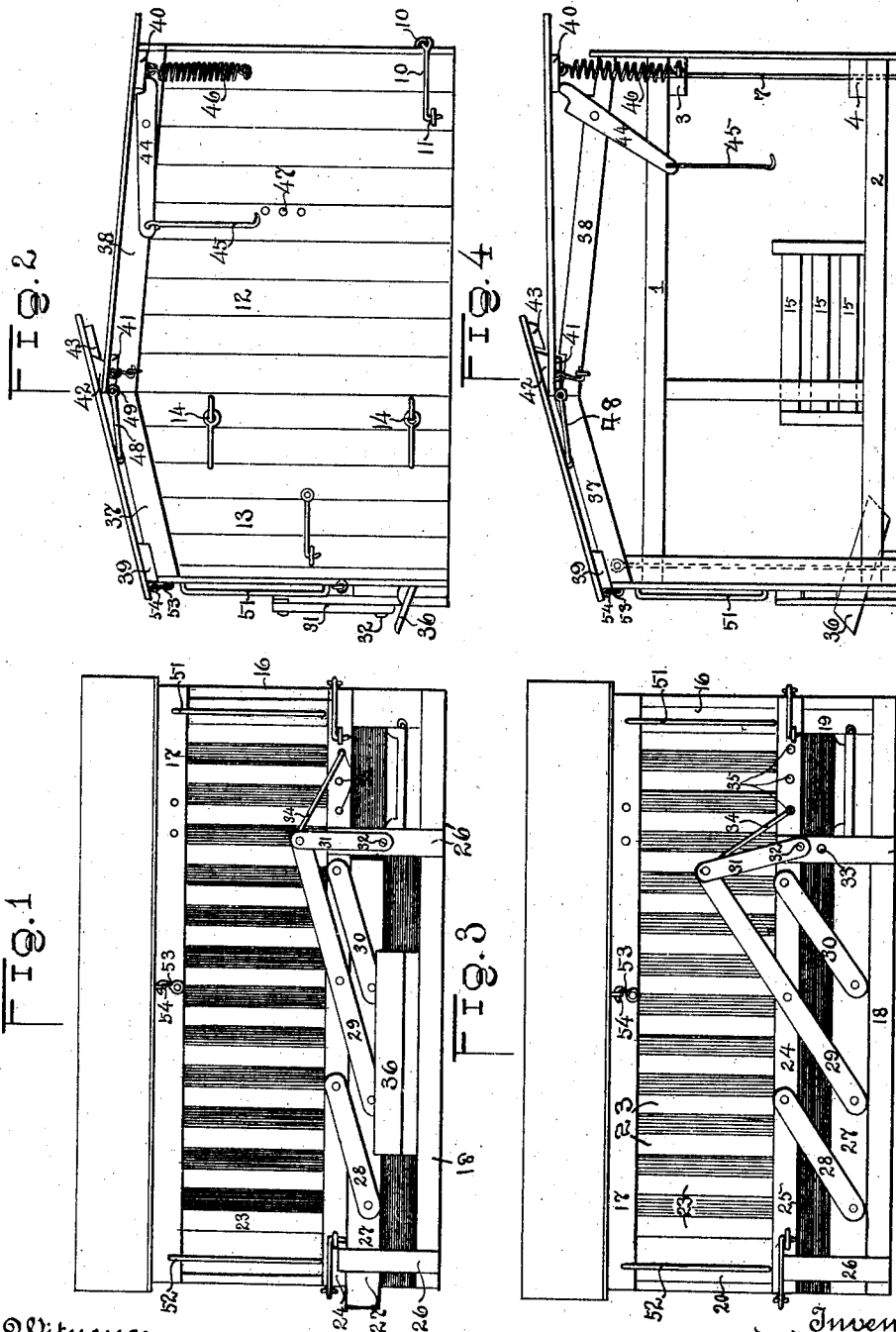


L. F. HAKE.
HOUSING APPLIANCE.
APPLICATION FILED DEC. 30, 1909.

980,514.

Patented Jan. 3, 1911.

2 SHEETS—SHEET 1.



Witnesses
Gilbert J. Keene,
M. Newcomb.

