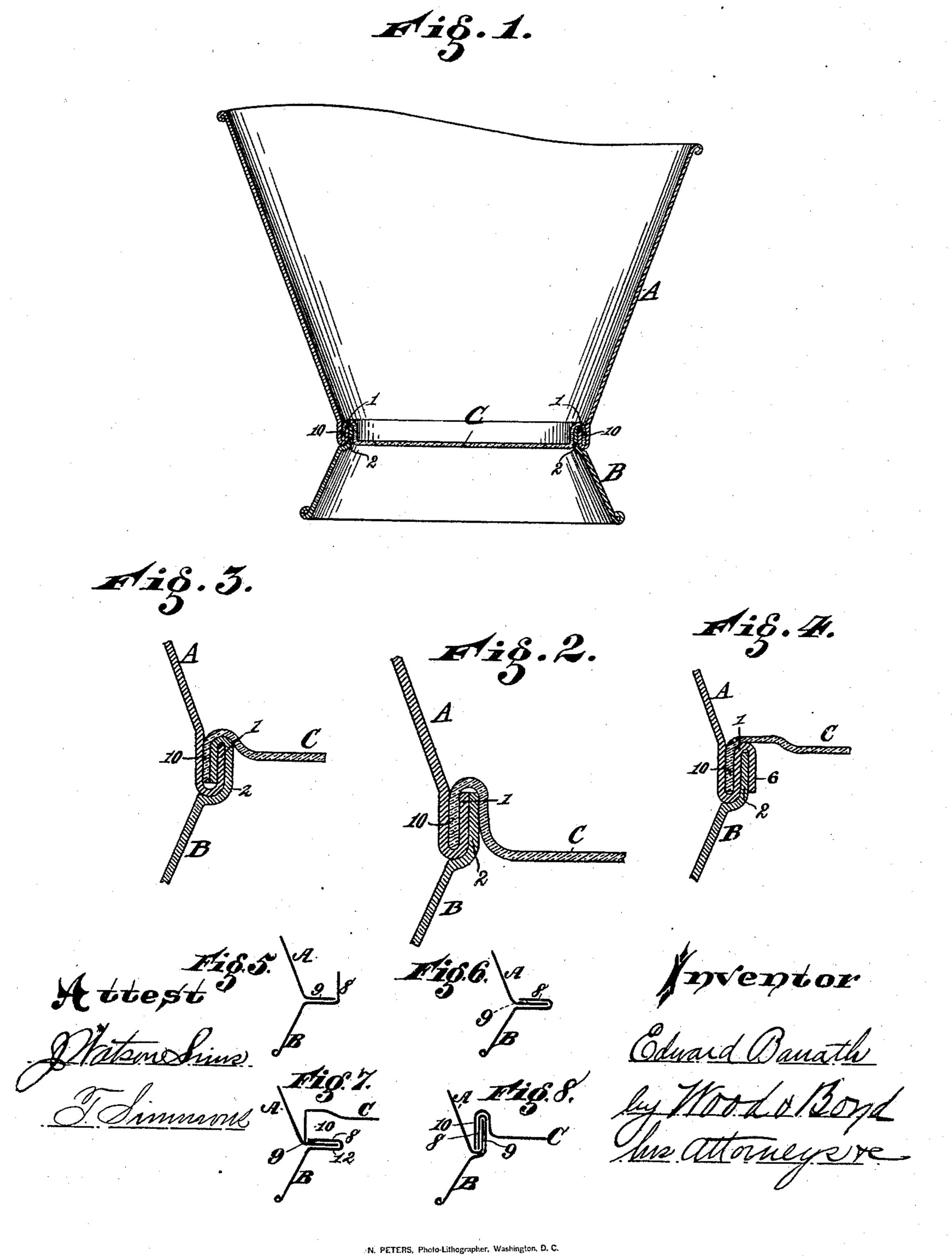
(No Model.)

E. BARRATH. COAL HOD.

No. 396,975.

Patented Jan. 29, 1889.



