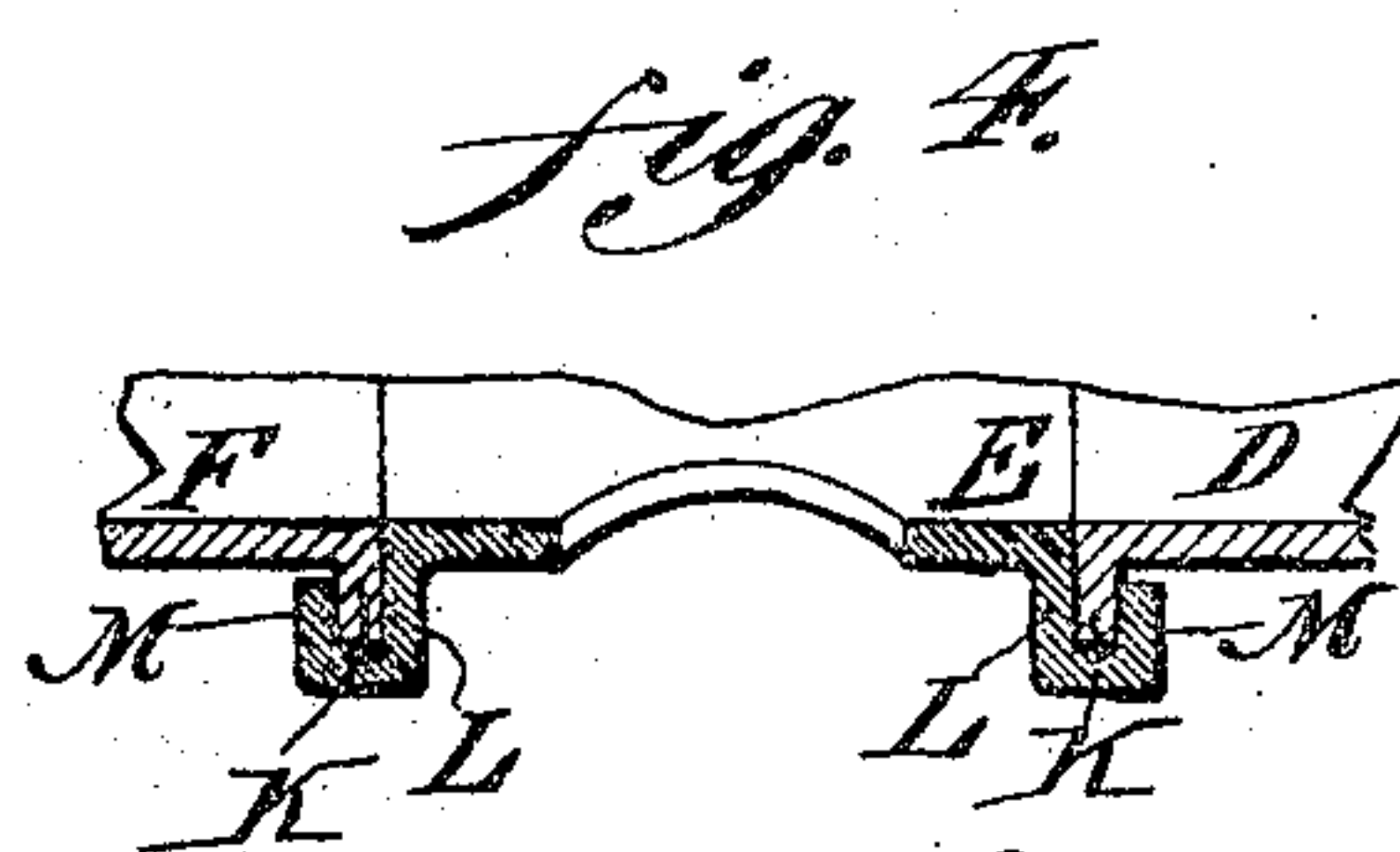
