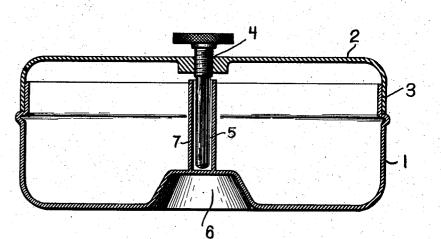
PATENTED SEPT. 22, 1903.

No. 739,406.

J. H. FEARIS. COVERED BOX. APPLICATION FILED MAY 15, 1903.

NO MODEL.



Witnesses: Ehner R. Shipley. Mr. S. Belden

James H. Fearis Inventor by James W. SEE Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 739,406.

Patented September 22, 1903.

UNITED STATES PATENT OFFICE.

JAMES H. FEARIS, OF CONNERSVILLE, INDIANA.

COVERED BOX.

SPECIFICATION forming part of Letters Patent No. 739,406, dated September 22, 1903.

Application filed May 15, 1903. Serial No. 157,213. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. FEARIS, a citizen of the United States, residing at Connersville, Fayette county, Indiana, have invented 5 certain new and useful Improvements in Covered Boxes, of which the following is a specification.

This invention relates to improvements in that class of covered boxes in which the lid

- 10 is held to the box by friction and is likely to be so tightly held upon the box as to make its removal very difficult. For instance, in tin boxes containing shoe-blacking and the like the lids often become so tightly stuck upon 15 the box, as a result either of tight fitting or of
- fouling, as to call for the use of an implement of some kind in removing the lid.
- My invention provides a box having selfcontained provision by means of which tightly-20 held lids may be readily removed.
 - My invention will be readily understood from the following description, taken in connection with the accompanying drawing, which is a diametrical section of a metallic
- 25 box of otherwise well-known form, but having added to it my present invention.

In the drawing, 1 indicates the body of an ordinary circular box; 2, the lid, capping over the body and holding thereon by friction; 3,

- 30 the joint where the lid fits the body; 4, a screw threaded through the center of the lid and having an exterior head by means of which it may be turned; 5, the inner end of the screw 4, the same being prolonged in-
- 35 wardly a sufficient distance to reach the bottom of the box when the screw is turned inwardly and having no threads; 6, a recess formed upwardly in the bottom of the box, and 7 a tube projecting rigidly upward from 40 the bottom of the box around the lower por-
- tion of this tube.

By turning the screw 4 its inner end 5 is caused to impinge against the bottom of the box and force the lid from the body, or at least

- 45 result in so completely loosening it as to per-mit its ready removal by hand. The threads of the screw may of course be extended clear down to the lower end of the screw; but the omission of threads as indicated in the draw-
- 50 ing renders the screw less liable to withdraw pasty contents from the box. The recess 6,

material of the bottom of the box, to stiffen the bottom of the box where it is engaged by the screw, and it serves also to shorten the 55 screw, and it serves also as a receptacle for the head of a screw projecting upwardly from the box below when such boxes as this are piled upon one another. The tube 7, if employed, serves in forming a central recess in 60 the contents of the box, so that the screw in, reaching the bottom of the box does not need to come into contact with the contents or penetrate the contents. The central disposition of the screw causes it to exert an equable 65 strain upon the joint uniting the lid to the body and to thereby certainly and promptly loosen the joint, whereas a side disposition of any such screw would serve rather to cant or cock the lid and tighten it unless a plu- 70 rality of screws were employed.

I disclaim, broadly, a construction in which centrally-disposed screw in a lidded box a acts tensionally only or construction in which a screw is disposed at one side of the box and 75 acts compressively at one point of the periphery of the wall of the box. Neither of these constructions attains the object of my invention-namely, the equable application of separating power simultaneously at all points in 80 the circumferential line of frictional contact between the lid and box.

stantially as set forth, of a box-body, a cover 85 frictionally engaging the body, and a screw with threads centrally engaging the cover and adapted to impinge compressively upon the center of the interior surface of the bottom of the box and having an exterior head.

2. In a covered box, the combination, substantially as set forth, of a box-body, a cover frictionally engaging the body, and a screw with threads centrally engaging the cover and adapted to impinge compressively upon the 95 center of the interior surface of the bottom of the box and having an exterior head, the main portion of said screw which projects within the box being without threads.

3. In a covered box, the combination, sub- 100 stantially as set forth, of a box-body having its bottom upwardly recessed, a cover frictionally engaging the body, and a screw with if present, serves, by reason of its arching the | threads centrally engaging the cover and

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adapted to impinge compressively upon the center of the interior surface of the bottom of the box over said recess and having an exterior head adapted to enter the correspond-5 ing recess in a superposed box.

4. In a covered box, the combination, substantially as set forth, of a box-body having a central upward projection from its bottom, a cover frictionally engaging the body, and

10 a screw centrally engaging the cover and adapted to impinge compressively upon the interior surface of said projection and having an exterior head.

5. In a covered box, the combination, sub15 stantially as set forth, of a box-body, a centrally-disposed tube projecting rigidly upward from the bottom of the box, a cover fric-

tionally engaging the body, and a screw with threads centrally engaging the cover and projecting into said tube and adapted to impinge 20 compressively upon the interior surface of the bottom of the box and having an exterior head.

6. In a covered box, the combination, substantially as set forth, of a body portion, a covered portion frictionally engaging the 25 same, and a screw with threads centrally engaging one of those portions and projecting into the box and adapted to impinge upon the center of the interior surface of the other portion and having an exterior head.

JAMES H. FEARIS.

Witnesses: Sylvester Meek, J. M. Kellum.