r a college man's life work is really

begun, he will soon become conscious of the monotony of his daily routine, interesting

imposters? They have been led astray by their ignorance and have proclaimed the fact to the world in the most public and perni-

cious manner.

Besides the study of the physical sciences affords one of the best forms of mental discipline. The speaker then graphically and learnedly reviewed the benefits that would

learnedly reviewed the benefits that would accrue from the study of physiology in its relation to the laws of health and heredity; psychology and the origin of all mental action of zoology from the lowest form of living matter up to the most intelligent animal; biology and the great men who have shone in the actence; botany in its connection as a link between the animal and mineral kingdoms; forestry in its effects on vegetable life; geology, reveating the unwritten history of the planet on which we live; astronomy and the insight it affords to the sidereal heavens. Chemistry, physics and electricity were also

NEED OF BOOKS.

Investigation and, if we please, experiment, will naturally follow later on, but at the outset we need to thoroughly make acquaintance with the subject in hand and to learn what others have observed and done, and this we can only gather from the books. In them we find recorded the investigations of those who have preceded us: the labors they have performed, and the results reached.

They are our storehouses of knowledge, from which we can draw at will. Vast in number and almost inexhaustible in matter we find them of such a varied character as to suit both the novice and those more ad-

we find them of such a varied character as to suit both the novice and those more advanced.

To books in general and their value, it were hard to find a more concise and beautiful tribute then that paid them by the great Italian poet, Petrarch.

He says:—"I have friends, whose society is extremely agreeble to me; they are of all ages and of every country. They have distinguished themselves both in the cabinet and in the field, and obtained high honors for their knowledge of the sciences. It is easy to gain access to them, for they are always at my service, and I admit them to my company and diamiss them from it, whenever I please.

"They are never troublesome, but immediately answer every question I ask them. Some relate to me the events of past ages, while others reveal to me the secrets of nature. Some teach me how to live and others how to die. Some by their vivacity drive away my cares and exhiterate my spirits, while others give fortitude to my mind and teach me the important lesson how to restrain my desires and to depend wholly upon myself.

"They open to me, in short, the various av-

After having awakened an interest and laid a foundation for knowledge by the study of books, we need to go to nature herself for further information. It is just here that the studies prevent their hygienic chaim in a studies provent their hygienic chaim in a studies provent their hygienic chaim in a studies provent their hygienic chaim in a studies are studies as a studies are studies are studies as a studies are studies are studies are studies as a studies are studies are studies as a studies are studies are studies as a studies are studie

studies prevent their hygienic claim in a most positive manner.

Most meu, actively sugaged in the pursuit of their vocation, need some stimulus to draw them out into the fields and the woods, where alone they can receive the benefit of nature's therapy. And what more calculated to take them there than to feel that there is something awaiting them, which they greatly desire and which cannot be obtained without a visit.

OUTDOOR LIFE REQUIRED.

If, as we are told, more outdoor life is needed to preserve the proper tone of health, what more delightful way could be devised for obtaining it than the study of natural science, which, while it takes us where beatth may be found, turns aside the channel of our daily thoughts and adds immensely to our store of knowledge.

White we have books on which to ground our study and observation by which to broaden it, we still need to extend it by mix u.o examination, especially in the departments of zoology, botany and mineralogy.

In the study of sciences, our first and

## THE COMMENCEMENT SEASON.

THE ORATIONS PROM MEMBERS OF THE GRADUATING CLASS, F. & M. COLLEGE.

tion-The College Chapel Ro-Echoes With the Elequence of the Young Orators.

baugh hall, on Wednesday afternoon, though brief and few, and of a different character from those which generally mark the con-sion, were very impressive. Mr. Cosana's tribute to Dr. Nevin was in excellent laste. Dr. Weiser's oulogy was admirably Rev. Cyrus Cort very effectively traced the erate means, who had been a student of Dr. Nevin's writings, and had come on at this season, and made a donation of \$2 000 to the

institution.

At the observatory dedication, Dr. J. O. Miller, of the committee of trustees, presided and delivered the invocation; Rev. Dr. T. G. Apple read the dedicatory service, and the closing prayer was made by Rev. Dr. K. R. Eshbach. The paper read by Prof. Kershner, contained much valuable information as to the equipment.

nediately after the dinner the guest J. O. Miller, of York, presided, and led in prayer. J. B. Kershner, professor of mathematics, followed in a lengthy address in which he stated that though the observatory was not finished, it was thought that this was the proper time to desticate it, as next year the centennial celebration will occupy the attention of the alumni and friends of the institution. The observatory is all completed but the dome, which will be finished by the end of June. The transit instrument and the chronograph are in working order and the telescope is ready to be put in piace when the dome arrives. The completion of the dome was delayed by the late spring. In conclusion he sisted that the observatory would probably not have been built for many years had it not been for the original gift of \$10,000 by Mrs. James M. Hood, of Frederick City, Md., and alumni and friends of the institution feel the highest regard for the founders of this monument as a "daughter's grateful tribute to a father's memory."

Dr. Thes. G. Apple now performed the dedication earemony, and in accordance with Mrs. Hood's wishes named the building the "Daniel Scholl Observatory." Dr. E. R. Eschbach, of Frederick, Md., offered prayer and the spectators for ming in procession marched to college chapel, where the principal address of the exercises was delivered by Prof. C. A. Young, of the College of New Jersey, Princeton, N. J., a brief abstract of which was already been given.

