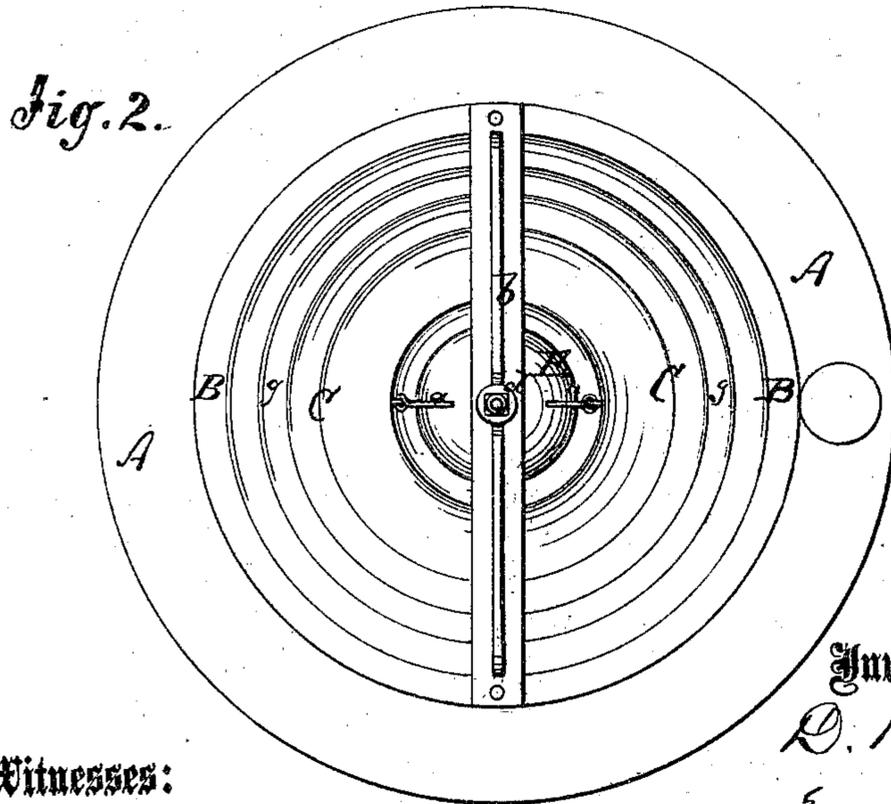
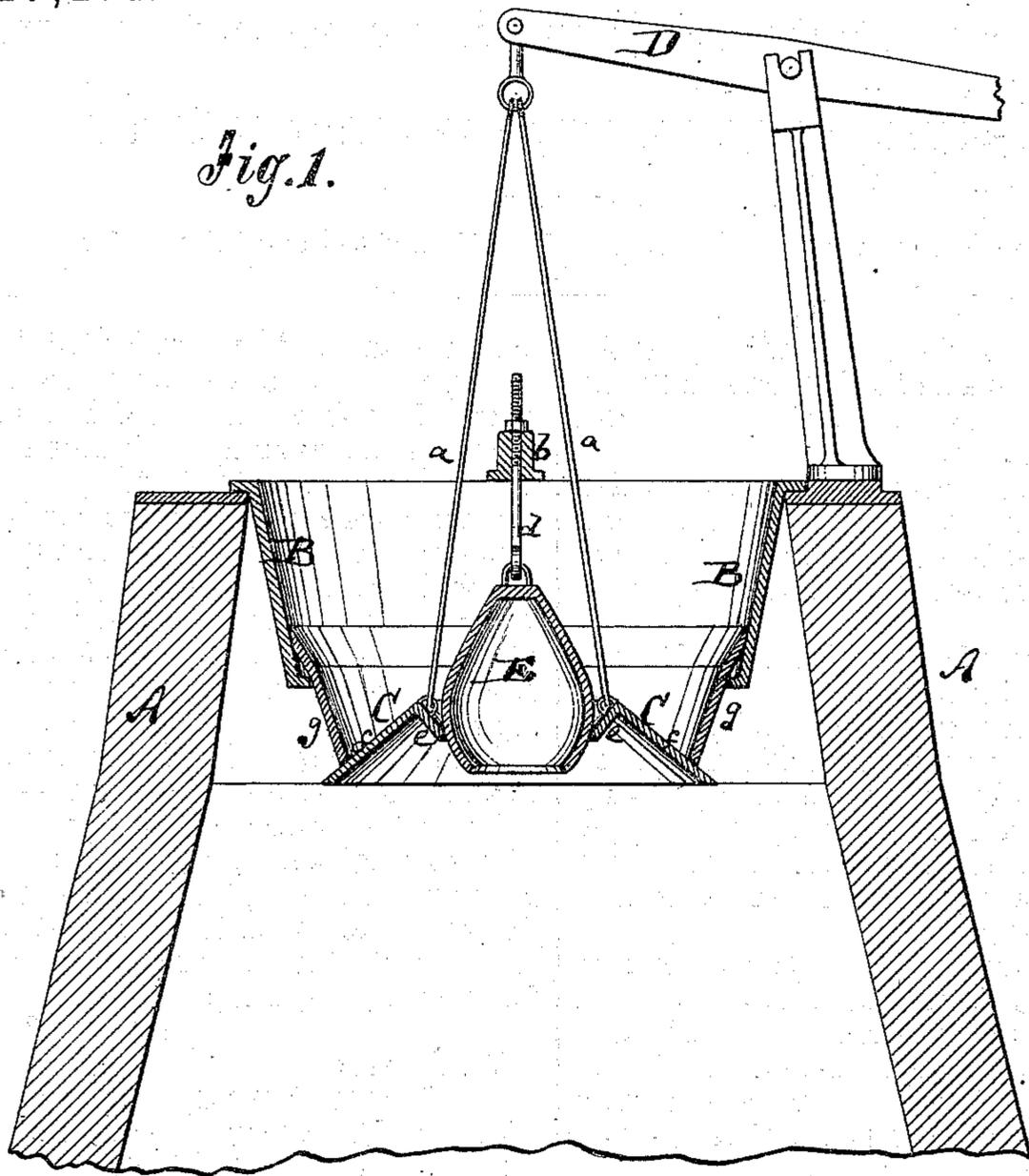


