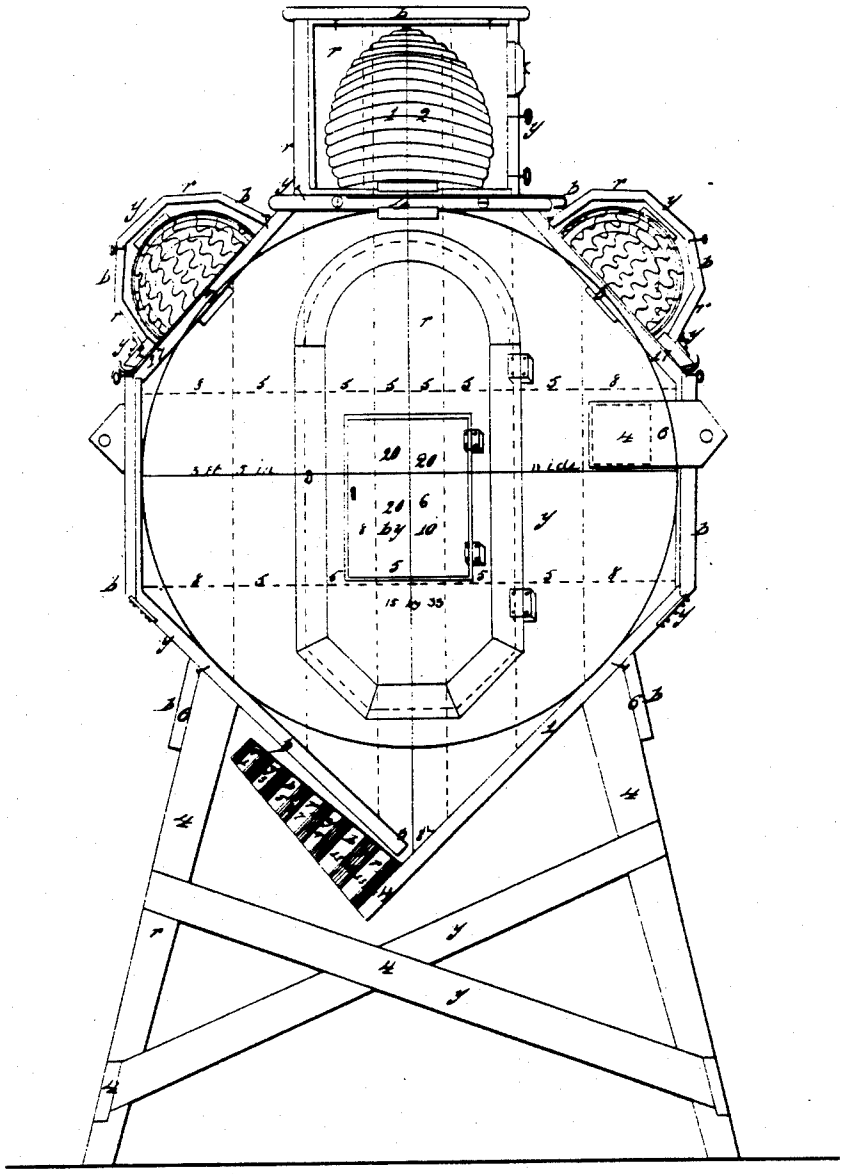
W. Grove.

Bee Hive.

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No. 8,875 X

Patented Jun. 12, 1835.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

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June 12, 18..

