

Free Text-book of Nature.

In an address on agricultural education at Tauranga, New Zealand, shortly before leaving for Canada, V. W. Jackson, Director of Agriculture and Nature Study, delivered himself of these remarks, which we endorse and reproduce:

"Training solely from books has had much to do with the lack of interest in the primary industry of the country and the consequent rush to cities. . . . Both from a practical and educational point of view, the growing of plants, experiments with manures, analysis of soils, habits of grasses, weeds and clovers, the structure of farm roots, the lives of insect pests, the drawings of flowers, fruits, leaves, etc., the measurements of plots, yields, the testing of milk, and the practice of dairy arithmetic, is a fit and proper elementary training for country children to receive. An enthusiast has pertinently remarked, that farm roots are more important than Latin roots, and King Corn more real than King Midas. We quarrel over free text-books, and leave the free book of nature unread. We struggle to master the Wars of the Roses, and fail to conquer weeds of our garden. It is safe to say that not half the weeds of the district are known. We debate over the banishment of Napoleon and allow codlin moths to ruin our apples. We define terminal moraines and glaciers and cannot tell whether a tomato is a fruit or a vegetable. More than charity begins at home. Experience begins at home, and we can only learn as experience permits us to interpret the new by what we already know. Therefore, let us add to the common things about and make education sound and helpful." Mr. Jackson said he was there to defend the little things which the teachers would be doing in the schools to help out the interest which the children of the Dominion would have in its primary industry. "Children must necessarily be given little things, but these might have a great influence on their after life. It was the lack of interest in the things on the farm that made it monotonous, for no occupation has greater variety of material and more allied sciences than agriculture. It is the purpose of agricultural education to weave a halo of interest around rural things, and thus make country life more pleasant, education more sound, and the individual more useful. Agricultural education is justified on both practical and educational grounds, but it is the practical side which the farmer will best understand and appreciate."

HORSES.

Horse-breeding Discussed.

Editor "The Farmer's Advocate":

At the regular meeting of the Brant Township Farmers' Club, held at the Prospect Hill schoolhouse, on May 11th, the subject of horse-breeding was discussed in such a way that every one of the members present was benefited. That the subject is to-day an important one, was shown by the large attendance of both members and others. It should interest every farmer. The breeding of high-class, well-bred horses is about as profitable a branch as any belonging to the farm. The demand for really good horses is never filled, and there is always a good price waiting for them. Five hundred dollars for a team of horses is considered a good figure, and it is not uncommon. We hear of cases where even more is paid for one horse. Dr. Standish, who was present at our meeting, mentioned a horse that was bought at a livery stable for \$180, and sold again for \$800.

The address on our subject was delivered by Robt. Richardson, and his long experience in the horse industry made his remarks very interesting and valuable. The following is a synopsis of his address:

"Horse-breeding is attracting attention nowadays on account of the ready sales and high prices that are obtained. Years ago, a horse was a horse, and brought a horse's price, and no particular pains were taken to breed good horses; but now, on account of the high prices ready for good horses, the farmer is devoting his attention to producing a better grade of stock. There is no danger of oversupplying this demand. High-class horses are scarce, and are always watched for. The production of high-class animals should, therefore, be the aim of the horse-breeder. The first thing necessary is, of course, a good brood mare, free from blemish, as curb, spavin, etc. Heavy horses are more desirable for a farmer to raise, since they are easier trained and handled. Crossing of breeds rarely produces an animal true to any type, and, therefore, the offspring seldom brings a good price." Mr. Richardson, with many years of horse-judging to his credit, says he has never seen a cross between a Clydesdale and a Percheron fit to enter the show-ring under any class. Stay with the breed of the mare, and do not sell the good mare colts, but breed them

again and again to stallions of the same breed, thus improving your stock. Keeping the old brood mare, and selling the colts, is doing more to injure the horse trade than anything else.

In selecting the sire, choose one suitable to the mare, and having the deficient points in the mare fully developed. By all means, use a registered horse, and do not let the price influence you.

CARE OF BROOD MARE CARRYING COLT.

The brood mare is better working than idle, as exercise is absolutely necessary. The work, of course, should not be too exhausting. Give her plenty of exercise till foaling time, and then let her rest. Brood mares seem to require a great deal of salt, so always have some ready where she can help herself when required, but never give it in her feed.

When foaling, try to spare her all the labor possible, but be sure that you do not pull on the wrong leg. When colts come wrong end first, help her to foal wrong end first, as a loss of time may mean the death of the colt. Teach the colt to eat grain before weaning time, so that weaning won't check its growth. No apparent difference is noticed in whole or chopped oats. If the mare is worked hard, wean the colt at three months; if idle, at five months.

Many horses are gluttons, and are overfed. Horses should be fed three times a day, at regular intervals, and idle horses should stand before an empty crib two or three hours before each meal. The habit of throwing some hay into the crib whenever it is empty is a poor practice. A few roots in the evening are much relished.

