

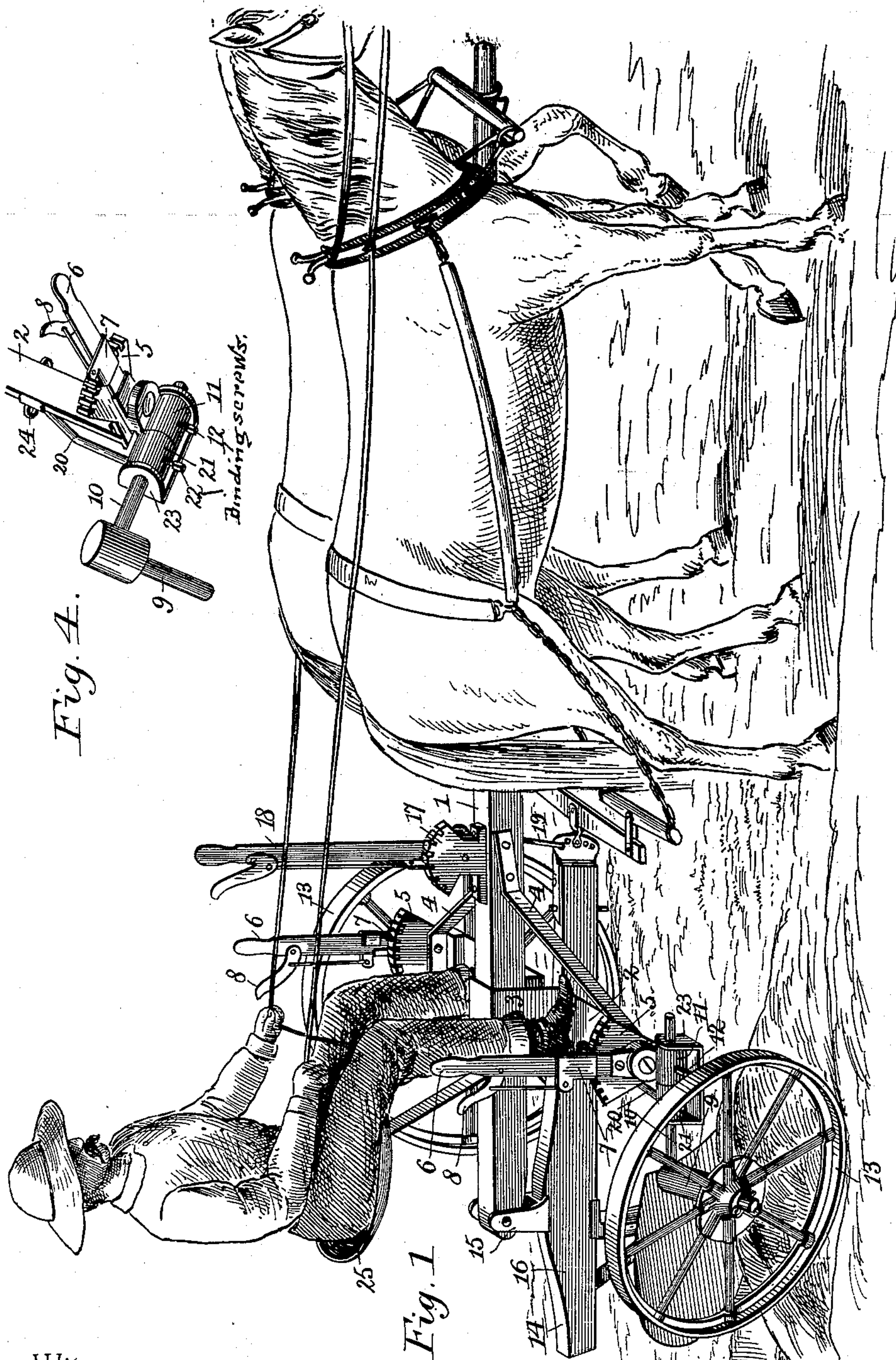
(No Model.)

