

July 26, 1960

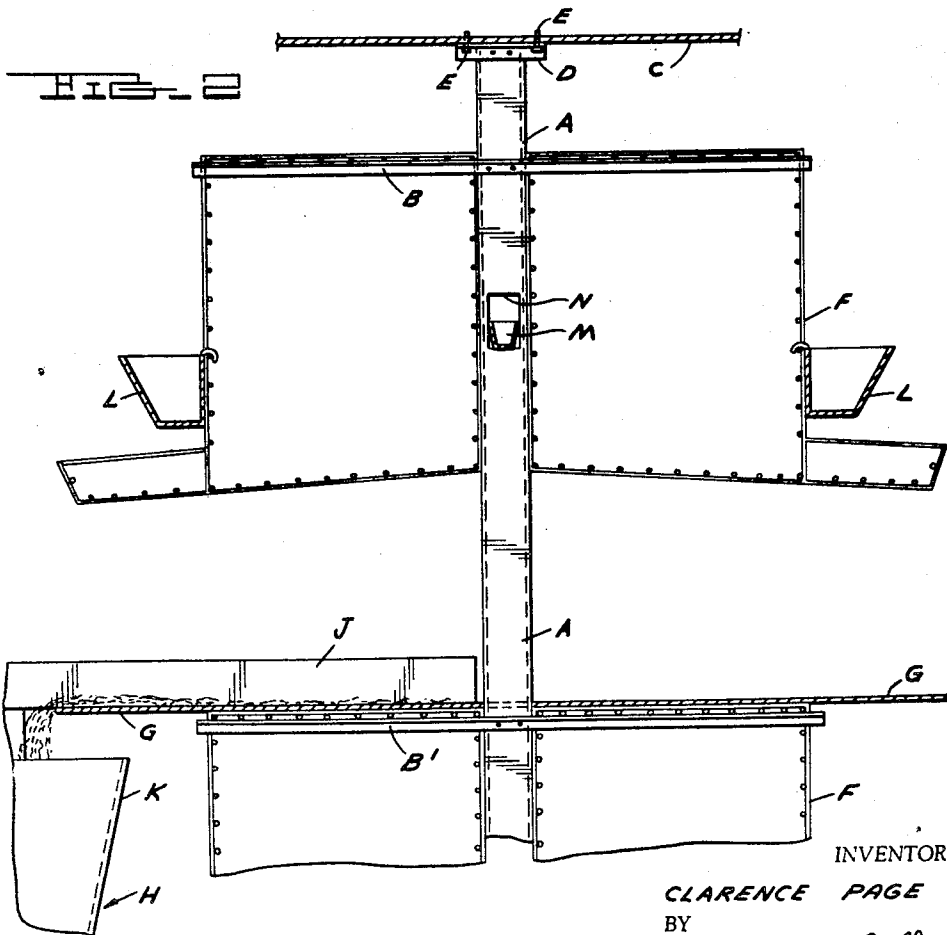
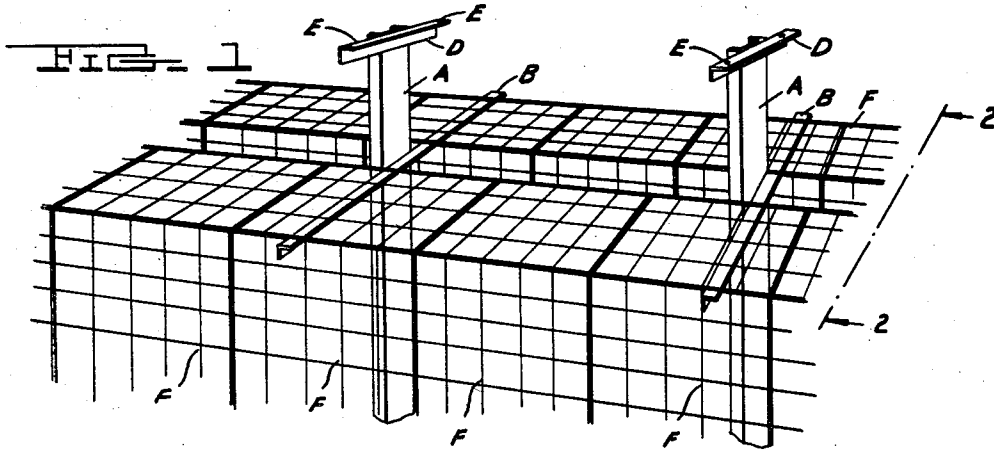
C. PAGE

