



**Agricultural Department.**

**COAL ASHES IN THE GARDEN.**

It has been long known that coal ashes have the effect of mellowing the soil, particularly clay. A rigid clay may thus be greatly improved in its texture. It has been held that the fertilizing properties of coal ashes are small; repeated analyses have shown this. Yet, used as they have been here in gardens, without other manure, the effect has been such as to lead irresistibly to the conclusion that they develop in some way a considerable amount of fertility. All cannot be accounted for by the mechanical improvement, as in cases where this is not lacking the effect is still present, and apparently undiminished, if not sometimes increased—in this case acting seemingly as word ashes do, requiring other (organic) fertility to aid, if full results would be obtained.

I was surprised, early in the season, on seeing unusually thrifty tomatoes and beans, to learn that the only manure used was coal ashes, scattered in the garden to get them out of the way. This was practiced for several years and no manure other than this had been used. I was shown another garden to-day which was treated exactly in the same way, the only dressing being coal ashes. Here the growth seemed all that it could be. I was shown a potato grown here that weighed one pound eleven ounces and a half. It was the early Vermont, a variety not noted, I believe, for its large specimens. But they were all large, averaging from half a pound to a pound; no small ones among them, and many exceeding a pound. They were planted fifteen inches apart in the rows, a small potato dropped in each hill. The owner of this garden lays the success to the coal ashes, and says there can hardly be any mistake about it. This is the opinion of others also. My own experience is confirmatory. But the effect, I find, is not immediate. It is more tardy than with wood ashes, whose potash and soda act promptly.

I would advise by all means that coal ashes, instead of being thrown away, be used in our gardens, removing the coarser parts; also on potato ground, always mixing well with the soil, and as early as the ground will admit, and to be repeated yearly, giving three times for effect upon the soil. I find the best success where the ashes have been applied for several years. The second year is sure to tell, even where thrown upon the ground and left to lie there undisturbed, as I have abundant evidence. But the place for full action is in the soil.

I should have stated that in the second garden mentioned where the ashes were omitted, as was the case with a small space, there was a uniform lack in the growth, both in the size of the vines and the tubers. About a quarter of the soil of this garden was composed of ashes. In places where the proportion of ashes was greatest the largest tubers were raised. There is no doubt of the general benefit of coal ashes in a garden, and their decided effect upon the tomato and potato family. They doubtless effect more or less favorably all plants, in the improved texture of the soil, which most of our old cultivated fields need. Add to this their known manurial properties which science has pointed out, little though they be, and there is no reason why coal ashes should not be used on our land, to say nothing of what may seem an occult influence when they are put in union with the fertility of the soil, resulting thus, as appears to me, in an increased growth. I have faith in the discarded coal ashes, and I am using them to advantage.

F. G., in Country Gentleman

**WINTERING BEES**

An essay read by Mr. A. Sausbury before the Illinois Bee-keeper's Association contained the following sensible hints:

Four antecedent requisites are necessary to secure at all times successful wintering. Yet they frequently winter quite well when these requisites are not perfect in all respects. They are as follows:

- I. Good wholesome food
- II. A proper, uniform temperature.
- III. Absorbents above the bees, or what is often called upward ventilation.
- IV. Youthful vigor or vitality to carry them through the winter.

The health of the bee, like all other animals, largely depends on wholesome food. During extreme drought and the influence of a parched earth and burning atmosphere, the saccharine portion of the fluid sap of all vegetation partakes very largely of the acid of the vegetable, the flow is too tardy and the quantity too scant, so it is adulterated before it

reaches the floral cup. Under these circumstances, the bees will forage largely on fruits, decayed apples, peaches, grapes and the pumuck about cider mills, etc. Such kind of food is no detriment to the health of the bee while on the wing and in the heat of summer, but it does harm it when long confined to the hive.

Syrup made of good refined sugar is a fine substitute for honey.

