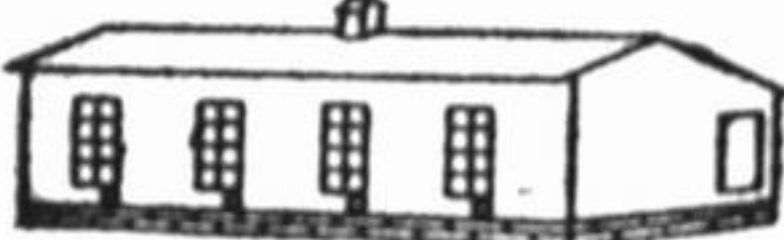


FRESH AIR WITHOUT DRAFTS

Poultrymen Beginning to Appreciate Advantages of Open Front Type of Buildings for Fowls.

Poultrymen are beginning to learn that if they have a house all her own, whose side walls are made of feathers, the best non-conductor that she can get, and that if she is allowed to have plenty of oxygen to burn up with the carbohydrates of her food she will very easily keep herself warm in almost any reasonable temperature. The only practical way to give her this very necessary fuel is by giving her plenty of fresh air, but drafts always mean roup, and every poultryman knows what that means, writes Ellis Santee of Essex County, N. Y., in Farm and Home.

I think all are coming more and more to appreciate the open front for fair weather, with muslin to cover the opening during bad weather. This means that the rest of the house will have to be as tight as possible in order that there may be no dangerous drafts. Experience has also shown that it is well to make the front tight for about two feet above the floor. Everyone has his own particular ideas about shape and size. I like best a square house, with the roof as low as convenience in doing the work will permit. Our most satisfactory house, as shown in cut, is built on the continuous house plan, 20x20 feet, with the eaves 6 1/2 feet from the ground in front and no eaves at the back, the roof coming down even with the back of the house, which is 4 1/2 feet high. The roofing material extends to the



Santee's Model House.

bottom of the sill. This gives us a double pitched roof, with the maximum of head room and a minimum of air space.

We are satisfied that concrete is the ideal material for a poultry house floor if it is properly constructed. It must not be laid in close contact with the ground unless it is insulated by putting in a thickness of roofing material to keep down the dampness. Tar felt is the most economical and is effective. A foot of small stone is best.

It is important that the partitions be made solid at least as far from as the door, and at least two feet high the balance of the way to prevent drafts.

If possible to have the yards in the rear it is well to have the windows made in one sash, extending from the roof to near the floor, hinged at the side next the partition, to be used as a clean-out door for taking litter in and droppings out. It is important that there be some glass in each room, even though muslin be used. This window should always be in the southeast corner of the room, so that you get the greatest amount of sunlight early in the morning.

The walls of the house should be not over one inch thick and covered with some kind of roofing material to make them tight. Matched lumber will shrink and make a chance for drafts that must be avoided. Roofing boards, planed on one side, put on with the planed side inside and covered over on the outside back and ends with the roofing material are economical and satisfactory. We like tar felt—some object to its color. Whatever is used, the three walls, roof and floor should be tight. The old idea of making the walls double thick with sawdust or building paper between made a fine condensing chamber and a damp place that is unprofitable for poultry. Dry cold is far preferable to damp warmth.

The tendency all along the line seems to be toward larger flocks on account of the labor problem. One man will take care of as many hens in a large flock as two will in small flocks. Thus far we have not gotten beyond pens holding 125. The question of free range will largely influence the size of the pens. We prefer to fence the garden rather than to confine the hens except during a very short breeding season. Even then it is better to confine the ones not in the breeding pen and give the breeders free range. Of course, where one breeds more than one variety this is out of the question.

To sum up, then, make the rooms square, large, tight on every side except above two feet from the floor on the south side. Make the floor of concrete and get it up off the ground.

Watertight Poultry Houses.
Poultry houses may be made watertight by placing dirt or sand floors on a good concrete foundation, and then they can be readily cleaned; in stables wooden floors on concrete, while covering more than the ordinary floor, will keep out the rats. Galvanized wire netting with a half-inch mesh will prevent rats from gnawing the wood beneath granulated poultry manure and manure buildings, but the granulated manure will need to be covered with a layer of dirt. Do not use any other material. Do not



DUCK RAISING IS PROFITABLE

Capital of \$1,000 Will Give Excellent Start—Business Requires Care and Watchfulness.

For breeding, ducks and drakes are better in their second year.

The duck laying season generally begins in February and ends in August, although the Indian Runner ducks are credited with being year-round layers.

