

# Carleton Sentinel Supplement, August 13, 1892.

## PAPERS READ AT THE FARMERS' CONVENTION HELD AT GLASSVILLE, JUNE 22nd AND 23rd, 1892.

### Horse Raising in New Brunswick. A. W. HAY.

It is fitting that we who are dependent on farming for our livelihood, and spend so much of our time at that occupation, should meet in this manner to discuss the different phases of our calling, exchange ideas, and derive mutual benefit; and it was with much pleasure I received an invitation from the secretary to be present at this convention, and I said at once, "Yes, I will go, and learn what I can from the experience of others, and perhaps I can say a word about that particular branch of farming—horse raising—in which I am more particularly engaged, to be of benefit to my brother farmers. We who cultivate the land, receive as a return for our labor the produce of the soil, part of which we need for our own use, and for part of which we have to find a market. This question came to me as it does to all farmers, "what can I produce on my farm that there will be the greatest demand for, at the most remunerative prices?" and after giving the different branches of farming that careful consideration which their claims demanded, the balance turned in favor of horses. One surplus of farm product we know to be so much per bushel, or so much per ton; we also know how much of this food it takes to keep a horse for a certain length of time; and we also know something of the grain in value from the colt to the mature horse. The difference between the cost of fodder and the selling price of the horse gives us the profit or loss. The labor involved in care and feeding of the horse is no more, perhaps less, than the labor of conveying produce to market.

The following table gives about the cost of raising horses, as fed on my farm:

The first expense is for the service of stallion, which we will put at \$10. The mare will take care of the colt for the first four months and do enough work to pay for her keeping, which brings the foal to feeding time in the autumn. The next expense is 6 months feeding of oats at 3 quarts per day, or 17 bus. at 30 c., making \$5 10, or perhaps an occasional change from oats to potatoes, turnips, or bran; also 6 months feeding hay, at 11 lbs. per day, making one ton—\$6; then comes pasturing 6 months at 75c. per month—\$4 50; interest on first investment of \$10—80c, making the total cost of the colt at 1 year and 4 months old, \$26.40.

1 YEAR AND 4 MONTHS—Now for the second winter the colt requires 6 months' oats at 4 quarts per day, or in all 23 bus. at 30c. per bus.—\$6 90; also 16 lbs. of hay per day, or 1½ tons in all at \$6 per ton—\$9 00; then comes the second summer's pasturing, 6 months at \$1 per month, or \$6; now we have the interest on the money invested in the colt, viz., \$26 40 at 8 p. c., or \$2 11; making the cost of the colt at 2 years and 4 months old, \$50 41.

2 YEARS, 4 MONTHS—Now for the third winter the colt requires 6 quarts of oats per day for 6 months, or 34 bus. at 30c.—\$10 20; also 22 lbs. of hay, or 2 tons at \$6—\$12 00; then there is the pasturing for 6 months at \$1 per month—\$6. The next item to add is the interest on \$50.51, the amount invested one year ago 8 p. c.—\$4 01; making the cost of the colt at three years and four months old, or a horse ready to earn his own living and more, \$82 62, and \$6.92 of that is for interest; and we have had a market right at home for our surplus farm products. With proper attention to using pure bred sires, we can find a ready sale for our horses, barring accidents, at that age—3 years, 4 months—at double that figure, or even more.

A neighbor of mine in 1889 patronized a pure bred Clydesdale stallion at a cost of ten dollars for service fee; his colt is now two years old, and he has refused \$200 cash for him. Another neighbor, who owned an equally good native mare, bred her to a nondescript horse, at a cost of service fee of \$2, and his colt is now for sale at \$50 and no person seems to want it. Breeding to mongrel stallions is like breeding to a white elephant, what are you going to with it? I hope I will not step on any person's toes, but the necessity of the case compels to speak very plain right here when I remember how our farmers have, and are being swindled by unprincipled owners of nondescript stallions. The prices of horses the world over are fictitious uncertain, and dependent on what his manners are like; what he is fitted for, his

age, size, breeding, action, color, appearance, and power; whether he is to be used as trotter, carriage, or draft horse; and to insure a good price he must be sound and otherwise perfect. Find out what kind of a horse you want.

First we will discuss the trotters, and the few words we will say at his requiem will be pointed. Farmers don't want them at all. If you have been over-persuaded to invest in trotters, when you get one you will think the blight has struck you sure. Leave them severely alone, as you would a pestilence.

Now for the carriage horse or saddle horse; which was so much in demand 20 or 30 years ago in New Brunswick, light, quick going horses, and for which there is a limited demand yet; but owing to the extensive railway communication, the demand has been limited; while on the other hand the growth of our lumber industries, the traffic of our cities and towns has increased the demand for heavier horses—draft horses.

