No. 847,067. PATENTED MAR. 12, 1907.

E. W. HARMON.

WAGON.

APPLICATION FILED FEB. 5, 1906.

3 SHEETS—SHEET 1.

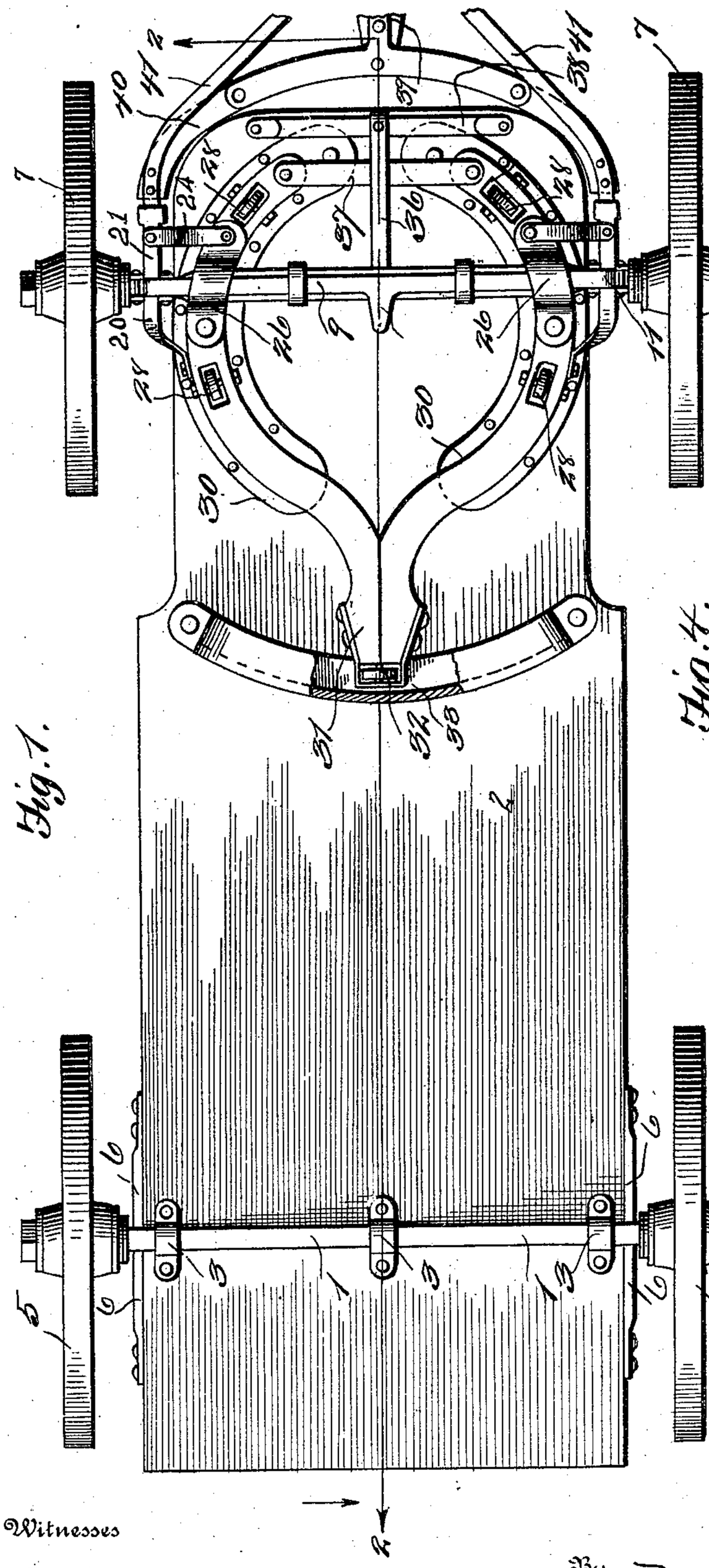

Fig. 1.

