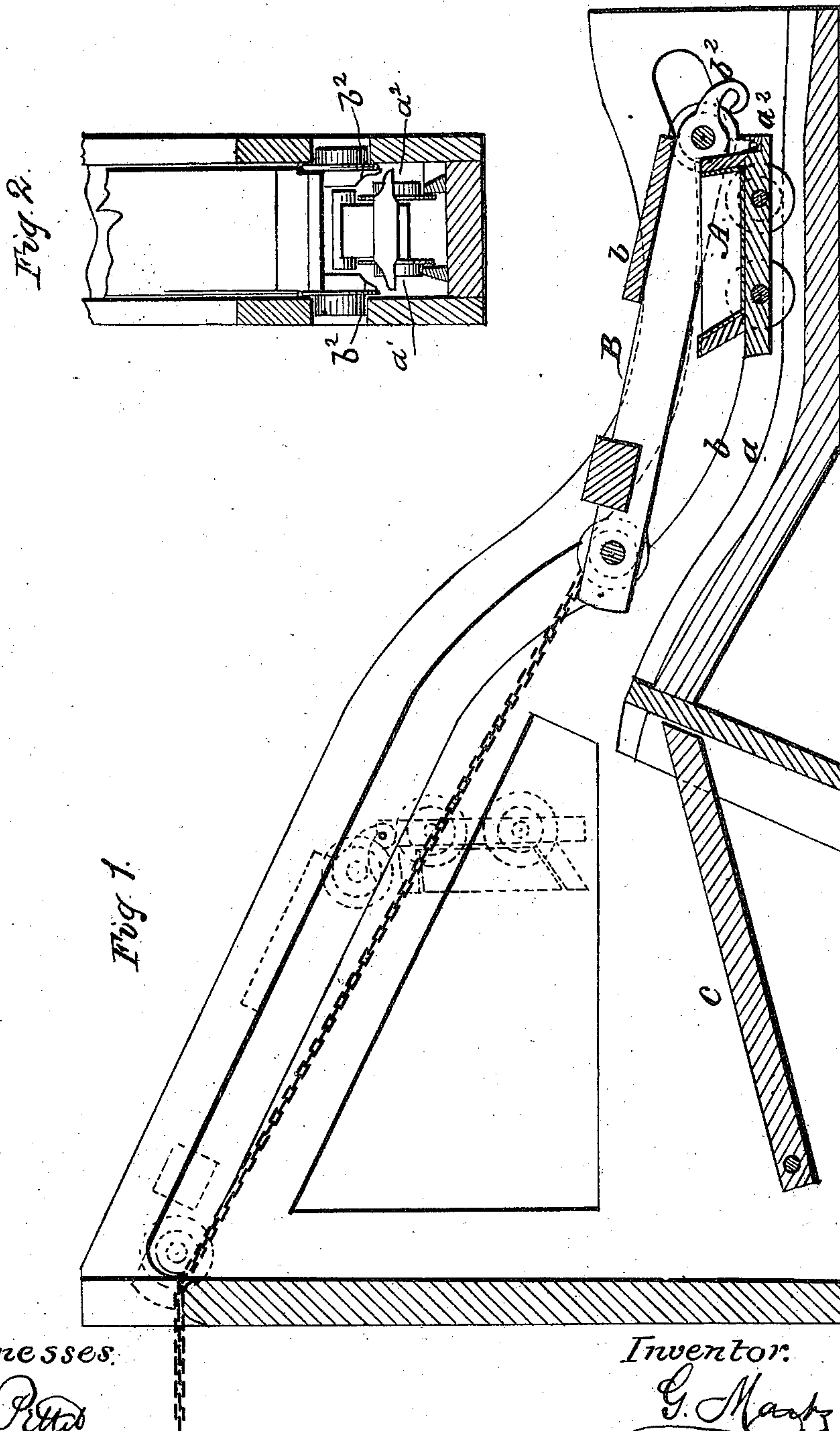


G. MARTZ.

Coal Car.

