

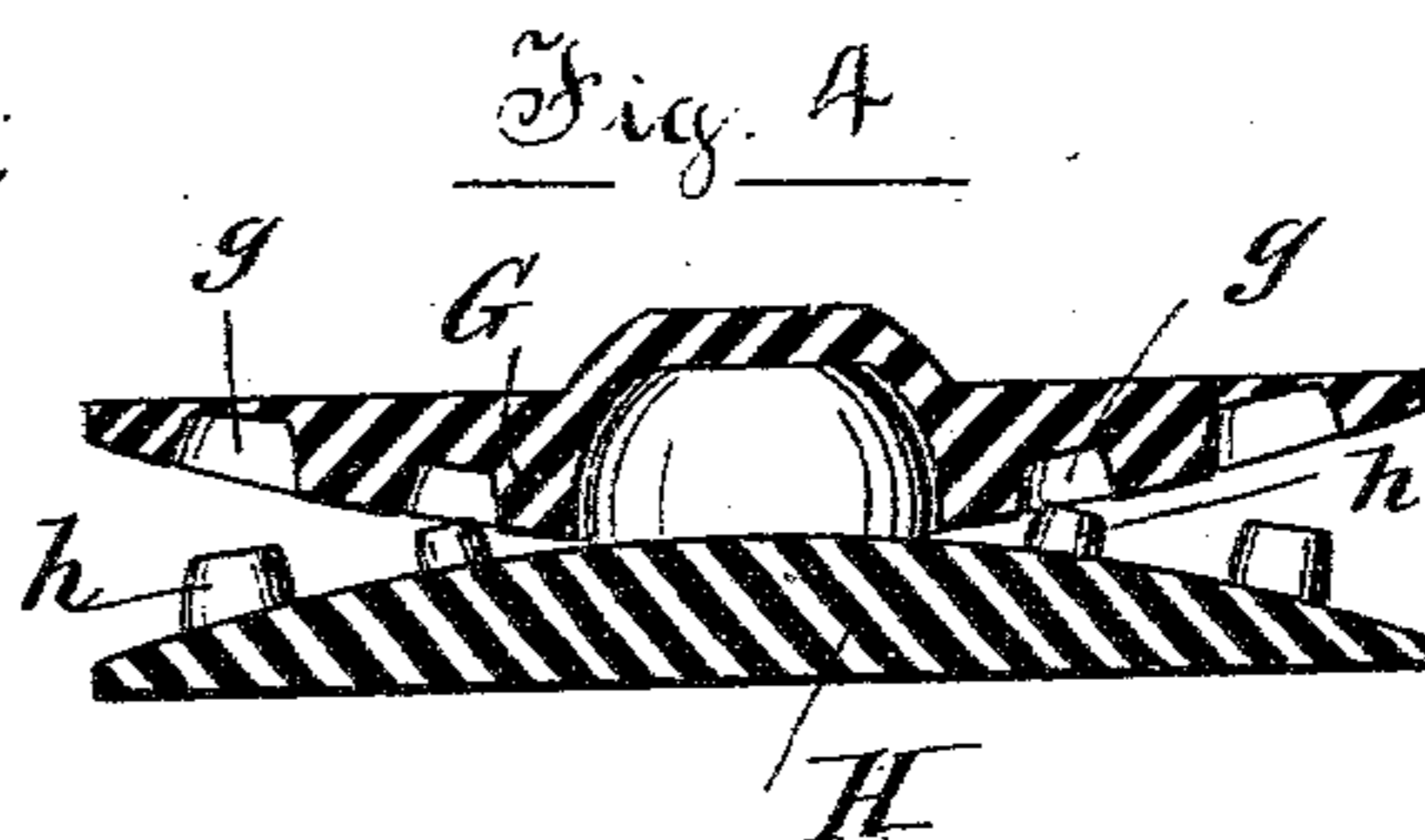