Hallock estimates that it costs, all told, 12 cents a pound to raise ducks up to the market age (ten weeks). This includes the cost of feed, help, marketing, eggs, insurance, etc. All over the 12 cents is clear profit. From February to May the eggs show the strongest fertility.

John Weber, the well-known duck raiser, in an address before the Ploughman Farmers' meeting at Boston some years ago, said if one owns the land \$1,000 capital will give a start in the duck business. Such an amount, he said, would be sufficient to cover all expenses, buy two incubators, a flock of about 30 ducks, a house for the breeders, a brooding-house and heater, feed boards and water fountains, wire fencing, etc. Such a plant would keep one man busy, and the future growth of the plant could be built on the profits.

The point to be remembered and strictly followed is to begin small, earn the lesson well and use every effort to get good results. This will require care, watchfulness and well applied business principles. The duck business is of such a nature that if rightly carried on it is very profitable, but disastrous if neglected.

TO CARRY EGGS SEPARATELY

Little Box Will Be Found Useful for Other Purposes Around Farm and is Easily Made.

Where trap nests are used with a large number of pens sometimes it is desirable to keep the eggs of each pen separate, as they are gathered. This is easily done in a carrying box, such as is here shown. This box is made of light wood and will hold three



An Egg-Carrying Box.

ty eggs. The box may be numbered on the end to correspond with the pen. Boxes of this style will be found very useful for many other purposes about the farm, especially for carrying vegetables in from the garden. As shown in the illustration this box is simply constructed and may be available on any farm.



Feed before you water.
Good food is economy.
Oyster shells are not good grit.
Too much soft food is not good for the chickens.

Ventilation is more important than heat in the poultry-house.
Watch out for lice, and grease with lard under the wing and top of head.
Throw your ashes into the poultry house and watch them enjoy themselves.

Fine gravel is not the proper grit for poultry. They want a sharp material with which to grind their food.
The incubator should be located in a room where the temperature does not vary much during the day or night.

Eggs will become fertile in from four to six days after mating. The effect of mating will continue several months.

It is necessary to feed the breeding ducks liberally, yet at the same time feed so as to keep them active and healthy.

The fowls need clean, dry, comfortable quarters during wet or cold weather. They will pay for that kind, but no others.

The eggs from matured hens will hatch better and produce stronger chicks than the eggs of pullets. They are usually larger, too.

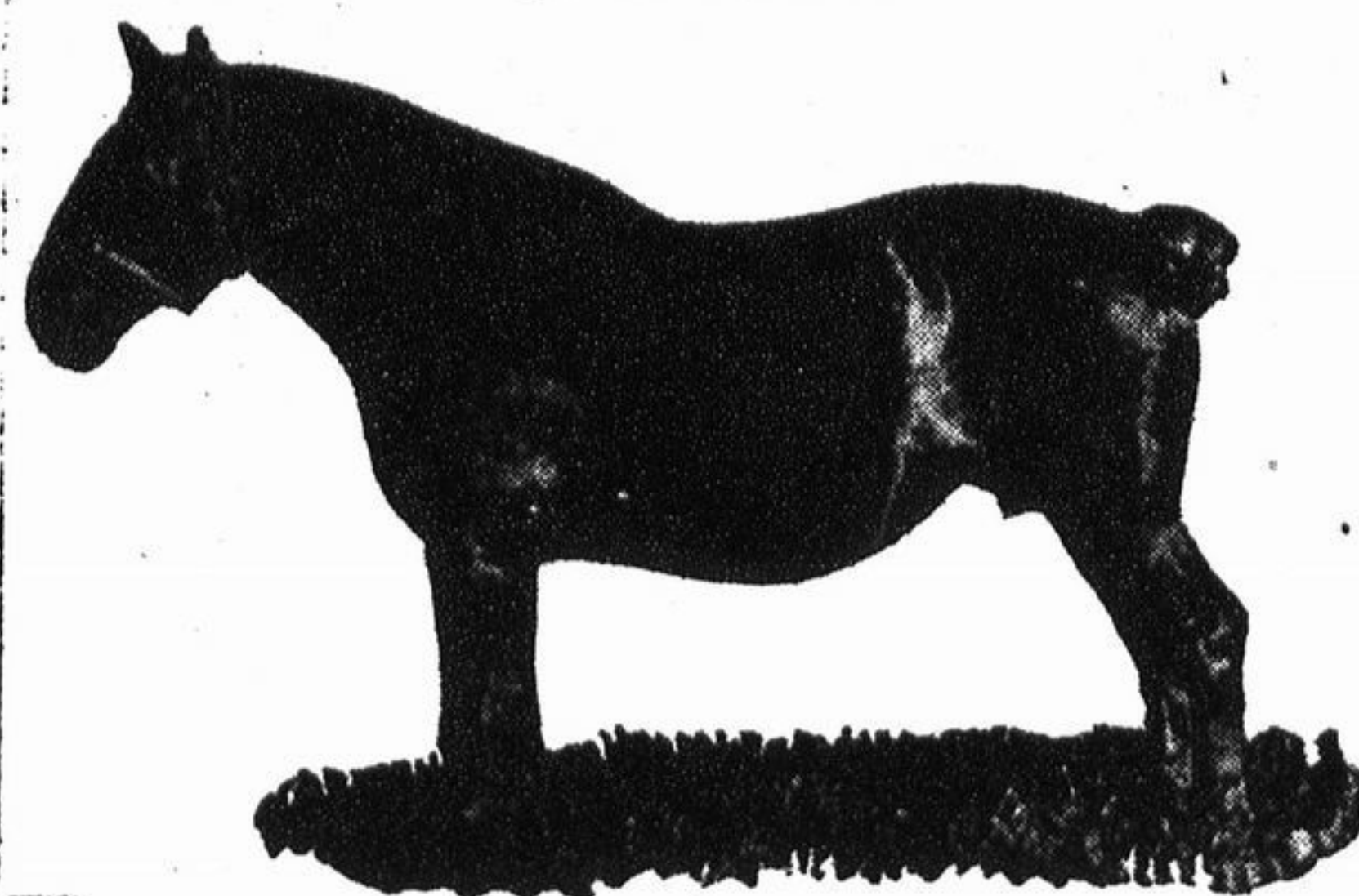
The best roosting place for young turkeys is on branches of trees. They will not suffer from exposure, and the open life will make them strong and healthy.

