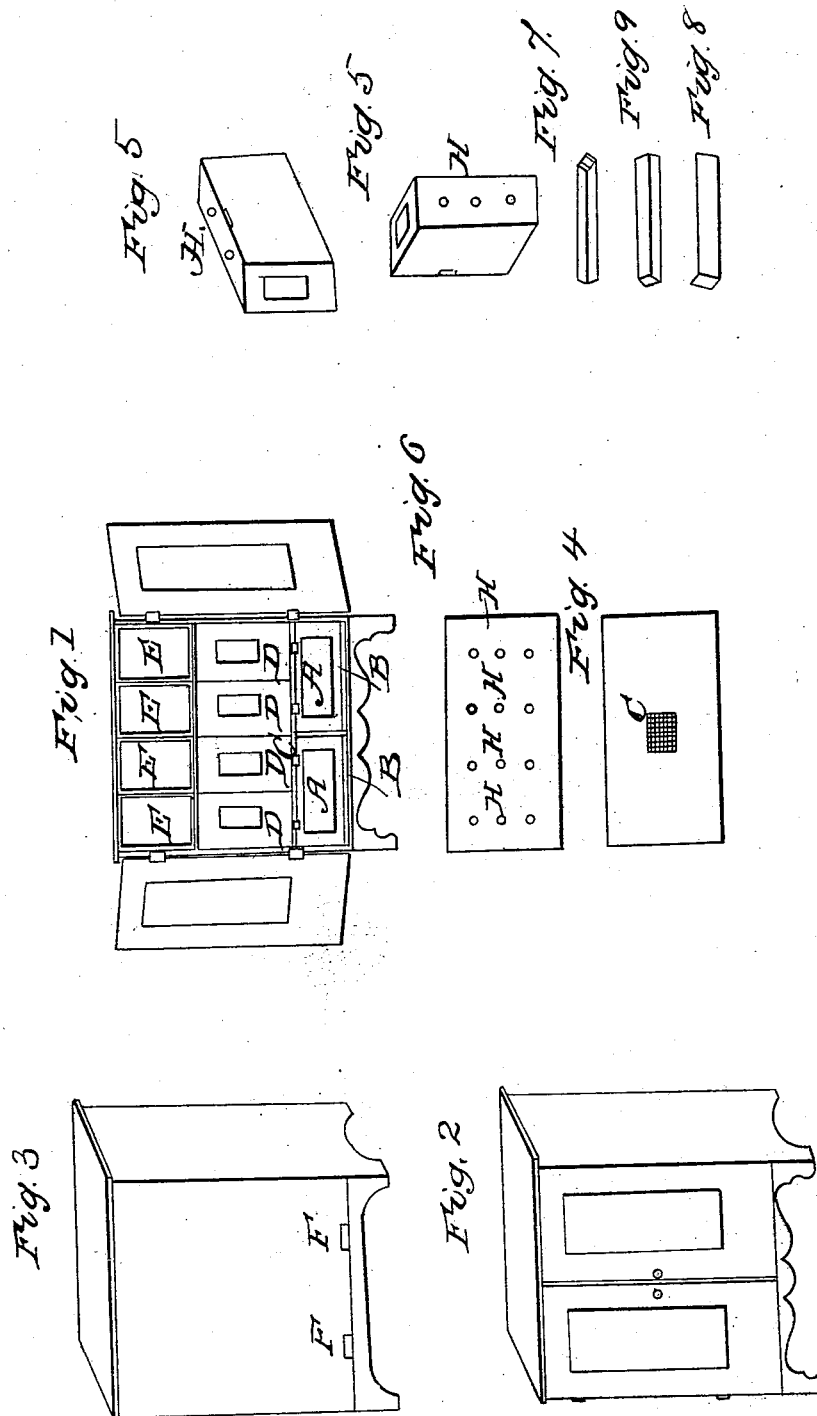


J. C. RICH.  
Bee Hive.

Patented March 4, 1843.

No. 2,988.



# UNITED STATES PATENT OFFICE.

JOSEPH C. RICH, OF PENFIELD, NEW YORK.

