W. AIKIN & W. W. DRUMMOND.

Apparatus for Mounting and Transporting Ladle for Molten Metal.

No. 202,321. Patented April 16, 1878.

Fig. 1

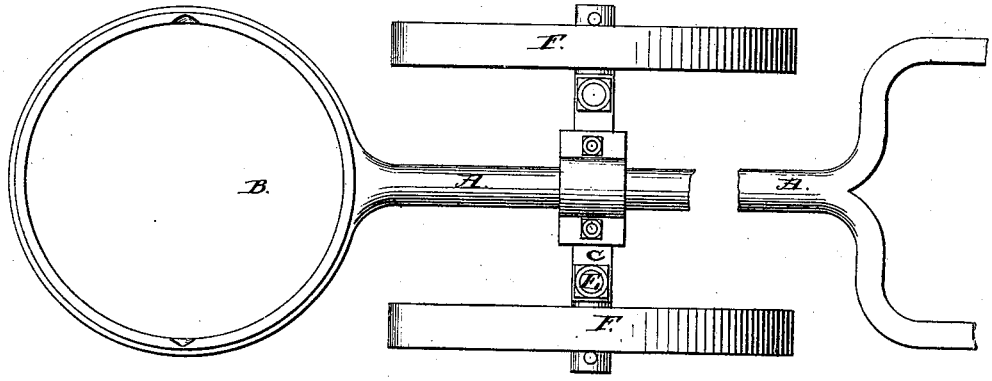


Fig. 2.

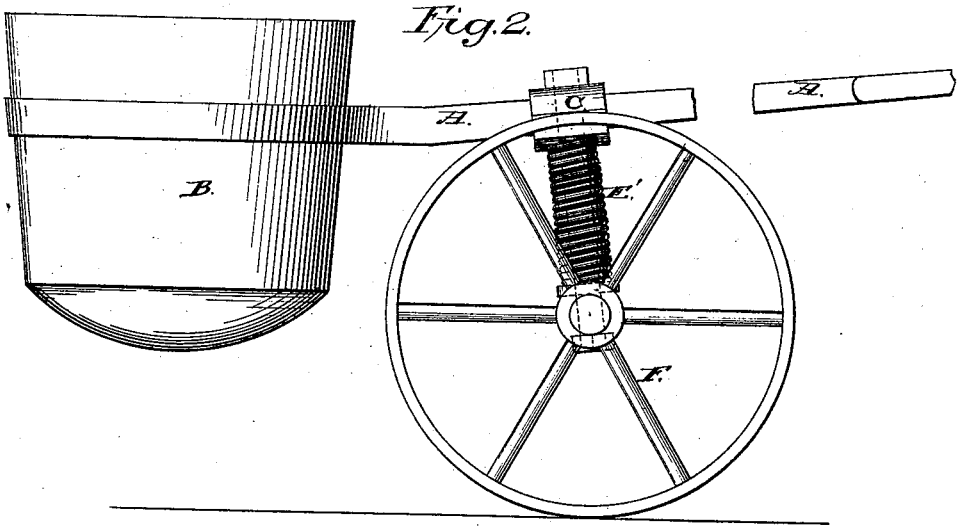
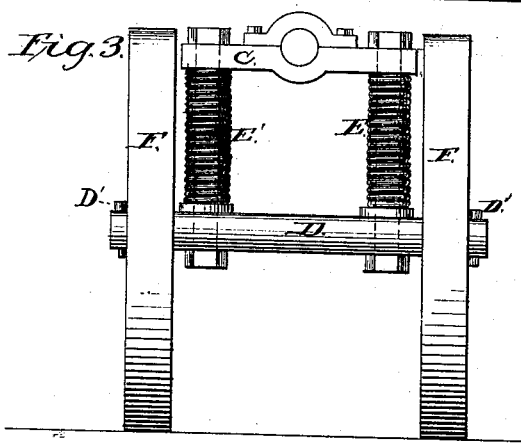


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM AIKIN AND WILLIAM W. DRUMMOND, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN APPARATUS FOR MOUNTING AND TRANSPORTING LADLES FOR MOLTEN METAL.

Specification forming part of Letters Patent No. **202,321**, dated April 16, 1878; application filed February 27, 1878.

To all whom it may concern:

Be it known that we, WILLIAM AIKIN and W. W. DRUMMOND, both of the city of Louisville, in the county of Jefferson and State of Kentucky, have invented an Improvement in an Apparatus for Mounting and Transporting a Ladle; and we do hereby declare that the following is a clear, full, and exact description thereof, reference being had to the accompanying drawing, making part of this specification.

The object of this invention is to supply a better method of carrying and handling molten metal; and consists of a ladle being mounted and carried on wheels, as hereinafter described and claimed, thereby saving the laborious and costly manner of carrying molten metal in hand-ladles.

In the annexed drawing, Figure 1 is a plan view, showing the top of ladle. Fig. 2 is a plan vertical section of same, and Fig. 3 is a vertical section in line of axle and cross-head.

The same letters indicate identical parts in each figure.

A is the ladle-shank, which is made with a journal in the body, a band on one end to receive the ladle, and a forked handle on the other. B is the ladle, which holds the molten metal, and which fits in the band end of shank A. C is the cross-head, made with a journal-bearing and cover, in which bearing the shank-journal A works. D is the axle, to which is attached uprights E. These uprights pass up through the cross-head C, and on top of these uprights is a nut or some similar fastening.

E′ are springs, which work over the uprights E to sustain the weight resting on cross-head C. D′ are pins in the ends of axle D, for the purpose of holding the wheels F in place. F are the wheels, which fit loosely on axle D, and are used to carry the ladle.

The operation is as follows: The molds having been made and placed on the floor in rows wide enough apart to allow the wheeled ladle to pass up between them, the ladle is filled with the molten metal, the weight of which is then resting on the cross-head C, which bears on the springs E′, which gives the proper elasticity for the moving of the ladle over uneven surfaces without spilling the molten metal. The ladle being filled with metal causes the depression of the springs enough to bring the lip of the ladle down close to the mold. As the metal is poured from the ladle into the different molds the springs are partly relieved. The ladle is thus kept in the proper elevation to pour all the metal into the molds. The cross-head C, axle D, and wheels F, acting as a pivot and swivel, allow the operator to bring the lip of the ladle directly over the sprue-hole to fill the mold.

A counter-balance may be attached to the shank when found desirable.

The springs E′ may be dispensed with and a bent axle or rigid uprights used, if desired.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

A ladle-shank having a journal on its body, and a cross-head with bearing to receive the journal, in combination with wheels, axle, uprights, and springs, as herein described, whereby the ladle is made self-adjusting.

WILLIAM AIKIN.
WILLIAM W. DRUMMOND.

Witnesses:
WM. T. DRUMMOND,
J. J. MCDONALD.