

rain, clover, corn and
Muir's case. It is a
and while every farm
lover seed, every farm
and most of them will
properly fed to the right
at remunerative prices.
is when fed to cows or
a considerable value

Guelph in 1885, having
adal in his final year,
into professional agri-
cultural farming. Although
ing was of no use to the
faith in the farm and
vantage the knowledge
Guelph. He said the
him to make a success
s given him a greater
that he knew the why
operations of farming,
plant growth, chemical
side of feeding, etc.,
more satisfaction from
vises anyone who wants
ing.

FARM.

ably!

who have not already
ion promptly to The
Magazine. In spite of
uction the price is the
farmers get the same
The chief aim of "The
and Service"—quality
ke up a great weekly
is end we require your
You would not purchase
cause it was cheap, for-
ly in the end. Apply
ing your farm paper and
value "The Farmer's
ption price. Get your
e Farmer's Advocate",
their interests and yours

Sweet Clover.

"Farmer's Advocate" of
ng. Now, I think A. G.
one intending to grow
pay to grow it on clay
et clover last summer on
n it grow on a clay hill
and I can show A. G. W.
ch on sandy land known
y from Camp Borden.
ow. A. G. W. says it
ow it on unlimed sandy
l has never had lime
o sow it with the husks
the husks being on as
self, and when it shells
certainly on the seed.
V. says it will not grow
he reason sweet clover
ur fields is that the soil
cher. I suppose it will
wet lands is in the corner
grow where any other
es where other clovers

E. A. LETTS.

Situation.

TE":
oat crop was a partial
ers are becoming some-
e supply of seed oats.
e part of farmers who
d them until later in the
d oats is delayed also,
needed for coal, feed

ed oats may be required
much larger quantity
ewan. The Canadian
ommission already has
the Interior Terminal
of good-quality early-
forward. Alberta and
l be given first con-
uced in these provinces.
Quebec may quite easily
ent oat crops in Prince
Nova Scotia. No. 1
are now being delivered
price comparable with
grade. The price of
k car lots at any point
not exceed the current
o. 2 Canada Western

oats by more than 35 cents per bushel. Registered and other select stocks true to variety may be higher in price.

The Dominion Seed Branch provides a system of grading and inspection, so that shippers in either Western Canada or the Maritime Provinces may make delivery of seed inspection certificates with their bills of lading. Purchasers of seed oats in any part of Canada may now buy on the basis of grade, No. 1 seed, No. 2 seed, etc., and subject to the delivery of seed inspection certificates.

Seed Commissioner.

GEO. H. CLARK.

CANADA'S YOUNG FARMERS AND FUTURE LEADERS.

Our Literary Society.

EDITOR "THE FARMER'S ADVOCATE":

The year before the war started our school organized a literary society, which was a success in every way for one winter. I will explain as best I can how we managed.

Early in November, when the fall work was pretty well over, a few of the more energetic characters met at the schoolhouse one night and elected a president, vice-president, secretary-treasurer and several committees. Each committee was composed of three members, and had full control of the work to which they were assigned. One committee saw that the room was warm, clean and lighted; another was responsible for the program each night, etc.

Once each month we had a debate on some popular subject, usually two members were for the affirmative and two for the negative. We were governed by the ordinary rules of debate, each side being given a certain number of minutes to present his or her arguments, and a second space in which to refute the arguments of the opponents was allowed the leader on each side. Our greatest difficulty was to procure competent judges, as an inexperienced judge would be swayed more by the side of the subject which appealed most to him than by the arguments of the debaters. On one occasion the judge granted the decision in favor of "Money," when the debate was "Brains versus Money," although the side in favor of "Brains" had snowed their opponents under, and the audience made it known in no uncertain terms that they disagreed with the judge.

Besides the debate, we had music, singing, recitations, and our club paper,—"Brushwood Brownings,"—which usually contained some local hits, or personal items of an amusing or pleasant nature. One can scarcely imagine the interest both old and young took in the meetings, and everyone helped the other fellow to prepare his debate.

Some of our meetings were as good as entertainments gotten up for special purposes, and the only fee was an occasional silver collection which more than paid for lighting and heating, and a final washing of the school floor when spring came.

Our Literary Society certainly helped us pass a very pleasant and profitable winter, and I know of no better way to maintain harmony and provide entertainment in a farming community than by organizing a literary society.

Russell Co., Ontario.

A FARMER.

AUTOMOBILES, FARM MACHINERY AND FARM MOTORS.

Timely Suggestions.

