Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- ☐ Coloured covers/ Couverture de couleur
- ☐ Covers damaged/ Couverture endommagée
- ☐ Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- ☐ Cover title missing/ Le titre de couverture manque
- ☐ Coloured maps/ Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- ☑ Bound with other material/ Relié avec d'autres documents
- ☑ Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- ☐ Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

- ☐ Coloured pages/ Pages de couleur
- ☐ Pages damaged/ Pages endommagées
- ☐ Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- ☑ Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- ☐ Pages detached/ Pages détachées
- ☑ Showthrough/ Transparence
- ☑ Quality of print varies/ Qualité inégale de l'impression
- ☐ Continuous pagination/ Pagination continue
- ☐ Includes index(es)/ Comprend un (des) index

Title on header taken from:/ Le titre de l'en-tête provient:

- ☐ Title page of issue/ Page de titre de la livraison
- ☐ Caption of issue/ Titre de départ de la livraison
- ☐ Masthead/ Générique (périodiques) de la livraison

☐ Additional comments:/ Commentaires supplémentaires:

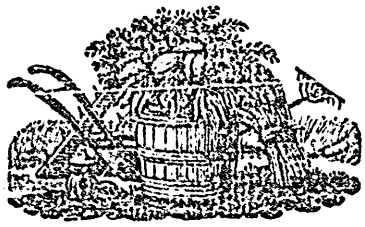
This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
☐		☐		☐		☐	✓	☐		☐	

THE COLONIAL FARMER,

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

VOL. 2. HALIFAX, N. S., MAY 16, 1843. NO. 22.



THE COLONIAL FARMER.

HALIFAX, N. S., MAY 16, 1843.

BLACK QUARTER.

As a number of Cows have lately died of this disease, we wish to call attention to its contagious nature, being convinced that proper precautions would prevent the greater part of the losses from this source. The stable in which a sick animal has been, should be thoroughly cleaned, smoked with sulphur, and that part where it was near the standing of the sick one, whitewashed with lime, before any other cattle are allowed to enter it. It would be most prudent always to bury the dead animals without skinning them, but if they are skinned, it should always be remembered that the disease can be communicated to man by inoculation, and that it is dangerous to touch the parts that are blackened with settled blood, with any part where there is a scratch. The disease has in several instances, been communicated to horses and swine which were in the same stable with sick Cows.

The person who has attended the diseased creature, should always change his clothes before he goes among other cattle.

The progress of this disease is so rapid, that the animals often are dead before it has been observed that they were sick: of course where there can be but little chance of relief from any medicine; but where there may be an opportunity for making a trial, we would recommend a dose of three pints, or two quarts of Molasses, a remedy which we have known to give sudden relief in violent inflammation which attacked a Cow soon after calving.

ASHES.

Ashes should always be preserved in a dry place for manure, and should be spread upon grass land, either in the beginning of May, or immediately after haymaking, at the rate of forty bushels to the acre, which will have a very perceivable effect upon land that has formerly been frequently manured. By applying the ashes at a time when the grass is beginning to grow, the potash will be preserved, which would have been, in a great measure lost, had it been exposed to the rains of winter by spreading it in the fall. About three times the quantity of leached ashes should be used, and it should be applied at the same seasons, as it generally contains a considerable quantity of sulphate of potash, which being a salt that is easily dissolved, remains after the free potash is washed out. Lime in leached ashes is in an excellent state for manure, being combined with carbonic acid which it has taken from the Potash. It has been used to mix with peat earth, which after being frequently turned, has been praised as a top dressing for grass; but for this purpose the swamp soil ought to be thrown upon the dry land and exposed to the air for several months, frequently turning it. Oxygen gas is a principal agent in decomposing animal and vegetable matter so as to fit it for the nourishment of vegetables, but peat generally contains iron in a state that attracts and fixes the oxygen, thus preventing decomposition. A considerable quantity of vitriolic water usually enters peat swamps, and the iron in vitriol is in the state of Protoxide, or a combination of one part iron and one of oxygen; now one part of iron will also combine with two, and with three parts of Oxygen, in which last case it is called Peroxyde, and is harmless, if not useful to vegetation. By exposure oxygen will be extracted from the atmosphere which will change the Protoxide to Peroxide.

Ashes produce sweet wholesome grass, excellent for soiling, but cattle ought not to be fed with fresh grass from land manured with fresh stable dung, or other rank manure, as it will expose them to sickness.

Neither ashes nor lime should ever be mixed with Stable manure, because it will immediately liberate, and occasion the loss of a quantity of ammonia, a very useful part of the manure, as any person may satisfy himself by mixing a little with dung that has begun to ferment, and working it over, when the strong scent of the ammonia will be perceived immediately, and often the eyes will be affected by it. For the same reason lime and ashes should not be added to heaps of manure that contain the offal of fish or other animal matter.

PLOUGHING MATCHES.

The utility of these exhibitions is great and undoubted. Strange as it may seem, yet it is a fact, that not long since ploughing was very badly performed in many parts of England, and even during the past season at a ploughing match in that country attended by a large number of ploughmen, nearly all had drivers to their horses and worked them in a line, or one before another, but wherever ploughing matches are introduced and kept up, the young men soon learn to drive their own teams, and to plough strait furrows. When the great saving of labour, and improvement in the work that is produced by good ploughing, is observed, it would be well for farmers to reflect whether many other practices that are continued because they are ancient, may not be capable of as much improvement. The following extracts of a letter from an old Yorkshire farmer, now settled in this country, will give an idea of what English farming once was, in some parts where it is now of a high character.—"Farming only began to be alive at the commencement of the French war. The population was suddenly greatly increased by the vast body of emigrants from the continent who fled to England, and at the same time the taxes were prodigiously increased. The farmers were roused, finding it necessary to bestir themselves in earnest. Agricultural Societies were formed, and by introducing improvements they slowly rose to their present state."—"At the time I was first able to drive the plough, soon after the termination of the first American war, rents and produce were low, farmers had little animation, never striving to pay their rents with any part of their crop, but waiting till they could sell a cow, a few sheep, or a fat pig, the poor and county