The address of Dr. A. Young, of Princeton, was published in yesterday's INTELLIGENCER.

evening to hear Dr. S. H. Guilford's alumn Titzel and the theme of his address was

The speaker began with a tender reference to the ties of college life, and the joy at their uition in the future. Passing ne modern innovations in college curricula, he warmly defended the study of the dead languages, and he believed that it would be the almost unanimous verdict of approval of the atumni that old Franklin and Marshall had held to her old moorings in

legiste education have prevailed in the past one, that the true function of a college was to satisfy a young man with knowledge; the other, that college training was especially and almost exclusively valuable in fitting young men for the learned professions.

"The former and older of these illusions, is happily dispelled, and it has come to be very generally understood that college study and training is not intended to secure to the student a mass of knowledge, but rather to bring out and develop that which is already in him. It cannot create a new faculty, or develop one that is not already there, but it does aim and should succeed in making the most of those powers with which the individual has been endowed. It is a training school, per se, and only pretends to prepare for the ready and systematic acquirement of knowledge after his training has been completed.

for the ready and systematic acquirement of knowledge after his training has been completed.

"The latter and more modern fallacy, that a college course is useful as fitting for a professional career but not for any other, is, we think, quite refuted by the facts. The greater number of colleges springing up all over the land with their yearly increasing list of students; the greater number of these students who are fitting themselves for vocations other than the learned professions; the testimony of college-bred men in mercantile and general business life; and the constantly expressed regret on the part of those who have been demed the privilege of a college course, all bear witness to its value.

"While believing that a collegiate course is of undoubted benefit to all who can avail themselves of it, it were foolish, in the face of every day observations, to contend that its possession would of itself remove the difficulties of life and lead to success in any department.

"Success in any vocation is dependent

department.

"Success in any vocation is dependent upon a variety of qualifications and conditions, and if these be not present in the individual the possession of a college degree will not save him from failure; neither will the absence of the degree prevent his success if they be present."

VALUE OF MENTAL TRAINING. "Many college-bred men fail to attain success in life, while many who have never enjoyed college advantages have met with conspicuous success. The superficial ob-server, noticing this fact only, draws from it the conclusion that college training, while a very pretty ornament, is really valueless as a help to success in life.

non-success of the collegian in certain cases would argue either the non-use or misuse o valuable advantages; an unfortunate choice of avocation, or lack of fixedness of purpose and determination. Abstractedly, it would be hard to find an individual who would con-

teach me the important lesson how to restrain my desires and to depend wholly upon myselt.

"They open to me, in short, the various avenues of all the arts and sciences, and upon their information I may safely rely in all emergencies. In return for all their services they only ask me to accommodate them with a convenient chamber in some corner of my humble habitation, where they may repose in peace; for these friends are more delighted by the tranquility of retirement than with the tumuits of society."

We are not required, as in former years, to gain our knowledge of the sciences by the perusal of books strictly didactic in their character, and thus in a measure uninviting; but as if to lure us to the study of that which we need, we have books offered us in which the subjects are presented in so plain and beautiful a manner as to make the reading of them a positive delight.

Besides the science primers which are calculated to give us exact and moderately complete introduction to the sciences, we have such charmingly written works as those of Gray, and Wood, and Packard, Proctor, Miss Buckley, John Burroughs, Charles Kingsley, Jean Mace and others, so ingeniously constructed as not only to entertain and instruct children, but adults as weil.

In addition to books, we have magazines or periodicals entirely devoted to science, with which to broaden our knowledge, and so great has become the demand for general scientific information that there is scarcely a popular magazine published in which a scientific article does not appear in each of its numbers.

After having awakened an interest and and determination. Abstractedly, it would be hard to find an individual who would contend that education could be a hindrance to man in any sphere of life, or that a well trained mind did not possess a value where ever placed, and if this be so, we cannot understand why a college graduate should not possess inberent advantages over his teas fortunate fellows. That he should not excel him, in certain instances, argues only that he with greater advantages has permitted himself to be outdone by one to whom those advantages have been denied.

"The true value of mental training and discipline as accomplished by a judicious college course is perhaps to no one more apparent than to him whose province it is to train young men for professional or other life work. Those who have had the advantage of collegiste instruction are readily distinguishable from those who have not. The power of the former to readily grasp presented truth and easily retain it; their ready reference of effect back to cause; the systematic arrangement of apprehended facts to as to be at all times readily available; and the case and comfort with which all their mental effort is put forth, makes them at once conspicuous among their less fortunate associates."

NATURAL SCIENCE AS A POST-GRADUATE

Mr. Guilford then urged in vigorous lan-uage the claims of natural science as a post-traduate study, declaring that college train-ng should not be exclusively for future anould not be started by the start of the start of the foundations for broad culture in the sto come. Linked with the pursuit of rail science is physical well-being. The the of professional men are daily wrocked

LANCASTER, PA., THURSDAY, JUNE 17, 1886.

by ceaseless devotion to his calling. Unin-

and awaken within him feelings of the most perfound reverence.

Unlike the talescope, whose possession is limited to the few, the microscope is within the reach of all, and when we consider the range of its applicability and the fact that objects for its investigation are to be found everywhere in nature, unlimited by climate, locality or medium, the wonder is that its possession and use are not more universal.

We have thus hastily and imperfectly sketched the leading features of some of the natural sciences, and the incentives to their study, in order to impress upon you their claims for post-graduate consideration.

A GREAT FIELD.

one best suited to our tastes and pursue it farther.

