To all whom it may concern:

Be it known that I, George T. Greer, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Atomizing Powder Boxes, of which the following is a specification.

This invention pertains to containers for powders such as for talcum or other toilet preparations and has for its object to provide the ordinary sifter-top box with means for discharging its contents in finely atomized streams in any direction and without detracting from its customary use as a powder sifter.

The invention consists of the formation, combination and arrangement of the various parts as will be herein described and claimed.

In the accompanying drawings, Figure 1 is a vertical section of a powder box constructed in accordance with and embodying my improvements, the same being taken on the line A B of Fig. 2. Fig. 2 is a similar section taken on the line C D of Fig. 1. Fig. 3 is a plan view of the same and Fig. 4 a horizontal section taken on the line E F of Fig. 1.

Referring now to these drawings, 1 represents a customary powder box having a slip lid or cover 2 which is provided with an ordinary sifter top 3. This box may be of any construction, the conventional form of talcum box being shown for the reason that the invention is intended primarily for talcum containers, although it may be as readily applied to insect powder boxes or the like.

Secured to the lid 2 and disposed just beneath the sifter top is an atomizing plate or shelf 4, the same being preferably secured, by soldering or otherwise, to the inside of the lid 2. This shelf 4 may be soldered to the lid 2 for the major portion of its perimeter or otherwise brought into close contact therewith, but at one edge, at 5, the shelf 4 is slightly removed from the wall of the lid or box so as to provide a narrow passageway 6 between the lower or main cavity 7 and the upper or atomizing cavity 8 of the box, these cavities being formed by the plate or shelf 4 acting as a partial partition.

It will be seen that when the box is turned with its top down, a portion of the contents of the cavity 7 will pass through the passageway 6 and into the atomizing cavity 8. When the box is returned to its normal upright position this powder will be retained on the atomizing shelf 4. By compressing the sides of the box a current of air will be forcibly discharged from the inside of the box through the passageway 6, over or through the powder on the shelf 4 and out through the perforations in the sifter top. The air thus discharged carries with it a fine mist or spray of powder which has been picked up in the atomizing cavity and which may be directed against any portion of the body or other object. The use of the unsanitary chamois or powder puff is thus avoided.

The atomizing shelf or plate 4, in addition to being spaced slightly beneath the sifter top is set at a slight angle therewith, the passageway 6 being at the lower edge thereof. The inclined surface of the plate 4 aids in allowing the powder to be sifted out through the sifter top as usual and further presents the powder thereon in a better position for atomizing in the current of air. Also, by this shelf and the compression of the walls of the box the powder may be forced out in a solid stream when the sides are compressed with the box turned with the sifter top downward.

In order to facilitate the compression of the walls of the box the sides thereof are formed at 9 into diaphragms which may be readily deflected for causing the forcible discharge of air over the atomizing plate.

Thus I have described an embodiment of my invention. It will be understood that various alterations therein and forms thereof of within the scope of the appended claims might be made without departing from the spirit of the same.

Having thus described my invention, I claim:

1. A powder box having a sifter top and having an atomizing shelf disposed beneath said sifter top, and means for forcibly discharging air from the cavity of the box over the said atomizing shelf and through the said sifter top.

2. A powder box having a sifter top and having an atomizer shelf disposed beneath, at an angle with and slightly removed from the said sifter top, and means for forcibly
discharging air from the cavity of the box over the said atomizing shelf and through the said sifter top.

3. A powder box having a sifter top and having an atomizing shelf disposed beneath and slightly removed from the said sifter top, and means for forcibly discharging air from the cavity of the box over the said atomizing shelf and through the said sifter top, said means comprising a diaphragm-acting portion of the walls of the said box.

4. A powder box having a sifter top and having an atomizing shelf disposed beneath and slightly removed from the said sifter top, the said atomizing shelf forming a partial partition across the said powder box whereby the same is divided into a lower main cavity and an upper atomizing cavity, and means for forcibly discharging air from the cavity of the box over the said atomizing shelf and through the said sifter top.

5. A powder box having a sifter top and having an atomizing shelf disposed beneath and slightly removed from the said sifter top, the said atomizing shelf forming a partial partition across the said powder box whereby the same is divided into a lower main cavity and an upper atomizing cavity, the said partition being so disposed as to provide a narrow communicating passage-way therebetween at one edge of the said atomizing shelf, and means for forcibly discharging air from the cavity of the box over the said atomizing shelf and through the said sifter top.

6. A powder box having a sifter top and having an atomizing shelf disposed beneath, at an angle with, and slightly removed from the said sifter top, the said atomizing shelf forming a partial partition across the said powder box whereby the same is divided into a lower main cavity and an upper atomizing cavity, the said partition being so disposed as to provide a narrow communicating passage-way therebetween at the lower portion of the perimeter of the said atomizing shelf and being closed for the remainder of the perimeter thereof, and means for forcibly discharging air from the cavity of the box consecutively through the said passage-way, over the said atomizing shelf and through the said sifter top.

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

GEORGE T. GREER.

Witnesses:

JOHN G. CHALLINE,
RAYMOND C. ABBOTT.