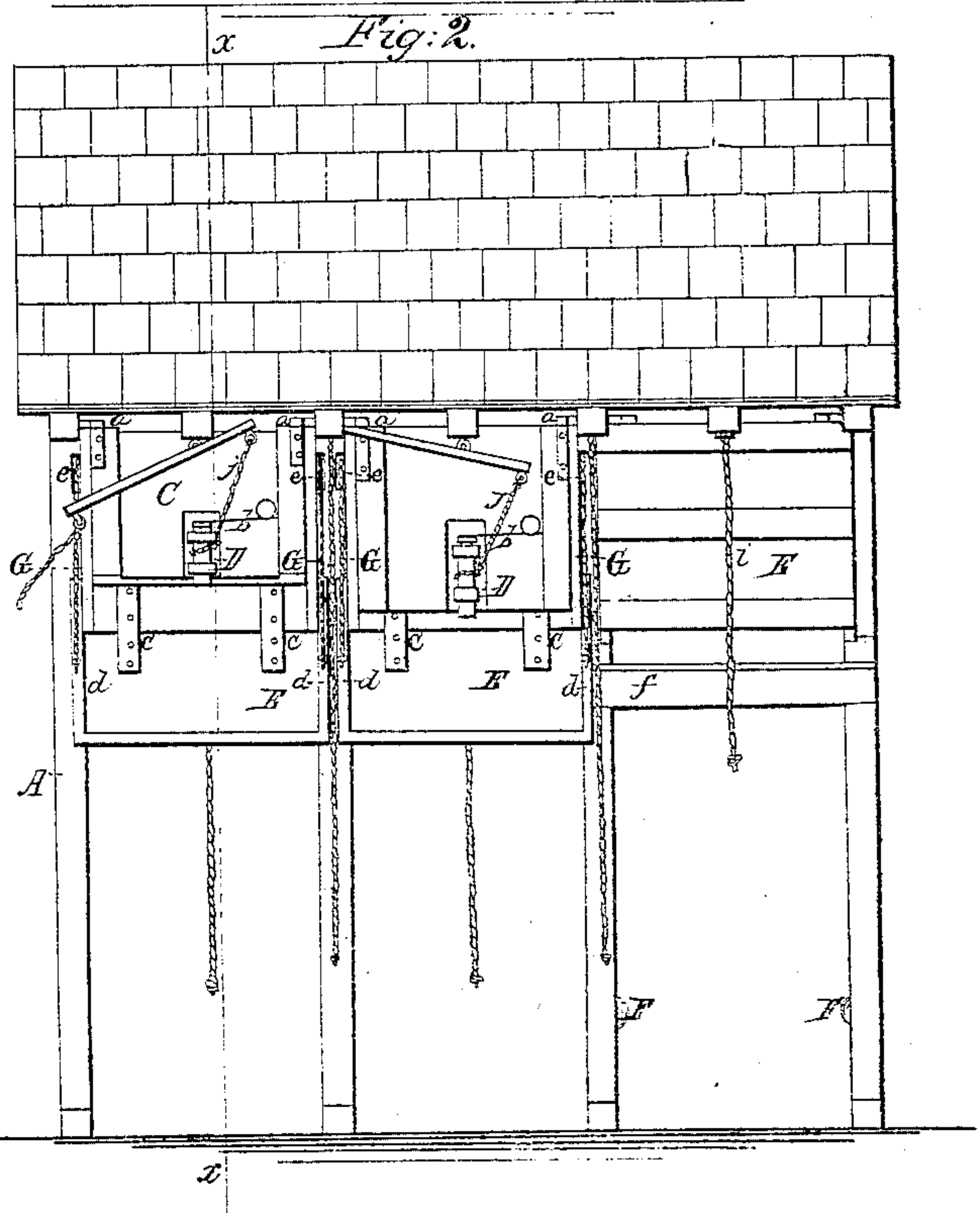
