

No. 733,189.

PATENTED JULY 7, 1903.

W. GRIESSER.
BREWING APPARATUS.
APPLICATION FILED DEC. 13, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

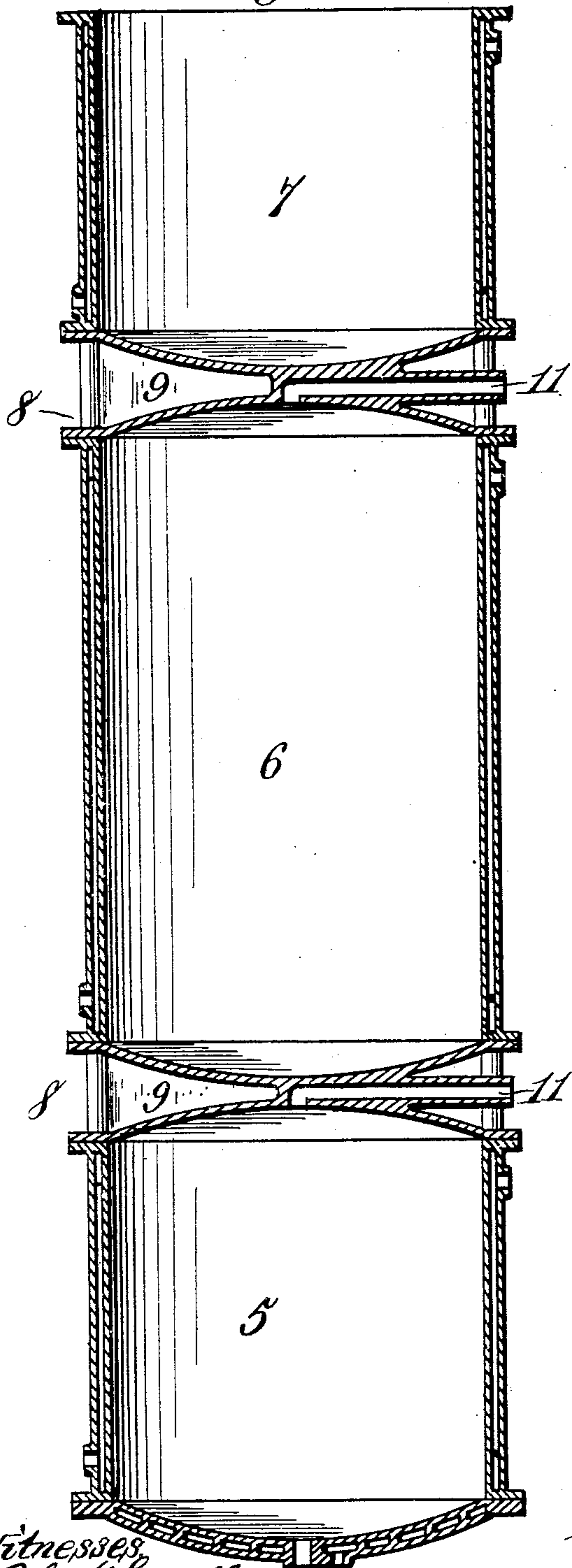


Fig. 2.

