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For the Average Farmer
or
Poultry Man.

Exactly What to Feed.
Exactly When to Feed.
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Poultry Pension,
Sarcoxie, Missouri

1900.
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Sarcoxie, Missouri.
INTRODUCTION.

This little book is devoted to poultry for fresh eggs for market, from a business point of view, not for fancy or pleasure. The greater the profit the more the pleasure shows up.

A big majority of those who supply the market with eggs, good, bad and indifferent, do not know the magnitude of the business, nothing the average farmer produces comes near it. It is not our intention to figure out a great big thing for you—do your own figuring. We will put you in a position to figure correctly, when you do. You will find it a bigger thing than you are aware of, counting capital, labor, etc., invested, with little or no risk; no risk at all if you go at it as a business, in a business way. It is only risky when you undertake to overdo the thing, so go at it meaning business.

After writing three times as much as was necessary, we carved it down to about one-third, as it was something practical and to the point we were after, knowing from experience the average farmer or poultryman wanted it in short metre.

We have tried to give it so you can almost
learn it by heart, leaving out a great amount of figures, cuts, etc. We hope it will find its mark, for of all the reckless handling, or not handling, of poultry, it is done on most farms, the very place where it should obtain its greatest success.

At the present time poultry for fresh eggs is in its prime, there being a greater demand for fresh eggs than ever. Why? Simply because they are, most generally, scarce. There are plenty of other kinds, stale, icehouse, etc., but these will never supply the demand for fresh. Of course, if you can’t get fresh, you take the next best, so with the market. Of late years the best of everything goes. Strawberries are graded right here (we are in a strawberry country) before being put in the car, and at what kicking. It is the same in almost every line of produce, and why should it not be with eggs. You are in better shape to control that part of the market than most any other producer, let the produce be what it may.

Cold storage cuts a big figure with almost all other perishable produce, not so with the fresh egg, they had just as well brand it “not fresh”, after storage, for it is known the minute it gets into market; so with your fresh egg, it is known also. The same egg does not bob up in the market long as a fresh egg; you can’t store it in an ice box and freshen it up every
morning. The average farmer and poultryman's fresh eggs bob up pretty regular every day.

As for the meat side of the poultry business, the big packing and cold storage corporations handle a large quantity of dressed poultry.

The big corporation is all right in its proper place, but where is its place? They seem to have an awful appetite for all they go after. The big cattle ranches are being, or trying to be, corralled by them. We have heard a great many say they would finally corral the farmer. All they lack now is to shut the gate. What could the farmer do if he would? What sort of a job do you think they would do towards corralizing the poultry business? They can never corral the old hen, unless by buying up poultry in large quantities, storing it and then dish it out in different localities.

The fresh egg has got the grip and you have only the hen that lays the egg to deal with, treat her right and you are perfectly safe, you are beneath the notice of these big concerns, simply because they cannot handle you, nor can they crush you.

In attempting to tell exactly how to feed and manage poultry to make them pay we have taken the "Average Farmer" for a target, although any one who may read this will see instantly that it is suitable to all who wish
to try it, and especially those of small means, also those in cities who are bound down to call of bell or whistle, with no certainty of their jobs lasting a month or maybe not a week. In a great many cases they may be doing very well, if so, "let well enough alone."

Who ever may take up this calling he also becomes an average farmer, as he will raise a great deal besides poultry, in fact the greater part of his living, fruit, vegetables, milk, butter, etc., maybe some for market, as poultry alone, in accordance with this plan, will not keep him employed as we do not advocate very big flocks. We call one hundred laying hens an average flock. We do not for one minute advise any one to go into it by the thousand, as is the first thought by a great many, especially the amateurs; they are the last ones who, at first venture, should attempt it on a large scale.

Probably after trying the plan on a small scale you might enlarge. If you are posted, just think a moment, how many of these one thousand hen poultry farms (for eggs for market) you know of, not that you hear of, but actually know of.

Some years ago poultry and other papers were full of accounts of big farms, some of big extent, others contracted to town lots, but doing big business, using various incubators,
brooders, heaters, etc., turning out broilers by the wholesale. What has become of them, and they were expert poultrymen (or writers, one or the other). No, the fresh eggs are not supplied from the mammoth poultry farms. There are special fruit farms, dairy farms, stock, etc., where would the market be if it were not for the average farmer and poultryman who steps up with his little package of fruit, butter, eggs, etc., drops it on the pile and moves on. The large farm egg is not in it at all, nor ever will be, that is for fresh eggs for market.

You read of so and so having an eighty acre poultry farm, another, forty acres devoted to poultry, most generally they do not try to furnish eggs for the general market. They are fanciers or breeders and they are very essential to the average farmer, as you will rely on such to improve and keep your stock fresh by buying eggs or roosters from them for that purpose. On most farms they swap eggs or roosters amongst their neighbors; that may do in a few cases, but if you are up to date that won't suit. For the average farmer, on a reasonable scale, the fresh egg business for market, is a permanent thing.

The meat side is furnished just as the egg side; every farmer having a few extra chickens to sell keeps the market well supplied. The surplus helps pay the feed bill.
Some say the poultry business is overdone, or will be, if everybody goes into it. That is the beauty of the business, there is no probability of it ever being overdone. Where one goes into the business, two go out, not because it was overdone, for the simple reason it was not half done, so let us give you a pointer, the greatest trouble will not be over doing, let you try ever so hard, so don’t be backward.

There are patents for fixtures for running the business on a large scale. Their advocates claim that the expense for labor eats up the profit. For about one or two thousand fowls, labor, lice, etc., are heavy pull on them. Take one hundred hens managed as we describe, or any good way, so you get full returns (that’s the rub), let the average farmer’s wife attend to the light work connected with it, the farmer himself, or boy, or hand, doing the heavy work. After deducting the feed bill, the wife will have at least $8.00 per month for her labor and she can tell anyone she never had to labor hard or long at a time.

Children can also attend to a flock; when they are old enough let them become interested in keeping account of everything. It is a good thing for them, they can pay you for feed, etc., but give them the proceeds after paying necessary expenses, and probably you might have to borrow money from them, but treat
POULTRY PENSION.

them fair and they will stay with you a long time; boy or girl, it makes no difference. Only it is better for the girl than for the boy as she may not have to go out from home to work, as is the case on too many farms. How many girls now are, well no telling where, away from home, who could have been kept at home by this plan. They may earn $2.50 per week (not often) or $10.00 per month, when she could have stayed at home and earned, with one hundred hens, $8.00 per month, or with two hundred hens, $16.00 per month. Look at the satisfaction and pleasure to herself and her parents. As for the labor, you know the value of a hired hand in your locality. How many such flocks could he attend to and do a fair day’s work besides?

The labor is a stumbling block for the big concerns. You can very seldom get help to attend to hens as they should be. for that reason the average farmer has the advantage—he is personally interested. Instead of following after hired help to see if the work is properly done, he does it himself, only undertaking what can be properly handled, in most cases where he undertakes it on a big scale, he too goes to the wall.

Labor saving machinery may be all right, but it is hard on the laborer. Some condemn it, but in every vocation it is eagerly sought
after. The farmer himself bites at it as soon, or sooner, than any one, even though he may go in debt for it.

As for labor saving machinery for the poultry business, we don't see where it can come in to any great extent. That also protects the business for the average farmer and poultryman.

It has been tried, is being tried now, to see if there is not an opening for capital to take hold of it, as in various other products. Capital is all right and of course there is room for some of it in the business, but not in quantities to suit the capitalists, it also being very risky. A limited amount of capital is necessary, so it naturally falls to the man with limited means to furnish the egg market, and that is the man we are after—the average farmer and his family—and there are others who can also do well, man or woman, with or without families. Say three or four women club together, live together on a few acres of land, handling what suit each. You say again, too many going into the business. In the first place, some never will make a success of it, even under a plain plan like we suggest. To be sure if all who are in it now and who have been in, and out, for years, the average farmer, those that may yet go into it, and all succeed, there would be plenty of eggs. At present we are short on fresh eggs. The case
is the same the world over. Take our average farmer, for instance, in other lines of produce; some do well, others fail almost entirely. So with poultry, some come across one of those pieces telling what can be done with a thousand hens. In they go and out they come.

Some can take our plan, attend strictly to details, enlarge by degrees, stop short at their limit, and do well. The little one or two hundred hen man is generally on deck. Others can not take fifty hens and get full returns.

Is that any reason why you should fail? We say you will succeed if you mean business. We know of a cripple who is not able to do hard labor, that is constantly, but with the help of his good wife, makes a good living easily with two one hundred hen flocks, getting his $16.00 per month pension from his two hundred hens, for fresh eggs. Raising most of his own food, vegetables, fruit, milk, butter, etc., on forty acres of land.

His neighbor has one hundred and twenty acres of land with a mortgage hale and hearty, borrows money, in small amounts, occasionally from his crippled neighbor. He is a hard worker, is shiftless, but he says there is no money in chickens. There probably ain't for him. Just such cases level the supply on the market.

Time and again we have been asked, "What
do you do to get so many eggs in winter, what kind of chickens have you, what do you feed, what is the secret? As far as we are concerned, there is no secret, and we willingly tell any one what we do, only hoping they may profit by it. We have asked different ones the following questions in return:

Have you a hen house?
The greater number say no.
Where do your hens roost?
Some in the trees, some at the barn, on the fence and wood pile.
Do you feed them regularly?
No, they get all the feed they want themselves.
Where do they get it?
Around the barns, pig pens, oh, all around the place.
Did they get all they could eat yesterday and the day before? (Feb. 27 and 28, 1898).
Well, no, lots of them never got off their roosts, some of them even froze to death on the fence.
How many eggs did you say you are getting a day?
Eggs a day? Why, we don't get "no eggs" at all.
How many hens did you set last spring?
Seventy or eighty, in spring and summer.
How many eggs do you put under a hen?
When the old woman sets them she puts fif-
teen to twenty eggs to a hen.

Who else set any?
A good many set out in the weeds and all around.

How many young chickens did you take off?
Don't know; 'bout two or three hundred.
The rats and pole cats bothered the old hens a heap.

Where did you say the hens were set?
Most of them set at the barn; some in a big brush pile.

Who attended to them?
Tended to them how? The old woman and the children done all the tending to them, I guess.

You say you took off two or three hundred chickens in all, where did you put them?
Some were in old barrels and boxes, some used under the brush piles. The boxes and barrels were open so they could go in and out as they pleased.

I suppose you raised them all didn't you?
Hush, I don't guess there is seventy-five.
What do you suppose became of them?
I told you the rats and pole cats were awful bad and a good many got drowned.

Your coops were open so the chicks could go in and out as they pleased; do you think those pole cats and rats would go in and out as they pleased, too?
They surely must, we are mightily put out with the chicken business. I guess next year we will just let them go on their own hook and not try to raise any; if they raise any themselves all right, if they don't we won't be out anything.

The above is literally true; at one time this very family had the "hen fever" terribly bad, and were going at it wholesale. Now they are just letting them go on their "own hook", and it would be hard to convince them that there is any money in the chicken business.

Now just look around you and see if you can find any who are managing as they did (before they "just let them go on their own hook") and are getting "no eggs."

As strange as it may seem there are a vast number who are in the same boat, maybe lacking the brush piles and other fixtures that these people had at hand.

Will very much of such management ever overdo the business?

Now we want to try and tell you how it is done, that is for the average farmer and poultryman. In fact tell you EXACTLY how it is done. That is quite an assertion. Bear in mind we do not say it is the only way, but we believe as sure, as cheap and as reasonable as any plan that is successful, for those who are getting "no eggs", in particular.
To the average farmer or poultryman, we wish to state emphatically, this is a business proposition, not very complicated, but if not run on business principles you cannot expect full returns. It would indeed be strange if this plan as we describe, escaped criticism, as opinions differ widely in regard to poultry; more so in regard to feed, quantity, quality, etc.

Should you be interested try the plan in full and you will succeed: "as sure as a gun is iron"; as before stated, some never will succeed, neither are all guns iron. This is from actual experience, as yet, has never failed.

Twenty years ago we wondered why some one did not tell more particularly what to feed, how much.

We have found out and propose telling it, so it can be profitably used by others whom we know are lost when it comes to the feeding for eggs for market.

The average farmer, whenever attempting to feed regularly, generally feeds too much. On the other hand, when he becomes an old hand, he tries to feed them race horse or roadster fashion. We hold to the opinion that the hen wants to be well fed to lay many eggs, more particularly in winter. On some farms they get "no eggs"—their hens are too fat. They are very seldom too fat, with plenty of
range, unless they are deprived of egg producing material, ground bone, animal food, etc. If not laying at all they may become too fat. At no time, by our plan, have we ever had any complaint to make, although when killing one to eat, they are sometimes pretty fat. the returns from the flock always holding its own, but they are surely well fed. Some say different breeds require different treatment, try this treatment on any of them, for eggs, with range and scratching pen. Compare it with the feed and care you read of in some places and see what is lacking. The "mush and milk" is lacking. We have no fault to find with milk, as it is fine most any time, but soft feed is not in this to any very great extent.

We are not responsible for failure if you do not follow directions, but will guarantee success if you attend to the details, which may appear of little importance. That is the key note, or secret, as some call it.

LOCATION.

Various sections are often mentioned as good locations for poultry and fruit farms. Some localities are more favorable than others, the climate being more suitable in the south and southwest, say for poultry, small fruits and vegetables in connection.

