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BIRD FEEDER HAVING REINFORCING RING

Abstract

The present disclosure provides a bird feeder having a seed container, seed tray, shroud, cover as well as a reinforced lower ring. The lower ring helps reinforce the lower part of the seed container. The bird feeder is also comprised of gaps positioned in between the cover and the seed container to increase a flow of air out of the seed container.

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Background/Summary

CROSS REFERENCE TO RELATED APPLICATION [0001] The present application claims priority to U.S. Provisional Application No. 63/552,400, entitled “BIRD FEEDER HAVING

REINFORCING RING" filed on Feb. 12, 2024, the contents of which are incorporated herein by reference in their entirety.

FIELD

[0002] The disclosure relates generally to the field of bird feeders, and more specifically to a bird feeder having a reinforced snap-fit ring and improved air circulation.

BACKGROUND

[0003] Bird feeders have been around for quite some time for bird watchers and animal lovers. However, many problems exist with current bird feeders, including but not limited to poor air circulation and fragile seed containers. Indeed, the existing seed containers are not well adapted to provide good air flow, and the lower end of those same seed containers can break easily when they are connected and disconnected from the bases for cleaning.

[0004] As such, there is a need for a novel type of bird feeder that can overcome the problems of the prior art.

SUMMARY

[0005] In an aspect, the present disclosure provides a bird feeder comprising: a seed container to contain seeds, the seed container having at least one opening to provide access to the seeds; a seed tray connected to the seed container and adapted to receive the seeds; perches to facilitate access to the at least one opening; a base releasably secured to the seed container; and, a cover.

[0006] In another aspect, the present disclosure provides a bird feeder comprising: a seed container to contain seeds, the seed container further comprising: at least one opening to provide access to the seeds; a base; and, an upper end terminating in an upper ring; a seed tray connected to the seed container and adapted to receive the seeds; perches to facilitate access to the at least one opening; and, a cover having a plurality of fins to cooperate with the upper end of the seed container.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The following figures serve to illustrate various embodiments of features of the disclosure. These figures are illustrative and are not intended to be limiting.

[0008] FIG. **1** is a perspective view of a bird feeder, according to an embodiment of the present disclosure;

[0009] FIG. **2**A is a first enlarged exploded view of a lower end of the bird feeder of FIG. **1**, according to an embodiment of the present disclosure;

[0010] FIG. **2**B is a second enlarged exploded view of a lower end of the bird feeder of FIG. **1**, according to an embodiment of the present disclosure;

[0011] FIG. **3** is an enlarged cross-sectional view of the base and lower ring of the bird feeder of FIG. **1**, according to an embodiment of the present disclosure;

[0012] FIG. **4** is a perspective view of an upper ring fitted onto the seed container of the bird feeder of FIG. **1**, according to an embodiment of the present disclosure;

[0013] FIG. **5** is a perspective cross-sectional view of the cover resting on the seed container and upper ring of the bird feeder of FIG. **1** and showing an air gap, according to an embodiment of the present disclosure;

[0014] FIG. **6** is another perspective cross-sectional view of the cover resting on the seed container and upper ring of the bird feeder of FIG. **1**, according to an embodiment of the present disclosure; and,

[0015] FIG. **7** is an underside perspective view of the cover of the bird feeder of FIG. **1**, according to an embodiment of the present disclosure.

DETAILED DESCRIPTION

[0016] The following embodiments are merely illustrative and are not intended to be limiting. It

will be appreciated that various modifications and/or alterations to the embodiments described herein may be made without departing from the disclosure and any modifications and/or alterations are within the scope of the contemplated disclosure.

[0017] With reference to FIG. **1** and according to an embodiment of the present disclosure, a bird feeder **10** is shown, preferably comprising a seed container **15** to contain seeds, the seed container **15** having at least one opening **17** to provide access to the seeds. The feeder **10** is also comprised of a seed tray **20** connected to the seed container **15** and adapted to receive the seeds, as well as perches **25** to facilitate access to the opening **17**. A cover **30** and a base **35** are also provided, the base **35** releasably secured to the seed container **15**. In another embodiment, the seed container **15** and cover **30** are one piece.

[0018] With reference to FIGS. **2**A, **2**B, **3**A and **3**B and according to an embodiment of the present disclosure, the interconnection between the seed container **15** and base **35** is shown. More specifically, the seed container **15** is further comprised of a lower ring **40** that surrounds a lower end of the seed container **15** to reinforce said lower end. Indeed, it was determined that without the lower ring **40**, the lower portion of the seed container **15** would be more prone to breaking and would have difficulties connecting and disconnecting from the base. As such, the lower ring **40** assists by reinforcing the lower end of the seed container **15** and making it easier to manipulate it. In a preferred embodiment, the lower ring **40** is attached to the seed container **15** by pins **45** fitted through openings **47**, although other attachment means are possible. The lower ring **40** is comprised of pivotable or flexible tabs **50** to releasably secure the lower ring **40**, and thus the container **15**, to the base **35**. As shown, the seed container **15** is comprised of apertures **55** adapted to receive the tabs **50** when they are pivoted or flexed. More specifically, when the container **15** is secured to the lower ring **40** as shown in FIG. **2**A, the tabs **50** are aligned with the apertures **55**. The apertures **55** are preferable as the tabs **50** are pivotable about their base, and therefore the tabs **50** need an area in which to pivot, which is the area created by the apertures **55**. To connect the lower ring **40** to the base **35**, the indicator **65** on the container **15** is aligned with the corresponding indicator **67** on the base **35**. The base **35** is then pushed over the lower ring **40**. When the indicators **65**, **67** are properly aligned, the tabs **50** pivot into place and abut corresponding lips **60** of the base **35** as best shown in FIG. **3**. The base **35** is now secured to the lower ring **40** and in turn the seed container **15**. To release the base **35** from the lower ring **40**, the operator may rotate the base **35** independently from the container **15**. In doing so, the tabs **50**, which have a semi-circular upper end **68** abut against an inner sidewall **69** of the base **35**, causing them to pivot about their lower end. Continued rotation of the base **35** relative to the container **15** forces the tabs **50** to be positioned against inner peripheral wall **71** of the base **35**, at which point the tabs **50** are no longer locked into place and the base **35** can be removed from the container **15**.