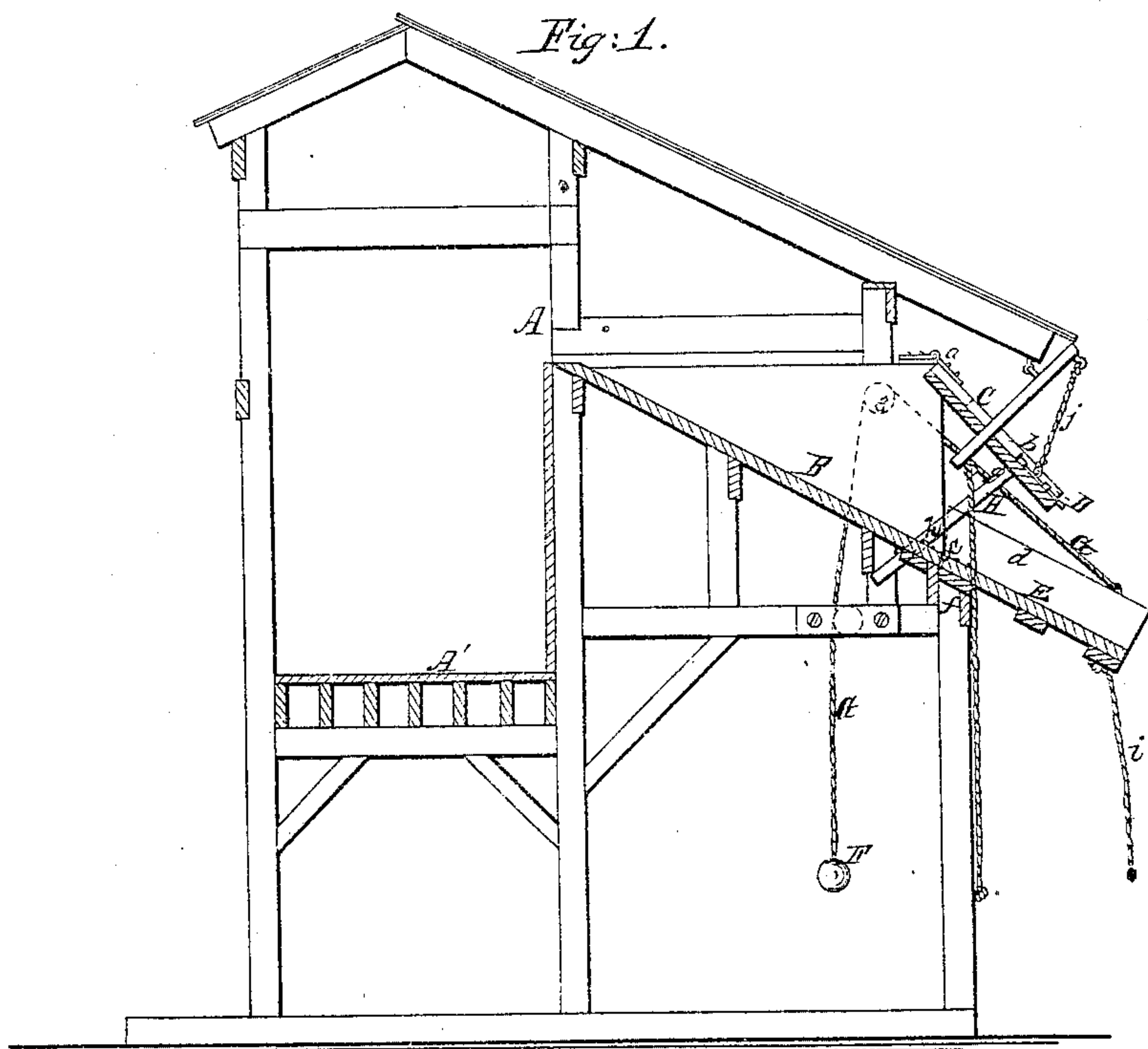