rates being generally paid by the landlord. When a farmer went to plough he would take three or four, and sometimes five or six horses, and three or four men with pickaxes and other instruments to raise a furrow where the plough should miss The horses were ranged one before another, and all walked in the furrow, and it was one man's employment to lie on the plough beam to keep the share in the ground. (This branch of husbandry I shall never forget, having been nearly shaken to pieces by bearing down on the plough beam.) When they came to the end the line of horses began to turn off, leaving all the draft to the last, who generally galloped out, the ploughman trying to catch a piece of it if he could; but what the plough missed the pickaxe men had to turn, and they would tell you it was all the fault of the land, for who could plough such stoney ground? By this management they got little done, and little done produced little, and could pay but little rent. The practice at that day was to plough the green sward and sow it with Oats, next year plough it twice, spread the stable manure on it and sow Barley, and then plough once, sow with Oats, and then let it lay for grass, seldom sowing any grass seed though sometimes a little from behind the horses racks was sowed. Thus they ploughed their land poorly, raised three poor crops, laid it down to grass poor, and had a few scanty crops of hay. The meadows lay undrained and produced a poor short grass, and if any one proposed to them to improve their meadows, they would say, "What shall we do for hay for our young cattle if we improve the meadows?" as if the young cattle could not eat good hay."

A LECTURE ON MANURES,

Read at a Meeting of the Gay's River Temperance Society, on Monday the 20th February, by the Vice President.

Manures are of two descriptions; one of these, termed organic, is composed of vegetable and animal substances, the greater part of which will change to the *gaseous* form by the action of the atmosphere during their putrefaction and decay. The other class of manure has a metallic base, and is not subject to putrefaction. These two classes of manures are nature's handmaids, in producing and bringing to maturity every species of vegetable production. The latter or mineral manures, I will first introduce and endeavour to explain their presence in vegetation as far as has yet been discovered by the latest Chemists and Physiologists in the departments of agriculture. Lime enters plants in different chemical combinations; it is found in them united with the carbonic, phosphoric, fluoric, and sulphuric acids, and as these compose parts of the plants, they must have composed part of their food. One half of the bones of animals are composed of phosphorate of lime; and as these all draw their substances originally from the vegetable world, vegetables must contain this substance. Phosphate of lime is found in the ashes of plants, particularly those of wheat. I will now try to show you how these substances, in their various forms, are supplied by nature. Muchel kalk, or shell lime, as it is generally termed by geologists, is the kind which contains by far the greater proportion of these salts which we have enumerated, and is far superior to any that has yet been discovered, for agricultural purposes. It has been formed in water in a pasty state, at a period of Geological history, when there were on the earth immense quantities of the lower animals, such as the crustaceons tribes of various families, consisting of shell fish of various forms, many of which are now extinct. These have become petrified, and are similar to the rock in which they are embedded; petrifactions of the vegetable kingdom are also largely diffused in this formation; in fact there are many parts in these rocks that are wholly formed of organic remains, vegetable and animal. There is the question, why is lime useful as a manure, answered in a most satisfactory manner, to a certain extent. If a heterogenous mass of animals and vegetables has been covered with a solution of lime, (which evidently been the case in these rocks,) and has afterward become endurated and crystallized by pressure and time, and has now become a stone, reason will affirm to our reflecting faculties, that that stone, yet contains all the constituents that were there in its first liquid formation, and if so, there would be everything present that constitutes the food of plants, could it be pulverised and applied to the land without the agency of calcination by heat which is the present mode of reducing it to powder. It has been supposed by some persons, that the animal and vegetable substances would evaporate during the process of pulverization, and leave the stone in a pure alkaline state, but chemical affinity would counteract any such results. It has been shown in this and my former lecture, that both vegetable and animal substances are composed of carbon, phosphate of lime, silicate of potash, ammonia, and some other salts; These all have a chemical affinity for potash and lime, which is the cement of this mass, and of course, would combine with one or all these substances. Carbonic acid would form carbonate of lime and carbonate of potash; the ammonia would form sulphate of ammonia, &c; thus a general combination would take place, as we now find it without the possibility of evaporation

It has long been known that carbonate of lime, when pulverised by mechanical agency, has more durable effects than that which has been calcined. It has also lately been discovered that lime also contains potash; this is the undoubted cause that lime is so powerful as a manure. Although the lime and potash in the *ashes of vegetables after combustion are partially, if not altogether* caustic, from the calcining effects of the fire, yet they were present in a neutral state in the plant, previous to that change, viz. the lime chemically combined with the phosphoric acid, forming phosphate of lime, and also with carbonic acid, forming carbonate of lime; the potash also enters into combination with silica in the in the plant, forming silicate of potash. This substance is indispensible in the perfecting of the grasses, viz: Wheat, Rye, Barley, Oats, Timothy, and various other species. You may perceive on the stalks of these vegetables, a glossy appearance after they *have shot or headed out; this on chemical examination proves* to be the substance in question: It strengthens the stalk and renders it elastic and capable of resisting the pressure of the wind.

Grasses and grains although well manured other ways in the absence of this ingredient, cannot stand wet but will fall to the ground. It may be observed where this is the case, that the glossy appearance of the healthy grain is absent also, the plant may become an herb but cannot bear fruit. Leibig states as a proof of the presence of this substance in grasses, that a melted vitrous substance was found in a meadow after a thunder storm. This mass was at first supposed to be a meteor, but was found on examination to consist of silicate of potash: a flash of lightning had struck the stack of hay, and nothing remaining was found in its place except the melted ashes of the hay. Limestone in its natural state as it comes from the quarry, is unfit to apply to the crop untill it is pulverised; the only means that have been practised as yet is calcination in a kiln built for that purpose; here it is kept at red heat for several days, until the carbonic acid and other gasses which may be combined with the alkalies are evaporated, which reduces the weight of the stone to about one half; this leaves it in its pure alkaline state, consisting chiefly of lime and potash.

