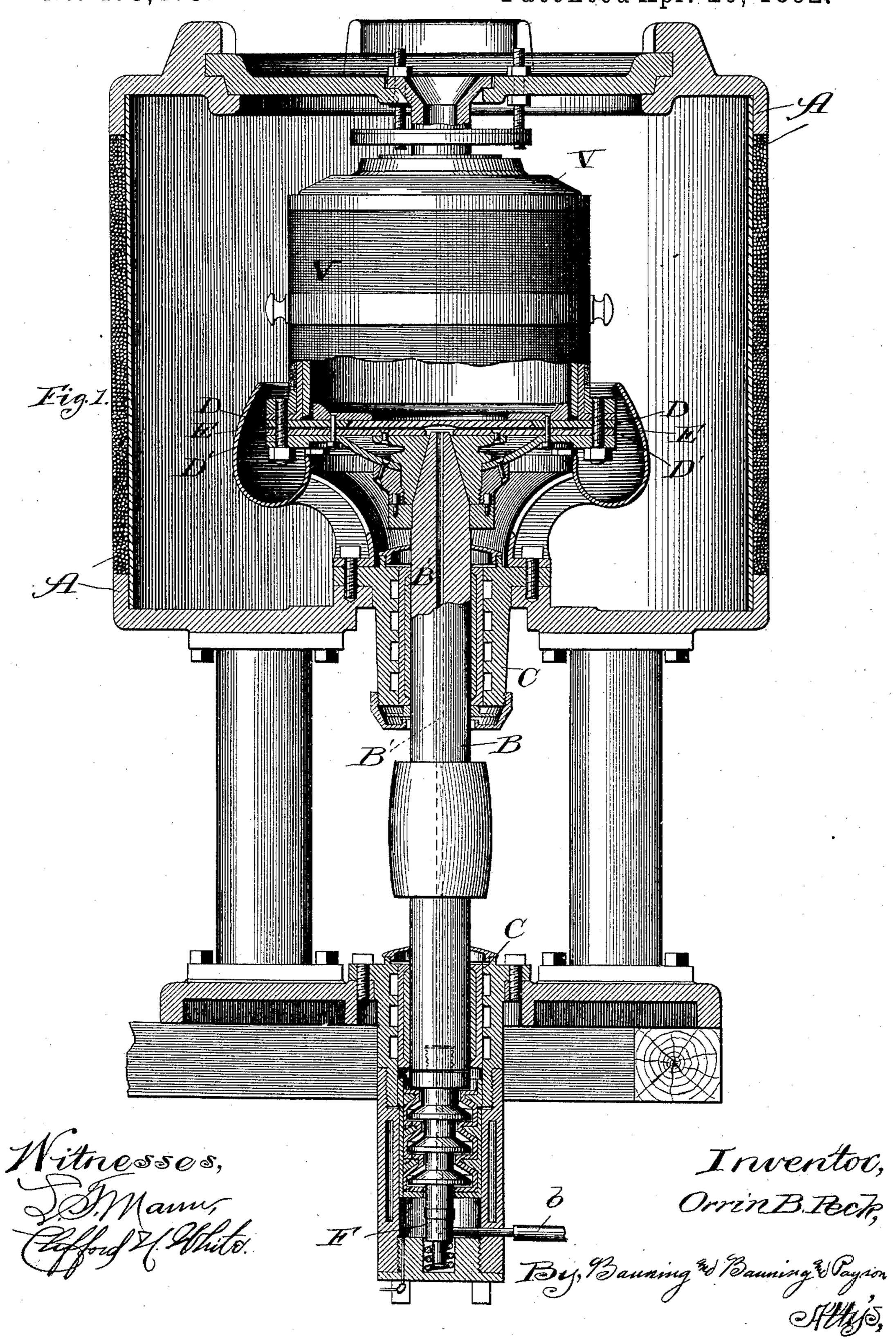
## O. B. PECK.

MACHINE FOR CENTRIFUGALLY TREATING MOLTEN MATERIAL.

