No. 749,556. PATENTED JAN. 12, 1904.

T. D. HARRIS.

MOLD FOR MANUFACTURING WHEELBARROW WHEELS.

APPLICATION FILED AUG. 29, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

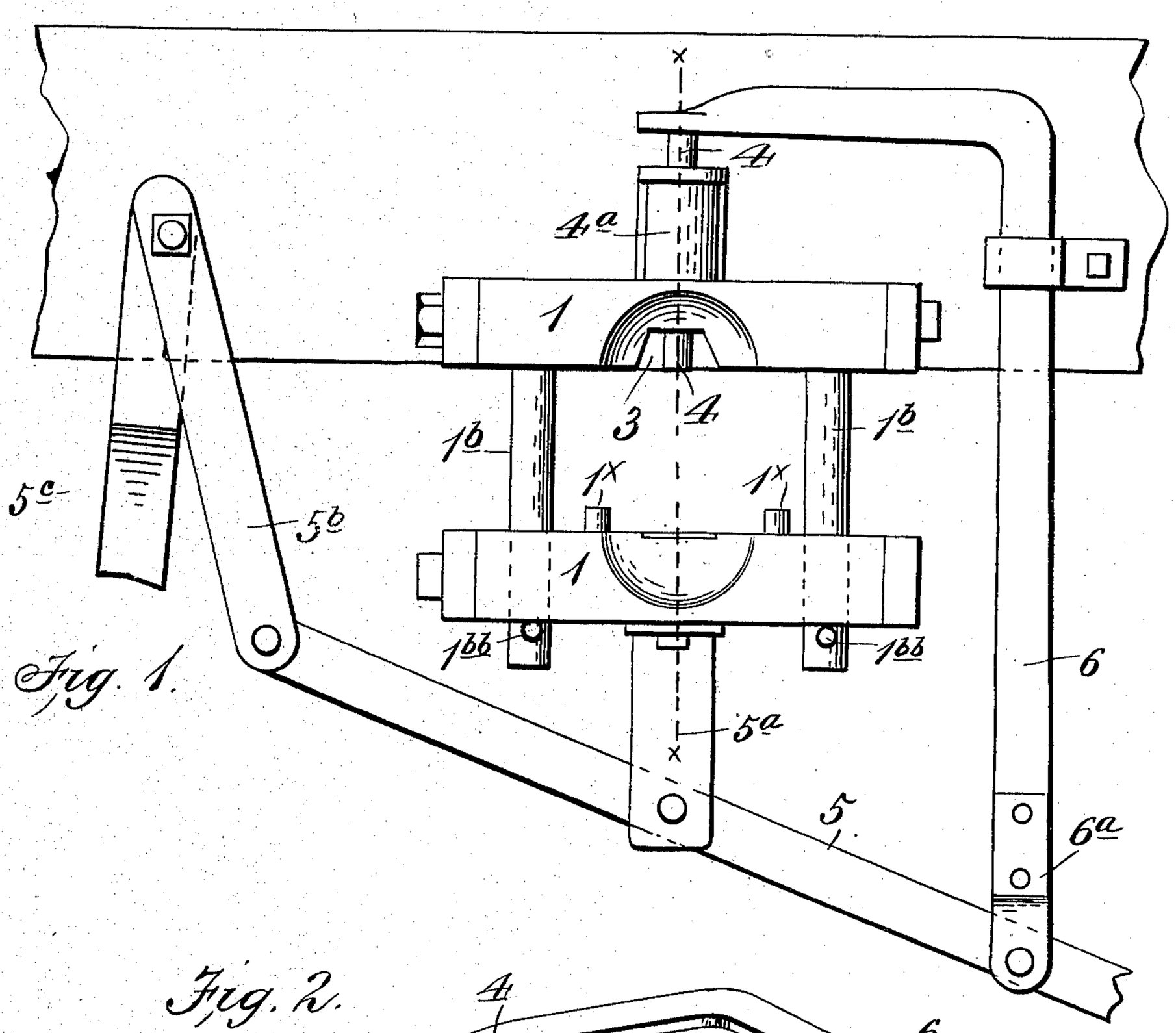

Fig. 1.

