

it most behoves him to know—wasting his time, and his energies, in mis-directed efforts to protect himself from the vegetable pests which invade his grounds. Many of our farms are already overrun with worthless weeds, which are extremely difficult to subdue; and we are menaced with the inroads of others still more annoying and pernicious. Yet there are but few of our Agriculturists who are able to identify these invaders, when they make their appearance—or who seem to be aware of the importance of prompt and vigorous measures for their extirpation.

“It ought not to be the case, among a people invested with the lofty privileges which we enjoy. The rising generation, at least, should be taught to notice what they see—to observe, to think, and to discriminate. Our young Farmers should learn to cultivate their minds, as carefully as they do their acres; and not be permitted to grow up in the neglect of their noblest faculties—nor—as a modern writer expresses it—be content ‘to wander among the productions of Nature, with little more perception, or enjoyment of her charms, than a cow on a common, or a goose on a green.’”

In reflecting upon the interesting character of Botanical knowledge, and upon the many inducements to acquire it—one is naturally led to ask, why a rational acquaintance with the Vegetable Products which every where surround us, and are literally strewn along our paths, should not be adequately inculcated in all our *Seminaries*—and especially I would ask, why such a humanizing and elegant Science should not be made an indispensable branch of *Female Education*. As a mere *accomplishment*, it is entitled to rank with any of those ornamental acquirements to which so much time is devoted. As a means of enlarging the views, and disciplining the mind—training it to habits of correct observation, and profitable reflection—the Study of Plants is far superior to many of the fashionable and fugitive attainments, which so generally engross the attention of young Ladies. It is a pursuit, too, which carries with it its own reward. The knowledge which it affords, is at once pleasing in the acquisition, and of enduring value. It is continually called for, and always at command—ready to minister to the instruction and gratification of the possessor—whether in the Garden, the Field, or the Forest.

“These Studies—said the Roman Orator, on another occasion—and the achievement is no less applicable here—these Studies are the intellectual nourishment of youth, and the cheering recreation of age; they adorn prosperity, and are the refuge and solace of adversity; they are pleasant at home, and are no incumbrance abroad; they abide with us by night—go with us in all our travels—and lend additional charms to the attractions of our rural retreats.”

Those who make only occasional visits, or excursions, in the country, will find their pleasure greatly enhanced by an acquaintance with the Plants which mainly contribute to the charms of the scenery. But, by those whose constant residence is in the midst of the vegetable tribes, a reasonable knowledge of Botany should be regarded—not merely as an accomplishment, but—as

one of the indispensable qualifications for the duties of rural life. I have already intimated the opinion, that an *American Farmer* should blush to be ignorant of the objects of his peculiar care; and I know not why a *Farmer's Wife*, or *Daughter*, should be entirely excused for a like deficiency. On the contrary, I am of opinion that it is to *Wives and Daughters* we must look, for the commencement of a salutary reformation in intellectual pursuits and discipline. The work must begin at that early period of life, when the character is being moulded under female auspices and care. The knowledge here advocated, is unquestionably desirable for both sexes; and I sincerely believe, that the most effectual method for diffusing it, will be—first properly to *educate*, and then—to invoke the *co-operation of the Ladies*. Their potent influence has been felt, and owned, in many a noble cause; and I cannot permit myself to doubt its controlling efficacy in this.”—*Darlington's Flora Cestrica*.

SCIENCE ANSWERING SIMPLE QUESTIONS.

Why is rain water soft? Because it is not impregnated with earth and minerals.

Why is it more easy to wash with soft water than with hard? Because soft water unites freely with soap, and dissolves it instead of decomposing it, as hard water does.

Why do wood ashes make hard water soft? 1st. Because the carbonic acid of wood ashes combines with the sulphate of lime in the hard water, and converts it into chalk; 2nd. Wood ashes converts some of the soluble salts of water into insoluble, and throws them down as a sediment, by which the water remains more pure.

Why has rain water such an unpleasant smell when it is collected in a rain water tub or tank? Because it is impregnated with decomposed organic matters, washed from roofs, trees or the casks in which it is collected.

Why does water melt salt? Because very minute particles of water insinuate themselves into the pores of the salt, by capillary attraction, and force the crystals apart from each other.

How does blowing hot foods make them cool? It causes the air which has been heated by the food to change rapidly, and give place to fresh cool air.

Why do ladies fan themselves in hot weather? The fresh particles of air may be brought in contact with their face, by the action of the fan; and as every fresh particle of air absorbs some heat from the skin, this constant change makes them cool.

Does a fan cool the air? No, it makes the air hotter by imparting to it the heat of our face, but cools our face by transferring its heat to the air.

Why is there always a draft through key holes and window crevices? Because the external air, being colder than the air of the room we occupy, rushes through the window crevices to supply the deficiency caused by the escape of warm air up the chimney, &c.

If you open the lower sash of a window, there is more draft than if you open the upper sash.