

council that he would call a special meeting of the county council for the purpose of procuring seed, and that the Reeve be authorized to apply for the sum of \$1,000 to procure seed for this township (Colingwood). Yet the young farmers of Ontario, by reading forestry reports, cannot but be impressed with the idea that the first settlers had nothing to do but just tickle the land and have plenty.

Then as regards clearing land averting thunderstorms; at a raising in the woods I was at in the spring of 1848 it came on a wind and thunderstorm which frightened us all away to a small clearing near by, and of the great storm in Oxford last summer we read that Capt. Williamson informed the people that when the county was first settled, upwards of sixty-five years ago, he witnessed one as bad if not worse. Rev. E. R. Young writes at Norway House: "When we were at family prayers the first evening after our arrival there came up one of the worst thunderstorms we ever experienced. The heavy mission house, although built of logs and well mudded and clapboarded, shook so much while we were on our knees that several large pictures fell from the wall, one of which tumbling on Brother Stringfellow's head put a sudden termination to his evening's devotions."

#### Agriculture in the Public Schools.

A paper read at the Teachers' Convention, at Virden, by Jas. Elder, "Hensall Farm," Virden.

A common question frequently asked is, "Why do our boys leave the farm?" and many are the answers given, all more or less correct. There is one answer, however, which is perhaps as much to the point as any, but which I have never heard given, viz.: Our boys are not taught the science of farming, and consequently they grow up with the idea that farming is a sort of low class occupation, from which, by dint of hard, dirty labor, an ignorant, stupid, simple set of men are able to just keep body and soul together, the only spice of whose life is an occasional visit of the bailiff, whilst the city and town occupations require intellect, education and sharpness, which, when applied, secure for those employed in them competence, dignity and respectability.

No doubt among those engaged in farming there are many well educated men. Educated in certain branches, but not in the branches applicable to their occupation; consequently, whilst they can talk intelligently about politics, history, geology or astronomy, they know nothing about the science of agriculture. Some of these are excellent painters or musicians, but in the business from which they expect a livelihood they are simply plodding along in the dark. They do a thing because they see some one else whom they consider a good farmer doing it, failing altogether to notice that the circumstances in his case are entirely different from those in theirs.

But perhaps some one will ask: "Is there any science in agriculture?" I answer, just as much as in any other occupation. Nay, I question if in any business there is more need for knowledge, skill, judgment and perspicuity than in agriculture, and therefore I am disposed to dispute the claim to the name "profession" with some of those occupations which now assume it. True, in the past it was generally thought that principal requirements in a farmer were plenty of physical strength and mental energy. But in these days of keen competition and improved methods, a man requires to exercise his mental even more than his physical powers; if he is to be successful in agriculture he must know the whys and wherefores, he must know the principles as well as the practice.

Yes; not only is agriculture a science, but it is the grandest science on earth. 1st. Because it is the fountain of the world's life. 2nd. Because it is the only science practised by man in his un-fallen state. The sciences of law, medicine, etc., are only the results of sin. 3rd. It is the most independent mode of existence offered to man. "Happy and free as a king is he who bows but to God alone." Therefore, we believe that the time has come for agriculture to be taught in our public schools.

As to the subjects to be taught, these are many and varied. Whilst technical chemistry is all very well in its place, at the same time I believe that, for the present, the very best text-book possible could be compiled of extracts from our agricultural journals. These are not only suitable to our times and conditions, but their practical character would make them interesting to our young people, and would impress them upon their minds in a manner impossible to the more technically written articles. A thoroughly practical, intelligent farmer should be chosen to make the selections. He would be in a position to make a much more judicious selection than a regular educationist.

A text-book of this kind could be made very interesting and instructive, and we have no doubt would in many cases be read with profit by the parents. It should embrace a wide variety of subjects, such as the constituents of soils, the constituents of plants and grains, the systems of cultivation for different soils and different plants. (I remember well, in my boyhood days, reading a series of articles in the old Canada Farmer, entitled "Familiar Talks on Agricultural Subjects," from which some excellent articles could be culled.)

Then there is the stock department—the characteristics of the different breeds of horses, cattle, sheep, pigs and poultry, also methods of feeding to best advantage, including results of experiments made at the Experimental Farm; also an article on pedigrees of stock.

