

(No Model.)

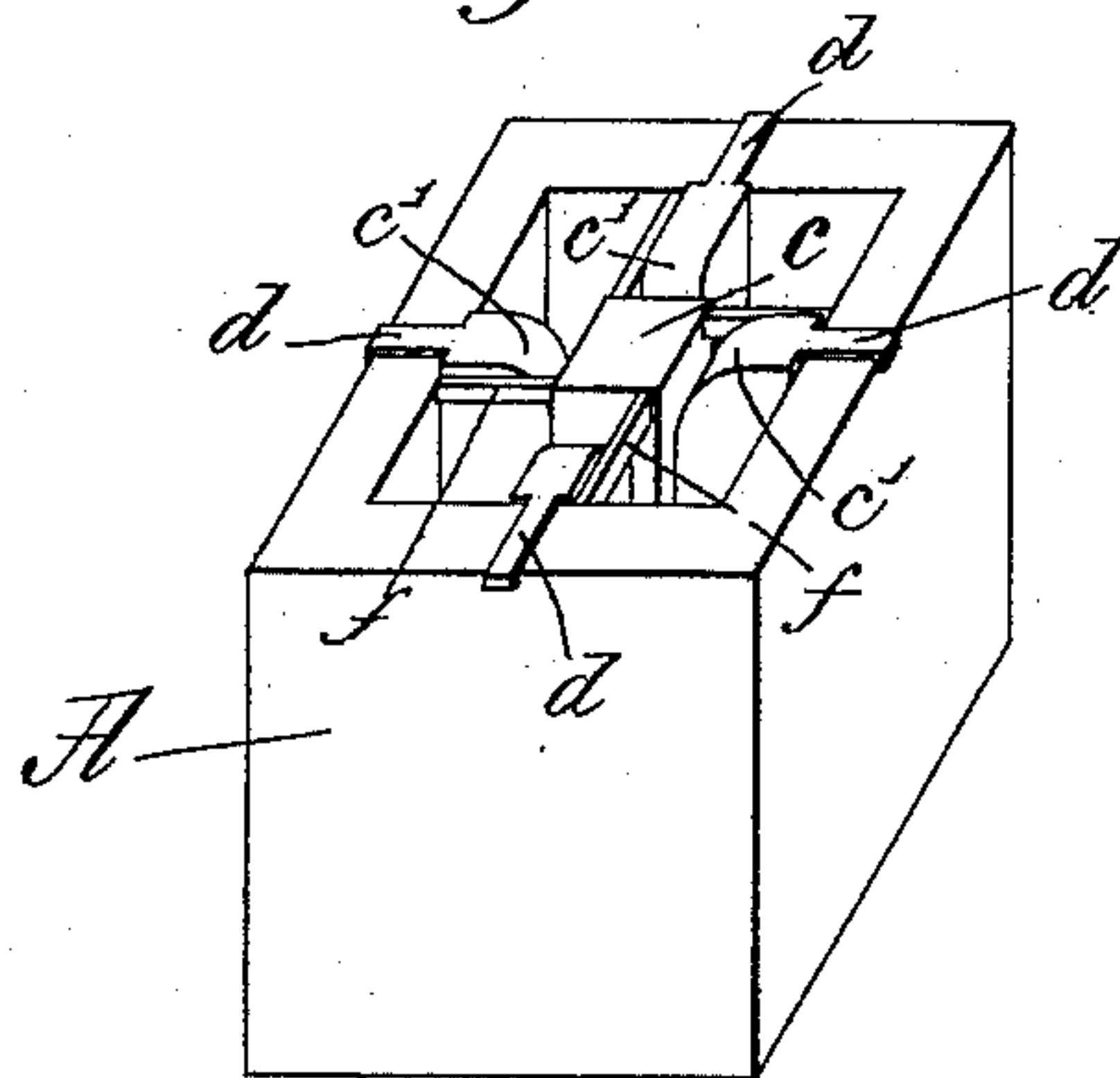
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GUIDE FOR MOLDS FOR COMPOUND INGOTS.

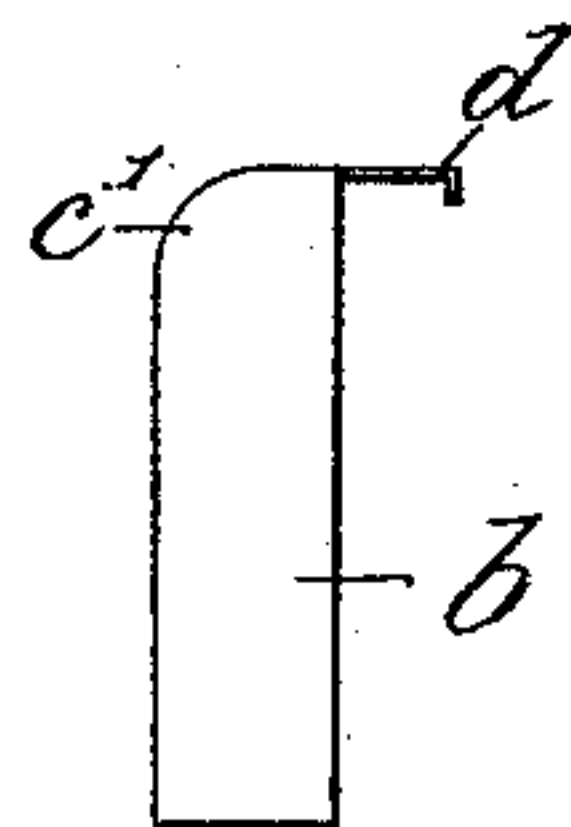
No. 354,284.

