

(No Model.)

2 Sheets—Sheet 1.

J. C. MILLIGAN & J. CHAUMONT.

ATTACHMENT OF HANDLES TO VESSELS.

No. 304,948.

Patented Sept. 9, 1884.

Fig. 1,

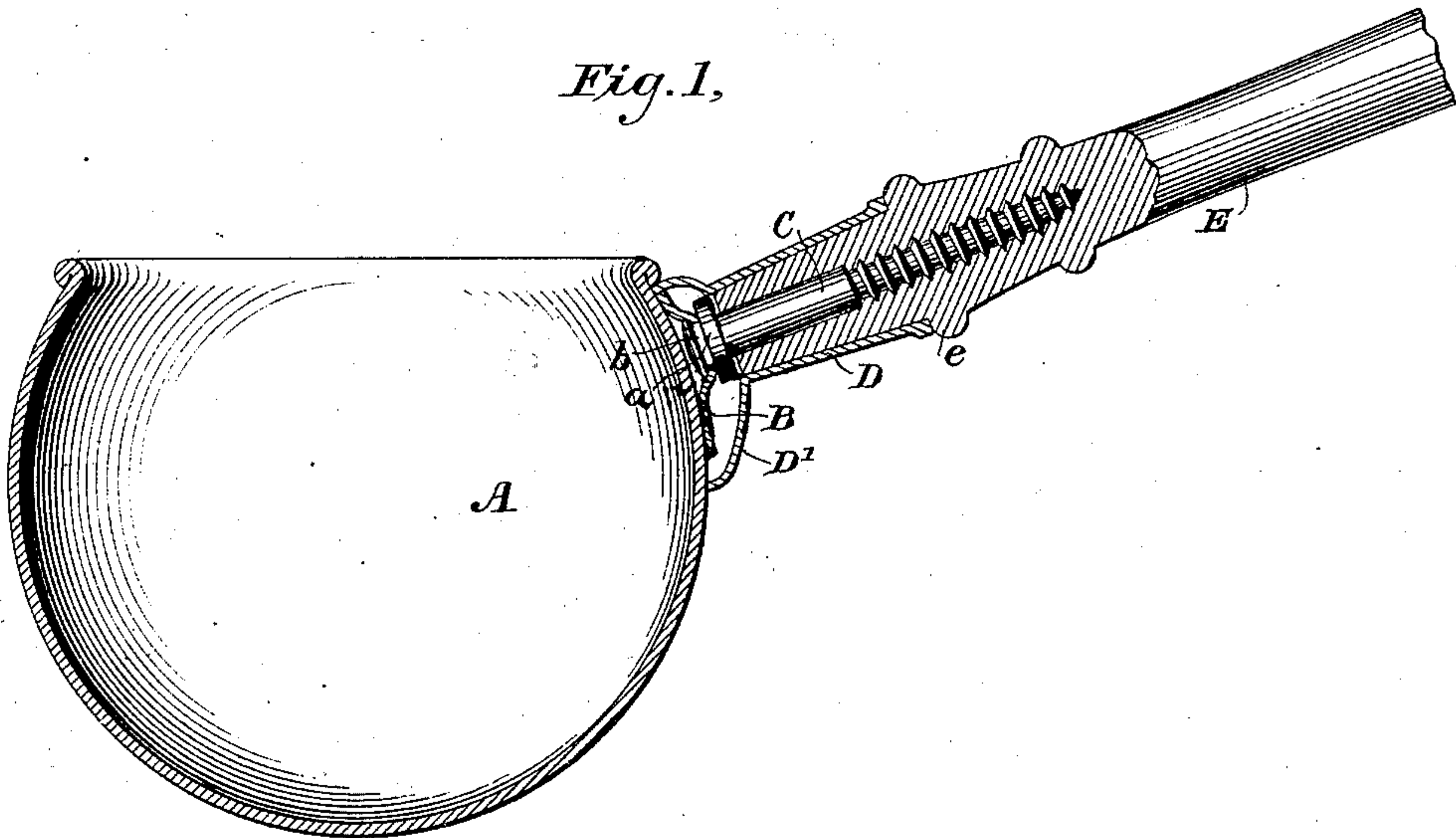
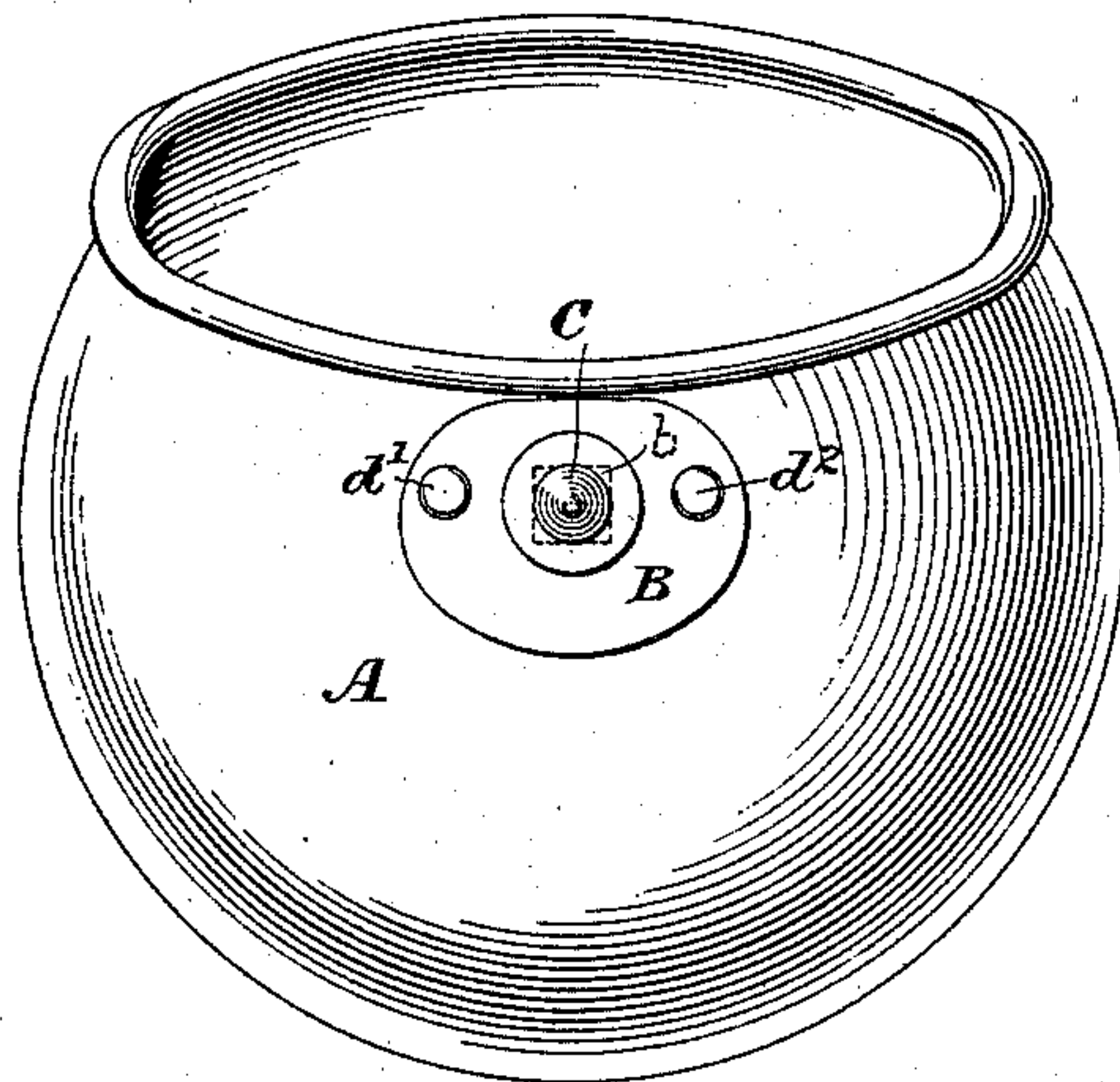