Mr. Richardson says he never does anything for the prevention of joint-ill, and thinks, if mare is in good condition, there is no danger of a colt contracting the disease. See that navel is tied good and tight, so that it does not leak, and put something on to dry it up as soon as possible.



Baron Ian.

Two-year-old Clydesdale stallion. First in class and reserve champion, Glasgow Show, May, 1909. Sire Baron's Pride.

Walter Rowand next addressed the meeting on light horses, but, as Mr. Richardson had covered the subject of the breeding of horses, there was not very much left to say, because rules of breeding, care, etc., apply to light as well as to heavy horses. However, what pertains to light horses can be summed up as follows. Farmers must select sires to suit their mares. It will not do to breed light mares to heavy sires. Light horses have several advantages over heavy horses. They are surer at foaling time, and, as a rule, walk a little better, and, if not too light, will outwork a heavy horse, when endurance is considered. The one disadvantage against breeding light horses for high prices is they are harder to train and get into shape for city trade than heavy horses.

Dr. J. Standish, whom the club is fortunate enough to have as a member, was present, and approved of all that had been said for both light and heavy horses, and said, if anything should be criticised, it would be Mr. Rowand's modesty. Select sire for the breed of horse that you want. Breed to the best horse. Feeding well and wisely has as much to do with breeding good horses as breeding itself. Exercise of the sire is as necessary as it is in the mare. Whatever class you desire to breed, keep at it. When you want ponies, get them as small as you can; while, if you want draft horses, breed as large as you can. Dr. Standish thought that, for general farming, the breeding of heavy horses was the most profitable, because of their easier training and handling.

A. E. W.

Handicaps of Horse-breeding.

Editor "The Farmer's Advocate":

Market reports continually state that draft geldings are in demand, and that the supply is not equal to that demand. The same obtains in the United States, despite the influx of Percherons, and, to a lesser extent, Shires; so that, it cannot be said that any one breed is, or is not, altogether responsible for existing conditions. It is a rare thing, in Canadian show-rings, to see, speaking on the average, the home-bred drafter give the imported animal much of a run for the money.

Three contributing reasons for the seeming inferiority of Canadian-bred drafters are: (1) The lack of good mares, (2) failure to work mares, regularly, (3) the failure to stick to type in stallions.

The lack of good mares is more apparent than real. There are many in the country, but there has not been shown the care in selecting mates for them that should be shown, if the best results are hoped for. Many mares with some draft blood have been used for breeding purposes, which should not have been stunted, and, as a consequence, the general average has been lowered. High prices for mediocre stuff have resulted in everything fertile being bred, and, as a consequence, the hit-and-miss method of sowing for a live-stock crop has resulted in plenty of weeds. The enrollment regulations of the Prairie Provinces are doing something in the way of disseminating correct information regarding the breeding of horses offered for stud purposes, and the knowledge thus furnished can be used by any horse-breeding community of farmers as a means of getting rid of unsound horses, or horses with fictitious or bogus pedigrees. Unfortunately, there are too many apparently well-bred, but undersized, poorly-built stallions now made use of as sires; and, while this continues, the influence of good mares is largely negated.

Regarding failure to stick to type in stallions, probably the first item under this charge is the use of undersized stallions, which, while up to weight, by means of heavy feeding, and, therefore, carriers of useless fat, are yet not, strictly speaking, heavy-draft horses; in this, of course, we see the fallacy of taking weights as the sole means of classifying heavy-draft horses. Bone and muscle are of far more importance than fat. If there is the right quality and amount of bone, there will be no lack of weight. Speaking generally, a draft stallion should measure at least 10½ inches below the knee, and an inch more just below the hock. A good indication of the muscling can be got from the gaskins (or lower thighs) and the forearm. There

should be sufficient to cause a bulging or nice rounding of the parts, rather than a flatness.

Another reason for lack of success is the want of virility in stallions. One can go into some show-rings nowadays, and see entire males standing around as unconcerned as a lot of geldings; while training has doubtless considerable influence on the docility of stallions, breeders will do well to avoid a stallion having the complacency of a beef cow, and in commenting thus, I do not wish my readers to confound virility and life with bad temper. In plenty of Thoroughbreds we find the former characteristics; the latter is common in many breeds. Unfortunately, bad temper is easily bred or developed by incompetent groomers.

To my mind, a flood of effeminacy threatens to engulf both human and animal life to-day, largely due to, in the former, the hunger for ease, and in the latter, the life of ease. Effeminacy in the highest type of animal world has transformed life, and the struggle for subsistence, from a fight in the open, with weapons displayed, into a contest in which dissembling, craft, cruelty and the ambush avail most; while, amongst the lower forms, the domesticated animals, the results are loss of individuality, virility, vitality, and lowered resistance against disease, the substitution of fat for flesh, and the consequent falling into disuse of the secreting structures, such as the mammary (milk) glands, and also the gradual disappearance of distinction temperamentally, between the sexes. Muscular tissue must be used, stretched and relaxed, and the per-