

(No Model.)

A. C. HOPKINS.
CARRIAGE FOR SEPARATORS.

No. 470,867.

Patented Mar. 15, 1892.

Fig. 1.

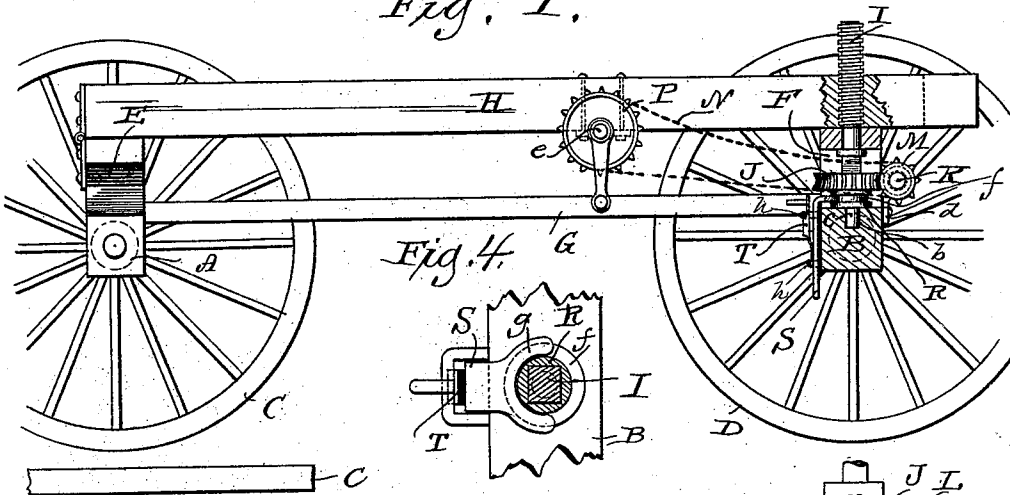


Fig. 2.

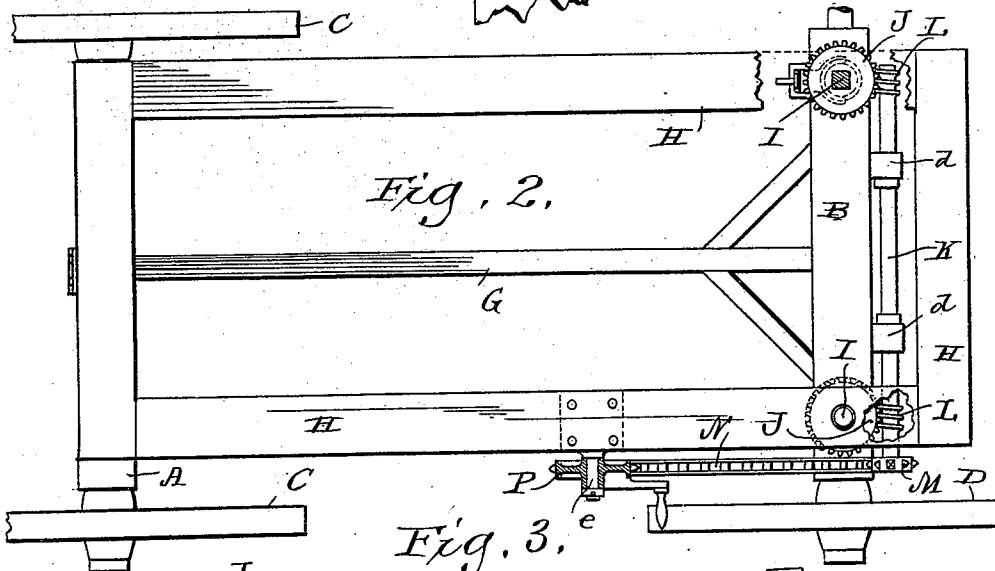
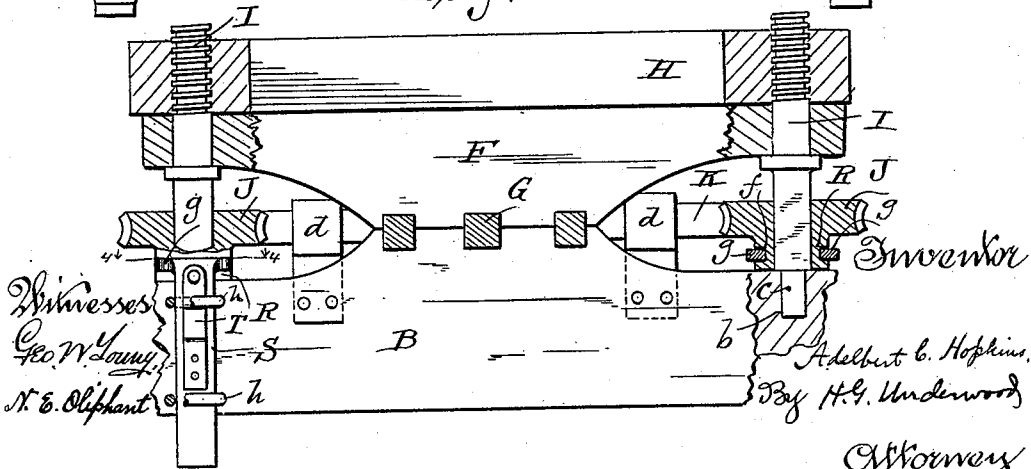


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ADELBERT C. HOPKINS, OF ASHIPGUN, WISCONSIN.

