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# REGISTER

OP THE

# Officers and Students

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# The Lehigh University,

SOUTH BETHLEHEM, PENN.,

WITH

THE PLAN OF ORGANIZATION, THE COURSE OF INSTRUC-TION, AND THE LAWS AND REGULATIONS FOR ITS GOVERNMENT,

PUBLISHED BY ORDER OF THE BOARD OF TRUSTEES.

BETHLEHEM, PENN. 1866.



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### FOUNDER OF THE UNIVERSITY.

THE HON. ASA PACKER, OF MAUCH CHUNK, PENN.

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WILLIAM THEODORE ROEPPER, Esq.,
Professor of Mineralogy and Geology, and Curator of the Museum

#### INSTRUCTORS.

GEORGE THOMAS GRAHAM, A. B.,
Instructor in Latin and Greek, and Secretary to the Faculty.

Instructor in French

Instructor in German.

Mr. George Washington Smith, Janitor. [Nore.—The Lehigh University was formally opened on Saturday, September I, 1866, in the precence of the Trustees, the Faculty, the Students of the First Class, and invited guests. After appropriate religious exercises, the audience was addressed by the Founder, Hon. Asa Packer; by William H. Sayre, Eeq., on behalf of the Trustees; by the President and the Professors; and by the Hon. Judge Woodward, of Wilkesbarre.

This opening was due to the determination of the Trustees to begin with two classes only, which would find ample accommodations in Christma-Hall, the building already erected on the park; in due time, as new elasses come, the rapid erection of Packer Hall will furnish the required room for them.

The Special Schools will be opened on September 1, 1867, when there will consequently be three classes in the institution.]

#### THE LEHIGH UNIVERSITY.

ORIGIN.—During the year 1865, the Honorable Asa Packer, of Maneh Chunk, announced, unsolicited, to the Bishop of the Diocse, the Right Reverend William B. Stevens, D. D., his intention to appropriate the sum of five hundred thousand dollars, and an eligible spot in South Bethlehem, containing fifty-six acres, (since enlarged, by the donation of seven acres by Charles Bredhead, Esq.) the purpose of founding an educational institution in the beantiful valley of the Lehigh, which should bear the name of THE LEHIGH UNIVERSITY. The Bishop was appointed President of the Board of Trustees.

District.—The purpose of the founder in making this munificant endowment was to provide the means for imparting to young men of the Valley, of the State, and of the Country, a complete professional education, which should not only supply their general wants, but also fit them to take an immediate and active part in the practical and professional duties of the time. The system determined upon proposes to diseard only what has been proved to be useless in the former systems, and to introduce those important branches which have been heretofore more or less neglected in what purports to be a liberal education, and especially those industrial pursuits which tend to develope the resources of the country—pursuits, the paramount claims and inter-relations of which natural science is daily displaying—such as Engineering, Civil, Mechanical and Mining, Chemistry, Metallurgy, Architecture and Construction.

It was further believed that the course of four years, provided for in the old system, as the same for all students, was not the best, as many were thus compelled to pursue studies, for which, by nature, they were not fitted, and which would be useless to them in their future professions. While, then, the institution is intended to be of a polytechnic character, the preparatory instruction of two years is designed to fit a young man to pursue any one of the professional courses which he may select.

While such an institution promises to be of peculiar benefit to the Lehigh Valley, and to the numerous other districts of Pennsylvania which are rich in mineral resources of many kinds, its usefulness will not be thus limited; it is intended for the benefit of the whole country: the instruction which it imparts will enable its graduates to play intelligent parts in exploring and developing the resources of all portions of the United States, and in applying the various modes of transporting and interchanging them.

The Style.—It would be difficult to find, any where in this country, a locality for educational purposes, which combines so many and such varied advantages as are concentrated on the site of the Lehigh University. Placed upon the gentle declivity of the Lehigh Mountain range in South Bethlehem, which on that side encloses the river valley, and in the midst of a noble park of forest trees, Packer Hall, the principal University building, stands three hundred and sixty feet above tide-water, and has a magnificent, unobstructed view—over the Lehigh River and the town of Bethlehem—of the Blue Mountains, twenty miles distant.

Facilities of Communication.—The site is about half a mile from the Railroad Depot, which forms the junction of the Lehigh Valley and North Pennsylvaina Railroads, and which is on the same side of the Lehigh River. The facilities for reaching the Lehigh University are numerous and great. It is fifty-four miles from Philadelphia by the North Pennsylvaina Road; eighty-seven miles from New York City, by the Lehigh Valley and New Jersey Central Railroads; and it communicates by the Lehigh Valley Road, in the other direction, with the rich and rapidly developing central portions of Pennsylvania. The Lehigh and Susquehanna Railroad is also in process of construction, and the Lehigh and Lackawanna Railroad is graded from Bethlehem to the Wind Gap, and when completed to Stroudsburg, will connect at that point, with the Delaware, Lackawanna and Western Railroad.

The health of Bethlehem is proverbial. The air is pure and

extremely invigorating. The water in the University grounds and buildings is excellent, and free from limestone. The swiftly flowing Lehigh does not produce those ailments which are found on the banks of larger and more sluggish streams.

THE UNIVERSITY BUILDINGS .- Packer Hall, named in honor of the munificent founder, stands seven hundred feet back of Packer Avenue, the front limit of the University grounds; it presents an imposing facade of handsome stone. At the western extremity is a belfry tower, containing the President's room and the Archive room, all fire-proof; at the eastern end is a large advanced wing, four stories high, in which are the lecture and recitation rooms, The central portion, eighty feet long, contains the chapel, library and cabinets. The entire length of Packer Hall is two hundred and thirteen feet. On the right and left of it, descending the hill in echelon, are being erected the houses of the President and Professors, handsome stone buildings which comport architecturally with the great Hall. The Architect is Edward Tuckerman Potter, Esq., of New York. Situated on Packer Avenue, towards the eastern extremity of the grounds, stands Christmas Hall, a large and commodious brick edifice, containing a chapel, lecture rooms and student's dormitories: it is used for the University exercises, until Packer Hall is completed. Packer Hall will be completed in about eighteen months from November 1, 1866.

## GENERAL PLAN.

The courses and subjects of study are set forth and arranged in the following manner:

The First Two Years.—These are devoted, by all regular students to the study of those elementary branches in which every young man should be instructed, for whatever profession or business in life he may be intended, viz: Mathematics, Languages, Chemistry, Drawing, Elementary Physics, Physiology, History, Rhetoric, Logic, Declamation and Composition. At the end of two years, having acquired this necessary knowledge, the student, following the bent of his own mind, and aided by his parents and his professors, will be ready to select some special professional course, to which all his studies and efforts will be directed. To enable him to do this there are several schools, which branch off from the end of the common course. In each, the term of study is two additional years, and the student, at his graduation in any one of them, receives a special degree. By this means it is secured that a young man is relieved from the overpowering and confusing study of those branches for which he has no taste, and pursues with cheerfulness the special course which he has selected, and for which he is suited by inclination and intelligence.

