

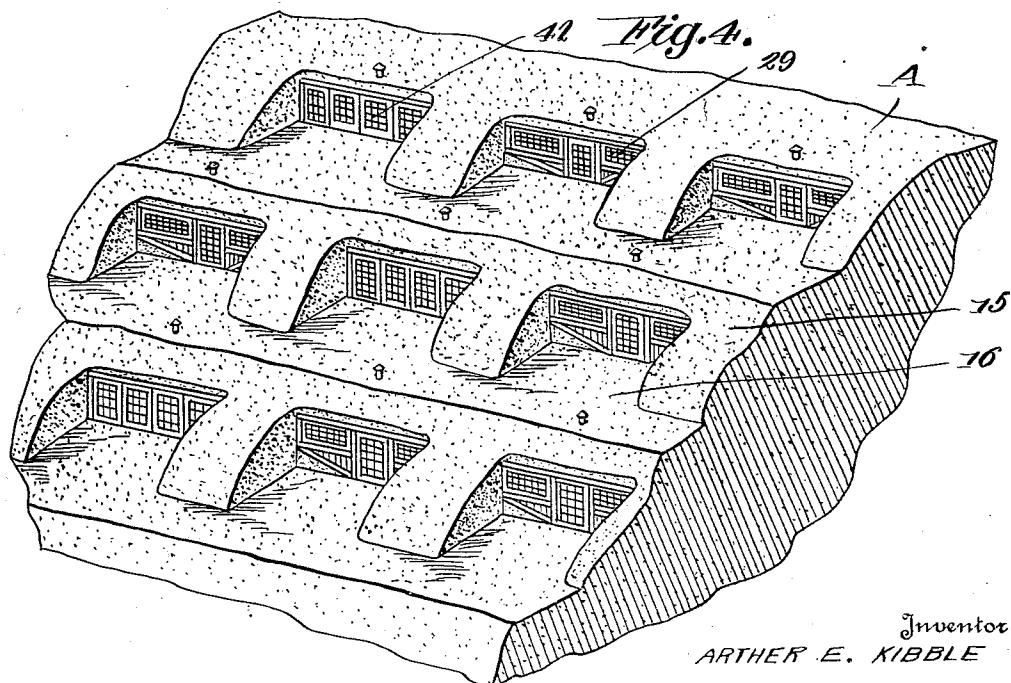
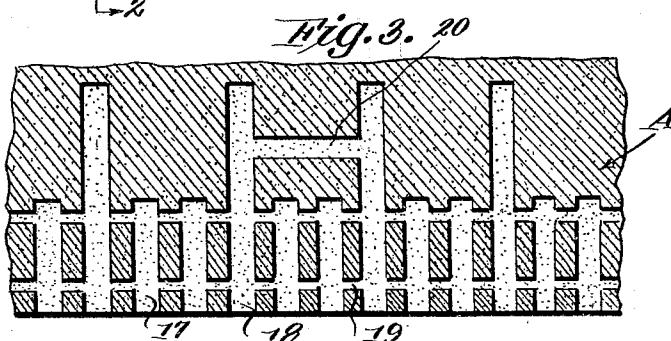
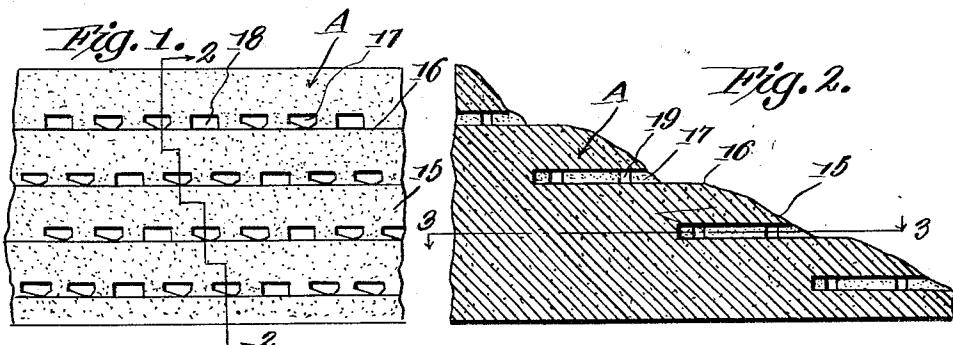
March 29, 1932.

