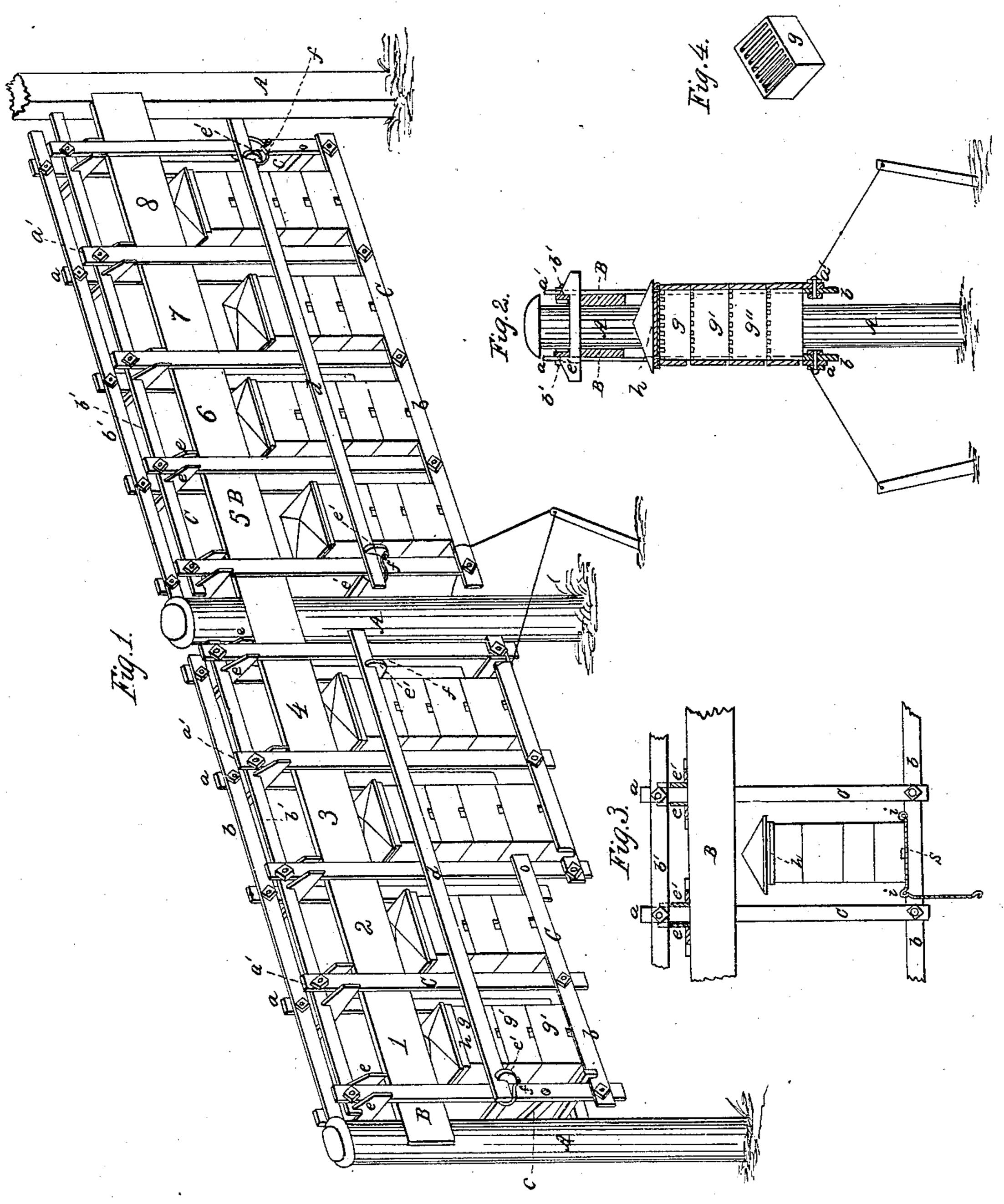
No. 30,143.

Patented Sept. 25, 1860.



Witnesses: Godwing. association. Inventor: John Jacobs by Munnflo Attorneys.

