

No. 658,555.

Patented Sept. 25, 1900.

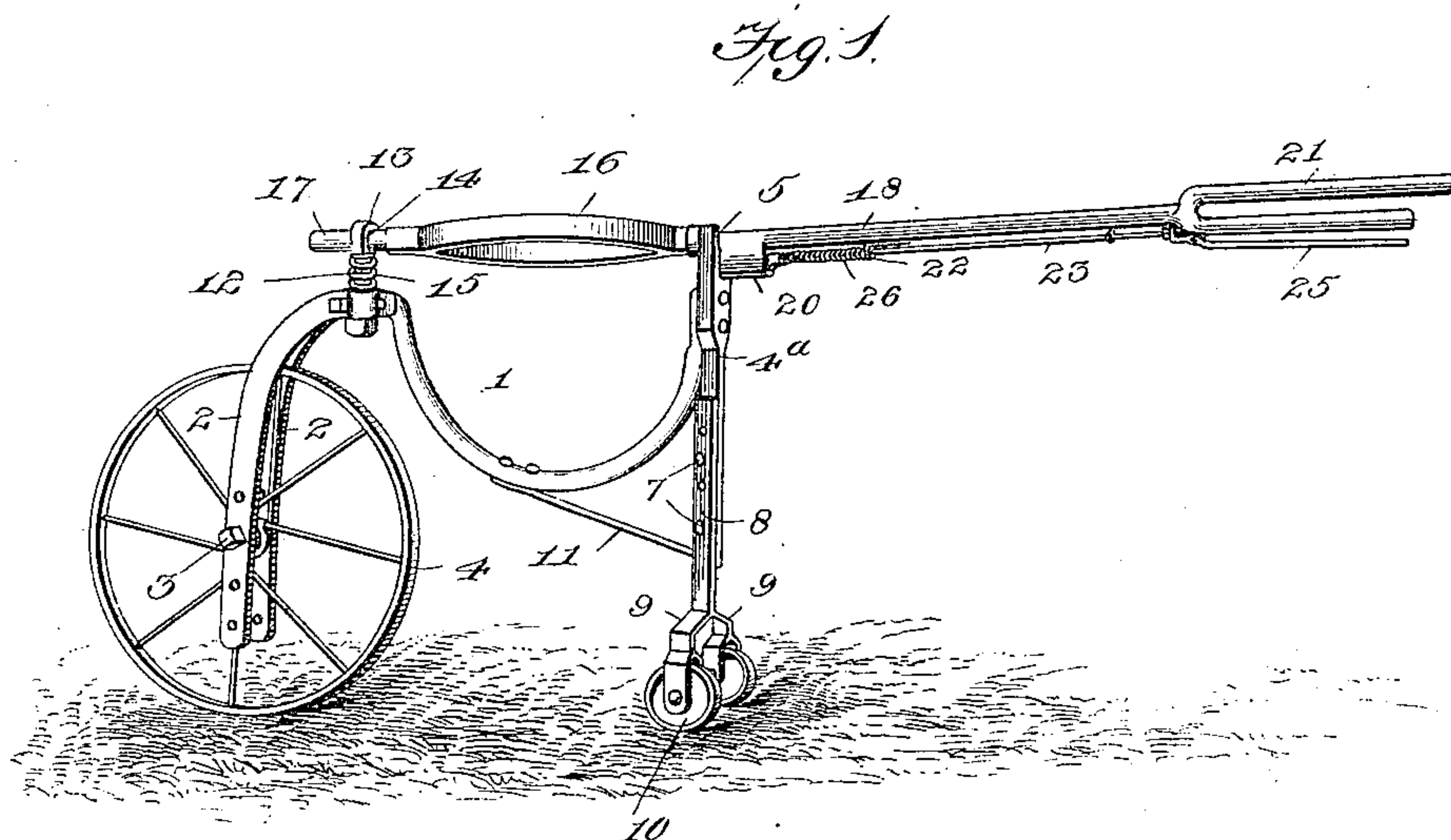
S. R. PERRY.

DEVICE FOR TRANSPORTING MOLTEN METAL.