Don't you think you can take this plan and make it pay where you are, with your poultry
house built warm enough to suit your locality, the scratching pen being essential everywhere, it being a good regulator towards keeping your hens warm as well as busy. Probably in the extreme south the scratching pen would not appear so needful, where your fowls have range in both winter and summer. In some cases it may do to go to new locations to conduct the business, but you must have the capital, no big amount, to buy, improve stock and live for at least a year, or until you get your flock of laying hens to help you along. In this case be sure before venturing too far. The man with "money to burn," needs no such caution. The man with small means can read what "the man from the east" has done, but he is an exception.

To the man with practically no means but big ideas try and see if you can not get a foothold where you are. We have heard some, yes, a great many, say a man in this day and age who has not accumulated something is not much account. Be careful—that is the very one we are trying to reach.

And great is the man with sword undrawn, And good is the man who refrains from wine, But the man who fails and yet still fight on, Lo! he is the twin-born brother of mine.

—Joaquin Miller.
Like "the man from the east", we believe South and Southwest Missouri, Arkansas, Texas, etc., will some day be a great poultry producing section, especially for winter egg production, the same being produced there cheaper than in the colder climate of the north.

We do not say the north will be depopulated, to the contrary the business will pay there as well as it ever did, or anywhere, north, south, east or west, according to the management—that tells the tale in any locality.

So go slow, make no rash moves to new localities, unless you can go prepared, and it might be a good idea to go prepared to come back.

HEN-HOUSE.

We will take it for granted you have some fowls, if not you will have some, but don't overdo the thing, only keep what you can take proper care of. If you already have a hen house add to it in any shape or style until you get the required ground space mentioned below, for if you expect to take the treatment, take it according to directions; but we don't expect you to give up what you already have, but you will see where you are lacking and can act accordingly.

The ground room in the house is what we want to commence on, and we must have it, as there are times when all the outside range in
your state is of no avail, especially when covered with snow, or very cold days.

We will give you our plan for building and assure you any new building you may wish to put up can not be put up much cheaper to answer the purpose. For one hundred hens we build 24 x 24 feet square, 4 feet high on each side and 10 feet in the center, with a roof sloping both ways. Some may say, in fact often do, that four feet is not high enough. We are building for chickens, you spend but little time in the house under the 4 feet, and it rises very quickly to 10 feet. Be your own judge and architect, but save the ground room.

One end of house should face the south, with doors in end to suit yourself. You may think that considerable ground room for 100 hens; my friend, we are coming right close to the "secret" of winter laying. If you expect eggs in cold freezing weather, you are bound to have it, you want some windows in the south end; say you have your door in center of south end, put window sash on each side of door, not over two feet from the ground. It is hardly safe for us to tell you how much glass to put in as you might think we had glass to sell, but put in two sash side by side on each side of door, at the corners of the house. You want more glass on east side of the house. If you expect eggs in cold freezing weather, you are bound to have it, you want some windows in the south end; say you have your door in center of south end, put window sash on each side of door, not over two feet from the ground. It is hardly safe for us to tell you how much glass to put in as you might think we had glass to sell, but put in two sash side by side on each side of door, at the corners of the house. You want more glass on east side of the house. It would be "mighty nice" to commence at the southeast corner of
the house and go north half way. Now don’t get excited, your hens will more than pay for it many times, if you follow directions. As for the material for the house, we see no use for very expensive houses.

We do not propose to go into figures, estimating cost of houses, cost of feed, labor, etc., nor do we intend trying to figure what a big thing you have in this plan of management, it is of no use whatever, to any one interested, as they are certain to figure the cost before ever making a move, besides one set of figures cannot suit all localities, so you must do your own figuring in every case, then you will know more about it than we undertake it for you.

You want your house close, no draft, warm in winter and cool in summer. We use common boxing, or barn siding, painted, with the crack well batten. For the roof you can use the same, shingles, felt or whatever you choose. Your locality will have something to do with it.

How many in your neighborhood have as good hen house?

For inside arrangements we will only state the more particular parts. For the roosts, commence in the center of the north end and go six feet each way, put up ten roosting poles, each being twelve feet long, have them up five feet from the ground and fifteen inches apart.
We make the frames for roosts solid, not swinging, all on a level, the five feet being plenty high and handy should you wish to take chickens from the roosts. You now have north end of house, twelve by twelve feet square, for a roosting place. We enclose this room up to the roof, in fact make a house within a house, the idea being to keep your laying stock, all others of course, warm in winter. The room has no direct contact with the outside, only on north end, which must be close, and the roof also.

This room in its present shape, becomes very warm in summer, we put two shutters, six feet long and one foot wide, even with the bottom of the roosts, in each side of roosting room, north and south, the north doors or shutters opening on outside of main house. "By opening these doors and the corresponding door in south end of main house, you obtain ventilation in the warmest weather. On each side of the roosting room you have a space six feet by twelve feet. One side is for the laying department; make and place the nests to suit yourself, but make them all movable. We use boxes when we can get them of proper size and shape; one foot square is about right. This room is ample for a flock at this house.

In the southeast corner of main house put a dusting bin, or box, right in the corner in the sun. Do not make it too small, say eight by
eight feet; have it even with bottom of sash so the sun can get a good sweep at it; have a tight bottom and keep it supplied with dirt, say road dust, fill it in the fall; also have a few barrels or boxes full for renewing. Step in some cold day and watch the hens in it, although they will use it the year through.

For the floor of your house, take your choice, some prefer one and some another. We have always had a dirt floor; if too low, fill up and occasionally take out from eight to twelve inches, put it on your onion bed and put in fresh dirt well tamped down, sprinkling with water as you tamp, to make it solid.

There is no fancy work attached to this plan, but if you attend to business you will soon be able to put on a few extra touches; but go slow. You are aware by this time that this book is intended for those at the bottom, that's the place to begin. We are now coming pretty close to the "secret" of healthy fowls.

In first writing this book for the average farmer, we had fourteen pages devoted to lice, telling a lot nonsense about their habits, location, etc., having also a number of cuts of same. After re-reading it, we politely threw the whole amount out! After getting started we carved right and left, but we want to assure you you have not missed a single thing by it; to the contrary, you are the gainer, as you
will make time by its omission. You will be just as able to deal with the lice without it.

If you neglect this part of the plan you had better build no house at all, we honestly mean it. "Just let them go on their own hook", roosting where they please, for with a lousy hen house you have various diseases, so called, when in reality, the lice are the cause of the whole thing, in order to beat them you have got to be vigilant. Clean out from under your roosts, the year round once a week, going into roosting room from a door in north end of same; with a wheel barrow, it is a short job, wheeling the manure right on to your garden, there is money in it. Sprinkle a little dirt under roosts occasionally. At any time, should roosting pen smell bad, more particularly in damp weather, dissolve a small amount of copperas in the water and sprinkle, air slacked lime is good. Whitewash, you know, won't hurt your house, but by cleaning out the manure once a week you do not give the lice much show in that direction, which is a great source for them.

There is another verse belonging to this secret—the roosts. Some say sassafras poles, cedar, two by four scantling, with the corners rounded off, etc., etc. Take your choice. We have never found one any better than the other as far as lice are concerned. They do
just as well on one as the other, as they do not seem to be very particular. We get nice, straight poles from the woods, all knots cut off smooth.

What ever your choice, oil them once a week with coal oil; we use a quart bottle, with a quill, or small pipe stem, put through the cork. The first time you oil them it will take some oil, but when you get them saturated and oil them regularly once a week, it won't take much at a time. The quantity does not cut much of a figure as the hens will foot the bill, provided you do your part.

Build as fine a hen house as you wish, feed and care for them otherwise, but if you do not keep them clean and oil your roosts, your success, if any at all, will be very moderate. We have heard some say, all that is a heap of trouble. Right there the curtain falls. When we tell you how easy it is to obtain a pension of from $8.00 to $16.00 per month (more according to your ability, less according to your disability) from your poultry, you will plainly see it is sure necessary to pay attention to these little details.

Figure the cost; if you can beat it at anything else with as little labor, don't be hoggish, let us hear from you. We mean on an average farm.

Say, brother, right here we put up the bars.
We came very near asking you a question which it would take a good one to answer. Should we have asked it, we might have attempted to answer it, in that case we know some of you might have been offended, so we will just let it go until another time.

If you will figure a little, you see you have three hundred and sixty feet of the ground space of your house left after cutting off your roosting and laying room.

Here comes another "secret"; it ought not to be such a great secret as it has been published time and again, but there is no doubt of it being a secret to some. You who have read of it often, don't see why it should be a secret, almost too true to mention, some take no papers at all that ever mention anything relative to their especial calling. Instead of taking one or more good agricultural journals, and also poultry papers, they barely take their county paper, in lots of cases not even that. Say, for land sake don't say a word about it, but we have been in lots of houses where the only paper they get is one wrapped around some purchase made in the country town, and is not always on account of poverty that they take none. We wish to tell our average farmer that we have no ax to grind at all, but if you want to keep posted after starting in on this plan of managing poultry for fresh eggs,
take some good papers; they are almost giving some of them away. Keep posted and you will find many suggestions; you can't near try all of them, but sift them and you will find many that are useful.

Some years ago we first read of the scratching pen, had we tried it at that time we would have done a great deal better than we have. After waiting eight or ten years we adopted it. With us it was the missing link; as it is in any other calling, so it is with the poultry business, to slight the undertaking in what may appear of little consequence, sometimes wrecks the whole thing.

We aim to tell you just what is needful, no more, no less. Of course you may improve on it, but don't cut down. On some farms the only eggs they get in winter come from the barn; what few hens that get therethrough the snow, with those that roost there, on the farming implements, etc., find a place to scratch, but even those do not lay as they should, lacking a full ration of egg-producing food, bone, meat, etc. Water also is scarce at barn and everywhere else in cold, freezing weather, if not provided. Yes, but they eat snow. So would you if you had to, but you know it won't satisfy.

In the foregoing, we have merely given you a fair start at what is needed in the way of a
house. There may be other things needed which you will soon see. Say you want an extra sash in north end of roosting pen, for light, poultry do not like to go in a dark place to roost; or it may be more light in the laying room, hens would rather lay in the dark, and rarely go in there only to lay, thus keeping out of mischief in a room intended only for business.

In the northeast corner of house, adjoining the roosting room, we have a small grainery (a large dry goods box) with a partition in it, holding from twenty to twenty-five bushels, say ten bushels of oats and ten bushels of wheat, for scattering in the straw in the scratching pen. It is raised two and one-half feet from the ground, or floor, giving plenty of room for hens to go under to scratch. To look at it, under there would look like a good place for nests, don't put any there nor anywhere else, only in laying room.

LAYING OR SITTING ROOM.

In the division of house, we have left six by twelve feet for your laying and setting room. This room would also be better enclosed. You see there is only one side of it open, you might enclose it up solid the height of the low side, four feet, with lattice or wire, the balance of the way. By having the room tight you can just set an old setting hen on the outside or on
the roost, close it up and she can't get back to the nest at least until morning. Such treatment will most generally break up a great many hens, especially hens best suited for eggs for market.

In regard to the nests, you can make good and cheap ones for layers, out of common four foot lath, making the bottom, front and back with the lath, with a solid partition between each nest, high enough so hens won't bother each other. Make four nests to each length of lath, that number being easy to take out of house at one time for cleaning, renewing, etc.

This room, as stated before, will be somewhat dark; all the better for your laying hens. but as you will have to be in there occasionally attending to your setting hens etc., you might make a door in the north side to enter, leaving it open for your setting hens to come out for exercise, water, etc.

Don't let the nests get filthy, renew them occasionally, sprinkling sulphur or some insect powder in them, also keep the whole room clean and in shape; it won't take long at a time nor will it have to be done often. None of your fowls should be allowed to roost in there. The house, as divided, has one apartment for each certain purpose. For one hundred hens we provide twenty-five or thirty nests.

Now listen, more trouble: every morning, the
whole year through, we put a nest egg in each nest, provided we do not have permanent nest eggs. We have not missed doing so for five or six years, not even one morning.

There are artificial nest eggs, but we have always used the hens' eggs for the purpose, making a very small mark on one end with a lead pencil, so there will be no possibility of using the same egg twice for a nest egg, as they will soon spoil, especially in summer, and if taken to market will hurt your reputation as a fresh egg poultryman or farmer. The mark being so small the merchant nor anyone else will notice them. It may look a little suspicious to some, as though the eggs might have been marked for setting purpose, or had been set, but we have never heard any complaint. On the contrary, it acted as our trade mark on one occasion. One afternoon my wife and self were away from home, and somebody came and cleaned up the hen house of eggs, amongst them being the nest eggs with the little pencil mark. We suspicioned certain parties, went direct to the store where they do their trading and asked the merchant if they had brought in any eggs lately. He said they had. We went direct to a tub of eggs and there found the eggs with the mark on them. The merchant had never noticed the mark; but am glad to say it is not necessary to mark them for that
purpose.

The egg gourd makes a very good nest egg, but when seasoned they become rather light weight, the hens raking them around with their bills out of nest on floor, etc. We believe if there were made a small hole in one end and shot put in to make them heavier they would answer for nest eggs, but you will probably not notice your nests so closely as you would were you putting nest eggs out every morning. A great many will say that it is too much trouble. How on earth do you expect to earn your $8.00 to $16.00 a month, are you doing as well at anything else, especially something for nothing? Now you see it and now you don’t.

Poultry confined in small quarters do not need nest eggs nor much of anything else but more room. Where they have plenty of range, as by our plan, we have found the nest eggs of benefit. Very few hens will lay anywhere else but in the room intended for the purpose; there is one thing you will get very nearly every single egg laid on the place, with nest eggs, provided you keep up all along the line; it all goes together. The young pullets long before beginning to lay, find out where the nests are and go right to them when they are ready for business.

