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Public DEPARTMENT
ORDER.
ROUTINE SERIES
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PUBLIC DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following endorsement of the Assistant
Secretary to the Government of India, Revenue and Agricultural Department,
dated *30th November* 1895, No. P. 2995.

ORDER, dated *19 December* 1895, R. No. 1489

THE following Notification will be published in the *Gazette* once.

The following specification of an invention has been filed in accordance with
Section 11 of Act V of 1888 (the "Inventions and Designs Act"), and is open to
inspection at the office of the Chief Secretary to Government, Fort St. George, on the
payment of a fee of one rupee:—

*Improvements in apparatus for
withering tea leaf*

*(By Robert Thomson, of Kinning
Park Engine Works, Kinning Park,
in the County of Renfrew, Scotland
Engineer and Tea Planter.)*

66 p. 65.

17/12

4144 Public

Recd 8
App 11/12/15
Encls 1

No. 3000 P.



The accompanying copy of a ^{Specification}~~Design~~, of which the original (bearing register number 255- of 1895) was ^{filed}~~registered~~ on the 9th of November 1895 in the Office of the Secretary to the Government of India in the Department of Revenue and Agriculture, is forwarded to the ^{Government}~~Chief Commissioner~~ of Madras in conformity with the provisions of Section 11 of the Inventions and Designs Act, 1888.

M. V. C.

Offg. Secretary under the Inventions
and Designs Act.

Encls

DEPARTMENT OF REVENUE & AGRICULTURE,

(PATENTS),

Calcutta, the 30th Novbr 1895.

India.

Inventions and Designs Act, 1888.

To all whom it may concern:—

Be it known that I, Conrad Field Mendham, of the Metropolitan Docks, Hong Kong, Engineer, am in possession of an Invention for "A new cap or stopper for sealing or fastening tins, cans, drums, and the like, containing oils, paints, kerosene, and other inflammable and explosive materials," and I, the said Conrad Field Mendham, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say:—

My invention relates to a new cap or stopper for tins, drums, and the like, containing materials which are of an ^{Explosive or} inflammable nature; and has for its object to supersede the present dangerous practice of sealing such vessels by soldering, in which the hot iron is necessarily brought into proximity with any vapour that may be arising from the contents; My invention consists essentially of a cap with a double flange, which is placed over a round hole in the vessel, the edge of the hole being turned up to form a slight cylindrical projection, and then by the pressure of a tool or tools suitable for the purpose, the flange of the cap is closed round the cylindrical projection, and by metallic contact, the cap and the vessel on which it is placed are made airtight.

The accompanying sheet of drawings will illustrate

illustrate the construction of the stoppers and the turned up part of the hole in the vessel, all the figures being considerably enlarged for the sake of clearness.

Figure 1 is a section, and fig. 2 a (half) plan of part of the upper side of a sheet metal vessel, with a circular hole cut therein, and flanged up round the edge of the hole to receive the cap; Fig. 3 is a section, and fig. 4 a plan of the cap, which is made to fit over the opening and engage with the flanged edge of the hole; Fig. 5, which is half in section and half in elevation, shows the cap laid over the opening, ready for sealing; and Fig. 6, also in section and elevation, shows the same when it has been closed and sealed by suitable milling and beading tools.

P is a portion of the upper part of a tin or drum in which a circular hole has been cut for the purpose of filling; a bead *a* is raised round the hole to afford strength and finish; *b* is a cylindrical edge flanged up round the hole; between *a* and *b* is a seat or recess *c*, in which the flange of the cap may rest if necessary; *D* is the cap which consists of a disc of metal flanged up round the edge *b* to form a shallow cylinder or cup, the top edge *d* of which is again turned over on the outside, forming an annular groove or flange *e* to fit over the cylindrical edge *b* as shown in fig. 5; the body of the cap is bunched up at the centre *e* and periphery *f*, as particularly shown in fig. 3. When the cap is put in its place after the vessel is filled, ordinary or special milling and beading tools are employed to compress the sides of the annular groove *d* over the edge *b* and to bead the periphery *f* tightly against the lower



lower surface of the recess c as shown by d' and g in fig. 6, the curved part of the cap at f allowing the metal to be expanded and fed up to the head without cracking. The part e in the centre of the cap is raised to strengthen it, so that in the event of its receiving a sharp blow, the downward pressure would serve to tighten rather than open the joint.