Then there is gardening in all its branches, a subject so important in contributing to the variety on the farmer's table, or to cultivating a taste for the beautiful; also tree planting, the knowledge of which seems to be very limited, and the practice of which would contribute as much as anything else to make country life pleasant, enjoyable and elevating.

And last, but not least, I would include in such a text-book articles for the girls on housekeeping, cooking, dairying, etc. I am afraid that too much pains are taken sometimes to teach the girls to ape the lady under a sad misapprehension of the true meaning of that term, and not enough to teach them those things which are essential to their future usefulness, happiness and well-being; for, after all, "Life is real, life is earnest." Fancy clothing, stylish gait and simpering manners may be very fascinating to the love-sick swain, but they add but little to the prosperity, contentment and happiness of after-life. A well-cooked meal, clean, cheery house, well-repaired pants, and a thrifty, intelligent wife, who can talk intelligently about mutual interests, will contribute to a husband's contentment and good humor, and to the happiness of the home, long after the simpering manners have lost their charm.

Let such a book be compiled, and I believe it would be the most interesting as well as the most instructive book in our schools.

Some will say that agriculture must be learned by practical observation. True, and do not our country boys have the practical part right before them? What they need is to be taught correct theories, and by comparing these theories with the practice they see at home, whether that practice is right or wrong, they will enjoy the very best facilities for learning the science of agriculture.

Now, as to the objects to be attained. These are both important and far-reaching. 1st. I would say that the ideas caught by the children at school, and by them suggested at home, would have an immediate effect in improving the methods practised by the parents. 2nd. It would cause the children to be more observant of farm operations, marking wherein the home practice agreed with the school theory, and *vice versa*. 3rd. The above two points gained, I believe, that an immediate effect would be seen in better managed and more productive farms; better and better kept stock, and, consequently, better financial results; and again, consequently, more happy homes, because the old Scotch rhyme is true:

"There's little cant and little cheer can come,  
Wi' duddy duplits and a pantry tounie."

4th. Our young people will learn that there is something more than plod in farm life; that there is a wide field for the exercise of their intellectual being, and that the farmer's or farmer's wife's life can be as respectable as that of any other man or woman who breathes the air of heaven. 5. Some of the future results will be: Fewer of our boys leaving the farm; fewer of our girls preferring the stylish dude to the substantial, noble-minded agriculturist; agriculture placed where it ought to be, as the most independent and honorable calling open to men and women, which God speed the day.

## POULTRY.

### How to Start and Stock a Hennyery.

Written for the ADVOCATE by J. C. Harrison, "Brandon Poultry Yards," Brandon, Man.

The subject of poultry keeping is just now receiving much attention from beginners who have no practical experience, and they ask for information on this important subject, to answer which privately would require too much time, so that I through the columns of the ADVOCATE desire to discuss the general principles of this subject in a public way. Poultry is kept principally for two purposes,—that of furnishing table fowls, and supplying eggs. Some varieties are best for one purpose, and some for the other. Some varieties are what might be termed general purpose fowls, combining both qualities. It will be well, then, for a beginner to first decide what he wishes to produce, and select breeds best adapted for his requirements.

Since fashion in poultry raising and poultry journalism has run so high, breeders of particular varieties have become so enthusiastic as to claim every good quality imaginable for their particular favorites. Every sensible person, however, should know that no one breed can excel in all characteristics. Some of the best layers are non-setters, and some of the heaviest table fowls are indifferent layers, and so on. In my many years' experience with the different varieties, I might affirm that they will all pay handsome profits, if furnished suitable quarters for their varying conditions and receive proper care. In order to assist the inexperienced in selecting the breeds most suitable to his purpose, I would advise the selection of Light Brahmas, Plymouth Rocks, Wyandottes and Leghorns as being the best for all practical purposes. The Brahma is a superior winter layer, the best of the Asiatics. The Plymouth Rock is a good average layer, will average about ten dozen eggs each per year; they are also excellent broilers, are also good setters and mothers; and I think that all the setting varieties will lay fewer eggs if deprived of the privilege of bringing out at least one brood of chickens. So long as the breeders of Plymouth Rocks will be content to have them occupy the middle ground between large and small breeds, and endeavor by careful selection to improve their egg-producing qualities, they will hold their position of favor against all rivals.