We do not claim that the nest egg will make the hens lay any more eggs, they will lay just
as many, but you may not find them all, and may have a great deal more trouble hunting what you do find than the putting out of nest eggs would have been. Now can't you plainly see the shortest route of the two is the nest egg? You not only get all of the eggs, but you get them regularly every day, while if the hens laid everywhere some eggs are often from one to three weeks old when run across; then where would you be in the fresh egg business? No, we are trying conscientiously to save you trouble rather than otherwise.

The eggs are gathered every evening just before or after feeding. It is better for one person to attend to the hens all through, feeding, etc.; hens are partial to a degree in that respect. There is no use of running to the nest every time a hen cackles, as is the custom on some farms, especially with the children, and somebody else's come to stay all day, make a dive for the hen house, scaring every hen off to see how many eggs are under them. Children can be of great help in the business when old enough, eventually tend to a flock of their own. Fowls are naturally shy but by kind and gentle treatment they become quite familiar, but rush into their laying room off and on all day and they are, from nature, inclined to move their place of laying rather than be disturbed. It is not necessary, it is
handier to gather the eggs at a regular time, one person attending to them; especially when laying, they are not near so shy. Should you wish a chicken to eat, don't call every one at hand, armed with clubs, rocks, etc., and two or three dogs, and then sail out after a chicken. Have a coop for the purpose, putting in what chickens you wish to dispose of or eat; you then have them handy. If spring chickens are ripe just pick them up out of feeding coops while feeding them, pen them up, feeding and watering them good, they soon become fine for the table or market. Have a small iron rod about the size of a lead pencil, bent at one end in such a shape that it will go around their leg, but will not slip over the foot as you draw them to you. When your neighbor calls to see you bringing a dog or two with him, gets seated and his dogs begin taking in the bone meal boxes, hens' nests, etc., just say, I'll be back in a minute. Go for those dogs with anything you can get hold of, you will miss them nine times in ten.

A CHEAP POULTRY HOUSE.

When approximating the cost of housing fowls comfortably and well, one dollar per head is considered a proper estimate here in New England.

Nearly every hen house on my farm, in fact every one that is arranged for laying stock,
POULTRY PENSION.

has its annexed stretching pen, tight roof, sides and back, with open front covered by wire netting to admit the air. These fronts are provided with oiled muslin curtains which can be opened and closed at will during very cold, stormy weather, hinged at top or on the end, whichever may be most convenient for hooking the frame up out of the way when not in use.

In the fall of '98 I had about 125 extra late hatched pullets that must need either be housed or sold then at a sacrifice. I bought some second grade spruce timber and hemlock boards for $14.00 per thousand feet. The sills 4x4 inches were set on cedar posts with a stone underpinning between posts. Balance of framing, 2x4 spruce. The lumber was all 14 and 16 feet in length, which cut with very little waste. The roof was covered with packing paper and over this two-ply tarred felting kept well washed with gas tar.

The interior is 14x28, with a partition from the front to rear, making two rooms 14x14. The platforms or floors or roosting pens are raised two feet from the sills and are four feet wide. These extend the entire depth of each room, running along the partition, which of course, is in the highest part of the house. This arrangement leaves the entire floor space to be used as a scratching room or pen. The
inside doors, or those over the roosts, are arranged so as to shut down flush with the edge of dropping boards. During cold weather these make a cupboard-like arrangement for the hens to roost in, while in summer the doors are left hooked up at all times, which leaves the roosting place practically as cool as would be an open shed.

Small windows for light and ventilation are put in front of each roosting room, and one each on side of the shed part. The laying nests are arranged around these latter pens. In buildings of this kind we can scatter the birds about the farm on the colony plan without having any yards. Where it was necessary to confine the flock the house could set in an enclosure or have adjoining yards.

The pullets that were housed in this building in November were quite small and immatured Barred Plymouth Rocks, but with these lodgings they developed rapidly and commenced laying early, keeping up a remarkable egg yield throughout the entire season. I have another lean-to shed fixed up after the same principles, with only one pen, the pullets in this shed were the best layers on the farm last winter.

I have spent over twenty years of my life in connection with practical poultry keeping and different methods and have yet to learn of a
better plan to keep hens in a laying condition during the winter months.

Apponaug, R. I. D. J. LAMBERT.

The above was taken from the "Farm Journal" published at Philadelphia, Pa., by the Wilmer Atkinson Company, and written by a poultryman who has been in the poultry business for over twenty years and he finds the poultry house, as described to you by us, as just the thing. We may differ a little, but in no case does it change the general structure. You may also think a little different, but as a whole you can't beat it. It gives us pleasure to have the endorsement of such a man as D. J. Lambert, Apponaug, R. I. Our plan is of our own selection, after trying various other plans.

SETTING THE HENS.

In setting the hens you have the same object in view as you do all through, eggs in winter. It is the early hatched pullet you have to rely on for eggs in winter, consequently you must set your hens early.

Don't keep on setting through the whole year unless you have an object in it. If your object is to keep them through the winter, you won't find much pension in a late hatched pullet, as they won't lay until towards spring, but will eat just the same. Bear in mind we are figuring on the one flock of one hundred
hens. If you should only have fifty and do not wish to enlarge, take it at one half; if you have two hundred, double it and so on. The above may sound strange to some, but try it on ten by taking it at one-tenth, and you are all right. For the average farmer and poultry-man it is what we call a soft snap, written for your especial benefit. It is only necessary for you to raise fifty pullets every year to keep your one hundred winter layers in shape. Each fall fifty of your hens will two years old next spring and fifty one year old next spring. The fifty you raise each spring takes the place of your coming two year olds; each fall you sell off your two year olds. There may be some exceptions, say in extra layers or early moulting.

Before describing the management of the setting hens, we will say it does not make so very much difference about what kind of stock you have, that is to begin on; you can improve them every year by getting new blood, in eggs or males. You can soon have a good flock of any breed that may suit your fancy, but treat them well and any of them will respond to good treatment. Sometimes you may think one certain hen an extra good layer; set all her eggs you can get.

We have one hen, "Blacklegs," which is nine years old, "Old Blue" is eight years old; they
were the best hens with young chickens we ever saw. They are very uncertain now as to setting, they do not commence laying until near spring; they are privileged characters, never having had any disease, and I guess the lice have not hurt them. In the spring when they commence laying they make as much noise as any of them. We never fail to set all their eggs that are on time. "Blacklegs" is an incubator chicken; as for their breed, they are more Leghorn than anything else. In their early days we had all colors and kinds, but by keeping the best we now have a pretty good stock of Leghorns of our own build. You can do the same with any breed you prefer. We have often heard a great many lay the blame altogether on their chickens, because they got "no eggs". It is not their fault at all, although some are, we think, better egg producers than others, any of them will bear good treatment.

To supply the fifty pullets it is only necessary to set ten hens. This will seem strange to a great many, but let me tell you, it is the number of chickens you raise out of a given number, not the number of hens you set. If any one person had the amount of eggs wasted in setting, they would have a pretty fair income.

To some, the idea of only setting ten hens in
one year we know appears strange, more so to those who are use to setting them the year round, when and wherever they come across them. We never set a hen outside of the hen house, notwithstanding the hen that steals her nest out gets great credit in some places. she has got to make a complete job of it before we come across her, if it were any trouble to get setting hens in the hen house, it would be different. You know they are taught to lay in the house, and that's where they go to setting. They are taught, also, to lay in the winter, so by spring there is no scarcity of setting hens, in fact a great many more than are needed, by this plan, provided they are of the setting kind.

We set our ten hens in each house from the fifteenth to the last of March, so as to have the chickens all off in April, which is early enough, and the weather settled, the chicks all growing off finely, will make good winter layers, if fed and cared for as directed. You know they will do better than those hatched in February or March and left to rustle for themselves, the old hen tied to a tree with a string to her leg; that is common. Of all the makeshifts that takes the cake, and some of these very people will tell you that they take good care of their chicks. They may think so, but why they do it is hard to understand. If you have good
warm coops with a run for each coop, you can
do the fair thing by them, but as stated be-
fore, you can do a better job by waiting until
the proper time. In the early spring how often
do you hear, Have you got any young chickens
yet? No. Why we have got one hen hatched
and eight more setting.

How many young chickens has your hen
got? Generally they say five or six. Ask
them two months later and you will find you
are ahead of them. At the end of the season
they may tell you they have set from fifty to
eighty hens, but the pole cats, rats and etc.,
were awful bad; that they did not get through
with many. After trying the ten hen plan,
with five good coops and runs you can tell
them you only set ten hens, took off one hun-
dred and ten chicks (a low estimate some
years) and raised one hundred and five.

Which one, or are you both overdoing the
chicken business, only taking different routes?
It is all right to be up to date provided you are
fixed for it.

Our plan is comparatively easy,
much more pleasant and profitable.
Your hens, after laying in fall and win-
ter, will be plenty early wanting to set; some
too early, but don’t get excited and set some
so you can blow around the neighborhood that
you have hens setting. The principal time is
in the wind up, not what you set but what you raise. We have five double boxes to set the ten hens, a common cracker box does very well, with solid partition between each nest, always setting two hens at the same time; don't fool away the time with setting one hen at a time; should there be only one hen wanting to set, let her alone, not in your double box, as it is not in your hen house, they are only used for setting hens in; when another hen is ready, fix up your double box, making plenty of nest, sprinkling some sulphur or insect powder on same, carefully select fifteen eggs for each hen, that is enough. Some put twenty and even more, they think the more the better, everything on a big scale, only as to results.

This double box is perfectly tight all over, having a door, with leather hinges, to close up so other hens cannot bother them, nor those pole cats, rats, weasles, etc., that your neighbor spoke of, but your hens must have air, so you will bore plenty of holes small enough so a mouse cannot get in, all around, front, back and sides; it is also better to sprinkle the nests and hens occasionally with insect powder or sulphur up to the third week after setting.

When your hens have been setting a day, take some corn in a shallow pan or box, open
each double nest and feed them on their nests. It may be neither of them will eat the first time but they will soon come to it. Have a regular time to feed them every day. notice that none of the grain falls in their nests, as it will tempt other hens to scratch in their nests while they are off, it is not often they wish to leave their nests more than every other day. Leave the doors down so they can go out for water, exercise, etc., the water, of course; always being handy and in the same place at all seasons, they know just where to go. Most generally some laying hen takes their nest the moment they go off. Notice when the setting hens begin going back; see that they get their own nest; they may go on another nest. Put the laying hen out of her nest and lift her on gently. You may not have gotten hold of a good hen in the start and she may stay off too long. Walk around her and most generally she will go back. If she does not appear to mean business, bear with her until you get another. there are plenty most generally wanting to set; put the other one up, she will soon go to laying again.

One of the greatest sources for lice is the setting hen. By this plan you do not spend much time with the setting hen unless you manage as some do. Never break up a hen; that won’t do, put them in a coop a few days.
Don't let them hatch lice, there is no money in them. There being one hundred hens in each flock and you only set ten out of them, if of that nature or breed, all will want to set during the season. We have a special double coop for breaking setting hens, letting out one side at a time, feeding and watering them well, after breaking them up, or at the time, is a good time to dispose of some of your two year old stock, as they will weigh well.

It is natural for some to say, too much trouble. Well, try the fifty or eighty hen plan, set here and yonder all through the season. Notice the ages of your pullets in the fall; see how many of them will lay that fall or winter. Have often read, not feed setting hens on the nest. In ten or twelve years' trial, have not found any fault with it. After attending to your poultry by this plan, in every detail, or any other good plan, if you do not make some headway in improvement in different lines you are not as deeply interested as you should be.

You could, or may, have a different room for your setting hens; not a bad idea at all, provided you also give them the proper attention. Our principal object is to start you, trying to get you to abandon some of the old time poultry fixtures, brush piles, fence corners, etc.

When your hens commence hatching, once a day notice and see that the egg shells do not
cover another egg. Take them out of the nest. When nearly through hatching take one hen off, the one you may select as liable to be the best mother, put her with what chickens are dry, in a roomy box, leaving the other hen to finish the job. When finished put the hen and chickens out in the coops, put your other hen in the setting coop. She is in good condition, being well fed will soon go to laying. Grease her well under the wings and body before putting her in coop. Also your hen with the chickens, not the chickens at this time, but at any time if you think they are not looking right, standing sleeping, wings drooped, grease every one lightly on the top of the head. Taking them out of back door in coop; if you have kept your hen house clean, oiled your roosts, you will not have much trouble with lice.

The best feed we have ever used is the common corn or egg bread, just as you make it for yourself. Before going any farther in the feed line we will tell you of the coops.

In all profitable manufacturing establishments they have their plant, so with you in the poultry business for manufacturing fresh eggs for market. The hen does a manufacturing business that is beyond comparison unless it be to that piece of machinery that turns out the same product. Other fowls may equal her
but only to a limited extent, the reproduction, whether of animal or vegetable, is beyond comparison. Man has attempted and accomplished wonders, but here he stops, and well he may.

Your houses, coops, etc., are the permanent part of your plant, if properly constructed will last a long time. We make our coops of the old style letter A, or roof fashion; make them two and one-half feet wide and two feet deep, two and one-half feet from eaves to comb. We make the frame or rafters out of 2x2 inch stuff covered with siding overlapped so as to shed the rain. The bottom, to keep out those pole cats, rats, etc., is made of two 2x4 cross pieces, with most any kind of lumber for bottom, only letting the lumber extend half way on the 2x4, leaving room for the coop to set down in so the rain will run off clear of the bottom of coop. The above well painted will last a long time. We make a sliding (up and down) door in each end of coop, the outside or back door being handy to take your young chickens out to grease, if necessary, also for inspection of coop. In making the two ends of coop do not let your lumber go clear up, leave a hole you can put your fist in for ventilation, covering it with wire cloth. In very warm weather bore small holes in front and back doors. In early spring break the ends of corn cobs in those
holes, punching them open when needed. Put a small piece, 2x1 inch sloping, in front of each door to keep the dirt in the coop. Put the dirt in the coop and you are ready for your chickens, but don't forget to renew it occasionally.