A. E. KIBBLE

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UNDERGROUND CHICKEN HOUSE

Filed Feb. 21, 1930 3 Sheets-Sheet 1



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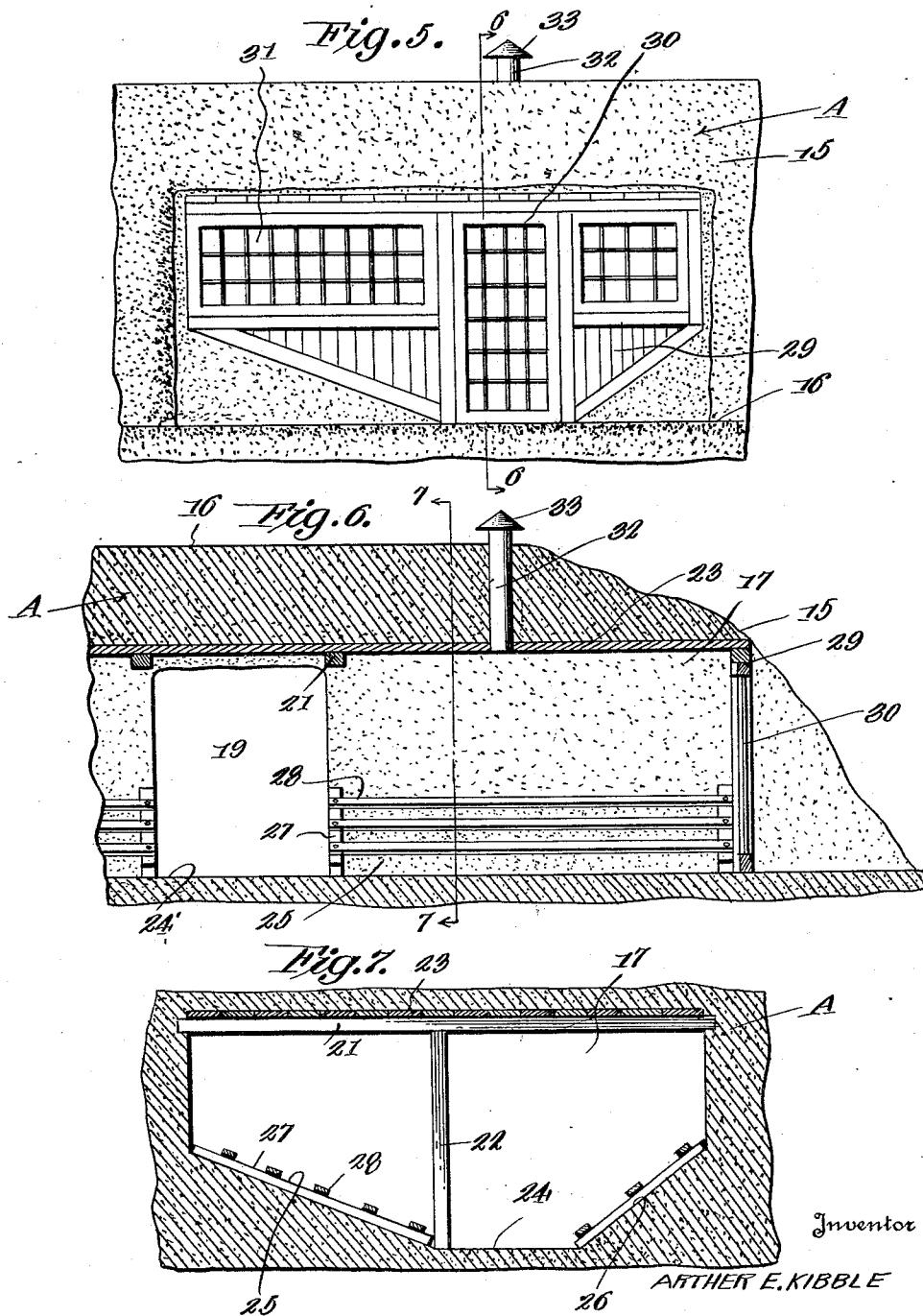
A. E. KIBBLE

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UNDERGROUND CHICKEN HOUSE

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Loring L. Mathews
Attorney

March 29, 1932.