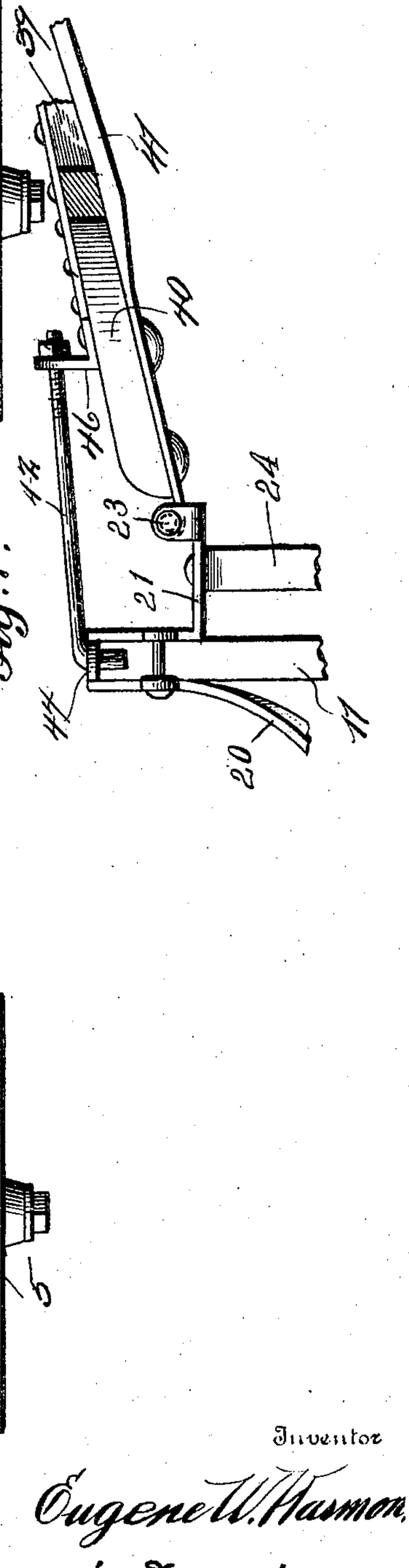

Fig. 4.

Witnesses

P. A. Boswell.

E. K. Bond

Inventor

Eugene W. Harmon,

By Marion & Marion

His Attorneys

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3 SHEETS—SHEET 2.

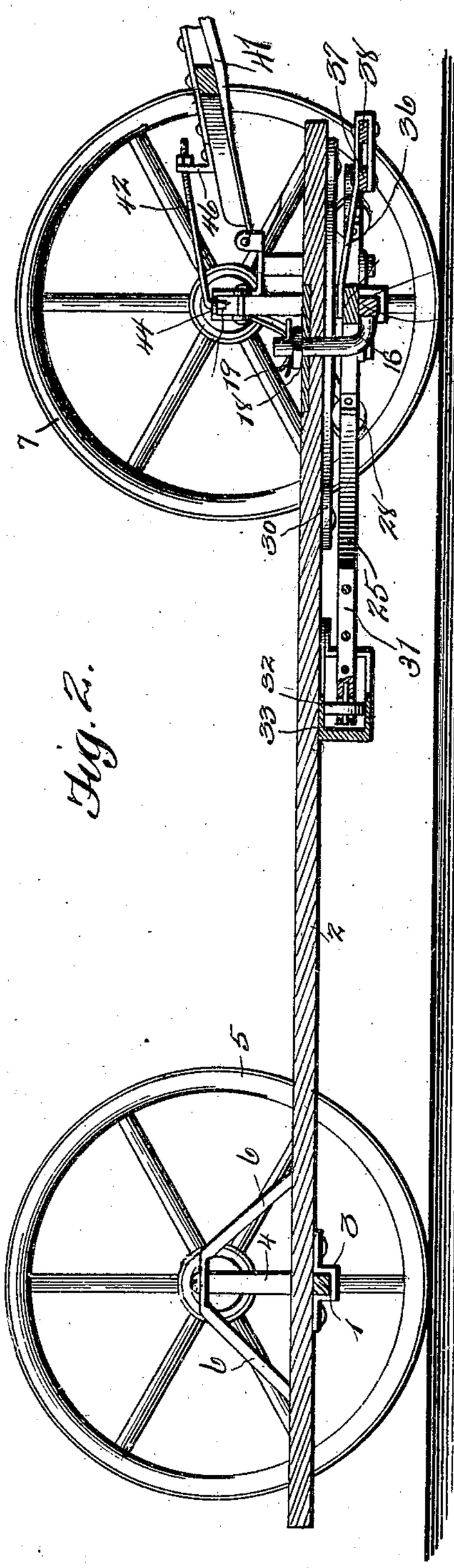

Fig. 2.

