F. P. BOLAND.

SAWDUST BOX.

APPLICATION FILED AUG. 8, 1910.

981,911. Patented Jan. 17, 1911.

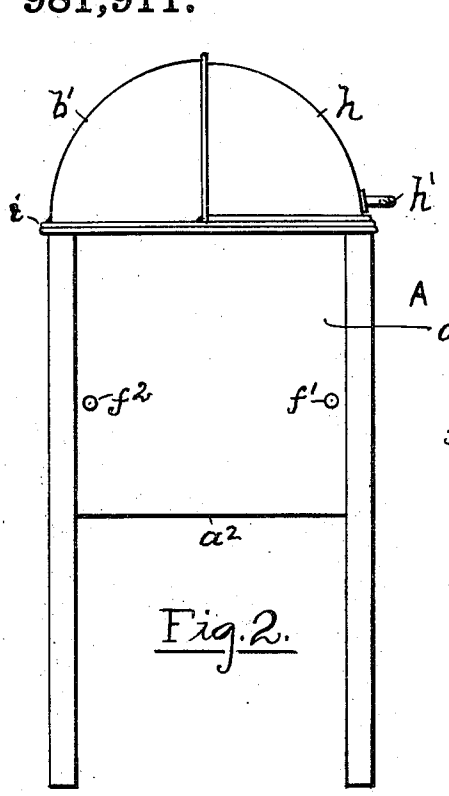

Fig. 2.

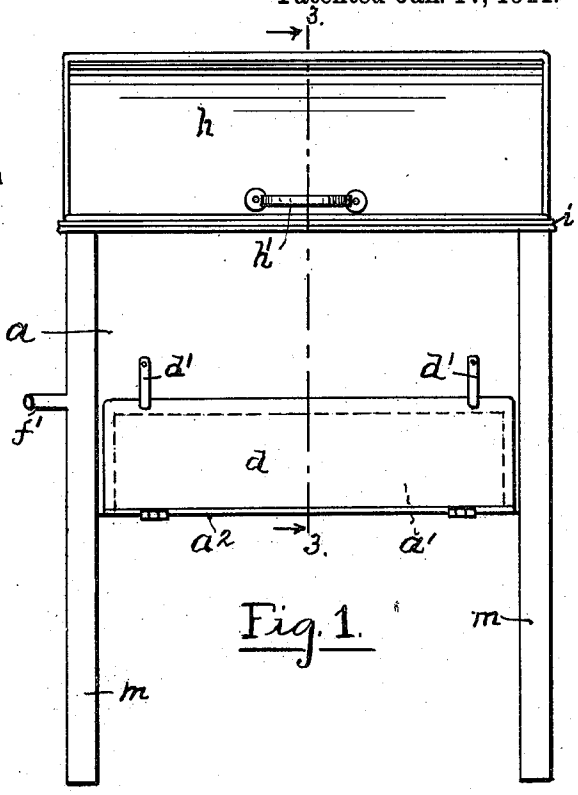

Fig. 1.

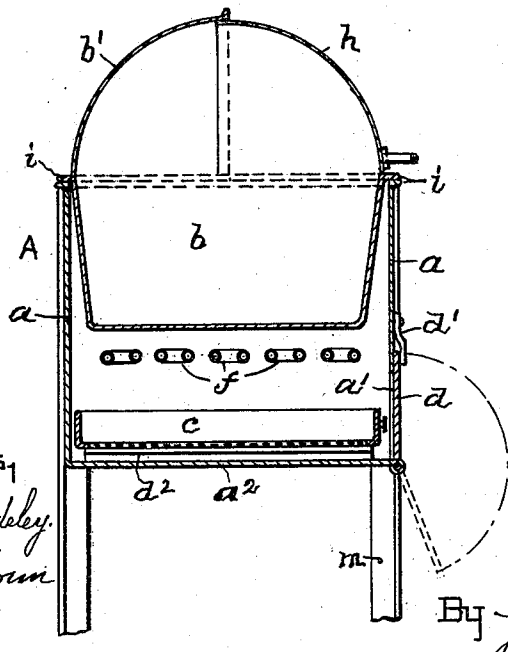

Fig. 3.

Witnesses,
Willard H. Bardeley.
Calvin H. Brown

Inventor,
Francis P. Boland.

By Geo. H. Remington
Atty.

UNITED STATES PATENT OFFICE.

FRANCIS P. BOLAND, OF PROVIDENCE, RHODE ISLAND.

SAWDUST-BOX.

981,911. Specification of Letters Patent. **Patented Jan. 17, 1911.**

Application filed August 8, 1910. Serial No. 576,036.

