

BUILDING OF HOUSE IS IMPORTANT FEATURE

IN COMMERCIAL POULTRY-RAISING ECONOMY OF LABOR IS A GREAT FACTOR.

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In this second installment on "Environment," more attention is paid to the large commercial poultryman than in the first article. Definite plans are described of a multiple unit laying house, capable of indefinite expansion at minimum cost.

So much is dependent on surroundings, in poultry raising, that particular attention is given to details. The information furnished is a most valuable contribution to this series of articles.

Of corresponding interest also is Mr. Graham's article and sketches of White Aseel, one of the oldest known varieties of poultry—dating back to India 1000 B. C., when it was bred for fighting purposes.

THE large commercial poultrymen who must often winter several thousand layers must use special care in the design and construction of their houses. Aside from having them congenial he must have them designed with reference to convenience in caring for the birds. In planning the house, provision should be made for as many labor-saving devices as possible, such as swinging doors between communicating pens, with a friction stop between. Large self-feeding hoppers should be used which require filling but once a week, thus eliminating a great amount of labor. Drinking vessels should be of such a type that they can be easily and quickly cleaned; the nests should be conveniently located and easy of access.

Next to convenience, economy in construction should be of paramount consideration. It is very easy to build houses which are too expensive and which will permanently tie up a larger amount of capital that should not be used for that purpose. In many cases, a too heavy investment in buildings has greatly hindered operations by not leaving sufficient working capital to meet the maintenance and operation expenditures.

With these two facts especially in mind the housing question has been carefully studied and after three years of experimentation the New Jersey state experiment station has evolved the following type of laying house which will fit all conditions from a 100 bird flock to any limit.

Multiple Unit Laying House.
The unit capacity is 100 birds, each unit of 100 having a house 20 by 20 feet which makes 400 square feet of floor space or four square feet per bird. When it is desired to keep more than this number—say 200 or 500—the standard unit can be increased to accommodate the number desired. For purpose of discussion a double unit house will be used, the outside dimensions of which are 40 by 20 feet.

For a double unit, with capacity for 200 hens, the sills should be made of four by six material and should be bolted to a foundation. Wall, eight inches wide and 20 inches deep, which should be laid on a ramped, cinder or crushed stone, the entire depth of the foundation trench being three feet. It will be noted that the shed roof type of construction is used, being nine and one-half feet high in front and four and one-half feet in back.

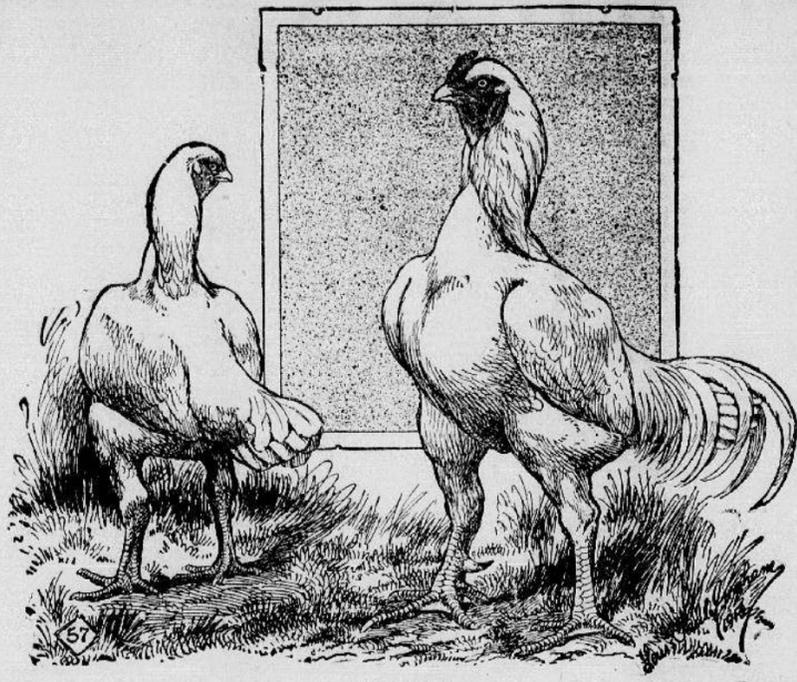
All studding and rafters are made of 2x4 yellow pine or hemlock. A 2x6 girder runs the length of the house, supporting the roofing rafters at their center and is itself supported every 10 feet by 4x4 posts resting on concrete piers. The plate should be made of 2x4 material doubled and all joints broken. All outside walls and roof should be single hoarded, preferably of six or eight-inch tongued and grooved yellow pine. The roof and back-wall should be covered with a good roofing paper, all joints being carefully lapped and cemented. The muslin curtains are hinged at the top and can be lifted up. The 3x5 sash is hinged at the side and opens. One window in each pen should be so constructed that the lower part of the wall under same will open when desired, thus making a combination door and window. This will greatly facilitate

cleaning and filling hoppers, especially if the house is quite long.