The students in the first two classes are called First and Second Classmen. Those in the schools are called Junior and Senior



Schoolmen. A simple diagram will show the relations of the classes to the schools.

The schools at present provided for are: 1. The School of General Literature; 2. Givil Engineering; 3. Mechanical Engineering; 4. Mining and Metallurgy; 5. Analytical Chemistry.

This scheme may be expanded by the addition of

other schools, as indicated by the dotted lines in the diagram. A few preliminary words will explain the nature of the schools.

1. The School. Of General Literature.—In this school, regular students, who have passed through the first and second classes, may continue Latin and Greek, as cocledic studies. Rigorous attention will be paid to French and German Literature, Moral and Mental Philosophy, International Law, Civil Polity, Political Economy and Christian Evidences. There will be extended practice in Composition, in English, French and German and The earlier instruction in French and German being

designed to enable the student to read technical works, and to converse, their further study in this school is intended to make him acquainted with the delicacies of their literatures, and to give him thus a comprehensive comparative view of the entire field of Modern Literature.

Students who complete the stadies of this school shall receive the degree of B. A., (Bachelor of Arts). This school corresponds, with certain important differences, to the course long established in our Colleges; many of the studies, however, being of a higher order, including much that is usually considered of a post-graduate character.

2. THE SCHOOL OF CIVIL ENGINEERING.—The general scope of this school comprises the higher branches of mechanics; surveying; topographical engineering; the experimental examination, location, construction, and general management of canals, roads and railways; Geognesy; Geodeys; Hydrography; with so much of Mechanical Engineering as refers to bridges, canal locks, and spocial constructions used in civil engineering; watering, draining and lighting towns. Students in Civil Engineering will have their regular practice in the field, with the use of all necessary instruments, as a rigorous feature of the course.

To this school is also assigned instruction in Architecture and its applications, but with special stress upon those specific kinds of architecture most used around us.

The graduate in this school will receive the degree of C. E., (Civil Engineer).

3. TRE-SCHOOL OF MECHANICAL ENGINEERING.—The studies of this school will comprise the applications of Mechanics to machinery, in the construction of hand, steam and air engines, stationary, losomotive and marine engines, mills of various kinds, furnaces, foundries, rolling mills; the manner of casting and working in iron and other metals, and of making and using the implements employed in these works; the construction and use of various manufactories; agricultural implements and the machinery of the steading. Much attention will be paid to the drawing of models, and to the analysis and synthesis of machines. The proximity of numerous machine-shops and foundries will enable the student to receive practical instruction in all branches

of mechanical art, and visits to these will form an important feature in the school of Mechanical Engineering.

The graduate in this school will receive the degree of M. E., (Mechanical Engineer).

4. The School of Metallungy and Mining.—In the studies of this school are included Mineralogy and Geology; metallungy, with the modes of extracting all metals from ores; the methods of mining for various ores, with special instruction as to iron, coal, zinc, lead, copper, gold and silver. The aim will be to fit the student for immediate service in the rapidly developing mines of these metals in many parts of our country.

The graduate in this school will receive the degree of E. M., (Engineer of Mines).

5. The School of Analytical Chemistry.—This school will comprise all the operations of chemical analysis, qualitative and quantitative; of inorganic and organic chemistry; the spectroscope; the blow-pipe; assays of every kind; practical problems; the analysis of minerals; mineralogy, geology, metallurgy. The student will have constant practice in the analytical laboratory, under the direction of the Professor.

The graduate in this school will receive the degree of A. C., (Analytical Chemist).

This general statement has been made, divested of details, which are presented in the programme of studies,—in order to give a clear view of the system, and of the relation sustained between the regular preparatory instruction in the classes, and the special professional instruction in the schools.

In the school of Analytical Chemistry, the study of Physics and Mechanics will be continued from the class years. In the schools of Civil Engineering, Mechanical Engineering and Mining, the study of Physics, Mechanics and Chemistry will be continued from the class years, in such proportion as may be necessary in each. It will thus appear that some of the studies will be the same for two or more of the schools, especially in the Junior Year. In the Senior Year the separate and specific subjects of each school will be studied.

#### PROGRAMME OF STUDIES.

In arranging a programme of studies to suit the needs of education in the present practical age, it was necessary to scrutinize the former systems, and to eliminate those studies which have been long demonstrating themselves to be useless, if not injurious; in no way strengthening the foundations of a student's knowledge. It became also necessary, before such changes could be judiciously made, to go back and seek for the true relation which the elementary or foundation studies should bear to each other and the system.

It is remarked, in the first place, that Mathematics, Chemistry, and Language, are the three foundation stones, forming the basis of a practical education. These studies, while imparting practical knowledge, also secure that discipline of the mind which is essential to proper progress.

1. The principles of Mathematics underlie all the mechanical processes in nature and art. Too great prominence cannot there-

fore be given to this branch.

2. The study of Chemistry, preceded by that of the elementary principles of Physics, forms the basis of all analysis of nature as to its composition, affords the knowledge of materials, and the modes of combining materials used in construction, opens and illustrates the subjects of mineralogy and metallurgy; and therefore great importance is given to Chemistry as an elementary branch of learning. Besides, as an objective science, it is particularly attractive to young minds, by the number and variety of interesting experiments which are required to illustrate it.

 It is hardly necessary to dwell upon the vital importance of Languages as a means of study in all the arts, and of communica-

tion with men.

A knowledge of the English Language, as to its structure, and tis varied uses in the accurate expression of thought, cannot be too highly estimated. In order to secure this knowledge, Latin and Greek are studied in such a manner as to trace the English derivatives from those Languages. French and German are taught with the same view, and further as a means of enabling the student to read the best treatises bearing upon his special studies in the Uniwersity and his special pursuits hereafter. The student is also taught to speak these languages, that he may readily communicate with the numerous foreigners of every class, with whom he will certainly be brought into contact if he engage in industrial pursuits. It may be added that the German is the mother tongue of a large portion of Pennsylvania, and of other parts of the United States; and it is also true that the purest German spoken in America is spoken by the educated people in Bethlehem.

With these views the following course of studies has been adopted, subject to such alterations and improvements as the progress of science may render necessary.

#### REQUIREMENTS FOR ADMISSION.

Applicants for admission into the First Class must be at least sixteen years of age, and must present testimonials of good moral character. They will be examined in the following subjects:

Mathematics .- Arithmetic complete, Davies' Bourdon, through equations of the second degree. First four books of Legendre's Geometry.

English.-Correct spelling, to be determined by writing from dictation in idiomatic English. Mitchell's School Geography.

Latin .- The elements of Latin Grammar, with the rules of Syntax.