In the foregoing description it is assumed that the plate P forms an integral part of the tin or drum, but for convenience, separate metal plates may be made, a trifle larger than the circular head a, as shown by the dotted lines p in fig. 2, and in these auxiliary plates the holes formed and turned up; then when it is required to use them on the vessels, the plates are soldered thereto when empty, the vessels filled, and the caps fitted and sealed as already described. In this form the caps and plates may be sold separately from the metal vessels and affixed thereto as required.

I am aware that, prior to my invention, the edges of sheets of metal have been pressed or rolled together without soldering, to form seams by an involute process, and this process has been employed in putting in the bottoms of sheet metal cans and vessels: I therefore make no broad or general claim to the formation of metal seams by beading or milling; but having described my invention and the means adopted for carrying the same into effect, I declare that what I claim is:

1. A cap or stopper made of tin or other sheet metal for use on vessels containing oils, explosive or inflammable substances, by which when the caps and the metal of the vessels are sealed by milling or compressing the touching surfaces together, they

they are rendered perfectly air tight, substantially as herein described and shown.

2. A cap or stopper for tin and other sheet metal vessels as already described, rendered perfectly air tight by expanding and beading the cylindrical touching surfaces from the inside, as shown by the parts f and g in fig 5, and 6, substantially as described.

3. A cap or stopper for vessels containing oils, paints, explosive or inflammable substances, which renders the vessels airtight by metallic contact, without the application of heat or jointing material, substantially as and for the purposes herein set forth and described, and illustrated in the accompanying drawings.

Dated this 6th day of September 1875.

W^m C. F. Mendham

Witness,

W^m L. Hutchison

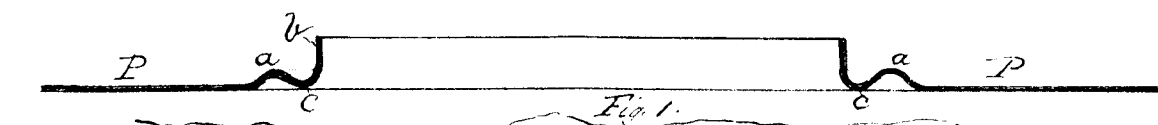


Fig. 1.

