

be inflicted on a child, accompanied with words so uttered as to counteract entirely its intended effect; or the parent may use language, in the correction of the child, not objectionable in itself, yet spoken in a tone which more than defeats its influence. A few notes, however unskillfully arranged, if uttered in a soft tone, are found to possess a magic influence. Think we that this influence is confined to the cradle? No: it is diffused over every age, and ceases not while the child remains under the paternal roof. Is the boy growing rude in manner and boisterous in speech? I know of no instrument so sure to control those tendencies as the gentle tones of a mother. She who speaks to her son harshly, does but give to his conduct the sanction of her own example. She pours oil on the already raging flame. In the pressure of duty, we are liable to utter ourselves hastily to children. Perhaps a threat is expressed in a loud and irritating tone; instead of allaying the passions of the child it serves directly to increase them. Every fretful expression awakens in him the same spirit which produced it. So does a pleasant voice call up agreeable feelings. Whatever disposition, therefore, we would encourage in a child, the same we should manifest in the tone in which we address it.

MORNING.—There is nothing on earth like the sweet hours of the morning! It is the youth of the day; and the childhood of all things is beautiful. The freshness, the unpolluted freshness of infancy, hangs about the early moments of the dawn; the air seems to breathe of innocence and truth: the very light is instinct with youth, and speaks with hopes. Who is there that loves beauty and brightness, and does not enjoy the early hours of the morning

### Agriculture.

#### DESIRABLENESS OF AN ACQUAINTANCE WITH VEGETABLE PHYSIOLOGY.

Plants obtain the greatest portion of their carbon from the atmosphere; but the other materials of which they consist, such as earthy and saline matters, they get from the soil by means of their roots. The extremities of the roots are furnished with what are termed *spongioles*, from their resemblance to small sponges; these contain a large number of exceedingly minute pores, so small indeed, that nothing in a solid form can possibly enter them. It thus becomes evident, that the food of plants can be taken up only in a liquid or gaseous state. Hence, in applying manures, so as to secure their full benefit to the crop, the desirableness of the practical farmer making himself acquainted with the laws that govern vegetable nutrition. It is only a waste of labour and money to apply soil manures to plants, under conditions which will prevent their becoming active or of any use. There is a great difference in this respect in the nature of the various substances employed as manures; some being more readily decomposed, and rendered soluble than others. Wollen rags, bones, and rough farm-yard dung require considerable time and moisture to reduce them into a proper state to enter into the circulations of plants; while the nitrates

of potash and soda, which are very deliquescent salts, are brought quickly into action by the slightest agency of a common dew. We have seen the action of these manures on wheat or other crops, in the course of forty-eight hours, when a warm shower has immediately followed their application. There is no mistaking their action; the yellow feeble leaves of the plant speedily becomes changed to a swarthy green, indicating the assimilation of the nitrogen of the manures—the coating of flint or silica, which gives smoothness and strength to the stems of wheat and other cereals, previously existing in the soil in a state of fluidity. And every one must have observed the striking effect of a thunder shower, on the growing crops of manured land in dry weather. The moisture and heat acting upon materials that had lain dormant in the soil, thus become changed in their condition, and are brought within the range of the chemical affinities and vital forces of the plant. —*British American Cultivator.*

CARE OF SHEEP AND YOUNG CATTLE.—Many lambs are lost for want of attention; and many for want of skilful shepherds. When sheep drop them early, while the weather is cold, they are very apt to lose them. When wool is the chief object of the farmer, it is not advisable to have early lambs. In this state many farmers keep sheep with a view to make a profit on the meat, particularly the lamb's meat, and they choose to have their lambs as early as March, to fit them for an early market. When this is the system, particular care should be taken to save the young animals and prevent their freezing, for their clothing is very thin during the first week. It is not enough to carry them into a barn, or before a fire, when they are found on the snow and unable to stand. We have known them to die with too much warming and nursing. J. A. Morton, Esq., of Hadley, tells us his method is when his lambs are chilled and unable to help themselves, to take them to the house, put them into a tub of warm water, more than blood warm, and rub them gently for twenty or thirty minutes; keeping them long enough in the water to warm them. He then takes them out and rubs them gently with flannel till they are quite dry. Then instead of cramming their stomachs, as many unskillful people do, let them run about the room and keep warm by exercise. In a little time an appetite will be created, and the little fellows will come around you and make a feast of almost any part of your clothes. When you find they have a sharp appetite for food, give them a little warm new-milk, or cream, with molasses in it. This physics them, as the milk from the mother always does, and they will soon be able to draw their sustenance from the udder. Sheep will not always own their offspring when they are in a large flock. Mr. Morton says, in such cases he confines the sheep in a separate pen, and he finds no difficulty about relationship.

MENTAL IMPROVEMENT OF FARMERS.—Prof. Meacham observes:—"In making provision for your family, you should provide something to read, as well as something to eat. You have little for congratulation in improving land and stock, if the mind about you is going to waste. Every farmer has more time in the year for