

with the back of the hand, or by lifting up the skinning-dish, beneath which the curd and whey will distinctly appear if the coagulation be complete. Another criterion is the colour of the whey, which should be of a pale green.—*Journal of the Royal Agricultural Society of England.*

ASHES FOR POTATOES.

Messrs. Editors:—In your paper of the 22nd, I see a notice respecting the use of ashes for potatoes, wishing some one that had tried ashes to give the result. I last year had my potatoes planted about the 20th May, and used as a dressing at the time of planting a mixture of ashes, plaster, and salt, the proportions were five bushels ashes, one plaster, and one of salt. At the first hoeing gave them a similar dressing of about a wine glass full at each time; and at digging found little or no rot; the potatoes were put into a large bin in the cellar, and those left, say 70 or 80 bushels, are now as sound to appearance, as those of years previous to the rot. I planted my potatoes three and a half feet one way, and three the other, which gave them plenty of air, and the crop was a good one. I shall try the same dressing this season. I did not try any without last year, but shall this. C. A. D.

Chulstow, N. H., May 23, 1847.

P. S. Since writing the above, a friend advises putting into the hill one pint of unleached ashes, the result has been good, and the crop nearly sound.—[Boston Cultivator.

RENOVATION OF THE POTATOE.

The following facts in regard to the renovation of the potato, being the mode of culture adopted by Mr. N. S. Smith who obtained premiums for the best seedling potatoes, and the greatest variety of seedlings from the State Agricultural Society—are taken from the January number of the Cultivator communicated by H. A. Parsons.

Mr. Smith began four years since to plant from potato hills, and has every year planted not only the tubers from the improved seed, but the seed from the newly produced tubers. In the potato springing from the improved seed of each successive year, there has been a manifest improvement in size, quality, and quantity; this year 36 sizeable table potatoes were obtained from one hill, or rather from one seed, all attached to one vine. Many of the potatoes growing from seed planted last spring, weighing from five to seven ounces each. The seedlings, though of many varieties, appear fair and healthy, with no signs of the prevailing disease. Mr. Smith the past year planted on two outer sides of his garden, which is of the same soil, exposure, &c., some eight rows of common potatoes purchased in market, consisting of pink-eyes, no-hanocks, or mowers, and flesh coloured; next to these on two sides some twenty rows of different varieties of his improved; and next to these seeds taken from the hills last spring. These had all the same soil, culture and attention. The seeds were first sown in a hot-bed, and afterwards set out in a furrow about two feet apart—one plant making a hill.

In digging, the following was the result:—Of the varieties first named, many were badly diseased; the no-hanocks most, the pink-eyes next, and the flesh coloured last. The no-hanocks, growing by the side of these, showed scarcely anything of the disease, and the seedlings made a hill.

RICE CEMENT.—This is prepared by intimately mixing rice flour with cold water, and gently stirring it over a mild fire. It thus forms a very durable and delicate cement, answering, when made thin, all the purposes of put in a higher degree, for paper and the like, and when made of the consistency of plastic clay, it may be cast in moulds, and the articles when dry have much the appearance of white marble, and will take a high polish. The domestic idols of the Chinese are mostly cast of this material. Any colouring matter may be added at pleasure.

FRENCH ROTAS, OR TWIST.—One quart of lake-warm milk, one tea-spoonful of salt, a large tea-cup full of home-brewed yeast, or half a bushel of attilly yeast, flour enough to make a stiff batter; set it to rise and when very light, work in one egg and two spoonfuls of butter, and knead in flour till stiff enough to roll.

AN EXCELLENT AND CHEAP PLOUGH.—Ompint of rice; twelve apples of good size and sour; pare core and slice them; mix the rice and sliced apples, and put all into a bag and hold them for half an hour. The bag must be large enough to allow the rice to swim, and yet no larger than the rice, when swelled, will fill. Eat with an ounce of sugar; the taste; butter and sugar are excellent.

TO KILL COCHRANES.—A tea-cup full of well-brained plaster of Paris, mixed with double the quantity of oatmeal, to which add a little sugar (the latter is not essential) then strew it on the floor or in the cracks where they are wont. This is simple, and being of no cost, it is worth a trial.—*Gardeners' Chronicle.*

RED SPOTS.—The *Gardeners' Chronicle* recommends, for the extraction of those insects that fasten on the leaves of trees, with a quantity of laurel leaves, covered as tight as possible, to prevent the bees, evolved from the leaves, escaping; in a few hours the insects will be destroyed. The branches of the camellias infested with the scale should be rubbed with oil, on the place where the insects abound.

IN ORDER TO STOP THE GUMMY EXUDATION IN CHERRY TREES wash the gummy spots with strong soap, and to a bandage over them, with soap enclosed. This is stated to be very efficacious.

