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THE COLONIAL FARMER,

DEVOTED TO THE AGRICULTURAL INTERESTS OF NOVA-SCOTIA, NEW-BRUNSWICK, AND PRINCE EDWARD'S ISLAND.

VOL. 2. HALIFAX, N. S., NOVEMBER 16, 1842. NO. 10.

THE COLONIAL FARMER.

HALIFAX, N. S., NOVEMBER 16, 1842.

THE SEASON.

The months of May and June were cold and wet, rains being frequent, although there was not a single heavy rain sufficient to produce a flood or freshet in the rivers. The cold was mainly produced by the large quantities of ice passing near us, there being much of that kind of mist which earlier in the season would have been "silver thaw" or freezing rain. This very often leads fields of floating ice, appearing like a thick haze with a dark edge in the eastern horizon, the wind very chilly, blowing from that quarter, and shifting to southeast, south, and finally to southwest; when it grows warmer and the black-edged haze disappears, the ice field having passed. If in the latter part of February there are two "silver thaws" in succession, it is probable that the winter is broke, and that there will be no more severe cold of any continuance. In the silver thaw the clouds generally rest on the earth, and it has often happened that directly after a warm rain which has completely thawed the branches of the trees, and while the drops of water were hanging to them, a kind of fog would overspread the country, and a mist composed of minute drops, barely visible to the naked eye would begin to freeze to these unthawed branches, and soon cover them with ice, while the drops were so small that had they fallen thirty feet through the cold air they must have been snow. If there are now, Philosophers employed as Messrs. De Luc and Hutton were formerly, in attempting to explain the process of the formation of rain, we would advise them to spend a winter in Newfoundland, where they will have the advantage, in the "silver thaws," of trying their experiments *in the clouds* where the rain is forming. About the beginning of July the weather became very warm and continued so till the end of August, the wind generally blowing from a point a little south of west. Dry weather commenced with the hot weather, but the hay crop was so forward near Halifax that it was not injured, and proved a heavier yield than common, and persons who were strong-handed had fine weather for making their hay, but the drought was succeeded by rain before all the hay was made, frequent small rains continued to fall, and there was an uncommon growth of after grass. In some parts of the Province the drought commenced earlier and injured the hay crop, but wherever the weather was similar to that at Halifax it proved better than was expected in the spring, for the preceding open winter had destroyed much of the Timothy and Clover. Oats and Wheat generally produced a good crop, in many places above average. About the end of August we had an easterly rain which cleared up with a North wind, the weather became cold, and continued so through September, stopping the growth of cucumbers, squashes, beans, &c., but with very little frost as the North wind generally continued all night attended with flying clouds. Early in October the weather moderated, and we had a kind of Indian summer for half this month, when after a rain storm attended at times with thunder the cold north wind returned, and on the night of the 21st we had the first frost sufficiently severe to kill the potatoe vines generally. Most of the potatoe fields were affected by the blight, but in general not till they were nearly ripe, so that all that were planted in proper season have yielded a fair crop, of good quality. Taken altogether the Farmers have rarely had a better crop, but we are sorry that we must say, that owing to dullness of business in town, they have seldom had a worse market to dispose of their surplus produce. Good potatoes have been sold at auction as low as 6*d.* ℔ bushel, and good beef at 1½*d* ℔ lb, but this is one of those circumstances which prove that all classes of the community make but one body, and that it is for the interest of all that all should thrive. Could tradesmen and laborers get constant employment, provisions would fetch a remunerating price, but when they cannot, the farmer is obliged whether he will or no, to supply them with food at a loss to himself, and it is well that he is able to do it, for it is better that his wife and daughters should wear their old gowns a while longer, than that any body should starve.

DULL MARKETS.

The market at Halifax is at present glutted with country produce, the tradesmen and laborers having but little employment, are obliged to purchase either on credit from retailers, or else to buy a very few days provisions at a time, while at the same time there is a large surplus of provisions in the neighbouring states, for which they can hardly find purchasers. At such a time it will be well for farmers to reflect that glutted markets are generally soon succeeded by scarcity, that it will be better for them to winter as many lambs as they can, than to sell them for four and sixpence a head—that it is better to winter more swine, than to pay freight for potatoes to Halifax and then sell them at tenpence a bushel. All the stock that is kept on the farm furnishes manure, an article of which the Farmer never has too much, and if the inhabitants of Prince Edward Island were to adopt the practice of selling salt provisions and butter, instead of disposing of their oats and potatoes at such very low prices as they have realized for some years, they would undoubtedly raise the money to pay their rents more easily than they do at present, while at the same time a large addition would be made to their stock of manure, and consequently they would get larger crops with the same labour.

We have this year, generally, a large crop of straw. Some hardy cattle will eat it readily and keep in good order without hay, but all will eat it when cut and wet with scalding water containing a small quantity of mashed potatoes, as it is prepared by our German farmers. Horses have better wind when they are allowed cut straw about equal to half their hay, the straw being given with their grain. The horses on the Barbary coast and in part of Spain, are generally fed only with straw and barley, without any hay.

When the present prices of country produce are compared to the prices of forty years ago, there appears to be a very great decrease, but many of the articles which the farmer purchases have also fallen; a sufficient quantity of printed cotton, to make a dress for a woman, can now be purchased for less than two shillings. Cotton warp yarn is now cheaper by the pound than the cotton wool was formerly. There is however such a falling off in the farmers profits, that it will be necessary for many to reduce their expences, nor is this such an evil as some fancy it. It appears to be necessary to our general comfort, that luxury should occasionally receive such checks. We are too much in the habit of adding to our expences by little and little, in things which add nothing to our happiness, till we find ourselves unable to live upon what we once thought a good income, but when circumstances which we cannot control, oblige all to reduce their expences, this necessity, although like other medicines, it goes against our stomachs, yet generally turns to our advantage.

We are here affected by the poverty of other countries in some degree, so that we can honestly say we have not caused *all* the dullness of business and depression of markets by our own unskilful management. Our sister Province of New Brunswick engaged in lumbering, and paying little attention to agriculture, has been accustomed to purchase a large quantity of the produce of our farms, they have met one of those reverses which are not uncommon wherever this ruinous business is carried on, and having now but little to purchase with, they take but a small proportion of what they used to do, from Novascotian farmers; numbers of the inhabitants have come among us, for want of employment at home. From our mother country also, where there is much *real* distress emigrants are constantly arriving. As we had tradesmen and laborers enough before, these newcomers, of whom very few are farmers, prove somewhat burdensome at first; but this burden we ought to bear cheerfully, and be thankful that we are able to bear it. When industrious men find it impossible to procure a living in their own country they have a right to remove to a better, and should always be welcomed. All men at times need the aid of others, and all should be willing to give assistance to those that need it; our turn may come another day. May we never have cause for a more serious complaint, than that *we have more bread than we can eat, and cannot sell the surplus for its value.*

Securing Roots.—Orris, Parsnips, and Parsley may be sowed at this season; the parsnips in drills 2 feet apart, and the orris and parsley 10 inches. A slight covering of straw should be given to the ground after it is sowed, otherwise the frost alternately with thaws will displace the seed.

