No. 623,044.

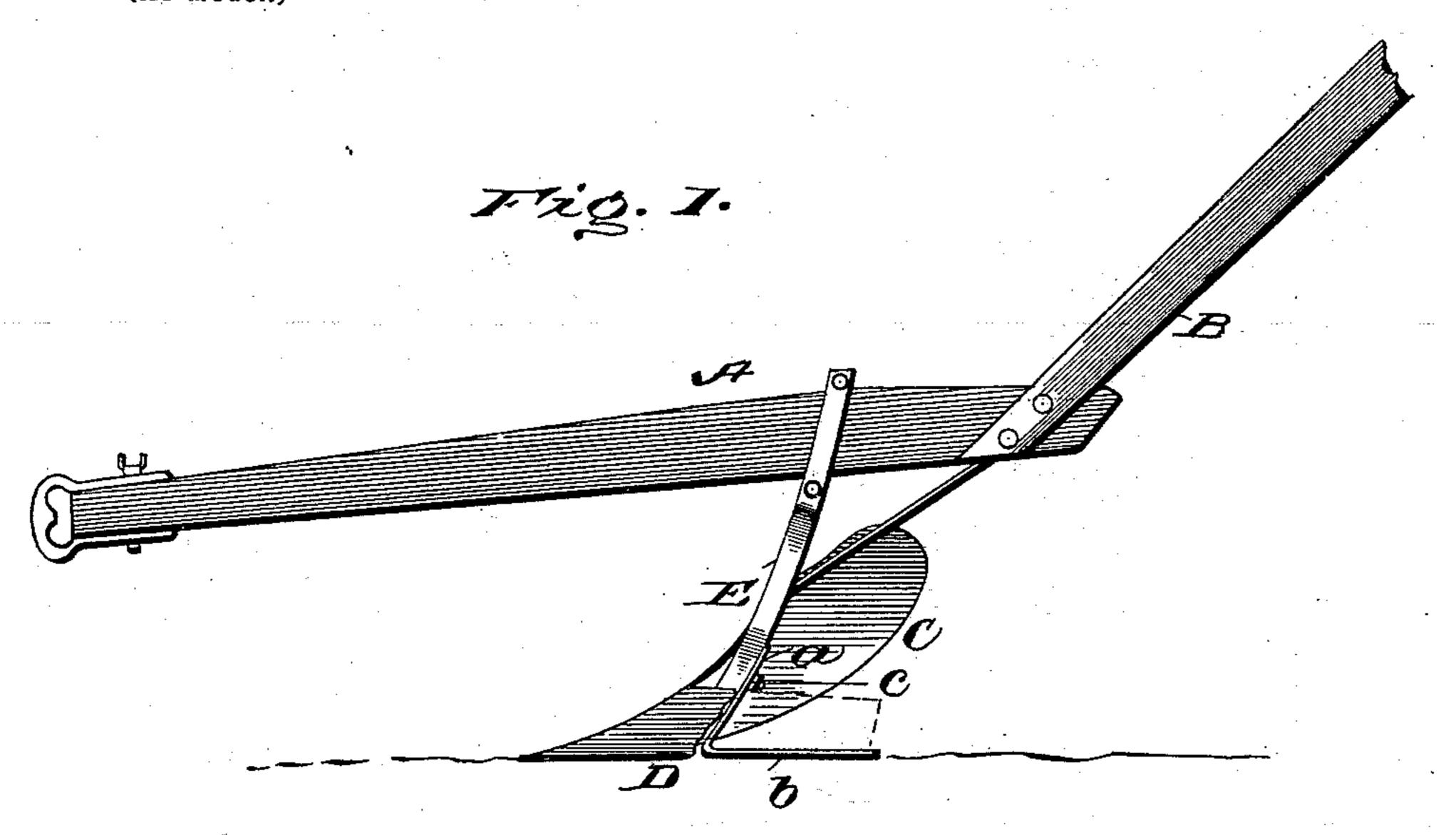
Patented Apr. II, 1899.