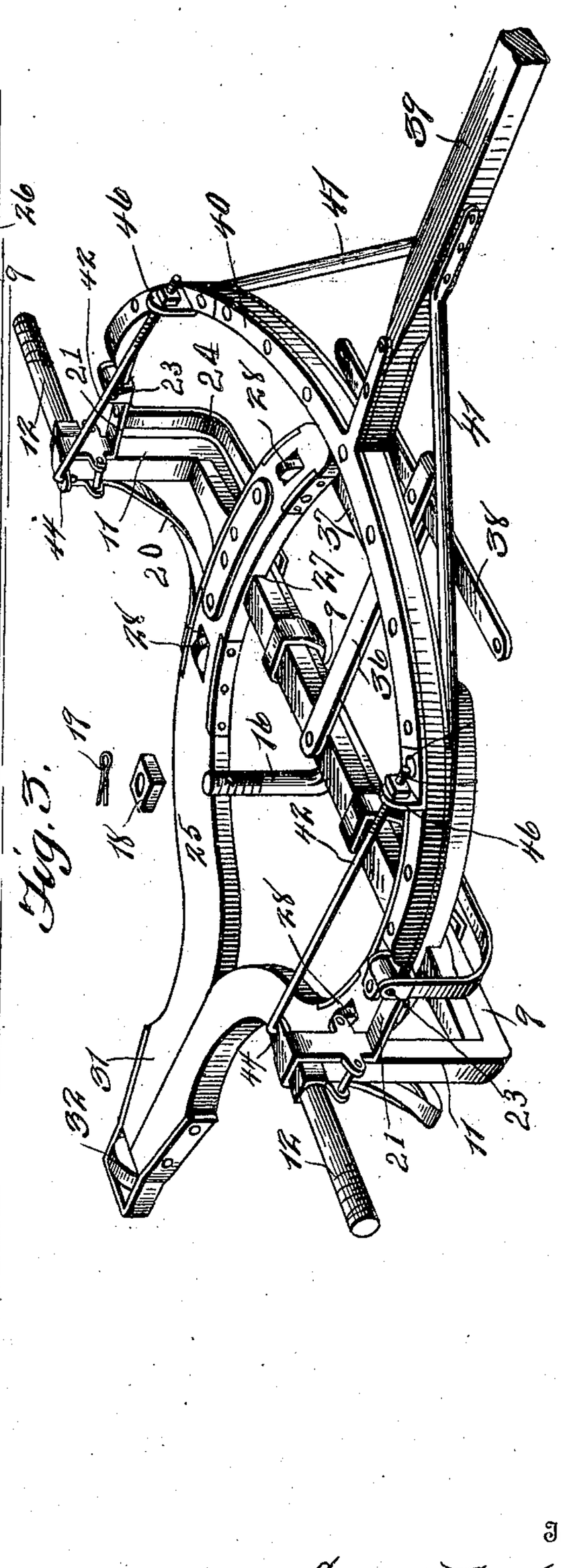

Fig. 3.

Witnesses

R. A. Boswell.

E. W. Bond

Inventor

Eugene W. Harmon

Marion & Marion

Attorneys

his.

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E. W. HARMON.

WAGON.

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3 SHEETS—SHEET 3.

Fig. 6.

