

(No Model.)

J. W. BOWERBANK.  
HINGE FOR PAIL LIDS.

No. 476,032.

Patented May 31, 1892.

Fig. 1

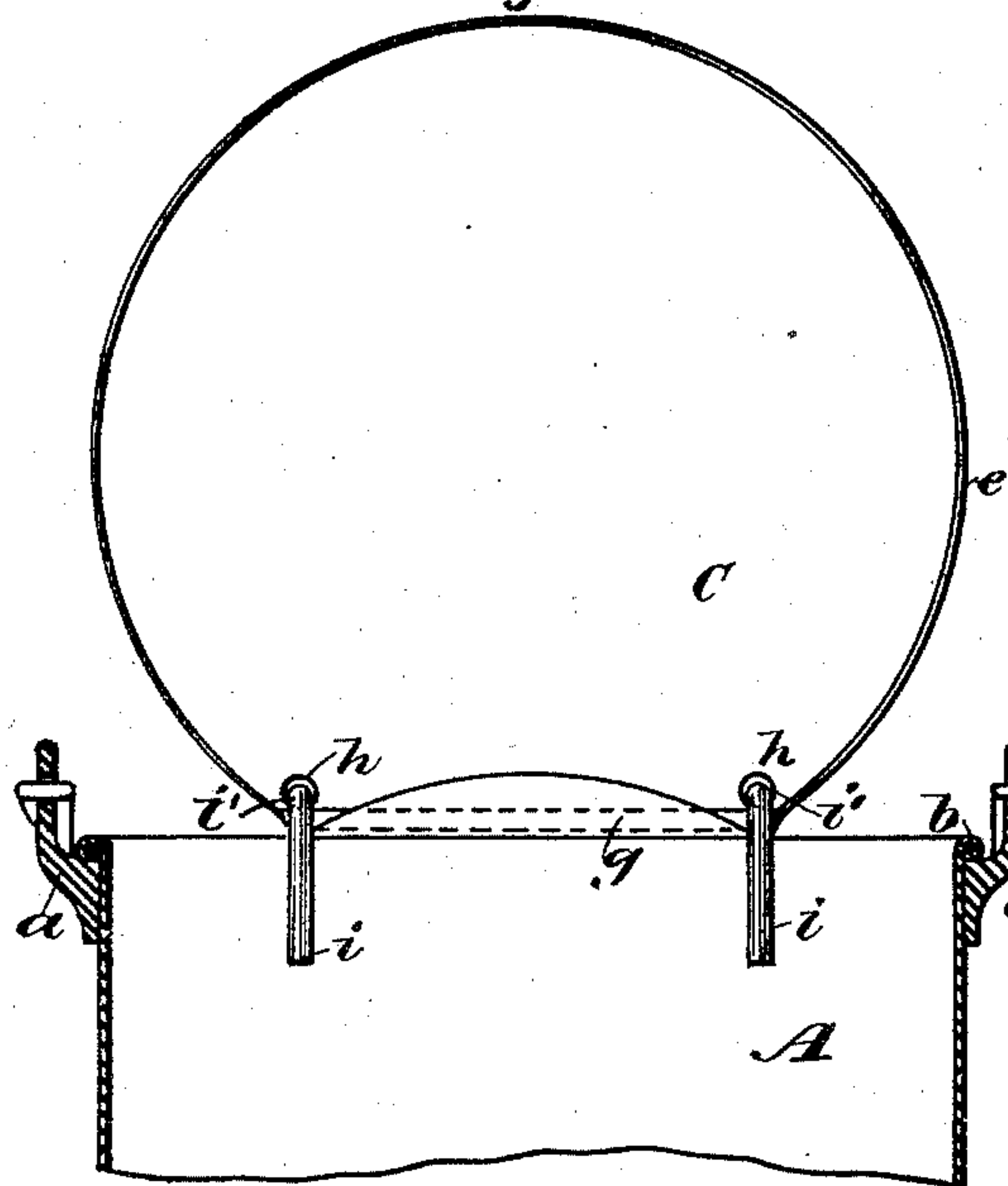


