A. L. ROGERS.

PLOW.

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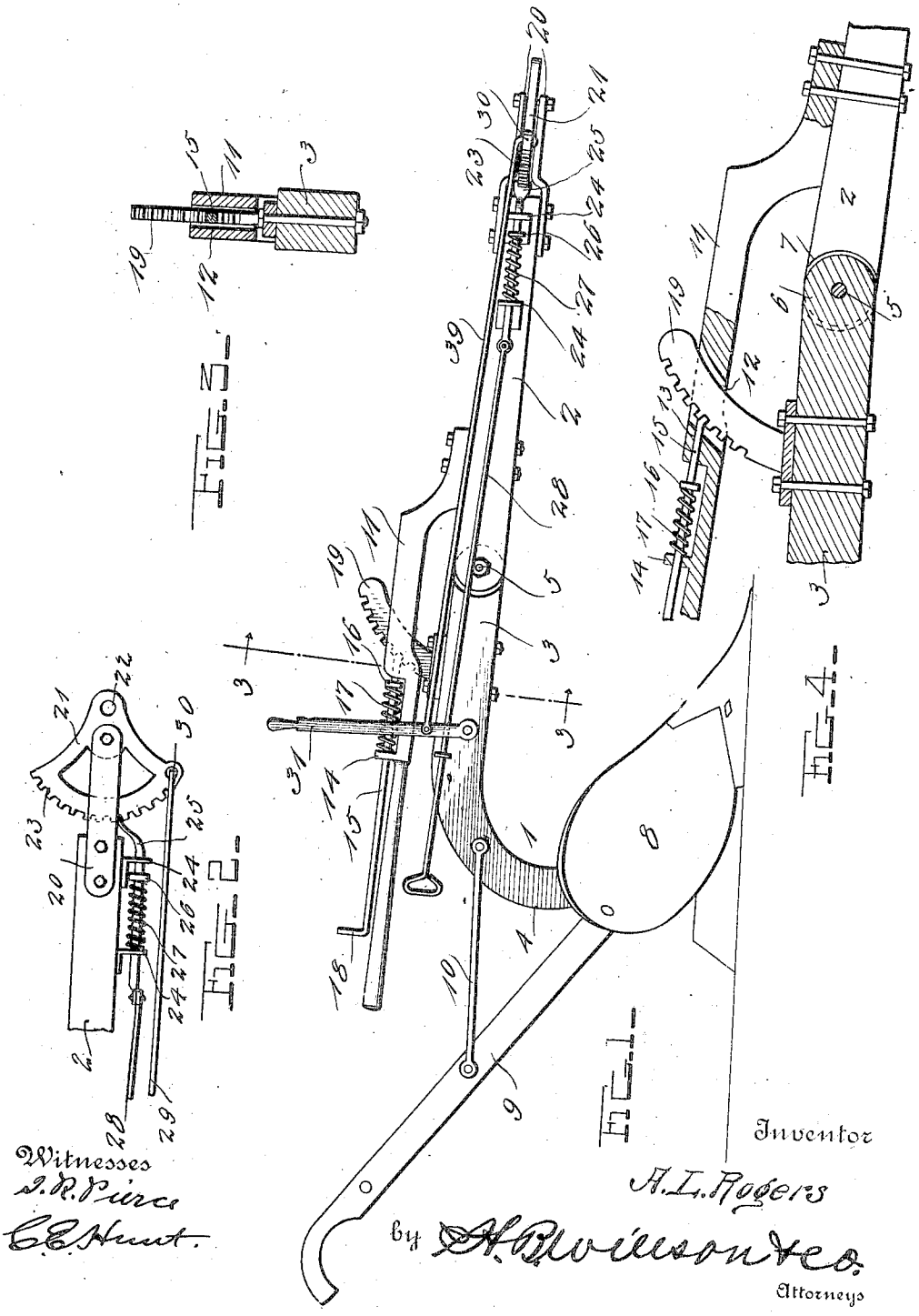

Witnesses
S. R. Pierce
C. E. Hunt.

Inventor
A. L. Rogers
by A. R. Williamson & Co.
Attorneys

UNITED STATES PATENT OFFICE.

ANDERSON LAYNE ROGERS, OF CARBON, TEXAS, ASSIGNOR OF ONE-HALF TO J. E. GILBERT, OF CARBON, TEXAS.

PLOW.

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To all whom it may concern:

Be it known that I, ANDERSON L. ROGERS, a citizen of the United States, residing at Carbon, in the county of Eastland and State of Texas, 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.

This invention relates to improvements in plows.

One object of the invention is to provide a plow having an improved construction of jointed beam and means for adjusting the sections thereof for the purpose of regulating the draft of the plow and to vary the angle of the plow standard and point whereby the latter will be caused to plow the ground more or less deeply as desired.

Another object is to provide a plow having a pivoted clevis and means whereby the same may be adjusted to change the side or lateral draft of the plow.