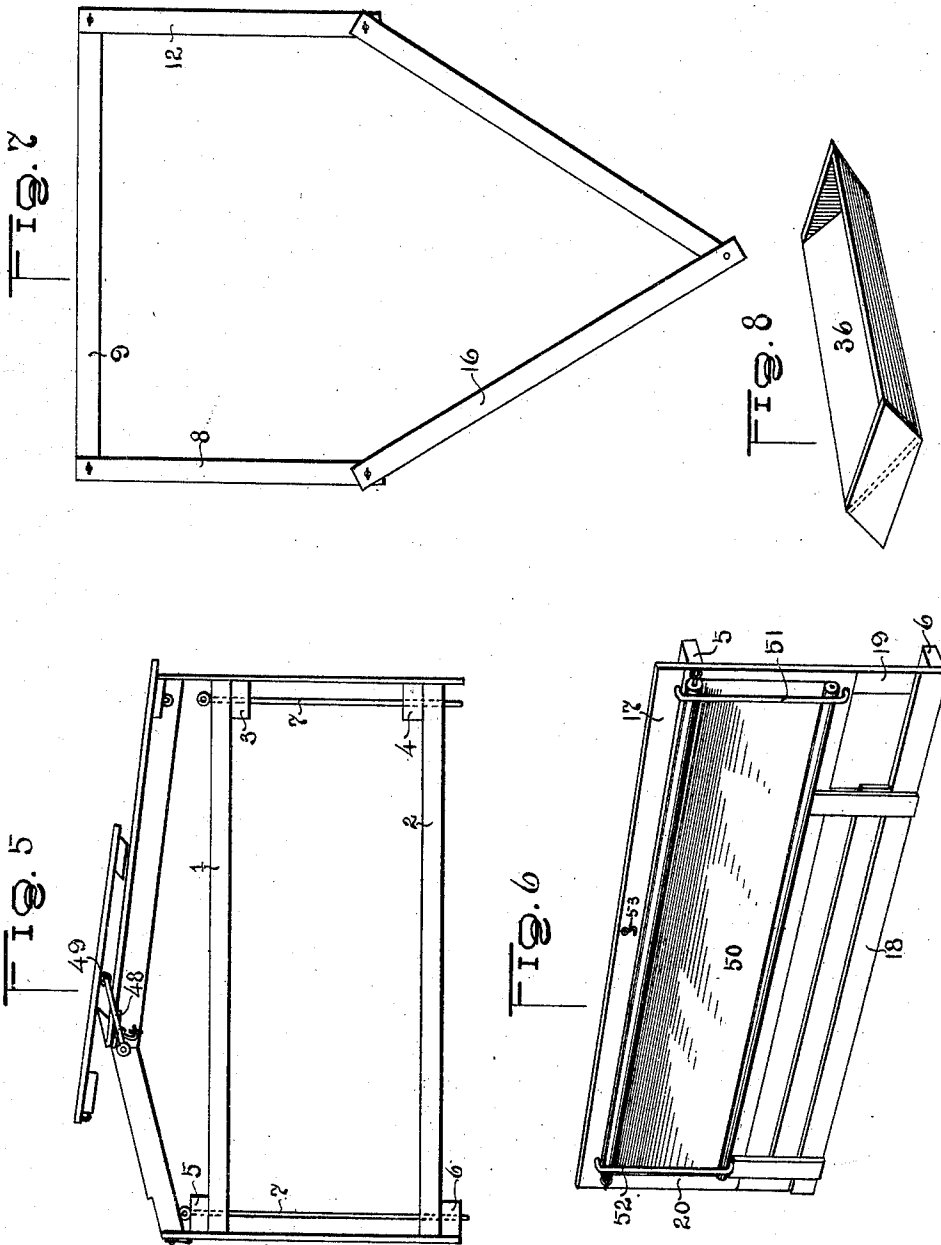
Inventor
Lewis F. Hake.
By W. J. Fitzgerald
Attorney

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WITNESSES:

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INVENTOR

Lewis F. Hake.

BY

W. J. Fitzgerald & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

LEWIS F. HAKE, OF OTTAWA, KANSAS.

HOUSING APPLIANCE.

980,514.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed December 30, 1909. Serial No. 535,560.

To all whom it may concern:

Be it known that I, LEWIS F. HAKE, a citizen of the United States, residing at Ottawa, in the county of Franklin and State of Kansas, have invented certain new and useful Improvements in Housing Appliances; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in housing appliances for poultry, swine and the like having for an object to provide a device which will afford good ventilation.

A still further object is to provide a housing which may be easily and substantially constructed, also one having certain novel arrangements for securing the inclosing walls in relation to each other and a further object is to provide a means for controlling the ventilating members.

