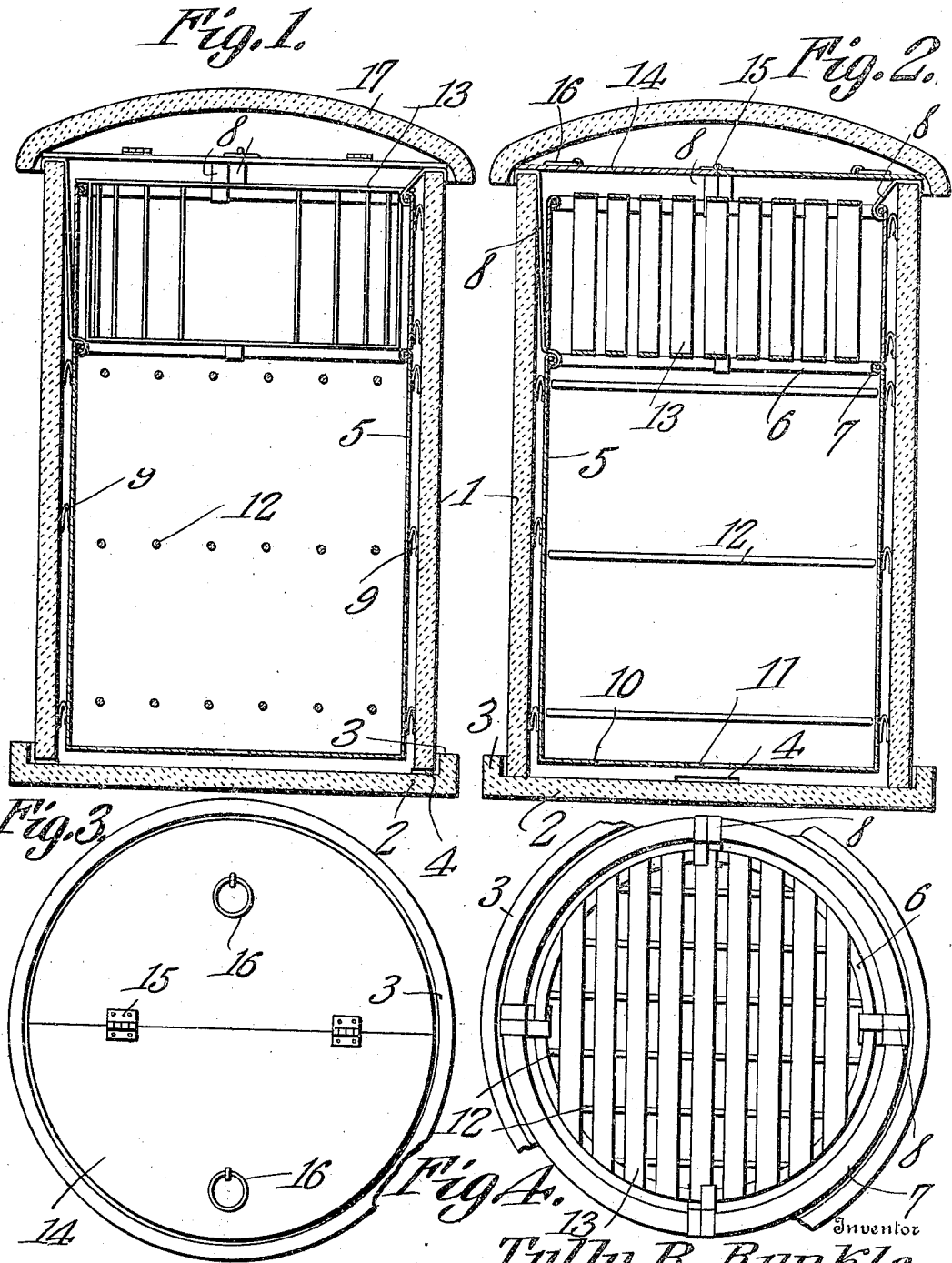


T. R. RUNKLE.
BEEHIVE,
APPLICATION FILED SEPT. 4, 1909.

948,742.

Patented Feb. 8, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

TULLY R. RUNKLE, OF FARMERSBURG, INDIANA.

BEEHIVE.

948,742.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, TULLY R. RUNKLE, a citizen of the United States, residing at Farmersburg, in the county of Sullivan and State of Indiana, have invented a new and useful Beehive, of which the following is a specification.

