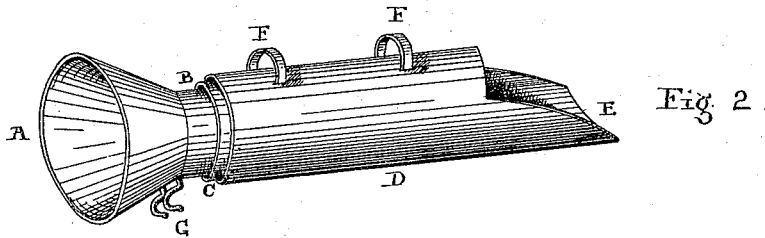
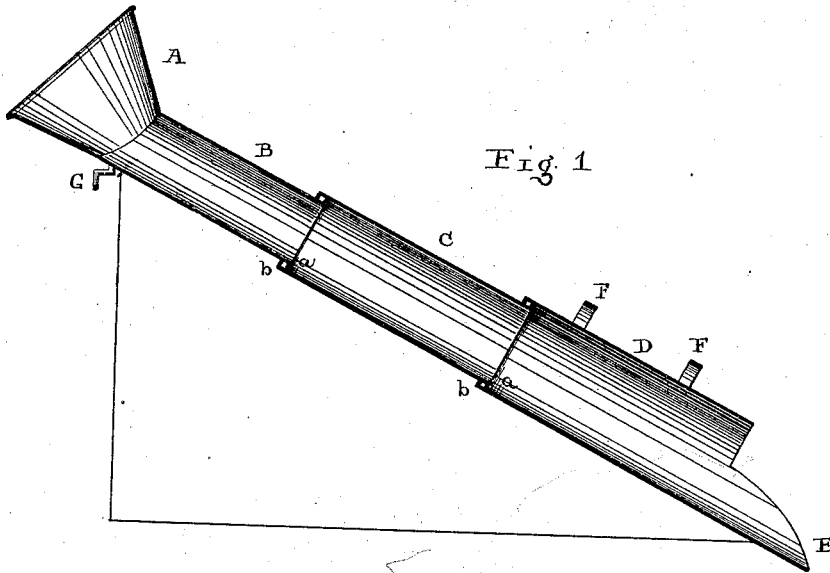


D. P. BITNER.

CHUTES FOR DISCHARGING COAL FROM VEHICLES.

No. 169,618.

Patented Nov. 9, 1875.



-WITNESSES-

*W. B. Miles*  
*Jacob Hauffer*

-INVENTOR-

*D. P. Bitner*

# UNITED STATES PATENT OFFICE.

DAVID P. BITNER, OF LANCASTER, PENNSYLVANIA.

## IMPROVEMENT IN CHUTES FOR DISCHARGING COAL FROM VEHICLES.

Specification forming part of Letters Patent No. **169,618**, dated November 9, 1875; application filed September 6, 1875.

*To all whom it may concern:*

Be it known that I, DAVID P. BITNER, of the city of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Chutes or Telescopic Tubes for Unloading Coal, of which the following is a specification:

This improvement relates to that class of inventions of extension chutes or troughs for conveying coal from a wagon over a pavement into the cellar, without causing dirt or dust to arise from the coal, or injury to the sidewalk; and consists of an independent telescopic tube, provided with a funnel-mouth or oblique hopper, and bottom hooks, by which it can be suspended from the upper edge of the side or end of any vehicle.

The accompanying drawing illustrates the construction and application of said telescopic coal chute or tube, with the letters of reference made thereon, and a brief explanation will enable those skilled in the art to make and use the same, and in which—

Figure 1 is a sectional view of the tube extended; Fig. 2, a perspective view of the closed tubes and appliances.

These tubes are in sections, one sliding into the other, as shown in Fig. 1. A funnel-mouth or hopper, A, is connected obliquely with the section B. This section slides into section C, and that slides into section D, as shown, terminated with a scoop-shaped mouth, E, to enter an open grate, and in front or under the funnel-mouth A are shown hooks G, to hold onto the end gate or side of the wagon, with the hopper or funnel-mouth so inclined as to adapt it for shoveling in the coal. There are also handles, F, shown on the lower or outer segment D. Thus, when closed together, it occupies but little space, is easily handled

when made of stout sheet-iron, with flanges *a b*, so as to lock together when extended to the full length allowed, and to prevent being drawn apart.

In the mere sliding of one tube into another, with arresting-shoulders, as in the telescope or common spy-glass, there is no novelty. But, I am not aware that a tube with a funnel-mouth, and made extensile by segments for the purpose of a coal-chute or tube, in combination with the front claws and scoop-terminus, was ever used for said purpose, or made, as herein set forth.

I am aware that sliding and simple tubes have been used for discharging coal, attached, by various modes, permanently, to the rear or bottom of vehicles, formed hopper-fashion, with openings and valves, such as shown in patents No. 14,301, February 26, 1856, or No. 73,684, January 21, 1868, and patent March 16, 1875, No. 160,861. Such connection or attachment to a vehicle I disclaim, for the obvious reason that, to attach such to an ordinary wagon or cart, the object aimed at to deliver coal across a wide sidewalk is frustrated, without the intervention of a hoisting apparatus, or undue height in the bed or running-gear of such vehicle expressly made. Therefore,

What I claim as my invention for discharging coal from a wagon across the sidewalk into a cellar is—

The independent telescopic tubing B C D, with arresting flanges *a b*, funnel-mouth A, hooks G, scoop-terminus E, and handles F, as and for the purpose shown and specified.

D. P. BITNER.

Witnesses:

W. B. WILEY,  
JACOB STAUFFER.