2,946,309

SUPPORTING MEANS FOR CAGE SERIES IN CHICKEN HOUSES

Filed Nov. 29, 1957

2 Sheets-Sheet 1



INVENTOR.

CLARENCE PAGE

BY

Whittemore Hallbert & Belknap

ATTORNEYS

July 26, 1960

C. PAGE

2,946,309

SUPPORTING MEANS FOR CAGE SERIES IN CHICKEN HOUSES

Filed Nov. 29, 1957

2 Sheets-Sheet 2

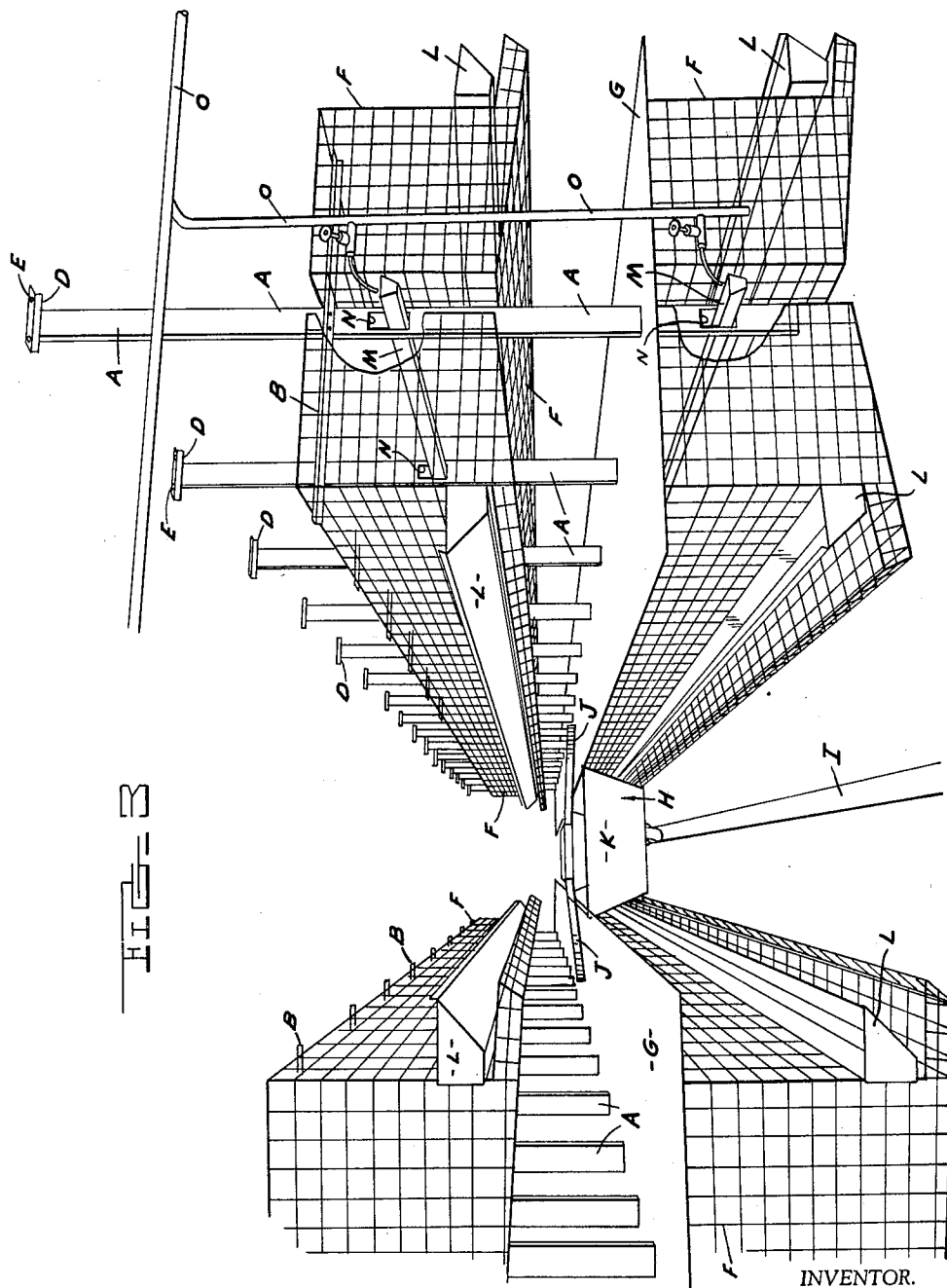


FIG. 3

INVENTOR.

CLARENCE PAGE

BY

Whittemore Hulbert & Belknap

ATTORNEYS

1

2,946,309

SUPPORTING MEANS FOR CAGE SERIES IN CHICKEN HOUSES

Clarence Page, Southfield, Mich., assignor to Page and Cox, Detroit, Mich., a copartnership

Filed Nov. 29, 1957, Ser. No. 699,672

4 Claims. (Cl. 119—22)

The invention relates to chicken houses of that type in which the fowl are retained in open wire mesh cages so designed that eggs laid therein will automatically roll into a trough at the front and outside of the cage. These cages are arranged in longitudinal series and in a plurality of tiers, one above another. They are usually supported by suspension wires depending from the roof or ceiling and arranged at suitable intervals along the front and back of the series. However, these wires form an obstruction to the cleaning of the house and more particularly to the lower tiers. It will be understood that the droppings from the fowl in the upper tier cages would fall upon the lower tier and therefore a platform is placed therebetween which may be periodically cleaned. The suspension wires interfere with this cleaning, requiring each section therebetween to be individually cleansed.