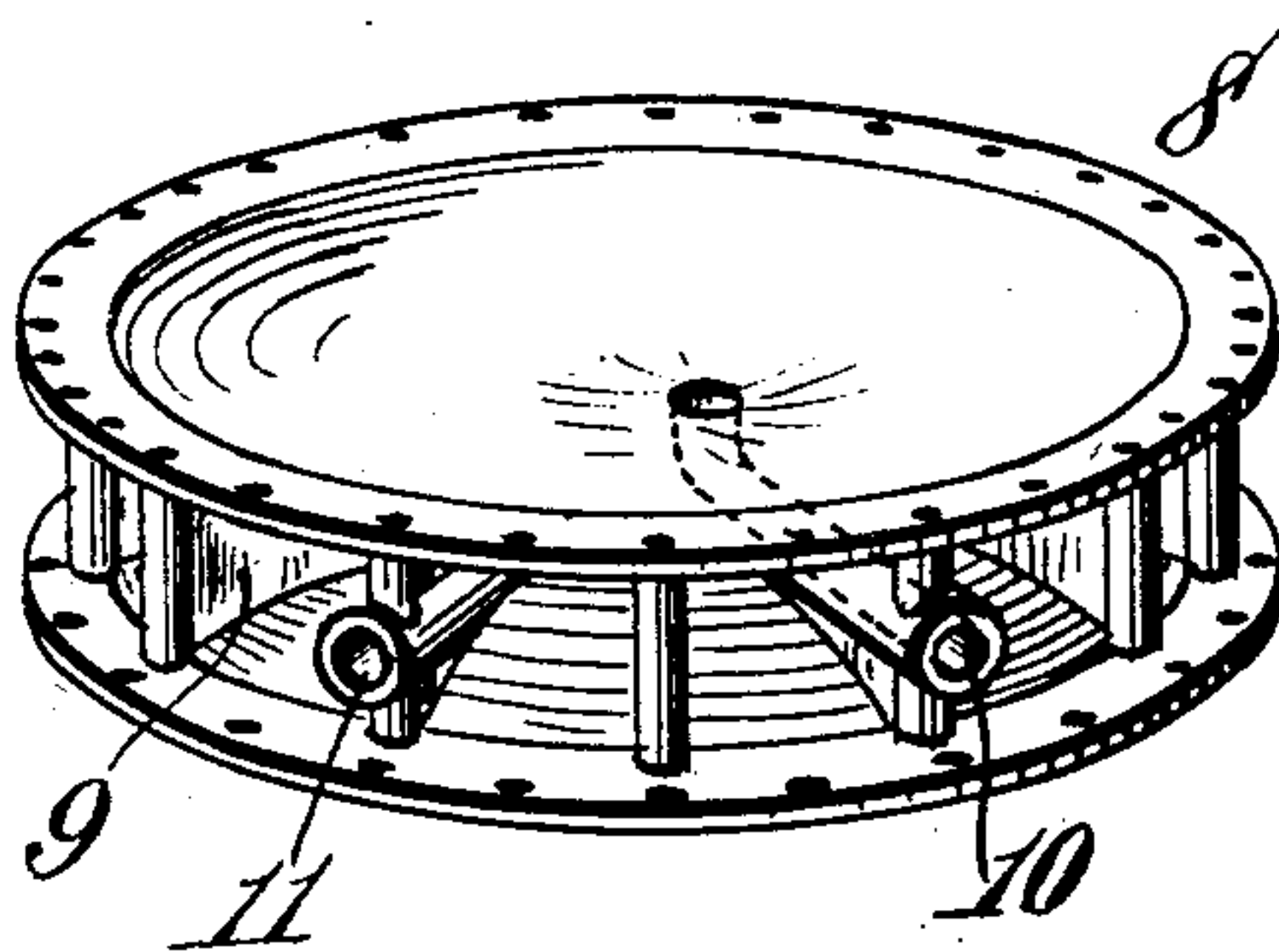