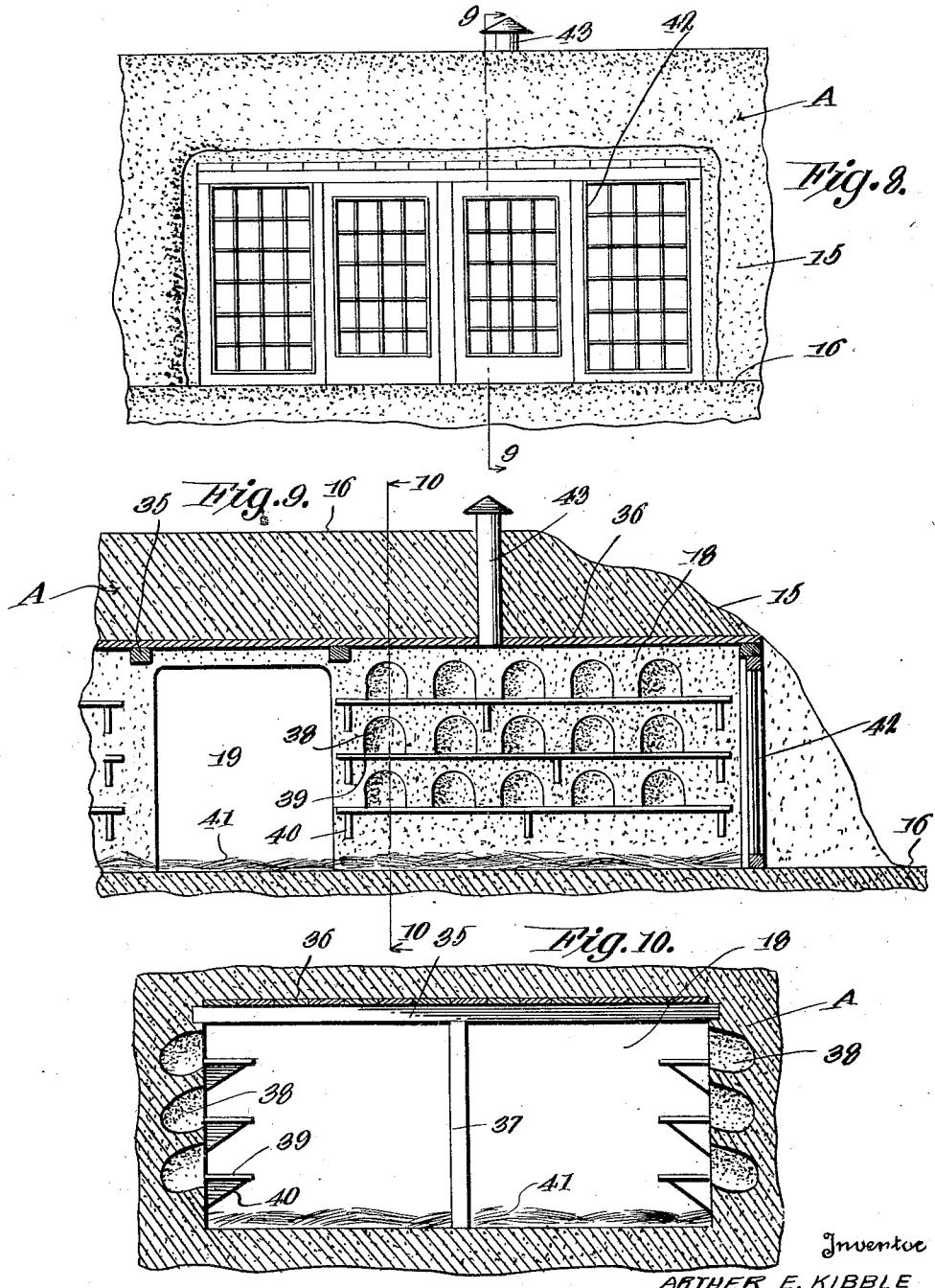
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UNDERGROUND CHICKEN HOUSE

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UNITED STATES PATENT OFFICE

ARTHUR E. KIBBLE, OF RENO, NEVADA

UNDERGROUND CHICKEN HOUSE

Application filed February 21, 1930. Serial No. 430,327.