E. R. Kerr,
Coal Chute,
No 58,549, Patented Oct. 2, 1866.



Witnesses
M. B. Livingston
Wm. Stewart

Inventor
E. R. Kerr
Per Munn & Co

UNITED STATES PATENT OFFICE.

EDWIN R. KERR, OF KEWANEE, ILLINOIS, ASSIGNOR TO HIMSELF AND
J. L. PLATT, OF SAME PLACE.

IMPROVED COAL-DUMPING APPARATUS.

Specification forming part of Letters Patent No. 58,549, dated October 2, 1866.

To all whom it may concern:

Be it known that I, EDWIN R. KERR, of Kewanee, in the county of Henry and State of Illinois, have invented a new and Improved Apparatus or Means for Coaling Engines and Handling or Manipulating Coals and Ores; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, an elevation of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved means for supplying locomotive-engines with coal; and it consists in having one or more chutes in a shed or building, the chute or chutes being provided with doors arranged in such a manner that the outer doors, when lowered or opened, will form a continuation of the chutes, and the inner doors so arranged as to admit of being readily opened to allow the coal to be discharged, the outer doors being counterpoised, so as to work, open, and close easily without any slamming, and consequently without the liability of being broken or torn from their hinges.

A represents a shed or building provided with an elevated platform, A', upon which the coal is conveyed in any suitable vehicle. B represents a series of chutes at one or both sides of the shed or building. The outer ends of these chutes are flush with the sides of the shed or building, and each is provided with a door, C, hinged at their upper ends to the top part of the chutes, as shown at *a*, and provided with a bolt, D, at their lower ends, which, when the doors are down or in a closed position, fit into notches in the bottoms of the chutes, the bolts having springs *b* bearing upon their upper ends, which have a tendency to keep the bolts in the notches and the doors secured in a closed state.

E represents doors, which are hinged to the

bottoms of the chutes, as shown at *c*. These doors are provided with side strips, *d d*, to lap over the sides of the chutes when the doors are in an elevated or closed state, and to enable said doors E, when in an open state, to serve as continuations of the chutes B.

The doors E are counterpoised by weights F, attached to chains G, the latter being connected to the upper ends of the doors, and passing over pulleys *e* in the framing of the shed or building.

When the doors E are down or fully open they rest upon a sleeper or plate, *f*, in the framing, and have an inclined position corresponding to the inclination of the chutes B, as shown clearly in Fig. 1.

The doors C have each a bar, H, attached by a pivot, *g*, and these bars are notched, so as to catch over a pin, *h*, in the bottoms of the chutes, a slot being made in the bottoms for the bars H to work or pass through.

When either of the chutes is to be used the outer door, E, is lowered, which may be done by pulling a cord or chain, I, attached to it, said doors opening and closing easily in consequence of being counterpoised by the weights F. The door thus lowered forms a continuation of the chute to which it is attached, as shown in Fig. 1. The inner door, C, is then raised by pulling a cord or chain, *j*, attached to the bolt D, the bar H, when the door is elevated, catching on the pin *h* and holding it open or in an elevated position. The coal is then thrown into the chute, which discharges it into the tender placed to receive it.

The coal is conveyed upon the platform A' in any suitable vehicle, and thrown therefrom into the chutes *c*.

I would remark that the cords or chains *j*, which are attached to the bolts D, may be connected to levers (shown in red) for the convenience of raising the bolts and opening the doors C.

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

1. The chutes B, placed in a shed or build-

ing and provided with two doors, C E, the outer ones, E, being so arranged as to serve, when lowered or opened, as a continuation of the chutes, substantially as shown and described.

2. Counterpoising the outer doors, E, by means of weights, substantially in the manner as and for the purpose specified.

3. The hanging of the inner doors, C, at

their upper ends, in combination with the spring-bolts D at their lower ends, when said doors are applied to chutes B, for the purpose herein set forth.

EDWIN R. KERR.

Witnesses:

J. S. MCGILLIARD,

HENRY G. LITTLE.