It is the object of the invention to provide supporting means for each series or tier of cages which will avoid any obstruction to the space therebetween for the whole length thereof. This will permit the use of a single scraper which may be continuously advanced along the platform from one end to the other thereof. Such scraper may be mounted on a power driven carriage which also holds a receptacle for the material removed. The invention therefore consists in the construction and arrangement of such supporting means as hereinafter set forth.

In the accompanying drawings:

Fig. 1 is a perspective view of series of cages in a plurality of tiers and the supporting means therefor.

Fig. 2 is a cross section on line 2—2 of Fig. 1.

Fig. 3 is a perspective view showing the carriage, the track therefor and scrapers for the platforms.

The number of cages in a single series or tier of course depends upon the size of the building. There may be as many as one hundred or more in a single series if space therefor is available. Also there may be in a single tier a pair of series with the cages thereof arranged back to back and at least two tiers in vertical alignment. The supporting means comprises vertical members A, such as channel bars, arranged between the backs of said series at suitable intervals in the length thereof. Each of these bars has a cross member B, such as an angle bar, centrally attached thereto and projecting oppositely therefrom for supporting the cages of the two series in one tier. A similar bar B' is connected to the bar A for a second tier. The bars A may be suspended from a roof or ceiling beam C and attached thereto by a T-head D and bolts E. As shown the head D is formed of an angle bar welded to the upper end of the bar A and the bars B are also attached by welding or bolting to the bars A.