## BEEHIVE.

Specification of Letters Patent No. 2,988, dated March 4, 1843.

*To all whom it may concern:*

Be it known that I, JOSEPH C. RICH, of Penfield, in the county of Monroe and State of New York, have invented a new and improved mode in the construction of beehives and in the management and preservation of bees and in the feasibility and ease with which their surplus honey may be obtained without disturbing or injuring them; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a front view with the doors thrown open. Fig. 2 is a front and end view with the doors shut; Fig. 3 is a back and end view. Fig. 4 is a view of the bottom of the hive showing the opening through it covered with wire gauze. Fig. 5 is a view of one of the boxes with the slits through the sides and holes through the bottom and top of it. Fig. 6 is a view of the shelf with the holes through it. Fig. 7 is a view of one of the tubes. Fig. 8 is a view of the flat tin. Fig. 9 is a view of the tin bent at right angles.

Letter A represents the hanging sash under the shelf B the strip of board under the sash C the front edge of the shelf D the front ends of the lower tier of boxes E the front ends of the upper tier of boxes F the entrance for the tubes through the back of the hive G the wire gauze H the holes through the shelf and boxes I the slits through the sides of the boxes.

The nature of my invention consists in constructing bee hives in such a manner and size as to obviate the necessity of bees swarming and to render them convenient to take honey from without disturbing or injuring the bees, or being disturbed by them, by means of the inside of the hive being mostly filled with boxes resting on a shelf in such a manner as easily to be removed from the hive when they are filled with honey, and in their being a chamber formed between the shelf and bottom of the hive with hanging sash doors in front of it, with a strip of board under the sash door, and in their being properly ventilated by means of a hole through the bottom covered with wire gauze, and in the front of the hive being composed of doors in such a manner as when thrown open to show the entire

arrangement of the inside of the hive and give access to it.

To enable others to make and use my invention I will proceed to describe its construction and operation I make my hive of boards in size say three feet high two feet six inches wide one foot four inches deep or any other convenient size standing on legs like a bureau the front of the hive should be composed of doors hung to the sides of the hive opening in the center there should be a molding fastened to the edge of one of the doors so as to project over the other when shut to keep the light out, there should be a shelf put in about six inches from the bottom for the boxes to rest on (refer to drawings letter C) about three fourths of the space under the shelf should be shut up with a hanging sash door in front hung to the front edge of the shelf (see letter A), the remaining space under the sash door should be closed up with a strip of board in such a manner as to be easily removed when necessary to clean out the bottom of the hive (see letter B), there should be a hole cut through the center of the bottom of the hive about three inches in diameter and a piece of wire gauze tacked on over it to prevent the bees passing through it. By the circulation of air through this hole and through the tubes the hive becomes properly ventilated (see drawings Fig. 4 letter G), this air hole should be covered up in cold weather. There should be say four boxes seven by twelve inches in size and reaching from the front to the back side of the hive (see letter D), placed on the shelf, the bottoms of all these boxes but one (to hive the bees in when they are to be put in this hive) should be fastened on with screws so that they can be easily removed when necessary to take honey from the boxes.

There should be another tier of boxes seven by nine and of the above length placed on the above boxes (see letter E), the bottoms fastened on with screws as above, these two tiers of boxes or chambers is just to fill the space above the shelf, the front ends of the boxes may be wholly or in part made by putting in window glass thereby affording a delightful view of the operations of the bees.

There should be slits (see drawings Fig. 5 letter I) cut in the sides of the lower tier

of boxes close under the cover in such a manner as to open a passage for the bees from one box to the other through the sides of them, these slits should be three inches by half an inch, there should be three holes one and a half inches in diameter made through the shelf (Fig. 6 letter H) under each of the boxes these holes are to be continued through the bottoms of the boxes and through the tops of the lower tier of boxes (Fig. 5 letter H) these holes are to open a free passage for the bees from the bottom chamber or space under the shelf up throughout all the chambers or boxes, the manner of arranging the above slits and holes will more fully appear by examining the drawings referred to.

