No. 738,372. PATENTED SEPT. 8, 1903.

E. STRAUCH.

CASTING MACHINE.

APPLICATION FILED DEC. 8, 1902.

NO MODEL 2 SHEETS—SHEET 1.

Fig. 2.

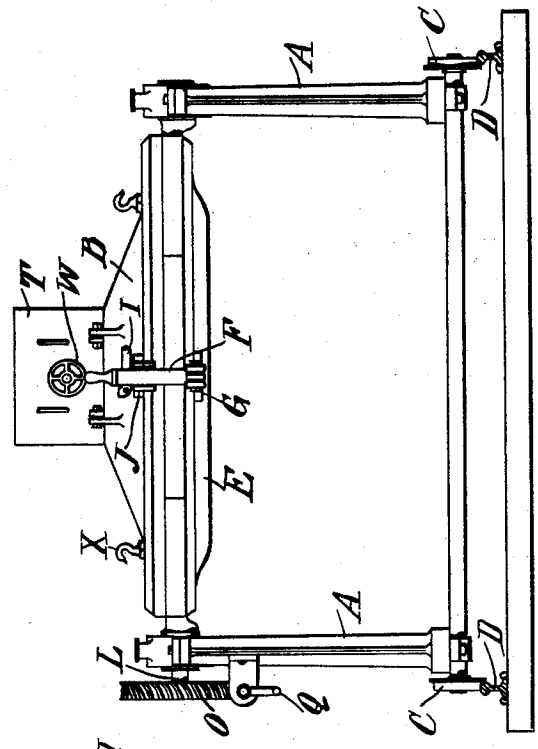
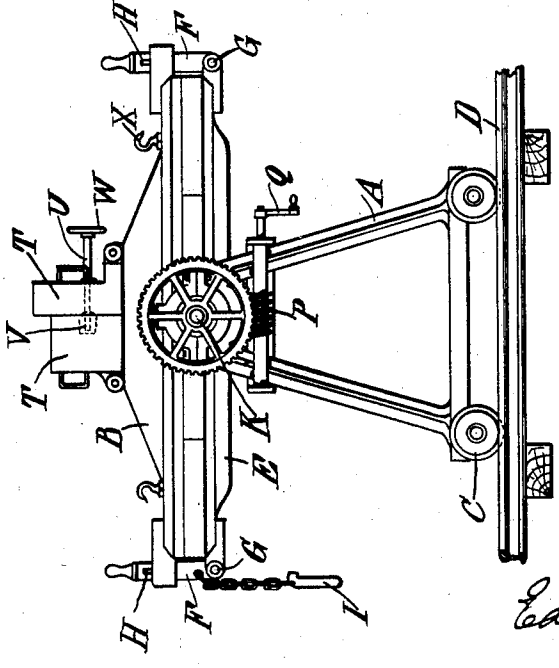


Fig. 1.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

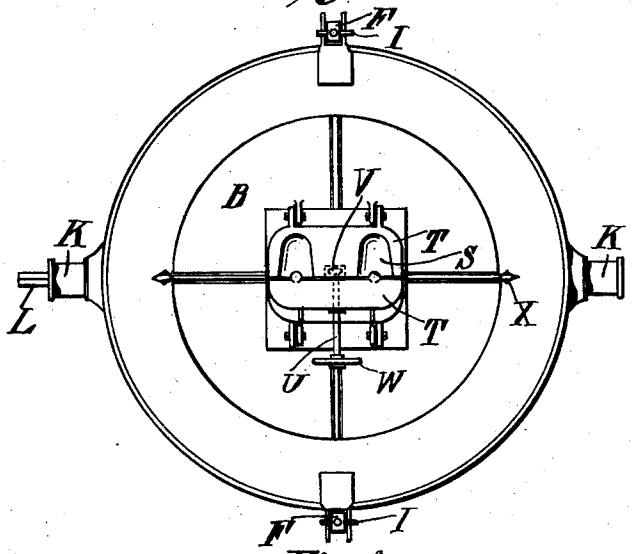


Fig. 4.