With these and other objects in view, the invention consists of certain novel features of construction, and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings; Figure 1 is a side view of my improved plow. Fig. 2 is a top plan view of the same. Fig. 3 is a vertical cross sectional view of the front end on the line 3—3 of Fig. 1; Fig. 4 is an enlarged central longitudinal sectional view of a portion of the plow beam sections showing more clearly the manner in which the same are adjusted.

Referring more particularly to the drawings, 1 denotes my improved plow the beam of which comprises a front section 2 and rear section 3, said rear section being preferably extended and curved downwardly to form the standard 4 of the plow. The rear and front sections of the beam are hingedly connected by a pivot bolt 5, and in forming the joint the forward end of the rear section of the beam is reduced on its opposite sides to form a tongue 6 which is loosely engaged with a notch or recess 7 in the inner end of the outer section of the beam as shown. The tongue 6 and the adjacent parts of the front section of the beam have formed therein alined bolt holes with which is engaged the pivot bolt 5 which hingedly connects the sections of the beam together.

Secured to the lower end of the standard 4 is the plow blade 8 which may be of any form or construction and to which are secured in any suitable manner the handles 9 of the plow. The handles 9 are braced and secured to the standards 4 by suitably arranged brace rods 10.

Secured to the front section 2 of the beam adjacent to its pivoted rear end is an upwardly projecting beam adjusting lever 11 in which is formed a guide slot 12 and a guide passage 13. On the lever 11 and spaced a suitable distance from the connected end thereof is an apertured guide lug 14 with which and with the guide passage 13 is slidably engaged a pawl 15 on which is arranged a stop collar 16. On the pawl 15 between the stop collar 16 and the guide lug 14 is arranged a coiled spring 17 the pressure of which is exerted to force the pawl inwardly. The pawl 15 is extended and has on its inner end a handle 18 whereby the pawl may be retracted against the pressure of the spring 17.

Fixed on the upper side of the rear section 3 of the beam adjacent to its pivotal connection with the front section is a segmental rack 19 which projects upwardly through the guide slot 12 in the opposite rear end of the lever and with the teeth of which is adapted to be engaged the rear end of the pawl 15 when the latter is projected by the spring 17.

By providing the front section of the beam with the lever 11 and providing the pawl and ratchet connection between said lever and the rear section of the beam it will be obvious that said beam sections may be adjusted to different angles with respect to each other thereby regulating the draft of the plow and also varying the angle at which the plow blade or point enters the ground, which will cause the point or blade to plow more or less deeply according to the amount of adjustment given to the sections of the beam.

The front end of the front beam section 2 has arranged thereon parallel bearing plates 20 between which is pivotally secured a clevis 21. The clevis 21 is in the form of a

segmental plate, the outer portion of which is tapered and has therein a draft eye 22 to which is adapted to be secured any suitable form of draft devices (not shown). In the curved outer edge of the segmental plate forming the clevis is a series of rack teeth 23. Slidably mounted in suitable brackets 24 secured to one side of the beam is a pawl 25 the outer end of which is adapted to engage the teeth on the inner end of the clevis whereby the latter is locked in the positions to which it has been adjusted. On the pawl is arranged a stop collar 26 between which and one of the brackets 24 is arranged a coiled spring 27 the pressure of which is applied to force or project the pawl forwardly to engage the end thereof with the teeth of the clevis. Connected to the inner end of the pawl is a pawl retracting rod 28 which extends back alongside the beam to a point within convenient reach of the driver or operator of the plow whereby the pawl may be retracted and disengaged from the teeth of the clevis to permit the latter to be turned on its pivotal connection with the outer end of the beam whereby the side draft of the plow is varied.

In order to permit the clevis to be turned to vary the draft, I preferably provide a clevis adjusting rod 29 the forward end of which is loosely connected with an eye 30 in one end of the clevis, while the inner end thereof is attached to an operating lever 31 pivotally connected to one side of the inner section of the plow beam within convenient reach of the driver or operator whereby when the pawl 25 has been disengaged from the teeth of the clevis in the manner described the lever 31 may be adjusted to turn the clevis to the desired extent in which position the same is again locked by the pawl 25 through the pressure of the spring 27.

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

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as claimed.

Having thus described my invention, what I claim is;

1. In a plow, a beam composed of two sections hingedly connected, the front end of which is adapted to move in a vertical direction, and means secured to the front end of said beam and adapted to be laterally moved in respect to the draft end thereof, and means for operating the latter in both directions from the rear end of the beam.

2. In a plow, a beam formed of a rear and front section pivotally connected, a segmental rack bar secured to the rear section, a lever rigidly secured to the front section and provided with a curved slot through which the rack bar freely passes, a pawl carried by said lever and movably secured thereto and in parallel relation therewith, said pawl having an upturned end for manipulating the same and an operating end for engagement with said rack bar, a guide lug forming a part of the lever through which the pawl slidingly passes, a collar fixed to said pawl, and a coil spring disposed between said collar and lug, whereby the pawl is held in engagement with the rack bar, the operating end of the pawl being located in advance of the manipulating end of the lever, whereby the front end of the beam may be readily manipulated and adjusted.

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

ANDERSON LAYNE ROGERS.

Witnesses:
L. A. White,
J. M. Lowe.