

JOSS PAPER BURNER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a joss paper burner, and more particularly to a joss paper burner for efficiently and completely burning off joss papers and to keep an outer surface of the joss paper burner at a lower temperature to avoid burning.

2. Description of Related Art

When burning joss papers in a conventional joss paper burner, the joss papers are stacked and put into the conventional joss paper burner. During burning of the joss papers, because of little fresh air entering into gaps between stacking joss papers and poor air convection in the conventional joss paper burner, the joss papers are burned from edges thereof, and inner regions of the joss papers are hard to be burned completely. So the user needs to stir the joss papers in the conventional joss paper burner during burning of the joss papers to let the joss papers completely burned.

In addition, while burning the joss papers, an outer surface of the conventional joss paper burner is extremely hot. The user may get burned when accidentally touching the outer surface of the conventional joss paper burner.

To overcome the shortcomings, the present invention tends to provide a joss paper burner to mitigate or obviate the aforementioned problems.

SUMMARY OF THE INVENTION

The main objective of the present invention is to provide a joss paper burner to burn joss papers efficiently and completely and to keep the outer surface of the joss paper burner at a lower temperature to keep a user from getting burned.

The joss paper burner in accordance with the present invention comprises a furnace body, a furnace cover, and an ash bucket. The furnace body has a first body, a second body, an annular channel, and a bracket. The first body has a top, a bottom, a first surrounding wall extending from the bottom to the top of the first body, a first chamber formed in the first body, an inlet formed through the first surrounding wall, communicating with the first chamber, located near the bottom of the first body, and spaced apart from the bottom of the first body, and a bottom opening formed through the bottom of the first body. The second body is annularly disposed inside the first chamber and spaced apart from the first

surrounding wall of the first body. The second body has a top located lower than the top of the first body, a bottom located higher than the bottom of the first body, and a second chamber formed in the second body and communicating with the bottom opening. The annular channel is formed between the second body and the first surrounding wall of the first body and communicates with the second chamber and the inlet. The bracket is placed in the second chamber and is located near and above the bottom of the second body. The furnace cover covers the top of the first body and has a cover body, an upper cover, a lower cover, and a cover opening. The cover body covers the top of the first body. The upper cover is located higher than, spaced apart from, and connected to the cover body. The lower cover is located lower than, spaced apart from, connected to the cover body, and is located inside the second chamber. The cover opening is formed through the cover body and is located directly below the upper cover to form an outlet space between the upper cover and the lower cover communicating with the second chamber. The ash bucket is disposed below the furnace body and has a bucket opening formed in a top of the ash bucket and communicating with the bottom opening of the first body of the furnace body.

Other objectives, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of a first embodiment of a joss paper burner in accordance with the present invention;

Fig. 2 is an exploded perspective view of the joss paper burner in Fig. 1;

Fig. 3 is another exploded perspective view of the joss paper burner in Fig. 1;

Fig. 4 is a cross sectional side view of the joss paper burner in Fig. 1;

Fig. 5 is an operational cross sectional side view of the joss paper burner in Fig. 1 showing that a furnace body is uncovered;

Fig. 6 is an operational cross sectional side view of the joss paper burner in Fig. 1 showing that a furnace cover covers the furnace body;

Fig. 7 is a perspective view of a second embodiment of a joss paper burner in accordance with the present invention;

Fig. 8 is a side view of the joss paper burner in Fig. 7; and

Fig. 9 is an enlarged operational perspective view of the joss paper burner in Fig. 7 showing that an ash bucket is pulled out from the bottom of the furnace body.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to Figs. 1 to 4, a first embodiment of a joss paper burner in accordance with the present invention comprises a furnace body 10, a furnace cover 20, and an ash bucket 30.

The furnace body 10 comprises a first body 11, a second body 13, an annular channel 12, and a bracket 15. The first body 11 has a top, a bottom, a first surrounding wall extending from the bottom to the top of the first body 11, a first chamber formed in the first body 11, an inlet 112 formed through the first surrounding wall and communicating with the first chamber, and a bottom opening 114 formed through the bottom of the first body 11. The inlet 112 is located near the bottom of the first body 11 and is spaced apart from the bottom of the first body 11. The first body 11 is divided into a lower base 111 located below the inlet 112 and an upper annular body 113 located higher than the inlet 112. The upper annular body 113 is spaced apart from the lower base 111 and is connected to the lower base 111 via multiple connecting sheets 115.

