PART II

CHAPTER I

A Visit to Wyckoff's Grandview Poultry Farm

The Principles and Methods that Make This Farm One of the Simplest Yet Most Successful Poultry Establishments in Existence—Wyckoff's Leghorns Averaged to Lay Around 200 Eggs Each Over a Quarter of a Century Ago—Practical Methods and Substantial Results Are Life Work of Men of Energy and Brains

By GRANT M. CURTIS, Editor of Reliable Poultry Journal

MOST of this chapter consists of an interview the writer had in October of 1920 with C. H. Wyckoff, senior member of the firm of C. H. Wyckoff and Son, proprietors of Grandview Poultry Farm, located on the east shore of Cayuga Lake, less than a mile from the village of Aurora and twenty-seven miles north of Ithaca, on the Lehigh Valley Railroad. At that time Mr. Wyckoff senior was in his seventieth year and quite probably was the only man living who had been engaged for forty years in breeding White Leghorns—and almost continuously, the only break being a period of about a year in 1899-1900, just after he sold his original plant at Groton. Grandview Poultry Farm was established in 1900-1901 and has been in continuous successful operation since then, under the personal management of C. H. Wyckoff and his son, E. L., who at this time (1920) was forty-five years old.

Writer had the good fortune to visit Mr. Wyckoff senior at the Groton plant, summer of 1896, a report of which visit was published in the September, 1896, issue of the Reliable Poultry Journal and attracted wide attention, because at that time this undoubtedly was the most successful breeding and egg-production poultry establishment in America, devoted to the S. C. White Leghorns and conducted on practical, money-making lines. In this chapter will be found a number of references to that visit of a quarter of a century ago, also a photographic view of part of the old plant. Back there, especially during the early career of the Groton plant, Mr. Wyckoff sold eggs largely to the daily market for table use and therefore was deeply interested in prolific yield—in a high flock average, as every additional egg meant increased cash income; but as the years went by, the name and fame of the "Wyckoff White Leghorns" traveled far, with the result that before long he was favored each year with a demand for breeding stock and layers, also for hatching eggs in season, that took all his surplus, that broke into his flock almost continuously and that called for more eggs at hatching time than the fowls could produce, even when held back from full average production earlier in the season.

C. H. WYCKOFF, AURORA, N. Y.
Originator of the Wyckoff strain of S. C. White Leghorns and the Wyckoff system of flock breeding in limited space for prolific egg yield.

Practical common sense from the first guided Mr. Wyckoff in all he did with his fowls. A mechanic or machinist by trade (repairing and rebuilding railway locomotives), he was methodical, systematic, thorough. He had a trained mind and made use of it, spurred on by necessity, because when he went on the sixty-acre, run-down general farm near the village of Groton, Tompkins County, N. Y., he had no capital. To enable him to secure possession of the place, his father had to sign the papers and advance some of the cash for a few garden and farming tools. The first year or two he found that his few fowls were the best-paying "crop" he had, and for that reason he gave them more and more attention, soon replacing the mixed flock with purebreds—with Standard S. C. White Leghorns "of that day and generation," now practically forty years ago.

It is believed that Mr. Wyckoff senior was the first man to give S. C. White Leghorns the now popular title, "Business Hen of America." To bestow on him further well-deserved credit, we quote here a tribute paid him lately by James E. Rice, head of the poultry department of the New York State College of Agriculture (Cornell University), Ithaca, and also publish "An Appreciation" by John H. Robinson, for years the editor of "Farm Poultry," Boston, Mass., now an associate editor of the Reliable Poultry Journal. Said Professor Rice to us, October, 1920:

"Mr. C. H. Wyckoff was a generation ahead of his fellow poultrymen on lines of actual achievement in high-egg production. Yes, I have visited his poultry plant almost every year for the last thirty years or more and know about his splendid results."

Following is the statement of Mr. Robinson:

"For more than a score of years my personal opinion has been that the greatest single positive factor in giving the S. C. White Leghorns their great popularity was the influence and wide distribution of the Wyckoff strain.

"Since 1897 I have been in a position to learn and have generally made it a point to learn something of the origin of the large stocks of White Leghorns on commercial farms and also of the origin of small flocks making remarkable egg records.

"In the first ten or twelve years of this period I do not think a single such case came to my knowledge when the stock was not either wholly or principally from Wyckoff foundation stock. In all the stocks that I saw then the Wyckoff type was conspicuous.

"Later there was more evidence of the influence of the popular exhibition strains, and a tendency toward smaller birds. The fact that the Wyckoff Farm is still one of the striking successes, with the same type of Leghorn that made its reputation, speaks volumes for the value of the type."

Mininum Cost—Maximum Returns

The Wyckoffs never have used trap nests nor given special consideration to the egg yield of individual birds. Their dominant idea has been—above and beyond good

size ad great vigor in the stock—maximum yield and cash returns from moderate-sized flocks, with the minimum of labor and expense. That plan, for them, has been "the middle of the road," although as the success of their methods and the money-earning value of their stock became widely known, the demand for their products shifted largely from the daily market to that from their fellow poultrymen, as above briefly set forth.

