

(No Model.)

J. R. CUMMINGS.
STEREOTYPER'S CASTING APPARATUS.

No. 457,896.

Patented Aug. 18, 1891.

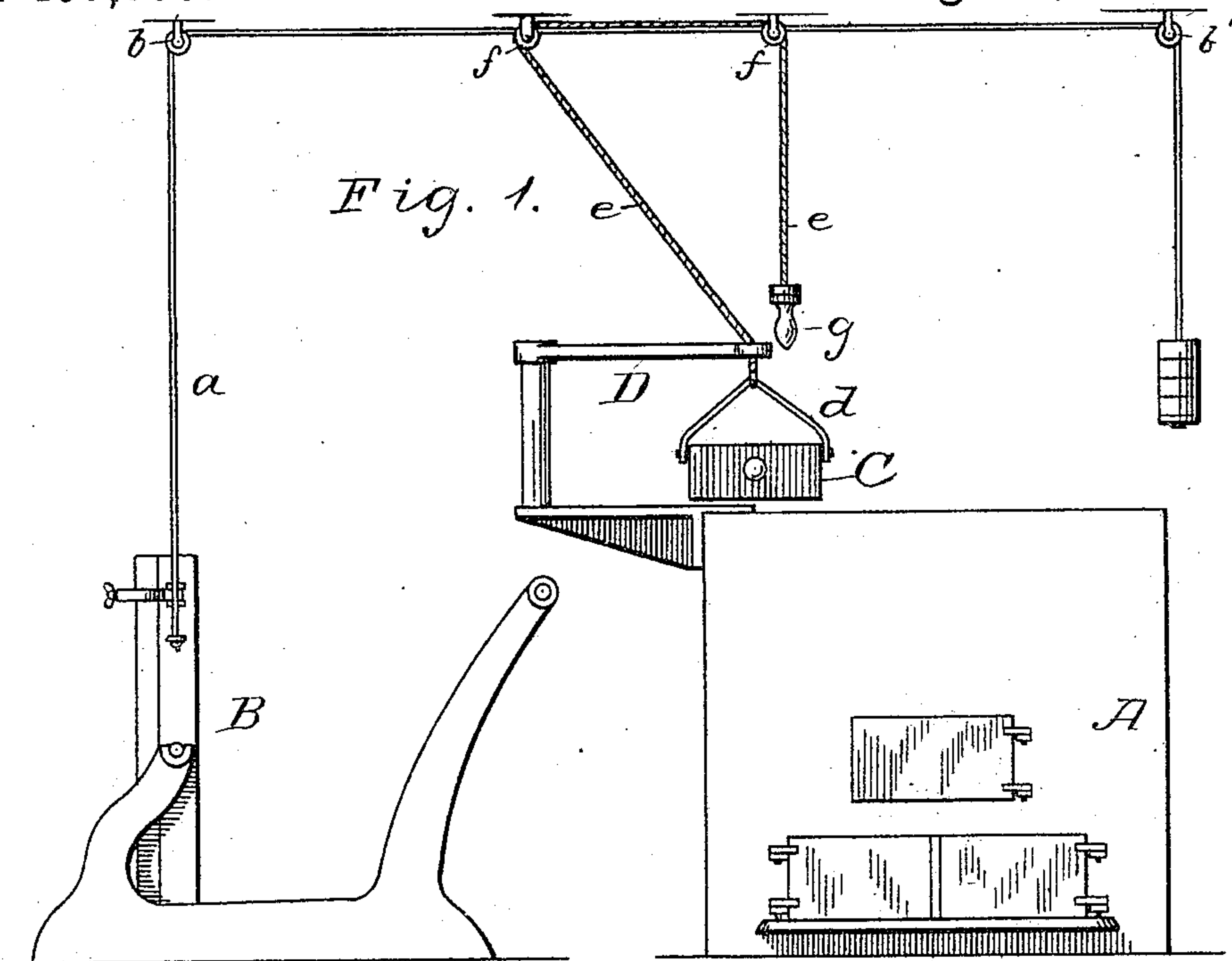
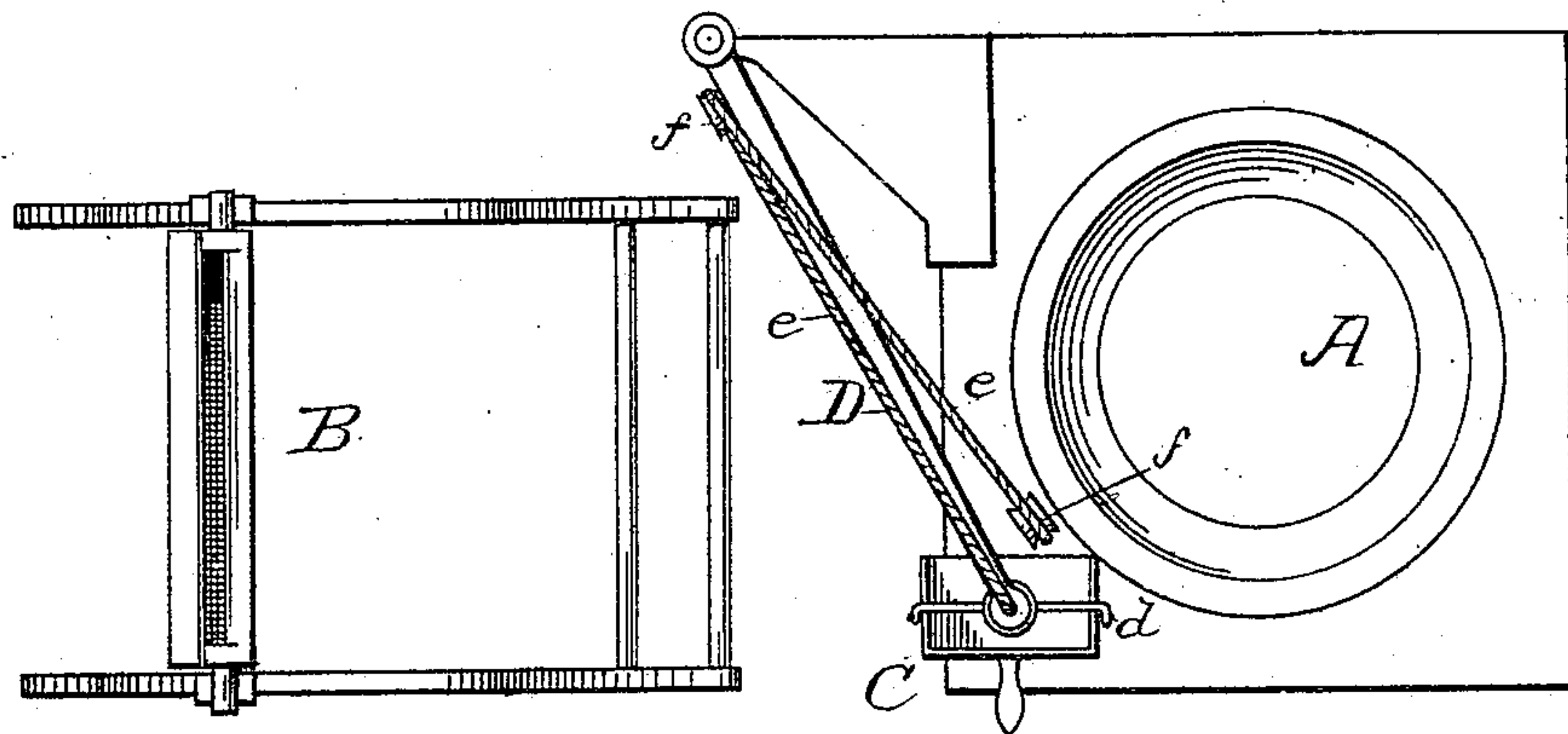


