

L. BRADLEY.

Deodorizing and Improving Liquors.

No. 108,558.

Patented Oct. 25, 1870.

Fig. 1

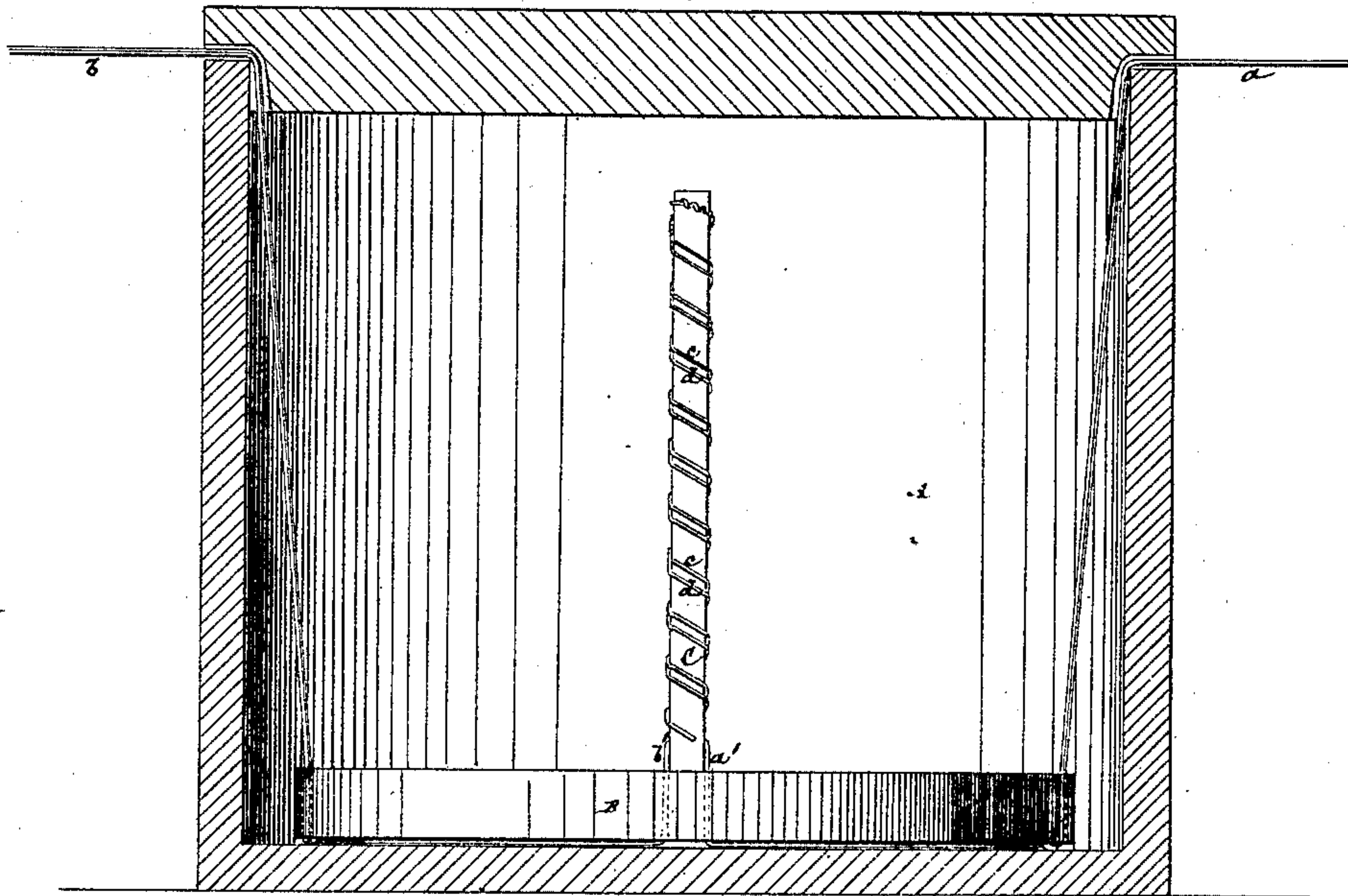
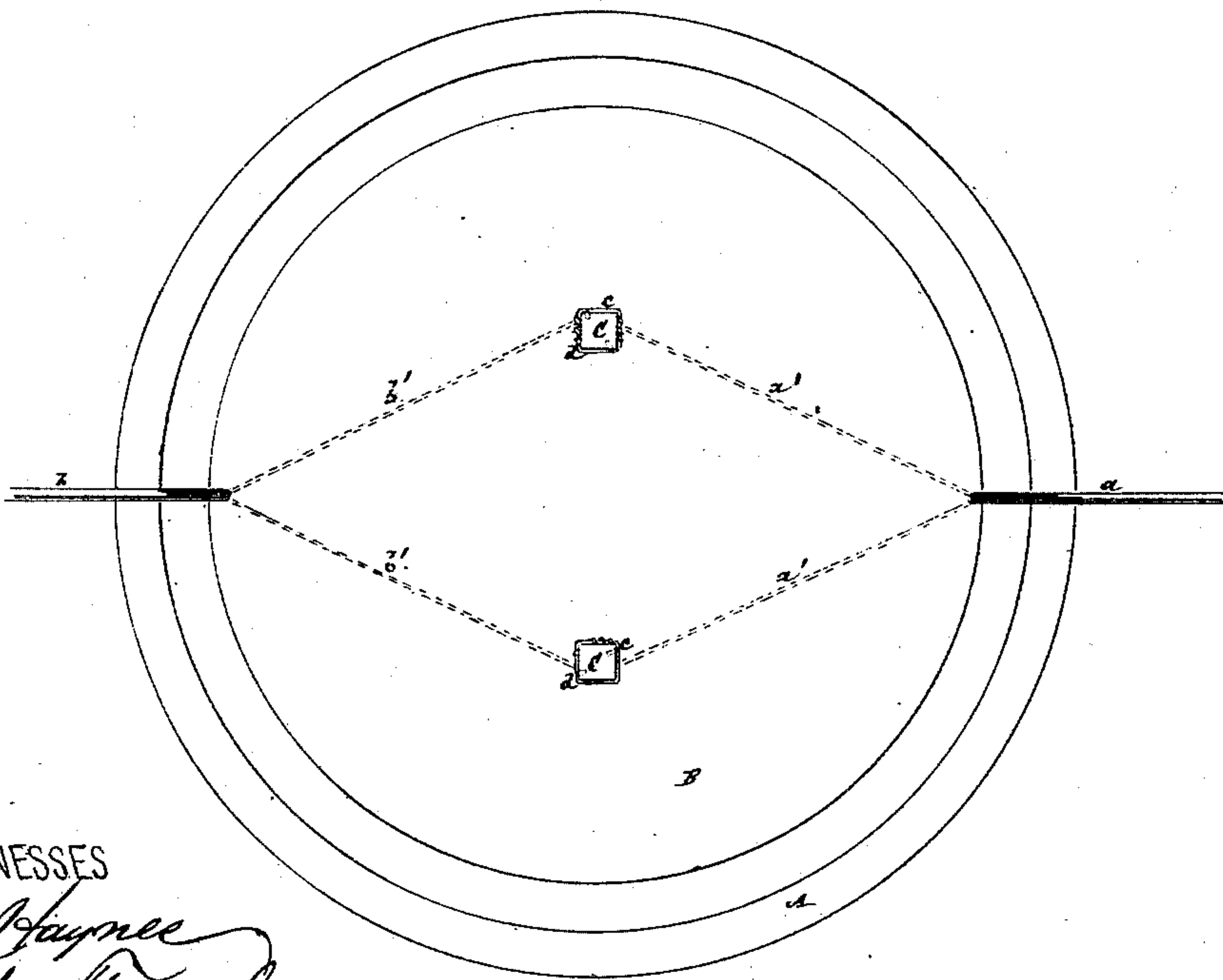