In connection with the above coop, we have two lath coops to feed in. We take common lath, cut them half in two, nail them to a full length (four feet) lath, one-half inch apart—four of such panels make the coop—to set right in front of your roosting coop. Make the top out of lath; for a few days feed the old hen and chickens in this coop, drive stakes in the ground and fasten the panels to them with wire. Most old hens are so industrious scratching that they keep the teed in such shape the little chicks fail to get enough to eat, so we have another coop for them alone. We cut the lath into three pieces, making and staking it at the corners, the same way as the other; this one only takes three lengths, as one end of the other coop makes one side of it. This additional coop more than pays for itself in a short time in the saving of feed, as the old hen can not get in there to scratch and waste the feed. Of course you must feed the old hen. When putting up this additional coop raise the partition between the two so they can run from one coop to the other, but never raise the the small coop on the outside as outside hens
try to reach in under to get the feed. When your little chickens get strong and lively, raise the main coop up so they can run in and out and very shortly you will let the old hen out, but of a morning when the dew is heavy the little ones can run out and in, also in wet weather. On such days and times a great many young chickens are lost, the old hen dragging them through the dew and rain. Of course you know you have to shut them up in their house every night.

We feed these little chickens in a trough two and one half feet long, six inches wide, with lath nailed around the edges, with a partition in one end four by six inches. As stated before, feed the corn bread, don't feed soft feed at all. Some of you may go against us, but we are sure many young chicks are killed by feeding soft feed, especially corn meal made up a few minutes before feeding. There is old bread etc., on many farms, soak it, squeeze it as dry as you can, throw it to the main flock and give your chicks some small grain, millet seed, cane seed, cracked corn, wheat or something similar, by putting a little in the coop they will soon get to eating it and you will need have no more bother with your corn bread.

The partition in your trough is for bone meal. Keep it there constantly. You are aware this plan is for business as well as
pleasure, so you want them laying by fall. In order to do so you must feed them for this purpose. Some time when you are admiring your chickens and the "soft snap" you have by this plan, drop a little charcoal in (fine grained) the trough, or a little cracklins (also fine) and notice your chickens go for it; they are fond of it and it is good for them. We have known people who would never rest until they had a box in the coop for that purpose, and in the fall chuckle to themselves because their pullets commenced laying so early, not telling a soul the cause of it. You may pick up lots of little tricks, but don't be selfish, tell it, it will do no harm, besides there ain't one in ten that will try it, they are afraid they might overdo the chicken business.

There are various ways for watering the little chickens, but by all means use something that they cannot get into with their feet. A pie pan or saucer is most generally used—about as poor a vessel as you can use. We use a common half gallon fruit can. Set it in a saucer open end down, take a case knife, lay it level on top of saucer, mark on the can by rubbing the knife backward and forward, take a pegging awl or small nail and make a hole in the can just below, not too low, the mark, fill the can with water, lay the saucer on top, give it a quick flop, set it on an inch block in one
corner of the coop. The water will flow just as they drink it out, in a short time set it up two inches higher, a brick is good to set it on. The drinking fountain is to remain in the main feeding coop all the time as the old hen will have to have water. Should she get restless at times, running around in the coop trying to get out and knock the can over, slip a piece of lath through the cracks of your coop, in front of the can or put a loop of wire or string around it. Keep plenty of water in the cans until your chicks are big and bold enough to go to the larger vessels having the water for the main flock. Recollect you want to raise every one of the whole five flocks, or say about one hundred and ten or twenty chicks, which is no trick, barring unavoidable accidents. From now on pay a little attention to those who take off from two to three hundred chickens in a season and see what they have in the fall. They hate to tell. "Oh, I guess there is a hundred or hundred and fifty."

We don't say all are that way but we do say an overwhelming majority are.

You should keep feed in your little chickens' trough all the time until they are half grown, then feed them morning, noon and night for a short time, then morning and evening, eventually merging them into your main flock. The old hen will quit her chickens sooner by this
double coop plan than she would otherwise. Some of her chicks may follow her to the hen house to roost; let them go, but they will still visit the feeding coop and run with the others during the day. When all the chicks are weaned, put several of the small coops together in front of the large coop nearest the hen house and make that the general feeding place, calling all up together, old and young, putting the feed in the pens for the young, scattering it to the old, by this means you will soon feed all together. Do not take the big coops from any of the roosting coops, only what small coops you need, as they may still go home to roost, or some of them, nor do not raise the small coops off the ground, but let them go in through the big coop as before. The older ones are not apt to bother the feed in the small coops as they do not know how to get in. You will have to raise the big coop to suit the size of your young ones, from time to time; the older ones will learn the trick and go in there. You will have to let them go as there is no use scaring them out, by so doing your younger ones will get wild. You ought to take off twenty-five chicks to each two hens, at the least calculation, making one hundred and twenty-five chicks all told. There is a screw loose somewhere if you do not raise from ninety to ninety-five per cent, as you are prepared to pro-
tect them from all varmints, or conditions of the weather. The old hen and chicks are partial to their coops and will make for them when a rain comes up. We often round them up when it begins to look squally, by opening the door and letting the old hen in, all's well. Don't go in a whoop but be gentle, at the same time get a move on yourself. The chickens that are lost by this route will compare favorably with the pole cat route.

Some of us average farmers take a notion to go to pa's and ma's Saturday evening and stay until Sunday evening, sometimes until Monday morning. Every one the place go, even to the dog, more often dogs. Possibly a near neighbor may milk the cow and feed the chickens. As for shutting them up, it won't hurt this time; it sets into raining some are drowned, the polecat, weasel, rats, etc., do love to ramble on a wet night, they take a turn at the chicks, which almost, if not, completely ends the whole business, as they, or some of them, merely suck the blood and kill a great number in one night. When we return, what? The the chicken business don't near pay, so we "just let them go on their own hook."

We don't say you do that but don't you know some who do, or have done almost exactly that way? We told you in the start we were going to give it to you from actual ex-
Poultry Pension.

The above is positively so, but not personal experience. "Once upon a time we ourself, had one hundred and ten as fine chicks as you would want to see in a brooder of our own make, it had a lid to shut down like a box, near the top there was a small opening; we thought it was just the thing for air. So it was. One night something came and killed every one of them and as near as I recollect, did not eat the whole of any one. The sight was awful; we thought awful. We soon knew what the air hole was for. We just closed down the lid and left everything just as we found it. The next night we put a steel trap down in where whatever it was would get it. The next morning there was the mother polecat in the trap, with nine little kittens dancing around in the brooder. They were sure cute little things—not half as cute as my little chicks were. That was twelve years ago; when we want air holes we always put wire cloth over them.

Out of the number of chickens you raise you will have no trouble getting your fifty pullets to renew your flock, the balance being roosters, disposing of them as you please. But don't forget to give proper credit for them, as you ought to keep a strict account so you will know if you are making your $8.00 per month pension, clear of all expenses. You are expected
to charge to your flock all the feed fed to them; you certainly will give them credit for what you use or sell. Try it one season and see how interesting it will become; but don't think because you have done so well that you will increase your flock to two or five hundred and crowd them into your one hundred hen house: it is often attempted. Then another one has overdone the chicken business and gone out, leaving another place to be filled.

We will give you a pointer here in regard to proper credit for eggs. Whenever eggs are used in the family we drop a grain of corn in jar or bottle for every egg used. At the end of each month the corn is counted and credited to the month in which they were used. The eggs that are set should be credited in their proper month. It is not so particular what you use, you are the judge on that score, but if you are running on business principle you have no right to use them and not give credit for them. It is on that principle we are giving this, on no other whatever, not for fun or pleasure, although you derive lots of pleasure if you are interested.

How do you expect to tell if your hens are laying the amount of eggs they ought to if you do not keep close account of them? You can also tell what comes in every month, otherwise you can not. You are expected to have dis-
posed of your fifty coming three year old hens by or before the pullets are leaving their coops going to the hen house to roost, which they will soon do, as the mother hen has often taken them into the scratching pen, consequently this is no new place to them, but should any of them take a notion to a tree or fence to roost when nearly all the rest are on the roosts in the house, gently scare these off the fence or tree for as sure as they become accustomed to roosting out, it is almost impossible to break them of it. By setting your coops near the hen house when you first put the old hen and chickens out, and by moving your general feeding pen, on the wind up, close to house, the most of them will naturally take to the house.

We have often read, don't set your coops near hen house on account of lice. For a great many that may answer, but by this plan of management, cleansing your house and oiling your roosts as per directions, you need have no fear on that score, and as stated above, you must put them near the house you wish them to occupy when they are grown.

At the end of the first season, after practicing this plan up to the above time, just call the "old woman", put your arm around her waist, stand in the door of the hen house, see if everything is snug and neat, see if you have fifty coming two year old hens and fifty coming
one year olds, pay close attention and see if they all have not plenty of room on the roost, notice what a mess you would make if you imagine, next year we will set more hens and raise twice that many. Don't, not in the same house; hew to the line and you are in to stay. You and the "old woman" will be far better off. Of course in due time you may "expand", which is all right in some cases, but expand along the line; just multiply two, say two houses, twice the amount of feed, twenty setting hens, ten hens and chickens, two hundred laying hens, twice the amount of labor, twice the amount of diligence, $16.00 per month pensions. The above reads fine, by experience you can accomplish it. Were we personally acquainted with you we might tell you by what figure to multiply the experience. We do not wish to frighten you for we are giving you an exact plan by which it can be done; but will you do it?

SETTING SIX HENS.

In some cases, parties advocate that a three year old hen is in her prime as to laying.

By this plan we prefer the one and two year old hen, though there are good laying three year old hens, those especially that moult early in the fall. In many cases we have discarded an inferior pullet, keeping a coming three year old in her place. As you dispose of your stock
in mid summer, or coming fall, all are called coming so and so, as they are not evened up until spring, the time when all are supposed to be hatched out. We give you the six hen plan, which is all right for those holding the above opinion, also not wishing too much setting hen business.

In order to fully explain the plan, we will suppose you start in the spring of 1901 with the following aged hens:

50, 1 yr olds } Spring 1901 set 6 hens. 
50, 2 " " 

50, 2 " " 

to replace one-half, or 25. of your two year olds which you dispose of during summer.

In spring of 1902 you have:

25. 1 yr olds } 1902 set 6 hens. 
25, 2 " " 
25, 3 " " 

Replace your 25 3-year olds. In spring of 1903 you have:

25, 1 yr olds } 1903, set 10 hens. 
25, 2 " " 
50, 3 " " 

Replace your 50 3-year olds by setting 10 hens. In spring of 1904 you have:

50, 1 yr olds } 1904, set 6 hens. 
25, 2 " " 
25, 3 " " 

You drop back to your six hens. By the above plan you will only set the ten hens every third year. The plan is feasible and will bear
investigation; the only advantage of the plan is you have fewer setting hens to bother with. The same as with the ten hens, in comparison to the brush pile, fence corner plan, you get all your chicks at the proper season, raising a greater per cent, in fact nearly every one, with no trouble at all compared with the old plan. But to any whodesire to set more hens, there is no one to stop them even from one year's end to the other. Some believe they have to set hens the year through to get eggs the year through; that is a mistake. The early hatched pullet is the queen of layers the year through if fed for the purpose.

INCUBATORS.

Of all poultry fixings, the incubator is terribly abused by both the manufacturer and the unskilled user. We remember how they used to say the chicken business was gone up the spout, the incubator was going to revolutionize the whole thing; things were going to be done on a grand scale, by the wholesale; that did the business for the incubator, as it does for every branch of the business today, a sure thing to the amateur. Manufacturers said, raise chickens by the thousand, or rather hatch; a child can run it, etc., etc.

The amateur jumped at it, loaded it with various brands of eggs collected from various sources, not even having enough hens to sup-
ply eggs for breakfast, much less for an incubator. But they were too deeply interested to let the children try to run it, they were actually out of joint until the time for results rolled around, and then—well, you know the rest. Of course the incubator was to blame. Some put in fair eggs, had a fair hatch and raised only a few to maturity, after a short while they quit entirely. Others did better and are still using them.

We know of various makes of incubators that can be purchased for "name the price and take it". At the start some of them were as good as any on the market, and in proper hands, are all right. Learn to raise chicks with the old hens before tackling an incubator. The brooder is the thing that has to be perfect.

Most incubators do very well when started with good eggs, no better than you ought to put under the hen, and faithful care. Don't risk them with children. The raising of the chicks is the rub with a new beginner, and we don't know as any one has it down to perfection.

When you are in the business up to the two hundred notch, an incubator might come in good play. Should you take a notion to try one, get one of some reliable manufacturer. With your two hundred hen plan it ought not to be a big job to keep up your flock, as you
will only want one hundred pullets each year. You could start your incubator say the first of March, have everything in good shape to care for the chicks. Don’t feed too much soft feed; you can’t beat the feed you used to feed in your one hundred hen business, before you expanded. Keep the chicks warm; they hatch in a pretty good month, April, you may be able to do well.

Don’t think because you have an incubator you will keep it fired up and going the year round. True, it is idle capital most of the time—in a great many cases had better be. Personally, we have used them, and do not blame the incubator as much as the man, not the child, who is trying to run it. Be your own judge; if you should fail with the incubator your old hen is still on deck ready for business at the old stand and you have a good plan, which, like the incubator, needs a certain amount of attention. Go slow, don’t expand too much, there is a limit to everything—you may bust.