This preliminary examination will be rigorous, and no student will be permitted to enter who is deficient in these branches.

#### STUDIES OF THE FIRST CLASS.

Mathematics .- Davies' Bourdon, completed. Davies' Legendre completed. Plane and Spherical Trigonometry. Mensuration including sur-

veying, with practical applications in the field.

Latin .- Andrew's and Stoddard's Grammar, reviewed and completed. Cæsar's Commentaries on the Gallie War. Six orations of Cicero. Arnold's Prose composition. Tabular view of the Latin elements in the English language, and of the Latin forms and derivatives in our scientific nomenclature.

Greek .- Crosby's Greek Grammar.

Translations from the Greek Testament and from the Septuagint. Tabular view of the Greek elements in the English language, especially in the formation of scientific nomenclature. Greek discontinued at the end of the year.

Chemistry.- Preliminary lectures on Physics. Inorganic Chemistry

completed, in Youman's and Fowne's Treatises. Lectures by the Professor, with illustrative experiments. Wetherill's Syllabus. A prize is

given for the best note-book of the chemical lectures.

English Studies.—Weber's outlines of Universal History. Physical Geography. Coppee's Elements of Logic. Compositions carefully prepared, and essays written extemporaneously under the eye of the instructor. Lectures on American History. Declamation in the chapel, (Coppee's Academic Speaker). A prine is given to the student who shall be adjudged to have made the best declamations throughout the year.

French.—Fasquelle's French course. Translations from Chapsal's Literature Francaise and Rowan's Morceaux Choisis. A portion of each recitation during the second term devoted to conversation in French.

Tabular view of the French elements in the English Language.

German.—(Begun in the Second Term) Woodbury's method. Writing in the German letter. Conversation. Tabular study of Literary and Scientific terms in German.

Drawing.—The use of the pencil and pen in free hand drawing. Topographical drawing. Elements of perspective. Models are given to the student, according to his proficiency.

#### STUDIES OF THE SECOND CLASS.

Mathematics.—Church's Analytical Geometry, begun and completed. Church's or Courtenay's Differential Calculus, Integral Calculus, and Calculus of Variations.

Mechanics.-Mechanics of Solids and of Fluids.

Chemistry.—Organic Chemistry. Fowne's and Youman's Chemistry.

Lectures with illustrative experiments. Prize for the best notes on the

Latin.—Translation of English selections into Latin. Study of Latin Philology. Latin discontinued at the end of first term of the second

year. The time thus gained is given to German.

English Studies.—Analysis of the English language. Marsh's Lectures on the English language. Outline of General Literature. Coppee's Rhetoric. Constitution of the United States (Sheppard's). Compositions and Declamations.

Elementary Anatomy and Physiology.-Cutter's.

French.—Translations from English into French. French compositions.

Conversational exercises. Selections from French comedies. Lectures in French.

German.—Translations from English into German. German compositions. Conversational exercises. Selections from the best German authors. Drawing.—Topographical drawing with pen and colors. The human figure. Pencil and Crayon drawing from casts. Landscape drawing.

This completes the preparatory two years which fit a young man to enter one of the special professional schools. Before proceeding to give the course of studies pursued in the last two years by the Junior and Senior Schoolmen, we will set forth the manner in which the above programme is carried out.

#### THE UNIVERSITY YEAR.

The University Year is divided into two terms; the first term opens on the first of September, and ends on the first of February. The second term opens on the third of February, and ends on the twenty-fifth of June. There will be a short Christmas vacation, beginning on the twenty-second of December, and ending on the fourth of January; and a short Easter vacation, from the Thursday before Easter to the Monday after Easter Monday. From the twenty-fifth of June to the first of September shall be the long summer vacation. All exercises shall also be suspended during the hours of divine service on Ash-Wednesday and on Thanksgiving Day. Except on special occasions there shall be no other vacations during the year.

DAILY EXERCISES.—The bell will be rung daily at twenty minutes before nine o'clock, A. M. All the students will assemble at a quarter before nine, to attend the religious exercises, which will be conducted by the President, or, in his absence, by one of the Professors in the order of seniority. The arrangement of seats is in alphabetical order, and every student shall retain his seat during the term, unless he receive special permission from the President to change it. All absentees are noted by the University Instructors.

Chapel Exercises.—The exercises in the chapel consist of Scripture reading and prayers, after which there shall be declamation of selected pieces (daily except Sunday) by two students in regular routine. This will cause the first hour of recitation or' lecture to begin at about nine o'clock.

RECITATION HOURS.—To all lectures each class goes in a body. For purposes of recitation the classes, according to the number of students in each, are divided into two or more sections, to secure the special attention of the instructor to the daily exercise of each student.

As soon as the students are dismissed from chapel, they proceed, in class or in sections, to their recitation rooms according to the accompanying roster, in which A represents the first class, B the second, A1 and B1 the first sections, and A2 and B2 the second sections of the classes respectively: (See next page.)

Greek is discontinued at the end of the first year: the hours thus released are given to German, as are also some hours taken from Latin and French. The arrangement of the roster gives four hours of University exercises, — recitations, lectures, or drawing—daily to each student; these hours are selected between nie and four, and are so chosen as to give, if possible, an intermediate hour of free time to every student between each two recitations. There is but one hour of recitation on Saturday, from nine to ten.

STUDY HOURS.—Study hours, announced by the ringing of the bell, will be from half-past seven to half-past nine, P. M., during the first term; and from eight to ten, P. M., during the second term. During this time students are required to be in their rooms, unless they receive permission of absence from the President.

Recitation hours are under the same rules as study hours.

Necetation hours are under the standard standard Sunday Exercises.—Every student is required to attend Divine Service on Sunday morning. The bell will be rung et ten o'clock, A. M., when the students will assemble in the College chapel, and then proceed, each class in a body, accompanied by the College Instructors, to the Church of the Nativity, where free seats are provided for them. Such students as present the written request of their parents that they may attend other places of worship, will receive special permission from the President to do so. Sunday must be observed by a quiet and orderly demeanor. No games shall be played, nor shall the students go upon the river or ride or drive on that day, except for some necessary purpose. Reverent demeanor in church is particularly enjoined and will be enforced.

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#### THE SPECIAL SCHOOLS.

The special schools will be opened on the first of September, 1867. The following is presented as the general programme of instruction in these schools.

REQUIREMENTS FOR ADMISSION.—Students who have passed successfully through the First and Second Classes, may be admitted into any one of the Schools. All other applicants for admission into one of the Schools must pass a satisfactory examination on the subjects studied in the first and second class years, and must be at least eighteen years of age. An exception to this latter rule is made in the case of graduates of any College in good standing, who will be received without an examination.

#### 1. SCHOOL OF GENERAL LITERATURE.

#### Junior Schoolmen.

Mechanics.—Peck's in common with the other schools. General principles of astronomy in common with the other schools. Acoustics. Optics

Intellectual Philosophy .- Hamilton's Metaphysics.

