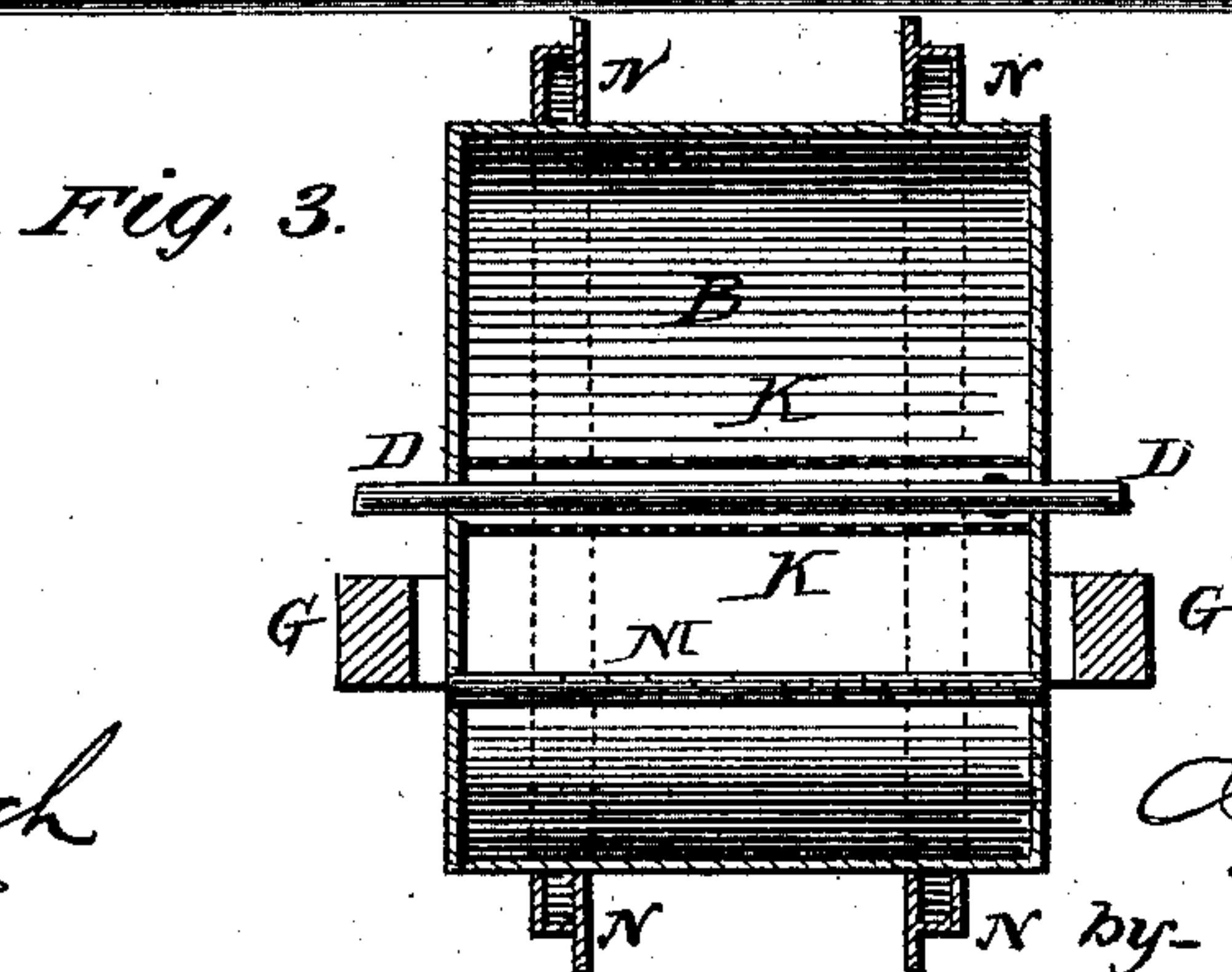
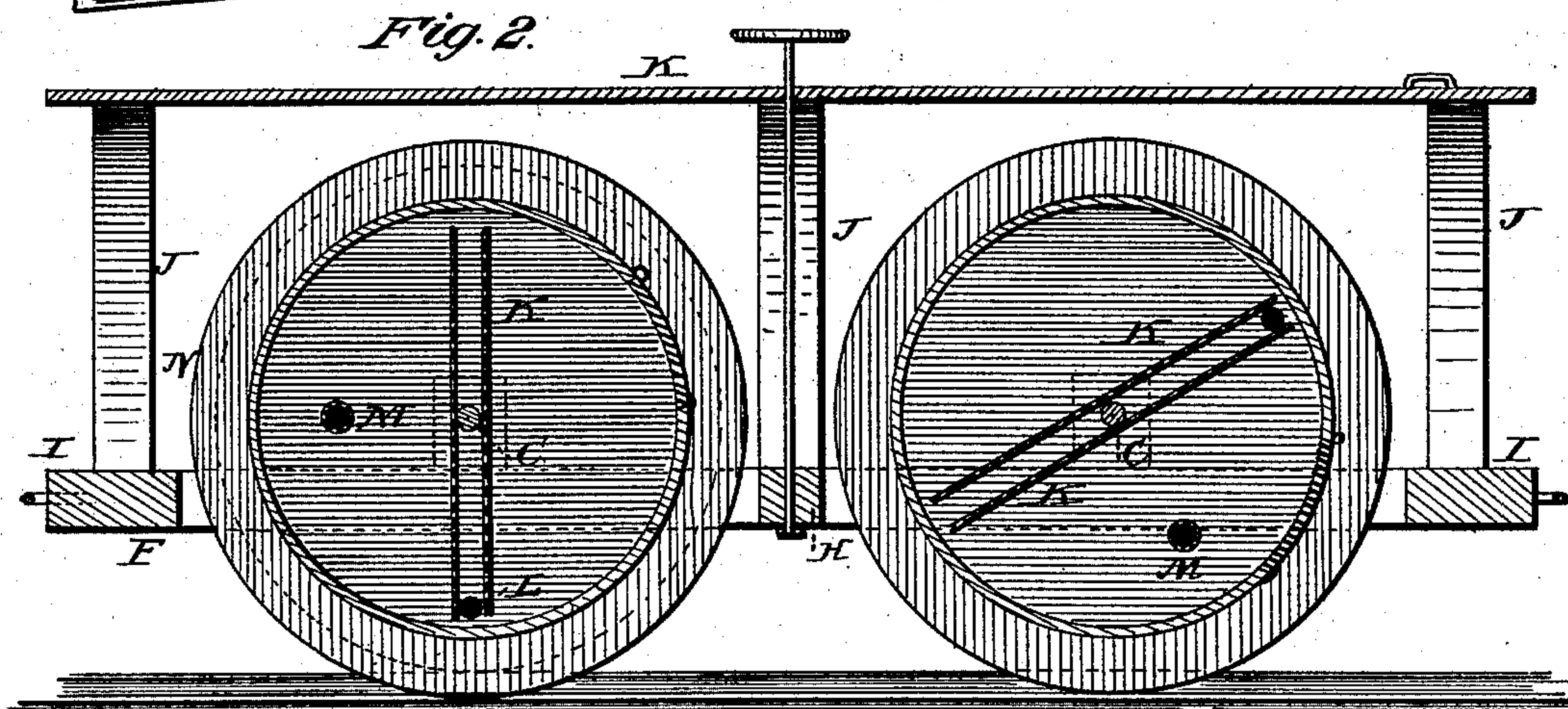