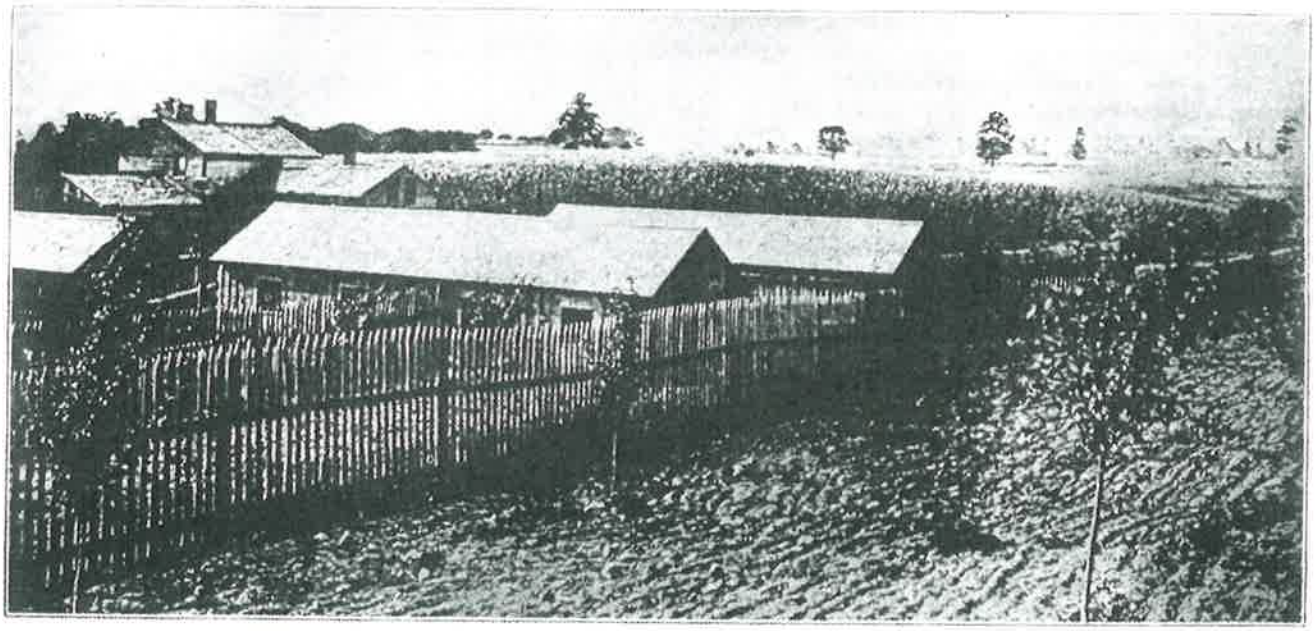
Of recent years, therefore, the Wyckoffs have not found it practical nor to their special interest, as they believe, to keep a yearly egg record on the basis of the number of hens on hand because, in filling orders and making shipments to all parts of the civilized world, they constantly are disturbing the flocks, first in one house, then in another, with the result that during probably no two weeks of the year do they have the same number of layers on the farm. They do keep a book record of the number of eggs gathered each day, also of shipments of eggs, both for hatching purposes and to the daily market, but at Grandview Farm they have not tried to keep accurate and continuous daily records.

Reliable Poultry Journal on the flock production of the above-mentioned 600 S. C. White Leghorns, we said:

"We should say it was!" referring thus to our remark of twenty-five years ago that an average of 194 eggs per bird in one year was "a very good record for so large a number of hens." Continuing in the January, 1921, issue, we said:

"At that time editor of R. P. J. did not at all comprehend how good a record that was, nor did anyone else, so far as we know—and we make this statement from the vantage-point of the present, looking backward over the last quarter of a century. To have secured such an average that long ago was truly remarkable, no doubt about it, and the pity is that poultrymen in general of that day did not realize what it meant—did not study more carefully Mr. Wyckoff's methods and benefit to a far greater extent by his extraordinary achievement.

"And still another remarkable fact is that Mr. Wyckoff kept those 600 hens—had them housed and yarded on a little over one acre of ground, and he is doing the same thing today so far as his laying houses are concerned, including the runways connected therewith. At Groton the runways or parks were 33 by 108 feet in size, or 3,564 square feet to each park. In each half of the 12 by 40-foot house he kept 50 to 70 hens or pullets—70



PART VIEW OF ORIGINAL C. H. WYCKOFF PLANT NEAR GROTON, TOMPKINS COUNTY, N. Y.

Photograph kindly furnished by James E. Rice, head of the poultry department, New York State College of Agriculture (Cornell University), Ithaca, N. Y. Was taken by Professor Rice some thirty years ago, "about 1890." Shows early low-cost type of 12 by 40-foot Wyckoff laying and breeding houses and style of yards, 33 by 108-feet, with wooden picket fences; also cornfield range in background, and new plum orchard in ploughed field at right in foreground. A cornfield range for young stock has been popular with Mr. Wyckoff many years.

based on any given number of hens and pullets, either for certain flocks or in an attempt to cover all birds on the plant.

At this point let us quote from the printed report of that visit to the original Wyckoff Poultry Plant, near Groton, N. Y., as same was published in the Reliable Poultry, September, 1896:

"ONE YEAR HIS 600 HENS AVERAGED 194 EGGS PER HEN, A VERY GOOD RECORD FOR SO LARGE A NUMBER OF LAYERS."

The 600 birds above referred to were kept in comparatively small yards, in flocks of about 60 to each flock. Herewith is shown a photographic view of the Groton plant, with its 12 by 40-foot laying and breeding houses, each having a partition across the middle and each half section (quarters for 50 to 70 birds) opening into a yard or park, 33 by 108 feet in size, enclosed with a low-cost picket fence. Commenting in the January, 1921, issue of

early in the season and about 50 later on after he had sold off what he regarded as surplus, disposing of them as layers or breeders. An acre consists of 43,560 square feet, therefore it is easy for the reader to arrive at a near enough knowledge of the number of layers Mr. Wyckoff was able to keep on one acre of ground at Groton years ago, and now keeps at Grandview Farm by the same system.

