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Foxbower et al.

[11] **3,883,907**

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[54] **METAL BEEHIVE LINER**

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[52] **U.S. Cl.** **6/1**

[51] **Int. Cl.** **A01k 47/00**

[58] **Field of Search** 6/1, 5; 206/2, 84; 220/3.1, 17

[56] **References Cited**

UNITED STATES PATENTS

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[57] **ABSTRACT**

For use within a beehive comprising a peripheral wall and a floor closing the bottom of the wall, a metal liner adapted to fit within said peripheral wall and to be adjacent to and at least coextensive with said peripheral wall and said floor. The peripheral wall and its adjacent lining include an opening therein to permit access to the interior of the hive.

9 Claims, 4 Drawing Figures

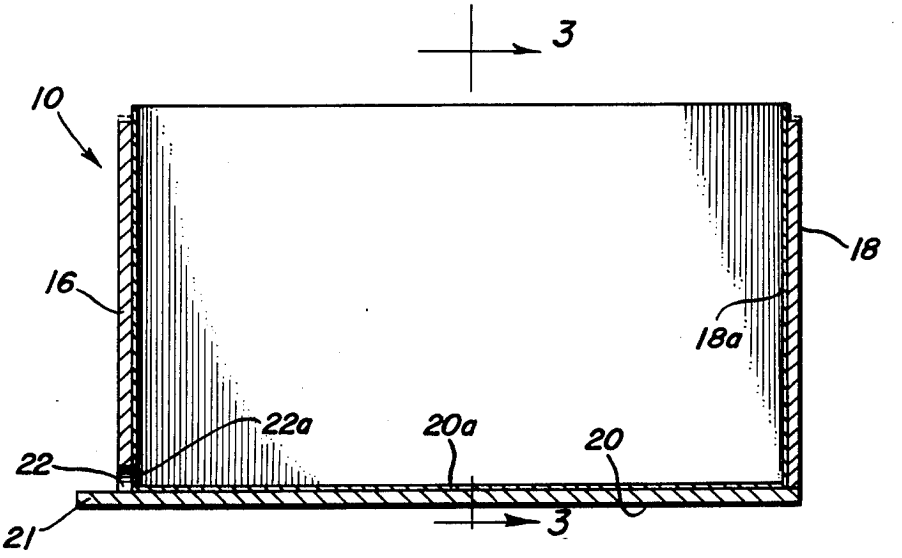
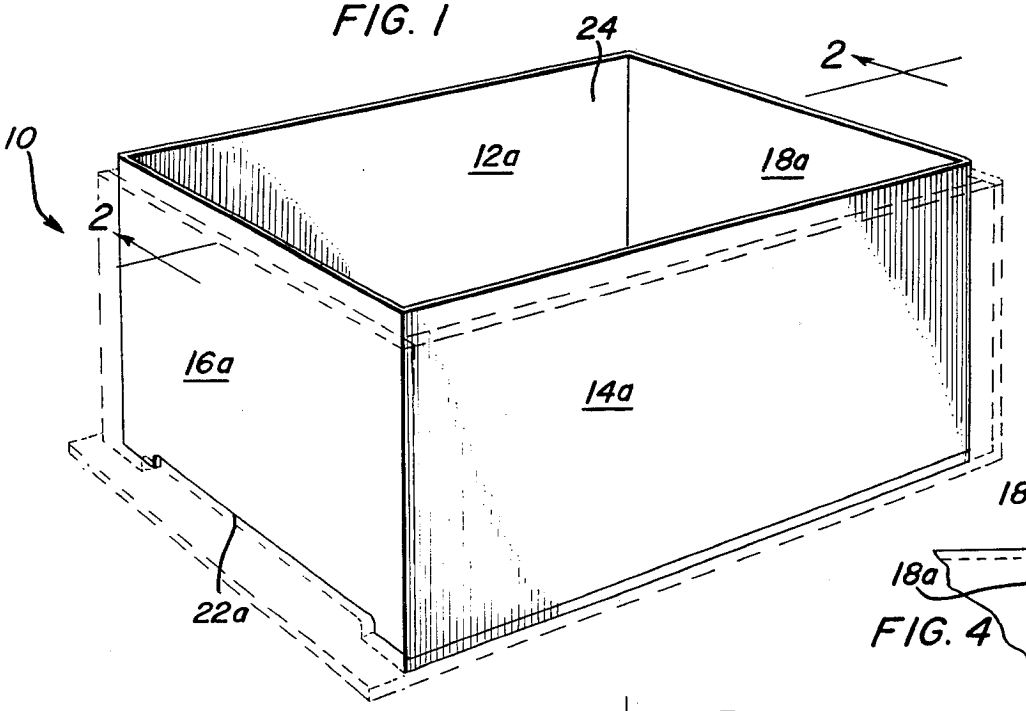