Says a recent writer "At least one science should be acquired by every well educated person, should be carried into detail, pursued experimentally, and pushed to its boundaries. He should be brought face to face with the stern problems of nature, and learn to wreatle with the difficulties she offers; only thus can he truly know how much is meant by the word "truth," and get the discipline that will give value to his other scientific studies."

Examples of men who have done this, are without number, and many of them, to their greater credit be it said, had been without the advantage of the mental training afforded by a college course. Besides ministering to their own pleasure in pursuing their special lines of investigation, they have slimulated others by their example and brought some renown not only to themselves but also to the community in which they lived. This goodly city of Lancaster will long be proud of the labors of a Rathvon, a Porter and a Stauffer.

The definite knowledge already attained in any branch of the sciences, is small as connexted with that still to be revealed. In

The definite knowledge already attained in any branch of the sciences, is small as compared with that still to be revealed. In view of this fact, do we not owe it as a duty to do something toward the advancement of that line of study which has for so long a time been our benefactor? Well has it been said, "When nature becomes the subject of study, the love of nature its stimulus, and the order of nature its stimulus, and Adjourned Alumni Meeting.

the latter should be. Certainly a diversion can lose none of its charm by having associated with it an element of usefulness, while the gain must be apparent to everyone.

"Fortunately, we have at command a means of entertainment which while it affords perfect relaxation unites with it a most admirable means of real mental culture. We refer to the study of the natural sciences. "Who of us does not remember the pleasure afforded by our first insight to these studies during our college course; how fresh their truths appeared by contrast with some of the drier metaphysical studies; how easily the facts were acquired and readily retained; and how almost insensibly we were led to a fair comprehension of them by the beautiful and symmetrical order of their arrangement.

"Studies of this character, which were fascinating to us then, should prove much more so now with more time in which to prosecute them and more mature minds to bring to their comprehension. If there were no other value in the study of the natural sciences than the mere information it brings to us, this would be a sufficient incentive to the study. We cannot afford, in this age, to be ignorant either of the cause of physical facts occurring under our eye, or of their proper meaning and relation. The world expects of us, and we are not fulfilling our highest duty unless we possess, at least a fair acquaintance with the great world of nature which surrounds us. Ignorance upon this subject, even though we be highly educated in the line of our special work, stamps us as incomplete men, men of but partial culture. Do we not constantly mest with persons, accounted cultivated and accomplished who are unable to intelligently account for some of the ordinary phenomena in the physical world, and are we not mortified and chagrined every day of our lives by seeing the names of those whom we considered wise and intelligent affixed to the testimonials of chariatans and imposters? They have been itel astray by their ignorance and have proclaimed the fact adjourned meeting of the Alumni association was held. A vote of thanks was tendered Dr. Guilford for his address, of which several of the members spoke in very high terms of praise. The selection of Gen. B. F. Fisher

The following minute reported from a com-mittee appointed by an informal meeting of

The sorrowing sons of Marshall, and of Franklin and Marshall colleges, as well as of the theological seminary of the Reformed church in the United States, institutions, litthe theological seminary of the Reformed church in the United States, institutions, literary and religious, once planted at Merceraburg, and transplanted in Lancasier, Pa., whose honored headmaster and life-long patron had been the late lamented and widely distinguished John Williamson Nevin, doctor of theology, of laws, and of Christian philosophy, would express and record the high regard and filial affection they ever cherished for the great learning, efficient service, and saintly life of their venerable proceptor; and their deep sense of bereavement occasioned by the final departure of their moble chief; as well as their comforting assurance of his ascension, like another prophet in Israel, to reap the eternal fruits of his earnest devotion to truth, the good of mankind, and the glory of Christ's kingdom on earth; and their sincere prayer, that his unsuited mantle may fall upon all his spiritual children, who loved him as a lather in God. They would also render their tribute of love and affection permanent and ever green, by erecting such shrines for their reverent sentiments, yes, such a series of memorials, as shall perpetuate his memory through all the after-ages of the institutions, to whose rise, maintenance, and growth he so constantly and diligently contributed of his strength and wisdom, and so fully animated them by his genius and spirit, as to characterize them a distinctive school of thought, whose name and fame extend over our own and other times and lands.

More especially would the clergy and

and other times and lands.

More especially would the clergy and laity of the church, whose standards he espoused as his own, at the call of Providence, laity of the church, whose standards he espoused as his own, at the cail of Providence, and within whose walls he stood as a prince in Christendom, hope that the children of her faith in coming generations may never cease to learn and remember, how, under Got, the Reformed church in the United States emerged from her local and provincial state into a significant and constituent tody of American Christianity, through the untiring and self-denying zoal and sacrifice of John Williamson Nevin, whose field was the empire of truth; at whose feet the thoughtful admirers willingly sat, and whom the scholarly controversialist even of American, Anglican and German Christendom regarded as a worthy antagonist for the last half century. garded as a worthy antagonist for the is half century.

The association then adjourned after

seting of unusual interest and spirit.

Reunion of Class of 61. the 25th anniversary of their graduation after the alumni address of Dr. S. H. Guilford last ovening. The reunion was held at the hotel of George Al. Smith, on Centre Square, and was a most delightful occasion. The following members, being nine of thirteen survivors, were present: Rev, W. C. Cremer, A. J. Eberly, esq., Dr. S. H. Guilford, Rev. A. J. Heller. Rev. T. Frank Hoffmeler, S. P. Raber, esq., A. C. Reincehl, esq., Rev. W. H. Snyder, Rev. John P. Stein. A pleasing feature was the presence of Mr. Abraham Mickley, of Waynesboro, a member of the class in the freshman year. To entitle him to be present it was necessary for him to have a degree, and the degree of doctor of agriculture was formally conferred, and a diploma properly signed by all the members was handed him. The banquet was elegantly served in regular courses of little neck clams, turtle soup, devilled crabs, frogs, chickens, fruit, berries, coffee and other refreshments usual on great occasions. It was resolved to have another reunion next year, and Rev. A. J. Heller was elected chairman for the coming year. evening. The reunion was held at the hotel

THE BACCALAUREATE ADDRESSES.