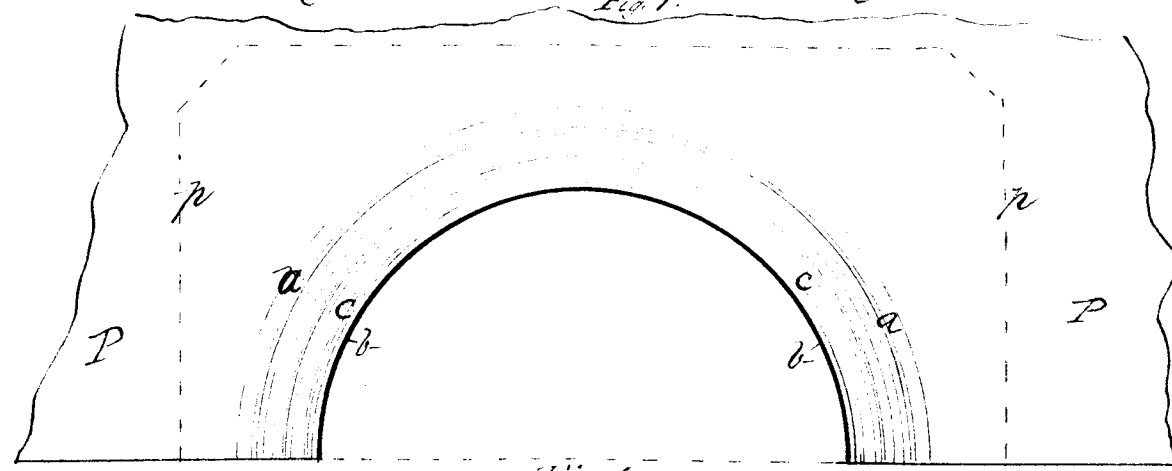


Fig. 2.



Fig. 3.

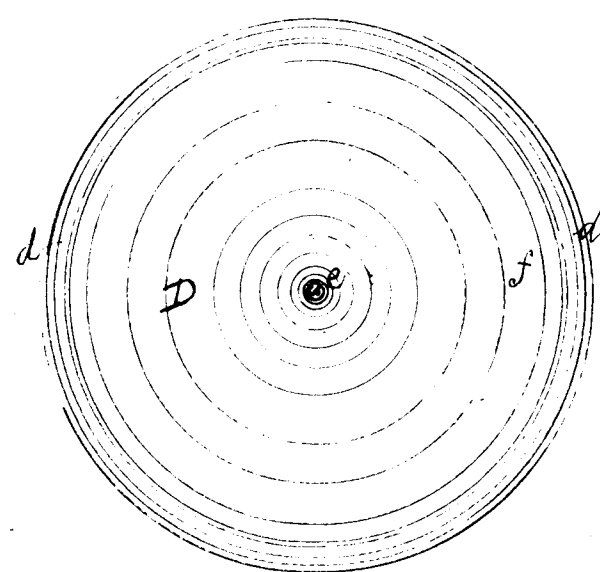


Fig. 4.

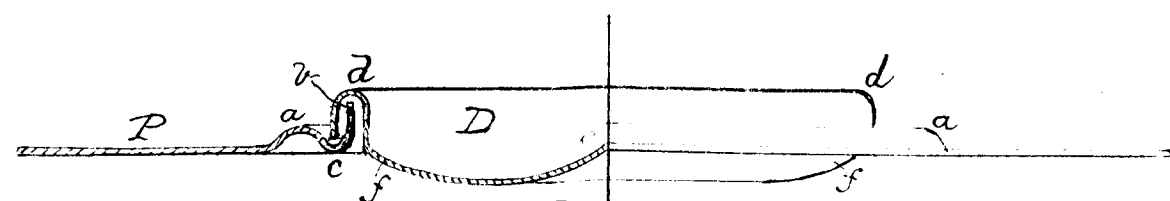


Fig. 5.

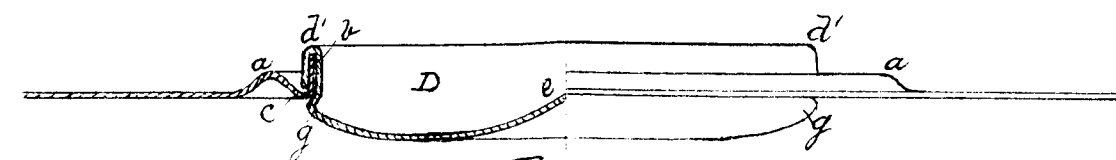


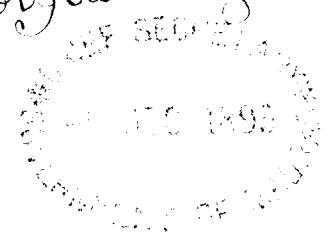
Fig. 6.

Register No 255 of 1895

In the matter of
Act V of 1888

and

In the matter of Conrad
Field Hendham's invention for
a new Cap or stopper for
sealing or fastening tins etc



Specification

J. Price
London

Lignam & Co.
Palermo