No. 692,127. Patented Jan. 28, 1902.

F. LA F. EZELL.

PLOW.

(Application filed May 27, 1901.)

(No Model.)

Fig. 1.

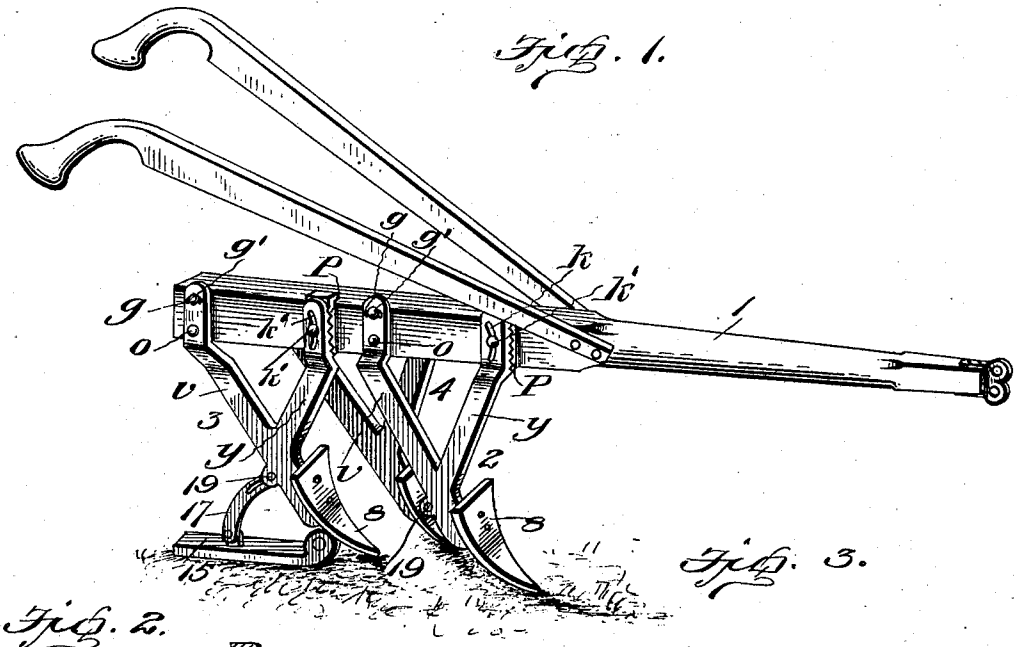


Fig. 3.

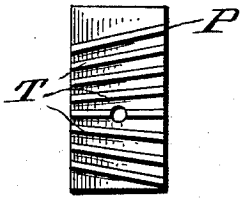
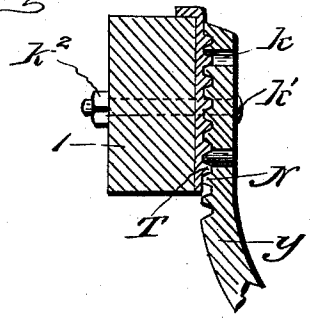


Fig. 2.



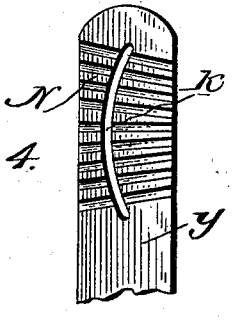


Fig. 4.

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UNITED STATES PATENT OFFICE.

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PLOW.

SPECIFICATION forming part of Letters Patent No. 692,127, dated January 28, 1902.

Application filed May 27, 1901. Serial No. 62,069. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS LA FAYETTE EZELL, a citizen of the United States, residing at Flatrock, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to plows of the single, double, triple, or gang shovel type.

The object of the invention is to provide simple, durable, and inexpensive means for retaining in adjustment the standards, whereby a different pitch may be given to the shovel, provision being made for adjusting the regulator to correspond to the pitch given the shovel.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a perspective view of a triple-shovel plow, illustrating the application of my invention. Fig. 2 is a vertical sectional view through the plow-beam and the upper end of one of the forked arms of the plow-standards. Fig. 3 is a front elevation of the toothed plate, and Fig. 4 is an elevation of the inner face of the upper end of the forked member, which coacts with the toothed plate.

In the drawings, 1 denotes a plow-beam, 2, 3, and 4 the standards, and 8 the shovels connected at their lower ends to the standards in any well-known or approved manner. The standards 2 and 4 are curved outwardly in opposite directions, while the standard 3 is curved so as to lie directly under the beam 1. The standards are connected to the beam in a novel manner to permit of the adjustment of said standards to change the pitch of the shovels. The means for accomplishing this preferably consists in bifurcating the upper ends of each standard to form arms v and y, the former of which is pivotally connected to the beam by a bolt o. Immediately above the bolt-hole in said arm v is formed a curved slot g, through which extends a bolt g'. The center of curvature of the slot g is the hole for the bolt o. The other arm y is provided with a curved slot k, the center of curvature of which is the hole for the bolt o, and a bolt k' extends through the slot k and is provided with a tightening-nut k^2. A plate P is interposed between the side face of the beam and the arm y and has a bolt k' extending through it, the upper edge of this plate being bent over and lying upon the upper face of the beam, so that strain in a downward direction will not be sustained entirely by the bolt k'. This plate P has on its outer face radial teeth T, whose center of curvature is the hole for the bolt o, and these teeth mesh with radial teeth N, formed on the inner face or side of the arm y and pitched to correspond with the teeth T. The standards 2 and 3 are each provided with a lug 19.

15 denotes the regulator, which may be of any well-known or approved construction and which is pivoted at its forward end to one of the plow-standards 2 and 3 or has an arm 17, which has a bolt-and-slot connection with the lug 19, projecting from one of the standards 2 or 3. When the plow is used as a triple plow, the regulator is attached to the rearmost standard 2. When used as a double plow, the standard 2 is removed and the regulator is attached to the standard 3.

When it is desired to change the pitch of the plow-shovel, the bolts g' and k' are loosened, the teeth N disengaged from the teeth T, and the arm y of the standard adjusted up or down to give the desired pitch to the shovel. The teeth N of the arm y are now engaged with the teeth T of the plate P and the bolts drawn tight, thus securely holding the shovel in its adjusted position. The regulator 15 is now adjusted to correspond to the changed pitch of the shovel.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

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

The combination with a plow-beam, of a forked standard, one arm of which is pivoted to said beam, and is provided with a curved slot, a bolt passed through said slot into said beam; and the other arm of which is formed with radial teeth and with a curved slot, a plate secured to the plow-beam and having corresponding radial teeth to engage the teeth of the arm and formed at its upper edge with a laterally-projecting lip to lie upon the upper face of the plow-beam, and a bolt extending through the slot last mentioned and the plate, and provided with a nut, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANCIS LA FAYETTE EZELL.

Witnesses:

T. H. GRAINGER,

ED. D. FISHER.