Christian Evidences.—Bishop Potter's Lowell Institute Lectures.

History.—The History of the United States. References to Bancroft, Hildreth, Curtis' Constitutional History. Lectures on the Philosophy of History.

Languages.—Rhetorical studies in English. Declamation of original pieces. Themes. Colloquies. Lectures on English Literature. French readings from Moliere, Cornellle, and other writers. German readings from Schiller: Wallenstein, Don Carlos, and Maria Stuart.

Drawing .- Painting in oil, at the option of the student.

#### Senior Schoolmen.

History.—English Constitutional History. The student's History of France.

Languages.—French and German readings continued. Lectures on the comparative literature of the modern languages. References to Schlegel, and to Longfellow's Poets and Poetry of Europe.

Christian Evidences .- Lectures by the Professor.

Moral Philosophy.—Whewell's Elements. Political Ethics. Lectures on Christian Evidences continued.

Civil Polity. -Political Economy. International Law. References to

Kent, Halleck and Woolsey. Government and State Jurisdiction. Lectures on Commercial and Maritime Law.

Rhetorical Studies. - Theses in English, French and German. Decla-

mation of original pieces in these languages.

Optional Studies in the School of General Literature.—Greek and Latin may be continued, or Italian and Spanish may be studied as the student may desire.

# 2. SCHOOL OF CIVIL ENGINEERING.

#### Junior Schoolmen.

Mathematics.—Church's Descriptive Geometry; Projections, Shades and Shadows, and Perspective.

Mechanics and Physics.—Peek's, and Bartlett's mechanics in common with the other schools. The use of the mercurial and ancroid Barometers in determining elevations. The application of the boiling point of water to the determination of height.

Astronomy and Cosmography.—The use of astronomical instruments in making observations: in determining latitude and longitude, geodetic surveying, and the establishment of geographic frontiers. Analytical and Celestial mechanics.

Mineralogy.-In common with the other schools.

Surveying.—Topographical surveying. Surveys of rivers and harbors. Deep sea soundings. Use of the sextant, theodolite, solar compass, transit, level, rod and chain, in actual surveys.

Engineering.—Moseley's Mechanics of Engineering, edited by Mahan.

Mahan's Civil Engineering. Study of the Locomotive Engine.

Drawing.—Maps and Charts. Bridges and Culverts. The Locomotive Engine.

#### Senior Schoolmen.

Engineering.—Roads, Canals, Railroads. Preliminary surveys, approxiinate locations, rail-way curves. The use of instruments continued. Grading: Computation of excavation and embankment. Computation of materials used in masonry. Tunnels and viaduets. Constructions in wood, stone and iron; the strength of materials and walls. Aqueducts, the distribution of water. Drainage. Methods of conveying water into cities and towns.

Military Engineering.—Mahan's Military Engineering. Field Fortification.

Architecture. History of architecture. Grecian orders. Later schools

of architecture. Applications of Descriptive Geometry to carpentry, stone cutting, masonry, domes, ground and cloistered arches. Bridge building, wood, stone, and iron.

Industrial Jurisprudence.—Lectures in common with the other schools.

Chemistry amilied to the Arts.—Chemistry of building materials.

Christian Evidences. - Lectures by the Professor.

Drawing.—Plaus, profiles, and sections of railroads. Canal locks. Morgan's Parallel of the Architectural orders. Stone cutting. Isometrical perspective. Methods of keeping note-books and using books of tables. Keeping Railroad Construction and Freight Accounts. Perspective.

#### 3. THE SCHOOL OF MECHANICAL ENGINEERING.

#### Junior Schoolmen.

Mathematics.—Church's Descriptive Geometry; Projections, Shades and Shadows, and Perspective.

Mechanics.—Peck's, and Bartlett's Mechanics. Moseley's Mechanics

of Engineering. Cinematics. The theory of prime movers.

Engineering.—The theory of constructing machines. The steam en-

gine; stationary, locomotive and marine engines. Efficiency and location of engines.

Chemistry applied to the Arts.—Iron, steel, zinc, and other metals.

castings, railroad iron.

Mineralogy .- With the use of the museum. Lectures.

Metallurgy.—The value and reduction of ores.

Drawing .- Isometrical perspective. Models of special machines.

#### Senior Schoolmen.

Engineering.—Air engines. Various kinds of boilers; their construction, strongth and safety. Hydraulie engines. Construction of furnaces, foundries and rolling mills. Machines used in agriculture. The cotton gin; sugar factories and refineries. Printing presses; types and type metal. Quarrying and the machinery used. Planing and sawing machines.

Christian Evidences .- Lectures by the Professor.

Mineralogy.-Lectures continued; a partial course in Metallurgy.

Industrial Jurisprudence.—Lectures. Methods of employing men, and keeping their accounts.

Drawing.—Plans, sections and elevations of the machinery in the Bethlehem Rolling Mill, and in the Zinc Works. Photography of machines.

#### 4. SCHOOL OF MINING AND METALLURGY.

#### Junior Schoolmen.

Mathematics.—Church's Descriptive Geometry; Projections, Shades and Shadows, and Perspective.

Mechanics.—Peck's mechanics. Moseley's Mechanics of Engineering.

Machines.—Stationary and Locomotive engines. Their application to
mines. Pumps of various kinds.

Geology.—Physical Geography, Geognosy, Palæontology. Beds, strata, seams. Workable coal-beds. Lodes or mineral veins. Dislocations and rules for finding the dislocated or lost portions of a deposit.

Mineralogy.—Dana's. Lectures by the Professor. Crystallography.

Analysis of metallic ores, iron, copper, lead, zine, gold, silver, and of coal, &c. Access to the mineralogical cabinet.

Drawing.—Crystals. Maps of geological and mineralogical surveys. Plans of machines used in mining.

#### Senior Schoolmen

Metallurgy.—Methods of reducing all ores. Qualitative and quantitative analysis of minerals. The spectroscope. The blow-pipe: Assays wet and dry. Alloys of gold, silver and copper for monetary and other purposes. Fluxes, slags. Access to the Metallurgical Cabinet, with illustrative loctures.

Mining.—Modes of laying out mines. Exploitation. Boring, blasting, shoading, trenching, sinking shafts, winding or raising in shafts. Uses of fuel. Draining, pumping. Ventilation and lighting of mines. Transportation of ores under and on ground. Different methods of mining for different ores and metals.

Christian Evidences.—Lecture: by the Professor.

Industrial Jurisprudence.—Lectures.

Drawing.—Plans, sections and elevations of mines. Machines used in mining.

#### 5. SCHOOL OF ANALYTICAL CHEMISTRY.

#### Junior Schoolmen.

Mechanics.—Peck's.