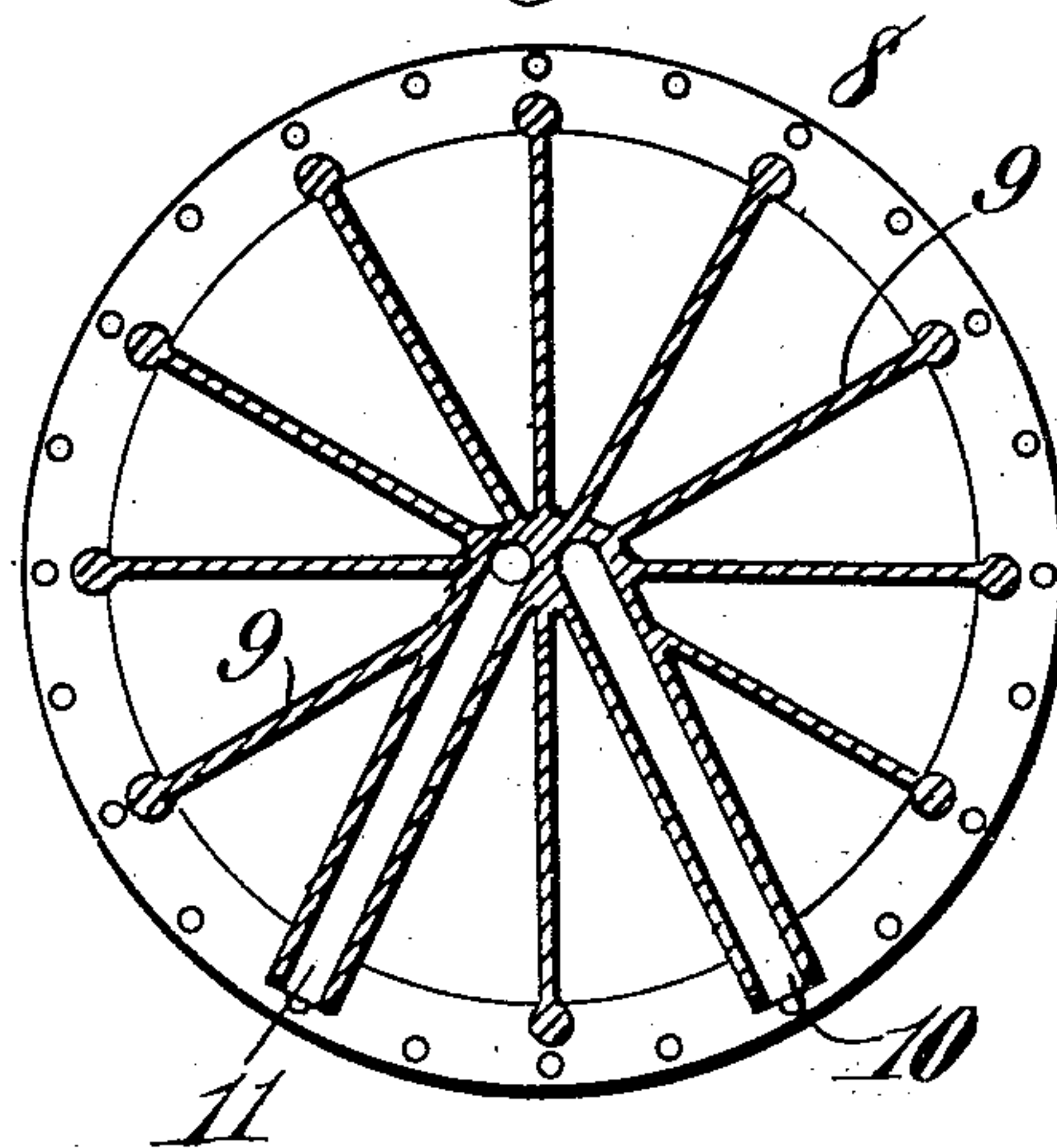