When a hive of the above description is obtained place it in an upper room in a house out building or in a bee house the back against the wall of the building then insert two tubes (Fig. 7) about eight inches apart and close above the bottom of the hive reaching from the inside of the hive to the out side of the building the bottoms of the tubes should project one and a half inches beyond the building to afford a place for the bees to light on these tubes should be at least four inches by half an inch on the inside and should incline a little downward at the outside to prevent the water from running into the hive through them.

Some of the benefits to be derived from keeping bees in the manner here recommended are as follows: first, by keeping bees in a house they are secure from the inclemency of the weather and the owner is enabled to appropriate their proceeds to his own use instead of having them wrested from him by lawless predators as is often the case when kept outdoors and unprotected. Second, they are not liable to loss in wintering and are secure from insects as it is fully believed they cannot possibly harm them in these hives as there is no hiding place for them in the lower chamber and they never will find the way into the upper chambers; third, they are not liable to loss by swarming as it is a well established fact that bees do not swarm as long as they have sufficient room to work in (which is one great design in this hive) thereby saving the trouble of tending to them in the season of their swarming and experience has shown that bees frequently do but little for weeks in the best of the season for making honey but lay on or about the hive (when kept in small hives) waiting their time to swarm and it is not infrequent that bees do not swarm at all and the use of them is entirely lost for want of room to work in; fourth, they soon become so numerous in these hives as the result of their not swarming to enable them to withstand the attacks

of all other swarms thereby saving the loss so often sustained by bees robbing one another; fifth, by means of the glass in the front ends of the chambers and having sash a delightful view is presented on opening the doors of every part of the hive and of the operations of the bees and of their progress in storing the chambers with honey; sixth, they are properly ventilated by means of the hole through the bottom covered with wire gauze the air circulating through the tubes and through this hole; seventh, they are so arranged as to render it feasible and easy to remove the surplus honey from any part of the hive, when I wish to remove the honey from one of the upper boxes I take two tins (Fig. 8) three inches wide and twelve inches long run them in under the box to be taken out in such a manner as to cut off the passage from the lower box to the upper one, then draw out the box with one of the tins with it kept snug to the bottom of the box, to prevent the bees escaping out leaving the other tin over the holes of the box under the one just removed, take the above box outdoors and turn it bottom side up remove the tin and rap on the box and the bees will immediately leave it and return to the hive and the owner can use the honey at his leisure, when the box is emptied return it to its place in the hive and all will go on well, the same course is to be pursued in removing one of the lower boxes (the top box being taken off first) with the addition of four tins (Fig. 9) bent to right angles in such a manner as to fit in to the corners of the boxes these are to be run in on each corner of the box to be taken out and on the corners of the boxes next to it so as to prevent the bees getting out at the slits in the sides of the boxes, the honey should be removed in the latter part of the season or the young bees might be lost in the operation the honey they deposit in the chamber below the shelf may be left for them to winter on or it may be removed in cold weather when the bees are still and in the upper boxes there must be about the amount of two of the above boxes of honey left in the hive for the bees to winter on which can well be afforded as hives of bees of this description usually afford a surplus of from sixty to eighty pounds a year of the finest honey and it is confidently believed that bees kept in hives of this description will yield a profit of fifty percent. over any other hive now in use; eighth, the arrangement of the lower chamber with the hanging or swinging sash in front, forming doors to the chamber with the strip of board under the sash is of great importance, the tubes being inserted at the bottom of the hive enter this chamber making an excellent retreat for the bees when they rush into the hive almost all at once as they frequently

do when there arises a sudden storm while they are out at work, and by this arrangement it is made easy to get at this chamber to remove the honey from it and by removing the strip of board under the sash the bottom of the hive is easily cleaned out without being disturbed by the bees.

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

The arrangement of the lower box or 10 chamber provided with the swinging or hanging sash doors in combination with the hive constructed as above described.

JOSEPH C. RICH.

Witnesses:

C. W. OWEN,  
HORACE C. BRYAN.