

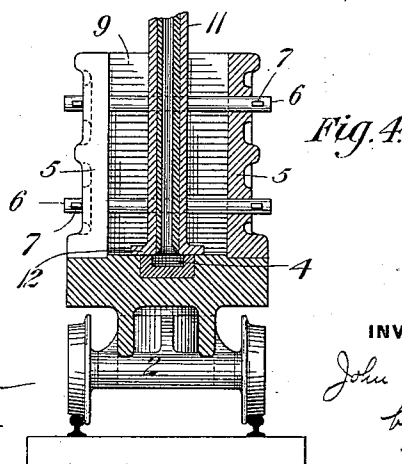
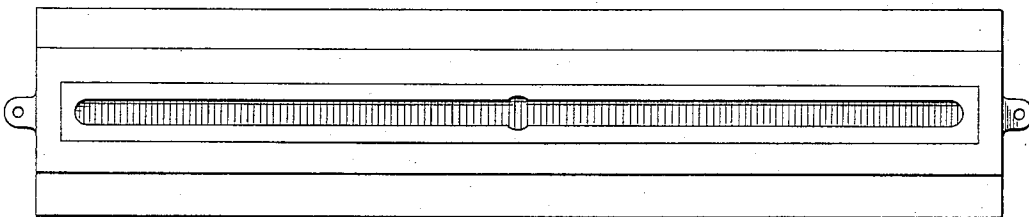
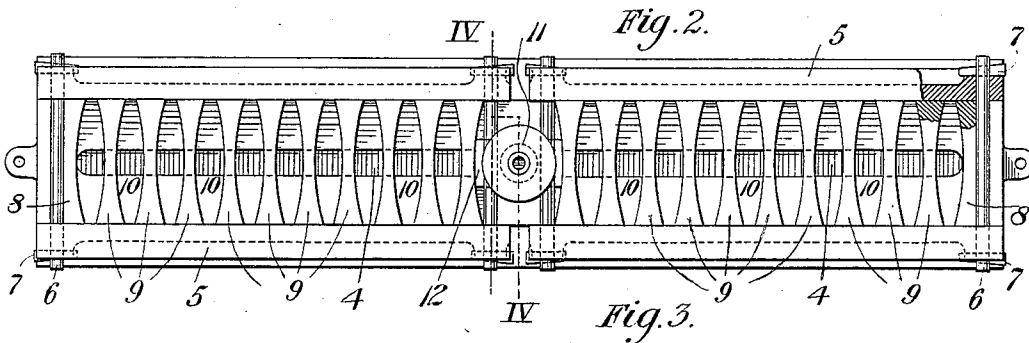
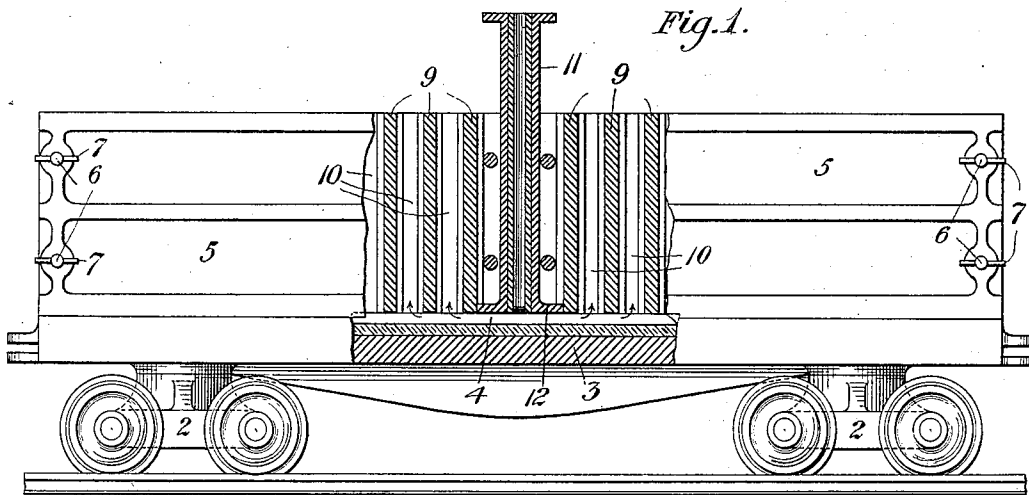
(No Model.)

