

W. N. MARTIN,

Coal Scuttle.

No. 11,898.

Patented Nov. 7, 1854.

Fig. 1.

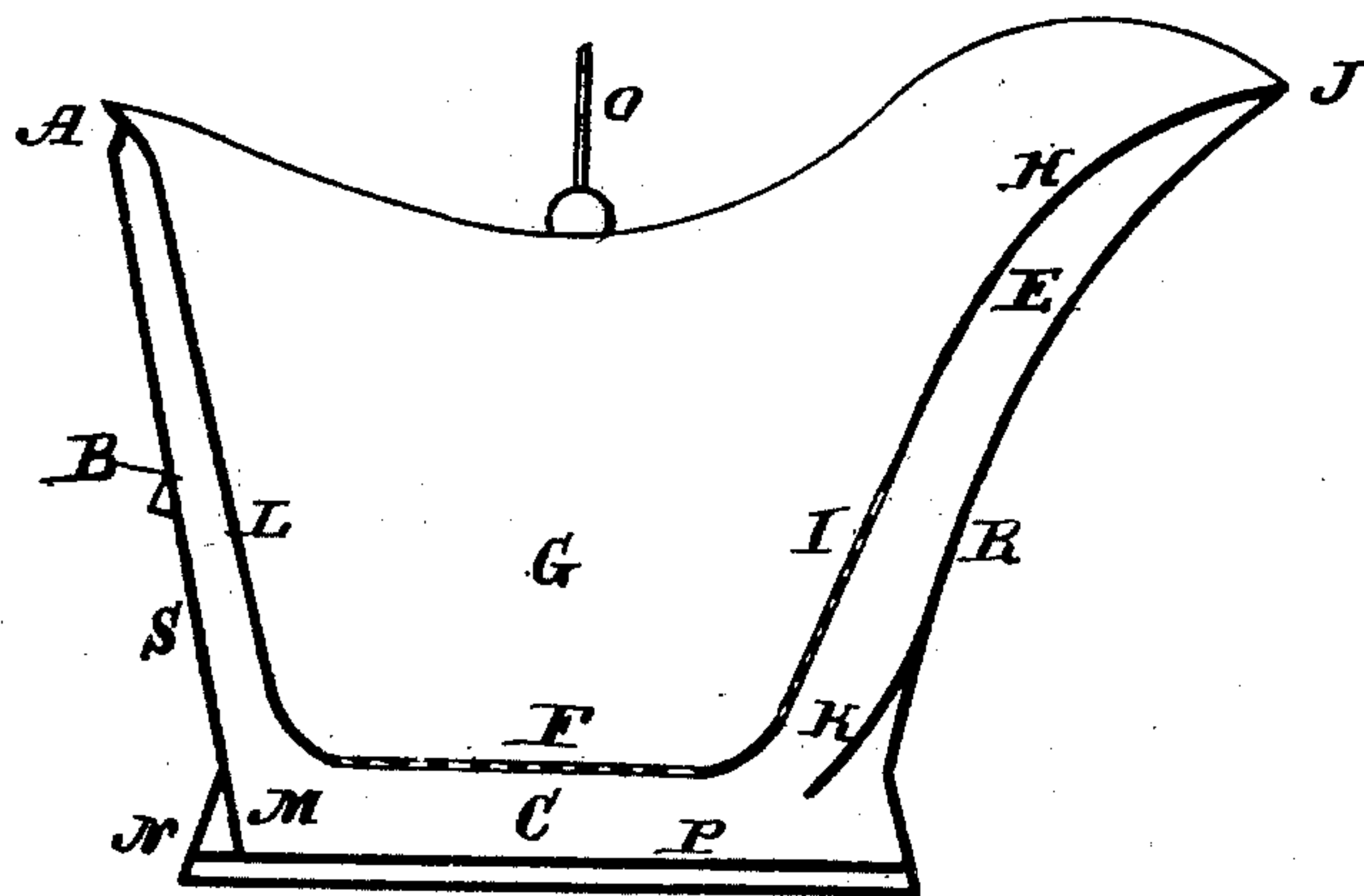
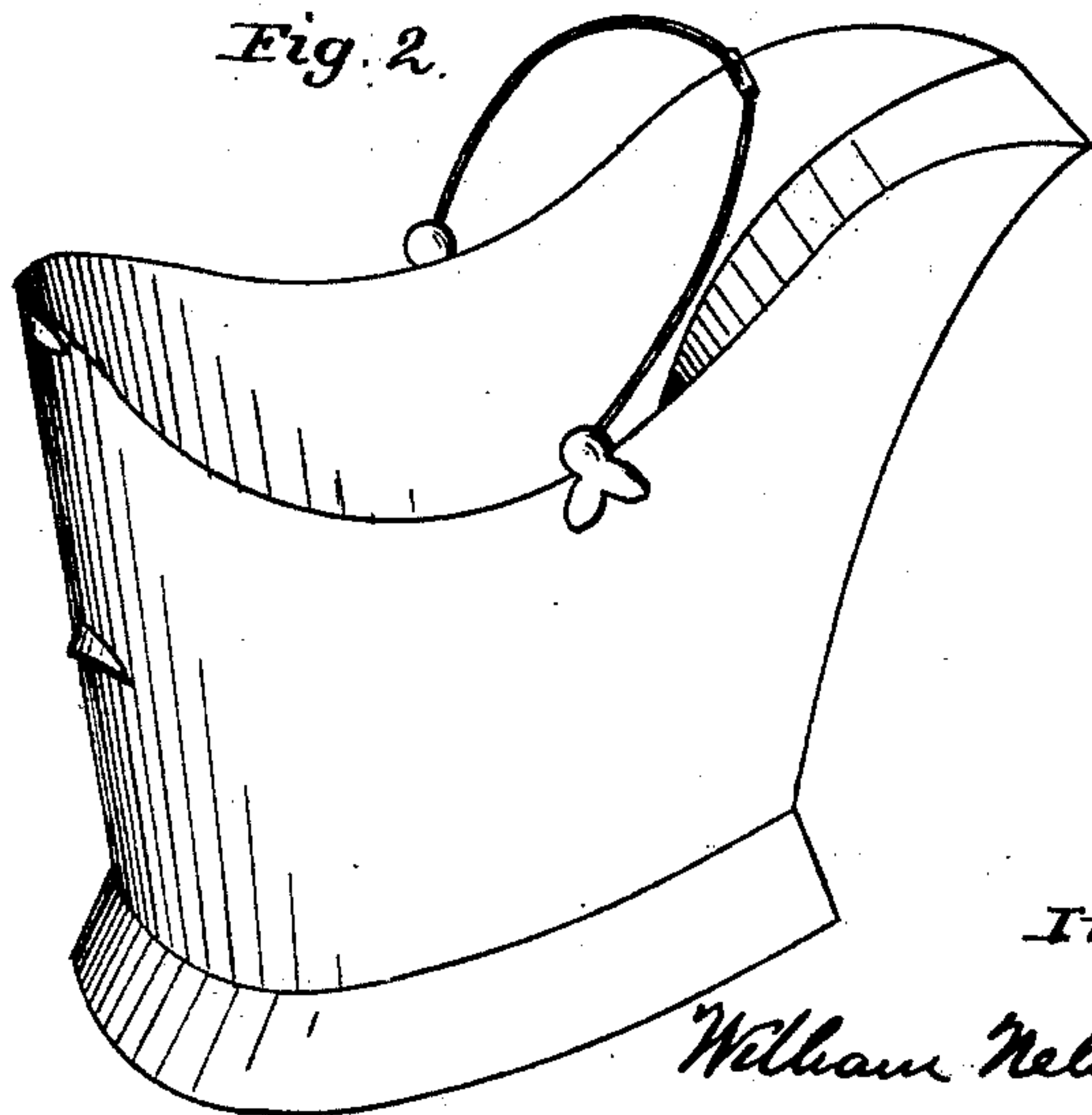