Fig. 2,



WITNESSES

Wm A. Skink
Carrie E. Ashley

INVENTORS

John C. Milligan,
Jules Chaumont,
Pope Edgcomb & Butler

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Fig. 3,

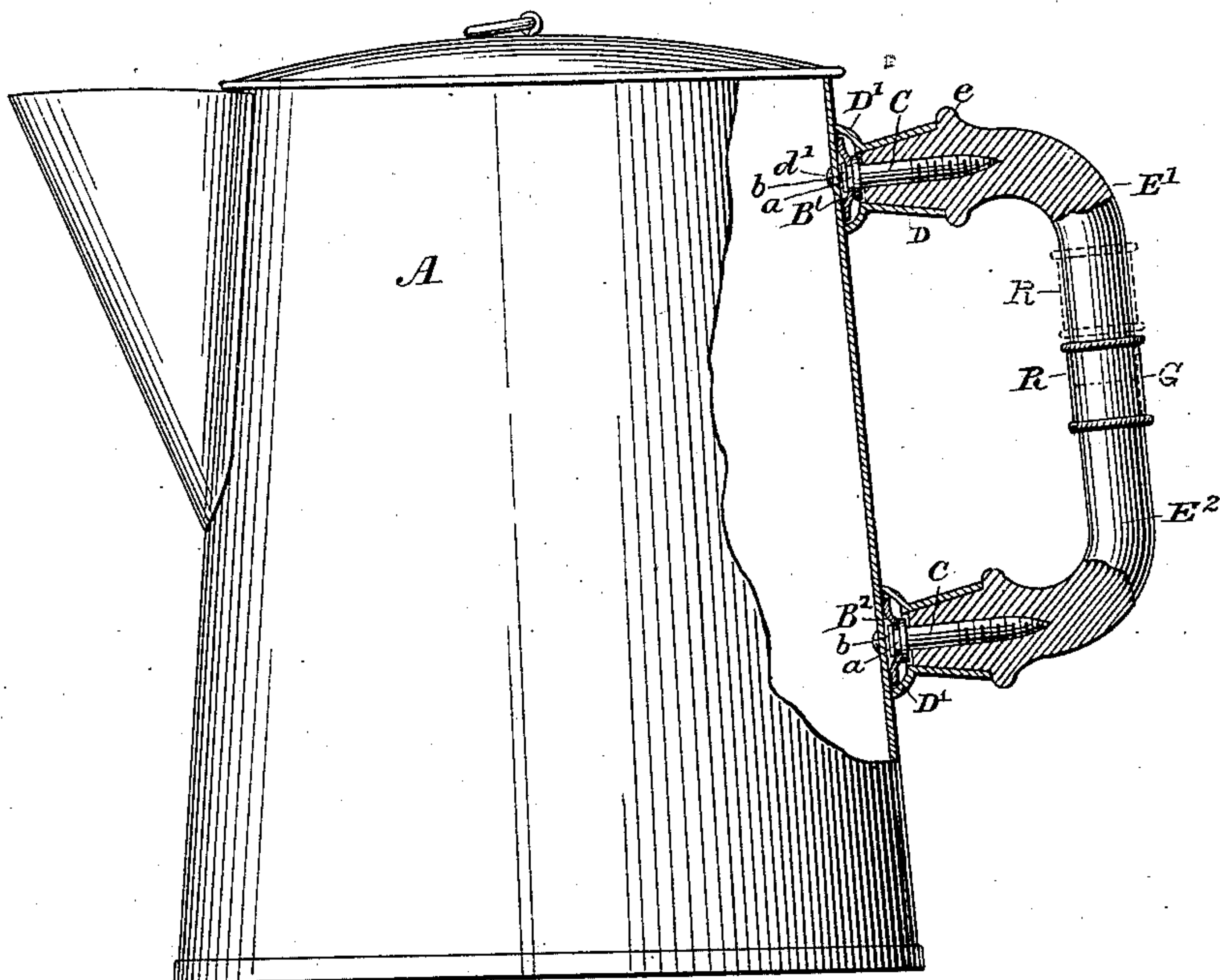


