(No Model.)

E. ROOMS.

MACHINE FOR MAKING RETORTS, &c.

No. 480,138. Patented Aug. 2, 1892.

Fig. 1.

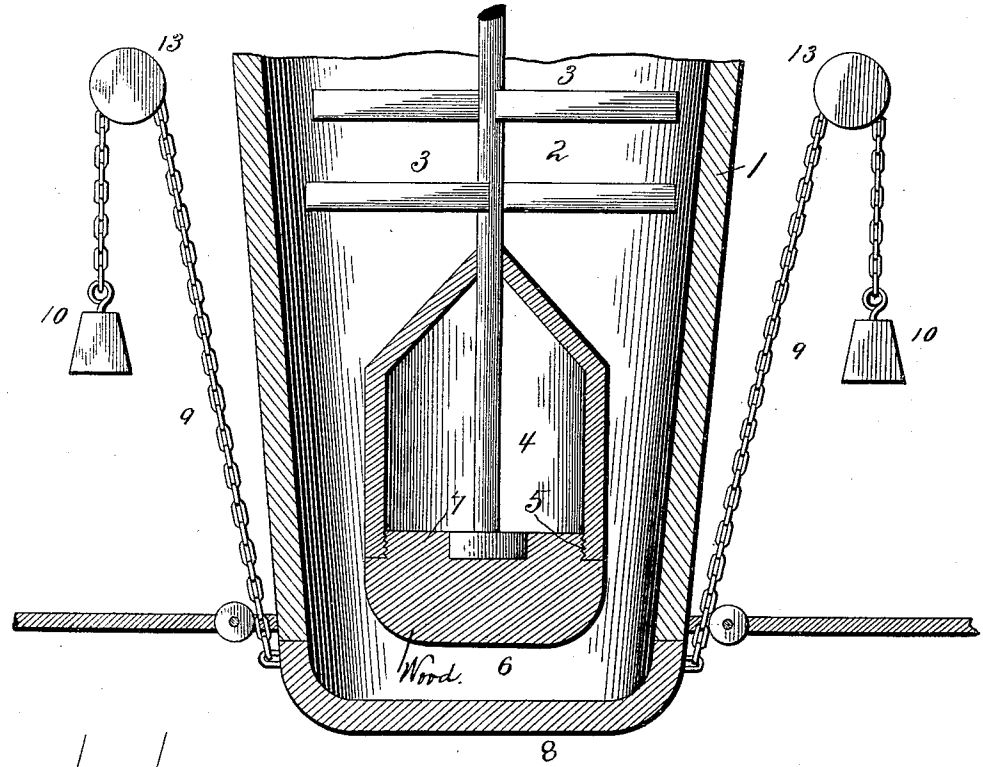
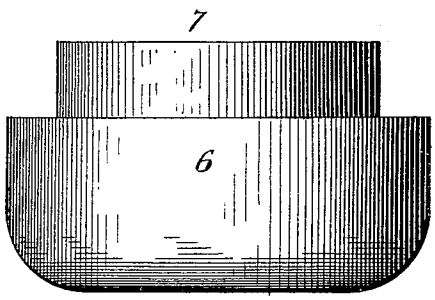


Fig. 2.



WITNESSES:
F. L. Curaud.
W. L. Coombs

INVENTOR:
Eug. Rooms,
by Louis Bagger & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

EVO ROOMS, OF NEVADA, MISSOURI.

MACHINE FOR MAKING RETORTS, &c.

SPECIFICATION forming part of Letters Patent No. 480,138, dated August 2, 1892.

Application filed April 17, 1891. Serial No. 389,359. (No model.)

To all whom it may concern:

Be it known that I, EVO ROOMS, a citizen of the United States, and a resident of Nevada, in the county of Vernon and State of Missouri, have invented certain new and useful Improvements in Machines for Making Retorts, &c.; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in machines for making retorts, crucibles, and other similar objects from clay or other refractory material.

In machines of ordinary construction for forming crucibles and retorts from clay for metallurgical and other purposes great difficulty is experienced in forming the bottoms thereof, such articles usually being made in the form of open-ended cylinders and the bottoms subsequently formed by hand.

The object of the invention is to provide a machine by which a crucible or other similar object may be made complete, thus rendering any subsequent operations for forming the bottoms unnecessary.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a central vertical section of a portion of a machine for making crucibles, retorts, and other similar objects embodying my invention. Fig. 2 is a detail view of the wooden head.

In the said drawings the reference-numeral 1 designates an open-ended drum or mold, in which is located a shaft 2, having a number of radial blades 3. This shaft is rotated by any suitable means such as is ordinarily employed in this class of machines. To the lower end of this shaft is connected an iron or other metallic shell 4, having interior screw-threads 5 at its lower end. Within this shell is inserted a wooden head 6, these parts constituting the mold-core. This head at its upper end is cut away, forming an upwardly-projecting portion 7, smaller in diameter than the body thereof. This portion 7 is of a size to fit tightly within the open end of the shell, being inserted by screwing it therein, the screw-threads of the shell cutting into the wood, and thereby forming corresponding threads. The lower end of this head is rounded or beveled, as shown.

The numeral 8 designates a vertically-movable plate which is connected by chains 9 with counterbalance-weights 10, passing over pulleys 13. This plate is forced downward by the completed article as it emerges from the bottom of the mold and is provided with suitable means for locking it in place and for returning it after the article has been removed. These parts, however, form no part of the invention, and further description is not considered necessary.

It will be seen that the head 6 is flush with the lower end of the mold, a space being formed by the same and the plate 8, into which the clay is forced by the rotating blades 3, thereby forming the bottom of the retort or crucible.

Heretofore machines have been constructed for making retorts and crucibles in which an iron core was employed. These, however, were found to be impracticable, owing to the fact that the clay would stick thereto, rendering it very difficult to withdraw the same from the completed article without damaging or destroying the same.

I make no broad claim herein to a core for a crucible-mold nor to the means for actuating the same, nor to the other features shown for forming the articles, my invention consisting, essentially, in the core comprising a metallic shell with interior screw-threads and a wooden head fitting therein, having found by practical experience that the clay or other material will not stick or adhere to the wooden head, thereby enabling it to be readily removed from the completed article.

Having thus described my invention, what I claim is—

The combination, in a retort-machine, of

the mold 1, open at its upper end, the removable bottom 8, the chains 9, provided with weights 10, connected with said bottom and passing around sheaves or pulleys, the shaft 2, having radial blades 3, the hollow metallic shell secured to said shaft, and the wooden plug fitting in the lower end of said shell, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

his
EVO × ROOMS.
mark

Witnesses:
AUGUST PETERSON,
BENNETT S. JONES.