**D. BAUMAN.**  
**Improvement in Hoppers for Blast-Furnaces.**  
 No. 127,214. Patented May 28, 1872.



**Witnesses:**  
*A. Bennekenhof.*  
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# UNITED STATES PATENT OFFICE.

DENNIS BAUMAN, OF PARRYVILLE, PENNSYLVANIA.

## IMPROVEMENT IN HOPPERS FOR BLAST-FURNACES.

Specification forming part of Letters Patent No. 127,214, dated May 28, 1872.

Specification describing a Feed-Hopper for Blast-Furnaces, invented by DENNIS BAUMAN, of Parryville, in the county of Carbon and State of Pennsylvania.

The invention consists in a hopper provided with a double-inclined valve, movable thereunder, so as to feed the fuel simultaneously to the circumference and intermediate space of fire-box.

Figure 1 is a vertical section, and Fig. 2 a plan view of my invention.

A represents the mouth of fire-box, and B the hopper, with or without a sliding funnel, *g*. C is a centrally-apertured valve, having two circular inclines or chutes, *e f*, at an angle to each other. It is also suspended to a lever or beam, D. E is an ovoidal or otherwise suitably-shaped pendant.

The space between the funnel *g* and pendant E constitutes the valve-seat of hopper. This valve-seat is covered by the elevation of valve C and uncovered by the depression of said valve. When the latter takes place the fuel in hopper B falls upon the two inclines *e f*, and

is at the same time distributed both around the circumference and over the intermediate space of fire-box. The feed being completed, the valve is drawn up, the valve-seat covered, and the lever D made fast.

I am aware that a valve has been used to distribute the fuel circumferentially; also one which distributed it centrally; and again one which could do both at two distinct and separate operations; but none that can perform the two functions simultaneously, as is done by my machines.

What, therefore, I claim as new, and desire to protect by Letters Patent, is—

The combination, with a hopper, B, provided with a central pendant, E, of the centrally-apertured valve C, having the two inclines *e f* at an angle to each other, and arranged to move up and down under said hopper, as and for the purpose described.

DENNIS BAUMAN.

Witnesses:

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