"But it should be well understood that while Mr. Wyckoff, in the early days near Groton and now at Grandview Farm, could keep and does keep as many as 600 layers on what is equal to about an acre of ground, all his laying and breeding stock is raised on range, from chickhood to maturity. It is entirely practical, in other words, to keep well-bred, range-raised, vigorous fowls in comparatively limited quarters for egg production after they have matured but, as a rule, it is both difficult and expensive to raise chicks in too limited quarters where they do not get sufficient exercise and the ground is sure to become contaminated unless great care is taken to prevent this fatal condition. Now, as in the old days, Mr. Wyckoff is a firm believer in having some form of helpful vegetation or at least untainted ground under the feet

of his fowls, also in a liberal daily use of green food. Said he, in our interview with him twenty-four years ago:

"'It seems to me that I would almost rather stop feeding grain than green food. That is of course an extreme statement, as green food is mainly an appetizer and bowel corrective, but I could not do business without a daily ration the year round of green food."

Location and Size of Grandview Farm

Associated with Mr. Wyckoff as a partner is his son, E. L. Wyckoff, and both families live at Grandview Farm in a fine colonial-type house with broad veranda looking out on spacious, well-kept lawns, embellished with shrubbery and fine old trees. Thought and care were used by the Wyckoffs in selecting this location. About five hundred feet away and perhaps seventy-five to one hundred feet below the average level of the farm, is the widest part of Cayuga Lake—four and one-half miles wide and over six hundred feet deep somewhere near the middle. Cayuga Lake is so wide and deep opposite Grandview Farm that in the twenty years the Wyckoffs have lived there the lake at this point has frozen entirely over twice only. Six degrees below zero is the coldest it has been at Grandview Farm in the history of this plant. The large body of water tempers the atmosphere both winter and summer and has made the east shore in this section one of the best fruit-growing localities in central New York—in our whole country. Moreover, twelve to fifteeen miles farther west, beyond a single range of hills, is Seneca Lake. Both these lakes are practically forty miles long, the two largest among those that form what are known as the Finger Lakes, five in number.

At Groton Mr. Wyckoff used plum trees extensively in the poultry yards and during the earlier years at Grandview he had peach trees in the poultry yards and on the ranges, from which he gathered numerous large crops, but when these trees became old and less profitable, he replaced them with English walnut trees, doing this on account of the somewhat moderated climate and because there were several trees in the neighborhood, old in years and large in size, that have borne good crops of walnuts time and again since Mr. Wyckoff senior selected this locality for his present poultry plant. All told, Grandview Farm consists of but nine acres—not a very large area for carrying 1,400 layers and breeders, also for raising 2,500 to 3,000 birds each season for replacement purposes and to sell, yet sufficient after one has learned how to do it, it, as the success of the Messrs. Wyckoff amply proves.

E. L. WYCKOFF, AURORA, N. Y.

Son of C. H. Wyckoff and partner with his father in conducting the business of Grandview Poultry Farm. Has been "at it" twenty years and is making the poultry business a life work.

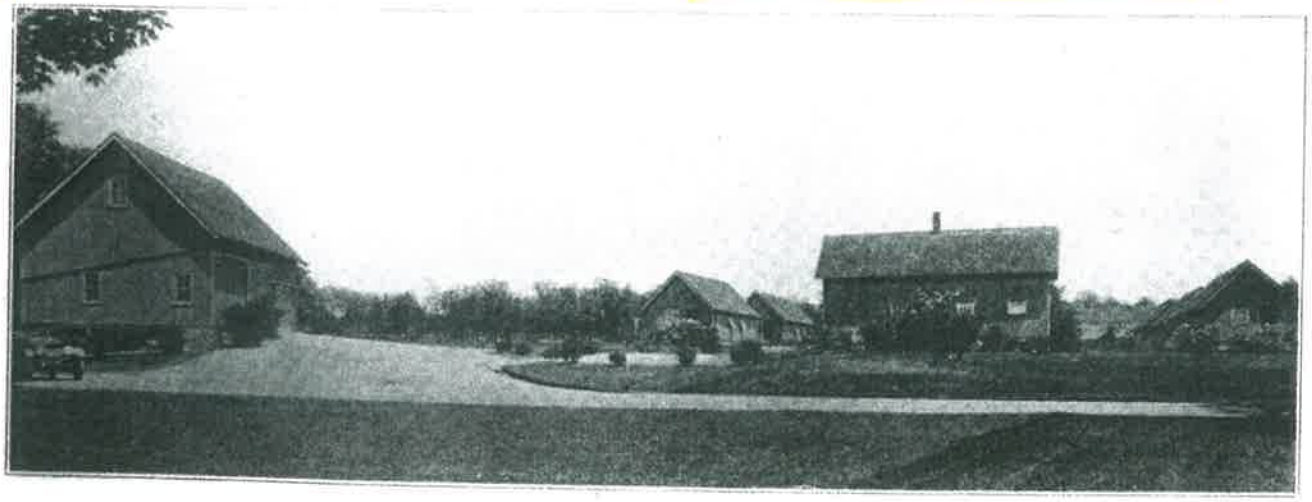
Personal Interview, October, 1920

Next, for the information and benefit of the readers of this book on "High Egg Production," we are pleased to quote at length from an interview we had with C. H. Wyckoff in October, 1920, at Grandview Poultry Farm, telling of the origin of the Wyckoff strain of S. C. White Leghorns, his theories and practices in developing this strain, what his views are about standard weights, correct type, selection, inbreeding, culling, season of molting, etc., and also giving the Wyckoff method of feeding the layers and breeders, together with the profitable results they have secured at Grandview Farm by the use of artificial lighting to increase egg production during the short-day period of the fall and winter months.

