

J. E. TESSEYMAN.
DUMPING CAR.
APPLICATION FILED JULY 3, 1911.

1,007,820.

Patented Nov. 7, 1911.
2 SHEETS—SHEET 1.

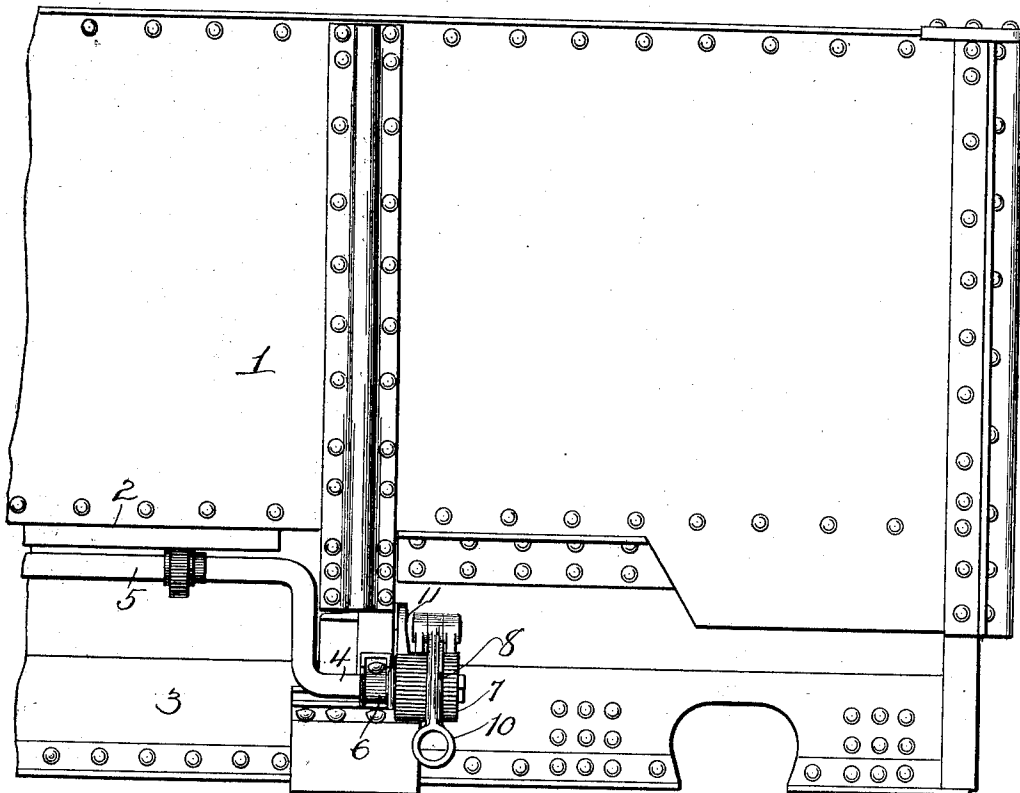


Fig. 1.

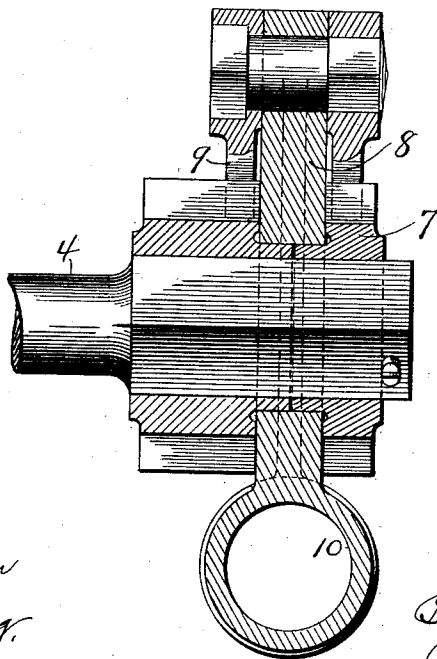


Fig. 3.

WITNESSES
E. Nottingham
G. F. Downing.