To all to whom these Letters Patent shall come,

Be it known that I William Groves a Citizen of the United States have invented a "Fortified Bee Palace" on a new and original plan for which I have obtained a Patent under the Seal of the United States. The said invention has been pronounced by the best judges to be far superior to anything of the kind hereto before discovered for beauty, convenience and usefulness. The preservation of the bees, the procurement of pure and much larger quantities of honey without destroying or hiving the bees — the great and remarkable increase of their number — the facility and ease with which the honey can be taken from the house without even disturbing their ingenious proprietors; these are some of the most obvious advantages arising from the above mentioned invention. The following is a full and exact description of the construction and operation of said "Palace" — the pavilions are made of different sizes, according to the number of hives, which they are to be commenced with, but the most ordinary size is one of six feet long, two feet two inches wide, they are made of inch boards, pine or poplar &c. the gable ends are made first, one precisely like the other. After they are planed, both ought to be described inside and outside, exactly as on the draft, before the boards are taken off. First the centre, 16 inches from the top and sides. Then the circle, the square is then brought up to the circle, the top part is equally divided into five spaces by allowing two inches in the top platform, and 4 inch above and below for the reception of large window glasses, of 4 inches high by 12 wide, so that five spaces will be each 4 inches wide on the outside. The doors are then described 2 inches from the top platform and 13 inches wide, by 21 high. A glass 6 by 8, is inserted on the inside of each end door (and a little door as a bird cage, on the outside (and a hole 4 inches wide, square, one 2 inches from the side is cut out with a rabit, to receive a slide board of ¼ of an inch thick. The lines struck with dots (see draft) ought to be marked on the inside of the gable ends, after the gable ends are thus alike prepared, ploughed, grooved and glued together, (and the boards all one plained off, warm tar with a pencil should then be applied to the edges of the gable ends and on all the joints of the boards, as they are placed

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with 10 bolts above, two small strips of two inches wide, with six space spaces under each strip of boards of six inches wide through which the bee plate is inserted in order to cut off the combs with glass boxes, are nailed on the inner edges of the two side platforms, to receive the ends of the cross pieces and also to keep the glass boards, from sliding high up to wide, which is necessary, large frame boards, from slipping off on each side there is also two cross pieces of five squares, the three upper squares with the ends are screwed fast, the two bottom squares are secured (one having six shallow with two screw eyes, by which the boards are kept in or out; in these boxes the operations of the bees are to more especially seen, than in anything else of the kind, there is a screen on the top platform to receive the drawers of the first swarm with the hollow having a hole in the center of one side, for the top of each drawer and is secured by which the honey is taken out of the swarm season (and a small glass of 3 inches high by 2 long is pushed in the inside of each drawer, having sticks put in to slide along on the outside through all the drawers of glass between each (and) a book is to be applied in each manner, but these boxes with the drawers and boards are not used the first year, in the first place, after the house is put to its proper place, but the glasses are being pushed in, that is for two years and perhaps as many as they contain an ounce over the holes on the top platforms. The hives are then shut up, on the outside around, being with a cement made of a gill of tar, a tea spoonful of sulphur a quart of clay, and some hot water, two small boards are screwed on the two side platforms with bar under them at the bottom as the bees have run their combs down over all the bars, and have sufficient maintenance to last them through the winter, the hives are then covered with a mat or thin cloth and a thin bee plate is slipped in under on the holes in order to secure the bees after the old hives are taken of full of honey, and the bees all saved in the "fruitful palace". then the boards on the side platforms are to be run away from the boxes with the drawers and boards screwed on, thus the bees have room to spread out in every direction, (and are not idle.) When one of the drawers boxes are entirely full, the bee plate is inserted the board the drawers taken out with two combs (are the purest honey. After the ride is uncovered (and) cut off with a wire, emptied fine is placed, the bees will be either using

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ed on, with a shelf 4 inches wide for the bees to light on (and an open space
3 feet wide all along, like a wind mill, in the equipment in front of the
same, in addition to enable them to rob out all offensive matter from their
defeated brethren and fighting against all intruding insects. N.B. The boards
are all described as open in the inside before they are nailed on; afterwards
ingroove from the nailes on the inside of the two ends, 5 inches apart, 2 grooves
one lengthways 2 1/2 inch from the ends and sides, on the inside (an 1/4
inch all round and the ends to be sawed off on the outside.) for small holes in the
reception for eight slides 1 inch square thick. On the inside of the
shelf and before they are nailed on, holes are described (and cut out in the
middle) in the top platform 4 inches wide (and on the side platforms 3 inches
wide round one foot apart or between every four rows of slides. The two side
platforms are then nailed on; after they are covered (and laced the top platform is
screwed on. The inside of the facings ought to be as light (and even as smooth
as possible, and the end doors should not be very light (and the outside bottom ought
always to be left open in order to serve as a passage for ventilation, to prevent the
bees from smothering; in a case can be made of tin. 3 squares full of small holes
boring with bungs, after the body is thus constructed the ends are then screwed
on instead of (and after the body is smoothened all over, then the doors are cut
out with a saw in the same commenced by boring a hole with a small gimlet
to let the same lumber being taken for the doors; small strips as before, 1 inch
wide (and one eighth thick are glued and pinned on around the edges of the
doors to cover the cracks. The holes are then bored in with a wood and stone
3/4 of an inch in the same before described. Whenever the body is placed on its legs, which
are 2 feet high by 4 inches thick, to pass off below, and strips of ten inches
wide nailed on, crossways and lengthways, the legs are screwed on from the out
side right under the out most upright, in order that after they shall have been
painted, they may be replaced. The side boards 3 inches wide are then screwed on (the
whole length same) The slides when finished all round the ends, and
of 2 inches square are then put in. N.B. Four slides are in the inside
the doors are then hung, one to hanging two hinges (and a hook. The hinges on
the two inside doors on shutters, are put in with eight inches from the ends.

