

No. 680,651.

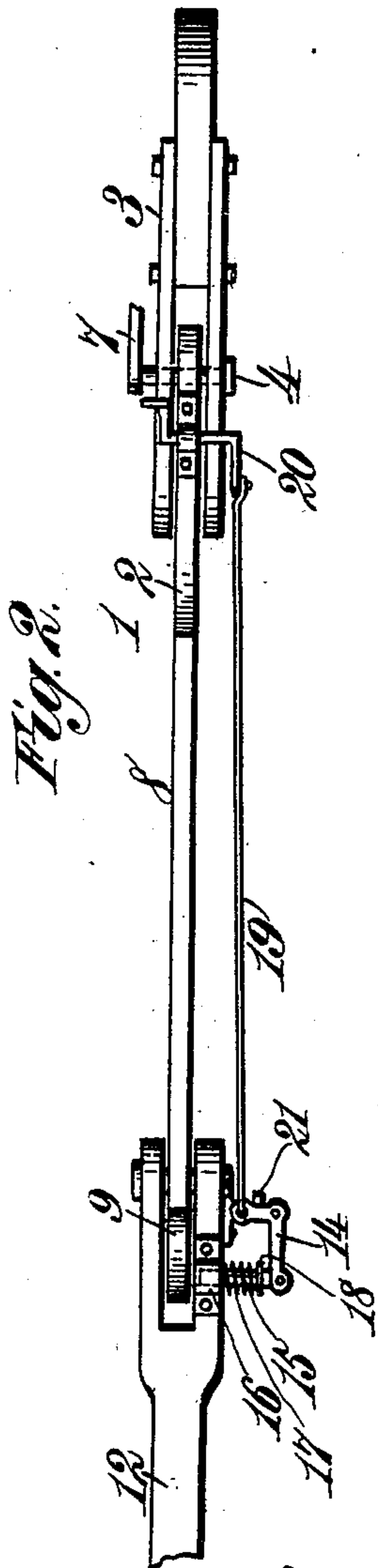
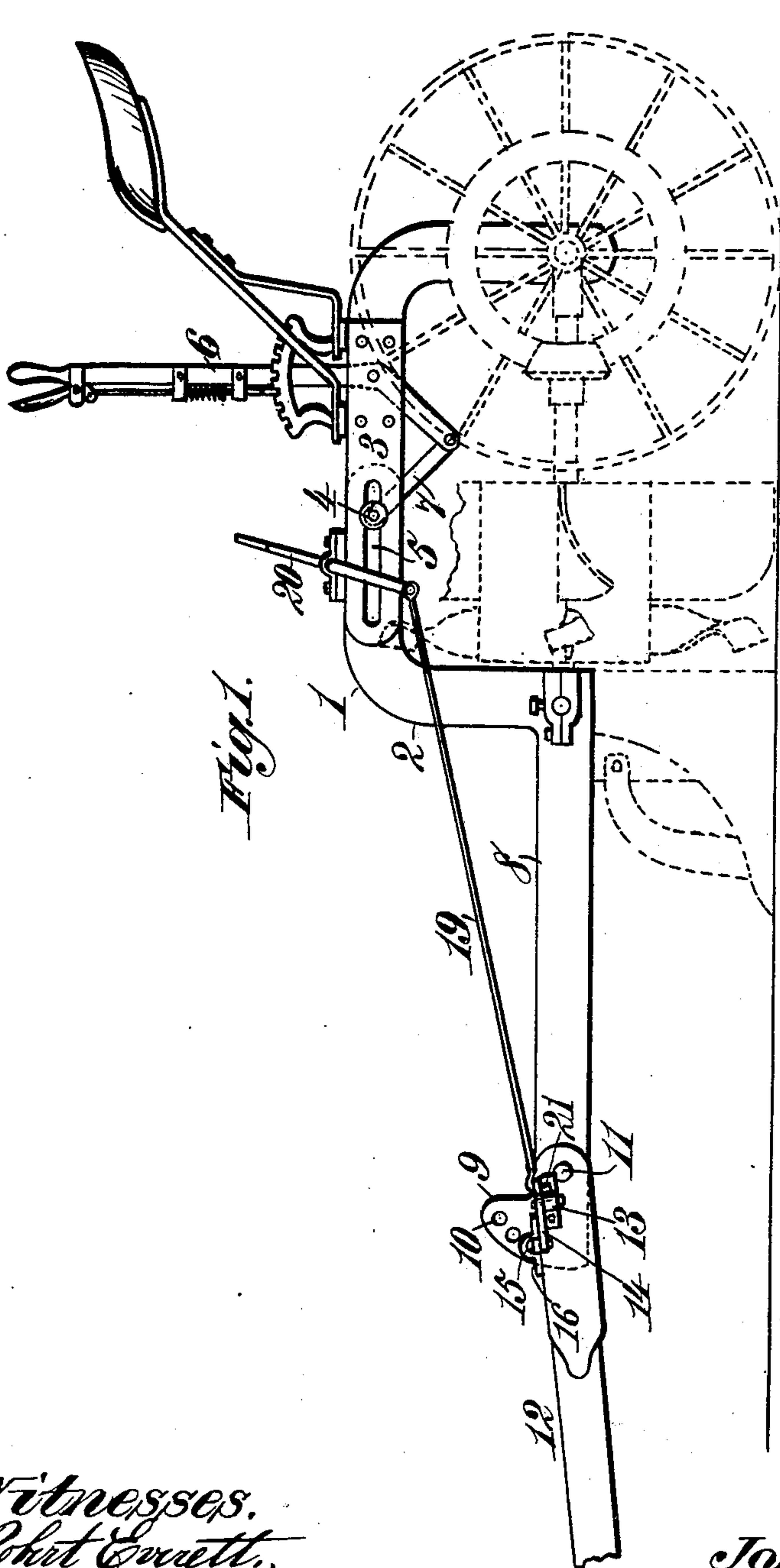
Patented Aug. 13, 1901.