A still further object is to provide a housing which may be converted into various forms in order to meet the requirements for which it is to be utilized.

These and other objects will be more particularly referred to in the accompanying specification and claims.

In the drawings forming a part of this application, Figure 1 is a front elevation of the house in its assembled condition. Fig. 2 is a vertical elevation showing one end of the house. Fig. 3 is a front elevation showing the lower portion of the house closed. Fig. 4 is a transverse section looking toward the inside of the end shown in Fig. 2. Fig. 5 is a vertical elevation with one of the ends removed showing how the frame-work in the house is positioned and joined together. Fig. 6 is a detail elevation of the front of the house showing the canvas roll or the like drawn downward. Fig. 7 is a diagrammatic view with the roof removed showing how the inclosing walls of the housing may be extended with the addition of a wall corresponding in length and height to the front, in order to provide a yard or run, and, Fig. 8 is a detail perspective view of a reversible trough to be used in connection with my housing.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 and 2 are horizontal standards or frames po-

sitioned parallel to each other, while 3 and 4 are longitudinal extending frames parallel to each other, the frame 3 being positioned below the standard 1, while the frame 4 is positioned above the standard 2 and at the opposite end of the frames 1 and 2, are the longitudinal extending frames 5 and 6, the frames 5 and 6 being parallel to each other and being positioned respectively above and below the standards 1 and 2. Rods 7 are used for the purpose of securing the frames and standards together, said rods extending downwardly through each of the frames and standards.

The end wall 8 and the rear wall 9 are constructed of a series of slats secured adjacent each other upon a suitable frame-work and are secured at their meeting ends and in relation to the frames and standards by means of hooks 10 and staples 11, these hooks and staples being used as securing members for all of the walls. The end wall 12 opposite the wall 8 has a door 13, said door being hingedly mounted upon the wall 12 by any preferred means such as the hinges 14, while a hook and staple or the like may be utilized for securing said door in a closed position. On the interior of the door and adjacent thereto, are a plurality of cross slats 15 which prevent the occupants of the housing from gaining access to the exterior when the door 13 is open. As before said, the end wall 12 is secured to the rear wall and adjacent the frames and standards by means of the hooks and staples 10 and 11 and is also secured to the front wall 16 by the same means.

The front wall 16 is composed of the longitudinal extending frames 17 and 18 and the upright standards 19 and 20 adjacent each end respectively of the frames 17 and 18 being secured therewith, while a pair of frames 5 and 6 extend inwardly from the frames 17 and 18 and adjacent the lower and upper ends of the standards 19 and 20, while a plurality of slats 23 extend between the frame 17 and a longitudinal bar 24, said bar 24 being parallel to said frame and spaced apart therefrom. To the rear of the bar 24 and extending down below said bar is a shield 25, each end of said shield being secured in the inside of the upright standards 19 and 20. A pair of guides 26 and 26' are secured vertically between the bar 24 and the frame 18 and a sliding plate 27 is adapted to move within said guides by means of a

series of levers 28, 29 and 30, the lever 28 being pivoted at one end on the bar 24, while the opposite end is pivoted upon the plate 27, the lever 29 having one end pivoted
 5 upon the plate 27 and at about its middle point pivoted upon the bar 24, while the other end thereof is pivoted with a pitman 31 and the lever 30 is pivotally mounted similar to the lever 28, while the free end of
 10 the pitman 31 has an opening 32 adapted to register with the opening 33 in the guide 26' in order that a pin may be inserted therein for the purpose of holding the plate 27 in an elevated position, as shown in Fig. 1.
 15 A securing pin 34 is pivotally carried between the pitman 31 and the lever 29, said securing pin being adapted to register in the openings 35 into the bar 24 for the purpose of positioning the levers at various
 20 angles to open or close the plate 27. When the plate 27 is elevated, my improved form of reversible trough 36 may be positioned in between the plate 27 and the frame 18 and securely held in position by the pressure of
 25 the plate 27 thereon and should it be desired to remove the trough for the purpose of cleansing, or otherwise, the levers may be operated to close the opening by lowering the plate 27 to rest upon the frame 18. A
 30 second trough 36 is adjustably secured between the guide 26' and the upright standard 19.

