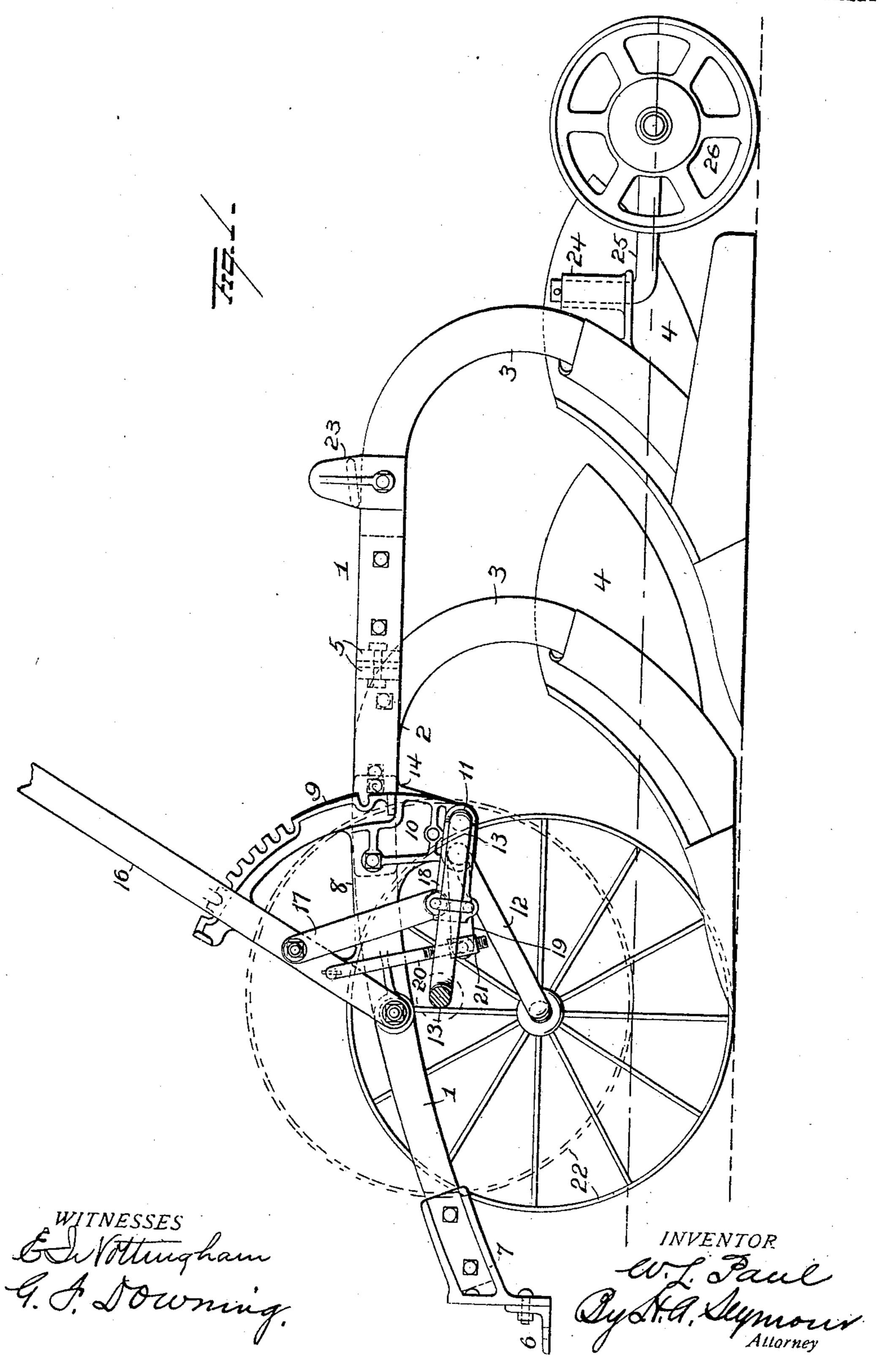
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APPLICATION FILED JUNE 15, 1907.

