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LATIN IN THE HIGH SCHOOL.

By EDWARD CONRADI, Fellow in Clark University.

The educational value of the different high school studies has received considerable attention in recent years, not only in this country but also, and even more so, in Germany. This question is of special interest when the importance and the pre-eminence of certain school studies is questioned with the idea that they may, in many cases, cost more than they are worth. The storm has been raging especially about the classic languages, which have had a pre-eminent place in secondary curricula ever since the days of Sturm. Until quite recent years no one was considered cultured unless he had studied Latin, and possibly Greek, a certain number of years, and to those two languages was given the first place in the programmes of study. With the advance of modern science and the modern languages, their place gradually has been disputed until now, when they are slowly and reluctantly taking their place among other subjects of study, and, like other studies, the student pursues them when they are necessary, or helpful, or interesting in the line of work he is pursuing. In connection with the discussion of recent years it is interesting to see the results of studies that have been made to ascertain what has been accomplished in the study of the classical languages in the secondary schools.

Prof. Nelson G. McCrea recently tabulated the results of the Latin papers of the College Entrance Examination Board for the first three years. He read 8,896 papers but reports only those that received a rating of from 60-100 per cent. The papers on Cæsar, Cicero, and Vergil ranged from 58-88%, but the average of all the grammar papers was 41%, of all the elementary composition papers about 42%, and of the ad-

vanced composition papers about 31% for the three years. He says, "We can scarcely view these figures with equanimity, much less gain from them hopefulness for the future position in education of a subject whose claims are now so seriously challenged." He thinks this condition of things can be remedied if the Latin teacher focuses on the Latin syntax and vocabulary and not on Roman history, religion, archæology, etc. He says for the successful performance of the work that it ought to do in Latin the college requires that students at entrance should have (1) a working vocabulary of from 2,000-2,500 words which they can use with equal readiness in translating Latin into English and English into Latin, *i. e.*, which they really know; (2) a ready control of all the fundamental principles of syntax. He proposes a plan by means of which the student shall know at the end of the first year at least 300 words, at the end of the second 400 more, at the end of the third 700 more, at the end of the fourth 800 more, making a total of 2,200 words which the student can use freely in translating from one language into the other. These results, he admits, are not obtained at the present time.

Thorndike asked a number of students of Latin the following questions: (1) Was Cicero courageous? (2) In which were the Romans most proficient, making laws, writing books, or building beautiful buildings? (3) Which were the Romans most like, the English or the Americans? Why? (4) Is there any other reason for reading Cæsar besides the wish to learn the Latin language? The answers obtained lead him to the conclusion that it seems fairly sure that the average high school student is more likely to be misinformed than instructed about Roman history by his year's reading of Cicero. He gets only a superficial stratum of fact and may be utterly mistaken in his interpretation of it. The text seems to have failed signally to arouse any useful interest in the man Cicero or the times.

In 1903-04 I made a rough test as to a student's Latin vocabulary as follows: The whole Latin vocabulary at the end of Collar and Daniel's First Latin Book was printed, without the definition, leaving space enough on the galleys for the student to write the definition to the right of the word. Thirty-five students were tested: a class of 24 and a class of 11. The class of 24 had completed second year Latin and therefore was also given a list of words from the Gate to Cæsar, their second year text, including only those words not found in Collar and Daniel. The class of 11 was a first year Latin class in the 9th grade, who had studied Latin a little over a year—about 1½ years. The list from Gate to Cæsar was given the class complete; it contained about 450 words. The list from Collar and

Daniel was not given complete, the second year class accidentally lost a few of their Latin hours at the end of the year, and the 9th grade class could not give the required time to the work. In the latter case a test-list was made by having an expert strike out the most common and the rarest words in the book, one of one kind for one of the other, until the whole list was reduced from 1,168 to 685 words. For the second year high school class the new words in the fables in Collar and Daniel had to be struck out since the class had omitted that part of the book.

In each test the words given were so mixed that the pupil could not readily remember what part of the vocabulary he had gone over. Furthermore, in the second year class these tests were thrown in incidentally during a few weeks so that the student was not aware that they were coming and so probably did not make special preparation. In the 9th grade class the tests, by mistake, were given one after another in regular succession. It should also be mentioned that in this last case the teacher knew about six months in advance that these tests were coming, introducing a possible unconscious psychological factor which might influence the results.

The following instructions were given to each pupil: (1) Write the name, date, and age at the top of each paper. (2) Write the definition of the word to the right. (3) Do not stop at words you do not readily recall, but go on writing those definitions you do recall. If you get through the list before the time is up, go through the list again, filling in if you can, those words you skipped the first time. Try to get over the whole list at least once. This last precaution was given for fear that the student might stop to think at the first word he did not know, and thus confuse himself and lose valuable time which he should use to define the words he did know. The high school class was given about 230 words to go over in a session of 45 minutes and the 9th grade about 137 in a session of 25-30 minutes. Care was taken to note during the first tests whether the lists were too long, but it was found that the pupils had time enough to write the definitions of the words they did know. The high school class went over about 910 words out of a total of about 1,618, and the 9th grade class over 685 out of a total of 1,168. Thus in both cases more than 50% of the total number of words the pupils had met in their work were comprised in the lists.

In the schools where these data were gathered it was a standing request of the principal that the Latin teachers give special attention towards the pupils' acquiring a good Latin vocabulary. It should also be stated that the 9th grade class was reported by the teacher as an exceptionally bright

class, not only in Latin but in their studies in general, and that the high school class was unusually poor in Latin. This latter was a college preparatory class and many of the students took Latin only because their fathers insisted on their doing so because it was demanded for entrance to college. The study of Latin seemed to be a perfect bore to many of them and they wasted the teacher's nerves without gaining any appreciable results, as the returns show and as the teacher herself admitted. All these facts were unknown to the writer before hand, but were gathered while the tests were in progress and were given with frankness and sincerity.

Any one will readily see that the looking over and correcting such a list of words is quite a difficult matter. To credit the pupil with such words only which he defined absolutely correctly according to the book definition was doing him a possible injustice, since in free translation a word may be used in a way different from the orthodox vocabulary use and therefore the definition given by the pupil might vary from the strict use somewhat widely and yet the sentence might be so constructed in English that the definition would be correct. It was therefore deemed better to credit the pupil with every definition that could be construed in his favor and mark wrong only those which were absolutely missed. This method is, indeed, not free from error but the writer felt that he would rather err in the direction of leniency.

The classification of the words into parts of speech was considered of no great value since it is difficult to tell which words occur the oftenest in the text. Nouns undoubtedly occur oftener than verbs and so we find that they are better remembered. In the list given the pupils the number of nouns exceeded the number of verbs by $1\frac{1}{2}\%$, but 56% of the nouns were defined correctly and only 42% of the verbs. It was also hard to determine whether the parts of speech were properly recognized, especially so where the definition consists of but one word.

