(No Model.)

C. PARKIN.

COMPOUND INGOT MOLD.

No. 347,636. Patented Aug. 17, 1886.

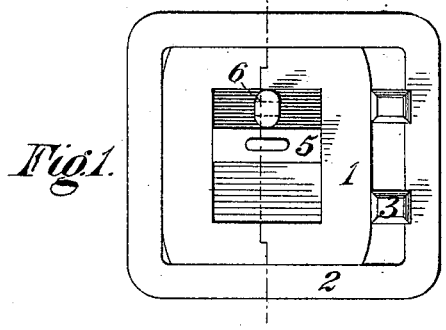

Fig. 1.

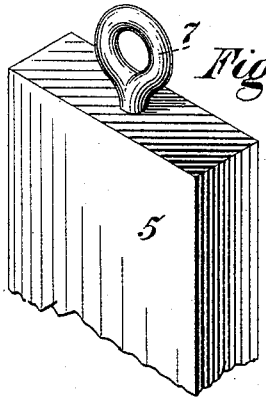

Fig. 5.

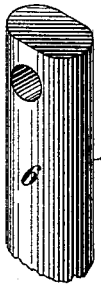

Fig. 6.

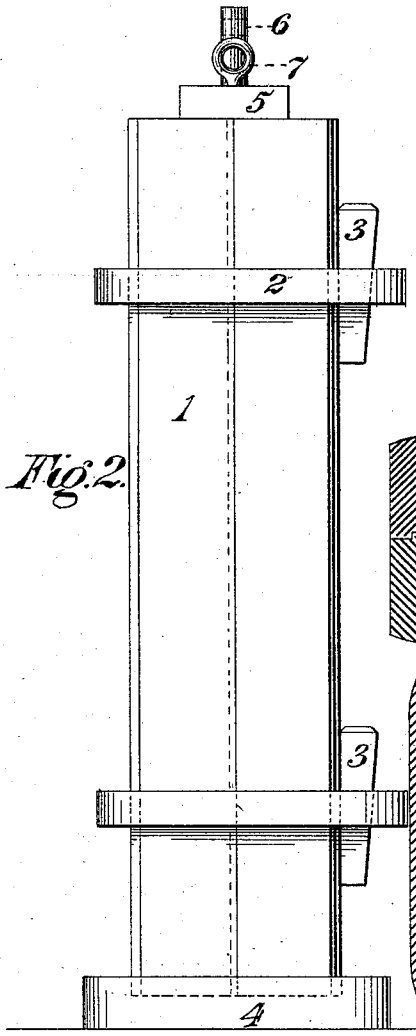

Fig. 2.

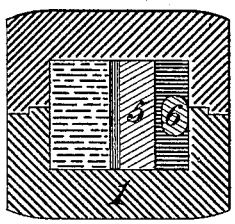

Fig. 4.

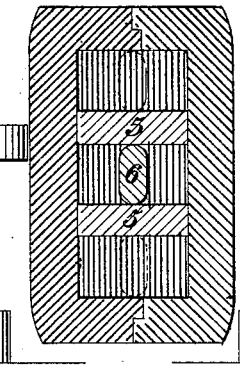

Fig. 7.

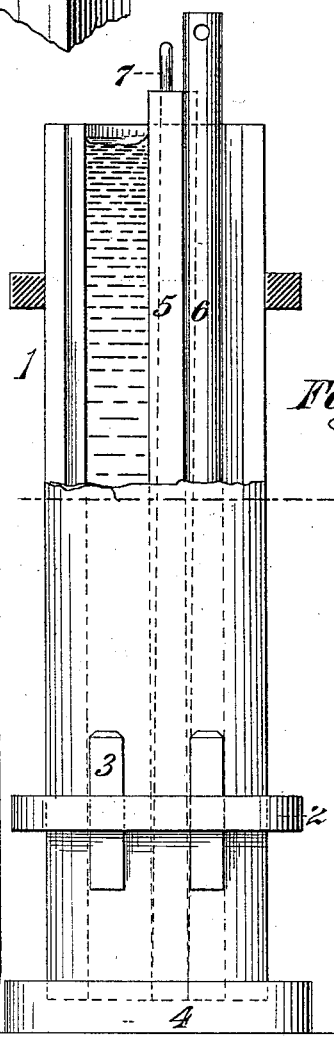

Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES PARKIN, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO MILLER, METCALF & PARKIN, ALL OF SAME PLACE.

