

The Yorkshire Coach Stallion, Shining Light.

The horse that is portrayed upon our plate page in this issue is one of the best specimens of the popular breed to which he belongs. Those who have watched the show ring for the past few years will have noticed that in the carriage class, which is open to all breeds of horses as long as they comply with the standard in height, it has been animals of the Yorkshire Coach and Cleveland Bay type that have won the principal prizes. The length of time that these breeds have been established has made them wonderfully prepotent, and therefore they impress upon their progeny the good qualities for which they have so long been held in repute. Therefore colts and fillies that have one, or, better still, two crosses of this breeding are hardly distinguishable in appearance from the imported animals.

Shining Light is one of the handsomest horses in America. He has a grandly formed neck and head, immense style, is beautifully turned above, his top being superbly finished, good hind quarters and shoulders, and a capital middle, and although he has been fitted for show so many times, his legs are smooth and clean, and his feet and pasterns faultless. He has abundance of hard bone below the knee and hock, while his coat, as his name so aptly expresses, is magnificent. When we last saw him, in a box stall, ungroomed, in mid-winter, he was remarkably smooth and sleek.

It is not surprising that he has been successful in the show ring, having won every year since his importation, and in the highest company, having competed with as many as twenty horses in a single class, yet he was never placed lower than third, and that on only one occasion. At succeeding shows he was placed before the horses that had previously beaten him. The fact is, few horses in any class have continued to win year after year and again return fresh to the conflict with the success that has attended this one. In 1888 he won first as a three-year-old and silver medal; in 1889, in his four-year-old form, he won second in his class, but the following year succeeded in beating the winner. In 1890 he won third in his class. In 1891 he won second at Toronto Industrial, and in 1892 he won first and a silver medal for the best horse of any age, beating one of the horses that had been placed before him in 1890. In 1892 he also won a first prize at Toronto of \$60 for best stallion and five of his progeny, beating the noted winner, Prince Alexander, one of the best stock horses in Canada, and sire of the silver medal group of 1891.

Shining Light's colts are coming to the front at all the principal shows, and have succeeded in carrying more than their share of winnings. Among these is Sunlight, the first colt sired by him, owned by B. Rothwell, Ottawa. This is one of the best carriage stallions in Ontario, winning first prize and sweepstakes two years in succession at Ottawa, beating the imported sweepstakes winner, Argyle.

A yearling gelding by Shining Light also won silver medal at Toronto, 1892, a two-year-old filly winning second, a two-year-old stallion winning third.

Shining Light was imported by Messrs. Irving & Christie, Winchester, Ont., and has been owned and travelled on the same route for the past four seasons by Mr. A. C. McMillan, Erin, Ont., his proprietor, with immense success. In fact, so well pleased are his patrons that they are now urging Mr. McMillan to place another Coach horse within their reach, in order to continue in the same line of breeding. For this reason only Mr. McMillan may sell this grand and impressive sire.

Shining Light, we believe, is the only horse of his class that has won sweepstakes twice at Toronto. He is registered in the Yorkshire Coach Horse Book; is a beautiful bay, free from white, black points, mane and tail, stands 16½ hands high, weighs 1,400 pounds, has capital action. He was bred by Mr. Dale, Otterington, Eng.; foaled June 10th, 1885; sired by Wonderful Boy (534); g. sire Wonderful Lad (911); sire of dam, Herod (218); sire of g. dam, Champion (85), all of which were celebrated prize-winners in their day.

Artificial Fertilizers.

Since our last issue, a gentleman representing Freeman's Fertilizer Works called on us. He reports that this firm sold to farmers during last season over six hundred tons of artificial manures; that their output has doubled each year since the works were opened. This being the case, a great many farmers and fruit growers must have given these manures a fair trial. We invite those who have tried them to send us a report of their experience. We would be glad to receive all such testimony not later than February fifteenth.

Agriculture in the Schools.

A very important bulletin, issued by the Hon. Mr. Dryden's Department, has just reached this office. Its subject is the "Teaching of Agriculture in the Public Schools"; it is based upon the excellent address delivered last fall in Toronto by Mr. C. C. James, M. A., Deputy Minister of Agriculture, before the Provincial Association of School Trustees. That body requested the publication of the address, and the Bulletin is the answer to the request.

SHOULD AGRICULTURE BE TAUGHT IN THE PUBLIC SCHOOLS?

The twenty-two interesting pages of this pamphlet are devoted to answering three questions:—

1st. Should agriculture be taught in the public schools?

2nd. Can agriculture be taught in the public schools?

3rd. How can agriculture be taught in the public schools?

One would think, in an agricultural province like Ontario, to ask the first question is to answer it, at least so far as the rural schools is concerned; but experience seems to throw doubt on the opinion that even the farmers of Ontario believe that agriculture should be taught in the rural schools. For, were the belief seriously entertained by a considerable number of them, they would at least attempt to use the means provided by the Education Department for the teaching of the subject. The trustees of the schools are farmers, the teachers are mostly the sons and daughters of farmers, the subject has had for at least six years a place on the curriculum of studies, there is a text-book provided and one of the "special directions" in the Regulations (page 110), is that "the authorized text-book on this subject (agriculture) should be introduced into every rural school, that special attention should be given to such points as how plants grow, how farms are beautified and cultivated, . . . the relation of agriculture to other pursuits, etc.," and yet we have good reason to believe that in the majority of rural schools the text-book is not introduced, and the subject, even if it has a place on the time-table, gets no place or time in the exercises of the school. This statement, which will hardly be questioned, is further supported by the exceedingly small proportion of the candidates at the entrance examination who take agriculture. Of the 337 rural candidates who wrote last July at points near this city, only seven tried the paper on that subject.