Qualitative Analysis.—(Fresenius), English translation. Use of the blow-pipe (Plattner). Use of the spectroscope. General chemistry, (Miller's Inorganie). Lectures by the Professor, and constant practice in the Laboratory.

Physics.—Lectures on Chemical Physics.

Geology.—The same course as in the School of Mining.

Mineralogy.—Dana's, and lectures with access to Cabinet.

#### Senior Schoolmen.

Quantitative Analysis.—(Fresenius). Stocchiometry (Rammelsberg.)— Specific Gravity of solids and liquids. Miller's organic chemistry.

Organic Analysis.—(Liebig). Specific gravity of vapors and gases. Volumetric analysis (Mohr.) Quantitative blow-pipe analysis, (Plattner.) Chemistry applied to the arts (Knapp.) in common. Lectures on Chemical Physics. Metallurgical and Technical analysis and assaying; (Bodemann's Probirkums). Dialysis. Bunsen's Gas Analysis. Chemistry applied to agriculture and the arts; methods of analysing soils.

Christian Evidences .- Lectures by the Professor.

REMARK.—Students who may take a partial course in any one of these schools, will not receive the degree, which is only given for the full course, but will be presented with a certificate of what they have accomplished.

SPECIAL INSTRUCTION.—Students who desire it may have instruction in Music, at extra charge.

# ADMISSION OF STUDENTS.

Application for admission into the University should be made to the "Secretary of the Faculty," from whom all information may be obtained.

REGULAR STUDENTS.—All applicants for regular standing in the classes or schools must be prepared to pass an examination according to the programme of studies just given. From this it will be seen that a student may be admitted at any time, if able to pass a satisfactory examination in the studies already pursued by his class.

Partial Students.—Any young man of good moral character and of the required age, may enter as a partial student, selecting such studies as he pleases, with the sanction of the President.

Conditional Students.—Any young man who is partially but not thoroughly prepared to enter in full standing in either class, may thus enter as a partial student, admitted conditionally to make up his deficiencies by extra study under the care of a Professor or Instructor. When they are made up he will be received into full standing in his class.

Promotions.—Any student who, by superior talents and industry, can accomplish more than the regular studies of his class, may be promoted in all or in certain branches, to a higher class; the object being to prescribe, not an unalterable period, but a certain amount of knowledge. In this way a brilliant student may gain an earlier admission into one of the Schools. In all cases the student will receive a certificate, not of what the class has done, but of what he individually has accomplished.

Graduates of Colleges in good standing will be received into any of the schools without a preliminary examination. But in no other case shall a student be admitted without passing an examination on the studies which have been pursued by the class. And in every case of admission to an advanced class, the student shall pay a quarter of the tuition for each of the back terms,

FOUNDATION SCHOLARSHIPS. - There are three Foundation Scholarships in each class, to which the scholars, being nominated by the Founder, are appointed by the Trustees. This number will be increased, with the future progress of the University. No student shall be a Foundation Scholar without passing a satisfactory examination, nor can he retain his scholarship without taking the full University course, in the two classes and in one of the schools. A Foundation Scholarship entitles the holder to roomrent and tuition both free

COMPETITION SCHOLARSHIPS,-There are in the University two Competition Scholarships for each class, which entitle the holders to room-rent, tuition and board free. These are conferred upon such applicants for them as pass the best examination for admission. In order to give due time and knowledge of the competition, application to be examined for these scholarships will be made at or before the first of June in each year. The examination will take place in presence of the Faculty, on the thirtieth of August,

Any holder of a scholarship (Foundation or Competition) who shall incur the censure of the Faculty for neglect of studies, misbehavior or irregularity, may, at their discretion, forfeit his scholarship. Holders of scholarships must be models of excellence.

OTHER SCHOLARSHIPS.—Any person or corporation may, by permission of the Board of Trustees, endow a scholarship by the payment of —— dollars into the Treasury of the University. The scholarship shall bear the name of the person or corporation endowing it, who shall also nominate a student, and such student shall be appointed to it, provided he pass his examination; and his admission and residence are sunctioned by the President.

The arrangements for partial students, have also special reference to young men who, from the force of circumstances, have not doubtion, time or means for a full course, but who desire to gain, in a limited time, as much technical and practical knowledge as they can, in a special department. Among these are many who, while obliged to labor daily, can only devote a small portion of their time to study. Such are invited to come and learn what they can, and they will have such inducements presented to a continuance and increase of their studies as their earnestness, industry and proficiency may warrant.

Modes of Instruction.—The instruction in all parts of the University course is, principally, by text-books, with supplementary lectures. The use of text-books enables the student to revise his lessons by references to his books. All supplementary instruction will be written by the student in his note-book. A prize is offered for the best note-book of Chemical Lectures.

LIBRARY.—The Library of the University shall be for the use of the members of the Board of Trustees, the President, Professors and all officers, and the students of the University. It shall be open every day except Saturday and Sunday, from ten to twelve, A. M., and from three to five, P. M. It is designed also as a reading-room for the students in the hours between their recitations. Students whose rooms are at a distance from the University may thus have a commodious place for study.

A Librarian, appointed by the Trustees, shall have charge of the Library, and remain in it during the hours mentioned; he will be responsible for its order and police; and shall make an annual report to the President of its condition, accompanied with a list of the books procured during the year, whether by donation or purchase; if the latter, from whom purchased and at what prices. He shall also keep a manuscript catalogue, in which the books shall be twice arranged: alphabetically, and according to subjects.

Books of general reference, which shall be separately catalogued, such as atlases, encyclopadias, dictionaries, catalogues, and other books of great rarity or value, shall not be taken from the Library without the written permission of the President.

Persons not connected with the University, may, under certain restrictions, obtain permission to consult books in the Library.

Students may take out two books at a time, to be retained not longer than four weeks. No book shall be lent by a student; and all books must be returned before the end of the term. Students desiring to consult books will ask the Librarian for them, and not take them from the shelves without his permission.

There shall be no loud talking or disorder of any kind in the Library. All damages to books shall be assessed by the Librarian, under an established tariff. All books lost or destroyed will be replaced at the expense of the loser or destroyer.

#### EXPENSES

Boarding.—A limited number of rooms are provided in the University buildings, to be occupied by students, and arrangements have been made for a mess-hall, where any or all may board in messes of about thirty, each; but students may board and lodge in any part of the town, provided the houses they select meet the approval of the President.

The rooms in the University building are rent-free. The board in the mess-hall is furnished at as low a rate as possible.

FEES.—In carrying out the view of the Founder, to confer the benefit of the institution upon as large a number of worthy young men as possible, while the highest standards of instruction and scholarship will be maintained, the tuition fees are less than in most other institutions of a similar character. In the First and Second Classes the fees are \$45 per term; in the Schools of Special Instruction, \$50. Proportional charges will be made to partial students. All fees are payable in advance.