Fig. 3.



Witnesses
Robert G. Gault.
James L. Norris Jr.

Inventor
Wilhelm Griesser.
By James L. Norris.
Att'y.

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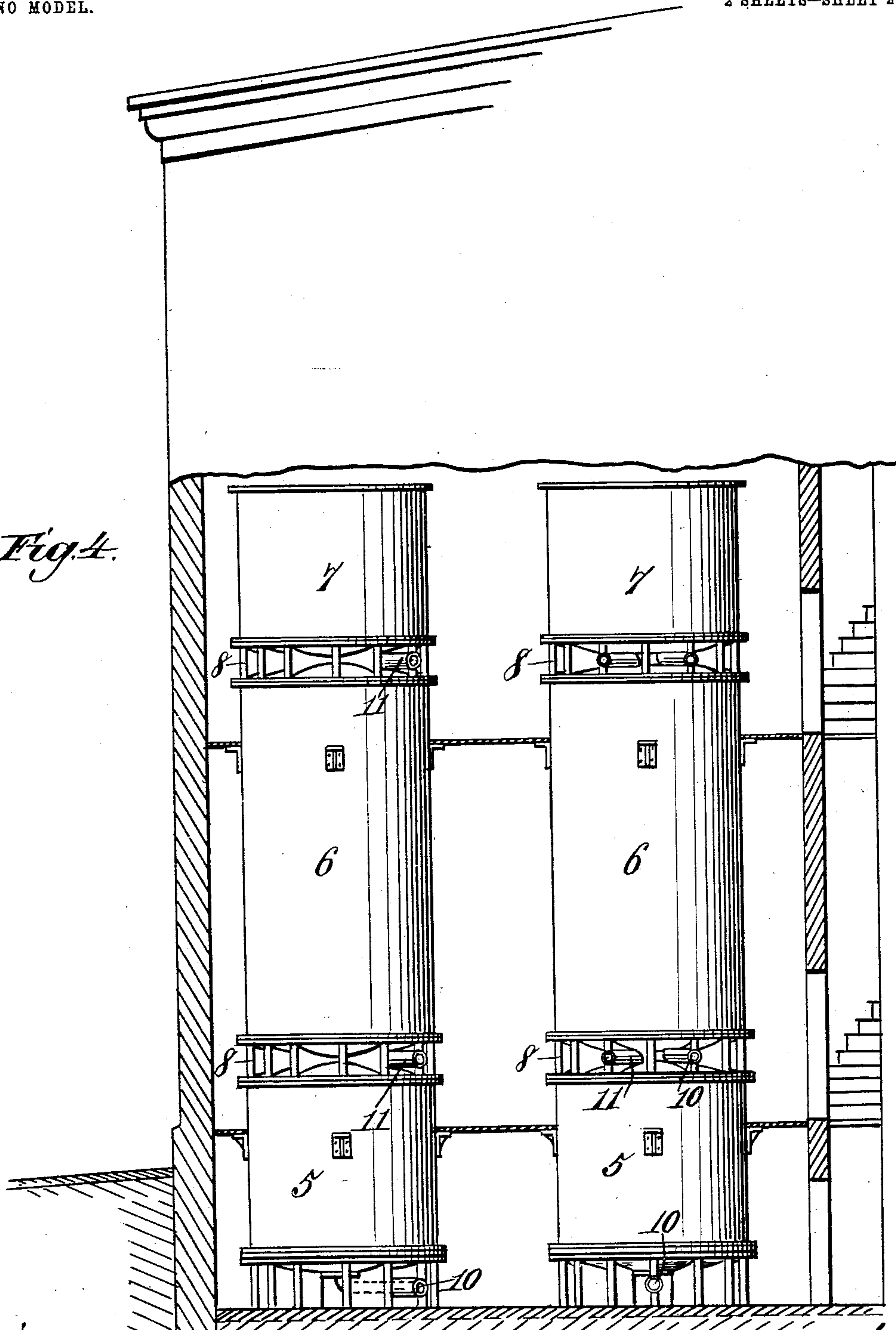
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2 SHEETS—SHEET 2.

Fig. 4.



Witnesses:
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James L. Norris, Jr.

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UNITED STATES PATENT OFFICE.

WILHELM GRIESSER, OF NEW YORK, N. Y.

BREWING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 733,189, dated July 7, 1903.

Application filed December 13, 1902. Serial No. 135,122. (No model.)

To all whom it may concern:

Be it known that I, WILHELM GRIESSER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Brewing Apparatus, of which the following is a specification.

This invention relates to a brewing apparatus; and the object of the invention is to provide an effective apparatus of this character which can be readily and inexpensively installed.

In a brewing apparatus or system including a chip-vat, a stock-tub, and a fermenting-tub it is the custom to construct a special building to accommodate the same, the chip-vat being generally on the ground floor and the two tubs on the upper floors. By my invention this is not necessary, as I superimpose the vats or tubs—that is, a lower vat supports an upper. These vats may be of any suitable number, but in the present instance are three. It will therefore be understood that the fundamental feature of the apparatus is a plurality of superimposed vats, so that I am enabled to dispense with independent or superposed floors for sustaining the separate vats constituting part of the apparatus.

In order to secure a strong structure, I provide between adjacent vats a dividing member, preferably made integral and consisting of upper and lower members, the lower member constituting a top for a lower vat and the upper one constituting a bottom for an upper vat, and in order to further increase the stability of the structure I provide strengthening webs or ribs between the upper and lower parts of said dividing member.

The invention is shown in one simple embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a central vertical sectional elevation of a brewing apparatus including my invention. Fig. 2 is a perspective view of a dividing member between the superimposed vats. Fig. 3 is a horizontal sectional plan view of said dividing member. Fig. 4 is an elevation of two of the apparatus shown as arranged in a building.