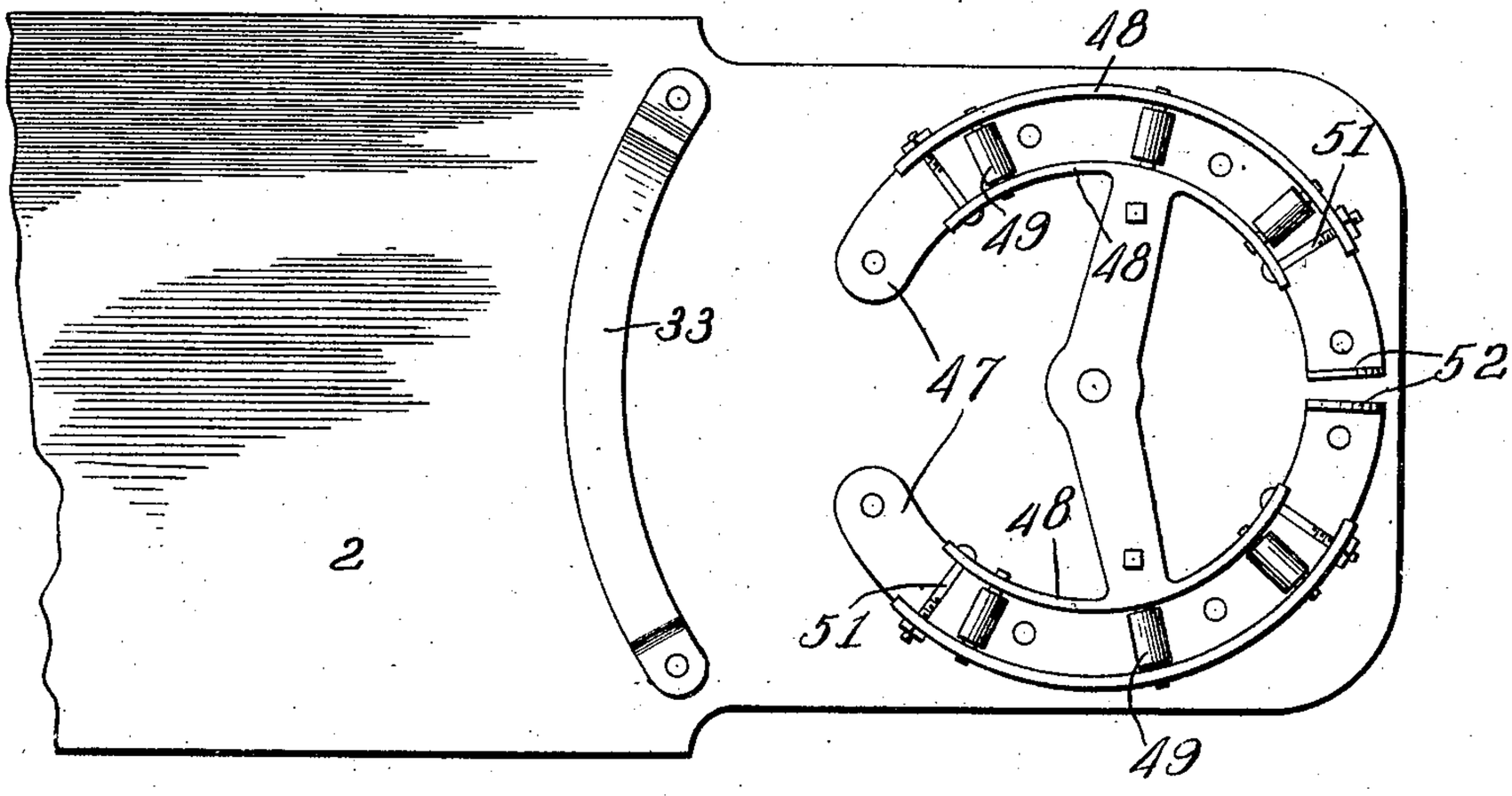
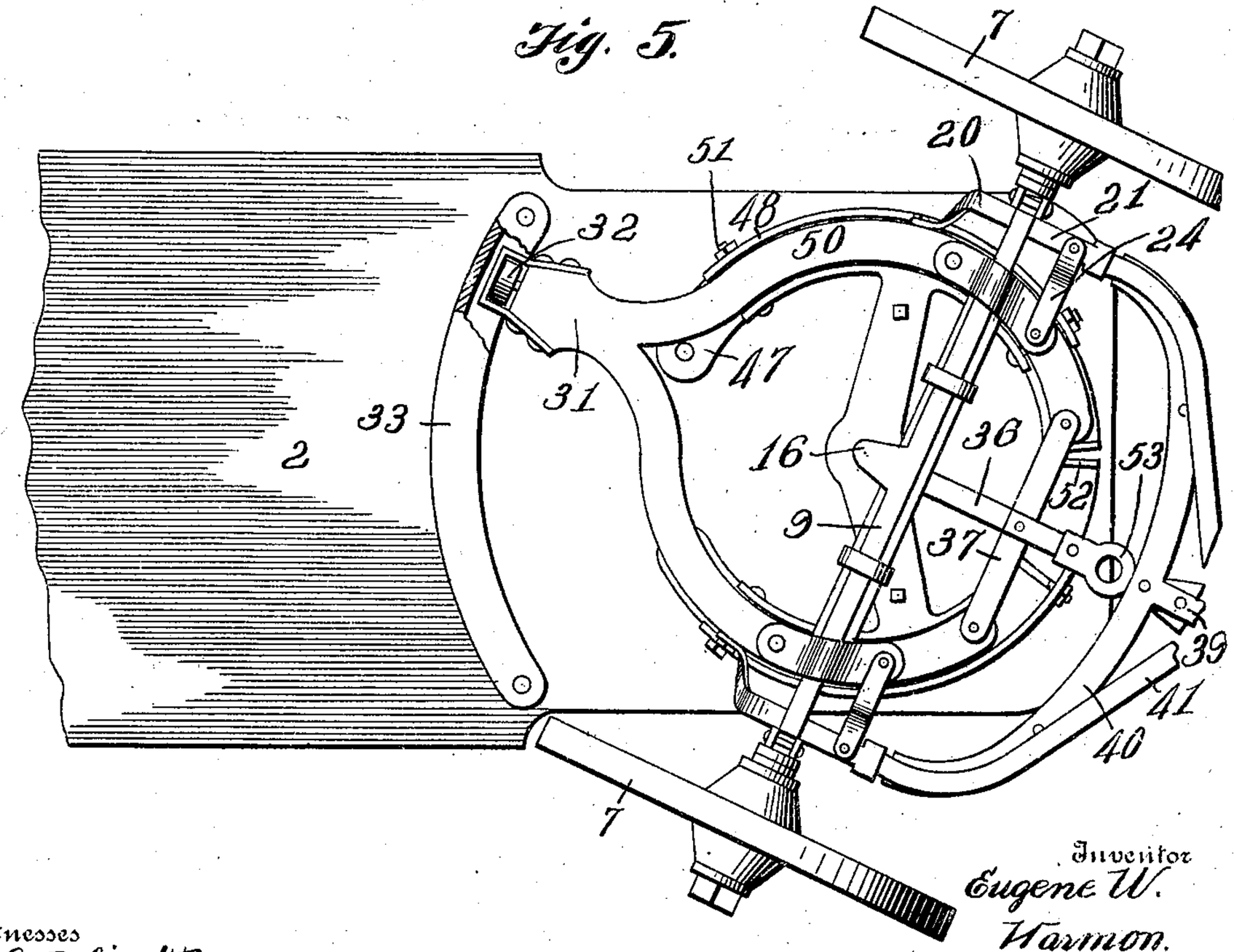