This invention relates to improvements in bee-hives and has for its object the provision of a construction by which the interior of the hive will be readily accessible for the purpose of removing the honey or for hiving a swarm or for any other purpose.

A still further object of the invention is to construct the hive in such a manner that the bees will be protected from the ravages of bee-moths, mice or other vermin.

With these objects, and such other incidental objects as may hereinafter appear, in view, the invention consists in certain novel features of the device illustrated in the accompanying drawings all of which will be hereinafter first fully described and then particularly pointed out in the claims.

In the annexed drawings;—Figure 1 is a vertical diametrical section of a hive embodying my invention. Fig. 2 is a similar view taken at right angles to Fig. 1. Fig. 3 is a plan view with the outer lid removed. Fig. 4 is a plan view with both lids removed.

In carrying out my invention, I employ an outer cylindrical shell 1 which is constructed of cement, concrete, shale, clay or similar material and the said shell rests upon a base 2 of the same material, the said base having an upstanding annular flange 3 which surrounds the lower end of the shell and is spaced therefrom sufficiently to provide ample passageway for the bees. Openings 4 are provided in the lower edge of the shell so as to permit the bees to pass into or out of the hive, as will be readily understood. Within the shell 1, I support a jacket 5 which is constructed preferably of galvanized iron and is made in two sections, the upper section occupying about one-third of the space within the shell, while the lower section occupies about two-thirds of the said space although the exact dimensions are immaterial. The sections of the jacket are provided at their upper edges with a bead 6 formed by rolling the edge of the jacket around a rod or wire 7 and the sections are supported within the outer shell by means of hooks 8 which are hung upon the upper edge

of the shell and extend down within the jacket to engage the bead 6 as clearly shown in Figs. 1 and 2.

The jacket is spaced from the inner face of the outer shell and is maintained in its proper relation therewith by springs 9 which are arranged between the shell and the jacket, as clearly shown, at intervals throughout the hive and serve to overcome any tendency to violent shaking of the combs when the hive is being handled for any purpose. The lower end of the jacket is provided with a bottom 10 having a central opening 11 so that the bees may be permitted to enter the brood chamber or the honey frames while the access of mice or other pests to the interior of the jacket will be prevented. A plurality of rods 12 are secured across the lower section of the jacket to provide means upon which the bees may form the brood combs. A plurality of honey or extract frames 13 are placed in the upper section of the jacket and these frames have their upper bars extended beyond their ends so as to rest upon the upper edge of the jacket and be thereby suspended within the same. This arrangement supports the extract frames within the jacket in a secure manner and at the same time permits the ready removal of any one frame without disturbing any other frame or causing any excitement among the bees in the lower or brood chamber. A cover 14 is placed upon the upper end of the outer shell 1 and this cover is composed of two sections connected by hinges 15 and provided near their outer edges with handles 16 in order that either side of the hive may be opened without uncovering the entire hive. In order to further protect the hive against changes in temperature and to prevent access of parasites, a cement top 17 is fitted over the cover 14 as clearly shown.

It is thought the use and advantages of my bee-hive will be readily understood and appreciated from the foregoing description taken in connection with the accompanying drawing, without a detailed elaboration of the same. The use of the cement outer shell thoroughly protects the bees against changes in temperature so that they are not disturbed or their health injured either in summer or winter and the said shell thoroughly protects the bees against the entrance of mice or insects. The provision of the inner jacket

which is suspended within the outer shell permits the removal of the entire swarm of bees or the withdrawal and replacement of honey frames without the loss of time or the performance of any laborious work.

Having thus described my invention what I claim as new and desire to secure by U. S. Letters Patent is;—

1. The combination with an outer shell, of an inner jacket formed in two sections, the lower section constituting a brood chamber and the upper section being adapted to support honey frames, and means for suspending the jacket within the shell from the upper edge of the same.

2. The combination with an outer shell, of an inner jacket having a bead at its upper edge, and hooks engaging the upper edge of the shell and having their lower ends engag-

ing the said bead to suspend the jacket within the shell.

3. The combination of a cement shell, a cement base supporting the said shell and spaced therefrom, a jacket suspended within the shell, springs interposed between the shell and the jacket, brood-comb supports within the lower portion of the jacket, honey frames within the upper portion of the jacket, a sectional lid resting upon the upper edge of the shell, and a cover extending over the said sectional lid.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

TULLY R. RUNKLE.

Witnesses:

JAMES F. CRAWFORD,
PLEASANT L. COMBS.