[0019] With reference to FIG. **4** and according to an embodiment of the present disclosure, the bird feeder **10** is also comprised of an upper ring **70** surrounding the upper portion of the seed container **15**. As shown, the upper ring **70** has funnel-shaped inner wall **75**. A purpose of the funnel shape of the inner wall **75** is to guide the seeds that are dropped into the bird feeder **10** into the seed container **15**. Indeed, providing a slope to the inner wall **75** facilitates seed flow and reduced the loss of seeds that would otherwise fall out of the seed container **15** if not properly deposited therein.

[0020] With reference to FIGS. **5**, **6** and **7** and according to an embodiment of the present disclosure, the cover **30** is comprised of a plurality of fins **80** extending from an underside **85** of the cover **30**. As best shown in FIG. **6**, the fins **80** are adapted to receive the upper ring **70** of the seed container **15**. Indeed, the upper ring **70** rests on a seat **90** of the fins **80** to seal one to the other. However, each fin **80** is separated one from the other by an opening **95**. These openings **95** allow for a gap **105** to form in between the underside **85** of the cover **30** and the upper ring **70** when the cover **30** is positioned onto the upper seed container **15**. In turn, the gap **105** allows air circulation and moisture to escape the seed container **15**. Such air circulation is advantageous as it helps keeps

the seeds fresh and prevents staleness.
[0021] Many modifications of the embodiments described herein as well as other embodiments may be evident to a person skilled in the art having the benefit of the teachings presented in the foregoing description and associated drawings. It is understood that these modifications and additional embodiments are captured within the scope of the contemplated disclosure which is not to be limited to the specific embodiment disclosed.

Claims

1. A bird feeder comprising: a seed container to contain seeds, the seed container having at least one opening to provide access to the seeds; a seed tray connected to the seed container and adapted to receive the seeds; perches to facilitate access to the at least one opening; a base releasably secured to the seed container; and, a cover.
2. The bird feeder of claim 1 further comprising a lower ring surrounding a lower end of the seed container to reinforce the lower end of the seed container.
3. The bird feeder of claim 2 wherein the ring is comprised of at least one pivotable tab to clip into the base.
4. The bird feeder of claim 3 wherein the base is rotatable relative to the seed container, said rotation of the base to disengage the at least one pivotable tab from the base when the bird feeder is assembled.
5. The bird feeder of claim 4 wherein the at least one pivotable tab is comprised of a circular top end configured to cooperate with an inner sidewall of the base.
6. The bird feeder of claim 3 wherein the seed container is comprised of at least one aperture through which can pivot the at least one pivotable tab.
7. The bird feeder of claim 1 further comprising an upper ring surrounding an upper end of the seed container, the upper ring having a funnel-shape inner wall to reduce seed loss in the bird feeder.
8. The bird feeder of claim 1 wherein the cover is further comprised of a plurality of fins projecting from an underside of the cover.
9. The bird feeder of claim 8 wherein the plurality of fins is separated by openings and configured to receive an upper ring of the seed container.
10. The bird feeder of claim 9 wherein the openings create a gap in between the underside of the cover and the upper ring, the gap allowing air circulation and moisture to escape the seed container.
11. The bird feeder of claim 8 wherein the plurality of fins is further comprised of a seat.
12. The bird feeder of claim 11 wherein the plurality of fins is separated by openings and the seat is configured to receive an upper ring of the seed container.
13. The bird feeder of claim 12 wherein the openings create a gap in between the underside of the cover and the upper ring, the gap allowing air circulation and moisture to escape the seed container.
14. The bird feeder of claim 1 wherein the seed container and the base are each comprised of opposed indicators to identify proper alignment of the base relative to the seed container.
15. A bird feeder comprising: a seed container to contain seeds, the seed container further comprising: at least one opening to provide access to the seeds; a base; and, an upper end terminating in an upper ring; a seed tray connected to the seed container and adapted to receive the seeds; perches to facilitate access to the at least one opening; and, a cover having a plurality of fins to cooperate with the upper end of the seed container.
16. The bird feeder of claim 15 wherein the plurality of fins is separated by openings and wherein the openings create a gap in between an underside of the cover and the upper ring, the gap allowing air circulation and moisture to escape the seed container.
17. The bird feeder of claim 15 wherein the plurality of fins is further comprised of a seat and wherein the plurality of fins is separated by openings, and the seat is configured to receive an upper ring of the seed container.

18. The bird feeder of claim 17 wherein the openings create a gap in between the underside of the cover and the upper ring, the gap allowing air circulation and moisture to escape the seed container.