Abstracts of the Graduating Orations of the Tea Young College Orators.

Despite the threatening weather the college and its yieinity was a scene of bustling activity from an early hour this morning. At 9:30 a. m. the faculty of the college, the board of trustees and the senior class, numbering twenty-eight, filed into college chapel, the faculty and trustees occupying the right and the graduating class the left of the stage. The chapel was filled to overflowing with a very intelligent audience, composed for the most part of the men of the graduating class.

Folioning is a complete list of the names

and eddresses of the twenty-eight young gentlemen who received their diplomas as bachelors of aris to-day: Daniel Weitzel Albright, Reading, Pa.; M. M. Balliet, New Mahoning, Pa.; Lloyd E. Coblentz, Middletown, Md.; George M. Dorwar, Lancaster, Pa.; C. Resses Eaby, Lancaster, Pa.; John Henry Gerhart, Lancaster, Pa.; A. H. Hertst, Pottstown, Pa.; J. Ressier Kauffman, Fisher's Ferry, Pa.; Charles H. Keller, Funkstown, Md.; W. R. Kieffer, Chambersburg, Pa.; A. Marion Rifer, St. Petersburg, Pa.; Charles Krall, Schaefferstown, Pa.; Stanley L. Krebs, S. Littlestown, Pa.; Paul A. Kunkle, Harrisburg, Pa.; A. L. Little, Saxton, Pa.; George J. Lisberger, Bath, Pa., A. R. Lutz, Fritz-town, Pa.; D. Franklin Mauger, Douglassville, Pa.; J. Harvey Mickley, Waynesboro, Pa.; C. Herbert Obreiter, Lancaster, Pa.; Charles A. Santoe, Cavetown, Md.; Charles David Schaeffer, Kutztown, Pa.; Daniel H. Sensenig, Lancaster, Pa.; George P. Stem, Stemton, Pa.; Sofelion E. Stofflet, Siegfried's Bridge, Pa.; George B. Walbert, Macungle, Pa. Pa.

Ten of the above named delivered addresses, the abstracts of which are here given:

The salutatory—"Leisure and its Use," D. F. Mauger, Douglamville, Pa. a pleasing and happy manner, the speaker passed to the consideration of his theme, say-ing leisure properly signifies unoccupied time. A man of leisure is a man who has nothing to do; a condition supposed to be honorable in these countries where false

ur own. But we use the word leisure in a somewha narrower sense as designating the interval of relief which men who follow a regular calling have from their more pressing engagements. The satisfaction of our temporal wants demands some labor, but to many men it is the business of life, a mere merchant; a mere business man. Who would be content with such a designation? What respect can one feel for such a character? All he gets from the world is the credit of being worth so much money. The names of such men die with them, nor does marble, granite or history preserve the memory of their sordidness. Those who have done most for all branches of science have been men who have wrested from toil time for its generous and ennobling services. The intervals denominated leisure are those in which our proper life should be formed, and therefore should be sought and guarded. After referring to the manner in which leisure can

"THE STRUGGLE AFTER IMMORTALITY." Oration-"The Struggle After Immortal ity," by A. I. Little, Saxton, l'a. How many school boys are there who, as they read the motto, "Nothing is impossible to him who wills," have not allowed their minds to carry them away into bright dreams of future greatness? Yet how many have suc ceeded? If we go to some cemetery we find them lying there, thousands of upturning faces. There was a time when fire flashed forth from those vacant orbits; when dreams slave did more for the liberty of Rome than an entire army could have accomplished, but it does not tell us the name of one of does not tell us the name of one of It rewards their noble deeds by

these. It rewards their noble deeds by forgetting their very names.

The scientist, the novelist, the poet, all are striving to attain this end. Where do we meet with books that were in circulation a few centuries ago? How many of the names of the authors are remembered now? And now as we behold a modern library filled with new books, boldly standing forth in their rich gilding and binding, weil may we wonder how many of these will be left a century hence. For a short time tribute is paid to them by their admirers, but soon a generation passes away, their names are less and rumor, a local sound, like the bell that has just toiled, filling the ear for a moment ling-ering transiently in echo, and then passing away like a thing that was not."

"IRRESISTIBLE DICTATION," Oration-"Irresistible Dictation," by A. R. Lutz, Fritztown, Pa. Men generally sur-prise us. The unexpected generally happens. Here are two enigmas of human life at prise us. The unexpected generally happens. Here are two enigmas of human life at which we guess and guess away. There is a law of diversity permeating all creation. There is endless variation. A similitude of this law is found in music. By irresistible dictation is meant the hidden forces that direct and shape the life of each individual. As Pythia spoke whalever the unseen powers dictated, so there are such divinations existing now in the lore of classic Greece. It is fortunate for us that the star of our nativity shone on us in the temperate zone where the scorching rays of a tropical sun does not make intellect and spirit feeble and inactive. When we come to the spiritual constitution of man, the true significance of our subject becomes evident.