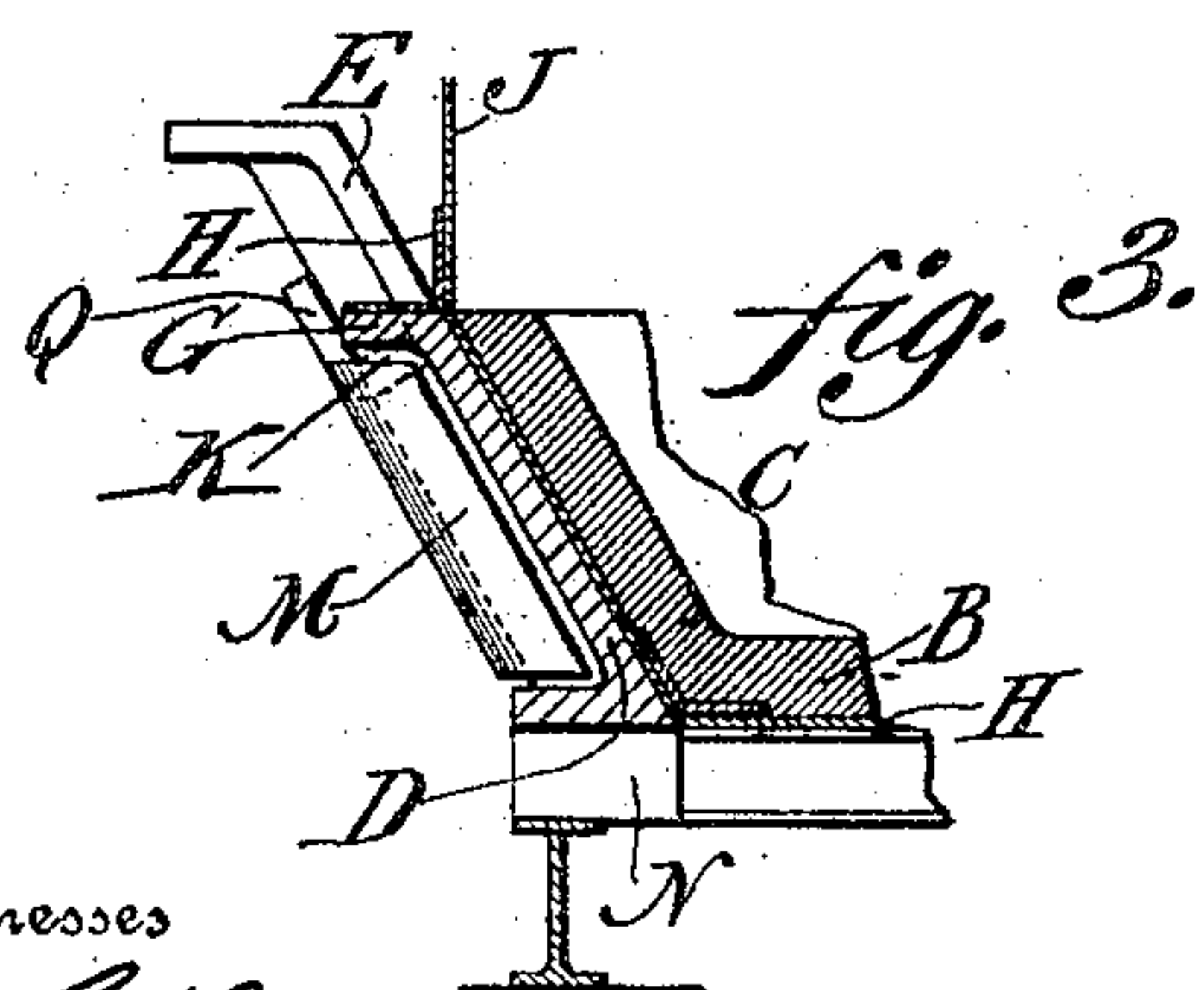
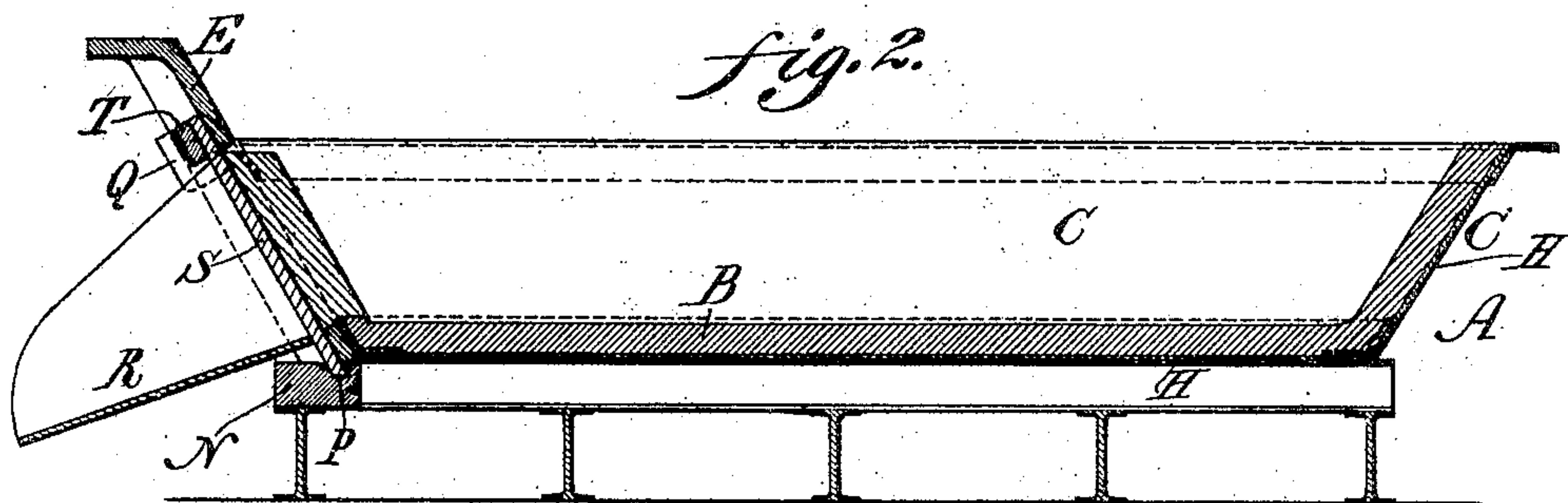