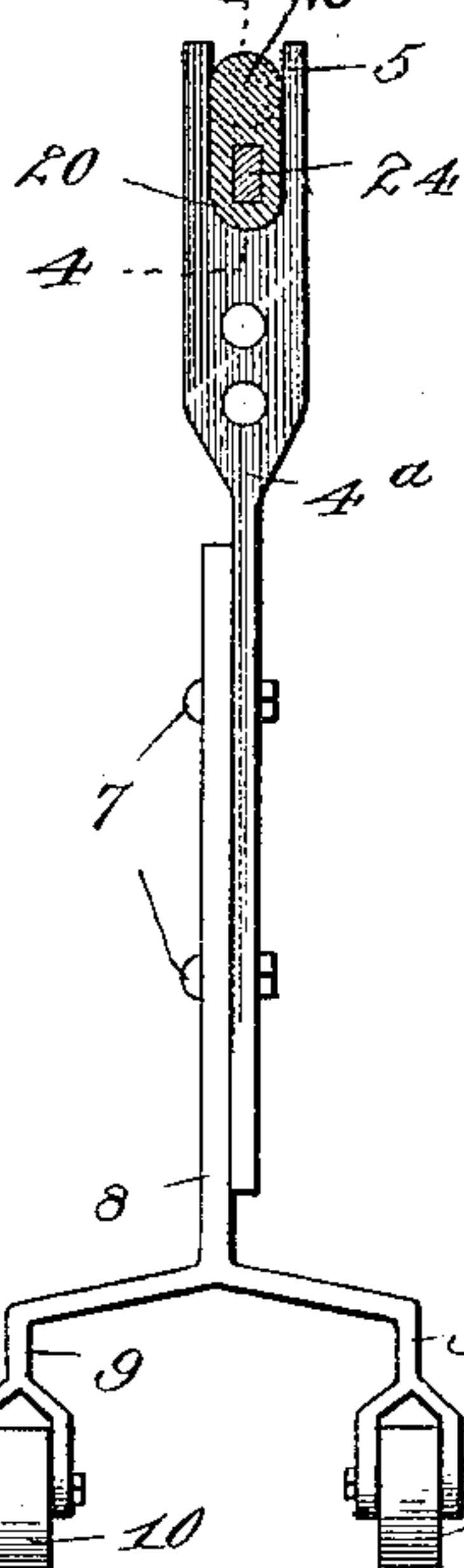
(Application filed Dec. 2, 1899.)

(No Model.)