Fig. 2

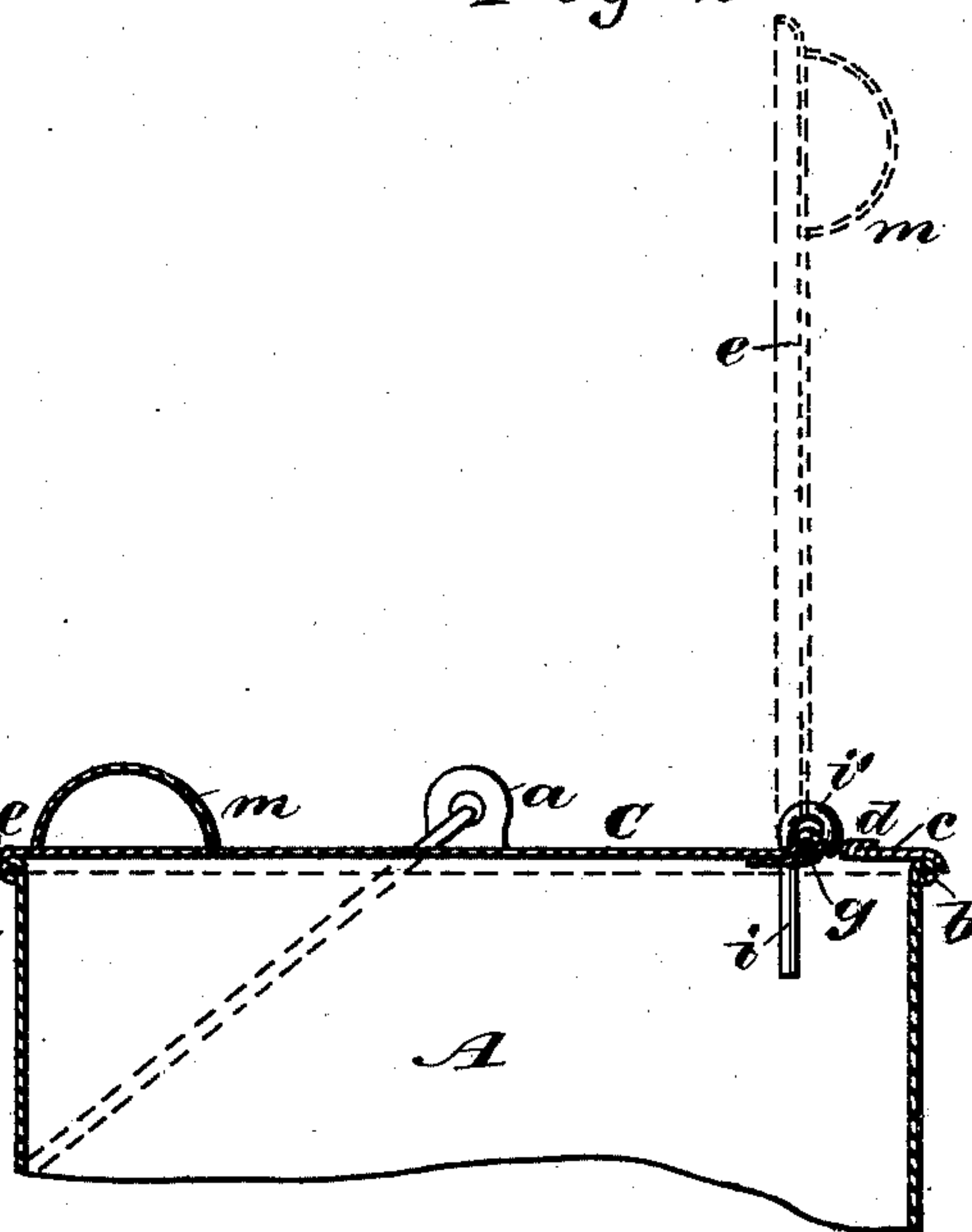


Fig. 3

