

elementary schools, and especially to the increased efficiency of our High Schools and Collegiate Institutes.

On the other hand, there is a similar dependence of elementary and intermediate education upon the work of the Universities, and in fact upon all higher learning. This holds good both of the *matter* and the *methods* of instruction, although the fact is one that the mass of people seldom recognize. It is assumed that the colleges need the schools, but that the schools could do well enough without the colleges. Never was there a greater mistake. Quite recently a public complaint was put forth by one of our most efficient and prominent educators against the endowment of a national University in Ontario, on the ground that the general wants of the community are sufficiently provided for by the preparatory schools, and that the University, being chiefly of service to professional men, should be supported by those who reap the advantages. This is hardly sound doctrine, and I hope it will not spread. Doubtless the endowment by the State of one single college is a very one-sided policy (what, by way of legitimating the common phrase, we may call a "one-horse" policy), and inflicts serious disadvantages and injustice upon the other outlying Colleges, but for all that, even a member of an outlying College may be permitted to deprecate the state-abandonment of higher learning. The public good would appear rather to call for the support of several Colleges than the disendowment of the one. However this may be, it is all-important to remember the inestimable benefits conferred by these higher institutions, and by all men of science, not merely upon the professional classes, but upon the people at large, and especially upon the work of the intermediate and elementary schools. The schools indeed teach only rudi-

mentary knowledge, but what is elementary now was not always elementary, nay rather, it is the simplified and popular statement of what was once scarcely known at all, or known only to men of profound thought, and discovered by them after many years of laborious investigation. Nor would their laborious researches have been crowned with success, but for the tentative efforts and frequent failures of a long line of predecessors. The torch to be handed on must be kept always burning. The rotundity of the earth, the Copernican astronomy, the law of gravitation, the circulation of the blood, the existence of an American continent: these are all elementary matters now, and more or less inculcated in our common school-books, and implied in the ordinary speech of the common people, but they were once hidden in darkness, and were only made visible by the light of intense thought, focalized long and earnestly in the distant watch-towers where men of genius have stood through the chilly hours watching for the dawn. Euclid and Kepler, Copernicus, Newton and Faraday, these are the men who have snatched from heaven the immortal flame that burns so brightly where our busy youth first grow warm with intellectual life. And we are not to suppose that this great law of intellectual heritage is abrogated. The hills still water the plains, and far up the cold mountain side may be now rising the rill, that, by and by, as a majestic river, is to sweep grandly on across the continent, with its curves of beauty and its fertilizing power. In the endowed halls of science, or in the heroic exploring expedition, still toil the men who are to make new discoveries "for the relief of man's estate." It was no sordid aim that sent Livingstone and Stanley to open up the recesses of Africa, but already the merchant scents from afar