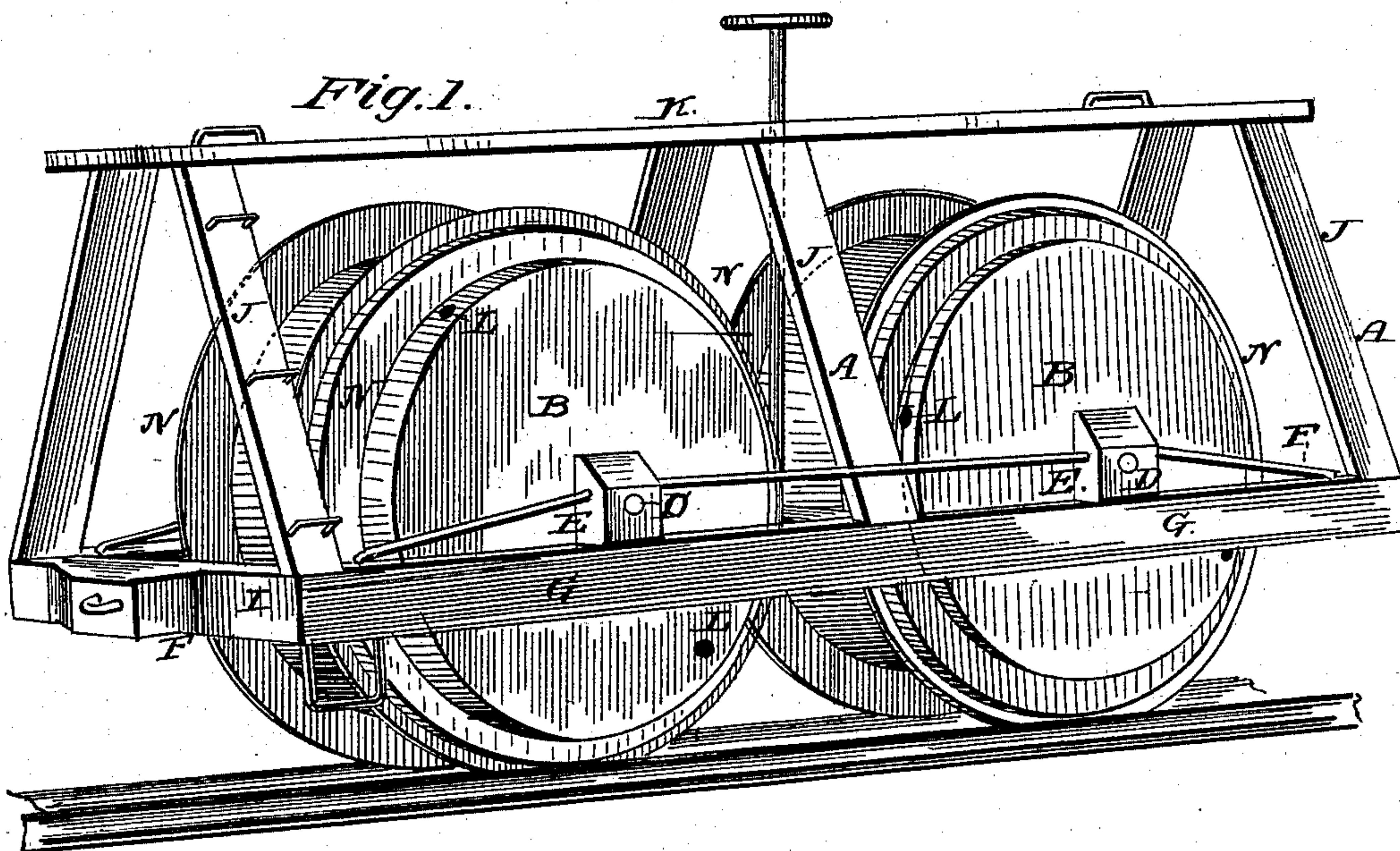


