

stock, Ont., 851; 8, Hammond, H., Monkton, Ont., 840; 9, Jackson, M. G., Simcoe, Ont., 835; 10, Stephenson, L., Cathcart, Ont., 830; 11, Wilson, A., Delhi, Ont., 812; 12, Axford, H., Ridgetown, Ont., 800; 13, Henderson, H. F., Owen Sound, Ont., 784; 14, Rogers, H., Truro, N. S., 775; 15, Rogers, E., Woodstock, Ont., 774; 16, Stewart, R., Eden Grove, Ont., 732; 17, Morrison, C. A., Whitechurch, Ont., 713; 18, Loney, Lorne, Carthage, Ont., 710; 19, Hotham, J., Delaware, Ont., 662; 20, Campbell, G., Scotsburn, N. S., 602; 21, Clutton, G. N., Calgary, Alta., 541; 22, Christensen, T., Hobendal, Denmark, 461.

* Must pass supplemental examination in written cheese-making.

** Must pass supplemental examination in written cheese-making and milk-testing.

Farm Dairy Class (maximum 900.)—1, Irschick, L., Guelph, Ont., 771; 2, Morris, W. F., Britannia, Ont., 741; 3, Chauncy, R. J., Oxford, Eng., 658; 4, DeTrafford, E. A., Tamworth, Eng., 594.

O. A. College.

H. H. DEAN.

POULTRY.

Hints on Turkey Raising.

Editor "The Farmer's Advocate":

In order to make a success of turkey raising, the first essential is a suitable location. Under favorable conditions, upon a soil that is not very heavy or in a place that is not too exposed, there is probably no branch of the poultry business which pays better returns for the money invested, than raising turkeys, whereas, when the conditions are unsuitable, successful results can not be obtained. Many instances have come under my notice, where failure and loss have occurred, simply owing to the fact that the place was unsuitable for turkeys. I have in mind two localities, one high, dry, fairly well sheltered and soil of a sandy nature. Here the farmers' wives rear large flocks of immense turkeys every year with practically no losses. The other is a low, clay flat, where the few who try to raise them have constant loss from disease and weakness in their flocks. My advice to A. McD., of New Brunswick, then is, if he lives in a low, flat, clayey part of the country he will be much better off, both in pocket and temper, if he will adhere strictly to the "cackling hen with her money-making winter egg basket." For my own part I much prefer to see a flock of well-bred, well-marked hens singing contentedly around their own domain than to have to tramp hither and yonder following up a long-legged turkey hen bent on hiding her nest at any cost.

Those, however, who are in a suitable or partially suitable locality are sure of a fair amount of success if they will but exercise their own common sense, and follow a few hard and fast rules necessary to turkey raising.

In the first place A. McD. speaks of not having kept turkeys for three years, the ground, etc., is now clean. Unless measures have been specially taken to make the ground, etc., clean, it can not possibly be clean in "three years", nor I doubt if ten years would obliterate the germs left by "blackhead." Nothing short of a liberal dressing of lime over every square foot of ground, previously inhabited by a diseased flock of turkeys, would rid out the germs in three years. This, of course, applies to yards and uncultivated fence corners, where turkeys are liable to congregate. Where the ground has been cultivated and cropped this is not necessary. Then, if all precaution has been taken to have the ground and buildings made sanitary, and indications of blackhead are seen in your flock, prompt measures may check it before any damage is done. Castor oil has been recommended by some who have used it as being a cure, but I fancy the turkeys had diarrhoea and not blackhead. The only cure or preventive so far known to expert turkey raisers is muriatic acid, given in the drinking water in the proportion of one teaspoonful to a quart or less of soft water. In the analysis of a diseased liver it has been found by experts that the nature of the disease is alkaline in character and consequently requires an acid to counteract it, and muriatic acid has been found to be the acid that acts most effectively in treating blackhead in turkeys. As a precaution against the disease, it is well to add a little of the acid to the drinking water at least once a week all through the summer. In fact it may be used to advantage with all classes of fowl, and is especially good in the early spring when the fowl are apt to gorge themselves on soft succulent grass and bring on diarrhoea.

