

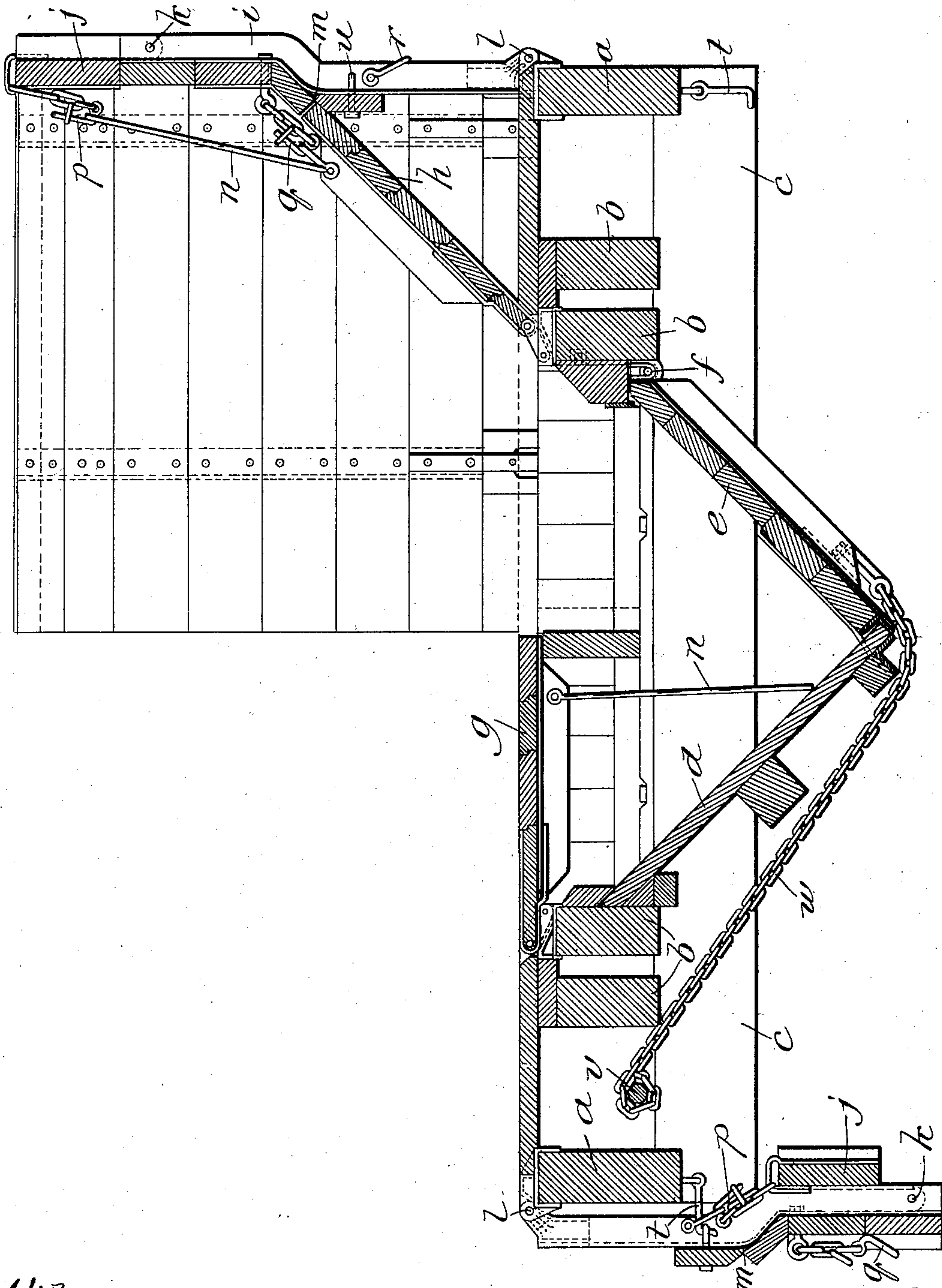
No. 754,475.

PATENTED MAR. 15, 1904.

O. W. MEISSNER.
DUMP CAR.

APPLICATION FILED JULY 27, 1903.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

OTTO W. MEISSNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO RODGER BALLAST CAR COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

DUMP-CAR.

SPECIFICATION forming part of Letters Patent No. 754,475, dated March 15, 1904.

Application filed July 27, 1903. Serial No. 167,150. (No model.)

To all whom it may concern:

Be it known that I, OTTO W. MEISSNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Dump-Cars, of which the following is a specification.

The invention relates to that class of dump-cars known as "Rodger" ballast-cars, and particularly to the construction and arrangement thereof by which such cars may be made convertible and used either as a center dump-car of the Rodger type or as a platform-car, all of which will more fully hereinafter appear.

The principal object of the invention is to provide a simple, economical, and efficient convertible dump-car.

The invention consists principally in a dump-car in which there are combined a supporting-framework, a V-shaped hopper portion secured thereto and extending below the same lengthwise thereof and with its apex at or near the longitudinal center of the car and formed in two portions—a lower V portion and an upper foldable portion—secured to the supporting-framework of the car above the same, so as to form a portion of the inclined sides of the V-shaped hopper when in one position and a portion of the flat part of a platform-car in a second position, and side boards pivotally secured to the framework of the car and adapted to form the sides of a dumping hopper-car or be folded outwardly and downwardly to permit the formation of a platform-car.