CARRIAGE FOR SEPARATORS.

SPECIFICATION forming part of Letters Patent No. 470,867, dated March 15, 1892.

Application filed October 23, 1891. Serial No. 409,619. (No model.)

To all whom it may concern:

Be it known that I, ADELBERT C. HOPKINS, a citizen of the United States, and a resident of Ashippun, in the county of Dodge, and in the State of Wisconsin, have invented certain new and useful Improvements in Carriages for Separators, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a carriage for certain machines—such, for instance, as separators—that require to stand level when in operation in order to produce the best results; and said invention consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a side elevation, partly in section, of a carriage constructed according to my invention; Fig. 2, a plan view of the same, partly broken away; Fig. 3, a detail front elevation with certain of the parts in section; and Fig. 4, a detail plan view, partly in horizontal section, on line 4 4 of the preceding figure.

Referring by letter to the drawings, A B represent front and rear axles for wheels C D, said axles being provided with bolsters E F and connected by a reach G to thereby form the running-gear of my carriage. Supported on the bolsters E F is a frame H, that serves as the sills on which to mount a separator or other machine, this frame being shown as hinged to the front bolster.

The rear axle B is shown as provided with suitable sockets *b*, in which the lower round ends *c* of vertical posts I are free to turn, and these posts are also free to turn in the bolster F, that is mounted on said axle. The upper portions of the posts I are screw-threaded, and the side pieces of the sill-frame H are provided with screw-threaded openings for engagement with said posts. Just above the axle in which it is socketed each post I is squared or otherwise suitably constructed to receive a worm-wheel J, that will be free to move on said post in a vertical direction, but which on rotation will cause a corresponding movement of the said post and consequent raising or lowering of the adjacent portion of the sill-frame.

Arranged in suitable bearings *d* is a shaft K, provided with worms L for mesh with the worm-wheels J on the posts I, and one end of this shaft is provided with a sprocket-wheel M, connected by a drive-chain N with a similar wheel P, mounted on a stud *e*, that is laterally extended from the sill-frame, this latter sprocket-wheel being actuated by a crank Q to impart motion to a sprocket and worm-gear, above described.

Each worm-wheel J is provided with a depending collar R, having an annular groove *f*, for engagement with the fork *g* of an angular bar S, that works in guides *h* on the adjacent axle and is held in its adjusted position by a spring T, fast at one end to said bar and impinged against one of the guides for the same, as best illustrated in Fig. 1. By a movement of either bar S the relative worm-wheel J may be thrown in and out of gear with the corresponding worm L on the shaft K when it is not desirable to operate the screw-post that is controlled as to rotation by said worm-wheel.

While I have shown only the posts I and their actuating mechanism in connection with the rear portion of the sill-frame, I do not wish to be understood as confining myself thereto, as a similar construction may be as readily employed in connection with the front portion of said sill-frame without departure from the spirit of my invention.

In practice if a carriage does not stand on level ground the sill-frame is adjusted by the mechanism above described to level the machine that may be supported thereon, it only requiring that the operator shall engage the necessary worm-gear and turn the crank controlling the sprocket and chain-gear to effect the desired result, there being enough play in a full-sized machine, between the lower ends *c* of the posts I and their sockets or between the screws E and the frame F to prevent cramping of said parts when the adjustment is effected.

A carriage similar to that above described is particularly useful in connection with separators that require to stand perfectly level in order that the grain may feed evenly over the sieves, and by the employment of such a carriage will save the time and trouble usually devoted to leveling a separator by the usual methods and means.

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

1. The combination, with the running-gear, 5 of vertical posts free to turn on said running-gear and having screw-threaded upper portions, a sill-frame having threaded openings engaging the post-threads, a worm-wheel on each post, a shaft provided with worms for 10 engagement with the worm-wheels, and suitable means for rotating the shaft, substantially as set forth.

2. The combination, with the running-gear, 15 of vertical posts free to turn on said running-gear and having screw-threaded upper portions, a sill-frame having threaded openings engaging the post-threads, a worm-wheel vertically adjustable on each post, a shaft provided with worms for engagement with the 20 worm-wheels, and suitable means for rotating the shaft, substantially as set forth.

3. The combination, with the running-gear, of vertical posts free to turn on said running-gear and having screw-threaded upper portions, a sill-frame having threaded openings 25 engaging the post-threads, a worm-wheel on each post, a shaft provided with worms for engagement with the worm-wheels, a sprocket-wheel on the shaft, a similar wheel on the sill-frame, a drive-chain connecting the 30 sprocket-wheels, and a crank connected to the sill-frame sprocket-wheel, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Oconomowoc, in 35 the county of Waukesha and State of Wisconsin, in the presence of two witnesses.

ADELBERT C. HOPKINS.

Witnesses:

MERRIL HATCH,
OSCAR F. JONES.