2 Sheets—Sheet 1.

O. C. HUBBARD.  
PLOW CARRIAGE.

No. 604,351.

Patented May 17, 1898.



Inventor

Witnesses

Chas. H. Curand  
V. B. Hillyard.

By his Attorneys,

Oliver C. Hubbard

Cashow & Co.



(No Model.)

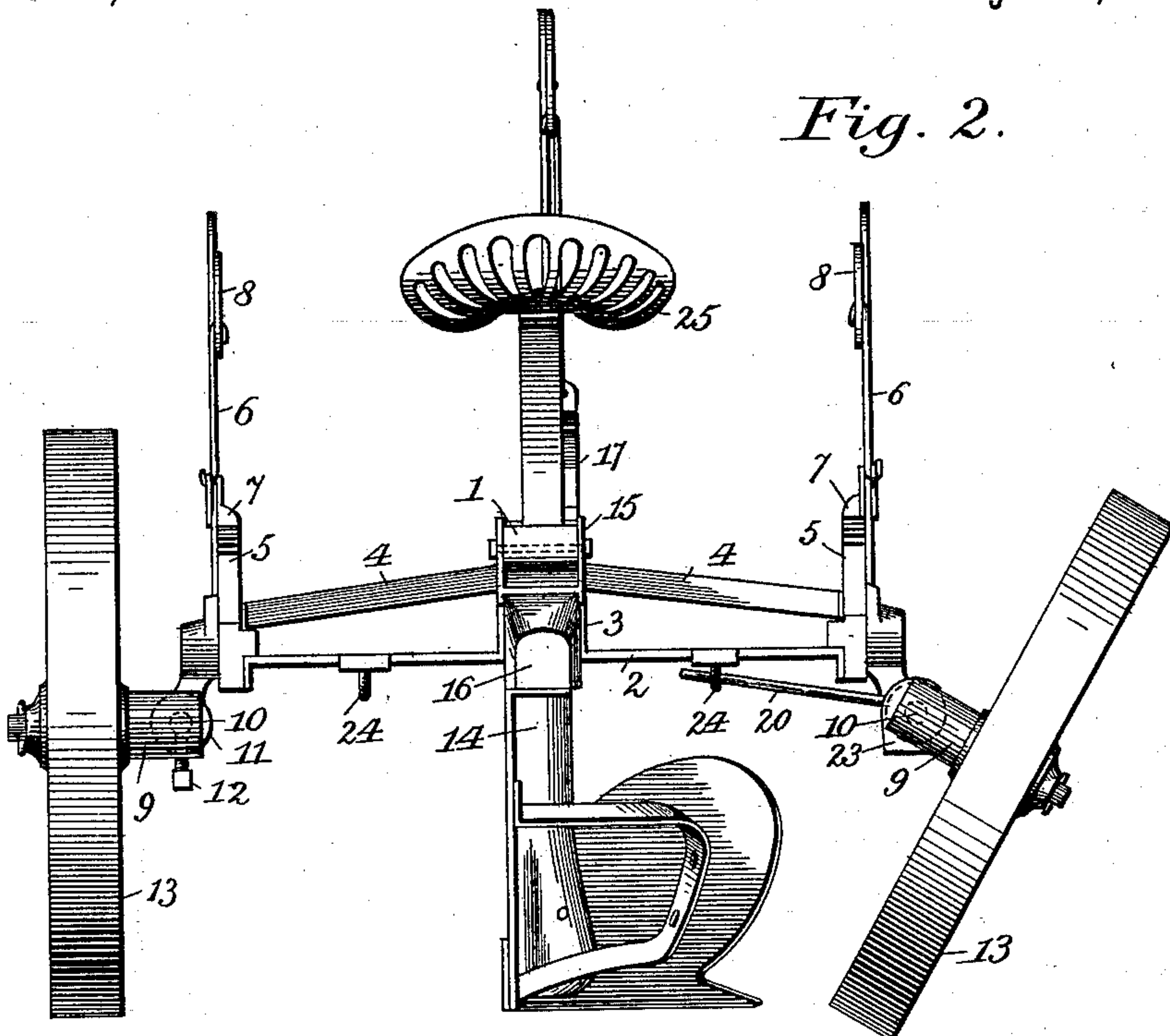
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