We are born perhaps gifted, perhaps with the highest genius or doomed to the life of an idiot. Nature cuts all kinds of capers and yet there seems to be a law of compensation. She fashions a dude sleek and slender and then casts him off without any brain. The speaker, referring to the various influences that are exerted upon the individual character, said, "Let us not delude ourselves by taking consolation in the saying, "it was so to be." Man, take care of thy faith, for faith is stronger. "Come all ye that are weary and heavy laden and I will give you rest." But who knows the longings and doubts of the human heart? We hope and mistrust, then hope again and again, and yet, and yet,"

Oration—"Our Age," by C. H. Obreiter, Lancaster, Pa. In order to understand our own age properly we must remember that it is the outgrowth of all the preceding ages, each one of which has had its one of which has bed its own one of which has bed its own one of which has bed its own of the control of the c is the outgrowth of all the preceding ages, each one of which has had its own characteristic tendencies by which it is widely separated from all others. In ancient Greece, for example, the idea of beauty reigned supreme, and in Rome strength and stability. In our own age we see several tendencies that are exerting a great influence over its development. The first of these is the utilitarian, that we need useful knowledge rather than that which pertains to general culture. Men influenced by this principle argue that nothing should be learned that is not used in every day life. Another tendency that exerts a vast influence upon our age is the mechanical. Men have grown mechanical in head and heart as well as in hand. In politics, for example, everything is managed by machinery; men forget that the properly constituted state is an organism. They have lost their faith in the invisible; only the material, the immediately practical, not the spiritual, hold an important position among us. The injurious effects of these two principles, the mechanical and utilitarian, are partially counteracted by the tendency to the diffusion of knowlege. Education is opening the eyes of the humblest and is increasing the number of thinking minds, and as the happiness and greatness of mankind have been progressive, so let us hope that our age is advancing to a higher rank than any that has preceded.

Oration—"Right vs. Duty." by C. A. Saneach one of which has had its own character

" RIGHT VS. DUTY." Oration-"Right vs. Duty," by C. A. Santee, Cavetown, Md. Man is a social being, and the idea of his social relation lies back in and the idea of his social relation lies back in the original idea of humanity. There is a tendency in every individual to unfold himself in some form to his fellow-man. Mankind is an organism, and comes into the world amidst social relations. In the actualization of man's individuality from the spiritual side, the spiritual world meets him in the form of the true, the beautiful, the good, and the religious. In the good we have the idea of right, which defines the individual existence, especially in its relation to the general existence of society. Duty is virtue put into practice. It may be analyzed and classified, but considered as an obligation it is one. Right and duty always bear a certain relation, so that they depend upon each other. We often hear the expression, "The world owes me a sustenance," Here we

have right against duty in its simplest form. There is also another relation, namely, that which exists between right and duty in the same person. We find these relations illustrated in this grand old document, "The Declaration of Independence." We enjoy a right to life, also a right to freedom or liberty, which implies the opportunity to exercise the functions of life unimpeded. The speaker concluded by saying: "Let us free ourselves from the prejudices which an erroneous expression invariably generates, and unity of action our purest measure of right will be the result."

Music—Waltz—"O, He Mama."

Oration-"The Human Arm," by C. D.

Schaeffer, Kutztown, Pa. Several decades ago Prof. Pierce, of Harvard University Schaefer, Kutztown, Pa. Several decades ago Prof. Pieros, of Harvard University, demonstrated a very curious proposition in mathematics which has an important bearing upon the mechanism of the human arm. The point of his demonstration wasy be briefly illustrated by setting in motion a lever having one end fixed and a pencil attached at the other end. This pencil will describe a circle. If a second centre of motion is establishing by attaching another lever to the end of the first and removing the pencil to the cuter end of this new lever, it will no longer describe a circle but a more compticated curve. If I take another lever and fix it to the end of the second in the same way, any of the cycles and epicycles of the planets may be described by the path of the pencil. If a fourth, a fifth and a sixth be added in a similar way the pencil may be made to describe any error in higher mathematics, even to the lifth and sixth order. Astronomers no longer use such a series of levers to explain the motion of the planets; but every one in this audience is making daily use of such a series of levers. The shoulder is the first centre of motion; the third is at the beginning of the wrist; and the fourth, fifth and sixth are found in the joints of the fingers. Mathematics thus show that in the human arm the Creator gave to each and every one of us a six-told series of levers with which we can

describe any curve or movement in the fine or mechanical arts.

Well msy we look at the human arm with wonder and admiration. What has the human arm not accomplished? What may it not accomplish in ages to come? The myth of Dardalus, who wished to cleave the air with wings, the Homeric dreams of living ships, the speed of flying horses in the Arabian Nights, the rapidity of communication between places far distant from each other; indeed all the magic powers dreamed of by the ancient and medieval minds have been more than realized by the skill, success and aid of the human arm.

The arm can be set in motion. What is the cause of the motion of our arm? We move and bend our arm, open and close our hand, lift our fingers and point to yonder heavens, merely because we will it, and our conscious-

both cases and the only difference is that the one is constantly dependent on the other. The more I think of the human arm, the more it lifts my thoughts to Him who formed it. For how does the will act upon this human arm? Philosophy cannot teil. Anatomy shitts the difficulty by pointing to a nervous fluid, but how the will acts upon this nervous fluid is a mystery, and this mystery points to a still greater mystery, which envelopes the relation between the Creator and the creature. The highest activity of the intellect, in my mind is not understanding, but faith,— a faith so living that it shall bind

but faith,— a faith so living that it shall bind the neart to God by the cords of love; a faith so humble and obedient that it shall resolv this arm with its hand into an instrumen Oration-"Historical Development," by G. B. Walbert, Macungie, Pa. The history of the human race has very aptly been com pared to a stream of water. Its like that of a great river which are as countiess as human possibilities. The conflict between ignorance and intelligence, though not the most material and visible, is the most stubborn and real. Both are powerful. The conservative and the radical are two forces which operate whenever there is organized society. In the struggles between civilizations the higher has always predominated. The weak Persian civilization came in conflict with Greece, but were forever expelled from Europa. The struggle between despotism and the people is grounded on the sacred and inallenable rights of the individual; it is a struggle for freedom. We cannot help but see that there is a teleology in the development of the race; that there is something that gives direction to this development. If we view the world from the side of intellect and will, it must appear that there are yet many stages. Traced to their last causes all human conflicts are found to be the conflict of error and truth.