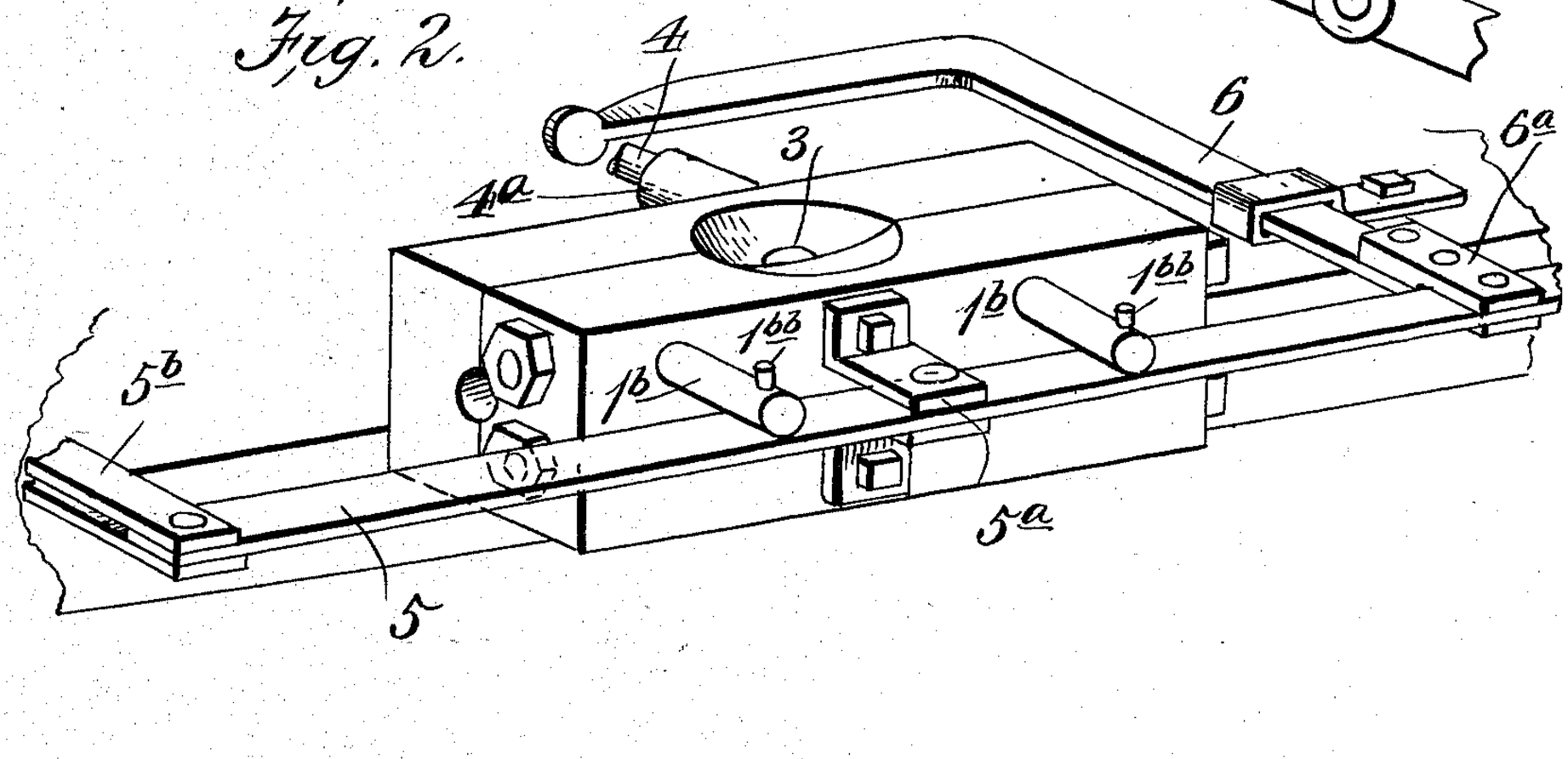

Fig. 2.

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H. B. Jones.

Inventor:
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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