W. H. SHERROD.
PLOW.

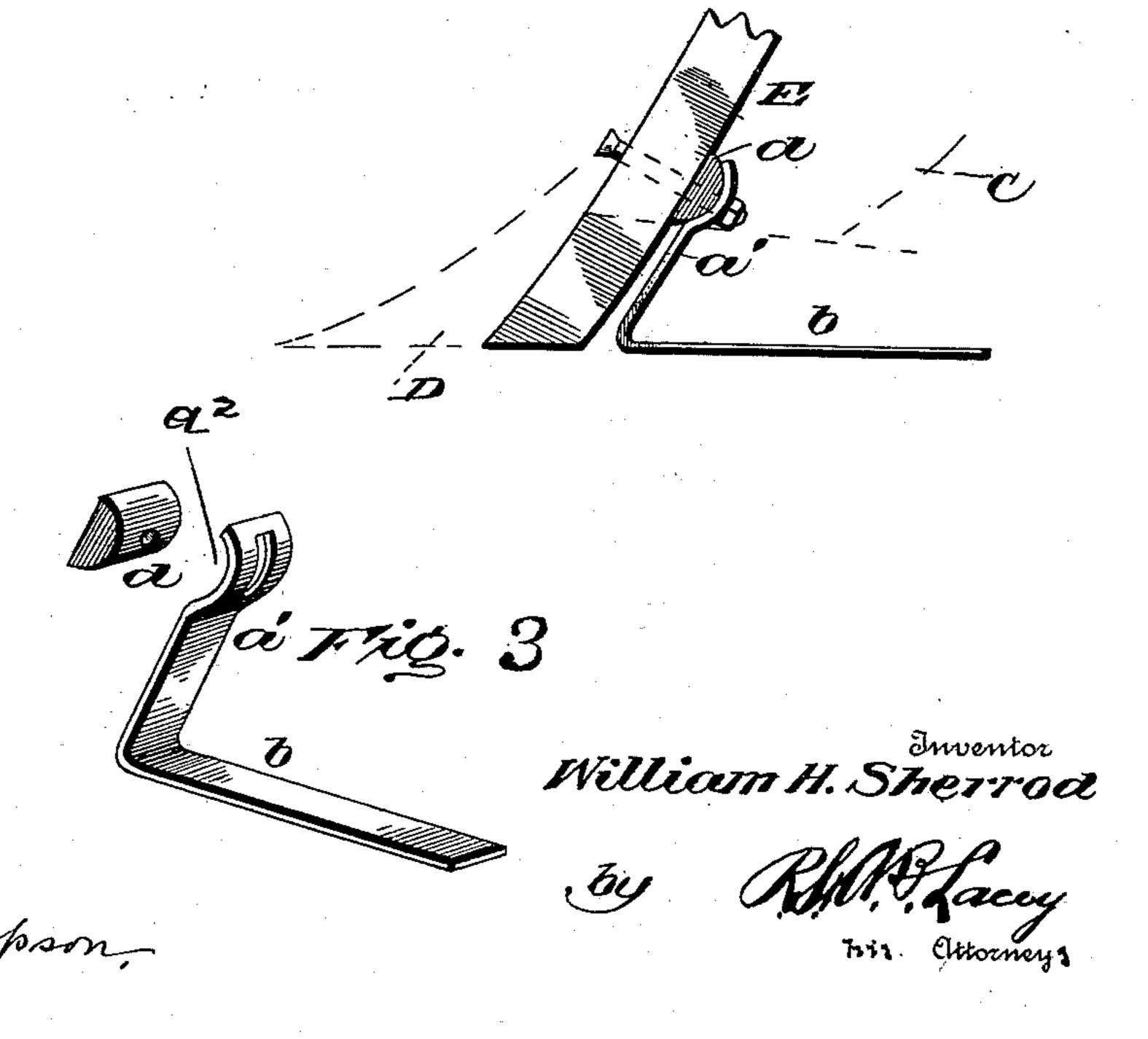
(Application filed Sept. 6, 1898.)

(No Model.)

Witnesses



rig. 2.



## United States Patent Office.

WILLIAM H. SHERROD, OF CASTELL, TEXAS.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 623,044, dated April 11, 1899.