Beets and Carrots are best preserved by packing them in sand or barren soil in the cellar. If small parsnips are spread thin in a shed where they will be exposed to frost, they will after they have become withered and half dried, be found much sweeter than they were when first dug up.

After cellars have been carefully banked it frequently happens that the rats open themselves paths through the banking which admit the cold wind into the cellar; it is therefore prudent at the commencement of a severe spell of weather in the early part of the winter to examine the walls of the cellar by carrying a candle near to them and carefully caulking every hole through which wind is perceived to come and affect the flame of the candle, for there is more danger of frost entering the cellar with the first severe weather than with that which comes later in the season, as the damp air from the cellar will finally convey moisture enough to close all the crevices with ice.

Frozen potatoes may be preserved by pressing the water in them thoroughly, and then spreading them where they will, when they will answer as good a purpose for fattening pigs as they had not been frozen. The Peruvian Indians who live on lower part of the Andes raise a very unpalatable kind of Pot which they purposely expose to frost, press out the water, and and then beat or grind them into meal.

TRAP DOORS.

We would advise every young farmer who is about building be careful not to introduce this nuisance into his house. No room is lost by making cellar stairs directly under the chamb stairs. The farmers wife has such frequent occasion to go into cellar, that were nothing taken into calculation but the loss of time in passing the trap door, it would show that there was bad economy in using it, but there are so many serious accide caused by these mischievous traps for breaking bones, that we he tily wish there was a tax of three pounds a year upon each of them the money to be applied to the support of the cripples of the pari

In a small farm-house the stairs should not have a very ste ascent, nor should they wind; it is much better to ascend a few steps, and then turn upon a landing, or broad step, as wide as it long, if a turn should be necessary. The young Farmer's you wife has generally a flock of young children, and as she has muc to do besides watching them, there should be as few traps in the house that may injure them as possible.

DRY ROT IN POTATOES.

This disease appears to be leaving us; it was most probably caused by a visitation of some new species of small insects, as it did not attack roots with unbroken skins. It is well remembered by many that a number of years back a family of insects entered this Province and destroyed in a few years a great part of the larg Spruce timber, and then suddenly disappeared, nor has a single tree for nearly twenty years met our observation, which was affected with that disease; we may therefore reasonably hope that some change of season may before long relieve the neighbouring State and Canada from the destructive wheat fly.

WORMY APPLES.

From the worms in the apples which fall from the trees, the fly originates which deposits the eggs in the young fruit the following season. If therefore all the windfall apples are collected and boiled with the pigs potatoes, there will be but few wormy apples, except there should be another orchard in the neighbourhood where the same precaution is not used, for these creatures can fly, although they generally creep. It is, however, asserted by some who have tried the experiment, that to dig the ground about apple trees, smooth it, and spread on it about an inch of old lime from the sweepings of a lime store late in the fall, has prevented the fruit from being wormy the following season. Should this be confirmed it would show that the bugs bred under each particular tree, cause the defects in its fruit.

Plumb trees should have the ground within four feet of the stem covered with straw or fir boughs upon the approach of winter, as they are often injured by the cold if this is neglected.

A slight covering of straw or moss should be given to Sage, Thyme, and Peppermint, when the leaves of the trees have fallen, and a thicker covering of straw or fir boughs should be added when severe weather commences.

BLACK WORM ON FRUIT TREES, RESEMBLING A SLUG.—It is said that spreading tanners refuse bark, which is thrown out of the yard, about the roots of the trees, will preserve them from this insect, as the flies that deposit the eggs are hatched from worms that remain through the winter in the ground under the trees. Strong tar water thrown upon the leaves with a syringe is said to kill the worms immediately. Some have succeeded also by dusting the trees with lime that had been slacked just before it was used, but it is probable that to ensure success these remedies must be used on the first appearance of the vermin; for we know from experience that the grey worm which devours the leaves of our turnips is quickly killed when but three or four days old, by dusting them with lime; but that after they are fully grown it does them no injury.

Pear trees often cease bearing and have the leaves diseased and covered with black. It is asserted that by covering the ground around the roots of the trees, in some cases with tan, and in others with blacksmith's cinders, the fertility of the trees has in many cases been restored.

Rockweed or Kelp spread about the roots of Gooseberries late in the fall, and early in the spring, generally secures the fruit from worms—salt destroys many of the eggs of insects, as well as small insects.

PARRSBOROUGH AGRICULTURAL SOCIETY.

The Committe of the above Society will pay the following Bounties and Premiums established by them in 1842.

1s. 6d. ℔ Bushel for every three or more bushels merchantable Wheat raised by members in 1842.

3d. ℔ lb for every ten or more lbs. merchantable clover seed, raised by members in 1842.

1s 6d ℔ Cwt. on every cwt. Oatmeal, manufactured from grain raised in 1842, by the member applying for it.

1l. ℔ load, for every ox-cart load compost, valuable as manure, turned out any time before the 1st of July, 1843, (not made from barn mud, nor chiefly from the winter dung of Cattle.) No member to receive bounty for more than 100 such loads.

£5 to the member who shall show, within the years 1842, 1843, 1844—the best plan for saving manure from the urine of cattle; such plan to have been tested by experiment, upon at least ten head stabled for five months, or more, and to be approved of by a majority of the whole Committee.

£3 to the member who shall make, within the years 1842, 1843, and 1844—the best *one wheel plough*, after the manner of Hart's, described to in the "Colonial Farmer" for March, 1842—such parts as cannot be manufactured here may be imported.

N. B.—Members whose subscriptions are not paid to the Treasurer on or before the third Monday in December, 1842, cannot be participators in the above bounties and premiums. All applications for bounties or premiums must be made to the Committee at their meetings, upon the certificate of one or more of the officers of the Agricultural District where the applicant resides.

By order of the Committee,
JOHN T. SMITH, *Secretary.*

Parrsborough, 19th Septr., 1842.

ANOTHER AGRICULTURAL SOCIETY.

A meeting of a number of the Inhabitants of the Township of Argyle, for the purpose of forming an Agricultural Society, and to suggest means for improving the Agriculture of the Township, was held at the Court House, in Tusket, on Saturday last. The following Resolutions were unanimously adopted:—

1st. That the Society now formed, be called the Argyle Agricultural Society.