2 Sheets—Sheet 1.

J. A. POTTER.
APPARATUS FOR CASTING INGOTS.

No. 565,296.

Patented Aug. 4, 1896.



WITNESSES

J. M. Corwin
W. T. Corwin

INVENTOR

John A. Potter
by his Attorneys
W. B. Russell & Sons

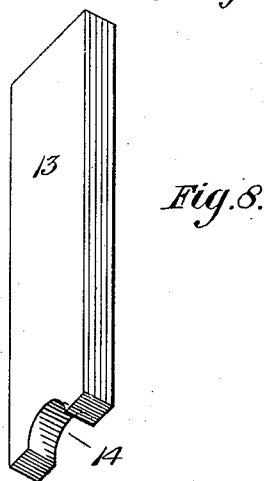
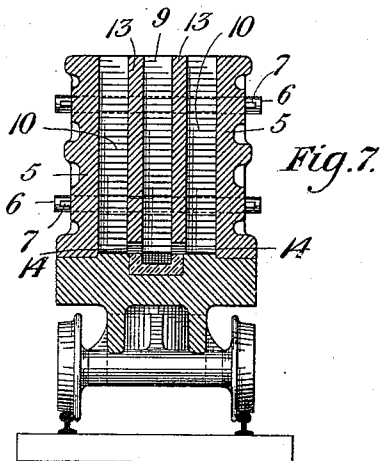
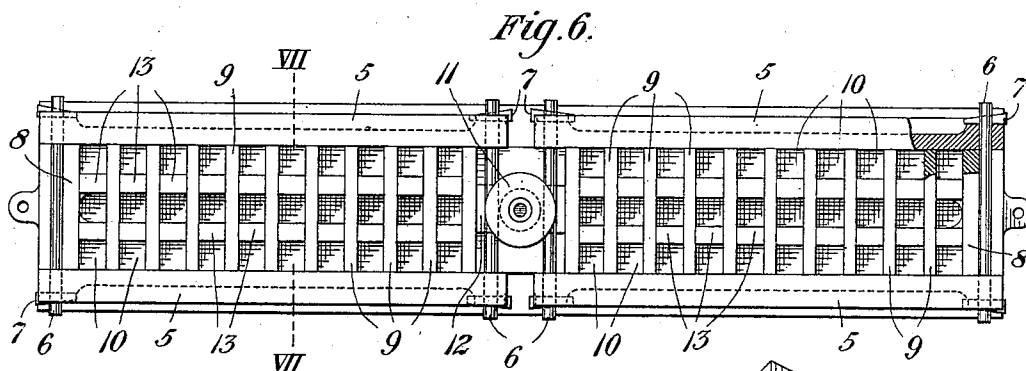
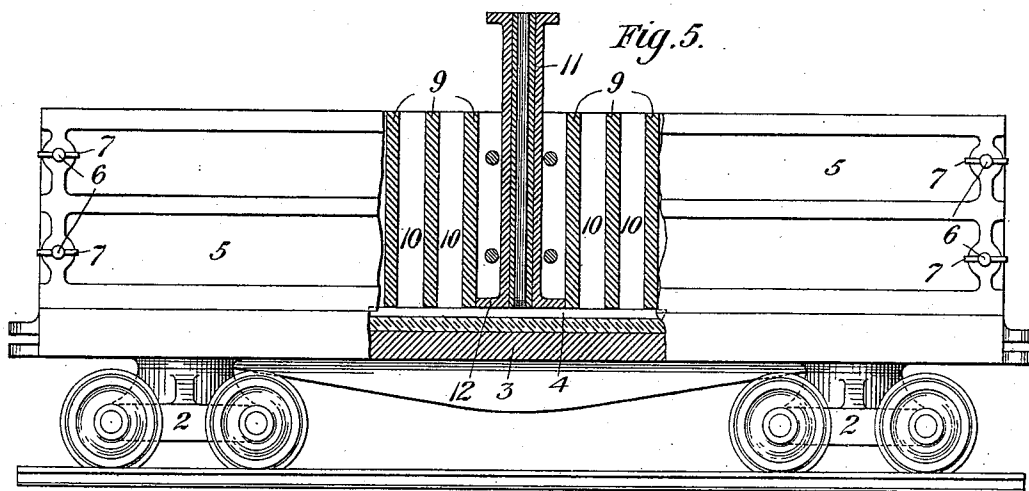
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2 Sheets—Sheet 2.

