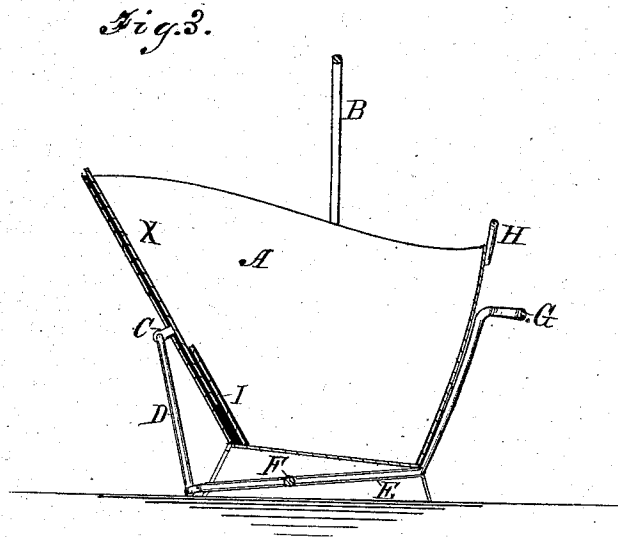
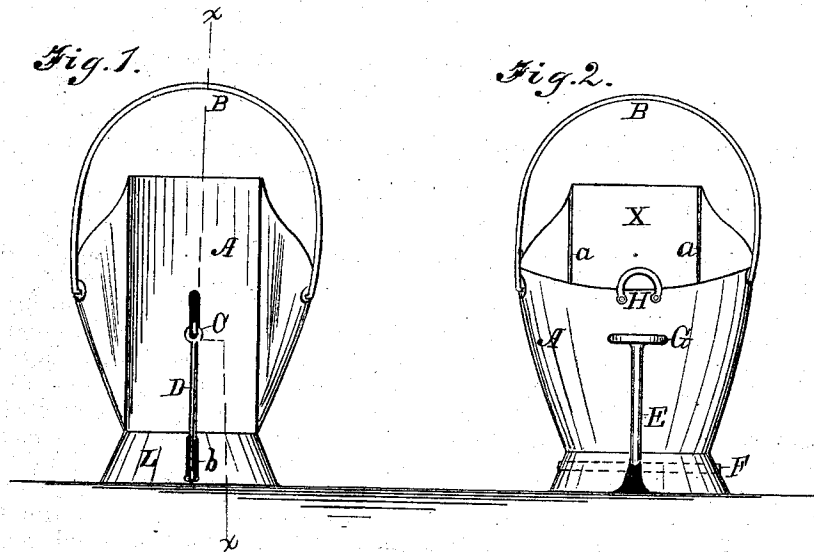


E. W. BYRN.
Coal-Hod.

No. 159,540.

Patented Feb. 9, 1875.



WITNESSES:

John O. Kemmer
Charles A. Pettit

INVENTOR:

Edward W. Byrn.

UNITED STATES PATENT OFFICE.

EDWARD W. BYRN, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN COAL-HODS.

Specification forming part of Letters Patent No. **159,540**, dated February 9, 1875; application filed January 22, 1875.

To all whom it may concern:

Be it known that I, EDWARD W. BYRN, of the city of Washington, in the District of Columbia, have made a new and useful Improvement in Coal-Hods; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 is a vertical front elevation of the improved hod; Fig. 2, a vertical rear elevation of the same, and Fig. 3 a vertical section through line *x x* of Fig. 1.

The object of this invention is to obviate the difficulties usually encountered in discharging the contents of a coal-hod into the stove by providing a means whereby the above result is accomplished in an easy, uniform, and graceful manner, without spilling, and without the awkward exertion necessarily involved in the old way. It consists in the combination, with a coal-hod, of a reciprocating slide contained within the hod, which forms the bottom of the channel through which the coal is discharged, and by its motion shuffles the coal easily and uniformly into the stove. It also consists, in combination with a coal-hod, of a pivoted lever, one end of which performs the double function of handle, by means of which the hod is tilted, and the means for operating the slide. It further consists in the combination of the reciprocating slide, the pivoted lever, and a pitman or connecting-rod.

In the drawings, A represents the body of the hod, which is made in the usual form, and provided with the ordinary supporting-handle B. X is a reciprocating slide which moves in ways *a a* attached to the sides of the hod, and forms the bottom of the channel through which the coal is discharged. Said slide may be either flat or curved in transverse section, and is provided with an extension, C, to which is attached a connecting-rod, D. E is a lever which is pivoted upon a shaft, F, journaled in the base-frame L of the hod, which said base-frame is made a little deeper in front than in the rear,

to give sufficient room for the play of the end of lever E in slot *b*. The said lever E is connected in front with the rod D, and is bent up in the rear to form a handle, G, by means of which the hod is tilted and the slide operated. I is an inner casing extending up over the end of slide X to avoid the obstruction which the coal would afford to its operation.

The operation of the device is as follows: The hod is lifted with the left hand grasping supporting-handle B. Handle G is then seized with the right hand and the hod tilted thereby. As soon as the hod is tilted handle B is brought into such a position as to admit of a third handle, H, being also grasped by the left hand for the purpose of maintaining the hod in an inclined position while handle G is being operated with a vertical reciprocating motion.

I am aware of the fact that coal-hods have been constructed with an extensible spout operating upon the outside. I therefore disclaim this idea, and limit my invention to the reciprocating slide operating inside the hod, as set forth in the claims.

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

1. The combination, with a coal-hod, of a reciprocating slide contained within the hod, which forms the bottom of the channel through which the coal is discharged, substantially as and for the purpose described.
2. The combination, with a coal-hod, of a pivoted lever, E, bent to form a handle, G, which performs the double function of tilting the hod and operating the slide, substantially as described.
3. The combination of lever E, the connecting-rod D, and the reciprocating slide, substantially as and for the purpose described.

This specification of my invention signed by me this 22d day of January, A. D. 1875.

EDWARD W. BYRN.

Witnesses:

SOLOMON C. KEMON,
CHAS. A. PETTIT.