It may be thought that depriving the lime of its acids and gaseous constituents, would deteriorate its fertilizing quali

but I will show you when I come to treat of the organic manures, that if such was the case, it is fully remedied by the new powers which it has acquired by calcination. Gypsum or sulphate of lime is also used as a manure in different countries, with various success; in some cases its fertilizing qualities have been so striking that in former times such effects would have been attributed to magic. The causes of the fructifying powers of this substance are but partially understood. Sir Humphrey Davy has thrown some light on this subject. He analysed a portion of clover and found it to contain a proportion of Gypsum, equal to three bushels to the acre: this proves that gypsum is a constituent of clover, but does not prove that it must previously be in the soil in the form of of sulphate of lime, as it is well known that calcined lime will combine with the sulphuric acid which is always in clay soils, or soils that contains it. Leibig in his Agricultural Chemistry of the present day, when chemical science has much improved since Sir Humphrey Davy's time, has shown that powdered gypsum in its raw state has a strong affinity for ammonia.* This latter substance, as I have before informed you, is one of the most indispensible to all plants that are cultivated for the sustenance of man and all his domesticated animals, and if it did not enter into the bread plants and grasses, animals could not exist although plentifully fed with them: This substance is the most volatile of all the constituants of organic bodies, and will fly off in the gaseous state whenever these bodies are decomposed either by natural decay, fermentation, or artificial heat. No small loss is sustained by the farmer in the evaporation of this article, not only from dung of every kind, but also from the offal of slaughtered cattle and the bodies of cattle that may occasionally die; and this richest of all his manures is not only continually escaping, but giving offence to our senses, and also rendering the atmosphere less healthy. Leibig's discovery of the attraction of Gypsum for ammoniacal grasses points out to us a principle by which all these losses and offences may be remedied. Leibeg also shows that this gas which has escaped may yet be caught and retained. This, no doubt will appear to you a paradox, but a few words will unfold the mystery. This ingenious chemist has discovered that the carbonate of ammonia which is continually ascending from the surface of the earth, as has been shown, rises high into the atmosphere, combines with the clouds and watery vapour, and descends with the rain; this he has proved by repeated anaylisis of rain water, and shows that the substance in question was always present in a greater or less proportion; snow water contains it in an equal degree. This principle has been tested last summer in various parts of the United States and found to be correct. The carbonate of ammonia which is in the rain water is volatile, and will evaporate and escape with that water. In this way Leibig accounts for the useful effects of Gypsum; the sulphuric acid of the Gypsum having a stronger affinity for the ammonia than carbonic acid, combines with it and forms sulphate of ammonia,† which is a salt that is not volatile but soluble in water, and would remain in the soil, although the water were evaporated; the carbonic acid being thus set free from the ammonia combines with the lime of the Gypsum, and forms carbonate of lime—the use of which is well known. It is evident that the strong affinity that Gypsum has for ammonia would retain that substance in all those places that I stated it to be lost to the farmer. If in all those places in and about the farmer's yard, gypsum were applied, either by covering, mixing, or scattering, as circumstances would permit, and the judgement of the farmer dictate, all this waste and loss would be at an end, and the value of the manure more than doubled. This last expression may require to be explained;—the urine which falls from the stock, generally, is never thought of being retained, but is allowed to pass off with the water which falls from the buildings, or perhaps into some brook or stream; in the latter case, the result is obvious, and in the former, the carbonate of ammonia will evaporate and of course the greater part is lost, even in the very field which it has run over. It may be proper to state, that men of the best information on this subject, are of opinion that the urine contains full one half of the nutrifying principle which falls from the stock; and in this is included all the ammonia that comes from that race. I will now refer to an exhausted field, that formerly produced luxuriant crops, but continued cropping for many years has reduced, and in some cases, exhausted altogether, the various mineral constituents that formed parts of the plants which had been produced, there in perfection, although regularly manured with barn manure during the whole of this time. These cases are very frequently met with even in this vicinity. The cause of this barrenness may be easily described;—the mineral constituents which had formerly abounded in the original soil, had now become exhausted, and although manured as before stated, from the barn, yet this manure did not contain the chemical salts mentioned in the former part of this lecture, but in very small quantities; therefore, this part of the food being absent or scanty, the plant could not be produced, or if produced, it would be in a very imperfect and sickly condition.—Lime or calcarious marl in such cases, I believe, is the only artificial remedy: but nature will also furnish a remedy by giving her time. We all know that by letting an exhausted field remain in follow two or three years, it gradually recovers the powers which the extraction of the mineral salts had deprived it of. In order to exhibit the causes of this, I must inform you that all soils are partially, or wholly, composed of the detritus or matter produced by the wearing down of the various rocks which form the crust of this globe. From what I have previously stated, you will perceive that, with a few exceptions, if any, the bases of all the salts that enter into the food of plants, are lime or potash. Salts of alkalies form, in various proportions, parts of many of these rocks, and of course, remain in the soil until exhausted by repeated cropping. But the sand, gravel, and stones, are undecomposed portions of it, and yet contain the original amount of the salts in question. The gradual decomposition of these materials is still progressing by the action of the atmosphere, and annually supplying the fields with those salts, but not to the amount required by the annual cropping. This explains why fallow will restore exhausted lands to fertility. Leibig says that the country around Naples—a country famed for its corn land, is farmed on this principle:—A field is cultivated once every three years, and is in the intervals, allowed to serve as a spring pasture for cattle. The soil experiences no change in the two years which it lies fallow, further than it is exposed to the influence of the weather, by which a fresh portion of the alkalies contained in it are set free or rendered soluble. The animals fed in these fields yield nothing to these soils which they did not formerly possess. The weeds upon which they live, spring from the soil, and that which they return to it as excrements must always be less than that which they extract. The fields therefore can have gained nothing from the mere feeding of the cattle upon them, on the contrary, the soil must have lost some of its constituents.