Fig. 2.



Witnesses

Rodney K. Pratt
E. J. Allard

John Raymond Cummings
Inventor

By his Attorney

Frank D. Thomason

UNITED STATES PATENT OFFICE.

JOHN RAYMOND CUMMINGS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE
AMERICAN PRESS ASSOCIATION, OF SAME PLACE.

STEREOTYPER'S CASTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 457,896, dated August 18, 1891.

Application filed December 31, 1889. Serial No. 335,542. (No model.)

To all whom it may concern:

Be it known that I, JOHN RAYMOND CUMMINGS, of Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Stereotypers' Casting Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is to facilitate the pouring of the molten stereotype metal into the mold so as to enable one man to do the work of two men, and so as to greatly facilitate the work of casting, substantially as hereinafter fully described, and as illustrated in the drawings, in which—

Figure 1 is a side elevation of my invention. Fig. 2 is a plan view thereof.

Referring to the drawings, A represents a furnace with a molten-lead pot in its top, and B represents a stereotype-casting apparatus which is placed alongside of said furnace a suitable distance away.

The stereotype apparatus consists of a box and cover, (corresponding to the cope and drag, respectively, of an ordinary mold,) which are oscillated from a horizontal to a vertical position after the matrix is placed therein preparatory to casting. In order for one man to raise said casting from the horizontal to the vertical position without the expenditure of much time and strength I counterbalance the same by means of the ropes *a*, which I attach to the box of the same, and from thence pass up over the pulleys *b b'*, and have their free ends provided with a sufficient weight *c*.

C represents a large ladle, which is of such capacity as to hold sufficient metal to make one casting. This ladle is provided with a handle by which the operator controls it, and is also provided with a bail *d*, to which is attached a rope *e*, which passes up through a suitable pulley *f*, and is provided at its free end, which hangs down to within easy reach of the operator, where it is weighted, with a suitable hand-grasp *g*. The rope *e*, after it leaves the bail of the ladle, passes up through a suitable opening in the revoluble guide-arm D, which is on a plane sufficiently above

the top of the furnace to permit of the ladle passing over the furnace, and which is of such a length and has its vertical post so located that the path described by its end will move over both the lead-pot of the furnace and the casting apparatus.

The operation of my invention is substantially as follows: The casting apparatus having been previously prepared and oscillated to a vertical position, the guide-arm is turned so as to bring the ladle over the lead-pot of the furnace. The ladle is then dipped into the same and filled and lifted out of the same by slightly pulling on the hand-grasps *g* of rope *e* until the bail of the ladle by striking against the end of the crane prevents further lifting thereof. The operator grasping the handle of the ladle with one hand pushes it toward the casting apparatus, the guide-arm through which its suspending-rope *e* passes guiding its course infallibly thereto, whereupon its contents are poured into the mold, and it is returned to or toward the furnace.

The perfect control which the operator has over the ladle by my improvements, which before required two men, and was by them often of necessity handled awkwardly, greatly facilitates and materially decreases the expense of casting stereotypes.

What I claim is—

The combination, with a stereotyper's furnace, a bracket projecting therefrom having a post arising from it, and a revoluble guide-arm pivoted at one end to said post and of such length that it can be moved over the pot in the top of said furnace, of a ladle C, a rope suspending the same, and pulleys *f f*, said rope after it leaves said ladle passing up through a suitable opening in the end of said guide-arm, from thence independently of said arm to a point above and about in vertical alignment with the pivotal center thereof, and after passing over said pulleys having its weighted end hanging down contiguous to said furnace, as set forth.

JOHN RAYMOND CUMMINGS.

Witnesses:

FRANK D. THOMASON,
J. S. MCCLURE.