Music— Patrol of the Guard." conflict between ignorance and in

of error and truth.

Music—" Patrol of the Guard."
" MUSICAL THERAPEUTICS." Franklin oration—"Musical Therapeu tics," by Stanley L. Krebs, Littlestown, Pa. Man is not only of divine origin, but is also a child of the universe around him. Hts individuality comes not only from a spiritual side, but from a natural side as well. The

side, but from a natural side as well. The influence of music upon the will is great, through the medium of emotional nature. The science of musical therapeutics is subsidiary to that of medicine. We believe that music is not merely an art to please. Every science is based upon certain fundamental and abstract principles. In our science of musical therapeutics we recognize three:

First. The power of mind over matter, or of will over our manners and the movements of the body. This proposition has been taken as an axiom.

Second. The influence of music on the will through the medium of the emotions or sensibilities. The action of the will always depends upon the antecedent action of the sensibilities.

Third. The intimate relationship between the aesthetical and ethical. For the good, the beautiful and the true are real objective entitles, brought together in one vital union.

bjective entities, brought together in one vital union.

Beauty is not merely an abstraction hovering away off somewhere in the distant obscurity of mental space; but it is a spiritual reality. When will a man deserve D. M. to be affixed to his name? asked the speaker, and then in a very forcible manner proved his point by saying, he must be a thorough psychologist and a thorough musician. The oration throughout was something new and the speaker did credit to the Franklin oration.

" LABOR NECESSARY TO E XCELLENCE." Marshall oration—"Labor Necessary to Ex-cellence," by L. E. Coblentz, Middletown, Md. Since the time of man's first introduc-tion to surrounding nature in all its splendor Md. Since the time of man's first introduction to surrounding nature in all its splendor there has been a motive, an impulse imbedded in his very being that urges him on and on in the various pursuits of his life. This indescribable impulse, this everlasting tendency to something higher in every phase and every undertaking, life grows stronger. No degree of excellence in any sphere is attained without labor. Here is a skillful carpenter; he has reached quite a high degree of excellency, but all by hard labor. Excellency in all things can be attained by no man. Human nature is so peculiar, so wisely constituted, pervaded by such a far reaching diversity even within its organic unity. The speaker here referred to what was necessary in manual labor to acquire excellency, and also to what has been accomplished in the past in the different spheres of labor. Then the speaker said a world without labor would make a miserable race of men. Man owes his growth, his energy, mainly to that striving of the will that conflict with difficulty which we call effort. Every work falls to make robust minds, does not give men consciousness of their abilities, and falls to train them to endurance and perseverance. Thus difficulties are sometimes of more importance than assistance. Work we all must if we wish to develope and perfect our nature. The cration throughout showed much thought and was creditable to the Marshall orator.

Music—Medley, "The Rambler."

Valedictory, "The Influence of Man." he

"THE INPLUENCE OF MEN." Valedictory—"The Influence of Men," by P. A. Kunkel, Harrisburg, Pa. There have

been men who have mapped out; for then

been men who have mapped out; for themselves simply a brilliant career. One has said, "A great reputation is a great noise." They have received the plaudits of their countrymen, but they were not content. The spirit of egotism is the bane of our social life. It oppresses and crushes humanity into masses, destroying individuality and causing widespread demoralization. It makes the possessor for a time great, but when the nobler nature of the people stirs to life his fame vanishes. He presents a subtle barrier in the way of progress. But opposed to these there have always been men of virtue whose character we must honor. Their distinguishing characteristic has been their regard to principle. The homage that today is paid to men of true honor demonstrates that theirs is a living influence. It is inspiring all with the thought of the poet Wordsworth, "What one is, why may not millions be."

For the creation of virtuous men, government is not the most effectual instrument. This is the age of the strong and original thinker, and of the individual who improves old modes of education or invents better. This is an age of men who though dead "are moving in triumphant march, nightier than when alive." It is their influence that is giving the world a history.

Few are willing to recognize the puisance of a college. Yet Emerson has said: "The sublime point of experience is the value by the meeting of two such—of two or more such,—who understand and support each other and you have organized victory." This embodies the definition of a college. Through and from its classic waits breathes the silent influence of the learned and the great who have ever lived. At this crystal fountain the instructor increases his influence which he transmits to the student who goes forth into the world to wield it in his turn. Then turning to the board of trustees the valedictorian thanked them for their interest in the college whose very name showed the influence of great men. The death of Dr. John W. Nevin was referred to in an appropriate mann

which the class arose and formed in a cres-cent to receive their degrees, presenting a fine appearance. It would be hard to find a body of young men of more manly and gen-tlemanly bearing.

Dr. Apple then in the name of the board of trustees and in virtue of the authority con-ferred by the commonwealth of Penn-sylvania declared them entitled to receive their degrees and delivered the roll of diplomas, which were reverently revolved from end to end of the line of ex-seniors now alumni.

