

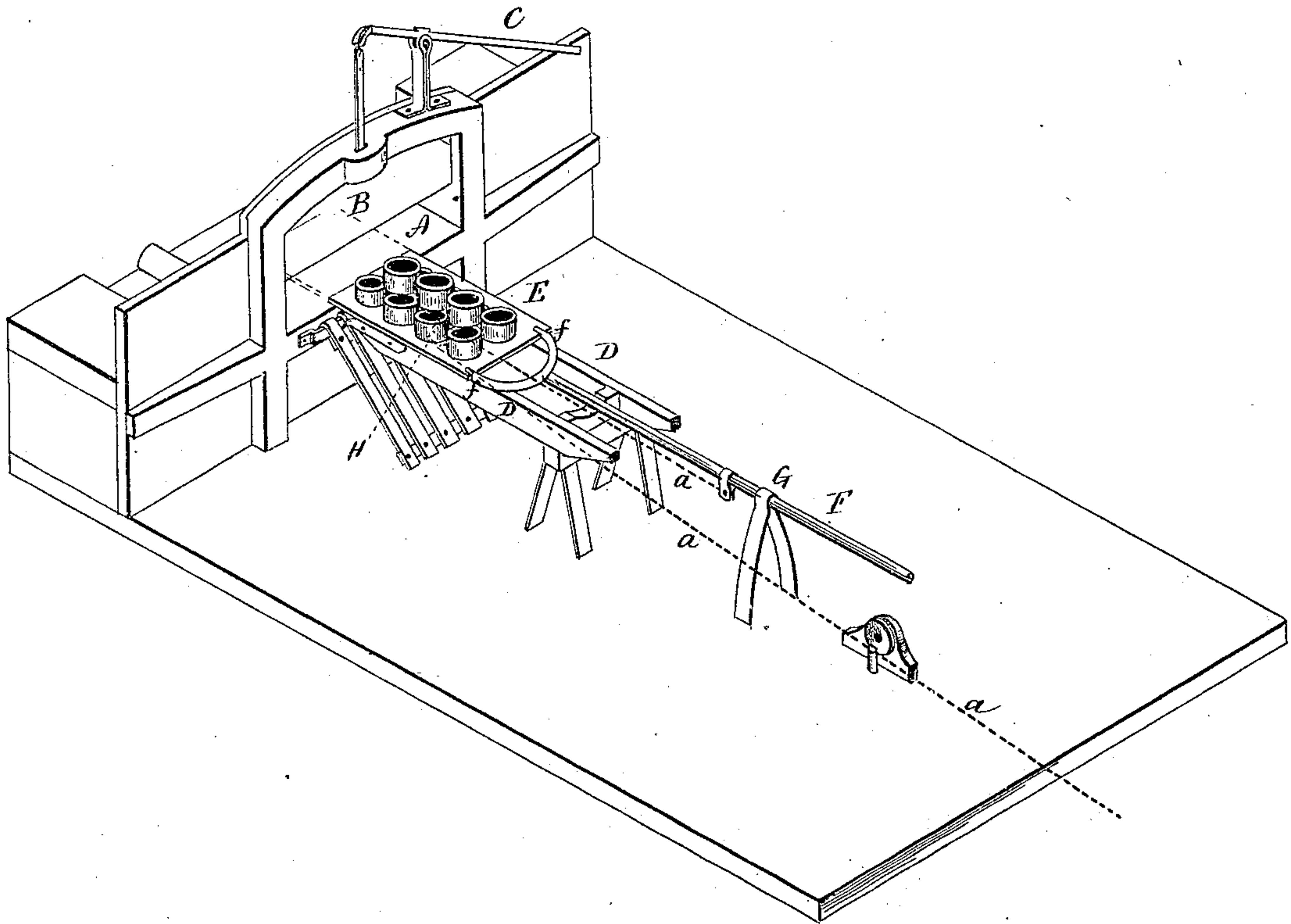
(No Model.)

G. P. CHAPMAN.

Device for Introducing Pans into Muffle Furnaces.

No. 240,965.

Patented May 3, 1881.



Witnesses.

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L. S. Rogers

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# UNITED STATES PATENT OFFICE.

GEORGE P. CHAPMAN, OF WATERBURY, CONNECTICUT, ASSIGNOR OF ONE-HALF TO THE WATERBURY BRASS COMPANY, OF SAME PLACE.

## DEVICE FOR INTRODUCING PANS INTO MUFFLE-FURNACES.

SPECIFICATION forming part of Letters Patent No. 240,965, dated May 3, 1881.

Application filed February 4, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE P. CHAPMAN, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Devices for Introducing Pans into Muffle-Furnaces; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents a perspective view.

This invention relates to a device for introducing loaded pans into muffle-furnaces. The heat at the mouth of the muffle, when open, is so great that the workman cannot approach so near as to directly introduce the pans. The usual method of doing this work has been to employ a number of men with long poles or rods, which they placed against the pan and pushed it forward into the muffle. The operation requires considerable power, because the pans, when charged, are very heavy.

The object of this invention is to avoid the employment of so many men and make the introduction easier; and the invention consists in the construction as hereinafter described, and particularly recited in the claims.

A is the mouth of the muffle, the door B represented as raised by means of the usual lever C attached thereto.

Extending from the mouth and flush with the floor is a pair of skids or support, D, on which the pan E is placed. The door of the muffle being closed, the metal or articles to be introduced to the muffle are placed on the pans, as shown in the drawing. After the pan has been thus charged the workman takes in hand the rod F, applies the forked end *f f* to the pan, the rod being of the usual length, so that the workman may stand at some distance

from the furnace-mouth. The rod is here represented as resting in a support, G; but such a support is not required, the operator being able to hold the rod.

Attached to the rod F is a chain or cord, *a*, extending toward the muffle. It passes over a fixed pulley, H, and returns back from the muffle to a windlass or other mechanism, upon which the chain may be wound. The door is raised and the power applied to draw upon the chain. The pan is forced forward into the muffle, guided by the workman through the rod F. The rod may then be disengaged, and the door closed in the usual manner.

The rods, as usually considered, are made with a single point of connection with the pans. By employing a bifurcated or forked end on the rod a double connection is made and the guiding more readily performed.

It will be understood that the pans must be moved into the furnace to a considerable distance, which is the reason for attaching the chain so far back upon the rod. By this arrangement a single man will introduce the pans with greater facility than several men by the usual method.

I claim—

1. The combination of the support for the pan flush with the floor of the furnace, the fixed pulley H, and guiding-rod F, and the chain or cord attached to the rod at a distance from the pan, substantially as described.

2. The combination of the support for the pan flush with the floor of the furnace, the fixed pulley H, and guiding-rod F, bifurcated to form two points of connection with the pan, substantially as described.

GEORGE P. CHAPMAN.

Witnesses:

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