(No Model.)

J. CONNOLLY.

MOLD FOR CASTING CAR WHEELS.

No. 590,452. Patented Sept. 21, 1897.

Fig. I.

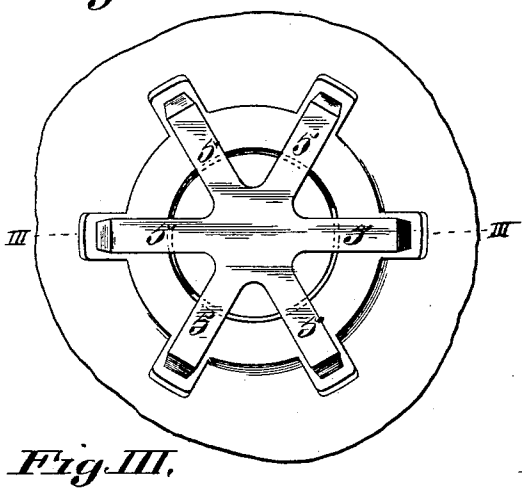


Fig. II.

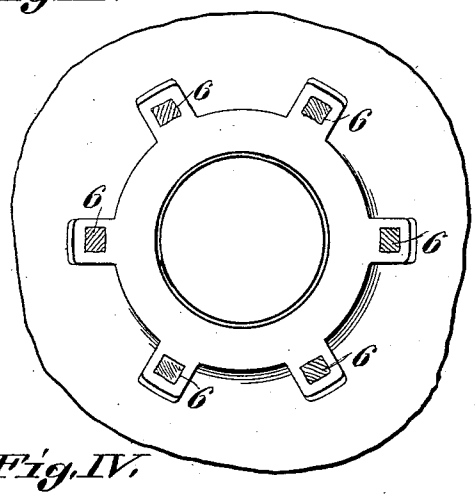


Fig. III.

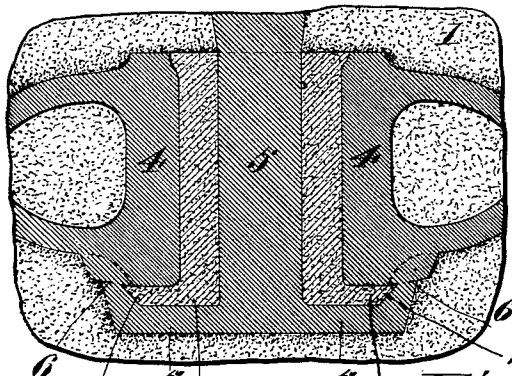


Fig. IV.

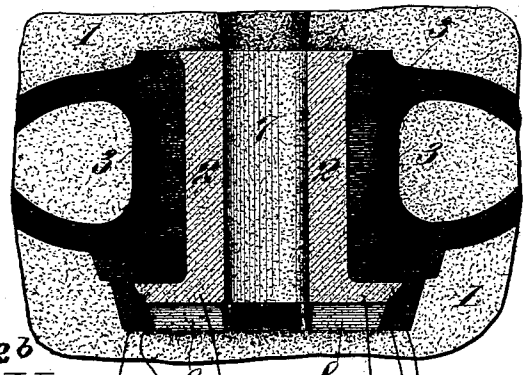


Fig. V.

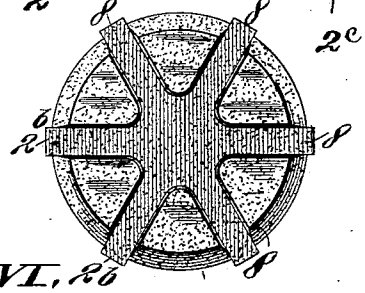
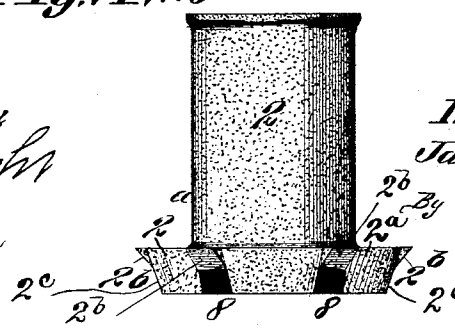


Fig. VI.



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UNITED STATES PATENT OFFICE.

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MOLD FOR CASTING CAR-WHEELS.

SPECIFICATION forming part of Letters Patent No. 590,452, dated September 21, 1897.

Application filed February 1, 1897. Serial No. 621,585. (No model.)

To all whom it may concern:

Be it known that I, JAMES CONNOLLY, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Molds for Casting Car-Wheels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to an improved mold for casting car-wheels; and my invention consists in features of novelty hereinafter fully described and claimed.

Figure I is a detail view showing the central part of the back of a car-wheel before the gate and runner-sprue have been knocked off. Fig. II is a like view after the sprue has been knocked off. Fig. III is a section taken on line III III, Fig. I, and showing part of the mold in which the wheel is cast. Fig. IV is a section showing part of the mold and showing the core before the metal is poured. Fig. V is a bottom view of the core. Fig. VI is a side view of the core.

Referring to the drawings, 1 represents the mold, and 2 the core.

3 is the cavity in the mold formed by the pattern (not shown) and which is occupied by the casting when the metal is poured.

4 is the casting.

5 represents the gate and runner-sprue that is knocked off when the casting is removed from the mold, the point of separation between the sprue and the casting being indicated at 6, Figs. II and III.

The core 2 has a gate 7 in its vertical portion and runners 8, the latter forming the spider part of the sprue 5. The runners are formed in the bottom of the conical base 2^a of the core, as shown in Figs. IV and VI, and extending from the base 2^a are projections 2^b, that lessen the space between the base of the core and the mold at the points where the runners are located, thereby weakening the contact between the sprue and the casting where the former has to be broken off. The base 2^a is formed with an inclined edge 2^c, above which the projections 2^b overhang.

By this improved method of casting car-wheels the metal is introduced into the mold-cavity from beneath, which is the back of the wheel when cast, so that the points of union between the runner-sprue and the casting are at the back of the wheel, and when the sprue is knocked off the points of fracture cause no objection, as they are not on the face or front of the wheel, the face being thus left perfectly smooth.

I claim as my invention—

A mold for casting car-wheels comprising a central core 2, formed with a vertical portion having a gate 7, and with a conical base 2^a having runners 8, and projections 2^b located over the runners, extending beyond and overhanging the wall of the base to lessen the space between the base of the core and the mold and thus decrease the thickness of the sprue connections between the sprue and the casting whereby the said sprue connections are weakened; substantially as described.

JAMES CONNOLLY.

In presence of—
E. S. KNIGHT,
STANLEY STONER.