Then followed the announcement of degrees conferred. In addition to those published yesterday the following were conferred: Degree of master of arts in course upon the following graduates of the class of '83: Lewis Robb, C. D. Moyer, Rev. M. H. Mill, Rev. G. A. Schwedes, Addison C. Snyder, Edw. S. Johnson, M. D., and Rev. D. B. Lady, class of '69.

All arose to receive the benediction and then the audience and speakers, to the strains of Meyer's galop "Rapid Transit" by the orchestra, dispersed full of hope for the future of the men who have graduated with so much honor to their alms mater and themselves.

selves.

The music which was of excellent character was furnished by Prof. Thorbahn's orchestra of ten pieces.

#### ANOTHER VACHT RACE.

New York, June 17.—The regatta of the New York yacht club, in which the four famous yachts, the Puritan, Priscilla, Atlanta and Mayrlower, together with a number of other first-class yachts, are entered, was started nearly on time this morning, the starting gun having been fired precisely at

yachts are now off Coney Island point in the following order: Prescilla a good first, behind with the Atlantic under the May flower's starboard quarter. The Mayflower on all and is now doing well. is barely enough wind to fill the sails. There is a haze close to the water making it diffion the port tack.
SANDY HOOK, 12:50 P. M.—The yachts are

now at Southwest Spit and will probably round in the following order : Priscilla, Mayflower, Puritan, Atlantic; wind refreshing.

## KANSAS CITY, Mo., June 17 .- Nothing of

importance was made known here yesterday concerning the Thompson tragedy in New York. The sad news occasioned a shock to the many friends of the Thompson family and deep sympathy is the general expression. It is not known here whether Dr. Thompson was aware of his marriage, but it is supposed that he was not, as he had not spoken of it to his friends. The family of the lady who was supposed to be young Thompson's fiances, state that there was no engagement between the young people, though Thompson had paid the lady attentions and had corresponded with her until recently. None of the Thompson family are at present in town.

New York Fugitives Arrested.
FERGEES FALLS, Minn., June 17.—Detectives Kernan, of New York, and Box, of Crookston, arrested here yesterday R. M. and Joseph Collins, fugitives from justice in New York, the former being accompanied by his wife. Their crime was grand larceny in the first degree, and they were under ball of \$5,000 and \$6,000, which was furnished by been shadowing them some weeks. Their home is in Poughkeepsie, N. Y., where their relatives are respectable persons.

A Strange Man Missing.

BUFFALO, N. Y., June 17.—George Boyd, an ecentric Englishman aged about 50, has boarded at the Stafford house for over two boarded at the Stafford house for over two years, rarely speaking to anybody and promptly meeting his board bills by means of a monthly stipend of \$100 which was sent him by relatives in England. Boyd was subject to periods of insanity, one of which occurred last Saturday night. He created considerable disturbance and on Sunday evening left the hotel, since which time he has been missing. Fears are entertained of has been missing. Fears are entertained of his having committed suicide.

BUSHNELL, Ills., June 17.—A very heavy wind storm, accompanied by rain and hall, visited this place yesterday afternoon, blowing down fences, etc., and doing some damage to growing crops. Wallace & Co's circustent was blown down, injuring about thirty people, some, it is feared, seriously. The tent was well filled and it is a miracle that no lives were lost. The damage to the circus is quite heavy.

Neal Dow and St. John.
PORTLAND, Maine, June 17.—1t was announced yesterday that Gen. Neal Dow would accept the nomination for governor if his name was presented at to-day's convention. Ex-Governor St. John, who arrived here last evening, was presented at the evening meeting and made an eloquent speech. After the meeting Mr. St. John held an informal execution.

# WASHINGTON, D. C., June 17 .- For

New York, Pennsylvanis, Delaware and New Jersey local rains, followed by fair weather, winds generally westerly,

FOR FRIDAY—Local rains are indicated for New England, with slightly lower tem-perature and local rains, followed by cooler, fair weather, for the Middle Atlantic states.

### MORRISON DEFRATED.

BILL LOST BY 187 20 200.

Test Vote Shows No Chance of The Legislation in This Congress of the

WASHINGTON, D. C., June 17.—[Hos-when the House was called to order morning, there was an unusually large tendance of members. This was due to anticipation that the tariff till would brought to the attention of the House.

After the transaction of some routine mess Mr. Hiscock, of New York, stated there was an understanding that a member of the control of the cont

there was an understanding that a m would be made to-day to go into the con tee of the whole on the tariff bill, and inq

The House by a yea and nay vote declined to go in committee of the whole for the purpose of considering the general tariff bill. The opposing faction have a majority of W. Speaker Carlisle voted in the affirmative.

The roll call was proceeded with withou incident until the name of Mr. Holms incident until the name of Mr. Holman was reached. As the Indiana statesman has been West looking after his fences it was not thought that he would get back in time to vote on Mr. Morrison's motion, but to the surprise of his colleagues, Judge Holman responded firmly "aye"—voting to go into committee for the purpose of considering the bill. The response of Mr. Holman was greeted with applause, and his friends gathered around him and shook his hand condulative.