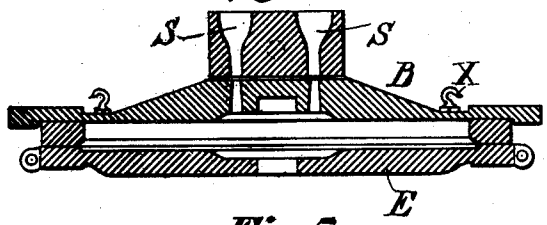
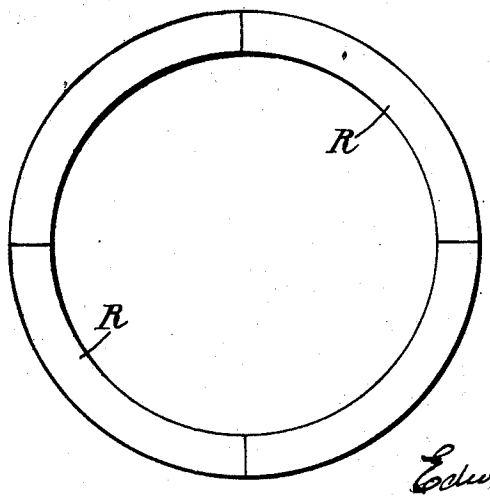


Fig. 5.



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No. 738,372. Patented September 8, 1903.

UNITED STATES PATENT OFFICE.

EDWARD STRAUCH, OF NEW YORK, N. Y.

CASTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 738,372, dated September 8, 1903.

Application filed December 8, 1902. Serial No. 134,404. (No model.)

To all whom it may concern:

Be it known that I, EDWARD STRAUCH, a subject of the Emperor of Austria-Hungary, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Casting-Machines, of which the following is a specification accompanied by drawings.

My invention relates to casting-machines; and its objects are to improve upon the construction of such machines and enable castings to be readily and rapidly made and handled.

Another object of my invention is to afford provision for quickly removing the casting from the mold.

Further objects of my invention will hereinafter appear; and to these ends my invention consists of a machine for carrying out the above objects embodying the combinations of elements, arrangements of parts, and features of construction substantially as hereinafter fully described and claimed in this specification and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a machine embodying my invention. Fig. 2 is an end elevation of the same. Fig. 3 is a plan view with the frame removed. Fig. 4 is a sectional side view of the mold, and Fig. 5 is a detail view of the intermediate sectional separating mold portion.

Referring to the drawings, A represents a suitable frame upon which the mold is pivotally mounted, so that it may be rotated to dump the casting after the top part B of the mold has been removed, and in this instance the frame A is provided with wheels C, adapted to run on the rails D, so that the frame and mold carried thereby may be bodily moved from place to place and may be placed upon a circular track and carried in succession past the furnace. In this manner a great number of castings can be made in a very short space of time. I have merely shown a portion of the track to illustrate in what manner the mold is mounted for bodily movement from place to place.

My improved casting-machine may be utilized for casting any apparatus or devices to which the machine is applicable; but it is designed more particularly for casting car-wheels, and in the drawings I have shown a machine constructed to cast car-wheels, although I do not limit myself to a machine of this particular construction, as, if desired, the mold might be formed for casting brake-shoes and other articles.