2d. That any person residing in the County of Yarmouth, may become a member of this Society, by paying the sum of Five Shillings to the Secretary, and that such person shall continue a member, so long as he pays five shillings annually to the Secretary—each year to end the first Monday in December.

3d. That the business of this Society shall be transacted by a President, two Vice-Presidents, a Secretary, and a Treasurer, and eleven other members of this Society, who, with the foregoing officers, shall form a Committee, any nine of whom shall be a quorum to transact business.

4th. That there be a general meeting of the members of this Society holden at the Court House, in Tusket, on the first Monday in December, in each year, to elect office-bearers, and to transact other business of the Society.

5th. That the Committee hold their meetings quarterly in the Court House, in Tusket—the first meeting to be held on the first Monday in December next.

6th. That the President be empowered to call an extraordinary meeting of the Committee, whenever he may deem it necessary.

7th. That any seven members, may, at any time, call a general meeting of this Society, by stating the object they have in view to the President, in writing, who shall thereupon direct the calling of such Meeting.

8th That the Committee of this Society shall have the disposal of the funds thereof, *during their continuance in office.*

The following persons were selected as office bearers and members of Committee for the present year:—

Matthew Jeffery, Esq., *President.*
Rev. James Lent, Simon D Entremont, *Vice Presidents.*
James Bingay, Secretary.
John Ryder. *Treasurer.*
Committee—Reuben Spinney, Thomas Willett, Israel Harding, jr., James Frost, Reuben Abbott, Prince Kinney, John Burke, William J. Hatfield, John V. N. Hatfield, Archibald Jeffery, John Gavel, 2d.

Each and every member of the Committee authorised to receive subscriptions from any person or persons desirous of becoming members of the Society.

And that the Secretary will forward the above to Mr. Lawson to be published in the Yarmouth Herald.

JAMES BINGAY, *Secretary.*

Argyle, October 8th, 1842.

WE would apologize to a part of our readers for introducing the *following extract from* Dana's Muck Manual. They who understand it will see that it contains not only curious but useful information. The demonstration that "Snow is the poor man's manure," is one instance among many which prove that the unlettered man has often discovered truths by experience which the learned did not believe, because they did not see any demonstration of them, till new discoveries in science proved the unlearned man to be right. We see by Dr. Williams's experiment upon snow-water, that a considerable portion of rotten manure in a state of vapor arises from the earth even in winter, and that a covering of snow prevents it from being carried off and may readily comprehend the reason that grass is so much better on land where the aftergrass *is left, than it is on where it is mowed,*

IRRIGATION is chiefly employed on grass lands. The green sward here may not be broken up—what if it was? What if, by ploughing, it was exposed to the action of the air? Remember the properties of geine. Air converts the insoluble to soluble, by forming carbonic acid, that is, the air combines with the carbon of the geine, and forms that gas. Give the geine this oxygen, condensed in water: wet it with this concentrated oxygen, crowd it into geine, as would be done by overflowing a meadow with water. It penetrates every crack and cranny, and every mole's eye hole; it expels the carbonic acid imprisoned under the sod. It is doing the same work upon the untouched *green sward which would be* effected by ploughing and tillage. The long and the short of the whole action of irrigation with pure limpid water is, that its absorbed oxygen, converts insoluble to soluble geine. Is this explanation which science offers, confirmed by practice? The appeal is made to all who have attended either to the theory or practice of irrigation, to bear witness to its truth. Is it not admitted, that running waters are alone fit for this purpose? That after remaining a few days, they are abated, and a new flood must cover the land? Is not this necessity, of renewing at short periods, the covering of water, which shows no deposit, a proof that it has given up some invisible agent to fertilize the earth? This invisible agent is oxy-

gen. Is it not evident from the extreme slowness with which air is absorbed by water, that, if it were not for the running water, which every few days replaces that which has acted, that the practice of irrigation with pure water could be never successful?

This is the principle, a principle which having been wholly overlooked, has led to a waste of time and money, and has given to irrigation, in many minds, the odor, if not of a bad, at least, of a useless practice. Where, guided by this light of science, grass lands can be irrigated, let it be done. If the experience of the most enlightened agriculturalists in Europe, is not all deception, by simple irrigation with running water, the farmer may cut two tons of hay, where he toils and sweats to rake off one.

But by far the most fertile source of increased crops, by irrigation, is found in the impurity of water, the salts and suspended matter, the slime and genial mud of freshets. Perhaps the effects due to this cause, cannot be better illustrated than by a statement of those substances, and their amount, which fill the waters of the Merrimack; a flood of blessings which rolls by those engaged in the din and hot haste of manufacture, as unheeded as was the earthquake, which thundered and trembled and rolled away under the feet of the fierce soldiery, in an ancient battle. In the year 1838, during twenty-three days of freshets, from May till November, no less than 71,874,033 pounds of geine and salts rolled by the city of Lowell, borne seaward. During the five days of the great freshet, from January 29th to February 1st, 1839, no less than 35,070,597 pounds of the same matter rolled by at from the rate of 112,128 pounds, to 20,405,397 pounds per day, each cubic foot of water bearing onwards, from 1½ to 30¼ grains. This is only the suspended matter. That which is chemically dissolved by the waters, the fine filmy deposit, which occurs in a few days after the coarser and grosser matters subside—and the matter ordinarily suspended in the water of the river added to the above, for the year 1838, give a grand total of 839,181 tons of salts and geine, which were rolled down in the water of the Merrimack river.

What is this matter? Is it of any agricultural value? The answer to the first question will answer both. The dissolved salts are sulphate and geate of lime, and the fine deposit occurring after the water has settled, is composed of one half of geine, and the remainder of salts of lime and silicates. The great agricultural value is found in the clayey deposit, which occurs in the first few days. The coarser part, that which collects about the foot of rocks, and falls and eddies is composed as follows:

Geine	3.92
Silex	72.70
Oxide of Iron	9.15
Alumina	8.80
Lime	0.51
Magnesia	0.10,

but considering the elements as we have usually treated them, as silicates, salts and geine, the composition of the several deposits is shown in the following table:

	Geine. Sol	*Ia.*	*Sulphate of lime.*	*Ph. of lime.*	*Sil.*
The coarse deposit above,	2 06	1 86	0 74	0.90	94 44
Freshet, 1839,	5.40	6.50	2.34	1.20	84.66
Freshet, July 7—18, '39.	8.80	6 30	3.20	0.60	81.20

If the doctrine of the action of silicates, salts and geine, upon each other when aided by growing plants, is considered, it cannot fail to be perceived, that the fertility of soils, periodically overflowed by turbid waters, is owing to the elements, salts and geine which it contains, and to the exquisitely finely divided state of the silicates which form the bulk of the deposit. The carbonic acid of the air, acts on each atom of silicate; while owing to the geine, having been as it were, irrigated, the oxygen of the air and water, must put that into a state to evolve carbonic acid. Hence, the silicates are at once decomposed and their alkali liberated. How beautiful! It seems like a special interposition of that Beneficent Power, whose blessings while they fill us with wondering admiration, at the infinite skill, which directs every change in the material universe, should teach us also, that these changes are held up to us, not only to admire, but in some humble degree to imitate. Whenever man, "the faithful servant and interpreter of nature," has thus learned the lessons propounded by an Infinite mind, he finds when he humbly imitates nature's laws, she is a kind and indulgent parent. She opens her hand liberally, and gives fertility by irrigation, and rivers and streams like holy water, sprinkled by a reverend father fructify all they bedew. With hearts thus attuned, by the observation of the laws of nature, they respond to the gentle vibrations, caused by the descent of genial and fertilizing showers.