You all, no doubt, have observed in the spring of the year,

---

* This is a doctrine advanced by Leibig, but we cannot see that he has demonstrated its truth.—Ed. Col. Farmer.]

† This fact is contradicted by Mr. Partridge a practical chemist.—Ed. Col. Farmer.]

around the stones, particularly those that are scattered over the fields, the grass to spring up more luxuriantly than at a distance from them. The action of the atmosphere and particularly the alternate frosts and thaws during the winter, have decomposed a portion of, we will say for instance, a Granite stone. This has fallen to the earth and produced the luxuriance alluded to. You naturally will enquire what would be in the stone that could produce such effects?—the answer is that granite contains potash in its composition, and, of course, its disintegration would set this valuable manure free to produce that striking luxuriance generally observed. Potash enters into the composition of various other rocks, such as feldspar, clay slate, clink stone, &c., whose portions are now forming the stones in our fields, and their disintegrations are annually supplying in part, the waste which is drawn from them by cropping. It has long been observed, that where stones were removed from a field, its produce decreased; here the cause is fully explained.

Further proofs of this I could add, but the length of this lecture prohibits my proceeding at present. In a future lecture, I may say more on this branch of the subject.

I will now present to you the result of some experiments that I have made during the last season, to test some of these new theories in agriculture, that have been the fruits of study and laborious investigation of Doctor Leibig, Professor of Chemistry in the University of Gissen, in Germany. My object is to set before you a sample of wheat produced by manure composed of Gypsum saturated with urine. My intention is to prove and explain that part of my lecture which treated of ammonia and the means of retaining it by Gypsum. I applied the compound in question, which is called urate, to seed wheat, taken from that which I had prepared for my fields, both were sown on the same day, and harvested at the same time. I had what we generally call a good crop, but where the urate was applied, the colour, length of head, and strength of stalk, were far superior to that in the field, and those two samples will prove the superiority of the grain. It requires thirty-two grains of the latter to be equal in weight to twenty produced from the urate, and to put it past doubt, I will weigh it in your presence. I have here also for exhibition, a sample of wheat, grown from the same seed, sown and harvested at the same time, grown in pure powdered charcoal put into an earthenware bowl, and nothing added except a sufficient quantity of rain-water, to produce the moisture necessary for its growth. You will naturally enquire, where did the food of this plant come from? I will inform you in a few words.—The water produces the oxygen and hydrogen which are the constituents of pure water; but this being rain-water, it gives the ammonia. The charcoal not only produces the carbon, but its ashes contain the lime, potash, and other salts, suitable to the growth of wheat; charcoal also has the property of absorbing ammonia from the atmosphere, and retaining it for the food of plants.

AGRICULTURAL ADDRESS,

Delivered before the Stirling Agricultural Society, by the Secretary, John Bonyman, Esq.

The improvement of the country where our lot is cast is a duty incumbent upon all; and in Nova Scotia at the present day, no class of its inhabitants has an equal opportunity of doing so much in the way of permanent improvement, as that which I now address. Any country whose chief dependence rests upon commerce or manufactories, is subject to great fluctuations in its state, and when markets fail, or prices become very low, there is often much suffering both in body and mind—society is to a certain degree unhinged, and crimes are perpetrated that otherwise would not be. Not so with a country where the chief dependence is upon agriculture, and the population mostly engaged in rural pursuits. I have now lived about thirty years in Nova Scotia, and I formed an opinion soon after I came to it, that farmers might live as comfortably as any class in the country, or as well as the same class in any part of the world. Here we have no haughty, imperious landlord to demand the fruit of our labour in the shape of rent;—our taxes are moderate, and chiefly expended in the improvement of the country—our time is at our disposal, except training days to learn to fight our enemies, if we should be so foolish as to make them, and we have none to controul us in the exercise of our rights or the enjoyment of our privileges—Were envy, justifiable under any circumstances, the oppressed classes in our fatherland might be excused, if they knew our situation, and did envy us a little. It would be in vain to deny that we have difficulties to combat, but they are such as we by proper management, may overcome, being either those that are inseparable from the condition of a new country, or of our own making. We shall point out a few of these and suggest such remedies as are under the farmer's controul; and to begin with bad roads, which we all have had to go over, but which are every year improving, and I conceive would do so faster were the price of labour upon the highways limited to 2s. 6d. a day, or done by job-work under faithful commissioners, and the statute labour commuted at a low rate.

The long winters are considered by a good many as a drawback to the farmer; they are becoming more mild, and no doubt, will continue to do so as the country becomes more cultivated. The want of proper markets for farm produce and manufactures of different descriptions, and the system of barter hitherto persued, taken in connection, are the greatest barriers in the way of the farmer's success, and these, as they are intimately connected, we shall consider together. The merchants' trading to Great Britain find that they can realize higher profits by taking British manufactured goods in return for what they send there, than specie, and these goods the farmers here, from the want of manufactories, are obliged to purchase with produce at a very high rate compared to the price allowed for produce, as the merchant has the fixing of both prices. Those who know the price of British manufactured goods in Britain, and the comparative price of produce to that rate, must be satisfied that here we are dealing at a ruinous disadvantage; for instance, a cwt. of beef will put a substantial coat of clothes on a man in Britain—here it would procure only one yard of good cloth, or pay about one half the price of making the suit, independent of the price of the cloth, or it would take over five cwt to do here what one would do in Britain. I have been entertained a hope that our merchants would come to money payments for farm produce—they being the prime necessary of life are worth the best kind of pay; but until the farmers come to understand their own interests better, and act decisively, and in concert, the case is about hopeless, and we may go on from year to year without any amelioration in our condition; the Yankee carrying away our money, and we grumbling with the Legislature for allowing them to do so, while neither the one nor the other should be blamed, one establishment for curing and exporting various kinds of meat from this country to Britain now that the market is open, would do more in this case than ten enactments of the Legislature. Were the business established and properly conducted, meat would bring about the same price here in currency that it does in British Sterling, the difference in the rate