The individual cages F are as above stated formed of open mesh wire fabric and are of rectangular form. They may be attached to each other by any suitable means to form a series of the desired length. They are then engaged with the bars B which are small enough in cross section to pass through mesh openings in back and front and beneath the top of a cage. The whole series

2

may thus be simultaneously engaged with all of the bars B being slipped thereon from the front and moved back against the vertical bars A. In each lower tier a plank or platform G is placed over the top of the cages to extend the entire length of the series.

As shown in Fig. 3, a carriage H is supported on a track I between two series of cages and has scrapers extending over the platforms of said series. This carriage also transports one or more receptacles K for the matter removed from the platforms. Feed troughs L are supported on the cages at the front thereof to extend the length of the series and are accessible to the fowl within said cages. There are also water trough M at the rear of the cages extending the length of the series. To avoid interference with the supporting hangers A the web portions of the latter are cut away at N to form apertures for the passage of the trough therethrough. The trough is also vertically adjustable within these apertures to raise one end higher than the other so that water supplied by a conduit O will constantly flow the whole length of the trough. This will supply fresh water accessible to the fowl in each of the cages.

What I claim as my invention is:

1. Supporting means for a longitudinal series of cages and chicken houses comprising vertically extending members adjacent to the rear face of and at longitudinally spaced points along the series of cages, and lateral members secured to and extending outwardly from said vertical members for directly supporting the cages, leaving a space thereabove open at the front and unobstructed for the length of the series, a plurality of spaced vertically aligned lateral members for supporting tiers of cage series, a platform on a lower tier for receiving the droppings from the fowl in an upper tier, the space between tiers having an unobstructed opening to the front throughout the length thereof, a carriage for traveling the length of the series adjacent said lower tier, a scraper mounted on said carriage extending over said platform and adapted to remove the deposits thereon during continuous travel of said carriage, a receptacle on said carriage for receiving the removed matter, said receptacle being beneath and laterally placed from said lower tier, and said arm laterally and forwardly extending from said carriage and said receptacle and overlying said receptacle so that the removed matter will travel rearwardly along said scraper until it reaches the end of the tire at which time it will drop into the underlying receptacle.

2. The construction as in claim 1 wherein there is a second series of spaced vertically aligned lateral members supported by a series of vertical members which has a lower tier laterally aligned with said first lower tier, a second scraper being mounted to said carriage and extending forwardly and laterally therefrom to engage the second lower tier, said receptacle being of sufficient lateral dimension to underlie the edges of said laterally spaced lower tiers whereby advancement of the carriage in a forward direction between said lower tiers will cause the scraping of said lower tiers and the depositing of the removed matter into said common receptacle.

3. A cleaning and scraping unit for the surfaces underlying the fowl or other cages, comprising a carriage movable in a forward direction adjacent the surface to be scraped, a carriage attached scraping member inclined forwardly and disposed laterally over the surface to be scraped, a receptacle disposed laterally and downwardly from the surface to be scraped underlying a portion of said scraping member and connected to said carriage, whereby movement of said carriage longitudinally of the surface to be scraped will cause the scraping member to move along and clean the surface and direct the removed material rearwardly to said receptacle.

4. The construction as in claim 3 wherein a second

arm is disposed laterally from said carriage in an opposite direction from said first arm and is inclined forwardly, said second arm being connected to said carriage and having a portion overlying said receptacle whereby movement of said receptacle in a forward direction will cause both of said scraper members to move along the surfaces to clean the surfaces and deposit the removed material into the receptacle.

References Cited in the file of this patent

UNITED STATES PATENTS

2,096,356 Fox Oct. 19, 1937

10

2,105,058
2,212,549
2,309,458
2,488,120
2,851,990
2,863,418

5

Smith et al. Jan. 11, 1938
Olson et al. Aug. 27, 1940
Ingraham Jan. 26, 1943
Petraske Aug. 31, 1948
Rowland Sept. 16, 1958
Pockman Dec. 9, 1958

FOREIGN PATENTS

Great Britain Apr. 9, 1936
Great Britain Sept. 26, 1951
Australia Nov. 2, 1955