**FEED AND CARE OF LAYING HENS.**

We now come to a part of the plan on which a great deal depends, whether you get the full amount of your pension, more according to your ability, less according to your disability.

You cannot do any feeding in your house, only in your scratching pen; neither can you
put your water in the house because of the
dust which the hens raise in scratching. Your
bone meal boxes will also have to be outside on
account of the dust. Your house being twenty-
four feet square gives you plenty of room on
either side, according to the wind or weather.
We use two two-gallon crocks for water ves-
sels; they are easy kept clean by scalding them
occasionally. A board fence running out from
the house, from either side you prefer, makes
a good shelter for your water crocks and bone
meal boxes.
We make the fence ten feet long and two feet
high, having rafters across the top, extending
two feet on each side of fence, with movable
cover or roof, shifting from one side to the
other, in case of wind, rain or sun. In freezing
weather you, of course, will empty the crocks
at night, setting them just inside of house
with the bone meal boxes.
The above is very handy; after you get
straightened out, doing a "land office" busi-
ness, you may see some way to improve on it,
as you ought all along the line. It did not take
the "man from the east" long to catch on.
In freezing weather we keep the tea kettle
hot all the time, pouring water into the drink-
ing vessels, no telling how often during the
day. Good, clean water (warm in winter) is
as necessary as any other part of the feed.
Some say water three times a day; that may do, we know certain it is better than not at all, as we have heard people say sheep and poultry did not need water. Poultry may be taught to drink three times a day, we won't dispute that, but what would be gained by it? The three times a day is advocated for a purpose, for what we can't say; if it is to save labor, by our plan it is no go. In winter when we see our hens pecking away at a frozen up vessel, we would sure thaw it out, or else put it out of sight, which you would have to do by the three times a day plan. We notice our hens on the coldest of days come from the scratching pen at all hours of the day for water, and they always look to us like they could hardly wait until the regular time, if it was far off. The same with the hen when she lays her egg. She comes from her nest cackling, goes straight for the water. If it suited the hen, it would suit us. Ours don't like the plan, but it may be the way they are raised. I know the way they are raised has a heap to do with their laying, it may be so with watering. So water for results. Let your hens be the judge. After you teach them the trick, you can load up your water tank, setting them to go off at the required times a day, and you are in it up to your neck and if your poultry are not there to drink the water at stated time, you may get
drowned. There are lots of good fountains now on the market where the hen herself touches the button, that's more like it. Look in your poultry paper or farm paper and see if you don't find lots of good hints from correspondents, etc. In winter when a big snow falls, we are up before daylight clearing the snow away from the hen house, more particularly where the water crocks and bone meal boxes set, also paths around the hen house and to various other places. Make yourself a snow plow out of lumber, something in the shape of a big hoe with the handle on the bottom, well braced so it will push easy.

Some say they never let their hens out in the snow at all. Like the watering, they may be taught that way; ours go to the barn, in fact. wherever we have our paths plowed out. As we don't like to wade around in the snow we soon have all around the place looking like a switch yard of a railroad, some of the branches running out to a grass patch.

When it is extremely cold they don't go very far, some hardly coming out at all, not because they are shut up. The coldest days of last winter (1888 and 1889) they laid equally as well as before and kept at it, increasing all along towards spring.

From the start we have faithfully tried to avoid almost any figures at all, for the reason
that we did not want to mislead any one. Should we have attempted it we could surely have given figures as straight as a string, of results from this plan of management, which are hard to beat. Not for one, but severa-
years' faithful practice, showing an increase, every year, of eggs to the individual hen, or in other words, the average to each hen, knowing that if you try the plan faithfully you will do the same and you are just as apt to try it without the figures as with them.

We will say the increase in eggs, commence in the fall in November, increasing each month, more in December, January, February, March and April, with May a good second, gradually decreasing until September; September and October being the least months of the year, although with plenty of eggs in the above two months to more than pay running expenses.

The above is just as good as figures and as true as steel. Brother, we have no desire whatever to deceive you and do not know of anything that would give us more pleasure than to see or hear of you doing equally as well, it is easy enough.

The laying is done by the early hatched chickens we told you of and how to get them. We also told you it was of no use to keep up the whole year unless you had another object.

The boxes for your bonemeal are not partic
ular as to shape. We get tobacco caddies, if too high we cut them down to about four inches, nail lath flat down on top, letting project over on inside of box; that keeps the hens from flipping the bone meal out with their bills; then nail lath across each way in center of the box, to keep the hens from scratching with their feet. Should you prefer, you can make a trough, nailing lath on the edges and across the top. Whatever you use, scrape the meal from out of the corners occasionally, keep it supplied the year round with bone meal; it will take more in fall and winter, as that is the time they are getting ready; also laying. You will notice your laying hens visit it pretty regularly; also hens when moulting find use for it. When you quit putting it in your chicks' feed coops, watch them hunt it up.

We will tell you our way of obtaining the bone meal. We buy the bone meal that is sold for fertilizer, as raw, pure bone meal, coarse ground. It is easy to get most everywhere, and we have yet found no fault with it. In another place we will tell you of other kinds and sources of obtaining bone meal; having never used them we cannot put them as belonging to our plan, but you might find them to your idea. We have no doubt they are just as good, no better, nor as cheap. In buying the bone meal get the pure bone, not a mixture of bone and
some other stuff for fertilizer. It is no trouble to get if you call for it. Buy it by the quantity, or at least by the one hundred pounds, if you have to have it shipped to you, as the rate is the same on a less amount. You will need for each flock of one hundred hens, about four hundred and fifty pounds a year; make it say, five hundred. It may be you can get your neighbors interested in the business, go together and buy it by the ton, delivered. Make no secret at all of the way you manage to get so many eggs, especially in winter, for when you try this plan according to directions you are sure to get the eggs, and if your neighbors are like a great many neighbors they are sure to want to know, as they think you have a secret. It does seem it is a secret to some. It is nothing new at all, although we have given it to you in a bunch and in a shape so it is easily understood or practiced.

There is one more box to provide, or if you prefer, can make a trough for winter use, especially when the ground is covered with snow; it is for grit and charcoal, neither one being hard to furnish. If you have ever paid much attention to chickens, you have often noticed them hunting the ash pile for charcoal. They are very fond of it so we furnish it to them when they cannot get it themselves. It is very little trouble to lay up a quantity for
them. You can easily make a sieve to sift the ashes in; say a box, with neither top nor bottom, with common wire screen tacked on one side. The ashes after sieving, make good fertilizer for either putting in the hill or broadcasting. It won’t take very long to sieve enough charcoal to last a long time. For grit you can save all the broken crockeryware, grinding the same in a mill made for the purpose, answering also to grind your charcoal; or in case of necessity you can pound it up, which is slow, for the old crockery, but if you are up to business it won’t be long before you can afford to buy a mill. There is grit already prepared, on the market now for sale, but it looks like the average farmer or poultryman could furnish plenty of grit for his poultry, sharp gravel, etc., as it is only needed when there is snow on the ground a short while at a time. They are both needed for your winter layers, otherwise we would not have said a word about them. You can have a partition in your box for both the charcoal and grit.

These little tricks are of more consequence than a great many are aware of. Your poultry pension, or the amount, is governed to a great extent by just such little things, that in reality cost comparatively nothing.

In regard to the feeding of the flock, as stated before, we are up early, in fact a great
part of the time, in winter particularly, before the chickens are off the roosts, getting their bone meal boxes, water crocks, etc., in shape.

On most farms, the chickens, when fed at all, are the last thing to be attended to. That is a losing game; just as soon they come from their roosts they should be fed, by this plan they come off pretty early, going directly into the scratching pen. We have long since come to the conclusion that one certain person should attend to the feeding, watering, etc., having a regular time and system.

Have you not often heard some member of the family, way up in the day, maybe near night, say, Has anybody fed the chickens? Do you call that business? When it is one person's duty it is more apt to be attended to, sure to if they are taking any interest. Children, when old enough, are all right, one at a time, attending to chickens; but don't drive them, give them an interest, it will stimulate them not only for the present, but will give them good ideas.

You are aware hens generally commence laying in the spring, even the brush pile, fence corner stock, simply because nature provides them with the certain foods necessary for the egg. one of which is bugs, worms, insects, etc. In order to obtain eggs in winter, you may provide similar food. The best sub-
stitute for bugs, insects, etc., is animal food of some description. We could give you page after page describing certain different things that an egg contains, what a certain grain contains toward making an egg and so on. We don't propose to take your time to read such, besides it does not interest very many. We plainly tell you that how to get the egg itself, which we believe is of far more importance to an average farmer and poultryman.

Animal food being what you want to supply in the place of insects, we propose telling you what we have used, we will also tell you other substances, all being easy to get. On most farms there is generally enough cracklins to supply a big portion of the animal food. In case you run short you may be able to get them at your nearest butcher shop. Should many in your neighborhood try this plan, cracklins at the butcher shops become scarce. In another place we tell you how to obtain something else. The cracklins are cheap but they are sure hard to cut, as they must be cut pretty fine. The butcher shop cracklins are easier to cut on account of being pressed so much harder. It takes a heavy tool to cut them, we use an ax for the purpose.

Some tear the cakes up and throw them out in that shape; no use going to the expense of buying cracklins to feed in that way, chips.
old boots, or shoes are just as good, as the hens can come as near eating one as the other.

There are bone mills on the market that cut them, they have knives that shave them, so it said. We have never tried them, but may do so, as the ax cutting is a hard job.

We commence feeding the cracklins, or whatever food you use, in the early fall, when bugs, grasshoppers, etc., begin to get scarce; better a little too early than too late, as you want to start your hens into the winter laying. To do this you must commence in time, time is money in this case. You need not expect full returns unless you do this. When you refer to the feed tables given in the following pages, do your own figuring, you will find it a money making investment. Some have come to us in dead of winter wanting to know what we do to get so many eggs, then when we tell them they pull out for cracklins and bone meal, expecting to get a full flow of eggs. So bear in mind you must commence early, attend to the details in full, if you expect complete success; if you take the treatment, take a full dose.

The first of August is early enough to commence feeding the animal food in small quantities (see table). When you commence feeding the animal feed (Aug. 1), mix it with your bone meal until the nights begin getting cold, but continue the bone meal.

For feeding the cracklins, in cold weather,
we feed it in steamed grain. We put wheat, corn or oats in a pot, pour boiling water over and let it steam on the stove; when ready to feed, pour it out in a large vessel, dish pan is good enough (this is expected to be only steamed grain, not a lot of water in it, if so drain it off), mix your cracklins and a little bran to take up the moisture. By letting it set a while the cracklins become soft. This you feed every other morning in cold weather. From the tables you will see the amounts to feed, we merely tell you how to feed at this time, the tables belong entirely to themselves.

You must be your judge in a great many cases, say in regard to feeding the steamed grain, which we feed whenever the weather is cool, that is in fall; if you become interested you will do the same, while others may not take such interest and feed altogether by the tables, principally dry. The steamed grain is only for a change and you know that is a benefit, even of the same grain, although we change from one grain to another, but no mush anywhere in it.

We have a regular feeding place all the time. We take the steamed grain, drop a handful in a pile briskly. Should the ground be wet and muddy, we omit the steamed grain, feeding the animal food mixed with the bone meal, making the grain tood dry, of whatever
grain we take a notion to. According to the table, most generally wheat, that is of a morning, and in the scratching pen, also on bad days when the hens cannot get out and rustle, we scatter small grain of almost any kind, at noon in the scratching pen. In the evening just before going to roost, we feed them corn straight from the hand on the ground. It is very seldom but what corn can be fed broadcast, often all through the year in muddy, rainy weather. We feed it in the place of wheat for the evening feed, as spoken of in table for summer feeding of wheat. Some farmers think wheat expensive feed for chickens, such is not the case. Wheat is an expensive crop. To feed it to chickens according to this plan, you will realize more for your wheat than in any other way. The grain fed to your chickens is supposed to be good, sound wheat, not the rotten, mouldy refuse that anything else won't eat. Feed according to tables and see that they get good weight of some good, sound grain. You need not weigh every feed, have a measure of some kind, box, bucket or such, after testing the grain, you can feed it by measure. Some grain will not weigh out. Whenever you change grain, change your quantity by measure to correspond with your weight per bushel. Take oats, for instance, some seasons a bushel will over run the 32 pounds, more often they fall short. Some years oats are not fit to feed your poultry at all. In that case change to wheat. You can starve a
hen awful easy on such kinds of grain. When your eggs begin falling off, slip out and weigh your grain, you will soon see where the trouble is.

Often you read in the papers, correspondence from the women how they are doing with poultry. Frequently they say, the old man don’t believe in chickens, they eat too much, waste too much, etc. Such “old men” are a tough proposition. We have known such “old men”, one in particular; he raised a big racket in the family on account of the chickens. It went so far the lady quit trying to raise any chickens, not even setting a hen. Pretty soon the “old man” began to notice the children were not shoed and clothed as before, the table lacked in several things. Don’t you think they began raising chickens again, what would you have done? Now honestly, don’t you know several such old men, only they did not go far enough to choke off the supply of extras the chickens afforded without taking money directly out of his pocket.

Now in regard to the waste and destruction, it is the fault of the “old man”, if he had his grain cribbed so the fowls could not get to it, they would not soil it. If you will give them time they will eat it all and not waste a grain, but feed them as they should be, they are all right and more profitable. Some, of course,
claim they get all they want at crib, pig pen, etc. On very cold days, ground covered with snow, they sit on the roost and if by chance some one thinks of them they may throw them some corn in the snow; but when spring comes and nature provides for these poor, neglected fowls, all are ready and eager to get the eggs and market them, but no one hardly thinks of them at other times. Not on all farms is the above the case, but it is positively so on some.