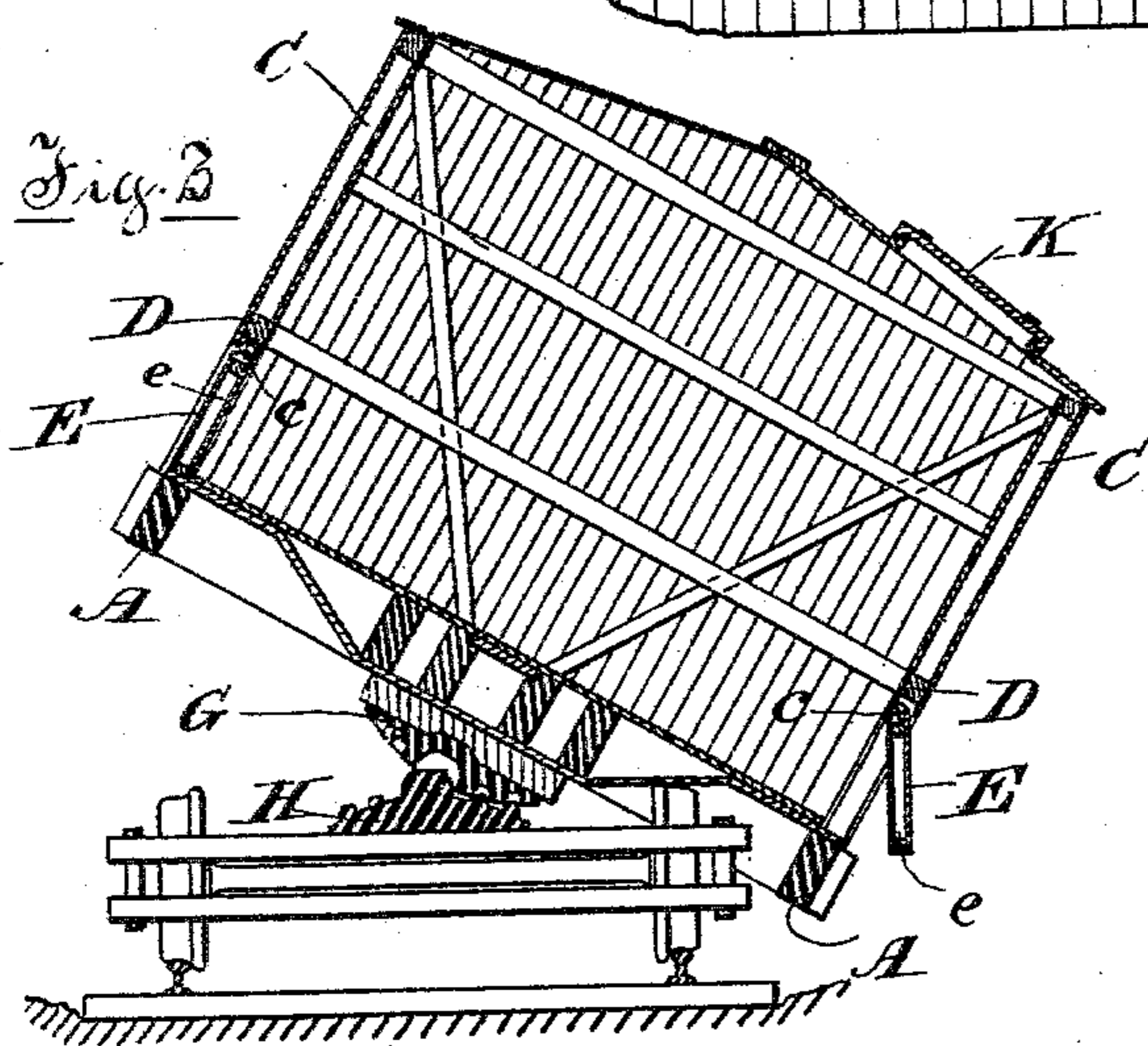
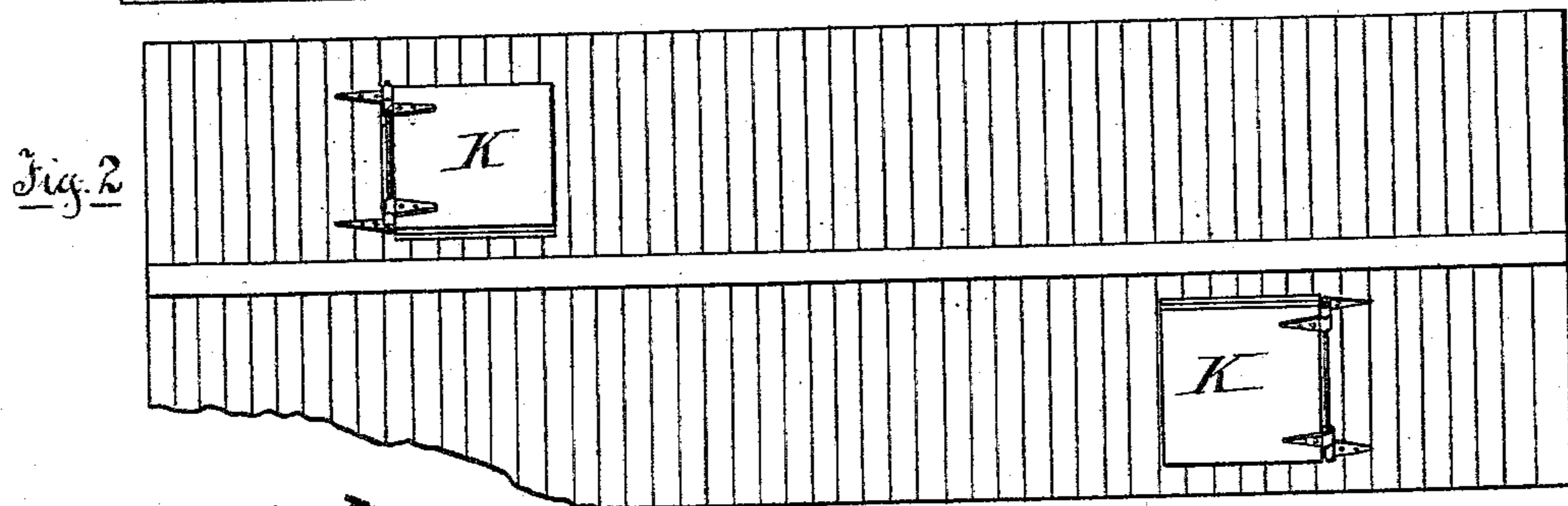