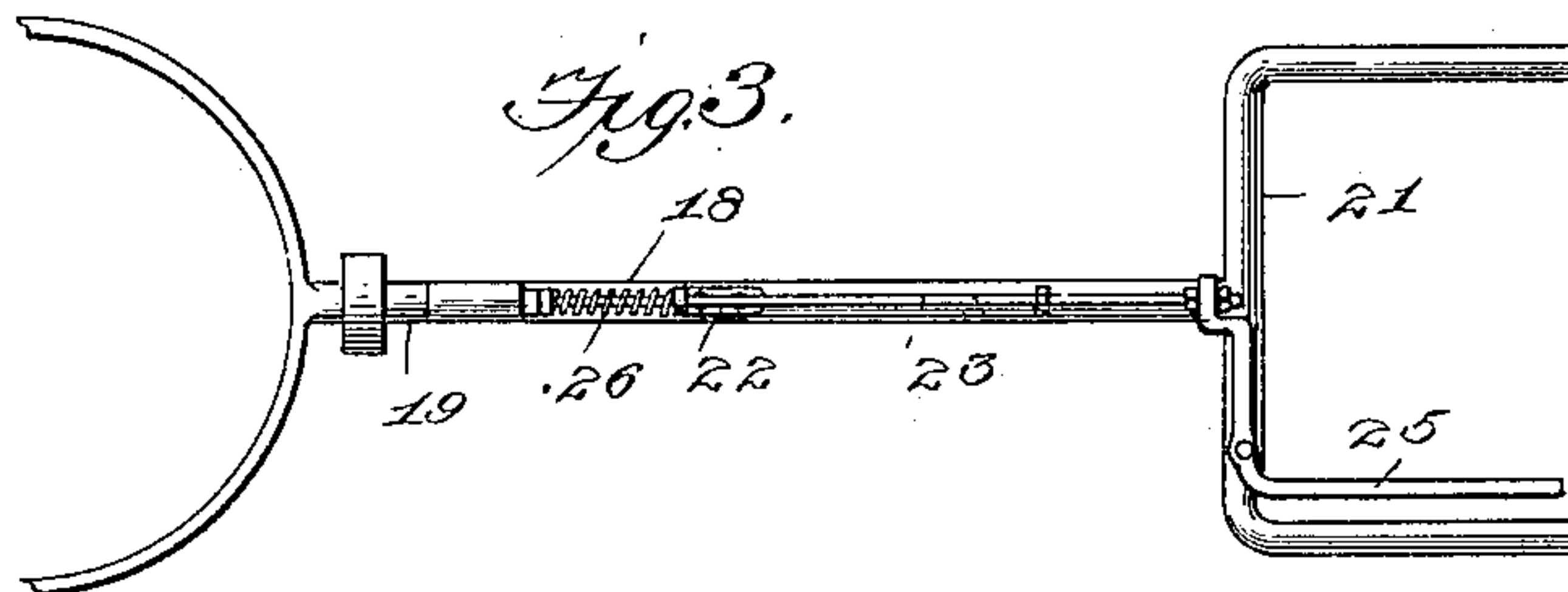
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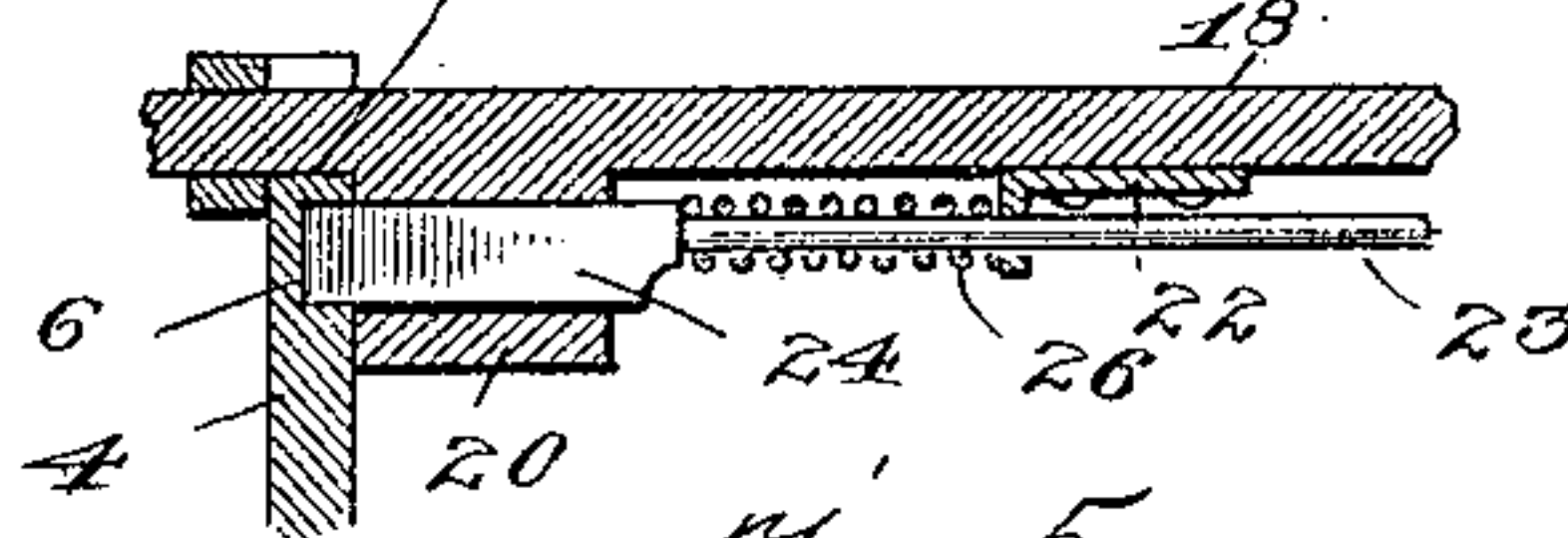
*Fig. 2.*