Morrison tariff bill was defeated was ayes 140 nays 157. The announcement was received

Morrison gave notice that he would renew his motion on Tuesday next, and McKi stated that the opponents of the bill would

The vote was as follows:
Yeas—Carliale, J. J. Adams, of New York;
Allen of Miss.; Anderson, of Ohlo; Ballentine, Barbour, Barkadale, Barnes, Barry,
Beach, Belmont, Bennett, Blanchard, Bland,
Blount, Breckenridge, of Arkanas, Breckenridge, of Kentucky; Burnes, Haynus,
Cabell, Caldwell, Felix, Campbell, of New
York; Cendler, Carleton, Catchings, Ciardy,
Ciements, Cobb, Cole, of Maryland; Comptent,
Comstock, Cowles, of North Carolina; Crain,
Crisp, Croxton, Calberson, Daniel, Dargan,
Davidson, of North Carolina; Davidson, of
Florids: Dawson, Dibble, Doughesty,
Dunn, Fisher, Ford, Forney, Gibson, of
Maryland; Gibson, of West Va.; Glass,
Glover, Green, of North Carolina; Haie,
Halell, Hammond, Harris, Heard, Hemper,
Hewitt, Hill, Holman, Howard, Hudd, Hut
ton, James, Johnson, of North Carolina;
Jones, of Texas; King, Kleiner, Laffonn,
Landes, Lanham, Lore, Lovering, Lowrey,
Mahoney, Matson, Maybury, McCarry,
McMillin, McRes, Miller, Mills, Mitshell,
Morgan, Morrison, Neal, Neede, Nelson, Norwood, Oatea, O'Ferrall, O'Neil, of Missouri;
Outhwaite, Peel, Perry, Reagan, Rese,
Richardson, Riggs, Robertson, Rogers, Badler, Sayers, Scott, Seymour, Shaw, Singleton, Skinner, Snyder, Springer, Stewart, of
Texas: Stone, of Kentucky; Stone, of
Missouri; Storm, Stewart, Swope, Taraney,
Taulbee, John M. Taylor, of Tennames
Throckmorton, Tillman, Townshend, Trigs,
Tucker, Van Falon, Wakefield, Ward, Indiana; Weaver, Jowa; Wellborn, Whoeler,
Willis, Wilson, Winsun, Wiss, Wolford and

Taulbee, John M. Taylor, of Tennasse Throckmorton, Tilliman, Townshend, Tright Tucker, Van Faton, Wakefield, Ward, I diana; Weaver, Iowa; Wellborn, Wheele Willis, Wilson, Winans, Wise, Wolford as Worthington—140.

Nays—tien, E. Adams, Allen, of Massech, sette; Anderson, of Kansas; Arnot, Atkinson Baker, Bayne, Bingham, Bliss, Bound, Botelle, Boyle, Brady, Brown, of Indians Brown, of Ohio; Brown, of Pennsylvanis Brumm Buchanan, Buck, Burrows, Buttworth, Campbell, of Pennsylvanis, Campbell, of New Yor Cannon, Conger, Cooper, Curtin, Cutched Davenport, Davis, Dingley, Dorsey, Dowdne Dunham, Elisberry, Ely, Ermentron, Evas Everhart, Farquhar, Felton, Findiay, Figer, Foran, Fuller, Funston, Gallagher, G. Geddes, Gliffillan, Goff, Green of New Jerus Grosvenor, Grout, Greenther, Harmer, Haden, Henderson, of West Virginia; Hendeson, of Illinois; Henley, Hepburn, Horman, Hires, Hiscock, Holmes, Hopkins, Irie Jackson, of New York; Johnson, of Isalans; Kelley, Ketcham, Lafallette, Laire Lawler, Lefevre, Lehlbach, Libbey, Landley, Little, Long, Loutit, Lymn Markham, Martin, Moadoo, McComas, McKenna, McKinley, Marrims, Millikes, Moffatt, Morrill, Monton, Wuller, Negley, O'Donnell, O'Hara, O'Head, Plumb, Price, Randail, Rassen, Plumb, Price, Randail, Rassen, Plumb, Price, Randail, Rassen, Peyne, Sessions, Smalls, Sowden, Spries, Stahlnecker, Steele, Stewart, of Vannessee; Thomass, of Illinois; Thomass, Wisconain; Thompson, Viele, Wade, Wawarth, Walt, Wallace, Ward, of Illinois, Worth, Walt, Wallace, Ward, of Illinois, Thomass, Wisconain; Thompson, Viele, Wade, Wawarth, Walt, Wallace, Ward, of Illinois, Thomas, Wisconain; Thompson, Viele, Wade, Waswart, of New York; Welley, Walt, Walt, Wallace, Ward, of Illinois tariff bill went into committee of the Waoon the naval appropriation bill.

An Editor's Death.
Madison, Wis., June 17.—H. M. Page, Baraboo, formerly one of the editors of Wisconsin State Journal and a man with known throughout the state, died Tues evening of a complication of brain and it troubles. He was the husband of the so stress Rose Marliani, of the New York

KANSAS CITY, Mo., June 17.—W. D. Carlisle, who shot Dr. Munford, John Hale and Miss Streeter, Monday, was released in evening on bail in the sum of \$1,000 in each

Passenger Rates Reduced.
St. PAUL, Minn., June 17.—The board of railway and warehouse sioners yesterday issued its long tape order reducing passenger rates in Minns to three cents per mile.

WASHINGTON, D. C., June II.—The dent to-day signed the Arthur Kill bill and the bills for the relief of exters Chester A. Arthur and W. H. Rot of New York.

This morning quite an excitent

caused on West King street.
with a very large wagen load
ted to drive into the stay.
Cross Keys stables, and dethe buildings on the
alley—the alley being
than at the catalogs
thought the male way
in wagen and it was parent.
"Nobody hurs."