Rain is only natural irrigation; the water is found like that of rivers, rich in oxygen, and organic matter. The fertilizing power of rain, is referred to the same causes, which lead to irrigation, the salts and geine which rain water contains. Several chemists have proved the existence of saline matters and organic substance in the air. The falling rain, carries down with it salts of ammonia, of lime, and a flocky organic matter. These all may be supposed floating in the air. The dry soils, give to the winds an impalpable dust, its silicates and geine. When hailstones which have been formed in the regions of perpetual frost, exhibit almost the same substances, which are contained in rain water, the height at which these matters float, would almost compel the supposition that they exist in a gaseous state. From the examination of hailstones by Girardin, a French chemist, it appears, that no sensible trace of ammonia was detected during the evaporation of their water, but there was found a notable quantity of lime and sulphuric acid, and above all, a large proportion of an organic substance containing nitrogen. Melted hailstones have the appearance of water, containing a drop or two of milk; by standing, the water grows clear, and the flocky matter which settles, burns with the smell of animal matter and evolves ammonia.

It is a question whether, even at the Giessen laboratory this was not the source of the ammonia, there discovered in rain water. It is taken for granted, that the ammonia in rain water existed as a volatile carbonate, because it was found to pass over in distillation. So did a volatile product, which always discolored the crystals of sal ammoniac, procured by adding muriatic acid to the distilled water. This discoloring matter, was noticed a century ago, by Margraf. Later chemists have also detected ammoniacal salts in rain water, but no volatile carbonate of that base. It is well known that muriate of soda arises in evaporation, so does chlorate of potash and several other salts. If in distilling rain water, the ammonia did not pass over in the volatile organic discoloring product, it may have gone over as muriate of ammonia. It is not questioned that ammoniacal salts exist in rain and snow water. The fact that it there exists as carbonate, seems to be assumed, and is incompatible with the salts which have been heretofore obtained, from rain, snow and hail. This subject has of late excited much attention, and as the existence of salts in snow is intimately connected with the old saying, that "the snow is the poor man's manure," it may be worth while to examine the foundation of this proverb. Like all others of this class, it will be found to rest on observation and be supported by experiment. In 1751, Margraf, in the neighborhood of Berlin, after it had snowed several hours, collected in glass vessels, as much falling snow as afforded 3600 ounces of water. This carefully evaporated, afforded 60 grains, of calcareous matter, with some grains of muriatic acid, and traces of nitrous vapour. An equal quantity of rain water, afforded 100 grains calcareous matter, with some muriatic acid; and in both cases, the matter was discolored by an oily substance. A similar result was obtained long ago in Ireland, by Dr. Rutty, who found in a gallon of snow water, 4 grains, and in one gallon of rain water, 5 grains of calcareous matter. This is about the proportion found by Margraf, and would give for each inch of snow water about 10 lbs. of salts per acre. From the existence of free acids in this case, it is evident that no carbonate of ammonia could have there existed. There are some experiments performed by our countryman, Dr. Williams, formerly Hollis Professor of Mathematics and Natural Philosophy in Harvard College, and detailed in the first volume of his history of Vermont, where the experiments were performed. In 1791, 6 gallons of fresh falling snow water, afforded by evaporation, 11 grains calcareous matter, 2 grains of saline matter, 5 grains of a dark brown oily matter. In January, 1792, 6 gallons of snow water, from snow lying three inches deep on the grass, on an area of 16 square feet, where it had lain 59 days, covered with a depth of 27 inches of snow, afforded the same salts as above, and 105 grains of this oily matter. This is the most remarkable fact, and may afford some weight to the suggestion before made, that organic matter exists gaseous in the air. It must have been drawn up by capillary attraction, or evolved from the surface of the earth. It is there condensed by the snow and returned to the earth, impregnated with its salts of lime and ammonia. The snow is "the poor man's manure." It not only adds salts and geine, but prevents the escape of the last. But is it possible that it should escape in the cold? Doubtless it does when the ground is not frozen. The snow by its warm man-

...tually prevents the earth growing colder, and as has been in...ly suggested, keeps up an imperfect vegetation. The snow ...n frozen ground. In 1791, Professor Williams found that the ...d which had been frozen 6 inches in depth, before the snow ...not only had this frost extracted in a few weeks by snow, but ...the ground 6 inches below the surface, had a temperature of ...degrees. This slight elevation of temperature was enough to ...r the gaseous exhalation of organic matter, which was found to ...ed that of fresh fallen snow, by 20 times. This quantity in ...r 3 inches deep, would give per acre 40 lbs. and to this are to ...added 5 lbs. of salts. If this geine is not a natural addition in ...ht, it has undergone a transformation and become soluble ...ces every inch of fresh fallen snow, actually adds a little of ...ame matter; it will not be extravagant to estimate the total ...tion of geine at 50 lbs. per acre for the winter. This added to ...warming effects of snow, shows that it may have a genial and ...ching power on vegetation, independent of its ammonia. The ...otion of the existence of nitre in snow is not supported by evi...ce; but in whatever view we consider the salts of lime, in snow ...rain water, it is difficult to believe that carbonate of ammonia ...is in atmospheric air."

Rotted stable manure is nearly the substance called Geine, and ...this a large proportion is Carbon—Oxygen air mixed with a less ...portion of Hydrogen forms water. Water is decomposed by ...ny substances which have a strong attraction for oxygen, the hy...ogen flying off in an aerial state, and the oxygen uniting with ...other substance and forming sometimes a solid, as when by ...ing with iron it forms rust, and sometimes an aerial fluid as in ...sion with carbon, when it forms carbonic acid gas, or what is ...n called choke damp, in mines. This carbonic acid gas is the ...incipal food of many plants which retain the carbon and perspire ...e oxygen through their leaves.

