# Scientific Americar. 

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NEW YORK, SATURDAY, AUGUST 25, 1860. SCIENTIFIC VERSUS CLASSICAL EDUCATION.

E see that New Haven, following the examples of Providence and Cambridge, has established a school forteaching the physical sciences, in which the scholars will not be required to go through the ordinary course of classical study. How much Latin and Greek shall be taught in our colleges is a question of more importance, perhaps, to the permanent well-being of the republic, than any of the political questions that are agitating the community, and it seems to us that the answer is not difficult. The English language is so largely derived from the Latinand Greek, that some knowledge of those languages is necessary to a thorough mastery of our own. It is important that a scholar should know the meaning of the roots from which our own words have come, and this is especially important for the student of natural history. The names of the several genera being almost all derived from the ancient languages, and being descriptive of the peculiarities of the genera, a knowledge of the meaning of the roots is absolutely necessary to enable most minds to remember the names. We believe the shortest way for a person to acquire a knowledge of zoology, botany and geology, is to devote a few months of preliminary study to the Greek and Latin tongues. The amount of knowledge of the classics sufficient for this understanding of the derivations is just about the amount which is now required for admission into our universities.
If our lives lasted a thousand years, it might be very well to devote four of those years to acquire a minute and critical knowledge of the language that was used by the ancient Greeks, and of all that was said, done, thought, believed, or imagined by that peculiar little people. Three hundred years ago, this might have been rational matter for instruction. But at the present time, it can only be acquired at the expense of other information. The accumulation of the knowledge of the universe possessed by our race has now become so great that it cannot be acquired by any individual, either in four years or in forty. A choice must be made between different kinds of learning. On the one hand there is this minute knowledge in relation to the Greeks, who were certainly a very intellectual people, and who produced many fine works on architecture, sculpture, oratory and poetry. But the gods whom they worshiped had no existence except in their own imagination; their history consisted to a large extent of incredible fables; their total knowledge of the universe was of the most superficial, meager, and unreliable character; and a very large part of all that they believed was a mass of delusions. Is it better to devote a given number of years to learning all these delusions, and the language which was the vehicle for their communication, or to bestow the same time in acquiring a portion of that vast mass of positive and accurate knowledge which has been accumulated by the patient and laborious research of the last twenty centuries? Since the directors of the Cambridge and Oxford seminaries first determined the course of studies there, how changed is the condition of the problem! Then a mastery of the classics comprised a considerable portion of the learning which it was possible to teach. But since that time, chemistry has grown to its enormous and constantly spreading extent. The primitive elements have been discovered, their course has been tracked through thoir innumerable
groupings, and finally the great law of chemical combination has revealed itself in its simple and beautiful proportions to the long labors of successive investigators. An invisible universe, swarming with living beings, a thousand times more numerous than those which are to be seen with the naked eye, has been discovered, spreading about us on every hand, filled with strange, wonderful and multitudinous life. That long history which nature had contemporaneously written and laid away in the rocks, has been cautiously, patiently, faithfully and correctly interpreted. The vaat globe on which we dwel has been weighed and measured. And not it only, but its sister planets also, and the great sun himself, notwithstanding the unapproachable distances at which they move in the depths of space, have all been subjected to the measuring rod, and laid in the balance, by human intelligence. The great problem of the sun's path, as he sweeps along with his attendant worlds on his long journey among the stars, has been grappled with, and is in fair way of being resolved. By his superior knowledge of the properties of light, the modern student has discovered, deep sunk in the abyss of space, myriads of worlds, the existence of which was undreamed of by the ancients, and the distances of which almost confound even those great minds which have been enlarged by the study of modern science.
Is not a knowledge of these actual truths of the universe more valuable than the mastery, however perfect, of the language and literature of the ancient Greeks? We should like to see all our colleges, while they require the same progress in the classics for admission that they do at present, abandon all further teaching of these in the college walls. The colleges are the proper places to teach the natural sciences; these absolutely require expensive apparatus, oral instruction and experiments, which can only be obtained by the combination of large numbers of students.
By one of the universal sentiments of human nature, we are all disposed to place a high value on the things which we possess; and this is especially true of our possession of knowledge. The sailor despises the man who does not know that the " sheets". are ropes, and the farmer looks with contempt on one who mistakes growing wheat for barley. Our college professors and presidents are not free from this common weakness of humanity, and, having acquired much knowledge of the classics, it is natural for them to regard this as the most valuable knowledge of all. We rejoice to see that, under the lead of Dr. Wayland, one of the broadest and greatest minds in the country, so many of these professors have broken through the trammels of this prejudice, and are exerting themselves to introduce a more rational course of instruction. We hope that, in this great and noble effort, they may receive the support of the press and the people.