EDITOR "THE FARMER'S ADVOCATE":

I noticed in the January 8 issue of "The Farmer's Advocate," in the "Automobiles and Farm Machinery" department, where a reader is having considerable trouble with his gasoline engine, for which you gave a number of causes. I have an engine which has acted in a very similar way, but is running perfectly since I found the cause. Since the spark plug is firing good and strong, as he suggests, I think the trouble must be with too much spark, or it is not getting it in the right place. First examine your heavy wire running to your spark plug and see if there is any breakage in the covering which will touch steel, or at least let the wire touch it. If that is not the trouble, examine all the wires. Examine your batteries and see if they don't test below ten amperes. If this is not the trouble, then examine your spark coil and see if it is giving a dull buzz, instead of a quick sharp buzz like a bee. Do not get too sharp a buzz, or too strong, as this will burn out all the batteries you can put in it. Probably the two points of the buzzer have become pounded round instead of flat and matching properly. If you have too strong a spark it will cause the gasoline to evaporate in large, black clouds, and if you go to close it off it will bang something fierce, and will use far too much gas. If your heavy wire is drawing spark to other parts of your engine, it will run very unsteadily as though the governors were not working properly. Keep your engine tightened up in good condition and do not run it too fast, as fast running will help to increase trouble and expense. I have been running a six horse-power engine for nearly four years, and since I got a new heavy wire on I have not had one report for six months. If these suggestions are followed I am sure the trouble can be located.

Dufferin Co., Ontario.

J. BERRY.

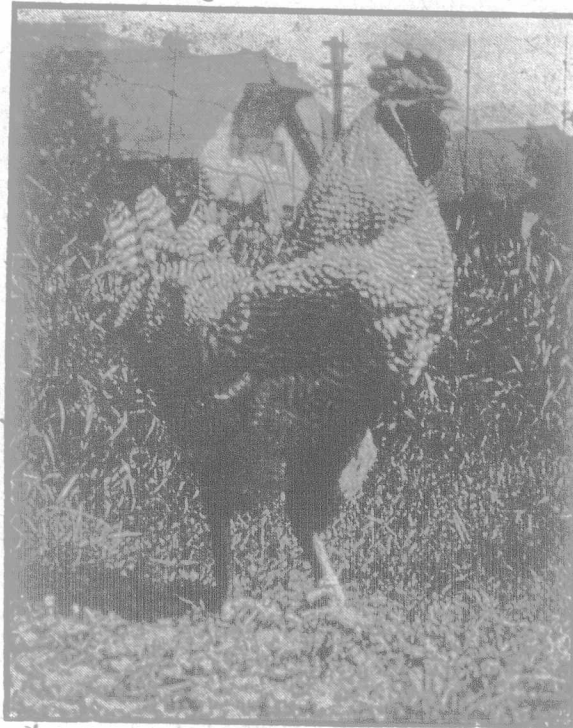
POULTRY.

Agriculture in New York State.

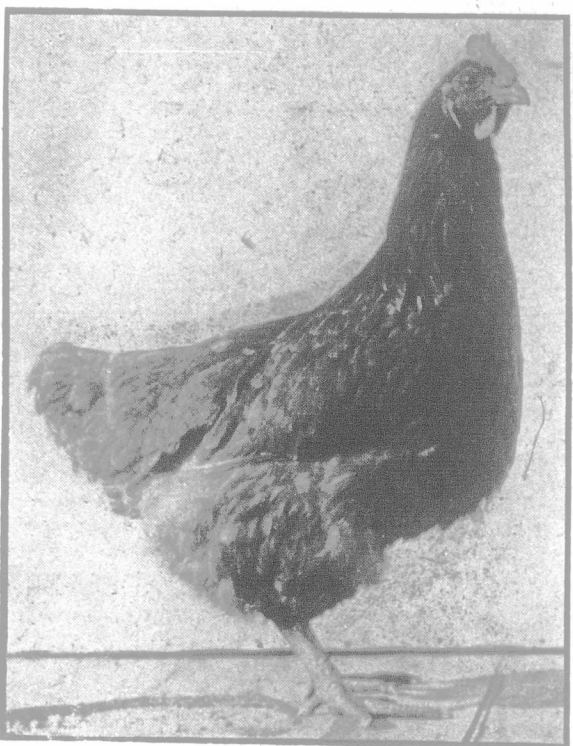
Continued.

ROOSTERS WHOSE PROGENY WILL BE GOOD LAYERS.

Happening into "The Farmer's Advocate" office before leaving for New York State, one of the editors said "I wish you would interview Dr. Kent, of Cornell University. He was the originator of that method of judging hens by the color of the bill and legs, and other such trivial signs, in midsummer, so as to determine how many eggs they have laid in the season so far, and how many they are going to lay. They can do it," said he, "yes, sir! within half a dozen, either past or before moulting." "Half a dozen?" was asked inquiringly, perhaps doubtfully. "Yes, sir," with emphasis, "not more than that either way. And now that that method has been elaborated to a nicety, and hearing that Dr.



A Sample of Good Breeding.
Six near dams averaged 230 eggs.



A Good Female Breeder.

She averaged 180 eggs during her first two years, and raised 43 out of 48 chickens hatched in 1917-18 and 1918-19.

Kent has been studying up the rooster question as well, we would like you to find out from him what he has discovered on that side of the subject,—that is, as to features in the cock bird which indicate the type that will transmit the laying tendency to his offspring."