There are in this Province many situations where brooks which ...escend hills might be made to answer the purpose of manure for ...grass land. With very little expense such brooks can often have ...their water spread over the face of the hill by little channels turn...ing right and left from the brook: but there are brooks which will ...do very little good to the grass; and there is on primitive rocks ...as the southern seabord of this province, much land to which no ...limpid water can do much good. There are some important facts ...not taken into consideration by Dr. Dana, which should be well ...understood by those who wish to make a trial of irrigation. Almost all the slate, and some other rocks abound with a mineral, which is constantly changing to sulphate of iron (in plain English "cop...peras") wherever it is exposed to the air. This copperas, dissolved in water, is constantly rising to the surface by capillary attraction where the rock is near the surface. Another fact should be attended to, which is, that clear water oozing from a swamp, has dissolved in it a portion of the swamp soil, or of the substance which Dr. D. calls Geine, which furnishes food to vegetables without exhausting the soil. But when this water meets with a solution of copperas the oxyde of iron in the copperas unites with the dissolved peat in the water forming a carbonate of iron resembling amber, which falls to the ground, and is often mistaken for iron ore, and sometimes thought to be an indication of coal, as it has a likeness to coal cin...ders. Should the water as it leaves the swamp spread over a flat...tish surface, it will give it the appearance of rich wet land, produc...ing Crowfoot and *Fiorin* grass as fa... as it drops this umber, but after it has run thirty or forty yards on a vitriolic soil, this deposit is no longer to be found, the vegetation changes to the smallest kinds of Hypericums and rushes, and the soil upon stirring it will be found to have the disagreeable smell of cold vitriolic soils, and, in dry weather, the taste, "which twists the mouth," that Virgil mentions when directing the farmer to avoid attempting to culti...vate such land. Shallow soils therefore, which rest upon rocks, the fragments of which, when exposed to the air become rusty, will re...ceive little benefit from irrigation or from lime, but should the soil be three feet or more in depth and gravelly beneath it will generally be helped by watering. Land also which has a subsoil of blue clay is often unfit for water or lime till it is underdrained and has the subsoil loosened to prevent the ascent of the copperas water, for all the blue clays that we have seen in the province are vitriolic.

The water of a brook that has run for a considerable distance on rusty rocks is worthless till it passes through a swamp. The rivu...lets that ooze from swamps always carry a fertilising water. What is said above applies to clear water, for the muddy water that runs from cultivated ground, or rich light soils is almost invariably useful.

TO MOTHERS.

On the care with which a mother performs her duty, more than on the conduct of any other human being, depend the "future good and ill, the infamy or fame" of her offspring. The following ex...tracts on this important subject, are from a paper on Education by Selina Tyler, published in the *Albany Cultivator*.

"I am well aware that those moral reformations which most materially benefit the community at large, originate with, and are carried on by those whom Providence has placed high in society; but though I do not belong to the class mentioned above, and am too sensible of my want of talents to think I could do much good if I did, yet since philanthropists have become so deeply engaged in the cultivation of the human intellect, I have felt an almost ir...repressible desire to offer my m... of aid; not as one fitted by edu...cation to instruct the public—a position I could not maintain—but as possessing some little experience as an American mother - a word, a name, Sir, as you are aware, of no small import. I have observed with some regret, that in those eloquent appeals (of late so frequent) to public sentiment on the subject of education, a reference to the duty of mothers has not been so often had as I think the public in...terest requires. *Now Sir, one of the objects of this communication* is to suggest to you the idea that it might be proper to give mothers a more general invitation to enter into the labors of this field of usefulness than they have yet had. There are many who only need to be reminded of their duty in order to do it. We have divine authority for saying that this duty, when faithfully performed, never fails of being attended with success. I know there would seem to be some exceptions to this rule; but 'tis a great thing to have done our duty. O! that parents could be led to realize this while their children are young!

"Some years since I saw a woman at her tub, washing; her two children were in the same room, making cobhouses; a lad some what older than her son was visiting there and at play with them. When they had laid up all their building materials, and not finished their houses, the little girl offered to go and bring more, if her brother and his visitor would not take any of hers in her absence. Both promised faithfully that they would not. As soon as she was out of sight, the visitor proposed that they should each take a few of hers, in order to make their houses the highest; the brother at first refused, but was finally persuaded. The mother was one that (whatever might claim her attention) kept an eye and an ear open to the doings of her children. She had made up her mind that to 'guide the house' meant something more than to keep the clothes clean, though she knew that to be essential. She believed that to have 'brought up children,' would be to have grown up herself into that perfection of character which the gospel enjoins, and to have led her children up with her. She took her seat by her children and spent the next *half hour in obedience to that divine* command respecting laws; which says to parents 'thou shalt teach them diligently, &c. Those boys are now both young men, both only sons; both their fathers are upright, honest men. The visitor was not under the care of a mother like the one described above; he is now a noted thief, and has been taken up by the public autho...rities as such. The other is what chivalrous people would call the 'soul of honor,' none that know him would fear to trust him with thousands. Now who can say that he would not have been a thief as well as the other? He was persuaded to break his word, and to take what was not his own, and might have been again and again, but for his mother's watchful eye, which was his constant guard until his feet were fairly set in that path from which Infinite Wisdom has said, 'he will not depart.'"

From the Groom.

The work of every horse varies according to the station and habits of his owner; we all know that either drawing or carrying will be the daily duty of his life; but we do not all know, at least we do not constantly bear in mind, that there is an almost endless variety both in draught work, and in saddle work. It is because he does not think of this when he makes his purchase, that the buyer is so frequently disappointed when he becomes acquainted with his horse. A very different animal is required for a chariot and for a stanhope—for a light phaeton or britska, and a heavy philanthum—for a gentleman's carriage or a stage-coach—a butcher's carriage or a lady's park chaise. Even where horses are required for business alone, without regard to pleasure, regard must be had to their intended occupation: a mail requires a faster and better bred team than a heavy coach; a London waggon would be badly served by cattle that would do well for the plough, because the work demands more quickness and vivacity; a butcher or a baker wants an active horse, to save time in collecting and executing orders, while a traveller is best suited with one of less speed and more bottom, and I may add, that a physician or surgeon in extensive practice, will not take three months to ruin a pair of high courageed and impatient horses, that would gaily do the work of the park for twice as many years.

