

(No Model.)

J. J. HILL.
Dumping-Car.

No. 227,434.

Patented May 11, 1880.

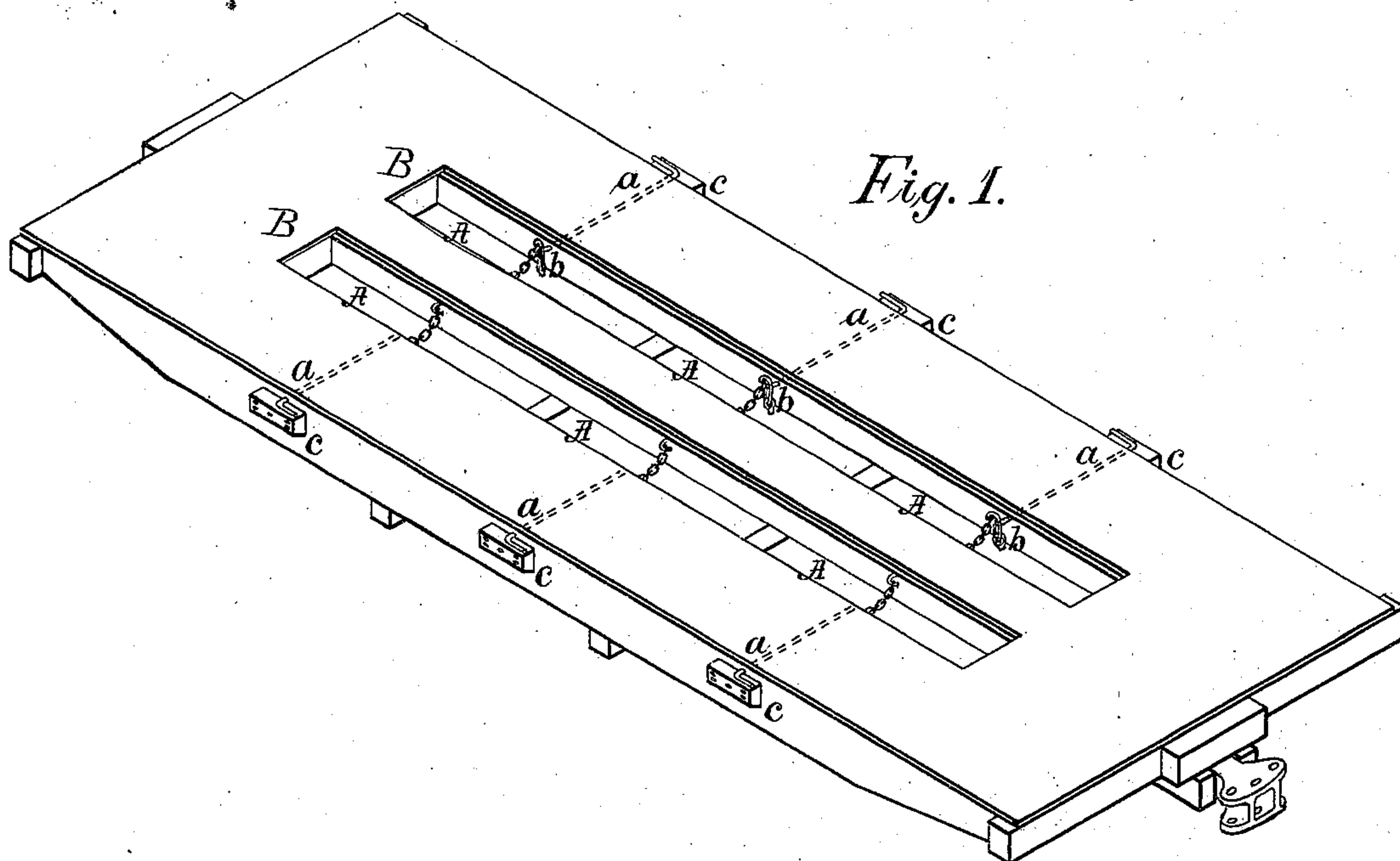


Fig. 2.