2.—Notwithstanding bees often winter in a very irregular temperature, uniform success demands an even temperature, not too hot or cold, about 45 deg. In this latitude this can only be secured by a good warm repository. Where all things are equal, bees will live in dark confinement four or five months, and come out as active as they went in.

3.—Absorbents above the bees, in the shape of chaff or straw cushions, or the second story of the hive filled with leaves (a cloth first covering the frames), is almost indispensable for outdoor wintering, but in a warm repository they are all superfluous. All that is necessary is to raise or slip the lid of a hive a little to one side and let the moisture from the bees, which arises in the form of vapor, escape, otherwise it will condense into drops of water and damage the combs and endanger the lives of the bees.

It was once stated by the late Samuel Wagner (if my memory serves me right) that bees grow no older when in healthy confinement. I am not inclined to be skeptical on this point, but it is apparent to all that have lived out two-thirds of their time before they go into winter confinement will die in early spring before a sufficient number of young bees to generate heat and take charge of the hive are hatched. So bees, queen and all, become discouraged and decamp—a suicidal act, but with them preferable to a lingering death in their once happy home.

When honey gathering is good the latter part of August and the first part of September this matter always regulates itself where the queen is not forestalled, and her brood nest filled with honey—this, however, seldom occurs with good young queens. Where no honey gathering occurs at the proper season, all difficulties may be overcome by stimulating with sugar syrup.

**ROVING FARMERS.**

There is a class of farmers, says an exchange paper, who are constantly on the lookout for a better place to go. Their farms are always "for sale," and they dream of luxuriant lands, in some other part of the country, which can be bought "for a song," where they imagine they would be more prosperous and enjoy life better than where they now reside. Many of these men own mortgaged farms; and for such men to desire to remove where they can own a free farm, though it be far, far away, is but a natural manifestation to better one's condition which the human mind cannot resist. But where can these men go after selling their farms, and be contented? This is a serious question, which no man can answer of his own knowledge. Suppose they can sell out, and command a thousand or fifteen hundred dollars after paying all their debts, and they start for "the West," Kansas, Missouri, Iowa, or some other State. Eighty acres of land, with a comfortable house or log cabin on it, can be bought for from \$5 to \$10 per acre. The land is all right, as good as "lies out of doors," but alas for the surroundings. Neighbors are scarce, society is a myth; and the poor, frail housewife, who follows her husband without a murmur, pines for friends. The children have to go two miles or farther to school; and in the winter season they cannot attend much of the time in consequence of storms. Churches are "far and far between," and the people are generally a mixture of various nations; and the result of all is, that many an Eastern farmer who goes West is unhappy and wishes himself back on his old homestead. So if one goes South, or anywhere, he will not find things just to his mind. If one thing is better than on the old place, another is worse; and taking all things into consideration, but few farmers change their residences, who are able to make a living on the old place, that better themselves by removing to a distant State. One may obtain rich lands at a low price where there is no market for what he grows, and he may get into an unhealthy locality, and soon he may bury his wife and children, and what then?—a gloomy world for him.

**HOW TO FATTEN CHICKENS.**

It is hopeless to attempt to fatten chickens while they are at liberty. They must be put in a proper coop, and thus, like most poultry, appetences, need not be expensive. To fatten twelve fowls, a coop must be three feet long, eighteen inches high, and eighteen inches deep, made entirely of bars. No part of it solid, neither top, side nor bottom. Discretion must be used according to the sizes of the chickens put up. They do not want room. Indeed, the closer they are the better—providing they can stand up at the same time. Care