The Wyandotte of late has come into public notice; they are very similar to the Rocks, and are their strongest competitors. They are shorter jointed, more blocky, finer boned and closer feathered, and if they become of a uniform type they will certainly deserve all the praise their breeders give them.

The Leghorn is a non-setting variety, and one of the best producers of eggs, being most prolific during the warmer months, their chickens making nice, early, though small broilers, and should only be used as such, as their skin is too tough to make good roasts. Their chief merit is, however, in egg-production alone. They mature early, many pullets commencing to lay at five and a-half months old.

The Langshans will lay as large an egg as the Brahma, and perhaps as many of them, also of the same desirable color, but they are not considered a first-class table fowl by the Americans on account of their white skin.

The Dominique, I would say, occupied the middle ground in company with the Plymouth Rock and Wyandotte. Of the many other varieties of poultry, I might just mention the Hamburg family, whose chief merit is egg-production, one gold-spangled hen having laid one hundred and fifty eggs in six months. Their meat is too dark to be desired for table use, their chickens are delicate and hard to raise, but when six or eight months old become quite hardy. The different varieties of this family are gold and silver-spangled, gold and silver-pencilled, and the white and black varieties, which have been introduced more recently. The black I consider the hardiest and most prolific of all.

The Black Spanish, long known as one of the best layers, is equal in every respect to the Leghorns, laying a larger egg than any other breed. The chicks are extremely delicate, but the matured fowls are reasonably hardy, the contrast of the pure white face and ear-lobes with the metallic green-black plumage making them a very handsome, showy bird, but in breeding for this particular marking much of their merit has been sacrificed.

The French class, comprising the Hoodans, LeFlesche and Cravecoeurs, while highly appreciated in France, have failed to give general satisfaction in America. I heard of one poultryman in the Southern States who has been very successful with Hoodans, and who claims every excellence for them as table fowls, besides being good layers. All these varieties, however, as well as the Polish, require warm, dry quarters, as they are very liable to roup if kept in damp pens.

The LeFlesche are the most delicate to rear of the whole race, especially in this northern climate, but I believe a good hen of this breed would lay more eggs from March to October than any other, not excepting Leghorns.

#### A Correction.

A while ago I saw a collection of statistics concerning many different kinds of fowls and eggs, wherein it was said some smaller eggs fell short of a pound to the dozen, while larger kinds overran in varying degree. Writing on another subject than size of eggs, I absent-mindedly "lumped" and misquoted the above as requiring to a pound one dozen large eggs of the hen. How I could have done so, I cannot tell; I give it up. I knew better, for I have often wished I could sell my hen-fruit by the pound, since many specimens are too large for fitting ordinary egg-cases. Even the most accurate are human, and may err. "Homer sometimes nods," which I don't wonder at, if he had my burden and variety of spring work.

MRS. IDA E. TILSON.

#### Secluded Nests.

It is a mistake to locate the nests of the hen-house in an open place, where the light can shine full upon them. Such nests invite scratching, pecking and the eating of eggs. The nest should be so dark inside as to hide the contents almost entirely, and it should be roomy, too, so as to prevent eggs from being crushed by the hen in getting into it. Hens like cosy nests, and plenty of them. To neglect this point in the care of the flock is very shortsighted. The more secluded the nest, the better it suits the hen. If we disinfect the nest boxes now, and every two weeks hereafter for the season, we will have no mites to worry the hens when the weather gets warm.—[Tennessee Farmer.]

#### Dangers in Impure Water.

The sanitary condition of the live stock of the farm sometimes receives more attention than that of the family. This is true more often in regard to the water used than in anything else. For convenience sake, the wells for domestic use are placed near the house. Frequently they are found under the porch or kitchen floor. For the sake of safety they are generally tightly curbed, thus preventing any purification that might be brought about by a free circulation of the air. Being in such near proximity to the houses, wells often serve as cess-pools for the drainage of the buildings and surroundings. It need not be argued that water from wells which are not scrupulously clean, and as well ventilated as they can possibly be, is dangerous. Disease is often found in water which appears as pure and sparkling as crystal. A close analysis of the water used for domestic purposes would often astonish those who use it. Clean and purify the wells.