Arriving at his office in Cornell one afternoon, we found him absent, but inquired over the phone by his clerk located him in the chicken houses, and arrangements were made for an interview about two hours later. Coming back to the office about two minutes before the appointed time, we were given a chair, and in a few moments a tall young man, who looked more like a student than a professor, quietly walked in and said "You were wanting to see me?" "We wished to speak with Dr. Kent," we said. He smilingly said "I'm the man, I guess." It was rather astounding, after having pictured a man at least middle-aged with a self-absorbed,

somewhat absent-minded air of a book-worm professor, to be confronted by a quiet, unassuming, though wide-awake, young fellow from the outdoors evidently, who looked as though he might have lately come up from the farm to learn something at the University.

When he understood the purpose for which the interview was sought, however, he at once showed his familiarity with the different poultry types. After a few minutes' talk, he said "Come into this room where there are some skeletons of birds, which will show more plainly what I mean." Here were skeletons of two hens, but hens were not specially under discussion, and also skeletons of two male birds, one of a poor type and the other representing the kind most desired. In life, the undesirable bird, though smaller and lighter-boned, had been better fleshed and weighed almost exactly the same as the other. But it was in the conformation of the skeleton where the important difference lay. The much greater depth of body in the better bird, as shown in the distance at the front between the bone of the back and the breastbone, or keel bone, was pointed out, and also, what was possibly as important, how this distance rather increased than diminished towards the hinder part of the body. In the other skeleton not only was the depth of body at the front much less, but the keel bone curved upward quite distinctly and was also decidedly shorter in comparison with the bone of the back. Depth of body, with good length, the depth increasing rather than diminishing towards the rear, is the most important indication of the desirable laying strain.

Joined with this there must be, of course, vigor of constitution and a healthy appearance. Another point of importance is that the skin should be thin and soft, not thick, hard and leathery, as is the case with some fowls.

The eye should be examined. A bright eye, as everyone knows, is a fine feature in man or beast. But in judging the laying tendency the shape of the eye-opening is of some importance. It should be oval, not merely round like the eyeball, and the eye should be set towards the end of the opening farthest from the beak, not forward as if inclined to squint.

The first point, depth of body, is the important one. With practice this can be determined fairly well by measuring with the hands, gripping the bird with the thumbs on the back and the fingers below, but for exactness calipers must be used.

It was only natural that the talk should not be limited to the male sex in fowls and turn at times to the marks of good laying hens. On saying that the best hen in our flock at home was the one that always followed closest to the heels when hoeing. Dr. Kent remarked "there is no more infallible mark of a good laying hen than that. A rustler, and yet quiet in her movements." He said that he had done a good deal of photographing hens of the different types, and while it was easy to get a picture of a good layer, he had found it extremely difficult to do so with one of the poor-laying specimens. Their movements were so restless and aimless that it was hard to catch them standing still.

On the remark being made that a large comb was a pretty sure sign of a good-laying hen, Dr. Kent demurred. Some of the best performers, he said, had rather small combs. Of course, said he, none of those with tiny little combs such as some fowls have are desirable. No, a large comb is an indication not so much of a good layer as that the hen will lay large eggs. The probable reason that it is taken as a sign of a specially good layer is in the fact that when a hen is laying her comb is for the time enlarged, and the accompanying conditions when eggs are being produced is mistaken for the evidence of continued laying propensity. Thinking back to our best hen, whose comb is specially large, we remembered that her eggs were by far the largest of any of the flock. But this thought comes to mind: Is not "much egg" about the same thing as many eggs? Certainly it is, except when sold by the dozen. T. B.

THE DAIRY.

The Storage of Ice.

Following the article on the harvesting of ice for summer use, which appeared in a recent number of "The Farmer's Advocate", the following hints on the storage of ice, forwarded to us from the Dairy and Cold Storage Branch of the Department of Agriculture, at Ottawa, should be instructive. We believe that less wastage is likely to occur if two feet of sawdust and possibly three feet of hay are put on top of the ice, instead of the one foot of sawdust and two of hay suggested below.

"The storage of a few blocks of ice for summer use is a very simple matter where the ice is readily available. Any unoccupied corner of a shed will serve for the purpose. A rough board enclosure 10 feet square and 8 feet high will hold enough ice to provide 50 pounds per day for 130 days, after allowing for a reasonable amount of wastage. The smaller the quantity stored, the larger is the proportion of waste.

"The bottom of the enclosure should be covered with about 1 foot of sawdust. If the soil underneath is impervious clay it will be all the better if there is a few inches of gravel under the sawdust. In putting in the ice the boards can be taken away from one side and replaced after the ice is in position. A space of 1 foot should be left between the ice and the boards to be filled with sawdust, and the ice should be covered with about the same thickness. It is the sawdust which keeps the ice from melting. The drier the sawdust is the better the ice will keep, and it is a good plan, as