must be exercised to put up such as have been accustomed to being together, or they will fight. If one is quarrelsome it is better to remove it at once, as, like other bad examples, it soon finds imitators. A diseased chicken should not be put up. The food should be ground oats, and may either be put in a trough or on a flat board running along the front of the coop. It may be fed with water or milk, the latter is better. It should be well soaked, forming a pulp as loose as can be, providing that it does not run off the board. They must be well fed three or four times a day—the first time as soon after day-break as possible or convenient, and then at intervals of four hours. Each meal should be as much and no more than they can eat up clean. When they have done feeding, the board should be wiped, and some gravel may be spread. It causes them to feed and thrive. After a fortnight of this treatment, you will have good fat fowls. If, however, there are but four to six to be fattened, they must not have so much room as though there were twelve. Nothing is easier than to allot them the proper space; it is only necessary to have two or three pieces of wood to pass between the bars, and form a partition. This may also serve when fowls are put up at different degrees of fatness. This requires attention, or fowls will not remain fat and healthy. As soon as the fowl is sufficiently fattened it must be killed, as otherwise it will not still get fat, but it will lose flesh. If fowls are intended for the market of course they are or may be all fattened at once; but for home consumption it is better to put them up at such intervals as will suit the times when they are required for the table. When the time arrives for killing, whether they are meant for market or otherwise, they should be fasted, without food or water, for twelve or fifteen hours. This enables them to be kept some time after being killed, even in hot weather.—London Cottage.

**HATCHING EGGS IN A HOLE.**—Another family of Australian birds, which are the most anomalous of all in their habits, are the brush-turkeys, which we may look upon as supplying the place of the pheasant and grouse, and whose unique domestic economy is specially adapted for the peculiar conditions of Australian existence. The mother of a family of brush-turkeys is very far removed from the position of a domestic fowl, and enjoys complete immunity from the slavery of incubation. The old birds in spring share the labor of collecting an enormous mass of half-decayed leaves, rubbish, and earth, five feet high, and sometimes forty-five feet in circumference. As soon as the hotbed, by the fermentation of the vegetable matter, attains a heat of about 93° Fahr., the hen bird deposits her eggs one after another in the centre. They are very carefully arranged in a circle on their ends, and then covered to a considerable height with leaves and earth. When hatched the young birds scratch their own way out, and are able at birth not only to run but to fly sufficiently well to enable them to perch on trees out of harm's way. The mother, however, seems generally to hang about the neighborhood, and to assume at once the education and guidance of the family. The solution of this extraordinary peculiarity is, as Mr. Wallace has pointed out, only to be found in the peculiar condition of the open regions of Australia, where prolonged droughts and scanty water supply entail a periodical scarcity of food. The confinement of the parents to one spot for the purpose of incubation might under these circumstances lead to starvation, and the consequent death of the offspring; but with free power to roam the birds may easily find sustenance, and the young, fully developed at birth, are at once capable of prolonged and extended journeys.—Good Words.

**APPLES.**—With us the use of the apple as an article of food is far underrated. Besides containing a large amount of sugar, mucilage and other nutritive matter, apples contain vegetable acids, aromatic qualities, etc., which act powerfully in the capacity of refrigerants, tonics and antiseptics, and when freely used in the season of mellow ripeness they prevent debility, indigestion, and avert, without doubt, many of the "ills that flesh is heir to." The operatives of Cornwall, England, consider ripe apples nearly as nourishing as bread, and far more so than potatoes. In the year 1801—which was a year of much scarcity—apples, instead of being sold into cider, were sold to the poor, and the laborers asserted that they could "stand their work" on baked apples without meat, whereas a potato diet required either meat or some other substantial nutriment. The French and Germans use apples extensively, so do the inhabitants of all European countries. The laborers depend upon them as an article of food, and frequently make a dinner of sliced apples and bread. There is no fruit cooked in so many different ways in our country as apples, nor is there any fruit whose value, as an article of nutriment, is so great and so little appreciated.—New York Journal.

