground wheel. The rear end of each plate is formed upon a circular line, and upon its outer face is provided with a semi-spherical enlargement, a, while at their common center said plates are provided with a horizontal recess or slot, D, which has a vertical depth of about three-fourths of an inch, is open at its sides and rear, and at its front side is formed upon a circle that corresponds to and forms a continuation of the circular line of said rear end. Within the slot D is fitted a correspondingly-shaped tongue, E, which is

attached to and forms a part of a rectangular bar, E', that extends horizontally rearward for about six inches. A bolt, F, passing vertically downward through the plates A and A', and through the tongue E at the radial centers of their circular portions, insures the relative positions of said parts, and at the same time forms an axial or a pivotal bearing upon and around which said tongue and its bar have a semi-rotary movement in a horizontal plane. From either the upper or lower side of the bar E' a flange, e, is extended horizontally and laterally outward, and within the angles formed by the same and the vertical sides of said bar are placed the plow-beams, the parts being secured together by means of two bolts that pass horizontally through the same.

The device is now complete, and, as will be seen, furnishes broad and firm pivotal bearings, for and by means of which are secured the vertical and horizontal movements of the plow-beams, while, at the same time, the laterally-vertical position of each plow or shovel is insured, and all twisting or wobbling is prevented.

In addition to the above-named advantages, the parts of the device are capable of being cast and combined without other fitting up than, possibly, the drilling of the bolt-holes, by which means the cost of its production is rendered comparatively small.

Having thus fully set forth the nature and merits of my invention, what I claim as new, is—

The plow-coupling shown, consisting of the plates A and A' provided at their forward ends with the cylindrical opening C, and at their rear ends with the semi-spherical bosses a and recess or slot D, connected together by the bolt B, and combined with the tongued bar E and E' by means of the bolt F, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of August, 1872.

JAMES K. PITTS.

Witnesses:

JOSEPH PITTS,  
C. C. ALDRICH.