In the following tables are given the percentages and the number of words that were marked correct. In table I, giving the result of the high school class, the percentage in Collar and Daniel is based on 460 words, in Gate to Cæsar on 450, unless otherwise indicated. In table II, 9th grade class, the percentage is based on 685 words. The mark * means absent at one test.

TABLE I. BOYS.

	Coll. and Dan.	Gate to Cæsar.	Average %	No. of Words.
1.	49%	18%*	33.5	542
2.	40 "	21 "	30.5	494

LATIN IN THE HIGH SCHOOL.

5

	Coll. and Dan.	Gate to Cæsar.	Average %.	No. of Words.
3.	42%	17%	29.5	477
4.	41 "	16 "	28.5	461
5.	30 "	14 "	22.	356
6.	29 "	15 "	22.	356
7.	13 " *	10 "	11.5	186
8.	19 "	00.3%*	9.5	154
9.	18 " *	00.2%*	9.	146
Average	31%	12.4%	22%	352

TABLE I, Continued, GIRLS.

	Coll. and Dan.	Gate to Cæsar.	Average %	No. of Words
1.	75%	54%	64.5	1,044
2.	72 "	47 "	59.5	961
3.	67 " *	34 "	50.5	817
4.	63 "	36 "	49.5	800
5.	64 "	35 "	49.5	800
6.	60 "	37 "	48.5	784
7.	61 "	31 "	46	744
8.	55 "	27 " *	41	663
9.	56 "	25 "	40.5	655
10.	48 "	27 " *	37.5	606
11.	45 "	24 " *	34.5	558
12.	38 "	21 "	29.5	348
13.	29 "	14 "	21.5	324
14.	30 " *	10 "	20.	315
15.	24 "	00.5%	12.	194
Average	52.5%	28%	40.3%	641

TABLE II.

<i>Girls.</i>			<i>Boys.</i>		
	Per cent.	No. of Words.		Per cent.	No. of Words.
1.	76	887	1.	63	736
2.	75	876	2.	58	677
3.	72	841	3.	46	537
4.	72	841			
5.	62	724	Average	55.6%	650
6.	55	642			
7.	55	642			
8.	53	619			
Average	65%	759			

It may be interesting to compare these high school pupils' Latin vocabularies with the vocabularies of children about two years of age. As we see from the above tables, the highest of

the boys had about 550 words, and all the rest were below 500; more than half of them were below 400 and the three lowest were below 200. Of the new words they met in the second year Latin, two of the boys had one word each and one girl had 2. The girls have a higher percentage. Seven are above 700 and all but four have a higher percentage than the highest of the boys; only one is below 200. Taking the class as a whole, more than two-thirds of the class had their vocabulary below 700 and just $\frac{1}{2}$ had theirs below 500 words. The vocabularies of little children 24-30 months old, as given by Tracy, are as follows: 24 mo., 285, 263, 250, 139; 26 mos., 171; 27 mos., 677, 451; 30 mos., 327. Mrs. K. C. Moore's child had 475 words at 24 months, and Harlow Gale's three children had 783, 741, and 729 respectively; the two girls of Professor West, as reported by M. C. and H. Gale, had 614 and 578 respectively, and the boy 115 at the age of two years. The vocabulary of Humphrey's child was 1,121, of Deville's 739, and that of Marion Martindell 783 at the age of two.

Many of the mistakes where words were defined wrong were due to various causes. Sometimes words of similar sounds and looks were confused in the student's mind, as for instance when he confused *poena* and *Poenus*, *puto* and *pono*, *cupio* and *capio*. It also sometimes happened that the pupil gave the opposite meaning as when he said *lugeo* means "rejoice." Many mistakes were due to wrong guesses or to wrong associations, or to both working together; good examples are *fatum* = "plump," *mos* = "mouse," *dens* = "thick," etc. Errors on guesses were rather more frequent with the bright pupil than with the dull one. In some cases the dull pupil seemingly did not have orientation enough to see even the plainest analogies. Again, the number of errors in the beginning class is somewhat higher than those in the high school class in Collar and Daniel, but the errors of the latter class in the list from Gate to Cæsar are by far the most numerous, more than twice as many errors being made than in the list from Collar and Daniel. The percentage of errors for the 9th grade was 7%, for the high school class it was 6% for the list from Collar and Daniel and 15% for the list from Gate to Cæsar. This may indicate that with time the line of demarcation between known and unknown words becomes more distinct, or this difference may be due to the fact that a certain number of words from Collar and Daniel were repeated in Gate to Cæsar and so became fixed, whereas all the hazy words of the year before were forgotten. However, it is also in some measure due to wrongly defining the Latin word by its English analogue. "Errors" in this paragraph does not include words left blank.

A comparison of these children's vocabularies with the ideal one suggested by McCrea can hardly be made since these children were not taught by the method suggested by him, and, moreover, their vocabularies are of words they recognize at sight and not such as they can use in translating from English into Latin as well as from Latin into English. It is evident that their vocabulary which they can use in translating both ways is much more limited than that which the table would indicate, yet, applying the percentages to the complete vocabularies of the texts, many of the second year pupils have, according to the table, a much smaller vocabulary than 700 words. None of the boys had even 600 and eight of the girls were below 700.

We see that the 9th grade has a much higher percentage of correct results than the other class. There are several explanations which suggest themselves. In the first place, the class as a whole is a brighter class, and secondly, the whole vocabulary was still fresher in their mind, they having begun Latin a little over a year previous. Furthermore, being younger than the other class, they were yet closer to the so-called period of verbal interest and verbal memory. The difference in the average ages of the two classes is about $1\frac{1}{2}$ years. And I should again refer to the factors mentioned before, especially to the fact that the tests were given on successive days which may have led the pupils to make special preparation. The results did show that some special preparation may have been made in some cases. All showed improvement in the second test and some showed decided improvement, but only two had the last four tests higher than the first, and six made the last three tests on about the same level of correct results as the first, whereas three showed a falling off. Moreover, this class held more closely to the text-book definition than the other, probably partly because they had a better verbal memory, partly because they had closer vocabulary drill, and partly because they may have made special efforts to review the text-book vocabulary from day to day while the tests were in progress. It is true, most of these children defined more than enough words to meet Professor McCrea's standard, but, whether they satisfy that standard cannot be determined since from the tests one cannot tell how many words they were able to use freely in translating Latin into English as well as English into Latin.