With regard to the feeding of young poults, too much care is very liable to be more disastrous than too little. My first experience with turkeys goes to prove this. I was brimful of "how to care for and feed them" and was doing

the best I knew how, but in spite of careful feeding my poults were dying. A friend who was also an expert hand at raising turkeys, said, "quit feeding them for a few days." I did so, with many misgivings, and lost no more of that year's flock, while those that showed signs of dying fully recovered. All the care I gave them was to keep them housed until the dew was off the grass, then after they were a week old I gave them a light meal of stale bread soaked in milk when I let them out, and for the rest of the day I let them find their own feed until they were six weeks old, after which I gave them a light grain feed at night to help attract them home.

Carleton, Co., Ont.

N. S.

White Leghorns in the Lead.

Readers will be interested in the progress of the second International Egg-laying Contest of 100 pens of five birds each, including some 18 breeds at the Storrs, Conn., Agricultural Experiment Station. More White Leghorns (43 pens) are in the contest than any other breed, and two English pens were a long way ahead at the end of the 21st. week of the contest, those of Tom Barron having made a record of 466 eggs; Ed. Cam's being second with 425. Mr. Cam has also a pen of White Wyandottes third in the race, with a total of 384 eggs, Beulah Farm (McLeod Bros.), Stony Creek, Ont., have two White Wyandottes in the race, and one of them has the creditable score of 343 eggs in the 21 weeks. The total number of eggs laid to that date was 23,278.

A Suitable Farm Poultry House.

With the awakening of interest in farm poultry comes an increased number of enquiries regarding the best type of house for the farm flock. As with all other classes of farm buildings circumstances have a very important bearing upon the kind of house built. There is little doubt but that, in many cases, the colony-house system may be made answer for winter and summer, and on most farms where a pride is taken in the poultry and where poultry is kept under best conditions with an eye ever focused upon the net returns and especially where a large number of chickens are raised annually, cheap colony houses would be a paying investment even where a permanent stationary poultry house is located.

Nearly every farm requires a permanent poultry house, dry, light, airy and free from

window, four feet by five feet, is placed in the west end. This window should be hinged at the top, so that it may be raised during the hot weather. The roosts are arranged at the north side all on the same level, being hinged to the back of the pen so that they may be fastened up out of the way when cleaning out the pen. The house may be built of rough lumber with the cracks battened or with tongued and grooved material. It is comparatively cheap, is durable, easily kept clean, light, free from drafts and altogether well suited for farm poultry.

HORTICULTURE.

Renewing Life in Old Orchards.

Editor "The Farmer's Advocate":

As agriculture becomes more prominent nowadays, we are told of fortunes that have been made by farmers. But there are many of which we never hear. They have not been made yet. In the old, uncared-for orchards of Ontario there are thousands of dollars that may be realized by any who will take the trouble to work for them. An unfavorable year, such as 1912, discourages many men from developing the apple industry. Yet Ontario did not produce too many first-class apples last year. The trouble lay in the production of inferior grades and in faulty methods of marketing and distribution. However that has to do with the selling end which I shall not discuss just now.

A fancy product may be sold at a profit in any year, and was sold at a profit last year. Some of the demonstration orchards in Durham and Northumberland counties, under the supervision of R. S. Duncan, gave a net profit of \$100 an acre in 1912. And in every case they were old orchards that had been neglected before the year 1911.

If any farmer in a location suitable to apple growing, in Ontario, disregards his orchard he is neglecting one of his best opportunities to make money. But an orchard is like any sound business proposition—it won't give something for nothing. A scrub tree is just as unprofitable as a scrub cow—only it is easier to persuade it to pay a larger dividend.

HOW TO PRUNE

The first step in the reformation is to prune the trees, and right here a word of warning should be given. The object in view should be

to remove all dead wood, to cut away all limbs that interfere with others, to make the tree sufficiently open to admit the light, and to make a low, wide tree that can be worked around economically. We see too many trees that have been trimmed in a careless fashion. They have been trained high in the air, with long limbs bare of growing wood, that resemble fish-poles with a tuft on the ends. The dead wood should be removed and promptly destroyed, as it harbors insects. The limbs should be trimmed sufficiently to prevent crowding, but bearing wood should be forced out as far back as possible. The tree should be opened up to the light to color the fruit properly.