These, and other statements which might be adduced, emphasize the necessity for the discussion of the first question which Prof. James proposes in the Bulletin, and justify his occupying half its space with accumulation of argument to prove that agriculture *should be taught*. When the farmers of this province become fully seized of that opinion, they will find or make a way to have the subject receive its proper share of attention in their public schools.

We have not space to state and review Prof. James' premises and arguments. In brief, he shows that a large proportion—fully two-thirds—of our people either reside in the country or are intimately associated with the rural districts; that 69 per cent. of Ontario's school population belong to the rural schools; that an undesirable movement from the township to the city is in progress, resulting in an estimated loss to Ontario's rural population in ten years of 368,605; the capital invested in Ontario in agricultural interests amounts in round numbers to one thousand million dollars, being 5½ times the investment in manufactures in Ontario and 3 times the investment in manufactures in the whole Dominion; that a large part of the surplus produce of Canada comes directly from its tilled acreage, and that our yield per acre, of wheat, for example, is decreasing instead of increasing. The conclusion is that the farm would become more attractive and profitable if proper instruction were given in the science of agriculture, and that therefore it should, if possible, be taught in all our rural schools.

CAN AGRICULTURE BE TAUGHT IN OUR PUBLIC SCHOOLS?

The Bulletin answers this question mainly by quoting official reports of what has been accomplished since 1879 in the elementary schools of France. At that date it was made compulsory on every Normal College to provide agricultural instruction for the teachers-in-training, and subsequently agriculture became a compulsory subject in the primary schools. Eighty-six Professors of Agriculture have been appointed to instruct the teachers, to hold conferences with the farmers, and to carry out investigations suggested by the government. The course of study in each class is stated, one step of which is particularly worthy of mention, viz., practical lessons in the *school garden* for children

from seven to nine years of age. The British Board of Agriculture last year reported, that in France the success achieved is encouraging and worthy of imitation. Professor James thinks that, judging by the success of the Agricultural College at Guelph, Ontario need not fear to enter on a course that France has shown to be practicable and advantageous.

The difficult question is—

HOW CAN AGRICULTURE BE TAUGHT IN OUR PUBLIC SCHOOLS?

The author of the Bulletin grants that the teacher should receive some training before undertaking the work, "otherwise it were better to leave it alone." France began its work by training the teachers in its 160 normal institutions. We have two normal schools, turning out only about 400 teachers per year, while our model schools are yearly recruiting the profession at the rate of 1,200 or more; to be exact, the figures per last report were, respectively, 442 and 1,379. Hence it is clear that the normal schools cannot meet the necessities of the case. The short 12-weeks' term at the model schools is already crowded, and can not give much attention to the subject. The intending teacher, as a rule, spends two years at the high school and three months at the model, therefore it seems to us that under the present system of licensing teachers in Ontario, agriculture must be taught in the high schools before it can be successfully introduced into the rural schools. Anyone who admits the force of Professor James' answer to the first question would not deny that every high school undertaking to train teachers and receive government aid therefor should be properly equipped to teach scientific agriculture.

The friends of agricultural education, recognizing the need of some special training of the teachers, rejoiced to read the proposition made by the Hon. Mr. Dryden, at a meeting in Whitby, about the beginning of last month. He proposed to invite teachers to spend four weeks of their summer holidays at the Agricultural College at Guelph, to hear special lectures on various subjects connected with agricultural pursuits, such as the nature of soils, plant and animal life, etc., and to observe the methods pursued and experiments undertaken at the farm. Judging by the attendance of teachers at the special classes in drawing, music and science, held at the Education Department halls two or three years ago, we should expect from 50 to 100 teachers, of the best men and women in the profession, to avail themselves of the excellent opportunity offered by the Minister of Agriculture. It would be a boon to holders of second-class certificates who do not expect to again attend any training institution.

As other means of reaching the interest and sympathy of teachers, we would suggest to Farmers' Institutes the propriety of appointing delegates to attend their respective county Teachers' Associations, not to give lectures on agricultural themes, but to stimulate the interest of the teachers, to confer with them as to what is doing, and what more can be done to make agricultural instruction general and efficient, and to ask for suggestions as to how the institutes, trustees and parents may co-operate with the teachers to further the good work.

Could not township councils or agricultural societies devote a grant sufficient to carry on a series of lessons for a month or two in some one of the largest and most convenient schools in each township? A competent teacher might do much in this way for many of the advanced pupils in the municipality, besides aiding such teachers in the neighborhood as would care to attend classes on Saturdays. Be the means what they may by which the teachers receive their training, we agree with Prof. James that "all or nearly all depends on the (trained) teacher."

And yet not quite all, for, as our author says, trustees must be willing to provide necessary means. They must recognize in his salary the increased expense incurred by the teacher in fitting himself for this work. They must put house and grounds in such conditions of size, arrangement, fencing, drainage, etc., that will make the best teaching possible.

School sections which earnestly undertake this work, likely to be of so much benefit to the country, deserve recognition from the government. As long ago as 1871 the late Dr. Ryerson, to whose wisdom and foresight our excellent school system is the monument, proposed that a special legislative grant be made to every school taking up agricultural chemistry and the kindred sciences; and he went so far as to establish a special course of study, examination and certificate for teachers. To be eligible to share in the proposed grant, a school was to be in charge of a teacher possessing one of these special certificates and to hold classes for this instruction. A number of teachers studied the course and passed the examination, but the legislature never voted the