If one begins with the chicks, does things with deliberation, never makes a sudden and unexpected movement, even the most timid breeds will become tame.

The white-feathered broilers always have the more attractive appearance in market, as the pin feathers do not show as they do in dark-plumaged birds.

Stalk stale bread in sweet skim-milk, press out the milk as completely as possible, and feed the chicks. Also keep chicks warm before they are set; without it the chicks cannot grind their food.

COST OF HORSE LABOR THE LARGEST SINGLE ITEM OF EXPENSE ON A FARM



One of the Imported Percheron Mares Owned by the University.

By W. F. HANDSCHIN,
University of Illinois.

That the cost of horse labor is the largest single item of farm expense does not seem at first thought to be true, but a little careful study of the factors involved show this item to be surprisingly large, and of far greater importance than is generally recognized.

While a large percentage of farmers, without giving the matter any definite consideration, would say that they can keep a work horse for \$60 or \$80 a year, it is safe to say that on nearly all of our corn-belt farms this estimate should be increased by from 50 to 75 per cent.

Just what the value of the mature farm work horse is in this section cannot be accurately learned, but on most farms an estimate of \$150 seems reasonable. On this basis we would have the following fixed charges: Interest at 6 per cent, \$9; figuring the average working life of a farm horse at ten years, making his work to about thirteen years of age, a charge of 10 per cent, or \$15 annually, must be made for depreciation. Here we have already \$34 of cost which is in the main overlooked. There are also several other costs not usually considered that must be included. Shelter must cost from \$2.50 to \$5 annually, even when of an inexpensive nature. Labor spent in feeding, grooming and the general care of the horse, even when figured at only 20 minutes per horse daily, amounts to \$18.25 on the basis of 15 cents per hour. Shoeing, although usually a small item of expense on most farms, since many horses are not shod at all, must cost on the average of from \$2 to \$3 a year. Harness wear, repairs, oiling, etc., will also cost from \$2 to \$3 annually. Then feed, the largest single item (and the only one usually considered), at the prices that have prevailed during recent years, or are likely to obtain in the future, cannot well be provided for less than 30 cents a day, if the horse is to be kept in good working condition, making a feed cost of \$78. Taking each of these lowest estimates and making no charge for bedding, taxes, veterinary fees, medicine and other small items of general expense, we have a total cost of \$121.75.

In view of these figures, it seems entirely conservative to assume that it costs from \$120 to \$140 per year to keep a work horse on our corn belt farms. From these figures it can be readily seen how large an item horse

labor really is in our farm expense account.

