

(No Model.)

E. PECKHAM.
ELECTRIC CAR GEAR.

No. 420,544.

Patented Feb. 4, 1890.

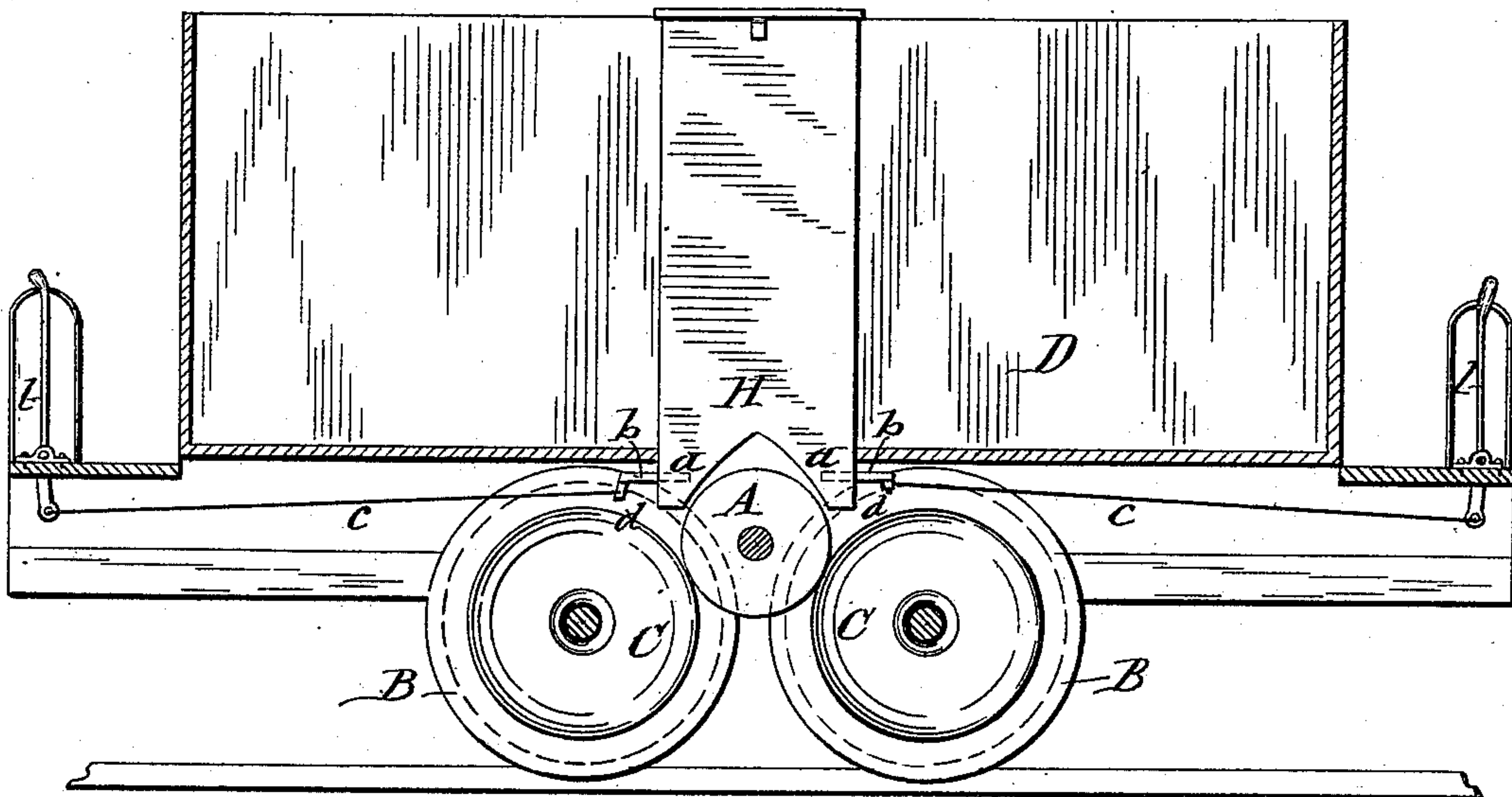


Fig. 1

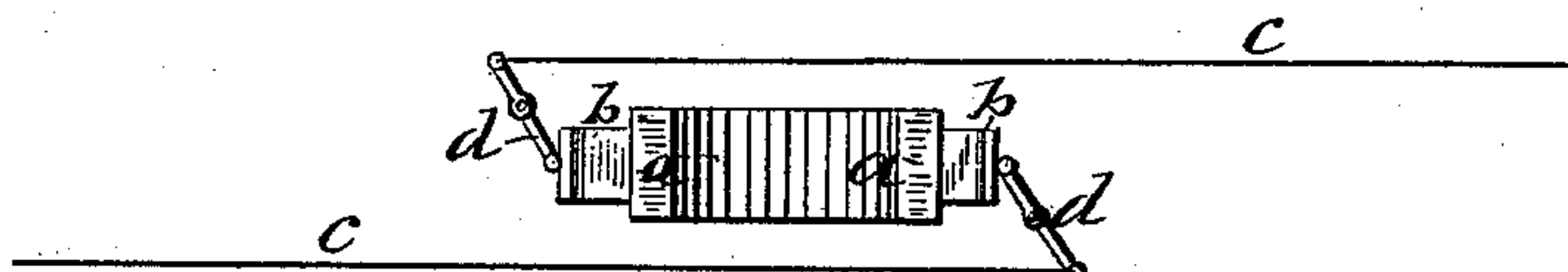