J. I. DE WITT.

FLOW.

(Application filed Apr. 5, 1901.)

(No Model.)



Witnesses.
Robert Emmett,
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UNITED STATES PATENT OFFICE.

JOHN I. DE WITT, OF BLUFFTON, INDIANA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 680,651, dated August 13, 1901.

Application filed April 5, 1901. Serial No. 54,490. (No model.)

To all whom it may concern:

Be it known that I, JOHN I. DE WITT, a citizen of the United States, residing at Bluffton, in the county of Wells and State of Indiana, have invented new and useful Improvements in Plows, of which the following is a specification.

My invention relates to plows, the same residing in novel means whereby the pivoted tongue thereof may be readily and quickly made rigid with the beam.

The invention consists of a plow-beam, a tongue pivoted thereto and capable of vertical movement thereon, a perforated segmental plate on the forward end of said beam, a lever fulcrumed on said tongue, a locking-bolt carried by said lever and adapted to be introduced into one of the perforations in said plate, and means for operating said lever.

The invention also consists in certain features and details of construction and combinations of parts, which will be hereinafter more fully described and claimed.

In the drawings forming a part of this specification, Figure 1 is a side elevation of my improved plow-beam, and Fig. 2 is a plan view of the same.

Like reference-numerals indicate like parts in both views.

The plow-beam 1 is made in two parts or sections 2 3, substantially as shown in my Patent No. 651,240, dated June 5, 1900. The connection between the sections 2 and 3 is by way of a transverse pin 4 in the rear end of the section 2, which fits and moves within an elongated slot 5 in the forward bifurcated end of the section 3. Mounted on the section 3 is an operating-lever 6, connected through the link 7 with the pin 4, so that said sections may be separated or drawn together for the purpose of throwing the plow-point into the ground or elevating the same therefrom. This operation is effected by moving the lever 6 in one direction or the other. The section 2 of the beam is formed with a horizontal extension 8, at the forward end of which is secured a segmental plate 9, having a series of perforations 10 therein. Pivoted upon the bolt 11 to the extension 8 is the tongue 12, the rear end of said tongue being bifurcated or formed with side plates which embrace or straddle the plate 9. Secured to

the tongue 1 and extending outwardly therefrom is a bracket 13, upon which is fulcrumed a bell-crank lever 14, the forward arm of which has pivoted to it a locking-bolt 15, which projects through a bearing-plate 16 and is adapted to be introduced into one of the openings 10 in the segmental plate 9. A coil-spring 17 surrounds the locking-bolt 15 and engages the bearing-plate 16 at one end and a collar or projection 18 on said locking-bolt at its other end. The said spring serves, therefore, to normally hold the engaging end of the locking-bolt 15 away from the segmental plate 9. The rear arm of the lever 14 is connected through a pitman 19 with the lower arm of a lever 20, fulcrumed upon the section 2 of the beam 1. The upper end of the lever 20 projects above the beam 1 and is adapted to be engaged by the foot of the operator.