Like characters refer to like parts in the several figures.

The improved apparatus includes in its construction a plurality of superimposed vats, three being shown in Figs. 1 and 4, and these may be of any suitable construction. They are represented as being of the kind disclosed by my contemporaneously-pending application, Serial No. 135,121, filed December 13, 1902. The vats, commencing with the lowest one, are denoted, respectively, by 5, 6, and 7 and are preferably made of metal; but this of course is not essential. The lowermost vat constitutes the chip one, while the vats 6 and 7 constitute what are known, respectively, as “stock” and “fermenting” tubs, the beer during its process of manufacture being initially placed in the fermenting-tub 7, where it is allowed to remain for a certain time, after which it is delivered into the intermediate vat or stock-tub 6, from which it is subsequently run into the chip-vat 5. As I superimpose the vats or tubs it is not necessary to separately support the same upon superposed floors, as is the present custom, so that I am enabled to install the improved apparatus at a less cost than can be done with existing forms of apparatus. The superimposed vats are separated by dividing members 8, (see Figs. 2 and 3,) consisting, respectively, of upper and lower sections, each of concavo-convex form and with their convex portions facing each other. The lower section of the dividing member 8 constitutes a top for a lower tank, while the upper section thereof constitutes a bottom for an upper tank, and said dividing members may be connected to the adjoining tanks in any suitable liquid-tight manner.

By superimposing the several vats, tubs, or tanks I not only do away with the usual floors for sustaining the same, but provide a very rigid strong structure. In addition to this the passage of liquid from an upper into a lower vat is facilitated. In order to further increase the stability of the structure, I locate between the superposed sections of the dividing members the webs 9, which radiate from a central hub between said sections and extend nearly to the margin thereof, such webs or ribs being preferably made integral with said superposed sections.

Between the sections of the dividing member 8 are arranged the pipes 10 and 11, respectively, also preferably made integral with

said part, and the inner end of the pipe 10 opens into the upper face of said dividing member, so that the contents of an upper vat can pass into said pipe 10, which it will
5 be understood constitutes a discharge-pipe for said upper vat. The outer end of said pipe 10 is located in proximity to the periphery of the dividing member. The pipe 11, which constitutes a supply-pipe for a lower
10 vat, extends inwardly from near the periphery of the dividing member and, like the pipe 10, is located between the sections of said dividing member. The inner end of the pipe 11, which is located in proximity to the corresponding end of the pipe 10, opens into the
15 under face of the lower section of the dividing member, so that liquid flowing through said pipe can be supplied to a lower vat or otherwise disposed of. In practice the pipes
20 10 and 11 are connected by suitable piping, (not herein shown, as they form no part of the invention,) whereby the contents of an upper vat can be run into a lower one, the same successively traversing the pipes 10 and 11.
25 Not only is the apparatus thoroughly strong, but it dispenses with the flooring at present in use in stock-houses. Besides this, the several parts of the apparatus can be manufactured in one plant and shipped therefrom to
30 a purchaser and can be quickly and easily installed by unskilled labor.

The invention is not limited to the exact construction hereinbefore described, for many variations may be adopted within the scope
35 of my claims.

Having described the invention, what I claim is—

1. A brewing apparatus consisting of superimposed vats, a dividing member between said vats having upper and lower sections, 40 the lower section constituting a top for the lower vat and the upper section constituting a bottom for the upper vat, and webs between the sections of the dividing member.

2. A brewing apparatus consisting of superimposed vats, a dividing member between said vats having upper and lower sections, 45 the lower section constituting a top for the lower vat and the upper section constituting a bottom for the upper vat, webs between the sections of the dividing member, and supply and discharge pipes for said lower and upper vats, located between the upper and lower sections of said dividing member. 50

3. A brewing apparatus consisting of superimposed vats, a dividing member between the same having upper and lower sections, 55 the lower section constituting a top for the lower vat and the upper section constituting a bottom for the upper vat, and pipes between said sections in communication with the respective vats. 60

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILHELM GRIESSER.

Witnesses:

HEATH SUTHERLAND,
ROBERT EVERETT.