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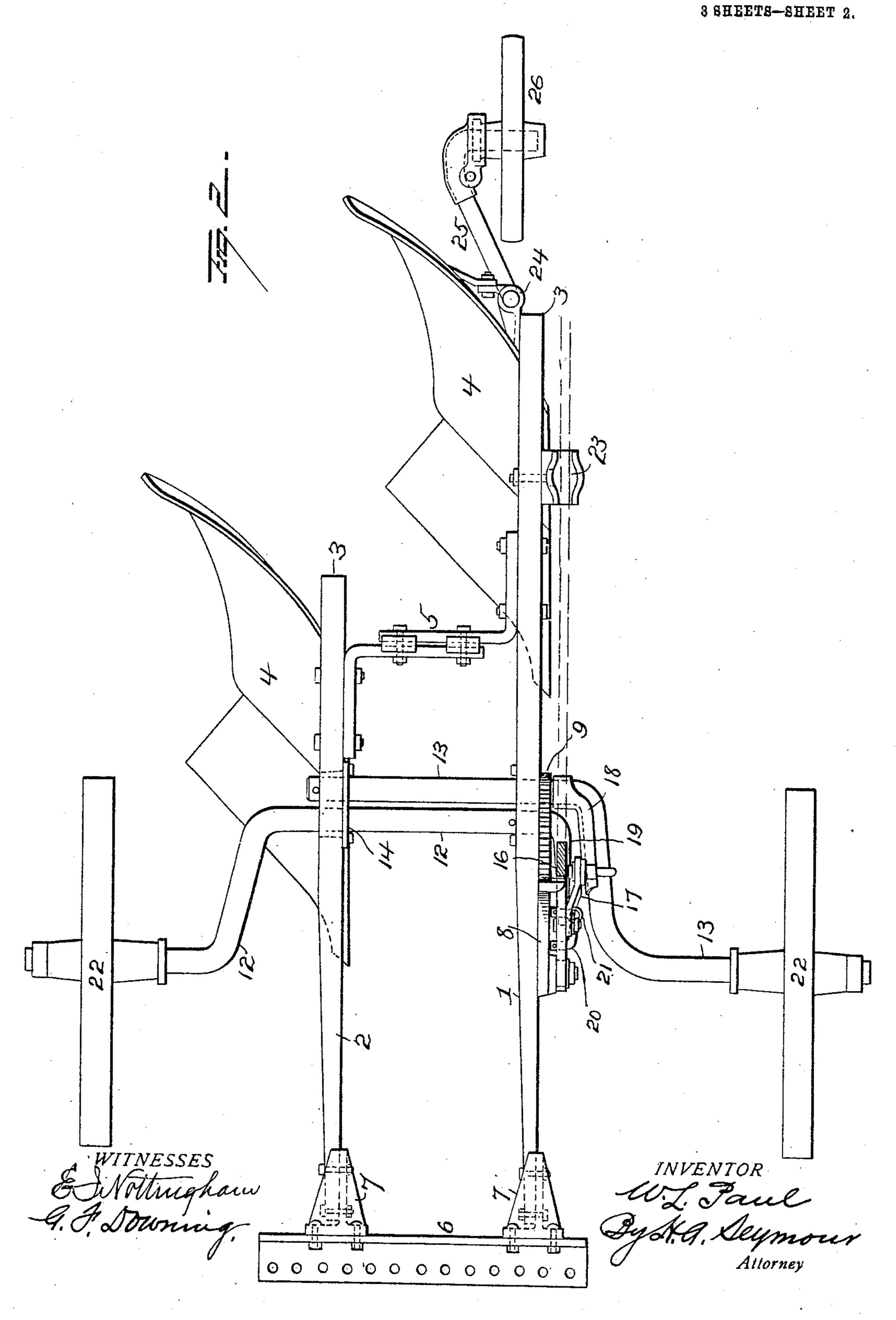
3 SHEETS-SHEET 1.