To all whom it may concern:

Be it known that I, FRANCIS P. BOLAND, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Sawdust-Boxes, of which the following is a specification.

This invention relates to improvements in sawdust boxes, so-called, of the class adapted to be heated and employed in jewelry manufactories for drying articles of jewelry.

Sand-boxes or driers heretofore produced have usually been made of wood. One objection to the use of such wooden boxes is that the heat (steam or gas, as the case may be) action is less efficient in that it requires a longer time to suitably heat the sawdust so as to effect the proper or desired absorption of the water or moisture from the washed articles of jewelry contained in the box. It may be added that, owing to carelessness or other causes, particles of sawdust are liable to become lodged in pockets or small recesses immediately contiguous to the steam-heated pipe or coil, the continued action of the heat, coupled with suitable atmospheric conditions may, and in fact occasionally does, produce spontaneous combustion: the smouldering sawdust, if undetected, is liable to burst into flame and communicate itself to the wooden tank or box, &c., and cause serious loss or damage to the surrounding property.

The object of the present invention is to produce an incombustible sawdust box in which the objections or disadvantages before referred to as being inherent in boxes of this general character are wholly eliminated, the improved apparatus at the same time being more conveniently accessible, efficient and lighter, and also presenting a more attractive ornamental effect.

To these ends the invention consists in the novel construction and combination of parts, as hereinafter set forth and claimed.

In the accompanying sheet of drawings. Figure 1 represents a front side elevation of a sawdust box or jewelry drier embodying the improvements forming the subject of this application for patent. Fig. 2 is a corresponding end elevation; and Fig. 3 is a transverse sectional view, taken on line 3 3 of Fig. 1.

A, again referring to the drawings, designates the improved, self-contained sawdust box or drying apparatus complete. The structure comprises a hollow, rectangular-shaped sheet metal body a, open at the top and supported by the four standards or legs m. An opening a^1 is formed in the lower portion of the front side, protected by a swinging drop door d; latches d^1 serving to keep the door in the closed position. The bottom, a^2, of the body is provided with cleats d^2 adapted to support a removable shallow metal tray or pan c, having a perforated or wire mesh bottom, access to the body chamber being through the said opening a^1.

At a point above the pan c is located suitable heating means. The drawings represent a series of pipes f, arranged to form a circulation heating coil, adapted to connect with the boiler or other generator of steam. f^1, Fig. 2, indicates, say the inlet-pipe and f^2 the return pipe of the coil.

The sheet-metal sawdust tank or box proper b extends downward into and is supported by the body a, a space intervening between the said coil and the tank's bottom. The upper edge of the tank is provided with a circumscribing outer flange i, adapted to rest upon the corresponding edge of the member a, thereby closing the opening and at the same time serving to support the tank. The latter is also provided with an integral arc-shaped hood b^1 extending above the said flange and longitudinally of the tank. A correspondingly shaped top member h, or cover having closed ends, is movably fitted to and adapted to coöperate with the said hood; its function and manner of operation being analogous to the well-known angularly movable roll-top desk cover. Upon swinging the cover rearwardly, facilitated by handle h^1, access to the interior of the tank may be had. The drawing represents the cover in the dropped or wholly closed position.

In the practical operation of the device a quantity of suitable sawdust is placed loosely in the box chamber and controlled steam admitted into the heating coil f, the steam circulation being continued as long as desired. Articles of jewelry, after being subjected to a cleansing bath, are then temporarily immersed or embedded in the heated sawdust, the cover h then being in the closed position. If desired, the mass contained in the box may be stirred or agitated from time to time. Upon removing the thus

acted upon articles of jewelry from the box all trace of moisture will have been absorbed or evaporated from them by reason of their contact with the heated sawdust. During the drying process just described the heat from the coil may be further utilized for drying other articles of jewelry contained in the pan *c*.

I claim as my invention and desire to secure by U. S. Letters Patent:

As an improved article of manufacture the herein described self-contained metallic sawdust box, the same consisting in the combination of a supported chambered body or casing having side and bottom walls, a tank for holding sawdust removably supported on the casing and extending downwardly into its chamber, an arc-shaped hood member secured to or integral with the upper portion of the tank and partly closing the same, an independently movable arc-shaped front cover member constructed and mounted so as to coöperate with the hood for temporarily closing the tank, and a heating coil or analogous means mounted in the casing chamber.

In testimony whereof I have affixed my signature in presence of two witnesses.

FRANCIS P. BOLAND.

Witnesses:

CALVIN H. BROWN,

GEO. H. REMINGTON.