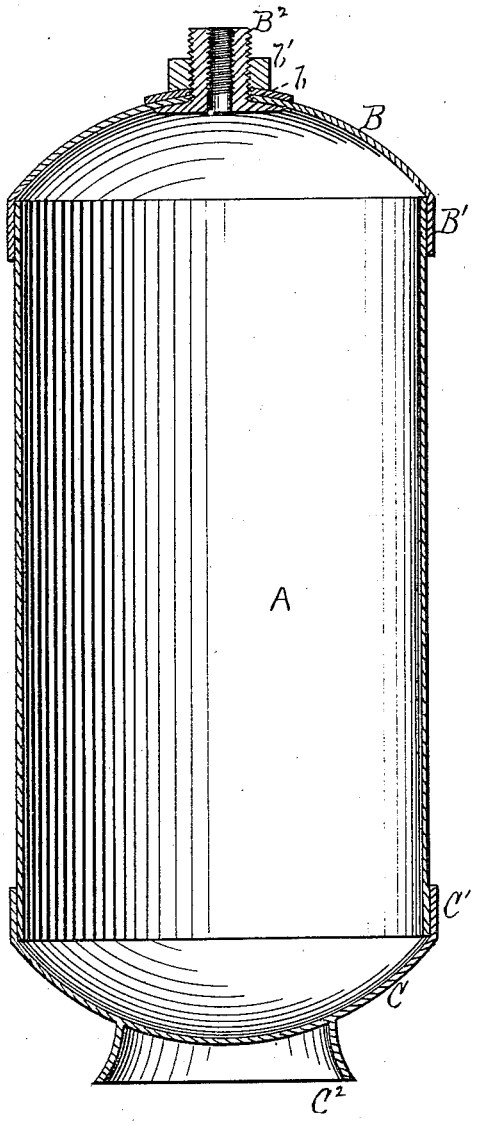
F. W. WIESEBROCK.

Soda-Water Fountain.

No. 166,440. Patented Aug. 3, 1875.

Fig. 1.



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UNITED STATES PATENT OFFICE.

FREDERICK W. WIESEBROCK, OF NEW YORK, N. Y., ASSIGNOR TO HENRY W. SHEPARD AND ROBERT SEAMAN.

IMPROVEMENT IN SODA-WATER FOUNTAINS.

Specification forming part of Letters Patent No. **166,440**, dated August 3, 1875; application filed January 29, 1875.

To all whom it may concern:

Be it known that I, FREDERICK W. WIESEBROCK, of the city, county, and State of New York, have invented certain Improvements in Soda-Water Fountains, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, and the letters of reference marked thereon, making part of this specification, in which is represented a vertical sectional view of my improvement.

My present improvement is essentially a new article of manufacture, and is an improved fountain for soda-water and other gaseous liquids, or for confining gas or any other like medium.

The nature of my invention consists in constructing the fountain out of sheet-steel or sheet-iron, and in then tinning the same, and after its several parts are soldered together the vessel is then heated, and its interior surface is coated with paraffine, and which provides an exceedingly neat, light, strong, and durable fountain, and in which all danger of corrosion is, through the use of the paraffine in connection with the tinning, securely guarded against.

The construction and operation of my invention are as follows: A is the cylinder. B is the upper end piece or top, and C is the lower end piece or bottom. These end pieces B C are each arched or dome-shaped, and are provided each with a broad well-defined hoop, as shown at B^1 C^1 of the accompanying drawing. The top or end piece B is provided with an opening, *b*, at its center, and is as an article of manufacture the same as Burnett's milk-can breast, patented November 21, 1871, No. 121,154, and the article now manufactured under which patent I contemplate using as a top or end piece in the construction of my fountain, only making the same of sheet-steel or sheet-iron instead of a heavier material. The bottom or end piece C is in form the same as the top B, only it is solid and without any opening at its center, and is provided with a foot rest or seat, C^2. These severel features are constructed either of sheet-steel or sheet-iron tinned. The cylinder is then riveted, and the end pieces B C, and the bung B^2, and the foot or seat C^2 are all soldered together; or the bung B^2 may be provided with a screw-thread, and, after being passed through the opening *b*, may be secured by means of a nut, *b'*, as clearly shown in the drawing. The fountain, being thus constructed, is next heated, and its entire interior surface is coated with paraffine, whose well-known qualities, in connection with the tinning, will prevent corrosion, or the fibers of the material being eaten or otherwise destroyed through the destructive action of any acid which the material which the fountain may contain, or of which it may be used as a carrier, possesses.

I am aware that years since an effort was made to introduce a cast-iron fountain, the interior surface of which was first enameled or lined with porcelain or other similar vitreous matter, and then coated with melted paraffine; but, owing to its immense weight, the attempt proved to be, comparatively speaking, a failure, and they have, owing to the great difficulty in handling them, in consequence of their weight, been almost entirely superseded by the sheet-metal fountain lined with block-tin. While fountains of this class—such, for instance, as the one embraced in my patent of April 6, 1875, No. 161,845—operate successfully, yet they are expensive and laborious to manufacture, and, besides, are objectionable on account of their weight. Now, a fountain constructed according to my present improvement is much lighter than a fountain lined with sheet or block tin. It is far cheaper to manufacture than any fountain now known to the trade that possesses the same degree of strength. As the thin film of paraffine fills up all the pores which may have been left open in the process of tinning it is impossible that the acids which the water contains should corrode the metal. Now, I am aware that the process of coating metallic substances with paraffine is not a new one; neither is the process of tinning sheet metal new. But neither of these processes, singly applied, could be successfully employed in the construction of a sheet-metal soda-water fountain. To attempt to coat the interior surface of either a sheet steel or iron fountain—not cast metal, but sheet—with a thin film of paraffine, and without any other agent being employed, would

be impracticable, because the paraffine would soon peel off, leaving the uncoated surface of the metal exposed to the destructive action of the acids. Now, it would be equally as impracticable to attempt to use a sheet-metal fountain which is simply tinned, because as is well known to all who are practically familiar with the process of tinning either sheet iron or steel that it is impossible to so perform the process as not to leave certain of the pores of the metal uncovered or exposed. These exposed portions, coming in contact with the water or carbonic-acid gas, will soon become rusty and discolor the contents; but if the inside of the vessel is first tinned and then coated with paraffine when heated, as in my present invention, so as to melt the paraffine on the tinned surface, the paraffine will enter all the pores and crevices, and, completely filling the same, render it impossible for the water or acid to rust the metal; and as the coating of paraffine which I propose to use is designed to be nothing more than a mere filling up of the pores of the tinned surface, there is no danger of its peeling off, in fact, the metal and paraffine become, as it were, so amalgamated that a very rough usage of the fountain will not wear off the same.

Having now fully stated what I believe to be the condition of the art as applicable to my present improvement, what I claim as new, and desire to secure by Letters Patent, is—

A sheet-metal fountain tinned and coated with paraffine, as a new article of manufacture.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

F. W. WIESEBROCK.

Witnesses:
J. D. BAKER,
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