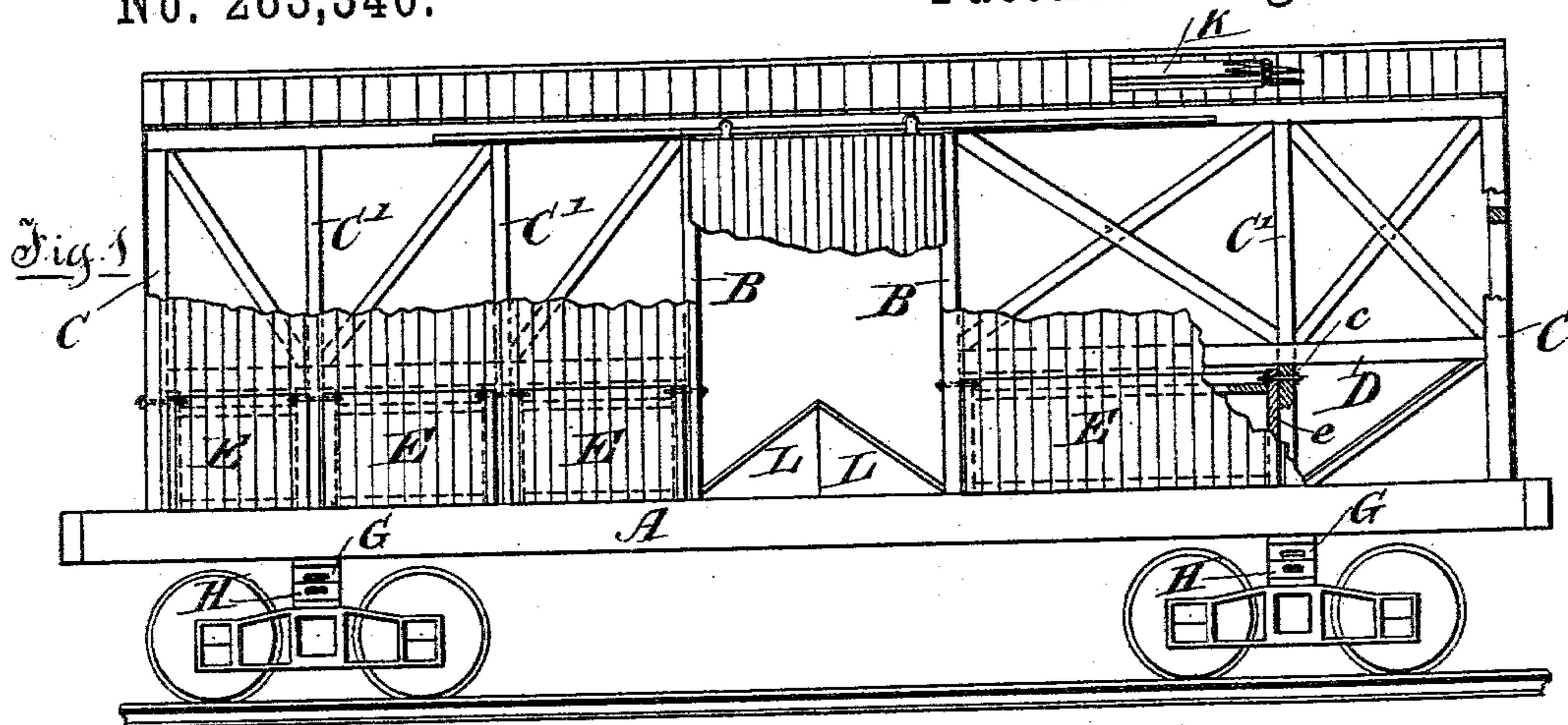
(No Model.)