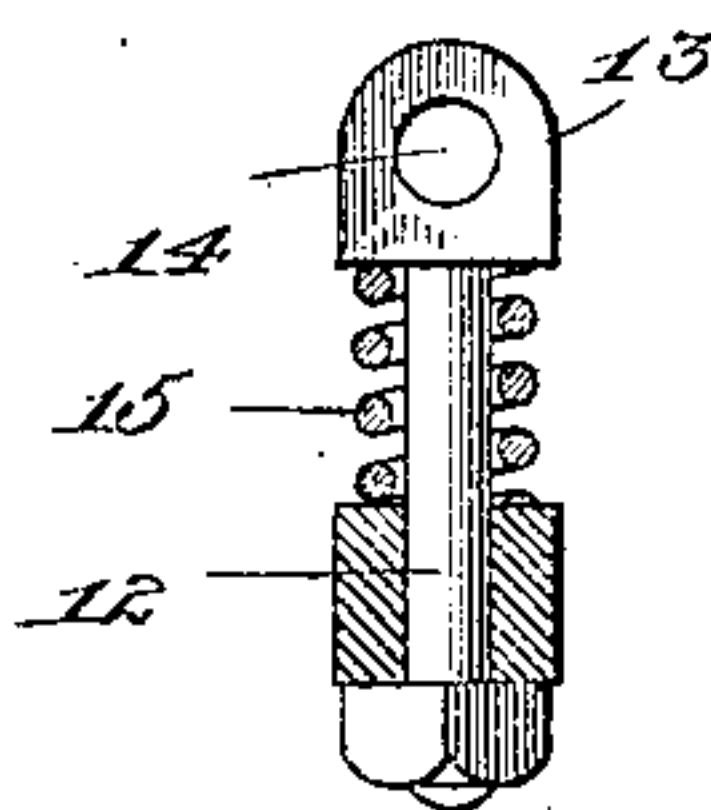
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses

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Fig. 6.

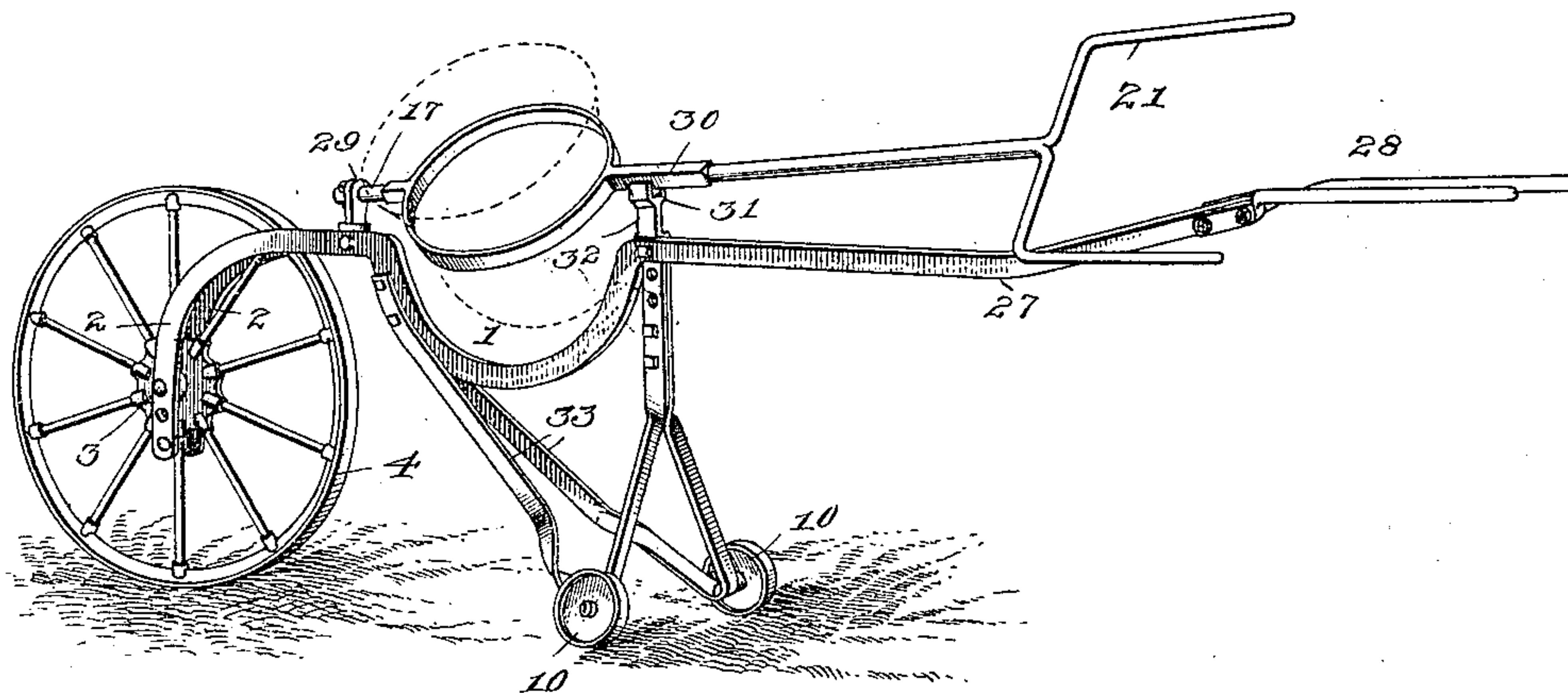


Fig. 7.