The invention consists, further and finally, in the features, combinations, and details of construction hereinafter described and claimed.

In illustrating and describing these improvements I have only illustrated and will describe that which I consider to be new, taken in connection with so much as is old as will properly disclose the invention to others and enable those skilled in the art to practice the same, leaving out of consideration other and well-known elements, which if set forth herein

would only tend to confusion, prolixity, and ambiguity.

In constructing a car in accordance with these improvements I provide a supporting-framework having side sills *a*, intermediate sills *b*, and cross-sills *c* tied together in any desired or usual manner.

To form a convertible dump-car, I provide a V-shaped hopper portion and arrange it lengthwise of the car to form what is known as a "center-dump" hopper-car of the Rodger type. This hopper is made in two portions—a lower V-shaped portion secured to the framework of the car below the same and having one inclined side, *d*, rigidly secured to the framework and the other side, *e*, pivotally secured thereto at *f*, so as to form a discharging-door. The upper portion of this hopper is made of two swinging sections *g* and *h*, pivotally secured to the supporting-framework of the car above the same, so as to swing upwardly and outwardly to complete the inclined side of a V-shaped hopper when in one position—that shown to the right of the figure—and to be laid in a flat plane and complete the flat portion of a platform-car when in a second position, as shown to the left of the drawing.

Swinging side boards made in two foldable portions *i* and *j* are provided and pivotally secured together at *k*, being also pivotally secured to the framework of the car above the same at *l*. These joints, which form the pivotal connection between the foldable portions of the side boards, are made in the form of "rule-joints," so as to permit such portions to be folded back upon one another or arranged in continuous form, as desired. The side boards are so constructed and arranged that they may be raised to an upwardly-extending or vertical position and are provided with recesses *m* to receive the upper edge of the swinging hopper-sections and hold the same in their inclined position. To lock them in such position, they are provided with links *n* and the foldable side boards with chain-hooks *p* and *q*, by which such parts are secured together and sustained in the desired relation, so as to form a center-dump hopper-car. To permit the for-

mation of a platform-car, the foldable side boards are released from their interlocking engagement with the swinging hopper-sections and the upper part *j* folded back upon the lower part *i*, so as to permit its chain-hook to engage a locking-link *r*. A hook *t* is provided on the lower part of the supporting-framework of the car and arranged to engage with an eyebolt *u* on such board and hold the parts in position, as shown to the left of the figure.

To open and close the discharging-door of the hopper portion, the usual rock-shaft *v* and chain mechanism *w* are provided and adapted to be operated in the usual manner, all of which is well known and understood by those skilled in the art.

I claim—

1. In a convertible dump-car, the combination of a supporting-framework, a V-shaped hopper portion extending lengthwise of and below the same with its apex at or near the longitudinal center of the car and formed in two portions—a lower V portion and an upper foldable portion secured to the supporting-framework of the car above the same so as to form a portion of the inclined sides of the V-shaped hopper when in one position and a part of the flat platform of the car in a second position, and swinging side boards pivotally secured to the framework of the car and adapted to form the sides of a dumping hopper-car or be swung outwardly and downwardly to permit the formation of a platform-car, substantially as described.

2. In a convertible dump-car, the combination of a supporting-framework, a V-shaped hopper portion extending lengthwise of the car and formed in two portions—a lower portion secured to the framework of the car extending below the same and an upper portion formed of two swinging sections pivotally secured to the framework of the car above the same so as to complete the inclined sides of the V-shaped hopper in one position and the flat portion of a platform-car in a second position, foldable side boards pivotally secured to the framework of the car and arranged to be placed in a vertical position to receive the upper edges of the swinging hopper-sections when in one position and to be folded outwardly and downwardly in a second position,

and means for securing the foldable side boards to the swinging hopper-sections to hold both of such parts in desired relation, substantially as described.

3. In a convertible dump-car, the combination of a supporting-framework, a V-shaped hopper portion arranged lengthwise thereof and made in two parts, a lower V-shaped portion secured to the framework of the car and below the same, and an upper portion formed of two swinging sections pivotally secured to the framework of the car above the same so as to complete the inclined sides of the V-shaped hopper in one position and the flat portion of a platform-car when in a second position, and swinging side boards made in two foldable portions pivotally secured to the framework of the car and having recesses arranged to support the free edges of the swinging hopper-sections in one position and be folded together and swung outwardly and downwardly to permit the formation of a platform-car when in a second position, and means for securing both portions of the foldable side boards to the swinging hopper-sections to sustain the parts in the desired relation, substantially as described.

4. In a convertible dump-car, the combination of a supporting-framework, a V-shaped hopper arranged lengthwise thereof and made in two portions—a lower V portion having one fixed and one swinging section extending below the supporting-frame and an upper portion formed of two swinging sections pivotally secured to the framework of the car above the same so as to complete the inclined sides of the V-shaped hopper in one position and the flat portion of a platform-car in a second position, swinging side boards made in two foldable portions pivotally secured to the framework of the car and having a recess in which the upper edges of the swinging hopper-sections rest, rule-joints forming the pivotal connections of the swinging side boards and foldable portions, and link-and-chain mechanism for holding the swinging side boards and hopper-sections in desired relation, substantially as described.

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