Origin of the Wyckoff Strain

Asked about the origin of what later became known as the Wyckoff strain of S. C. White Leghorns, Mr. Wyckoff senior, gave us these facts:

"I got my stock originally at the New York State Fair, from a man named George Weed, who then lived at or near Poughkeepsie, N. Y. This was along about 1880 or 1881. Weed had quite an exhibit at the Elmira, N. Y., fall fair, and I liked the looks of them. On second thought I am not sure this was a state fair, but I know it was held in Elmira. Have since lost all trace of Mr. Weed. Never heard of his exhibiting after that. I re-



PARTIAL VIEW OF BUILDINGS ON GRANDVIEW POULTRY FARM, AURORA, N. Y.

Showing at left, stable and storehouse for garden and farming tools; right of center (foreground), work shop, feed and root cellar, shipping rooms and storage loft; two rooms of the 16 by 40-foot breeding and laying houses; a peach orchard range in background, and the character of well-kept lawns and driveways. Might well be called "The Home of Spick-and-Span," everything is so orderly and neat.

call that his birds were larger, sturdier and appeared to be more active and vigorous than any other Leghorns I had seen. I bought ten or twelve—do not now recall the exact number—out of his exhibit at the fair and from the first they proved to be unusual layers. After that it was a matter of study and selection—a study of common-sense methods and of selection according to egg yield—what is now called 'performance.'

"Before the time you visited me at Groton in 1896 we had developed our methods to a high degree, so far as heavy egg production and stamina were concerned, and had reached almost the 200-egg per hen mark for a flock average covering 600 birds. These days we do not work that hard for big flock averages. We let the eggs come right along and breed for maximum vigor, but it pays us better to cater to the eggs-for-hatching trade, this and the production during March and April each year of the 2500 or more head of young stock we need for replacement and to sell."

Weights and Type of Wyckoff Leghorns

In this connection, let us report on the size or weights of the Wyckoff strain of S. C. White Leghorns, which represent what the Messrs. Wyckoff prefer, after their long years of experience. The pullets, as they approach maturity, "weigh up close to 4 lbs.," as Mr. Wyckoff senior expressed it, "and the hens 4½ to 5 lbs." Said he: "Birds of this kind will stand up better to heavy egg production." In males, the cockerels weigh 5 to 5½ lbs. and the cock birds "6 lbs., or a little better." Asked to describe the type, size, etc., of birds they prefer Mr. Wyckoff said:

"In males we want them of good sound color as to plumage, with bright yellow, sturdy legs set well apart; want them long in body and with good upright combs, red eyes and well-developed lobes and wattles, also with tails carried fairly well down—not upright nor squirrel. I favor the present standard type with full weights and maximum vigor. We never use undersized, ill-developed birds or birds with thin, long heads and smallish or undersized combs.

"In females we want good length and depth of body—every breeding bird to be full breasted, with long back, tail carried at moderate angle, fully developed head points and expressive face, showing signs of a gentle, intelligent disposition—not wild nor scarey. They must have good leg bones, not thin and spindly. Combs of males should be medium large—not too large, but set well on heads and carried upright. They also should have intelligent faces, of which the eye is the best sign. We prefer what might be called medium-length legs in both males and females, rather than thin or spindly shanks and legs.

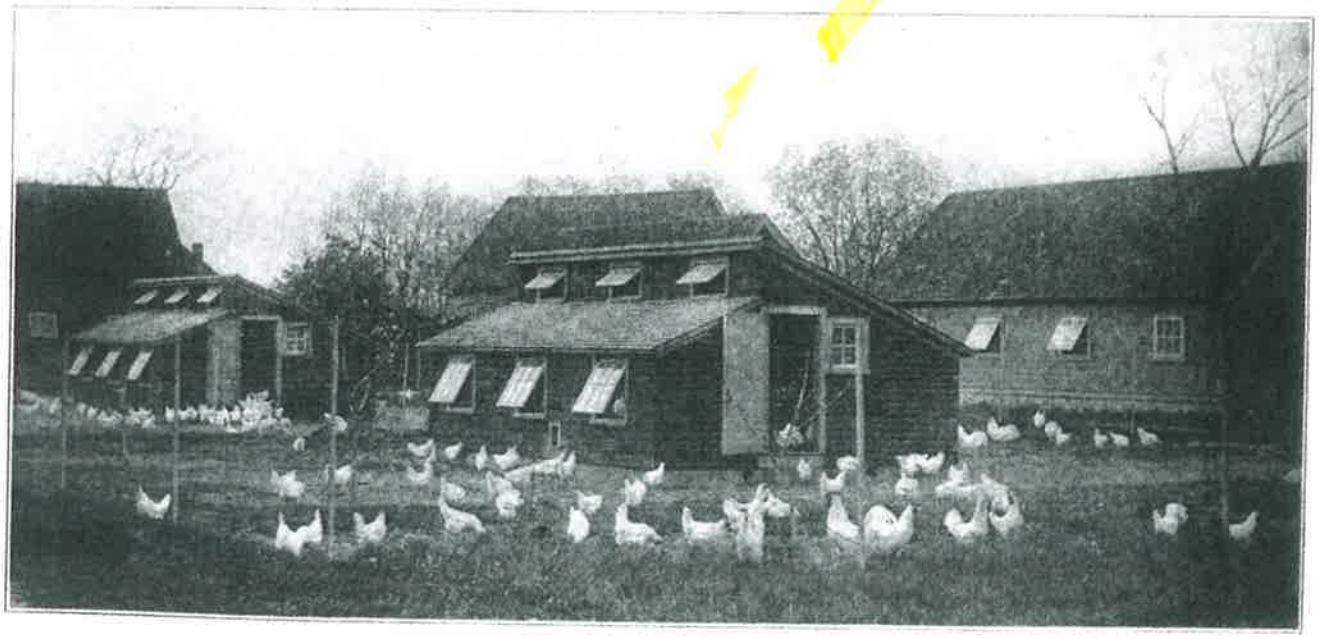
"No, in making our selections, we do not go by finger measurements. We invariably select birds that have good depth of body, also good length and strong, well-furnished heads. A poor layer will show it in her head quicker than any other place. Always avoid small, weak-looking heads, also weak-appearing beaks and you will find that the combs on such birds usually lack color. Avoid also small, undeveloped or shrunken combs. Select birds with broad skulls, full face and eyes and stout, strong beaks. Good breadth birds behind will have good finger capacity, which is what we all want, I guess. But the difference of a finger or two isn't very definite, as I see it. It will be found that pigmentation supports the above description of the poor producer or nonlayer and therefore is a help in picking out the drones at a time when they should be laying."