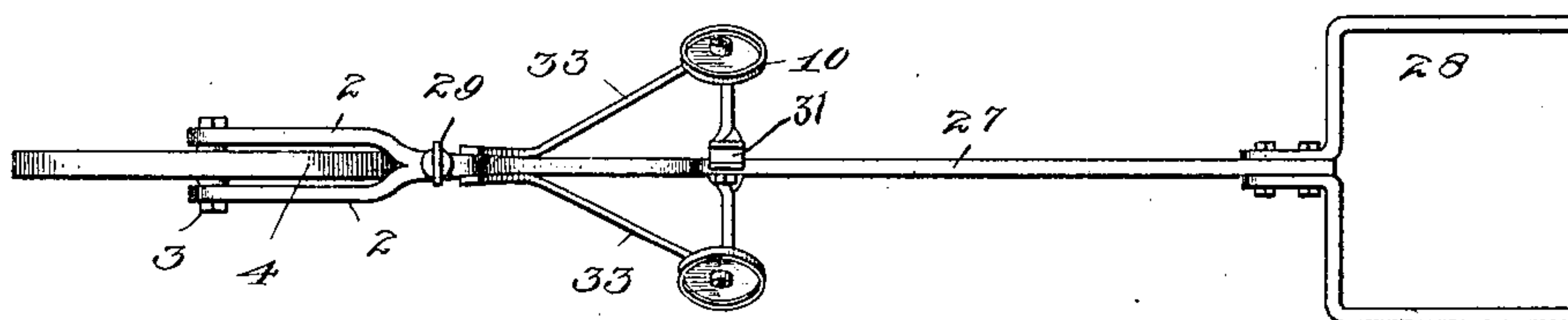


Fig. 8.

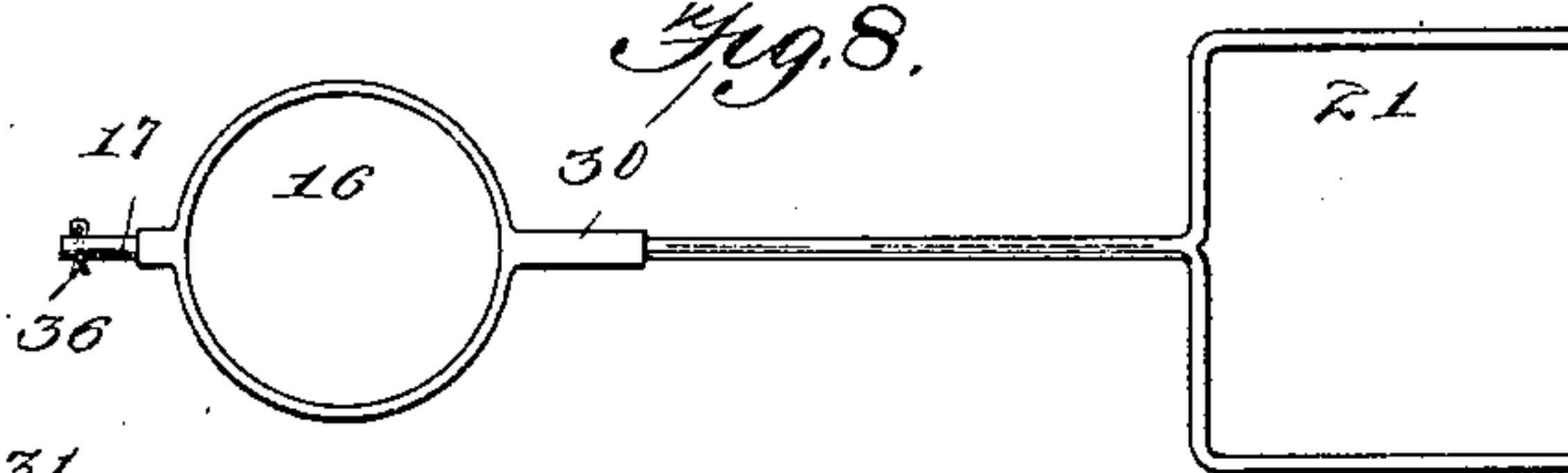


Fig. 9.