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. 396,975, dated January 29, 1889.

Application filed May 29, 1888. Serial No. 275,422. (No model.)

To all whom it may concern:

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

the following is a specification.

The object of my invention is to provide a novel, cheap, strong, and durable coal-hod or similar vessel, the features of which will be 10 fully hereinafter described and claimed, reference being made to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a central vertical sec-15 tion of a coal-hod embodying my invention. Fig. 2 is a detail of the joining-seam. Figs. 3 and 4 are detail views showing modifications of the seam. Figs. 5, 6, 7, and 8 are diagrams illustrating the various steps in the

20 process of constructing the hod. In the accompanying drawings, the letter A indicates the conical body of the hod, and B the base-rim. In the preferred form of construction shown in Fig. 3 the base-rim B 25 and the body A are first bent and placed in position together, as shown in Fig. 5—that is, the lower edge of the body A is bent inward, as at 9, and the rim B is bent inward and upward, as at 8, the flange 8 of the rim B pro-30 jecting above the flange 9 of the body A. This flange 8 is then turned down upon the flange 9, as shown in Fig. 6. The depending vertical flange 10 of the bottom C is then placed so as to rest upon the flange 8 of the rim 35 B, and the part 12 is bent by applying a spinning tool or die to the under side of said part 12, Fig. 7, and forcing it up into a vertical position to rest against the flange 10 of the bottom C, thus forming a vertically-ar-40 ranged hook seam between the body A and bottom C. In the modification shown in Fig. 2, the same process is observed except that

there is considerable metal in the flange 10, so that the interior of the bottom sets down. 45 against the inside of the vertical flange 2 on the base-rim B, as shown in Fig. 8. This form of construction is to give strength and furnish elasticity and prevent the ready wearing out of the parts. The strain upon the

seam, being in the direction of the vertical 50 flanges thereof, has little tendency to open the seam. When the body A is made flaring or conical and the bottom concave, the tendency of the weight is to draw the seam inward instead of spreading it outward. In 55 the modification shown in Fig. 4 the flange 8 of the rim B is omitted and the flange 9 on the body A is lengthened, so that it may be turned down to form the flange 6 inside of the flange 2 on the rim B.

In the several constructions the seam is composed of hooked flanges in such manner that the flanges stand in vertical or perpendicular positions parallel or approximately so

to the vertical axis of the hod.

In Figs. 1, 2, and 3 the body A has at its lower edge a single hooked flange, the flange 1 being vertical, while in Fig. 4 the lower edge of the body has a double hooked flange, 1. In the different forms shown the flange 2 70 on the base-rim is clamped between the flange on the bottom C and a part of the flange 1 on the body.

What I claim is—

1. A coal-hod composed of the body A, the 75 rim B, and the bottom C, united by hooked flanges with the flanges standing vertically or approximately so to the vertical axis of the hod, substantially as described.

2. A coal-hod composed of the body A, the 80 rim B, and the bottom C, each formed of a separate piece, the bottom having a depending flange standing in a vertical plane, the body having an upward-projecting vertical hooked flange embracing the flange on the 85 bottom, and the rim having a vertical flange clamped between a part of the bottom and the flange on the body, substantially as described.

3. A coal-hod or similar vessel consisting of 90 the body A, having its lower edge turned upward into a vertical hooked flange, the bottom C, having its edge turned downward into a vertical flange, and the rim B, having its upper edge extended around the hooked 95 flange on the body, and, together with the flange on the bottom, clamped in position by said hooked flange, substantially as described.

4. A coal-hod consisting of the body A, having its lower edge bent inward and upward to form a vertical hooked flange, the bottom C, having its outer edge bent downward to form a depending vertical flange, which is clamped by the hooked flange on the body, and the base-rim B, having a vertical flange clamped between a part of the bottom and

the vertical flange on the body, substantially as described.

In testimony whereof I have hereunto set my hand.

EDWARD BARRATH.

Witnesses:

E. E. WOOD, ROBERT ZAHNER.