Now we have to select our ideal from the many excellent breeds of draft horses. Dr. Talmage says when he went to buy a horse, he took the Prophet's description of a horse, and bought one whose neck was clad with thunder. He says the thunder was all right, but he didn't like the lightning that flew out of his heels. Use only pure bred sires, and pure bred dams too, so far as possible; as any crossing of breeds we may do is not going to make any improvement, but quite the contrary. Breeding a pure Clyde with a pure bred Percheron or a pure Shire is not preserving pure bred stock, though the Shire and Clyde are similar breeds, it would be reducing pure bred stock to mongrel. A horse may have several good strains of blood from different breeds, he would only be a mongrel, and probably a very poor one. It is essential to decide on what breed you will have and then confine your breeding to that stock only. If you cannot easily decide which breed of draft horses to raise, ask men who are making money out of the horse labor; ask our contractors, truckmen, or lumbermen. I remember about four years ago when I decided to give more attention to horse raising, of going to some of the principal users of draft horses in our Province, and asking them what breeds they found most profitable? What breeds possessed the greatest powers of endurance? What breeds would move the greatest number of pounds, the greatest distance in a given time, with a given amount of provender? What breeds they found the most satisfactory all round? I received but one answer, "If you want to raise horses for us, raise Clydesdales, that peerless prince of draft horses throughout the civilized world, whose characteristics are indelibly fixed by the number of generations they have been bred without any crosses, giving that ordinary impressive power, which makes them so desirable for mating with our native mares, producing a class of horses valuable for their inherited excellence." On Monday last, while looking at a horse that was kept for stock purposes, I enquired his breeding, of the groom in charge. He said he was Cannon Ball and Warrior on his dam's side, and Measenger and Nigger on his sire's side. I asked him if his horse was registered. He said "No, would you advise registration." I replied, "No, I would advise castration, or annihilation." The number of faulty and unsound stallions of mongrel breeding used in some districts, is creating much harm and loss to our farmers. By using pure bred sires we soon get to have pure bred or nearly pure bred offspring. For instance, a pure bred stallion crossed with mongrel mare gives a half breed; a pure bred crossed with a half breed gives a three-quarter breed, and so on. On the other hand after we get a half breed or three-quarter breed and then use mongrel sires we get mongrels in the offspring, going backward instead of ahead.

The law of supply and demand comes in here in horse breeding as in other business, it depends on what you want, the kind of sires to use. I remember last September at our horse show at Woodstock, hearing a couple of United States horsemen, who were visiting New Brunswick at that time, discussing the merits of the Clyde and Percheron horses. After they had said other things about the different characters of the two breeds, one said, "Yes, in France where about 20,000 horses are slaughtered annually for their flesh for food, they raise Percherons; but in Scotland where the canny Scott regales himself on oats, they raise Clydesdales." If you want flesh to eat don't raise Clydesdales. While the soft delicate flesh of the Percheron might be most pleasing to

the palate, the hard sinewy flesh of the Clyde would not be so appetizing.

Thanking you Mr. Chairman, and you my brother farmers, for the kind attention you have given my paper and hoping ere long again to meet you all in farmers' convention, (our board of trade) and hoping your land may drop fatness, and your mares may drop Clydesdales, I shall always have a spot in my heart for Glassville.

### Agricultural Chemistry.

#### DR. WELCH

It is with great pleasure that I have received an invitation and the permission to address so distinguished and enlightened an audience on the important subject of agricultural chemistry.

That anything which I am able to bring before you to-day should be thought worthy of the attention of this convention is indeed an honor, and I shall endeavor to prove my gratitude by using every exertion to illustrate this department of science and to point out its uses.

In attempting these objects, the peculiar state of the enquiry presents many difficulties to a lecturer. Agricultural Chemistry has not yet been reduced to a popular and simple form in which it is capable of being received by the generality of agriculturists, probably an A B C form of the science has never been demanded, because the average farmer is D E F to it. The science has been pursued by competent enquirers for many years, but their experiments and deductions have not been collected into any elementary treatise, and, on an occasion like this, when I have to trust so much to my own arrangements and to my own limited knowledge I cannot but feel diffident as to the interest that may be excited, and doubtful of the success of the undertaking. I know, however, that your candor will induce you not to expect anything like a finished work upon a science comparatively in its infancy, and I am sure you will receive with indulgence my feeble attempt to illustrate its importance in a distinct public lecture. It is within my own memory when the idea of applying chemistry to the farm was held in abhorrence by the farmer and held up to public ridicule by the public press. I have here an extract from the newspaper press of England, published less than half a century ago, which I will read to show you in what little esteem the applications of science to agriculture were held only that short time ago.

Of course, it has always been difficult to move the farmer out of established rut, and as a consequence nearly all improvements and innovations have met with strenuous opposition. This is admirably illustrated in Tennyson's Northern Farmer and his opposition to steam cultivation, where he says:—

"But sum man 'll come after me,  
Mayhap wi' his kettle o' steam,  
Huzzin and Masine the blessed fields,  
Wi' the devils own team."

But to resume the subject of the afternoon's purpose, agricultural chemistry has for its objects all those changes in the arrangements of matter connected with the growth and nourishment of plants, the comparative values of their produce, as food the constitution of soils the manner in which lands are enriched by manure, or rendered fertile by the different processes of cultivation. Enquiries of such a nature cannot but be interesting and important, both to the theoretical agriculturist and to the practical farmer. To the first, they are necessary in supplying most of the fundamental principles on which the theory of the art depends; to the second they are useful in affording simple and easy experiments for directing his labors, and for enabling him to pursue a certain and systematic plan of improvement.

It is scarcely possible to enter upon any investigation in agriculture without finding it connected more or less, with doctrines or elucidations derived from chemistry.

If land be unproductive and a system of ameliorating it is to be determined on, the surest method of obtaining that object is by finding out the cause of its sterility, which must necessarily depend upon some defect in the constitution of the soil, which may be easily discovered by chemical analysis.

Some lands of good apparent texture are yet sterile in a high degree, and common observation and common practice afford no means of ascertaining the cause or of removing the effect. The application of chemical tests in such cases is obvious, for the soil must contain some noxious principle which may be easily discovered and, probably, easily destroyed.

Are any of the salts of iron present? They may be decomposed by lime. Is there an