The duties of a saddle horse are yet more diversified, for they depend on the weight, the taste, the pursuits, and especially the riding, of the owner. A man of fourteen or fifteen stone must be mounted on an animal of proportionate strength; but if he does not hunt or travel, speed is of little value in comparison with power, and a half-bred horse will answer his purpose best. A young man, whatever may be his weight, is seldom satisfied unless his stud exhibits both speed and mettle, and of course it must combine breeding with power, unless he is very light. A bad rider will be uncomfortable on any horse that is not quiet and even tame in his temper, and well-bitted besides: a bold rider, on the other hand, will quarrel with the best, if not a little hot and 'spicy,' as well as very fast. A daily ride to the counting-house is the proper business of such horses as are adapted to timid old gentlemen,' but a lounge in the park requires something 'out of the common way.' Even in the field, similar variety is found: many men hunt, who cannot ride at all; and yet more ride to hounds, who cannot hunt at all, and mistake it for racing; they should be mounted accordingly; the first class on tolerably good donkeys; the last on broken down racers, whose legs will fail before they ride over the hounds; but every real sportsman should have a horse of power, activity, good bottom, quiet temper, and well trained.

It is not because the groom will be entrusted to buy horses that he ought to understand these matters; though even on a purchase his opinion will frequently be asked, and he will yet more frequently be required to make trial of them: but the knowledge is important because the horse is sometimes over-weighted, over-worked, or put to work for which he is not qualified; and every groom ought to be able to distinguish between injury, the result of such improper use, and incapability, springing from actual disease. His first business then is to learn the points of a horse in reference to the work for which he is required.

The 'points' of a horse, using the word in a technical sense, refer only to the external peculiarities of his anatomical structure: as the form and character of his head, his shoulders, his body and legs, and the several parts of which they are respectively composed, so far as they are visible to the eye, or perceptible to the touch But I shall give to it a more enlarged meaning, and include under this expression all the qualities as well as the outward anatomy of the animal; reserving however all indications or symptoms by which soundness is detected, till I come to that subject.

The first point to be noticed is *the power* indicated by his make and size: it may be observed by way of introduction, that strength is indicated much more by shape than by stature: a large horse of sixteen hands is undoubtedly, where equally well-framed, more 'strengthy,' than one of fifteen or under. Power, whether in horse or man, always depends more or less upon weight; but great weight may exist with the feebleness of a child, if the muscles are not well developed, the joints well set, and the limbs well proportioned to the body: and on the other hand, where these advantages of form are combined, great strength is often found in very light weights. In judging therefore of the animal's power, the eye should be directed closely to the symmetry, the prominence of the muscles, and the flat, well knit appearance of the hocks, legs, & ancle joints.

The symmetry of a horse is not uniform, but depends on its breed and sex; the stallion is more symmetrical than the gelding, as the gelding more so than the mare; the neck, crest, and loins, a stallion are thicker and broader; the arms are larger in proportion, and the chest is deeper: the gelding, especially if not gelt till he attains his second year, approaches much nearer to the stallion in these points, except the loins, than the mare; but still there is a very perceptible difference, and particularly in the crest and shoulder. In the mare, the loin is often as broad as in the stallion; but the neck and shoulder are always lighter, and the head large and heavy in proportion to her size. Good judges will often tell a mare from a horse or gelding, by the appearance of the head alone. Subject to these differences, the relative size of the different parts of all horses, is very much the same, when they are well framed for strength. A cart-horse is more heavy and unwieldy than a racer. but if both are powerful horses of their kind, it will be found that the leg of the cart-horse bears the same proportion to the girth of his body, as is found in the race-horse: the same lightness of head will distinguish both, and in both, the length of the body from the rise of the shoulder to the root of the tail, will bear a similar proportion to the height In considering the symmetry of a horse as indicative of power, the length of the body is a matter of importance; if a just proportion is wanting here, so obvious as to catch the eye, it is a pretty certain proof of debility; a want of compactness, or, as it is sometimes familiarly called, 'not being well put together,' is always a great defect: in very young horses it is difficult to judge on this point, because some are more backward in attaining their full stature than others; and if very early put to severe work, they never attain it at all: whether the defect proceeds from the excess of work, or mal-formation, may be guessed in some measure, by the presence of other symptoms of having done too much; whatever may be the cause of it, an unusual length of the body is so connected with weakness, that is a serious fault in a horse, where power is required. Another drawback from symmetry is great length of leg in proportion to the depth of the brisket, or, as ostlers express it, when 'too much daylight is seen under the belly.' Some years ago a gigantic brute was exhibited in London, and at many of the provincial towns, above twenty hands high. I examined him very attentively, and it was obvious that, even if his immense size had not disqualified him for all ordinary work, he was destitute of strength for it, from this very fault: his legs were not wanting in substance, but the light carcase which they sustained, bore no proportion to their length, and betrayed inherent weakness. The man who showed him, admitted to me that he was a very weak horse.

In considering the development of the muscles, the condition of a horse must be taken into account: every ill-conditioned animal will exhibit the form of the muscle more prominently than one that is fat, and yet the muscular fibre may not be so firm; the very circumstance of a horse being poor in condition, unless very satisfactorily explained, warrants a distrust of his strength; or, at all events, that he has already been worked till his strength is exhausted. There is a wide difference, however, between the sleek, fat, comfortable appearance of a horse fed up for sale, and the fulness of muscle that denotes power. My young readers may not, perhaps, be perfectly aware of the nature and action of the muscles: I will briefly explain them. The muscles constitute what is known as the flesh of the body; they vary in size, form, and position, according to the duty they have to perform. they consist of a mass of fibrous threads, closely and firmly adhering to each other, and are usually attached at one extremity to a bone, while the other extremity is terminated by a tough, stringy substance, called a tendon; by the contraction of the fibres of the muscle, which in most cases depends on the will of the animal, the tendon is set in action, and draws up or extends the limb to which it is united. Thus the thick cord that every body feels descending down the back of his leg to the heel, is a tendon that is united to the heel-bone at one extremity, and at the other to a muscle in the calf of the leg: when that muscle contracts, the tendon raises the heel. So again the great mass of flesh at the top of the shoulder, is a muscle that terminates by a tendon that attaches itself to the middle of the upper bone of the arm, and by contracting this muscle, the whole arm is raised. The fibrous character of the muscles may be understood in an instant, by examining a sirloin of beef before it is put to the fire. These fibres are enlarged by frequent use, as may be noticed in the case

of a blacksmith; who, by the daily use of his sledge hammer, has the muscle of the arm that I have been describing, swelled to nearly twice the size of an ordinary man's; and it will also be found so hard, compact, and tough, as to be scarcely more sensible to pressure than a deal board. This distinctness and prominence of muscle, is what is meant by being well developed.

Sickness of condition is not occasioned by a healthy enlargement of the muscle, but by an increase of the fat which covers and lies between the muscles to protect the blood vessels. When a horse is fairly fat, the softness of the body will show that his apparent condition is to be ascribed to that cause: but where the muscles are well developed, they will be found to be hard instead of pulpy to the touch. It is in the arms and legs that the character of the muscle is best ascertained, and the distinct and projecting form of it most perceptible.