No. 97,207.

Patented Nov. 23, 1869.



Witnesses:  
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# United States Patent Office.

GEORGE MARTZ, OF POTTSVILLE, PENNSYLVANIA.

Letters Patent No. 97,207, dated November 23, 1869.

## IMPROVED COAL-CAR AND TRACK.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE MARTZ, of Pottsville, in the county of Schuylkill, and State of Pennsylvania, have invented a new and improved Hoisting-Machine for running up slopes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section, and

Figure 2 is an elevation of the lower end of the tracks with the gangway.

This invention relates to the propulsion of cars laden with coal, from the gangway of a mine, up an inclined way to the surface, by means of a motive truck, separate from the cars, and running upon a track above them.

The invention consists in providing said truck with a platform, either fixed or adjustable, which shall serve as a cover for the coal-car. Also, in providing hooks upon the motive-truck and journals upon the coal-car, and so arranging the two vehicles with respect to each other that the said hooks and journals may be automatically connected and disconnected, for dumping, lowering, and releasing-purposes. Also, in so combining the coal-car and motive-truck that the one may propel the other by simple contact, without other connection.

In the drawings—

A is a coal-car, supposed to be placed in the gangway of a mine, and running upon an inclined track, *a*.

B is a motive-truck, placed directly over the car A, and running upon an inclined track, *b*.

The two inclined tracks should be placed far enough apart to enable the coal-car when loaded to be run under the motive-truck.

The latter has a platform, *b'*, on its rear end, of a capacity to cover the coal-car, and prevent the escape of the contents of the latter when moving up the incline loaded.

The platform *b'* should be adjustable with respect to the truck B, so as to admit under it a load of coal of any height.

The advantage of placing the cover of the coal-car upon the motive-truck is, that when the latter arrives at the end of its track, and is ready to dump its load upon the chute C, its cover is borne off by the truck whose track *b* does not terminate at the same point as the track *a*, and thus nothing prevents the delivery of the coal.

The tracks *a* and *b* run parallel until near the upper end of the former, where the upper track assumes a steeper pitch than the lower.

This brings the rear ends of the truck and car nearer together than when they run parallel, and causes the hooks *b<sup>2</sup>*, placed upon the rear end of the former, to take hold of the journals *a<sup>2</sup>*, projecting from both sides of the rear end of the latter.

When the front end of the coal-car is almost at the terminus of the track *a*, the hooks *b<sup>2</sup>* raise the rear end of the car, and, if the truck B be drawn far enough forward, the coal-car will be suspended perpendicularly, by means of its journals, upon the hooks, and all its contents will fall upon the chute C. On returning, the hooks gradually lower the car till it assumes its proper place on the track.

At the lower terminus the upper track rises out of parallelism with the lower one, and causes the hooks and journals to separate, so that the coal-car may run onward into the mine and be loaded up.

It should be noticed that, by reason of the peculiar directions of the tracks, the coupling and uncoupling of the hooks *b<sup>2</sup>* and journals *a<sup>2</sup>* is automatic.

The propulsion of the coal-car, from the bottom of the incline to near its upper terminus, is effected by the rear axle of the truck B coming in contact with the rear end of the car.

The hooks and journals do not come into connection till near the end of the drawing. This connection, by simple contact, enables the ends of the truck and car to separate, without obstacle or unshackling, when it becomes necessary that they should do so just previous to the dumping-operation.

Having thus described my invention,

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

1. A motive-truck, so constructed and adapted to the coal-car that its platform shall serve as a cover to the car.

2. A coal-car and motive-truck, constructed and adapted to each other, so as to automatically connect and disconnect themselves, substantially as and for the purpose specified.

3. The described arrangement of coal-car and motive-truck with each other, and with the tracks *a* *b*, which are constructed as described, whereby the car is propelled forward by means of the motive-truck, substantially as and for the purpose set forth.

To the above specification of my improvement, I have set my hand, this 17th day of August, 1869.

GEORGE MARTZ.

Witnesses:

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