J. A. POTTER.
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UNITED STATES PATENT OFFICE.

JOHN A. POTTER, OF CLEVELAND, OHIO.

APPARATUS FOR CASTING INGOTS.

SPECIFICATION forming part of Letters Patent No. 565,296, dated August 4, 1896.

Application filed January 9, 1895. Serial No. 534,307. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. POTTER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Ingot-Casting Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 shows one of my improved mold-cars in side elevation, partly in vertical section. Fig. 2 is a plan view thereof. Fig. 3 is a plan view of the bottom plate. Fig. 4 is a vertical cross-section on the line IV IV of Fig. 2. Fig. 5 is a view similar to Fig. 1, but showing a modified construction of the apparatus. Fig. 6 is a plan view of the apparatus of Fig. 5. Fig. 7 is a vertical cross-section on the line VII VII of Fig. 6, and Fig. 8 is a perspective view of one of the division-plates of Fig. 6.

Like symbols of reference indicate like parts in each.

In the drawings, 2 represents the truck of a car having a metal bottom plate or platform 3, which forms a stool for the mold apparatus. In the surface of this plate is a longitudinal groove or gutter 4, having a refractory lining.

5 5 are side plates set vertically at the margins of the platform and preferably divided into two parts on each side of the car. The opposite side plates are connected by bolts 6 and keys 7, and there are end plates 8 and series of cross-partitions 9 set between the side plates at intervals, so as to divide the space between the side plates into a suitable number of mold cavities or chambers 10 of proper dimensions. In the middle of the car is an upright pipe or pouring-fountain 11, which has an interior refractory lining, and is set on the platform directly over the gutter 4, the flange 12 at the base of the pipe covering the gutter between the middle cross-partitions 9.

The parts of the apparatus are assembled as shown in the drawings, the side plates being set on the car, the cross-partitions set between them and adjusted at the proper distances apart to give the desired sizes of ingot, and the side plates are clamped laterally upon the partition by driving the keys.

The parts being assembled as described, the molten steel is poured into the pipe 11,

and flowing along the gutter 4 rises within and fills the mold-chambers 10. When the steel has solidified in said chamber, the ingots are removed by taking out the keys 7 and bolts 6 and separating the side plates and cross-partitions.

As shown in the drawings, the partitions 9 may be formed so as to impart an elliptical section to the ingot, or they may be otherwise shaped, as desired.

The advantages of my invention will be appreciated by those skilled in the art. It affords great facility for casting small ingots and for making them of any desired dimensions, and the ease with which the ingots when cast can be removed from the mold-cavities renders the apparatus very easy to operate.

The essential part of my invention lies in the use of the car-platform as a mold-stool and its construction with a groove or gutter for bottom casting. The metal may be cast directly from the furnace into the molds and the car then drawn off to the heating-furnaces.

The apparatus shown on the second sheet of the drawings resembles that described above, except that in addition to the cross-partitions 9 I show other partitions 13, set between them, so as to divide the mold-chambers 10 into several smaller parts, and having at their lower ends notches or openings 14, which permit the metal to flow laterally from one compartment of each chamber 10 to the others.

Other modifications of the apparatus may be made by those skilled in the art without departure from my invention as stated in the following claim.

I claim—

A car for casting ingots, having detachable side plates, cross-partitions between the same, a longitudinal gutter, and a pouring-stand, having a flange arranged to cover the gutter between two of the cross-partitions; substantially as described.

In testimony whereof I have hereunto set my hand.

JOHN A. POTTER.

Witnesses:

T. W. BAKEWELL,
F. B. CARPENTER.