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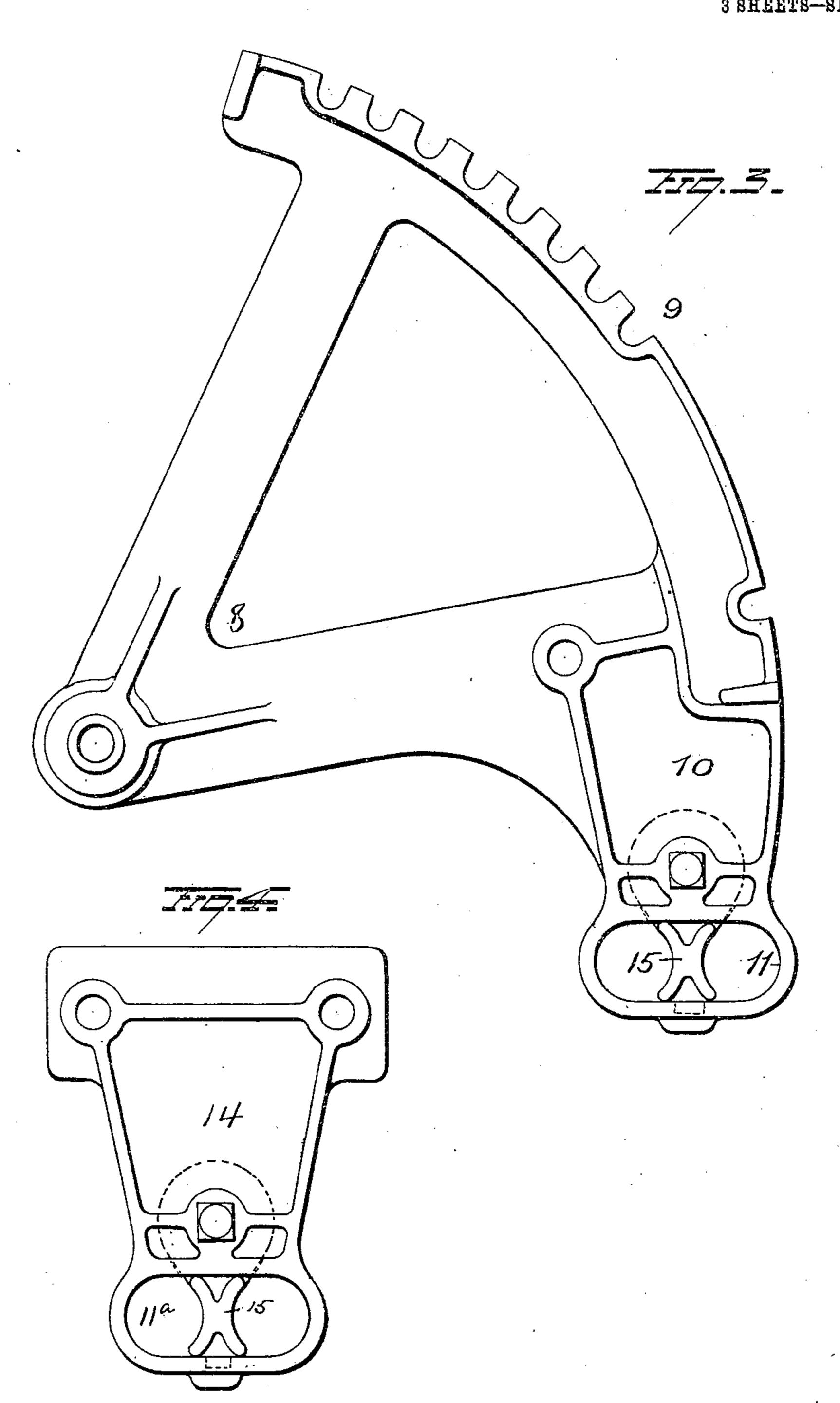
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3 SHEETS—SHEET 3.



WITNESSES Wottungham J. J. Downing

INVENTOR L. Faul Syst. a. Sleymour Allorney

## UNITED STATES PATENT OFFICE.

WILLIAM L. PAUL, OF SOUTH BEND, INDIANA, ASSIGNOR TO OLIVER CHILLED PLOW WORKS, OF SOUTH BEND, INDIANA.

## WHEELED PLOW.

948,247.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed June 15, 1907. Serial No. 379,184.

To all whom it may concern:

Be it known that I, WILLIAM L. PAUL, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Wheeled 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 appertains to make and use the same.

My invention relates to an improvement in wheeled-plows,—one object of the invention being to provide simple and efficient means for raising and lowering the plows and to guard against the bending of the operating lever while the plows are raised and when the machine is being turned at the end of a row or furrow.

A further object is to simplify and im-20 prove the construction of the axle and its connection with the lifting devices, whereby adequate strength is insured and the possibility of the parts becoming loose avoided.

A further object is to improve and simplify the manner of mounting the axle members and to facilitate the assembling of the parts.

With these objects in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a wheeled plow embodying my improvements. Fig. 2 is a plan view of the same, Fig. 3 is an enlarged detail view showing the toothed-segment and axle-bearings, and Fig. 4 is an enlarged detail view of the bracket 14 and spreader 15 therein.

1, 2, represent beams terminating at their rear ends in standards 3, to which plows 4 are secured. The rear portions of the beams 1, 2, are maintained properly spaced apart by means of a bracket or spreader 5 and the forward ends of said beams are maintained in proper relation to each other by means of a clevis 6 secured to said beams through the medium of brackets 7.