Details of Construction.
The dropping boards, perches and nests are best arranged on the back wall, the perches being hinged to the wall so that they can be hooked up when cleaning. The nests should be placed under the front of the dropping board, the birds entering them from a door in the front. The dividing partitions between each unit should be made of wood and extended from the back wall to the remaining space being left entirely open, except when it is desired to keep the layers in 100 bird flocks, in which case this opening can be provided with a wire partition with a swing door. This partition prevents draughts and can be conveniently used for a large self-feeding hopper which should preferably be built into the wall when the house is built. An elevated platform should be constructed under the muslin openings which provides abundant space for the grit, shell and drinking fountains.

When the house is completed a concrete floor should be laid and be built as follows: First, a layer of 10 inches of cinders or other drainage material, which should be thoroughly tamped, should be laid below the ground line. This keeps the soil moisture away from the bottom of the concrete; second, a rough coat of concrete about three inches thick and over this a finish coat of equal parts of sand and cement should be laid and same float finished. Such a floor is moisture-proof, rat-proof, vermin-proof, easily and quickly cleaned, and it costs no more than a well-constructed floor and is more permanent.

Material for a Double-Unit House.
Lumber:
Sills, six pieces, 4x6 by 20 feet, hemlock.
Plates, eight pieces, 2x4 by 20 feet, hemlock.
Rafters, two pieces, 4x4 by 14 feet, hemlock; two pieces, 4x4 by 18 feet, hemlock.
Studding, nine pieces, 2x4 by 18 feet, hemlock; four pieces, 2x4 by 14 feet, hemlock.
Rafters, 21 pieces, 2x4 by 22 feet, hemlock.
Frame for nests and dropping boards, five 1x2, 2x2 by 10 feet, hemlock.
2,200 square feet eight-inch tongued and grooved yellow pine boards for roof, dropping boards, walls and nests.
200 linear feet 1x2 white pine for curtain frames and trim.
100 linear feet 1x4 white pine for nests.
One bundle plaster lath for broody coop.
Nails, 10 pounds 20-penny wire, 50 pounds 10-penny wire, 20 pounds eight-penny wire.
Approximate cost of the above: \$75.54
Roofing paper, 1,060 square feet, or 11 rolls, at \$3..... \$32.00
Four special sash, 3x5 feet, at \$2..... \$8.00
Muslin, eight square yards, at 20 cents..... \$1.60
Hardware, as hinges, locks, tacks, hooks and wire..... \$4.75
Foundation and floor..... \$17.50
Cinder or gravel, 30 yards, at \$1..... \$30.00
Sand, 5 yard..... \$7.50
Total for floor..... \$55.00
Total cost, not including labor, if concrete floor is put in the house and sand has to be purchased..... \$177.89
This gives a cost of one square foot of floor space..... 22
It shows a cost per bird, allowing four square feet for each hen..... \$88
Adding labor to this at one-quarter the cost of material, the total cost would be \$222.36, or \$1.11 per bird. This type of house, meeting as it



WHITE ASEEL.

One of the very oldest varieties of poultry. Known in India 1000 B. C., and in that country has been bred and developed by the eastern potentates chiefly for fighting. Both sexes are very pugnacious and will fight till there is hardly a feather left. Their utility value is small. The females are poor layers and the flesh of both sexes too tough and hardened by years of fighting development to be of any value as market poultry.

ASEEL IS CHOSEN FOWL OF INDIA ONE OF THE OLDEST OF ALL KINDS

By LOUIS PAUL GRAHAM.
(Copyright, 1913.)

The Aseel is undoubtedly one of the oldest races of fowls, of not much utility value alone, but of great value for outcrossing with other varieties. The Aseel is one of the parents of the famous dark and white Cornish fowls.

It has been bred for generations in India chiefly by the rulers of the country for fighting purposes and has practically no other use. The females are poor layers and the fowls so hard muscled that they make poor table fowls. Excellent results are obtained, however, by crossing them with softer-fleshed varieties. Although poor layers, the hens are splendid sitters and mothers, defending their young to the last. Both sexes are fighters and have remarkable courage.

