

(No Model.)

G. MILLER.

MACHINE FOR DRYING BARRELS.

No. 312,002.

Patented Feb. 10, 1885.

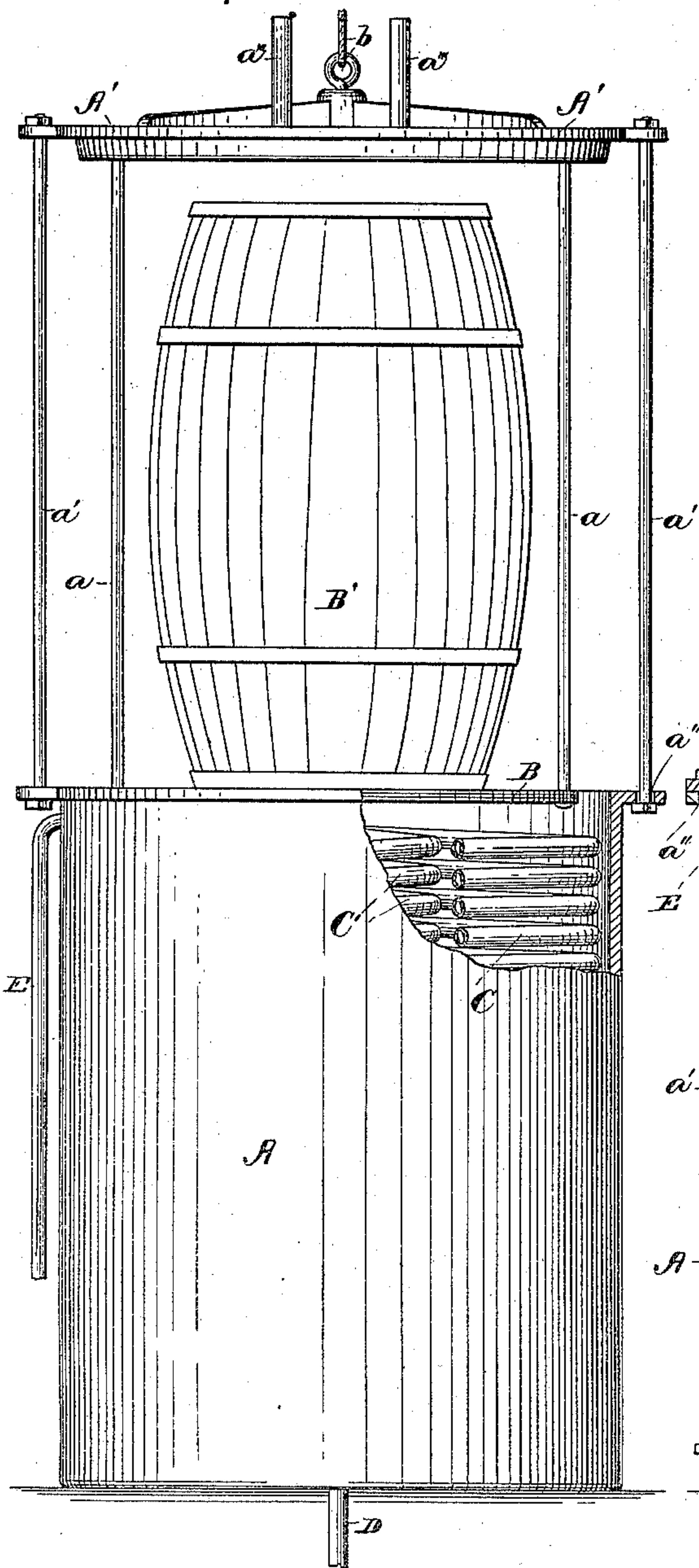


Fig. 1.