On one farm, we knew of two young ladies who took week about—not feeding the hens—gathering the eggs to sell for their own especial benefit, the hens took care of themselves. Either one of the above ladies could take a flock, manage them properly, pay the "old man" for his grain and make from $8.00 to $16.00 per month. More according to their ability, less according to their disability. Have no fear of the hens, they will discount you.

Let us talk to the "old man" a while. As we told you in the start, he is a hard proposition. He says they don't pay for their feed. We want to tell him he has no other stock on his place that will come anywhere near paying like the hen. The trouble with such "old men" they expect one hen to equal one cow. Now, "old man", just try it and find out for yourself. Put the same amount of money into
poultry that you have in one of your cows, counting everything; you will soon find out what a big difference there is, and in favor of your poultry. The old man would rather sack up and haul thirty bushels of wheat to the mill or market at sixty cents per bushel, the miller making it into flour, when he could have let the hens grind it, and get a dollar a bushel for it. Taking the eggs, a finished product, to town with less trouble than he could the original thirty bushels. Say, old man, you are standing in your own light.

On a great many farms, not only the old man, but others think any kind of grain or waste is good enough for chickens. That is a big mistake. They also think they only need feeding during the winter and even then only in stormy, bad weather, another mistake. While it is true there is no other stock on the farm that will come as near taking care of themselves and still give returns, we yet say she will give more clear profit, above feed and care, than any other stock kept by the average farmer.

It is not profitable to feed and care for any stock unless you get full returns. The hen, without care will not lay near the amount of eggs she would if proper attention was given, in which case you will make a good profit.

In order to get full returns you should feed
regularly the whole year through. Do you know that some of you really feed more than is really necessary? That may sound strange to some, but it is so. We mean the stormy, cold day feeders. What can you expect of your hens when you do not try to get them ready to lay when eggs are high? Consequently you must keep them in good shape all the time.

The following tables are given for hens who are supposed to have good shelter, a place to work in scratching pen. The tables were not intended for hens that have no house or anything else, although it is more feed than probably most of them get, generally.

Take the amount named in the tables and you will find out it is not a large amount of grain, etc., for one hundred hens, but a little every day in the year, with some idea of business.

**DECEMBER 1, TO APRIL 1.**

A. M., 6 pounds of wheat (or oats).

P. M., 6 pounds corn.

4 pounds cracklins (every other day).

2 pounds bone meal (every day).

With this four months feeding you can feed any apple, potatoes and other vegetable peelings, etc., of a morning in your steamed grain, also with this four months, or any time during the year, give any surplus milk you may have. Feed the steamed grain whenever you can, that
is, every other day. After a while you may be able to fix up like "the man from the east." You can feed it under shelter whenever you wish. Nice days do not put too much feed in your scratching pen at noon. On most farms there is generally plenty of grass range. We have found it of great benefit to sow a piece of wheat, sown a little earlier than for the general crop, it makes fine picking to go with this four months of winter feeding.

With this four months you will pay close attention to your charcoal, grit and bone meal boxes, particularly in bad weather. There is nothing very hard about this four months, although it requires a little closer attention, which will repay you well, as you should get lots of eggs, at a season when they are high, to pay you big for your time and trouble. As for the time, it will take probably an hour all told.

Keep a garden rake in your scratching pen to loosen up the straw, leaves or whatever you have in your scratching pen. After your flock has gone on the roost is a good time, it will then be ready for the morning grain. Your hens generally come off the roosts pretty early, a great deal earlier than they would if they were roosting out of doors on fence or trees, as they will not have to fly down in the snow, and your glass or canvas makes it light and com-
fortable. Say, brother, you have got a snug little business "under your own vine and fig tree."

Give plenty of water and warm it whenever needed.

Of all the seasons, this is the time to get there, the other seasons, or tables for feeding, are all making ready for this one, getting them in shape, ready for business when your neighbor's hens are idle, provided they have not been attended to on the same plan or one similar. Tell them the secret, it won't hurt your business one iota.

The above feed is all you will need for the four months named, but we will state again, you will substitute oats for wheat occasionally in your steamed feed, which does not increase your feed bill. The oats are good for a change, provided they are sound and of full weight. If not, don't fool with them, for we want to fully impress it on your mind, poor oats are next to nothing as food for poultry.

Recollect, you ought to charge your poultry for everything you feed, market prices. It is no more than fair that you should deliver it, not by the wagon load, but as they need it, the same as you would do for the merchant. Fill your little grainery with so much grain, of any kinds needed, keep account of number of bushels put in; when fed out you know just what it takes. While you are doing all this charging,
don't forget to give your poultry proper credit for everything, then you will know what you are doing. You may talk as you please, that is the only correct way of doing it.

APRIL 1, TO AUGUST 1.

A. M., 3 pounds wheat.
P. M., 4 pounds wheat (or corn).

1 pound bone meal.

In most of cases, those who feed the four months previous, during cold spells, fail to feed any more until cold weather comes again. That won't near pay, that is if you are in the business for profit, nor do we know of any other case where it is the right thing to do. This four months' feed is less expensive, but just as essential. It is about the only time during the year in which they can get animal food, bugs, etc., consequently, it is not necessary to feed your substitute, but put out the bone meal. There are times when you will feed corn in place of the wheat mentioned above, when the ground is muddy or sloppy, it is much handier for your fowls to pick up, you can feed it on the short grass around your house for evening feed. The morning meal you can throw in your scratching pen, as your hens never give it up during the whole year, and will spend about as much time in there as any where else. Same with the hens with chickens. The chickens, when about full grown, run in
there out of rain the same as the older ones. Pay attention to the little details, neglect in small matters sometimes makes great loss. a missing link in any chain weakens the whole chain; so with this plan, one part depends on the other for success and the size of your monthly poultry pension. You will get plenty of eggs the year round to more than pay your expenses, even if you had to buy your grain, etc., from day to day.

Some few years ago there was a great cry about corn being too fattening; such is not the case, when fed properly. We often use it for evening feed; if fed according to the tables it is all right the year around, if short on wheat.

AUGUST 1, TO DECEMBER 1,
A. M., 4 pounds of wheat.
P. M., 5 pounds corn (wheat occasionally.)
1 pound bone meal (Nov. and Dec. 1½ lbs.)
2 pounds cracklins.

This four months is sure a business period. You will have to keep the machines supplied with the right kind of fuel as every pulley (pulley) must be started at this time.

This period's feeding almost settles the question in regard to the winter laying of your stock. If attended to properly will greatly aid your hens when molting or shedding, which is quite an item. Some people (town lot poultrymen) say molting and laying hens should
be fed differently. Not by this plan, where they have plenty of range, for you know we are out in the open.

The latter part of the summer, especially if dry and hot, does not furnish sufficient animal food, bugs, etc., so we commence on our cracklins, or substitute. You must get your hens started to laying, or under the spell, before winter sets in; if you do not, it is a hard matter to get them started in mid-winter, whatever the feed, they may lay a little earlier in the spring. For that reason, we say commence in time. This four months' feed cuts quite a figure and if you wish to keep a sure secret in regard to winter laying, never mention how you feed this period; if you do you have let a bird go. Say, don't be foolish, you have nothing to gain by such secrets. It is really true some try to keep such things a secret, when if they would stop and think they must know they are not a drop in the bucket when it comes to keeping the markets supplied with eggs. It is all right to know such so called secrets and practice them, that is the one who is at the top, but how many will do it if you tell every one you see?

On most farms the above season is when most of grains are ripe and are being, or are, harvested. When the grain is near the fowls they may help harvest some of the grain; don't
give up feeding, call them up at night and give them some grain different from the grain they have been harvesting. Here comes the same "old man" bellowing and shooing them off his shocks of grain, but leaves them still stand in the field to tempt them, and it might be long enough for the wet weather to set in and spoil them. It is of no benefit to the chickens; under our plan it our purpose to give them all the grain they need, but should they have access to such grain, feed them only at night as long as they get the grain outside, but don't make a habit of it.

In feeding the cracklins, or substitute, this four months it is not necessary to steam, although it will do no harm, and the steamed grain, in October and November especially is a good inducement to start them laying and also a good change in the matter of feeding; but if you wish to take the shortest route, take the sieve for sifting ashes and sieve the cracklins, putting the fine with the bone meal, saving the coarsest to feed with the steamed grain. You can mix the cracklins and bone meal in the bulk, two pounds of cracklins to two pounds bone meal, putting it out in the boxes used for bone meal. The above mixture is a good egg producing mixture; if it were not for feeding the steamed grain in late fall we would feed it as described.
We have given the above tables for the average farmer or poultryman, not for the one who has his poultry in little pens; but with the scratching pen the big range is not as essential as it would be without it, but on an average farm there is no lack of range.

You should get—well, now, how many eggs do you say you should get? Of course you have no idea. It all depends on the management, not alone in the feed and shelter, but in getting the early hatched pullet we told of at first. You may not have the flock to suit you, but come at it by degrees. When you get down to business, be sure and have the early hatched pullet.

The way the average farmer, the majority, manage, they get from seven to nine dozen eggs from each hen in the course of a year, more often seven dozen. You have probably often heard of your neighbor having hens that lay every day. That might be so for a few days, but not long at a stretch.

One man told us of a Hamburgh hen that layed every day for a year. The Hamburghs are good layers and a good breed for this plan, but no Hamburgh, nor any other hen, ever was guilty of such a trick. Any of them that put in one half of the time in a year are good ones, and there are some that have beat it, but only under good conditions and where there were
but a few hens in the bunch, not by the one hundred hen plan. But come to think of it, we read, not long ago, of a poultryman who got an average of one hundred and ninety-six eggs from each hen in a flock of six hundred White Leghorns. Now that is very seldom heard of, much less accomplished. We have no reason for disputing it as the Leghorns are noted layers and such is not improbable, which beats the half time we spoke of. Counting 365 days to the year, the whole six hundred went 14 days over the half time. Say, that is business and if you ever reach that number you are a good one. Note difference between the seven dozen we generally get, us average farmers, and the sixteen and one-third dozen he gets from each of his six hundred hens, but don't let that worry you, you don't need that many to keep your pension up to $8.00 per month. But you ought to get eleven dozen from each of your 100 hens; that will pay the pension and leave some, but should you keep along with the crowd, managing by the brush pile, fence corner plan, you may get seven dozen, often not that. Do your own figuring and see if this way of managing won't pay.

BREED OF FOWLS.

As regards the different breeds, we would say, if you are just starting in the business, start with the best you can get. Of course for
fresh eggs for market, you want to get egg producers, such as Leghorns, Hamburghs, Spanish, etc. If you already have chickens, build up and improve by introducing new blood.

For our own use we prefer the Leghorns, but all are not alike as to choice of breeds. You may now have hens that you think are good layers, if so, stick to them, improve until you get the average laying hen up to a good notch. Some may wish to breed for fancy stock. But with this plan it is for business, not much fancy work about it.

We first imported the Leghorns, but they were not hardy, appeared tender, although our stock at present is nearly full blood Leghorn of "our own make," built from the ground up from common stock, by getting a setting of eggs occasionally, or roosters if you prefer, you will soon have a flock to suit.

Get roosters or eggs from some reliable breeder, picking the best eggs for setting, whenever you come across the hen that lays every day, set all her eggs you can get. If you wish, you can have a small flock for breeding from, of course keeping them separate from the main flock. In that case you need no roosters with the laying hens, they lay just as well, some say better. At present writing we have not got a rooster on the place and are getting lots of eggs.
Should you keep a breeding pen you will not have to keep them shut up long, as you are not long in getting what eggs you wish to set, as by this plan it don't take many. After obtaining the amount of eggs you wish, you can let the breeding flock out with the main flock, or even when you are getting eggs to set, you can let the hens and rooster out late of an evening, as they will all go back to their own house to roost. You can shut them up for the next day's laying. This gives them exercise.

The breeding pen will appear expensive and useless to some of the brush pile, fence corner poultrymen. Keep the right kind of stock, bred to lay, and you sell enough settings of eggs to pay expense of same.

We do not aim to suggest any particular change in our present plan of management, but merely state, once in a while, another way of accomplishing the same thing, our plan in the main being correct. You are expected to make any change to suit your convenience; improving wherever the same may appear.

As we have mentioned more than once, we have found, in our locality, no inducement to set any more hens than it takes to keep our laying stock up to the proper number, not finding it profitable to raise chickens especially for the market. You may think differently; your locality may offer better inducements to
POULTRY PENSION.

raise chickens for the market. With the plan as given, you ought to have every year fifty hens to dispose of and say one-half of your early hatched chickens, which will be roosters, another fifty, making 100 head or 8 dozen. Do you sell that number by your present plan of managing?

The market, of course, is your dictator. It never fails to call for fresh eggs, if it calls for poultry. You must be your own judge whether you will supply your part or not.

All along we try to tell you how to get full returns; we will tell you of another source of income.

