UNIVERSITY OF TEXAS BULLETIN NO. 14.

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ANNUAL REPORT

OF THE

PRESIDENT AND FACULTIES

OF THE

UNIVERSITY OF TEXAS

TO THE

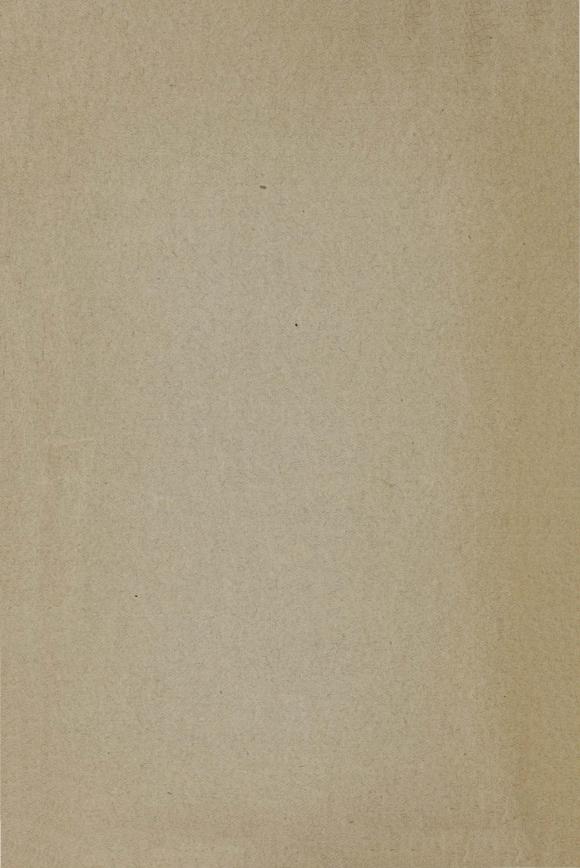
BOARD OF REGENTS

FOR THE

SESSION OF 1901-1902.



AUSTIN, TEXAS: VON BOECKMANN, SCHUTZE & CO., PRINTERS, 1902.



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PRESIDENT'S REPORT.

To the Hon. T. S. Henderson, Chairman of the Board of Regents.

SIR: I have the honor to submit the following report of the work of The University of Texas for the session of 1901-1902, being the nineteenth annual session of the Main University, at Austin, beginning September 30, 1901, and terminating June 11, 1902; and the eleventh annual session of the Medical Department, at Galveston, beginning October 1, 1901, and terminating May 31, 1902.

Attendance and Enrollment.

During the session of 1901-1902 there has been an attendance of 1109 students. If to this be added the 191 who attended the Summer School of 1901, we have a total attendance of 1300, and an increase during the past three years of 500 students.

The enrollment in the University for the past two years, by classes and departments, has been as follows:

DEPARTMENTS OF LITERATURE, SCIENCE AND ARTS AND OF ENGINEERING.

	1900-1901.	1901-1902.	Percentage of gain and loss.
Graduates	. 33	33	0% gain.
Seniors	. 41	53	30% gain.
Juniors		70	14% gain.
Sophomores	. 100	100	0% gain.
Freshmen	. 209	260	24% gain.
Specials	. 98	92	6% loss.
Irregulars	. 111	132	19% gain.
Totals	. 653	740	13% gain.

DEPARTMENT OF LAW.

Graduates		0 74 92	$6\% \\ 19\%$	loss. loss. loss.
Totals	206	166	19%	loss.
DEPARTMEN	T OF MI	EDICINE.		
School of Medicine School of Pharmacy	$\begin{array}{c} 119 \\ 52 \end{array}$	$\begin{array}{c} 167 \\ 59 \end{array}$	$40\% \\ 13\%$	gain. gain.
School of Nursing	21	19	10%	
Totals	1051	$\begin{array}{r} 245\\1151\\42\end{array}$	28%	gain.
Totals	1005	1109	10%	gain.

Number of Students from other Institutions.

108 students are registered in the Main University who have studied in other universities and colleges. The following list gives the distribution: Sam Houston Normal Institute, 14; Agricultural and Mechanical College of Texas, 12; Baylor University, 9; Add-Ran University, 9; Southwestern University, 8; Austin College, 7; Vanderbilt University, 4; Fort Worth University, 3; Washington and Lee University, 3; University of Nashville, 3; University of Missouri, 2; Notre Dame University, 2; University of the South, 2; Virginia Military Institute, 2; Trinity University, 2; Yale University, 2; Weatherford College, 2; Mary Nash College, 2; North Texas Female College, 2; Western College, Ohio, 2; National Normal University, 1; University of the Pacific, 1; North Mississippi Presbyterian College, 1; Alabama State Normal, 1; University of Colorado, 1; Ohio Normal College, 1; University of Kansas, 1; Wellesley College, 1; University of Michigan, 1; University of Iowa, 1; Baylor Female College, 1; Harvard University, 1; Central College, Missouri, 1; University of Virginia, 1; Southwest Baptist University, 1; University of Illinois, 1.

Students Paying Their Own Way.

Two hundred and fifty-six students have earned the money they are expending on their education, and 153 are either wholly or in part defraying their expenses by work while in attendance upon the University.

Number of Native Texans.

Six hundred and seventy-two of the eight hundred and sixty-four students of the Main University are native born Texans. The birth places of the remaining number are as follows: Tennessee, 22; Missouri, 18; Kentucky, 18; Illinois, 14; Mississippi, 14; Georgia, 13; Alabama, 12; Arkansas, 6; Louisiana, 6; Iowa, 6; Indiana, 6; South Carolina, 5; Germany, 4; Kansas, 4; England, 4; Michigan, 3; Virginia, 3; Wisconsin, 3; Ohio, 3; West Virginia, 2; Porto Rico, 2; New York, 2; Massachusetts, 2; California, 2; Nebraska, 2; Isle of St. Helena, 1; New Hampshire, 1; Nevada, 1; Canada, 1; Connecticut, 1; Florida, 1; North Carolina, 1; Mexico, 1; Greece, 1; Minnesota, 1; Ireland, 1; Japan, 1; Utah, 1.

The birth places of three students were not given.

Distribution of Patronage.

Of the 1109 students attending the University, 864 are at the Main University in Austin, and 245 are at the Medical College at Galveston. The number of women students at the Main University shows a slight increase over last session, there being 252, to 227 for the session of 1900-1901. With the opening of the Woman's Building, it is expected that there will be a large increase.

Counties Represented.

The catalogue of students by counties is given below. There are 146 counties represented: Travis, 182; McLennan, 39; Bexar, 38; Dallas, 34; Galveston, 30; Harris, 29; Grayson, 27; Hill, 24; Bell, 23; Ellis, 20; Williamson, 19; Milam, 18; Navarro, 17; Tarrant, 14; Anderson, 12; Washington, 12; Johnson, 11; Fannin, 11; Denton, 11; Walker, 10; Fayette, 10; Caldwell, 10; Harrison, 10; El Paso, 10; Smith, 10; Collin, 10; Hunt, 9; Lamar, 9; Erath, 9; Parker, 9; Gonzales, 9; Bosque, 9; Hays, 8; Robertson, 8; Cooke, 8; Leon, 8; Kaufman, 7; Wilson, 7; Bas-trop, 7; Austin, 7; Colorado, 7; Red River, 7; Comanche, 6; Cherokee, 6; Bee, 6; DeWitt, 6; Nueces, 6; San Saba, 6; Brazoria, 6; Coryell, 6; Guadalupe, 6; Henderson, 6; Madison, 6; Mills, 6; Limestone, 6; Jackson, 6; Nacogdoches, 5; Wood, 5; Houston, 5; Wise, 5; Rusk, 5; Young, 5; Polk, 5; Jefferson, 5; Shelby, 5; Grimes, 5; Uvalde, 4; Gregg, 4; Kerr, 4; Lavaca, 4; Llano, 4; Morris, 4; Shackelford, 4; Falls, 4; Brown, 4; Brazos, 3; Clay, 3; Comal, 3; Duval, 3; Knox, 3; Wilbarger, 3; Aransas, 3; Runnels, 3; Atascosa, 3; Blanco, 3; Coleman, 3; Webb, 3; Taylor, 3; Wharton, 3; Panola, 3; Burnet, 2; Eastland, 2; Gillespie, 2; Jack, 2; Marion, 2; McCulloch, 2; Montague, 2; Tom Green, 2; Bowie, 2; Medina, 2; Angelina, 2; Callahan, 2; Hamilton, 2; Karnes, 2; Matagorda, 2; Maverick, 2; Montgomery, 2; Baylor, 2; Victoria, 2; Rockwall, 2; Lampasas, 2; Archer, 1; Armstrong, 1; Chambers, 1; Childress, 1; Cottle, 1; Edwards, 1; Hale, 1; Hall, 1; Hopkins, 1; Jasper, 1; Lee, 1; Lubbock, 1; Mason, 1; Mitchell, 1; Orange, 1; Potter, 1; San Augustine, 1; San Patricio, 1; Sterling, 1; Titus, 1; Val Verde, 1; Van Zandt, 1; Wichita, 1; Jones, 1; Dawson, 1; Cass, 1; Tyler, 1; Waller, 1; Freestone, 1; Fort Bend, 1; Calhoun, 1; Franklin, 1; Burleson, 1; Haskell, 1.

Non-resident Students.

Eighteen students are registered from places outside of Texas, as follows: Missouri, 3; Illinois, 3; New Mexico, 1; West Virginia, 1; Virginia, 1; Massachusetts, 1; Indian Territory, 1; Kentucky, 1; Connecticut, 1; Florida, 1; Louisiana, 1; Indiana, 1; Iowa, 1; Japan, 1.

Occupations Represented.

There are 52 occupations and trades represented by the parents of the students of the Main University at Austin, distributed as follows: Farmers, 161; lawyers, 94; merchants, 67; ranchmen, 50; physicians, 35; teachers, 31; ministers, 26; bankers, 25; real estate agents, 20; bookkeepers, 17; railroad men, 10; surveyors, 9; clerks, 8; drummers, 7; contractors and builders, 6; county officials, 6; commission merchants, 5; druggists, 5; mill men, 5; insurance agents, 4; United States government officials, 3; judges, 3; mechanics, 3; grain dealers, 3; carpenters, 3; painters, 3; nurserymen, 3; ginners, 3; seamstresses, 2; postmasters, 2; sheriffs, 2; hotel keepers, 2; shoemakers, 2; printers, 2; editors, 2; money lender, 1; blacksmith, 1; telephone manager, 1; express agent, 1; cotton buyer, 1; cotton classer, 1; bee-keeper, 1; broom manufacturer, 1; cigar manufacturer, 1; cabinet maker, 1; dairyman, 1; rice planter, 1; lumberman, 1; optician, 1; fruit grower, 1; photographer, 1; upholsterer, 1; undertaker, 1; immigration inspector, 1; locomotive engineer, 1; marble carver, 1.

Matriculation.

The enrollment in the Main University this year shows a gratifying increase over that of any preceding year, and is as follows:

	Department of Literature, Science and Arts Department of Engineering Department of Law	80
(2)	Total By Sex:	864
(~)	Men Women	

The enrollment of women at the Main University is confined exclusively to the Department of Literature, Science and Arts.

The following table shows the relative enrollment of men and women in the Departments of Literature, Science and Arts and of Engineering, for the years 1896 to 1902 inclusive:

	Men.	Women.	Per cent.
1896-1897	196	125	38
1897-1898		149	37
1898-1899	301	175	36
1899-1900	387	179	31
1900-1901	429	224	34
1901-1902	436	262	37

Method of Admission.

The 380 new students for this session were admitted to the University in the following ways:

On	diplomas from affiliated schools	.161
On	certificates from other colleges	. 55
On	examination	. 69
	first grade certificates	
On	special approval	. 49

It is reported by the Dean that the students admitted in any one of these ways, on the whole, acquit themselves as creditably as those admitted by any of the other methods.

Faculty Legislation.

A .--- REQUIREMENTS FOR ADMISSION AND FOR DEGREES.

The Faculty, with the authority of the Regents, considered and enacted a number of important measures during the current session. Perhaps the most important piece of legislation is that which provides for a single degree, the B. A. degree, to be granted after 1905. It is difficult to predict what the effect of this legislation will be. It is, however, in accord with movements in the more progressive institutions of the country, and there are good reasons for thinking that the effect in this institution and in the State will be quite wholesome. The action was taken after long deliberation, and the safeguards which are provided lead one to think that the evils which many fear will not present themselves.

The exact provisions of the legislation for admission and for the curriculum will be found fully set forth in the catalogue for 1901-1902, pages 28-42 and pages 48-49.

It may be well to point out particularly that the new admission requirements will make it more difficult for students to receive a degree from this institution than heretofore. The effect of the new requirements will be that each student will be required to do as much work for the Bachelor's degree as applicants for the old B. A. degree had to do in order to secure that degree. Provision is made, however, for those students who can not present all the admission requirements when they enter the University. Such students will be allowed to remove conditions by taking courses in the University which have been arranged to meet this contingency. These new requirements effect not only students who apply for admission to the University on examination, but also those who enter upon teacher's certificates or upon diplomas from affiliated schools. If the credentials presented by such students do not cover all the admission requirements for the degree, they will be required to make up the deficiency by electing and completing successfully certain courses in the University.

B.-DATE OF ADMISSION.

A second important piece of Faculty legislation is that which deals with the time of admitting students to the University. The work of the University has been seriously interfered with by reason of the fact that students have been allowed to enter the institution at any time. Not only has this practice materially injured or hampered the work of the University, but it has also operated to the great injury of the individual students themselves. It has, in fact, been a great injustice to them and to their parents to permit them to come here after the class work has advanced some distance and to attempt to do the work required of them. The Faculty legislation covering this point seems just and adequate. It provides that no student who is merely prepared to enter the University shall be allowed to enter after the 15th of October; that students of maturity and adequate preparation may enter after the 15th of October upon the approval of the professors concerned and the Dean, provided they satisfy the professors that they have substantially covered the back work of the courses; that four days shall be set aside for examinations and registration, viz., from Wednesday, September 24th to September 27th inclusive, and that students registering after this period shall pay a registration fee of three dollars.

C.-TIME AND PLACE OF HOLDING EXAMINATIONS.

The third piece of Faculty legislation makes certain modifications in the regulations governing the times and places for holding entrance examinations. The Faculty for various reasons is disposed to encourage students who desire to enter the University on examination to present themselves for the test in the spring, so that if they are deficient they may have an opportunity to pursue their studies further along the lines of their deficiency, and present themselves for further examination in the fall.

The new regulations covering this point may be seen in detail in the catalogue for 1901-1902, pages 39-41. The second Wednesday in May was fixed as the day for the beginning of the spring examinations. A minimum of six credits was established for entrance into the University, and a minimum of four and one-half credits for permission to complete the examinations in the fall. A second and final period for examinations is provided for, at a date two weeks later than the regular fall examination period.

It would be a distinct gain if applicants would attempt the spring examinations.

Amount of Work.

The Faculty regulations provide that no student may register for more than five and one-third courses except on petition approved by the Advisory Committee, and that for regular and irregular students; that is, for students under twenty-one years old, the minimum number of courses shall be four. The Advisory Committee, exercising its discretion, determined at the beginning of the current session that it would not allow any first year student, except one who secured advanced standing, to register for more than five and one-third courses, during the fall term. This, of course, affected the large mass of entering students. Its effect has been wholesome. Students coming to the University for the first time have no knowledge of the character of University work and of its requirements. They think that they are prepared to take a great many subjects. They are insistent upon what they desire, and it is diffiult to dissuade them from following their wishes. In the past concessions have been made to them, and in most cases it has turned out that such concessions were unwise. The rule adopted by the Committee last fall held entering students to the maximum, and the students themselves soon realized the substantial wisdom and justice of it. Very few returned to the Committee with requests for increase of work.

The faculty regulation fixing the minimum of courses at four for students under twenty-one years of age was passed by the Faculty several years ago, after careful deliberation, to meet a growing evil. That evil was presented by the fact that certain students, generally young women, mostly from the city of Austin, with purposes not always by any means especially serious, registered in the University for only a few courses and devoted a large part of their time to music and such things, or to social activities. On the whole, these students proved a drawback to their classes, and unfortunate examples to the mass of the students. For two years the rule was rigidly adhered to, and the conditions materially improved. This year several exceptions were made at the beginning of the session and the Advisory Committee was given discretionary power. This, it is believed, was unfortunate. It is difficult for either the Advisory Committee of the Faculty to exercise discretion in these matters in a satisfactory manner. It is hard to make an exception in one case and not to make it in other cases. Each applicant thinks that he has perfectly sound reasons for his request, and his parents and friends agree with him. While individuals may be excluded by this rule, to their detriment, the failure to observe and enforce the rule leads to much more serious injury to a greater number of individuals and to University standards. It ought to be made clear to the people of the State, to parents and to students, that The University of Texas is a place for earnest, hard work, and that students who will not work, or can not work, will not be allowed to remain in the institution. It is believed that such a policy will secure the approval of the people of the State, and have the cordial endorsement of every thoughtful parent.

The Year's Work.

An inspection of the reports from the instructing force indicate on the whole excellent results from the year's work. It gives me pleasure to commend the faculties of the several departments for the diligent, faithful and effective work of the session.

Growth is shown in every department of the University except in the numbers of the Law Department. Earnestness and diligence have characterized the work of the student body. There have been comparatively few cases of discipline, and when the crowded condition of the buildings is considered, the order and decorum of the student body has been remarkable. I am glad to report a decided improvement in the morale and general bearing of the students.

Crowded Condition of the University Building.

At the beginning of the session, owing to the increased attendance at the Main University, it became necessary to give an extra room to the Engineering Department, and later another to physics, and these changes and the general increase required that the teaching force should occupy, in addition to all the recitation rooms in the University, also the three Literary Society Halls, which had heretofore been set apart to the Rusk, Athenæum and Ashbel Literary Societies. The members of these societies cheerfully gave the use of their halls, including the furniture, to accommodate the increasing classes. If this increase in attendance at the Main University continues, as is probable, there will be considerable difficulty in accommodating the student body the coming session, and it will be impossible to provide for them for the session following without an additional building. If the woman's building is completed by next December, according to contract, we may obtain partial relief during the next session by transferring the woman's gymnasium from its present cramped quarters to the new woman's building, and utilizing this large room for recitation purposes.

Engineering Building.

The demand for additional space will, however, become more urgent with the expansion of the courses in mining and electrical engineering, already determined upon, and a new building devoted exclusively to Civil, Electrical and Mining Engineering and Drawing is imperatively demanded. The work of the mineral survey of the public lands, conducted under the auspices of the University, and the publication and distribution of the University Bulletins upon Texas Petroleum, Fuels, Asphalts, Sulphur, and Quicksilver have awakened a profound interest in the mineral possibilities of the State, and the attention of the people at large and of investors have been directed to mining. The installation and equipment last year, in connection with the chemical laboratory of the University, of a laboratory wherein prompt and reliable assays and analyses of the minerals of the State could for the first time be made in Texas, has stimulated inquiry and a number of the students have indicated their desire to qualify themselves for Mining Engineering by taking advanced courses in Mining and Metallurgy.

The University is growing so rapidly and developing in so many ways, that it is difficult to determine relatively what is its greatest present need. It would seem, however, that its most pressing need is a modernly constructed and well equipped building for Civil, Mining and Electrical Engineering.

The early erection of such a building and the transfer to it of the Department of Engineering is necessary in order to relieve the Main University building of its present congested condition and give adequate room therein for instruction of the classes in the Department of Literature, Science and Arts.

Law Building.

There will be also need for a separate building for housing the Law Department and taking proper care of the Law Library. The present quarters for this department in the basement of the east wing are uncomfortable and inadequate, even for the present attendance, and, if this should increase materially, as is probable, a number much larger than we have now can not be accommodated. The library, where all of the law students must necessarily congregate for daily study and consultation of authorities is entirely too small a room to accommodate properly even the present attendance upon the Law School.

Chemical Laboratory.

During the past summer the Chemical Laboratory building was re-arranged and re-equipped so as to utilize all possible space and make the work of the School of Chemistry more effective. The desk room was materially increased, the sanitary condition was greatly improved and the efficiency of the teaching was advanced by means of the more convenient arrangement of the rooms. This building is already crowded and additional room will soon be needed for the students in chemistry.

Library.

The comfort and efficiency of the Library has been greatly increased by covering the floor with matting. A new and commodious circular desk has been constructed in the Library for the use of the Librarian and his assistant for the distribution of books and for holding the cases containing the card catalogue. This desk, as well as a number of additional book cases, has been made in the workshop for the use of the Library.

In order to secure more room for the classes the books, periodicals, and papers of the Texas State Historical Society, which had been heretofore, by permission of the Board of Regents, stored in one of the history rooms, were removed to the Library and placed in cases constructed for them. The excellent collection of periodicals and exchanges which have been collected by the Texas Academy of Science, and which have been heretofore housed in one of the rooms devoted to geology, have also, for the purpose of securing greater room for the increased School of Geology, been removed and placed in cases in the Library. The Library is, therefore, taking care of these two valuable collections of exchanges and periodicals, and when the catalogue of the Library is completed it is hoped that these collections may also be included in it. There are vast treasures in the great library presented to the University by Mr. Palm which are unknown and can only be rendered available when they are properly catalogued and arranged. In addition to the books now in the Library, I have received recently information that the rare and valuable library of the late Dr. Ashbel Smith, first president of the Board of Regents, consisting of some four thousand volumes, and which by the will of Dr. Smith was bequeathed to The University of Texas, are now ready to be delivered to the University authorities. It is expected that these books will be placed in the Library during the coming summer. An effort will also be made to push the matter of cataloguing with an extra force during the months of June and July, when the Library will be less used, so that the cataloguing may be as far advanced as possible by the beginning of the next session. With the addition of Dr. Ashbel Smith's library, the University Library will contain about 40,000 volumes. The additional shelf room required for these books must be secured by making wooden book cases in the workshop, as heretofore, or it will be necessary to begin installing a system of double-deck metal fireproof cases in the Library. The height of the ceiling in the Library is sufficient to admit of placing therein this system of double-deck fireproof metal cases. This character of cases, while more costly in the outset, are far better than the more cumbersome wooden ones which do not admit of but one story of shelves. The metal cases can be placed in sections and added to as necessity may require, and will constitute the

most desirable system of shelving and secure the greatest economy of space not only for the present Library room, but will be permanent cases, which can easily be removed to and utilized in a new and fireproof Library building, which will become a necessity in the near future. Among the Palm collection of fifty years of papers, periodicals, and books, are treasures which could not be replaced if lost by fire. Many of these will be of immense value to the students and scholars who shall undertake to write our history. The capacity of the present Library can be almost doubled by adopting and installing this system of double-deck, fireproof metal shelving, and I would strongly urge its inauguration in the Library.

The School of Mines.

Instruction in this school has been carried on during the year by Professors Taylor and Simonds. Professor Taylor devoted the spring term to instruction in mine surveying, and Professor Simonds lectured on mines and mining.

During the first two years of the course leading to the degree of Engineer of Mines the instruction is the same as for the degree of Civil Engineer. At the expiration of the second year those students who elect to follow civil engineering pursue studies looking to this degree, while the students in mining pursue the courses leading to the degree of Engineer of The catalogue of 1901-1902, pages 153-155, states the studies Mines. pursued in the School of Mines, and this statement has been adhered to during the year. Ordinarily, students do not declare their intention of choosing between civil and mining engineering until after the close of the second year, and for the reason already given, viz.: that the courses are identical through the first and second years. There are students in the University now who have entered for the instruction in mine engineering but who are now counted among the students in civil engineering. The opening of the fall term will find these enrolled for the course in mining engineering. They will then take up such studies as masonry construction, drawing of mine structures, mineralogy, assaying, hydraulics and physics, while continuing the course in chemistry. In the Senior year they have economic geology and ore deposits, mining, metallurgy, and the testing of materials and preparation of a thesis. Provision is made for eight weeks of field work between the Junior and Senior years.

The Catalogue.

The catalogue for 1901-1902, for the first time in the history of the institution, was issued so as to be ready for delivery in May. This became a necessity because the former edition of the catalogue had been entirely exhausted before the catalogue of this year could be passed through the press. The list of former graduates of the University has grown to be so large that it was deemed best by the Faculty to discontinue this year and hereafter the publication of such list in the catalogue. The publication of the Alumni Catalogue this year, which gives fuller information in regard to the graduates, made it unnecessary to publish the names of the graduates in the annual catalogue. A list of the alumni, by vote of the Faculty, will be hereafter published triennially in a separate bulletin by the Registrar of the University.

Alumni Catalogue

An important work of the year has been the collection of data for the publication of an Alumni Catalogue of the graduates of the University. This has been published as an edition of the Record. No systematic effort has heretofore been made to collect this desirable data in regard to those who have been students of the University. It will serve to furnish much useful information in regard to the alumni and their careers since leaving the University, and will keep them in closer touch with each other and with their alma mater. It is believed this publication will stimulate a patriotic desire on the part of the alumni to serve the State which has provided for their education. The State has a right to expect service from those whom it has trained for the discharge of all the high duties of intelligent citizenship, and for the advancement and preservation of her institutions. It is confidently believed it will not look in vain to the graduates of The University of Texas for willing service in the promotion of the highest interests of the commonwealth.

Water System.

The laying upon the University campus of the water mains for a complete system of water supply, has just been accomplished, and promises, with an adequate supply of water, which the city of Austin has agreed to furnish, to solve not only the problem of fire protection for the buildings of the University and their contents, but to make it possible to grow trees, shrubbery and grass successfully upon the University grounds. This will add greatly to the comfort and beauty of our surroundings. When the standpipe is completed and connected with the water system, this will secure an adequate and regular supply of water to the botanical and zoological laboratories, situated on the third floor of the University.

During the past session we have frequently been subjected to much inconvenience on account of an inadequate supply of water, and at times the supply has failed entirely.

In connection with the new water supply, there should be erected in the Main University building three water pipes, four inches in diameter, running from the basement to the third story, two to be located at the ends of the east and west corridors respectively, and one at the north end of the central corridor, with plugs and fire hose attached for immediate use in case of fire. This provision inside, with the fire hydrants outside, would, it is believed, afford reasonable protection from fire.

STUDENT ACTIVITIES.

Band and Glee Club.

During the present session the brass band has purchased a full set of superior instruments, and has contributed largely to the entertainment and pleasure of the student body by plaving on public occasions at the University, and by giving occasional evening concerts on the University campus. Under the direction of Instructor Schoch, the musicians among the students of the University have become expert performers, while Instructor Penick has trained the Glee Club in college songs and sacred music. Great pleasure has been realized not only by those participating in the musical activities of the University, but by all whose privilege it has been to hear the excellent music made by the students, many of whom are among the best students in the institution. The influence of this music upon the student body is both healthful and inspiring. At some future time it is hoped there may be placed in the Auditorium of the University, for the benefit of the students, a grand organ. Nothing could be more attractive or contribute more to their enjoyment.

Oratorical Contests.

Under a regulation passed by the Faculty, hereafter all agreements pertaining to inter-collegiate debates or oratorical contests to be participated in by students of the University, and the selection of debaters and orators to represent the University in such contests, must be approved by the Faculty Committee on Forensics and Oratory. This regulation, it is believed, will hereafter prevent improvident and unwise agreements, and will secure representation from the best students.

Entertainments.

For the purpose of eliminating abuses and the improper interference with the regular exercises of Commencement week, a committee from the Faculty conferred with representatives from the Fraternities, and after full consideration of the subject reported to the Faculty the following resolution, which was adopted:

"Resolved, That public social functions, including receptions and dances, given by students of the University during Commencement week, shall be limited hereafter to one such function, in addition to that given by the young ladies on Saturday night preceding Commencement week, which shall not extend beyond 11 o'clock p. m.; one on either Monday morning or Monday night (not to be given by a fraternity); and one on Wednesday night. The Literary Society entertainment heretofore held on Monday night shall not exclude another social function on that night."

For the further purpose of discouraging the use of intoxicants by the students at any of their social entertainments and the prudent direction of these entertainments, the Faculty also adopted the following resolutions:

"Resolved, That the Faculty is opposed to the use of intoxicating liquors in any form at any social function given by students of the University, and the Faculty requests the earnest coöperation of the students in carrying out this policy.

"Resolved, That a standing committee of three be appointed on social activities given by University students, with discretionary power to act in such matters."

Student Associations.

During the month of May, 1902, two student associations have been formed, one among the young men and the other among the young women, whose purposes are indicated in their constitutions, which are here given for the information of the Board of Regents, and to record a new movement on the part of the student body. It is believed that this voluntary movement on the part of the student body, if wisely directed, may prove of value to the institution.

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It must be understood, however, that in undertaking the direction of all such matters as are mentioned in these constitutions, the action of the students will be subject to the general authority and control of the Faculty so as to avoid reckless or hurtful conduct. The President and Faculty seek to encourage the student body to be self-regulating, selfcontrolling, and self-respecting, and strive to teach them that their personal honor, the honor of their *alma mater*, and the honor of the State, is in their keeping and must be jealously upheld and guarded by them. By this means it is hoped to bring the student body to a realization of the obligations as well as the privileges which are involved in intelligent citizenship.

Constitution of the Women Students' Association of the University of Texas.

ARTICLE I.

The name of this organization shall be the Women Students' Association of the University of Texas.

ARTICLE II.

The purpose of this Association shall be, through self-government, to foster and maintain the highest standards and ideals of conduct and scholarship, to promote better acquaintance among its members, to bring about a greater unity and fellowship among the women of the University and to organize the upper-class women in such a way that systematic work may be done each year in aiding the women of the incoming class.

ARTICLE III.

SECTION 1. All women registered as students in The University of Texas are active members of the Association.

SEC. 2. Associate membership shall be open to the ladies of the Faculty and to the wives of the gentlemen of the Faculty.

SEC. 3. Honorary members shall be the Lady Assistant to the Faculty, the wife of the President of the University, and the ex-presidents of the Association.

ARTICLE IV.

SECTION 1. Active members only shall have the power to vote.

SEC. 2. Associate members shall have the power to attend all the meetings of the Association and to counsel the Association on any matter that may be considered by the Association.

SEC. 3. One-fourth of the active members of the Association shall constitute a quorum in all cases not otherwise provided for.

ARTICLE V.

The legislative power shall be vested in the Association.

ARTICLE VI.

SECTION 1. The executive power shall be vested in an Executive Board, which shall consist of the President, the two Vice-Presidents, the Secretary and the Treasurer of the Association.

SEC. 2. There shall be an Advisory Board consisting of ten members of the Association, two representatives from each class and two from the graduate students.

SEC. 3. The officers of the Association shall be elected annually, by signed ballot, by the members of the Association on the first Friday in May, and shall enter upon their duties immediately on the conclusion of the elections.

SEC. 4. The Advisory Board shall annually be elected, by signed ballot, two members from each incoming class and two from the incoming graduate students, to be elected by the women of each class in separate assembly; the upper-class women shall hold their elections on the first Friday in May, the Freshmen on the first Friday in November; the term of service in each case to begin immediately after election.

SEC. 5. To elect an officer of the Association or a member of the Advisory Board, a majority vote of one-fifth of the members present shall be required.

SEC. 6. Only graduate students and members of the two upper-classes are eligible to office, and therefore to membership on the Executive Board.

ARTICLE VII.

SECTION 1. It shall be the duty of each member to assist in every possible way in maintaining high standards and ideals of conduct and scholarship and to coöperate with the superior officers.

SEC. 2. The duties of the President shall be to call and preside over all meetings of the Association and of the Executive Board.

SEC. 3. The duties of the Vice-Presidents shall be to assume the duties of the President in the absence, or at the request of the President, and to be chairmen of working committees.

SEC. 4. The duties of the Secretary shall be to keep the minutes of the Association and a list of its members; to post notices of meetings; to attend to the correspondence of the Association, and to be the chairman of a working committee.

SEC. 5. The duties of the Treasurer shall be to care for the money of the Association and to spend the same in accordance with the will of the Association, under the direction of the President, and to be the chairman of a working committee.

SEC. 6. It shall be the duty of the Executive Board to carry out the will of the Association as expressed in the Constitution and By-laws and in such resolutions as the Association may from time to time adopt.

SEC. 7. It shall be the duty of the Advisory Board to advise with the Executive Board and to be members of working committees. The officers of the Association shall be the chairmen of said committees.

SEC. 8. The Executive and Advisory Boards, in their efforts to foster and maintain the highest standards and ideals of conduct and scholarship, shall have the power to exercise their judgment and discretion in advising with any woman of The University of Texas on any matter relative to her university life, and in extreme cases to make recommendations to a committee consisting of the Lady Assistant and two lady teachers, who shall be elected by the Association on the first Friday in May, the same regulations holding as in the election of the officers.

SEC. 9. The President shall have the power to call a meeting of the Association at any time, and must call a meeting at the request of ten members. The President shall have the power to call a meeting of the Executive Board at her will, and must call a meeting at the request of two members. The President shall also have the power to call a joint meeting of the Executive and Advisory Boards at any time, and must call a meeting at the request of five members of the said Boards.

SEC. 10. The chairman of the Advisory Board, elected by the Board, shall have the power to call a meeting of the Board at her will, and must call a meeting at the request of three members.

SEC. 11. The chairman of the Committees for Self-Government in the various Halls shall act with the Advisory Board on matters that come under the jurisdiction of the Women Students' Association.

ARTICLE VIII.

Should a vacancy occur in any office of the Association, or in the Advisory Board, it shall be filled as soon as may be by special election. New members of the Executive Board shall first be elected, corresponding in number to the vacancies, and subsequently the new officers shall be elected by the Board from among its own members.

ARTICLE IX.

There shall be an annual fee of twenty-five cents for each active member.

ARTICLE X.

This Constitution may be amended by a two-third vote of the members present at a meeting called on petition, signed by one-tenth of the active members of the Association.

Students' Association of the University of Texas.