Referring to Figs. 2, 4 and 5, it will be appreciated how the construction of the roof
 35 permits of ventilating the interior of the house, the roof being so constructed as to be adjusted. In Fig. 2 is shown the roof in a closed position, the parts of the roof being designed to rest upon a pair of beams
 40 37 and 38 located adjacent the upper end of each of the end walls 8 and 12 and a notch is provided at each of the outer ends of the members 37 and 38 to receive the frames 39 and 40 which form the base of the
 45 roof and adjacent the inner end of the member 38 is also a notch to receive the frame 41, which extends parallel with the frame 40. Adjacent the frame 41 but on the upper side of the roof is a beveled strip 42, which is
 50 designed to engage with a beveled frame 43, the latter extending parallel to the frame 39 on its respective section of roof, it being obvious how the roof is divided into two sections. Adjacent the frame 40 and bearing
 55 against the under side thereof, is a cam member 44 fulcrumed upon the member 38 and designed to raise that portion of the roof adjacent the frame 40 above the member 38 when operated by means of the handle 45, in order to exert a counter-acting
 60 pressure against the spring 46, the lower end of the handle 45 being bent in order to be secured in the openings 47 for the purpose of maintaining the cam member 44 in an
 65 elevated position. It is well to state that

this lifting mechanism, as just described, is located on both of the end walls of the housing. In Fig. 4, the roof is shown as it would appear when elevated by means of the cam member 44. In Fig. 5 is shown the
 70 portion of the roof opposite to the portion that is raised by the cam member 44 out of its normal closed position. A pair of pins 48 are pivotally secured at one end on the member 37 at each end of the housing,
 75 while the opposite ends of said pins are designed to operate in connection with an eye 49 so that the section of the roof may be pivotally swung upward and backward in order that a portion of said section of the
 80 roof may rest on the adjacent section, thus leaving an opening for ventilation.

By reference to Fig. 7, it will be appreciated that the four walls of the housing may be so positioned that the two end walls
 85 will extend parallel to each other and the rear wall at right angles to the end wall, while the front wall is swung at an angle to one of the end walls and an extra wall corresponding in dimensions with the front
 90 wall, is secured at one end to the outward end of the front wall, while the other end thereof is secured to the front end of one of the end walls, thus providing a run or yard
 95 at the front of the housing, while the roof remains over the undisturbed portions of the housing.

Referring to Fig. 6, it will be seen how a strip of canvas 50 or the like may be mounted upon the front wall of the house between
 100 the guides 51 and 52, this canvas covering or the like being for the purpose of shutting out any cold drafts or rain or snow. Hooks 53 and eyes 54 are used to secure the upper end of the walls with the roof members.
 105

It will doubtless be appreciated from the foregoing description that I have provided a housing appliance for poultry, swine and the like which combines certain novel features which seem to answer the requisites of
 110 such a structure. Since it is such a well known fact that the question of ventilation and cleanliness plays such an important part in the care of live stock and poultry, it is my endeavor to provide a housing appliance
 115 which will provide the necessary features to overcome the deficiency involving said question.

What I claim is:—

1. A device of the character described, comprising four inclosing walls removably
 120 secured at their meeting ends, an adjustable roof therefor formed in sections and supported thereon, a sliding plate mounted on one of the side walls, and means to adjust
 125 said plate to various heights, whereby a trough or the like may be held thereunder.

2. A device of the character described, comprising four inclosing walls removably
 130 secured at their meeting ends, an adjustable

roof formed in sections and supported there-
on, a sliding plate mounted on one of said
side walls, levers pivoted to said plate and
side walls, and means to operate said levers
5 and adjust said plate to various heights.

3. A device of the character described,
comprising four inclosing walls removably
secured at their meeting ends, an adjustable
roof formed in sections and supported there-
10 on, a horizontal bar mounted along one of
said walls, a pair of guides extending ver-
tically from said bar to the lower frame of
the housing, a sliding plate mounted be-
tween said guides, levers pivoted to said
15 plate and horizontal bar, one of said levers
having a pitman connection with one of
said guides, and means to retain said slid-
ing plate in its various adjusted positions.

4. A device of the character described,
20 comprising four inclosing walls removably

secured at their meeting ends, one of said
walls being formed of spaced apart mem-
bers for the ventilation of the housing, a
roof for said walls formed in sections, means
to adjust one section of said roof for the 25
ventilation of the housing at such point,
and additional means to adjust the other
section of said roof comprising a pair of
pins pivoted at one end to a frame above
said inclosing walls and the opposite end of 30
said pins being pivotally secured to said
section about centrally.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

LEWIS F. HAKE.

Witnesses:

J. L. TURNER,
E. E. SMITH.