

he also admits, that it gives "intellectual power, as we interpret her secrets, predict her phenomena, enforce her laws, and re-create her universe," in other words, that the study of these branches imparts both knowledge that can be immediately and practically applied, and discipline of the mental faculties, both recognized objects of education.

The question, therefore, as far as colleges are concerned, may be regarded as substantially settled in favor of the advocates of the new education, since, as a result of such views, find in almost all colleges parallel elective course regarded as equivalent, and entitling to the same degree of Bachelor of Arts, according to which in each case the decision between the dead languages and living science is left to the student or his natural guardian. But just at this point another question of equal, perhaps greater importance arises, as to whether these branches are exercising their full influence in a system of education designed for the masses, and assemblages of educators seem most appropriate places to introduce the consideration of the degree to which, and the manner in which the study of natural science may be utilized in a grand system of American popular education, restricting the word popular in this connection to that part of the educational system which acts directly upon the masses, and leaving out of consideration, unless incidentally, any ultimate indirect effect upon the education of the masses, which opportunities afforded for the more thorough education of a few may have.

Upon no subject, perhaps, is there so great expressed unanimity of opinion and feeling among the American people, as upon the desirability, or even necessity, of popular education. That the masses should be educated scarcely any one disputes, but the unanimity begins to disappear when the closer consideration of what is meant by the word education begins, and when the means for its accomplishment are discussed. The simple establishment of some system of popular education does not necessarily imply progress on the part of the people, the advancement of the masses in those traits of intellectual or moral character most essential to their individual happiness and collective prosperity. As far as popular education involves the development, direction, or control of the intellectual and moral faculties, it has been recognized as a good, or a means to an end, by almost all nations; but China of to-day, in spite of her system of education, running back through the ages, is more the China of a thousand years ago than the civilized nations what they were but a few generations ago. The tendencies and objects of popular education are as varied as the ages and peoples, as well as the means employed, and the results are largely embodied in national characteristics. America, as she has no model in the past for her form of government, and her social regulations, and we might add her religious life, has, too, no model according to which she can build up a system of education, her system must be eminently an American system, it must be, and will be, the outgrowth, not only of her peculiar ideas, but of her peculiar wants; it must be the complement of all the peculiar educational agencies at work among the masses, developing and moulding the highest traits of national character.

It would be a grave misstatement, however, to say that we gain nothing by a study of the best systems of education in the world; but such study is simply pernicious in so far as it tends to close our eyes to our peculiar educational surroundings, the peculiar educational influences of our form of government outside of a distinctive educational system. The American masses above those of any other nationally are born to intellectual toil; they have multitudinous incitements to thought

thrust upon them, and upon some of the most important subjects that come within the range of human thought. Every man must act upon his own conclusions, and must suffer the consequences not only of his own errors of judgment, or of his own indifference, but of that of his neighbors, and must incite them to thought, must bring them over to his own way of thinking. No one can remain outside the great current of thought; he will be dragged in, or thrust in at some point, either through his interests, his affections, his prejudices, or perhaps the rude disturbance of his case. We may then, indeed, say that intellectual activity is the characteristic habit, the fashion of Americans. Grave questions which force themselves upon governments, ultimately rest upon the masses here for their settlement, and through the consideration of them the masses are brought to higher moral and intellectual levels. Great interests may clash with great principles, individual selfishness may aggregate into great national injustice and wrong, but slowly and perhaps with much suffering and sacrifice, the masses rise to a higher level, the problem solves itself, and the nation looks back almost with wonder upon its former self. There is always a surprise in the evolution of grand moral principles, of fundamental truths from the apparent chaos of prejudices, of passions, of misconceptions, and even of unmistakable, political rascality and corruption. Now among the grand, peculiar educational agencies at work here are found preeminently the free, untrammelled, and, on the average, ably-conducted public press and the earnest pulpit, in addition to, and in a large measure controlling and regulating all the various elements of political machinery.

Indeed, the public schools of America, though playing an essential part, as it is the initial part, undoubtedly do not play the most prominent part in this grand work. Their great work is simply to supplement all the other educational agencies that are moulding American character. They are required simply to furnish the citizen to all these other influences with acquisitions and in a state of development favorable to the highest and noblest and most rapid effect; they are to turn the intellectual activity of the masses, whether voluntary or constrained, to the best account. How much thought as well as time and labor are needlessly expended in almost every earnest political campaign, because the intellectual processes of the masses are as crude as they are; how much longer it takes and how much more laborious it is to convince an individual, however open to conviction, who finds a difficulty in following and retaining a line of argument. How much less the mental wear and tear to the disciplined mind in reaching correct conclusions on any subject, and how much more passions and prejudices are liable to lie under the control of a well-balanced mind. We Americans do not realize clearly enough that in the working out of the grand problems involved in self government, we are prodigal of intellectual force, we are without a thought of accomplishing the greatest amount of good with the least expenditure of effort. We are prone to be proud of our material growth and unexampled prosperity, although we cannot say how much of this is fortuitous, or may be in spite of ourselves, and to overlook, or to be scarcely conscious of, the sublime spectacle we present of thirty millions of people laboring, thinking, sacrificing, in working out the grand government problems that fall to us as a people.

Now, perhaps, no system of popular education is justly so celebrated as the Prussian, for none is more effective as a means adapted to a certain end, but the masses affected by it are rather instructed than developed; they are more thinking machines than thoughtful citizens; they read well, write well, cipher well, may even draw