CONSTITUTION, ADOPTED MAY 24, 1902.—PREAMBLE.

We, the students of the University of Texas, in mass-meeting assembled, in order to effect an organization of the student-body, do hereby adopt the following constitution:

ARTICLE I.

The Students' Association.

SECTION 1. This organization shall be known as the Students' Association of the University of Texas.

SEC. 2. Every bona fide student of the Main University shall be a member of this Association, and shall have a voice and vote therein.

SEC. 3. The officers of this Association shall be a President, a Vice-President and a Secretary-Treasurer, and an Executive Committee.

SEC. 4. (a) It shall be the duty of the President to preside at all meetings of the Association and at all meetings of the Executive Committee as hereinafter provided for.

(b) It shall be the duty of the Vice-President to act as President in case of the absence or inability of the President.

(c) It shall be the duty of the Secretary-Treasurer to keep a correct record of the proceedings of the Students' Association and of the Executive Committee, and to receive and keep all money belonging to the Association, and to pay the same out only on order of the President. On or before the seventh day of June of each year he shall present to the Executive Committee, for auditing and publication, an itemized account of the receipts and disbursements made by him on behalf of the Students' Association, and shall render a similar account at the end of his term of office.

SEC. 5. Two hundred students shall constitute a quorum to do business.

ARTICLE II.

Functions of the Association.

SECTION 1. The Association shall elect a President of the Final Reception.

SEC. 2. The Students' Association shall assume control of the University publications.

(a) 1. The Students' Association shall take control of the "University of Texas Literary Magazine" as soon as satisfactory arrangements can be made with the Societies.

2. The Association shall elect a business manager and a board of editors consisting of an editor-in-chief and eight associate editors, of which number three associate editors or the editor-in-chief and two associate editors shall be women.

3. It shall be the duty of the business manager to secure subscriptions and advertising, and to attend to all matters pertaining to the printing and publication of the *Magazine*, for which services he shall receive all the net profits up to two hundred dollars and fifty per cent. of all above that amount, provided, that in no case shall he receive more than three hundred and fifty dollars. Not later than the first day of June of each year the business manager shall submit to the Executive Committee, for auditing and publication, an itemized statement of all receipts and disbursements made on behalf of the *Magazine*, and he shall turn over to the Secretary-Treasurer of the Association all funds received by him in excess of his remuneration, as hereinbefore provided for.

4. It shall be the duty of the board of editors to collect and prepare all literary matter for the *Magazine*, and to turn the same over to the business manager not later than the tenth of each month.

(b) 1. The Students' Association shall have control of the *Cactus*. 2. The Association shall elect a business manager and an editorial board, which shall consist of an editor-in-chief and eleven associate editors, of whom three shall be women; provided, that the Athletic Association shall retain the business and financial control of the *Cactus* for the coming year, or until the other two publications herein provided for have been acquired by the Students' Association. 3. It shall be the duty of the business manager to secure subscriptions and advertising and to attend to all matters pertaining to the printing and publication of the *Cactus*, for which services he shall receive thirty per cent. of all the net profits; provided, that in no case shall he receive more than two hundred dollars. The *Cactus* shall be ready for distribution not later than the tenth of May, and on or before the first day of June the business manager shall submit to the Executive Committee, for auditing and publication, an itemized statement of all receipts and disbursements made by him on behalf of the *Cactus*, and shall turn over to the Secretary-Treasurer of the Association all funds in his hands in excess of his remuneration as herein provided for, taking a receipt for the same, at which time he shall turn over all unsold and undelivered copies of the *Cactus* to the President of the Association.

4. It shall be the duty of the board of editors to collect and provide all matter for publication in the *Cactus*, and to turn it over to the business manager not later than the first day of March.

(c) 1. The Students' Association shall assume control of the *Texan* as soon as satisfactory arrangements can be made with the proprietors.

2. As soon as such arrangements shall have been made, the Association shall elect a business manager and an editor-in-chief. The editorin-chief shall select associate editors and reporters from the various departments as he shall see fit.

3. It shall be the duty of the business manager to secure subscriptions and advertising, and to attend to all matters pertaining to the printing and publication of the *Texan*, for which services he shall receive fifty per cent. of all the net profits; provided, that in no case shall he receive more than four hundred and fifty dollars. Not later than the first day of June of each year he shall submit to the Executive Committee, for auditing and publication, an itemized account of all receipts and expenditures made on behalf of the *Texan*, and he shall turn over to the Secretary-Treasurer of the Association all funds received by him in excess of his remuneration as herein provided for.

4. It shall be the duty of the board of editors to collect and provide all matter for publication and to turn the same over to the business manager not later than Monday of each week.

(d) The net proceeds of the Students' Association arising from the management of the foregoing publications shall be distributed by the Association in such manner as may be equitable to all interests concerned, to the Oratorical Association, the Musical Association, and the Athletic Association, provided that in no case shall the Athletic Association receive less than sixty per cent. of such proceeds; and provided, further, that the necessary expenses of the Students' Association shall first be deducted.

ARTICLE III.

The Executive Committee.

SECTION 1. There shall be an Executive Committee, which shall consist of sixteen members, including the President of the Students' Association, five to be chosen from the Academic Department, five from the Law Department, and five from the Engineering Department. Each department shall elect its own representatives on the Executive Committee. SEC. 2. (a) The President of the Association shall be *ex-officio* chairman of the Executive Committee, but shall have no vote therein, except in case of a tie.

 (\bar{b}) The Secretary-Treasurer of the Students' Association shall be *ex-officio* Secretary-Treasurer of the Executive Committee, but shall have neither voice nor vote therein.

SEC. 3. (a) The Executive Committee shall make contracts with the business managers of the various publications subject to the regulations provided in Section 3 of Article 2.

(b) The Committee shall submit and publish the accounts of the receipts and disbursements of the Secretary-Treasurer of the Association, and of the business managers of the various publications and shall see that all provisions of this constitution relating thereto are observed.

(c) The Committee shall furnish bond for the publication of the *Cactus*, and shall furnish such other financial backing for the publications as shall be necessary.

(d) The members of the Executive Committee from each department shall constitute a subcommittee for the purpose of investigating all branches of the honor system on examination arising among the men in that department, and shall report their findings to the general Executive Committee, and it to the Faculty; provided, that this provision shall not apply to the Law Department.

(e) The Executive Committee shall have control of all student arrangements for the celebration of University holidays.

(f) It shall be the duty of the Executive Committee to represent the interests of the student body in securing favorable rates from railroads, laundries, etc., and to deal with all other matters that may be referred to it by the Students' Association.

(g) The Executive Committee shall fill all vacancies that may occur, and such appointees shall hold office until the next regular meeting of the Students' Association, or until their successors are duly installed.

ARTICLE IV.

Miscellaneous Provisions.

SECTION 1. Meeting of the Association—There shall be three regular meetings of the Students' Association during each scholastic year. These meetings shall be held at three o'clock on the third Tuesday in October, January and May. In addition to regular meetings the President shall call the Association together in special meetings at such time as he may deem necessary, or whenever he shall be petitioned to do so by five of the members of the Executive Committee or by fifty members of the Students' Association.

SEC. 2. Time of Elections—(a) The President, Vice-President, and Secretary-Treasurer of the Association shall be elected at the regular meeting in May, and shall serve for one year or until their successors shall be duly installed; provided, that at the first meeting to be held on Friday after the adoption of this constitution these officers shall be elected to serve until the regular meeting of the following May.

(b) The members of the Executive Committee shall be elected by the several departments in separate meetings for the purpose, which shall be

held at three o'clock on the Monday just preceding the regular meeting of the Students' Association in October, and shall serve one year, or until their successors are duly installed; provided, that at such departmental meetings, to be held at three o'clock on Thursday after the adoption of this constitution, Executive Committeemen shall be elected to hold office until the regular election of the following October.

(c) The business managers of the various publications hereinbefore provided for shall be elected at the regular meeting in May of each year, to serve for the following scholastic year; provided, that the manager of the *Magazine* for the coming year shall be elected at the first meeting to be held on Friday after the adoption of this constitution.

(d) The editors of the *Magazine* and the *Texan* shall be elected at the regular meeting in May and shall serve for the following scholastic year; provided, that the editors of the *Magazine* for the coming scholastic year shall be elected at the first meeting to be held on Friday after the adoption of this constitution.

(e) The editors of the *Cactus* for each year shall be elected at the regular meeting in October.

(f) The President of the Final Reception shall be elected at the regular meeting in January.

ARTICLE V.

Amendments.

This constitution may be amended at any regular meeting of the Association by a two-thirds majority of the students present and voting; provided, that no proposed amendment shall be considered by the Association unless signed by fifty students and posted on the bulletin board at least two weeks prior to such meetings.

Educational Associations.

The University of Texas became a member of the Association of Southern Colleges and Preparatory Schools last November, having met all requirements of said Association as to standards and entrance examinations. It is deemed proper that The University of Texas, while it was founded primarily for the education of the youth of Texas, should take its place beside the leading universities of the country and contribute its full share to the advancement of the general cause of higher education.

During the past year The University of Texas, through its President, became also a member of the Association of State University Presidents, at a meeting of this Association held last winter in Washington City. This Association of State University Presidents has heretofore met annually with the National Educational Association, which holds its annual meetings in midsummer, and this year at Minneapolis. It is probable hereafter that a second meeting of State University Presidents will be held during each winter, and may be held at the same time and place of the annual meetings of the Representatives of the Agricultural and Mechanical Colleges. There are many common problems of State education which it is expected this Association of State University Presidents will aid in solving.

Professor Lester Gladstone Bugbee.

Lester Gladstone Bugbee, Adjunct Professor of History in The University of Texas, who had been granted, on account of failing health, a year's leave of absence, died March 17, 1902, at his father's home in Johnson county, Texas, of tuberculosis. Representatives of the University attended his funeral, the Faculty adopted appropriate resolutions and an hour at midday on Wednesday, May 14, 1902, was set apart for the assembling of the Faculty and student body in the Auditorium of the University for the purpose of hearing addresses from representatives of the Faculty and student body in honor of his memory. At the time of his death Professor Bugbee was thirty-three years of age, and, as stated in the resolutions of the Faculty: "The life of Lester G. Bugbee was preëminently one of usefulness. As teacher, as investigator, as a man of administrative capacity, he showed both the will and power to serve his State, to elucidate her history, to uplift her youth.

As a teacher he was enthusiastic, clear in exposition, patient in explanation, knowing just how much to try to impart, he won golden opinions from his students. Thoroughly acquainted with Texas educational conditions and with the needs and wishes of the student body, he was first of all practical in his teaching, but in being practical he did not fail to be also inspiring. No one loved the University more heartily than he, no one ever served it with more sincerity and singleness of purpose."

This is the proud record which one of the faithful sons of this institution has left to honor his *alma mater*. Peace to his ashes, honor to his memory !

Fellowships.

During the past year through the generous provision of Hon. Lewis Hancock, of Austin, a Fellowship in Political Economy has been established in the University for the ensuing year of the value of \$250.

Another Fellowship in Physics of the value of \$150 has been kindly provided for the next session by Major Ira H. Evans, of Austin, Texas.

This wise provision for fellowships will stimulate meritorious students to make special effort, and will enable those winning these fellowships to pursue here advanced work.

It would be of great advantage to the institution if more of such fellowships were established not only in the Main University at Austin, but also in the Medical Branch at Galveston, where advanced work could be done advantageously in studying many of the special diseases incident to this climate. Such fellowships have been established in many of the leading universities of this country, and it gives me pleasure to state that within the past few weeks fellowships have been awarded the graduates of this University in the University of Wisconsin, in the University of Chicago, in Bryn Mawr, and in Columbia and Harvard Universities.

As an evidence of the superior attainments of the graduates of our Medical Branch at Galveston, I desire to record the fact that at a recent examination held by the State Board of Medical Examiners, at Waco, eight of this years' graduating class appeared, and the average of their grades, as given by said State Medical Board, was over 90. One of the number made an average grade of 96 6-10, the highest average of any applicant before the board.

Department of Law.

Special attention is called to the report of the Dean of the Law School. The work in this school appears to have been more satisfactory and the Faculty are of opinion that the quiz-masters should be continued.

It is believed that the hour and a half period for lectures and recitations in this department should be discontinued, and that two periods daily of an hour each, with an intermission, should be adopted instead. An hour and a half is too long a period, both for the professor and the student. Greater effectiveness, it is confidently believed, will be attained by a change to two periods of an hour each for lectures and recitations. The entrance requirements, both in the Law and Medical Departments, are too low and should be gradually raised. The four years' course in the Medical School partially remedies the lack of the requisite disciplinary training in those desiring to enter upon professional training In the two years allowed in the Law School, however, no adequate opportunity is afforded for correcting this deficiency. The result is that many of those who take only the prescribed two years' law course come to their profession lacking much of the training that is essential for success in their chosen calling. The matriculate in the Law School should be better grounded in history, should be more thorough in English, and it would be advantageous if he were better versed in the sciences than is at present required. Before he enters upon the study of law as a science, he should have an understanding of the origin, growth and development of institutions and their relations to society and govern-It is believed to be impossible to crowd more into the two years' ment. course than is already included, and it therefore seems necessary either that higher requirements for entrance should be demanded or a longer time be given for completing courses leading to graduation. It is my judgment that the entrance requirements should be strengthened and that the courses should be re-arranged and re-organized into a full three years' course, beginning with the session of 1903-1904. It is not deemed wise to attempt this change too suddenly, but it is believed that an urgent demand exists for this advance.

Department of Medicine.

Attention is called to the reports of the Dean and of the several professors of the Medical College. During the past year the Medical College building has been remodeled and rearranged so as to better subserve the purposes for which it was intended. The lowering of the roof and the large extension of the skylight in the operating room and in the anatomical lecture rooms have proved to be of great advantage. The reëquipment of the several laboratories of the Medical College have greatly increased the convenience and efficiency of the work of the teaching force. The quarters of the School of Pharmacy have been materially enlarged by cutting off part of the room heretofore devoted to the School of Chemistry. To each of the desks in the School of Chemistry have been added another drawer which practically doubles the capacity, so that no inconvenience has been realized by the School of Chemistry on account of surrendering part of its floor space to the School of Pharmacy.

A new laboratory for the Chair of Medicine has been fitted up, installed and equipped in what was the old negro hospital, which was removed to make room for the new brick negro hospital. This old negro hospital has been remodeled and converted into a home for the nurses. The equipment of this laboratory for the Chair of Medicine was a much needed improvement.

A permanent home for the nurses was also a much needed improvement, since they have had no place they could call their own since the storm of 1900.

The two-story new brick negro hospital, which has just been completed and is situated on the same block with the John Sealy hospital, will hereafter furnish ampler provision for taking care of the negro patients than we have ever had.

The negroes of Galveston, as a token of their appreciation of this generous provision made for their race, have contributed by voluntary subscriptions some \$600 towards furnishing this new hospital. It is expected also that this new negro hospital will furnish additional clinical material, which has been greatly needed by the Medical College since the storm. The laboratories of chemistry, pharmacy, physiology, and the laboratories and museums of pathology and anatomy have been greatly improved and enlarged by the acquisition of new and additional apparatus, specimens and illustrations. The Medical College has never been in so good a condition for doing satisfactory work.

The Library has also been much improved by the funds appropriated, and it now numbers about 4,000 volumes, which are being catalogued and placed upon the shelves. Heretofore, on account of lack of funds, little has been done for the Library. It is now hoped that it will prove of much greater value, both to the students and Faculty. The lack of adequate funds for the support of the College next year has necessitated cutting down the appropriations for the laboratories of the several schools to a point that it is feared their efficiency may be somewhat impaired.

University Hall has been restored and will hereafter be used as a home for the women students of medicine.

Mrs. Emma Lee Cartmell.

On January 5, 1902, Mrs. Emma Lee Cartmell, Clinical Instructor of Nurses and Superintendent of Nurses in the Medical College, was removed by death. Mrs. Cartmell came to her position at a time of stress and anxiety immediately following the great storm of 1900, when the Training School, aside from the disturbances of that time of danger and excitement, was already in straits on account of the absence for a number of months of a regular superintendent. Her willingness, under such difficult conditions, to undertake the guidance of the classes was strong evidence of her spirit of loyalty to the school of which she was herself a graduate, and the efficiency of her efforts was soon evident and continued unabated until the end of her life.

Mr. George Sealy.

It is fitting that I should here record the great loss sustained by the Medical College during the past session in the death of Mr. George Sealy, who, since the establishment of the John Sealy Hospital, has been a representative upon its Board of Managers, chosen by the Board of Regents of The University of Texas. Mr. Sealy was recognized by all as an extraordinary man. It is only the great who can be so simple, so modest, and yet so worthy. As a member of the Board of Managers, he at all times manifested the deepest interest in the workings and condition of the hospital, and generously contributed his time, his thought, and his means to the promotion of its welfare. In all his relations with the hospital and the College he was the great-hearted, broad-minded, judicious counsellor and friend, whose wisdom and generous helpfulness was ever apparent. He was indeed nature's nobleman, an honor to his city, to his State, and to his race, and fortunate indeed is this University to have had the services of such a man. He has passed to his reward, but verily his works do follow him.

Prof. David F. Houston.

Prof. David F. Houston, Professor of Political Science and Dean of the Academic Faculty, has recently been elected President of the Agricultural and Mechanical College of Texas, and his acceptance of this position takes him away from the University after the close of the present session. It is a matter of universal regret that the University will lose Professor Houston, but our loss will be the gain of our sister institution, to which he goes as its head. His high character, his scholarly attainments, and his organizing ability, give promise of a splendid career in the great work he has undertaken. The compensating thought in our loss is that the services of Prof. Houston will not be lost to Texas, but will only be transferred to another and broader sphere of activity in the great field of education. I desire to record my high appreciation of the services which Prof. Houston has rendered the University during the entire time he has been connected with the institution. As a teacher he has been wise, able, and effective; as an associate and friend, he has been courteous and true; as a disciplinarian, he has striven to maintain high standards among the students, and as a man he has borne a character without reproach. He carries with him the confidence and esteem of his associates in the Faculty and of the student body, and the warmest wishes of all for his future happiness and success in his new field of labor.

In conclusion, I desire to commend the spirit of devotion to the University manifested during the past session by the teaching force and all the officers and employees. There has been a genuine spirit of service and coöperation on the part of all, for which I feel sincerely grateful: and this has secured another year of successful work in the career of The University of Texas.

Respectfully submitted,

WM. L. PRATHER, President.

REPORTS OF THE FACULTIES AND OFFICERS

of the

Departments of Literature, Science, and Arts, Engineering, Law, and Medicine.

BOTANY.

President Prather.

SIR: I beg herewith to submit my annual report of the School of Botany for the current session.

COURSES OF INSTRUCTION AND ENROLLMENT.

During this session the following courses have been carried to completion:

Course 1. Summer School. One-third course. Enrollment 15
Course 2. Summer School. One-third course. Enrollment 2
Course 1. General Biology. One-half course. Enrollment
Course 2a, 3a, 3b, Advanced Botany. Full course. Enrollment 12
Course 5. Elementary Botany for Teachers. Full course. Enroll-
ment 6
Course 5c. Spring Term. Elementary Botany for Teachers. One-
third course. Enrollment 8
Course 6. Study of Texas Flora. One-third to full course. Enroll-
ment
Course 8. Forestry. One-third course. Enrollment 12
Total enrollment
Actual enrollment exclusive of Summer School

Of the foregoing courses, those of the Summer School and the course in Forestry were conducted for the first time. Attention is invited to the interest manifested in the course in Forestry. With one exception, the students were young men who, quite uniformly, cultivate a vital interest in Texas forestry. It is expected that a number of them will receive the appointment of Student Assistants in the Government Bureau and be assigned to summer field work this season.

THE INSTRUCTING JORCE AND THEIR WORK.

The botanical force during this year has consisted of an Adjunct Professor, an Instructor and two Student Assistants. With this force, it has been possible to carry on the courses with fair satisfaction. I have personally conducted the courses in the Summer School, the lectures in General Biology (two weekly), all of Courses 2a, 3a, and 3b, the course in Forestry, the second half of Course 5, and the work of two students in Course 6. Instructor Ferguson has had in charge the laboratory work (four periods weekly) of General Biology, and the quiz exercises; the first half of Course 5, part of the students in Course 6, and the preparation of material for class study and illustration. His work has been strenuous, conscientious and efficient.

The Student Assistants, Mr. Chas. Winkler and Miss Julia Estill, have assisted students in the laboratory, have helped collect and prepare class material and attended routine duties in the laboratory. Both have rendered satisfactory assistance besides making good records as students, although it has been necessary to claim more of their time than is really warranted in the case of Student Assistants. This arose because of the large number of students occupying the laboratories at the same period.

SPECIAL LINES OF STUDY AND CONTRIBUTIONS.

During the year, considerable progress has been made in the pursuit of botanical investigations—especially in the field of Texas flora. We have hitherto complained of a lack of advanced students to take up the work. That disability is being rapidly removed. We have now a corps of very enthusiastic and efficient advanced students.

In this connection, I beg to call attention to our lack of a medium of publication for contributions designed to be of local and practical use, rather than purely technical. We have, for example, a student who is making a study of the Mistletoe, with reference to giving instruction as to its habits, its destructive effects, and methods of exterminating it. Similarly for the "Spanish moss" and other harmful or useful plants. Such contributions ought, in my opinion, to come from the University as its contributions to the welfare of the State.

No such difficulty exists with regard to the more purely technical contributions. In this field, also, some work has been done. Our former student, Mr. Long, now of the Denton Normal, has continued his studies of the Texas fungi begun here, and has published two valuable articles in standard botanical journals. Mr. Ferguson has assiduously pursued his study of one of our peculiar Texas plants—Ephedra, a member of the pine kinship—the results of which are not yet ready for publication. He contemplates making this the basis of his thesis for the degree of Ph. D. at Cornell University, where he will, this summer, as last, pursue his studies to that end.

Further investigations have been made into the forest resources and conditions of the State, and the range of territory visited has been vastly extended. This has been made possible by co-operation with the National Bureau of Forestry. By utilizing the Thanksgiving recess, the Christmas holidays, the winter term examination week and other single holidays, I have been able to explore the following territory:

1. The Red River bottoms and uplands near Texarkana.

2. The Trinity river bottom lands in Leon county.

3. The shortleaf pine lands about Kilgore and Garrison.

4. The several types of forest along the line of the Houston East & West Texas Railway.

5. The Trinity river bottoms in Liberty county.

6. The swamp forests about Beaumont.

7. Longleaf pine lands about Olive, in Hardin county.

8. The live oak, and the cedar brakes of the San Bernard, in Brazoria county. 9. The cedar brakes near Austin and on the Colorado northwest of Burnet.

The results, in part, have been embodied in an extended and fully illustrated bulletin of which the manuscript has just been sent for publication to the National Bureau of Forestry. This bulletin is to replace the preliminary one submitted last year, which was lost, with other papers, in the transfer of the Bureau to its new quarters. Briefer articles have been published in the State press and in lumber journals.

Another publication which, it is believed, will be of assistance in stimulating the study of Texas flora is "The Ecological Relations of the Vegetation of Western Texas" in the *Botanical Gazette*, distributed in November.

INCREASE IN EQUIPMENT.

The funds placed at the disposal of the School of Botany have been expended with reference to increasing the efficiency of courses now being given, and in accumulating equipment for more advanced special lines of work. Among the accessions ought to be mentioned:

1. The purchase of stereopticon outfit and lantern slides to illustrate some of the lectures.

2. The acquisition, partly by exchange, of improved photographic instruments, and the addition of many excellent views illustrating various phases of Texas flora.

3. The addition of over twelve hundred well prepared herbarium specimens illustrating the flora of Texas and other interesting regions in the United States.

4. The construction of individual student lockers for the safe keeping of important specimens, notes, and valuable instruments.

PLANS AND RECOMMENDATIONS FOR THE SESSION OF 1902-1903.

Owing to the limitations of laboratory room and the time in which the medical preparatory work in Zoology must be given, it is proposed that instead of conducting a course in General Biology in conjunction, the Schools of Botany and Zoology shall each offer a separate introductory full course throughout the year. This will result in the complete separation of the work of these two schools, and as a large part of the equipment consisted of property originally purchased for Zoology, this move leaves the equipment for the first course—and, indeed, for all courses—in Botany markedly deficient. This deficiency is chiefly in the matter of compound microscopes, of which the School of Botany owns but twelve. In other respects, the School is prepared, or can be prepared, to carry on its work alone on the basis of the past year without additional special appropriation.

The Courses of Instruction contemplated for next year embrace two features in addition to, or different from, the work of the past year.

First, the first year Botany will be a full course running through the year.

Second, there are to be offered three consecutive one-third courses in the field of Economic Botany as follows: fall term, Plant Breeding and other phases of applied physiology; winter term, Forestry; spring term, the study of Plants useful as drugs, textiles, and foods. It is believed that such courses will materially assist in bringing the work of the school into helpful relation to the larger interests of the State.

INSTRUCTING FORCE FOR 1902-1903.

We are probably justified in assuming that the present instructing force will be able to carry on the work of the next session. As a matter of fact, we have during the past year been obliged to employ additional student help equivalent to that of a regular Student Assistant but for work outside of laboratory instruction, and possibly this same arrangement could be repeated if the income from the fees will warrant the expense.

I recommend, therefore, the retention of Mr. A. M. Ferguson as Instructor, and of Student Assistants Chas. H. Winkler and Miss Julia Estill. I am not sure that we shall be able to retain Mr. Ferguson at his present rank and salary. Unquestionably his work merits greater remuneration.

As to Mr. Winkler, he is an unusually efficient and promising assistant and student, whom I have recommended to carry on certain phases of laboratory photography, lantern slide making and microscopical technique at Cornell University during this summer recess, and arrangements have been made with certain laboratories there to that end. As this will place him upon considerable extra expense besides increasing the value of his services to us, I recommend that his salary be raised from \$100 to \$200.

EXPENSE BUDGET FOR 1902-1903.

In the expense budget for the coming year, three classes of items are to be provided for:

1. The annual supply stock.

2. The addition of the most urgent new items rendered necessary in the natural growth of the school.

3. Emergency supplies.

Arranged under these three classes the items are as follows:

Class 1.	Materials for class study and demonstration\$	150
	Chemicals, glassware, reagents, tools and miscellaneous	
	appliances	300
Class 2.	Revolving microtome essential for work of advanced	
	students	80
	Fitting up dark room for photography and physiolog-	
	ical experiments	75
Class 3.		
	Course 1	100
	Twelve compound microscopes, at \$42 (about)	500
	-	
Tot	al	.205
		.,

It will be observed that of this amount, \$600 is required to provide for the addition of Course 1 as a full botanical course.

The need of more compound microscopes is urgent, since the School of Botany owns but twelve of these. With twelve additional instruments, it will be possible to accommodate the students, especially as during part of the year several microscopes can be borrowed from Zoology. Without the additional microscopes, our work would be seriously embarrassed.

If it should be necessary to eliminate any of these items of the budget, naturally it should be in class 2.

DEVELOPMENT OF THE SCHOOL.

Recognizing the present urgent needs of other schools and in accordance with the desire to see them put upon a firm footing, we have waived the right to urge the provision for the immediate development of the School of Botany along the lines hitherto projected. It is fitting, however, to embody in this report a brief statement of what direction the development is to take.

We propose, in the first place, to make the school an efficient agent in giving instruction in the several phases of Botany specified in the Catalogue; first, for the disciplinary value of the study; and, second, for the contributions such a study will make toward the development of the State's resources. This involves expenditure in furnishing the laboratories with all those appliances which make possible a high degree of efficiency. It involves further, ample museum facilities, and green house and garden space for the cultivation of plants used in investigations.

We propose further to enlarge the scope of our operations to embrace a thorough botanical survey of the State, and to study every element and aspect of the flora and its relation to soil and climate as economic elements or as indications of possible developments in economic lines.

This would involve not only a continuation and extension of present investigations in the timber resources, and the working out of a rational system of forestry or forest policy for the State, but would involve also the necessity of carrying on field work in other lines comprehended in a botanical survey, much of which could be done economically, by co-operation with other schools of this institution or with government survey corps.

In brief, then, the several phases of development may be summed up as follows:

1. Increase the efficiency of botanical instruction, by perfecting the laboratory and lecture room and library equipment.

2. Provide museum space and material for both popular education and for demonstration in class work.

3. Continue the study of Texas flora in general, of economic questions like forestry in particular, and gradually perfect the organization of a botanical survey of the State.

4. Secure the adequate housing of the School of Botany in a building erected especially with reference to the work to be carried on.

5. Erect a suitable green house for indoor cultivation of necessary plants, supplemented by garden space for open air culture—the ultimate aim being a complete and modern botanical garden.

Respectfully submitted,

WILLIAM L. BRAY,

Adjunct Professor of Botany.

CHEMISTRY.

President Prather.

SIR: The number of students enrolled in the School of Chemistry during the session of 1901-1902 is as follows:

TOTAL ENROLLMENT.

Course 1	2
Course 2)
Course 4	5
Course 6	
Course 11	3
P. & H 19:	ł
Total in courses	L

Inasmuch as the quantity and character of the work entailed in the courses herein enumerated is fully set forth in the Catalogue of 1900-1901, it would be superfluous to repeat it here. It is sufficient to say that the time of the teaching force has been fully taken up by the work of the school, and that the students have received all the attention possible under the conditions presented here.

Several researches have been in progress during the year, the results of which will soon be ready for publication. They represent real contributions to chemical knowledge. The work has been done under very great stress; but it must be remembered that the extension of knowledge is one of the highest functions of the University, and it is to be hoped that our opportunities in this direction will be enlarged each year by substantial recognition in the form of increased library facilities, larger equipment, augmented teaching force, and endowed fellowships and scholarships open to worthy and competent students whose time will be wholly given to research. This character of work, more than any other, develops the highest type of scholarship and inculcates the profoundest regard for the truth, and it should be fostered with a strong arm. It is an effective and lasting stimulus to the student, and it brings him to the joyful recognition that *work* is its own reward—that life is worth living —that every man must do his part.

During the past year the Chemical Laboratory of The University of Texas Mineral Survey, under the supervision of the head of this school, through the work of the assistant chemists, has contributed a large mass

^{*}la is a new course given to students who began Chemistry in the preparatory schools. It is the equivalent of the second half of Chemistry 1, but entails the organization of a separate section of that class in order to obviate waste of time of students who present at entrance one unit of Chemistry. The University would be relieved of this extra burden if it demanded two inits of one Natural Science, in lieu of one unit each of two Natural Sciences. This plan would be equally advantageous to the University, the secondary schools, and the students who elect courses in the Natural Sciences.

of chemical facts concerning the resources of Texas. The extent of this work, its nature and its importance, will be communicated to you by Dr. Wm. B. Phillips, Director of the Mineral Survey.

The wisdom of the generous action of the Board of Regents which made it possible to carry out the plan submitted for remodeling the interior of the Chemical Laboratory has been fully exemplified in the improved conditions under which the work of the school and the chemical work of the Mineral Survey have been done during the session. The results obtained during the session now about to close could not have been accomplished under the pre-existing conditions. I would not have it understood that the present arrangement is perfect, or that it fully meets the needs of the School of Chemistry, but the fact remains, it is a vast improvement upon the previous arrangement, and is a long step opportunely made for the betterment of working conditions in the Chemical Building.

The working of the new system of heating installed in the Chemical Building during the Christmas holidays and the first half of January has been set forth in detail in another report.

This session witnesses the "passing" of the course in P. & H. For several years the conduct of this course has been divided between the heads of the Schools of Zoology and Chemistry, and its removal from the University is a decided relief to the responsible heads of these two schools. The classes have been very large, and the work has been laborious, burdensome and enervating. In spite of the difficulties which beset the work the course has done a real service to the State in elevating the standard of the work in this topic given in the secondary schools of Texas. As its influence in this direction will continue, its retirement from the University is fully justified.

The library of the School of Chemistry has been strengthened during the year by the addition of complete sets of The Analyst, and the Zeitschrift für physikalische Chemie. It is the firmly established policy of the School of Chemistry to add to its library complete sets of chemical journals when possible to do so; fully recognizing that such sets are of paramount importance, that they are of permanent value, that no school can present a valid claim to being well equipped for serious work until its library is well stocked with this type of literature. A good beginning has been made, but the school is still in need of large additions in this particular direction, and also of a supply of revised and recent editions of chemical manuals. While complete sets of journals are of permanent value, *i. e.*, their usefulness is continuous, the rapid growth of the science shortens the life of single editions of its handbooks, and, unless these manuals be revised and replenished, their use, except for historical purposes, soon becomes dangerous—because they propagate obsolete ideas.

Your attention is called to the reorganization and redistribution of the work in the School of Chemistry as set forth in the Catalogue of 1901-1902. It is the policy of the school to keep the work fully abreast the progress of the science, to make it as effective as possible under the conditions that confront us, and to earnestly endeavor to meet the growing needs and demands of the State. To carry out this policy entails a great deal of labor other than that of teaching, requires a strong and enthusiastic corps of teachers and assistants, and a much larger supply of apparatus and chemicals than the School of Chemistry possesses. The development of this school under very trying circumstances is submitted as evidence of the competency of its teaching force; the life and activity in the school must speak for enthusiasm; the multitudinous details, the demand for personal supervision and individual laboratory instruction to a large number of students must show the urgent need of additional assistants.