Fig. 5.



Witnesses
H. A. Polinette.
G. Ayres.

Inventor
Eugene W. Harmon.
By Marion & Marion.
Attorneys

UNITED STATES PATENT OFFICE.

EUGENE W. HARMON, OF BLAINE, MAINE.

WAGON.

No. 847,067. Specification of Letters Patent. Patented March 12, 1907.

Application filed February 5, 1906. Serial No. 299,503.

To all whom it may concern:

Be it known that I, EUGENE W. HARMON, a subject of the King of Great Britain, residing at Blaine, in the county of Aroostock and State of Maine, have invented certain new and useful Improvements in Wagons, of which the following is a specification.

My invention relates to improvements in wagons; and it consists in the constructions, combinations, and arrangements herein described and claimed.

An object of my invention is to provide a strong and durable form of running-gear for wagons which will carry the bed of the wagon at any desired distance below the wheel-hubs and support the tongue or other draft appliance in proper position.

In the accompanying drawings, forming a part of this application, and in which similar reference-symbols indicate corresponding parts in the several views, Figure 1 is a bottom plan view of a wagon provided with one embodiment of my invention. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a perspective view, on a larger scale, illustrating the parts constituting my invention. Fig. 4 is a detail side elevation of a part of the construction shown in Fig. 3. Fig. 5 is a detail bottom plan view of a wagon provided with a slightly-modified form of my invention, and Fig. 6 is a view similar to Fig. 5 with the running-gear removed to show the bearings attached to the wagon-bed.