This invention appertains to animal husbandry and more particularly to a novel chicken house.

One of the primary objects of my invention is the provision of novel means for forming a chicken house under ground so as to effectively use available hillside space for a chicken ranch.

Another important object of my invention is the provision of a chicken house in the nature of tunnels formed in the side of a hill with novel means for arranging and forming the tunnels so as to provide independent chambers for the chicken roost and for feeding and egg laying.

A further object of my invention is the provision of novel means for forming the sides of the tunnel or chamber for the chicken roost whereby the perches will be effectively supported and whereby the sides of the chamber will form dropping boards below the roosts.

A further object of my invention is the provision of novel means for forming the laying nests in the feeding chamber, the nests being formed by arranging pockets in the side walls of the chamber or tunnel.

A further object of my invention is the provision of means for terracing the side of a hill and tunneling the terraced face of the hill to form the chambers for the chickens, the chambers in the different terraces being arranged in staggered relation so that a strong and durable structure will be had.

A further object of my invention is the provision of novel means for closing the entrances to the chambers or tunnels so as to form a complete house with means ventilating the chambers or tunnels.

A further object of my invention is the provision of means permitting inter-communication to be had between said chambers and tunnels.

With these and other objects in view, the invention consists in the novel construction,

arrangement and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawings, in which drawings:—

Figure 1 is a diagrammatic view showing the layout of the chicken chambers or tunnels, formed in a hillside or bluff, the hillside or bluff being shown in front elevation. 50

Figure 2 is a vertical section taken on the line 2—2 of Figure 1 showing the layout of the tunnels or chambers diagrammatically. 55

Figure 3 is a horizontal section taken on the line 3—3 of Figure 2 looking in the direction of the arrows, showing the layout of the tunnels or chambers in one terrace 60 diagrammatically.

Figure 4 is a fragmentary perspective view of the front of a hill or cliff constructed in accordance with my invention to provide the chicken house. 65

Figure 5 is a front elevation of one of the chicken roosting chambers or houses formed in the side of the hill or cliff. 70

Figure 6 is a longitudinal section through the same taken on the line 6—6 of Figure 5 looking in the direction of the arrows. 70

Figure 7 is a transverse section through the same taken on the line 7—7 of Figure 6 looking in the direction of the arrows. 75

Figure 8 is a front elevation of one of the chicken feeding and laying chambers formed in the side of a hill or cliff. 75

Figure 9 is a longitudinal fragmentary section through the same taken on the line 9—9 of Figure 8 looking in the direction of the arrows. 80

Figure 10 is a transverse section through the chicken feeding and laying chamber, taken on the line 10—10 of Figure 9 looking in the direction of the arrows. 85

Referring to the drawings in detail, where in similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates a hill side, which in accordance with my invention 80

is formed into a plurality of stepped terraces 15, each terrace embodying a horizontal runway, road, or path 16, for a purpose, which will be later described. Each terrace 15 is 5 pierced to provide a plurality of equidistantly spaced tunnels 17 and 18, and it is to be noted that the tunnels 18 are formed relatively longer than the tunnels 17 and that I employ two tunnels 17 between each tunnel 10 18. The tunnels 17 are formed into roosting chambers for the chickens while the tunnels 18 are formed into feeding and laying chambers for the chickens. I prefer to connect all of the chambers together by suitable passage- 15 ways 19 which extend longitudinally of the hillside and transversely of the chambers adjacent to the front and rear thereof. If preferred, the rear ends of the tunnels 18 can be divided from the front portions thereof 20 so as to form rear storage chambers for the chicken feed and if preferred certain of the chambers 18 adjacent to their rear ends can be connected together by a transverse chamber 20 which may constitute a cold storage 25 chamber. It can be seen that the chambers or tunnels 17 and 18 open out on the horizontal paths 16 which form open air runways for the chickens and further these runways can be used as roads if desired.