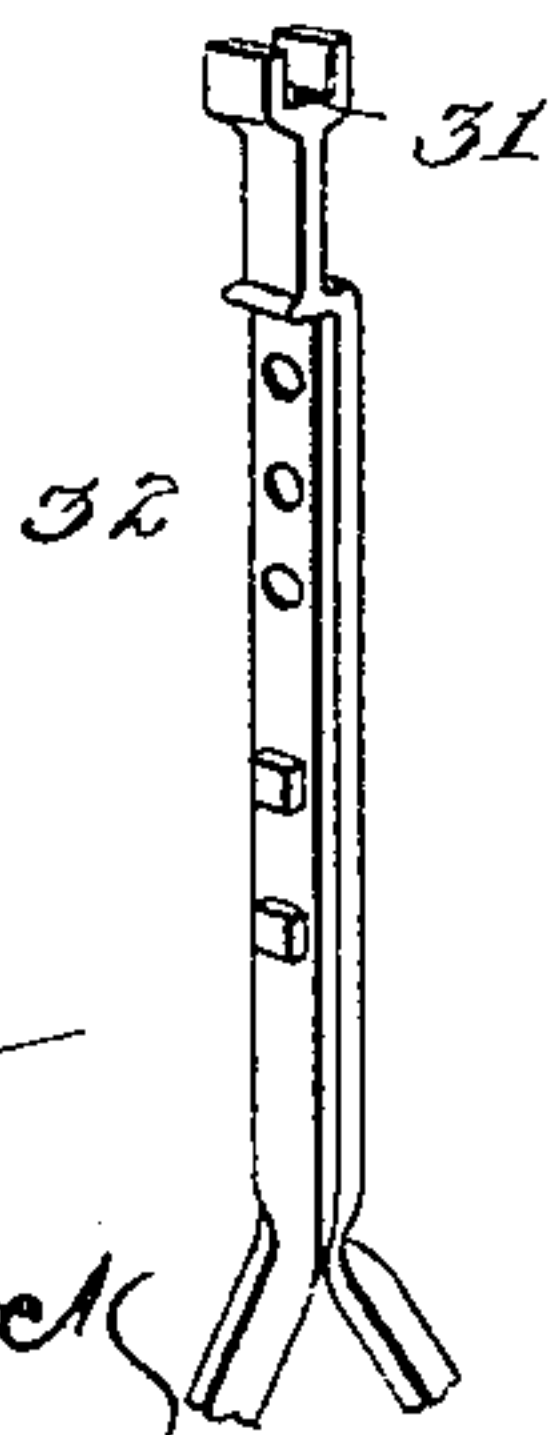
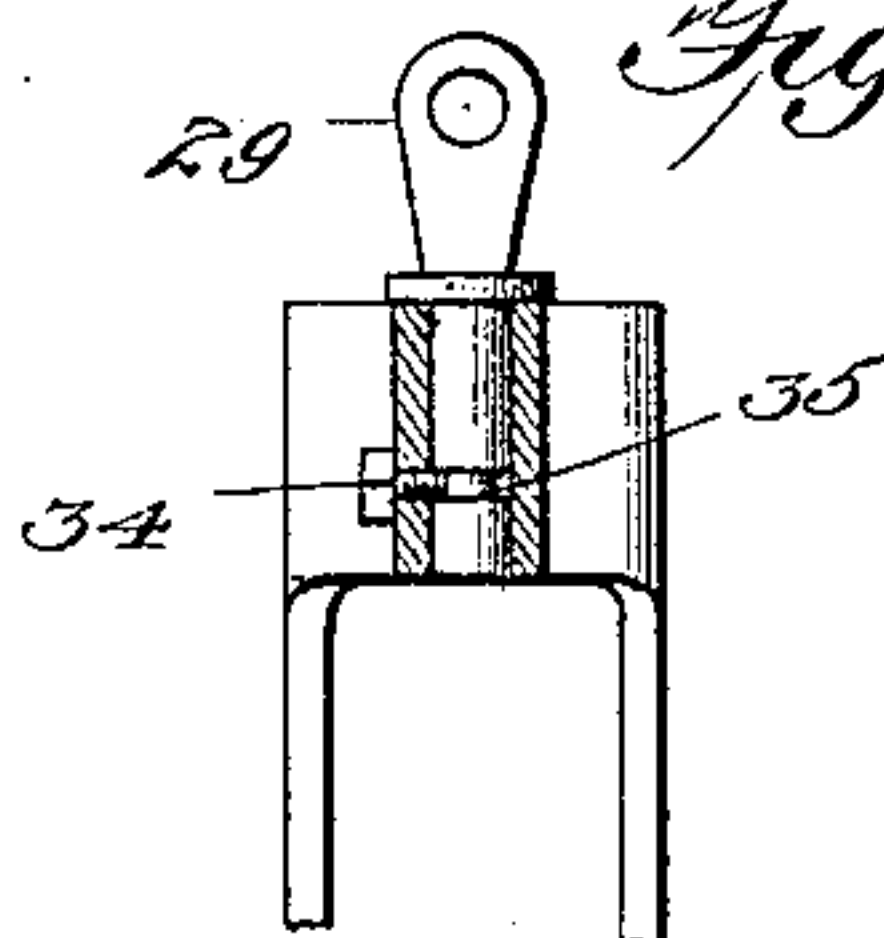