The development of courses in Electrical and Mining Engineering necessarily enlarges the scope of the work in the School of Chemistry. The school has already taken steps to meet this demand, as will be seen in the courses published in the Catalogue; but this, together with other demands that have been steadily growing and urgently pressing for more than three years, will necessitate a much larger equipment for courses offered in quantitative analysis including electrolytic methods. Quantitative analysis should be begun in the second year of Chemistry. For several years it was given here in that stage of the course in Chemistry; but the growth of the second-year class soon reached a size that rendered it impossible to give a satisfactory course in quantitative analysis to so large a number of students with the equipment at hand. The only alternative was to set the course in the third year and reduce the number of students therein until adequate equipment could be had. The time is now ripe for the return of this course to the second year, and it has been so announced in the Catalogue for 1901-1902. Next session no less than twenty students will apply for this particular course, and to accommodate them it will be absolutely necessary to very materially increase our equipment of platinum ware, analytical balances, analytical weights, and other instruments of precision, to say nothing of additional glassware, copper drying closets, high grade chemicals, etc. The work in electrolytic methods and technical analysis will require special equipment. The equipment here outlined is expensive, and will require a very substantial appropriation to obtain it. It must be borne in mind that platinum ware is now worth eighty-two cents per gram, and that it will take a good many grams of platinum ware to carry out this plan of work. The platinum crucibles needed will average in weight thirty grams each, and the dishes forty-eight to one hundred and twenty-five grams each.

Another problem that confronts the School of Chemistry is the question of an adequate supply of distilled water. For years we have been depending upon the steam that enters the Chemical Building from the boiler house—collecting and tanking the condensed steam when the boilers would make it possible so to do. Hitherto this supply has nearly met our needs; but during the present session it became necessary to purchase distilled water from the ice factory and also to distill and redistill large quantities, using gas as a fuel. The last two sources of supply are expensive; and it is evident that a distillation plant capable of using cheap fuel (coal or oil) should be installed in the Chemical Building. Such a plant would not only supply an adequate amount of distilled water, but would also prove an economical source of steam and sand-bath heat in many operations daily going on in the laboratories. It is not only a necessity, but in time would soon prove to be a great economy of time and money.

The total absence of a chemical museum has greatly hampered the work of the school; but the financial outlay for an adequate equipment of this character practically estops its discussion at this time, especially when confronted with so many other important needs.

The question of transportation of laboratory supplies is a very con-

siderable item. In spite of the very best business economy our freight bills during the session of 1901-1902 closely approximate the large sum of \$400. The business management of the Chemical Laboratory has received constant personal attention from me. Quality, quantity, and price of supplies, and cost of containers, packing, and transportation all receive full consideration, and serve as the basis upon which the supplies for this school are purchased. Many of our supplies are most advantageously purchased in European markets, but to reap the fullest benefit of such purchases more time is needed than is afforded when the appropriation is made in June. Splendid connections in domestic and European markets have been made with some of the very best factories and dealers, but our remoteness from the best markets of the world makes it imperative to have a definite capital to work with if the greatest economy is to be achieved. All orders for supplies purchased abroad should be placed before April 1st in order to have them here by October 1st. Besides, the earliest orders receive the best attention and secure the most favorable prices. They reach the factory and the dealer when their stocks are full and the demand is lightest-little business sagacity is needed to see the result. The closing of the large glass factories during the summer months is always followed by an upward tendency of the glass marketand at times the stocks on hand do not meet the summer demand, thus placing the purchaser at the mercy of the middleman-the very man into whose hands we most frequently fall. The foregoing statement of facts is based upon practical experience in the manufacturing and wholesale chemical market extending through a period of more than twenty vears.

I wish to emphasize the fact that the whole stock of chemicals and apparatus carried by the University of Texas is entirely too small to meet the most urgent demands made upon it during the session; and that the great distance from the source of supply makes it absolutely necessary to carry an adequate stock in order to make the work in the school effective. Each year I have asked that the appropriation for the School of Chemistry be sufficiently large to meet the normal growth of the school, and, while it has been somewhat increased each succeeding year, still that increase has never been commensurate with the growth of the work in the school, and as a result our supply of apparatus and chemicals each year falls short of the most urgent needs.

The burden of the teaching has been borne by Adjunct Professor Bailey, Mr. Schoch, and myself. Mr. Alfred Freshney, in the capacity of Fellow and Storekeeper, and Mr. Miley B. Wesson, Jr., as Student Assistant, have rendered valuable service assisting in the laboratory. The distribution of the work is shown in the University catalogue. It will be seen that there is need of additional help in this school. The work has been faithfully and competently performed.

A Tutor should be added to the permanent teaching staff of the school. If this position be established, Mr. Alfred Freshney should be selected to fill it.

The school will also need a Fellow or two Student Assistants.

Mr. Wesson's service as Student Assistant in Chemistry has been satisfactory in every respect. I greatly regret that we are unable to offer him adequate inducement to remain another year.

Mr. J. S. Brown will conduct the work in Chemistry given in the University Summer Normal.

For the session of 1902-1903 the immediate urgent needs include:Organic solvents\$ 200 00Other chemicals\$ 800 00Apparatus1,200 00Platinum ware\$ 800 00

A distillation plant (the cost of which cannot be given at this writing).

An appropriation for library purposes.

For further extension of the usefulness of the School of Chemistry you are respectfully referred to the annual report made by me for the session of 1899-1900.

Respectfully submitted,

H. W. HARPER, Associate Professor of Chemistry.

ENGLISH.

President Prather.

SIR: I respectfully submit for your consideration the report of the School of English for the session of 1901-1902.

I. ENROLLMENT OF STUDENTS AND DISTRIBUTION OF WORK.

The enrollment of students in the school and the distribution of work among the members of the English Faculty are given in the following tabular statement:

Course.	Section.	Subject.	Hours a week.	Terms.	Instructor.	Number of Students.	
*1	I	English Grammar and Composition	3	3	Campbell and Cal-	39	
111111111111111111111111111111111111111	II III IV VI VII VIII IX X		000000000000000000000000000000000000000	3 3 3 3 3 3 3 3 3	laway.† Waldo	29 30 41 40 32 34 31 36 32	
2 2 2		Outline History of English Literature	333	3	Butler Butler Reed	344 36 57 39	
3 4 5 6 7 11 11 8		English Composition	10 10 10 10 10 10	3 1 1 2 2 1	Campbell Callaway Callaway Butler Callaway Callaway Callaway { Callaway { Butler	132- 43 10 26 34 41 4 10 10 168	
	Grand Total						
	Net Total						

* Subdivided into 1a, Grammar; and 1b, Composition. † Mr. Callaway met the class in Historical English Grammar twice a week during the Spring Term. To sum up the matter: during the present session ten courses have been offered, and one of these has been divided into ten sections and another into three. Six hundred and forty-four students have been enrolled, of whom 344 are Freshmen and 300 upper-classmen. Fiftythree hours a week have been devoted to class-room instruction, and at least thirty to conferences. And this work has been done by five teachers and one assistant.

A comparison of these figures with those of last session demonstrates a healthy growth both in the lower and in the upper classes. In 1900-1901 there was a total registration of 525 students, of whom 300 were Freshmen and 225 upper-classmen; while this session, as we have seen, we have a total of 644 students, 344 of whom are Freshmen and 300 are upper-classmen.

II. COURSES OF INSTRUCTION.

As I gave last year a rather full statement of the general division of the courses in English into (A) Composition, (B) Language, and (C) Literature, and also of my belief that the best work in any one of these lines is possible only when all three are closely correlated, I shall give only a brief *résumé* of the work in these respective fields, with such comments as seem called for.

A. Composition.

As during last session, we have had two courses in English Composition: 1b, for Freshmen; and 3, for others. Besides, much writing has been required in the courses in Literature. While the writing of the English students is by no means up to the ideal of the school, substantial improvement is undoubtedly being made; and we are hopeful of the future.

Course 1b.-I am glad to report decided improvement in the work of this fundamental course in Composition. As a rule, the students taking it are better prepared to begin their work,-a fact partially due to the somewhat stricter but by no means strict enforcement of the entrance requirements by the committee having charge thereof. The time devoted to class-room instruction has been more than doubled: for several years past the course was allowed but one hour a week for the year; this session it has been given three hours a week for the first two terms and one hour a week for the third term. Despite the larger number of students taking it (344), the classes have been smaller than formerly; we have had ten sections this year instead of last year's eight, so that each section has had an average attendance of slightly over 30. Owing to the increased time allotted the course, the instruction has been more largely based on the first-hand study of literary masterpieces than hitherto; this has lent additional interest to the work. The frequency of the practical exercises and of the personal conferences has been of incal-Owing to these reasons and to the one given in the culable benefit. following paragraph, the number of withdrawals has been considerably decreased this year and the number of "passes" materially increased.

The work of this course has been done by Drs. Campbell and Butler, Mr. Reed, Miss Waldo, and Mr. Benefield (the reading of papers). They have labored with a faithfulness, a cheerfulness, and an efficiency that merit the most cordial recognition. I am afraid that we shall have to struggle with nearly 400 Freshmen next session; if so, an eleventh section should be added.

Course 3.—The advanced course in Composition has been conducted by Dr. Campbell, whose report is genuinely encouraging: "The class of this year has contained a number of first-rate students; at least onefourth of the class have been not only willing at all times to do all work required of them, but often anxious to do more; and a half of the class will, in all probability, earn B-grade or better. The ground covered this year has been—except for the study of Arnold in the Fall Term—about the same as that covered last year. Weekly and term essays, averaging, respectively, five and ten pages each, have been required; and a classroom study has been made of Genung's Working Principles of Rhetoric and of certain selections from Arnold's prose, during the Fall Term; of Brewster's Specimens of Narration, during the Winter Term; and of Baldwin's Specimens of Description and Lamont's Specimens of Exposition, during the Spring Term."

In my judgment, this is one of the most practical and at the same time one of the most stimulating courses offered by the School of English. It helps the prosaic to be intelligent; it inspires the gifted to enroll themselves, in a humble way, among the creators of literature.

B. History of the English Language.

The courses offered in the History of the English Language are: A Brief Sketch of Historical English Grammar (1a); a detailed History of the English Language (4); Gothic (9); an advanced course in Old English (10), in Middle English (11), and in Modern English (11a). Course 1b is required of Academic Freshmen; all the other courses are elective. Courses 1b and 4 are given each year; Courses 9 and 10 alternate with Courses 11 and 11a.

Course 1a.—This course is designed merely to give an introduction to English Historical Grammar, and is allotted two hours a week for the Spring Term. As we have barely started on the new schedule, it is too early to forecast results. With the exception of Dr. Butler, all the English teachers are engaged in this work. In my own section, I am daily surprised at the interest manifested.

Course 4.—I have personally conducted this course, which attempts to give in broad outline the *History of the English Language* from the Old English period to the present. The work is based upon the reading, in the original, of Old and Middle English texts, supplemented by a text-book (Emerson's *History of the English Language*) and by lectures. The class is doing excellent work.

Course 9.—The course in Gothic (9) has this year been given by Dr. Primer, and is reported in the School of Teutonic Languages.

Course 10.—Although there were several applicants for the advanced course in Old English, it was withdrawn this session in order to give me more time for Freshman work and for English 11.

Course 11.—The advanced class in Middle English, conducted by the writer, has studied critically selections from Morris's Specimens of Early English and the section of Sweet's New English Grammar dealing with both the Old and the Middle English periods. In this course, as well as in 11a, the text-book is supplemented by lectures.

Course 11a .- An advanced course in Modern English Grammar, also

given by the writer, has been added this year, and is at present being taken by the members of English 11. The work is based on the modern part of Sweet's A New English Grammar.

In both 11 and 11a the students have worked faithfully, and it is a pleasure to record that each of the members expects to devote his life to the teaching of English.

C. History of English Literature.

In English Literature, there have been given the following courses: Outline History of English Literature (2), which is prerequisite to all other courses in Literature; Shakespeare (5); Outline History of the English Novel (6), and Victorian Poetry (7). Next year it is proposed to offer three new courses: The Romantic Movement in English Literature, by Mr. Reed; American Poetry, by Dr. Campbell; and The Principles of Literary Criticism, by myself.

Course 2.—The attendance on the Outline History of English Literature was so large that we were obliged to have three sections instead of last year's two. Even after this, one of the sections was unduly large; and it seems imperative, as suggested by Dr. Butler, to add a fourth section next session. Last year there was a total registration of 86 in the course; this year the total is 132.

Of the three sections this year, two have been conducted by Dr. Butler and one by Mr. Reed. Both make gratifying reports of the year's work.

The scope of the work may be gathered from this statement by Dr. Butler: "In the outline course in the History of English Literature, the continuity of the literary history has been, as far as possible, kept before the minds of the students. Though the more brilliant periods of the literature and the more important authors have, of course, received special attention, the correlation of the various periods has not been neglected. Special attention has been devoted to a more careful study of *Beowulf*, of Chaucer, of Shakespeare, and of selected authors from the time of Dryden to that of Tennyson. Selections, at least, from most of the better known poets have been carefully studied in class. And an attempt has been made to give each student a more accurate knowledge of some great author or of some great literary movement by assigning subjects for special investigation. The object has been to encourage the students in habits of reading, and at the same time to teach them to distinguish and to love the best in literature."

"Throughout the year," says Mr. Reed, "much attention has been given to the writing of essays. By this means students have not only learned to write with more facility, but the work has been an invaluable aid in literary appreciation." Essays have been regularly required in Dr. Butler's sections, also.

Course 5.—During the Fall Term I had an interesting class in Shakespeare. A detailed study was made of *The Merchant of Venice* and a rapid survey of *The Tempest*. The class worked earnestly and effectively.

Course 6.—Of the course in the History of the English Novel, Dr. Butler writes: "The students in this course, coming from the higher classes, manifested a most gratifying interest in the work, and the results of the course were very satisfactory. With the aid of a textbook, the facts in the development of the novel were outlined. Special lectures upon various periods were given, and typical works were chosen for illustration. A great deal of parallel reading was done by the students, who were also required to present essays or critical studies and analyses. Special attention was given to the Elizabethan Romance (Lodge's *Rosalynde*), to the realistic work of Defoe, and to selected works by Maria Edgeworth, Jane Austen, Scott, Thackeray, and Dickens."

Course 7.—I am at present conducting a course in Victorian Poetry. The whole of the Winter Term was devoted to Tennyson. Considerable study was given to The Princess as happily exemplifying Tennyson at his best. The Idylls of the King was also studied, though more rapidly. The Spring Term is being given up largely to Browning; and the class is now wrestling with Paracelsus, to be followed shortly by Men and Women. The class is a strong one; and I have been particularly pleased with the independence of judgment manifested in their work both in the class-room and in their essays. The subjects for their final essays are drawn from some Victorian author not studied in the class-room.

Course 13.—The course in The English Lyric of the Seventeenth Century has been conducted by Dr. Butler. "The object of this course," he writes, "is to study the lyric of the seventeenth century with special reference to the school of poets known as 'Metaphysical' or 'Marinist.' It was sought, in the first place, to train the students in knowledge and correct appreciation of the lyric as a literary form. Although special attention was paid to the greater poets, such as Donne, Herrick, and Cowley, of whom the students were required to make special studies, the course aimed at treating the period as a whole and tracing the literary development from Drummond of Hawthornden to Cowley and Waller. The students have shown appreciation and have done good work."

III. THESES FOR THE MASTER'S DEGREE.

This session, three candidates for the degree of Master of Arts have made English their major subject, and have worked faithfully on their theses. The subjects of these theses are:

1. The Negro in Fiction: A Historical and Critical Sketch, by Edith Lanier Clark.

2. The Poetry of Paul Hamilton Hayne: A Study, by Mary Lee Horton.

3. The Friar as Portrayed by Chaucer and by Langland, by Isaac Lee Massey.

IV. THE ENGLISH LIBRARY.

The money appropriated to the School of English by the Library Council has been expended in keeping up our subscriptions to standard periodicals and in buying the *Publications of the New Shakespeare Society* and the better works on Browning and Tennyson. The Shakespeare *Publications* are especially valuable, the set being almost complete. Despite these acquisitions, the Library is still very far from adequate to our needs. So long as it remains as it is, definitive work is impossible on the part of either students or teachers. It is hoped, therefore, that the Regents will make as liberal an appropriation as possible to the University Library. When not reading or copying papers, the Student Assistant in English has been making a catalogue for the special use of the School of English. When completed, it will be of great service to both students and teachers.

V. RECOMMENDATIONS.

1. The staff of teachers in the School of English has grown to such an extent that our single office is totally inadequate to our pressing needs. As conferences are going on at almost every hour of the day, the school should have at least two offices, one for a consultation room and one for a waiting and study room. In calling your attention to this matter, I do not forget the crowded condition of the University building; I wish merely to say that, if you can find us an additional office, it will add greatly to the efficiency of the work in the school.

2. I request that the present office be fitted up with cases and drawers substantially like those in the School of Education. We handle thousands of papers during the year, and at present have no way to preserve them. As this work can be done in the University shop during the summer, it should not cost much, say about forty dollars.

3. The attention of yourself and of the Regents is respectfully called to the needs of the English Library, as stated in Section IV, above.

4. As has been shown above, we have this session handled 644 students against 525 of last year,—an increase of 119. Moreover, this increase has necessitated the adding of a ninth and a tenth section to English 1 and of a third section to English 2. It seems probable that next session we shall have a total registration in English of about 760, and that a new section must be added to English 1 and to English 2. In my judgment, to attempt to run the School of English without increasing the teaching force for next session would be hazardous. I recommend, therefore, that the school be granted an additional tutorship.

In conclusion, I wish to thank you and my associates in the School of English most heartily for the courtesy and the co-operation so unfailingly manifested. Very respectfully,

MORGAN CALLAWAY, JR., Professor of English.

FRENCH.

President Prather.

SIR: The registration in French for the session 1901-1902 was as follows:

Course A B		4 hours.
Course 1	. 11 students.	3 hours.
Course 2	. 10 students.	3 hours.
Course 4	. 5 students.	1 hour.
Course 5	. 1 student.	2 hours.
Course 6	6 students.	2 hours.
	66 students.	15 hours.

The work on the whole has been satisfactory, much more so than that of the two previous years. The total enrollment shows a small increase in numbers; I feel justified in saying that there has been a more marked improvement in quality.

The work done in the various courses was substantially as outlined in the Catalogue. Very respectfully,

> E. VILLAVASO, Instructor in French.

GEOLOGY.

President Prather.

SIR: During the present academic year instruction has been given in the following subjects, viz.: 1. Elementary Geology, an introduction to the science especially adapted to meet the needs of all students and, at the same time, serve as a preparation for those who may desire to pursue the subject further (full course). 2. Historical Geology, supplementing the preceding (one-third course during the Spring Term). Paleontology and Paleontologic Drawing (full course). Historical 3. Geology and Paleontology are taken after the student has made some advance in geology by having completed at least two-thirds of the first course above mentioned. They represent the development of the subject on the organic side and these studies may be continued in the course numbered 7 in the Catalogue for 1901-1902 (one or two full courses). 4. *Mineralogy*, including Crystallography and Blow-pipe Analysis (full course). 5. Special Geology (full course or two full courses). In compliance with the law the instruction in Economic Geology has been placed under the direction of Dr. Phillips, but as the applicants for the course this year failed to meet the requirements for admission, it was not given. It should also be stated that there were no applicants for the course in Petrography. From the above it will be seen that all of the instruction in Geology has been given by Miss Whitten and myself.

The following is a statement of the registration for the present year:

Course	1.	Elementary Geology	127
Course	2.	Historical Geology	8
Course	3.	Paleontology and Paleontologic Drawing	4
Course	4.	Mineralogy	8
Course	7.	Special Geology	2
\mathbf{Course}	on	Mines and Mining	22

The steady increase in attendance has added much to the labor of instruction. While lectures may be given without difficulty to a class of a hundred or more, recitations and demonstrations cannot be successfully carried on without a division into sections. In Course 1—the registration of which reached 127—during the Fall Term, in addition to the lectures, written exercises were given every other week, at which times the class was divided into two sections of over fifty each, as but one section could be accommodated in the lecture room. This arrangement brought in an immense number of papers to be examined and passed upon, and on the whole was quite unsatisfactory; moreover, it prevented that most profitable means of instruction, the personal contact of the teacher with those taught. While the schedule called for three class-room exercises weekly, four were given on alternate weeks.

During the Winter Term, when the work was necessarily of a kind to demand demonstration at almost every step—the study of minerals and rocks—this large class was divided into three sections, two of which I taught, while the third was taken by my assistant, Miss Whitten. Each lecture and demonstration was thus repeated three times, or, in other words, to teach this class required nine hours per week instead of three, that is, the time of teaching three classes instead of one. During the Spring Term I lectured to this same class twice a week, and gave, with Miss Whitten's assistance, a quiz to each of the three sections into which it was divided, the actual work amounting to five hours per week instead of three. In addition to this introductory course, with the exception of Economic Geology and Petrography, above noted, the work of the school has been carried on as usual.

As may be expected, until the School of Mines is fully developed, the number of students in advanced geology will not be large, but with the establishment of professional courses, the demand for Economic Geology, Petrography and Mineralogy will be greatly increased.

During the Spring Term I have given a course of lectures upon "Mines and Mining," the registration in which reached twenty-two. The great interest manifested by this class cannot fail to indicate the growing demand for, and appreciation of, this kind of instruction in the University. Among the subjects treated were the following: Common ores and minerals, as of iron, copper, lead, zinc, silver, and the ores of the so-called "lesser metals"; non-metallic substances, as salt, petroleum, etc.; mineral deposits classified and defined; terms employed in the discussion of mineral deposits; the outcrop of veins and lodes; the intersection and faulting of veins; placer deposits; the occurrence of silver, lead, copper and iron; prospecting; outfit of a prospector; methods employed in prospecting; the value of geological knowledge in prospecting and mining; how to investigate a property; drilling machines and boring; locations; the Federal law; Texas State law; tools employed in mining; explosives—powders, dynamite; modes of attack; blasting; shafts, tunnels and drifts; coal mining; ventilation.

The annual excursion to Granite Mountain and Marble Falls, which for many years has been a special feature of the instruction in Geology, took place on May 2. Through the kindness of Mr. G. Waldo, commercial agent of the Houston & Texas Central Railroad Company, the courtesies heretofore granted by the Austin & Northwestern Railroad Company were extended by the company he represents. And here it may be mentioned that for the study of geology and mineralogy the location of the University is unexcelled. The Cretaceous outcrops in the vicinity of Austin are both numerous and varied; their fossil contents are in an excellent state of preservation and of a wide range—from the Foraminifera to the Vertebrata; faulting, resulting from those displacements of the strata whereby large blocks of the earth's crust have been raised or depressed, are well shown; and the topography of the region affords a subject of still further interest. To all this there remains to be added the Llano country, sometimes called the "Central Mineral Region," which, with its great variety of mineral wealth and older stratified rocks, lies but a few hours from our door. Truly it may be said that nowhere in Texas, if, indeed, in the South, is an institution so favorably situated for the study of geology and mineralogy.

Before speaking of equipment, I desire especially to call attention to the necessity of reseating the Geological lecture room. The furniture has not been renewed for twelve years, at least, and is now worn out. This year many students have been obliged to take notes without either arm rests or desks, and at times the class could only be seated by bringing in chairs from the outside. The students have undoubtedly been very uncomfortable, but have endured all with commendable patience. It scarcely seems proper, however, that seats should be purchased with funds set apart for equipment, but rather from those appropriated for the general care of the building.

During the present academic year the equipment of the School of Geology has been increased by the addition of the following relief maps and models manufactured by Mr. E. E. Howell, of Washington, D. C.: The Grand Cañon of the Colorado, geological; the Henry Mountains, geological; the Henry Mountains and Vicinity, geological; sterograms of the two last mentioned; Leadville, Colorado, dissected, geological. Since my last report there has also been added to the equipment an excellent photographic camera and outfit and a pair of Zeiss-Stereo field glasses.

During the year several dozen lantern slides have been prepared illustrative of the occurrence, pumping, and storage of petroleum in Texas. Last November I made a trip to Corsicana especially to obtain the views of that field which, with those representing the earlier phases of the Beaumont Field, have furnished the University with a valuable series.

As the custodian of the conchological collections, the school has received, as a donation, a small collection of shells from Mr. Phillip Tucker, of Austin, and Mr. A. P. Stramler, a returned Philippine soldier, now a student in the University, has presented a few interesting species from the Pacific. These have been turned over to Mr. H. G. Askew for determination, after which they will be added to the collection at the University.

The needs of the school are many: the collection in Paleontology is meagre, and, as in past years, has been supplemented by my own; many additional models, relief maps and wall maps are still wanting and various instruments are needed. The apparatus used in Blow-pipe Analysis is much worn, and must soon be renewed. I therefore request an appropriation of \$500.00 for the year 1902-1903.

Respectfully submitted,

FREDERIC W. SIMONDS, Professor of Geology.

GREEK.

President Prather.

SIR: I have the honor to submit my report of the School of Greek for the year 1901-1902.

The following is a tabular view of the instruction given and of the enrolment:

NAME OF COURSE.	SUBJECT.	NO. OF		NO. OF TUDENTS.
1. Section 1Atti 1. Section IIAtti 2Beg 3Dev 5Hist 6Dra 7Con	nents of Greek nents of Greek c Prose or prose nnings of Poetry and Pre elopment of Poetry ory of Greek Art ma ference Course Testament	4 0se	(Winter Term	4) 19 3 1) 17
Total number of """" Total numbe	courses hours taught (Fail Terr " (Winter T " (Spring T r of students	n) 'erm) erm)		
Net Tot	al			132

Dr. Penick has given Course 8 and one section each of Courses A, B and Course 1, except during the Winter Term, when Mr. Crosby relieved him of his section of Courses A, B, and Dr. Penick took Course 2 from me.

In the main, the work has been encouraging, the spirit of the classes good. The division of Course 1 into two sections proved very helpful. New students of a high degree of preparation, together with those of good standing from last year's Courses A, B, were put into a section by themselves. They have not been held back by weaker students, and their progress has been the more rapid on that account. Course 8 is an experiment. I have long desired to see the New Testament Greek taught here, but up to the present year it has not been practicable. Dr. Penick, who has had the work, reports it as unusually satisfactory. There is evidently a demand for it, which will probably increase. The giving of this course has been made possible by the creation last June of the Fellowship in Greek and Latin. The holder of this fellowship, Mr. H. L. Crosby, has relieved Dr. Penick of the correction of the exercises of Courses A, B and 1, and thereby given him time for more class work. The one-third course in Greek Art was rendered more satisfactory this year by the use of the additional slides bought with the appropriation made last year. I should like to see this work developed into a full course. For this we have now almost the requisite material, but the other demands on my time do not admit of it.

The next fall will see the inauguration of the new degree of Bachelor of Arts without Greek. That this will seriously affect the enrolment of the School of Greek I have no doubt. The rising enthusiasm in Texas for industrial development is not favorable to the study of Greek. Up to the present the prestige of the B. A. degree, which could not be had without Greek, has brought many to begin the study. From now on only those will come to the language who look to the ministry, or to the teaching of the classics, or to the special study of language, or who prefer for whatever cause the rigid discipline of the old classical education even if it be not rewarded with a distinctive degree. That these will be few relative to the whole number of our students may be regarded as certain. Greek has the name of being difficult, and it will not be surprising if young and thoughtless boys and girls do not recognize the value of its discipline, the incomparable beauty of its literature.

The expected diminution in the enrolment of the school will not alter for next year the character of the work. The courses will be practically the same except that it may be thought wise to expand Course 8 into a two-thirds or a full course. It has given me great pleasure to offer this work through President Sampson to the students of the new Southern Presbyterian Theological Seminary to be opened in Austin the coming fall. The New Testament will be studied purely as Greek without any theological bias. This is universally recognized as legitimate work for colleges and universities apart from divinity schools. As a phase in the history of the Greek language and as literature the books of the New Testament are of unsurpassed interest. Moreover, to give this work in the University will relieve the Theological Seminary of the need of establishing a chair for this purpose, and so will enable better and more extended instruction to be given in theology. It should be, and, I take it, is, the policy of the University to encourage in all ways possible the establishment here of seminaries by the different denominations for the training of their clergy. As a State university, we can not have a theological seminary of our own, but if the churches shall undertake to supply the deficiency, great good will result in broadening the sympathies and outlook of the clergy by bringing them into contact with our manifold and vigorous activities and in raising the tone of our own religious life by the infusion of the enthusiasm and high moral ideals of students of divinity. Indeed, so convinced am I that it is the function of the University to teach all honorable subjects, and that it is to the advantage of both parties to draw close the relations of the University and the church schools, that I hope the time is not far distant when we shall have a chair of Hebrew and the History of the Jews.

To enable the work of the school to be increased in efficiency, with special reference to the development of the work in New Testament Greek, and as an encouragement to the study of the classics, I ask the continuance of the fellowship created last year in Greek and Latin. * *

For the better presentation in the University of the artistic side of Greek civilization, I have in my last two reports suggested the purchase of lantern slides illustrating Greek sculpture and architecture. With the appropriations granted I have had made for the University a set of slides aggregating, if we count those ordered but not delivered, more than nine hundred in number. Adding to these those already possessed by the University and those presented by Dr. Mather, we have a total of over a thousand slides illustrating Greek art, besides some two hundred more in the Mather collection illustrating Egyptian and Assyrian art and Greek private life. I have taken great pains to select representative subjects and to secure satisfactory slides. With the results I am reasonably satisfied. For the study of Greek sculpture and architecture we have now an excellent series of illustrations and a beginning has been made with painting. I do not believe any institution in the South has so good a collection on these subjects.

Lantern slides, however good and however numerous, reach only a small class. The influence of casts is far more potent. They may be seen at any time by anybody, and being in form exact copies instead of mere pictures they give a much better impression of the originals. My judgment is that nothing would do more to elevate the standard of taste among us, nothing more to vivify our appreciation of the real greatness of the Greeks in art, than a well-chosen collection of casts. It would seem as if the great hall on the fourth floor of the Main Building were intended for just this purpose. For anything else it has only been made available by temporary and unsightly partitions of wood. A large part of the space is at present occupied by the University Mineral Survey, but for this use it is unsuited and unsatisfactory, and it is to be hoped that the day will soon come when the Survey will have rooms more worthy of its excellent work. When that time comes I would suggest that this great area, when unencumbered by partitions, a striking and handsome hall, be consecrated to a Museum of Casts. With purchases out of appropriations from time to time, with donations from kindlyminded friends, with memorials left by successive senior classes as pledges of their love for Alma Mater, a collection will be built up in no long time of which we need not feel ashamed. In institutions for the training of youth everywhere, from university to common school, the influence and power of art is being recognized. Everywhere collections of casts are held to be the most natural and most effective line of development. Surely, the University of Texas should not fail to recognize its duty and its opportunity here.

For the creation of our Museum of Casts it is not necessary to wait for the removal of the Mineral Survey. The Greek Room has still vacant walls and floor space for many casts, and there is abundant room on the fourth floor unused by the Survey to contain our collection for several years to come. In the superb casts of the Lateran Sophocles, the Aphrodite of Melos, the Hermes of Praxiteles, and the two slabs of the Parthenon frieze now in the Greek Room an excellent beginning of our museum has been made. As the next step I suggest that the Board of Regents be asked to appropriate \$400, to be expended as follows:

Farnese Bust of Hera (Naples)\$	8	00
Orpheus Relief (Naples)	6	00
Two Metopæ from the Parthenon (London)	20	00
Bologna Head of Athena	8	00
Monument of Hegeso (Athens)	24	00
Kaufmann Head of Aphrodite (Berlin)	10	00
Statue of the Praying Boy (Berlin)	25	00
Head of Youth from Beneventum (Paris)	6	00
Statue of Victory from Samothrace (Paris)	60	00
Statue of Boy and Goose (Rome)	18	00
Head of Asclepios from Melos (London)	3	00
Head of Aphrodite from Armenia (London)	4	00
Bust of Pericles (London)	2	00

Bust of Socrates (Rome)	5 2	00
Bust of Plato (Rome)		00
Bust of Euripides (Rome)		00
Bust of Homer (Naples)	3	00
Bust of Cæsar (London)	2	00
Restored model of corner of the Parthenon, showing Doric		
order	40	00
Freight and packing	154	00

Total\$400 00

It is a pleasure again to call to your attention the good work of Dr. Penick and to commend Mr. Crosby for the faithful discharge of his Mr. Crosby will, I hope, continue his studies at Harvard next duties. year. In this connection it seems appropriate to mention the success of two former classical fellows of the University. Donald Cameron, once Fellow and Tutor in Greek and Latin, now holds at Harvard an Edward Austin Fellowship, worth \$500, and has just been appointed for next year to a Parker Traveling Fellowship of the value of \$700, one of the highest honors that Harvard bestows in the Graduate School. C. C. Rice, a four years' student of the School of Greek and sometime Tutor of Latin, was at first a student of Comparative Philology at Harvard, but has now transferred his allegiance to the Modern Languages, and so excellent has his work been that he was a year ago appointed Professor of Modern Languages at the University of Oregon, with a year's leave of absence to enable him to complete his doctor's work at Harvard. Townsend Scholar last year, he now holds the more valuable Shattuck Scholarship. The development of scholars such as these is one of the first duties of a university. The policy of encouraging them by assistantships and fellowships may now be regarded as fixed among American, as it has long been in foreign, universities. Its adoption here has been productive of great good in the past and its extension would bear abundant fruit in increasing the estimation in which the University is held abroad. Respectfully submitted,

W. J. BATTLE. Professor of Greek.

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HISTORY.

President Prather.

SIR: The enrollment in the School of History for the year 1901-1902 has been as follows:

Course A, General History (full course):		
Division I	34	
Division II	35	
Division III	38	
Division IV	30	
		137
Course 1, Ancient History (full course)		57
Course 2, Mediæval History (full course):	30	
Division I Division II	$30 \\ 34$	
	94	64
Course 3, History of Modern Europe (full course)		39
Course 4, History of England (full course)		48
Course 5, American History (full course)		67
Course 6, Spanish Occupation of Texas, 1715-1722 (one to		01
three full courses)		7
tillee full courses)		•
Total enrollment		419
Names repeated		75
rames repeated		
Net total		344

This shows an increase of 45, or about 12 per cent., in the total enrollment over last year. The per cent. of increase in registration for the Departments of Literature, Science, and Arts, and of Law for the year is only about half as much.