## UNITED STATES PATENT OFFICE.

JOHN JACOBS, OF COLUMBUS, OHIO.

## BEEHIVE.

Specification of Letters Patent No. 30,143, dated September 25, 1860.

To all whom it may concern:

Be it known that I, John Jacobs, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful 5 Arrangement of Beehives; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in 10 which—

Figure 1, is a perspective view of my improved arrangement of bee hives. Fig. 2, is a transverse section of the same. Fig. 3, is a side elevation of a portion of the same, 15 and Fig. 4, is a perspective view of one of

the sections of a hive.

Similar letters of reference in each of the several figures indicate corresponding parts.

To enable others, skilled in the art, to 20 make and use my invention, I will proceed to describe its construction and operation.

A, A, A, represent three vertical posts set some distance into the ground or fastened to movable sills.

B, B, are longitudinal joists fastened on opposite sides of the posts and serving to brace the posts and to support frames which contain the hives. These joists are placed directly opposite each other and nearer the

30 top of the posts.

C, C, are frames for containing the hives. These frames consist of narrow upright strips a, a', narrow top and bottom longitudinal strips b, b', cross connecting bars 35 c, c, longitudinal central strips d, d, and shouldered and notched supporting cross pieces e, e'. The frames thus constructed are suspended on the joists B, B, by means of the shouldered cross pieces e, e', as repre-

40 sented. It should be noticed that the cross pieces e', are movable up and down by means of wire loops f, and that the central strips d, can be lifted out of the notches of the pieces 45 e'. It should also be noticed that the cross pieces e', are not fastened to the upper strips b, nor to the joists B. It should further be observed that a space exists from top to bottom between all of the timbers of the whole 50 structure. In connection with these frames, I use hives constructed in sections  $g, g', g^2$ , one top h, being common to the several sections that is when one section is removed, the top h, is placed on the next section. The 55 lower section has no bottom, but is provided

with a hinged wire gauze ventilating valve s so that during snowy weather, the bees may be confined and prevented from going out at the bottom when the usual ingress and egress passages are closed. The valve is con- 60 structed with two hinge rods i, i, which have one of their ends bent at right angles and rest in the lower strips of the frames. Either or both of these rods, may be slipped out laterally whenever it is desired to take 65

away or let down the valve.

The hives can be placed in the frames by simply lifting the central strip out of the notches of the cross pieces  $e^1$ ,  $e^1$ . When the hives are in the frames, their lower ends rest 70 upon the lower longitudinal strips b, and are prevented from lateral movement by the central strips d, d. To take out the hives, all that has to be done is to lift out the strips from the notches of the cross pieces e', e', 75 and slip the hives out laterally. By this arrangement, a middle hive can be removed without disturbing those adjoining it. In this respect my hive differs from those referred to in the Bee Keepers' Manual for 80 the very objection against the necessity of removing a series of hives when it is desired to remove a central hive—is obviated by my arrangement. Again when it is necessary to repair the structure, jarring the bees is pre- 85 vented, for the central strips can be taken away and the hives removed and then by turning down in the manner shown in red, the upper shouldered cross pieces e, e, and slipping them out laterally, the frames can 90 be lowered and removed, to a firm or suitable foundation on which to repair them. Another advantage and an important one, is this—by placing a series of bottomless hives on top of the joists, the young swarms of 95 bees from the hives below will rise and enter the empty hives very naturally and conveniently.

My elevated arrangement of frames and bottomless hives gives the bees perfect pro- 100 tection from frost and all their enemies and at the same time insures perfect ventilation, for by elevating the hives the air has a free circulation and all moisture has a chance to drip down and pass off.

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

1. The arrangement of the posts A joists B top and bottom longitudinal strips b b'adjustable notched cross pieces e' e' detach- 110 able shouldered cross pieces e, e, detachable | valve is constructed and arranged in the longitudinal central strips d and sectional manner and for the purpose described. bottomless hives g g' g'' when the whole is constructed and operated in the manner and

for the purposes described.

2. In combination with the above, the Goodwin Y. AtLee, wire gauze ventilating valve s when said Robt. Fenwick.

JOHN JACOBS.

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