The second body 13 is annular, is disposed inside the first chamber in the first body 11, and is spaced apart from the first surrounding wall of the first body 11. The second body 13 is connected to the first body 11 via multiple supporting sheets 135. A top of the second body 13 is located lower than the top of the first body 11. A bottom of the second body 13 is located higher than the bottom of the first body 11. A second chamber 14 is formed inside the second body 13 and communicates with the bottom opening 114. The inlet 112 is located higher than the bottom of the second body 13. The annular channel 12 is between the second body 13 and the first surrounding wall of the first body 11. The annular channel 12 communicates with the second chamber 14 and the inlet 112. The bracket 15 is placed in the second chamber 14 and is located near and above the bottom of the second body 13.

The furnace cover 20 covers the top of the first body 11 and has a cover body 21, an upper cover 23, a lower cover 25, and a cover opening 22. The cover body 21 covers the top of the first body 11. The upper cover 23 is located higher than, is spaced apart from, and is connected to the cover body 21. The lower cover 25 is located lower than, is spaced

apart from, and is connected to the cover body 21, and is located inside the second chamber 14. The cover opening 22 is formed through the cover body 21 and located directly below the upper cover 23 to form an outlet space between the upper cover 23 and the lower cover 25 communicating with the second chamber 14 in the second body 13. A cover handle 27
 5 is mounted to the upper cover 23.

The ash bucket 30 is disposed below the furnace body 10 and has a bucket opening formed in a top thereof and communicating with the bottom opening 114 of the first body 11 of the furnace body 10 to collect ashes.

With reference to Figs. 1 to 4, in the first embodiment, the furnace body 10 is
 10 supported by the ash bucket 30. The furnace body 10 can be moved up to separate from the ash bucket 30. The furnace body 10 may have at least one furnace handle 17 disposed on the first surrounding wall of the first body 11, so the user can hold the at least one furnace handle 17 to move up the furnace body 10 and separate the furnace body 10 from the ash bucket 30. The ash bucket 30 may have at least one bucket handle 33 for holding,
 15 so the ash bucket 30 can be held by the user easily.

With reference to Figs. 7 to 9, in the second embodiment, a stand 40 is mounted to the bottom of the first body 11 of the furnace body 10. The stand 40 has a standing portion 41 for standing on the ground, a supporting portion 43 located higher than a bottom of the standing portion 41 for placing the ash bucket 30, and a bucket supporting space is formed
 20 between the bottom of the first body 11 of the furnace body 10 and the supporting portion 43 of the stand 40. The ash bucket 30 is placed in the bucket supporting space and is supported by the supporting portion 43 of the stand 40. The ash bucket 30 is configured to be laterally pulled out from the stand 40 for cleaning. The ash bucket 30 has a bucket handle 33 mounted thereon for ease of being laterally pulled out.

With reference to Figs. 5 and 6, to burn joss papers, the joss papers are put into the
 25 second chamber 14 inside the second body 13 and stacked with one another on the bracket 15. Then, a fire is set to the joss papers to burn the joss papers in the second chamber 14 inside the second body 13. Hot air generated by burning the joss papers in the second chamber 14 rises up along the second chamber 14 and escapes from a top of the furnace
 30 body 10. The rising hot air reduces the pressure in the second chamber 14 and draws outside fresh air into the furnace body 10 via the inlet 112 of the first body 11. The fresh air flows

along the annular channel 12 between the first body 11 and the second body 13 and enters the second chamber 14. Part of the fresh air flowing into the annular channel 12 flows downwardly and enters into the second chamber 14 from the bottom of the second body 13 via a gap between the bottom of the second body 13 and the bottom of the first body 11.

Therefore, outside fresh air is continuously convected into the second chamber 14 for burning. The other part of the fresh air flowing into the annular channel 12 flows upwardly along the annular channel 12 and surrounds the second body 13. The heat in the second body 13 is isolated by the fresh air and hardly to be transmitted to the first body 11. So the first body 11 is kept at a lower temperature to keep the user from getting burned.

As shown in Fig. 5, when the furnace body 10 is uncovered, the fresh air flowing out from a top of the annular channel 12 surrounds the rising hot air from the second chamber 14 to concentrate the rising hot air therein and to prevent the hot air from dissipating quickly.

As shown in Fig. 6, when the furnace body 10 is covered by the furnace cover 20, the air inside the furnace body 10 enters into a lower region of the outlet space lower than the cover body 21 for escaping out from the furnace body 10. The air entering into the lower region of the outlet space rises and enters a higher region of the outlet space higher than the cover body 21 via the cover opening 22. The air is blocked by the upper cover 23 and laterally exits the outlet space. Flowing ashes inside the furnace body 10 can be blocked by the lower cover 25, the cover body 21, and the upper cover 23 to prevent the flowing ashes from escaping out from the furnace body 10.