Referring especially to Figs. 1 to 4 of the drawings, 1 indicates a rear axle connected to the wagon-bed 2 in any suitable manner, as by brackets 3. The axle 1 is shown with upturned ends 4 for carrying at a proper elevation the journals for the rear wheels 5, braces 6 being provided for securely supporting said upturned ends 4 of the axle.

The front axle 9 is provided with upturned ends 11 for supporting at a suitable height the journals 12 of the front wheels 7, said axle being provided with a king-pin 16, which extends through the wagon-bed and is secured in any suitable manner, as by a nut 18 and split pin 19.

The fifth-wheel 25 is rigidly secured to the front axle, as by brackets 26, and carries two sets of friction-rollers 28, which are adapted to ride on segmental bearing-plates 30, secured to the under side of the wagon-bed. The fifth-wheel is provided with a rearwardly-extending radial extension 31, which carries a friction-roller 32 in a channel-guide 33, secured to the wagon-bed concentrically to the king-pin 16.

The wagon-pole 39 is suitably secured to a coupling 40, to which it is braced by the rods 41. The coupling is pivoted at 23 to supports 21, carried by the upturned ends 11 of the front axle, braces 20 and 24 being provided for rigidly securing the pivotal supports 23 and the upturned ends 11 to the fifth-wheel.

Rods 42 are shown adjustably secured to ears 46 on the coupling 40 and provided at their rear ends with hooks adapted to engage apertured ears 44 at the upper portion of the axle ends 11. By thus adjustably mounting these rods in the ears 46 a convenient means is provided for holding the wagon-pole at any desired elevation, the hooked rear ends of the rods being disengaged from the ears 44 when it is desired to permit free swinging of the pole in a vertical plane. Obviously chains or other suitable flexible connections could be substituted for the rods 42 for permitting vertical swing of the pole, while limiting the downward movement thereof.

A bar 36, attached to the front axle, is secured by a cross-bar 37 to the fifth-wheel 25 and provided at its forward end with a swingletree 38 or other suitable supplementary connection for the draft-power. This swingletree can be used when employing an additional horse in advance of the usual team or in cases where only a single horse is used and the pole 39 removed.

Figs. 5 and 6 illustrate a slightly-modified construction in which segmental brackets 47 are secured to the under side of the wagon-bed and provided with flanges 48. Two sets of friction-rollers 49 are journaled in the flanges 48 to constitute bearing-surfaces for a fifth-wheel 50, secured to the front axle of the vehicle. Bolts 51 are shown extending through the flanges 48 to prevent spreading thereof. The brackets 47 are provided with two lugs or stops 52 for engaging the fifth-wheel of the wagon to limit its swing about the king-pin 16, and the bar 36 is shown provided with an eye 53 instead of the swingletree 38 of the previously-described construction for attachment of a draft-chain. In all other respects this modified construction is similar to that previously described, and the corresponding parts are indicated by similar reference-numerals.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a vehicle, the combination of a front

axle pivotally secured to the vehicle-bed, a fifth-wheel carried by said axle, a vehicle-tongue attached to said axle, and a supplemental connection for draft-power secured to said axle and fifth-wheel, substantially as described.

2. In a vehicle, the combination of a front axle pivotally secured to the vehicle-bed and provided with upturned ends, a fifth-wheel carried by said axle and provided with a rearward extension, means for guiding said extension and confining it against vertical movement, brackets carried by the upturned ends of said axle, and a tongue-coupling pivotally secured to said brackets, substantially as described.

3. In a vehicle, the combination of a front axle pivotally secured to the vehicle-bed and provided with upturned ends, a fifth-wheel carried by said axle and provided with a rearward extension, means for guiding said extension and confining it against vertical movement, brackets carried by the upturned ends of said axle, braces for securing said brackets to the fifth-wheel, and a tongue-coupling pivotally secured to said brackets, substantially as described.

4. In a vehicle, the combination of a front axle with upturned ends, brackets carried by said upturned ends of the axle, a tongue-coupling pivotally secured to said brackets, and adjustable means connecting said coupling and the upturned ends of said axle for adjusting said coupling about its pivotal connections, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EUGENE W. HARMON.

Witnesses:
JENNIE DORITY,
J. M. RAMSAY.