FIG. 1



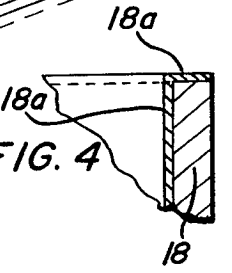


FIG. 4

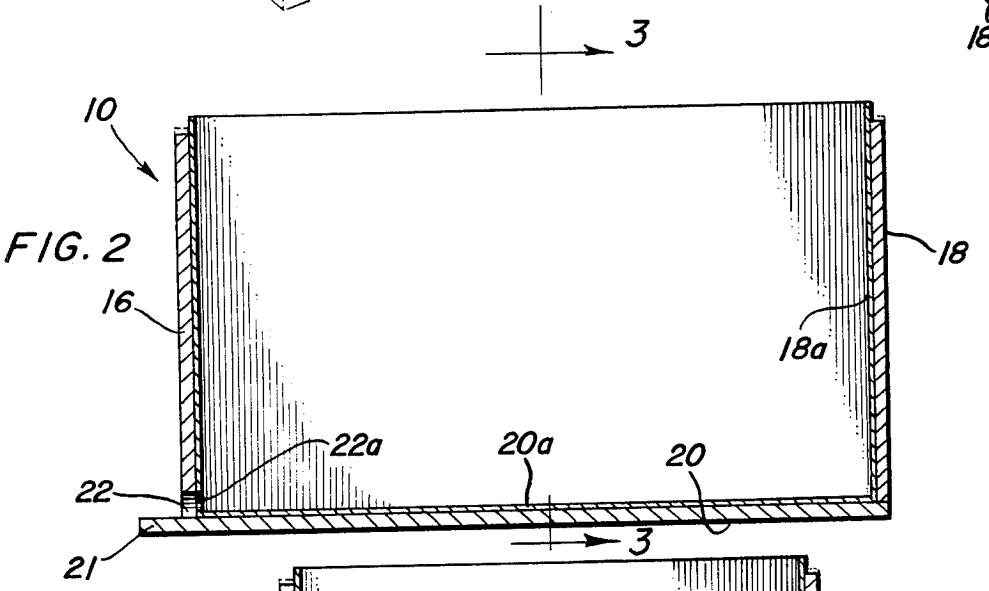


FIG. 2

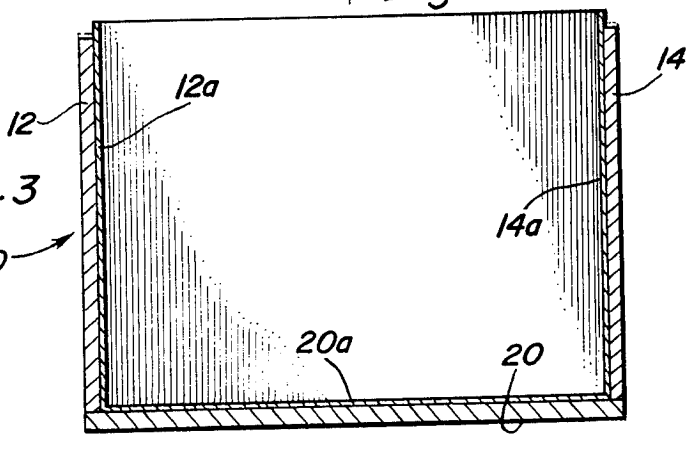


FIG. 3

METAL BEEHIVE LINER

The present invention relates to beehives and, more particularly, to metal liners therefor.

A large number of man made beehives are constructed of wood. However, wood hives are known to be susceptible to attack by the wax moth or worm which eats into the wooden hives and destroys the bees. To combat this, it has been suggested to form the hives from some material resistant to the mothworm. According to U.S. Pat. No. 2,522,511 attempts to make metal hives, which appear to be best from a structural and moth-worm resistant standpoint, have been unsuccessful because bees will not alight on the metal. Therefore, hives having metal interiors have not been used.

Contrary to the view that bees will not alight on metal hives, it has now been found that if conventional hives, such as wooden hives, are lined with metal sheet, the hive is moth-worm resistant yet conducive to honey production by the bees. Moreover, the advantages inherent in the use of metal are realized to the fullest extent.

Accordingly, it is an object of this invention to provide a metal lined beehive which is resistant to the moth-worm.