**DOMESTIC.**

**EXTRA COTTAGE PUDDING.**—One cupful of granulated sugar, and one tablespoonful of butter, beaten well together, the yolks of two eggs, one half teaspoonful soda dissolved in one cupful sweet milk, a little salt, then the beaten whites of two eggs, and three cupfuls sifted flour, or enough to make a middling stiff batter; bake in a well-buttered mould. Serve hot with fruit sauce made in this way.—Take one quart or more of any kind of fruit or berries. If peaches are selected they must be very ripe, pare them, remove the stones, then mash them well with a potato-pounder. To every quart of fruit add one tablespoonful melted butter and one cupful powdered sugar stir well together; set it on the fire for a few moments until it becomes warm, pour it in a glass dish, and use a gravy ladle when serving it with the pudding.

**BURNS AND SCALDS.**—Dr. G. F. Waters, of Salem, Mass., has recently discovered a most effective remedy for burns and scalds, which is so simple, and always at hand, that we give it for the benefit of our readers. It is merely to sprinkle the injured surface with the Bicarbonate of Soda—the common baking soda—and cover it with a wet cloth. When the burn is only superficial, the pain is said to cease instantly, and but one application needed, where the injury extends deeper, longer time and more applications will be required. To show the efficiency of this remedy, Dr. W., at a meeting of the Mass. Dental Society, made an illustration in his own person, in presence of the meeting he scalded his wrist with boiling water, in one place making a deep scald, by applying boiling water with a sponge for 30 seconds. The pain at once ceased on the application of soda, covered with a wet cloth, and the next day, all but the par. intentionally burned more severely than the rest, was practically healed, and that portion was healing rapidly.—American Agriculturist.

**CRETONNE-WORK.**—The work consists in cutting out of fine figured cretonne the delicate flowers or birds which may form the patterns, great care being observed so that the outlines may be kept perfect. Choose for several different patterns, no matter what color the ground, as that will all be cut out. Having thus cut out all the bouquets, etc., let us compose the design by combining parts of several things. For instance, one we saw lately had a stork as the central object, perched upon some branches placed horizontally. The ends of these branches were entwined with graceful vines, and leaves and flowers were added according to taste. Many pretty subjects will suggest themselves, especially after a little experience has been gained. A beautiful cushion is made by taking a square of cotton-backed black satin or velvet, and arranging such a design in the centre; then, having basted them well in place, go around the edges with button-hole stitch in sewing silk. Antennae of insects and the tendrils and stamens of flowers may be done in embroidery silk. Screens and many other small things may be made in the same manner, and if the edges of the cretonne be well worked, they will prove substantial as well as beautiful. In England this work is very popular, and is used to ornament the seats and backs of chairs, for table-covers, and for curtains.—Racer.

**TO MAKE VINEGAR.**—Wine vinegar is used by many to make pickles, but pure cider vinegar is the only kind we would willingly use for that purpose. In the country one can make one's own vinegar (even if there are but few apples) with a small cider press. After the juice is pressed out let the cider ferment, and then, if the weather is still warm, set the keg or barrel in the sun, and put an inverted glass bottle in the bung-hole. A gallon of good cider vinegar added, and brown paper dipped in molasses dropped in if there is no "mother" in the vinegar-jug, will after a little make the best of cider vinegar. Add a little molasses, brown sugar, and good home-made yeast, and occasionally the skimmings from jellies and preserves. If too cold when the cider is pressed out, let the barrel be put into a cellar that never freezes, and remain till warm spring weather, then set in the sun as above directed. Keep the barrel closely stoppered so that no dirt can enter after the vinegar is made, and it can be constantly replenished as it grows too strong by adding fresh cider occasionally, a little at a time; and thus you need never be out of good vinegar. Be sure that it is never frozen. Save all apple, peach and pear peelings, and the cores and pits and all sound pieces of fruit, cover with a little water long enough to extract the juice. Strain and put into the vinegar barrel, and in a few days the vinegar will be as perfect as if fresh made. To prevent the possibility of having inferior vinegar for a few days after adding to the barrel, have the forethought to keep a jug always filled for constant use, and be at the personal trouble of seeing that it is full every time before making any additions.—Mrs. Beecher.