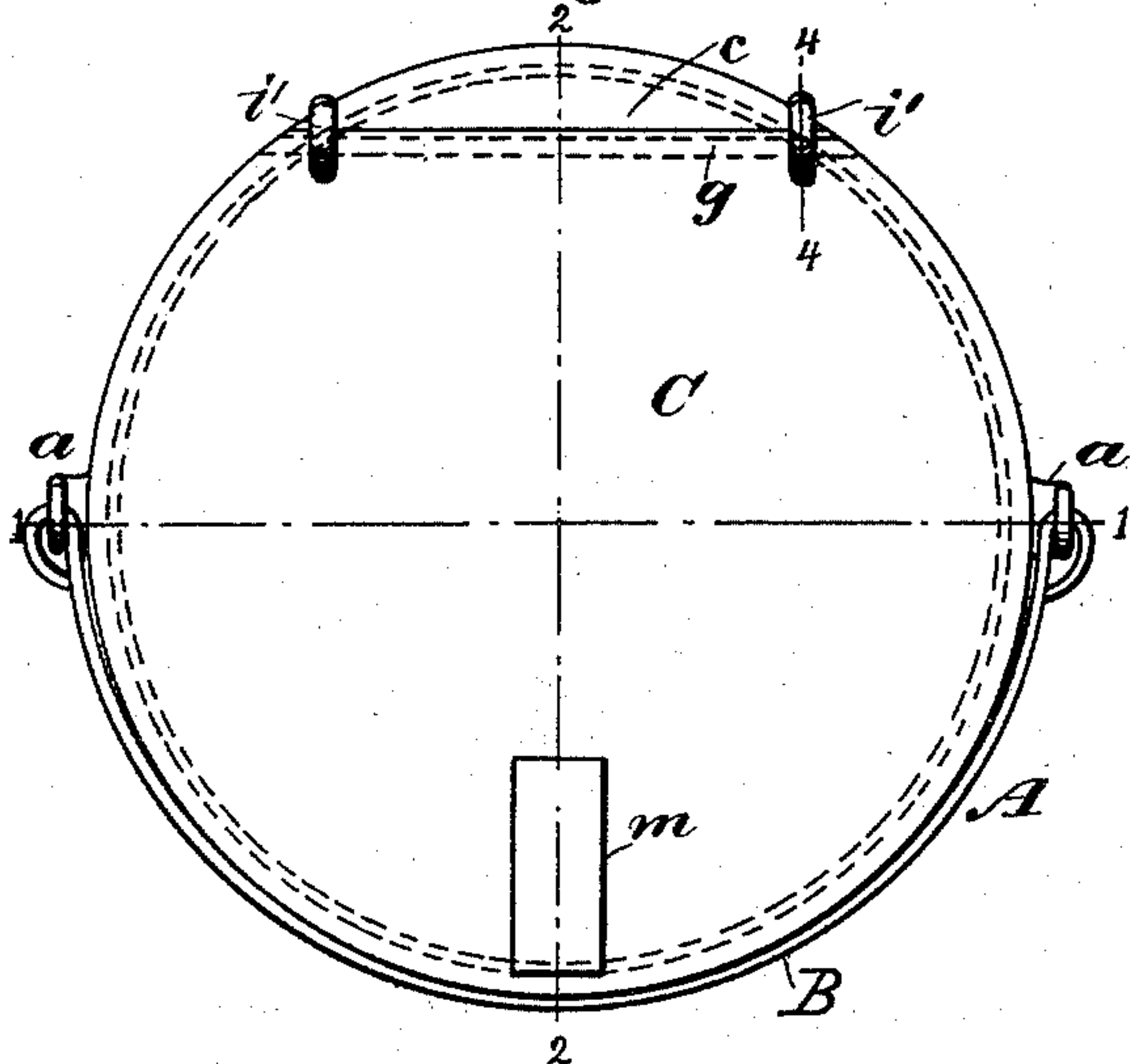
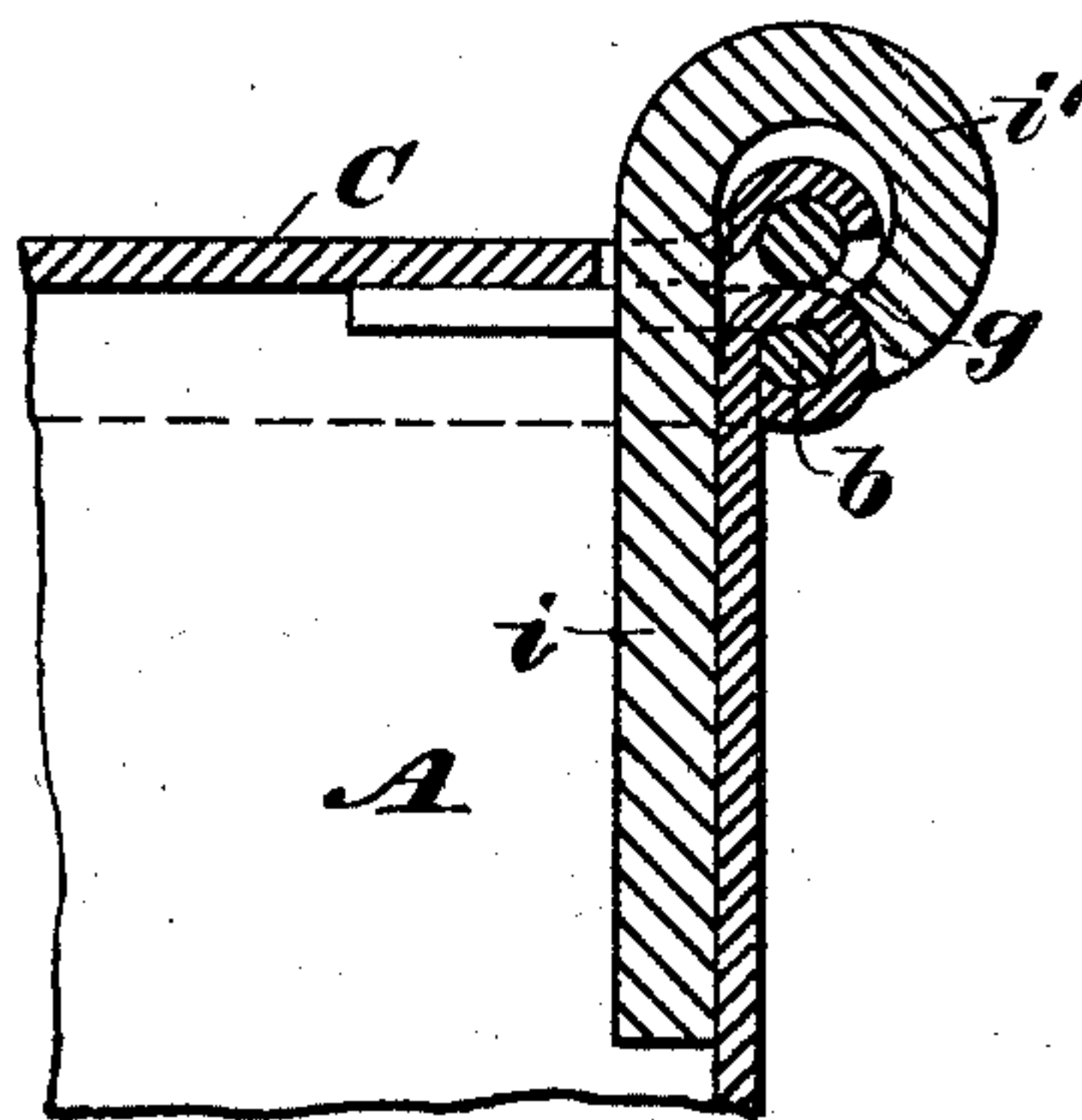


