

child from his entrance into the primary school, until he shall have finished the whole range of studies deemed necessary to a liberal education? I do not say that these schools, of whatever grade, are in every particular, precisely what they should be, but that the institutions exist which profess to furnish, each in its sphere, all that a finished general education requires.

From what has been said, we cannot mistake as to the connection between schools and colleges. Colleges constitute the highest grade of our non-professional educational institutions. They are an integral part of the system, sustaining to the high school and academy precisely the same relation which these sustain to the lower schools.

"Until recently, all non professional institutions have been arranged in three divisions—common schools, academies, and colleges. Of these three, the college has been much the most specific in its character. It has undertaken a more definite work than either of the others. In them a much greater variety of attainment has always been found. The academy has admitted multitudes that ought to have been in the school, and the school has been compelled to retain many that should have been found in the academy. In practice, there has been no boundary line between them, except in the case of a very few of our best academies. But the college has always had its boundaries on either side. It has required a definite amount of literary attainment for entrance, and the completion of the prescribed course of study is the completion of the student's connection with it. The inmates of the college have also been required to arrange themselves in classes, that the instruction might be rendered as efficient as possible, by giving ample time to the recitations, and by permitting the instructors to confine themselves to particular branches. Thus, colleges have ever conformed to the two great features of classification.

"The other departments of what I have called general education are now beginning to follow the example of the college, in the matter of classification. Formerly, the common school and the academy had no limitation in the range of studies. The pupil might enter when he chose, and remain as long as he chose. And so long as his teacher chose to hear him, he might study what he chose. Thus, the teacher was sometimes required to pass from a recitation in the primer to one in Virgil—from one in the elements of numbers to one in Trigonometry. But an improvement has commenced. The principle of division of labor, so long in use in our colleges, is beginning to be applied to schools. Most of our towns have their graded schools, each possessing a definite course of study, which the pupil must complete before he can pass on to the next higher; and when he has completed it, he *must* pass on. The advantages of this arrangement are so manifest in theory, and in its practical workings it combines so fully both economy and efficiency, that no doubt can be indulged of its general prevalence.

"It is sometimes said that 'Colleges are behind the age.' It is one of the most general of all generalities, and may mean anything or nothing. Whatever may be intended by it when applied to colleges, we have seen that one of the greatest improvements introduced into our schools has been adopted from the colleges; so that, if they are behind the age, they at least have the Union Schools to keep them company.

The college then is, chronologically, the last school in our general school system. Using the most general classification and nomenclature, we have five departments—the primary, the secondary, the grammar school, the high school, and the college, occupying from two to four years each. They all have the same end in view, and differ only in the order of succession. Some think that colleges are intended specially for professional men; and so many think that high schools and academies are for the special benefit of the rich. The two opinions are deserving of equal credit. From the day the boy commences the alphabet to the day that terminates his collegiate course of study, he is pursuing those studies which the intelligent voice of mankind has pronounced to be the best adapted to the development of his intellectual faculties. Examine the course of study in all the best union schools in Ohio, and you will find a remarkable similarity. Go to other States, and it is still the same. Whence has it arisen? Manifestly from the conviction, in the minds of intelligent men engaged in the work of instruction, that these studies, each in its place, are just what the pupils require.

If, as I have before supposed, the whole school system were to be re-constructed, should we not have substantially the same grades as now exist? It would hardly be affirmed that the highest grade is unnecessary, because some of our young men are too highly educated. Nor would it be said that the studies of that grade could be better pursued without instructors. Professional education is obtained by the aid of teachers, and that, in most of the professions, at a very heavy expense. Much more, then, does general education, which precedes professional, require instructors.

What institutions shall furnish the closing portion of a good general education? Were our high schools to attempt it with their present organization, they would violate the principle which lies at the basis of graded schools. Give them a large corps of instructors, and increase the time to six or eight years, and they might do it. In that case,

however, they must be divided into at least two grades; the upper of which would be, in substance, a college. But, except in the case of our large cities, the expense of such an arrangement would be an insuperable obstacle. The metropolitan city is now making the experiment with her Free Academy, and we doubt not that it will be successful.

But even if all our large cities had institutions of the highest grade for their own youth, they could not meet the wants of the citizens of our towns and townships. Parents would not send their children to the cities. There must be institutions, located at eligible points, to meet these wants. We have them already, and they are called colleges. What link is wanting in the system? It may be enlarged and perfected, but it now seems to be a continuous system—an uninterrupted succession of links.

I have dwelt more upon the relation of colleges to the other parts of the system, because of the vagueness which exists in the minds of not a few, as to the precise place which colleges occupy in our educational machinery. If the view now presented is the true one, the college is the highest of our institutions for general education, as distinct from professional. The culture which it gives may be more essential to certain occupations than to others, but it is because these require a higher culture. In this, it is not peculiar. It is the same from the beginning of the school course. Especially is it true of the high school and academy. But who calls these professional? Or what teacher, who is worthy of the name, would hesitate to affirm that the studies of the high school would be of incalculable value to every lad, no matter what might be his future employment? From beginning to end, through every stage of the educational process, which commences in the primary school and closes with the college, the culture is intended for the future man, as man—as a being endowed by his Creator with noble faculties, which need development; and not for him as a merchant, or a farmer, or a lawyer, in distinction from the other pursuits of life.

"Once more: Colleges repay the schools by scattering abroad through the community a class of men who are always found to be the warmest supporters of good schools. Liberally educated men, without exception, are anxious that their children should be well instructed. They are always foremost in employing well qualified instructors, and most ready to give them an adequate compensation. Their countenance and support may be depended upon when the teacher has to contend with the prejudices of the narrow-minded and the ignorant. Their judicious suggestions for the improvement of his school, will always meet his approbation and encouragement. When our noble system of free schools is attacked by the demagogue under the plea of economy, the educated man will be found among its most earnest and successful defenders."

(Remarks by the U. C. Journal of Education)

The above remarks are from a report by a Professor of one of the Colleges in Ohio, on the "Relation of Schools and Colleges." What he states as a general and acknowledged fact in Ohio, *ought* to be a fact in Upper Canada. Not one of our Colleges would be in existence, were it not for support directly or indirectly received from Public Grants. Every person who has been educated in them, owes a duty to his country which he sadly disregards when he keeps aloof from, or neglects, or is not active in advocating or promoting, the general educational interests of his neighbourhood.

JOHN GUTENBERG, INVENTOR OF PRINTING.

From the French Correspondent of the New York Observer.

Preliminary Remark.—Birth and early years of John Gutenberg.—His first and unsuccessful attempt in Strasburg.—Return to Mentz.—His connection with John Faust.—New disappointments.—Books published by Gutenberg.—His last years.—Rapid progress of Typography.

A learned French writer, M. Augustus Bernard, has given to the public a work in two octavo volumes, on the *origin and commencement of Printing in Europe*. He has applied himself particularly to collect new information upon the life and labors of John Gutenberg, the celebrated inventor of an art which has changed the face of the modern world. I have thought that a brief sketch of this biography would be acceptable to your readers, for we must all feel a desire to know the life of a man who, by his wonderful discovery, has been one of the benefactors of mankind.