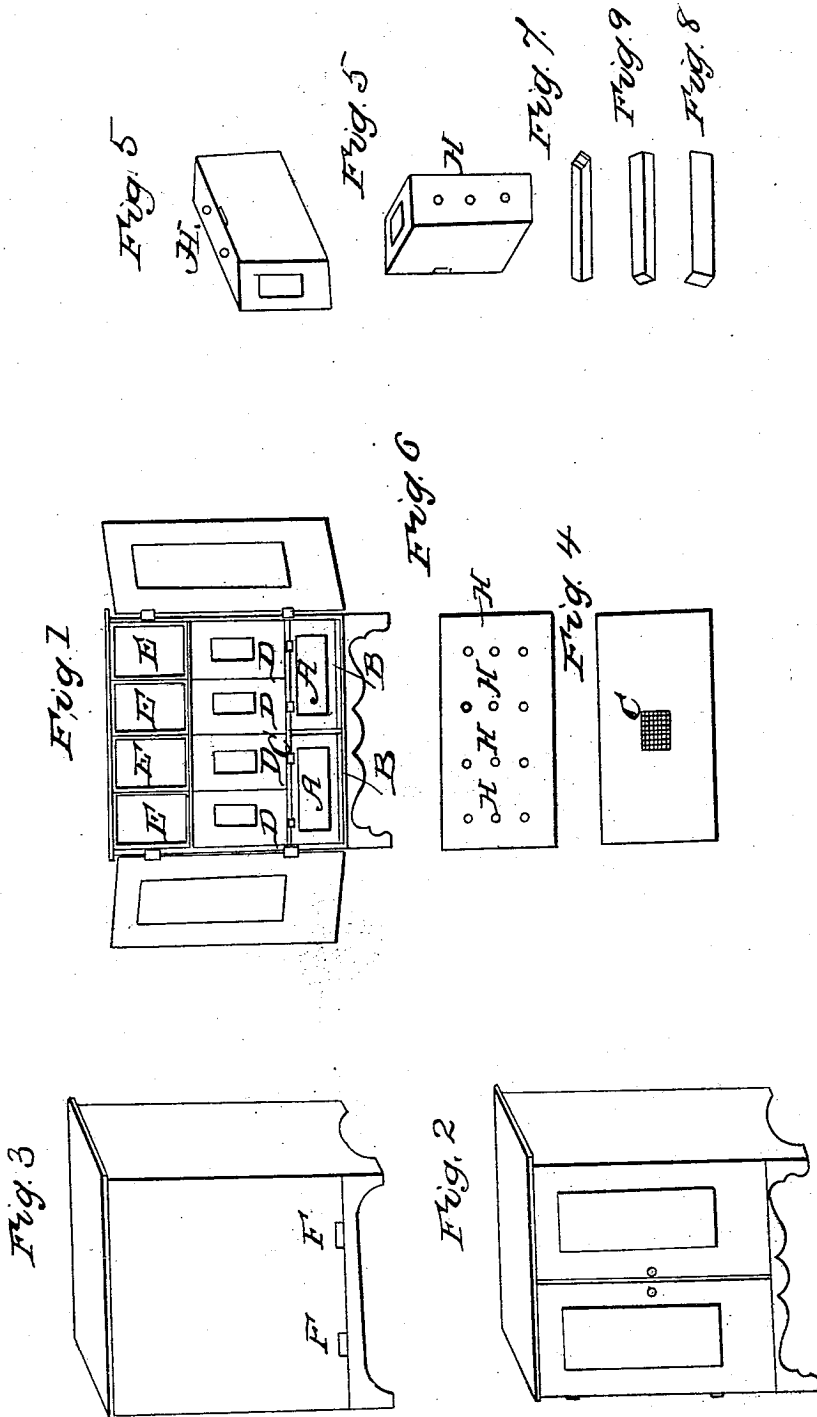


J. C. RICH.

Bee Hive.

Patented March 4, 1843.

No. 2,988.