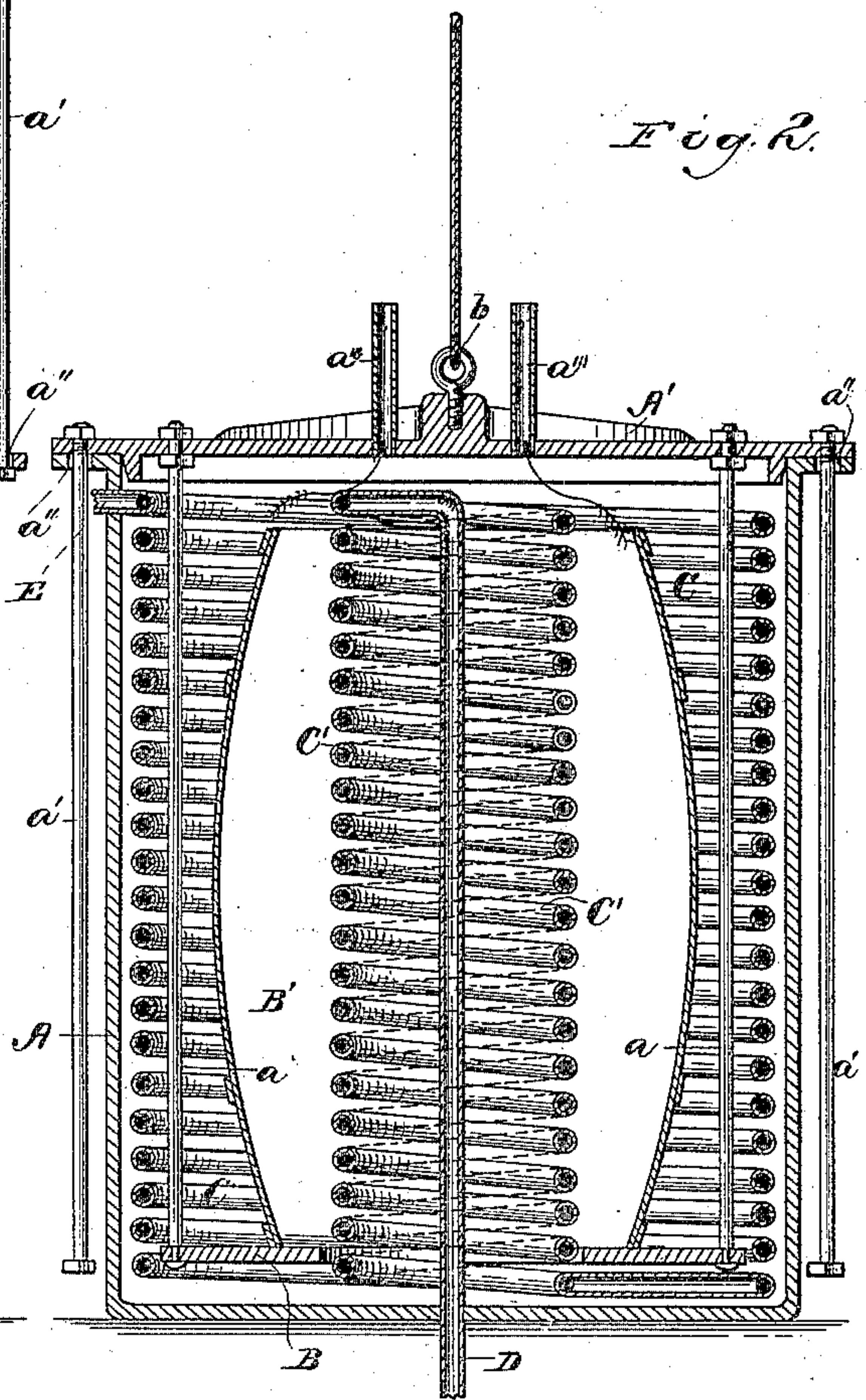


Fig. 2.

Witnesses,

Henry Frankfurter,
W. L. Baker.

Inventor.

George Miller
per. Merriam & Whipple
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE MILLER, OF LAKE VIEW, ILLINOIS, ASSIGNOR TO DANIEL W. RYAN, OF SAME PLACE.