It was interesting to note that many words, especially in the list from Gate to Cæsar, were defined rather in their English than in their truly Latin use, *i. e.*, the pupils gave the definition of the English derivative instead of that of the Latin word. Many of these words, it is true, might have a meaning, often figuratively, similar to that of the English derivative, but the

student had probably never met them in any other but their truly Latin sense, since the text vocabulary gave only the strictly Latin use. For example, *arbitror*=arbitrate, *eruptio*=eruption, illustrates what I mean. Here we have Latin interpreted in the light of the English and not English by means of Latin. It is, therefore, doubtful whether these students really strengthened their English vocabulary by means of the Latin; they rather seemed to use their English words to get an acquaintance with Latin, thus reversing the process which is supposed to take place.

All the boys in the high school class belong to those who did the poorest. There were nine boys in the class, six of whom were below 30% and 33.5% was the highest average made by any boy. Whereas of the 15 girls three were above 50%, six others, or 9 in all were above 40% and only 4 were below 30%. The highest average per cent. made by any girl in this class was 64.5. The average of correct results by all girls is 40.3%, of the boys only 21.7%. That is, the standing of the girls is almost twice as good as that of the boys. In the 9th grade class there were only three boys, one stood fifth, one seventh, and one lowest.

What is the cause of this difference between the sexes? Numerous explanations might be offered. It should be added here that the number of students involved in this study is too small to permit of definite and authoritative generalizations and that the number would have been increased were it not that such an investigation takes so much of the pupil's time. However, some suggestions and possible explanations may be in place. It is well known that studies that have commercial, industrial, political and other practical bearings are more interesting to boys, but that has more specially a tendency to reduce the number of boys taking Latin or Greek, if they have any say so in the matter. In this case a number, if not all, of the boys took Latin not because they liked it or felt the need of it, but simply because their fathers insisted that they take it because it was required for admission to college. They were not dull boys as the Latin teacher very well knew and as the high school record shows. They had good records in other studies even in French and German, but the Latin did not appeal to them and so under compulsion did they remain in the class as an almost absolute dead-weight. That some of these boys did absolutely nothing in the second year Latin class is quite evident, not only from the returns but from other testimony. They did even worse than nothing; they were cultivating habits of carelessness and idleness which stifle all impulses to that healthful activity without which not only school work, but life itself is a burden and a failure. These

boys were buying their Latin at a fearful cost—were they not paying too much for their whistle?

Another part explanation may be found in the fact that at this age boys would do better under the more sturdy influence of a male teacher. These boys had not only all their Latin training but almost, if not quite, all their other training under female teachers, and it is possible that with them that natural and healthy reaction against too much woman's influence, however good and refining it may be in its way, had come—a reaction which is apt to come in every true and vigorous boy, and which should be respected in the organization of our schools. With proper attention given to the nature of boyhood even this to them uninteresting study might have yielded better results. Professor Armstrong, of the Mosley Commission, says that the distinctly low average of attainment in our high schools is in large part due to the preponderance of women teachers. It seems to the writer a sign in the right direction that the percentage of female teachers in our secondary schools has slightly decreased in the last few years.

In the Report of the Committee of Twelve of the American Philological Association the fact is emphasized that the increase in the number of Latin students in secondary schools from 1889-90 to 1897-98 had been 174%, more than twice the increase in the number of secondary students, and this increase was ascribed to an increase in the interest in Latin studies and it was suggested that this would mean an increased interest in Greek. It may well be asked how much of this increase is due to interest and how much to a onesided and abnormal conception of the parent or the school who forces this Latin upon the student much as the biscuit was forced upon Gulliver, simply because tradition, supported yet by most colleges, says Latin is basal in all education above the common school. How much is this increase due to the interest of the student and how much to the pedagogical conditions which furnish us teachers who can teach Latin as dead languages are taught, but not teachers who can teach a living language in a living way. It is quite certain that a number of the members of this Latin class are innocent of wilfully increasing the total number of Latin students in this country, and how many more such students there are further investigation only can reveal. And how many there are who make a creditable record only by struggling against the stream with all their might, who, under the halo of reverence that clings to classical learning, believe that by a few years of Latin study they become wise and cultivated men and women, though they drop the study the minute the high school course is ended, we may never know. Whereas, if the same time and energy (and the amount of available

energy increases if the friction decreases) were given to some study of more live interest it would lead the pupil into lines of reading and study which would be to him not only a source of information and culture, but of interest and pleasure as well in after life. Those who believe that to pursue difficult uninteresting studies is a good preparation for the difficult battles of life, forget that probably all true successes in life are made by men who are interested in what they do. Interest does not mean easiness; the most difficult problems are solved by men who are interested in their task. If dead languages are not interesting—and they often are not—take living ones so that the exuberant life of youth be not stunted even before its bloom. President Hall advises his students to be sure to take a problem that is interesting to them because it means that one-half of the difficulties are already solved. No better advice can be given, and in its essentials it applies to high schools as well as to universities. This is not soft pedagogy but sound common sense.

President Hall thinks the cause of this increase in the number of Latin students in our high schools is external; that Latin is one of the cheap subjects to teach and that the teaching of it is more open to women than science, but holds that the chief cause is its prestige and tradition. As to Latin in the high school he says that for the American boy and girl, high school too often means Latin. That this gives at first a pleasing sense of exaltation to a higher stage of life, but after from one to three years the great majority who enter the high school drop out limp and discouraged for many reasons, largely, however, because they are not fed. He says the nature and needs of the adolescent mind demand bread and meat, while *Latin rudiments* are husks.

It is possible that we have passed the climax of this Latin craze. Since 1898 there has been a slight decrease in the percentage of students taking Latin. In 1898 it was 50.29%, in 1901-02 it was 49.52%, there being a slight decrease each year. The number that study Greek has also decreased; in 1901-02 the total number of students taking Greek was 241 less than in 1897-98, being a decided loss and not a gain as was anticipated, suggesting that the increase in the number of Latin students is probably due to other causes than a natural interest in the classics.

In Ontario, Canada, from 1895-1900 the number of high school students that studied Greek was uniformly 6%; during this time Greek was optional as to university entrance but was held equal to two modern studies. In 1900 it was made optional with German, French or science and the percentage immediately dropped to 3½. The natural interest in Latin would probably behave similarly under like conditions.

The supposition that the increase in the number that study Latin is due to a natural interest and the facts as they are found that so many students attain such poor results do not harmonize. It is true, bad results may be due to many causes, one of the most important being bad teaching, but how much may they not be due to a lack of native interest which cannot be aroused even by good teaching? It is also true that poor results and bad methods are found in other studies than the classical languages, but this is largely due to the formalistic cut-and-dried dead-language methods that have thoroughly laid hold of many of the modern subjects.