Outside the eggs-for-hatching season, Grandview Farm sells new-laid eggs at premium prices to a hotel in Auburn, N. Y., and to a commission merchant in New York City, for which they obtain "top prices." The past season, on October 29 and for some time previous to that date, they were getting $1.10 per dozen in case lots. Their eggs range in size or weight from twenty-five to thirty ounces to the dozen. Said Mr. Wyckoff senior:

"They are almost too large for the daily market, but the hatching-egg trade demands good size—in fact, large-sized eggs. Shipping them to market in the ordinary egg case we often have trouble to get them into the egg fillers, without danger of undue breakage."

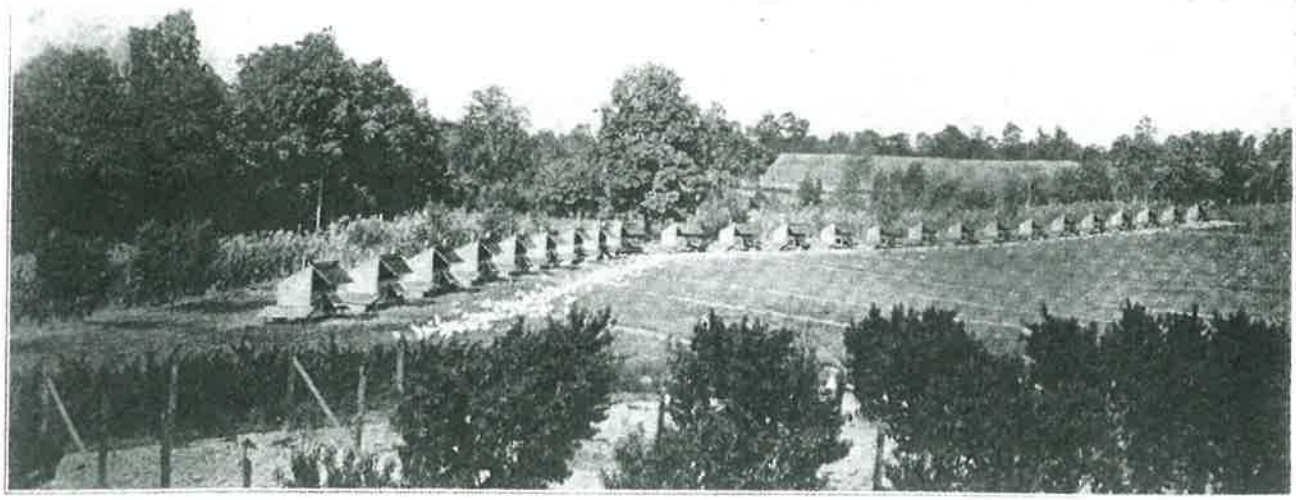
Not Worried About Inbreeding

"No, we do not use trap nests, nor do we worry about inbreeding. When the birds of a flock have proper vigor and the chicks are well reared, I believe that much of the talk about the dangers of inbreeding is mere theory. In our case we have introduced no outside blood since twelve years ago, at which time the experiment was not a success. The eggs from those crossbred birds did not hatch as well, the chicks did not grow and develop as well and the hens and pullets from that mating were not as good layers. We made careful comparisons with our own stock, and with those results. We select closely season after season, keeping near to our choice of type—good length and depth of body, full-breasted, long backed, stout-legged, moderately low-tailed specimens of



NEW-STYLE POULTRY HOUSES AT GRANDVIEW FARM

Are of the semimonitor type, each 16 by 24 feet in size. Capacity, 120 hens or pullets with five or more male birds during hatching season. Also shows uniform standard type of world-renowned Wyckoff strain of S. C. White Leghorns.



THE WYCKOFF TYPE OF COLONY HOUSES FOR PULLETS

View of long row of the 4 by 8-foot chick-growing coops, twenty-four in number, used for young pullets at Grandview Poultry Farm (after sexes are separated), showing how fronts are constructed, the raised floor, etc., with two "sun shelters" between each two houses, where feed troughs and water fountains are located for use of the pullets. Houses are 4 feet high at rear and 6 feet high in front. For detailed plans and specifications suitable for building this style of colony house, see R. P. J. book, "Forty Years with the White Leghorns."

both sexes, then we mate them as we like, regardless of family ties or relationship.

"Frankly, we pay no attention to whether our mated birds, when they finally get into the laying houses after we have selected or culled them carefully, are or are not brothers and sisters. I have studied this matter a good many years and cannot see that it makes any difference. We select very carefully according to our experience and best judgment for size and vigor, then we aim to house and feed properly—do this and you will never know any difference, is my belief. All these years it has been to my interest, also to that of our thousands of customers, to learn about this matter and I know that today our birds are better than ever as to size, vigor, health and egg production, and I claim this is the answer and proof, in combination with the fact that they never have had disease and now lay better than at any time in the past, according to our requirements in yearly egg production.