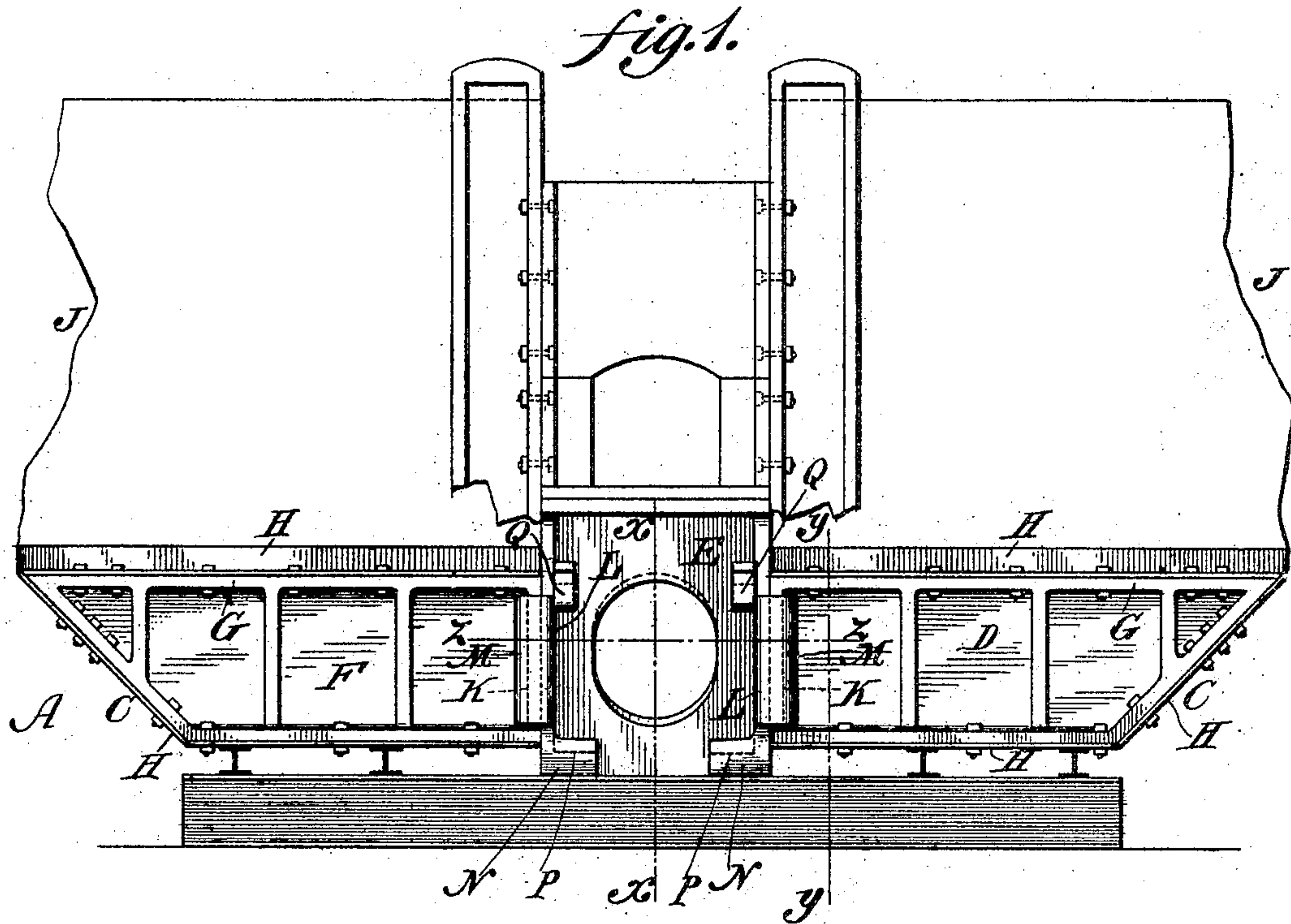