The rising hot air in the second chamber 14 may hit the lower cover 25 and may return into the second chamber 14, so the burning heat can be kept inside the second chamber 14 to increase the temperature in the second chamber 14. The fresh air flowing out from the top of the annular channel 12 is blocked by the cover body 21 and enters into the second chamber 14 to be mixed with the rising hot air and to provide oxygen for burning off smoke produced by the burning joss papers. The incompletely burned ashes rising up with the rising hot air can be burned again. Accordingly, the joss papers can be burned completely inside the furnace body 10 and smoke produced by the burning joss papers can be reduced. The completely burned ashes will drop into the ash bucket 30 via the bottom opening 114 of the furnace body 10. After the joss papers are completely burned, the ash

bucket 30 can be separated from the furnace body 10 for cleaning.

Because the furnace body 10 has the first body 11 surrounding the second body 13 and spaced apart from the second body 13, the outer surface of the first body 11 can be kept at a lower temperature during burning of the joss papers inside the second chamber 14. The user would not get burned when accidentally touches the outer surface of the first body 11 of the furnace body 10 while burning the joss papers.

The furnace cover 20 has the lower cover 25 placed inside the second chamber 14 to prevent the heat inside the second chamber 14 from directly escaping out, so heat can be kept in the second chamber 14 and the temperature inside the second chamber 14 increases, the joss papers can be burned in the second chamber 14 efficiently.

With the arrangement of the furnace body 10, fresh air is drawn from the inlet 112 and flows along the annular channel 12 formed between the first body 11 and the second body 13 to provide oxygen into the second chamber 14 for burning. The fresh air flowing out from the top of the annular channel 12 will provide oxygen to burn smoke produced by the burning joss papers again for burning off the incompletely burned ashes in the top region of the second chamber 14. Whereby, the smoke produced by the burning joss papers can be reduced and the joss papers can be burned completely.

WHAT IS CLAIMED IS:

1. A joss paper burner comprising:

a furnace body having

a first body having

a top;

a bottom;

a first surrounding wall extending from the bottom to the top of the first body;

a first chamber formed in the first body;

an inlet formed through the first surrounding wall, communicating with the first chamber, located near the bottom of the first body, and spaced apart from the bottom of the first body; and

a bottom opening formed through the bottom of the first body;

a second body being annular, disposed inside the first chamber and spaced apart from the first surrounding wall of the first body, and having

a top located lower than the top of the first body;

a bottom of the second body located higher than the bottom of the first body; and

a second chamber formed in the second body and communicating with the bottom opening;

an annular channel formed between the second body and the first surrounding wall of the first body and communicating with the second chamber and the inlet; and

a bracket placed in the second chamber and located near and above the bottom of the second body;

a furnace cover covering the top of the first body and having

a cover body covering the top of the first body;

an upper cover located higher than, spaced apart from, and connected to the cover body;

a lower cover located lower than, spaced apart from, connected to the cover body, and located inside the second chamber; and

a cover opening formed through the cover body and located directly below the

upper cover to form an outlet space between the upper cover and the lower cover communicating with the second chamber; and

an ash bucket disposed below the furnace body and having a bucket opening formed in a top of the ash bucket and communicating with the bottom opening of the first body of the furnace body.

2. The joss paper burner as claimed in claim 1, wherein the inlet is located higher than the bottom of the second body.

3. The joss paper burner as claimed in claim 2, wherein the first body is divided into a lower base located below the inlet and an upper annular body located above the inlet; and

the upper annular body is spaced apart from the lower base and is connected to the lower base via multiple connecting sheets.

4. The joss paper burner as claimed in claim 3, wherein the second body is connected to the lower base of the first body via multiple supporting sheets.

5. The joss paper burner as claimed in claim 4, wherein a cover handle is mounted to the upper cover.

6. The joss paper burner as claimed in any one of claims 1 to 5, wherein the furnace body is supported by the ash bucket.

7. The joss paper burner as claimed in any one of claims 1 to 5, wherein a stand is mounted to the bottom of the first body of the furnace body and has a standing portion; and

a supporting portion located higher than a bottom of the standing portion; and a bucket supporting space formed between the bottom of the first body of the furnace body and the supporting portion of the stand;

the ash bucket is placed in the bucket supporting space and is supported by the supporting portion of the stand and is configured to be laterally pulled out from the stand.