Mr. Barker has had charge of Courses A and 1, Dr. Bolton of Courses 2 and 3, and the other courses have been given by myself.

One new course, that in General History, has been added during the year. The reasons for this addition were given in my report for last year. For next year, there is to be another new course offered, which is to be known as History 6, and which is described on page 85 of the current Catalogue. While the course is offered in European History, the special object of it will be to explain the colonization of America; and it will therefore be largely of the nature of a course in American History. It will have the highly desirable effect of bringing the students face to face with some of the most important problems of current American politics, and of giving special preparation for the graduate work in Southwestern History.

Not wishing to weary you by what would be substantial repetition, I would respectfully refer to the statements in my last report relative to this work in Southwestern History. During the past year evidence has accumulated rapidly to show that the University of Texas has a real opportunity in its favorable situation for the development of this subject. It is apparent that the great institutions of the North and East are looking to the Universities of Texas, California, and Stanford to take the lead in working up this hitherto almost neglected field, and this university has, in some respects, decidedly the advantage of the other two.

The most pressing necessity just now for the promotion of the work mentioned is additional help in classifying and putting in order the various collections of manuscript and other material now stored in the vault of the University. Mr. Johnson, one of the Student Assistants in History, has been occupying himself about six hours per week during this session with the classification of the Bexar Archives. These papers consist mainly of military and civil correspondence, and Mr. Johnson has been arranging the letters by dates, and when this is done a subclassification by places to or from which they were written will be attempted. When this has been completed, the search for any given document in the Archives will be comparatively easy; but in their present condition it is almost a hopeless task to find any paper known to be among them.

Besides the Bexar Archives, the University now has in its vault the Austin Papers, the papers of the Texas Veterans' Association, and the Roberts Papers, all of which demand classification, binding, etc. This work should be pressed far more energetically; but to do so would require more help. Of the two Student Assistants in History for this year, one gives his attention to the Archives, as already stated, while the other helps in the teaching work, by examining maps, reading certain kinds of papers, and performing some routine duties in attending to the class rolls, etc. Either a specific appropriation to pay for the services of some one who might be employed to complete the classification, or the appointment of an additional Fellow or Student Assistant would greatly hasten the completion of the task of ordering these papers and making them really available for investigation.

I intended to purchase out of the contingent fund of the School of History for this year a relief map to be used in teaching, but I found such a one as I need in the possession of the School of Geology, and available for my classes. Inasmuch as this map is quite costly, I have thought best to use the one already here rather than to duplicate, which would be a little more convenient. The fund has been expended mainly for duplicate copies of books for special collateral reading, which sustain to history the same relation as microscopes, or other teaching apparatus, to biology, or any laboratory science. Part of the fund has been expended for Spanish dictionaries to be kept in the vault for use in handling the Spanish material, and a little over five dollars went to repair. wall maps. The amount appropriated for this year was \$80, and I was allowed to carry over an unexpended balance of about \$82 from the year previous, making about \$162 in all. Of this there has been expended for the purposes indicated, including accounts not in, about \$125. The balance of \$37 is reserved to meet contingencies expected to arise before September 1st. Among these are the purchase of an additional dictionary for the vault, which should cost about \$10, and some Manila, or other cheap covers, to hold portions of the Archives, as the classification is completed, until they can be bound. I would request a contingent appropriation of \$80, to be used for similar purposes to those indicated above, for the year beginning September 1, 1902.

The year has brought a sad misfortune to the University, and espe-

cially to the School of History, in the loss of Professor L. G. Bugbee, who died at Pleasant Point, Johnson county, March 17th. The very effective work of Professor Bugbee, both as teacher and as investigator, demand the special acknowledgment of a record in this report. The marks of his efforts and influence on the inner life and development of the University are deeply cut, and will not soon disappear.

It gives me great pleasure to commend the faithful services of Dr. Bolton and of Mr. Barker, who have not only handled their classes well, but have greatly increased the efficiency of the work in the school by the hearty and unselfish co-operation which they have given me in all possible ways.

In another communication I have nominated two Student Assistants for the year 1902-1903.

Respectfully submitted, GEORGE P. GARRISON, Professor of History.

LATIN.

President Prather.

SIR: I have the honor to submit the following report of the School of Latin of the University of Texas, covering the session of 1901-1902:

ATTENDANCE.

First Year Latin (Freshmen)	99
Second Year Latin (Sophomores)	40
Third and Fourth Year Latin (Juniors and Seniors)	
Graduates	
	100

Total (no name counted twice)..... 162

The increase of the School of Latin in numbers has been very satisfactory, and corresponds pretty closely with the expectation expressed in my last report.

By the appointment of Miss Roberta Lavender as Tutor, the School of Latin was put into excellent condition for effective work, and in consequence, for the first time since my connection with the institution began, the Freshman class has enjoyed adequate instruction in sections not so large as to be unwieldy.

The courses of study of the past year have not differed materially from those of previous reports, but with the Freshman class an interesting experiment was tried. It is the policy of the School of Latin to admit no student to classes above the Freshman, without examination, and merely on affiliation. But some of our best schools, notably the Ball High School of Galveston, give much more than the three years' modicum of Latin now required of the affiliated schools. Accordingly, this year, for the first time, the Freshmen who had enjoyed a strong four years' preparation in Latin were put into an advanced section, to which, in the third term, pupils of high rank in the other sections were promoted. The experiment has worked not badly. This plan not only enables us at the start to give students that come with strong preparation more difficult work, in new and therefore more interesting authors, thereby restraining them from falling into lazy habits; but the selection, later on, of the stronger students of the other sections for promotion gives them an ambition to become strong students. Incidentally, also, the students that remain in the regular sections may be more thoroughly drilled on the special points in which they are deficient.

No renewed mention need be made of the work of Dr. Penick, which has been kept at its habitual level of carefulness and efficiency; but it is becoming to express my satisfaction with the excellent work of Miss Lavender, the newly appointed Tutor. She has not only been a distinct acquisition to the instruction force for Latin, but a most helpful influence in the student life of the University.

Besides noting that the Latin Conference Course has had three members, all applicants for the A. M. degree, it may be of interest to remark that during the past year a course in Elementary Sanskrit was given by the Professor of Latin to a class that consisted of three University students who are devoting themselves to classical studies, and was attended further by a professor in the University and a clergyman of Austin.

The announcement for next year will be found to offer several new courses, a choice of which will be open to students interested in extending their Latin knowledge. The course in Roman Life cannot be given until suitable provision is made for the purchase of lantern slides. The giving of this course is further contingent on the realization by the Professor of Latin of a plan to make beforehand an archeological *giro* in Italy.

One of the new courses offered next year is a teachers' course, in the conduct of which the whole force of instruction for Latin will, it is expected, be engaged. There has been a fair demand during the past year for Latin teachers, and our advanced students should form the natural source of supply for Latin teachers in the State high schools. The continuance of a classical fellowship I deem essential and legitimate as a means of encouraging students to stay and prepare themselves for ripe high-school work. Incidentally, the holder of this fellowship during the past year has rendered assistance to the School of Greek by teaching. Respectfully submitted,

EDWIN W. FAY,

Professor of Latin.

P. S.—Hereto is attached an exhibit of the appropriations needed by the School of Latin for the session of 1902-1903.

MATHEMATICS.

President Prather.

SIR: The work this year in the School of Pure Mathematics has been quite successful, and a continued effort is being made to adapt the courses more and more to the widening needs of a constantly increasing number of students. The attendance has been quite regular, the number of failures not unduly large, and the preparation of those entering Mathematics 1 perhaps a shade better than it has been in previous years. The numbers registered in the various courses so far this session are as follows:

Course 1:		
Section	I. Mr. Duval 52	5
Section	II. Mr. Rice 40)
Section	III. Mr. Duval 51	L
Section	IV. Adjunct Professor Benedict 27	7
Section	V. Mr. Rice	3
Section	VI. Adjunct Professor Benedict 41	
Section	VII. Mr. Shaw 38	ŏ
		-
Tot	tal in Course 1 287	7
Course 2.	Professor Halsted and Mr. Moore	5
Course 3.	Professor Halsted	3
Course 4.	Adjunct Professor Benedict 40)
Course 5.	Professor Halsted 16	3
Course 7.	Adjunct Professor Benedict 19)
Course 8.	Adjunct Professor Benedict 34	
Course 9.		3
Course 10.		B
Course 12.		8
Course 14.		6
Course 15.	Professor Halsted	3
Tot	tal	-

The work in Course 1 is being modified slightly from year to year in an attempt to fit it more closely to the average Texas high-school curriculum. In particular, more stress is being laid upon Plane Geometry at the expense of Solid Geometry in the firm conviction that the former is of greater benefit to our students and unrivaled as mental discipline when properly taught. Original exercises are a prominent feature of the course. In Algebra, finding our students fairly well prepared in the standard elementary topics, we are emphasizing the graphical and numerical sides, being thus in accord with the best modern tendencies and making much of the work in Trigonometry far more effective. Having found the subject of Infinite Series too difficult for this course this topic has reluctantly been omitted. Attention is invited to my last report, in which the needs of this course are fully set forth. The instructors are making every effort to reach the students individually, but the burden is a heavy one and the labor of reading frequent exercises by numerous students is exceedingly onerous.

Courses 2, 3, 4 and 5 have this year been conducted along lines previously laid down and justified by experience.

The two courses offered this year in Astronomy (Mathematics 7 and 8) have been well attended. One is a one-third course in Popular Astronomy, intended for persons who desire to obtain a general nontechnical knowledge of the subject, while the other is a one-third course in Spherical and Practical Astronomy, required for the C. E. degree, and intended for persons who wish to acquire the elements of higher surveying, geodesy, and navigation. In both of these courses the instruction can be made much more effective by a small equipment of globes and maps. Accordingly an appropriation of \$60 is most respectfully asked for this purpose, to be expended as follows:

One dozen Yale Globes with graduated hemispheres\$12	00
Two dozen Handy Globes 5	00
One dozen Whittaker's Planispheres 7	20
One Joslin Celestial Globe 15	00
One set Johnston's Astronomical Charts 12	00
Total\$51	
Freight, etc	80
Grand total\$60	00

This equipment will pay for itself in increased effectiveness many times, and it is also to be noted that most of it will be of great use in the other mathematical courses.

In Course 9 the work of the year has been based on Lamb's Infinitesimal Calculus, and the course has been thorough and rigorous. In connection with the theory the students have solved a great many problems, testing and enlarging their knowledge. Special attention has been given to the geometrical applications and to the relation of the subject of Physics.

This year a course on the teaching of Elementary Mathematics (Course 12) was given for the first time by Mr. Rice, of which he writes as follows:

"This year I offered a course for the benefit of those expecting to become teachers of mathematics in the State. None were allowed to enter the class who had not had Course 1 in Mathematics. On account of this prerequisite several who wished to attend were excluded from the class. However, several Freshmen attended the lectures although they received no credit for their work. There were eight who were properly enrolled.

In my experience in public school work, I found the greatest difficulty of those teaching mathematics, in a lack of a proper conception of the fundamental principles of the science. So many teachers do not know just where they are in the development of the subject they are teaching. It has been my purpose in this course of lectures to trace the growth and development of mathematics in such a way that the teacher may clearly grasp the subject as a whole and be able to teach from a much more intelligent point of view.

In this way I believe the University can greatly benefit and assist the teachers of the State. Each teacher going out from the University will be able to help many others with whom he comes in contact."

This year I have given two advanced courses, one on the Foundations of Geometry and one on the graphic treatment of the complex variable, while Dr. Benedict has given a lecture course on the elements of function theory based mainly on the methods of Cauchy and Ricmann and including the elementary properties of singly and doubly periodic func-Very respectfully yours, G. B. HALSTED, tions.

Professor of Mathematics.

ORATORY.

President Prather.

SIR: I have the honor of submitting the following report of the School of Oratory for the session of 1901-1902.

The enrollment in courses offered has been as follows:

	Academic		
	Dept.	Law Dept.	Total
Course 1, Public Speaking (full course)	69	36	105
Course 2, Oratory (two-thirds course)	. 12	3	15
Course 3, Debate (full course)	13	9	22
Course 4, Extempore Speaking (two-thirds	3		
course)		7	22
Course 5, Debate Seminary (one-third to two	-		
thirds course)	. 5		5
Course 6, Oratorical Seminary	. 1		1
Total in each department	. 115	55	
Total enrollment			170
Names repeated			18
Net enrollment	•		152

Below is a tabulated statement of the yearly enrollment in this school since its establishment:

	1899-1900	1900-1901	1901-1902
Course 1	. 94	101	105
Course 2	. 15	21	15
Course 3		12	22
Course 4	. 19	15	22
Course 5			5
Course 6			1
Total	. 129	149	170

GENERAL SCOPE AND NATURE OF THE WORK.

Course 1 is an elementary course in delivery, and is intended to lay the basis for the more advanced work. The principles of effective expression are first studied, and practiced before the class as an audience, with suggestions and criticisms by the instructor, supplemented by private drill with the Assistant in the school. As the work progresses, more and more practice is had in delivery, so that during the last half of the session the class exercises consist in speaking declamations and original addresses to the class as an audience. (See Exhibit 1.) The class meets in three sections, two sections of Academic students, and one section of Junior Law students. With the law students, the aim is to adapt the work to their special needs, in preparation for their professional work. This session some practice was had in oral exposition and argument on subjects lying in the field of their law studies. With the co-operation of the law professors, a series of exercises based on legal topics was prepared (see Exhibit 2) and used during the Spring Term with gratifying results—especially so, considering the unsatisfactory conditions, hereafter referred to, under which law students have been taking work in this school.

Course 2 is a writing and speaking course, beginning with the Winter Term. One term is devoted to the study of oratorical masterpieces and the rhetoric of oral discourse, and the second term to the writing and delivery of orations.

Course 3 consists in the study of the principles of argumentation, a detailed study of one or two masterpieces in forensic oratory, and writing briefs of debatable questions of present interest. The questions previously briefed are used as the basis of a series of exercises in oral debating during the last half of the year. (See Exhibit 3.)

Course 4 gives practice in extemporaneous speaking, according to a carefully planned system. In this course, as well as in Course 3, the aim is to train students to co-ordinate clear and orderly thinking with an effective delivery. A further aim is to train the students for the privileges and duties of citizenship, hence the subjects treated are drawn from Texas and American history, economics, and questions of the day. (Exhibit 4.)

In Courses 5 and 6, special investigations in debate and oratory are made by the more advanced students. In this connection I may mention the valuable assistance rendered our intercollegiate debaters by the five students in the Debate Seminary, and also the excellent Master's thesis by Mr. E. E. Bewley on "The Lincoln-Douglass Debates: A Study in Argumentative Oratory."

NEEDS.

The Force of Instruction.-Although no course in this school is required for a degree, and although Freshmen, save in rare instances, are not admitted to the classes, yet the number of students electing work is too large for effective teaching by the present instructing force. Owing to the number of applicants in the course in Extempore Speaking, it was found necessary to form a second section, which met two hours weekly on Wednesday night. My schedule of class exercises called for sixteen hours weekly during the Fall Term, and nineteen hours during the Winter and Spring terms. I cannot therefore give the required attention to the students individually, outside of class hours,-attention that is especially needed on account of the nature of the work. This has been the work assigned to Mr. Allen, the Fellow in the school, who has devoted twelve hours weekly to meeting students by appointment. He has also relieved me by hearing some of the exercises in Course 1 during the Spring Term. To students in public speaking, the need of individual attention, supplementary to class instruction, cannot be overemphasized. With 105 students in Course 1, it will be seen that it requires fully two weeks, in even fifteen-minute appointments, for one assistant to meet once all the students. Besides this supplementary drill in delivery, help is needed in the more advanced work. In lieu of an instructor, such help can be secured from advanced and well-qualified students who wish to pursue graduate or professional lines of work. The school needs at least two Student Assistants or Fellows, or a Tutor. Apprehensive of the needs of other schools, I am asking for only such help as seems absolutely indispensable for the satisfactory prosecution of

the work of instruction. I may add that by the appointment of two Student Assistants or Fellows, or a Tutor, as may be later determined, the work of instruction can be carried on for some time, I should say, without added help.

Students from the Law Department.-In my two preceding 2. reports attention has been called to the work of law students electing one or more courses in this school, and to the unsatisfactory conditions under which the work is attempted. During the past three years an average of about forty Junior Law students have entered each year a class in Public Speaking formed to meet their special needs. An average of about fifteen Senior Law students have each year entered classes in Debate and Extempore Speaking with Academic students. But with no provision for this work in the Law Department curriculum-the work being purely voluntary, and not counting toward a degree-even the more earnest students, when their required work presses upon their time, neglect their work with me, with results unprofitable to them and to myself. I am convinced that the present relation of the work of this school to that of the Law Department should either be changed, or that any relation cease to exist. The latter I should regret, since I believe this school can best serve the University by affording training to law students, in preparation for their professional work.

Pending the inauguration of a three years' law course, I beg leave to suggest, as a solution of the problem, that in lieu of the present absolute requirement of a course in Economics, the Board of Regents prescribe the requirement of either a course in Economics or a course in Public Speaking (the art of advocacy; the special investigation and oral discussion of legal, historical, and economic questions). That is, the student may elect either one of these two subjects, but having made his election, to meet his individual needs, he must complete the course so elected as a condition precedent to his graduation from the Law Department.

3. A Contingent Fund.—Yearly sundry needs arise that call for a modest amount as a contingent fund for the school—such as subscribing to a clipping bureau for cuttings from newspapers and periodicals on the subjects for our intercollegiate debates; incidental supplies and furnishings for the recitation room, etc. I ask the sum of \$25.00 to meet contingent expenses.

PUBLIC CONTESTS IN SPEAKING.

Incidental to the work of instruction, the number and general excellence of public events in the various lines of public speaking may be taken as indicative of student work and interest. Seven such events will have been held during the session, towit: The Scarbrough prize contest in Debate, on February 8th; the Evans prize contest in Declamation, on April 5th; the Texas-Tulane Debate, on April 18th; the Dubois prize contest in Oratory, on May 10th; the Southern Interstate Oratorical Contest, at Lexington, Ky., on May 21st; the Texas-Colorado Debate, at Boulder, Colo., on May 23rd, and the Inter-Literary Society Debate, on Monday night of Commencement week.

The Scarbrough prize contest in Debate was for a prize of \$100, given by Mr. E. M. Scarbrough, of Austin. The final contest was participated in by eight students, the prize being awarded to Mr. E. T. Moore, Jr. This generous gift by Mr. Scarbrough gave a desired stimulus in bringing out material for our intercollegiate debaters. The Evans prize contest in Declamation was for a prize of \$25, given by Major Ira H. Evans, of Austin. The contestants were twelve young men selected from the classes in Oratory 1. The prize was divided between S. W. Fisher and A. F. Weisberg.

The School of Oratory and the University are indebted to Mr. Scarbrough and Major Evans for these prizes.

In the second annual debate with Tulane University, we were represented by E. T. Moore, Jr., and J. B. Dibrell, Jr. Last year at New Orleans the decision was two to one in favor of Tulane. This year, by the unanimous vote of the judges, the decision was given to Texas. The work of the students in debating has far exceeded that of any previous year. The work of preparation has been more systematically organized, so that we have had all interested working together towards a common end. In the course of preparation, a large mass of official documents were studied, over five hundred letters to Congressmen and public men were written, and we had at least ten students who had a thorough and comprehensive grasp of the question for debate. We also send a team to debate the University of Colorado at Boulder. Colo., on May 23rd. We cannot, of course, expect to be uniformly victorious in such contests, and the decision of the judges, I take it, is not, after all, the thing of most value. In any event, we are developing a debating plant here that will enable us to furnish debaters who will worthily represent the University in public discussion with students from other institutions. I thoroughly believe in debating as a form of public speaking: the special investigation and public discussion of living issues is of great value in training students for the duties of citizenship.

To summarize, I beg leave to recommend (1) that \$25 be appropriated for a contingent fund for this school; (2) that \$500 be appropriated for either two Fellows or Student Assistants, or for a Tutor, as may be later recommended; (3) that the Board of Regents make a full course in Public Speaking an alternative elective with Economics to students of the Law Department.

Respectfully submitted, E. D. SHURTER, Adjunct Professor of Oratory.

PHILOSOPHY.

President Prather.

SIR: The enrollment in the School of Philosophy is given in the following table:

1.	Psychology (one-third course) 30)
2.	Logic (one-third course) 39)
3.	Ethics (one-third course)	ł
4.	Psychology of Education (two-thirds course) 55	2
5.	Psychology of Development (one-third course) 47	2
6.	History of Philosophy (full course) 11	L
7.	Advanced Psychology (full course) 10)
8.		L
		-
	Gross enrollment 229)
	Repetitions 110)
		-
	Net enrollment	9

Professor Ellis had charge of the Winter Term of Course 4, of the Winter and Spring Terms of Course 7, and of Course 5. Mr. Fletcher had charge of the laboratory work in Courses 1 and 4, which were combined during the Fall Term, and was assisted by Miss Shipe and Miss Turner, of the School of Education. Besides he assisted in Courses 2 and 7. The efficiency of the assistants, and the harmonious co-operation of the Schools of Philosophy and Education, are causes for gratification.

The completion of a card catalogue (begun under Professor Ellis's direction two years ago) of articles in English scientific periodicals dealing with Philosophy and Education, puts in our hands the most effective instrument for doing really solid work that we possess. It remains to complete the catalogue for our too scant supply of foreign periodicals, and then to keep it up to date.

Respectfully submitted,

S. E. MEZES, Professor of Philosophy.

PHYSICS.

President Prather.

SIR: I submit, herewith, the annual report of the School of Physics for the session 1901-1902.

The courses given and the enrollment in each is as follows:

Course 1.	Lectures and laboratory practice in general Physics for first-year students in the subject (one and one-third	
	courses) 118	3
Course 2.	Lectures and recitations in heat, sound, and light for	
	second-year students in the subject (full course) 18	3
Course 3.	Laboratory practice for second-year students (two-thirds	
	course)	3
		4
Course 5. '	Theoretical mechanics for advanced students (full	
		4
Total.		2

This is an increase, on the face of the returns, of 25 per cent. over the enrollment of last year, but, in reality, owing to the consolidation of courses previously enumerated separately, an actual increase of 100 per cent. in the number of individual students. This marked increase is due to the opening of the first-year courses to Freshmen, thus placing the school on a par with the other schools of science.

As a whole, the work of the year has been very satisfactory, considerable progress having been made in several directions. A small amount of apparatus has been purchased and more made in the workshop, and the second-year courses much enlarged and strengthened. The additional laboratory, made available through the courtesy of the Department of Engineering, has been fitted up in part and the congestion that was previously manifested in our advanced laboratory classes much relieved thereby. A new set of laboratory notes is being prepared by Mr. Kuehne and printed for the use of first-year students, and a more extended set for the use of advanced classes has also been undertaken by Miss Bailey and myself.

It is with pleasure that I record the gift of \$150 by Major Ira H. Evans for a Fellowship in Physics during the coming year and the appointment of Mr. C. Shuddemagen to the position. Many of our students desire to enter upon graduate work, but are prevented by the lack of adequate means. The establishment of Fellowships is, therefore, a matter of moment if we are to encourage our graduates to seek a more thorough training here as well as elsewhere. I feel that the University is to be congratulated on the beginning made in this direction.

The enlarged classes and the nature of our equipment has rendered it impossible to undertake any extensive researches. I record, however, the following article:

"A New Apparatus for Determining the Relative Velocities of Ions; with Some Results for Silver Ions," by W. T. Mather, 19 pages in American Chemical Journal for December, 1901.

In connection with the future development of the school I call to your attention the importance of a consideration of the relation of the School of Physics to the recently created School of Electrical Engineering. As is well known, electricity, pure or applied, is merely a branch of Physics, and the success of the engineer depends largely upon the security and breadth of his knowledge of the general principles of the parent subject. It is, therefore, essential that the School of Physics should be so equipped that it may offer those courses which are not only of large value to the general student, but are prerequisite to further study of the subject on its practical side. In view of these facts it is especially gratifying to note the recent appropriation of \$3000 for the purchase of apparatus from abroad and the expressed determination to provide the additional equipment that is necessary. Numerous orders have already been placed and our plans are fully matured for the opening in the fall of full courses in Physics leading to the degree of Electrical Engineer. The completion of these plans is, of course, dependent upon the further appropriation requested, and I earnestly hope that it may be made available at an early date. When this is done the work of the school will be placed on a high plane of efficiency, able to meet the demands placed upon it.

In closing, I desire to commend in the highest terms the work of Instructor J. M. Kuehne and Tutor Lulu Bailey and to recommend that their services be secured for the coming year. I also desire to emphasize the value of the workshop to the school and to request that in the allotment of the time of the mechanic special consideration may be given us, that the plans submitted may be carried out. Very respectfully,

WILLIAM T. MATHER, Associate Professor of Physics.

POLITICAL SCIENCE.

President Prather.

SIR: I respectfully submit the following report of the work of the School of Political Science for the session of 1901-1902.

The work of this course was conducted by the Professor of Political Science, the Instructor in Political Science and Law, and the Fellow in Political Science. The arrangement of courses was as follows:

I. Professor Houston.

- 3. Comparative Constitutional Law (full course)... 24 students.

II. Instructor Huberich.

1.	Reman Law (two-thirds course)	11 8	students.
	General Jurisprudence (one-third course)		
	Finance for Junior Laws (one-third course)		
4.	Conflict of Laws (two-thirds course)	. 8 s	students.

I am glad to say that the work of the students in this school was, as usual, reasonably satisfactory, and that the facilities for instruction were more ample than heretofore. Still we were much hampered by the lack of adequate library facilities.

I desire to call particular attention to the efficient work which Dr. Huberich has done for the last two years. He is a very thorough teacher and a conscientious and careful investigator. In addition to the work outlined which he has done in Political Science, he has given courses in the Law School in Criminal Law and Criminal Procedure. In view of the heavy work which has been placed upon him and the efficient way in which he has borne that responsibility, I most earnestly urge that some recognition be given him in the way of increase of salary and rank.

Some question seems to have been raised as to the propriety of giving courses in the School of Political Science in International Law, General Jurisprudence, and Civil Law. I do not see on what grounds this question can legitimately be raised. Such subjects furnish an appropriate part of academic training, and if they are not given at all in the Law School or are not given under such conditions as to permit Academic students conveniently to take them, I am of the opinion that they should not only be given in the Academic Department, but should be extended. The work of the Junior Law Class in Economics for the year was more satisfactory than it has ever been, but was still, as compared to that of the Academic class, unsatisfactory. I think the reason for this is mainly that the Law students have not sufficient time to give to it as the Law course is now arranged. Of course there is the further fact that they have not yet as a whole realized that it is essentially a proper part of their training as lawyers. I am glad to say that the Law Faculty has done what it could to bring the Law students to a truer realization of the value of this work and have, therefore, furnished me substantial support.

Mr. Potts, the Fellow in Economics, has given me very efficient assistance. He has done everything I have called upon him to do, and has at times given much more than the required amount of time to the work which I assigned him. I strongly recommend that the Fellowship in Political Science be continued and that Mr. Potts be reappointed.

Very truly yours,

DAVID F. HOUSTON, Professor of Political Science.

PSYCHOLOGICAL LABORATORY.

President Prather.

SIR: We beg to report concerning the Psychological Laboratory as follows:

Preliminary laboratory work was given this year to fifty-two students in the Psychology of Education and twenty-six students in Pure Psychology. Advanced work was given to ten students in Experimental and Abnormal Psychology, and to three graduate students in special investigations. All of this work has been as successful as could be hoped for under such overcrowded conditions.

The following pieces of apparatus have been added during the year:

One Continuous Roll Kymographion.

One Speed Reducer for Motor.

One Clockwork Time Marker.

One Galton Whistle.

Four Grosse Stimmgabeln.

Four Spherical Resonators.

One Mounted Prism.

One Pony Relay.

Many minor pieces of equipment and supplies.

In order to meet the growing needs of the laboratory and to work towards a moderate equipment in Psychology, there will be needed an appropriation of five hundred dollars for the year 1902-1903 for apparatus. (See attached list.)

There is also great need of a special fund to complete the broken sets of foreign periodicals. In so new a science as Experimental Psychology the magazine literature is doubly essential for good work by professors or students. Our sets of standard foreign periodicals are very incomplete, and with the present small share of the general library appropriation devoted to Psychology it is impossible to procure these sets of journals. Each year these sets are becoming scarcer and higher. Two of the sets of American periodicals bought by us four years ago have recently doubled in price. Unless a larger general library fund is provided, it will be imperative that some provision be made by which these foreign journals may be procured while they are to be had at reasonable prices.

Respectfully, S. E. MEZES, A. CASWELL ELLIS.

APPARATUS NEEDED FOR PSYCHOLOGICAL LABORATORY, 1902-1903.

Services of Assistant for making charts, etc., in summer\$	60	00
Card board (100 sheets)	8	00
Chart cloth	15	00
Adjustable chart roller (50 chart capacity)	35	00
One hundred lantern slides	50	00
Four lantern slide cases	4	00
Plethysmograph	30	00
Perimeter and cards for same	25	00
Brains	10	00
Electromagnetic Fork	15	00
Iris Diaphragm Shutter for Dark Box	8	00
Sonometer	8	00
Contactuhr	35	00
Exposing Screen	50	00
Sphygmograph	40	00
Adjustable Hand Dynamometer	10	00
Algometer	10	00
Adjustable Pendulum Electric Connection	22	50
Electrodes	1	50
Kymograph Paper	3	00
Lamp		50
Candles		50
Gas Fixtures	2	00
Thermometers	2	00
Stereoscopic Diagrams	3	00

APPARATUS NEEDED WHICH COULD BE MADE IN THE WORKSHOP DURING THE SUMMER FOR PSYCHOLOGY.

- 1. Complete a Dark Box.
- 2. Tilt Board.
- 3. Rotation Table.
- 4. Binocular Vision Apparatus.
- 5. Aesthesiometer.
- 6. Chart Racks.
- 7. Case for Hipp Chronoscope.
- 8. Two Tables.
- 9. Filing Cabinet for Papers.
- 10. Krypteon.
- 11. Balance for Weber's Law.
- 12. Two Steadness Gauges.
- 13. Partition Laboratory.

SCIENCE AND ART OF EDUCATION.

President Prather.

SIR: I beg to submit the following report concerning the School of the Science and Art of Education for the current academic year.

ENROLLMENT.
 ENROLLMENT.

Courses.	Instructors.	Students.
Course 1, School Management Course 2, The Method and Principles of Teaching Course 3, The Psychology of Education Course 4, The Psychology of Development Course 5, Studies in the History of Education Course 8, Pedagogical Seminary Course 10, Advanced Psychology	Ellis Ellis Sutton Sutton and Ellis.	69 53 47
Total enrollment		275
Separate students, no student counted more than once		123

II. INSTRUCTION.

Adjunct Professor Ellis was granted by the Regents a leave of absence for the Fall Term in order that he might devote himself exclusively to the completion of an educational work upon which he has been engaged for some years. His classes in Psychology for that term were taught by Dr. Mezes, who had generously offered to assume the extra duties involved, and who was assisted by Tutors Fletcher and Shipe and by Fellow Turner.

The Pedagogical Seminary, a course given jointly by Dr. Ellis and myself, was conducted during the Fall Term by myself only, and during the Winter Term mainly by my associate. The Seminary Course has been pursued this year only by Seniors and Graduate students, and has been more satisfactory than during any previous year since the School of Education was re-established in 1897. This course calls for ability to investigate problems at first hand, and offers to the competent student an inviting field for research. Among the topics that have been considered this year are: Educational Reforms Advocated by President Chas. W. Eliot; Educational Problems in Texas; Problems of our American Educational System; Examinations, their Value and Limitations; Governmental Control of Education; The Education of Women; Relation of Biology to Education; Francis W. Parker and His Place in the History of Education; Punishment in Education; The Teaching of Modern Languages; Literature in the School; The Course of Study of the Secondary School.

Besides the thesis presented by each member of the Seminary, there was required a review of Dr. Eliot's *Educational Reform*, a work in which is recorded the professional progress of Harvard's president and the evolution of American education. So sane and vigorous in thought, and so clear and forceful in style, is Dr. Eliot's book that it was studied and discussed with interest and profit. An acquaintance with such a work necessarily gives one deeper insight into education and life, and makes him a better man and a better teacher.

In Course 5, which deals with the History of Education, there has been registered a greater number of students than last session, the class this year being confined chiefly to Graduates and Seniors. While there is no satisfactory text-book available for this course, and while the University library facilities are lamentably poor, the willing co-operation of the students with their instructor has, to some degree at least, overcome the disadvantages just now mentioned.

In Courses 1 and 2 and in other courses the poverty of the library has been a serious obstacle to the prosecution of such work as is worthy of the university stamp. While text-book teaching rightly occupies a very large place in the lower schools, it should play a relatively insignificant part in the scheme of university instruction. This being true, the university student should find ready access to the world's best books, ancient and modern, as well as to laboratories and museums, by means of which he can make at least a beginning in research upon his own account. Texas is a new country, and her University has not much more than been organized; yet it is especially important, in this early formative period, that serious attention be given to the most vital factors of educational progress. That the work of instruction is the paramount feature of a university's development, none will question, and as a means of enriching and strengthening instruction, it is here urged that there is none greater than a library well equipped and well managed. As the schools in which natural sciences are taught, require liberal outlays of money for laboratories, as well as for books, so those schools in which human nature subjects are treated should receive particularly generous appropriations for library purposes, for the students in these latter schools should make daily use of the library as an actual laboratory. It is for this reason that one of the recommendations hereinafter stated, asks for a generous increase in the library appropriation to be made available for the session of 1902-1903.