Books, materials, paper, pencils, chemical materials used in

the analytical laboratory, and instruments are furnished at the expense of the students; under the direction of the President. The fee for the diploma or graduation in any one of the schools is \$10, payable before receiving it, and no student shall receive his diploma until all his dues to the University are paid.

DIPLOMAS AND CERTIFICATES.—The Diploma is given only to those who have passed through the regular course in the classes and in one of the schools; it does not simply confer a degree in general terms, but states distinctly the studies pursued, and the proficiency and standing of the student in all branches. For all practical courses a certificate is given of what the student has accomplished.

Graduation Essays.—Every student, in each of the schools, will be required to present a written essay upon some topic connected with his special school, as a necessary portion of the exercises for his final examination for a diploma. These essays shall be accompanied by drawings and diagrams when the subject needs such illustration. The originals will be kept by the University as a part of the student's record, for future reference: but a copy may be retained by the student, and be published, permission to do so being first obtained from the President.

UNIVERSITY DAY AND EXHIBITIONS,—The day following the close of the Annual Examination shall be known as UNIVERSITY DAY. Upon this day the "Annual Exhibition of Graduates" shall take place in the University Chapel, in the presence of the Trustees, faculty and invited guests. The exercises shall consist of orations and colloquies in English, French and German, declamations of selected pieces, and an address to the students by the President or some member of the Faculty. Every student must perform the duty assigned to him, unless excused by the President.

On some other day, annually appointed, the University Oration will be pronounced by some distinguished person invited to do so.

The University Sermon will be preached on the Sunday before the 25th of June, under the direction of the Reverend Professor of Christian Evidences.

PHYSICAL EXERCISE.—A large and complete gymnasium will be provided, which will be open to all students who subscribe a small sum to keep it in proper repair. The students have also formed a boating club, and have a fine flotilla of barges and boats upon the Lehigh. An unobstructed stretch of water for several miles above the town of Bethlehem and below, affords excellent opportunities for the manly and admirable exercise of the ear.

#### OF THE TRUSTEES

By the Constitutional Charter, the Board of Trustees is endued with the supreme governing power. In order to consider the interests and needs of the University they have made it a rule to have stated meetings on the third Wednesday of January, April, June and Sewbernher.

Special meetings may be called by the President of the Board of Trustees, or by the President of the University when he deems a necessity to have arisen.

In case of the death, resignation or retirement of a Trustee, nominations to fill the vacancy, shall be made at one meeting, but no election shall take place until the next meeting after such nominations have been made.

In every case of stated meetings the Secretary of the Board shall give previous notice of the meeting, in writing to each Trustee.

The officers of the Board shall be a President, a Secretary, and a Treasurer of the University Fund.

The Treasurer shall be required to give a bond of security in the amount of \$25,000, for the faithful performance of his trust, the shall receive, pay out and account for all the moneys of the University, in such manner as the Board may direct; and shall report to the Board annually, and at such other times as the Board may require.

All diplomas and certificates granted to students, upon the recommendation of the Faculty, shall be signed on the right lower margin by the entire Faculty, and countersigned on the left by the Secretary, "in behalf of the Trustess;" The Secretary shall also affix to his signature the seal of the University. All diplomas and certificates except those for special study in French or German, shall be written in English.

SEAL.—The Seal is oval in form. In the upper part is a Sun; just below an open Bible; on the bible is a Heart. Thus are represented the three Persons of the Ever Blessed Trinity. Around the upper margin are the words of Bacon;—"Homo minister et interpres Nature." Around the lower margin are the words:—"LEHIGH UNIVERSITY," and just below the Bible; "Founded by Asa Packer, 1865."

OF THE MODE OF APPOINTING THE PRISIDENT AND PROFFSSORS.—The President and Professors of the University shall be appointed by the Board of Trustees. Normations shall be made at one meeting of the Board, but no election shall take place until a subsequent meeting. All recommendations and testimonials of candidates shall be made to the Board through the Secretary.

All other officers of the University shall be elected in a similar manner.

The salaries of all officers of the University shall be fixed by resolution of the Board, and shall be payable monthly after their services have been rendered.

COMMITTEES,—The Board will appoint such standing and special committees as may be deemed necessary for the transaction of their business.

#### GOVERNING FACULTY.

The President and the University Professors shall constitute the Faculty of the University. The Faculty shall direct the course of instruction, and shall administer justice in all cases, concerning the students. Instructors shall only sit in the Faculty when immediately concerned in the matter or case before it, when they may debate and suggest, but not vote.

The Faculty shall make such rules and directions for the government of the students as do not conflict with the charter; subject in all cases to the sanction of the Board of Trustees.

## OFFICERS OF THE UNIVERSITY.

The Officers of the University are: a President, Professors, Instructors, Registrar, Janitor and Librarian.

#### OF THE PRESIDENT.

The President shall be at the head of the University, and shall have charge of the administration of its affairs.

He shall preside at the Faculty meetings, and shall call meetings

of the Faculty at his discretion.

He shall direct the religious and public exercises of the University; and shall see that the laws, rules and directions are obeyed and carried out.

He shall be the only medium of business communication between

the Faculty and the Trustees.

It shall be his duty, from time to time, to visit the several recitation and lecture rooms, that he may keep himself informed of the condition of instruction in each department.

He shall report to the Trustees, from time to time, the condition of the University; its needs, and the manner in which all its officers have performed their duties, and he shall make suggestions for the management and improvement of the University.

He shall be empowered to grant such leaves of absence, as he may deem necessary or proper, to the Professors and Students, but every leave of absence for more than one week must receive the written sanction of the Board of Trustees.

He shall arrange the roster of duties and studies.

In addition to his vote as a member of the Faculty, he shall have a casting vote when there is an equal division.

He shall have the general charge of the public buildings, the park grounds, and the moveable property thereon.

He shall have power to punish the students to the extent of reprimanding them, and of suspending them for a period not exceeding one week.

In case of his death, resignation, or permanent disability, the senior professor shall act in his stead, with full powers, until the vacancy be filled.

#### OF THE PROFESSORS.

Each Professor shall have, under the direction of the President, charge of the instruction and the administration of his department.

He shall give his opinion and advice on any subject of University concern, when requested to do so by the President.

The Professors shall take precedence in meetings of the Faculty and in all University exercises, according to seniority; and, in the absence of the President the Senior Professor will preside.

Each Professor will have certain duties and a proper proportion of time assigned to him by the President: the duties and time shall be displayed upon a roster, or scheme of daily instruction, set forth by the President. A copy of the roster shall be sent, at the opening of each term, to the Trustees; as shall also any modification of it made during the term.

Each Professor shall select his own mode of instruction, and the text-books to be used, subject in every case to the approval of the President.

No Professor shall have official communication with the Board of Trustees except through the President.