Fig. 2



WITNESSES
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United States Patent Office.

LEVERETT BRADLEY, OF JERSEY CITY, NEW JERSEY.

Letters Patent No. 108,558, dated October 25, 1870

IMPROVEMENT IN APPARATUS FOR DEODORIZING AND IMPROVING ALCOHOLIC AND VINOUS LIQUORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, LEVERETT BRADLEY, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Apparatus for Deodorizing and Purifying Alcoholic and Vinous Liquids, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a sectional elevation, and

Figure 2 a plan of a vat or vessel with my improvement applied to it.

Similar letters of reference indicate corresponding parts.

My invention relates to the deodorizing and improving of alcoholic and vinous liquids by electrolysis, and consists in a certain construction and arrangement of the electrodes by which the electrical currents are passed through the liquid to be treated, said electrodes being composed of platinum or other wires wound in pairs or sets spirally, at any desired distance apart, around posts made of or covered with non-conducting material, and immersed in the liquid. By this arrangement an extended active surface is obtained for the electrodes, and the uniformity in distance apart of each two in a working pair secured, without risk of the same being accidentally disturbed or brought in contact by slipping.

The invention also includes a certain arrangement of any number of such electrodes upon a false bottom or base, made capable of fitting within a vat or vessel containing the liquid to be treated, so as to rest upon the bottom of said vessel, such false bottom, which may be made of any non-conducting material, carrying the wires or conductors that convey the electrical currents to the electrodes. This arrangement of the electrodes upon a false bottom, capable of removal, and with the conducting-wires attached to it, forms a very simple and convenient means of applying the invention in a vat where the liquid has to be treated in bulk, and which is the arrangement shown in the accompanying drawing.

In said drawing—

A represents the vat or vessel for containing the liquid to be treated, and

B the false bottom, which may be of wood or other non-conducting material, and which carries the wires *a b* and branch wires *a' b'*, that convey the electrical

current to the electrodes. These wires connect respectively with the opposite poles or terminal wires of the battery, or other electrical apparatus used for the generation of the electrical currents.

C C are posts erected on the false bottom B, and having wound spirally around them, at any required distance apart, and disconnected from each other at their ends, platinum or other suitable metal wires, *c d*, that constitute a pair of electrodes, which connect respectively, by the branch wires *a'* and *b'*, with the terminal wires of the battery or other electrical apparatus, the circuit from the one wire to the other, in each pair of electrodes, being completed by the liquid. These posts C C, of which there may be one, two, or more, according to the number of electrodes required, should be made of or covered with a non-conducting material.

By the spiral construction of the electrodes they are made to present an extended active surface, and the uniformity of the wires composing the same, apart, is preserved: likewise their contact by slip prevented.

The arrangement of such electrodes upon a removable false bottom or base, with the conducting-wires attached, forms a very simple and convenient means for operating upon liquid in bulk, in vats or other vessels, which may either be open or closed.

Alcoholic and vinous liquids may be rapidly deodorized and improved by this invention, at but a small cost, as compared with the results obtained.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The electrodes, composed of separated wires *c d*, wound spirally, at any required distance apart, around a post or posts, C, and connected with opposite poles of a battery or other apparatus for obtaining electricity, for operation, substantially as specified, in a vessel containing the liquid to be treated.

2. The arrangement of the electrodes *c d* or posts C, carrying the same, upon a false bottom or base, B, having attached to it the wires which convey the electrical currents to the electrodes, essentially as and for the purpose herein set forth.

L. BRADLEY.

Witnesses:

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FERD. TUSCH.