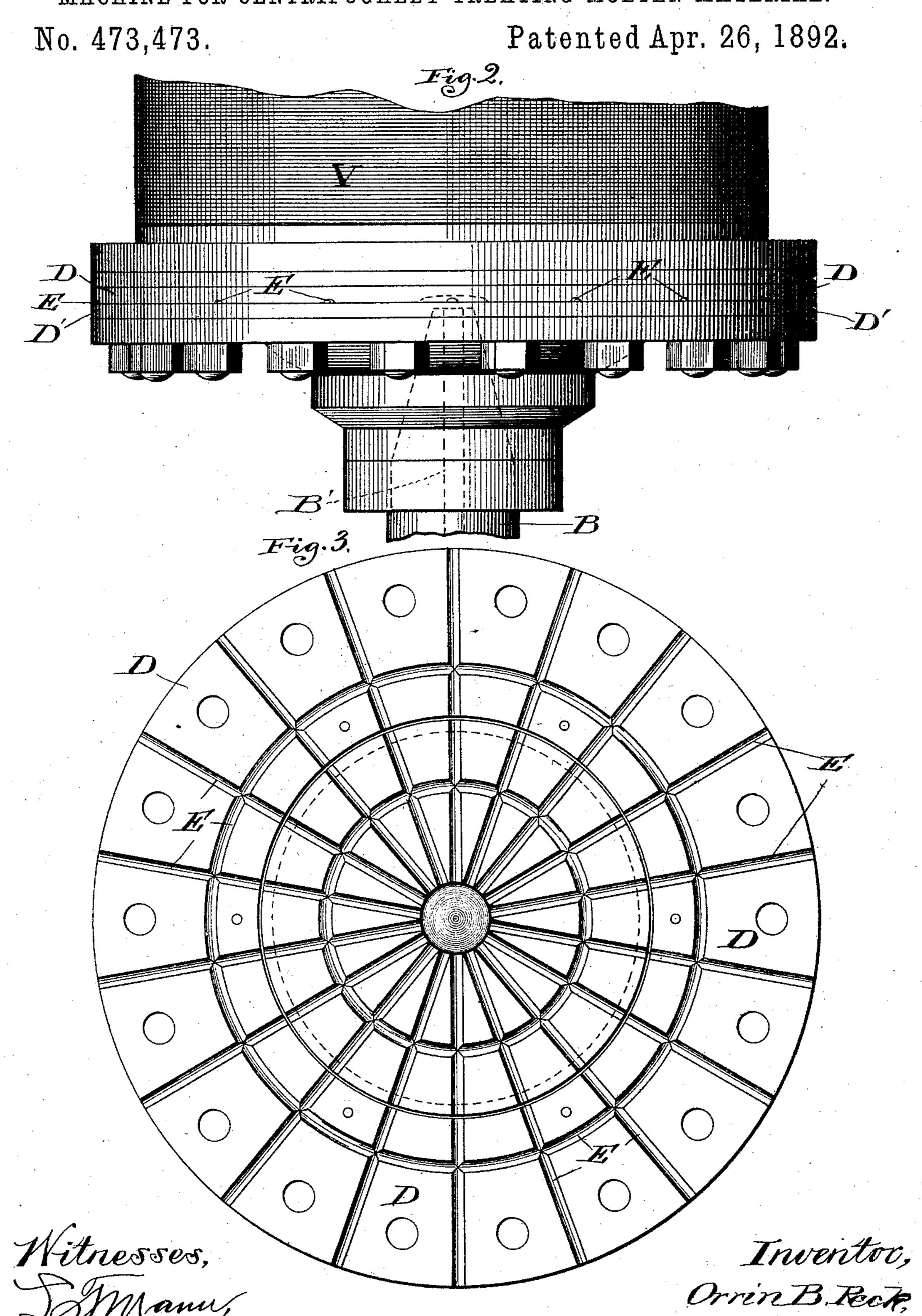
No. 473,473.

Patented Apr. 26, 1892.



O. B. PECK.

MACHINE FOR CENTRIFUGALLY TREATING MOLTEN MATERIAL.



By, Banning W Banning W Payson.

## United States Patent Office.

ORRIN B. PECK, OF CHICAGO, ILLINOIS, ASSIGNOR TO MELINDA PECK, OF SAME PLACE.

## MACHINE FOR CENTRIFUGALLY TREATING MOLTEN MATERIAL.

SPECIFICATION forming part of Letters Patent No. 473,473, dated April 26, 1892.

Application filed March 3, 1890. Serial No. 342,438. (No model.)

To all whom it may concern:

Be it known that I, ORRIN B. PECK, a citizen of the United States, residing at Chicago, Illinois, have invented a new and useful Improvement in Machines for Centrifugally Treating Molten Material, of which the following is a specification.

The object of this invention is to provide suitable means for introducing water between to the plates or pieces of which the bottom of the receiving-vessel is formed and for distributing and discharging the water therefrom; and the invention consists in the features and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a vertical elevation, partly in section, of a centrifugal machine provided with my improvement; Fig. 2, a vertical elevation, on an enlarged scale, of the lower portion of the receiving-vessel and the upper portion of the supporting-shaft; and Fig. 3, a bottom plan view of one of the plates forming the bottom.

V is the receiving-vessel; A, the curbing surrounding the same; B, the shaft for supporting and revolving the vessel; B', a hole or channel in such shaft; b, a pipe for supplying water to such channel; C C, journal-bearings for supporting and maintaining the vertical position of the shaft; D D', plates forming part of the bottom of the receiving-vessel; and E, grooves or channels formed in

The lower end of shaft B is preferably provided with a suitable non-rotating water coupling or connection F, this coupling being provided with a suitable pipe b for the introduction of water. The shaft B is provided with a hole or opening B', communicating with the pipe b through the coupling F and also communicating at a point at or near the top of

the shaft with the space between the bottom plates. In one of these bottom plates I form a number of grooves or channels E, by means of which water passing through the shaft is 45 distributed between the plates and allowed to be discharged. When made as shown in the drawings, these grooves or channels are formed in the under surface of the plate D; but it will be obvious that if desired they may 50 be formed in the upper surface of the plate D'or partly in each of the plates, as desired, and since the purpose of these grooves is to distribute the water between the plates and allow of its discharge any other means may 55 be employed that will afford a sufficient space between the plates—as, for instance, the plates may be held apart in any suitable way.

In the operation of my improvement water is supplied through the pipe b, passes up 60 through the hole B' in the shaft, serving during such passage to assist in cooling the journal-bearings C C, and then passes into the space between the plates D D', and being distributed over the surface of such plates is 65 discharged. By means of this introduction of water between the plates D D' the melting or otherwise quickly destroying of such plates by the intense heat of the molten material introduced into the vessel is prevented.

I claim—

In a centrifugal machine for the treatment of molten material, the combination of a receiving-vessel provided with a water space or channel between the plates forming its bottom, and a shaft provided with a channel for introducing water into such water space or channel, substantially as described.

ORRIN B. PECK.

Witnesses:

GEORGE S. PAYSON, SAMUEL E. HIBBEN.