COMPOUND-INGOT MOLD.

SPECIFICATION forming part of Letters Patent No. 347,636, dated August 17, 1886.

Application filed May 18, 1886. Serial No. 202,523. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PARKIN, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, a citizen of the United States, have invented or discovered certain new and useful Improvements in Ingot-Molds, of which improvements the following is a specification.

In the accompanying drawings, which make part of this specification, Figure 1 is a top plan view of my improved mold for casting compound ingots. Fig. 2 is a view of the same in side elevation. Fig. 3 is a similar view, a portion of one of the walls being broken away. Fig. 4 is a transverse sectional view on the line *y y*, Fig. 3. Figs. 5 and 6 are detail views, on an enlarged scale, of portions of the removable partition and the buttress. Fig. 7 is a section of a modification.

The invention herein relates to certain improvements in molds for casting compound ingots—*i. e.*, such as contain two or more kinds or grades of metal—and has for its object such a construction and arrangement of parts as will permit of the quick and easy removal of the partition slab or plate after the casting of one kind or grade of metal; and to this end the invention consists in the construction and combination of parts, substantially as hereinafter described and claimed.

The ingot-mold 1, composed of two separable parts, is of the usual form and construction, said parts being held together by the bands 2 and wedges 3, and supported on a suitable base, 4. After the parts of the ingot have been secured together on the base 4, a metal slab, 5, is arranged transversely across the mold, said slab being supported in position on one side by a removable post or buttress, 6. The slab or partition 5 should be of such a width that the joint between its edges and the sides of the mold will be sufficiently tight to prevent the flow of metal therein, and the thickness of the slab should be such as to avoid any liability of its being warped or twisted out of shape by the heat of the molten metal. The supporting post or buttress 6 is made elliptical or approximately so in cross-section, and is so proportioned that the longer axis of the ellipse is equal to the distance from the rear side of the slab when in position to the side of the ingot-mold, all as clearly shown in Fig. 1. This construction of support or buttress affords a comparatively narrow bearing-surface against the rear side of the slab and the side of the mold; hence a very slight movement or rotation of the buttress will be sufficient to permit its withdrawal from the mold. The slab or partition 5 is provided with an eye, 7, or other convenient means for handling, whereby it may be removed from the mold.

In casting compound ingots the slab 5 is placed in position in the mold, and the support or buttress 6 is arranged between the slab and the side of the mold, the buttress being so turned as to bear at the ends of its longest axis against the slab and side of the mold. The metal is then cast in the space between the slab and the side of the mold, as shown in Figs. 3 and 4. As soon as this metal has set the buttress is rotated from engagement with the slab and then withdrawn from the mold. Then the slab is pulled back away from the cast metal and withdrawn, and finally the space left in the mold is filled with another grade or kind of metal. By employing different sizes of buttresses three or more grades of metal may be cast in the same mold, as will be readily understood; or two slabs or partitions 5 may be arranged in the mold, as shown in Fig. 7, one buttress 6 being placed between them, said partitions and buttress being removed after the ends of the mold have been filled; or, if it is desired to cast the central portion of the ingot first, two buttresses may be placed between the slabs and the ends of the molds, as indicated in dotted lines in Fig. 7.

I claim herein as my invention—

1. The combination of an ingot-mold, a movable slab or partition arranged transversely of the mold, and an elliptical support or buttress for bracing or supporting the slab in place, substantially as set forth.

2. The combination of an ingot-mold, a movable slab or partition arranged transversely of the mold, and an elliptical support or buttress interposed between the slab and the side of the mold, substantially as set forth.

In testimony whereof I have hereunto set my hand.

CHARLES PARKIN.

Witnesses:
DARWIN S. WOLCOTT,
C. M. CLARKE.