The pivoted mold comprises, essentially, a lower portion E and the top part B, with means for removably securing the parts together, in this instance the lower portion being provided with pivoted hand-clamps or locking-levers F, pivoted at G, and provided with apertures H, through which the locking-pins I are adapted to be thrust when the clamps F are in an upright position within the recesses afforded by the projections J on the top part of the mold. In this instance the lower portion E of the mold is pivoted to the frame A, as upon the trunnions K, one of which is provided with a squared extension L, to which a worm-wheel O is secured, meshing with a worm P, connected to be operated by means of a suitable crank-handle Q, although any other suitable means may be provided for rotating the mold about its pivots. The mold is also constructed with an intermediate sectional separating portion comprising the sections R, shown in this instance in the form of quadrants, adapted to be assembled to form a ring, which is placed upon the lower portion E of the mold and then the top part B placed thereon and the whole locked together by the clamps, as described. The sectional intermediate portion R forms the sides of the mold, as shown, and suitable means are provided in connection with the top part B for pouring the metal, in this instance said top part being provided with ingates S, formed by the pivoted or hinged blocks T, which may be locked to each other by any suitable means—as, for instance, the spindle U and key V, adapted to be turned by the hand-wheel W. The top part B of the mold is also provided with suitable means for lifting the same from the remainder of the mold—as, for instance, the hooks X, to which chains may be attached and the top part of the mold removed after the clamps F have been unlocked. The blocks T, forming the ingates, having been unlocked and turned back on their hinges, the top part B of the mold may be removed and then the remain-

der of the mold rotated about the pivots K to dump the casting and sectional ring. It will thus be seen that the sectional ring or intermediate separating portion formed by the sections R falls away from the casting, or else the sections may be removed before the casting is dumped from the mold.

It is obvious that my machine is comprised of few parts simply constructed, and castings may be made rapidly, and they may be readily handled after having been cast, for the parts of the mold may be quickly taken apart and the mold dumped and then the parts again readily assembled.

Obviously some features of my invention may be used without others, and my invention may be embodied in widely-varying forms.

Therefore without limiting myself to the construction shown and described nor enumerating equivalents, I claim, and desire to obtain by Letters Patent, the following:

1. In a casting-machine, the combination with the frame, of a mold comprising two detachable portions, one of which is pivoted to the frame and the other provided with ingates, means for removably securing one portion of the mold to the other, and means for rotating one portion of the mold upon its pivots when the other has been removed, to dump the casting, for substantially the purposes set forth.

2. In a casting-machine, the combination with the frame, of a mold comprising a lower portion pivoted to the frame, a removable top part, an intermediate sectional separating portion, with means for removably securing the top part to the lower portion, and means for rotating the lower portion of the mold about its pivots to dump the casting, for substantially the purposes set forth.

3. In a casting-machine, the combination with the frame of a mold comprising a lower portion pivoted to the frame, a removable top part adapted to be secured thereto, intermediate sectional separating portions for the mold, and ingates formed in separable blocks separately pivoted to the said top part and means for securing said blocks together to form operative ingates and for separating said blocks to remove the gates and permit the removal of the mold-top, and means for rotating the lower portion of the mold about its pivots to dump the casting after the top and gates have been removed.

4. In a casting-machine, the combination with the frame, of a mold comprising a lower portion pivoted to the frame, a removable top part provided with ingates formed by pivoted blocks, and means for locking said blocks together to form ingates, an intermediate sectional separating portion for the mold, means for removably securing said portions of the mold together, and means for rotating the lower portion of the mold about its pivots to dump the casting, for substantially the purposes set forth.

5. In a casting-machine, the combination of a frame provided with wheels for bodily moving the frame and the parts carried thereby, a mold rotatably mounted on said frame and comprising upper and lower portions and an intermediate separating portion, with means for removably securing the parts of the mold together, and means for rotating said mold, the upper portion of the mold being provided with means for lifting the same away from the lower portion and intermediate portion, whereby the contents of the mold may be dumped as the lower portion of the mold is rotated, for substantially the purposes set forth.

6. A casting-machine for casting car-wheels, comprising a frame, a mold pivoted thereto, means for rotating the mold, the lower portion of the mold being pivoted to the frame and the top part of the mold being provided with means for removing the same, means for securing said lower portion and top part together, and an intermediate sectional separating mold portion arranged between said lower portion and top part, and adapted to encircle the rim and flange of the casting-wheel, whereby when the top has been removed the casting may be dumped from the lower portion of the mold when said lower portion is rotated.

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

EDWARD STRAUCH.

Witnesses:
H. G. OGDEN, Jr.,
E. VAN ZANDT.