

W. POWERS.

Bee Hive.

No. 23,192.

Patented March 8, 1859.

Fig. 1

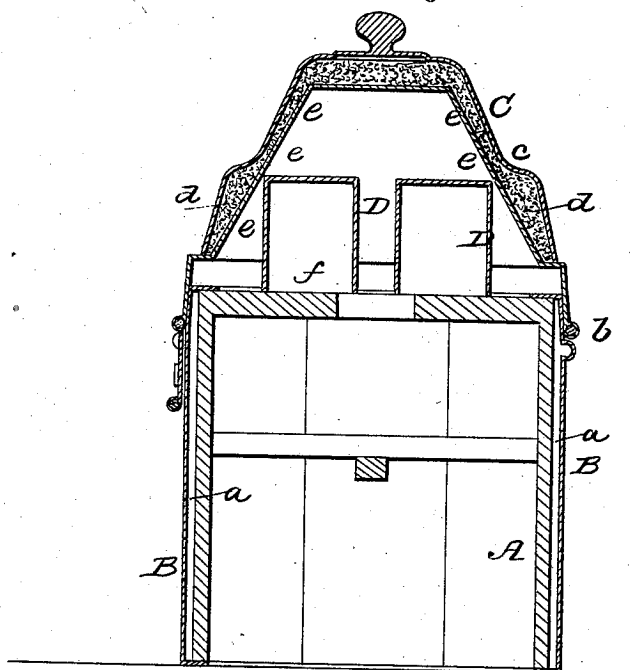
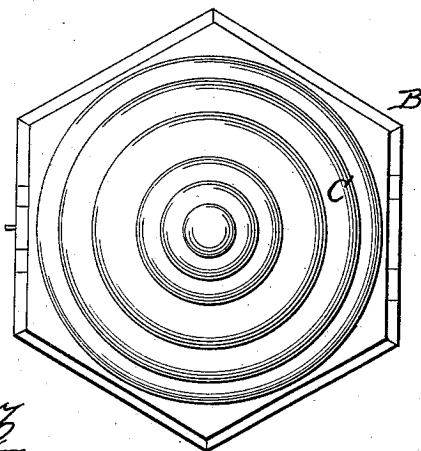


Fig. 2



Witnesses  
Joseph G. Harvey  
Jas. Ammon

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# UNITED STATES PATENT OFFICE.

WILLIAM POWERS, OF YOUNGSTOWN, OHIO.

## BEEHIVE.

Specification of Letters Patent No. 23,192, dated March 8, 1859.

*To all whom it may concern:*

Be it known that I, WILLIAM POWERS, of Youngstown, in the county of Mahoning and State of Ohio, have invented a new and  
5 Improved Beehive; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

10 Figure 1, is a vertical central section of my invention. Fig. 2, is a plan or top view of ditto.

Similar letters of reference indicate corresponding parts in the two figures.

15 This invention consists in a peculiar manner of constructing the cover of the hive as and for the purpose hereinafter fully shown and described.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

My improved bee-hive I prefer to construct of wood and metal combined. I first form a body or main portion A, of wood,  
25 ordinary boards or planks will answer. The body may be of rectangular or any polygonal form, open at the bottom, and of about equal length and breadth, the dimensions of the body A, corresponding with  
30 those of ordinary beehives in use. This wooden body A, has its sides covered with sheet metal B, zinc or brass would probably be preferable, and a dead-air space  $a$ , is allowed between the body A, and metal B,  
35 as shown clearly in Fig. 1.

To the upper part of the body A, a cap or cover C, is connected by a hinge joint  $b$ . This cap or cover is constructed of taper form gradually diminishing from its lower  
40 to its upper end, as shown clearly in Fig. 1, and formed with double sheet metal walls  $c, c^1$ , the space between being filled with charcoal,  $d$ . The inner plate or wall  $c^1$ , is perforated as shown at  $e$ , and the top  $f$ , of  
45 the body A, within the cap or cover C, spare honey boxes D, are placed, an aperture  $g$ , being made in the top to allow the bees to pass through, as shown clearly in Fig. 1. These honey boxes may be of glass, bowls  
50 or jars of proper dimensions being used, and one or more may be employed, as desired.

The space within the cap or cover C, above the top F, of the body A, being inclosed by

a double wall  $c, c^1$ , filled with charcoal, will of course be quite uniform in temperature,  
55 and as the warm air loaded with vapor ascends from the main body or portion of the hive below, the vapor as it rises will be condensed by the cooler air within the cap or cover, the moisture being absorbed by the  
60 charcoal  $d$ . The wood A, of the main portion or body of the hive will also absorb some moisture. The cap or cover, also, by being constructed as described prevents the sound produced by rain or hail falling on it  
65 being transmitted within the hive, bees having an aversion to noise or any jarring or vibration of the hive.

The ventilation of beehives has been previously essayed but, so far as I am aware,  
70 with no great success. Apertures have been made in the upper part of the hive to allow a free circulation of air entirely through, but this plan proved objectionable on account of often reducing the temperature of  
75 the hive too low, preventing the propagation of the insect, as also the making of the comb which requires to be rendered sufficiently ductile by heat to be readily formed. The moisture produced by the respiration of  
80 the bees frequently induces disease among them and decimates whole colonies. In a state of nature the insect finds a home in hollow trees and being encompassed with thick wooden walls, and as the trees are  
85 decayed they are consequently coated internally with a carbonaceous substance like charcoal, and chemically nearly the same, thereby absorbing the moisture generated within the hive. In my improved hive I  
90 have designed to imitate nature so far as utility is concerned and thereby obtain greater advantages than heretofore in the "keeping" of bees.

I do not claim, broadly, a hive constructed  
95 with double walls; but

What I do claim as my invention, and desire to secure by Letters Patent, is:—

The cap or cover C, of double walls, the inner one perforated as shown, at  $e, e$ , and  
100 the space between filled with charcoal in the manner and for the purpose specified.

WILLIAM POWERS.

Witnesses:

JOSEPH G. HENEX,  
JAS. KINNINMONT.