In Germany modern studies have made great progress within recent years. The *Gymnasium* will, undoubtedly, for some time to come have its usual quota of students, at least as long as the social feeling is what it is now. Though the emperor has placed the three higher schools, *Gymnasium*, *Real-gymnasium*, and *Ober-Realschule* on the same footing as far as culture value goes, it is too well known that a stroke of the pen cannot obliterate the imprint of centuries of tradition. Moreover, whereas the graduate of a *Gymnasium* is admitted to all the privileges of the university, technical as well as others, and the graduate of the *Real-gymnasium* is only excluded from the study of theology and a few minor privileges, the graduate of the *Oberrealschule* is in addition excluded from the study of medicine. Why a graduate of a *Gymnasium* should be permitted to take technical courses and a graduate from an *Ober-Realschule* should be excluded from the medical courses is difficult for the democratic American mind to understand.

The following are some comparative figures as to the attendance at the higher schools of Prussia. They are divided into two groups; those in the first group have Latin (some of them, of course, also Greek), and those in the second group have neither Latin nor Greek.

	1880	1890	1900	1902
Gymnasium	74,556	76,705	88,366	93,655
Realgymnasium	26,684	25,769	21,256	24,197
Pro-Gymnasium	3,995	5,184	6,972	5,210
Real Pro-Gymnasium	13,204	8,739	1,850	1,595
Total	118,439	116,397	118,444	124,657
Ober-Realschule	1,663	4,129	14,967	17,426
Realschule	5,093	17,360	30,062	34,206
Total	6,756	21,489	45,028	51,632

We see that in 1880 the ratio of non-classical to classical students was 1:19.4, and in 1902 it was 1:2.4. From these fig-

ures it is evident that the *Realschulen* meet a real need, and, if Lehmann is correct, many more students would attend them were it not that students from *Realschulen* cannot pass over to the *Gymnasium* without great inconvenience, and well situated parents still refuse to cut their boys off from the *Gymnasium* at so early an age (9 to 10), since the latter school is still the school for the aristocrats. Furthermore, the great increase in the number of Latin students in the *Gymnasium* and the *Realgymnasium* from 1900 to 1902 can be partly explained by the fact that in 1900, the *Gymnasium* course has been liberalized by making Greek optional below "Obersckunda," and that the *Realgymnasium* since 1901 prepares for the medical courses and since 1902 for the law courses in the university. Moreover, there is a constant change taking place, the six class schools being abandoned or made into nine class schools; this is especially true of the last two in the first group.

The predominance of the classical languages in German secondary education is largely due to class distinctions. Only the classically trained men belong to the "höheren Fakultäten" and can move in "higher" society. Paulsen says: "When a few years ago the question was current as to whether the 'Gymnasialzwang' should be repealed for medical students and the medical profession, the medical associations were asked for an expression of their opinion; they all were against admitting the graduates from the *Realschulen* to the medical course. One would be deceived, however, if one would see in this a proof that the instruction in a *Gymnasium* was considered better or more suitable; their refusal showed merely, as one could read in their verdict, directly as well as between the lines, that the *Gymnasium* was considered more aristocratic; they feared a lowering of the social rank; if the jurist would also go over to the *Realschule*, one could hear, the physicians would not have had any objections." More recently Lehmann expresses the same views. (On this point see also Schmeding, *Die Klassische Bildung der Gegenwart*, pp. 90 ff.)

The results obtained in Germany are not very flattering as the classicists themselves admit. Numerous voices are heard on the subject. Lehmann summarizes the situation well in these words: We fully recognize the value which humanistic culture has had for a long time for German education; yet, on the other hand, we must not deceive ourselves, for the effect it formerly had it no longer exerts. That our *Gymnasium* students no longer respond in the smallest degree to the demands which the humanistic culture ideals make of them, that our students, our young officials and scholars generally show no trace of interest in, nor attachment to, the studies which they pursued during their school course, are facts which the friends

as well as the enemies of humanistic culture admit. The well-known judge, the oft quoted physician, who after his day's work picks up his Horace or his Homer, belongs to the generation before 1870; he who left the schools since that time, unless he be a philologist, usually sells his classic authors or places them in "die Rumpelkammer." And, what is still worse, they produce no lasting inward effects, they cannot because they never had a live influence. To what extent antiquity as a whole and its noblest phenomena, to what degree Horace and Homer are inwardly unknown to our present day graduates of our *Gymnasien*, is known only to him who has had opportunities for observation. Not only do they fail to get a knowledge of language form, but the content and value of humanistic culture, namely, an understanding of the very essence of antiquity, of its works of art and its great men, has fallen by the wayside.

This statement of Lehmann is a very severe indictment. It would indeed be almost calamitous if a knowledge of the Greek and Latin languages were essential toward an understanding of modern thought and modern society. Such, however, is not the case as the classicists themselves begin to admit. Dr. McCrea, for instance, goes farther than that and says that the proposition that a knowledge of the Græco-Roman civilization is educationally necessary, because without it one cannot understand the constitution of modern society, is no longer defensible. He also says that few, if any, students when entering college can give upon the basis of their study of Latin and Greek alone a fairly comprehensive, coherent, and rational account of the salient features of the ancient social organism, nor can define in an intelligent way the nature, extent, and value of the influence which Greece and Rome have respectively exerted in the advancement of civilization. This is undoubtedly true. He focuses on one argument for Latin and one only, viz., the value of Latin as a linguistic discipline. That Latin is a linguistic discipline is true also, any language is; but whether it is the best, the most fruitful linguistic discipline for a high school student who knows only his mother tongue and who will drop Latin as soon as, or before, his high school course is ended, or who does not study philology or allied subjects in his college course, is not so self-evident. Latin is a language so different from ours that it presents baffling difficulties to the young beginner. Paulsen says this difference is an obstacle which can be overcome only by an exclusive sojourn for many years in the world of antiquity. With all its borrowings English has remained true to itself and no amount of study of Latin grammar can give us the force of the living English idiom. The structure of English is English.

"The Latin may contribute its tale of bricks, yea, of goodly and polished hewn stones, to the spiritual building, but the mortar, with all that holds and binds the different parts of it together, and constitutes them into a house, is Saxon throughout" [Trench]. Moreover, our "Sprachgefühl" has developed on its own soil and refuses to accept anything that does violence to our idiom.

Some classicists hold that Latin is fundamental to a study of the science of language. But here comes the evolutionist who is not only acquainted with dead languages but also lays under contribution the living languages of mankind—of the Russian and the Chinaman, of the Hottentot and the Indian—and says, without the knowledge of these we are wofully ignorant of linguistic evolution and that the Greek, Latin, and Sanskrit aspects of English have been fearfully overdone; that Latin and Greek are incidents or accidents, not necessities of our mother-tongue. Dr. Chamberlain, furthermore, says that no language is a model for another; that "for the ordinary boy and girl the inflections and conjugations of the classical languages are simply a millstone around the neck." This is undoubtedly true of the great majority of youths to whom not "fossil grammar" but living speech is matter for education. He says further: "Latin has no more shaped the English tongue than Rome has built the Saxon heart or made the Saxon arm. English grammar is soundly Anglo-Saxon run through the sieve of a mind that never had a Latin bent."

