

L. Luffen,
Shovel Plow.
No. 103,275.

Patented Oct. 11, 1870.

Fig. 1

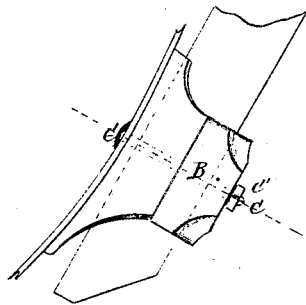


Fig. 2

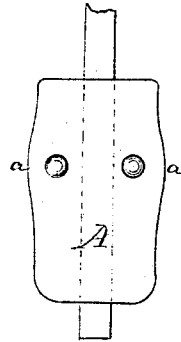


Fig. 3.

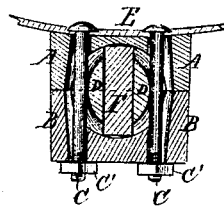
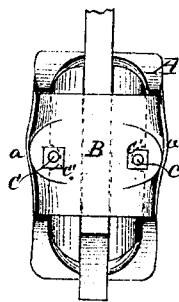


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

LUPPE LUPPEN, OF PEKIN, ILLINOIS.

IMPROVEMENT IN SHOVEL-PLOWS.

Specification forming part of Letters Patent No. 108,275, dated October 11, 1870.

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 my improved fastener, showing also a portion of the blade and leg of a shovel-plow. Fig. 2 is a front elevation thereof. Fig. 3 is a horizontal section on line *xx* of Fig. 1. Fig. 4 is a rear elevation.

The same letters are used in all the figures to indicate identical parts.

This invention relates to an improved device for securing the blades of cultivator-shovels and plows to the legs or standards thereof; and it consists of a block of metal, with a suitably-curved face to impinge against the back of the blade, and a semicircular vertical recess or seat in its rear side to receive and partly encompass the leg or standard, a cap for embracing the rear portion of such leg, and bolts and tightening-nuts for securing all the parts together, the arrangement being such that the blade may be fastened at any height and at any angle to the line of draft.

It further consists in combining with such a fastener fillets of wood or metal in such a manner that it may be used on legs of a flat or angular form with the same effect as on those of a cylindrical form.

In the drawings, A represents a block of metal or other suitable material, having its face curved, so as to fit the particular style of blade which is to be secured to and give to it the desired pitch. In its rear side a semicircular recess or seat is formed vertically, as clearly shown in Fig. 3, and near the center it is somewhat enlarged, as at *a*, through which enlarged or widened portion the holes for receiving the bolts are formed.

B represents the cap, of a length and width equal to that of the seat portion of the block A. It is made of a semicircular form, with

a flattened portion on its back to give suitable bearing-surfaces to the tightening-nuts, its curvature being such that when resting with its edges upon the flanges of the block A a round aperture is formed, through which the leg or standard of a plow or cultivator may pass.

In practice the leg is always made somewhat larger than this aperture, so that when the block and cap are drawn together by the bolts C and tightening-nuts C' the edges of such block and cap may not touch, and they be made to firmly clamp such leg.

C C represent bolts, with a squared portion near their heads, and made of a suitable length to pass through the blade E, block A, and cap B, through which latter they project a sufficient distance to receive the tightening-nuts C'. Their heads may be formed as shown, or countersunk in the blade. The squared portion, fitting nearly in a square hole in the blade and block, prevents their turning on tightening the nuts.

The superior advantages for fastening blades to their legs, and the facility of arranging such blades at any height thereon and at any desired angle to the line of draft by means of this fastener, are apparent. At the same time it is most simple in construction and can be applied by the most inexperienced farm-hand.

In order to adapt the device above described to be attached to a leg or standard of flat or angular form, such as shown at F in the drawings, I use fillets D, of wood or metal, to be inserted upon the sides of such leg, to fill the spaces in the round aperture not occupied thereby. Care must be taken that these fillets are made in such a manner that on securing the fastener with its blade on the standard the pressure shall come upon the edges of such standard and not upon the fillets. When these fillets are used, I set the bolts nearer the center of the aperture, so that they shall enter a groove around the curved side of the fillets, and thus prevent the latter from leaving their proper positions.

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

1. A shovel-fastener consisting of the block A, cap B, bolts C, and tightening-nuts C', substantially as shown and described.

2. In combination with the elements in the preceding clause, the fillets 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.