F. BALDT.

PAN OR BOTTOM FOR OPEN HEARTH FURNACES.

APPLICATION FILED JULY 9, 1900.



Witnesses

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# UNITED STATES PATENT OFFICE.

FREDERICK BALDT, OF CHESTER, PENNSYLVANIA.

## PAN OR BOTTOM FOR OPEN-HEARTH FURNACES.

No. 797,932.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed July 9, 1900. Serial No. 22,962.

*To all whom it may concern:*

Be it known that I, FREDERICK BALDT, a citizen of the United States, residing at Chester, in the county of Delaware, State of Pennsylvania, have invented a new and useful Improvement in Pans or Bottoms for Open-Hearth Furnaces, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an improvement in pans or bottoms for open-hearth furnaces whereby said furnaces can be cleaned of any deposit, hardened metal, or dirt which may settle therein and which is known by the name of "salamander."

It further consists in providing a removable spout for the said furnace.

It further consists of novel details of construction, all as will be hereinafter fully described, and particularly pointed out in the claim.

Figure 1 represents a front elevation of a portion of a furnace embodying my invention. Fig. 2 represents a vertical sectional view on line *x x*, Fig. 1. Fig. 3 represents a vertical sectional view on line *y y*, Fig. 1. Fig. 4 represents a horizontal sectional view on line *z z*, Fig. 1.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a pan or bottom for open - hearth furnaces, which is suitably supported on beams and which consists of the base or bottom B, having sides C and a front which consists of cast-metal plates D, E, and F in the present instance, although, if desired, the said front can be made in one piece. The plates D and F are provided with flanges G, which are bolted or otherwise secured to the forwardly-projecting flanges H, which are integral with or secured to the base B and sides C of the pan A and to a front wall J of the furnace, the said plates D and F being further provided each with a flange K. The middle plate E is provided with a forwardly-projecting flange L, which has connected therewith or integral the rearwardly-extending portion M, leaving a space therebetween into which the flange K on the side plates D and F is adapted to enter, so that the plates D, E, and F are locked together.

Secured to the center plate E are the lugs or projections N, which form pockets P, (shown in dotted lines in Fig. 1,) said center plate E being further provided with the lugs

or projections Q, leaving a space between the same and the face of the plate E.

R designates a removable spout having a back-plate flange S, the lower edge of said plate being adapted to fit in the pockets P and the upper portion of said plate being adapted to be held in position by a bar T, which rests between the lugs Q and the face of the center plate E, it being readily seen that by removing the bar T the spout can be quickly and easily removed.

The operation is as follows: The parts being in the position seen in Fig. 1 and the furnace having been used and a salamander having been formed, to remove the same the spout R is first taken away, after which the cast-metal plates D, E, and F are unbolted and removed, whereby the salamander can be placed on skids and moved out from the pan or bottom until it can be properly handled by a crane, after which the parts are again placed in position, it being apparent that this is more quickly accomplished and less expensive than in the construction now in use, where it is necessary in order to remove the salamander to jack up the same until it is above the top of the sides of the pan, after which it can be removed, this being very expensive, laborious, and dangerous both to the furnace and to the operator. It is of course obvious that this convenient removal of the salamander or fused mass is only possible by reason of the fact that no flanges or other obstructions rise or point inward from the bottom B or side C, these parts continuing in their respective planes to their extreme front edges.

The three sides and bottom of the pans can be made of rolled steel or iron, while the othersides and plates of the front can be made of cast metal for obvious reasons.

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

A pan for open-hearth furnaces, comprising a front consisting of side and central plates, the latter having lugs at the bottom forming pockets to receive the bottom edge of a removable spout and lugs near the top, a removable spout having a back plate, and removable means held between said back plate and upper lugs to hold the spout in position.

FREDERICK BALDT.

Witnesses:

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