N. H. GREENE.

FREIGHT CAR.

No. 283,340.

Patented Aug. 14, 1883.



Witnesses:
Owen Evans
Arthur Harris

Nathan Harrison Greene
Inventor.
For Atty:
Rus. H. Reynolds

UNITED STATES PATENT OFFICE.

NATHAN HANSON GREENE, OF MONTREAL, QUEBEC, CANADA.

FREIGHT-CAR.

SPECIFICATION forming part of Letters Patent No. 283,340, dated August 14, 1883.

Application filed February 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, NATHAN HANSON GREENE, of the city of Montreal, in the district of Montreal, and Province of Quebec, Canada, have invented certain new and useful Improvements in Railway Freight-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object to produce a freight-car which, while specially adapted, from its construction, for the transportation of coal, ores, and such heavy merchandise, may be utilized on its return journey to carry goods of other kinds, thus obviating the necessity of hauling the dead-weight of empty cars, and economize running expenses. I propose to effect this by certain modifications and improvements in the present construction of dumping-cars, with especial reference to those invented by Matthew Van Wormer. These improvements are shown in the drawings hereto annexed and forming part of this specification, in which—

Figure 1 is a part side view and part sectional elevation of a car embodying my invention; Fig. 2, a plan of roof of car; Fig. 3, a transverse sectional elevation of car, showing it tipped; and Fig. 4, a detail of the rocker and bed on which the car works.

