

in the mazes of a sensational novel, redolent of poisonings, treason and murder, seizes hold of every day scenes of the fireside. Her novel reminds one, by its local colors, its simplicity and its general run of characters, of *Charles Guerin* by Mr. Chauveau, or *La Terre Paternelle* by Mr. Lacombe, two of the best Canadian Romances extant. *Armand Durand*, in our opinion, is immensely superior to *Antoinette de Mircourt*; its morality is sound. How many a rising man, even in our own little cities, where the grades of society are not as clearly marked out as in European communities, has lived to rue the day when he made a *mésalliance*?

"Armand Durand" will, doubtless, find its way to every Canadian home.—*Chronicle*.

From Dawson, Brothers, Montreal:—

Cameos from English History, from Rollo to Edward II. pp. 475, New York, Appleton & Co.

A Practical Introduction to Latin Composition for Schools and Colleges by Albert Harkness, Ph. D. pp. 306, Appleton & Co. Appleton's Illustrated Almanac for 1869.

Notices of the above works (excepting the Almanac, of which it may be stated at once that it is well and neatly got up, and the illustrations good, rivaling those of the English illustrated Almanacs) will appear in our next, being crowded out of our present number. In the mean time we can heartily recommend the "Cameos" as a very interesting and useful book, seasonable and well adapted as a rational Christmas or New Year's Gift to any young person who may have advanced in historical knowledge beyond the first outlines usually placed in the hands of beginners.

## MONTHLY SUMMARY.

### EDUCATIONAL INTELLIGENCE

—*Continental and English Technical Education*—The two systems cannot well be combined. The foreign plan requires a young man to study in a college till the age of about twenty-three, when it is too late for him to think of entering an office or workshop for three more years, paying a heavy premium, and receiving no salary. Before considering which is the better system, it will be well to give you a somewhat fuller account of what is done in these great technical schools. At Zurich and at Carl-ruhe a staff of from forty to fifty competent professors gives a technical education to the students. Not only do they teach mathematics, mechanics, physics, geology, chemistry, but they teach how the knowledge of all these elements is to be applied to practical problems in every department of engineering. The pupil begins by designing screws, bolts, rivets, or walls, and culverts, and ends by designing, under the master's eye, the most complex machines and the most elaborate bridges and harbours; he is shown the practice of all nations; he is forced to calculate his work so as to meet the requirements of real problems, and so thoroughly is this done, that students do leave these colleges well able to earn a good salary in the drawing-office of the civil and mechanical engineer. I could not have believed this to have been possible had I not seen it, and my personal inspection of the colleges taught me to marvel at the combination of theoretical with practical knowledge evinced by the German professors. At the Ecole Centrale I found that the system was similar; in addition to the usual courses of lectures, projects were each month submitted to each class, that is to say, they received a short specification of a certain work to be designed. The designs, specifications, and estimates were to be ready in one month's time. Meanwhile each pupil was free to consult books, friends, even the professor himself, but he was bound to produce an original design, making the drawings in the class-room. When each design had been sent in, the professor cross-examined every pupil as to his motives for choosing the dimensions, materials, and forms adopted, and finally he corrected and criticised the design. Couple with this admirable lessons in the higher mathematics, pure and applied, and you will not wonder that the Ecole Centrale turns out men who are thorough masters of the theory and practice of design applied to engineering works. This is the foreign system. What is ours? Young men at the age of about eighteen, enter the office of a civil engineer. Usually few questions are asked as to previous training. Etiquette requires the engineer to show a certain reluctance to receive the pupil; and, in fact, the ordinary pupil is a sort of nuisance in an office, only tolerated in consideration of the fee which accompanies him. From personal experience, I can declare that most pupils are so ignorant of algebra, that they are not only incapable of working out a result for themselves, but actually cannot apply the simple formula which are given in engineers' pocket books. The calculation of the solid contents of a wall is often beyond their powers. Their arithmetic is very shaky, and a knowledge of physics, chemistry, geology, or the higher mathematics is wonderfully rare. The men have too often chosen the profession from an idea that it is pleasant, and because, forsooth, it is guarded by no preliminary examination. Not even a pass-examination