Birds Speak for Themselves

"Just go out and look our birds over for yourself. You certainly should know by this time when you see healthy, vigorous birds—and they are out there to speak for themselves. However, at one time we reached a state of mind—about twelve years ago—when we thought we should have some new blood. But every time we tried it we got a set-back from these new matings that took several years to overcome. Meanwhile, those of our flock or strain into which we did not introduce new blood, but depended solely on selection for improvement —selection based on vigor of the individual specimens— kept on doing better and laying better than anything we could build up alongside of them. I know that this practice of indiscriminate mating, as to sires and dams and brothers and sisters, is contrary to the theory or teaching of numerous poultry experts, but it is the truth about my long experience, and I understand it is facts that you want me to give you.

"As regards trap nesting, we do not get that close to individual production. On the other hand, we work for pen or flock averages, on the percentage basis. As an example, a year ago last spring, from 1,100 birds our daily egg collection went up to 830 per day and better for quite a period in the flush season. This was without the help of artificial lights. Year after year in the flush season, production with us runs from sixty-five to eighty per cent and a little better, at the time we want our largest yield for the hatching-egg season.

"Back at Groton, at one time, I catered to the market egg trade and worked for maximum annual production, with special efforts for fall and winter yield to catch the high prices, but for years now we have been primarily a breeding plant, our main object being to produce strong, vigorous breeding stock and eggs to be used for hatching purposes, both to be ready for our customers when they can receive and use them to best advantage. On this account we are not today specially interested in high egg records, by individual birds, but work for standard type, proper size of frame, full weights, sound plumage color, outstanding vigor and good pen or flock averages in all-the-year-'round egg production.

Molting of Hens and Pullets

"You ask about molting. We do not want to see our hens molt before late August and during September and October. However, we do want a full new coat of feathers by the time real cold weather arrives. Birds of our strain that are of the same age, partly as the result of long years of selection and breeding, now molt uniformly —at about the same time and they require about the same length of time to complete their new coat of feathers. The poultryman who observes well will notice that any poor-type, weakly, undersized specimen, or any bird of poor physical condition will molt earliest. Year after year we have taken pains to get rid of such birds, keeping at it right along, so as not to be penalized by these loafers or slack producers, let alone breeding from them.

"We like to have our pullets go through a light molt the latter part of September and during October, so that by the last of January and in early February they will get into full lay of hatchable eggs after their midwinter rest. These pullets, as a rule, are hatched the latter part of March and third week of April—which is our preference for this latitude and climate. Early fertility from these well-matured pullets usually runs better than from hens, and eggs for hatching from such pullets give very good satisfaction.

"In each half of our large breeding houses we place 70 to 75 hens or pullets and use four to five males in each pen. We start usually with five and wind up with four, as a rule. Four or five males will get along better than two. We find that it is not wise to make changes in males during the season. We put them in the pens early in the winter and after three or four days they will not bother one another. They may or may not be brothers. This makes no difference, if they have been raised on range together and are acquainted."

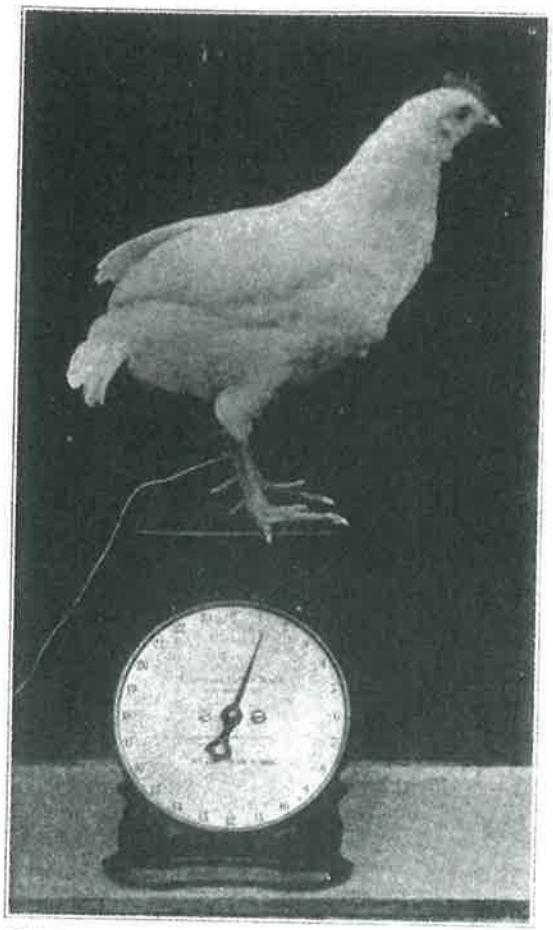
Asked if he understood that he was first to call S. C. White Leghorns "The Business Hen of America," Mr. Wyckoff replied:

"Yes, I am responsible for that. And it seems a long time ago! Am now in my seventieth year and have been breeding and studying the White Leghorns for practically forty years. At the Groton farm 700 to 800 breeder-layers were our limit, but here we are carrying 1,200

to 1,400 birds, and with proportionately greater profits and success.

Hens' Eggs and Cockerels

"We prefer to raise our breeders from hen eggs, but we pay no attention whatever to relationship of males



POUND-AND-A-QUARTER, SIX-WEEK OLD COCKEREL

Sample of six-week-old, Wyckoff-strain S. C. White Leghorn, weight, 1¼ pounds. Note vigorous-looking head, substantial body and sturdy shanks.

and females. In the past we have retained our best breeders only two years, but in future, on account of the demonstrated benefits of artificial lighting, we are going to hold them over the third year, and I believe we can do it to advantage.