Fig. 4



WITNESSES:

J. A. Berghman  
L. Sedgwick

INVENTOR

J. W. Bowerbank  
BY Munn & Co

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JOHN W. BOWERBANK, OF NEW YORK, N. Y.

## HINGE FOR PAIL-LIDS.

SPECIFICATION forming part of Letters Patent No. 476,032, dated May 31, 1892.

Application filed September 17, 1891. Serial No. 405,942. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. BOWERBANK, of New York, in the county and State of New York, have invented a new and useful Hinge for Pail-Lids, of which the following is a full, clear, and exact description.

This invention relates to an improvement in hinges for the lids of tin pails, and particularly for those used in the transportation of shelled oysters, and has for its object to provide a hinge-joint for the lid of such a receptacle which will be cheap and easy to manufacture, be durable in service, and that will permit the lid to open and expose nearly the entire area of the pail-top.

To these ends my invention consists in the construction and combination of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical section of a pail shown broken away below, taken on the line 1 1 in Fig. 3, a lid in open adjustment thereon, and the improved hinge connection therefor. Fig. 2 is a vertical section of a pail-body broken away below, taken on the line 2 2 in Fig. 3, the lid and improved hinge therefor being shown in closed adjustment by full lines and in an open position by dotted lines. Fig. 3 is a plan view of a pail, a lid closed and connected to the pail-body with the improved hinge-joint, and a hinged bail; and Fig. 4 is an enlarged broken section of one joint of the hinge, taken on the line 4 4 in Fig. 3.

The body of the pail A is preferably made cylindrical and is provided with a bail-handle B, hinged in the usual manner to the ears a, so as to fold laterally and allow the lid C to be freely manipulated in opening or closing the top of the pail. In order to stiffen the upper edge of the pail-body, it is folded outwardly over a wire ring b, thereby forming a rounded edge externally.

Upon the rim of the pail-body a cap-piece c is secured, which conforms in shape with the wired edge that it is seated upon and has its inner marginal portion straight and prefer-

ably stiffened by folding a hem thereon, as shown at d in Fig. 2.

The lid C is preferably made of sheet metal, circular in form, and flat, having a depending flange e formed on its periphery, that is of such a proportionate diameter as will permit the flanged edge to closely embrace the rim of the pail-body when the lid is imposed thereon.

At the point where the hinge-joint is to be produced between the lid C and pail-body A an edge portion of the lid is lap-folded upon the lid proper, which folded part is equal in dimensions with the cap-piece c, so that the lid and cap-piece together form a complete cover for the pail.

In the fold of the lid C a wire rod g is introduced and secured in the bight of said fold by solder or equivalent means, the sheet metal of the lid being swaged with a proper tool to cause it to closely embrace the rod.

Two perforations at h h (see Fig. 1) are made near the peripheral flange e of the lid C, which perforations are also adjacent to the terminals of the incased wire rod g and are designed to allow two hook-bars i to be inserted through the lid at the points indicated. The hook-bars i are made of wire rod, preferably, and have each an open loop or hook i' bent on the end which is allowed to project above the lid C, said hook-shaped portions having a loose engagement with the enveloped wire rod g near each end of the same, as shown in Fig. 3.

When the parts are assembled to form a hinged connection between the lid and body of the pail, the straight portions of the hook-bars i are secured vertically upon the inner surface of the cylindrical side wall of the pail, as indicated in Fig. 1, which will dispose the hook-bars in parallel planes and provide a hinged connection of the same with the rod g.

When the lid C is in open adjustment, the entire top of the pail A is uncovered, except the small portion below the cap-piece c, thereby affording ample space for the introduction or removal of the contents and cleansing of the interior.

It will be seen that all strain of the hinge-joint between the lid and pail-body is sus-

tained by the hook-bars 2, which may be made substantial, and thus afford a strong connection of parts which will permit the lid to close tightly.

- 5 For convenience in manipulation a loop-piece *m* is secured on the lid C near its free edge.

10 It is evident that the pail-body A may be made of a different form from that shown and the lid, of a corresponding shape, be hinged thereto in the manner hereinbefore explained, so as to provide a cheap strong hinged joint between these parts.

- 15 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a pail-body and its lid, of a transverse rod secured on the lid at one folded edge thereof and two hook-bars

which pass through holes in the lid and are 20 affixed on the inside surface of the pail-body, substantially as described.

2. In a hinge-joint for a pail-body and its lid, a transverse wire rod secured in a fold 25 along a straight edge of the lid, in combination with two hook-bars formed of wire rod bent into hook shape at one end, which rods pass loosely through holes in the lid near its edge and near the ends of the wire rod and are secured to the pail-body on its interior, 30 having their hooked end portions loosely engaged with the incased wire rod, substantially as described.

JOHN W. BOWERBANK.

Witnesses:

WM. P. PATTON,  
C. SEDGWICK.