In connection with the cost of keeping farm horses, we might profit by a little detailed study of the cost of horse labor per hour in ordinary farm practice. Here again, when accurate records are kept, the number of hours of labor performed per day is found to be surprisingly small. While we have few accurate records covering a sufficiently large number of horses, the Minnesota investigations along these lines bring out some valuable information. These studies, including a considerable number of horses on 40 to 50 farms in various parts of the state, show that for a five-year period the average farm horse works only about three hours per day, on the basis of 300 working days a year. And it is likely that this is not far from the average number of hours of labor performed on the ordinary corn-belt farm. From these figures, it seems logical to believe that the average cost per hour for horse labor must be from 13 to 15 cents, or from \$1.30 to \$1.50 for a 10-hour day.

Since it is rather unlikely that on the average farm the total cost of keeping a horse can be very much reduced, the only rational solution of this problem appears to be the adoption of systems of management that will enable us to reduce the cost per horse hour, through the better utilization of our horses in the productive enterprises of the farm.

This might be done in some instances by keeping brood mares and raising foals. In others, by growing a greater variety of crops rather than devoting a large portion of the farm to one crop. The production of live stock should also help to distribute horse labor more evenly throughout the entire year.

In addition to this, the general efficiency of management should be studied, in order that the work may be done in a satisfactory manner with the least number of horses capable of doing it. This means that all work which can be done during the winter, or other slack times, must not interfere with the regular work during the busy season. It means that every horse must go into the busy season in fit condition to do a horse's work. It means that, through intelligent management, he must be kept at his highest efficiency every day he is needed in the harness. In short, it means that only through the most efficient utilization of our animals can we hope to reduce the cost of horse labor on our farms.

AGRICULTURE IN COUNTRY SCHOOLS

By ASSISTANT PROFESSOR A. W. NOLAN.

Agricultural College Extension, University of Illinois.

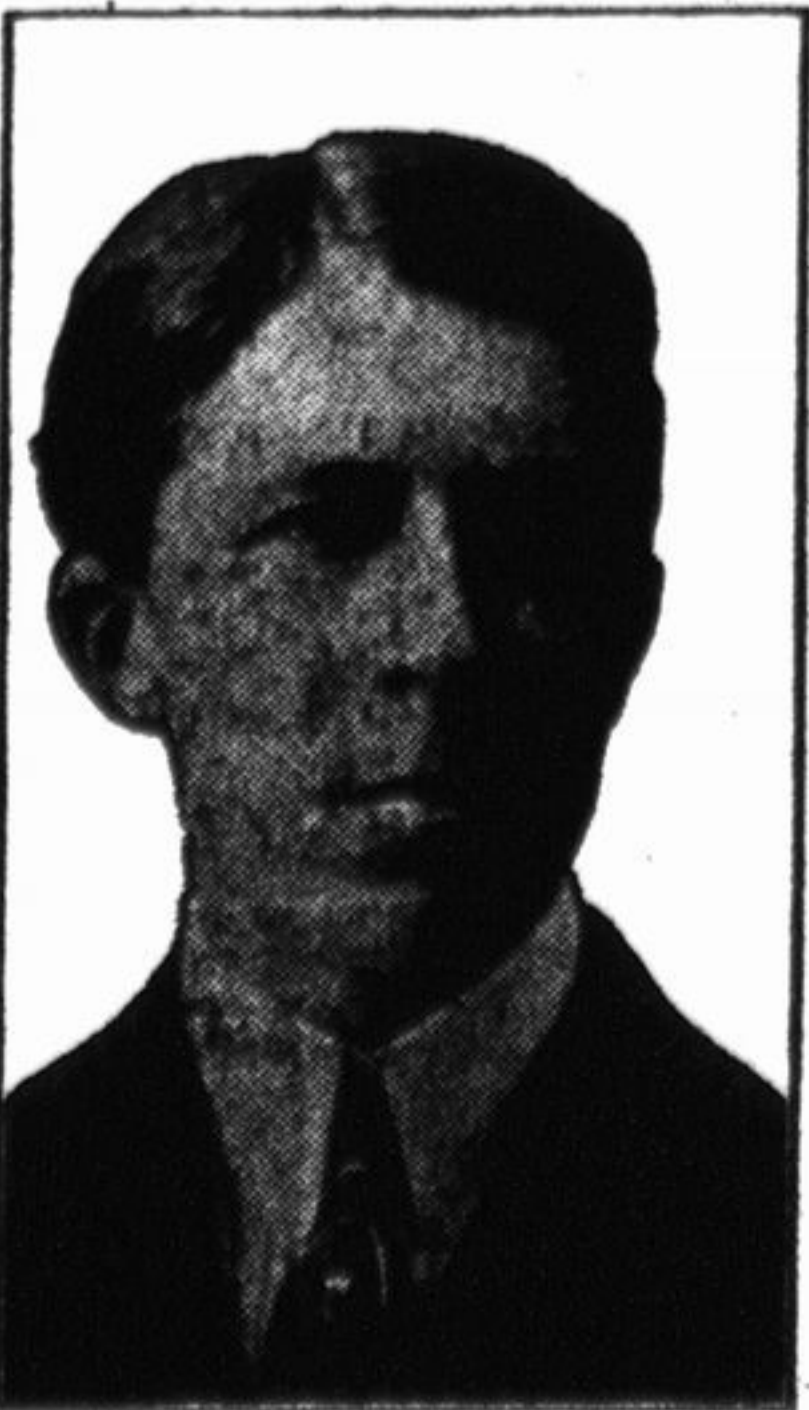
The people of the country are, and always will be, industrial, and hence, with the progress of education there arises a demand for vocational training in the country schools. Whether we will or not, the farmers are going