TO CORRESPONDENTS.

D. K. Brock. Your request will be attended to,—the missing numbers will be sent also.

O. J. H. If the facts are as you say, there is no doubt but your title is good; any lawyer, or indeed any person having much acquaintance with business, will tell you so.

CANADA FARMER.

June 5, 1847.

One of the Editors of this journal will probably call upon several of the principal agriculturists, between this and Montreal, within the next two or three weeks.

AGRICULTURAL CHEMISTRY.

We have for some time had it in our mind to devote some space to the publication of such information upon this important subject as would greatly benefit our readers, and especially the younger portion of them who may not have access to the best books relating to it—by affording them the opportunity of becoming acquainted with those first principles and the more common scientific terms, the knowledge of which is absolutely necessary to the understanding of the writings of all scientific men; at the same time that the labour of selection and explanation would freshen and extend our own knowledge. As remarked by our correspondent. (Whitby Farmer) much of what is written is unintelligible to the majority of readers in consequence of their ignorance of the language used. It would be impossible to write upon scientific subjects (and agriculture is not only a science, but involves the principles of several sciences) in such a manner as to come down to the comprehension of the mass of readers without the most tedious circumlocution, or (as this is a "big word," we may explain its meaning better by) a constant repetition of words and a round-about mode of speaking. Of course there is such a thing as *useless* technicality, but in our selections we have endeavoured to avoid articles of this kind. The most technical, or rather the most difficult to be understood of those we recollect, was published in our second number on "the good and bad points of cattle." It was written by a veterinary surgeon and published in a scientific work. Still with the aid of a common dictionary most of it could be made out. Speaking of the feel of the skin in a good animal, the writer says "its easy residence when traction is made use of" is a "good prognostic." &c. Johnson or Walker will solve the difficulty if there be any in this sentence. "Residence" they inform us means "a stalling or leaping back." "Traction," the "act of drawing," so that the meaning becomes clear even to those who may never have seen these words before, upon consulting a common dictionary. For "prognostic" he might have said "sign," which would have been plainer if not quite as appropriate. "Interstitially posite," "adipose and reticular tissue," "saponaceous feel," &c., may all be understood by reference to the same authorities, one or other of which we hope is in the possession of every family. To express the same meaning, in the commonest language would have required a great number of words, except in the last example, which is an instance of *useless* obscurity. *Soapy* would have done just as well as "saponaceous," for it has the same meaning. There must be an effort made on both sides; the writer must study plainness and simplicity, and the reader must strive to comprehend without the necessity of a constant explanation of the meaning of words.

But in a science like that of chemistry *terms of art* are absolutely necessary. When we speak of "ammonia," we might say "hartshorn," and perhaps be a little better understood, because this is the popular name by which this substance is known in one of its forms. We should however, to convey our meaning correctly, be obliged to use several other words, for hartshorn contains but 32 per cent. of ammonia, united with other substances. Ammonia in its pure state is a gas, of great importance to the tiller of the soil; it

is produced in the fermentation of animal matter, and its smell may be detected in dung-hills and cess-pools. It is now well established that the fertility of animal or barn-yard manures depends in a great measure on the presence of this substance. How important then to understand its nature, and the mode of making and preserving it! But chemistry teaches us that even this volatile gas, is composed of two other simple gases! viz., nitrogen one part, and hydrogen three parts. In speaking of these substances we are driven to use their chemical names, for they have no others. And the only way we can get over the difficulty is to explain them by their properties and peculiarities every time we mention them. Thus if we are speaking of the components of the atmosphere or air, we say in 100 parts there are 79 of nitrogen, an elementary gas, colourless, inodorous, or without smell, inactive, of nearly the same weight as air, incapable of sustaining life or flame, &c., &c., and 20 parts of oxygen, which in its simple form is also a gas, colourless, tasteless, and inodorous; it is electro-negative, that is, when those substances with which it is united are electrically decomposed (separated into their elements) it always appears at the positive surface (but this requires a knowledge of the nature of electricity to be understood). It is heavier than atmospheric air, it is the most powerful supporter of combustion or flame, and of life, &c., &c. Does not the reader see that it would be absurd and impossible to go through such a lecture every time a chemical term is used! After it was explained once, the repetition would become intolerable to those who remembered, and understood it. Now, we shall devote at least a column to the explanation of the elementary principles and terms of art, of those sciences more immediately connected with agriculture, and we shall begin with Chemistry, adding such observations to our selections from the most approved authors, as from time to time shall appear necessary. We hope our young readers especially, will go with us through these interesting inquiries and they will assuredly become both wiser, richer, and better in consequence.

HAY-MAKING.