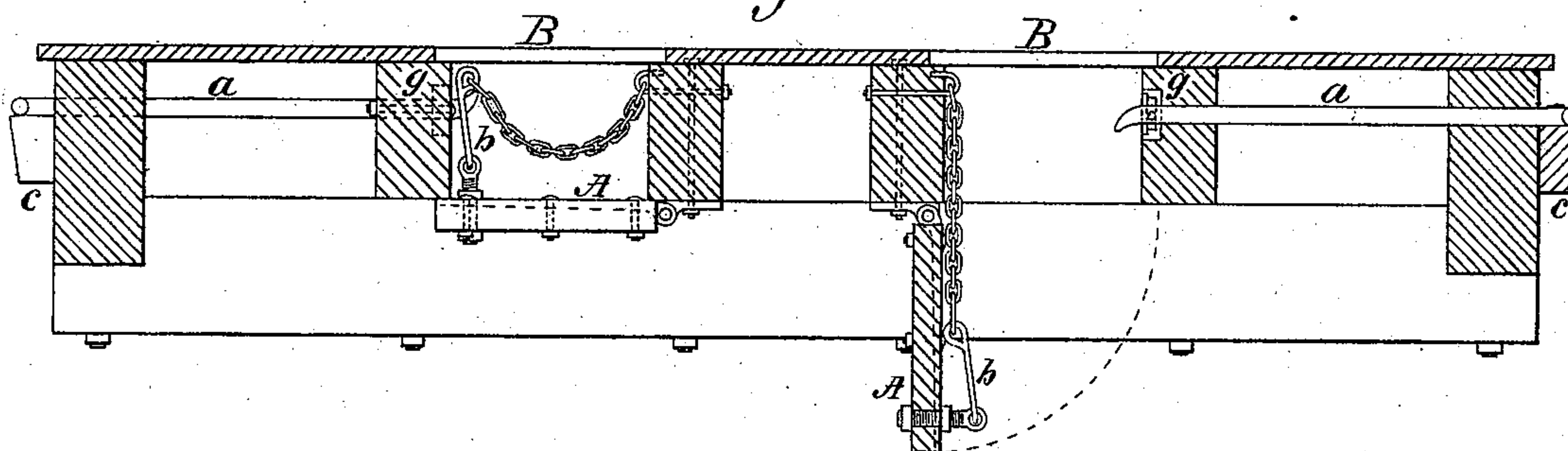
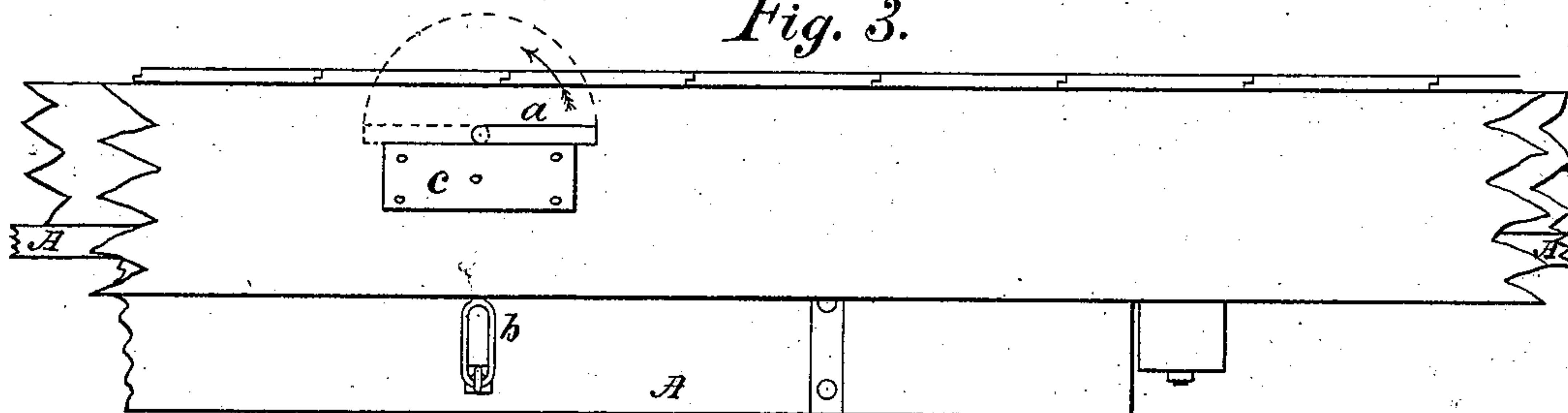