Fig. 4,

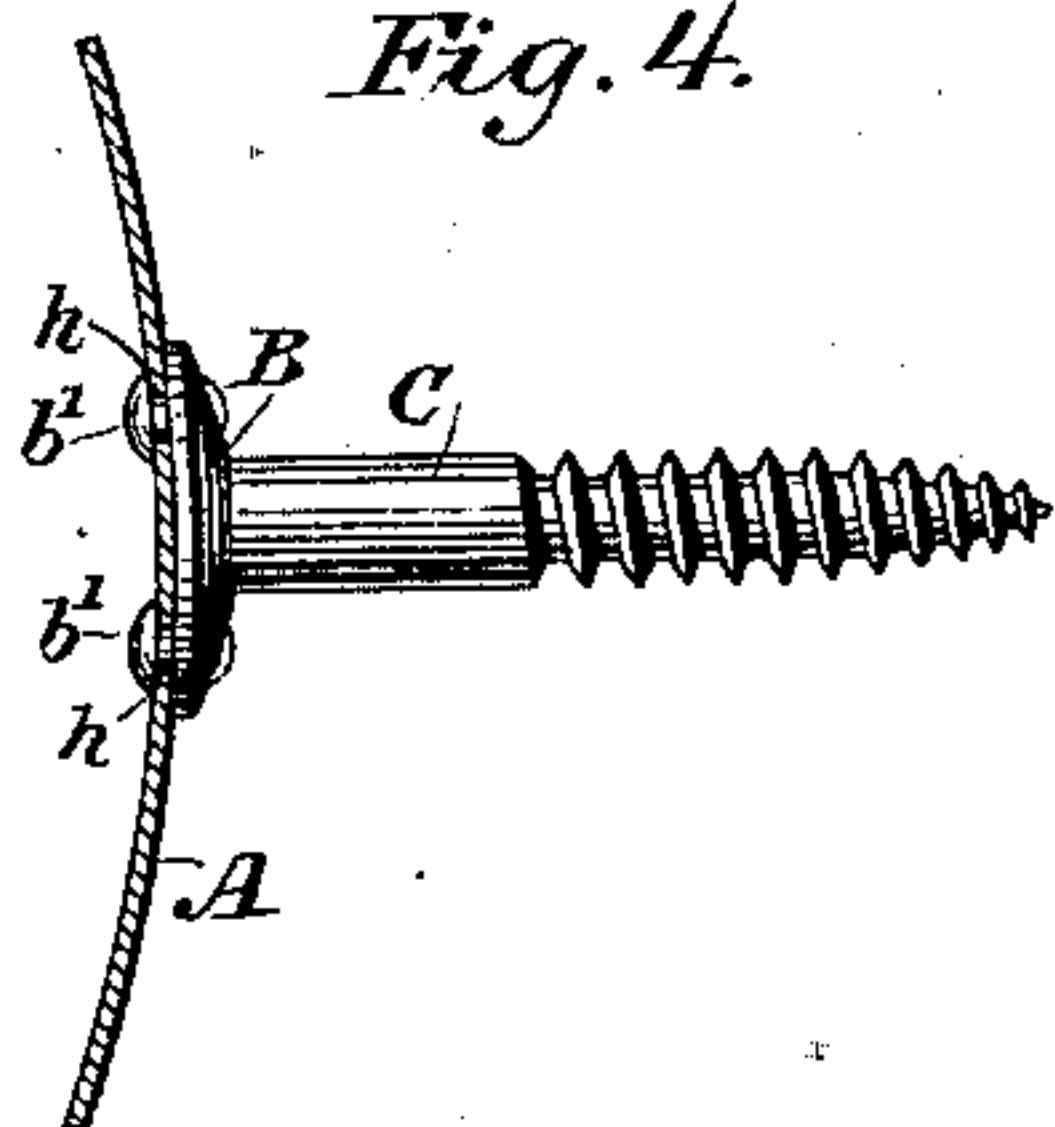
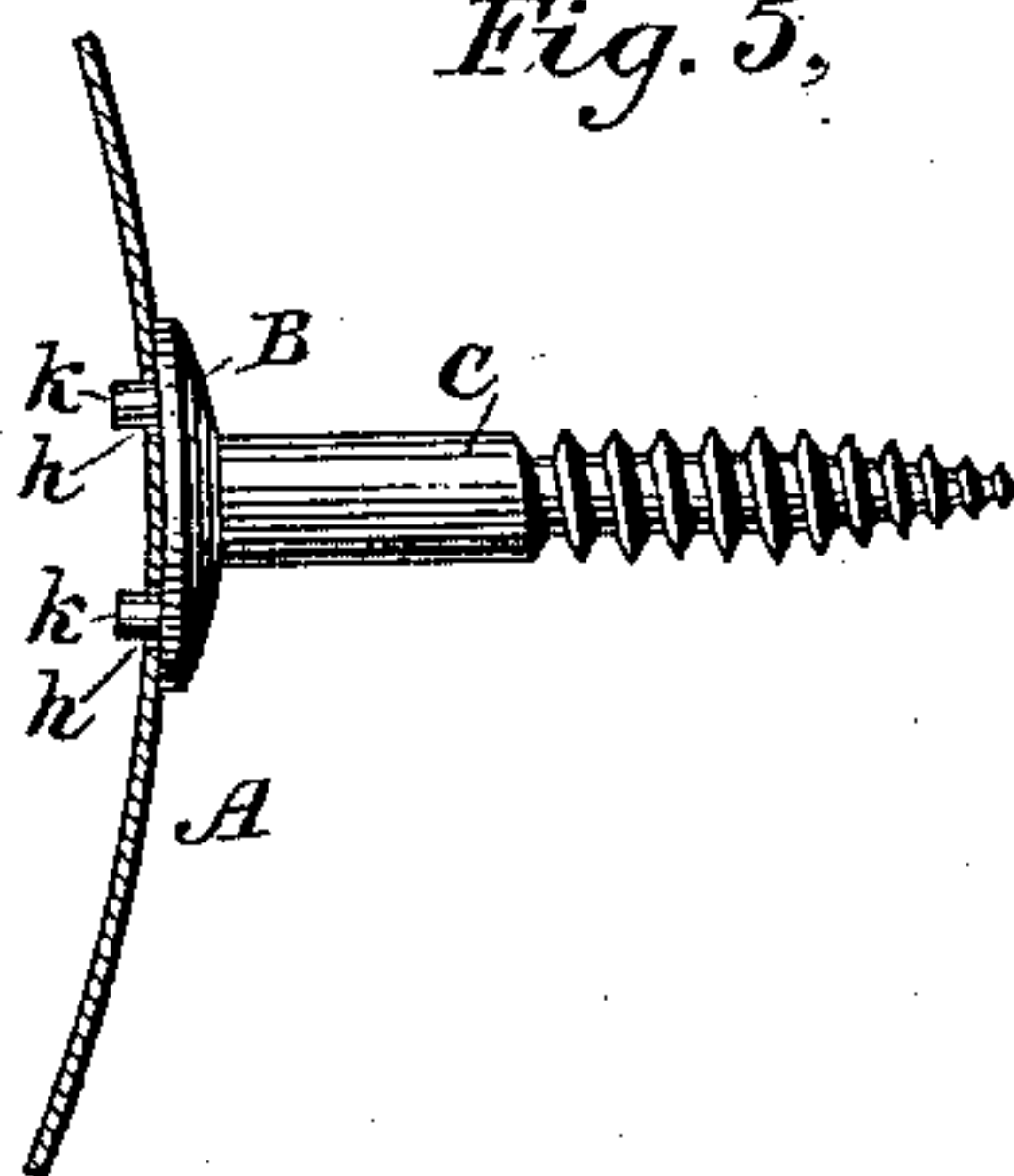