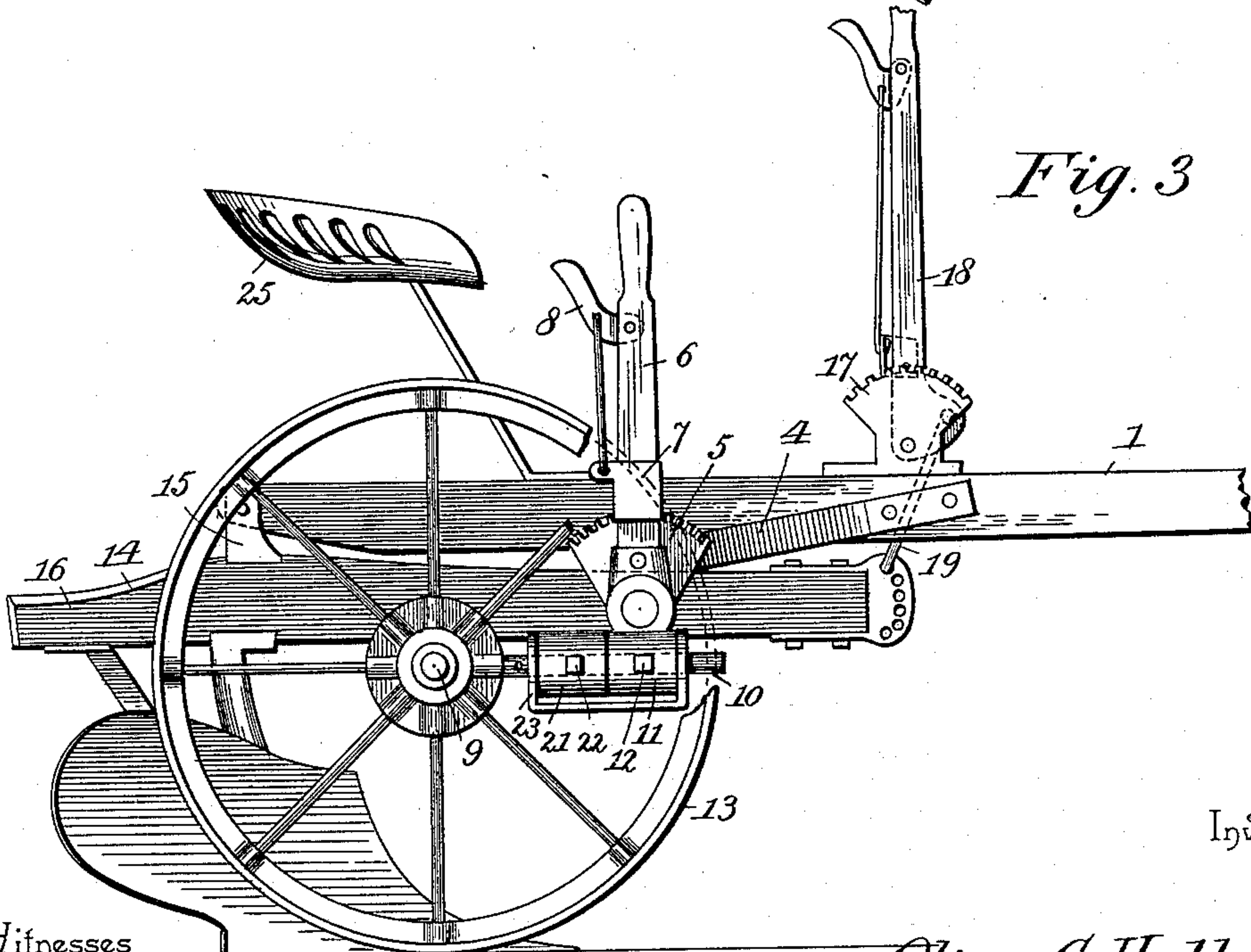
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*Fig. 2.*



*Fig. 3.*



Inventor

Witnesses

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Oliver C. Hubbard

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# UNITED STATES PATENT OFFICE.