It is another object of the invention to provide a metal lined beehive which is simple and inexpensive to construct.

It is still another object of this invention to provide a metal lined beehive which is conducive to honey production and wherein the bees will produce up to one third more honey.

Other objects and advantages will become apparent from the following description and appended claims taken in conjunction with the accompanying drawings.

FIG. 1 is a perspective view of a conventional beehive (shown in phantom) lined with the metal liner of the present invention.

FIG. 2 is a sectional view taken substantially along line 2—2 in FIG. 1.

FIG. 3 is a sectional view taken substantially along line 3—3 in FIG. 2.

FIG. 4 is an enlarged portion of the sectional view of FIG. 2 showing the metal liner overlying the top of the hive wall.

Referring now to the drawings, there is shown generally at **10** a substantially rectangular beehive which may be constructed of wood or other conventional hive material. Hive **10** consists of opposite side walls **12, 14** and opposite end walls **16, 18** and is closed on the bottom by a base **20.** A slot **22** formed in end wall **16** adjacent base **20** extends transversely to within about one inch of side walls **12, 14** and provides access for the bees to the interior of the hive. If desired, base **20** can include a portion **21** extending beyond end wall **16** to provide a landing and alighting platform adjacent slot **22.** The configuration of the hive interior may include framework and the like, all as is well known and conventional in the art.

Metal walls line the inside of the hive **10** adjacent walls **12, 14, 16** and **18** and adjacent base **20.** For ease of identification and location the metal liner portions are designated **12***a*, **14***a*, **16***a*, **18***a* and **20***a* to correspond with the portions of the hive to which each is adjacent. The metal liners are preferably of thin, light weight sheet, e.g., a wall thickness of about one-thirty-second inch is satisfactory. Desirably, the metal liners

are formed of non-corroding (nonrusting) metals such as aluminum, zinc or stainless steel. The metal liners **12***a*, **14***a*, **16***a*, **18***a* and **20***a* are located immediately adjacent and preferably contacting the respective hive walls and base, **12, 14, 16, 18** and **20.** Liner **16***a* has a slot **22***a* formed therein corresponding in size and location to slot **22** to permit the bees access to the interior **24** of the hive through the metal liner. The top margins of the metal liner desirably project a short distance above the tops of the end and side walls and, as shown in FIG. **4,** may be bent outwardly to overlie the tops of the walls. When the overlying top margins are nailed or otherwise fastened to the tops of the end and side walls, the liner is securely fastened to the hive and will not come out when portions of the inside of the hive are removed.

Although not shown, it is customary for hives to include cover portions. Any suitable rectangular cover can be used to close the top of hive **10** when covering is desired. If the top margins of the metal liner are not bent over and secured as shown in FIG. **4,** the cover may include depending flanges around its periphery to telescopingly fit over the top margins of the liner with the depending flanges resting on the tops of the side and end walls.

While the present invention has been described with reference to particular embodiments thereof it will be understood that numerous modifications can be made by those skilled in the art without actually departing from the scope of the invention. Accordingly, all modifications and equivalents may be resorted to which fall within the scope of the invention as claimed.

What is claimed as new is as follows:

1. For use in preventing the wax moth from destroying a beehive and its contents, wherein said beehive is of the type comprising a peripheral walled enclosure having a base closing the bottom of said enclosure, said peripheral wall including an access opening therein adjacent said base, a non-corroding metal liner in said enclosure adjacent to and at least coextensive with said peripheral wall and said base, said liner including an opening therein of substantially the same size as and adapted to be aligned with said access opening.

2. A beehive, as claimed in claim **1,** further including a platform adjacent said access opening on which bees can land.

3. A beehive, as claimed in claim **2,** wherein said metal liner is formed from a metal selected from aluminum, zinc and stainless steel and includes a portion overlying the top of and secured to said peripheral wall.

4. A beehive, as claimed in claim **1,** wherein said metal lining is formed from a metal selected from aluminum, zinc and stainless steel.

5. A beehive, as claimed in claim **1,** wherein said metal lining adjacent said peripheral wall includes a portion extending beyond the top of said wall.

6. A beehive, as claimed in claim **1,** wherein said metal lining adjacent said peripheral wall includes a portion overlying the top of said peripheral wall.

7. A beehive, as claimed in claim **6,** wherein said overlying portion is secured to said peripheral wall.

8. A beehive, as claimed in claim **1,** further including a cover member closing the top of said enclosure.

9. A beehive, as claimed in claim **1,** wherein said peripheral wall is rectangular.

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