Fig. 10.



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# UNITED STATES PATENT OFFICE.

SAMUEL R. PERRY, OF JEFFERSONVILLE, INDIANA.

## DEVICE FOR TRANSPORTING MOLTEN METAL.

SPECIFICATION forming part of Letters Patent No. 658,555, dated September 25, 1900.

Application filed December 2, 1899. Serial No. 739,010. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL R. PERRY, a citizen of the United States, residing at Jeffersonville, in the county of Clark and State of Indiana, have invented a new and useful Device for Transporting Molten Metal, of which the following is a specification.

My invention is in the nature of a barrow or truck upon which to mount ladles for molten metal for the purpose of facilitating the transportation thereof from place to place and the pouring of the molten metal therefrom.

The object of the invention is to simplify, lighten, cheapen, and generally improve such devices, whereby when transporting a ladle from place to place it will be rigidly held and all liability of tipping and spilling the metal avoided and whereby when desired the ladle can instantly be disengaged from its locking devices and tipped to pour out the metal.

With this object in view the invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described, and afterward specifically pointed out in the appended claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming a part hereof, in which—

Figure 1 is a perspective view of a barrow constructed in accordance with my invention. Fig. 2 is a vertical transverse sectional view on a plane cutting through the barrow in front of the adjustable leg-support. Fig. 3 is a bottom plan view of the ladle-carrier and handles removed from the barrow, the rear portion being broken away. Fig. 4 is a detail sectional view on the plane indicated by the dotted line 4 4 of Fig. 2. Fig. 5 is a detail view of the elastic bearing for the journal of the ladle-carrier. Fig. 6 is a perspective view of a modified form of barrow. Fig. 7 is a bottom plan view thereof. Fig. 8 is a plan view of the ladle-carrier. Fig. 9 is a perspective view of the adjustable supporting-leg detached from the barrow. Fig. 10 is a detail

sectional view on a vertical plane cutting through the frame in front of the bearing for the journal of the ladle-carrier.

Like numerals of reference mark the same parts wherever they appear in the several figures of the drawings.

Referring to the drawings by numerals, 1 indicates the main frame-bar in the form of the lower half of a vertical circle, the rear end being turned horizontally and rearwardly and having secured to it a yoke or pair of arms 2 2, in any pair of a series of holes in which the axle or pin 3 of a wheel 4 is secured, according to the height at which the frame is to be adjusted. The forward end of the semi-circular frame-bar 1 is secured to an upright leg or support 4<sup>a</sup>, provided with a notch 5 with a curved bottom and a rectangular opening 6. The leg is composed of an upper and lower bar adjustably secured together by means of bolts 7, passing through series of holes in the leg and its lower bar 8, the latter being branched at 9 9 and each branch forked at its lower end to form the bearing for a wheel 10. The main bar or leg is stiffened by a brace 11, connecting it with the frame-bar 1, being riveted or bolted to both parts.

In the junction of bar 1 and yoke-arms 2 is mounted a vertical bolt 12, the head 13 of which is provided with an opening 14, and between the frame and head a spring 15 is coiled around the bolt, normally holding the bolt in its upper position.

