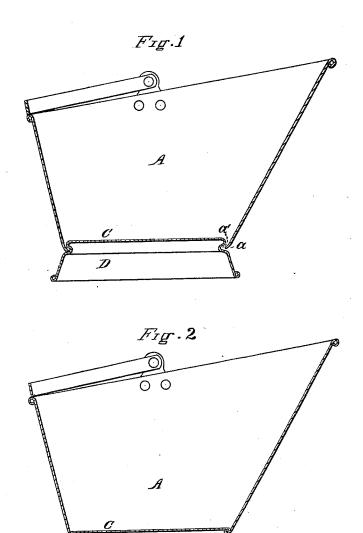
## U. D. ALEXANDER. Coal Hod.

No. 165,698.

Patented July 20, 1875.



WITNESSES.

J. J. Samlor

F. J. Herring.

Urbana D. Herander By Gudley & Warner Alty

## UNITED STATES PATENT OFFICE

URBANA D. ALEXANDER, OF CHICAGO, ILLINOIS, ASSIGNOR TO MARGARET ALEXANDER, OF SAME PLACE.

## IMPROVEMENT IN COAL-HODS.

Specification forming part of Letters Patent No. 165,698, dated July 20, 1875; application filed April 6, 1875.

To all whom it may concern:

Be it known that I, URBANA D. ALEXANDER, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Coal-Hods, of which improvement the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the said improvement, reference being had to the accompanying drawing forming a part hereof, and in which—

Figure 1 is a vertical central section of a coal-hod embodying my invention, showing the form of the parts before they are rigidly attached to each other; and Fig. 2 a like section, showing the form of the parts after the joint is completed.

Like letters of reference indicate like parts. The object of my invention is to so unite the hoop and bottom to the body of the hod that the operation may be performed in an expeditious manner, and with facility, and the parts firmly held together.

In the drawing, A represents the body of the hod; C, the bottom, and D the hoop. The body may be made in any suitable or desirable form. That feature of my invention which relates to the body consists in slightly setting in the lower edge of the body, as shown at a.

I make the hoop and bottom in one piece, as represented, and sink a groove inwardly into the periphery of the part forming the hoop, as shown at a'. I then place the lower edge of the body in the groove a', and press the parts together, as shown in Fig. 2.

It will be observed from reference to the figure last referred to that the edge a has now assumed the position of an inwardly-turned horizontal flange of considerable width. This flange is thus widened during the operation of crowding the parts together in the manner referred to. The upper side of this flange is wholly lapped by the bottom, and its under side rests firmly in the groove a'. The bottom and hoop are thus rigidly attached to the body, and the metal is not injured during the operation. No raw edges are exposed, and there are no outward projections at the joint thus made.

The parts may be set down upon each other

by inverting the body over a fixed block or die of proper size, and by arranging in the hoop a block or die resting on the ridge formed by the groove a'. A sharp blow on the latter block or die will close the groove a' sufficiently to clasp the parts firmly together in the manner shown.

I am aware that the hoop and bottom have heretofore been made in one piece, but this piece has been so formed as to cause the bottom to project a considerable distance from the periphery of the hoop.

The lower edge of the body has also been set outward, forming a very broad flange which has been set on the flange on the hoop, and turned to lap the lower side of the latter flange, thus uniting the bottom and hoop to the body.

I am also aware that the bottom and hoop have been made in separate pieces clamped to each other and the body in various ways. Furthermore, I am aware that rivets have been employed as a means of fastening the bottom and hoop to the body; but I do not here claim these methods of securing the parts to each other.

The pans forming the bottom and hoop may be found upon the market, or may be made in the usual manner. The groove a' may be readily sunken and the edge a may be turned with facility.

The operation of setting down the parts upon each other is also easy, and may be performed without the aid of complicated machinery.

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

A coal-hod consisting of the body A, having an inwardly turned lower edge, a, continuous therewith, combined with the bottom C and hoop D, the latter having the groove a' sunken inwardly into its periphery, and being made in one and the same piece with the bottom, the said parts being united to the body by setting down the groove a' upon the flange a, substantially as shown and described.

## URBANA D. ALEXANDER.

Witnesses:

F. F. WARNER,

N. C. GRIDLEY.