ering the expense of transit and the duty, provided the article ere of good quality, which no doubt it might be. The returns ight be partly in money, and partly in such commodities as we ally stood in need of, but no gew gaws. If, along with this, ere were grain merchants, who would pay money, even allowing e price to be low, it would give a start to our farming operations; oney being to trade of any description what oil is to a machine. With a view to put the farmer in a position to bring about this der of things, the manufacturing of our own cloth, particularly oo'en, should be attended by every farmer; the raw material we ve here of excellent quality, perhaps nothing inferior to Saxony, d by care the quantity might be increased to the required extent. While Oats sell at the low price they now bring, it would be more ofitable to feed sheep with them, the wool to be applied as above ggested, and the carcase to be consumed by the manufacturers. have little doubt, were proper manufactories established and well nducted, that in a few years, in place of being dependent upon a foreign supply, we might be supplying others. Other manufactories might probably be established to advantage, such as aking different kinds of agricultural implements, nails, &c., but t being directly connected with our subject, we pass them over d go on to the high price of labour.* In every country the price f labour should bear a certain proportion to the necessaries of life· f the price of labour is too high, the consequence is that the pro cer is not remunerated, and a check is given to the springs of dustry, and if the price of labour is too low, the labourer is pressed in making a comfortable subsistence, which never ought to be the case, as there is no natural need for it. Were the price f labour equitably balanced in the way here alluded to, a great any farmers would hire labourers to assist them, but they find t in most cases it will not pay; hence improvements are retard·d, and not unfrequently a failure of crops, to a certain degree, the nsequence.

The common complaint with most people now is that the times e very hard, and no money to be got. Farmers should be thankful that they feel the want of money as little as any class of people; "having food and raiment we should therewith be con·ent." It is better to have one bushel of Wheat to sell if it should e at only five shillings, than to have to buy one at ten. We ould by no means get discouraged; let us go on perseveringly, prooving our farms, and although in the mean time the produce es not bring a high price at market, the tide will turn, and fairer ices will be obtained. although money has now, in a great easure ceased to circulate, it is still in existence, and industry is e surest means to again bring it to flow in its wonted channel. hen we reflect that every acre of good land reclaimed from the rest and brought under a complete state of cultivation, is better an Twenty pounds put in the Bank, it should stimulate us to ertion, more particularly when we consider that no one can de·ive us of the benefits arising therefrom, unless through our own mmanagement, or from some very untoward circumstance hap·ening. It is very different from this in other parts of the world here the farmer has to labour hard and to improve his farm to nable him to pay his rent, and at the end of his lease, either to y for his own improvements by an additional rent, or give them to another. The young people, more especially, should exert emselves by persevering industry, and habits of economy to lay fair foundation, and in after life they may reap the fruits now wn, by living in easy circumstances, unencumbered with debt,—ing in the scale of society to that station that nature has marked t for them, and that a proper arrangement of the affairs of life would ultimately bring about, for the most useful class that exists on the face of the earth. When we see people from Europe, many of them with but little means, as to property—completely destitute of a knowledge of the country, consequently having every thing to learn, and a great many prejudices to overcome—by hard labour making a living, and some of them a good one too; certainly were there not some radical defect, those brought up in the country might rise to affluence. On the contrary, how often do we see the sons of those who have by honest industry and incessant care accumulated considerable property, squander it in a few years, disposing of the personal property to procure superfluities, and in some cases, the real estate falling into the hands of others, and then rendered as completely bare as if they had never possessed a pennyworth in the world. Every right thinking person must regret to see such things happen, and as there is no effect without a cause, it may be of some consequence to make a little inquiry, and if we can discover the cause, strive to discover a remedy. Little doubt but in many cases where young people go astray, when they enter upon a course of management for themselves, the fault might be traced to the misconduct of the parents. A good many suppose that if they possibly can provide some property to leave to their children, it is their duty, and about the whole of their duty to them; but this may be a mistake leading to the consequences now under consideration. If in the accumulation of the property there has been much hardship endured, and few comforts enjoyed, the young people may have got disgusted with the kind of life they had been forced to live, and as pleasure of some description is eagerly sought by all, they may have been induced to look for it in a way the most unlikely to its being real or permanent, namely, in the gratification of the sensual propensities. Had a different course been adopted by the parents, and consistently followed out, the result might have been very different, and led to the happiest consequences. Had the best education that could be obtained been given, and the mind as it expanded, exercised upon subjects calculated to afford rational gratification, and a well arranged system acted upon in the management of every part of the domestic affairs, avoiding as far as possible, every thing of an oppressive nature, blaming when needful only, and then with caution, and praising heartily where merited, allowing reasonable time for youthful recreation, and rewarding industry and care by some token of approbation, I am fully satisfied there would be fewer failures in success amongst young farmers than now is. Another thing that would have a great tendency to promote the comfort and general prosperity, not only of the beginning farmers, but during the whole course of life, would be an acquaintance with science, as far at least as to know the principles upon which his operations are or should be conducted. There is no line of life whatever better adapted to lead to an acquaintance with nature's laws, than the farmers; and the more he acts in accordance with those laws, the more satisfaction will be found in the prosecution of his labours, and the more profit will accrue therefrom. In conclusion, I would recommend the study of the theory of Agriculture in the long Winter evenings, and at other spare times, from the many treatises within our reach, and have it well digested in the mind, so that practice might be systematically conducted, and the farmer enabled to live as comfortably as he should do.

From the Albany Cultivator,

CULTURE OF THE STRAWBERRY.

