The eye is satisfied with seeing, and strange thoughts are stirred in us, amidst this repository of nature's archives, this presence-chamber of the secrets of animal and chemical creation. Natural history! Is this indeed history? These organic and these inorganic remains—are they the statues of our ancestors, which we, the youngest born of the world, may piously behold? Here are scoriæ from the bowels of the earth, and stones supposed to have fallen from the moon. Transparent lumps of amber, with gnats and flies within; radiant spar, and stalactites: huge blocks of quartz; native gold in all its forms of crystallization and combination; gold in threads, in plates, in crystals, in dust; and silver taken from the earth molten by fire. We are impressed by the inexhaustible gigantic riches of nature. The limits of the possible are enlarged, and the real is stranger than the imaginary. The universe is a wilder puzzle than ever, as you look along this stark series of once animated forms,—the hazy butterflies, the carved shells, the bird, beast, worm, snake and fish, and the upheaving principle of life every where incipient, in the very rock, aping organized forms. Whilst I stood there, I yielded to a singular conviction, that in all these rich groups of natural productions which surrounded me, and in all the vast system which they represented, not a form so grotesque, so savage, so beautiful, but is an expression of some property in man the observer. I felt that there is an occult relation between the crawling scorpion, the flowering zoophyte, and man. I was moved by strange sympathies. I said, I will listen to this invitation. I also am a naturalist.—*R. W. Emerson.*

The Gold Watch an Emblem of Society.—I have now in my hands a gold watch, which combines embellishments and utility in proportions, and is usually considered a very valuable appendage to the person of a gentleman. Its hands, face, chain, and case, are of chased and burnished gold. Its gold seals sparkle with the ruby, the topaz, the sapphire and the emerald. I open it, and find that the works—without which this elegant case would be a mere shell, those hands motionless, and those figures without meaning—are made of brass. I investigate further, and ask, what is the spring, by which all these are put in motion, made of? I am told it is made of steel. I ask, what is steel? The reply is, that it is iron that has undergone a certain process. So then I find the main-spring, without which the watch would be motionless, and its hands, figures and embellishment but toys, is not of gold—that is not sufficiently good; nor brass—that would not do; but of iron. Iron is, therefore, a very precious metal; and this watch an apt emblem of society. Its hands and figures which tell the hour, resemble the master spirits of the age, to whose movements every eye is directed. Its useless but sparkling seals, sapphires, rubies, topaz, and embellishments, represent the aristocracy. Its works of brass, the middle class, by the increasing intelligence and power of which the master-spirits of the age are moved—and its mainspring, shut up in a box, always at work, but never thought of, except when disordered, broke, or wants winding up, symbolically the laboring classes—which, like the mainspring, we wind up by the payment of wages; and which classes are shut up in obscurity, and though constantly at work, and absolutely as necessary to the movement of society as the iron mainspring is to the gold watch, are never thought of, except when they require their wages, or are in some want or disorder of some kind or other.—*Edward Everett.*

Of the Nature of Earths, and their action upon Vegetation.—Nearly all vegetables derive their support from the earth. There are, however, some, the seeds of which, being deposited upon trees by birds or by the winds, germinate and grow, appearing to be in the situation designed for them by nature; such are the mistletoe, the mosses, &c. There are others that float upon the water, or fasten themselves upon dry rocks, upon slates, or tiles; of the last kind are the fleshy plants. As the earth furnishes the greatest number of plants, and all those which are of the most importance to man, its influence upon vegetation is of the greatest consequence, and at the same time one of the most difficult things of which we can treat.

Plants are not, like animals, endowed with powers of locomotion; but are always fixed to a limited portion of the soil. They depend upon the small space which they occupy for the supply of their wants; they can place under contribution only those portions of the surrounding air, earth, and water that come in contact with them; it is necessary, then, that they should find immediately around them the nutritive principles requisite for their growth, and for the exercise of their functions; it is necessary that they should be able to extend their roots, in order to draw from the soil its nourishing juices; and to fasten themselves in the earth, so as to be secure from being dried up by heat or uprooted by the winds.

As all the qualities required by a vigorous vegetation cannot always be found united in land appropriated to cultivation, we are led to examine the nature of earths, and the differences which exist among them.

Of Mould.—All plants, when dead, are more or less readily decomposed; and in undergoing these changes, which are greatly facilitated by air and heat, they form products with which it is of importance for us to be acquainted; as the principal aliments of living plants are furnished by those that are dead. Decomposition is most rapid in succulent vegetables, and in those which are collected in heaps; but a high degree of atmospheric temperature and the humidity of plants contribute powerfully to accelerate it. During decomposition much carbonic acid is given out; a part of this exists in combination with the constituent principles of the plant, and a part of it is produced by the action of the oxygen of the atmosphere upon the carbon of the plant; hydrogen, which is probably furnished by the decomposition of the watery particles, and is generally carburetted, is likewise exhaled, as also ammoniacal gas when its elements exist in the plant. When large masses of vegetables are in a state of fermentation, heat is always produced; but if they have been dried, it is necessary to collect them into heaps, and moisten them slightly in order to determine their fermentation and decomposition; in this case the heat produced is sometimes so great as to cause the combustion of the mass; a phenomenon which occurs when hay is stacked without being sufficiently dry, or when ropes, hemp, or flax are piled up wet.

When all the parts of a plant are decomposed, there is produced an earthy residuum of a brown color, which is called *mould*. In this, besides the salts and the earths which it contains, are found some oils and extractive principles which escape decomposition.

The distillation of mould in a retort, produces much carburetted hydrogen, some carbonic acid, a bituminous empyreumatic oil, and some water holding in solution pyroligneous acid and carbonate of ammonia.—*Chaptal.*

Hint to Lovers of Flowers.—A most beautiful and easily attained show of evergreens in winter may be had by a very simple plan, which has been found to answer remarkably well on a small scale. If geranium leaves (branches?) are taken from healthy and luxurious trees, just before the winter sets in, cut as for slips, and immersed in soap and water, they will, after drooping for a few days, shed their leaves; put forth fresh ones, and continue in the finest vigour all the winter. By placing a number of bottles thus filled in flower-baskets, with moss to conceal the bottles, a show of evergreens is easily insured for a whole season. They require no fresh water.