A few years ago, the big packing houses were throwing away a vast amount of refuse. What do they throw away now days? Well, just say nothing whatever and you have told it in full. With the average farmer it should be the same in every branch of his business. With his poultry managed by this or some other good plan, he has a field for profit. Take the manure taken out of the hen house each week, and the refuse from the scratching pen occasionally, its value is far greater than many who have never tried it are aware of. There is still another source which makes a fertilizer equal to the best on the market. We often notice our hens are very destructive to young birds, toads, etc. Just let a young bird
get out of its nest, they will go for it immediately. We did not like that part of the game and could see no reason for their being such cannibals. We at last came to the conclusion that it had been taught to them the same as some hens are taught to eat eggs by throwing the egg shells out to them; when cleaning chickens for our own use we threw the entrails to the other chickens. We have no doubt but right there we were teaching them the habit of eating birds, or anything that satisfied the appetite in that line. We thought at once of burying the entrails, feathers, feet and head. On second thought we recognized in the above a very valuable fertilizer, provided it was manufactured so it could be properly handled. You know that is hard to beat, and on every farm there are the materials at hand for manufacturing the same. Most all of you know how to make the old time ash hopper. Well, make one, or get an old barrel, box or such, sieve your ashes to get the charcoal out to store away for the chickens in winter—say, they eat charcoal the year around—put a layer of ashes in, and when cleaning the chickens, or when through, pour the whole mixture, entrails, etc., and bloody water, onto the layer of ashes, scattering it, then cover with another layer of ashes, and you have your manufacturing plant going. There may be other refuse to put in,
the more the better. Keep it moist enough for the ashes to work, not too wet, as you do not aim to make a liquid fertilizer, but a compost. Should it run, put something under it to catch the liquor, pouring it back on the mass. Should it become too dry, moisten it up; chamber lye is fine for the purpose. Work it over occasionally; after setting, say a week, take a spade or shovel, mixing it well, after while you have a sure enough high grade fertilizer. You must use it with judgment, put it in the hill for corn, etc. Five acres fertilized will equal, or beat ten acres not fertilized, and you have it of your own make, as is the same with the other manure. Forty acres of land devoted to poultry, using the manure as above described, for raising their and your own food, will beat oceans of eighty acre farms as now run. Some people think land not fit for anything else is just the thing for poultry. You average farmers know better, but you can improve any of it with poultry, that is if you use all the manure they furnish. Every hen on on the place will produce enough fertilizer, and of the best, every year, to more than raise what she eats.

For curiosity, my brother, let us talk with you on that score a little. It has been counted for years that each hen will consume in one year, one bushel of corn, or its equivalent.
That may be all right for one hen, but suppose you had two one hundred hen flocks, or two hundred hens; it makes no particular difference as to the price of corn, as to the quantity your hens eat, they should have the same amount at each feed, let it be high or low, let it be corn or wheat.

When you want to lay in a supply of corn for your teams, not having sufficient on hand, you try to purchase on the best terms you can, for that reason you most generally purchase in the fall at gathering time. When you get for the chickens, do the same thing.

Last fall all corn sold, at gathering time, at 25 cents per bushel. Your hens, by this plan, always have a little money on hand. You take their own money and purchase their 200 bushels of corn, giving for the same $50.00, or 25 cents a bushel. By this plan of feeding, they won't eat a bushel of corn apiece, but they may consume the equivalent in something else, say, wheat, oats, bone meal, animal food, etc. You are supposed to purchase the above in quantity and at the proper time when the market is right. Of course you are expected to raise all the grain, or most of it, but what we want to tell you is this, corn is now selling from 40 to 45 cents per bushel; are you going to charge the hens 40 or 45 cents a bushel for it when she could have bought it with her own
money at 25 cents, enough to do her a year? These extra touches are for your own benefit. By taking the tables you can figure it all out, but the labor. On very few farms is the labor taken into account, but it should be. The poultry business is not as some would suppose, simply a sitting down and folding the hands. True, the labor is not killing hard, but it is there all the same. You can compare it with other labor done on the farm, a great deal with no profit at all attached to it. The "old man" spoken of will plainly tell you it don't pay to hire help on the farm. He thinks a heap of his old woman and girls, but from outside appearances, only for what work they can do, as he has them out in the fields working. For a change we give you a piece of poetry that exactly suits a big majority of such old men.

"ONE OF A THOUSAND."

BY MRS. M. A. KIDDER.

"She's one in a thousand,"
Said old farmer Grey,
As he waded knee-deep
In the sweet-scented hay.
"You won't find her like, marm,
From here to the town—
That woman out there
In the calico gown!
"You thought 'twas a servant
A yoking the steers!"
And the old farmer laughed
Till he started the tears.
"And you was half right, marm,
For, 'twixt you and me,
She has worked like a slave
Since the year forty-three.
"If you could have seen her
That morning in May,
When I stopped at her father's
And took her away—
A likely young bride, marm,
So blooming and fair,
And chipper as that little lamb
Frisking there!
"You wouldn't a thought it,
Now would you, friend, say?
As you look at her wrinkled
And brown face today?
Her hard, bony hands, marm,
Her back like a bow?
Ah, she's one in a thousand
To labor, tha't so!
"When first we were married,
All, all for my sake;"
And here the old farmer
Leaned hard on his rake,
"She gave up her music,
POULTRY PENSION.

And gave up her books—
No nonsense about her,
You'd know by her looks!"

"And if you should lose her?"
I ventured to say.
The old farmer sighed
And looked down at his hay!
"'Twould near break my heart."
He replied with a tear,
"And then help's uncommonly
High about here!"

—New York Ledger.

Well, the girls, or mother, could take a flock
of chickens, attending to them with half, yes, one-tenth of the labor, and do well, even though they might have to pay the "old man" for his grain to feed their poultry. He would probably want to borrow the balance to hire his help, and of course never pay it back, and yet growl that there was no money in chickens, but mother and daughters would have a far easier time.

A great many girls are now working out for just such a purpose, to help keep up the farm. It is the same with girls as it is with boys, some don't care the snap of your finger for poultry; those who do should be encouraged. In fact, in some families there is not a single one from the "old man" down, who pays much attention to poultry. No longer than yester-
day we heard a lady say she was going to raise 300 young chickens this year, and as true as can be she did not have a hen house or chicken coop on the place. She raised Cain for a new smoke house and summer kitchen, got it, too, but does not need a hen house, or at least no complaint about it. But she is fortunate in way of brush piles, big barn, straw stacks, etc.

MARKETING THE EGGS.

The first consideration is the quality, many think it is the quantity; quality is more in demand in every line of produce today on the market than ever before; to the average farmer an egg is an egg.

Do you know eggs are spoken of as being rich? While we are not surprised at any new thing that may happen in the poultry business, we always watch where it originated. Keep your eye skinned and see if there won’t be some brand of food gotten up to produce rich eggs.

There is a difference in the egg produced by the well fed hen and the one on half or no rations at all. There is no disputing the fact, the beauty of the whole thing is, the average farmer is prepared to feed such food. The plan as given you is for producing eggs of as good quality as anybody’s and, especially in good quantities, also some markets or locali-
ties want the shells a certain color. Now how about that? The average farmer will hardly be bothered in that respect, unless it be in a case where he has regular customers, serving them something on the plan that a milkman furnishes milk. Should they take a notion to different colored eggs the producer would have to furnish them or lose the trade, but for the average farmer in the main, the general market is his port of entry. In a few cases, near mining or manufacturing centers, large cities, etc., there may be established an egg route, having regular customers. You yourself, will have to be regular, also. At no time of the year are you to run short of eggs; if you do your regular customer business is gone up. You can not depend on outsiders for eggs, as you can in no wise guarantee anyone else's eggs and such a route has to be furnished with the freshest of eggs. In the spring you may have lots of eggs, but it takes good management and good judgment to supply such a trade the whole year. In the most of cases, the average farmer takes his eggs to the country store, taking them up in trade, which is all right, so far, but when you try this plan according to rule, you are going to get more eggs than you ever got before and may not be able to take them all up in trade.

All over the country there are plenty of cash
buyers, in the future there will be more of them, ready and eager for your eggs, and the farmer that is awake is the one to profit by it. But you are sure to have to quit the business unless you have fresh eggs. Before long no other egg goes. When coming across a nest of eggs laid out, never mix them with other eggs known to be fresh. Some times a neighbor may suggest going in together and shipping. Never ship unless you can ship a guaranteed case of fresh eggs; in that case you can not guarantee your neighbor's eggs, nor can he yours. Feel your way before commencing it.

In the winter time an egg may be called fresh for a week from the day it is layed, in summer, 4 or 5 days, and then it begins to become stale.

Should you manage right, keep on and get up to the two hundred hen plan, you can easily get a case of thirty dozen eggs in, at the lowest calculation, four days. If near a shipping point, you might ship a case, guaranteed fresh, which you can easily do by this plan. Mark them as such and see what you can do. Under no circumstances put in a doubtful egg: the sooner you can see the advisability of handling only fresh eggs, the sooner you will command better prices.

All produce, no difference what kind, is graded, so with eggs; there is not much mid-
dle ground in the egg. It is simply fresh or stale, good or bad. Notice in the market reports the following:

"Quality so poor, dealers do not care to handle it."

"The best of near by points stock, higher."

"The supply was light of fresh, salable, on basis loss off."

"Quality of stock poor, loss heavy."

The above tells just what is on the market; who is to blame? First the producer, in not selling his stock (eggs) when fresh. Next, the merchant for holding them so long before shipping. What are you going to do about it; do you notice what was said above, "Quality so poor dealers don't care to handle?" After while you will not hear, they don't care to handle it, when you take your doubtful eggs in they will say, the dealers positively won't handle it. So get on board if you wish to be in front. The whole thing is on the move, just stick a pin right here. The above conditions are sure to exist. They don't like to handle them now, shortly they won't; and then where will the brush pile, fence corner poultryman be?

As stated above, all over the country there are cash egg buyers. Ten or fifteen years ago did you ever hear of us poor average farmers ever being offered cash for eggs? What
brought those cash buyers amongst us? You may not think think of such things. You yet have time to take notice of the progress of the egg business with much less trouble than before as there is but one direction to look in—the "*Fresh Egg Route,*" and to think some will say the poultry business is overdone.

We have often heard some of the country merchants complain about this "loss off" you notice and hear of, claiming the last shipment they made the loss was so heavy that they could not pay much for eggs this time. Right here there is a screw loose, the merchant candles your eggs (no, not candles. be safer all around if he would), but tests them with a tester, to our notion of not much consequence, only to tell a real bad egg from a tolerably fair one, not distinguishing the genuine fresh one at all. At any rate, if he ships them out pretty soon after receiving them, the loss ought not to be so much. We are an average farmer (hardly that) ourself, but the eggs are very nearly lost, in a great many cases before the farmer ever starts to town with them. The commission merchant gets the blame, in most cases, for this last "loss off", some even claiming he keeps it as a part of his profit. Generally speaking, they are a high class of men, and they sure have a hard job handling just such eggs as are first taken to town by us
average farmers to the average country merchant and tested by not an average tester. Most eggs taken by the average farmer are gathered from all over the farm, may be have been held for higher prices, two weeks or more, part the time with a hen on. Eggs have been known to hatch on the way, or on the market, in the hands of these very commission men, and you know it takes three weeks at home for the purpose. The commission man is to blame, I suppose. When you come to keeping the eggs for higher prices it is generally a losing game, on most average farms. Shove them into market fresh. If you cannot get proper credit at home for guaranteed fresh eggs by the case, try shipping. Cold storage cuts a figure in holding eggs over, but when they get into market and run up against the fresh egg, you hear the following: "Choice, fresh eggs sold 25c, but cold storage held or doubtful stock would not bring anything like that figure." In justice to the cold storage man, he doesn't try to compete with the fresh egg, he is only buying them up so when he catches the hens napping, in winter, he shoves in his stock. In some cases the market is glad to get them. That is a trick in the trade, not a very old one either. As we told you before, keep your eye skinned and stay with the procession; whenever they try to turn the trick on the old hen, they are
not in it at all, she holds the trump. No imitation, but the genuine fresh egg is the only thing. Where, or what have you got to do with it, you average farmers? You are right next to the old hen, for without you there is no egg market to talk about, you create the supply, that is the majority of it, and always will, but don't neglect your opportunity; the brush pile, fence corner poultryman is doomed.

DISEASES.

Right in the start we will have to admit that we know practically nothing about it, that is as to any cure, unless it be the steamed oats we speak of later. Our experience has been that the fowls kept by the plan as given by us, have been healthy.

Several years ago, we were in a bad state of affairs, some kind of a disease struck our fowls and struck them hard. It was called chicken cholera; it may have been, but we have always believed it was lice that caused it, for they had lots of them, house, nests and all, covered with them. We lost a great many chickens, but we got rid of it, or quit. We killed some, quarantined some and had a general cleaning up. In those days we did not oil our roosts at all, nor did we clean out the hen house very often, which we have faithfully done since, and have had no trouble. We never hand a case of roup that we know of,
and from all accounts of the disease, I guess that we would have known it. We are very particular in regard to drafts in cold weather in the roosting room. The roosting room, if protected as we have described, has no immediate contact with the outside, except on one side and the roof, which can be protected if necessary. In a cold climate, double it, or cover with roofing felt.

Our idea is that half the so-called diseases are caused from filth and lice. We sometimes have noticed sulphur-colored droppings under the roosts; being afraid of cholera, we throw air slacked lime on it, more often take it out and throw it on the garden.

An old lady told me that steamed oats would cure the cholera every time. We have had no cholera since to try it on, but if a hen ever looks bad, or wrong in any manner, she gets steamed oats. At any rate we have adopted it as a ration in our feed table, changing occasionally to wheat.

We don't feed any preventatives at all, but we believe a good way of feeding is a good way to prevent several things. We have noticed a lot of different things put in the water, at different places, to keep off the cholera. Sometimes very little water was in sight, but the other stuff was there, poke root, white oak bark, blue stone, common, bottled blueing, etc.
POULTRY PENSION.

etc. Whenever they thought of giving the hens water, it was poured in on that stuff and they call it a preventative for disease. Many are the farms where poultry seldom ever get a drink of water only when it rains, and we have just finished telling you that the market for fresh eggs depended on the average farmer, or do we count them as not average?

Don't fail to give plenty of pure, fresh water every day in the year, in clean vessels, leaving out the stuff named above, it is of no good on earth. If you manage by this plan, or some other good plan—we don't pretend to say this is the only way; we do say for one who does not know of any system at all, it is just the plan to jump at.