Messrs. Editors—I early turned my attention to Horticulture, and in one department of that, the cultivation of strawberries, I think I can show by facts, that I have been truly successful. I

have not failed to have a good crop every year, for ten years; and last year, from 1,371 plants only a year old, I sold eighty gallons, besides what was consumed in my family, and some choice parcels, perhaps from vanity, sent as presents to my friends. My garden is a light loam, nearly level, but high and dry, not remarkably rich, it having been taken from a wheat field and enclosed the year before.

My mode of cultivation is to set out the plants or runners at equal distances of 18 inches, and if planted in the spring, keep them constantly worked and the runners off. This may be done with a garden scraper, quickly and neatly. In the month of November, if the season does not set in cold sooner, I manure with well rotten manure and work it in, putting my beds in nice order. I then cover them about one or two inches deep with pine shatters, (having an abundance of them,) straw, chaff—perhaps tanner's bark would do as well though I object to the chaff because it has more or less wheat, which will vegetate, and give your beds an unsightly appearance. Having made my servants work the shatters under the vines, they stay on until the strawberries are done bearing. In this way the vines are kept warm in winter, the grass and weeds do not spring up, and the fruit is so clean when gathered, that there is no necessity of washing, &c. I make no alleys in my beds, my ground being porous and dry. If I plant in the spring, I deem it advisable to renew my beds after the second year's bearing. This is done by simply directing the runners to the centre of the square formed by the old vines, throwing over the tendril of the runner, a little earth, to keep it in place, and when the runner has taken root, sever it from the parent vine. Then with a hoe, for the space will admit it, cut out the old vines. The manure which the ground has received in two years, will put it in fine order, and thus the bed may be kept for years. I intend to try plaster on my vines this spring. I sold my strawberries for 50 cents a gallon, throughout the season, in our village market, and could not gratify the demand. I omitted to state that the 1,371 plants grew on a comparatively small area, as any one may see by calculating it. I then had four beds, I now have twelve, and in every bed the plants look beautiful, scarcely one missing. I had but very few male plants, though it was by accident.

BRICE J. GOLDSBOROUGH.

Cambridge, Md. Jan. 28, 1843.

DOMESTIC ECONOMY.

LETTER FROM A FARMER'S WIFE.

From the Albany Cultivator.

MESSRS. EDITORS.—I am a farmer's wife, and as such should be pleased to become your correspondent, if I could by that means induce others of my own sex, who are much better qualified to write than I am, to become contributors to your paper; for I really think you could devote a column, or a part of a column, for our benefit. Why should all your attention be paid to cultivate the mind of the farmer, while the farmer's wife is totally neglected. We have no papers devoted to ourselves. There are the fashionable Magazines, &c., but they are filled up with love and murder stories, the fashions of our great cities, music, and a sorry kind of poetry, which are good enough in their place perhaps, but they do not furnish us with the information we want. The farmer's wife wants something more. She wants to know how to fulfil her duty in the sphere in which an all-wise Providence has placed her. I do not think you are so much of a flatterer as to tell us that we are perfect; neither do I think you are so much of a slanderer, as to say we are so proud, vain or ignorant, as to be unable to learn our duty as the wives of farmers. As almost every thing in and about the house, comes under the superintendence of the wife, she ought to be well instructed in the art of house-keeping, taking care of the garden, dairy, poultry, &c.; and let me tell you, I think the success of the farmer depends very much on the management of his wife. How can a farmer thrive, when his wife crawls out of bed after the sun has been some time shining, jerks on a dirty dress, jumps into her shoes slipshod, which shows the holes in the heels of her stockings to advantage, and then starts in a flurry to get breakfast with her night-cap on, and her bed left in the way she got out of it? In two hours after all hands ought to have been at work, breakfast is ready, which may be a mixed up mess, with sour bread or heavy cakes, spread on a dirty table by the side of the wall, which nothing but a keen appetite, and one continued volley of scolding, could make go down. With such a start in the morning 't is not hard to guess how business will go on about the house as well as on the farm, through the day. Instead of this, we ought to rise with the lark in the morning, and as cheerfully go to the business of the day, neatly dressed from head to foot, our houses in order, with a clean good breakfast ready by times. Then if the farmer does not go to his work with a light heart and strong arm, it is not our fault. As a well wisher of the cause you are engaged in, I send you these few hints, hoping you may do much towards promoting the proper cultivation of the soil, and the proper cultivation of the mind of the farmer and the farmer's wife.

Yours respectfully,

Ohio, Jan 20 1843. SARAH.

From the Farmer's Herald.

The following paper on crushed bones was published in a provincial paper some time ago: under the firm conviction of its great utility, we have, with the consent of the writer, transferred it to our columns, in order that its value may be more generally known and appreciated:—

ON THE ADVANTAGES OF BONE MANURE.

It has been said that while our manufactures are constantly advancing and improving, our agriculture is stationary. Now never was assertion more utterly unfounded, and unsupported by facts. Any individual who has impartially examined the history of agriculture for the last twenty years, cannot but observe that its greatest improvements have taken place, both as regards the management, the production, and the quality of agricultural produce. 'Tis true, further than the taking up of commons, and the reclaiming of wastes, the land has not been increased in extent, but the labour has been increased very considerably, and land once thought barren and worthless, is now productive and fertile. The mode of management too has undergone an equal revolution; materials and substances once wasted as useless, have been found to possess agricultural uses. To nothing does this apply more forcibly than to the introduction and use of bone manure. Well may he remember the ridicule which was cast on those who used it, when first introduced, and the wonder of their neighbours when they saw its effects, although that disposition to ridicule is much subsided, yet many are still remarkably sceptical as to their utility, and consider a trial of them to be a risk of the failure of the crop.