The gain in the efficiency of the instruction given in the School of Education this year has been marked by reason of the fact that a Tutor and a Fellow have rendered valuable, and it may be said, necessary, service in holding frequent conferences with students. Theses, summaries, critiques, and other written exercises have been carefully examined, and have been discussed in conference with the respective students preparing them. However excellent may be some features of the lecture system of teaching, in one most important respect it is lacking—it does not make even semi-adequate provision for individual instruction. There is, in fact, no such thing as developing the minds of men and women by companies; real instruction is distinctly an affair in which the mind of one individual comes into vital contact with that of another individual.

Of the work of the great majority of the students enrolled in the school this year it is a pleasure to be able to speak with emphatic approval. With but remarkably few exceptions the students have been regular and punctual in the performance of duty, and have manifested an earnest purpose to gain insight into a field of learning which is full of human interest, and which is especially attractive to one desirous of becoming a professional teacher.

III. NEW COURSES.

The subject of education is one having many phases, dealing, as it does, with the problems of the school, an institution as complex, as myriad-sided, as human life. Up to this time the University has offered only a few fundamental courses in education. For example, but a single course in the method and principles of teaching has been given. It is manifest that only the most general outlines of the subject could receive What is desirable, is that this course in general method be attention. supplemented by additional courses in special method. A beginning in this direction has already been made. Instructor Rice, of the School of Mathematics, will next year offer a course entitled The Teaching of Elementary Mathematics. It is to be hoped that arrangements may be completed for similar courses in the teaching of English, of history, of ancient languages, of modern languages, and of the natural sciences. These special courses would, by no means, take the place of the general course in method; but they would greatly reinforce it, and would appeal to the different tastes and purposes of students preparing for widely divergent lines of educational work.

There are many other courses in education which have just claims for consideration; among these additional courses may be mentioned:

- The organization and the conduct of the secondary school. (a)
- (b) The elementary school.
- (c) The kindergarten.
- (d) Manual training.
- The psychologic foundations of education. (e)
- (f)The school systems of England, France, Germany, and America.
- The history of education in America.
- (g) (h) The rise and development of universities.
- The pedagogy of Herbart and his disciples. (i)
- (i)The problems of the modern Sunday school.

With the present teaching force of the School of Education it is out of the question to consider seriously the introduction of new courses; but the list of educational courses was presented above in order to call attention to the very great work which lies before the University in the professional training of teachers. It is a work of great magnitude and great diversity. That it is the function of the University to undertake it and accomplish it, the thoughtful student of education has no doubt. The professional ideals of the teacher, whether in kindergarten, elementary school, secondary school or college, should be high, and the highest ideals are gained through training in university ways of dealing with things. Our University, being the head of the public school system, has no greater function than to dignify the profession of teaching by contributing yearly to its ranks many men and women, who, in addition to such culture as all educated people should enjoy, have given serious study to questions pertaining to that calling, which, for want of such study and the strength and dignity afforded thereby, has through the long centuries been degraded to the level of a mere trade. The University herself will not only justify her claim to leadership in education by rigorously exercising her function in this direction; she will also reap rich benefit therefrom. It is a well-known fact that the growth of every great university has been largely promoted by those of its alumni that have gained distinction as teachers. Another fact to be taken in this connection, is that the development of the School of Education will minister to the growth of all the other schools of the University. That school, in the very nature of the case, can be jealous of no other school, were jealousy at all compatible with culture and character. The University School of Education, properly directed, will promote without ceasing the cause of sound learning in every legitimate field, ancient and modern. Seeking for the enjoyment of none but legitimate privileges, it will always contend for its rights and dignity. It will strenuously resist any and all efforts to degrade the study of education from the position now accorded it in modern universities to the plane it occupied in mediæval times, and to which it would even now be cheerfully and everlastingly condemned by occasional mediæval-minded men of this generation. The occasion for such opposition will seldem arise, for opposition to the professional training of teachers for all grades of schools has within the last quarter of a century been well-nigh destroyed, and the study of education has, along with other modern subjects, been accorded by universities the academic dignity with which every worthy subject should be honored.

IV. RECOMMENDATIONS FOR THE YEAR 1902-1903.

I respectfully recommend:

1. That Miss Maud Margaret Shipe, who has served so acceptably as Tutor during the current session, be re-elected, and that her salary be increased to \$600 per annum.

2. That Mr. John Robert Swenson, a graduate of the University of Denver, be given the Fellowship worthily held this year by Miss N. D. Turner. Mr. Swenson, who has taught for some years in Texas, is desirous of taking his master's degree from The University of Texas.

3. That an appropriation of one hundred dollars (\$100) be made to the School of Education, to be used chiefly in providing materials for work in advanced classes, in prosecuting studies in education by means of questionnaires, and in issuing from the school, from time to time, such circulars as will be believed to be helpful to teachers and school officers.

4. That the school trustees in certain cities where there are local boards of examiners, and where teachers' certificates granted by the University are not recognized, be requested to consider the advisability of exempting from examination the holders of such certificates.

5. That the appropriation made for the library be increased to \$5000.

Other recommendations, which are considered more or less meritorious, are withheld from this report simply because conditions render the approval of such recommendations clearly impracticable at this time.

To my associate, Adjunct Professor Ellis, and to Tutor Shipe and Fellow Turner, I am indebted for helpful and generous co-operation throughout this academic year, which, largely because of their efficiency and fidelity, has raised the ideals and strengthened the purposes of the School of Education.

Very respectfully, W. S. Sutton.

Professor of the Science and Art of Education.

President Prather.

SIR: I beg leave to report as follows concerning that part of the work in Education and Psychology which has been under my charge during the year 1901-1902.

Education 3 (Psychology of Education) enrolled 53 students.

Education 4 (Psychology of Development, or Child Study) enrolled 47 students.

The part course in Physical Education and School Hygiene (Education 2 in part) enrolled 60 students.

Education 8 (Educational Seminary) enrolled 8 students. This course is conducted jointly by Prof. Sutton and myself.

Education 6 and 7 (the two forming an advanced course in the Philosophy of Education) were omitted this year because of the absence of the instructor during the Fall Term, and the increased amount of work consequently crowded into the remaining two terms.

While much good work has been done by the classes this year, so much has been half done and so much left undone that as a whole the work has been very unsatisfactory to the Instructor in charge. In spite of the valuable services of the tutors and fellows in the Departments of Psychology and Education, a part of the time of each of whom is alloted to me, I find the amount of routine work required in teaching and outside committee duty so consumes both time and energy that it is impossible to give to advanced classes the attention needed by them and demanded for any original investigation. The lack of this work of investigation has a most deadening effect upon the Instructor, and even upon the preliminary courses in the school. We now have several well trained students able and anxious to pursue the work of investigation so much needed in the field of the Science of Education: there are many problems we can not attempt because of lack of library facilities and of a practice and experiment school, but many other problems which are within the range of our equipment can not be touched from sheer lack of any time in which to work at them or direct others in such work.

I see no hope for relief from this situation until the resources of the University are such as to justify the appointment of another professor to take charge of part of the work now given in psychology, and to add to the advanced work now offered. I consider this one of the imperative and immediate needs of the University.

I wish to commend the work of Miss Shipe, the Tutor in Education, and to recommend her re-election.

I wish also to commend the work of Mr. Fletcher, the Tutor in Psychology, and to recommend that this tutorship be re-granted as requested in the report of Prof. Mezes.

I wish also to commend the work of Miss Turner, the Fellow in Education, and recommend that this fellowship be re-granted, in accordance with the request made in the report of Prof. Sutton.

I desire to express my appreciation of the courtesy of the Board in granting my leave of absence during the past fall, and to thank Prof. Sutton and Prof. Mezes for the generous and able manner in which they took charge of my classes during this absence.

Very respectfully,

A. CASWELL ELLIS,

Adjunct Professor of the Science and Art of Education.

SPANISH.

President Prather.

SIR: Permit me to submit for your consideration the following report of the School of Spanish for the session of 1901-1902:

The enrollment in the various classes has been:

Course A, B—1 $\frac{1}{3}$ courses (beginner's Spanish):

Section I	43 students.
Section II	43 students.
Course 1 -1 course. Spanish Syntax and Reading	26 students.
Course 2 -1 course. Contemporary Literature	9 students.
Course 3 -1 course. Spanish Classical Drama	3 students.
Course 4	21 students.
Course 4a-1 course. Rapid Reading	8 students.
Course 5 —1 course. Historical Spanish	3 students.
Course 6 —1 course. Graduate Work	3 students.
Total enrollment	159 students.
Names repeated	

Repetition of names is thus explained: a number of the students taking Spanish 4 have been likewise enrolled in one of the other courses.

The total enrollment in the school presents an increase of 40 names on last year's enrollment. At the present date the attendance in the school is 124. Of these students a larger proportion are doing satisfactory work than have so done during several sessions preceding this one. This is particularly true of the lower classes. In general, work has proceeded smoothly and faithfully, and the prevailing spirit has been commendable. There have been a few cases of irregular attendance so chronic as to need dealing with, but the majority of absences have been due to these individuals, and the attendance of the rest has been regular. Since I deem this a very important point, I am striving very earnestly to obtain the desirable regularity.

With the exception of the course in rapid reading, which was offered after consultation with the Dean, all the courses given were carried on as set forth and outlined in the Catalogue for 1900-1901. The abovementioned exception, Spanish 4a, was meant to meet what was believed to be a just demand; however, since the teaching-power of the school is somewhat taxed, it seems wise not to continue this extra course unless the demand becomes still greater. All the courses given were undergraduate courses except Spanish 5 and Spanish 6. Spanish 5 was not as happy in its workers as last session, but as it should develop into a very useful complement to the work of the School of History, it will be retained, and careful attention given it. Of the graduate students two, Miss Alice P. Hubbard and Miss Edna Wallace, are working on theses, offering Spanish as the major subject for the M. A. degree.

No important external change is contemplated in the work, because the chief need of this young school now seems to be to build it up internally as carefully as possible, giving it vigor and good traditions and ideals, and doing as thoroughly as is practicable all that is attempted. The most decided drawback to the best results in the beginners' course is the large size of the classes: there is a great mechanical difficulty towards making the work sufficiently practical in language teaching, when a beginners' class consists, through the year, of between thirty and forty individuals. I recognize that perhaps this is a necessity of present conditions, borne by all the foreign-language work, but whenever our sections can be made smaller, the results of the modern language teaching will necessarily be very much more satisfactory.

The contingent fund of \$100 granted to the school for this closing session has been disposed of for books for the School of Spanish. With respect to these books, which are sorely needed and will prove a great boon, I desire to make a statement and a request. Owing to a number of circumstances the bills for these books may, as I understand from Mr. Wyche, be deferred so as to arrive a short time after the close of the session. I therefore earnestly beg that the money granted be reserved for the purpose for which it was intended when appropriated, *i. e.*, for the books which Mr. Wyche has ordered for the School of Spanish to that amount. This I ask very earnestly, for the school is very poor in books, and every one ordered is one needed at some time in the work.

There is one more point I desire to present as a fact for consideration. The most important journal for advanced work in Romance Philology and Literature, the Romania, of which the back numbers, published since 1870, form a most important and valuable collection, is not on our shelves. The set today costs about \$200. On the one hand is the fact that if we mean some day to have a good departmental library we should have the set, and that the old numbers are becoming every day more expensive; on the other hand, it is quite true that the set will benefit chiefly the teaching force and a limited, very limited, number of graduate students. For this latter reason I would at present be disposed to hesitate to lay the claim of the Romania before the Library Committee, but it has occurred to me to offer the facts of the case as openly as I can to you, who have exposed before you the relative needs of the schools. If, therefore, now or at some other time yourself and the Regents considered it convenient and proper to allow \$200 to be set aside for the French and Spanish Schools for the purchase of the Romania, and if it could be done without injustice to other more pressing and general needs, it would be a very precious addition, from the scholarly standpoint, to the equipment of the two schools mentioned. It is hardly necessary to indicate that a set so invaluable to the instructors must, though indirectly, benefit a school. However, I repeat that I offer this as a statement, rather than a request; it is my duty to try to suggest, in time, the best equipment I know, but I cannot know how soon it may be possible, among the various crying needs, to supply one of this sort.

Respectfully submitted,

LILIA M. CASIS, Adjunct Professor of Spanish.

President Prather.

SIR: I have the honor of submitting the following report of the School of Teutonic Languages:

The enrollment is as follows:

Herman A, B 89)
ferman 1 66	;
lerman 2 14	E
lerman 3 12	
Ferman 4 39)
lerman 5 and 6 2	
Ferman 7 17	1
	-
239	•

The best insight into the working of the school can be obtained from the reports of Miss Andrews and Mr. Wild.

Miss Andrews gives the following details of her class work:

"The class in Course A, B II will complete Part I of Thomas's *Practical German Grammar*, with a few additional exercises from other texts, and Guerber's *Märchen und Erzählungen*, Part I, together with several of Leander's *Träumereien*.

"The class in German 1, II, will have had 150 pages of Part II of Thomas's *Practical German Grammar*, besides reading Storm's *Immen*see, Baumbach's *Der Schwiegersohn*, and Schiller's *Lied von der Glocke*. Part II of Thomas's *Grammar* not being supplied with exercises based upon the text, it has been found advisable to prepare such exercises for the use of the class. In addition to these, numerous exercises based upon *Immensee* and upon stories read to the class have been of service in giving practice in composition work.

²⁴The class in German 2 will have read Lessing's Minna von Barnhelm, Schiller's Die Piccolomini, and Goethe's Iphigenie auf Tauris. In addition to these German texts, which are read and carefully translated in the class, there have also been read about three thousand pages from various works on the history of German literature,—Bayard Taylor, Carlyle, Max Müller, Kluge, Francke, Hosmer, Kuno Fischer, Sime, R. M. Meyer and others. Twenty papers have been required during the session, including short sketches, abstracts, essays, reproductions, and one extended outline of the Britannica article on the Renaissance. The success of nearly all of the class in forming this outline deserves special mention. Indeed, the faithful and intelligent work of the class in German 2 throughout the session must be heartily commended.

"The conversation work in German 4, III, has been usually based upon German stories, assigned to and prepared by the class. About eighty pages of Leander's *Träumereien* have been thus read. Pictures have, now and then, formed the subject of discussion.

"Of these classes as a whole, it may be said that there is earnest and faithful attention to duty on the part of the large majority. Some are so poorly prepared when they enter the University that their work is necessarily poor. Few are really neglectful of duty, and the number of those poorly prepared is becoming smaller.

"As to our present need for books, I would say that the Allgemeine Deutsche Biographie seems to me the most desirable set of books that we could purchase."

My own work is similar to and supplements that of Miss Andrews. I can only emphasize Miss Andrews' opinion that the classes are doing excellent work. The interest shown is great, and is increasing from year to year.

The Scientific German has been very successful this year, and the class has been the largest (17) in the history of the University. Mr. Wild's report shows what has been done:

"The class in Scientific German read three sciences during the year: chemistry the first term, geology the second, and mathematics the last. About 250 pages were read in each. The work in class consisted in translating into English orally the German text. The constant object in view was to get the thought of what was read. No attention was paid to grammar, except where it helped to make clear the meaning of the sentence. Special emphasis was placed on the correct translation of the German scientific terms. Sometimes, when the lesson was difficult, short written abstracts or outlines of the lesson were asked of the students to be prepared before the recitation, in order to make sure that the text was understood. In addition to the class work each student had to do some outside reading each term. For this purpose scientific articles and essays in German were offered by the different schools of science. Each student then reported on what he or she had read, either orally or in writing. Thus the entire amount of reading done by each student equals a little over 900 pages. The spirit of the class is to be especially mentioned, being a very commendable one. The class was earnest, sincere, and conscientious in its work."

I unite with Miss Andrews in urging the purchase of *Die Algemeine Biographie*. I, myself, have felt the need of such a book of reference in my advanced class (German 3) this year.

The University Library contains nothing on Gustav Freytag, the author studied, and we were deprived of any help in our studies. This biography would be invaluable to our school and to the general library, as it is a universal biography and includes all noted men of all departments. It would cost, for a bound set, \$100, and I would ask for an appropriation of that amount in order to purchase this set of books. In addition to the great need of the School of Teutonic Languages, I would urge that it has never had a contingent fund, never had any of its requests for books granted by the Board of Regents, and has never received any favors in the distribution of the Library appropriation proper.

Respectfully submitted, SYLVESTER PRIMER, Adjunct Professor of Teutonic Languages.

ZOOLOGY.

President Prather.

SIR: In obedience to your request I herewith submit my report of the condition of the School of Zoology for 1901-1902.

I. COURSES OF STUDY AND ATTENDANCE.

During the past Academic year the total number of students doing work in the School of Zoology has been 354, distributed as follows:

Course 1	(General Biology) 69	
Course 2	(Comparative Anatomy) 18	į.
Course 3	(Histology) 17	1
Course 4	(Embryology) 16	j
Course 5	(Entomology) 11	
Course 5a	(Field Entomology) 9	l,
Course 6	(Advanced Zoology) 7	
Course 7	(Zoological Seminar) 12	
Course 8	(Physiology and Hygiene) 191	
Course 9	(Advanced Embryology) 4	
		•
Total .		:

This attendance shows a total increase in the Physiology and Hygiene, General Biology and Advanced Zoology courses of twenty over last year.

II. INSTRUCTION.

The work of instruction in the School of Zoology has been carried on during the past year by the same teaching force as was employed during the year preceding, viz.: by Miss Augusta Rucker, Messrs. A. L. Melander, C. T. Brues, J. F. McClenden and myself.

Miss Rucker has had exclusive charge of the zoological half of the laboratory instruction in General Biology. In this she has been assisted by Mr. A. L. Melander. Miss Rucker has also assisted in the laboratory work in Courses 3 and 4 during the winter and spring terms, and has aided the students in other courses at odd times throughout the year. Miss Rucker's work has been characterized by the same thoroughness and devotion as during the previous years of her service to the institution.

All the teaching in Entomology has been done by Messrs. Melander and Brues. They have succeeded in interesting the students in the subject, and have also materially enlarged and improved the collections of the school.

The laboratory work in Physiology and Hygiene has been conducted by Messrs. McClendon and Brues. Even after subdivision into four sections the classes in this subject have been far too large, and the work has not been satisfactory.

My own time and energies have been consumed in giving all the lectures of the School except those in Entomology, in attending to the laboratory work of Courses 2, 3, 4, 6 and 9, and to the management and business of the School.

III. PROPOSED CHANGES IN THE COURSES.

The following changes in the work of the School may be announced for the coming year:

1. It has been decided to drop the work in Physiology and Hygiene. This can not but make the teaching in the remaining courses more effective by limiting the energies of the teaching force and by preserving the microscopes and apparatus from the dreadful wear and tear they have been subjected to in the past.

2. Two courses in Physiology, one in the elements of the subject and one in the general principles, will be given by Miss Rucker during the Winter and Spring Terms of 1903. Miss Rucker has prepared herself for these courses by doing work during the summer vacations at the University of Chicago and the Marine Biological Laboratory at Woods Holl under the direction of Professor Jaques Loeb.

3. The addition of a course in Zoological Drawing.

4. During the ensuing year it will be best to continue the Beginning Zoology (first half of General Biology) through the whole year, making it a full course. By doing this the present Zoology 2 (Comparative Anatomy) can be included in the first year's course, and the second year can be devoted entirely to Histology and Embryology. This will enable us to give the full amount of premedical work in these courses required for entrance to medical colleges throughout the country. Heretofore our work in Normal Histology has been somewhat defective as a preparation for Pathology.

IV. EQUIPMENT ADDED.

During the year the Biological lecture room and laboratories have been furnished with ten dozen tablet chairs out of a special appropriation to the Biological Schools. The hall between the Zoology laboratories has been fitted up with four large wall-cases for the accommodation of museum specimens and other materials for which room could not be found in the laboratories and store room. Fifteen good compound microscopes, a new Minot rotary microtome and a mechanical substage have been added to the laboratory equipment. The human skeleton has been enclosed in a box specially constructed for it by the University work shop. For demonstration in Physiology a human mannikin has been purchased, and for this, too, a box has been constructed. A number of lantern slides for demonstration in the Zoological lectures have been made for the School by Messrs. Melander, Brues and Hartmann. 'I'wenty Schmitt boxes have been purchased for the accommodation of the Entomological collections of the School.

V. ROOM NEEDED.

I can only repeat the remarks of my last year's report on the entirely inadequate quarters of the School. With the increase of students during the past year the evil has, of course, been even more keenly felt. While the abolition of the course in Physiology and Hygiene will bring us some relief, it will be but slight and temporary, and it will be necessary for the School of Zoology to have the large northeast laboratory on the third floor of the Main University building entirely for its own work. Only one course remains open to the School, unless more room is provided in the near future—to limit the number of its students. While this might improve the quality of the students, it would be diametrically opposed to the wishes of the teaching staff, for of all the subjects taught in the University none should be made more accessible to all the students than Biology. Even during the past year we have had to advise students to take other subjects, as the space in the laboratory was inadequate. Not only is space sorely needed for the accommodation of the students, but also for the proper storing of the specimens, books and apparatus continually accumulating in the School. One of the greatest needs of the School is at least one large room to be used as a library, reading room, museum and research laboratory. Until this is provided much of the time and energy of the Zoological staff will be dissipated in moving objects about in the laboratories to make room for successive classes.

VI. LIBRARY.

The most deplorable defect in the School of Zoology is its library. The small amount annually appropriated for books is entirely consumed in taking a very few of the most necessary journals and in purchasing about a dozen cheap books. Of the vast amount of zoological literature appearing annually we are unable to secure even the absolutely essential minimum fraction, *i. e.*, the compendia and general text-books relating to the subject. Investigation which might otherwise extend over a wide field is necessarily limited to a rather narrow channel. Even the identification and description of our common Texan animals is accomplished only with difficulty or not at all.

VII. MUSEUM.

A museum is an essential feature in the zoological school of every university. Situated in the very midst of a very rich and varied fauna, the University of Texas possesses great natural advantages for the proper development of a collection, which should represent in a clear and instructive manner the whole fauna of the State. A more favorable location for such a collection could scarcely be conceived than at the capital city of the State and in its University, where it will be alike accessible to the students and to the general public. Such collections stimulate the community to a study of nature, and are invaluable adjuncts to institutions like the Texas Academy of Science. The zoological collections now in the University constitute a good beginning for such a museum, which should be limited, at least in the first instance, to the fauna of the State and to such synoptic collections as are necessary for demonstration in the lecture-room of all the leading types of the animal kingdom.

VIII. STATE ZOOLOGICAL SURVEY.

A State Zoological Survey is naturally suggested in connection with the Mineralogical and Botanical surveys, and should be planned in such a way as to co-operate successfully with these. The vast territory of our State makes much greater demands on us in this direction than do the smaller States of the Union, many of which have already made great progress in their zoological surveys. The additional expense of keeping one or two zoologists constantly in the field in connection with the Mineralogical Survey would be slight, and would answer all purposes. It is to be hoped that the School of Zoology may be enabled to undertake this work as soon as the Mineralogical Survey is well under way and has demonstrated its great value in the investigation of the natural resources of the State.

IX. RESEARCH.

During the past academic year three graduate students, Messrs. A. L. Melander and C. T. Brues and Miss Margaret Holliday, have done work for the M. S. degree in the Zoological School.

Mr. Melander offers as his thesis the first half of an extensive monograph on the Nort American Empididae. This work, which will place Mr. Melander among the leading North American Dipterologists, is being published in the well-known Transactions of the American Entomological Society. Mr. Melander has been appointed to a senior fellowship in Zoology at the University of Chicago.

Mr. Brues offers as a thesis a study of the embryology of the Strepsipteran parasites of wasps (Polistes). The embryology of these forms has never before been studied, and Mr. Brues has succeeded in bringing to light a new type of insect development. Mr. Brues has been appointed to a senior fellowship in Zoology at Columbia University.

Miss Holliday offers as a thesis a long and patient study of the peculiar transitional forms that are found to connect the workers and the queens among ants. Miss Holliday has dissected many hundred specimens. and the tabulation of her results will show that she has added materially to our knowledge of the possible normal fertility of worker ants.

The following is a list of "Contributions from the Zoological Laboratory of the University of Texas" that have been published during the past year:

No. 20. Microdon Larvae in Pseudomyrma Nests, by W. M. Wheeler. Psyche, July, 1901.

No. 21. The Texan Koenenia, by Augusta Rucker. American Naturalist, August, 1901.

No. 22. The Parasitic Origin of Macroërgates Among Ants, by W. M. Wheeler. Am. Natur., November, 1901.

No. 23. An Extraordinary Ant-guest, by W. M. Wheeler. Am. Natur., December, 1901.

No. 24. A New Agricultural Ant from Texas with Remarks in the Known Species, by W. M. Wheeler. Am. Natur., February, 1902.

No. 25. A Monograph of the North American Empididae, Part I, by A. L. Melander. Trans. Am. Ent. Soc. Phila. 1902. (Thesis for the M. S. degree.)

No. 26. New and Little Known Guests of the Texas Legionary Ants, by C. T. Brues. Am. Natur., 1902,

No. 27. The Postembryonic Development of Ulula hyalina, by J. F. McClendon. Am. Natur., 1902.

No 28. A New Silphid Beetle from a Simple Insect Trap, by A. L. Melander. Psyche, April, 1902.

No. 29. Notes and Descriptions of Texan Dipterous Larvae, by C. T. Brues. Psyche, 1902.

No. 30. A Consideration of S. B. Buckley's North American Formicidae. Trans. Tex. Acad. Science, Vol. IV, Part II, 1902. No. 31. Notes on the Acroceridae, by A. L. Melander. Entomological News, 1902.

No. 32. Two New Texan Ant and Termite Guests, by C. T. Brues. Entomological News, 1902.

No. 33. A Neglected Factor in Evolution, by W. M. Wheeler. Science, 1902.

The following papers, not included among the contributions, are in the hands of the printers:

1. The Psychic Facultics of Ants, translated from the German of Prof. Aug. Forel by W. M. Wheeler. To be published in the "Popular Science Monthly."

2. A Key to the Genera of the Formicidae, translated from the French of Prof. Carlo Emery by W. M. Wheeler. To be published in the "American Naturalist."

The following contributions are in course of preparation. Their numbers and sequence are subject to change:

34. Ergatogynic Ants, by Miss Margaret Holliday (thesis for the M. S. degree).

35. A Contribution to our Knowledge of the Stylopidae, by C. T. Brues (thesis for the M. S. degree).

36. Further Observations on Koenenia, by Miss Augusta Rucker.

37. The External Morphology of the Neuroptera Vera, by J. F. McClendon.

38. Note on the Placentation of the Nine-banded Armadillo (Tatu novem-cinctum), by W. M. Wheeler.

39. The Gall-ants of Texas, by W. M. Wheeler.

40. Observations on an American Polyergus, by W. M. Wheeler.

41. Further Observations on Leptothorax Emersoni Wheeler, by W. M. Wheeler.

42. The Development of the Insect Appendages, by W. M. Wheeler.

43. Gynandromorphism among Ants, by W. M. Wheeler.

44. The Mush-room Growing Ants of the United States, by W. M. Wheeler.

X. TEACHING FORCE AND EQUIPMENT NEEDED DURING THE COMING ACA-DEMIC YEAR (1902-03).

It will be necessary to employ the same teaching force in the School of Zoology as during the past year. In the place of Messrs. Melander and Brues, who have completed their work at the University and leave us to enter upon their work elsewhere for the doctorate, I would respectfully suggest that Mr. J. F. McClendon and Mr. Carl Hartmann be appointed to fellowships, each of \$250.00. and that Mr. A. Deussen be made student assistant in Zoology at \$150.00. Last year Miss Augusta. Rucker's salary of \$900.00 was not increased. As she will have entire charge of the two courses in Physiology during the coming year, in addition to the usual work which she has so faithfully performed for several years, I think it culy just that her salary should be increased. For running the school during the coming year \$1,000.00 is needed. This is but little in excess of the appropriation for last year, and is an extremely moderate estimate when we consider the great and urgent needs of the school and the fact that the number of students has again shown a considerable increase.

Very respectfully submitted,

W. M. WHEELER, Professor of Zoology.

REPORT OF COMMITTEE ON AFFILIATED SCHOOLS.

President Prather.

SIR: Below is respectfully submitted the report of the Committee on Affiliated Schools for the year 1901-1902.

During the year the following schools were affiliated:

(1) The Victoria High School in English, History, Mathematics, Botany, Chemistry, Physics, and Physiology and Hygiene.

(2) Alexander Collegiate Institute, Jacksonville, in English, History, Mathematics, Latin, and Greek.

(3) The Brownwood High School and the Whitis Avenue School, Austin, in English, History, Mathematics and Latin.

(4) The Marlin, Texarkana and Yoakum High Schools in English, History and Mathematics.

Among the schools previously affiliated, the following were affiliated in special subjects:

(1) The Ball High School, Galveston, in German.

(2) The Blinn Memorial College, Brenham, in Physics, Chemistry and German.

(3) The Brenham High School, in German.

(4) The Calvert High School, in Chemistry.

(5) The Corpus Christi High School, in Spanish.

(6) The Dallas High School, in German.

(7) The Gainesville High School, in German and Spanish.

(8) The Gonzales High School, in German.

(9) The Marshall High School, in Physiology and Hygiene, Physics and Chemistry.

(10) The San Angelo High School, in Physics, Latin and Chemistry.

(11) The Sherman High School, in Latin.

(12) The University Preparatory School, Austin, in French and German.

The Committee has considered original applications for affiliation from these thirty-six schools: Allen Academy, Bryan; Athens Academy; Burleson Preparatory School and Normal Institute; Burnetta College, Venus; Central Texas Institute, Moody; Carlisle's School for Boys, Hillsboro; Elmwood Institute, Celeste; Evangelical Lutheran College, Brenham; Jeff Davis College, Pittsburg; John B. Denton College, Denton; Masonic Institute, Marshall; Oak Grove Institute, Marshall; Sacred Heart Academy, Gainesville; St. Mathews Grammer School, Dallas; University Training School, Blooming Grove; and the public high schools in Anson. Bay City, Bellevue, Columbus, Cuero, Elgin, Floresville, Graham. Hubbard, Kerens, Lampasas, Lockhart, Lovelady, Mineral Wells, Mt. Calm, McKinney, Mt. Vernon, San Diego, Santa Anna, Uvalde and Winters. Ten of these schools have for one reason or another been refused affiliation, while the necessary steps leading to the affiliation of each of the remaining schools have not yet been completed.

These schools, which were affiliated in former years, made application for affiliation in additional subjects:

(1) The Ball High School, Galveston, in Physiography, Physiology and Hygiene, Chemistry, Physics, French, German and Spanish. (2) The Bowie High School, in Physics and Chemistry.

(3) The Denison High School, in Chemistry, Physics, Physiography, and Botany.

(4) The Denton High School, in Physiography and Physiology and Hygiene.

(5) The El Paso High School, in Physiology and Hygiene, Chemistry, Physics, Physiography, and Spanish.

(6) The Ferris Institute, in Physiology and Hygiene, Botany, Chemistry, Physics, and Physiography.

(7) The Gatesville High School, in Latin.

(8) The Gonzales High School, in Physiography and German.

(9) The Hempstead High School, in Latin, German, Physics, and Physiography.

(10) The Henderson High School, in Latin, Physics, Spanish, Chemistry, and Physiology and Hygiene.

(11) The Hillsboro High School, in Physiography and Physiology and Hygiene.

(12) The Houston High School, in German, Spanish, Botany, Chemistry, Physics, and Physiology and Hygiene.

(13) The Kaufman High School, in Physiography and Physiology and Hygiene.

(14) The Kerrville High School, in Physiography and Physiology and Hygiene.

(15) The Mexia High School, in Chemistry, Physics, and Physiology and Hygiene.

(16) Mrs. Mulholland's School for Girls, San Antonio, in French, Physics, Physiography, and Physiology and Hygiene.

(17) The Navasota High School, in Physiography.

(18) The Orange High School, in Physiography and Physiology and Hygiene.

(19) The Patton Seminary, Oak Cliff, in French, German, Chemistry, Physics, and Physiography.

(20) The Plano High School, in Physiography and Physiology and Hygiene.

(21) The Quanah High School, in Physics and Physiography.

(22) The San Antonio Academy, in German, Spanish, Physiography, and Physiology and Hygiene.

(23) The San Antonio High School, in Botany, Physics, and Physiography.

(24) The Seguin High School, in Latin, Physics, and Physiography.

(25) The Taylor High School, in Physiography.

(26) The Temple High School, in German and Physiography.

(27) The Wall School, Honey Grove, in Physiography and Physiology and Hygiene.

(28) The Waxahachie High School, in Physiography and Physiology and Hygiene.

The necessary steps for the affiliation of many of these schools in these subjects are yet to be taken. In a number of instances the committee has been unable to consider the question of affiliation in the natural sciences because of the fact that adequate means for laboratory instruction is wanting. In other instances the courses submitted could not be approved. This is the first year in which opportunities for affiliation in the modern languages and natural sciences have been offered to the schools. The applications above enumerated are sufficient evidence that, at least, a beginning has been made in the encouragement of the proper teaching of these two great groups of human learning. It is confidently believed that, through the active co-operation of the superintendents, high school principals and school boards of the State, the teaching of the modern languages and natural sciences in Texas will be placed upon a plane as dignified as that occupied by English, History, Mathematics, Latin, and Greek.

During the year affiliation was withdrawn from four schools on account of the fact that sufficiently high standards were not maintained. Five other schools were informed that it was necessary that improvement be made with respect to instruction. These five schools will submit examination papers to the committee next year, and will, furthermore, be again inspected. Should the reports concerning the papers, and should the report of the inspector be favorable, these schools will not forfeit affiliation.

During the year a large number of schools were visited and inspected by members of the Faculty. Following is a list of the visits made:

By Dr. Primer: The University Preparatory School, Austin.

By Dr. Callaway: The Austin Academy and the Austin High School. By Dr. Ellis: The Wall School, Honey Grove; the Whitis Avenue School, Austin; and the public high schools in Cleburne, Bonham, Honey Grove, and Paris.

