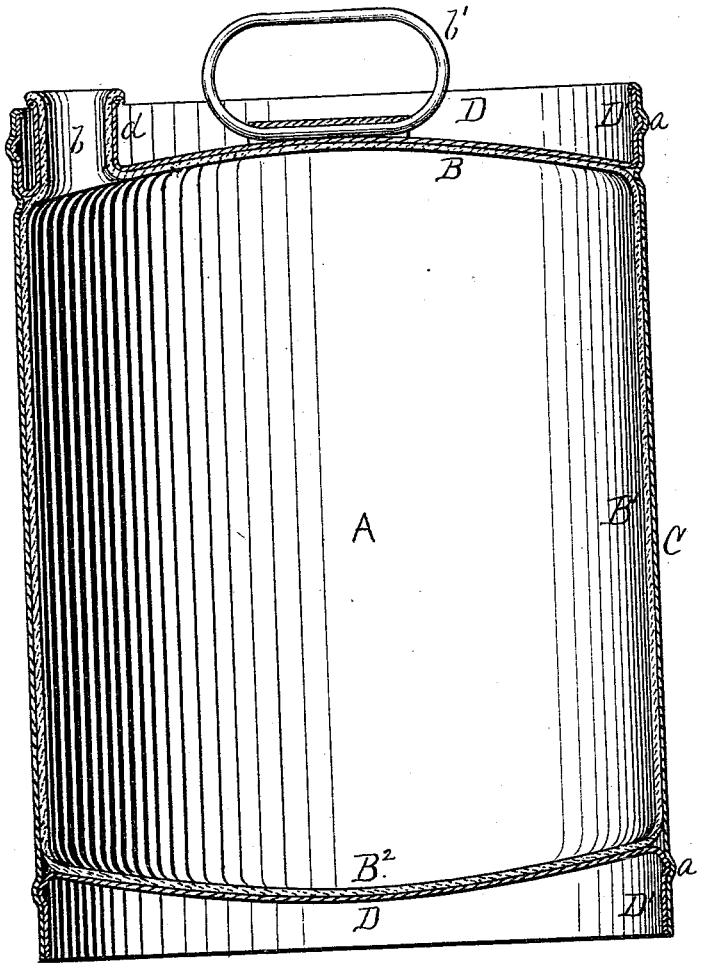
F. H. KALBFLEISCH.

Carrier for Acids.

No. 165,590. Patented July 13, 1875.



Witnesses:
Edwin James.
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per J. E. J. Holmead
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UNITED STATES PATENT OFFICE.

FRANKLIN H. KALBFLEISCH, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN CARRIERS FOR ACIDS.

Specification forming part of Letters Patent No. **165,590**, dated July 13, 1875; application filed January 25, 1875.

To all whom it may concern:

Be it known that I, FRANKLIN H. KALBFLEISCH, of Brooklyn, in the county of Kings and State of New York, have invented an Improved Carrier for Acids, 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 improved carrier.

The object of my invention consists in providing a suitable carrier for such acids as oil of vitriol, &c., and one which will permit of their safe transportation and in convenient quantities to meet the wants of the trade.

The nature of my invention consists in constructing the carrier of some suitable heavy material, and with a pouring-nozzle, and in lining the same with lead extending through the nozzle and surrounding its edges, and which material, as is well known, will resist the destructive action due to the causticity of the acids.

The construction and operation of my invention are as follows: C is the outer casing, and is to be constructed of suitable heavy material, and is to be of such form and dimensions as will conform to the interior vessel A, so that when it incloses said vessel it will fit snugly around the same. I prefer to make this outer vessel of iron, and which may be tinned or galvanized and of the ordinary can form, as shown in the accompanying drawing. The body of this vessel C is constructed of ordinary black iron, and its end pieces are stamped out of the same material and provided with a deep vertical flange, D′. The end pieces or heads are inserted in the cylinder after the vessel A has been placed therein and secured by groove or bead joints *a a*, as clearly illustrated in the drawing. The upper end piece or head D is provided with a pouring-nozzle, *d*, and with a bail or handle, *b′*. The interior vessel A is constructed entirely of lead, and its top B, cylinder or body B^1, and throat or nozzle *b* are seamless, all being constructed or formed in one piece. The bottom B^2 is secured to the cylinder or body B^1 by burning the same to it by means of a blowpipe, a process well known to workers in lead for acid manufactures.

By reference to the drawing it will be seen that the throat or nozzle *b* of the interior vessel passes up through the throat or nozzle *d* of the outer vessel, and is turned down, overlapping or surrounding its upper surface, and thus the carrier is provided with a permanent opening or nozzle for filling and emptying the same, as is usual in demijohns or carboys, and one through which sulphuric and other like acids, oil of vitriol, &c., can safely be poured without danger of the material of which the outer casing is constructed being injuriously affected through the caustic action of the acids.

I am aware that vessels constructed of an outer heavy casing and lined with lead, tin, and other like anti-corrosive metals have been used before; therefore I make no broad claim to such a vessel; but

What I claim as new, and desire to secure by Letters Patent of the United States, is—

A carrier for caustic acids, provided with a pouring-nozzle and lined with lead extending through the nozzle and overlapping its upper surface or edge, as shown and described.

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

FRANKLIN H. KALBFLEISCH.

Witnesses:

LEANDER T. SAVAGE,

JAMES A. REYNOLDS.