## AN INVENTOR IN LUCK.

A few days ago we were the recipients of a weatly folded envelope containing a pressing invitation to a banquet to be given by one of our brother "quills" to the editorial fraternity of this city. The gentleman by whom we were thus honored, and whose hospitality we very joyfully accepted, was no other than Mr. Moses S. Beach, the enterprising editor and proprietor of the New York Sun newspaper. His elegant and spacious mansion adorns a portion of the summit of that remarkable bluff or high ground known as Brooklyn Heights, which fronts directly upon the southern extremity of our metropolis, the swift waters of the East river intervening. From these hights a splendid view of the great city, its noble harbor and forests of shipping, may at all times be enjoyed.
The immediate occasion of the pleasant entertainment to which we have alluded was the retirement of Mr. Beach from the proprietorship of the Sun, and his desire to meet his editorial brethren to bid them a professional farewell. As to the banquet, it must suffice to say that it was as rich and splendid as art and liberality could possibly render it. Every delicacy of the season was provided in prodigal profusion, and the tables groaned under the weight of the good things with which they were loaded. Following the entertainment came "the feast of reason and the fiow of soul." In a happy speech our host announced his retirement from the $S u n$ paper, returned his acknowledgments to his brethren o
the press for their kindness to him, personally, during his
association with them, and bespoke their good-will and fellowship in behalf of Mr. Wm. C. Church, whom he then introduced as his successor. The latter-named gentleman made a very appropriate and interesting speech, and was followed by several prominent and gifted editors connected with the New York press.

Mr. Beach has, it appears, recently sold his interest in the Sum paper; and, though a young man, he retires with a large fortune, the fruits of his own industry, from the active duties of business life. When we state that the New York Sun is a penny newspaper, and that it has attained-under Mr. Beach's auspices-a daily circulation of between sixty and seventy thousand copies, we may, perhaps, convey some idea of the genius and untiring energy which he has displayed in the management of that popular and successful publication.
Mr. Church, who succeeds as publisher of the Sun, is a gentleman with whom we have long enjoyed a friendly acquaintance. He is an able business man; and we can only wish him the success which has crowned the labors of his predecessor. We cannot doubt that, under Mr. Church's active guidance, the great newspaper luminary will continue to "shine for all" with unwonted splendor.

We have entitled this paragraph, "An Inventor in Luck," because Mr. Beach, although an editor, is also an inventor of no inconsiderable rank. Some of his models adorn the cabinets of the patented inventions at Washington ; and his name stands recorded, both in Europe and America, as the author and patentee of a number of valuable improvements. He is even now just completing the construction of a monster steam printing press, by which the sheets are cut from rolls, dampened, printed upon both sides at the rate of forty thousand impressions an hour, folded up, counted and delivered from the machine ready for the carrier and the mail. This machine is as high as a common two-story country dwelling house, and it will, when finished-if the expectations of its inventor are realized-constitute a most extraordinary specimen of mechanical skill and ingenuity. Thus it is that our inventors are to be found in every walk in life, always contributing something new and useful for the common benefit of mankind.

A GREAT HARVEST AND A GOLDEN RHiAPER.
In an article on another page of the present number. in regard to the cheering prospects of the crops, it is stated that, during this season, Mr. McCormick has sold 4,000 reapers. This statement is no doubt true, and affords an insight into the immense profits which some inventors make out of their patented machines. The McCormick reaper sells for $\$ 140$ and $\$ 155$-there are twosizes; it is safe, therefore, to calculate that the gross receipts of his sales this year will reach the enormous sum of $\$ 600,000$, out of which he will realize a moderate fortune, say $\$ 100,000$, the result of a single year'b business! Unlike most inventors, McCormick is an energetic man of business; and he knows, just as well as any other shrewd person, on which side his bread is buttered. He is undoubtedly one of the wealthiest men in the North-west ; and he not only has an interest in reapers, but he is a liberal supporter of religion, having not long since given $\$ 100,000$ to endow the Presbyterian Theological Seminary, at Chicago, under the charge of the learned and astute Dr. Rice. Apparently not satisfied with his profits as a manufacturer, and his zeal in the cause of religion, he is endeavoring to mix up with these secular and sacred affairs the infiuences of modern politics; for, according to a recent announcement, he hoped to run the race for the mayoralty at Chicago with the accomplished "Long John Wentworth," but owing to an unexpected shuffle on the boards, the great reaper-man was cut down, and a Frenchman, named Gurnee, was put on the track, only to be beaten in the race by the longer legs of "Long John." It is reported that McCormick did not quite like the manner in which he had been left out of the political race ; and, forgetting tbe injunction which says "revenge not yourselves but rather give place unto wrath," he straightway bought out the Chicago Herald for $\$ 5,000$, and afterwards purchased up claims against the Times, of that city, amounting to $\$ 23,000$, whereby he obtained a summary control over it. Thus equipped with the power of two newspapers combined, and an exchequer overflowing with the profits of his valuable patents, there is no knowing what heights of renown he may yet attain.