The appearance of the joints is the third characteristic that I have given of strength. It is usual to consider a 'bony' horse, as one necessarily of great power. It is not altogether a mistake, for I have examined several of our most distinguished racers, Smolensko in particular, and I have generally found great size of bone in the legs: but it is a great error to imagine that thick, clumsy, and prominent joints imply power. They far more frequently show a tendency to disease. The hock should be broad and flat, and what the farrier describes as 'clean,' both to the touch and in appearance. The knees should bear the same character, though from their structure they must be circular rather than flat: for anatomical reasons, it is particularly important that the fore-legs should be broad, or deep, immediately under the knees. There ought to be in every part a compactness and neatness of shape: none of the processes, or the points of the bones are called, should be too prominent and thick, though if the hind-bone of the knee is not sufficiently so, if the limb is 'tied in below the knee,' it is a bad fault. the shanks ought to be broad and flat, and free fom all protuberance or excrescence: the head should hang lightly on the neck, at if flexible, and quick in its movements. The shoulder-blade should rather incline backwards, allowing fair room for the play of the shoulder.

These are the essential points to be observed about the frame of a horse, so far as it is connected with the joints and bones, and in reference to its power; though were it not necessary to condense my remarks as much as possible, it would be proper to enumerate several others of inferior moment.

My pupil may read this over and over again, till he has learnt it by heart, and he will remain about as wise as he was before, if he does not assist himself by attentively considering the horse with his eyes: it is also clear that he must not confine his observation to one or two only, that he may chance to find in his master's stables; for a man who had never seen but one in his life, though that would be enough to tell him the difference between a horse and a cow, would be quite incapable of judging whether it were well or ill made, even if its head were as large as a mule's, and its legs as slight as an antelope's! It is by comparing one horse with another that we are enabled to detect the difference of make and shape; and it is by modelling one that we have good reason to believe is excellent in all its qualities, as the standard of comparison, that a correct judgment is formed. When therefore we happen to fall in with any celebrated racer, or hunter, or a fast-trotting cob, or any hackney that habitually carries great weight and carries it well, we should make a practice of studying it closely; we should examine it in detail; feeling its limbs and joints with our hands; measuring his bones with the span of the fingers; marking the distinctness of his muscles, and then, standing a little distance from him, we must take a view of his whole figure, and impress on the memory a correct idea of his proportions. If you can bring out a horse that you know to be weak and faulty, and place him by his side, the differences will be easily perceptible, and not easily forgotten; but if this direct comparison cannot be made, we must trust to our recollection to make it, as soon as the opportunity of seeing the other arrives.

I am at present only on the subject of strength; when we come to activity and safety, there will be many other points to be noticed. It is a very good rule to have a horse above his work; that is to say, of greater power than is just sufficient to do the work. This may be carried too far at times, because it is needless extravagance to give a high price for a horse, merely because he can carry sixteen stone, when one fairly equal to twelve would equally answer the purpose, and probably cost thirty or forty pounds less: nor is there any wisdom in buying a huge lumbering horse because he is strong, when his pace is rough and heavy, and the seat uncomfortable in consequence. Avoiding these extremes, it is prudent to lean to the side of strength, for the work will be more safely done, and the health of the animal will be more certainly preserved.

For a barouche or other carriage of heavy build, horses not less than sixteen hands high should be selected, and about three-parts bred. It is not merely because the power is generally greater, at least for draught, in a horse not thorough-bred, but they are usually more quiet and temperate in their work: and heavy work will very soon ruin an impatient, fretful horse. Some delicacy of judgment is requisite to decide the limits beyond which 'eagerness to go' becomes a fault; but it *is* a fault, if carried too far, in heavy work. No work of any kind, whether of man or brute, should be done in a fuss; and very high bred horses certainly do not often go through their work so coolly as they should do. Hence they come home in a sweat, and a state of excitement that takes them off their feed, and soon spoils their condition, though the same work, quietly done, would hardly have caused them to turn a hair. Half-bred horses are very often high couraged and fretful, but it is much less frequently their case than with those of pure blood.

I may here notice that purity of breed can rarely be pronounced with certainty without an authentic pedigree, but there are many signs of it that enable us to make a pretty accurate guess. The lightness of the head, the springy activity of the limbs, the breadth of the arms, the perpendicular line of the leg from the hock to the heel, the full development of the root of the tail, the silky character of the mane, and small and sprightly ears, and, above all, the gay and showy character of the whole horse, which is rarely observable except when the symmetry approaches perfection, are decided indications of high breeding: to be 'thorough-bred' means, in strictness, that the horse is descended, both by sire and dam, from some stock of acknowledged Arabian or Barbary origin; and all these stocks are carefully recorded in the stud-book; but many thorough-bred foals are dropt that never are entered for the turf, and therefore do not find their way into the stud-book; so that the omission of the horse is no decided proof that he is not of pure descent. To return from this digression.

A light britska, or chariot, may be well served by horses of fifteen hands and a half in height; especially if they are what are called 'short-legged' horses. This is not a correct expression, though commonly used. If a horse really were short-legged, that is, if his legs were disproportionately short for his body, I doubt if it would improve even his strength, while it would most assuredly injure his action: but when the limbs are very muscular, and the shank bone very strong, the legs do appear to the eye, substantial in proportion to the size of the horse, and this gives him the appearance of being short in the legs, though, in fact, they may be just as long as any other horse's of the same height and description.

A yet smaller class of horse will be sufficiently strong for a phaeton, where a pair is driven; fifteen hands, or even less, will indicate sufficient power for this work; and as it is usually driven at a faster pace, and often used for summer excursions, a phaeton is horsed better by active, trotting cobs, than by any other kind of horse: but they should be well-bred, for the daily journey in summer travelling is generally long enough to require bottom, and this is rarely found in a coarse horse.

Any carriage in which only a single horse is used, requires one of great power and high breed: the exertion in single harness is more unremitted; if it has only two wheels, the pace is always more severe and the journey commonly longer; and as a fall is always more or less dangerous to the driver, safety demands that the power of the horse should greatly exceed the duty imposed on him; a fall is more frequently occasioned by being over-weighted, than by disease. In a four-wheeled carriage with a single horse, speed should never be considered a necessary, nor even a desirable quality: for let the carriage be as light as it may, I never yet saw one that was not overloaded by women, children, and luggage, to a degree that no horse could draw it with ease for more than a couple of miles at the rate of six miles an hour; a family one-horse carriage should never have a horse in its shafts capable of much greater speed; and then he cannot be killed before his time.