"Yes, we like to use cockerels, as a rule, for breeding, selecting early-hatched, fully-matured birds and thus avoiding the expense and inconvenience of carrying older male birds over till they are two and three years old or older. We invariably find a good demand for the cock birds and the supply of course is limited.

Feeding the Breeding Stock

"How do we feed the layers or breeders? There is nothing complex about it. We give them a light scratch feed of whole oats for exercising purposes, doing this as soon as they can see to eat each morning. It doesn't pay to fill them up and make them logy. Dry mash is kept before them all the time, in a simple form of non-waste feed hoppers. For years we have used high-grade commercial laying mash, with good satisfaction. This season we are using the Ful-O-Pep brand, and with fine results—never better.

"Then there is the night feed of scratch grains, consisting of cracked corn, wheat, barley and buckwheat in this proportion: corn 1,400 lbs., with 1,000 lbs. each of wheat and barley and 600 lbs. of buckwheat, thoroughly mixed. We give this feed early enough before dark so they can pretty well fill their crops. All scratch feed is fed in the deep litter, to make them work for every particle they get. And they work—believe me! All these years it has been a constant delight to me to see those sturdy, vigorous, good-sized birds kick the straw about to find their daily ration. If I were to see a hen or male bird 'loaf on the job' at this time, out she or he would go EVERY TIME. Such a bird is either sick or of no real value.

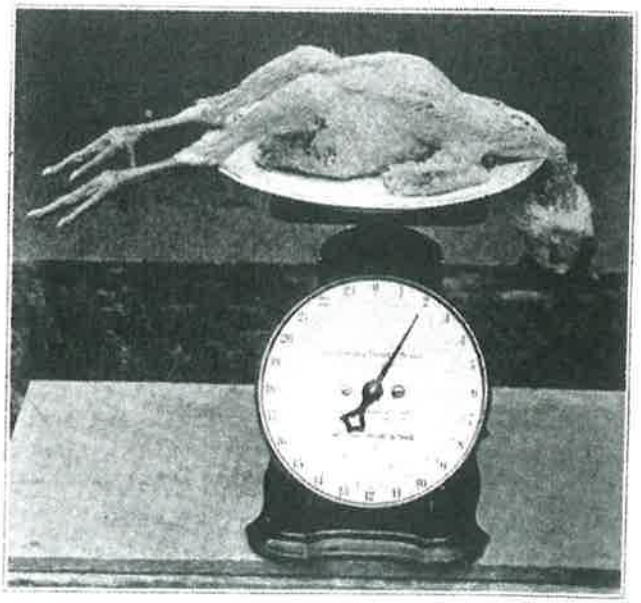
"Our green food for the breeder-layers consists in the early winter of cabbage; later on of mangel-wurzels. In the summer we use lawn clippings (you can see we have lots of them) and Swiss chard. Cabbage and wurzels are fed in suspended net bags. Clippings also are fed in bags. Chard is thrown in on the litter.

"Yes, you can overdo the green food proposition. Sometimes the birds will overeat and 'leave off' on grain food and dry mash, then they soon drop off in laying. We found this out several times by experience. Green food should be used to help balance the ration, not as the whole ration, nor even a main part of it."

Tested Lantern Lights in Stable Basement

The installation recently of electric lights, notably in the breeding and laying houses at Grandview Farm, is partly the result of what the Messrs. Wyckoff had read on the subject, but probably was mainly due to an experiment they made last winter. Note herewith on page 79, the well-built stable at left of picture. This building has a large basement with stone walls and has been used for years as overflow quarters for two or three hundred hens, to carry them partly through the winter. Size of this basement is 28 by 40 feet, with an entrance and three or four fair-sized windows on the north side, to the left in picture.

Last fall and winter (1919-1920) the Wyckoffs had about 300 hens in this basement, most of them three years old—a few two years old. Prior to December 1 the weather was cold and they "got no eggs at all." December 1 Mr. Wyckoff junior hung up three gasoline lanterns, suspending them from the joists seven or eight feet above



SAME COCKEREL, WHEN DRESSED

Bird was bled and dry picked; then weighed a trifle more than one pound, exclusive of plate. Shows rather unusual growth, as one pound at six weeks old is truly good weight. This toothsome-looking squab broiler was not special fed in any way—in fact, was one of a brood of 400 brooded under a coal-burning colony hover.

the fowls. These were lighted about 6:00 a. m. and kept going till daylight, then were again lighted at 3:30 to 4:00 p. m., and kept burning until 7:00 p. m. This was on December 1, 1919, at which time they were getting only two

to three eggs per day from this flock of hens.