No Professor is empowered to give permission of absence to any student (except during the absence of the President) but for his own hour of recitation; nor shall any Professor keep a class or a section in his room for a greater or less period than that set forth in the roster.

No Professor shall accept an appointment from any other institution or company, from which he may derive emoluments, without the written consent of the Board of Trustees.

No Professor or Instructor shall lend any apparatus or any other property of the University without permission of the Board of Trustees.

#### INSTRUCTORS.

Instructors are teachers subordinate to the Professors. They are appointed by the President, subject to the sanction of the Trustees. The Instructors who live in the University buildings have charge of the order of the students' rooms in those buildings, a certain portion of the rooms being assigned to each Instructor. The senior Instructor alone is empowered to give any directions, orders and permits to all the students in the University, which the local circumstances render necessary.

Every Instructor binds himself to serve the University for one year, unless sooner discharged by the Trustees.

One of the Instructors, by selection of the President, shall be the Secretary of the Faculty.

REGISTIAR.—The duty of the registrar is to take charge of all the business papers of the University, and to keep its accounts. He shall record and place upon the bills all assessments of damage to University property; make out all bills; and receive moneys, which he will at once deposit to the account of the Treasurer. He shall, at the requests of parents or students, keep the money of students, and either disburse it, or issue sums to them from time to time.

He will act as Marshal of University processions.

#### OF THE STUDENTS.

The following rules and directions have been prepared by the Faculty, and will continue in force until otherwise ordered:

GOOD ORDER.—Punctuality in all his duties, careful preparation of all lessons and subjects of study, entire silence and respectful attention in the Chapel and recitation room, obedience to the directions of the President, Professors, Instructors, and all officers of the University, will be required of every student. Order will be rigidly enforced.

Rooms.—Students who room in Christmas Hall, or any other University building, will be assigned to their rooms by the President, and shall not change their rooms without his permission.

The rooms of students, wherever they are, will be subject to visits from the President and Instructors, to whom the students must always open their doors when required.

No student shall be guilty of any disorder in his room, nor shall any student damage any part of his room or of any college property. No student shall have or use fire arms or gunpowder on the University precincts, or carry any weapon about his person. No intoxicating drinks shall be taken into the University, nor used there. Smoking in the halls and in the grounds is strictly prohibited.

Students may lodge or board only in such houses as meet the approval of the President, and they shall not change their boarding or lodging houses without his permission. The hours of meals in all such houses must conform to the University arrangement of recitation and study hours.

Students who room in the University buildings shall place their names in a card rack upon the wall of their room. The student whose name is at the head of the list is the orderly, and is responsible for the good order of the room, and for any damage which may occur. The orderly is changed weekly, by removing the top name to the bottom of the list.

THE JANITOR.—The Janitor is an officer of the University, specially placed by the President in charge of the buildings and grounds. He is delegated with authority to direct disorders to cease, and to report damages and breaches of order to the President.

GENERAL OFFENCES.—All offences against the laws of the land and municipal enactments, are ipso facto, offences against the University. All offences against social morality and decorum are offences against the University.

Any report of misconduct on the part of a student, in the town or elsewhere, made by any citizen or other person, will be inquired into by the Faculty, and such misdemeanors, if proved, will be rigorously punished. The good name of the University will not be permitted to suffer through the misconduct of any individual.

No student shall play at eards, or in any way gamble. No student shall become intoxicated; no student shall use profane or indecent language.

Writing or drawing upon the walls of the room, or upon any part of the buildings of the University, is strictly forbidden.

No students shall hold a meeting to transact business without permission of the President. When proper, such permission will always be granted.

No student or body of students shall invite any person to address or lecture to them, without the sanction of the President, to be obtained before the invitation is given. Nor shall any student put himself under the tuition of any person not recognized as a University Professor or Instructor, without the President's permission.

Combinations among students to do unlawful acts are among the highest offences against good order and discipline, and will be punished accordingly.

Although an offence may be small in itself, a repetition of it, after reproof or punishment, constitutes a high offence.

No student shall leave the town of Bethlehem, without special permission in writing from the President, or, in his absence, from one of the Professors.

Special permission shall be obtained from the President for the organization of all clubs and societies in the University; and no magazines, catalogues or other papers, shall be issued by the students without a like nermission.

No student shall reside in the University building during the long vacation, without permission of the President, who, if he grant permission, will direct the terms and requirements attending his residence.

Every student must obey, without delay, the summons of any Professor or Instructor, or of the Janitor to attend upon any Professor or Instructor.

In such studies as do not require the opening of text books in the recitation rooms, no student shall open his book without the direction of the Professor or Instructor.

Every student who is not prepared to recite, whether with or without excuse, must state his lack of preparation to his Professor or Instructor before the recitation begins.

PUNISHMENTS.—The punishments inflicted by the Faculty shall be the following: 1st. Warning; 2d. Raprimand; 3d. Suspension from College exercises and privileges for a definite term; 4th. Conditional attachment to the class and to the University, dependent upon good behavior and strict attention to study; 5th. Dismission; 6th. Expulsion with dishonor. These modes and grades of punishment may be used successively, or otherwise, at the discretion of the Faculty.

Every student shall upon his admission write his name, his father's or guardian's name, and his post office address in the Entrance Book and Register, and shall subscribe the following promise: "I promise to obey faithfully the Laws and Regulations of the Lehigh University, and to give full, prompt and cheerful obedience to all its officers."

MARKS.—Class rolls shall be issued weekly to each Professor and Instructor, upon which he shall record the absences and the recitation marks. These rolls shall be given to the President every Saturday morning, and shall be filed away for reference. The Professor or Instructor shall also keep the weekly average on a distinct roll, which shall be subject to the inspection of the President at the close of each term and just before the examination. The system of marks will be rigorously observed. No student shall be marked except for a recitation or exercise actually performed.

For a perfect exercise he will receive the maximum mark, which is 10; for an entire failure, 0. Marks between these two, carried to decimal points, to secure greater accuracy, will be given according to the proficiency or deficiency of the student.

The marks of each student will be added up weekly, and the sum divided by the number of his recitations. This will give the weekly average mark, which is recorded in the Professor's book, and which shall be exhibited to the student on the following Monday.

ABSECTS,—No student shall absent himself from any University exercise without good cause. Every student who is absent from chapel or recitation, or any other University exercise, is required to render an excuse in writing to the President on Saturday morning, immediately after the recitation.

If an excuse is valid, the penalty of absence is removed, but the absence will be entered as excused on the term report sent to the parent or guardian.

If an excuse is invalid, it will be reported *inexcused*, and be counted in making up the student's term mean, so as to diminish his mark by one fifth of 1, i. e., 5 inexcused absences will take away 1 from his term mean.

But besides this penalty, inexcused absences, when numerous, or when attended with wilfulness, disobedience, or other improper circumstances, may be otherwise more severely punished, at the discretion of the Faculty; and if persisted in, will lead to dismission.