The ladle-support, preferably made of a single piece or several pieces of metal welded together, comprises a ring 16, from one side of which projects a journal 17, adapted to engage in opening 14 in head 13 of bolt 12. From the opposite side of the ring projects a bar 18, formed at 19 into a journal to rest in notch-bearing 5 of leg 4, at 20 with a horizontal socket, and at 21 with double handles.

22 indicates an angle-bracket secured to the under side of bar 18, in which is slidably mounted a rod 23, carrying a bolt 24 in socket 20, and a handle 25, elbow-shaped and pivoted to handle 21. A spring 26 is coiled around bar 23 between bolt 24 and bracket 22, thereby normally holding bolt 24 in its outer position and causing it to engage in a



socket in leg 4 when brought opposite said socket. The handle 25 lies substantially parallel with handle 21 in its normal position.

In operation, the parts of the barrow being properly adjusted, a ladle of molten metal is set in the ring 16, when it may be readily transported from place to place, and, when desired, the handle 25 is pressed against the handle 21, which withdraws the bolt 24 from the socket in leg 4, leaving the ladle-support free to be turned in the bearings, (notch 5 and opening 14,) so that by manipulating handles 21 the ladle can be tipped and the molten metal poured out. When the ladle-carrier is tipped back to its level position, the bolt will be automatically thrown into the leg-socket, which will lock the carrier and ladle against accidental tipping.

In the modification shown in Figs. 6 to 10 the main frame-bar 1 is extended at 27 and provided with handles 28 to wheel the barrow, and an upright 29 with opening to receive the journal 17 of the ladle-support, and instead of journal 19 this part is squared at 30 to fit in a rectangular notch 31 in the upper end of a leg 32, thus dispensing with the spring-bolt and its operative means. Leg 32 is formed of two pieces rigidly riveted together and spread like an inverted Y at the bottom. The braces 33 are substantially the same as braces 11. The upright 29 is swiveled and prevented from rising out of its socket by a screw 34, the inner end of which engages in an annular groove 35, as shown in detail in Fig. 10. The journal 17 is held in its bearing in the upright 29 by means of a split key 36.

In the operation of the modified form when the squared bar of the ladle-support is in the rectangular notch of the leg the ladle-support is rigidly held against turning or tipping; but when raised out of the notch the ladle and its support can be tipped freely by means of handles 21 to pour the metal.

While I have specifically described the preferred construction and one modification of my invention, it will be readily understood that many slight changes may be made without departing from the spirit and scope of the invention.

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

1. The combination with a downcurved truck-frame, one end of which is bifurcated and curved downward to form a wheel-support, of a wheel journaled in the bifurcated curved ends, an extensible leg secured to the

frame adjacent to the end of the downward curve farthest from the curved bifurcated ends, a brace from the downcurved portion of the frame to the non-extensible portion of the leg, wheels upon the extensible portion, and a ladle-support pivotally mounted upon the frame, substantially as described.

2. The combination, with a downcurved truck-frame, one end of which is bifurcated and formed into a wheel-support, of a wheel between the bifurcated ends, a vertically-movable pin pivotally mounted in the frame between the curved and the bifurcated portions, the upper end of which is provided with a shouldered perforated head, a spring around the pin between the frame and the shoulder, a leg, and an open rigid bearing at the opposite side of the curve, a ladle-support, comprising a ring, one end of which is provided with a cylindrical journal longitudinally and rotatably mounted in the bearing of the head of the pin and an angular projection resting in the open rigid bearing, and means for locking the angular projection against removal from its bearing, substantially as described.

3. The combination with a truck-frame bar mounted on wheels and bent into depending semicircular form, of a bearing carried by an upright at one end of the bend, a leg supporting the bar at the other end of the bend, having a notch in its upper end with curved bottom and a bolt-socket below the notch, a ladle-supporting ring above the bend carrying two journals engaging in the notch and bearing, a spring-impelled bolt mounted on the ladle-support, handles for manipulating the ring and an elbow-handle pivoted to the handles and connected to the bolt, substantially as described.

4. The combination with a truck-bar bent into depending semicircular form, and extended horizontally at one end of the bend, a yoke secured to the extension and provided with opposite series of holes in its arms, a wheel straddled by the yoke, a pin or axle in the wheel passing through a pair of said holes, a leg secured to the opposite end of the bend and adjustable in height, wheels carried by said leg, and a ladle-supporting ring carried in bearings above the bend, substantially as described.

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Witnesses:

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