30 Referring more particularly to Figures 5 and 7 inclusive, wherein I have shown in detail the chambers 17 which form the roosting chambers, it is to be noted that the chambers are provided at spaced points with roof 35 joists 21, the end of which may be anchored in the side walls of the chamber 17 and these roof joists 21 can be further supported by uprights 22 of the desired size if preferred. These joists 21 can support roof 40 boards 23, if desired. In accordance with my invention I arrange a substantially central walk 24 in each chamber 17 and have the sides of the chamber on each side of the walk inclined downwardly in opposite di- 45 rections toward the walk as indicated by the reference characters 25 and 26. In order to form the roost for the chickens in the roosting chambers I provide at spaced points transverse stringers 27 which are laid on 50 the inclined walls 25 and 26 and secured to these stringers are the longitudinally extending perches 28. The front end of the chambers 17 are closed by suitable walls 29 which can be formed of any desired material, such 55 as boards and timbers and the walls 29 are provided with swinging doors 30 and 31. The doors and windows are provided with glass panels so as to insure the entrance of light into the chambers. At spaced points I 60 provide ventilating pipes 32 which extend through the terraces into the chambers 17 and the upper ends of the pipes 32 can be provided with ventilating cowls 33.

Referring now, more particularly, to Figures 8 to 10 inclusive, wherein I have shown

in detail the chambers 18 constituting the feeding and laying chambers, it will be noted that I also provide roof joists 35 at spaced points, the ends of which are anchored in the side walls of the chamber and these roof joists can support roof boards 36. The roof joists can be further supported by uprights 37 of the desired size.

In accordance with my invention, I provide rows of pockets 38 dug into the side walls of the chambers 18 and these rows of pockets constitute laying nests. In front of each row of nests I provide boards 39 which constitute entrance walks to the nests. These boards 39 can be supported by suitable brackets 40 secured in any desired way to the side walls of the said chambers. If preferred, the floors of the feeding chambers can be strewn with straw 41 which can be swept out at different times for the sake of cleanliness. The front ends of the chambers are closed by front walls 42 which can be in the nature of suitable panels provided with glasses for admitting sunlight. Certain of the panels can constitute doors to act as entrances to the chambers or tunnels. These chambers 18 are also provided with ventilator pipes 43 which extend into the chambers through the terraces.

Referring again to the diagrammatic showing in Figure 1 and also Figure 4 it is to be noted that the chambers 17 and 18 in the different terraces are staggeredly arranged relative to one another for the purpose of structural strength.

From the foregoing description, it can be seen that I have provided novel means for forming chicken houses in the sides of a hill or cliff and this arrangement, by actual experiment, has proven especially successful in the soft chalk cliff or hills in the state of Nevada.

Changes in details may be made without departing from the spirit or the scope of this invention, but:—

What I claim as new is:

1. An underground chicken house formed in the side of a hill, consisting of a plurality of stepped terraces providing paths, said terraces being tunneled inwardly of the paths for providing chambers, said chambers being provided with pockets in the side walls thereof to provide nests, transversely extending roof joists for bracing the roof of said chambers and having their ends anchored in the side walls of the chambers, ceiling boards placed upon the joists and engaging the top wall, uprights engaging the joists intermediate the ends thereof for bracing the joists, and means for closing the entrance to said chambers.

2. An underground chicken house formed in the hill side, consisting of a plurality of step-like arranged terraces to provide a plurality of paths, the hill side being provided with a plurality of tunnels extending directly

from said terraces and paths, said tunnels comprising chambers having pockets formed in the sides thereof to provide nests, the chambers extending from one terrace being arranged in staggered relation with respect to the chambers in the next adjoining terrace, ventilating means extending from one chamber up through the terrace arranged just above the chamber, bracing joists extending across the roof of said chambers and having their ends anchored in the side walls thereof, means for bracing said joists intermediate their ends, a removable front wall fitting in the front end of said chambers and constituting a closure therefor, and doors adapted to normally close the entrance to said chambers.

In testimony whereof I affix my signature.
ARTHUR E. KIBBLE.

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