Fig. 5,



WITNESSES

Wm A. Skink
Geo W. Breck

INVENTORS

John C. Milligan,
Jules Chaumont,

By their Attorneys

Pope Edgecomb & Butler

UNITED STATES PATENT OFFICE.

JOHN C. MILLIGAN, OF BROOKLYN, AND JULES CHAUMONT, OF WOOD HAVEN, ASSIGNORS TO THE LALANCE & GROSJEAN MANUFACTURING COMPANY, OF NEW YORK, N. Y.

ATTACHMENT OF HANDLES TO VESSELS.

SPECIFICATION forming part of Letters Patent No. 304,948, dated September 9, 1884.

Application filed December 12, 1883. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. MILLIGAN and JULES CHAUMONT, citizens of the United States, residing, respectively, in Brooklyn, in the county of Kings, and in Wood Haven, in the county of Queens, both in the State of New York, have jointly invented certain new and useful Improvements in the Attachment of Handles to Vessels Formed of Sheet Metal, of which the following is a specification.

Our invention relates to the joints by which handles are attached to the bodies of sheet-metal vessels, more especially those which are enameled, its object being to provide a strong, finished, and satisfactory form of attachment without the use of solder.

Prior to the date of our invention handles have generally been attached to those vessels of ordinary sheet metal which require comparatively long handles by soldering thereto the metal tube or socket, into which the handles of wood or other equivalent material was subsequently inserted. In the case of enameled sheet-metal vessels a space has usually been left free from enamel and the socket affixed by solder, or in other cases a brass plate has been riveted to the vessel before enameling, to which the tube or socket has been soldered in a similar manner. All of these methods are nevertheless defective, as it is found in practice that a soldered joint of this character is not sufficiently durable. By our invention a more durable attachment of the handle to the vessel is secured without the use of solder, while, if required, the handle may be readily removed from the vessel, for convenience in packing, as an instance.

In the accompanying drawings, which illustrate our invention, Figure 1 is a vertical section, and Fig. 2 an end view, of the improved joint as applied to a dipper, for which it is especially adapted. Fig. 3 shows the method of applying it to an ordinary vessel with straight sides, and Figs. 4 and 5 show modifications of the joint.

Referring to Figs. 1 and 2, A represents the body of the vessel, and B the plate, which is riveted thereto. In Fig. 1, C represents a

screw having a shoulder, *a*, and an angular head, *b*, which passes through and fits into an angular hole in the center of the plate B, the object being to prevent the same from turning. The top of the angular head *b* is then flattened or upset, securing the screw C firmly to the plate B. The plate B, with the screw C firmly attached to it, is now affixed to the body of the vessel by the rivets *d'* and *d''*. A metal socket, D, terminating at its lower extremity in a shield, D', is now placed loosely over the screw C. The shield is made of such size and shape as to entirely cover the plate B and fit closely against the body of the vessel A. The handle E, pierced in its center for the admission of the screw C, is provided with an annular shoulder or ridge, *e*. The extremity of the handle below the shoulder *e* is made of a proper size to enter freely into socket D, and is of such a relative length to it that upon being screwed down upon the screw C the shoulder *e* abuts against the edge of the socket D, pressing it firmly against the body of the vessel at the edge of the shield D'. The effect of this is to make a firm, durable, and well-finished joint for the attachment of the handle to the vessel.

Fig. 3 illustrates the manner of applying our invention to a vessel requiring two points of attachment of the handle. A' represents the body of the vessel, and B' B'' represent the plates, formed in the same way as before described in Figs. 1 and 2. The handle in this case is made in two pieces, E' and E''. Each part is secured into place as already shown and described. The two parts are then made to meet at the point G. A ring or ferrule, R, which has previously been placed upon one of the pieces of the handle, as shown by the dotted lines, is slipped forward so as to cover the point G where the two parts meet, and secured there in any convenient manner.

It is evident that the screw C and the plate B, when riveted together by means of the screw-head *b*, form practically one piece, in which the plate B is simply an enlarged head for the screw. Fig. 4 shows how the screw and plate may be made in one piece for the purposes of

the invention, C being the screw, and B the enlarged head or plate. Two or more rivets fasten the same to the vessel through the holes *h h*. Instead of rivets, the head or plate may
5 be provided with lugs, as shown at *h h* in Fig. 5, which pass through corresponding holes in the side of the vessel, and are riveted firmly upon the inside.

It will be seen that by our invention no
10 solder whatever is required to be used. The socket and shield are held in the firmest manner against the vessel, and yet it is not connected therewith, but can be removed and a new one substituted, as desired. Nothing has
15 to be done to the vessel after enameling.

We claim as our invention—

1. In a sheet-metal vessel, the socket D and shield D', in combination with the body of the vessel A, the screw C, having the head or plate
20 B, and the handle E, substantially as described.

2. In a sheet-metal vessel, the combination of the body of the vessel A, the screw C, and the plate B, shield D', and handle E, substantially as described.

3. In a sheet-metal vessel, the combination 25 of the body of the vessel A, the plate B, attached to the outside of said vessel, the screw C, attached to said plate, the shield D', and the handle E, fitting into said shield and receiving the said screw, whereby the said shield is held 30 in position against the side of the vessel by the said handle.

In testimony whereof we have hereunto subscribed our names this 5th day of December A. D. 1883.

JOHN C. MILLIGAN.
JULES CHAUMONT.

Witnesses:

W. E. HAYWARD,
J. T. BRUCE.