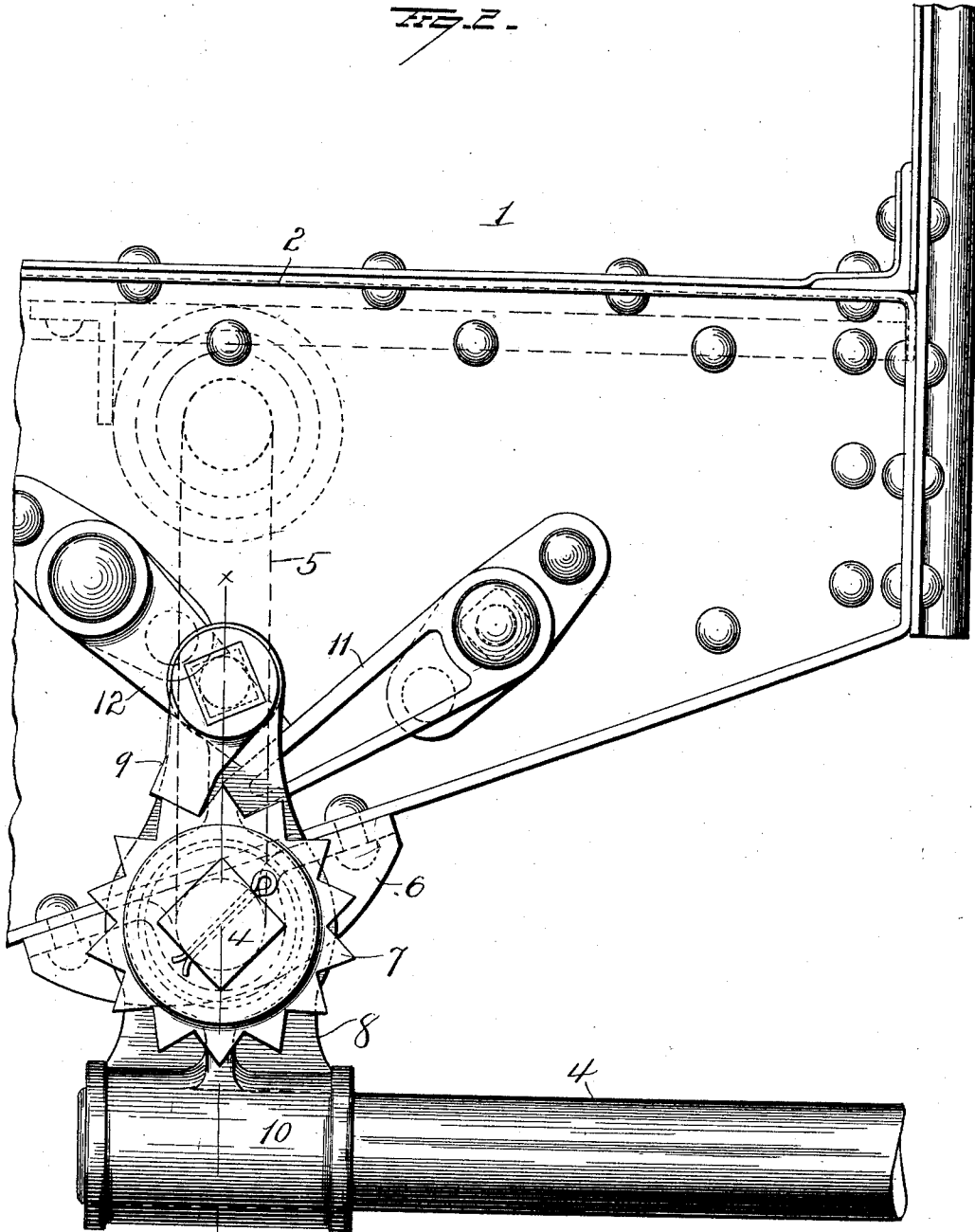
INVENTOR
J. E. Tesseyman
By H. A. Seymour
Attorney.

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Fig. 2.



WITNESSES
E. Nottingham
G. J. Downing

INVENTOR
J. E. Tesseyman
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

JOHN E. TESSEYMAN, OF COLUMBUS, OHIO, ASSIGNOR TO THE RALSTON STEEL CAR COMPANY, OF COLUMBUS, OHIO.

DUMPING-CAR.

1,007,820.

Specification of Letters Patent.

Patented Nov. 7, 1911.

Application filed July 3, 1911. Serial No. 636,755.

To all whom it may concern:

Be it known that I, JOHN E. TESSEYMAN, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Dumping-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in dumping cars and more particularly to mechanism for operating dump doors,—the object of the invention being to provide simple and efficient means for operating dump doors which are located between the car bolsters and to avoid the necessity of extending the operating shaft to the ends of a car in which no dump doors are provided between the bolsters and car ends.