procedure and in the training and selection of teachers for this work.

The sequence of subject-matter studied in rural school agriculture should be in harmony with the seasonal sequence of actual farm operations. Several good reasons for this plan are evident. Illustrative material is more easily available, the interest of school patrons in the work of the school by co-operative activities is more easily aroused, and the habit of doing the right thing at the right time is formed. Text-books should contain simple elementary discussions of the principle of good farm practice as it proceeds in the community where the school exists. Such practical exercises as collecting insects, weed seeds, etc.; judging and scoring corn; planting trees and examining fruit; testing seed corn; school garden work, where the term is long enough, are activities entirely practical and highly beneficial in the country school.

A great deal of home work and many farm projects directed from the school are advisable in connection with country school agriculture. Testing the home seed corn and the butter fat content of the home milk supply, the keeping of field, dairy and feeding records, the directing of home gardens, and many other lines of cooperation are possible and profitable in connection with the course in agriculture.

If the teacher is keenly alive and resourceful, he can make large use of the men and materials on the farms of the community in teaching agriculture in the country schools. He may even organize a weekly or monthly session of the class in week and demonstration meetings at the home farms of the community, where competent and successful farmers may give talks and demonstrations to the class. This plan properly carried out would give opportunity for some real teaching of agriculture to the boys and girls of the country. The school could well supplement such demonstrations by courses, reading and practical problems.



Prof. A. W. Nolan.

to see to it that the elements of agriculture be taught in the country schools. It is therefore a problem and a duty for the educators to co-operate with the farmers in the preparation of courses in the selection of subject-matter, in devising best methods of

A SAVINGS ACCOUNT

IN THE

FIRST NATIONAL BANK

OF DOWNERS GROVE

INSURES—

**SOUND SLEEP
GOOD DIGESTION
INDEPENDENCE**

3 per cent interest starts from the 1st on all deposits made on or before the 10th.

J. Warren Rogers, President Ralph N. Ballou, Vice-President
Samuel Curtiss, Cashier

DIRECTORS

Ralph N. Ballou W. S. Greene J. Warren Rogers
M. C. Connors J. W. Hughes J. R. Foster
Samuel Curtiss E. R. Puffer E. E. Stevens

Mertz & Mochel

**HARDWARE
COAL and FEED**

**Poultry and Field Fencing
Paints, Oils, Brushes, Etc.**

GOLD MEDAL FLOUR

36 South Main Street

TELEPHONE 29

THE

SHOE

SECRET

IF YOUR SHOES feel good on the inside and look good on the outside and stand the test of hard wear and don't cost too much—that's the secret of shoe comfort.

Bring your feet here and slip them into a pair of our shoes. We know you'll keep them on.

MEN'S \$3.00 and \$3.50 **Modern Shoe Repairing** **LADIES'** \$2.50 and \$3.00

CHAS. L. JOHNSON, 44 N. Forest Avenue

Always on the Job

When Moberg does your Painting it is done Right

HOUSE PAINTING and INTERIOR DECORATING

F. C. MOBERG @ SON

Phone 108J East Chicago Avenue

"Let someone else into the secret"

Don't forget to tell your neighbors that our goods are always very satisfactory.

Why? Because we handle only strictly high grade goods.

The selection being made from the best numbers—from best brands—from the leading wholesalers in this country.

A trial order in either Dry Goods or Groceries will convince.

B. E. KEHLER

DEALER-IN

General Dry Goods and Groceries

Southwest Corner of Main and Curtiss Sts.

PHONE 43-W.