Fig. 2

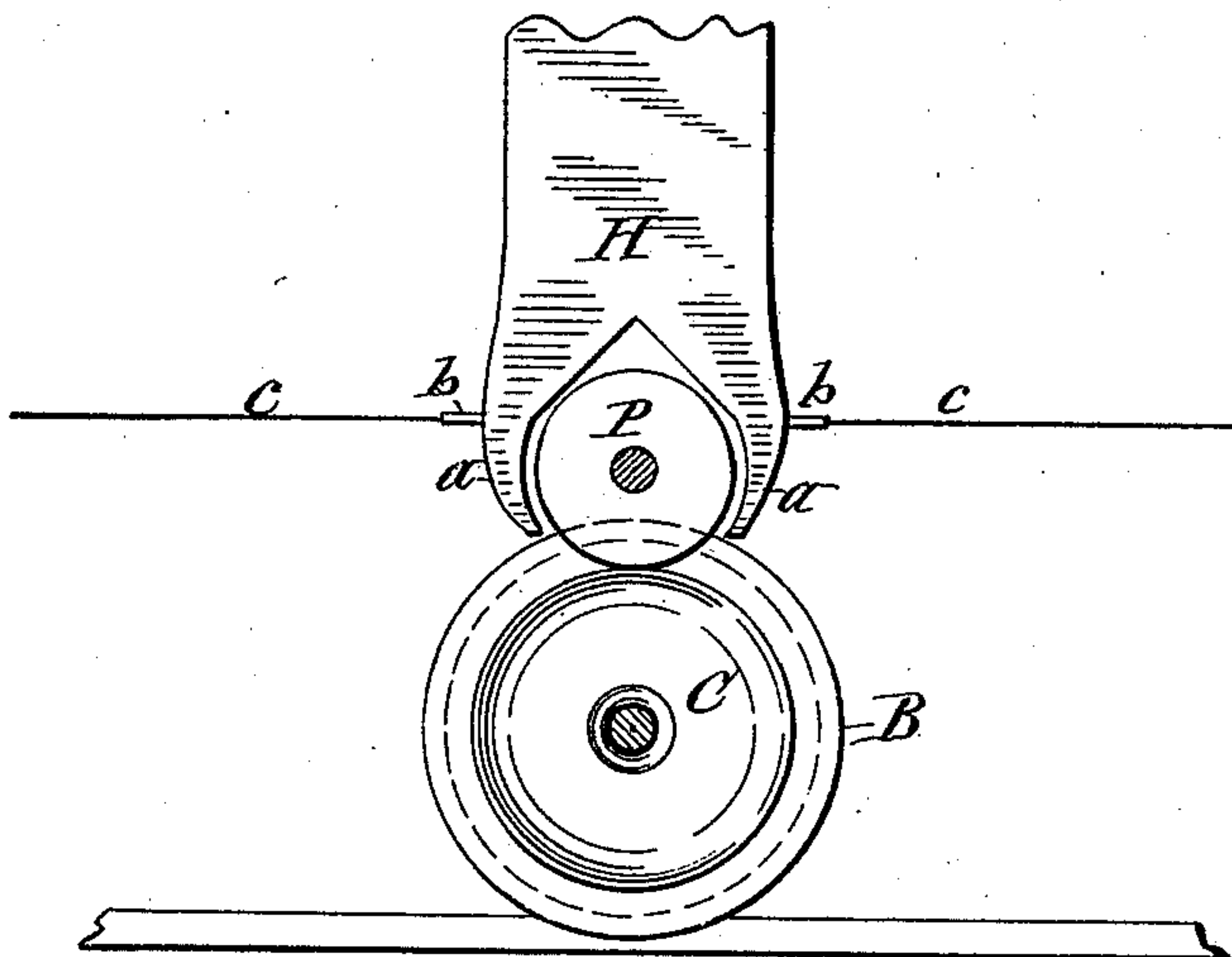


Fig. 3

WITNESSES:

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EDGAR PECKHAM, OF NEW YORK, N. Y.