By Dr. Benedict: The Central Texas Institute, Moody, and the public high schools in Cameron, McGregor, Rockdale, and Taylor.

By Dr. Battle: The West Texas Military Academy, San Antonio; The Coronal Institute, San Marcos, and the public high schools in Beeville, Corpus Christi, Cuero, and San Antonio.

By Mr. Rice: The Ferris Institute, Ferris, and the public high schools in Hempstead, Hillsboro, Navasota, and Waxahachie.

By Dr. Bray: The public high schools in Gonzales, Luling, Port Lavaca, Victoria, and Yoakum.

By Prof. Houston: Grayson College, Whitewright, and the public high schools in Beaumont, Dallas, Denison, Gainesville, Galveston, Houston, Orange, Sherman, and Waco.

By Dr. Wheeler: The Belton Academy, and the public high schools in Belton, Brownwood, San Angelo, and Temple.

By Dr. Fay: The Allen Academy, Bryan, and the public high schools in Bryan, Calvert, Corsicana, and Mexia.

By Dr. Garrison: The Blinn Memorial College and the Evangelical Lutheran College, Brenham; the Seeley Academy and Peacock's School for Boys, San Antonio; Alexander Collegiate Institute, Jacksonville; the Summer Hill Select School, Omen, and the public high schools in Brenham, Kerrville, and Palestine.

By the chairman of the committee: The North Texas Normal College and the Jno. B. Denton College, Denton, and the public high schools in Denton, Ennis, Greenville, Kaufman, Longview, Marshall, Terrell, Texarkana, and Tyler.

The correspondence and other clerical work required for conducting promptly the affairs of the committee have shown a marked increase over that of any former year in the history of the University. The chairman has given from one to five hours each day to this work, while the clerk of the committee, Mr. Norman Robertson, has faithfully attended to his duties day by day.

With respect to appropriations, it is recommended that at least six hundred dollars be set aside for defraying the expenses of visits of inspection to the several schools, and that two hundred dollars be devoted to the payment of the salary of the clerk, who should give greater time to the committee than has heretofore been given, and that twenty-five dollars be appropriated for such supplies as will be necessary for the use of the Respectfully submitted, W. S. SUTTON, committee.

Chairman Committee on Affiliated Schools.

GYMNASIUM (WOMEN'S).

President Prather.

SIR: I beg leave to submit the following report of my work in Physical Training for 1901-1902:

While we have had to face the same problems of space and ventilation as last year, the thought that this would perhaps be the last experience in these quarters has kept up our courage and made it possible to record at the close of this session a decided improvement over former years. In addition to the large class of Freshmen, more upper class students took advantage of the Gymnasium, showing by their voluntary attendance the importance they give to exercise. Even with that encouragement, it is plain that gymnastics for girls will never be the success it should be until some credit, though small, be given for the work. Just because they need the exercise and are benefited by it, is not inducement enough for them to give the time and attention they should to their physical development. And many of them slight their work here to do that for which they do receive credit.

The same method was carried out as last year,-the physical examinations given and the work plotted from them. The exercises in classes consisted mostly of light gymnastics and games. While some students showed an interest in the heavy work, it was not considered advisable to give it to the class as a whole, because their strength was not sufficient. No series of class games was played in basket ball. But a 'Varsity team was chosen to represent us in the contest with the Austin girls. The game was won by us with a score of 7 to 4.

There is no set of Anthropometric Apparatus for this Gymnasium, so our physical examinations were made under difficulties. The one belonging to the Men's Gymnasium was borrowed, but it could not be kept long enough to examine all the students. Those made, however, were used to compute the average and judge the standing. Every measurement shows an increase, pronounced in some cases while small in others. The greatest gain was in the lung capacity-37.8 cubic inches. The chest also shows good improvement. Gain in girth of chest natural, 11 inches; inflated, 3 inches; waist, 3.75 inches.

The results of these tests are encouraging. With such a favorable gain under rather adverse conditions, we expect a still greater improvement when once in the new building. To make these examinations as they should be, a complete set of Anthropometric Apparatus is necessary, a full list of which I enclose. I recommend that these instruments be purchased during the summer, so they may be ready for use at the opening of the next session. The number of lockers is entirely too small to accommodate the students using the Gymnasium. Another tier could be built in the southwest corner similar to the one already in use; these, with the screens to go with them, would add much to our comfort, and partly do away with the unhygienic conditions existing at present by crowding so many suits into each locker. The expense would not be lost, as they could be moved into another Gymnasium.

Respectfully,

PEARL ELEANOR NORVELL.

ANTHROPOMETRIC APPARATUS.

Self-reading Caliper, for depth of chest\$12	00
Stadiometer (height standard) 8	00
Shoulder Breadth Caliper 3	00
Wet Spirometer (for lung capacity) 12	00
Manuometer (Hand Dynamometer) 10	
Dynamometer (back, chest and legs) 50	
Scales (590A) 26	
Scales (590B)	00
Arm Stretch Rod 8	
Stethoscope 4	50

GYMNASTIC APPARATUS.

Fencing masks, six pairs at §	\$3.50\$21	00
Change of parallels, for a pair	r No. 846 48	00

GYMNASIUM (MEN'S).

President Prather.

SIR: I herewith beg leave to submit my second annual report as Director of the Gymnasium.

The appropriation granted this department by the Board of Regents last spring enabled it to increase its equipment by adding fifty regulation lockers to the Gymnasium dressing room, and forty-eight large double lockers for the use of the athletic teams, and to purchase parallel bars and mats for the Gymnasium. The lockers were all built by the work shop during the summer, and were ready at the beginning of school, but delay in securing the locks prevented giving out the lockers until some time after the work had begun, and to some extent delayed the work of examining the men and getting the classes organized.

Regular class instruction began October 14th, with 213 Freshmen and irregular students, and 54 students from other classes, making a total of 267 at the beginning of the season. Comparing this number with the number at the beginning of last season, it shows an increase of 113 men, or 73.37 per cent. During this term there were fifteen regular classes per week, with an average daily attendance of 91 and an average weekly attendance of 455. This is a gain of 65.45 per cent. over the average daily attendance for the same period last year.

After Christmas there was, as usual, a large increase in the number taking regular work. The roll increased from 293 at the close of the fall term to the remarkable number of 357. As only 213 of these men were required to take the work, it shows that nearly 150 men took the regular work voluntarily. This immense number of men, whose daily attendance averaged over 100 and frequently rose to over 130, overtaxed the capacity of the Gymnasium and permitted only the most elementary (although the most important) body building work to be carried on. The crowded condition of the rooms during the past season demonstrates once more, and more emphatically than before, the entire inadequacy of the quarters provided for this work, and imperatively demands a separate building of large size if the benefits of this work are to be advantageously presented to the immense number of students applying for it. The men could not have been handled this year by the Director alone, and it was only with the efficient aid of Assistant Dibrell that the work was accomplished. With his assistance the number of classes was increased from fifteen to twenty-four per week, and an increased number of men were given special work.

After the first of April all but one of the regular classes were discontinued, and voluntary outdoor work was taken up on the athletic field. The class meeting from 5 to 6 p. m. was continued under the direction of Assistant Dibrell until May first, when all class work was discontinued and individual work was continued for the balance of the year.

On February 8th a wrestling contest for the championship of the University was held in the Gymnasium, amid much enthusiasm. On March 21st the second annual gymnastic contest took place in the Auditorium, before a large audience. Both these contests were successful, and were well attended, and served to arouse interest in the work among the people of the city, as well as among the students.

Some people not familiar with the aims of this work or with the methods employed, and seeing only these contests, might get the idea that the object of physical training was to develop bar performers, acrobats and tumblers, and that the Gymnasium was run as a training school for the circus arena. Therefore it is with pleasure that I take this opportunity to disclaim any such purpose. The public contests are exhibitions of skill and courage upon the part of a comparatively few men who are especially interested in advanced work. They represent merely one phase of the recreative side of the work, and not its aim. Physical training seeks to develop the highest type of physical manhood. It corrects bad physical habits, bad postures, develops weak tissues, deepens and broadens the chest, strengthens the heart and lungs, develops will power, courage and self-mastery. In short, it joins hands with intellectual and spiritual training in an effort to develop the all-round man. It seeks physical and mental health first, then control and self-mastery. It aims to make men, not acrobats.

PHYSICAL EXAMINATIONS.

One of the most important features of the work of this department consists in giving each student a thorough physical examination and prescribing special exercises to remedy the defects found. It is easy enough to make the examinations and prescribe the exercises in each case, but to teach each individual the exercises prescribed and impress him with their importance so that he will practice them regularly, is a matter that requires a great deal of time, patience, and some tact. The time of the Director has been so taken up with routine work that could have been done by assistants, that this individual work has not been brought out as strongly as is desirable. To make the individual plan effective, the Director needs to be relieved of the routine work as far as possible, and in this connection a recommendation will be presented in the proper place.

The accompanying chart shows the average gain made by the class in a few essential points, namely, age, height, weight, girth of chest normal and inflated, depth of chest, and lung capacity. The average gain in weight was 6.25 pounds; height, 16mm. ($\frac{3}{5}$ in.); chest, normal, 28 mm. (over $1\frac{1}{5}$ in.); depth of chest, 9 mm.; lung capacity, 30 cubic inches.

The class as a whole averages slightly smaller than the class last year, and the extremes are greater. The average height is one-fourth inch shorter, the weight nearly five pounds lighter, and the lung capacity seven cubic inches smaller than the entering records of the class last year. In spite of this, however, and owing largely to the emphasis placed on deep breathing throughout the course, the average gain in lung capacity was nearly *twice* as great as the average gain last year. And not only was the gain greater, but the actual capacity, which was seven cubic inches less at first, increased until it averaged five cubic inches greater than last year. This demonstrates clearly that the extra time and attention devoted to lung gymnastics has been decidedly beneficial and has amply justified the prominence given to it in our system of work.

INDIVIDUAL CASES.

The results obtained in a few of the cases of individual work are given below.

Picture No. 1, Mr. R. E. McC., of Denton County. This is a common type of "student stoop." His development was classed as very poor. The first picture was taken the last of October, the second the middle of January, and the last in April. His second measurements show a gain of 12 pounds in weight, $1\frac{1}{2}$ inches in chest normal and $1\frac{1}{2}$ inches in chest inflated, $\frac{3}{4}$ of an inch in depth of chest, and 34 cubic inches in lung capacity. His last measurements, taken in April, show still further gains as follows: Weight, 17 pounds. Chest, normal, $2\frac{3}{4}$ inches. Chest, inflated, 2 inches. Depth of chest, $\frac{3}{4}$ inch. Lung capacity, 50 cubic inches. His normal heart rate was reduced from 112 to 98 per minute.

Picture No. 2, Mr. A. R. S., of Austin. This is a case of depressed chest with pronounced round shoulders and an exaggerated forward curve of the spine at the waist line with a consequent protruding stomach. The lack of energy in the first pose is especially noticeable. A man who stands like this seldom has self-confidence or courage, and can not look you squarely in the eye. In the second picture the chest and shoulders have improved and the poise is better, but the stomach is still too prominent and the lumbar curve is too pronounced. The pictures were taken October 9th, January 9th, and April 19th. His measurements show gains as follows: Girth of chest, normal, $1\frac{1}{2}$ inches. Depth of chest, $\frac{1}{2}$ inch. Lung capacity, 34 cubic inches. There is consumption in this man's family, on his mother's side.

Picture No. 3 shows the gain made by a typical case of "hollow" or "creased chest" in two months' time. At the time the first picture (A) was taken (November) he was thin and anemic and his development was classed as "very poor." There was a cup-shaped depression in the chest on each side, one over the stomach, and one over the liver, about where the seventh, eighth, and ninth ribs join the costal cartilage. These depressions were nearly half an inch deep and were as large as a tea saucer. They can be seen in the picture as a shadow just below the nipple. The shoulder blades projected sharply, the inferior angle being an inch and a quarter from his back. There was scarcely an indication of the presence of the rhomboidia, and the trapezius was merely a thin band under the skin and hardly distinguishable from it. The second picture (B), taken in December just before the holidays, shows the improvement in the shoulders as well as in the chest. The depressions are not quite eliminated, but there is a marked improvement. He has gained 11 pounds in weight, 24 inches in girth of chest normal, 1 inch in depth of chest, and forty cubic inches in lung capacity. This man's father died of nervous prostration and the son was in a fair way to follow him in a few years, but we hope to develop him to resist this tendency, and the results already obtained are encouraging.

Picture No. 4. This is a case of perfectly flat chest. His blood is in very bad condition and he is poorly developed. While a child he had scarlet fever, diphtheria, and typhoid fever. The first picture was taken November 7th, the second January 7th, and the third May 30th. He gained 13 pounds in weight, $\frac{3}{4}$ of an inch in depth of chest, $2\frac{3}{5}$ inches in girth of chest normal; and 52 cubic inches in lung capacity.

In examining these pictures it should be remembered that the poses are not the best possible postures the patient could assume, but are the habitual ones. The desire has been to show how the habitual postures have been improved and not how well the patient can stand when trying.

Picture No. 5 shows three typical cases of bad posture and poor development.

Respectfully submitted, F. HOMER CURTISS, Director Gymnasium.

LIBRARY.

President Prather.

SIR: I beg to submit the following report of the Library for the period from May 18, 1901, to April 19, 1902.

There are now in the General Library and in the various departmental libraries, making no deduction for withdrawals and losses, 36,136 volumes. During the year 2161 volumes have been added from the following sources: Purchase, 1124 volumes; gift, 627 volumes; binding, 410 volumes.

Out of the Library appropriation, \$2,500, the Library Council has so far authorized the following expenditure:

General periodicals\$	150	00
General reference books	100	00
Expensive sets	850	00
To each of seventeen schools, \$701	,190	00

Out of the fund set aside for expensive sets, the following have been purchased:

Publications of the New Shakespeare Society, 40 volumes. *Economic Journal, 7 volumes.

*Juhresbericht über die Fortschritte d. klassischen Altertunswissenschaft, complete set.

American Economic Association's Publications, 16 volumes. Littell's Living Age, 142 volumes. Botanical Gazette, 12 volumes. Zeitschrift für Physikalische Chemie, 35 volumes. Library Journal, 10 volumes. Myer's Konversations-lexikon, 21 volumes. *Proceedings of the Society for Psychical Research, to complete set. Anatomischer anzeiger, 13 volumes. The aggregate cost of these volumes will be \$676.48.

It seems wise that for several years a considerable amount of the Library appropriation be expended in completing such sets, the cost of which frequently puts them out of reach of the individual schools.

An approximately complete catalogue of periodicals in the general and departmental libraries has been made, from which it appears that out of 216 taken at one time or another, 156 sets are incomplete and but 60 are complete. Twelve of these were taken by one of the oldest and largest schools, not one of which is complete.

Among the more important donations may be mentioned a gift of about 675 volumes of United States government documents from the library of the late John Hancock. Of these, those that are not duplicates will appear in the accessions of next year. The Mineral Survey presented 26 volumes of the *Transactions and Proceedings of the American Society of Civil Engineers*. A donor whose name was withheld gave a set of Lowndes' *Bibliographical Manual* in 6 volumes. Through a favorable ruling of the Secretary of State, the Law Library has come into possession of 254 additional volumes of *Texas Reports*. A detailed list of donors is appended.

During the year, 410 volumes have been bound and 472 volumes have been rebound at a cost of \$551.37. The bulk of the work was done during the summer, and the arrangement under which it was done enabled us to get better work at a more reasonable price. A return to the contract system which now seems inevitable is much to be deplored. Much of the work so done will have soon to be done over.

The number of volumes drawn from the Library for home use for the past five years, respectively, is as follows: 8228 volumes in 1897-1898; 10,148 volumes in 1898-1899; 13,864 volumes in 1899-1900; 14,484 volumes in 1900-1901; 14,069 volumes in 1901-1902. No record can be made of the increasing use of books in the Library. For the past four summers the number of books drawn from the Library is as follows:

^{*} Ordered but not yet received.

673 volumes in 1898; 1557 volumes in 1899; 1537 volumes in 1900, and 775 volumes in 1901. This report is made four weeks earlier than that of last year, but estimating the circulation for this time the same as last year, it has increased 1552 volumes.

There has been an increased use of reserved books, but apparently no increase in general reading, which is due, doubtless, to the absence of a general fund for the purchase of the best current literature outside of technical lines. In view of the lack of library facilities both in Austin and in the larger proportion of the homes from which our students come, it would seem desirable to encourage the reading habit by expending annually a small amount for the purchase of this class of literature.

The services of a trained cataloguer have enabled us to take up in a systematic way this most pressing need of our Library. Miss Wandell began work October 8, 1901, and up to this time, in addition to the time spent in instructing the Library training class, has catalogued, shelf-listed and put in order 5352 volumes. This work is necessarily slow, but, once done, it will never need to be done over, and it will, of course, bring into availability, particularly the subject part of the catalogue, a large amount of material heretofore almost unknown.

The quiet of the room has been greatly increased by covering the floor with matting. This, with an extension of the quiet section, has given us decided improvement in the order and quiet of the room. A new desk made especially for the Library by the University workshop improves the looks of the room and enables us to keep the reserve books more securely and more easily accessible. Several new book cases and a catalogue stand, also made in the workshop, and a new typewriter for use in cataloguing, are other acceptable additions. Two of the bookcases are used for the exchanges of the Texas Academy of Science and the State Historical Association, which are now kept in the Library.

During the summer all of the books were removed from the shelves and carefully dusted.

NEEDS.

Undoubtedly the greatest need of the Library at present is a proper catalogue—a work which we have been hoping to achieve for four years, but which has been impossible, owing to the rapid growth in numbers of students and to our increased book accessions. Plans have been made to prosecute this work during the coming summer, which, it is hoped, will enable us to complete the catalogue next year, with the aid of Miss Wandell and a student helper who should do the mechanical work. Since the cost in the end will be about the same, it seems wise to push this work to completion as soon as possible, and not extend it over two years or more of time. Miss Wandell is doing excellent work, and has the catalogue well in hand, and the usefulness of the Library would be greatly impaired by stopping the work at this stage. By diverting the Library fees for this purpose, we have been able this year to secure her services, but in view of the large accumulation in the way of binding, work that is urgent, her salary should be provided for from other funds.

Where perfect freedom to the shelves is granted, which, owing to the lack of help and the incomplete condition of the catalogue, has been necessary here, it is only natural that some books should be misplaced and some "disappear," to use no harsher term. This practice is growing too common, for in either case we lose the use of a book when it is most needed, much to the annoyance and loss of time to all concerned. The most valuable books that have thus far been missed this year are Thayer's Cases in Constitutional Law and Traill's Social England, Vol. 2. In view of this evil, it seems desirable that access to the books be restricted to those who really have need to see the books on the shelves, and supply all ordinary calls by having students apply at the loan desk for books wanted. This could be accomplished by fencing off the cases, or the larger portion of them, having them arranged with this in view, and admitting only on written request through a gate near the loan desk. In this way, it would be known each day who was admitted, and then, too, the chance of books being misplaced would be largely lessened. This plan would also stop the habit, now so common, of using the alcoves for the study of text-books. The cost of this change would be very little.

Since the work of the loan desk has already outgrown one person, and as under the proposed change more help will be needed, I earnestly ask, in addition to the services of Miss Wandell as cataloguer, the appointment of three student assistants. We fortunately have in our Library training class several students upon whom we can call for assistance not only in the cataloguing department, but at the loan desk. There is, in fact, much mechanical and routine work in both these departments that could be satisfactorily done, and much less expensively, by such help. Then, too, the matter of a complete inventory should be pushed this year; and as many of the books have no marks of ownership except those made by a rubber stamp, they should be properly marked by means of a perforating stamp, which is much more safe. There are many other details which need attention, known only to those familiar with the work.

When we remember that the Library is the working laboratory of the whole University, the expense of its equipment, and its large opportunities, it follows that any effort to care for and make more available its resources, to enlarge its usefulness, or to make it more comfortable and attractive, is worthy of the most careful consideration. If by means of this additional help we can accomplish the first of these results next year, no doubt the others will follow in due season.

LIBRARY CLASS.

An outline of the work in Library Training will be found in the University Catalogue for the current year. Though a number of students applied for the course, it was found necessary to limit the class to six because of lack of room and equipment. Considering this lack and the lateness of beginning the work, the progress made has been satisfactory. Miss Wandell, whose training well fits her for this work, has given the technical instruction, giving to the class a total of 143 hours. Each student did from six to nine hours of apprentice work per week in various departments of the Library under my supervision. It is the purpose of this course to emphasize the important phases of the work rather than to undertake the more extensive courses offered in the various library interests along the lines already laid down, some equioment will be necessary. The furnishing of the room is inadequate to its needs, much of the furniture having been borrowed from one place and another.

A good beginning has been made in the way of a bibliographical collection, but there is still much that is needed in that line. There is no doubt much need of a course in Library Training in this State to meet the growing demands of the fast multiplying libraries, and no place seems more meet for such training than the State University, but, unless the Library staff is increased and suitable equipment provided, it is a question if it is wise to offer the course next year, or until the catalogue is nearer completion.

> Very respectfully, BENJAMIN WYCHE, Librarian.

	Books.	Pamphlets.		Books.	Pamphlets.
A. P. Wooldridge. Santtary Record. University of Pennsylvania. University of Pennsylvania. Driversity de Geneve. Dr. K. Campbell. W. C. Conant. Illinois Bureau of Labor. Warner & swasey. Mrs. M. E. Hicks. Mrs. J. V. Bergen. J. L. M. Curry. New York State Library. Conference for Education in the South. University of Texas Mineral Survey. Dr. S. Primer. Prof. W. S. Sutton. C. H. Swan. Bancroft, Whitney & Co. Ronbroke Press. J. G. Tod. T. B. Stockwell. E. A. Smith. Mr. Bugbee's Class.		18 1 16 many	Sec'y of Commonwealth of Mass. Chicago - ('ty schools, Supt Chicago - Public Work, Supt V. II. Hunt Pennsylvania Woman's College C S. Morse Trustees of Slater Fund. Pres. G. T. Winston Open Court Publishing Co Miss Leisewitz Pablic Libraries Dr. W. M. Wheelef. R. A. Thompson University of Toronto. Columbia University Philippine Information Society Dr. W. J. Battle Yrs. M. C. Jordan Miss M. G. Dill. J. M. Magle Dr. Q. C. Smith. F. W. Palmer Boston (Mass.) Park Dept Dr. M. Callaway. United States Government T. H. Murray Dr. H. A. West	4 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 10 108 5 1 1 many 1 15 1 1 1 1 1 1 1 1 1

LIST OF DONOES TO THE UNIVERSITY LIBRARY, 1901-1902.

LIBRARY COMMITTEE.

President Prather.

SIR: The Chairman of the Library Committee begs to submit the following general report, referring for all specific details to the report of the Librarian:

The entrance upon office of the Library Committee was, at its own request, shifted from the beginning of the session to the 1st of April. The object of this change was to enable the Council to recommend the allotment of sums of money to be expended by the schools early enough to make said sums available for expenditure in the summer before the books should be needed.

The general scheme of apportioning the Library fund was somewhat

altered during the past year, a decrease being made in the allotments to the schools, and an increase in the general fund, the latter being chiefly devoted to the purchase of rare and expensive sets of periodicals. Along this line lies the most urgent need of the Library. With this need in view, a strong plea was made in the report of last year for an increased appropriation to the Library.

A university library is not a young people's reading room of diverting literature: it is the working room of the serious student, whether pupil or professor; and such a library must aim to furnish a control of the history, methods and results of research in each subject of study in which the University attempts to give instruction. It is a modest estimate to say that an expenditure of \$2,500 to \$3,000 per annum for ten years, exclusively devoted to the purchase of works of learning and research, and not to diverting literature and belles lettres, will be necessary before we shall acquire even a moderate control of past specialistic research. An annual sum at least equal to the present appropriation of \$2.500 would also be necessary to provide for current periodicals, general reference books, special reference books needed by PROFESSORS and STUDENTS for NEW COURSES, and for the general equipment and growth of the Library.

The Library Committee has, so far as I am aware, no duties but to apportion the fund and recommend book titles for purchase by the general fund. The above report will be found to cover, in a general way, those points, and is hereby

> Respectfully submitted, EDWIN W. FAY, Chairman Library Committee.

WORKSHOP.

President Prather.

SIR: I have the honor to submit the annual report of the Workshop for the year 1901-1902.

During the present year the facilities of the workshop have been greatly increased by the addition of two machines: one a Tenoning machine for wood working, the other a small metal turning lathe. A number of small tools have also been added to the equipment of the shop. To complete the wood-working machinery, we should have a wood shaper, used for putting moulding on irregular surfaces and raised paneling on doors, and a sticker, used for making mouldings of all sizes and patterns out of scrap material, which is otherwise wasted; but owing to the crowded condition of the floor of the Workshop, I do not think it advisable to add any new machinery at this time; but, instead, recommend that the different parts to the machinery which we now have be purchased in order that each machine may be worked to its fullest capacity. This, in addition to a few small tools needed, would require an expenditure of about \$200.

The question of supplies is one that I beg to call to your attention for careful consideration. During the current year, numerous demands have been made on the Workshop for supplies for the various departments of the University. The supplies carried in stock by the shop are limited. If it is deemed advisable for the Workshop to carry a complete line of supplies to meet the general demands of the University, it could be done without additional expense to the shop and at a considerable saving to the University by buying these supplies in bulk instead of in small quantities, as heretofore.

The appropriation made to the shop for this year was \$1,200.00. The amount expended by the shop for material and supplies for the various departments for the year amounts to \$555.00. If the shop is to be reimbursed in this amount by the various departments for which these expenditures were made, it will practically leave the appropriation the same for the ensuing year, with the exception of the cost of the new machinery, small tools and incidentals for the shop purchased this year.

In conclusion, I wish to call attention to Mr. Ernst Hoffmann, the cabinet maker, who is a thorough mechanic in every respect. His work is known to you, and speaks for itself. In him the University has a competent employe who is in harmony with all of its interests, and I earnestly recommend that his services be retained for the ensuing year.

Respectfully submitted,

L. H. GRUBER, Foreman of Workshop.

WORK DONE BY WORKSHOP.

For the School of Botany.—Two sets of lockers; sixteen lockers in a set, complete with bottle holders and drawers; key for lock; connecting wire for stereopticon.

For the School of Chemistry.—Repairing balance; putting partitions in drawers for labels; changing window in fume-chamber; cutting off combustion tube apparatus; wooden balls for apparatus; repaired fourteen funnel stands; made funnel stands; putting locks on bookcases; five combustion tubes; cutting glass for bookcase; threads on bolts; board for hanging shelf; estimate on marble slab; making and putting up balance shelf; brackets for shelf; holes in marble slab.

For the School of Science and Art of Education.—Repairing optical bench apparatus; paper machine; bookcase with drawers; cleaning and repairing clock; schellacing shelves; putting on handles.

For the School of Engineering.—Taking tables apart and storing same; put up blackboard; turning valves for gas engine; seven hundred and fifty stakes; one hundred and fifty stakes; shelving.

For the School of Greek.—Repaired electric lantern; wooden blocks for lantern slides; repairing case; making key; wires for hanging pictures; changing curtain pole; frame for plaster casts; placing plaster casts.

For the School of Geology.—Cutting off table legs; Yale lock on laboratory; moulding for blackboards; putting up moulding; key for Yale lock; picture moulding; boards on blinds; electric wiring for stereopticon; gas fixture.

For the School of History.—Moving and putting map-rack; repairing book-shelving; cutting off rollers; hanging maps.

For the School of Latin.—One set of book-shelves.

For the School of Physics.—Apparatus repaired; box for lantern; printing frame; pendulum clock; changing Kundts' apparatus; candle stick; drawing instruments; tables for laboratory; hero fountain apparatus; heat apparatus; clock weight; organ pipe; Kundts' apparatus. Apparatus made: Bracket for holding microscope; baseboard for apparatus; patterns for castings; three manometer flames apparatus; two torsion apparatus; pendulum clock; Kundts' apparatus; whirling mirror; air bottle for drying apparatus; four Victor Meyers' apparatus; two Dumars' vapor density apparatus; mounting hollow lens; jumping float for surface tension; one sound tube apparatus; wooden stands for barometers; wire frames and disc on stem; wooden float on balance rod; box for resonator apparatus; baseboard for resonator; model for standard cell; gas tips for sensitive flames; ten wooden rings for calorimeters; stand for apparatus; brass cap on bottle; two stands for barometers; vapor tension apparatus; stirer for same; mercury cup cover; vapor apparatus; making optical bench; five apparatus for current sheets; two Clemens and DeSomers' apparatus; four magnets; backboard for calibrating apparatus.

Laboratory fittings and work in general: Case for clock; box for papers; two doors, Room No. 9; shelf for instrument room with two drawers; two cases for mercury still; shelf with trough, and sink-water and gas connections; two balance tables; making block for mercury still; box and mallet for crushing ice; changing partitions; three shelves for bookcase; setting up lantern; making two gas fixtures; box for packing glass balls; changing batteries; packing apparatus for shipping; piping for mercury still; fixing interior mercury still; water and gas connection to laboratory; lengthening gas jets; taking down pipes; changing water pipes; repairing floor of laboratory; putting shelves in stock room; unpacking apparatus; extension cord and plug; repairing table; gas connections to glass-blowing table.

For the School of Zoology.—Six boards for holding bottles; case for skeleton; changing coin case; making mould and casting section frames; repairing glass case; box for animals.

For Library.—Making and putting up four shelves; one large desk with shelves and drawers; table and bookcase combined for card-cases; two shelves in northwest room; two bookcases.

For the Mineral Survey.—One large mapcase with drawers; bulletin board; putting lock on same.

For the Women's Gymnasium.—Making and putting wire screens; repairing lock; making keys for lockers.

For the Men's Gymnasium.—Making forty-eight large lockers; fifty small; two special; wooden grates; gas fixtures; changing spirometers apparatus; wire screen; block for horizontal bar; repairing chest protector; repairing pipe for curtain; sprinkling cans; making jumping sticks.

For Brackenridge Hall.—Repairing lock; making keys; cutting chair bottoms; making box for water meter and putting it in place; making bed slats.

For the Campus.---Making five sets of steps.

For the School of Oratory.—Moving bulletin board; two pair steps; changing gas fixtures; picture moulding; catches on windows.

For the Repairs of Buildings.—Putting up picture moulding in eight rooms; repairing case in Proctor's office; water closets; repairing elevator; making cash drawer for Proctor; repairing doors; two shelves in Registrar's office; stand for alcohol; repairing desk Registrar's office; changing clock for bells; batteries of bell to elevator; making and put-

ting frames for notice cards; brass pieces for Yale locks; repairing water cooler; card receiver for course cards; repairing mailing machine; putting on Yale locks; key for East Wing door; repairing 298 chairs; changing gas fixtures; winding clocks for electric bells; schellacing picture moulding; repairing front door; putting catches on windows; report of the condition of the building; repairing laboratory floor; door closer in Law Department; repairing typewriter for Registrar's office; opening bulletin board; making key for same; repairing hall door, basement; door closer at south entrance; fastening down elevator frame; finding leaks in roof; key for President's office; looking over basement for excavation; repairing Library door; opening desk for Girls' Gymnasium; wiring for electric light in basement; making and putting two new doors in basement; changing water pipes and electric wires; showing brick layer work on roof; putting small window in basement; new ropes in flag poles; replacing electric wires to elevator; repairing water tank under the roof; showing tinner over the roof; putting fuse wire on elevator motor; repairing door to Law Department; putting on three Welsbach burners; repairing gas pipe; making new door for Gymnasium and hanging same; making and hanging gas fixtures; estimate on plumbing for Women's Building; making two steps for platform; catches on windows.

For Repair of Furniture, Building.—Making and putting up shelves for Prof. Sutton; key-hole plates for bookcase; opening stamp box; making key for same; bookcase with glass doors and drawers for Prof. Simkins.

For the Workshop.—Locating and setting tenoning machine; placing new lathe; making new bench with drawers for same; unpacking and checking freight; making and putting up two gates; shifters for mortising machine, and for lathe machine; ordering lumber; taking measurements; piling lumber in rack; making tap for cutting thread; oiling the machinery; splicing belts; going down town for material; cleaning hall; storing stock; repairing wood pulley; repairing belts; sharpening saws; working on report; sharpening dado machine; making box for the *Cactus*; two tables for the Athenæum society; oiling machinery; filing hand-saws and dado; moving tool case; making drawings and sketches; general work connected with the workshop.

The following list gives the cost of materials and labor for the work done by the Workshop for the various schools and departments of the University of Texas as previously mentioned:

For the School of Botany:

Material\$ Labor	78 100	53 07
Total\$	178	60
For the School of Chemistry: Material		
Total\$	45	12

For	the School of Education:		
	Material\$	7	34
	Labor	21	50
	Total \ldots	28	84
For	the School of Engineering:		
1 01	Material	2	45
	Labor	8	73
	Total\$	11	18
For	the School of Greek:		
	Material\$		67
	Labor	10	82
	Total\$	12	49
For	the School of Geology:		
	Material\$		50
	Labor	10	63
	Total\$	17	13
For	the Girls' Gymnasium:		
	Material	2	60
	Labor	4	14
		6	74
For	the Mens' Gymnasium:		
	Material\$	158	60
	Labor	103	40
	Total\$	262	00
For	the School of History:		
	Material\$	3	17
	Labor	11	28
		14	45
For	the School of Latin:		
	Material\$	2	60
	Labor	6	47
	Total\$	9	07
For	the University Library:		
	Material\$		74
	Labor	80	91
	Total\$	123	65

For	the Mineral Survey:		
	Material\$	21	44
	Labor	47	70
	Total	69	14
For	the School of Oratory:		
	Material	6	41
	Labor	12	
	Total\$	18	64
For	the School of Physics:		
	Material	85	07
		361	
	Total	446	76
For	the repair of building:		
	Material	68	12
	Labor	172	82
	Total	240	94
For	repair of furniture:		
1.01	Material	13	60
	Labor	18	
		01	
	Total\$	31	80
For	Brackenridge Hall:		
	Material		75 54
	Labor	9	94
	Total\$	7	29
\mathbf{For}	the University Campus:		
	Material\$		30
	Labor	7	92
	Total	8	22
For	the School of Zoology:		
	Material\$		66
	Labor	16	68
	Total\$	20	34
For	the Workshop:		
		33	
	Labor	104	05
	Total	138	01

The above figures represent the actual cost. If this work had been done outside of the Workshop, the cost would have been from 30 per cent. to 40 per cent. more. Therefore the work done by the Workshop is not only a saving in labor, but also is of a better grade in every respect.