is required, and the ignorance of some pupils, especially in mechanical work-shops, must be experienced before it can be believed. They really seem to think that a little turn for making toy models shows a bent for mechanical engineering such as will justify them in expecting success. These young men during three years have the run of the office or workshop, and, if they are intelligent, toward's the end of their pupilage, often have opportunities of seeing actual work in the field, or of designing some parts of actual machinery, and of assisting in the erection of more or less important works. No one teaches them anything, but they have the opportunity of seeing how some actual work is done; they see just how such mathematics is absolutely required and they pick it up. They see how workmen are managed, and learn their habits, they are brought into contact with the exact class of work which they will have to perform, and they know that unless soon they are competent to do this work, they will not have a chance of employment. The one point for them is, to convince their masters that they are useful, and hence, notwithstanding their ignorance at starting, the neglect in which they are left during their pupilage, the absence of opportunities for improving their theoretical acquirements, many of them do become useful men.—*A Lecture on the Education of Civil and Mechanical Engineers, by Fleming Jenkin, M. I. C. E., F. R. S.*

The public schools of Columbia, under the principalship of Mr. A. O. Newpher, are in a flourishing condition. The most commodious public school building in the county is found here. The School Board some time since purchased, for the use of teachers and pupils, a valuable library, comprising some fifteen hundred volumes—perhaps the best of the kind in the State.—*Pennsylvania School Journal*.

—*Wisconsin*—This State leads all the States in the Union in the comparative number of its Normal Schools, six having been projected—one in each Congressional district. The normal fund amounts in money and lands to \$2,300,000, being, probably, the largest normal fund possessed by any one State Government \$500,000 of this fund is not available. The Normal Schools are located at Whitewater, Platteville, Oshkosh, Stoughton and Sheboygan.—*Ibid*.

—*Connecticut*—The endowment of professorships in the various departments of Yale College are stated as follows: Natural Philosophy \$15,000; Modern Languages, \$31,330; Divinity, \$13,143; Metaphysics, \$20,000; Law, \$6,500; Sanscrit, \$12,000; Botany, \$23,000; Musical Instruction, \$10,000.—*Id.*

—*Illinois*—Prof. Samuel S. White Principal of one of the Chicago public Schools, and associate editor of the *Illinois Teacher*, has become Principal of the Normal School at Peoria, at a salary of \$2,500. He has the reputation of being one of the best educators in the West.—*Id.*

—*Maryland*—In Baltimore there are in operation nine coloured schools, having about 1,100 scholars on the rolls, with an average attendance of 800. Twenty-one teachers are employed, whose salaries amount to nearly \$12,000. The rent of buildings for schools is \$2,364.—*Id.*

—*Missouri*—The number of public schools in the State, as learned from the statistics for 1867, gathered by the Superintendent, Hon. T. A. Parker, was 4,840 being 2,156 more than in 1866; number of school-houses, 4135, being an increase of 1,500 new school-houses during the year. The number of colored children educated in the State was 33,617, nearly double in 1866.—*Id.*

—*New-York*—Hon. A. B. Weaver becomes Superintendent of Public Instruction, succeeding Hon. Victor M. Rice, who has held the office for several years. The New York City Board asks for three millions of dollars for expenses of the current year one half of which is for teachers' salaries. The average attendance in the various schools last year was 90,220; the whole number of pupils, 209,520; the cost per pupil \$8.54. From the last report of the State Superintendent, we learn that the item of salaries of teachers throughout the State, in 1867, amounted to \$3,000,000 and for building and repairs of school-houses, \$1,712,000. Total number of children between the ages of 5 and 21 years, 1,372,000; number enrolled in the schools, 947,162. Number of female teachers, 21,218; male teachers 5,263.—*Id.*

The late Matthew Vassar, founder of Vassar Female College, was originally a brewer. The College was founded by him in 1861, for the higher education of women. His first donation was \$400,000, much of which, was absorbed in buildings and grounds, leaving the institution with insufficient working capital. By the terms of his will he has left \$325,000 additional to the college, which will relieve it from all embarrassments, and permit it to do its real work. Mr. Vassar was 76 years of age at the time of his death.—*Id.*

### LITERARY INTELLIGENCE.

—*How Books are Circulated*.—At this period of the year, when the literary season may be said to commence, it is the custom of some of the old-established publishing houses to have what is called a trade sale dinner, at which are shown the forthcoming works of the season. Last Friday Mr.