Patented Dec. 14, 1886.

*Fig: 1.*



*Fig: 2.*



*Witnesses.*

*Arthur Zippert.*

*Fred L. Emery*

*Inventor.*

*Edwidge Wheeler*

*by Crosby & Gregory*  
*attys*

# UNITED STATES PATENT OFFICE.

ELBRIDGE WHEELER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF,  
WARE B. GAY, AND GEORGE W. GOGIN, TRUSTEES, ALL OF SAME PLACE.

## GUIDE FOR MOLDS FOR COMPOUND INGOTS.

SPECIFICATION forming part of Letters Patent No. 354,284, dated December 14, 1886.

Application filed April 30, 1886. Serial No. 200,646. (No model.)

*To all whom it may concern:*

Be it known that I, ELBRIDGE WHEELER, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Guides for Compound Molds, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention has for its object to provide molds of any ordinary construction, and such as are commonly used in casting Bessemer rail-ingots with guides, as will be hereinafter described, whereby when said molds are used in the manufacture of compound ingots the metal to constitute, preferably, the center of the compound ingot may be accurately located in the said mold.

The guides referred to will preferably be extended the length of the mold, and will preferably be beveled at their upper ends, so that the metal which is to constitute, preferably, the center of the compound ingot may be readily located in the center of the mold.

Figure 1 is a perspective view of a mold provided with my improved guides for locating the metal within the mold, and Fig. 2 is a side elevation of one of the guides.

The mold A, composed of wrought-iron or steel or other suitable metal, is and may be such as is commonly used in casting Bessemer rail-ingots. When it is desired to employ the mold A in the production of a compound ingot, the metal which is to preferably constitute the center of the said compound ingot will have its position secured at the center of the mold A by means of guides *b*, herein shown as four in number.

The metal which is preferably to constitute the center of the compound ingot may be a cast ingot of high or low grade carbon, or scrap iron or steel in any form, steel bars, old rails, bundled, tied, or held together in any convenient manner, and when fine scrap is used it will be contained in a preferably perforated case, said case being perforated, so that the molten metal poured in the mold may run through the said perforations and fill in the interstices of the scrap.

Referring to Fig. 1, I have shown the metal

to constitute, preferably, the center of the compound ingot as a bloom or pile, *c*. The pile *c* is herein shown as centered in the mold A by the guides *b*, preferably extended the depth of the mold, each of said guides being preferably beveled at its upper end, as at *c'*, Fig. 2, in order that the said pile may be readily and accurately centered in the mold. The guides *b* are each herein shown provided with an extension, *d*, which rests, as herein shown, upon the top of the mold A, said extensions serving to support the guides within the mold.

The thickness of the guides may be varied to any degree, so that the metal to form the interior of the compound ingot may be placed in any desired position within the mold.

I have herein shown four guides; but I do not wish to limit myself to any specific number, as when it is desired to locate the metal which is to form one component part of the compound ingot in different positions in the mold the number of guides used will vary.

In the practice of my invention the guide or guides, as the case may be, is or are placed within the mold A, and when suspended in said mold by their extensions *d* the metal, which is to constitute in most cases the center of the compound ingot, will be then placed within the mold A, the beveled edges of the said guides assisting to locate or position the said center metal.

After the metal referred to has been positioned within the mold, the guides are withdrawn, and said metal is supported in the mold by braces *f* at the top, and the metal to form the envelope or outside of the compound ingot will be then cast or poured into the mold.

When the metal to constitute the center of the compound ingot is a cast ingot having a flat end or face at the bottom, the braces *f* will be omitted.

I claim—

1. A mold for the manufacture of compound ingots, combined with a guide or guides by which to position or locate within the mold one of the component metals of said compound ingot, substantially as described.

2. A mold for the manufacture of compound ingots, combined with a guide or guides by which to position or locate within the mold

one of the component metals of said compound  
ingot, said guide or guides having an extension or extensions by which said guide or  
guides are supported within the mold, substantially as described.

3. A mold for the manufacture of compound  
ingots, combined with a beveled guide or  
guides by which to position or locate within  
the mold one of the component metals of said  
10 compound ingot, substantially as described.

In testimony whereof I have signed my name  
to this specification in the presence of two subscribing witnesses.

ELBRIDGE WHEELER.

Witnesses:

G. W. GREGORY,  
J. H. CHURCHILL.