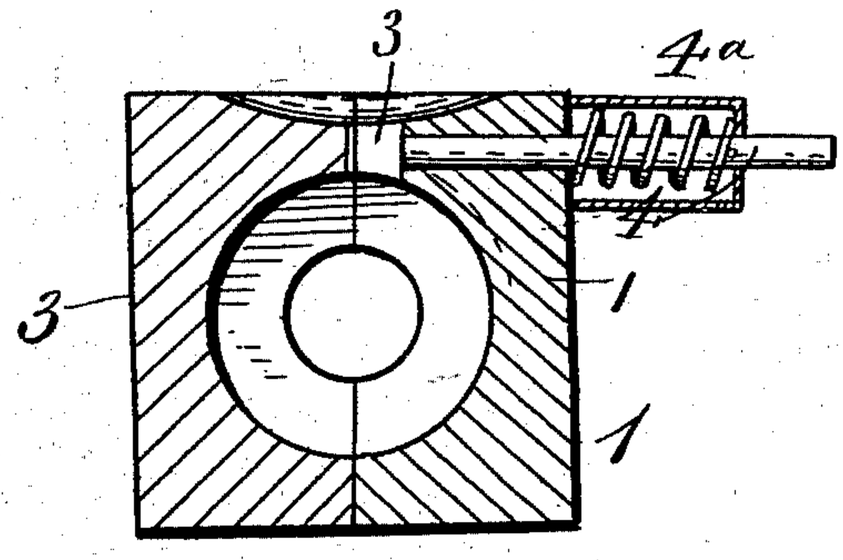


Fig. 4

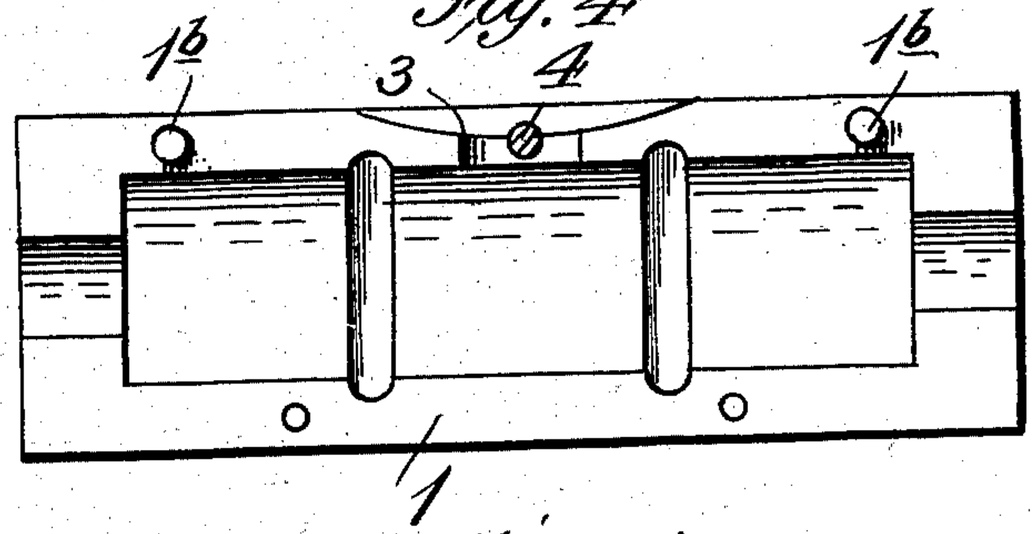
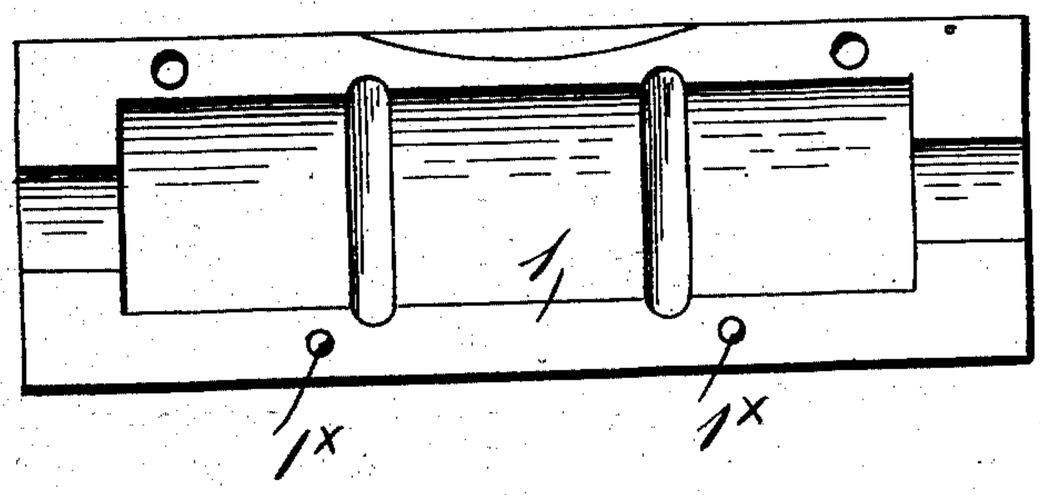


Fig. 5.



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No. 749,556. Patented January 12, 1904.

UNITED STATES PATENT OFFICE.

