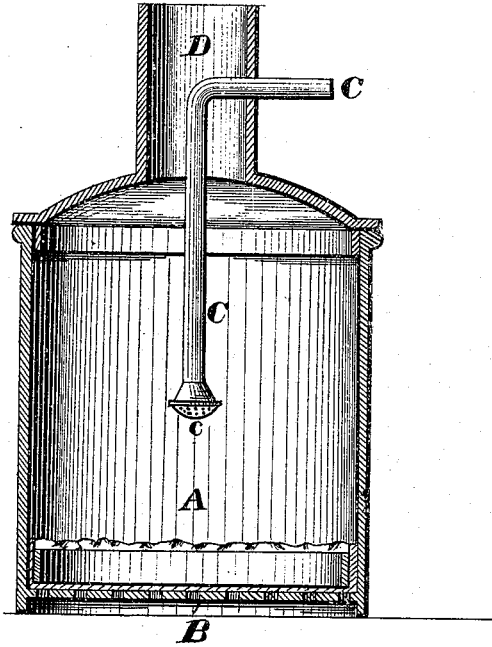


F. Q. BARSTOW.

APPARATUS FOR PURIFYING PARAFFINE.

No. 181,814.

Patented Sept. 5, 1876.



WITNESSES
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FRANK Q. BARSTOW, OF CLEVELAND, OHIO.

IMPROVEMENT IN APPARATUS FOR PURIFYING PARAFFINE.

Specification forming part of Letters Patent No. 181,814, dated September 5, 1876; application filed June 28, 1876.

To all whom it may concern:

Be it known that I, FRANK Q. BARSTOW, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Apparatus for Purifying Paraffine, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to the process of purifying paraffine or other analogous substances; and consists, essentially, in forcing a purifying element therethrough by means of the mechanism herein described and claimed.

In the drawing, which serves to assist in elucidating the process, is represented a vessel or receptacle, of which A is a chamber; provided with a perforated bottom, B, placed preferably a short distance above the lower edge of the side or sides of the chamber. On this perforated bottom the paraffine-wax, or any analogous substance to be purified, is placed, and benzine, or its equivalent, is thrown thereon—preferably in a spray—through the rose *c* of pipe C, but may be introduced in any other manner. At the same time, or afterward, air is forced into the chamber from above through the pipe D, so as to produce a body of compressed air over the benzine wetted or saturated paraffine-wax. This forces the benzine through the paraffine-wax. The former, carrying with it all the impurities of the latter, escapes through the perforated bottom, leaving the paraffine-wax or analogous substance in a purified state.

If desired, the vessel or receptacle may be constructed with a bottom below the perforated one; but the way in which I have usually employed the machine has been to simply place a pan or receptacle below the perforated bottom to collect the benzine and impurities that are washed from the paraffine-wax; and I would have it understood that I do not therefore limit myself to any particular formation of the apparatus beneath the perforated bottom; and instead of a rigid (such as a metallic or wooden) perforated bottom, I have employed simply a canvas bottom, and have properly supported the said canvas from below, and I have found that it serves every purpose.

A wooden or metallic perforated bottom may be employed to support the canvas bottom, or a screen of galvanized or other iron may be used for that purpose, the object being to provide a bottom or diaphragm upon which the paraffine-wax may rest, which shall be sufficiently open or porous to admit of the ready passage of the benzine with its suspended impurities, yet sufficiently close to act as an effective strainer. For this I have found canvas to be very good, though any other good strainer may be employed.

The pressure of the air from above serves to keep the mass tolerably compact, and insures a more effective operation of the benzine upon the paraffine-wax.

Before operating upon the paraffine-wax it should be first prepared by thoroughly disintegrating the mass. This may be effected by first heating or melting, and after cooling it is ground to a powder; but the especial means or process for disintegrating the paraffine-wax forms no part of my invention.

My process presumes the wax to be in a disintegrated condition before putting it into receiver.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In an apparatus for purifying paraffine-wax or other analogous substances, the combination of a closed receptacle or vessel, having a perforated bottom, for supporting the substance to be operated upon, with a pipe, C, for admitting the purifying element, and pipe D, for the admission of compressed air to the chamber above the perforated bottom, substantially as and for the purpose described.

2. An apparatus for purifying paraffine-wax, consisting of a receptacle closed at the top, and provided with a diaphragm of canvas, or other suitable strainer, for supporting the paraffine-wax, a pipe, C, for admitting benzine or other purifying agent, and a pipe, D, for the admission of compressed air to the chamber above the paraffine, substantially as described.

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

FRANK Q. BARSTOW.

Witnesses:

FRANCIS TOUMEY,
EDWARD WALSH.