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answered, in abundance, [illegible] the bees
can be removed with the slightest danger or trouble. As soon as the bees
run up their combs to the holes behind the doors, two other large bee hou
ses are screwed on, hole upon hole, behind the doors with some of the above-men-
tioned combs, thirty small ones round the holes; when the slides are remov
ed, a great quantity of bees will come out of the full into the empty houses,
and after they have worked their way into the empty ones they are removed and
others replaced for the reception of more, &c. From the main body of
the honey is taken in winter time, when a door is opened on a cold morning,
upon the plan is quite full. The bees will retire and become stiffened
from the combs are cut through right in the middle between the sticks,
with a sharp pointed, thin bended, knife, and a stick with its ends
also removed, thus a stick full can be taken out from the lowest box next
the floor every morning until the one half round is conveyed away. In the spring
these sticks are to be replaced; that the honey of every other half round can
be taken out every winter. By pursuing this plan the bees continue in mak
ing new combs, by filling up every other half and every summer, I, B, have
all boxes of these "half finishing" so large as to contain upwards of three kegs
heads, all commenced with eight inches. One hundred and sixty gallons
of honey have been taken out of one house in one year. The superiority of
this invention over any thing of the kind hitherto in use, is unquestionable
from individuals who have made [illegible] use of this plan all concur in saying
that the bees thrive better, have made ten times the quantity of honey which
they did in the former plans.

Know all Men by these Presents, That we the undersigned
have had a perfect knowledge & examination of all & every "Patent Bee
Hive, five summers (one we candidly believe that it will answer every
purpose as it is recommended; any person wishing to see a honey comb
that is five summers eight feet long (one foot wide) can be gratified with
the sight by calling with us. Jacob Partrew, Cornelius Keiser, Wm
Arnold, Phillip Gable, Reading Berks County Pa. December 9. 1834.

On this 26th day of May, 1835, before the subscriber, a Justice of the Peace in

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[illegible] personally appeared the aforesaid William Groves. made solemn oath according to law that he verily believes himself to the true [illegible] original inventor or discoverer of the invention above specified [illegible] described for a Bee Hive [illegible] that he is a citizen of the United States.

Wm. H. Wharton.

[illegible] under my hand & the Seal of the City of Washington this 12th day of June A.D.

S. Andrew Jackson

By the President. John Forsyth. Secretary of State.

"I do certify that the foregoing Letters Patent, were delivered to me on the 13th day of June A.D. 1836. to be examined [illegible] I have examined the same & find them conformable to law

B. F. Butler Attorney General of the United States

Exd
WKC

James L'Tenner
Letters Patent

C. 14, 1[illegible]

The Schedule referred to in these Letters Patent and making part of the same, containing a description in the words of the said James L'Tenner himself of his Improvement in Canal Boats for the transportation of Merchandize.

Schedule or Specification of James L'Tenner's improved Canal Boat for carrying merchandize and general freight to be used when transhipment from Canal to Rail or other roads and vice versa is necessary.

Construct the hull of the Boat Flat or shoe in all respects similar to those used on the Canal for navigation. Construct a short stern deck such as is now say four or five feet long next to which deck erect [illegible] in 6 feet for a Cabin. Also construct a short bow deck say four or five feet long.

These decks and Cabin will enable from fourteen to sixteen feet length