

1,005,773.

E. EVANS.
INGOT MOLD.
APPLICATION FILED JUNE 21, 1911.

Patented Oct. 10, 1911.

Fig. 1.

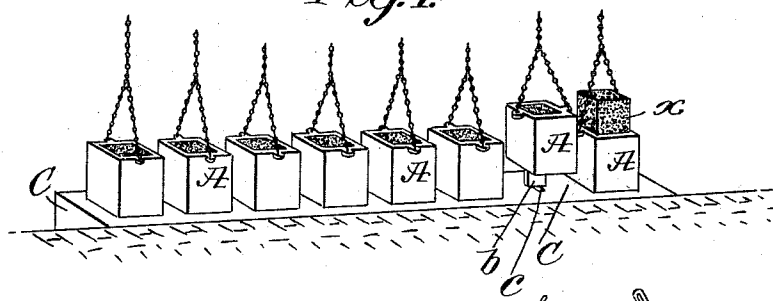


Fig. 2.

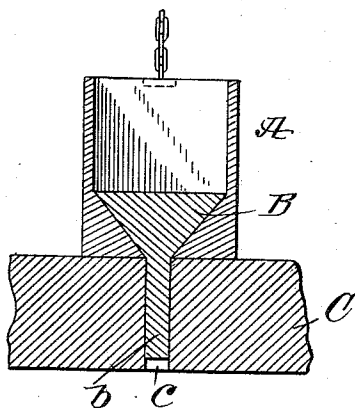


Fig. 3.

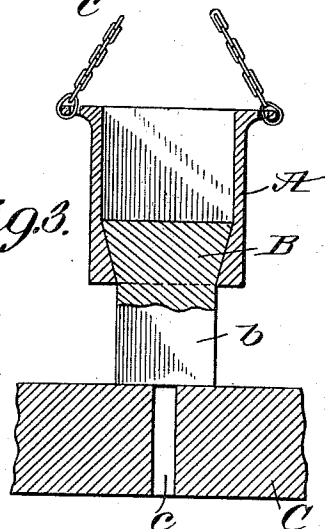
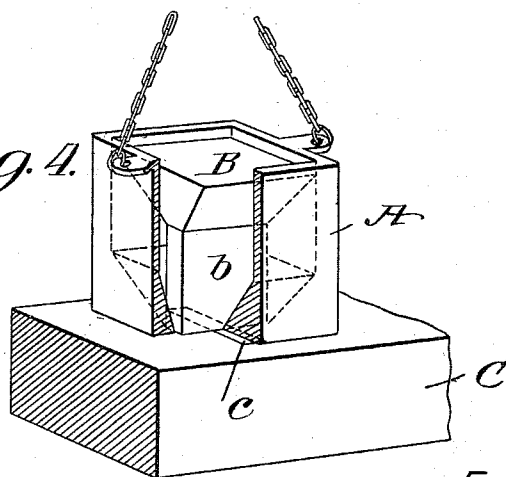


Fig. 4.



WITNESSES

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EVAN EVANS, OF PORT TALBOT, ENGLAND.

INGOT-MOLD.

1,005,773.

Specification of Letters Patent.

Patented Oct. 10, 1911.

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To all whom it may concern:

Be it known that I, EVAN EVANS, a subject of the King of Great Britain, and a resident of Port Talbot, in the county of Glamorgan, South Wales, England, have invented an Improvement in Ingot-Molds, of which the following is a specification.

The object of my invention is to effect an important economy in the casting of ingots, labor, time, and apparatus being much reduced as compared with the method generally used.

In the accompanying drawing Figure 1 is a perspective view illustrating a series of my improved molds including a block for supporting the same. Fig. 2 is a vertical section through the mold and block, showing the mold resting upon the latter. Fig. 3 is a similar section showing the mold raised from the block. Fig. 4 is a perspective view illustrating the operation of forcing the ingot out of the mold.

The mold proper A is a rectangular metal box having a central opening in the bottom, the upper sides of which are inclined inward, as shown in Figs. 2 and 4. The bottom of the mold is formed by means of a piece B which also serves as an ingot ejector. The head or upper portion of the piece B is beveled or inclined correspondingly to the bottom of the mold A, so that when the part B is in the lowermost position, shown in Fig. 2, it is supported on the mold bottom. The part B is provided with a pendant tongue *b* which enters a slot *c* in the base or block C. In practice, I employ a base or block C which is provided with eight slots *c*, as indicated in Fig. 1.

When the parts are in the position indicated in Fig. 2, that is to say, when the mold A rests directly on the block C and the tongue *b* of the ingot ejector is inserted in the slot C, the molding operation proceeds by filling the top or vacant portion of the mold. The next step in the operation consists in hoisting the mold A, as indicated in Fig. 3, until the tongue *b* of the ejector B

is raised above the block and then the mold apparatus proper is turned a quarter around and lowered so that the tongue *b* rests on the block C and across the slot *c*. Then the hoisting chain is slackened and the mold A lowered to the position indicated in Fig. 4, that is to say, until it rests directly upon the block C. The ejector B in such operation remaining fixed in position, necessarily forces the ingot up and out of the mold A. The ingot is then removed by any preferred means. In Fig. 1, the right-hand mold is shown lowered upon the base and an ingot *x* projected from the mold, while the second mold is shown raised and the tongue *b* set across the slot in the block, the same as in Fig. 3.

It will be understood that the casting of ingots by this means is effected in the pits ordinarily found in steel works. By my method it is not necessary in order to relieve the ingot or casting from the mold that it shall be raised out of the pit as is the usual practice, and I, therefore, dispense with the use of shear legs and other apparatus usually employed in the old method. I thus effect a great saving in labor, time, apparatus, and material.

What I claim is:—

The improved molding apparatus, comprising a mold proper, an ingot-ejecting device having a tongue adapted to project from the mold, a supporting base having a slot which is wider in one direction than any other, the said tongue being similarly wider in one direction than any other and adapted to fit loosely and slide in the base slot, whereby, when the tongue is inserted in the slot, it serves to support the mold, and, when withdrawn from the slot and set crosswise thereof, it is supported so as to perform its function as an ejector, as shown and described.

EVAN EVANS.

Witnesses:

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