EXAMINATIONS.—There shall be but one public examination in each year, which shall be called the *Annual Examination*. It will begin on the 10th of June, and end on the 23d. On the 24th the results will be announced, and the academic year ended.

The annual examination will be both oral and written, and on student shall be permitted to join a higher class until he shall have successfully passed this examination, which shall be conducted in the presence of the Faculty, or of a committee of the Faculty.

In order to keep accurately acquainted with the condition and progress of each student, there will be a prieste examination just before the close of the first term, to be called the Semi-Annual Review. It shall be thus conducted: After three weeks' review in each subject, the Professor shall take a sufficient amount of time, say two or three days, in which to call up and examine each suddent. After this more extended and rigorous recitation, the marks given to each student in each department shall be reported to the Faculty, and shall be considered afterwards in making up the award at the Annual Examination, thus

The weekly average marks shall be added together at the end of the first term, and their mean taken. To this, multiplied by two, shall be added the mark received at the Semi-Annual Review. If this sum be divided by three, the quotient will represent the relative standing of the student at that time.

In a similar manner the mean of the weekly marks in the second term for each student shall be multiplied by theo, and added to the marks received at the Annual Examination. This sum divided by three will give the standing of the student for the second term.

But as, at the close of the year, we wish to note the student's progress during the whole year, it is evident that these two marks must be combined. To do this we multiply the mark which indicates the standing for the second term by two; add to this the similar mark for the first term and divide by three.

In a similar manner the standing during the first year will be made to count at the end of the second. In the Annual Register the names of the first five students, in the first and second classes respectively, will be placed at the head of the list, with the marks in each department which entitle them to such rank.

Every student whose average mark for the entire year is less than 5 in any department shall be re-examined at the beginning of the new term, and if he fail to pass the re-examination in two departments he shall be turned back into the next elass. If the deficiency is greater he may be dropped from the University, at the discretion of the Faculty.

At the beginning of each term the Treasurer will present a bill to each student, which the student shall send to his parent or guardian. The term bills, due in advance, must be paid within a fortnight after the beginning of the term.

At the end of each term the Registrar will send a report of the scholarship, attendance and conduct of each student during the term to his parent or guardian.

An honorable discharge will be granted to any student in good, standing, at any time during the term, but only at the written request of his perent or guardian. In such case, the tuition being due in advance, will not be remitted or returned, but his boarding expenses will cease with his withdrawal.

After the ringing of the bell for study hours, no student shall leave his room without permission of one of the Instructors. This applies equally to students who occupy rooms in Christmas Hall, and those who live elsewhere in the town. Study hours form an essential part of the Univercity exercises and discipline, and must not be infringed.

After the ringing of the bell for study bours, there shall be no noise or disorder whatever in the rooms or halls, at any time during the night. Loud talking, whistling, loud cries of all kinds, the use of all musical instruments, are particular examples of the noises to be avoided.

Additional regulations will be made and issued from time to time, as they may be required.

A copy of these rules and directions will be presented to every student, and a copy kept in the Janitor's room. Every student will be held responsible for a knowledge of them and conformity to them.

## RESIDENT GRADUATES.

A limited number of graduates, who desire to pursue their studies under the general direction of the Faculty, may be allowed the use of the Library, and may attend lectures in any of the departments, during a term of three years, free of expense. Although not bound by University hours, they will be required to beep the directions of the President, and of Professors in reference to their departments; will board and lodge only in places sanctioned by President, and will have their names placed upon the Annual Register, with a statement of the general nature of the studies they pursue.

#### GRAMMAR SCHOOL.

It is in contemplation to have a Boarding Grammar School connected with the University, in which boys will be received and fitted for admission into the First Class.

## STUDENTS OF THE FIRST CLASS.

From September 1, 1866, to September 1, 186

From September 1, 18	66, to September 1, 1867.
LEHMAN PRESTON ASHMEAD,	- Philadelphia.
EDW. C. BOUTELLE,	- Bethlehem.
RICHARD BRODHEAD,	- South Bethlehem.
WILLIAM R. BUTLER, -	- Mauch Chunk.
RICHARD J. CARTER,	- Tamaqua.
J. H. H. CORBIN,	- Barbadoes, W. I.
GEORGE L. CUMMINS,	- Louisville, Ky.
MILTON DIMMICK,	- Mauch Chunk.
E. Albert Dobbins,	- Pottsville.
J. F. REYNOLDS EVANS, -	- Fort Wayne, Ind.
FRANK E. FORSTER,	- Muncy.
CHARLES W. FOSTER, -	- Mauch Chunk.
John Hunt,	- Catasauqua.
George A. Jenkins, -	- South Bethlehem.
HENRY C. JENKINS,	_ " "
WILLIAM H. JENKINS, -	- Wyoming.
WM. J. KERR, JR.,	- New York City.
A. Neilson Lewis,	- Havre de Grace, Md.
Peter D. Ludwig,	- Tamaqua.
LAWRENCE B. McCabe, -	- Havre de Grace, Md.
GEORGE McMullen,	- Mauch Chunk.
Asa A. Packer,	- Nesquehoning.
HARRY E. PACKER,	- Mauch Chunk.
WILLIAM L. PAINE,	- Wilkesbarre.
JOSEPH M. PIOLLET,	- Wysox.
HARRY R. PRICE, -	- St. Clair.
HENRY B. REED,	- Philadelphia.
RICHARD B. ROBERTS, -	- Drums P. O.
*Charles W. Roepper, -	- Bethlehem.
WILLIAM D. RONALDSON,	- Philadelphia.

<sup>\*</sup> In Analytical Chemistry.

South Bethlehem. JEREMIAH RYAN, JAMES K. SHOEMAKER, Mauch Chunk. JOSIAH WERTZ. Bethlehem. Bethlehem. BARNET WEST. ROBERT P. WESTON, Mauch Chunk. Phoenixville. CHARLES WETHERILL, WILLIAM C. WETHERILL, Bethlehem. \*CLARENCE A. WOLLE, Bethlehem. RUSSEL B. YATES, Waverley, N. Y.

#### SECOND CLASS.

MILES ROCK, - - - Lancaster, Penn.

# CALENDAR.

# FIRST TERM.

Opened Saturday, September 1, 1866.

Christmas Vacation begins on Saturday, December 22, 1866, and ends on Tuesday, January 4, 1867.

First term ends on Friday, February 1, 1867.

#### SECOND TERM.

Opens Sunday, February 3, 1867.

Easter Vacation begins on Thursday, April 18, and ends on Monday, April 29, 1867.

The Annual Examination opens on Monday, June 17, and ends on Tuesday, June 25, 1867.

Summer Vacation begins on Wednesday, June 26, and ends on Sunday, September 1, 1867, when the new Academic Year begins.

<sup>.</sup> In Analytical Chemistry.