

KINDNESS.—The following suggestions were made in to Lowell Offering. Their general acceptance would prove a joyful state of things:

"All cannot be greatest, but all can be kind."

"Speak kindly to thy fellow man,
Lest he should die while yet
Thy bitter accents wring his heart,
And make his pale cheek wet."

Speak kindly to thy brother man, for he has many cares thou dost not know; many sorrows thine eye has not seen; a grief may be gnawing at his heart strings, which are long will sweep them in sunder. O, speak kindly to him! Perhaps a word from thee will kindle the light of joy in his o'er shadowed heart, and make his pathway to the tomb a pleasant one. Speak kindly to thy brother man, even though sin has marred the spirit's beauty, and turned into discord the once perfect harmony of his being. Harshness can never reclaim him. Kindness will. For far down beneath all depravity there still lingers a spark of the spirit's loveliness, that one word from thee may kindle to a flame which will eventually purify the whole man, and make him what he was designed to be, the true spiritual image of his God. Speak kindly, act kindly to all, without asking who it may be. It is enough for thee to know he belongs to the brotherhood of man, and needs thy sympathy. Then give it to him freely!—ay, freely, as the Father who is in Heaven, giveth to thee.

ELECTRICAL TELEGRAPH.—MESSAGE SENT 1845, AND RECEIVED IN 1844!—Directly after the clock struck 12, on the night of the 31st December last, the superintendent of Paddington signalled his brother at Slough, that he wished him a happy new year; an answer was immediately returned, stating that the wish was premature, as the new year had not yet arrived at Slough! Such, indeed, was the fact, for panting time was matched against Professor Wheatstone, and beaten by half a minute. The distance being 18 miles, the new year arrives at Slough one minute and forty seconds later than at Paddington. M. Arago, in giving an account of some recent experiments with the electrical telegraph, estimates the rapidity of transmission at the rate of 32,000 leagues per hour.

DEFENCE FROM LIGHTNING.—Dr Franklin was the first who found out that lightening consisted of electric matter. This great discovery taught us to defend houses, and ships, and temples, from lightning; and also to understand, that people are always perfectly safe in a room during a thunder storm, if they keep themselves at three or four feet distance from the walls.

SIMPLE MEANS OF VENTILATION.—There should be near the upper part of every room an opening, to be used on proper occasions, to allow the hot breath and other impure air, which rises to the ceiling, to escape there. It is impossible to ventilate aright a room containing a number of persons, except through an opening near the top of it, and the great defect of all our arrangements now is the want of such an opening.—*Dr. Arnot.*

AGRICULTURE.

PREPARING BUTTER FOR THE LONDON MARKET.—The following is the most approved method of making and preparing butter for the London market, and is submitted for the advantage of farmers and dairymen throughout the country. Butter made on this system, with care and quick despatch, will insure high prices and quick returns. The agents' comments on each dairy's butter and improvement, are still going on. The best land is old pasture, as free from weeds as possible, with abundance of good water. The cows should not be heated or tormented in any way; housed at night, and fed on green food, and the pasture changed when practicable. In milking, take salt-petre in the pail, one-eighth of an ounce to 8 quarts of milk. The dairy should be perfectly clean, airy, of equal temperature (say 50 degrees), very little light, and completely shaded from sun by trees or otherwise; and in winter a stove may be required. Strain the milk into coolers, sweet and dry, (never mix warm and cold milk), keep it from two to four days, then put the whole of the milk and cream into a clean churn, which is not to be used for any purpose, except during the time it is in operation. Boiling water to be added to raise the temperature to about 68 deg. or 60 deg. if horse or water-power be used. The time occupied is from one or two

hours, depending on the size of the churn; but churning should not be continued beyond the proper time. After churning put the butter into two bowls or pans of pickle, made from pure water and fine stoved salt (as common gives the butter a bad flavour.) It should be well washed, and the pickle changed frequently, until all milk is extracted, working with the hand the two pieces alternately, until the pieces becomes quite close and firm, when it is to be cured with the finest dry stoved salt and sugar. The proportion to be one ounce of refined sugar to one pound of salt, to be well worked into the butter with the hand; but the quantity of curing materials will depend on the time and labour given by the dairy-woman, in working and beating the butter (after the salt and sugar are applied), which should continue until all pickle is driven out. The butter should be finished the day it is churned, and then be pressed as closely as possible into the cask. The pickle, frequently changed, or hot pickle; and must be strong and air-tight; the size is of no consequence, if filled and sent off in one week. If not filled at one churning, the butter is to be covered with pickle until the next; but no cask to contain more than one week's butter. If butter should at any time appear pale in colour, after churning has commenced, a little grated carrot-juice may be put into the milk, and will not injure either milk or butter. All butter should be at the place of shipping one day prior to the steamer leaving, so as to run no risk of going forward to the agents.—*Agricultural Gazette.*

SUBSOILING OF CLAY LAND.—Mr. H. Hudson, jun. of Wick, near Pershore, has sent the following answer to questions put to him respecting the experiment of subsoiling a retentive clay:—"The part of the field to which I alluded in my former communication was ploughed in the autumn of 1813, about five inches deep, and the subsoil plough moved the under part of the furrow about the same depth. I thus obtained about ten inches of soil. After so doing, I cross-ploughed it with a double mould-board plough, throwing up the furrows similarly to a celery-mound. I imagined the frosts would then pulverise the same, and in the seed-bed. To my disappointment, I found the raised furrow fine on the surface, and wet and stiff at the bottom. I therefore harrowed it as level as possible, and ploughed it with a common plough. The stiff furrows hardened in a few days, and required the spike roller to break the clods. The weather continuing dry, I burnt the whole of the surface in heaps (of about half a cart-load in each) at an expense of three guineas per acre, including coal and spreading, and planted it with Swedes to draw off in the autumn. The plants looked well the first two months, but afterwards turned blue in the top, and were not so good as those in a field adjoining that was cross-ploughed but not subsoiled. After removing the Swedes I planted the part of the field with wheat, and now that the burnt soil is thoroughly incorporated with the natural earth, the plants grow away vigorously, and the appearance is promising. To those who think the experiment an unfair one, as the cross-ploughing might have injured the land, I would suggest a trial without it, and should be happy to hear the result was favourable. My own private opinion is opposed to subsoiling retentive clays. I have subsoiled sixty or seventy acres of sand and deep loam with great advantage; in fact, nothing can be better than occasionally shaking the under part of the turnip soils. The same should be done when under fallow, and invariably dressed with lime afterwards."—*The Critic.*

A NEW MANURE.—M. Liebig, the celebrated Professor of Chemistry at the University of Giessen, has discovered a mineral substance which, when combined with guano, will produce one of the most fertilising manures known. A joint stock company, with a capital of 120,000l. sterling, composed for the most part of leading English capitalists, was immediately on the discovery being made, formed for the purpose of carrying on upon a large scale the manufacture of the new compound.

GRAFTING CURRANTS.—The *Gardner's Chronicle* recommends for the pretty appearance presented as well as for improved flavour; to graft currants of different colours, as the red, black and white, variously intermixed, on stocks trimmed up to a single stem three or four feet high. The tops may be headed down to a dense compact head, or trained as espaliers in the horizontal or fan method, the two latter modes of training, by the free exposure to sun and air, much improved the quality of the fruit. The importance of trimming the bushes up to single stems to improve the fruit and facilitate clean culture, instead of suffering two hundred and fifty suckers to shoot up all round into a dense brush heap, is very obvious to those who have tried both.