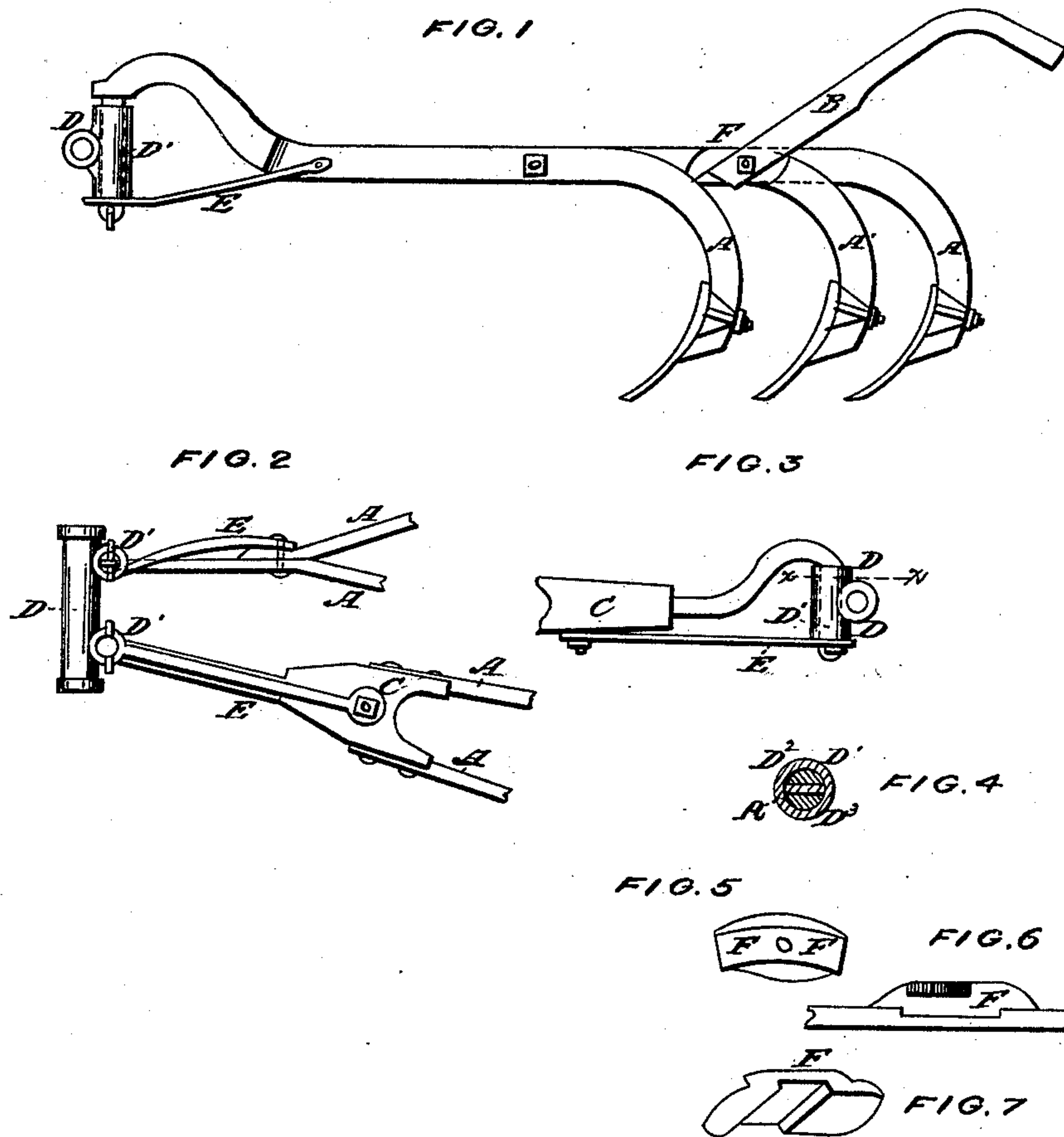


L. LUPPEN.
Plow Coupling.

No. 108,276.

Patented Oct. 11, 1870.



WITNESSES:

C. Clausen
A. Eding Eils

INVENTOR:

L. Luppen
D. P. Holloway & Co
Attys

United States Patent Office.

LUPPE LUPPEN, OF PEKIN, ILLINOIS.