THE UNIVERSITY RECORD.

President Prather.

SIR: I have the honor to make to you my report as Editor-in-Chief of *The University of Texas Record* for the year 1901-1902.

In my report of last May I stated my view of the aims of the *Record* to be: First, to record the growth and progress of the University in all its branches, not only as information for the public today, but as a dignified and permanent monument for posterity; second, to become a means of communication between the University and its alumni and an open forum for the discussion of University problems; third, to bind the University more closely with the State's educational system, and in particular to identify its interests with those of the high schools of the State, public and private.

An examination of the *Record* will show that these aims have been held in mind.

The record of current events has been made full. Besides the usual notes and other departments devoted to special topics, the *Record* gave in the September number the full text of Dr. Landrith's Baccalaureate Sermon and Mr. Samuels' Alumni Address; in the December number, the speeches on the notable occasion when the Governor, the Lieutenant-Governor, the Speaker of the House, and the Superintendent of Public Instruction united with the authorities of the University to open formally the session's work.

As a contribution to the history of the University the most important publication ever issued by the University will be the Historical Catalogue of Alumni, 1884-1901, which has been long in preparation and is now in press. The bulk of the Catalogue has grown to such proportions that it has been found necessary to devote to it two numbers of the Record instead of one. Indeed, the amount of matter contained in it will far exceed that of two average numbers. To cut down the Catalogue to a single number would not have been possible except by altering its whole plan. This seemed unwise for several reasons and it was out of the question to print in two installments. It was decided, therefore, to issue it in lieu of two numbers and at the time when the second of the two was due. The difficulties of the preparation of the Catalogue have been great and the delays provoking, but it is hoped that the result will justify the effort. The carrying through of the work is due chiefly to the untiring interest of Registrar Lomax and his Secretary, Mr. H. P. Steger. Besides a general oversight, my own contributions have been in the way of revising the MS. for the printer and in the reading of the proof.

In cultivating friendly relations between the University and the schools the *Record* has done good service by publishing Dr. Bray's *Proposed Scheme of Lectures for Affiliated Schools* and the papers read before the State Teachers' Association at Sherman by Miss Casis on Modern Language Teaching in the Educational Institutions of Texas and by Dr. Penick on The Latin Course in the Public Schools, and by reprinting your own Sherman address on The Position of the University in the Educational System of Texas. Perhaps of equal importance with these articles is the inclusion in the University Directory, published in the December Record, of the Affiliated Schools, their teachers, and their representatives in the University. This has proved very useful to the University in its dealings with the schools and has shown the schools that we really count them as part of ourselves.

It would be tedious to set down in detail all that the *Record* has contained. Its pages speak for themselves. It may not be inappropriate, however, to call special attention to Dr. Cohen's *Medicine in the Talmud*. We have here a paper showing real scholarship, which has received recognition outside of Texas.

For the coming year the *Record* should follow the lines already laid down. On the historical side it might be well to make the chief feature of the year the publication of biographies of the Regents and Faculty not now connected with the University. The work of these men is worthy of this commemoration, and each year the difficulty of procuring the necessary information increases.

As regards the finances of the *Record* the Business Manager, Mr. Lomax, will present a detailed report. I regret that the collection of unpaid subscriptions has not been rapid and that no considerable amount of advertising has been secured. There is still due on subscriptions a sum more than sufficient to pay the whole cost of printing the *Record* the coming year, but I am not sanguine enough of its being paid to suggest that the appropriation of three hundred dollars made last year by the Board of Regents should not be repeated. My earnest desire is that the *Record* should be self-sustaining, but the time for this has not yet come. Very respectfully,

W. J. BATTLE.

UNIVERSITY HALL.

President Prather.

SIR: I beg to submit herewith the report of University Hall for the session of 1901-1902 up to May 13th.

As you know, the HaH is under the general supervision of a committee of ten students, who board and room there. This committee is made up of two from each of the three floors, denominated the floor committee; two chosen at large to preserve order in the dining room, called the dining room committee; and a president and secretary chosen at large. This committee has met regularly and discussed questions of order, diet, service, and all matters pertaining to the general interests of the Hall. There have been remarkably few cases of serious breach of discipline. Early in the session, two students were requested to leave on account of disorderly conduct in the dining room. Save that single occurrence, the cases of misconduct have been trivial. Not one instance of malicious mischief or destruction of property has occurred. Drunkenness, card playing, and rowdyism have been unknown. The students have come to look upon the Hall as their home; they have protected it as such, and have required others to observe its rights. The committee has this year been composed of the following students: R. H. Hays, President; J. T. Brown, Secretary; F. T. West, L. F. Rigby, Frank Mann, W. W. Vann, C. Nowlin, J. B. Hatchitt, Spurgeon Bell, and E. W. Dabney. They have faithfully, impartially, and wisely fulfilled the functions for which they were elected, and the present good name of the Hall is most largely due to their prudent foresight and conservatism. They have given their time and thought to the enterprise without any compensation whatever.

The time from the opening to the closing of the Hall is approximately eight and one-half months. The collections on room rent have been as follows:

Rentals from September 23rd to June 12th\$2700 50Tax on room deposits	
Total receipts from rooms Disbursements from room rents: City National Bank, note to meet deficit incurred during Stevens's administration	
Total	\$2284 55
Cash on hand, May 12th Estimated bills due by June 12th	$\begin{array}{r} \hline \\ \$ 475 95 \\ 441 46 \end{array}$
Balance	\$ 34 49

There remains an unpaid balance due Bledsoe and Dahlich on the old furniture account, amounting to \$439. In view of this debt, and in order to provide better janitor service, and to purchase needed furniture, I suggest that the rental of rooms remain the same for next session. In addition to the chairs, tables, bed springs, and other accessories that will have to be purchased for many of the rooms another year, each room should be provided with a closet. The students have absolutely no place to hang their clothing. For the present, a good substitute could be made at a small cost by fitting into the room corners a horizontal board, at the bottom of which could be attached hooks, and the front draped with some sort of heavy cloth. In purchasing furniture for the Hall I earnestly recommend that only the most substantial be procured. The largest tax on the rooms is the water and light bill, amounting to nearly one thousand dollars for the session. I have endeavored unsuccessfully to have the rates lowered through a special enactment of the Water and Light Commission. The Hall is in good state of repair, all broken window lights having been recently put in, and the dining room re-screened. Collections on board have been made up to June 8th.

Amount collected	.\$12,543. 56	$\begin{array}{c} 65\\ 35 \end{array}$
Total Expenditures to date		
Cash on hand Total amount collected from all sources, 1901-1902		

The price of board has been uniformly ten dollars per month. From the present outlook, there will be only a very small margin at the close of the session—enough, it is hoped, to leave the Hall in good repair for another year.

All the supplies for the Hall are bought at wholesale prices, and awards for furnishing them were made from competitive bids. Fish and oysters have been shipped to us direct from the coast, berries have been obtained from Alvin, and potatoes, chickens, and eggs procured in quantities from country dealers. Other contracts for groceries, dairy products, bread, vegetables, etc., have extended throughout the year. Bills against the Hall have been met promptly and it has established a good credit. I have personally looked after all purchases of supplies, and audited and approved all accounts.

At the beginning of the session, the Hall was found to be almost entirely depleted of crockery and linen for the tables. During the first month purchases for these two articles were made to the amount of \$249.75. From time to time, additional tableware has been bought, the average amount being from \$25 to \$50 a month. The monthly salary list amounts to \$135; for janitor service, chargeable to room rentals, \$40 per month. A closer watch of the affairs of the kitchen and dining room would doubtless result in considerable saving in breakage, waste of food, etc., as it would certainly improve the service. Whether this saving would justify the employment of a manager, who would give his whole time to the matter, is open to question, particularly when we recall the disasters of the past. The students would never submit willingly to a manager who would interfere in disciplinary matters, and it seems to have been difficult for those who have gone before to keep their hands off such questions. Probably the best solution is to either employ an additional student-helper, or to give the one already in charge enough salary to justify his devoting more of his time to supervising the dining room and kitchen.

The number of student boarders in the Hall, including the fourteen student employees, has varied from 165 to 180. The rooms have accommodated from 110 to 120 at a time. Except for this last month, the demand for places has largely exceeded the supply, as many as twentyfive applicants being in waiting at once. This has suggested the remodeling and rearranging of the tables in the dining room so that 200 students may be seated at once. Such an arrangement can be easily effected by making the tables uniform in size. If this plan be adopted—and it seems wise in view of the increased demand for board at the cheap rates afforded by the Hall—it will be necessary to enlarge the range in the kitchen and to purchase additional kitchen supplies. To thus increase the number of boarders would not mean a corresponding increase in the expense per man. The fare could, therefore, be improved, and the expense for general improvement be met by setting aside a small sinking fund each month.

The Hall has been greatly annoyed by the dust that blows into the dining room from the roadway immediately in front of the building. I recommend that this vehicle passage be entirely stopped and that the space be sodded with Bermuda grass. All vehicles may easily reach the Hall by way of the side entrances.

The plumbing in the Hall works very unsatisfactorily; indeed, it would seem best, unless it can be put in better condition, that the whole system be remodeled or taken out altogether. This matter vitally effects the sanitary condition of the Hall and demands immediate attention.

The experience of the Hall this year, it seems to me, has demonstrated: First. The practical wisdom of absolute student control of all the

affairs of the Hall, including matters of discipline.

Second. The feasibility of ten dollar board. (This price has been maintained, despite the fact that all supplies have been from ten to twenty per cent. higher than is customary.)

Third. The need of another men's dormitory. A second men's dormitory, constructed and managed similarly to University Hall, would, in my opinion, be filled the first year. From the associations of dormitory life we must look most in the future for the unification of student interests in University affairs and for the conservation of University ideals and spirit.

When Mr. Brackenridge first gave the Hall to the University, he declared his purpose to be to afford an opportunity for the poor boy to get an education. I believe that purpose is now being fulfilled. Many students only pay one dollar per month for room rent (room rentals range from \$1.00 to 4.00 per month), and their total boarding expenses are therefore only \$11.00 per month each, or \$93.50 for the session of eight and one-half months. Fifteen young men get their board free in return for their service as waiters and assistants. Among these are some of the best students in the institution. Their capable service and intelligence have been large factors in making the Hall a success. I desire to especially commend Mr. Robert Richey, who has had immediate supervision of the dining room and kitchen, for his efficient service in a position requiring tact, judgment, and administrative ability.

(This report was read in open session of the Hall Committee, and was approved by them.)

Respectfully submitted,

JOHN A. LOMAX.

President Prather.

SIR: We, the Executive Committee of the University Hall Association, submit to you a report concerning the conditions at the Hall, and also methods by which it should be managed next year.

1. We believe the discipline, which is regulated by the students themselves, is entirely satisfactory.

2. Our experience has demonstrated that reasonably good board can be had at the Hall for ten dollars per month.

3. With regard to room rent, we believe that it should be so regulated as to meet the necessary expenditures of the Hall and create a small but safe surplus.

4. By far the most serious problem with which we have to deal is the servant problem. Service in the dining room and kitchen during the past year has not been satisfactory. This, we think, is due chiefly to the lack of unity of control and fixedness of responsibility. We believe that the most efficient remedy for this would consist in placing the servants and service completely under the control of the Steward, giving him at all times when desired the assistance of the Dining Room Committee. We believe, also, that if it be thought necessary by the Steward, there should be an Assistant Steward. We believe the Steward and the Assistant Steward should be elected by the Executive Committee of the Hall Association in conjunction with the Faculty Committee on University Hall matters, and that they be responsible to the Executive Committee of the Hall Association. We desire to stress the point that much care be used in the selection of these officers.

5. Another point is in regard to heat at the Hall. There seems to be a sufficient amount on the first and second floors, but on the third floor there is much complaint on account of the deficiency.

In conclusion, we desire to say that the management of the Hall during the past year has been more satisfactory than any year before in its history, and we attribute it all to student control. But we still believe there is room for improvement, and we believe that with our present experience we know how and can make such improvement.

Yours truly,

EDWIN DABNEY, L. F. RIGBY, J. T. BROWN, SPURGEON BELL, FRANK MANN, R. H. HAYS, F. T. WEST, J. B. HATCHITT, CLAUDE NOWLIN, W. W. VANN.

DEPARTMENT OF ENGINEERING.

President Prather.

SIR: I hereby submit a report of the work done in Engineering during the current session.

The attendance has been as follows:

ENGINEERING.

Olass.	No. of Students.	Hours per week.
Freshman		4
SophomoreJunior .	. 24	4
Junior	. 15	7
Senior	. 4	7
Total	. 90	22

DRAWING.

Class.	No. of Students.	Hours per week.
Freshman	. 51	9
Sophomore		9
Junior		9
Senior		9
Total	. 93	36

The enrollment of students for Course 1 (Freshman) was so much in excess of the preceding years that it required all of the drawing desks in Room 48 to accommodate them. There was no space left for the advanced students to draw, but about November 1st, the School of History gracefully relinquished Room 49 (across the hall from the old drawing room) and thirty-three new drawing desks were ordered to equip this room. This was its utmost capacity and every desk was taken.

At present there are ten field parties, averaging seven men each. Each party goes out one afternoon each week exemplifying by actual work the theories of the class room. The field work is carried on in all respects like similar work in actual practice. The efficiency of this work is abundantly attested by the success of our ex-students and by the fact that this year our present undergraduates have been in demand. In order to give each individual the experience with instruments he should really have the classes should have been divided into a greater number of field parties. But with our present force this was physically impossible. With the slightest increase next session additional parties will have to be organized and equipped.

I desire to call your attention to the report recently concurred in by Messrs. Wheeler, Bray, Harper, Mather, Phillips, Simonds and myself. This report, among other things, recommended:

"1. The erection of an Engineering Building for Civil, Mining, and Electrical Engineering.

"4. The creation of an Instructorship in Mechanical Drawing."

The building is sorely needed at this time and its erection in the near future is an imperative public necessity. We have now only one small room for laboratory purposes, and in addition to its use for testing, we are forced to use it as a recitation room.

The Department of Engineering was established by the Board of Regents January 17, 1895, and in the Catalogue of 1895-96 the groups of courses leading to the degrees of civil engineer, electrical engineer and engineer of mines were offered. The group of courses leading to these degrees have all been taken. The degree of C. E. has been conferred on many students, the degree of electrical engineer was conferred on Fritz Reichmann in 1896, and there are at present students in the course as outlined in the School of Mines leading to the degree of engineer of The present students in the Freshman and Sophomore classes. mines. as reported above, can continue the course in Mines in their next year's work. In the Sophomore Class we have studied the subjects of Railroad Curves, Geodetic and Mining Surveying. In the latter subject the methods as practiced by the U. S. mineral surveyors in locating lodes, placers, tunnel and mill sites, the U. S. Mineral Laws, the surface and underground surveying, the methods of working, the methods of ventilation and the management of mines have been studied. In order to make this course as practical as possible, the students in Mining Surveying were taken on a visit of inspection to the lignite mines near Rockdale, Texas.

The Instructor in Mechanical Drawing is absolutely necessary. The students in Mining and Electrical Engineering will have to take drawing. Add to this the increase in the Civil Engineering, and you will readily see that we have not a sufficient number of drawing desks, and yet both rooms are full of desks. Upon a conservative basis, we will have to double up our provisions for the course in Drawing. To do this in the present rooms we should have to provide additional help and additional facilities. The instructor referred to above can furnish the assistance, and it will be necessary to have the students draw on drawing boards and to equip each desk with two drawers so that one desk can be used by two men on alternate days.

There should be appointed for the next session two student assistants to help with the field parties. With four to six parties in the field one instructor should act as supervisor and have general control and supervision of all the parties.

In order to mitigate the crowded condition of the School of Physics the Department of Engineering relinquished the room in the basement used as a hydraulic and cement testing laboratory. This room was given up to Physics not because Engineering did not need it, but because the needs of Physics seemed greater than those of Engineering. The apparatus was removed to the already crowded mechanical laboratory, where it cannot be used, and the hydraulic room given to the School of Physics. The loss of this room and the consequent inability to perform many useful and instructive hydraulic experiments is felt very keenly, both by the students and the instructors of the Engineering Department, for the theories and formulas evolved in the class room too often remain vague and meaningless unless illustrated and exemplified by laboratory experiments. The importance of such a laboratory impresses still more forcibly the necessity of a new building for the department.

During the current session the students of the department have been of service to the University and to the State. By request of the State Purchasing Agent, through the President of the University, surveys were made for the establishment of a pipe line from the State Lunatic Asylum to the nearest points on the I. & G. N. and the H. & T. C. railroads. Much useful information was thus obtained and oil is now being economically conveyed from the railroad to that institution over one of the lines surveyed by the students. By request of the President there was also made a complete topographical map of the University campus and the streets adjacent thereto. Surveys and profiles were made for the location of a new water supply system. Much assistance was given during the execution of the extensive grading improvements on the east side of the campus and on the "peripatos" and information obtained for guidance in the further prosecution of this work.

Upon the assumption that Engineering and Drawing will have to spend another year in the present quarters, the following appropriations will be necessary:

BUDGET.

Instructor in Drawing\$1,200	00	
Four levels	00	
Four chains	00	
Six range poles	50	
Seventy-five extra drawing desk drawers	00	
Two drawing hoard cases	00	
One hundred drawing boards 27x36 inches	50	
Two Student Assistants 250	00	
Contingent 100	00	
Total	00	
Respectfully, T. U. TAYLOR,		
T. U. TAYLOR,		
Professor of Civil Engineering.		
EDW. C. H. BANTEL,		

Instructor in Civil Engineering.

MINERAL SURVEY.

President Prather.

SIR: I beg herewith to transmit to you a report, in brief, of the operations of The University of Texas Mineral Survey during the calendar year 1901-1902.

ORGANIZATION.

The Survey was organized under the provisions of an act of the Twenty-seventh Legislature, approved March 28, 1901. It was organized May 4th by the Board of Regents as follows: Wm. B. Phillips, Professor of Field and Economic Geology in the University, was placed in charge of the Survey; Professor H. W. Harper, of the School of Chemistry, was elected chemist to the Survey; B. F. Hill, a graduate of the University and for several years a Fellow at Columbia University and a member of the New York State Geological Survey, was elected Assistant Geologist; and Messrs. O. H. Palm and S. H. Worrell, graduates of the University and for several years in the chemical department here, were elected Assistant Chemists.

The act that provided for the establishment of the Survey also transferred the collections, cases, books, apparatus, etc., of the former Geological Survey, which came to an end in 1892, to the University, and these were at once removed and installed. Work was at once begun on the preparation of a Bulletin on "Texas Petroleum." It was issued the latter part of August and the demand for it has been so great that we distributed 4000 copies by the first of May, 1902, and have now no more on hand. Mr. Hill and myself went into the field again early in August, traversing the University and other public lands in the eastern part of Pecos county. I returned to the University in September, while Mr. Hill continued the observations in El Paso and Reeves counties. The results of these observations were published in our Bulletin No. 2, February, 1902, entitled "Report of Progress for 1901. Sulphur, Oil, and Quicksilver in Trans-Pecos Texas." The demand for this Bulletin has also been active and of the 3000 copies issued we have no more on hand.

I visited the asphalt regions of Montague and Cooke counties in November, and the quicksilver district of Brewster county in December, and the asphalt regions of Uvalde county in April and May. Mr. Hill completed some observations in El Paso county in February and in March we went into the quicksilver district again and Mr. Hill has been there ever since. We are preparing a special report on this quicksilver district, and it will be accompanied by a topographic map. The report will be made by Mr. Hill, the map by Mr. Arthur Stiles, topographer for the United States Geological Survey. We were fortunately able to secure the active co-operation of this Survey not only in Brewster, but also in Montague county. In addition to the special map of the Terlingua quicksilver mining district we are preparing, in co-operation with the United States Geological Survey, a topographic map of an area of about 600 square miles, covering the southwestern part of Brewster and the southeastern part of Presidio counties. During the last few months, beginning with November, 1901, we have been preparing a Bulletin on "The Coals, Lignites and Asphalt Rocks of Texas," and this is now in press. We hope to issue it in June.

CHEMICAL WORK.

During the year we have conducted chemical work in connection with the Survey and finished 556 analyses to the end of April, 1902. This work comprised almost every kind of chemical determinations, assays of ores, analyses of asphalt rocks, oils, clays, water, coal, etc.

CORRESPONDENCE AND DISTRIBUTION OF PRINTED MATTER.

The correspondence necessitated by the affairs of the Survey and dealing with the mineral resources of the State has been quite extensive. In addition, we have distributed a large number of the publications of the former Survey, which were turned over to us.

The amount of mail and express matter that has gone out from this office is shown in the following statement:

Letters Petroleum Bulletin (Bulletin No. 1) Trans-Pecos Bulletin (Bulletin No. 2) Miscellaneous (publications of former Survey, etc.)	$3,990 \\ 3,650$
Total	12,185

LECTURES AT THE UNIVERSITY.

Owing to frequent and protracted absences demanded by the exigencies of the field work, I was able to deliver but eleven lectures during the year, seven during the Fall Term and four during the Spring Term. These lectures dealt with various matters connected with Economic Geology and the prosecution of the Survey.

RELATION OF THE SURVEY TO THE SCHOOL OF MINES.

The action of the Legislature in authorizing the removal of all the mineral collections, etc., from the capitol to the University and in establishing the Survey under the care of the Board of Regents may be taken as evidence of its intention to connect the University in the most intimate manner with the development of the mineral resources of the State. The work of the Survey and the instruction in the School of Mines fall naturally together. Students who have pursued, for the last two years, the courses of instruction leading to the degree of Engineer of Mines, have access to the large and valuable collections transferred to the University and increased from time to time. These collections illustrate the economic geology of the State and could not be duplicated without very considerable expense. No such collection of what the State has to offer can be found elsewhere, and its value for educational purposes can hardly be overestimated.

> Very respectfully, WM. B. PHILLIPS, Professor of Field and Economic Geology.

DEPARTMENT OF LAW.

President Prather.

SIR: I beg to submit the following report and suggestions for the Law Department for the session 1901-1902:

FACULTY.

The several members of the faculty have had charge of the following topics:

Judge Gould: Partnership, Bills and Notes, International Law.

Col. Simkins: Equity, Insurance, Contracts, Sales and Agency,

Equity Pleading and Practice. Judge Lewis: Blackstone, Evidence, Constitutional Law, Real Estate. Dr. Huberich: Criminal Law, Finance.

Prof. Houston: Civil Government.

Judge Townes: Torts, Pleading and Practice, Corporations, and Practice Courts.

A copy of the schedule of work is attached, giving more detailed information on this subject.

QUIZMASTERS.

Owing to the abolition of the graduate class last year, it was found impracticable to secure the three quizmasters for half their time, and under authority granted, the appropriation for two was combined, and Mr. A. L. Burford, a graduate of last year, was employed for all his time. Mr. R. J. Randolph, also a graduate of the department last year, and who is taking work in the Academic Department, was employed for half his time. The year's experience has demonstrated the great utility of the quizmaster. The benefits are twofold. First, he relieves the professor of a great deal of drudgery, so that the latter is much freer to spend his time and energy in the more important portions of his work; and, second, the regular quizzes and very frequent written exercises require much more regular and constant application on the part of the student. He is the best means we have discovered yet to prevent cramming, which has been the worst fault of the department heretofore. We unhesitatingly pronounce the experiment a success, and urge the continuance of the method. In order to get the best qualified men, we think it will be necessary to engage them for all of their time, as it is not often that we can find graduates of our department who wish to take work in the Academic. We recommend that provision be made for the employment of three quizmasters for all of their time, at a salary of \$500.00 each. We are very sure that in no other way can the same amount of money be as profitably expended for the department.

ATTENDANCE.

There have been 92 matriculates in the Junior Class and 74 in the Senior Class this session. Total, 166. This is a falling off from last vear of 40-23 in the Junior Class, 5 in the Senior Class, and 12 in the Graduate Class. This is due in part to the abolition of the Graduate Class and in part, as we believe, to the scarcity of money. As a large percentage of the students in this department are self-supporting, financial depression is felt in it more quickly than in others where more of the students have their expenses borne by others. I do not think, however, that the falling off in numbers can be regarded as permanent, and in all plans for the future provision must be made for a larger attendance than we have now.

WORK.

The work of the department is being made more thorough each year. The faculty has raised the passing grade in all law topics from 75, as it has stood for a number of years, to 80. The relief given the professors by the quizmasters has enabled them to give more and better attention to teaching than heretofore.

DEPORTMENT.

There has been a marked advance in the spirit and actions of the students of the department in regard to cheating and similar offenses. These are among the most difficult problems with which the department has to deal. The faculty is very sure that the respective classes can control these matters more effectively than any other agencies. The Junior Class has put itself on record as absolutely opposed to such practices, and has been quite vigorous in its efforts to suppress them. The faculty feels hopeful as to the effectiveness of this action.

LIBRARY AND LIBRARIAN.

Mr. H. R. Bondies, a graduate of last year, is Librarian, and Mr. S. F. Leslie, a member of the present Senior Class, is Assistant Librarian. We are still much in need of additional sets of the Texas Reports, the United States Reports, and of the Federal Reporter. And if it is at all practicable, we would be very greatly obliged if provision were made to secure one or more additional sets of each.

We have had no fund with which to bind books this year. The Texas Reports are in daily use in great numbers, and many of them are in such condition that the continued use without rebinding will soon destroy them. The need was so great that we appropriated some of the money given to buy new books in this way. Still, there are a great many volumes that are in a dilapidated condition that could be saved if bound during the coming vacation. If this can be provided for in no other way, we earnestly request that the dollar per student paid in and retained out of the Library deposit by the law students be applied this way. While it is true that the law students use the General Library to some extent, their use of that is very limited as compared with their use of the Law Library. The dilapidated condition of the books is the result of constant use and comes about gradually, and cannot be traced definitely to any one person and charged to him. It is just such ordinary wear and tear as this that we understand is to be covered by the dollar retained from the Library deposit. If the funds thus coming from the law students should be appropriated to the Law Library, it would be very helpful. If this is done we would ask authority to expend as much as \$100.00 of the \$500.00 allowed us for books this year in binding the books during vacation, this to be restored out of the funds to be secured from the deposits for next session.

The \$500.00 appropriated for Law Library and \$400.00 for Law Librarians should be continued as heretofore.

STENOGRAPHER.

Mr. Veris McInnis, a member of the Senior Class in this department, is stenographer this session. This position is quite a useful one, and the \$270.00 appropriation for it should be continued.

LAW BUILDING.

It is not necessary to reproduce the statements made in our last report with reference to the necessity for a separate building, but we very earnestly urge this matter upon the attention of the Board.

The decrease in numbers this year has partially relieved the congestion from which we suffered so severely last, but it is apparent that this relief is temporary, and in the very near future a separate building will be absolutely necessary. As it takes a good while to plan for and complete a structure such as required by the department, common prudence and business sagacity combine in requiring that the matter be seriously taken up and some definite plan of action be determined upon and put into immediate effect. It is impossible to carry on the work of the department effectively in our present quarters with an attendance as large as that of last session. There is every reason to believe that this attendance will be reached again, if not next year, in the very near future. It should be provided for in the meantime, if possible. The removal of the department would give additional room for use by the other departments of the institution.

GOVERNMENT AND DEVELOPMENT.

The government of the department presents a number of very serious problems. Not the least of these is the proper distribution of authority and responsibility. Just how these are distributed at present is not entirely clear. And I go into some detail as to existing regulations so that the matter may be taken up for full consideration.

When the University was organized the policy of the whole institution was government by the Faculty. While this condition continued it was determined that in matters common to it and the other departments of the institution the Law Department should be under the direction of the combined faculties of the several departments, but that in matters of internal management it should be controlled by the faculty of the department. This policy continued without modification until the general change involved in the creation of the office of President and the centralization of the administrative powers of the institution in him. No definite action regarding this change as affecting the Law Department seems to have been taken. The general effect was the same on it as on the other departments of the institution. No change was made in the Catalogue announcements as to the government of the department further than to add that "the President of the University is the chief executive of the department." (See Catalogue, 1901-1902, p. 159.) Shortly after the creation of the office of President the question of discipline and its administration in the institution came up before the President and the general faculty. A number of resolutions were passed at different times, the result of which, taken collectively, is that all matters of discipline not involving expulsion are exclusively in the hands of the President, who appoints from the general faculty a Committee on Discipline, which sits with him at his request and hears the charges and the evidence, and reports what, in its judgment, should be done in the premises. This report is merely advisory, and the duty and responsibility of dealing with the matter ultimately rests with the President.

(For the present rules on this subject, see Catalogue, 1901-1902, p. 29.) At a Faculty meeting while this matter was under consideration, it was moved that all matters of discipline affecting the Law Department or the law students should be left to the Law Faculty for decision. This resolution was lost, some members of the Academic and some members of the Law Faculty voting for it, and some of each voting against it.

In the meantime, the position of Dean of the Academic Faculty was created and its duties defined. (See Catalogue, 1901-1902, p. 19.) Last summer the position of Dean of the Law Faculty was created for one year, and later his duties were enumerated substantially as set out in the Catalogue of 1901-1902, pages 19 and 20.

This, so far as known to me, is the sum of the legislation as to the distribution of authority in matters of government in the department. The results may be summarized thus:

1st. The general control of the department is in the Board of Regents.

2nd. General matters common to all the departments of the University, not disciplinary, or if disciplinary involving expulsion, are in the control of the general faculty, consisting of the combined faculties of the several departments of the Main University.

3rd. Internal matters not affecting other departments, and not disciplinary, are under the control of the law faculty.

4th. All disciplinary matters not involving expulsion are within the exclusive jurisdiction of the President, he having the power to confer such of this jurisdiction pertaining to this department as he sees fit on the Dean of the Law Faculty in such instances and to such extent as he shall expressly designate.

5th. The Dean has only such duties, responsibilities, and powers as are specified by action of the Board of Regents, and such others as are given to him by the Board or the President, and all his duties and powers are to be exercised under the general direction of the President.

I ask your careful consideration of these matters in order that we may have a correct common understanding of the respective duties and responsibilities of the several officers and agencies entrusted with the management of the department.

I propose the following changes regarding the Deanship:

1st. That the power of dealing directly and finally with disturbances and abuses occurring among the law students in the law quarters and not so grave as to involve suspension or higher penalties be conferred upon him. This is desirable, first, as affording a more effective and simple method of controlling and suppressing these annoyances, and, second, because it is more just to the Dean, who is naturally looked upon as responsible for these matters, and is subject to misunderstanding and censure for not taking them in hand.

2nd. The tenth duty required of the Dean as enumerated by the Regents is to submit plans and recommendations for the future development and betterment of the department. When this duty was suggested by me there was coupled with it the request that in order to enable him to discharge this duty intelligently he be advised of the action, policies, and purposes of the Regents regarding the department. The Regents thought it wise not to grant this request, and as it is impracticable for him to be of any advantage in carrying out policies, or seeking to advance purposes of which he is ignorant, I beg leave to withdraw the former recommendation on this point and ask that the Dean be relieved of this duty.

3rd. The Dean should have fair compensation for the services rendered by him in this capacity in addition to those devolving on him as a professor. Not to do this seems to me both impolitic and unjust. The duties are both extensive and onerous, and in the aggregate consume a great deal of time. I regard them as fully equal to one-fourth of the teaching done by any one of the professors. It is not practicable with the present teaching force to relieve the Dean from his full share of professorial work, as there would be no one to take charge of his topics without burdening the other professors. The duties of the Deanship are, therefore, added burdens and responsibilities beyond those incident to the Professorship. I think that \$500.00 per annum would be fair compensation for these services, and am very confident that any one capable of discharging the duties of the Professorship and the Deanship combined ought to command an annual salary of \$3,500.00.

I speak with perfect candor on this subject, as my term expires by limitation at the end of this session, June 12th, and I do not desire reappointment, and cannot be regarded as personally interested in the matter.

The present faculty, with the three quizmasters as requested, is sufficient to do the work of next session effectively. I feel quite sure that with the three quizmasters we can render better service and get better results than we have been able to do at any time. A great deal is being said, and properly, about the raising of educational standards and reforms in many directions in institutions of learning. The best possible reform, it seems to me; is to give such teaching force that thorough work can be required and obtained day by day. While no money should be wasted, here, as in other business enterprises, the judicious expenditure of a sufficient sum to secure thoroughness and regularity of operation is practical wisdom.

BUDGET.

On the basis of this report the next year's expenditure for the department would be:

Salaries, three professors on full pay\$	9,000	00
Salary, Judge Gould	1,500	00
Salaries, three quizmasters for whole time	1,500	00
Salary Dean	500	00
Salary Librarians	400	00
Salary Stenographer	270	00

Library appropriation Binding fund, Library deposits (estimated)	$500 \\ 175$	
Total	\$13,845	00
Increase in expense over this year would be: Salary Dean Additional salaries quizmasters Binding fund from students	. 750	00
Total	\$ 1,425	00

We last year, in our reports, gave estimates of the relative expense per capita of the students in this department as compared with other institutions and other departments in this institution. It is needless to recapitulate this further than to say that the per capita expenditure on the basis above will still leave the expense in the Law Department of each student much less than in either of the others.

This report has been presented to the Law Faculty, and has been approved by it. Respectfully,

JNO. C. TOWNES,

Dean Law Faculty.