G. E. SLY.
Railroad-Car.

No. 221,871.

Patented Nov. 18, 1879.



Witnesses:
Fred. L. Dietrich
J. R. Littell,

Inventor
George E. Sly,
by- C. A. Snow & Co.
Attys.

UNITED STATES PATENT OFFICE.

GEORGE E. SLY, OF BELLE PLAINE, MINNESOTA.

IMPROVEMENT IN RAILROAD-CARS.

Specification forming part of Letters Patent No. **221,871**, dated November 18, 1879; application filed October 2, 1879.

To all whom it may concern:

Be it known that I, GEORGE E. SLY, of Belle Plaine, in the county of Scott and State of Minnesota, have invented certain new and useful Improvements in Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical section, and Fig. 3 is a vertical cross-section through one of the cylinders.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to cylindrical railroad-cars for the transportation of certain kinds of merchandise; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A represents my improved railroad-car. B B are cylindrical forms, of suitable dimensions, two or more of which support the frame or truck, which, with the said forms, constitutes the car.

The cylinders B are constructed, preferably, of cast or wrought iron, although other suitable material may be employed in their manufacture. Each cylinder is provided with a shaft or axle, C, projecting at both ends, so as to form spindles D D, having their bearings in boxes E E upon the sides G of the frame or truck F, which latter consists, besides the side pieces, simply of a cross-piece, H, and end pieces, I, connecting the said sides and provided with car-couplings, and inclined uprights J, supporting a top piece, which should be on a level with the ordinary box-cars, so as to permit the train-men to pass from one car to the other throughout the length of the train.

Suitable steps and a hand-rail may be provided, and the sides of the frame may be trussed to secure strength.

The cylinders B are provided on each side of the axle with a perforated partition, K, and between the partitions several ventilating-openings, L L, are provided. In addition to this I provide in every cylinder one or more perforated tubes, M M, connecting the heads or ends, for the purpose of causing a circulation of air through the merchandise in transit. The cylinders, of course, are provided with suitable doors or openings for loading or unloading.

The cylinders B are provided with annular bands or tiers N N, which constitute the wheels, and are therefore of the same gage as the wheels of the box-cars.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation of my invention and its advantages will be readily understood. Principally, the weight of the load is direct upon the track, and not upon the axles, which latter support only the weight of the frame or truck, thus greatly reducing the friction. Owing to the large diameter of the wheels or tires the draft is light, and grain, for the transportation of which my improved cars are specially intended, is matured and ripened while in transit.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The cylinders B, having axles C and spindles D, perforated partitions K, openings L, and perforated ventilating-tubes M, substantially as and for the purpose set forth.

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

GEORGE E. SLY.

Witnesses:

ROBERT A. IRWIN,
JAMES M. HALE.