According to old authorities this is the fowl whose battles are alluded to in the "Institutes" of Menu, 1000, B. C. Aseel is the name by which the breed is known in India and has been adopted by those who imported the fowl into England and is an Arabic word meaning "high caste." They are known in several colors, blacks, black reds, white, duckings, grays, spaniels, speckles and mottles, but the first three are generally accepted as the distinct varieties.

Back in 1850, or thereabouts, the people of Cornwall, England, using the black red Aseel and some of the local fowl, evolved the now famous Dark Cornish. Others, using the White Aseel in a like manner, produced the White Cornish fowls. The latter, while partaking in a general way of the huge muscular formation of its Aseel progenitor, proved to be a most excellent table fowl, with the fine-grained, soft flesh, and was immensely popular for a time, not only in England but in America as well.

There are very few Aseel to be found in America. This is a country catering strictly to utility qualities and a fowl possessing such will attain much popularity and extensive sales, while others like the Aseel or for ornamental purposes are bound to have but limited favor and even this will be still further curtailed unless the fowls prove useful, as well as ornamental. Aseel fowls weigh from about 5 pounds for females to 6 for males, and in this respect suffer in comparison with the Cornish fowls. Their descendants, which run from 7 to 8 pounds for females and 8 to 11 pounds for males. The latter are also less pugnacious and make better market poultry while they at the same time possess about the same characteristics of form and color as the Aseel.

THE ART OF CULLING

Next week's poultry article will be devoted to picking out and marketing undesirable birds. Experts have estimated that more than half of the poultry in the United States is kept at a loss. One of the main sources of this loss is due to undesirable fowls that are not productive or bring low prices in the market. Methods of separating the good fowls from the bad are described. Advice is also given when and how to begin culling and how to detect the poor birds at an early period. Watch for the article exclusively in The Missoulian next Sunday.

is conclusive proof that the environment was such as to make the birds contented and happy.

SALTESE IS LIVELY

(Continued From Page One.)

cut, and, having a good team, he expects to become a hardy hand of the soil, break up his ranch, when the timber is removed, and then raise chickens, hogs and vegetables galore. Up to this date he has not imbibed the creamy fever, but it is a safe bet that ere the grass grows again the colonel will have a fine bunch of Jerseys.

The poor unfortunate who went through the forest fires three years ago have taken a new heart, and still believe Saltese is O. K. John Baier, Joseph Speakerman and Thomas Thayer have built good and substantial residences, better than they had before. Gust Moser took to the hills, engaging in mining, and has a comfortable cabin on Packer creek. He visits town every day, but seems to think "the hills" for him.

Both merchants, Saltese Supply company and W. L. Murray, are putting in good stocks of goods and have nearly everything in stock that can be found in our best towns.

All other business men are optimistic and looking for a general revival in business in all lines. Mining, which, outside of the lumber interests, is the chief industry in this section, have taken on new life, and matters in that line are looking up. Angus Sutherland shipped 40 tons of high grade ore from the St. Lawrence on Sunday. S. V. Wolf shipped a large car on Saturday. The Big Elk Mining company, under the direction of Peter Peterson as manager, has a carload nearly ready and will ship in the next 10 days.

There are many prospects on Silver creek and adjoining the country that work is being done on, but am not able to say, without personal observation, what it is, or the nature.

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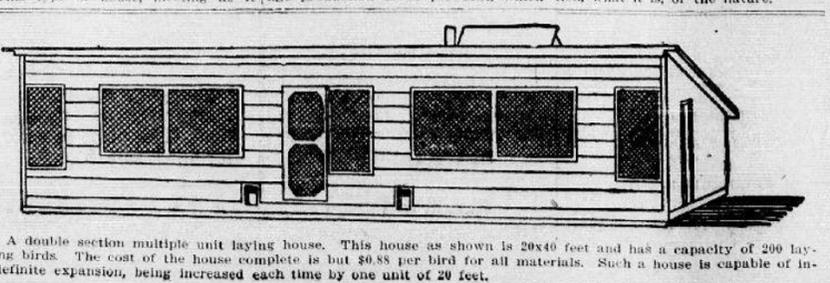
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A double section multiple unit laying house. This house as shown is 20x40 feet and has a capacity of 200 laying birds. The cost of the house complete is but \$9.85 per bird for all materials. Such a house is capable of indefinite expansion, being increased each time by one unit of 20 feet.