With this object in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of a portion of a car showing the application of my improvements thereto; Fig. 2 is an enlarged side elevation showing my improvements, and Fig. 3 is a sectional view on the line $x-x$ of Fig. 2.

1 represents a dump car in which the bottom between the bolsters consists of a plurality of dump doors 2 located between the transverse members of the car bottom and hinged at their inner edges to the top of the center girder 3. In the car to which my improvements are applied, the bottom, between the bolsters and the car ends consists of fixed floor sheets. As no dumping doors are provided beyond the bolsters, it is unnecessary to extend the door operating mechanism to the ends of the cars. For operating the doors I provide a shaft 4 having crank arms 5 to raise and lower the dump doors and this shaft is mounted in suitable hangers 6 secured to the transverse members of the car underframe. The shaft 4 terminates at its respective ends in proximity to the bolsters and at each end said shaft is made angular for the reception of a ratchet wheel 7.

Mounted upon the shaft 4 in proximity to ratchet wheel 7, is an oscillatory shaft lever

8. This lever projects above its mounting on the shaft and is adapted at its upper end for the reception of pivoted dogs 9 which are disposed in position to engage the ratchet wheel 7. The shaft lever depends below its mounting on the shaft and is made with a hollow head or enlargement 10 disposed at right angles to the axis of the shaft so that it will lie transversely of the car. This socketed head or enlargement 10 is intended for the reception of any suitable bar, the end of which may be inserted thereinto from the side of the car. By moving such bar up and down in the arc of a circle, the shaft lever will be oscillated on its mounting upon the shaft 4 and the dogs 9 carried by said shaft lever, engaging the ratchet wheel 7, will cause the shaft 4 to be turned and the dump doors raised or permitted to lower in accordance with the direction in which said shaft 4 is thus turned. It is apparent that when the dogs 9 project from one side of the shaft lever, the shaft will be rotated in one direction and that when said dogs are thrown to the other side so as to engage the ratchet wheel at the other side of its axis, the operating shaft 4 will be turned in the reverse direction.

A locking dog 11 is pivotally mounted on the bolster and engages the ratchet wheel 7 to prevent retrograde rotation of the latter and this locking dog is prevented from accidental disengagement from the ratchet wheel by means of a gravity pawl 12 which is also pivotally mounted on the bolster.

With my improvements the door operating mechanism can be manipulated from the sides of the car; the length of the operating shaft is reduced to a minimum, and a saving of material is thus effected as the shaft does not need to extend appreciably beyond the bolster.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is;—

1. In a dump car, the combination with an underframe and a plurality of dump doors, of a door operating shaft mounted on the underframe, a ratchet secured to said shaft, a shaft lever mounted on said shaft and projecting above and below the same, the lower end of said lever having a socket, and a dog carried by the upper end of said lever and adapted to engage the ratchet wheel.

2. In a dump car, the combination with an

underframe comprising bolsters and cross
bearers, and dump doors located between the
bolsters, of a door operating shaft supported
by the underframe and terminating at its
5 ends adjacent to the bolsters, a ratchet wheel
secured to said shaft adjacent to each bolster,
a shaft lever mounted on the shaft, a dog
carried by said lever to engage the ratchet
wheel, and a socketed head on the lower end
10 of said lever to receive an operating bar.

3. In a dump car, the combination with an
underframe comprising bolsters and cross
bearers, and dumping doors located between
the bolsters, of an operating shaft for said
15 doors supported by the cross-bearers and
bolsters, said operating shaft terminating at
its ends inwardly from the ends of the car
and adjacent to the bolsters, a ratchet wheel

on said shaft, a lever loosely mounted on
said shaft to oscillate thereon, said lever de- 20
pending below its mounting on the shaft and
made with a hollow head disposed at right
angles to the axis of the shaft for the recep-
tion of an operating bar, said lever project-
ing above its mounting on the shaft, and a 25
dog carried by the upwardly projecting por-
tion of said lever and adapted to engage the
ratchet wheel on the shaft.

In testimony whereof, I have signed this
specification in the presence of two subscrib- 30
ing witnesses.

JOHN E. TESSEYMAN.

Witnesses:

B. C. HANNA,
W. E. WEEKS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."