One of the chief reasons that are advanced for giving Latin such a prominent place in the high school is that the English vocabulary is so largely derived from Latin. We have, it is true, many words from the Latin either directly or through the French. An exact estimate of the foreign element in our language is impossible. The English vocabulary is an absolutely indefinite quantity since we are coining and borrowing words every day. Not only that; it is also difficult to determine what words should be excluded from the calculation, or, in other words, what constitutes a word, as C. P. G. Scott says. To what extent should scientific and medical terms, nouns in "ness," adverbs in "ly," etc.; to what extent should non-naturalized foreign words and provincialisms be included, are questions the answer to which would vary with the individual investigator. Yet, notwithstanding these variable factors and sources of error, it may be interesting and helpful toward a general orientation to see the results that different investigators in this field have obtained.

Trench, in 1858, estimated the English vocabulary at rest as follows: Saxon origin 60%, Latin 30%, Greek 5%, all other sources 5%; with language in motion, that is, taking all the

words used by authors as they come, he thinks that 70:10 or 80:10 would fall short of expressing the ratio of Saxon to Latin words. O. F. Emerson says that according to dictionary count 25% of our language is of native origin and 75% foreign, but counting all native compounds the ratio would probably be $33\frac{1}{3}\%$, and $66\frac{2}{3}\%$ respectively. The $66\frac{2}{3}\%$ would include *all* foreign sources. He thinks in actual use we have less than 30% foreign words. He gives the following table of percentage of native and foreign words as used by different writers on the running page: Spenser n. 86, f. 14; Shakespeare n. 90, f. 10; Bible, three Gospels, n. 94, f. 6; Milton n. 81, f. 19; Addison n. 82, f. 18; Swift n. 75, f. 25; Pope n. 80, f. 20; Johnson n. 72, f. 28; Hume n. 73, f. 27; Gibbon n. 70, f. 30; Macaulay, Essay on Bacon, n. 75, f. 25; Tennyson n. 88, f. 12.

Anderson says that by a dictionary count we find about $\frac{5}{7}$ of our words of classical and $\frac{2}{7}$ of Germanic origin with about 2,000-3,000 words from other sources. Meikeljohn makes the ratio of Anglo-Saxon to Latin words a little less than 1:2. Hemme says that two-thirds of the English vocabulary can be traced to Latin sources, but admits that in ordinary conversation, and even in literary productions, words of Germanic origin are chiefly used.

Skeat, in his Etymological Dictionary, makes an elaborate attempt to classify the words in the English language as to the sources to which they originally belonged. It is the most exhaustive piece of work of its kind of which the writer knows. The words selected for the purpose are chiefly those given in large type in the dictionary, to the exclusion of mere derivatives of secondary importance. The English list, he says, appears short in proportion chiefly because it contains a large number of these secondary words, such as *helpful*, *happiness*, *hearty*, and the like. Of the foreign element it is the Latin only that concerns us here. The ratio of Anglo-Saxon to Latin is almost exactly 1:2, but if we add to the Anglo-Saxon the words derived from the Scandinavian, the German and the Dutch the ratio is somewhat less than 2:3. He also gives a list containing the principal Latin words productive of rather numerous derivatives and which readily admit of prefixes. Words that produce but few derivatives or that are of no special interest are excluded. There are 448 words in this list giving rise to approximately 3,000 English words. Among these 448 there are 107 that can be traced back to Indo-Germanic roots. If it is necessary to know the origin of a word in order to understand it, we must, with these 107 words, go beyond the Latin.

Greenough and Kittredge consider it of little value to count,

as to origin, the words in a dictionary or of an author. They counted the words in A in Harper's Latin Dictionary, excluding proper names, doublets, parts of verbs, and adverbs in *e* and *ter*, to see how many had been appropriated by the English language, and found that fully one-quarter had come over. They think that, roughly speaking, that percentage will hold for the entire Latin vocabulary.

Marsh says he made no attempt to determine the etymological proportion of our entire verbal stock because no dictionary contains more than two-thirds, or at most three-fourths, of the words which make up the English language. He says dictionaries are made from books and for readers of books and that they all omit a vast array of words, chiefly Saxon, which belong to the arts and to the humbler fields of life, and which have not yet found their way into literary circles. Upon examination he finds that in the total vocabulary of the *Ormulum* (which, in opposition to most philologists, he considers English rather than semi-Saxon) nearly 97% of the words are Anglo-Saxon; that in the vocabulary of the English Bible 60% are native; that in Shakespeare the proportion is nearly the same, while the stock of words employed in the poetical works of Milton less than 33% are Anglo-Saxon. He adds, however, that the relation between Milton's entire verbal resources and his habitual economy in the use of them is most remarkable. He says that it is true that some words of Greek and Latin origin, such as *air*, *angel*, *force*, *glory*, *grace*, *just*, *mortal*, *move*, *nature*, *part*, *peace*, etc., occur very often, but that many of the foreign words employed by him are found in but a single passage, whereas the Saxon words are many times repeated. And this, he says, is not due to particles and other small words, since Milton as well as Shakespeare, is very sparing of them.

For the purpose of determining more satisfactorily the true character of the diction of Langland and of Chaucer, Marsh counted both the different words of foreign derivation and the repetitions of them in the *Passus Decimus-Quartus* of *Piers Ploughman* and in an equal amount of the Prologue to the *Canterbury Tales*. This is what he found: Exclusive of quotations and of proper names the *Passus Decimus-Quartus* contains somewhat less than 3,200 words, 500 of which, or 16%, are of Latin or French origin, and as there are about 180 repetitions, the number of *different* foreign words is about 320, or 10%. In the first 420 verses of the Prologue to the *Canterbury Tales*, containing also about 3,200 words, 370 or rather less than 12% are Romance; the number of repetitions are 70, leaving 300, or rather more than 9% of *different* foreign words.

He also made an attempt to determine the proportion in which

authors employ the words at their command. The following table gives the percentages of Anglo-Saxon words as found on the running page of the different authors. The authors are arranged chronologically.