Waiving for the present the relative value of farm yard and bone manure, there is a striking difference in the cartage, and laying the one upon the land, as compared with the other. Let it however be understood that what I say, applies to the soils generally denominated "turnips and barly land," only as to say that *any* manure is equally favourable to *all* soils is to claim for it a pre eminence which is in fact due to none yet discovered, nor indeed is likely to be due, to any that ever can. To manure land with farm-yard manure, is a serious consideration as regards the cartage, both in reference to the expenditure of time and labour;—it is to be carted from the yard to the mixen, there to be turned,—then to be laid and spread upon the land. The farmer too is anxious that his land should be manured in as little time as possible after it is ploughed, lest the drought should penetrate the soil, as to prevent the germination of the seed, but let him use whatever activity he may in using putrescent manures, he must occupy a very considerable time. Here then appear the advantages of bones;—a pair of horses will bring at a time, as much as will manure five acres of land, and can, with the seed be sown in less than an hour!

Bones always possess another advantage over dung, and it is this—dung, especially when fresh, as recommended by Sir Humphrey Davy, lightens the earth, and exposes it to the reception of the drought,—a serious defect in a dry season, while the differ-

produced by bones is scarcely perceptible. The farmer, however may very justly urge that he has his manure, and it must not be wasted, while he has to buy his bones at an extravagant rate.—this is quite true, but it is equally true that it is by far too common for farmers from mere parsimonious motives, to "make his manure do" and lay out as little as possible in the purchase of any other, forgetting that by this he is very considerably the loser; let him use his manure as far as it will go, and let him lay on that pretty liberally.—let him purchase bones for the changing of the land every alternate year, and he will find himself very considerably the gainer.

Hitherto I have gone on the supposition that bones and dung possess equally fertilizing powers, but I think experience has proved that the former upon light sandy soils, has a most decided superiority. To enter upon a disquisition into the chemical properties of bone, would be uninteresting to a mere practical farmer, I shall not therefore make it a subject in the present article, but endeavour to show to the practical man from actual experiments, its effects upon different kinds of soils and in relation to other manures.

The first experiment was upon a thin sandy soil inclining to moor. The bones were "half-inch," and drilled upon the land along with the turnip seed, at the rate of two quarters, (sixteen bushels) per acre, along with a small quantity of quetch ashes Upon another part of the same field, and adjoining to the above, two or three lands were manured in the usual way, with farm yard manure I cannot precisely say the weight of manure laid on the land, nor indeed is that material, but as a proof that it had a sufficient quantity, I need only say, that the person who spread it on the land, had very strong prejudice against bone manure, and laid on rather more than less, than usual, declaring that "they should have a fair trial" The result was, that the turnips sown down with bone, had the most decided preference to those sown with farm-yard manure, inasmuch that *the very furrow to which they extended could be distinctly marked out.* It has been said that bones are valuable as a manure only for the crop immediately succeeding their use and that they do not affect any future crop; forgetting perhaps, that when the sheep farmer has obtained his turnip crop, he has effected his purpose, as the eating of that crop on the land is the best management that can be used for it. Now the barley crop that succeeded the turnips in question, was also equally superior over that on the dung, and very much excelling any ever seen on the same land previously, and which distinction was manifest even to the seed crop which followed.

The second experiment was made on a sandy soil rather inclining to gravel. The bones were drilled at the same rate, (sixteen bushels per acre,) and without any ashes, and in the same field others were sown with well rotted dung, and some with compost, composed of fresh soil and manure, well mixed. Over the former the bones had considerably the advantage, and between them and the latter, there was no comparison in their favour.

Experiment the third, was made on rather a stronger soil, slightly inclining to clay:—drilled at the same rate per acre as the former, and on an adjoining land in the same field, the turnips were sown with manure in its fresh unfermented state as recommended by Sir Humphrey Davy, in his Lectures on Agricultural Chemistry. The boned turnips here, however, were rather smaller than in the two former instances, and not quite so luxuriant, but over the fresh dunged ones, there was no comparison in favour of bones.

Nothing can be more satisfactory than the above trials, at least they have been sufficiently so to the person who tried them to establish their reputation, and he uses them regularly, and has done so ever since, and never excepting one instance, (when they grubbed) have they been known to fail, or be inferior to the rest.

From the Albany Cultivator.

EXTRAORDINARY PIGS.

Our thanks are due Dr. C. for the following account of the pigs fattened by him in 1842. We do not now recollect another instance in which a pig of 20 months has reached 700 lbs; and the gain on raw apples adds another case in proof of this food for feeding pigs. We fully concur with the Dr. that fermented food is to be preferred for fattening swine, and that the less exercise they take, or the more restricted their range, the more rapidly will they take on fat.

To W. Gaylord, Esq.—Your note of the 16th, making some inquiries touching the breed of my hogs, mode and time of fattening, and the kind of food used for this purpose, was duly received. In replying, I fear I shall not be able to communicate such information as will be satisfactory to you on all the points on which you request it.

Of the breed of the two smallest I know nothing, as I bought them last spring, when about a year old, of a person who has since moved out of the country. I understood, however, from him at the time that they were of an improved breed. They weighed at that time (April) about two hundred pounds each The largest of my fattened pigs was of a cross between the Berkshire breed and a kind known in this vicinity as the Saratoga breed, from their having been first introduced here from that country. They are entirely white, very handsome, and though rather large boned, keep and fat easier than any breed of hogs I ever saw. I have been informed—how correctly I cannot say—that their true name is the Russia breed.

There was no particular care or pains taken of the one I slaughtered, the first season. He was kept for a boar until about a year old He was wintered *entirely* on raw apples, principally sour ones: and on this food, gained from 160 lbs., which he weighed in November, to 300 lbs., which he reached in April He was then altered, and put up in a pen with the other two hogs, where they remained until they were killed in the latter part of January last. They were 19 to 20 months old, and weighed respectively —704 lbs.—578 lbs.—410.

Their only food, from April to September, was boiled potatoes and buttermilk, mixed and fermented. In Sepetember, I mixed into this food ten bushels of ground peas; after this, until they were killed, their food consisted of barley meal, mixed with milk and water, and suffered to stand until sour. Of this they had all they would eat.