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES J. HILL, OF ST. PAUL, MINNESOTA.

DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 227,434, dated May 11, 1880.

Application filed March 6, 1880. (No model.)

To all whom it may concern:

Be it known that I, JAMES J. HILL, of St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Dumping-Cars for Railroads; 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, and to letters of reference marked thereon, which form a part of this specification.

The invention relates to cars used for the construction and maintenance of railroads, in distributing sand or gravel for ballasting ties, and for other purposes.

Heretofore cars have been used for similar purposes, but of such form or construction as to require an unnecessary amount of labor in distributing the material conveyed by them.

The object of my invention is to provide a simple and inexpensive attachment to cars already in use, or that may be built for the use of railroad and construction companies, which will enable said companies to distribute ballast for leveling their road-bed in such quantities and at such points as may be desired.

This invention consists in providing the floor of a car with longitudinal openings between the beams, which openings are closed by swinging doors, hinged at one side of the floor-frame, and opening downward to discharge any desired portion of the load, said doors being raised by chains and held up by hooks controlled by crank-rods from the sides of the car, all as hereinafter more fully set forth, the object of the construction being to provide a car which, when the openings are planked at the floor-level, is applicable to general freight purposes, but can, when said planks are removed, be used as a construction-car to carry and dump earth or ballast, or for the transportation of grain, coal, or other articles requiring similar handling.

In the accompanying drawings, in which similar letters of reference indicate like parts,

Figure 1 is a perspective view of the floor of a platform or flat car embodying my invention. Fig. 2 is a vertical transverse section of the same, and Fig. 3 is a partial side elevation.

In the openings B, which are made by the removal of parts of the floor of the car, are hinged planks of wood A in each of the spaces between the cross-beams thereof. Through the outer sills on each side of the car, in the center of the aforesaid spaces, are passed rods *a*, which are used to secure and also to drop the said planks A, as may be desired. Said rods *a* are bent at their outer ends, so as to form a handle or crank by which they may be conveniently turned, and at their inner ends drawn out and bent to form a pointed hook on which to suspend the link *b*. Back of said hook, on rods *a*, is fastened a small pin, which moves in guide-plates *g* and prevents lateral motion in said rods *a*.

Blocks of wood or other material, *c*, are secured to side timbers of car, on which the handles formed on rods *a* rest.

The operation of the device is as follows: When the car is to be loaded with sand or gravel the dump-planks A are hooked up in the manner shown in Fig. 1. To distribute the load the rods *a* are moved one half-turn, which movement drops the dump-planks A. What remains of the load after dumping is shoveled through the openings B or over the edges of the car, as may be desired.

To the link *b* is fastened a chain, by means of which the dump-planks A are raised into position and held there until the rods *a* are moved backward to their former position, when the car is ready to be reloaded.

When cars that are provided with the device are required for other purposes, the openings B may be filled up, and they are at once ready for use, without in any way interfering with the device, which can be left on the car permanently.

What I claim is—

A car provided with a floor having oblong openings B B, extending nearly from end to end, between the floor-beams, as shown, and closed by the dropping valves A, hinged at

one side to the lower edge of the beams, raised by chains and supported by the hooks *b*, engaging the hooked rods *a*, having cranks *c* at their outer ends, by which said rods may be semi-rotated and the hooks *b* engaged or released to support or drop the valves, all in the manner and for the purpose specified.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

JAMES J. HILL.

Witnesses:

R. B. GALUSHA,

EDW. J. SCHURMEIER.