	Anglo-Sax.
Robert of Gloster, Narrative of Conquest, pp. 354 and 364,	96 per ct.
Piers Ploughman, Introduction (entire),	88 "
" Passus Decimus-Quartus (entire),	84 "
" Passus Decimus-nonus (entire),	89 "
" Creed (entire),	94 "
Chaucer, Prologue to the Canterbury Tales, first 420 verses,	88 "
" Nonnes Preestes Tale (entire),	93 "
" Squiers Tale (entire),	91 "
" Prose Tale of Meliboeus (about 3,000 words),	89 "
Sir Thomas Moore, Coronation of Richard III (7 folio pages),	84 "
Spenser's Faerie Queene, Book II, Canto 7,	86 "
John's Gospel, chap. I, IV, XVII,	96 "
Matthew's Gospel, chap. VII, XVII, XVIII,	93 "
Luke's Gospel, chap. V, XII, XXII,	92 "
Romans, chap. II, VII, XI, XV,	90 "
Shakespeare, Henry IV, pt. I, act 2,	91 "
" Othello, act V,	89 "
" Tempest, act I,	88 "
Milton, L' Allegro,	90 "
" Il Penseroso,	83 "
" Paradise Lost, Book VI,	80 "
Addison, Several numbers of The Spectator,	82 "
Pope, First Epistle and Essay on man,	80 "
Swift, Political Lying,	68 "
" John Bull, several chapters,	85 "
" Four last chapters of Queen Anne, to end of sketch of Lord Byron,	72 "
Johnson, Preface to Dictionary (entire),	72 "
Junius, Letters 12 and 23,	76 "
Hume, Hist. of England, gen. sketch of Commonwealth in chap. LX,	73 "
Gibbon, Decline and Fall, vol. I, chap. VII,	70 "
Webster, Second Speech on Foote's Resolution (entire),	75 "
Irving, Stout Gentleman,	85 "
" Westminster Abbey,	77 "
Macauley, Essay on Lord Bacon,	75 "
Channing, Essay on Milton,	75 "
Cobbett, On Indian Corn, chap. XI,	80 "

	Anglo-Sax.
Prescott, Philip the Second, B. I., c. IX,	77 per ct.
Bancroft, History, vol. VII, Battle of Bunker Hill,	78 "
Bryant, Death of the Flower,	92 "
" Thanatopsis,	84 "
Mrs. Browning, Cry of the Children,	92 "
" " Crowned and Buried,	83 "
" " Lost Bower,	77 "
Robert Browning, Blougrams Apology,	84 "
Everett, Eulogy on John Quincy Adams, last 20 pages,	76 "
Ticknor, Hist. of Spanish Literature, Period II, chap. 1,	73 "
Tennyson, The Lotus Eaters,	87 "
" In Memoriam, first 20 poems,	89 "
Ruskin, Modern Painters, II, Part 3, section 2, chap. 5,	73 "
" Elements of Drawing, first six exercises,	84 "
Longfellow, Miles Standish (entire),	87 "
Martineau, Endeavors after the Christian Life, III. Discourse,	74 "

We see from this table that since the time of Johnson and Macaulay the Anglo-Saxon element has become distinctly more prominent again, some of the modern writers having as high a percentage of native words as Langland and Chaucer. The large percentage of Latin words in Webster's speech, as Marsh says, is due to the frequent recurrence of "congress," "constitution," and other technical legal terms. In the Eulogy of Massachusetts, containing more than 200 words, 84%, and in the peroration beginning with "God grant," etc., 80% are native. These modern writers, though they know more foreign words than the writers of the preceding century, actually use fewer, proportionally, in their literary productions. Marsh thinks that this recognition of the superior force and fitness of a Saxon phraseology, for all purposes where it can be employed at all, is the most encouraging of all existing indications with respect to the tendencies of our mother-tongue, as a medium of literary effort.

Furthermore, the native English is above all the language of the home as is shown by the stock of words used by little children. I studied the vocabularies of six little children in two groups of three each. In the first three there were 1,327 different words, exclusive of inflections and proper names, of which about 14% were of Latin and a few of Greek origin. The vocabularies of the three other children containing together about 1,900 words, exclusive of proper names but not of

inflections, had about 10% Latin. This percentage is increased to about the same as with the first three by excluding all inflections. The percentage as a whole is undoubtedly above the average since all six were children of college professors. These children represent only two families, but as far as the evidence of their vocabularies goes it proves that home-born English is the language of the home; that the deep and tender emotions and feelings and relations of the family and home life can be expressed only in words that have grown up in the holiness of the hearth. Moreover, a great many, if not most, of the words of foreign origin had come in very early, some of them as early as Anglo-Saxon times, not by a pedantic literary method, but by a close living together of races, and so had become thoroughly naturalized.

That the English language has been enriched by the Latin influx is true, but it has been impoverished by it as well. Due to a Latin bias some English writers borrowed foreign words where home-born English would have done as well, and even better. Moreover, by this borrowing process English has lost the power of making compounds, a power still retained by the Germans in a high degree and which is not only useful but also expressive. Old English formed compounds from independent words quite freely. O. F. Emerson says "the word *land* was part of at least sixty-three compounds in Old English, while the word *even* 'evening' was used in twenty-six, and *life* in twenty-seven compounds, and illustrates the expressiveness of some by such words as *life-busy*, *life-care*, *life-day*, *life-fast* 'having life,' *life-ward* 'guardian of life,' *life-way*, *life-well* 'living spring,' *life-win* 'joy of life,' all of which have not come down to modern times. Besides, he says, there must have been many compounds once used, but not now known, because not found in any relic of the older literature.

Many excellent words of Anglo-Saxon stock have been crowded out by Latin words. Trench gives the following: *sooth-saw* was pushed out by "*proverb*," *sour-dough* by "*leaven*," *to after-think* by "*repent*," *medeful* by "*meritorious*," *fore-word* by "*promise*," *freshman* by "*proselyte*," *moon* by "*lunatic*," *foretalk* by "*preface*," *sunstead* by "*solstice*," *leechcraft* by "*medicine*," *starconner* by "*astrologer*," *to eyebite* by "*fascinate*," *waterfright* by "*hydrophobia*," *wanhope* by "*despair*," *middler* by "*mediator*," and adds that on account of their simplicity and force it is to be regretted that some of these words have dropped out. It is certainly no gain to have "*prudence*" crowd out *forewit*, and "*conscience*" *inwit*.

