

not wisely look up in hope to their mighty monuments? Behold how fair, how far prolonged, in arch and aisle, the avenues of the valleys—the fringes of the hills! So stately—so eternal; the joy of man, the comfort of all living creatures, the glory of the earth—they are but the monuments of those poor leaves that flit faintly past us to die. Let them not pass without our understanding their last counsel and example; that we also, careless of monument at the grave, may build it in the world—monument by which men may be taught to remember, not where we died, but where we lived.—*Ruskin's Modern Painters.*

A GLASS THAT WILL NOT BEAR THE MORNING'S REFLECTION.—An American has patented a glass in which a man can see himself as plainly as others see him. At present he has not sold a single specimen, for everybody who has looked into the glass will not believe that the plain object before him could possibly be himself. Loud and bitter and unmitigated has been the disgust and indignation of everybody, and the consequence has been, that the poor American, believing in his innocence that the object of the world was to arrive at the truth, has lost largely by his foolish speculation. He is now trying his hand on a glass that flatters, and expects in a very short time to realize a considerable fortune. To the ladies he intends charging double, for he knows well enough that, let them be ever so beautiful, they will never be able to do without it. He has not yet fixed the price for girls who squint.

EDUCATION OF THE YOUNG.—The *Scientific American* referring to the fact that children are overtaken with school studies, says:—A New York school commissioner, with leather lungs and a cast iron head, may insist that a child who has been boxed up six hours in school shall spend the next four hours in study, but it is impossible to develop the child's intellect in this way. The laws of nature are inexorable. By dint of great and painful labor, the child may succeed in repeating a lot of words, like a parrot, but, with the power of its brain all exhausted, it is out of the question for it to really master and comprehend its lessons. The effect of the system is to enfeeble the intellect even more than the body. We never see a little girl staggering home under a load of books, or knitting her brow over them at seven or eight o'clock in the evening, without wondering that our citizens do not arm themselves at once with carving knives, pokers, clubs, paving stones or any weapons at hand, and chase out the managers of our common schools, as they would wild beasts, that were devouring their children. Indeed, they are worse than wild beasts, for those destroy only the body, but these fiends consume both body and mind of the helpless innocents who fall into their clutches. In Boston, the system of studying out of school has been prohibited in relation to the girls, and we should be

rejoiced to see this city take the lead in enforcing this prohibition to all the scholars. We are very glad to see that the time for gymnastic exercise is to be taken from the study, and not from those given to play, "Experience having shown," says the Superintendent, "that the scholars learn more when a portion of the time is given to these exercises than when devoted to study."

AIR.—No fact is better understood than of the necessity of air for securing life and growth to crops; but the functions of the atmosphere, and all the advantages arising from its influences, are not so well understood.

The face of Nature is continually giving and receiving excrementory matters, which are taken from the atmospheric ocean and carried from place to place; the falling of dews and rains are for the most part from the air and returns them to the earth for re-assimilation. During a drouth the surface of the soil prevades the atmosphere, which, in circulating through and deeply disintegrated soils, is brought in contact with particles colder than itself, and only deposits moisture upon their surface. This moisture is fully charged with those matters which act as an excitant, enabling it to dissolve the inorganic portions of the soil. Winter the water occupying the immediate surface becomes frozen, thereby destroying the life of insects; when thawed in early spring it has the capacity of receiving many volumes of such gases as are given off by the vegetation, and carrying them into the soil for the new organisms for re-appropriations. The action of the atmosphere above the surface of the earth not only takes away excessive heat from plants, but as it passes over the leaves and terminates at the terminalia of each plant, thus securing the ventilation of moisture received by the roots, the medium by which the *farina* of plants is carried from place to place, the trees and plants are swayed by its action. It renders each in degree an Hungarian pump barrel for the elevation of fluids from the soil into the body of the tree, where its action detain them. By this infusion of analysis, the primaries and proximates necessary to build up certain portions of the plant are supplied, permitting other matters to pass on and in turn deposit themselves where needed. The refractory force of the atmosphere prevents the sun's rays from being of use to plant life. It is the vehicle of the excretia, as well as of water, and the face of every particle of soil to which the atmosphere can circulate, with moisture by its presence, it facilitates these particles the necessary gases for such chemical changes as will gradually transform the inorganic and inert portions in