All draught horses ought to be full in the shoulder, and compact and inclining to a *trussy* form in the body; they should excel in the trot, and if wanted for state occasions, ought to have what is called grand action, that is, high bold action in the fore-legs, with a lofty carriage of the head. these latter points are unnecessary if they are only used for speedy travelling on the road.

A saddle horse's power should be equal to at least two stone more

than he has to carry (the weight of the saddle and bridle being always reckoned at a stone), and this should be observed, whatever may be the nature of his work; but if he is hunted, it should be extended much farther: a horse cannot have too much power for the field, so long as it consists with speed. If a man is a bad rider, it is yet more important that his horse should not be over-weighted, for he will receive no assistance from the bridle hand at any accidental stumble.

But the activity of a saddle horse must in no case be sacrificed for the sake of power, unless the rider exceeds seventeen or eighteen stone. In that event, he will so rarely find any horse that will long carry him safely, beyond the walk, that he must be content with what he can get.

POTATO STARCH PUDDING.

The *very* best, and the *very* cheapest, and the *very* least known pudding that can be made in a family, is made of potato starch, eggs, and milk. It is made too, in the *very* shortest time of any kind. We give below directions for making it, and every person who will try it, will say this recipe alone is worth a whole year's subscription to this or any agricultural paper in the Union, from which he may chance to take it. And what we ask is that every person who avails himself of it in his family, will in recompense for it, send to us or to some other agricultural paper his subscription for at least a year, and thus encourage the spread of like useful information through the land. Let us add, that the starch, though an article that is retailed for 12½ cents per pound, can be had in quantities for a very considerable less price. The directions for making the pudding are as follows:—

To eight table spoons full of the starch, use one quart of milk and four eggs as follows. Set the milk on the fire in a sauce-pan, reserving enough cold to wet the starch with to the consistency of thick cream—beat the eggs and mix them with the wet starch—when the milk in the pan commences boiling, (having seasoned it properly with salt,) stir into it the eggs, and as soon as an egg would ordinarily cook, (say in two minutes) the pudding will be ready for the table. It is eaten with cream or milk, and white sugar, like *blanc-mange*.

There is another excellent pudding to be made of the same material, and which, because of its characteristic similitude, and for want of a better name, we shall call

THE STARCH TAPIOCA PUDDING.

A pudding quite as good, and not to be distinguished from *Tapioca*, may be made in the following manner:—For a moderate sized pudding, take eight spoons, heaped, of potato starch—set a quart of water over the fire in a saucepan—when the water boils smartly, put in a small piece of butter, and strew the starch in the water, as you would make a hasty pudding. This will form the starch into little lumps, like Tapioca when softened. Then separate the globules of starch with cold milk—then make a custard and stir into it—add a little salt—spice according to taste, and bake like a Tapioca pudding, about an hour, or little more, and it is ready for the table. By adding more butter and sugar, it can be made sufficiently rich to eat with sauce. A little practice will ensure success. The water must boil smartly, and the starch be stirred in without being previously dissolved, else it will not form into globules, but be like arrow root.—*Maine Farmer.*

A New Method of Grafting Apple Trees.—Plant the seed in rows, at a suitable distance from each other, and the hills say five feet apart in each row. But one tree should be suffered to grow in a place. Now when the young tree is sufficiently grown, in the Spring of the second or third year, any quality of fruit may be grafted into it in the following manner. First, bend the tree over and obtain for it a firm resting place, either on a block or a board resting on the knee (after it has been divested of its branches) and with a stout sharp-pointed knife pierce holes directly through the centre of the tree, about five inches apart, into which the scions are to be introduced—leaving above, two or three buds. A trench is then to be dug, in a direct line between the trees, about four inches deep, and the whole tree bent down and buried—leaving the scions above ground. In this new condition, the scions become, uniformly, thrifty young trees, supported and nourished from the buried tree, from which issue, in due time, roots from its entire length.—The second year from this operation, the whole parent tree may be dug up, the new growth sawed apart, and transplanted. It will thus be seen that if the tree is five feet in height ten or twelve young trees, of whatever quality is chosen, may be obtained in this way, whereas by an ordinary method of grafting there could be but one, provided the graft lived. The young tree will bear fruit thus transplanted, in the same time it would have been grafted into a tree fifteen years old.

I know not whether this process is new among your agricultural community at the North; but I have repeatedly witnessed it in Georgia and Alabama, and I have repeatedly been informed by some of the best horticulturists in those States, that it is always successful. Yours respectfully, Henry Lee.

Will you take a Sheep?—A valuable old farmer, about the time that the temperance reform was beginning to exert a healthful influence in the country, said to his newly hired man:

"Jonathan, I did not think to mention to you, when I hired you, that I think of trying to do my work this year without rum. What shall I give you to do without?"

"Oh," said Jonathan, "I don't care much about it—you may give me what you please."

"Well," said the farmer, "I will give you a sheep in the fall, if you will do without."

"Agreed," said Jonathan.

The oldest son then said—

"Father, will you give me a sheep, if I will do without rum?"

"Yes," was the reply.

The youngest son, a stripling, then said—

"Father, will you give me a sheep, if I will do without?"

"Yes, you shall have a sheep too, if you will do without rum."

Presently the young one speaks up again—

"Father, hadn't you better take a sheep too?"

This was a poser; he had hardly thought that he could give what he had long been accustomed to, but the appeal was such a home-thrust, and from such a source, that it was not easily to be disregarded. The effect was, rum was henceforth banished from the premises to the great joy, and ultimate happiness of all concerned.—*Selected.*

Singular Effect of Mortification.—Dr. Whitney, of Newton Upper Falls, Massachusetts was called upon a short time ago together with a student in his office, to make a post-mortem examination of a woman who had died in a neighboring town. Mortification had set in before the subject died, and in the examination the mortified parts, it is supposed, came in contact with a slight scratch on the hand of both the operators. Both Dr. W. and the student were soon taken sick, under circumstances which left no doubt that they had imbibed a poison from the dead body during the post mortem examination. The student died in a few days, but Dr. W although fears were entertained at one time for his life also, has become convalescent.

[Violent Erysipelas, attended with mortification, appears to be in some degree contagious. We have known four persons who had been for some time in a crowded room at a funeral, to be attacked with fever and slight Erysipelas in the face within two or four hours; another who had watched with the sick man had "Shingles" (blisters upon the side, without any fever. In the fatal case, the servant maid was violently attacked, and had a narrow escape. Prudence would suggest, that in this complaint the same precautions should be used as in other contagious diseases, of which the most important are, probably, free admission of air and strict attention to cleanliness.—Ed. Col. Far.]

"THE COLONIAL FARMER,"

Titus Smith, Editor; R. Nugent, Proprietor,

Is published semi-monthly at the Novascotian, Office, Halifax.

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