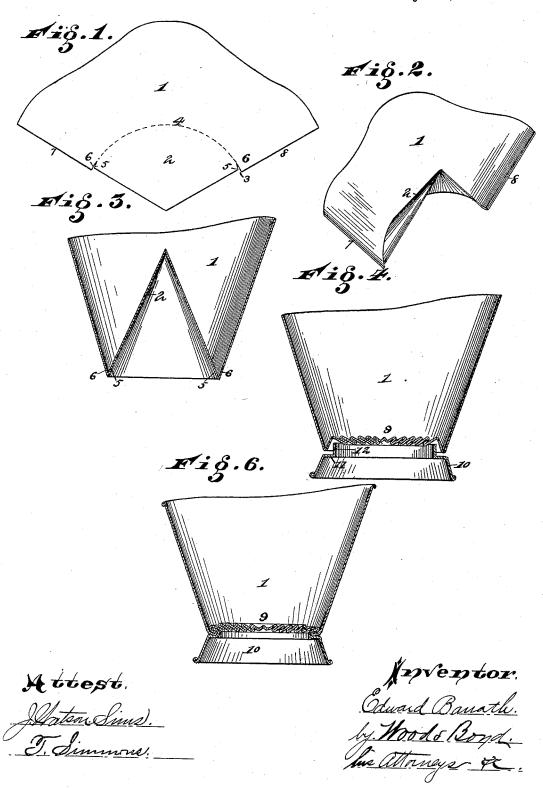
## E. BARRATH.

COAL HOD.

No. 382,939.

Patented May 15, 1888.



## United States Patent Office.

EDWARD BARRATH, OF CINCINNATI, OHIO, ASSIGNOR TO VICTOR E. KNECHT, OF SAME PLACE.

## COAL-HOD.

SPECIFICATION forming part of Letters Patent No. 382,939, dated May 15, 1888.

Application filed February 23, 1886. Serial No. 264,949. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BARRATH, a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain 5 new and useful Improvements in Coal-Hods, of which the following is a specification.

The object of my invention is to make the shell of a coal-hod out of one piece of metal

having a crimped bottom.

Another object of my invention is to form the crimped bottom by the compression of a cone made to project upward into the hod, so that the crimp will not be straightened out by

the weight in the hod.

The invention herein described is carried out by means of the dies shown in Letters Patent No. 378,755, granted my assignee, Victor E. Knecht, February 27, 1888, and by process described in Letters Patent granted my said 20 assignee of same date, No. 378,754, to which reference is herein made of various details of construction.

In the accompanying drawings, Figure 1 represents the blank from which the body and 25 bottom of the hod is made. Fig. 2 represents the first step of bending the blank into shape. Fig. 3 is a central section of the hod bent into shape ready for crimping. Fig. 4 is a similar section representing the cone crimped and the 30 shell in position ready to be attached to the base, which is shown in its proper relative position. Fig. 6 is a similar section of the completed hod.

1 represents the shell of the hod.

2 represents the portion of the blank from

which the bottom is made.

3 represents notches cut upon either edge of the bending line 4 of the blank, so as to allow the corner pieces 5 of the cone portion of the 40 hod to be bent within the shell portion opposite point 6, as shown in Figs. 1 and 3, so as to allow the cone to be formed within the shell in the manner shown in Fig. 3.

In order to form the cone 2 the metal is creased on the bending line 4 from the slitted corners 3 by any suitable tool, and the cone portion is bent to the position shown in Fig. 2. The blank will then be bent by drawing

the edges ? and 8 together, which are lapped or seamed together in the ordinary mode for 50 coal-hods.

It is not necessary to seam joint the cone other than the natural lap of the metal. The next step in the formation of the hod is to compress the cone into the crimped form 55 shown in Fig. 4. I prefer to perform this operation as described in the patents above referred to.

The inner shaping-die for crimping should be made of sufficient size and shape to enter 60 the shell of the hod and reduce the cone.

In Fig. 4, 9 represents the crimped portion, which projects up a sufficient distance within the shell to form a V shape at the peripheral base of the shell. 10 represents the base, 65 which is provided with an offset, 11, and a short cylinder, 12, which latter projects up into the V of the shell. A supporting die is placed within the base, the offset 11 resting thereon. A compression die of suitable shape 70 is applied uniting the shell on top of the crimps 9, pressure applied thereto, and the parts are brought into the position shown in Fig. 6, which completes the operation.

Fig. 6 shows in vertical section a completed 75 hod, the base 12 being united with the crimped portion of the shell 1, which forms the bottom of the hod by having its upper cylindrical portion compressed within the V-shaped peripheral edge of the portion 9. The 80 crimps are on the upper side of the bottom with the inner ones overlying the outer ones. By this construction the pressure of the load tends to consolidate the bottom instead of, as in the old construction of integral shell and 85 crimped bottom, separating its crimps, thus producing a much more durable, stronger, and better article than heretofore.

Having described my invention, what I claim is—

1. The blank for a coal-hod, provided with slits 3 and circular creased line 4, for forming the shell 1, and the cone 2 for a coal-hod, substantially as specified.

portion is bent to the position shown in Fig. 2. The shell and crimped bottom of a coal- 95. The blank will then be bent by drawing hod of a single piece of metal, the crimps of

the bottom being on its upper side, substantially as described.

3. A coal-hod consisting of a shell and crimped bottom of a single piece of metal having a V-shaped peripheral edge at the base thereof, the crimps of the bottom being on the upper side with the inner ones overlying the outer ones, and a base having an upper cylindrical portion compressed within the V-shaped peripheral edge to form a lock-seam, 10 substantially as described.

In testimony whereof I have hereunto set my hand.

EDWARD BARRATH.

Witnesses:

ROBERT ZAHNER,

J. WATSON SIMS.