No. 842,804. PATENTED JAN. 29, 1907.

G. E. MURRELL.

VEHICLE.

APPLICATION FILED APR. 21, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

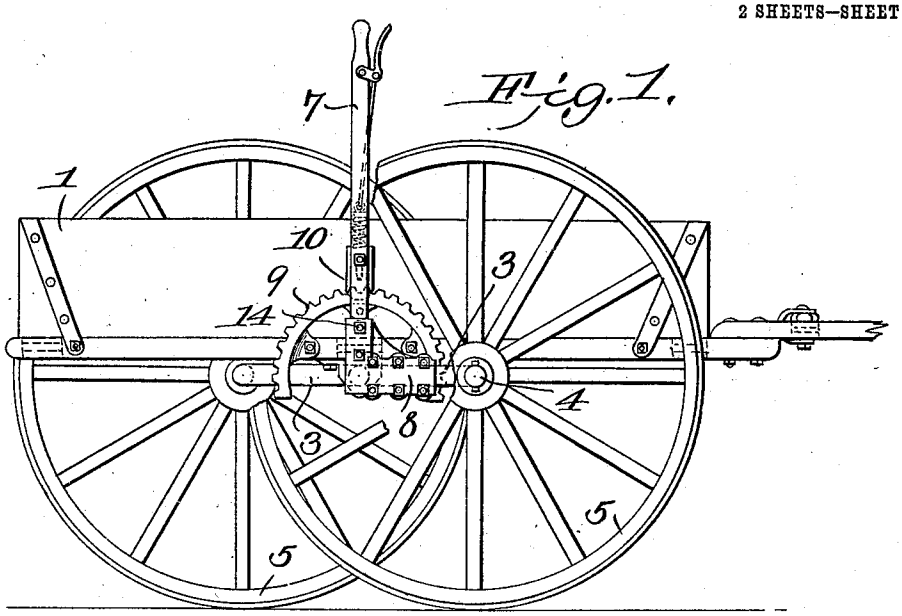
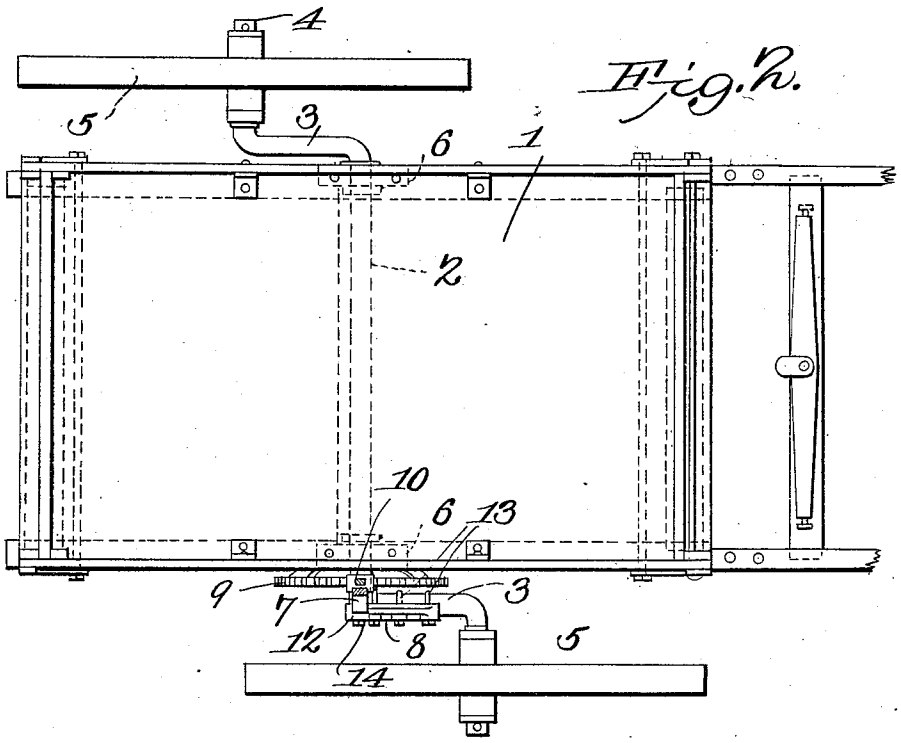


Fig. 2.



WITNESSES:

E. M. Stewart

C. Hattin Bradway.

George E. Murrell, INVENTOR.

By C. A. Snow & Co

ATTORNEYS

THE NORRIS PETERS CO., WASHINGTON, D. C.