With the locking-bolt 15 in its normal position away from the segmental plate 9 the tongue 12 is free to rock upon the pivot-bolt 11, and with the connection between the two parts 2 and 3 of the beam 1 loose the plow-point is adapted to drop by gravity and be drawn through the earth to produce a furrow. When it is desired to stiffen the tongue 12, or rather to form a rigid connection between said tongue and the plow-beam, power is applied through the foot of the operator to the upper projecting end of the lever 20, this action throwing rearwardly the lower end of said lever and through the pitman or connecting-rod 19 rocking the lever 14 on its bearing in the bracket 13. When this is done, the locking-bolt 15 is thrown inwardly into engagement with one or the other of the openings 10 in the segmental plate 9, and a rigid connection between the tongue 12 and the beam 1 is thereby produced. Upon now pulling the free end of the lever 6 rearwardly the weight is thrown upon the neck-yoke, thereby raising the front of the machine on which the plow point or share is mounted. Upon releasing the pressure on the lever 20 the spring 17 will serve to throw the locking-bolt 15 outwardly out of connection with the plate 9, and turning or pivotal movement of the tongue 12 is permitted. The section 2 of the beam 1 may then fall by gravity as soon as the lever 6 is released.

Upon the rear arm of the lever 14 is a downwardly-extending lug or projection 21, adapted to engage the bracket 13 for limiting the pivotal movement of said lever and preventing the spring 17 from throwing the locking-bolt 15 out of the bearing-plate 16.

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

1. The combination with a plow-beam and a vertically-movable tongue pivoted thereto, of a lever fulcrumed on said tongue, a locking-bolt actuated thereby, coöperating locking means for said bolt secured to said beam, and operating means for said lever.

2. The combination with a plow-beam and a tongue pivoted thereto and capable of vertical movement thereon, of a lever fulcrumed on said tongue, a locking-bolt pivoted thereto and adapted to be actuated thereby, a vertically-disposed plate secured to said beam and having openings therein into which said bolt is adapted to be introduced, and means for operating said lever.

3. The combination with a plow-beam and a tongue pivoted thereto and capable of vertical movement thereon, of a segmental plate provided with a series of openings secured in vertical position to the front end of said beam, a lever fulcrumed on said tongue, a locking-bolt pivoted to one arm of said lever and adapted to be thrown into engagement with one or the other of said openings, a spring for normally holding said locking-bolt in its retracted position, and operating means for said lever.

4. The combination with a plow-beam and

a tongue pivoted thereto, of a segmental plate secured to said beam, provided with a series of openings and lying between the branches of the bifurcated rear end of said tongue, a bell-crank lever fulcrumed upon said tongue, a locking-bolt pivoted to one arm of said lever and adapted to be introduced into one of said openings, a bearing-plate through which said locking-bolt passes, a spring attached to said bolt and engaging said bearing-plate for normally holding said bolt in its retracted position, and operating means for said lever.

5. The combination with a plow-beam and a tongue pivoted thereto, of a segmental plate secured to said beam, provided with a series of openings and lying between the branches of the bifurcated rear end of said tongue, a bell-crank lever fulcrumed upon said tongue, a locking-bolt pivoted to one arm of said lever and adapted to be introduced into one of said openings, a bearing-plate through which said locking-bolt passes, a spring attached to said bolt and engaging said bearing-plate for normally holding said bolt in its retracted position, an operating-lever fulcrumed upon said beam at the rear of said bell-crank lever, and a pitman connecting one arm of said operating-lever with the rear arm of said bell-crank lever.

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

JOHN I. DE WITT.

Witnesses:

DANIEL K. RINEHART,
JAMES H. HONCANNON.