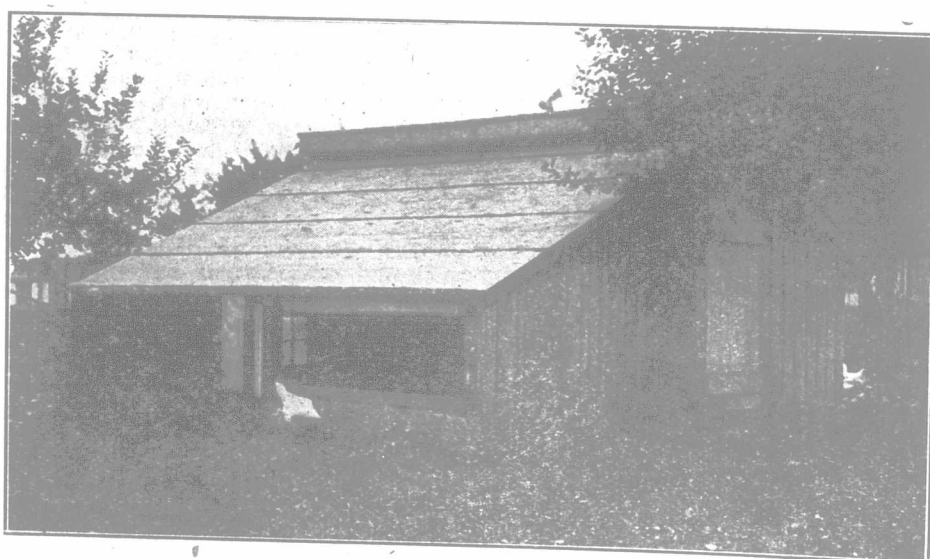
To make the largest gains the crop must be produced and handled as cheaply as possible. A low, wide tree, makes spraying and picking operations much cheaper. By heading back the top, bearing wood will be forced out along the limbs. If there is a good growth, it may be cut back ten feet or more, but if the limbs are long and bare, five feet is sufficient.

It is best to paint all wounds of 1½-inches in diameter or over. This tends to prevent the rain from soaking back in the wood, and prevents disease spores from gaining a foothold. In the orchards in these counties a mixture of white lead and raw linseed oil gave very good satisfaction.

It is well to scrape the trees. Codling moths winter over under the rough bark and cause much damage in the spring. But care must be taken not to scrape too severely. The bark is a natural protection, and if the green inner bark is injured more damage will be done than by the codling worms.

CULTIVATE—WHY?

The roots of the trees require light, air and



One of the Best.

Poultry-house, 20 x 20 feet, open front, to accommodate 100 hens.

drafts, as well as being comparatively low in cost. Nearly every average farm could well afford to keep at least one hundred first-class laying hens, but no farm can economically harbor a flock of mongrel non-layers. It is well, then, to provide for a flock of at least one hundred laying hens.

Of the various types of houses to accommodate this number of fowls, few, if any, are better than the open-front house, twenty feet square, illustrated herewith. This house, designed by Prof. W. R. Graham, of the Ontario Agricultural College, has given excellent satisfaction there, and those who have followed the plan throughout the country are getting equally good results. The house as shown has a two-foot open space the full length of the south side, this simply being covered with wire netting. It would seem too cold for the winter, yet hens kept in such houses during the severest weather of our Ontario winters, show no signs of discomfort and lay well. The front of the house is three feet high altogether, a scantling at the top and a board along the bottom taking up the other foot. Four feet six inches is the height at the north side, and the peak is seven feet from the ground. The door is placed in the east end, and a large

heat
By cul
a free
water
temper
growth
formed
the in
to abs
should
early
tends
are ap
also ca

In t
crop sh
moistur
become
tected
roots
a cover
been fr
Man
vantag
sults
vetch,
bush,
wheat
mixture
an acre
price 7

It is
through
mixture
trees
them e
covered
when in
gain a
them.
root-lik
spray t
well.

The
sects a
fruit a
is plac
aphis
and
former

lead a
with a
such a
This m
mixture

The
as inse
while a
Consider
enters
and ea
be insi
be plac
the tre
fall. 3
stage o
whole y
five day

Three
tion of
Before
per cen
The fir
cent of
from in
mercial
strength
calenda
of Marc
several
columns
may be
made.

The
wood b
It cont
leaf bli

The
the blo
lbs. of
mixture
caterpil
moths.

The
after th
lbs. ar
ture, to
scab.

In a
gallons
tree at
from 48

Some
benefit
task to