The triangular-frame 8 of a toothed-segment 9 is secured to the beam 1 and is provided with an arm 10 which projects below the plane of said beam, said arm being provided at its lower end with an elongated opening 11 to form bearings for two axlemembers 12 and 13. These two axlemem-

bers coöperate to form an arch-axle and also 55 have bearings in an elongated opening 11<sup>a</sup> in a bearing bracket 14 secured to and depending from the beam 2. By making the openings 11 and 11<sup>a</sup> at the lower end of arm 10 and bracket 14 elongated, the assembling 60 of the axle members is facilitated and after said axle-members shall have been placed in position, separable spreaders 15 are placed between them and bolted to the arm 10 and bracket 14 respectively, each spreader thus 65 forms portions of the bearings for the axle members where the latter are mounted in the arm 10 of the segment-frame 8 and in the bracket 14.

A lever 16 is pivotally supported at the 70 apex of the segment-frame where the latter is secured to the beam 1 and this lever is provided with the usual spring-actuated detent (not shown) to engage the toothed segment 9. A bar 17 is pivotally connected at one 75 end to the lever 16 and at its other end, said bar is pivotally attached to an arm or bracket 18 secured to the axle member 13 and projecting forwardly therefrom. The end of the axle member 12 is bent forwardly 80 to form an arm 19. A rod 20 is pivotally connected at its upper end to the lever 16 and its lower threaded end passes through a sleeve 21 pivotally connected with the arm 19 of axle member 12.

From the construction and arrangement of parts above described it is apparent that when the lever 16 is lowered, (it being of course understood that carrying wheels 22 are provided at the outer ends of the axle- 90 members as is common in plows of the type to which my invention relates) the axle-sections will be turned in their bearings and the plows raised. In order to avoid the bending of the lever 16 while the plows are raised 95 and when the machine is being turned at the end of a row or furrow by pressure applied laterally to said lever, I provide a bifurcated-bracket 23 secured to the rear portion of the beam 1 in position to receive said 100 lever when it is lowered to raise the plows.

A bearing 24 is provided on the rear plow standard 3 for a bracket 25 in which a furrow-wheel 26 is mounted, said bracket being free to turn in its mounting in the bear- 105

ing 24.
Slight changes might be made in the details of construction of my invention with-

out departing from the spirit thereof or limiting the scope and hence I do not wish to restrict myself to the precise details herein described.

Having fully described my invention what I claim as new and desire to secure by Let-

ters-Patent, is,—

1. In a plow, the combination with two plow beams, carrying wheels, and two axle members for said wheels, of a single operating lever mounted on one of the plow beams in advance of the mountings of the axle members, forwardly projecting arms carried by said axle members in proximity to the beam to which the lever is attached, and devices connecting both of said forwardly projecting arms with said single operating lever.

2. In a plow, the combination with a plowbeam, axle members and wheels at the outer ends thereof, of an arm depending from the beam and provided with an elongated opening forming bearings for the axle members, and a removable spreader secured to said 25 arm, disposed between said axle-members and constituting portions of the bearings

therefor.

3. In a plow, the combination with two beams, and carrying wheels, of a bearing bracket secured to and depending from each of said beams, each bracket having a horizontal elongated opening, axle members passing through said openings and mounted at their outer ends in the hubs of the carrying wheels, and a removable spreader se-

cured to each bracket and disposed in the

elongated opening thereof between the axle members.

4. In a plow, the combination with two beams spaced apart, of a segment-frame secured to one of said beams and provided with a depending arm, a bearing bracket secured to the other beam, axle-members mounted side by side in said bearing bracket and in the depending arm of the segmentation of the segmentation and axle-members coöperating to form an arch-axle provided at its ends with wheels, an operating lever pivotally connected with the segment-frame and adapted to coöperate with the latter, and connections 50 between said operating lever and the respective axle-members.

5. In a plow, the combination with a beam provided with bearings, axle-members mounted in said bearings and wheels at the 55 outer ends of said axle-members, of an operating lever pivotally connected with the beam, connections between said lever and the axle-members for raising the plow, and a bracket secured to the beam and having two 60 upwardly projecting members in position to receive said operating lever between them when said lever has been lowered to raise the plow.

In testimony whereof, I have signed this 65 specification in the presence of two sub-

scribing witnesses.

WILLIAM L. PAUL.

Witnesses:

FRANCIS C. NIPPOLD, W. A. WEED.