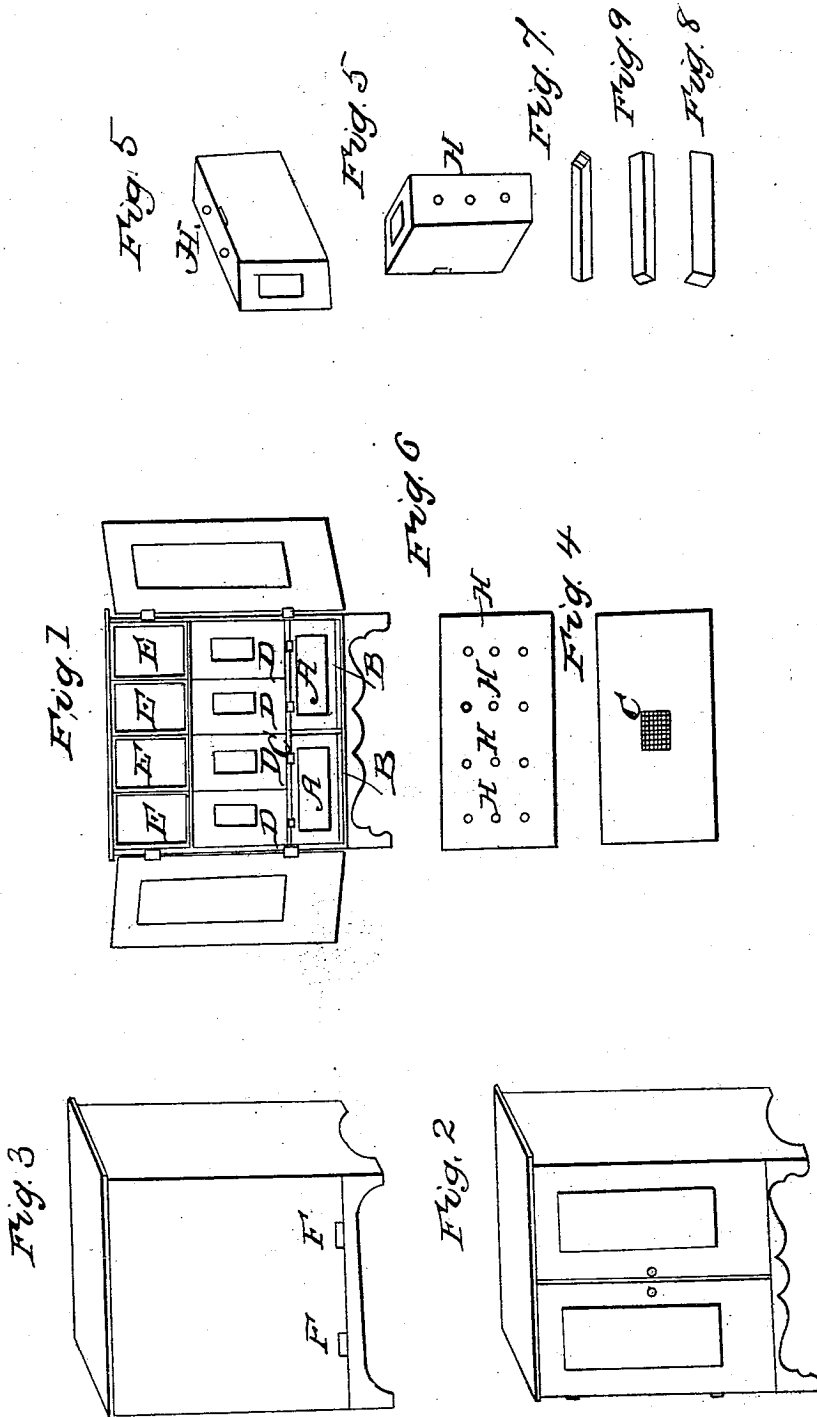


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of boxes close under the cover in such a manner as to open a passage for the bees from one box to the other through the sides of them, these slits should be three inches
 5 by half an inch, there should be three holes one and a half inches in diameter 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
 10 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
 15 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
 20 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
 25 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
 30 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
 35 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
 40 from him by lawless depredators 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
 45 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
 50 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
 55 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
 60 after lying out in this manner for weeks 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
 65 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
 70 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
 75 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
 80 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
 85 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
 90 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
 95 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)
 100 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
 105 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
 110 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
 115 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.
 120 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
 125 hive enter this chamber making an excellent retreat for the bees when they rush into the hive almost all at once as they frequently
 130

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 depredators 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