It must be understood that in these drawings I only show in detail the several features to which my invention refers, and that the other parts of the car not particularly mentioned may be identical with those of any dumping-car of approved pattern, and especially that of Van Wormer, above referred to.

Similar letters of reference indicate like parts.

A A are the side stringers or longitudinals, into which I frame the vertical posts B B, set apart the distance of the usual width of a door, and of the height suitable for a box-car.

C C are the angle-posts; C' C', posts intermediate between B and C; and D D, horizontal sills framed into these posts, the panels between B and C and the ends of the car being trussed, as shown in Figs. 1 and 2, or as may be found desirable.

Below the level of the sill D, I place, as is done in the Van Wormer dumping-car, a door, E, framed with vertical pieces e, pivoted to

the posts B C' by suitable bolts, e, passing through both in each case. To these vertical posts e is secured, on both sides, boarding, which may be placed horizontally; or when the posts e are braced between, so as to form a frame, the boarding may be placed vertically to correspond with that of the rest of the car, the edge of which may be brought down, so as to form a weather-strip and prevent rain beating in.

It will of course be understood that the posts B, C, and C', may be further secured to the sills A and D by irons or bolts of any desired kind. The side doors to close the openings between the posts B B will also be constructed, hung, and operated in any usual way.

Fig. 4 shows my improvement on the construction of the central convex bed and rocker used in some kinds of dumping-cars. G is the rocker, secured centrally over the trucks of the car, and having formed therein recesses g g, to receive the projections h h, formed on the correspondingly-curved surfaces of the convex bed H. By this formation of the bed and rocker I do away with the great liability, now existing in the present construction, of the recesses in the convex bed being filled up with water, (which freezes therein,) gravel, or any of the substances at the time carried in the car, or from any other cause, either accidental or malicious, which will prevent the rocker moving on the bed, and render the car inoperative, and even dangerous to the train-hands.

When it is desired to load the car with coal, ores, minerals, and the like, I prefer to do so through openings in the roof of the car, the gates E E and the side doors being at the time securely fastened. These openings are formed with raised edges, like a hatchway, and are provided, as shown at K, with covers hinged to the roof, and with projecting rim, so as to make the car water-tight. I also prefer, when the car is to carry such materials, to place in the center of the car two triangular chutes, L L, formed of planking, sheet-iron, or both combined, and of such size that when placed back to back their apices will reach the opening of the gates E. By this means the coal, &c., loaded into the car will run into such a position that the greater part of the load will be carried immediately over

the trucks, (the center being occupied by the chutes,) and when the gates E are opened will all run out.

5 All that is required to be done to fit the car for its return journey with ordinary merchandise is to remove the chutes and carefully secure the covers K and gates E, when it may be loaded and unloaded in the usual way.

10 Having thus described my invention, I beg to state that what I claim as new is as follows:

1. A box-car arranged to dump, having its sides framed with central openings, and on either side of these openings doors or gates extending up part of the height of the car, so
15 as to swing outward, all as herein set forth, and for the purposes described.

2. A box-car arranged to dump, and provided with central side doors, chutes L from same, gates E, and openings in roof with cov-
20 ers K, as and for the purposes set forth.

3. In a car arranged to dump sidewise, the arched rocker-bed H, having its arch or curve corresponding to that of the rocker, and formed with a long strong projection or pivot extending upward from the center of its convex
25 upper surface, such projection fitting into a corresponding recess in the center of the convex lower surface of the rocker G, said bed H having also on its said convex surface suitable teeth or projections, *h h*, of any desired size
30 or number, but shorter than its central projection, said teeth fitting into corresponding recesses, *g g*, in the rocker G, for the purpose of preventing the lodgment of foreign substances within the recesses, and consequent
35 difficulty in tipping the car.

NATHAN HANSON GREENE.

Witnesses:

FRAS. HY. REYNOLDS,
OWEN N. EVANS.