No. 842,804. PATENTED JAN. 29, 1907.

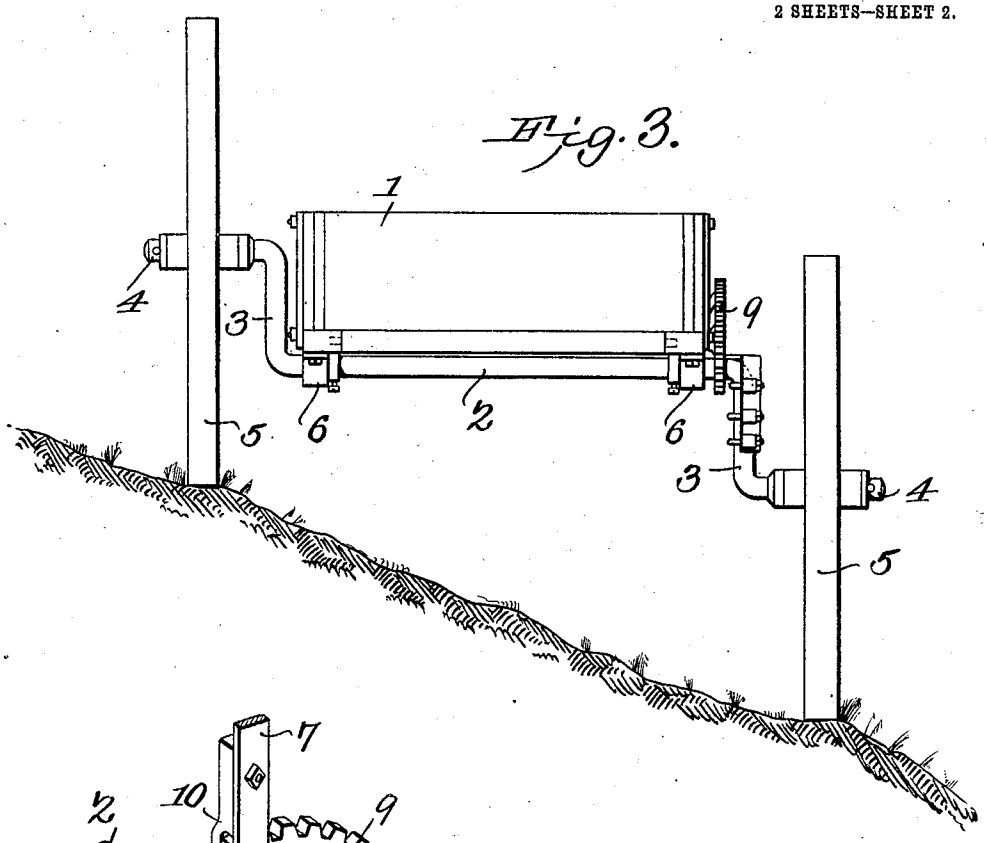
G. E. MURRELL.

VEHICLE.

APPLICATION FILED APR. 21, 1906.

2 SHEETS—SHEET 2.

Fig. 3.



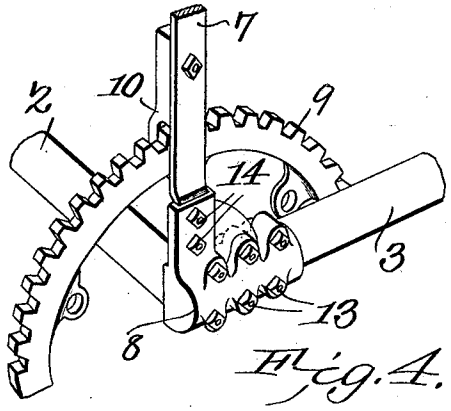


Fig. 4.

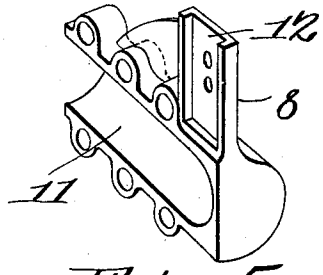


Fig. 5.

WITNESSES:

E. P. Stewart

Chatten Broadway

George E. Murrell, INVENTOR.

By Crosby & Co

ATTORNEYS

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE EDWARD MURRELL, OF FONTELLA, VIRGINIA.

VEHICLE.

No. 842,804. Specification of Letters Patent. Patented Jan. 29, 1907.

Application filed April 21, 1906. Serial No. 313,050.

