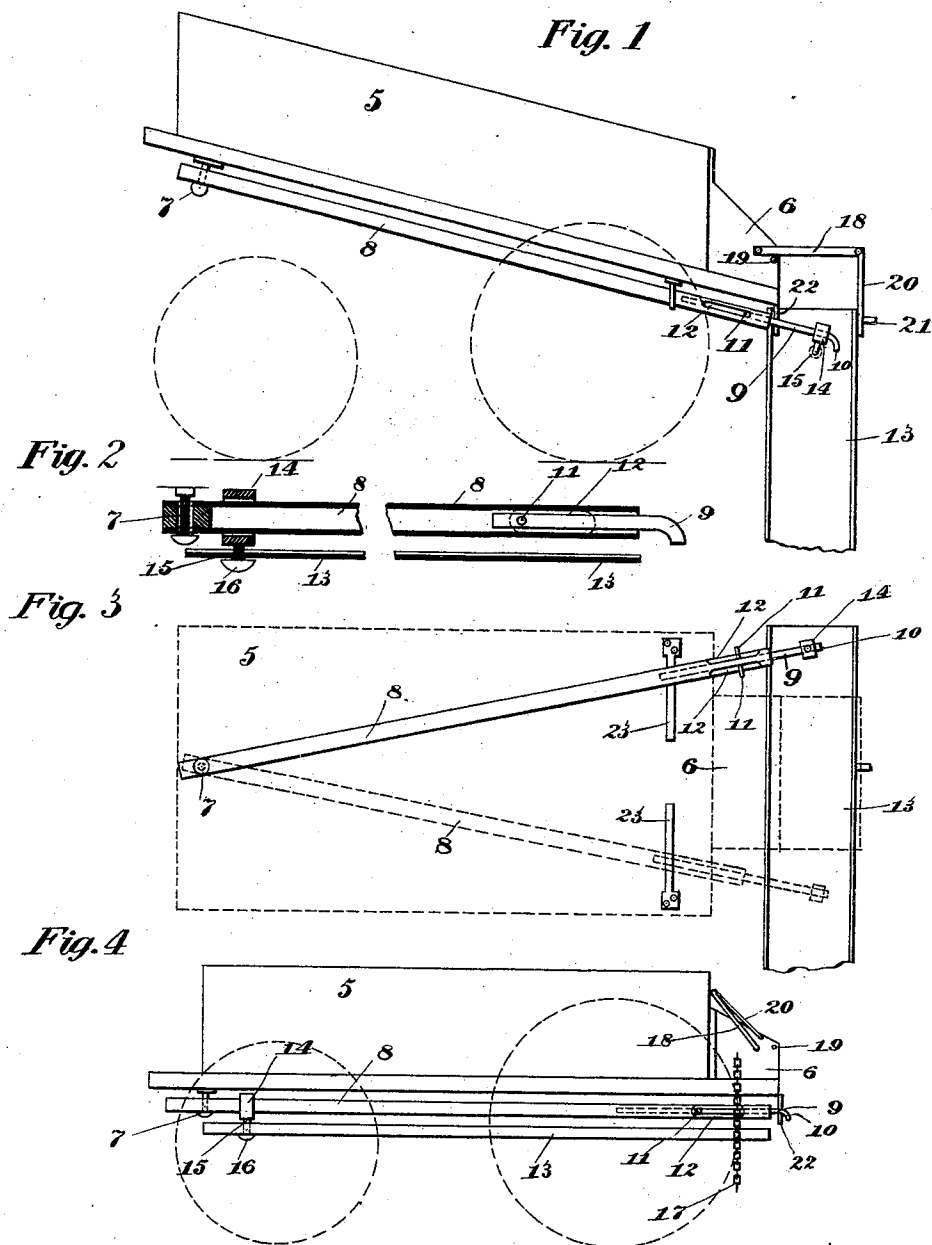


(No Model.)

R. A. McCAULEY.
CHUTE FOR COAL WAGONS.

No. 484,754.

Patented Oct. 18, 1892.



WITNESSES:

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REUBEN A. McCAULEY, OF BALTIMORE, MARYLAND.

CHUTE FOR COAL-WAGONS.

SPECIFICATION forming part of Letters Patent No. 484,754, dated October 18, 1892.

Application filed June 29, 1892. Serial No. 438,476. (No model.)