ELECTRIC-CAR GEAR.

SPECIFICATION forming part of Letters Patent No. 420,544, dated February 4, 1890.

Application filed May 13, 1889. Serial No. 310,584. (No model.)

To all whom it may concern:

Be it known that I, EDGAR PECKHAM, of New York, in the county of New York, in the State of New York, have invented new and
5 useful Improvements in Electric-Car Gears, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of electric-car gears in which motion is transmitted to the traction-wheels by means of friction-pulleys driven by the motor-shaft and in contact with friction-wheels attached to the traction-wheels.

15 The object of the invention is to guard against the slipping of the friction-pulley on its bearings on the friction-wheels; and to that end the invention consists in the employment of a sand-hopper on the car having
20 its discharge-spouts in front and rear of the friction-pulley, and gates adapted to open and close said spouts, all as hereinafter more fully described, and specifically set forth in the claims.

25 In the annexed drawings, Figure 1 is a vertical longitudinal section taken at the inner side of the traction-wheels of a car-gear embodying my improvements. Fig. 2 is an inverted plan view of the sand-hopper, showing
30 the levers for operating the gates of said hopper from opposite ends of the car, and Fig. 3 is a vertical longitudinal sectional view of a modification of my invention.

Similar letters of reference indicate corresponding parts.

35 B B represent two of the traction-wheels on one side of the car, which wheels have rigidly attached to their inner sides or formed integral therewith the friction-wheels C C, concentric with the traction-wheels.

A denotes the friction-pulley, which is either mounted directly on the shaft of the electromotor or on a counter-shaft receiving motion from said motor, said friction-pulley
45 being with its periphery in contact with the peripheries of the friction-wheels, and by said contact transmitting motion to the traction-wheels when said pulley is driven by the motor.

50 In the operation of said class of car-gears

it has been found somewhat difficult to prevent the friction-pulley from slipping on its bearings on the friction-wheels, and in order to obviate this defect I attach to the car D, in a suitable position and in any proper and
55 convenient manner, a hopper H, in which to carry fine dry sand. The bottom of this hopper is formed with two discharge-spouts *a a*, which are directed respectively to the front and rear of the friction-pulley, and preferably near its contacts with the friction-wheels. Each of said spouts is provided with a valve or gate *b*, which is adapted to open and close the spouts.

The two gates are independent of each
65 other, and are preferably operated respectively at opposite ends of the car by means of hand-levers *l l*, connected to the car thereat, each of which levers is connected by a rod *c* to a lever *d*, which in turn is connected with
70 the gate *b* at the farther side of the friction-pulley A, as illustrated in Fig. 2 of the drawings.

When it is found that the friction-pulley A slips on its bearing on the wheels C C, it is
75 readily checked by opening the gate *b*, which allows the sand to run from the hopper H to the peripheral face of the friction-wheel C at the rear of the friction-pulley A, and the sanded face of said wheel affords a secure
80 frictional hold for the pulley A.

It is obvious that the described sanding apparatus can also be employed in connection with a friction-pulley P, engaging the top of a single friction-wheel C on one of the traction-wheels B, as illustrated in Fig. 3 of the
85 drawings.

What I claim as my invention is—

1. On an electric car having friction-pulleys in contact with friction-wheels and
90 transmitting motion to the traction-wheels, a sand-hopper carried on the car and having discharge-spouts in front and rear of the friction-pulley, and gates adapted to open and close said spouts, as and for the purpose
95 set forth.

2. On an electric car having friction-pulleys in contact with friction-wheels and transmitting motion to the traction-wheels, a sand-hopper carried on the car and having
100

its discharge-spouts in front and rear of the friction-pulley, gates adapted to open and close said spouts, hand-levers on opposite ends of the car, and rods connecting said 5 levers with the aforesaid gates for operating the same, substantially as described and shown.

In testimony whereof I have hereunto signed my name this 9th day of May, 1889.

EDGAR PECKHAM. [L. s.]

Witnesses:

J. H. BURTON,
THORNLEY DICKSON.