

(No Model.)

H. K. MORRISON.  
COAL HANDLING APPLIANCE.

No. 502,445.

Patented Aug. 1, 1893.

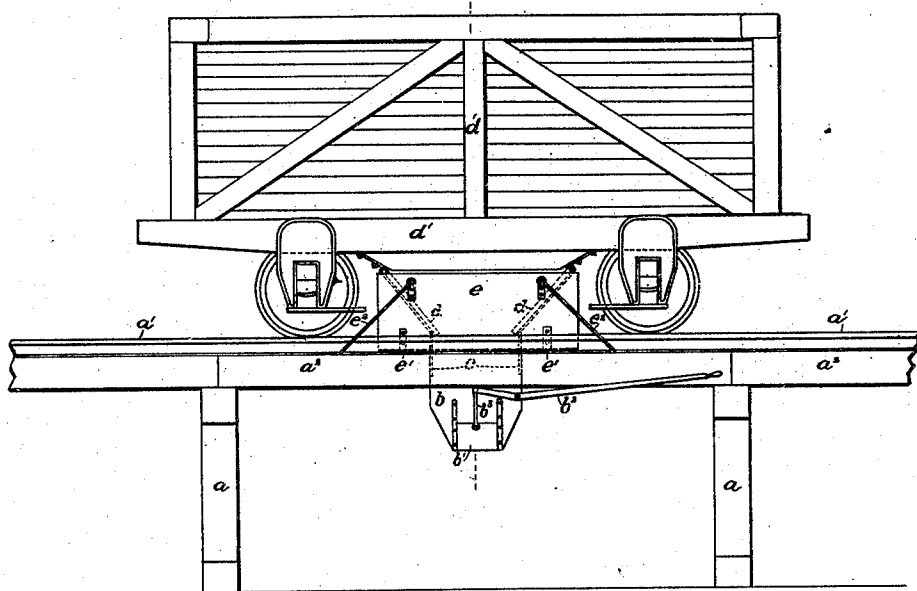


FIG: 1

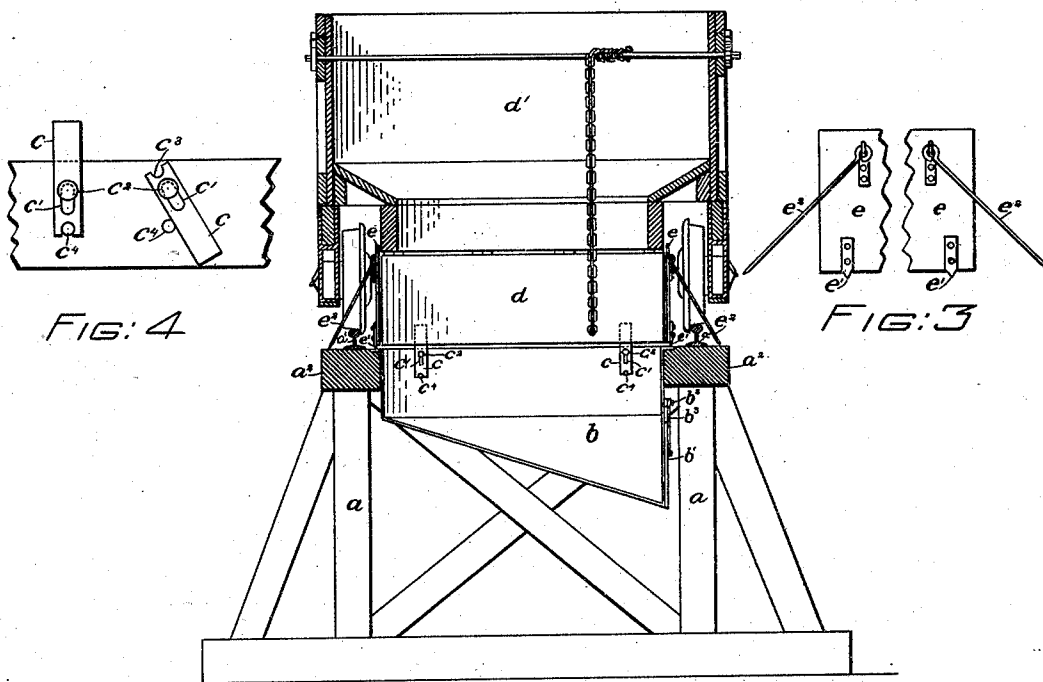


FIG: 2

WITNESSES:  
W. A. Schaefer  
Arthur H. Gale

INVENTOR:  
Henry K. Morrison,  
BY J. Walter Douglass.  
ATTY.

# UNITED STATES PATENT OFFICE.

HENRY K. MORRISON, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO THE UNITED GAS IMPROVEMENT COMPANY, OF PHILADELPHIA, PENNSYLVANIA.

## COAL-HANDLING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 502,445, dated August 1, 1893.

Application filed December 22, 1892. Serial No. 456,024. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY K. MORRISON, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Coal-Handling Appliances, of which the following is a specification.