MACHINE FOR DRYING BARRELS.

SPECIFICATION forming part of Letters Patent No. 312,002, dated February 10, 1885.

Application filed May 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE MILLER, of Lake View, county of Cook, and State of Illinois, have invented certain new and useful
5 Improvements in Machines for Drying Barrels, of which the following is a specification.

The invention relates to machines for drying barrels in the process of making; and it consists in an inner and an outer steam-heater,
10 er, with space between sufficient to allow an unheaded barrel to be placed therein, so that the outer heater will closely surround the outside, and the inner one will come near the staves on the inside of the barrel, whereby
15 both the outside and the inside of the staves are quickly dried at the same time and without being warped or drawn out of shape. I contemplate using the heaters so arranged both with and without an inclosing-tank.

20 The accompanying drawings illustrate the invention.

Figure 1 is an elevation showing the machine in position to receive a barrel, a portion being broken away to show the interior construction. Fig. 2 is a vertical section of
25 the machine closed, with a barrel inclosed therein.

A is an outer tank provided with a lid or cover, A'. The heaters are placed within
30 the tank, C designating the outer one and C' the inner one. There is sufficient open space between the heaters to allow an unheaded barrel to pass in, so that the outer one will be outside of and the inner one inside of the
35 barrel. The heaters are best made of a single pipe, E D, which may be coiled from the top down, so as to first form the outer heater, and thence carried in at the bottom and coiled up, forming the inner heater, from the top of
40 which it may be carried down inside of the inner one, as seen at D. The heaters, however, may be made in any of the well-known ways of making steam or water heaters.

To facilitate the putting in and taking out
45 of the barrel, I employ a plate, B, which is of the proper diameter to pass within the outer heater, and has an opening in the center of the proper diameter to allow the inner heater to pass through it, so that the part
50 between the opening and the outer edge of the plate shall substantially fill the width of the open space between the heaters. This plate is suspended on rods *a a* attached to

the cover. The cover is suspended on a cord, *b*, passing up over a pulley overhead, and
55 provided with a counterbalancing-weight so arranged that slight force will raise or lower the cover with the plate suspended thereto. Guide-rods *a'* are attached to ears on the cover, and slide up and down through holes
60 *a''* in ears on the tank to prevent the cover from swinging. The guide-rods will work equally well if attached to the tank and made to slide through holes or grooves in the ears
65 of the cover. Short tubes *a'''* or openings are provided in the cover to allow the vapor from the drying barrel to pass off.

In setting up the machine the top of the machine should be placed about on a level with the floor of the room in which it is set
70 up, so that when the lid is raised the plate B will be brought up about even with the floor. In this way the barrel can be rolled from the floor onto the plate without lifting.

The operation is as follows, assuming the
75 heaters to be hot and the machine closed: By means of the cord *b* the cover is raised until the plate B is even with the floor, or to the position shown in Fig. 1. The barrel B' is then placed on the plate, just outside of the
80 central opening. By means of the cord the lid is now let down, and the barrel thereby placed or lowered between the heaters, one on the inside and the other outside, as shown in Fig. 2, in which position it is left for about
85 thirty minutes, when it will be thoroughly dried. It is then raised out and the truss-hoops driven home.

What I claim is—

1. In a barrel-drier, an outer heater and
90 an inner heater, as C C', combined and arranged with reference to each other, substantially as and for the purpose specified.

2. In a barrel-drier, a tank, as A, provided with a lid, as A', in combination with
95 an outer and an inner heater, as C C', substantially as and for the purpose specified.

3. In a barrel-drier, an outer heater, as C, and an inner heater, as C', in combination with a plate, as B, having a central opening, and
100 mechanism for operating the same in the space between the heaters, substantially as and for the purpose specified.

Witnesses: GEORGE MILLER.

JOHN H. WHIPPLE,
DANIEL W. RYAN.