Application filed September 6, 1898. Serial No. 690,298. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SHERROD, a citizen of the United States, residing at Castell, in the county of Llano and State of 5 Texas, have invented certain new and useful Improvements in Plows; and I do hereby 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 10 appertains to make and use the same.

This invention relates to gage-runners for plows and the intent and purpose of the same is to regulate the depth of furrow in a positive manner, and whereby an adjustment is 15 also possible to compensate for various conditions, the attachment also insuring the maintenance of a uniform draft and the handling of the plow by the operator being mate-

rially facilitated.

The invention consists of the construction and arrangement of the several parts more fully hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a plow embodying the in-25 vention. Fig. 2 is a detail view of the plowstandard on a larger scale, showing the runner attached thereto. Fig. 3 is a perspective view of the parts of the improvement shown detached.

Referring to the drawings, wherein similar letters are utilized to indicate corresponding parts in the several views, the letter A designates a plow-beam, B the handles, C the moldboard, D the landside, and E the stock 35 or standard, all of substantially the usual

construction.

The rear edge of the stock or standard E should be flat, and thereagainst is attached, by means of an arm a, a rearwardly-projecting 40 blade b, arranged at such an angle to the said arm as to adapt it under normal conditions to rest on the bottom of the furrow and centrally thereof. By this construction an approximately L-shaped gage-runner is formed 45 and a uniform but yielding resistance relatively to an adjustable possibility is offered to an upward draft on the beam when the plow is in operation. The upper end a' of the arm recedes in convex contour from the 50 straight main portion thereof and to form a front concavity  $a^2$ .

Through the stock or standard E, at a suit-

able elevation, a bolt c is transversely passed and in a plane at about a right angle to said stock. The head of said bolt is at the front 55 of the stock, and the screw-threaded end to receive a clamping-nut is at the rear, said bolt being somewhat longer than the thickness or transverse extent of the stock. Against the rear edge of the stock a hemispherical 60 block d is mounted and has its flat or plane face bearing directly against said edge and its convex face at the rear. The block d is of a length equal to the width of the stock and has an opening therethrough for the passage of the 65 bolt c. The width of the upper end of the arm ais just equal to the length of the block d; but the concavity  $a^2$  is less in extent than the rear convex face of said block, so that an adjustment of the arm may be accomplished. The 70 concavity  $a^2$  snugly engages the rear convex face of the block, and to accommodate the adjustment a longitudinal slot  $a^3$  is formed in the said receded curved end a' of the arm. The object of this adjustment of the blade is 75 to provide means whereby it may be tilted to conform to varying angles of stocks in different makes of plows and maintain a horizontal position of the blade and also to overcome the tendency of the plow proper to suck down-80 wardly in loose or ashy soils. In the latter instance the blade is lowered sufficiently and will bear within the ground with a force strong enough to overcome this tendency of the plow and keep it well up. Under other conditions 85 it may be necessary to hold the plow from working upwardly out of the furrow, and in this event the blade is elevated above a horizontal and materially overcomes this operation.

In adjusting the blade the nut on the bolt c is loosened and the upper curved end a'moved over the rear convex face of the block d, either up or down, and when the desired angle is attained the said bolt is again tight- 95 ened.

By using the block d with the rear convex face the improved device is complete in itself and adapted for application to any stock or standard without specially recessing or oth- 100 erwise constructing the latter to permit the securement of the attachment. Old plows now in use can have by this means the device applied thereto, and changes in the proportions and dimensions may be made to accommodate various plows or standards.

Having thus described the invention, what

is claimed as new is-

In combination with a plow-stock or standard, of a bolt extending transversely therethrough toward the rear, a removable block of hemispherical form having an opening therein for the passage of said bolt, the front plane face of said block being held against the standard and the convex surface thereof standing to the rear, and a flat blade having

an upwardly-extending arm provided with an upper receding curved end to form a front concavity to snugly fit over and of less extent 15 than the rear convex face of said block, said receding end being slotted longitudinally for adjustable reception of the bolt.

In testimony whereof I affix my signature

in presence of two witnesses.

WILLIAM H. SHERROD.

Witnesses:

W. S. WOOTAN, T. M. DAVIS.