THOMAS DOW HARRIS, OF ASHBORO, NORTH CAROLINA, ASSIGNOR OF ONE-HALF TO EMMETT LEONIDAS MOFFITT, OF ASHBORO, NORTH CAROLINA.

MOLD FOR MANUFACTURING WHEELBARROW-WHEELS.

SPECIFICATION forming part of Letters Patent No. 749,556, dated January 12, 1904.

Application filed August 29, 1903. Serial No. 171,272. (No model.)

To all whom it may concern:

Be it known that I, THOMAS DOW HARRIS, a citizen of the United States, residing at Ashboro, in the county of Randolph and State of North Carolina, have invented new and useful Improvements in Molds for Manufacturing Wheelbarrow-Wheels, of which the following is a specification.

My invention relates to certain improvements in the manufacture of wheelbarrow-wheels, more especially molds therefor.

It has for its object chiefly to simplify construction, expedite the operation, and to provide for quickly and effectively ejecting or dislodging the casting.

Said invention consists of a mold of peculiar construction substantially as hereinafter more fully disclosed, and specifically pointed out by the claims concluding the following description.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a plan view thereof in open position. Fig. 2 is a perspective view of the same in closed position. Fig. 3 is a central transverse section produced on the line *x x* of Fig. 1. Fig. 4 is an inside view of one mold-section. Fig. 5 is a similar view of the companion mold-section.

In the carrying out of my invention I provide a two-part or sectional mold 1 1, suitably adapted to receive the core to produce the desired casting, the same being for the purposes of this invention a tubular cylindric bearing. Said mold has its sections or parts, one of which is stationary and the other movable or sliding, adapted to be brought compactly together, one part or section having studs or guides 1^b 1^b passing transversely through its companion section and extending some distance beyond the latter when said sections are in contact, as when ready for the casting operation, said studs or projections having pins or stops 1^{bb} near their outer ends to limit the movement of the sliding section. Said mold-sections are provided with vertical meeting recesses or depressions, with upper outwardly-flared enlargements, which recesses and enlargement constitute the "gate" or sprue 3 for the pouring of the molten metal thereinto. One mold-section has suitably incased or housed in connection therewith, as at 4^a, a spring-retractible plunger 4, movable within a passage intersecting the pouring opening or gate, said plunger, therefore, normally being withdrawn or retracted from said gate or sprue, the means for actuating which and when done will be presently referred to. The other or sliding mold-section has suitably connected thereto, as at 5^a, a hand-actuated lever 5, itself suitably connected, preferably, by a pivoted link 5^b to a base-piece bearing the fixed or stationary mold-section, said link being limited in its movement by an offset or angular arm 5^c, also secured to said base-piece. To said lever 5 is connected intermediately of its handle and its point of connection with the part 5^a an angular bar or arm 6, one end of which is linked, as at 6^a, to said lever 5 and having its other end opposed to the plunger 4. Thus it will be seen that as said lever 5 is moved to separate the mold-sections, as when the casting is removed after the casting operation, the arm 6 is caused to simultaneously move the plunger 4 into the plane of the gate or sprue 3, and thus eject the neck or elongation of the bearing-casting from said sprue or gate, accordingly effecting the dislodgment of said bearing-casting from the stationary mold-section. The movable mold-section has preferably dowel pins or projections $1^\times$ entering registering apertures in the stationary mold-section to aid in bringing and retaining the mold-sections in true alinement. The core being in position in the mold-sections and the latter closed and the molten metal poured into the sprue or gate, the same filling the mold, the result will be productive of a bearing-casting of an outline or contour agreeable thereto. Thus it will be observed that the casting operation is quickly performed by the use of my mold and the casting ejected or removed from said mold with facility and expedition, while the mold is simple in construction, easily operated, and can be manufactured at the minimum cost.

I do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of my invention.

It is apparent that the operative parts may be actuated by other power than as described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A mold of the character described, comprising duplicate members, a spring-retracted plunger arranged to enter the "gate" or sprue, a lever suitably pivoted in position and connected to the movable member and carrying an arm adapted to actuate said plunger.

2. A mold of the character described, comprising duplicate members, one member having a spring-retracted plunger arranged to enter the "gate" or sprue, means for housing the means for automatically retracting said plunger, a hand-lever suitably pivoted in position and connected to the movable member, and an arm connected to said hand-lever and adapted to actuate said plunger.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS DOW HARRIS.

Witnesses:

SAMUEL FRANKLIN PHILLIPS,

ELIJAH MOFFITT.