President Hall has a list of several hundred "Lost Beauties of the English Language," from which I quote some of those that have been replaced by Latin derivatives. It is to

be regretted, also, that some of these have dropped out. Some, it is true, are still used, but their use is either very restricted or provincial. The first word is always replaced by the second : afterword=postscript; back-word=contradiction; back-stand=resistance; benothinged=annihilated, bilk=defraud; bleary=confused; bode=message; bonny=beautiful; brant=precipitate; brightsome=luminous; couth=graceful; dearworth=precious; deft=dexterous; dingthrift=prodigal; douter=extinguisher; downcome=adversity; eldfather=grandfather; eldrich=haunted; farthel=quarter; fittle=arrange; flinder=fragment; forwent=renounced; forgather=convene; glumps=sullenness; grieve=magistrate; hap=fortune; hent=apprehend; hithercome=arrival; kirtle=petticoat; louton=courtesy; longsyne=antiquity; longsomeness=tedious; loveworthy=amiable; lowliness=humility; manful=virtuous; mauner=hesitate; maups=simpleton; meth=courteous; miff=temper; misdo=to err; mithe=conceal; moider=confuse; moltwater=perspiration; nantle=caress; nesh=delicate; niffer=exchange; pithful=vigorous; reuth=compassion; rapen=prepare; ream=effervescence; rogue-house=penitentiary; rowth=abundance; ruff=triumph; ruly=obedient; samely=monotonous; scale=disperse; scorse=exchange; shacker=vagabond; smerly=demure; smire=mischief; smither=fragment; snurle=influenza; sonce=prosperity; soncy=fortunate; speedful=prosperous; speer=injure; springalla=adolescent; stickle=arbitrate; stightle=confirm; stuckets=confectionery; swike=deceive; tenty=careful; tholance=toleration; thole=endure; thorp=village; thoughty=meditative; thraw=to be contrary; thrawn=ill-tempered; threesome=triple; throdden=increase; thwartover=contrary or transverse; tifty=quarrelsome; tilty=violent; tirly=rotatory; tozy=tender; unfurtherosome=unfavorable; unheartsome=melancholy; wafture=signal; wanchance=misfortune; wandought=impotence; wanluck=misfortune; wanlust=indifference; wanthrif=prodigality; wantrust=suspicion; wasty=consumptive; wathe=injury; weald=forest; wedbreach=adultery; wee=diminutive; ween=imagine; welder=governor; welfulness=prosperity; well-will=benevolence; ill-willy=malevolence; werne=refuse; wersh=insipid; wevin=moment; whist=silence; whuffle=to doubt; widerly=contrary; wightly=bravely; wish-worthy=desirable; winly=pleasantly; witcraft=logica; witterly=consciously; wontless=unaccustomed; wood, or wode=furious; word-wanton=obscene; worksome=industrious; worrisome=annoying; wraith=apparition; wright=artisan; yald=vigorous; yeavy=moist; yeep=active; yepty=actively; yonderly=timid, or retiring; yond=distant or strange; yeme=attention.

Not only was Old English able to form compounds freely,

but it was rich and flexible in other ways. O. F. Emerson again says: "In the great epic poem *Beowulf*, which consists of less than 3,200 lines, there are nineteen synonyms for 'ocean,' nine for 'ship,' and eleven for 'sword.' These are all simple words. In addition, there are twenty-three compound words used for 'ocean,' twelve for 'ship,' and eighteen for 'sword'—all true compounds and not made up of a genitive and a noun of which there are at least ten for the idea of 'ocean.'

This loss largely accounts for the fact that to-day we use Latin and Greek words more or less freely to express our thoughts, and in part, may be, for the slang so prolific with the youth who has these foreign words not yet at his command. Yet it is admitted on all hands that outside of books it is the genuine English words that have life and that the Englishman's deepest feelings are expressed in pure English. The "stilted classicisms" of Johnson and the "Gallic imitations" of Gibbon were never accepted by the people and are more and more repudiated by the writers of English. Marsh says that a better proof of the rich moral expressiveness of Anglo-Saxon than any citation of example is found in the fact, that those English dramatists and poets who have most clearly revealed the workings of the heart and thrown most light into the deep abysses of the soul, have employed a diction composed in the largest measure of words legitimately descended from the ancient mother of the English speech. In this inherited quality of moral revelation in Anglo-Saxon, he thinks, lies "in good part the secret of Shakespeare's power of bodying forth so much of man's internal being, and clothing so many of his mysterious sympathies in living forms."

Again, suppose a pupil does know the etymology of a word; suppose he does know the Latin meaning of *res* and of *publica*; does that give him the meaning of the word "republican" as used to-day? Is it not of more importance that he should know the force of the word in current use? The dynamic value is the all-important thing to which etymology must give the first place. Let the high school student study the English words in their natural habitat as they live among other words, in poetry and in prose, instead of worshipping their ancestors. The history of a word has little meaning for him until he knows the word in its present use, then and then only can derivation have value. Moreover, must the student worry through all the intricacies of Latin grammar with its innumerable rules and countless exceptions in order to know a little about the meaning the Romans attached to the word virtue? Some of the noblest interpretations of such words have been given by men and women who never wrestled once, neither with a Latin

ablative nor with a Latin subjunctive. This whole matter has a close analogy to the principles of the dynamic biologist, and we can agree with him when he says, "to present abstract relations to minds that know little about the things they relate suggests trying to feed babies with the combings of gray hair." James Russell Lowell says: "The pedigree of an adjective or substantive is of little value to ninety-nine men in a hundred, and the writers who have wielded our mother tongue with the greatest mastery have been men who knew what words had most meaning to their neighbors and acquaintances, and did not stay their pens to ask what ideas the radicals of those words may possibly have conveyed to the mind of a bricklayer going up from Padanaram to seek work on the Tower of Babel." And again, "the illuminate too often looks upon the stems and flowers of language, the highest achievements of thought and poesy, as mere handles by which to pull up the grimy tubers that lie at the base of articulate expression, shapeless knobs of speech, sacred to him as the potato to the Irishman."

A few years' study of Latin in the High School does not necessarily give one a command of an English vocabulary. As stated in an earlier part of the paper, many of the 24 Latin students in one class tried to interpret the Latin by means of the English and showed little evidence of having gained much, if any, etymological insight. Furthermore, a list of 30 words of Latin origin,¹ rather well known to fairly well read people yet not very common in ordinary conversation, was given to a seventh grade class, to a second year high school class, and to a college class in English. Some of the seventh grade class who had read considerably had a very good acquaintance with these foreign words and defined many of them very keenly, whereas many of the high school and of the college classes, most of whom had had Latin, showed a surprising ignorance. This little test indicates that it is quite possible to acquire a good English vocabulary without Latin and that a few years of Latin may almost totally fail to give help toward a mastery of one's mother tongue. That a child may get command of our words of foreign derivation without a knowledge of Latin is quite natural, since many of these words have become thoroughly incorporated in our language and are almost as English as the Teutonic words which our forefathers brought over from the continent of Europe. Most of the foreign words that were found in the children's vocabularies came in in very early times, and many of them came from Low Latin where they

¹ For this list I am indebted to Mr. W. Libby, Fellow in Clark University.

already had been tinged with Teutonic thought or had even been borrowed from northern races. Our words of foreign derivation, says Professor Matthews, have all of them been assimilated by the English language and we use them without giving a thought as to their foreign origin. We have made them ours, he says, once for all, and they are incorporated in our speech finally to be governed by all the rules of our own language.