Letters Patent No. 108,276, dated October 11, 1870.

IMPROVEMENT IN SHOVEL-PLOWS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LUPPE LUPPEN, of Pekin, in the county of Tazewell, and State of Illinois, have invented certain Improvements in Shovel-Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings making part of this specification, in which—

Figure 1 is a side elevation of a shovel-plow, having my improved axle-socket attached thereto.

Figure 2 is a bottom view of my improved axle-socket, showing also how the plow-beams are attached thereto, together with the method of bracing the same.

Figure 3 is a sectional elevation of the socket, showing the end of the draw-bar passing through it, and the brace upon its under side thereof, and connected with the plow-beam.

Figure 4 is a vertical section of the socket on line $x x$ of fig. 3, showing the method of attaching the end of the beam thereto.

Figures 5, 6, and 7 are perspective views, showing the construction of the device for attaching the handles to the beams.

Corresponding letters refer to corresponding parts in the several figures.

This invention relates to shovel-plows; and

It consists—

First, in the construction of a metal socket for the reception of the axle, and

Secondly, in the combination and arrangement of the parts connected therewith, as will be more fully explained hereinafter.

A A refer to the beams of the plow, which may be of metal, and bent, as shown in fig. 1, and be supplied with shovels of any approved pattern, their front ends being secured to the socket C by rivets and bolts.

B refers to the handles, which are attached to a socket, F, by means of which they are held in position.

C refers to a socket, to which the front ends of the beams are attached, and to which the draw-bar is also attached by means of a bolt, or it may be by an extension of one of the beams of the plow, as shown in fig. 2.

The above recited parts form no part of the invention herein claimed, and, consequently, need not be more particularly described here.

D refers to a socket, which is to have an aperture formed in it in a longitudinal direction, to receive a portion of the axle of the machine.

Upon one side of the socket there are to be formed one or more projections, as clearly shown in figs. 1, 2, and 3.

These projections are provided with apertures, which extend through them vertically, their office being to receive the bent forward end of the plow-beam or of the draw-bar, as may be preferred.

When the bent end of the plow-beam is used as a means of connecting the plow or plows to the socket D, it is to be so formed as that a portion thereof shall pass through the vertical aperture in said socket, such bent and flat portion being provided with two shims, made flat upon their inner surfaces, but in the form of a segment of a circle upon their outer surfaces, and of such dimensions that, when they and the bent portion of the beam are inserted therein, they will fill the vertical aperture in the socket D, and thus form a fulcrum, upon which the beam may turn to any desired extent.

The above-described arrangement of parts is clearly shown at fig. 4, where D^1 refers to the projections upon socket D, and D^2 and D^3 to the shims which fill the spaces between the sides of the beams A and the socket.

E refers to a brace, which extends from socket C to and connects with the end of the beam or draw-bar upon the under side of the projection D^1 of socket D.

The rear end of this brace is firmly bolted to socket C, its office being to prevent any tendency of the plows to turn socket D upon the axle while the machine is in operation.

When no socket C is used, as will be the case when the beam A extends to and through the projection D^1 , this brace at its rear end may be riveted to the beam A, as shown at fig. 2.

F refers to a device which is shown in figs. 1, 5, 6, and 7.

It is so constructed as to grasp the beam, flanges being provided upon its inner surface for that purpose, they being of a form to fit the edges of the beam at the point where it is desirable to attach them, while upon its outer surface flanges are to project, placed at such an angle as to give the handles a proper position with reference to the beam.

The flanges upon the outer surfaces of this device form, with the body thereof, a recess, into which the handle is placed, and a bolt is passed through it and the beam of the plow, which, when the nut is screwed down thereon, unites all the parts firmly together, and forms a complete support for the handles of the plow.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The socket D, having upon its side one or more projections D^1 , substantially as and for the purpose set forth.

2. The combination of the socket D, shims D² and D³, and beam or draw-bar A, substantially as and for the purpose set forth.

3. The combination of the socket C or beam A, brace F, and socket D, substantially as and for the purpose set forth.

In testimony whereof, I have signed my name to

this specification in the presence of two subscribing witnesses.

LUPPE LUPPEN.

Witnesses:

CHRIST HEFFT,
LEMUEL ALLEN.