OLIVER C. HUBBARD, OF BEDFORD, INDIANA.

## PLOW-CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 604,351, dated May 17, 1898.

Application filed April 6, 1897. Serial No. 630,987. (No model.)

*To all whom it may concern:*

Be it known that I, OLIVER C. HUBBARD, a citizen of the United States, residing at Bedford, in the county of Lawrence and State of Indiana, have invented a new and useful Plow-Carriage, of which the following is a specification.

This invention has for its object to provide a carriage or riding attachment to be used in connection with any make or style of walking-plow, whereby the latter may be converted into and used as a wheel-plow, so that the driver may ride and advantage be taken of his weight, in addition to the weight of the carriage, to hold the plow to its work, the carriage being provided with means whereby the pitch of the plow can be adjusted to suit the required depth of furrow to be cut.

In order that the invention may be susceptible of universal application, it is constructed so as to be applied to either a right or a left hand plow or to one having a wooden or metal beam.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a perspective view showing the invention as it will appear when in operation in the field. Fig. 2 is a rear view. Fig. 3 is a side elevation, parts being broken away. Fig. 4 is a detail view of a wheel-spindle and the parts intimately associated therewith.

Corresponding and like parts are referred to in the following description and indicated in the several views of the accompanying drawings by the same reference characters.

The carriage comprises a pole or tongue 1, a transverse bar 2, having a loop or arched portion 3 intermediate of its ends to receive the pole or tongue, to which it is secured, hounds 4, connecting the extremities of the transverse bar with the pole or tongue forward of the loop or arch 3, whereby the parts

are braced and strengthened, segment-standards 5 at the extremities of the transverse bar 2, levers 6, fulcrumed to the segment-standards 5 and provided with a latch 7 to engage with the upper toothed edges of the parts 5 for holding the levers in an adjusted position, hand-levers 8, operatively connected with the latches 7 for moving them, wheel-spindles 9, having arms 10 mounted in sleeves 11 at the lower ends of the levers 6 and secured in place by binding-screws 12, whereby the wheel-spindles may be held at the required adjusted position, and ground-wheels 13, loosely mounted upon the spindles 9.

The plow 14, which may be of any desired make and either right or left hand, has its beam operating in the lower end of the loop or arch 3 and secured to a clip 15, which is pivotally connected with the rear end of the pole or tongue 1, thereby admitting of the front end of the beam 16 being raised or lowered to regulate the pitch of the plow 14. A toothed segment 17 is secured to the pole or tongue 1 above the front end of the beam 16, and a lever 18 is fulcrumed to a side thereof and provided with the usual hand-latch to engage with the toothed segment and hold the lever in an adjusted position, a link 19 connecting the lever 18 with the beam 16, whereby the latter may be raised or lowered at its front end to secure the required adjustment of the plow. The draft is applied directly to the beam 16, and the neck-yoke is fitted to the front end of the pole or tongue, as clearly indicated in Fig. 1.