Fig. 2.



Inventor:

William Nelson Martin

UNITED STATES PATENT OFFICE.

WILLIAM NELSON MARTIN, OF BRISTOL, RHODE ISLAND.

COAL-HOD.

Specification of Letters Patent No. 11,898, dated November 7, 1854.

To all whom it may concern:

Be it known that I, WILLIAM NELSON MARTIN, of the town of Bristol, in the county of Bristol and State of Rhode Island, have invented a new and useful Improvement upon the common Coal-Hod, the object of which improvement or invention is to separate, screen, or sift the fine coal, coal-dust, or dirt, from the coarse coal, and that by the ordinary jar or motion to which the coal would be subjected in placing it into the hod, and in emptying or discharging it therefrom; and I do hereby declare that the following is a full and exact description of the construction and operation of the said improvement, reference being had to the annexed drawing, making a part of this specification, and which is intended to represent a longitudinal section of the coal-hod and also of my improvement thereto.

A, orifice or opening at the top of chamber B for the discharge of coal dust from the hod; B, chamber through which the coal dust passes to orifice A, from receptacle C, after its separation from the coarse coal;—C, receptacle for the coal dust as it falls from G, the main body or cavity of the hod;—E, chamber for receiving and retaining coal dust that may pass from main body of hod G, and from receptacle C while the coarse coal is being discharged or emptied from the hod at its mouth at J; F, perforated, or grating floor, to admit the passage of the fine coal from the body of the hod G, to receptacle C; G, main cavity, or body of the hod;—H, upper portion of the inner wall of chamber E. I, lower portion of the inner wall of chamber E, and which is perforated or grating formed, to allow coal dust to pass through it to chamber E, while contents of the main body G are being emptied; J, point where outer and inner walls of chamber E, unite to retain the coal dust and prevent it from being dislodged from the hod when the coarse coal in the body of the hod is being discharged;—K, partition attached to the inner surface of the outer wall of chamber E, and extending laterally across the chamber, and downward in a slightly curved line into receptacle C to a point a little lower than the level of floor F, to prevent the coal dust in receptacle C, from being removed into chamber E, while the main body or cavity G is being emptied of its contents L, inner wall

of chamber B;—M, partition separating space N from receptacle C, to prevent coal dust from lodging in angle or space N while dislodging coal dust through chamber B, to and out of orifice A; P, lower floor, or bottom of coal hod;—R, anterior, or front outer side of coal rod—S, posterior, or back outer side of coal hod.

I proceed to show the construction and operation of my invention so far as the same has not been already described. I take, or construct a coal hod, in any of its usual forms, although one of an oblong form, as shown by my model is the best adapted to receive my invention or improvement, and show its advantages. And in order to screen, sift, or separate the fine coal, coal dust or other fine substance not suited or not well suited for combustion from the coarse coal, I make two bottoms P, and F, to the hod, one above the other, with a space between them sufficiently deep, and depending in some measure upon the size of the hod, to receive all the fine coal, coal dust, or other fine substance that would ordinarily be mingled with the contents of the hod when filled for use. The upper bottom F, is laterally as wide as the hod, and its side edges are permanently attached to the sides of the hod. If this bottom F, is made of sheet iron or other sheet metal, it is perforated over nearly its whole surface, with holes of any form and size that will admit only the fine coal, coal dust or other fine substance to sift or pass through it to receptacle C. If not made of sheet metal, it may be constructed of metallic wire, or rods in the form of a grating. The longitudinal diameter or extent of this floor F, is less than that of floor P. The object of this, is to give room for a communication from receptacle C, with chambers E, and B, which are constructed in the anterior and posterior portions, or sides, of the hod, and which at their lower extremities open into receptacle C. The use of the chamber E, is to receive the coal dust from receptacle C, and also any that may pass through perforations or grating I, when the mouth of the hod at J, is depressed, to dislodge at that point, for use, the coarse coal from the body of the hod G. The walls H, and R, uniting at J, close the chamber E, at its upper extremity, so that the coal dust cannot again mingle with the coarse coal, or pass out of the hod at that point. When the hod is again set upon its

base P, the coal dust in E, falls back by its own weight into receptacle C. The semi-partition K, is united at its top and side edges only, with the inside of the outer front and side walls of the hod in chamber E. Its use is to prevent the great portion of the coal dust in C, from passing into E, when the mouth of the hod J, is depressed. To accomplish this, and also to admit any coal dust in E, to fall into C, its lower edge does not unite with floor F, but descends a little lower into receptacle C.

The use of orifice A, chamber B, and partition M, are as follows: When the receptacle C, is full of coal dust or fine coal, and requires to be emptied, the posterior portion of the hod is depressed at the point A, so as to allow the coal dust to fall from receptacle C, into chamber B, and from thence out at orifice A. And partition M, closing up the space N, is to prevent the coal dust from falling back into and lodging in space or angle N. No definite dimensions can be given to chambers B, and E, as their size will vary with the size of the hod. These chambers do not encircle the whole of the inside of the outer wall of the hod, but

occupy a section only of its anterior and posterior sides.

I disclaim the invention of the common "coal hod."

What I claim as my invention and desire to secure by Letters Patent, is—

Separating the main central chamber of a coal hod, or bucket, from the outer sides and bottom of the same, by an interior lining of sheet metal, partially perforated, or of sheet metal and wire grating combined, in such a manner as to form a dust chamber between said lining and the exterior of the hod or bucket, open at the rear and closed in front, by which the coal only will be discharged at the front side of the bucket and the dust be deposited in the said dust chamber; and when the coal is all discharged from the bucket, the dust can be removed from its receptacle therein, by movements the reverse of those required in discharging the coal from its receptacle substantially as herein set forth.

WILLIAM NELSON MARTIN.

Witnesses:

JONATHAN R. BULLOCK,
I. HALSEY DE WOLF.