This is not a philological but a psychological question. The high school student is not helped by spending a large portion of his time and the best part of his energy in, or in preparation for, "philological microscopy;" when a word fraught with meaning and emotion comes ringing into the soul it is the time to get a little life history of the word if you will, not only of the Latin, but of the home-bred and Indian as well, then it may be truly helpful. But the roots that the student finds by the long and wearisome Latin road are often not appreciated because of the company in which they are found. Moreover, language did not begin with the Latin, nor was it created in any other period of the past. It is being created now as well as in ages past. It is ever changing; and this living, ever-creating activity is of vital importance and not the burnt cinders of ages past. Whatever value they may have, they do not represent our language. Language as used on the platform and on the pulpit, by the common laborer, by the street-urchin, and by the press, as used by the writers and singers of this age—when intellect is at white heat, and passion in its very throw—that represents the language of to-day. Such language studied in the height of its activity gives us the true meaning of words. Whether the word was borrowed from Latin, from Greek, from Hebrew or Choctaw, it now is English and as English we study it; the etymology is a secondary matter. This idea was recognized by the makers of the Standard Dictionary when they placed the etymology after the definition.

It has been found again and again that modern languages are more easily learned by children than classical languages, because they are better adapted to their mode of thinking. Some of the students of the afore-named high school Latin class who almost completely failed in Latin had very good grades in German or French. It is not only good pedagogical principle to let the study of modern precede the study of the classical languages, but it often is of far greater value to the student since thus, if his school life ends with the high school, he at least "lays down tracks on which more of the traffic of later thought and life will go." It is true, by this plan most high school students will not know Latin, neither do they now with

all the effort put forth, but with the same effort they would know one or two modern languages so that they could use them for information and culture ever afterward.

It is not the aim in this paper to deny the value of Latin study, but rather to defend the idea that Latin take its place among, not above, other subjects of study. It need not be excluded from the high school, though it is a subject ordinarily better adapted to maturer students than high school beginners, but the feeling should not prevail that Latin has a peculiar educative power superior to other studies; nor should this study be forced upon the student, neither by the parent nor by the school, for the results show, in Germany as well as here in America, that such forcing proves disastrous. The writers quoted in this paper do not deny the value of the classics, but hold that the time of their dominance is past, that other studies may be pursued in place of Latin and Greek without detriment to culture nor to mental discipline, and without any sacrifice of sanity and serenity of thought. As is pointed out by many writers who defend the modern studies, it was well enough to study the writings of antiquity in the language of antiquity exclusively when the modern peoples had no literature, no language, no written history, and science had not developed. But all this has changed. But this is so well known it need not be repeated. Not only is classical antiquity accessible to us through masterful translations which give us a knowledge of the thought and the social conditions of the times better than any high school student gets by a study of the originals, but western civilization, since the time of the Romans, has produced a number of great men, in all the domains of human activity, whose works would make an excellent bible of that period. Their nearness to our present civilization makes their works in most cases preferable to those of antiquity as subjects of study in our secondary schools. And if science is questioned as being superficial and materialistic, it has long outgrown such suspicions; it has taxed, as we know, the massive intellects of a Darwin and a Helmholtz, and the idealistic optimism that prevails among our great lights of science is not surpassed by any of the students of the classics.

In conclusion, I wish to acknowledge my indebtedness to President G. Stanley Hall, Dr. A. F. Chamberlain, and Professor R. C. Bentley of Clark College, for assistance, and also and especially to those who so kindly helped me to the data in this paper.

BIBLIOGRAPHY.

Some of the less well-known books are annotated. The others either have a title which is self-explanatory, or are so well known to the readers of this journal that they need no further comment.

1. CHAMBERLAIN, A. F. The Teaching of English. *Ped. Sem.*, June, 1902, Vol. IX, pp. 161-168.
2. EMERSON, O. F. A Brief History of the English Language. New York, 1896, pp. 267.
3. GREENOUGH, J. B., and KITTREDGE, G. L. Words and their ways in English Speech. New York, 1901, pp. 431.
4. HALL, G. STANLEY. Adolescence. Chap. 16, Vol. II, pp. 449-560. New York, 1904.
5. HEMME, A. Das lateinische Sprachmaterial im Wortschatze der deutschen, französischen, und englischen Sprache. Leipzig, 1904, pp. 1235.

This is a sort of Latin dictionary containing only such words as have produced derivatives in German, French, and English. The German definition of the word is given first, followed by the derivatives in one or all of the above-named three languages. After the dictionary proper, are given three lists of words, German, French, and English, derived from the Latin, and a fourth list containing the Italian, Spanish, and Portuguese words which serve to elucidate the etymologies of the words in the first three lists. At the end of each word in all four lists is a definite reference to the page of the dictionary proper where the etymology is treated. The English list contains approximately 5,000 words.

6. LEHMANN, R. Erziehung und Erzieher. Berlin, 1901, pp. 344.
7. LEXIS, W. Das Unterrichtswesen im Deutschen Reich. Berlin, 1904, six vols.

These six volumes, written by experts, were prepared for the St. Louis Exposition. The work treats of the present conditions of university, secondary, common school, technical, and industrial education in the different states of the German Empire. Each section has an historical introduction and contains valuable statistics. In Vol. I, devoted to universities, we have a general discussion of the different faculties, followed by a very brief historical sketch and by statistics of each university separately.

8. LEXIS, W. Die Reform des Höheren Schulwesens Preussens. Halle a. S., 1902, pp. 436.

This work is written by a number of prominent educators of Germany and edited by W. Lexis. It is a history of, and a commentary on, the new school reform movement in Germany. The privileges of the different higher (secondary) schools, the different subjects in the programmes of study, physical education and school hygiene, the training of teachers, and other allied subjects are discussed. The general attitude is in sympathy with the reform movements of 1892 and 1900.

9. MARSH, G. P. Lectures on the English Language, First Series. Revised, 1885. New York, pp. 583.
10. MCCREA, NELSON G. The Latin Papers of the College Examination Board. Ed. Rev., 1904, Vol. XXVIII, pp. 28-37.
11. PAULSEN, F. Geschichte des Gelehrten Unterrichts. Leipzig, 1885, pp. 811.

This is an excellent history of higher education in the schools and universities of Germany from the Middle Ages down to 1885 with special reference to the classical languages and literature. A revised edition has appeared since 1885.

12. SCHULTZE, F. *Deutsche Erziehung*. Leipzig, 1893, pp. 332.

This work is mainly a discussion of pedagogical principles. In Chap. xi, in which he deals with methods and subjects of instruction, he defends the idea of letting the study of modern precede that of the classical languages, and that the former should be learned orally and not by means of grammar.

13. SCOTT, C. P. G. Number of words in English and other languages. *The Princeton University Bulletin*, 1902, Vol. XIII, pp. 106-111.