Hitherto in handling coal and other like matter or material it has been customary to run cars containing the same onto a trestle or other superstructure and to then discharge their contents into a so-called pocket, from which it was subsequently loaded in cars or wagons by gravity or other preferred manner. In such instances the pocket had to be large enough to contain the contents of one or more cars, otherwise their contents would be discharged onto the tracks and trestle instead of into the pocket, and the trestle had to be of considerable height in order to accommodate the pocket. In cases where the trestle was too low to accommodate a pocket the contents of the cars were dumped into bins or onto the ground and were then shoveled into wagons, carts or other vehicles.

My invention consists of the improvements hereinafter described and claimed.

The nature, characteristic features and scope of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof; and in which—

Figure 1, is a side elevational view illustrating an appliance for handling coal and analogous matter or material embodying features of my invention. Fig. 2, is a sectional view taken on the line 2—2, of Fig. 1. Fig. 3, is an elevational view of one of the guide-boards or shields; and Fig. 4, is an elevational view illustrating in detail lugs attached to the discharge-hopper and adapted to be turned into range of the dump-doors of the car.

In the drawings *a*, is a trestle or superstructure provided with rails *a'*.

*b*, is a discharge hopper suspended from the trestle *a*, and having its open top disposed substantially in alignment with the top portions of the stringers *a*<sup>2</sup>. The lower portions

of the discharge-hopper *b*, converge and slant toward a discharge opening provided with a sliding-door *b'*.

*b*<sup>2</sup>, is a pivotal lever connected with the door *b'*, by means of a link *b*<sup>3</sup>, and adapted to afford means for opening and closing the same.

*c*, are lugs projecting upward from the side walls of the hopper *b*, into range of the dump-doors *d*, of a coal-car *d'*. These lugs *c*, may be rigidly attached to the side walls of the hopper *b*, as shown in Fig. 1.

If preferred the lugs *c*, may be provided with slots *c'*, engaging pins *c*<sup>2</sup>, projecting from the side walls of the hopper *b*, and with notches *c*<sup>3</sup> adapted to engage pins *c*<sup>4</sup>, attached to the hopper. In such case the lugs *c*, may be turned into range of the dump-doors *d*, as shown at the left hand side of Fig. 4 or when not in use they may be turned downward out of the way, as shown at the right hand side of said figure.

*e*, are guide-boards or shields provided with spikes *e'*, and with spiked brace-rods *e*<sup>2</sup>, adapted for insertion into the stringer *a*<sup>2</sup>, or other parts of the trestle *a*.

The mode of operation of the hereinabove described device, is as follows:—The car *d'*, is drawn onto the trestle *a*, and over the discharge-hopper *b*, in any suitable manner, and the guide-boards or shields *e*, are placed parallel with the rails *a'*, and opposite the respective ends of the dump-doors *d*, and are then secured in such position by means of the spikes *e'* and braces *e*<sup>2</sup>, whereupon the dump-doors *d*, are released and consequently swing into open position in engagement with the lugs *c*, as shown by dotted lines in Fig. 1. Under these circumstances the doors *d*, and guide-boards or shields *e*, constitute a chute connecting the interior of the car *d'*, with the interior of the discharge-hopper *b*, so that the car, chute and discharge-hopper *b*, constitute in effect a reservoir from which the coal or other matter or material may be discharged at will into wagons or carts by means of the sliding-door *b'* and its accessories. Inasmuch as the car, chute and discharge-hopper constitute a reservoir for containing the coal or other matter or material it follows that the

hopper may be of very small dimension and consequently is especially applicable to comparatively low trestles.

It may be remarked that in handling large matter or material, such as "broken coal," the shields or guide-boards *e* and their complementary lugs *c*, are not absolutely essential; however, preference is given to their employment even in such cases, because they prevent any coal or similar matter from falling upon the trestle or rails.

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An appliance for handling coal and other matter or material, comprising a trestle provided with stringers having rails, a discharge hopper suspended between the rails and having its lower portion converging and slanting toward a discharge opening, a sliding-door for said opening, lugs connected with the side-walls of the hopper and projecting upward above said rails and into range of the dump-doors of a coal-car and guide boards or shields ranging transversely of the ends of the dump-doors and provided with spikes and

spiked brace-rods adapted for insertion in the trestle, substantially as and for the purposes set forth.

2. An appliance for handling coal and other matter or material, comprising a trestle provided with stringers having rails, a discharge-hopper suspended between the rails and having its lower portions converging and slanting toward a discharge opening, a sliding-door for said opening, lugs connected with the side walls of the hopper by slots and pins and provided at one of their extremities with notches adapted to detachably engage said pins, and guide boards or shields ranging transversely of the ends of the dump-doors and provided with spikes and spiked brace rods adapted for insertion in the trestle, substantially as and for the purposes set forth.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

HENRY K. MORRISON.

Witnesses:

J. M. RUSBY,  
E. F. JENNINGS.