A crank-arm 20 has a sleeve 21 at its outer end to receive an arm 10, and is secured to the latter at the required adjusted position by means of a binding-screw 22, and in order to prevent relative movement of the sleeves 21 and 11 a keeper 23, consisting of a plate having its end portions bent at right angles and apertured, is mounted upon the arm 10, and its terminal portions engage with the outer ends of the said sleeves. In the event of it becoming necessary to turn the arm 10 in either one of the sleeves 11 or 21 the required adjustment can be effected without danger of the sleeves parting by reason of the keeper 23, as will be readily understood. A guide 24 is secured to the transverse bar 2 a short



distance from its outer end and receives the inner end of the crank-arm 20, and this guide is longitudinally arranged and curves in the direction of its length and is intended to hold the furrow-wheel at the required slant in order to prevent and counteract side draft when drawing the plow over the field. The landside and furrow wheels can be adjusted to any relative elevation to suit the depth of plowing and the nature of the work to be performed, and when adjusted are held in place by the latches 7, engaging with the segment-standards 5 in the manner set forth. The driver's seat 25 is located upon the rear end of the pole or tongue and just in front of the plow, whereby the several levers are within convenient reach, so as to be operated to secure the various adjustments.

The construction herein set forth admits of the plow being elevated above the ground ten to twelve inches, more or less, when moving the implement over the field or road from one place to another, whereby the plow is held out of action and entirely free of the ground.

Having thus described the invention, what is claimed as new is—

1. In combination, a plow-carriage comprising a pole or tongue, and a transverse bar having a loop or arch intermediate of its ends to receive the pole or tongue, to which it is secured, the side or parallel members of the said loop being spaced apart a distance corresponding to the width of the pole to touch the sides thereof and brace it laterally, a plow having its beam pivotally connected to the pole or tongue and adapted to operate and snugly fit within the space of the said loop or arch to be braced laterally thereby, and means mounted upon the pole or tongue and connected with the plow-beam for raising and lowering the front end, substantially as and for the purpose set forth.

2. In a plow-carriage, the combination of a segment-standard, a lever fulcrumed thereto and provided with means to engage with the said standard for holding the lever in an adjusted position, said lever having a sleeve rigidly applied to its lower end, and a wheel-spindle having an arm adjustably mounted in the sleeve of the lever, substantially as and for the purpose set forth.

3. In a plow-carriage, the combination of a wheel-spindle, a support therefor, an arm as 20 having adjustable connection with a part extending laterally from the wheel-spindle, and a guide acting jointly with the said arm 20 to properly position the wheel-spin-

dle, substantially as and for the purpose set forth.

4. In a plow-carriage, the combination of a wheel-spindle having an arm, a support for the said arm, a crank-arm, means for adjustably connecting the crank-arm with the arm of the wheel-spindle, and a guide cooperating with the crank-arm to fix the position or slant of the wheel-spindle, substantially as and for the purpose set forth.

5. In a plow-carriage, the combination of a lever, means for securing the lever in an adjusted position, a wheel-spindle having an offstanding arm, means for adjustably connecting the offstanding arm with the aforesaid lever, a second arm 20 having adjustable connection with the arm of the wheel-spindle, and a guide cooperating with the second arm to hold the wheel-spindle in an adjusted position, substantially as set forth.

6. In a plow-carriage, the combination of a lever having a sleeve and provided with means for securing it in an adjusted position, a crank-arm having a sleeve at its outer end and having its inner end operating in a guide, a wheel-spindle having an arm passing through the aforesaid sleeves and having independent adjustable connection with each, and a keeper for holding the sleeves in fixed relation, substantially as set forth.

7. In a plow-carriage, the combination of a pole or tongue provided with means for raising and lowering the front end of a plow-beam connected therewith, a transverse bar having a loop or arch intermediate of its ends to receive the pole or tongue, to which it is secured, segment-standards at the ends of the transverse bar, levers fulcrumed to the segment-standards and provided with hand-latches to cooperate therewith for holding the levers in an adjusted position, said levers having sleeves at their lower ends, wheel-spindles having arms adjustably secured in the sleeves of the levers, a crank-arm having adjustable connection with the arm of one of the wheel-spindles, and a guide secured to an end portion of the aforesaid transverse bar and receiving the free end of the aforesaid crank-arm, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

OLIVER C. HUBBARD.

Witnesses:

FRANCIS M. LEMON,  
S. S. SNYDER.