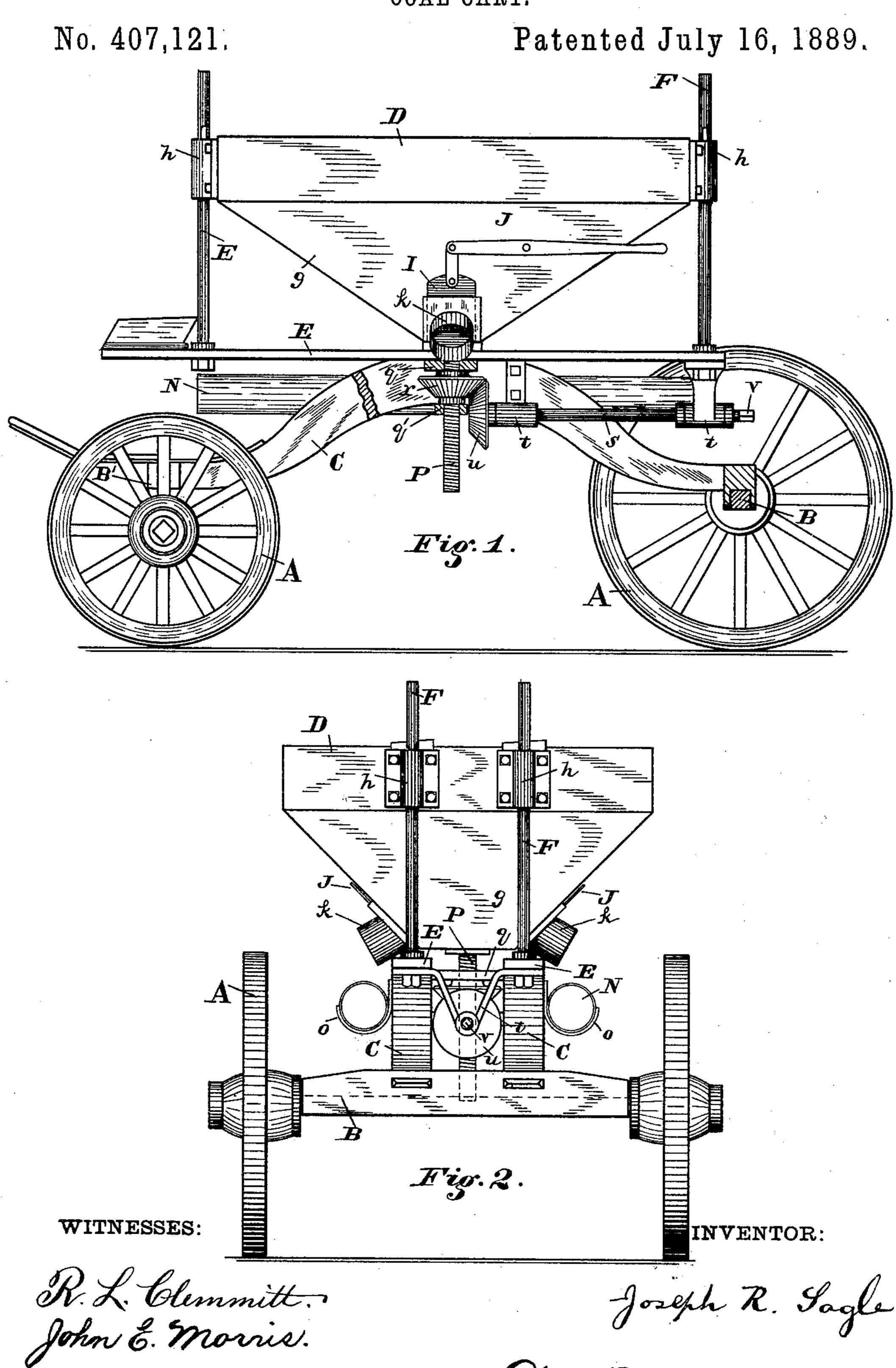
J. R. SAGLE.
COAL CART.



BY Chas 13. Manna ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH R. SAGLE, OF BALTIMORE, MARYLAND.

COAL-CART.

SPECIFICATION forming part of Letters Patent No. 407,121, dated July 16, 1889.

Application filed April 27, 1889. Serial No. 308,866. (No model.)

To all whom it may concern:

Be it known that I, Joseph R. Sagle, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Coal-Carts, of which the following is a specification.

My invention relates to a wagon for hauling and delivering coal, and is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the wagon, one of the reach-bars being broken and the rear axle in section. Fig. 2 is a rear end elevation of same

vation of same. The letter A designates the wheels; B, the rear axle; B', a bolster-bar resting on top of the front axle; and C, two arched reach-bars which extend from the rear axle to the front bolster-bar to which they are secured. The 20 rear axle may also have a bolster-bar upon it. These parts comprise the running-gear of the wagon, and the described arch construction of the two reach-bars provides at the center an elevated seat whereon the hopper-body D 25 is mounted. The arched reach-bars C support two horizontal bars E, extending lengthwise, and each of these has two vertical rods F, which guide and steady the hopper-body when it moves up and down. The body or 30 box D of the wagon has a hopper-shaped bottom g, and is provided with boxes or bearings h, which are occupied by the guide-rods F, and which slide thereon. The hopper-body has two discharge-gates I, one on a side op-35 posite the other and each worked by a lever J. A tubular nozzle k projects from the gatecasing l, and a tubular spout or chute N may be attached to the said gate-nozzle k. A section of this tube N may be carried upon hooks

Means for raising and lowering the hopper-body above the arched bars are employed, in order thereby to give an increased inclination to the tube-chutes N when they are in position to discharge coal, if the position of the ground, street, or coal-bin opening requires it. Any suitable means to this end may be employed in connection with the parts heretofore described. In the present instance a vertical lift-screw P has its upper end fixed in any suitable way to the base-point or bottom of the hopper-body and pro-

jects downward through two cross-bars q q', one above the other, attached to the two arched bars. A bevel-pinion r is internally 55 screw-threaded and fits on the lift-screw, and has position between the said two cross-bars q q'. This pinion r turns like a nut on the lift-screw, but cannot advance or change position, as it is confined by the two cross-bars. 60 A shaft s turns in bearings t and carries a bevel-pinion u, which gears with the said nutpinion r. This shaft has a square end v for the attachment of a crank-handle, (not shown,) which, when not in use, may be removed. 65

To hold the body down when it is empty and prevent injurious motion, the vertical rods F may be slotted and a tapered key or pin w inserted above the bearings h.

Of course a brake may be attached to the 70 wagon, and also the body parts may be mounted on springs.

The construction may be varied somewhat from that here shown without affecting my invention.

Having described my invention, I claim—
1. The combination of the axles and bolster-bars, two arched reach-bars C, horizontal bars E, attached to the reach-bars, vertical guide-bars F, projecting up from the said 80 horizontal bars, and the body D, seated on the elevated part of the arched bars and pro-

vided with a side discharge-gate.

2. The combination of the axles and bolster-bars, two arched reach-bars C, horizontal 85 bars E, attached to the reach-bars, vertical guide-bars F, projecting up from the said horizontal bars, a body seated normally on the elevated part of the arched bars, and a lift-screw P, to raise the body above its nor- 90 mal seat.

3. The combination of the axles and bolster-bars, reach-bars, vertical guide-rods F, provided with slots, a body D, having bearings h, which slide on the vertical rods, a lift-95 screw to raise the body, and keys w, inserted in the said slots above the body-bearings.

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

JOSEPH R. SAGLE.

Witnesses:

JOHN E. MORRIS, JNO. T. MADDOX.