the one is by something of the nature of an apprenticeship, and the other by attending a regular technical or practical school. In such an institution nothing but the application of science to the arts can be properly taught. A knowledge of the elementary principles of science, not to mention the common branches of education, must precede and be acquired in a preparatory school, else the technical school will be degraded, and its professors will be compelled to do the work of mere tutors. To talk of a practical school, where the rules of art without its principles are taught, is idle. A workshop or a farm would be better than such a school. In this sense it is to be hoped our common schools will never become practical. How, then, can the elementary schools be made practical? By rendering them strictly elementary; by developing the mind and furnishing it with the instruments of general knowledge; by giving power to the intellect which it can skilfully wield in any direction, and apply to any purpose. The man must precede the artisan. The knowledge common to all persons of ordinary education should go before that which is peculiar to any trade or profession. It follows that all children need essentially the same elementary education. We cannot foresee what will be the occupation or condition of the child on reaching his maturity, and cannot therefore safely descend to specialities in his education. Time must develop the order of his talents, and circumstances must determine the sphere of his duties. Meanwhile his education should be such as to fit him equally for any of the ordinary situations of life.

It is a very common error to regard education as consisting chiefly in the acquisition of knowledge. Persons who entertain this view generally estimate knowledge by its extent rather than by its depth. If we look into the schools where education is conducted on such a principle—and it would not be difficult to find them—we shall see the pupils laboring to store the memory with an immense mass of words and sentences, which are to them often little better than the words of a dead language, or of facts without understanding their nature, relations, or uses. The minds of such persons are like furniture rooms, crammed with articles without utility or order. The acquisitions made are not deeply fixed in the mind. The objects presented to view leave no distinct picture on the imagination. They are not compared, classified and arranged into a system by the intellect of the pupil, and consequently the memory holds them by a slight tenure. Knowledge thus acquired is too superficial to deserve the name, and rather injures than improves the mind. The habit of taking up with first impressions and specious appearances, of allowing loose and inaccurate ideas to float in the mind, is most pernicious in its influences. It tends to weaken the understanding, to destroy its soundness and integrity, and to render it incapable of those decisive and sure acts which are necessary to command reliance. What is chiefly to be aimed at in training this faculty is to give it power and precision, so that it may be both effective and safe in its operations. Such a result can be produced only by patient, exact, and thorough training. Mental discipline is a primary object of education to which the acquisition of knowledge is but secondary. The latter is, in this stage of study, chiefly important as a means of intellectual training, having at the same time a true but subordinate value in itself. Extensive knowledge is not necessary to mental discipline. A little that is well known and thoroughly digested is vastly superior in worth to a great amount hastily and superficially acquired. Not only is its effect upon the mind better, but its value as an instrument of future acquisition is greater. If elementary knowledge be of a faulty character, all that higher knowledge which depends upon it will be equally so. The principle here laid down will appear the more important, if we consider that its influence is not limited to the elementary schools, but extends to all our higher institutions of learning. The weakest point in the whole system of American education, is its deficiency in thoroughness in all the elementary courses. The students in our colleges need twice as much preparatory study as they now have. In our academies, pupils enter upon the study of ancient languages with a defective English education. And it will be found, upon examination, that the whole superstructure of our higher education is insecure in consequence of the slender foundation laid in the elementary schools. The evil spreads from the root of the tree to all its branches, and can be effectually arrested only where it originates. Until the time of study can be greatly increased in our schools, the course of instruction ought to be restricted within narrower limits. Not only should the number of branches be diminished, but, (as has been already remarked,) the extent to which each is pursued should be curtailed. It is of but little use to proceed far, in studies, in the confused and superficial way which is now so common. If the plan be well laid out, and the studies be properly arranged, the more labor there is bestowed upon the elementary part of each, the better will it be for the future progress of the learner. Beside the impossibility of doing well all that is ordinarily attempted, many of the subjects presented are not truly of an elementary nature, and may, on that account, better be postponed. Requiring as they do a certain amount of preparatory knowledge, and of maturity of judgment in order to be understood, they fail of their object when prematurely introduced, and lose, perhaps fewer, by being improperly used, the power of creating interest in the mind. It matters not how important and useful in themselves these higher studies may be. They may be more advantageously pursued at a future time. At present something more radical is required, namely, the power of acquisition. Though elementary knowledge be limited, if it be well chosen, and used chiefly as a means of intellectual training, it will constitute a solid basis, on which the acquisitions of a whole life may safely rest. If every exercise in the school were such in its disciplinary character that it might serve as a pattern to be copied in all the remaining studies and business of life, this one feature in a system of education would be so valuable that, in comparison with it, all the ostentatious attainments made without method or discipline would be of little account. Habits of order, of accuracy and thoroughness, lie at the foundation of all success in business no less than in scholarship. This building up of the solid frame-work of the mind, giving it capacity and aptitude for vigorous and systematic action, is a principal object of education. A contrary course impairs the strength of the intellect, weakens the whole foundation of character, begets disgust with intellectual effort, leads to sciolism and conceit, and produces just such a character as it is the business of true education to guard against.

Among the faults observable in the mode of teaching in the common schools, that of attaching more importance to words than to things is conspicuous. The true method is just the reverse of this. Not only should the latter be made much more prominent than the former, but it should come first in the order of time. Objects stand related to signs or symbols as substance to shadow. Language itself should, as far as possible, be studied from an inner point of view, beginning with the thought, and thence proceeding to its expression as from cause to effect; or, to speak more definitely, the words of the author should set the understanding and imagination of the pupil at work upon the objects or ideas represented, and these, when truly and vividly conceived, should give to the words employed their more precise import in the connection. In this way language will be learned, as it is in common speech, by usage. It will then be strictly vernacular; whereas that which is learned merely from the dictionary is in some sense a dead language. But I refer to something that lies deeper than this. Teachers do not duly consider what a wide difference there is between the abstract view of the author and the more concrete and life-like view of the pupil;—between the learned terms and artificial style of the one, and the familiar words and easy, simple language of the other. The consequence is, that the language of the book, though committed to memory and repeated paragraph after paragraph, remains a dead letter. The instructor, feeling no difficulty himself in understanding the words and constructions used, and not putting himself sufficiently in the position of the child, takes it for granted that the latter understands all except a few unusual or technical terms, and thinks he reaches the intellect, when in fact half that is learned is only by the mechanical act of putting syllables rightly together, and the equally mechanical act of retaining them in the memory. In hundreds of schools the knowledge of classes in respect to the ideas of the language they repeat has been tested; and the result has astonished none more than it has the teachers themselves. In most cases a full knowledge of the facts would lead to the proper remedy. But in some instances, the practice of committing to memory learned phrases and abstract rules and definitions without understanding them, is defended on the ground that the time will come when the language will be understood. Suppose all this to be true; it would not follow that the course is a judicious one.