To all whom it may concern:

Be it known that I, GEORGE EDWARD MURRELL, a citizen of the United States, residing at Fontella, in the county of Bedford and State of Virginia, have invented a new and useful Vehicle, of which the following is a specification.

The present invention relates to vehicle construction, and relates more particularly to mechanisms for changing the position of one or both wheels with respect to the vehicle-body, so that the latter can be maintained level while traveling on a hillside with the same facility as when traveling on a level road.

The object of the invention is to provide an improved mechanism of the character described which is of simple and substantial construction and capable of being readily operated from the vehicle-body at all times.

The details of the construction and arrangements of parts will be more fully described hereinafter, while the features of novelty will be set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one embodiment of the invention, Fig. 1 is a side elevation of the vehicle. Fig. 2 is a plan view thereof. Fig. 3 is an end view. Fig. 4 is a detail perspective view of the wheel-elevating mechanism, and Fig. 5 is a detail view of a part of said mechanism.

Referring to the drawings, 1 presents the vehicle-body having a suitable draft arrangement and mounted upon a shaft 2. In the present illustration a two-wheeled vehicle is shown, and the body is mounted upon the shaft in mid-position. The shaft 2 is a round bar and of the double-crank construction, having the crank-arms arranged one hundred and eighty degrees apart, so that when the vehicle is traveling on the level one crank-arm extends rearwardly and the other forwardly, Fig. 2. These crank-arms 3 terminate in axles 4, upon which the road-wheels 5 are mounted so as to freely rotate thereon. The shaft 3 is normally stationary, but is mounted at its ends in journals or bearings 6, Fig. 3, so that the same can be turned for elevating or lowering the wheel or wheels.

The mechanism for setting the wheels comprises a lever 7, which is attached to the lower crank-arm, Fig. 2, by means of a bracket 8, and arranged on the vehicle-body at one side of the lever is a toothed sector or rack 9, with which the latch 10 on the lever interlocks for holding the crank-arms from turning after the wheels have been set to any desired position. The bracket 8, as shown in Fig. 5, comprises a casting having a semi-cylindrical recess 11, adapted to receive the crank-arm, and an annular recess 12 for receiving the lower ends of the actuating-lever, Fig. 5, the latter recess being disposed at right angles to the former. The bracket is secured to the crank-arm by means of clips 13 and to the lever by bolts 14.

The operation is as follows: When it is desired to travel over a level stretch of ground or road, the lever is set to mid-position, as shown in Fig. 1, which corresponds to the horizontal position of the crank-arm. When an incline, such as a hillside, is encountered which slopes to the left, as shown in Fig. 3, the lever is thrown forwardly, so as to lower the right-hand road-wheel and raise the left-hand one. When the wheels have been shifted sufficiently to maintain the body of the vehicle substantially horizontal, the latch is released and the wheels are maintained in their shifted position, and, conversely, when an opposite incline is encountered the lever is disposed rearwardly.

While I have shown the crank-shaft of the double-throw construction, it is possible to employ certain features of the invention with a shaft having a single-crank arm, and, furthermore, a four-wheeled vehicle may be equipped with the invention and operate with the same effect.

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

1. The combination of a vehicle-body, with a crank-shaft on which the body is journaled which is provided with crank-arms extending diametrically opposite to each other, axles on the ends of the cranks, wheels on the axles, an operating-lever, a bracket removably secured to one of the crank-arms, means for removably securing the lever to the bracket at right angles to the arm, a toothed sector on the body of the vehicle arranged adjacent to the lever, and a latch mechanism for locking the lever with respect to the sector.

2. The combination of a vehicle-body, with a transversely-extending shaft, journals on the body for the shaft, a crank-arm at one end of the shaft, an axle thereon, road-wheels, a bracket on the crank-arm having a recess conforming to the shape of said arm and a second recess arranged at an angle to the

first-mentioned, a lever secured in the second recess, a latch mechanism on the lever, and a toothed sector for said mechanism mounted on the body and over which the lever is adapted to move.

3. The combination of a vehicle-body, with a transversely-extending shaft, journals on the body for the shaft, crank-arms at the ends of the shaft, axles thereon, road-wheels, a bracket on one of the crank-arms having a recess into which the said arm fits and a second recess arranged at an angle to the first, a lever bolted in the second recess, clips cooperating with the first-mentioned recess for securing the bracket to the crank-arm, a latch mechanism on the lever, and a toothed sector for the said mechanism which is supported on the said body in coöperative relation to the lever.

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

GEORGE EDWARD MURRELL.

Witnesses:

M. P. WILLIAMS,

ANNIE R. THOMASSON.