Their pen was some 12 by 15 feet, a partition running across the middle, with a door-way, and half of it roofed over. In the covered part was the trough. They were never suffered to run out into a yard, a mode many prefer. I have been many years of opinion that hogs will fat faster and cheaper under a system of close confinement and fermented food, than in any other way. Should you deem the foregoing sentiments such as would interest the readers of the Cultivator, they are at your service.

W. F. Cooper, M. D.

Kelloggsville, Cayuga, co., March. 1843

Recipe for making Good Bread.—James Roche, long celebrated in Baltimore, as a baker of excellent bread, having retired from business, has furnished the Baltimore American with the following recipe for making good bread, with a request that it should be published for the information of the public:

"Take an earthen vessel, larger at the top than at the bottom, and in it put one pint of milk-warm water, one and a half pounds of flour, and half a pint of malt yeast; mix them well together and set it away. (in winter it should be in a warm place,) until it rises and falls again, which will be in from three to five hours, (it may be set at night, if wanted in the morning;) then put two large spoonfuls of salt into two quarts of water, and mix it well with the above rising; then put in about nine pounds of flour, and work your dough well, and set it by until it becomes light. Then make it out in loaves. New flour requires one fourth more salt than old and dry flour. The water also should be tempered according to the weather; in spring and fall, it should only be milk warm; in hot weather, cold; and in winter, warm."—*Ib.*

The best tamer of colts that was ever known in Massachusetts, never allowed whip or spur to be used; and the horses he trained never needed the whip. Their spirits were unbroken by severity, and they obeyed the slightest impulse of the voice or rein, with the most animated promptitude; but rendered obedient to affection, their vivacity was always restrained by graceful docility. He said it was with horses as it was with children, if accustomed to beating they would not obey without it. But if managed with untiring gentleness, united with consistent and very equable firmness, the victory once gained over them was gained forever.

In the face of all these facts, the world goes on manufacturing whip, spurs, gallows, and chains; while each one carries within his own soul a divine substitute for these devil's inventions, with which he might work miracles, inward and outward, if he would. —*N. Y. A. S. Standard.*

Selected.

THE MARRIED MAN'S FARE.

BY J. S. WALKER, LIVERPOOL.

Happy and free are the married man's reveries,
Cheerily, merrily, passes his life;
He knows not the bachelor's revelries, devilries,
Caress'd by and bless'd by his children and wife.
From lassitude free to, sweet home still to flee to,
A pet on his knee his kindness to share;
A fireside so cheery, the smiles of his dearie.
O! this, boys this, is the married man's fare.

Wife, kind as an angel, sees things never range ill,
Busy promoting his comfort around;
Dispelling dejection with smiles of affection,
Sympathizing, advising, when fortune has frowned.
Old ones relating droll tales never sating,
Little ones prattling, all strangers to care.
Some romping, some jumping, some punching, some
munching,
Economy dealing the married man's fare.

Thus is each jolly day one lively holiday;
Not so the bachelor, lonely, depress'd,
No gentle one near him, no home to endear him,
In sorrow to cheer him, no friend if no guest.
No children to climb up;—'twould fill all my rhyme up,
And take too much time up, to tell his despair;
Cross house-keepers meeting him, cheating him, beating
him,
Bills pouring, maids scouring, devouring his fare.

He has no one to put on a sleeve or neck button;
Shirts mangled to rags, drawers stringless at knee.
The cook to his grief too, spoils pudding and beef too;
With overdone, underdone, undone is he.
No son, still a treasure, in business or leisure,
No daughter with pleasure new joys to prepare.
But old maids and cousins (kind souls!) rush in dozens,
Relieving him soon of his bachelor's fare.

He calls children apes, sir, (the fox and the grapes, sir,)
And fain would be wed when his locks are like snow;
But widows throw scorn out, and tell him he's worn out,
And maidens, deriding, cry "No, my love, no!"
Old age comes with sorrow, with wrinkle, with furrow,
No hope in to-morrow, none sympathy spares;
And when unfit to rise up, he looks to the skies up,
None close his old eyes up; he dies, and who cares.?

THE AMERICAN AGRICULTURIST.

Published monthly, each number containing 32 pages, royal octavo.

TERMS—One Dollar per year in advance, single numbers, Ten Cent., three copies for Two Dollars, six copies for Five Dollars.

Each number of the Agriculturist contains but One sheet, subject to newspaper postage only, which is *one cent* in the State, within 100 miles of its publication, and *one and a half cents*, over 100 miles, without the State.

Advertisements will be inserted at One Dollar, if not exceeding twelve lines, and in the same proportion, if exceeding that number.

☞ Remit through Postmasters, as the law allows.

Editors of Newspapers noticing the numbers of this work monthly, or advertising it, will be furnished a copy gratis, upon sending such notice to this office.

Vol. I of *The American Agriculturist*, with table of contents complete, for sale at $1, handsomely bound in cloth, $1 25 cts. It is a neat and useful book, and makes a handsome premium for distribution with Agricultural Societies; to which, when several copies are ordered, a liberal discount will be made.

☞ To prevent confusion, all letters merely ordering this work or enclosing money for subscriptions, should be addressed to Saxton & Miles, 205 *Broadway, post-paid or franked by the Post*master.

Communications for publication to be directed to the Editor, 205 Broadway, New York.

This cheap paper contains some very good figures of extra fine Stock.—ED. COL. FAR.

"THE COLONIAL FARMER,"

TITUS SMITH, EDITOR; R. NUGENT, PROPRIETOR,

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

TERMS—One copy, 5s., Six copies, 25s.; Twelve copies, 50s. Twenty five copies, 100s. per annum—*in all cases in advance.*

☞ Every description of Plain and Ornamental Printing executed with neatness and despatch at the "Novascotian Office."