There is a habit which some call, or rather class among diseases; it is egg eating. In many cases it is taught to the hens by the throwing out of egg shells, especially just after breaking the egg for house use, and tossing the shells out of doors, which is very common. It looks like they would soon learn it is not a good thing to do, but they do not, having practiced it all their lives, are still at it. Lay the shells on the hearth of your stove, or in a pan in the oven, letting them heat, not burn, until they crumble easily; mash them up and scatter them on the ground or in the scratching pen for the chickens; don't put them in the bone meal
POULTRY PENSION.

Some hens seem to take to eating eggs and are hard to break. Whenever you catch one certain hen eating eggs very often, the best idea is to eat her, the sooner you get rid of her the better it is for the balance of the flock. By feeding the right kind of feed there is not much trouble on the egg eating score. Half fed, or not fed at all, hens, are worse than any other. By eating one egg they may be able to produce another, but it is not profitable as they will only come out even; so feed them egg producing food, according to the tables, and you can get the finished product for your pay for your food and labor.

Give the poultry good care and attention and there is no more danger of disease than with any other stock.

TWO HUNDRED HENS.

We hardly know how to approach the two hundred hen plan as we have been talking to you altogether on the one hundred hen plan. You know as well as anybody there are many who will not manage 100 hens and get full returns, but for your especial benefit we will tell you something of the two hundred hen business, but don’t get excited and go into it until you are perfectly satisfied you can master the business. It is not the number you keep at all; some may have the 200 hens now, while if they only had 50 they would get more
clear profit.

For the 200 hen plan, everything is, of course, double. Twice the amount of house room, etc., but as we told you in the start you need not abandon what improvements you already have, add a shed here, an addition somewhere else and so on. If you build a new house out and out you can't beat the plan as we have given you, but don't attempt to run a 200 hen business in a 100 hen house. Don't think because we tell you of one thing more than the one time that you are hard to make understand. Take the book all through, make a note of each point where we have cautioned you so often. If you don't succeed, or are not doing as well as you wish, look up those oft repeated points and see if you are not hung up on one of them.

At one time we thought we would put up sign boards all along the route, but have just made them so plain that you can tell right where are to be put. Before proceeding, let us tell you the 200 hen business is no hard proposition at all, that is for you, but your neighbor might not do so well. You say you are not your neighbor's keeper. Help him along if you possibly can, it will benefit you and the whole neighborhood.

Notice in the poultry and farm and poultry papers and see what certain counties are doing in the egg and poultry business. See if
they don’t get better prices than you do, in a neighborhood where but a few produce first class poultry and genuine fresh eggs; egg and poultry buyers hunt such places. If we knew the exact location of your farm and farm buildings we could tell you more particularly about the location of your two houses, as it is we will but make suggestions; but will most emphatically say if you really mean business and aim to attend to the details, there is not much show for your losing anything by making the houses substantial, neat, well painted, etc.; the hens will soon pay for it. You may not be able to do it all at once, but begin with the intention, it will add to the appearance of your farm, besides paying more, counting the capital invested, than any other improvements on the farm. They are permanent improvements and if properly put up in the start, will not have to be replaced soon.

It is not necessary for us to attempt to estimate the cost, as you are not compelled to use any particular plan or material. You may have some building already on the place which can be worked over to suit the purpose, or some lumber at hand that would do, but be sure and have the ground room for scratching pen at each 100 hen house. We contemplate building another house by the plan as stated, fixed up in fine shape, but we do not expect
one more egg from the fine house than in the first house, built of common barn siding, roof of same, and painted with mineral paint. The hens don't care a copper so they are comfortable; but before we forget it we wish to tell you the hen is a sure queer bird. Paint the houses at each station a different color and see how soon they notice it, each one going to her proper house.

The location of the two houses has something to do with the management. At first thought you might think to have them as far apart as possible; that might do provided they were out of sight of each other, out of hearing distance or fenced apart, which would be necessary in case you had another two flock of 100 each, but we will only talk of the two 100 hen flock. If you go any deeper it's your look out; be careful when you go to expanding, it is risky in almost every case, let alone poultry, but it is sometimes advisable. If you run your 200 hens up to the notch, and still improving, you are almost sure to expand, and then what!

We prefer the houses close together, not jam up: "the man from the east" is working them on a good plan. You have to feed them altogether so you had just as well have the houses close together, for they will all come if they see or hear you. Some argue that 200 hens are too many for one flock, so say we, in one
house, especially a 100 hen house, but it is no trick at all too feed 200 hens out of their houses on the ground. Just stand in one place and throw the grain broadcast over a small space; don't throw one handful and watch the hens pick that up. keep it going, watch where they are cleaning up the fastest. The above is for corn. Should you take a notion to feed wheat outside of house, in summer, just trail it along in a circle big enough for them to get around it. In winter you will have to do most of your feeding in the scratching pen unless you get a move on yourself and clean the snow away from the house. Manage just as you did your 100 hen flock when you first went into the business for profit, only a little more so. When running a 200 hen flock, if you expect to use the eggs for setting, it will take several roosters and they cause a heap of bother, more particularly in winter, when the flock uses the houses during the day. When you get up the 200 hen flock you can surely afford a breeding pen, you know it don't take so very many eggs to set, considering the size of your business. You only want 100 pullets each fall and you ought to get them easy out of 300 eggs set. With a good breeding pen you can build up some trade in your neighborhood selling eggs for setting. When you also reach perfection with your 200 hen flock
you will commence thinking of an incubator. Well, a good 200 egg incubator run and managed with the same energy, should enable you to tackle the 200 hen plan, it being sufficient to set it only twice to keep your layers fresh. Should you undertake it, the first thing is a reliable machine, and you can only get one of a reliable firm. Don't go for one because it is cheap, but of course get it as reasonable as possible. Get a good brooder also, that is of more consequence, to very many, than the incubator. By this plan, the chicks ought all come off in April and May, two good months for raising chickens. Read your poultry and agricultural books and you will find lots of good suggestions on raising them; that is for warmth, etc., you can't beat the plan already given for feeding them.

Only when raising them in a brooder, you are to supply them animal food and grit. You will find from time to time various suggestions in your papers that will equal, and you may think beat ours; go for it, that is what makes the thing go. We don't care how near the head of the procession you get. We simply want to get you started in on the tail end before the whole thing moves off and leaves you. The average farmer and poultryman belong in the front. Some are away up now, but for the lands sake, look around and see how many
you know who are being left fast. When you get to talking to them, tell them if they can’t do any better, build a straw shed for their hens to scratch in, even if they have to roost out of doors. We don’t like to mention it to them, they might get offended. Let them have your book to read if they can’t afford one. Anything to start them, it’s for their own good.

SUBSTITUTES.

There are various substitutes for furnishing the animal food, bone meal, etc. We don’t know much about them from actual use. We used beef meal a short time on account of the cracklins becoming scarce. You can get it from same parties you get the bone meal from, but you cannot mix it with the steamed feed: of course you can but we believe it is better mixed with the bone meal as described in the table.

There are bone mills on the market for cutting or shaving green bone as it comes from the butcher shop, but like the cracklins, will be hard to get when many are wanting it, unless in large towns and cities.

In some sections, rabbits are plentiful enough to supply meat in winter. Boil them, season as you would were you going to eat them yourself, chopping them up fine, bone and all, steaming the grain in the water they were cooked in. To some, the rabbit may not seem like the proper thing; to others, it is just the
the thing, as there are localities where it is no trouble to get them, sometimes catching enough to last a long time, during a big snow. The beef meal, in the long run is the most reliable, as it is no trouble to get. Now it may seem extravagant to furnish animal food for your hens; we will just say it is far more extravagant not to furnish it, as it is a dead loss, for you cannot get full returns without it, not only once in a while, but regularly. Some have tried it occasionally, once or twice during the winter. Regular or not at all, that is the plan all through; the investment is something like laying down a dollar and taking up two.

There is also, on the market, granulated bone, about the size of wheat grains or larger, which is fine, but for the average farmer the bone meal is cheapest and, from our experience, answers the purpose. The granulated is claimed to be green bone; we hardly think it is, in every case, but believe it is all bone, that is all we have handled, but what it may be after while is another thing. The bone meal we speak of is sold as pure, fresh ground; it may have been when ground. In buying any of it you want to buy from some reliable firm.

There is a brand we intend trying, it is sold as pure flesh, blood and bones, if so it seems like it ought to be very near what we want.
At the present you will be all right with such as we first mentioned, and when you begin expanding, just keep posted with papers, and if you don't find enough to satisfy, you are amongst the first. Be economical in buying but don't try to be economical by not buying at all.

The Man from the East.

For an example, we give you a partial account of the operations of "the man from the east." He formerly worked in a manufacturing establishment in a northeastern state, running or tending a certain class of machinery. The proprietors, from time to time, have been adding other machinery, making it so the one man who formerly tended one machine now tends to three. His health began to fail; was in one strike; he began thinking of other machines being put on to replace more men; his health also beginning to fail, he thought he had better begin making other arrangements while he had a little money saved up, knowing if he lost his job his money would not last long.

He corresponded with the land agent of the Frisco R. R. in regard to land in Southwest Missouri and Arkansas. During a shut down of the mills, he pulled out for Arkansas. He says it was a hard pull, as he hardly knew what was going to become of him. He was
convinced he could not long remain where he was.

He landed in Southwest Missouri, just over the state line from Arkansas. He bought forty acres of land near a railroad station, paying $320.00 for the same. It had a pretty fair box house on it, a log stable, 22 acres fenced and broke out, the balance being covered with good timber. He built a log hen house 20x30 feet, with the help of his good neighbors, it cost him very little cash. He bought fifty hens, as good as the country afforded, which was far above what he had expected, set out three acres of strawberries, twenty-five apple trees, with various other small fruit. The first year came very near doing him up. His wife could hardly stand it, being raised in the east and coming to that "wooded country" it was sure hard to stand. Now it is all changed, neither himself nor wife cares to go back.

His stock now consists of 196 laying hens, his first poultry house; another built of pine lumber, 20x30, sawed right there in the neighborhood. There is a stone foundation under his new hen house, the stone also gotten close at hand.

His two houses are 30 feet apart, with a covered run between the two, 12 foot wide, with door connecting each house to this run.
It is used for feeding purposes in bad weather, mostly in winter. There are hinged troughs all around this feeding room, the sides of house making one side of trough. By unhooking at each end and center they are easily let down for cleaning. On south side of this run there is plenty of light and sun, having light glass and oiled muslin in plenty. The above run makes a fine place for feeding the steamed grain, in the troughs around the sides. All the above buildings have eave troughs for running the water away from the houses. To come right down to the point, everything is in good shape.

Now we come to a new idea of his own get up. When he first undertook the business, he knew very little about chickens. As he has to have 100 pullets every fall, it is a hard matter to pick out what he wishes to discard every fall, as they are now all full blood Brown Leghorns and look almost exactly alike. He is starting two breeding pens, one of Brown and the other of White Leghorns, one house to be whites and the other browns. One year set all browns and the next year all whites. By that means he says he will have no trouble in picking out what he wants to dispose of. If there is no sale for the eggs for setting purposes, he lets which ever pen he is not using run with the main flock.
He prepares his oiled muslin in the following manner:

Stretch the muslin tightly on a frame the size you want, get one quart of linseed oil, one ounce of sugar of lead and three ounces of rosin. Powderize the sugar of lead in a little oil and add it to the other materials. Put all into an iron kettle and, heat it until the resin is dissolved and all is thoroughly mixed; apply while hot. At the end of five years, he says he is all O. K. He is head boss, runs his own machine, has his own living, butter, milk, vegetables, fruit and honey, as he now has fine bees.

He thinks his section of country will soon be noted for the poultry business, the climate alone being a great inducement, to say nothing of cheap land, building material, etc. Transportation to market is ample, with talk of more routes being laid out. At present, there is a pretty good market, winter resorts using a good supply of both poultry and eggs, with egg buyers by the wholesale. At any rate he thinks he made a safe venture, having plenty of everything, good health, with two fine baby boys.

My reader, don't you think a man of the above type is a "winner" most anywhere?

He is talking of expanding, purchasing a 200 egg incubator, enlarging his flock, etc. It
is almost certain he will succeed, the firm that sells him an incubator and brooder can rest assured that the children won't run it; all the better for them, as a machine in such hands is a good advertisement.

THE MAN FROM THE WEST.

This man was born and raised in the west, or rather South-west. His parents were wealthy. The boy was not a complete success (according to our plan) in the city in which his parents lived. They moved to the city from a fine farm to "educate their children." They, him, or some one, concluded he was only fit to make a No. 1 poultryman. We have often thought it was against his own will.

They purchased land in a near by county and set him up in the business. Let me tell you there was no discount in the "set up." He had everything you ever heard of in the business, as far as fixtures are concerned, incubators, brooders, houses, glass and wooden, heaters, etc., he and his business were the talk of the whole section, and are yet. There was one grand mistake in the start, there were no children to run those incubators and they would not, or did not, run themselves, and they had a fair and impartial trial, as he left them entirely alone, while he spent the greater part of his time in a near by town, telling the boys just how he was going to stampede
the broiler market, and the boys all thought a great deal of him and always will, as long as the old folks at home foot the bills.

After cooking a batch or so of eggs, smothering or starving any chickens he may have hatched, he concluded the incubator was not reliable and gave them up. He then went after the fresh egg market; he served it just as he did the broiler market.

At last accounts he was still in the chicken business, drawing regularly on the old folks for funds to keep him (and the boys) going. The markets that he was going to glut remain the same as before. Take your choice.

THE END.