

because the hot vitiated air, which always ascends towards the ceiling, can escape more easily.

Why does the cold dry damp linen? Because dry wind, like a dry sponge, imbibes the particles of vapor from the surface of the linen as fast as they are found.

Which is the hottest place in a church or chapel? The gallery.

Why is the gallery of all public places hotter than the lower parts of the building? Because the heated air of the building ascends, and all the cold air which can enter through the doors and windows, keeps the floor till it has become heated.—*Dr. Brewer's Guide to science.*

EDUCATION OF FARMERS.

[From the Rural New-Yorker.]

That education is not necessary to successful farming has long been a prevailing sentiment. It has been considered important for the professional man, but as useless, or a luxury at most, to the agriculturist. Industry—plodding, patient industry—qualified for success in carrying on a farm; but that boy whose aversion to work and love of mischief, made his parents at a loss how to employ his energies, must study some profession. Did one seem rather dull and stupid, he could never be qualified for anything but farming. Another, who seemed unusually bright—who thirsted for knowledge—must be a minister, physician or lawyer; the life of a farmer could furnish no facilities for improvement or the gratification of his desires.

Now, this is all wrong—for no good reason can be shown why every farmer should not be liberally educated—why he should not find use for a good education in carrying on the operations of his farm. If his knowledge need be of a different quality, it should not be less in quantity than that of the professional man. All general arguments in favor of the thorough culture of our mental powers, will apply with equal force to the particular education of those who till the soil. That knowledge is valuable for its own sake—that it furnishes a continual feast for the mind—that it qualifies its possessor for a large measure of enjoyment during the whole course of his being, are truths generally admitted. But leaving out of the account such axiomatic truths, we propose to offer some reasons for the acquisition of knowledge which we trust will commend themselves to the consideration of farmers.

First—it makes labor more productive. The great object of toil is not to wear away the weary hours, but to secure the greatest possible useful product. Knowledge enables a man to bestow his labor where it will be best rewarded. The farmer should know the nature of the soil he cultivates, what crops are best adapted to it, what succession of the same will yield most profit, what kind and quantity of manure it needs to keep it in proper condition; and this requires knowledge of Agricultural Chemistry. And, to understand Chemistry, other general knowledge is indispensable. How much labor is lost by this want of adaptation of crops to the soil on which they are attempted to be cultivated!

The facilities for improvement are constantly increasing, and educated enterprise already making use of Nature's powers and machinery to save labor. That millenium will never come, when the soil will yield abundant harvests without labor, but the improvements of the age will aid continually to diminish the amount required. And yet we need never fear we shall be out of employment—and enough of it, too.

Some protest against the introduction of the improvements referred to, simply because they interfere with manual labor.—When Railroads first began to take the place of the old stage routes, some men who never see but an inch ahead, cried out, "This will spoil our market for horses and oats,"—and yet horses and oats have been rising in value ever since. An amusing story is told of the first introduction of fanning mills into Scotland. A preacher denounced the new invention in no gentle terms. "We used to trust to Providence" said he, "for wind to fan our grain, and it is but wicked presumption thus to interfere with the Divine prerogatives and manufacture wind for ourselves!"

The general truth that knowledge saves labor is seen in every department of life.—In ancient times the grain for bread was pounded or ground by hand, but now we have single mills which will make more and better flour than ten thousand hands could prepare in the same time. So of a thousand operations connected with agriculture, mechanics, &c. "Knowledge is Power," and may be successfully used in every department of human industry and enterprise.

Second—the genius of our government makes it the privilege and duty of every farmer to be educated. As citizens, they owe to our common country certain duties. If the people of our country were divided as they are in Europe into two great classes, the laboring people and the aristocracy, the latter furnishing all the law makers, then farmers might have a better excuse for neglecting their own and their children's education. But here, where the great problem of

self-government is to be decided, every man is a sovereign, and a plowman may be called to fill the highest office of the nation. In Rome's best day she was indebted for her power to the general education of her laborers. "The most distinguished generals," says a late writer, "after a series of victories and triumphs, and illustrious statesmen after guiding for a time the helm of the Republic—disdaining the pomp and splendor of rank—did not hesitate to return to the plough, and pass the remainder of their days in the quiet enjoyment of rural life. It was held that the highest virtues were cherished amid rustic pursuits, and that for a censor to say of any one that he was a good husbandman and farmer was to confer the highest praise."

The policy that has heretofore prevailed of selecting lawyers for our State Legislatures, is wrong from the foundation. The design of legislation is to subserve the interests of the masses: and who is so well acquainted with them as the farmer? Everybody knows that lawyers have made a thousand intricacies in the law, only—we naturally conclude—so they may be called upon to unravel them. There has in this respect been considerable improvement, but there is room for more. This state of things has arisen, in part, from the fact that it has been difficult to find men out of the professions, who have so familiarized themselves with our State and National polity as to be qualified for Legislators. Farmers have not felt the importance of these qualifications, and hence have not been called out into their active duties.

The great conservative power of this nation must ever lie with this class of our citizens, and that farmer who neglects the proper culture of his children is guilty of the double sin of wronging them and his country also.

THE SABBATH A FRIEND.

1. To Education. Compare countries with and without the Sabbath. Its ministrations powerfully quicken and invigorate the human intellect, while a vast amount of knowledge is accumulated.

2. To Government. Where are honored Sabbaths and Despotism co-existent? It shows the nature of human rights—adapts laws to the actual wants and circumstances of men—creates a conscience that sustains laws and qualifies men to make as well as to obey laws.

3. To Health. By promoting cleanliness, by furnishing needful rest for the body and mind, by promoting cheerfulness and elasticity of spirits through its power to produce a peaceful conscience, and by its sublime influence over the hateful passions of men.

4. To Good Morals. By keeping in sight the character of God, by unfolding the claims of His holy law, by creating a distaste for unlawful pleasures, by creating a public sentiment that frowns upon immorality, and through that sentiment causing wise and effectual laws for the suppression of vice and crime.

5. To Piety. By causing a right view of God to prevail, by constantly pouring on men's minds those great elements of piety, the divine truths of Revelation, by thus generating all right affections towards God and man, by shadowing forth and pointing men to the Sabbath or Heaven.

Therefore the Sabbath is the Friend of the nation, the family, everybody's friend, and never fails to repay true and devoted friendship for it with the most precious blessings for time and eternity.

LEARNING TO SPELL.

Bad spelling is discreditable. Every young man should be master of his native tongue. He that will not learn to spell the language that is on his tongue, and before his eyes every hour, shows no great aptitude for the duties of an intelligent, observing man. Bad spelling is therefore an unavoidable indication. It indicates a blundering man, a man that cannot see with his eyes open. Accordingly we have known the application of more than one young man, made with great display of penmanship, and parade of references, rejected for his bad spelling.

Bad spelling is very conspicuous, a bad indication. He who runs may read it. A bright school-boy, utterly incapable of appreciating your stories of science, art, and literature, can see your bad spelling at a glance, and crow over it. You will find it hard to inspire that boy with any greater respect for your attainments. Bad spelling is therefore a very mortifying and inconvenient defect. We have known men who occupied prominent positions so ashamed of their deficiency in this respect, that they never ventured to send a letter till it had been revised by a friend. This was, to say no more, sufficiently inconvenient.

We say again, learn to spell, young man. Keep your eyes open when you read, and if any word is spelled different from your mode, ascertain which is right. Keep your dictionary by you, and in writing, whenever you have the least misgiving about the spelling of a word, look it out at once; and remember it. Do not let your laziness get the better of you.