To all whom it may concern:

Be it known that I, REUBEN A. McCAULEY, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Chutes for Coal-Wagons; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the chutes of that class of coal-wagons the body whereof is elevated and the coal permitted to fall therefrom by gravity, the chute serving to conduct the coal to the cellar or other receptacle therefor, the object of my invention being to provide a cheap and reliable means of securing the chute to the wagon to permit its easy adjustment to any desired position, and when out of use and folded under the cart to be sufficiently rigid to prevent the jarring and rattling, which is a frequent accompaniment of these devices, all of which I accomplish by the device hereinafter fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 shows a side elevation of the device, the body of the cart elevated, and the chute in position for use. Fig. 2 shows a detailed view, partly in section, of the device as shown in Fig. 4, the chute being in the folded position. Fig. 3 shows a view looking down on the device, the body of the cart shown by dotted lines. Fig. 4 shows a side elevation of the device in the folded position, the body of the wagon down.

The same numbers refer to the same or similar parts throughout the several views.

The number 5 denotes the body of the wagon, which is provided with a suitable gate 6, wherethrough the coal will fall when the body is in the elevated position shown in Fig. 1. Secured to the bottom of the wagon at some central point near the head thereof is the pin 7, that serves to support the end of the tube 8, this end of the tube being solid, as shown in Fig. 2, and the pin 7, passing therethrough, serves likewise as a pivot whereby the tube 8 may be moved in a horizontal plane to either

of the positions shown in Fig. 3, one position thereof being shown by the dotted lines.

In the free end of the tube 8 is placed the bar 9, that may be made of solid metal or of gas-pipe, the exposed end being of the bent or hook form 10, (shown in Fig. 2,) this bar being sufficiently smaller in diameter than the tube 8 to be moved in and out therein, the telescopic movement thereof being limited by the pins 11, with which the bar 9 is provided, and which move in a suitable slot 12, formed in and near the free end of the tube 8.

To support one end of the chute 13, there is provided the sleeve 14, which is of such diameter as to slide freely over the tube 8. The pin 15, being formed on this sleeve and passing through the metal forming the bottom of the chute, is provided with a suitable head 16, which supports the chute and serves as a pivot therefor, thus with the circumferential movement of the sleeve 14 permitting the chute to be placed at any desired position or angle.

The manner of operating is as follows: In Fig. 4, the chute is shown in the position it occupies when not in use. When the coal is to be discharged, the body of the cart is elevated to the position shown in Fig. 1. The chain 17, that serves to support the free end of the chute, is loosened. The bar 9 is pulled out to the extended position. The chute 13 is next drawn to the rear, the sleeve 14 sliding along the tube 8, passing over the end thereof, and then sliding over the bar 9 until its farther movement outward is stopped by the hook 10. The chute is now turned in the desired direction, (it being placed at a right angle to the wagon in the drawings,) and the tube 8 is placed at such angle that the chute will be under the gate 6, from which the coal is discharged, as shown in Fig. 3, the tube 8 being supported in this position by the guide or bearing bars 23, that are secured to the body of the cart and may be made of the two pieces shown in Fig. 3 or of one continuous piece. To provide an additional support for the chute when in this position, the shield 18 is employed, it being pivoted or hinged to the gate 6, a pin 19 limiting its downward movement and the fold or shutter 20, hinged thereto, serving to support this end of the chute by a suitable hook or pin 21 provided

therefor, the shield and its shutter likewise serving to prevent the coal from jumping over the edge of the chute. When the coal is discharged, the chute is folded by reversing the operation just described and brought to the position shown in Fig. 4. If desired, an additional support for the free end of the tube when in transit may be provided by a piece 22, extended from the gate 6, in which the hook 10 will engage, and thus hold it firmly in position. It will be seen that by making the tube 8 and bar 9 to telescope in the manner described less space will be occupied by the device when in the folded position, and greater extension may be given when in operation than if these parts were fixed, the manner of pivoting the chute to the sleeve giving sufficient rigidity to this part to prevent rattling when in transit.

Having described my invention and the manner of operating, what I claim, and desire to secure by United States Letters Patent, is--

1. In combination with a wagon, the tube 8, free to be vibrated on a pivot near the front end of the wagon, a bar 9, placed in the free

end of said tube and free to be moved inward and outward therein, a sleeve 14, free to be moved along the said tube and along said bar 9, and the chute 13, the front end of which is pivoted to said sleeve, for the purpose set forth.

2. In combination with a wagon, the tube 8, free to be vibrated on a pivot near the front end of the wagon, the said tube provided with the slot 12 near the free end thereof, a bar 9, placed in the free end of the tube and free to be moved inward and outward therein, the said bar being provided with the pin 11, which, traveling in the said slot 12, limits this movement of the bar, a sleeve 14, free to be moved along the said tube and along the said bar 9, and the chute 13, the front end of which is pivoted to said sleeve, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

REUBEN A. MCCAULEY.

Witnesses:

WM. L. BAILIE,
JNO. T. MADDOX.