The season for making hay is rapidly approaching. The farmer should, therefore, look to his implements and have them in order. Much time may be saved as well as money, by paying early attention to these things. On our first page will be found a cut and description of a revolving horse rake, which we think, will be found less complicated and in every respect superior to those in common use. Any man of ordinary ingenuity may construct one; those, therefore, who may approve of the plan, will have time to prepare for testing its usefulness where their land will permit it.

There has been, and is still considerable difference of opinion among good farmers as to the best mode of making hay. One method, and it is the most common, is to dry it thoroughly in the swath, by turning and spreading during the day. Towards evening it is collected into small cocks, or raked into wind-rows. Next day it is spread again, and in the afternoon put up into larger cocks. On the third or fourth day it is taken to the stack or mow. No salt is used. By this mode the grass is thoroughly dried, but the process is tedious, and in the case of clover, much of its virtue is lost. Another plan which has many intelligent advocates, is to allow the swath to be turned and withered, putting it up into small cocks of about 200 lbs. by noon, when cut before breakfast. In this situation a sweating or fermentation takes place, attended by heat, and an exudation of moisture, which tends to cure the hay very fast. The forenoon of the next day the cocks should be examined, and if the heat is abated they may be shook up a little and left for a short time, and then carried to the barn. In mowing it away, salt should be sprinkled over it at the rate of two or three pecks to the ton. It will heat again slightly, but if not too green, cures

well, and makes the best of hay. The practice is adopted by some, of putting it away with alternate layers of straw, especially when composed of clover; heat is thus avoided, and the straw by imbibing the juices is enriched as food; less salt is required in this case.

Judge Buel, the able editor of the Albany Cultivator, from its commencement until his death, always recommended and practiced this plan. He says—

Philosophy teaches, and many years experience has confirmed us in the correctness of her teachings, that not only clover, but all hay in which clover or any of the succulent grasses, are constituents should be cured in small grass cocks, not rolled, but formed of layers with the fork. The objections to the old mode of curing wholly in the sun, are, in the first place, that the leaves and finer parts of grasses, dry, crumble and are lost, ere the stems and succulent portions are fit to carry to the barn. In the second place, that an intense hot sun is hurtful to the quality of the hay, that cured in the shade being always the most fragrant and nutritious. Third—it is liable to be seriously injured by the dew, sudden showers, or continued rains.

The practice of the best English, Flemish, and French farmers, says Deane, is to expose their hay as little as possible to the sun. It is carried in dry, but it preserves its green colour; and you see hay two or three years old in their market, of so bright and green colour, that we should entirely conceive it to be cured; yet they are in the practice of preserving it for years, and value it more for its age. The cock excludes it from the sun and preserves its greenness; and if a slight fermentation takes place there, the hay seldom heats, and never spoils, in the mow or stack. It is the best mode to make good hay. Let those who think otherwise try it.

For the Canada Farmer.

GENTLEMEN.—Upon seeing the Prospectus of your paper, I made up my mind to become a subscriber. It struck me to be just the thing that was wanted. I knew there were hundreds of farmers raising families of children, who cared nothing for the political papers, and therefore did not take them; and as, until yours was started, there were no others published in this country containing general information, these children stood a fair chance of coming up just as ignorant as their parents. It therefore appeared to me that a good farmer's paper, containing instruction upon agriculture of a useful kind, and at the same time giving news and matters of general interest; in fact, just such a paper as yours is, would meet with more encouragement (for it would be more worthy of it,) and do far more good than the whole host of political newspapers that are now floating over the country. I may put the religious papers, as they are called, in the same category, for they are started with the same party object, and are just as bitter and acrimonious in their language, and kindle so much strife and "brotherly hatred," and are just as neglectful of the real interests of the country (perhaps more so) as their worthy competitors.

Political papers may do well enough for those that like them; but as for myself I am quite tired of the continual wrangle about "party" and "office." I want to see the party that will do something. This eternal talk has sickened my stomach. But I am afraid you will think I am writing politics. Never mind—I have my own political opinions, and newspapers shall not change them. They are made up from facts, or acts, just as you like, and it will require the same kind of things to produce new ones; mere declamation, assertion, or abuse will not do. A newspaper in a family, even a political or religious one, is better than nothing. It contains many things pleasing to children, and gives them a taste for what is solid and useful. I am myself an instance of their benefit. My father took a paper, and though I hated the sight of a book, yet by reading the newspaper sometimes aloud for others, I gradually acquired a relish for the thing, and can now boast a considerable acquaintance with books and with the world, for one in my station, which I otherwise should have been ignorant of to this day.

I trust, therefore, as your journal is what every farmer wants (and if conducted as you have begun will no doubt be appreciated and supported), that you will be induced to continue it; I should be very sorry to see it stop, for I am afraid it would be a long time before we should have another like it. You may lose the first year, because many are waiting to see it established, but you will get a good list next year.