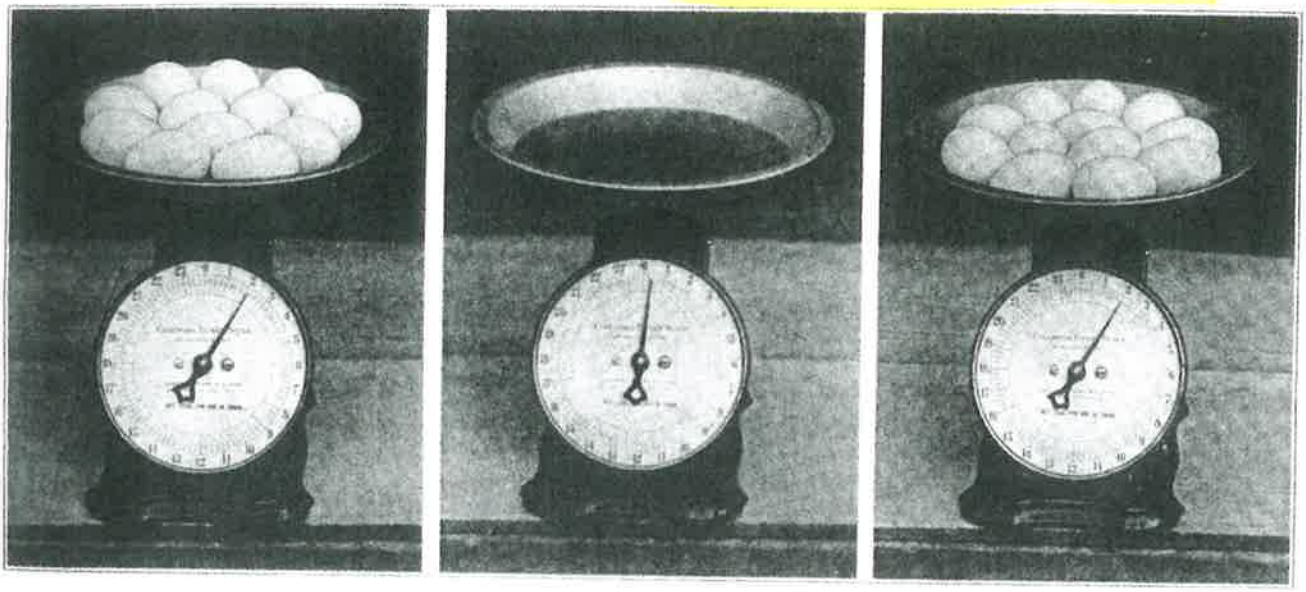
"By the eighteenth of December, or the eighteenth day under lights," said Mr. Wyckoff junior, "the production was up to 33 1/3 per cent. This certainly was a revelation to us! And it was wonderful how those hens would at once brighten up as soon as the light was turned on in this stable basement. They would scratch, eat, sing and lay and we soon were convinced of the remarkable benefits. Eggs from these hens we sold to the hotel in Auburn or shipped to our commission merchant in New York and the high prices helped a lot in paying for feed. In late December, however, we had to quit, because the lamps 'acted up' and we were afraid of fire—thought we might lose the stable and the hens, too. But this experience—this demonstration convinced us that we should equip our entire plant with electricity, which we are now doing."

The forepart of February, 1921, writer again visited Grandview Poultry Farm, in quest of further information and found the Messrs. Wyckoff truly enthusiastic about the installation and use of electric lights to increase egg production during the short-day period of the year. Briefly stated the lights were turned on two days before Christmas—December 23, 1920, at which time about 1,500 hens and pullets (hens practically all yearlings and early-hatched pullets—hatched the last week in March and third week in April, 1920) were in the eight laying houses. On that date, December 23, these birds produced 174 eggs. By the first week of January there had been a notable increase in egg yield and on January 23, exactly one month after the lights were turned on, the Messrs. Wyckoff gathered 926 eggs from these hens and pullets. Said Mr. Wyckoff senior to writer, at the time of this visit, the forepart of February, 1921:

"The 'lights' in our case certainly have done the work claimed for them, and I am speaking on the basis of comparison. To me the results have been little less than astonishing. Believe you will agree with me. Of course market eggs have sold at unusually high prices this season—somewhat higher even than last winter, but the fact is, as shown by our records, that it cost us a little over one thousand dollars to install the electric lights on the entire plant, including our residence, the work shop, etc., and during last month alone the increased cash receipts from eggs sold by us for table use—to Auburn and New York City—have paid for the entire installation, with a few dollars to spare. If anyone had told me such a thing a few years ago, it would have been hard for me to believe it."

Book, "Forty Years with the White Leghorns"

The Reliable Poultry Journal Publishing Company, in April, 1921, obtained the consent of C. H. and E. L. Wyckoff to furnish complete, detailed information about their experiences and success with Single Comb White Leghorns during the long period of years they have handled this variety of standard-bred fowl, which information is to be compiled by writer of this chapter into a book to bear title, "Forty Years with the White Leghorns," contents of which are to go back to the early start made by C. H. Wyckoff at the Groton plant forty years ago and will aim to embody all facts of importance, including illustrations of breeding and laying houses, brooding houses, colony coops, feed shelters, etc.; methods of cropping and cultivation of the soil to keep it free from contamination; the home growing and practical use of green foods of different kinds; plans and draughtman specifications of the present buildings, colony coops, chick shelters, labor-saving fixtures, etc., at Grandview Poultry Farm; also a detailed account of the efficient and economical methods now employed by the Messrs. Wyckoff in hatching with incubators, brooding the chicks by artificial means, self-taught roosting, single and double yarding, separation of sexes, etc.; also the building of shipping coops, their methods of packing eggs to ship to market and for shipment by parcel post as hatching eggs; also the use of shade trees for poultry, including plum, peach, English walnut, etc. Book will contain upwards of 150 illustrations made from photographs taken at Grandview Poultry Farm, 1920-1921, expressly for this purpose. For further description of book, "Forty Years with the White Leghorns," see annual book catalogue of Reliable Poultry Journal Publishing Company, which will be mailed free to any address on request.



SHOWS SIZE, UNIFORM SHAPE AND AVERAGE WEIGHT OF WYCKOFF-STRAIN WHITE LEGHORN EGGS

The dozen eggs at left were laid by yearling hens, week of April 25, 1921, and eggs at right were laid on same date by pullets that were one year old that month. Middle picture shows that shallow pan weighed 6 ounces; hence these eggs from hens nearly two years old weighed 28 ounces to the dozen and the pullet eggs, 26 ounces to the dozen. Average-sized eggs were selected in this case by writer, not extra-large ones. These weights were approved by the Messrs. Wyckoff as meeting their requirements for the Wyckoff strain.