SCHEDULE OF WORK, SESSION 1901-1902.

Juniors.

Class hours in Law Topics, 9 a. m., to 10:30 a. m. Political Science, Tuesdays and Saturdays, 12 m., to 1 p. m.

Subject.	Begins.	Examination.	Days.	No.	Professor.
Blackstone Torts Ontracts Pleading and Practice Sales and Agency Evidence Evidence	November 18. January 3 January 4 March 8 March 17 April 30	December 21 March 12 March 6 May 10 April 28 (May 10)	M., W., F. T., T., S. T., T., S. M., W., F. M., W., F.	29 30 25 27 18	Lewis. Townes. Simkins. Huberich. Townes. Simkins. Lewis.

Seniors.

Class hours, 10:30 a. m., to 12 m. Practice Courts, October 14th to March 29th. State Practice, Prof. Townes, Tuesdays, 12 m., to 1 p. m., October 14th to March 29th. Mondays and Fridays, 2 to 4:30 p. m. From March 30th to June 1st, Federal Practice, Prof. Simkins. Hours to be announced.

Subject.	Begins.	Examination.	Days.	No.	Professor
Equity Equity Partnership Insurance Bills and Notes International Law Real Estate Real Estate Corporations	November 5 November 4 December 9 January 4 January 28 March 8 April 4 to May 1	December 21 December 6 April 3 January 25 March 6. April 29. May 10	1., 1., S M., W., F M., W., F T., T., S T., T., S T., T., S Every day T. T. S	50 15 45 10 15 10 26	Gould. Lewis. Simkins. Gould. Gould. Lewis.
Corporations	May 12	June 5	Every day	27	Townes.

Class attendance and recitations will be considered in determining grades and graduation. Unexcused absences from class will, in the discretion of the instructor, bar from examination.

DEPARTMENT OF MEDICINE.

REPORT OF DEAN.

President Prather.

SIR: I beg to offer the following as the annual report of the Dean of this department of the University for the session closing at the end of the current month, appending thereto the reports handed me from the various professors of the school:

During the term there have been enrolled upon the books of matriculation 167 students in the School of Medicine and 59 in the School of Pharmacy. In addition, there are in the School of Nursing 19 students, thus making a total of 245 in the whole department, of which 226 are in the college proper. Such enrollment represents an increase of 53 students over the attendance during the session of 1900-1901. This increase has occurred in the Schools of Medicine and Pharmacy, there being a few less enrolled in the class of nurses this year than last session. The increase in the number of medical and pharmaceutical students is fairly divided among the higher and lower classes of both schools; the entering classes in both showing an increase of about twenty-five per cent. above the number admitted last year (Medicine, 1901, 63; 1902, 78: Pharmacy, 1901, 36; 1902, 45).

This year, as for several years past, the average grade of educational attainments presented by applicants for admission to the school has been higher than in the early years of the operation of the institution, although there has been a notable decrease in the number of college graduates in the entering classes. More of the students have pursued a partial course of university or college study, there are more graduates of high schools, and more are possessors of first grade teachers' certificates than formerly; and there has been a distinct diminution in the number both actually and proportionately who have been required to undergo the formal entrance examination of the school. I attribute these changes, in the first place, to the higher and more uniform development of the educational system of the State, and in the second place, to the disinclination on the part of the individual student to devote as much as eight years to the acquirement of a college and a professional education if by any means it is possible to evade a year or more of study. Thus men either curtail their attendance in the college or, having obtained a collegiate degree, seek schools of medicine willing to grant exemption for a year of professional study upon the basis that the degree represents in the possessor both unusual attainments and ability to make good such loss as may have been occasioned by the year's exemption without conflict or prejudice to the advanced work to which the student is admitted. This I believe to be a mistake, but the practice actually prevails. I do not believe under the present

system of separation of the Medical Department from the Academic and Scientific Departments other arrangements than those already provided can properly be made in the University of Texas. Of the existing provisions, however, no student has as yet availed himself, and I believe more publicity should be given this proposition before such students of the main department as may contemplate the study of medicine.

During the past year a number of notable improvements and additions have been made to the plant of the school. The remodeling of the Medical College by the Regents has been very satisfactory save in a few minor details, and has added much to the convenience of both students and teachers, and has made the building much more suited to the purposes for which it was originally intended. The building authorized by the Board of Regents to be built upon the northwest portion of the hospital block for wards for negroes has been erected by the building committee appointed by the Board of Hospital Managers with a fund of \$18,000, given the latter board for this purpose by the New York Board of Trade and the Galveston Central Relief Committee. This building, a large brick structure, arranged in two handsome wards and a number of special rooms, is ready for occupation, and will be formally presented to the University Regents as part of the University at the approaching Commencement Exercises. The provision of this negro building having made available the old frame structure formerly used as negro wards for other use, this building has been remodeled by the Regents, and is now being equipped as a home for the students in the Training School for Nurses. It should be finally occupied before the actual close of the term at the end of the present month. The portion (east end of first floor) arranged as a Laboratory of Clinical Technology for the Chair of Medicine has been occupied and utilized for class-work since January, last. The removal of the nurses from the building known as Asclepiad Hall, on the southeast corner of Tenth Street and Strand, opposite the Medical Hall, will free this building for the use originally intended as a club house for students; and during the coming vacation the Board of Managers appointed last spring by the Board of Regents intend arranging and furnishing it so that it may hereafter be utilized as intended.

With the assistance of the Provost, the Dean has, during the past session, undertaken the following matters of general utility in the internal management of the college proper:

(1) All letters received since the beginning of the school in 1891 have been arranged and filed in convenient form for reference; the same has been done with the matriculation cards of former years, and all receipted bills, vouchers and other business documents which have accumulated since the beginning of the school.

(2) A uniform system of matriculation cards, with blank forms for preservation of important data concerning the history of the individual student, uniform class reports, and similar formal stationery used in class organization and management have been arranged and provided.

(3) With the view of improving the janitor service, a formal set of rules for the government of the janitors and an hourly roster of duties assigned has been outlined and put in operation, apparently in large measure filling the purposes sought.

(4) The former custom of renting towels from a local towel supply

company having for many months become very unsatisfactory because of irregularity in delivery of towels to the building, and because of the extremely poor quality of towels furnished, a full supply of college hand-towels has been purchased, each department of the school being required to furnish its own supply of work-towels for washing tables, apparatus, etc. These towels, together with the expense attached to their laundry, have cost less than the annual rental of towels in previous sessions, and, moreover, the towels are good, and have been well preserved during their use this past winter, and will probably last for several sessions before it will become necessary to replace them.

(5) During such time as the janitor in charge of the workshop has not been engaged in other and more pressing work, he has been employed in repairing the lecture room furniture, which, it should be recalled, was not included in the repairs to the building after the storm, as well as other minor matters of repair in different parts of the building. The furniture of the lower lecture hall has been entirely repaired, painted and varnished in this manner, and in each of the upper halls the same work is in progress, and will be completed during the coming vacation.

(6) By the ready co-operation of my colleagues, this department has been able this year to join with the Main Department of the University in an early issue of the annual catalogue of the school; and of the 5000 copies of the portion of the issue devoted to the Medical Department, the Provost has distributed before the close of the past month about 4500 to the physicians and druggists of the State, the remainder being retained for distribution on request from persons contemplating entering the class.

Of the total appropriations by the Regents to the development of the Library, amounting to \$6,600 (\$6,000 from fund for repairs and re-equipment and \$600 from fund for maintenance for current session), there have been expended to date a little more than \$3,000, leaving about \$3,500 to the credit of the Library at this time. This money has been employed almost entirely in the purchase of standard text-books and books of reference. It is the intention of the committee charged with the Library matters to utilize the most of the remainder for the purchase of files of standard medical and other scientific journals for reference purposes, although some portion will doubtless be used in purchasing other texts and monographs. The further purchases will be made during the early part of the summer, and it is expected that upon the opening of the coming session this department will show much further development. There were credited to the Library at the close of the last session 2815 volumes; at the present time the accession books show the addition of 1080 volumes during the current session (representing the above-named expenditure). During last session there was little call for the volumes on hand, but twenty-three books having been borrowed from the shelves as far as shown upon the register. The new books have been in the Library only during the latter portion of the present term, but the registration cards show that up to the present time there have been two hundred and thirty volumes taken from the Library for study or consultation, and daily consultation of volumes in the reading room is made by many individuals without the formality of registration. In the reading room, too, the examination and more or less careful perusal of the files of journals show marked appreciation of the opportunities afforded the students and teachers. Miss Magnenat, elected as stenographer to the Dean's office and Librarian, has been almost constantly engaged in arranging, marking and cataloguing these new books, and the labor of completing the proper accessioning, cataloguing and indexing the books on hand and those to be purchased will be likely to run over a number of months, possibly several years. For the present, in view of the desirability of placing the Library in a well systematized state, I have as far as possible excused her from active clerical work in the office of the Dean.

During the session the same success as heretofore has attended the co-operative plan of student control of the dining hall in connection with the University Hall. The cost of board has been a little higher than last year, running slightly over ten dollars each month as an average, mainly because of the unusually high price of foods in this city for a number of months past. It is unlikely that such prices will always prevail; but even with the present rate the price of board of the same quality is everywhere else in Galveston higher than the rates at the Hall. The actual value of the club to the students should not, moreover, be estimated entirely by the ability to thus obtain satisfactory board at a reasonable rate; it should be remembered that a number of the men (about ten in number) who are financially unable otherwise to meet their expenses at school are thus provided, in return for service of one or other form to the club, with their board, and are thus materially aided in gaining their education. Probably the greatest feature of all, however, is the demonstration to the students themselves of the business methods of economical living, a phase of education which should be of no little value in after-life. Inasmuch as the difficulties in the way of obtaining sufficient and suitable quarters for the students are materially less than two years ago, when the storm of 1900 had devastated so much of the property about the college, it is believed that the ladies of the Board of Managers of that part of the institution will be in position to restore the dwelling portion of the Hall to the women students as originally intended, and I am informed that this is their expressed intention.

As recommendations for your consideration, I desire to offer the following suggestions:

Thus far all repairs in the laboratory parts of the college build-(1)ing, as far as the fixed and movable furniture is concerned, have devolved entirely upon the chair using the apartment in which such repairs are required. The annual estimates for maintenance of the different chairs are usually made only upon the necessity for supplies and apparatus, and there is usually little, if any, money available for such repairs. In consequence, not infrequently some laboratory or other has not been able to present the neat and well-ordered appearance which is desirable, and which it should be the endeavor to maintain. I would suggest, therefore, that the sum usually allowed for repairs to the building be somewhat increased and that the Dean be authorized to use the repair fund not only upon the building itself, but in the maintenance of the fixtures and furniture as far as possible of the whole building, in the laboratories as well as in the lecture halls and corridors. I believe that an addition of \$200 to the usual appropriation will do much in such an effort. I wish to suggest, too, that in the matter of repairs during the present session several items (as the shell roofs of the dead house

and of the coal shed, and of the shed in which is kept the electric motor) had to be renewed from our small repair appropriation, having been left out of the specifications for repair of the building after the storm damage; and that the roof over the boiler house is now in a deplorable state, and should be replaced by a good roof of heavy tin. As in the other instances mentioned, it was not included in the specifications for repairs. It is now covered by the paper which was put over it as a temporry arrangement immediately after the storm. A good roof can be put in place for about \$65, as estimated by the Browne Slate Co., of this city.

(2) I would advise the organization of a laboratory for the use of the students in Pharmacy for work in botany. There has never been any provision for the arrangement and preservation of samples of the medicinal plants about us; and for the studies in vegetable histology and microscopic pharmacognosy, as well as for class-work in plant analysis, there has been no permanent habitation, the classes being forced now to one place, now to another, as the laboratories used happen to be required by the medical classes for which they were intended. This suggestion is more specifically dealt with in the report of the Professor of Pharmacy, which I entirely endorse in the matter. There are six microscopes in the Department of Pathology not suited to the needs of the medical classes, but well suited for work in botanical study, which could be transferred to the Chair of Pharmacy if authorized. They were presented to the school when it was first put in operation by the persons having charge of the property of the defunct Texas Medical College and Hospital. I believe the Department of Pharmacy will be cramped by thus diminishing the space of the Laboratory of Pharmacy, but the advantage of placing the work in botany directly under the eye of the Professor of Pharmacy will, I am confident, more than make up for this disadvantage—and there does not seem to be any other room available in the building.

(3) Your attention should be called to the urgent need of the greatest effort on the part of the authorities of the University to have adopted by the coming legislature and approved by the Governor of the State, a law granting to medical schools as material for dissection, surgical demonstration and autopsy practice, all unclaimed dead bodies requiring burial at public cost. There is, in my opinion, no one other matter of as vital importance to the maintenance and development of the institution.

(4) As an addendum to the above, necessitated by action of the Faculty in session May 12, 1902, I am instructed to transmit to you the following list of moneys requested for the maintenance of the various laboratories for the coming session. The Faculty has today been informed of the general items of the finances of the institution, and requested by me to arrange the sums asked for for maintenance of the various chairs at the lowest possible limit, and realizes the difficulties in the way of making the appropriations asked in the various reports which I append to this writing. The sums mentioned below are given after the most careful consideration, and represent the utmost decreases possible in the judgment of the individual and combined members of the teaching corps of the school. In arrangement of this suggested list it will be noted that the sums set down are often at great variance with the sums requested in the individual reports appended. It is recognized

that it is impossible to permit the least development, and that every personal effort and inconvenience must be accepted, and that even the efficiency of the courses of instruction must give way to necessity. Those laboratories, where individual work may be made to, in a measure, make up for lack of facilities, and even in some measure for material, have been most cut; those where such measures will be of no avail, and where cost of material is the most certain, are cut the least; but all cheerfully undertake to do the best that is possible under the circumstances, although it is practically certain that if such figures cannot in some way be increased there is sure to be more or less deterioration in the quality and quantity of class-work possible the coming term. These figures, if adopted, should not be accepted as measures for future estimates, as there has been all honesty in the amounts suggested by the individuals in their separate reports for efficient work of their several departments. The sums suggested are as follows:

Surgery	$100 \\ 50 \\ 700 \\ 400$	00 00
Anatomy (of this \$500 is conditional-needed if bodies must		
be purchased, but not otherwise)	800	00
Physiology	400	00
Medicine	200	00
Obstetrics		
Therapeutics		
Shop	100	00
Library		
-		
Total	2,750	00
Very sincerely,		
Allen J. Smith	E,	
	Dean	•

ANATOMY.

President Prather.

SIR: Regarding the teaching of Anatomy during the session now nearly over I have pleasure in stating that I believe the work done in the Freshman and Sophomore years has been if anything superior to that of any previous year. The most practical methods of laboratory teaching have as formerly been adopted, and the dissecting material has been sufficient and of the best quality and preservation.

Owing to lack of subjects the course in Surgical Anatomy has been almost a failure; the course outlined being entirely a practical one, and the difficulty of getting bodies for dissection so great and the expense so excessive that funds ran short by the time I had cadavers enough for the Freshman and Sophomore classes, and the Junior class had to be abandoned after a short and very imperfect lecture course. The sum of \$331 was spent on bodies alone, and these had to be procured in an extremely irregular and precarious manner. The experience of this year has taught most emphatically how very necessary an anatomical law is to the prosperity of the Medical Department.

I cannot speak in too enthusiastic terms of the extreme value the new roof lighting has been to my students. For the first time the light has been such as to make demonstrations and dissecting satisfactory, and one wonders now how we struggled along so well with the old inefficient light.

The furniture of my department has been all repaired and varnished, a new storage tank has been put in, and the water-proof flooring in the north lecture room has been satisfactory.

In the early part of the session the dissecting room floor gave some trouble by leaking. I have not heard any recent complaints, and I think that two or three thorough oilings with boiled linseed oil will be sufficient to keep it in good condition.

A set of Embryology models at a cost of \$218 has been ordered from Zeigler, which will add greatly to the interest and efficiency of my teaching, and a glass case for the care and display of these and other specimens has been furnished to the dissecting room at a cost of \$91. Considering the time which could be spared from teaching, I have, with the help of my Demonstrator, Dr. Decherd, been successful in adding specimens of the greatest value to the Anatomical Museum, a work long delayed for lack of funds. The results attained in that direction this year have been so useful to the students and have so increased our teaching facilities that I trust sufficient money may be found available to enable me to add steadily to the number of my specimens.

Dr. Decherd's work as Demonstrator has been satisfactory, and it has only been by his aid that any museum work has been possible. The teaching experience of this year should make him a valuable assistant next year, and I have pleasure in advising the renewal of his appointment. I trust by his aid to add considerably to my museum during the summer vacation.

For the display of our steadily increasing number of specimens a reading shelf for bones is desirable, to occupy as much of the wall space of the dissecting room as can be made available. A new skeleton is to be articulated, and for its preservation and display a special glass case will be necessary. With the assistance of the mechanic this work can be done at small cost. The dissecting room attendant, August Elbert, has become quite expert in making concrete receptacles for the display of wet specimens and has given particularly satisfactory service during the past session.

The funds necessary for the maintenance of my chair during the coming year will depend so much upon the chances of procuring anatomical material that I have difficulty in making an estimate. Unless the new colored ward be put into operation without delay there will certainly be another dearth in material for dissection, which may require an expenditure of \$300 or even \$500, and even with that sum available it can only be procured by most irregular and precarious, not to say undignified, methods. I should advise that a sum of \$500 be held as an emergency fund for the purpose of procuring anatomical material, and that it be held for that purpose so long as the Faculty shall deem such a precaution necessary. Aside from the special emergency fund I should recommend an assignment of one hundred dollars (\$100) for permanent equipment, most of which will be required for additions to the museum, and four hundred dollars (\$400) for maintenance. I do not think my department can be efficiently maintained on a smaller sum.

WILLIAM KEILLER, Professor of Anatomy.

As there is absolutely no money left from my appropriation of last year, I desire, if by any means it can be accomplished, to have from \$50 to \$100 made available for the needs of my department between now and September, otherwise it will be almost impossible to utilize the summer vacation for such additions to the museum as only the leisure of summer gives time to prepare.

W. KEILLER.

CHEMISTRY.

President Prather.

SIR: I herewith present my report for the session of 1901-1902.

The work in Chemistry during the past session has been thorough and very satisfactory. Since the last report a number of changes in the laboratory have been made. The east end of the laboratory to the extent of perhaps one-fourth of its original total capacity has been partitioned off and made a portion of the Pharmacy Laboratory and is now used for practical work in prescription work and compounding. In order, therefore, to accommodate the chemical students in the lessened space, an additional drawer has been put in each desk, an arrangement which has proven satisfactory. The old wooden sinks in the tables have been replaced by small porcelain sinks and constitute a considerable improvement; but owing to defective plumbing they are not yet fully satisfac-A small room at the east end of the laboratory has been contory. structed in which are kept the analytical balances and in which all weighings are made, and also in which in glass cases are kept the physical apparatus belonging to the department, thus protecting it from the harmful action of the laboratory gases to an extent which has not heretofore been possible.

The generous appropriations to this department during the past two years have been expended in the purchase of new apparatus for lecture teaching, principally in Physics and Chemistry, and at the present time we are in better condition to teach these subjects than we have been at any time during the history of the institution. As a consequence the work has been pursued more intelligently by the students and to greater profit, as is shown by an inspection of the general term averages of the classes. I would respectfully request an appropriation of \$700 as necessary to properly conduct this department for the coming session.

Respectfully,

SETH M. MORRIS, B. Sc., M. D., Professor of Chemistry.

MATERIA MEDICA AND THERAPEUTICS.

President Prather.

SIR: I herewith submit the official report of the Chair of Materia Medica and Therapeutics for the session of 1901-1902.

The work in Materia Medica has been along the line pursued before, including the study of crude drugs, their preparations, doses, compatibility, and toxicology. On the whole, the work done by this class has been satisfactory.

The second-year work devoted to the physiological action of drugs has been materially assisted by the Demonstrator in the Physiological Laboratory of the Nervous and Circulatory Systems, the work in the two departments going on hand in hand.

The course in Practical Therapeutics to the third-year students, including the application of remedies in disease, the study of remedial agents other than medicinal, as well as practical work in the Pharmaceutical Laboratory, has been marked by a gratifying interest on the part of the class, except in a few instances where the most instructive work in the Pharmaceutical Laboratory was not appreciated, and consequently neglected.

Very respectfully, EDWARD RANDALL, Professor of Materia Medica and Therapeutics.

MEDICINE.

President Prather.

SIR: Since the last annual report—session of 1900-1901—of the Chair of Medicine to the honorable President of the University of Texas there has been established and equipped by the honorable Regents of the University a new and exceedingly important addition to the teaching facilities of the School of Medicine. The establishment of the Laboratory of Clinical Medicine by the Regents of the University marks an important epoch in the life history of the School of Medicine and furnishes another fact in evidence that the Regents are determined that the School of Medicine shall be abreast of the most advanced schools in the best methods of teaching medicine.

Unfortunately the opening of the laboratory to the students was delayed until near the close of the session by tardiness in the construction of the building in which the laboratory is located. But the short time the laboratory was open was sufficient to impress the students with the importance of the work and to stimulate a desire to profit by the opportunity that was offered them to learn practically how to make examinations of the blood, urine, sputum, fæces, stomach contents, etc., as a means of correctly diagnosing diseases.

The laboratory is now domiciled, fairly well equipped, and only needs a Demonstrator to make its machinery complete.

The professor of Medicine, in ward class instruction, assigns to groups of students certain cases in the John Sealy Hospital to write up. In doing this work, which is purely for their instruction and in no way influences the treatment of such cases, the students are required to write up the family and personal histories of the cases in so far as it bears on the disease, and the history of the present illness. To make physical examinations, including, when necessary, examinations of blood, urine, sputum, faces and gastric fluids of patients; to note the signs and symptoms and to make diagnosis and outline plans of treatment. Later this work is reviewed by the professor in the presence of the class, and errors and omissions are pointed out and cases fully discussed.

Now a Demonstrator of Clinical Laboratory Methods is required to teach such methods to the various student groups who go into the laboratory in working up cases assigned to them. The Demonstrator should, therefore, be in the laboratory and on duty during the teaching hours, and as this labor requires all of one man's time it cannot be had without compensation. I, therefore, respectfully request that a salary be allowed the Demonstrator of Clinical Laboratory Methods.

The duties of the Professor of Medicine include the following: Two hours per week throughout the course to systematic instruction in Medicine, by lectures or recitations; six hours per week to ward class instruction; six hours per week to outdoor medical clinics. He has been greatly assisted in conducting this work by Dr. Jno. T. Moore, Chief of Medical Clinic and Demonstrator of Clinical Medicine, who has devoted a considerable portion of his time daily for the past four years to this work, without other compensation than the pleasure of doing the work and the honor of having his name appear in the University Catalogue. His faithful work entitles him, I think, to other compensation, and I respectfully suggest that the Regents either advance him to the position of Associate in Clinical Medicine, without pay, or give him a suitable salary, without advancement.

Respectfully submitted,

J. W. McLaughlin,

Professor of Medicine.

OBSTETRICS AND GYNECOLOGY.

President Prather.

SIR: I have the honor to submit the following report of the School of Obstetrics and Gynecology for the session of 1901-1902.

On account of the overcrowded condition of the curriculum in the second-year class, it was decided by the Faculty, after consultation, to leave off Obstetrics and limit instruction in that branch to the Junior and Senior classes. This change will require two lectures a week rather than one throughout the session, and instead of impairing the effectiveness of the course will, in my judgment, prove advantageous. This alteration went into effect at the beginning of the present session, and as the Juniors had completed the division of the subject embraced in the preceding year, under the former arrangement, they have had this term, as in former years, only the surgery of Obstetrics. This course has consisted of comprehensive lectures, quizzes, and mannikin demonstrations, embracing in its scope all manual and instrumental operations pertaining to obstetric surgery; covering especially the induction of abortion and premature labor; the indications for those operations; the methods of performing them; and after-treatment. Forceps; history of its evolution; action; indications for its employment; and description and demonstration of its application in the various positions and presentations of the child. Version: varieties and methods; indications for the respective varieties and methods of the operation; contra-indications; description and demonstration of the several varieties and methods as applicable to different conditions and complications. Extraction in breech-presentations; extraction of trunk, by breech, by feet; management of cord; liberation of arms; extraction of head after it has entered the pelvis, and when it is arrested at the brim; manually and by forceps. Craniotomy and embryotomy: indications for the operations; explanation and exhibition of instruments for their performance; operative procedures upon the head; perforation, cranioclasis, cephalotripsy, basiotripsy; upon the neck; decapitation; upon the trunk; evisceration or eventration. Cæsarean section: indications; time to operate; general preparations; technique; after-treatment. Porros's operation : indications, technique; comparative advantages, etc. Symphysiotomy: indications; space gained; method of operation; after-treatment. Weekiy quizzes were held, and all manual and instrumental maneuvers demonstrated upon the mannikin, members of the class, in rotation, being required to take part. One didactic lecture a week was given, besides the weekly quizzes and mannikin demonstrations. This course was completed in the early part of April.

The rearrangement of the courses in Obstetrics has not affected the Senior Class in any respect. As formerly, this class has received instruction on the pathology of labor, and the diseases of childbed, which include anomalies of the expellant forces; deformities of the pelvis; abnormalities of the sexual organs; abnormalities of the foctus offering obstruction to delivery; eclampsia; post-partum hæmorrhage, primary and secondary; accidental hæmorrhage; placenta praevia; adhesions of placenta; ruptures of the genital canal; inversion of uterus; laceration of cervix, vagina, perineum; rupture of pelvic articulations; fracture of pelvic bones; prolapse of funis; puerperal hæmatoma; non-infectious fevers; infectious diseases; extra-uterine pregnancy; puerperal septicæmia; phlegmasia alba dolens. During about two-thirds of the session two didactic lectures a week and in the remaining third one lecture a week were delivered to this class, and weekly quizzes covering the subjects gone over were held. This course was completed by a final examination April 26th.

Gynecology has been taught by methodical didactic lectures, dispensary clinics, and operations in the amphitheatre of the John Sealy Hospital. Diagnosis by manual and instrumental methods have been comprehensively presented, and opportunity afforded members of the class to practice the various manipulations pertaining to them. Only sections of the class, in rotation, have been admitted to the dispensary clinics and demonstrations, thus insuring to each student the superior advantage of actual examination of patients, and personal instruction by the Demonstrater. Fourth-year students alone were admitted to this course, who were, in turn, selected as assistants in the various gynecological operations which were performed in the amphitheatre of the Sealy Hospital. One didactic lecture has been delivered upon this subject every week during the entire session. Clinics and demonstrations have been conducted in the outdoor service of the Hospital every day except Sunday; and operations representing a wide range in Gynecology have been performed in the presence of the class on Tuesdays, Thursdays, and Saturdays.

Two intermediate and final examinations—all written—have been exacted of the respective classes in Obstetrics and Gynecology. Three failures have occurred; one—second intermediate—in the Junior Class, and two—final—in the Senior Class. Every member of the Graduating Class has made the required averages in both intermediate and final examinations; and although the papers are satisfactory in the sense that the questions are answered, some of them exhibit in a striking way the defective English of their authors.

Respectfully submitted,

J. F. Y. PAINE, M. D., Professor of Obstetrics and Gynecology.

PATHOLOGY.

President Prather.

SIR: I desire, as Professor of Pathology, to present the following report of the operations of the Chair of Pathology for the session of 1901-1902, together with recommendations for the term of 1902-1903.

The usual work assigned to each of the four classes in Medicine in this department has been carried out during the past session with a fair degree of efficiency. In addition to this work in pathology proper, the following courses of instruction have been conducted by the professor and his assistants:

(1) A lecture and laboratory course in General Biology for the first year class by the Professor and Demonstrator of Histology.

(2) A lecture and laboratory course in Normal Histology for the first year class by the Professor and Demonstrator of Histology.

(3) A lecture and laboratory course in General Embryology for the second year class by the Demonstrator of Pathology.

(4) A lecture course followed by a recitation course in Medical Jurisprudence for the fourth year class by the Professor of Pathology. (The latter of these courses was intended as preparatory for the State medical examination, in which it is a required subject, although in this school it has not as yet been made a course upon which examination is required of the student.)

(5) A lecture course in Medical Climatology for the fourth year class by the Professor of Pathology.

(6) A recitation course in Normal Histology (preparatory for the State medical examination) for the fourth year medical class by the Professor of Pathology.

(7) A systematic and clinical lecture course in Mental and Nervous Diseases for the third and fourth year classes by the Professor of Pathology.

(8) A lecture course in Elementary Pathology for the first year class of nurses by the Demonstrator of Normal Histology.

(9) A lecture course in Nursing in Mental and Nervous Diseases for the second year class of nurses by the Professor of Pathology.

There has been distinct improvement in the work of the laboratories of Normal and of Pathological Histology, for which credit is due the Demonstrators of Histology and Pathology. The improved condition of the Laboratory of Bacteriology has made possible for the first time in the history of the school a practical course of instruction commensurate with the importance of the branch. A carefully outlined detail of class instruction with numerous selected experiments illustrative of the various important procedures has been prepared for this work, and will be published from this department during vacation for the purpose of facilitating the class exercises. A similar set of class notes and experiments has been arranged for the work in General Biology, which it is hoped may also be published before the opening of the coming term; and should these volumes prove of advantage, as is expected, in the work of the classes in the various other branches of this department, there will follow, from time to time, similar systematic class guides for student use.

Owing to a lack of post-mortem subjects because of the small hospital population of the past term, the practical work of the class in autopsy making has been decidedly less than it should be for the interests of the students, and less than has been afforded during any of the sessions preceding the term of 1900-1901. The usual instruction by lecture and demonstration of museum material has been regularly carried on; but every effort to prevent the continuation of such deficiency of autopsy material should be made, since it is impossible to substitute entirely the fresh appearances of pathological specimens, or to familiarize students with the technique of post-mortem examinations, by mere descriptions, preserved specimens or models. The need of renewed effort to have passed by the coming legislature a proper anatomical law directly underlies this matter, and cannot be too strongly urged upon your consideration.

I am compelled to report that owing to continued ill health, Dr. L. E. Magnenat has decided to sever his connection with the institution as Demonstrator of Pathology at the close of the session, contemplating an early removal from Galveston to a more suitable climate. Dr. Magnenat has been connected with the school as student and demonstrator successively in Chemistry, Histology and Pathology for the past ten years, during which time his interest in the welfare of the school and devotion to the duties to which he was assigned have been commendable. and I much regret to announce the necessity of his withdrawal. For the position thus vacated, with the approbation of the Faculty, I desire to recommend the name of James J. Terrill, a member of the graduating class, who, during the past term, has grown familiar with the laboratory and its methods in his position as Pathological Interne to Sealy Hospital, the work of which is done in and under the supervision of the Pathological Department. For the position of Demonstrator of Normal Histology, General Biology and General Embryology, I recommend for reappointment, with the approbation of the Faculty, Dr. M. Charlotte Schaefer, whose work in this position during the past term has been highly meritorious, and whose interest in the work and intelligent and painstaking efforts to make the instruction in the subjects assigned to her of high efficiency are a matter of which I am pleased to bear testimony. I would ask again that the Lectureship in Medical Jurisprudence be

left vacant until some one having sufficient interest and experience can be found to take up the work, until which time I am willing to continue the instruction of the class as for several years past. I wish to suggest, however, that when the Regents are able, this branch, among others, should be elevated into a full professorship, as its importance demands, and a competent person employed to fulfill its requirements. For the position of Lecturer on Medical Climatology, with the approbation of my colleagues, I desire to recommend James J. Terrill, whose general education and ability, together with his interest in the subject, will, I am sure, make of his work a success in spite of his inexperience as a teacher. I would recommend, further, if the Regents select Dr. Terrill for the posts of Demonstrator of Pathology and Lecturer on Medical Climatology, as suggested above, that it will be of distinct advantage that his services be engaged from the beginning of the vacation period, as there is much work about the Department of Pathology requiring the attention of demonstrators as well as of the Professor of Pathology. With the approbation of the Faculty, I wish to recommend Dr. Gammon for reappointment as Associate in Pathology, without salary.

No material additions or alterations are necessary in this department of the school for the coming session; but many of the supplies are low, and will require replenishing; many of the microscopes require repair; much of the laboratory furniture is badly worn, and should be repaired or replaced; the supply of experiment animals should be kept up and provision made for their food; the present supply of museum jars will be heavily drawn upon during the approaching vacation, when specimens collected the past year are mounted for museum exhibition. For such purposes the appropriation of not less than \$500 for the ensuing term will, 1 estimate, be required. This is the same sum as that appropriated for the past term. Owing to necessities arising in the remodeling of the old negro building, this was cut down to \$250. Had it not been that many supplies had been provided from the appropriation from the fund for repairs and re-equipment granted the chair, this sum would have proved entirely insufficient; and, as it has been, many unusual and inconvenient economies have had to be practiced to avoid seriously overdrawing. Of the appropriation made for the year, but \$10.38 remain, and I would respectfully ask that if possible this be increased by \$50, in order to provide materials required in the summer work and for food for the experiment animals for the summer months.

Respectfully, ALLEN J. SMITH, Professor of Pathology.

PHARMACY.

President Prather.

SIR: During the scholastic year about to close I have had under my instruction thirty-five third-year medical students, forty-seven first-year, and fourteen second-year pharmacy students.

The course in practical Pharmacy which we have been giving our medical students for the last four or five years was continued to about the middle of March. I was more than pleased with results obtained under existing conditions. I believe this to be a very important course and am anxious to make it more interesting to the classes. The medical students themselves have repeatedly expressed their appreciation of this work and suggested that more of it be given to future classes.

If Mr. Kemp is re-elected next year, I will be able to do more of this work with the medical students. I will also be able to do more advanced work with my Pharmacy classes, as I will then have Mr. Kemp's entire time.

I take pleasure in announcing that the Texas State Pharmaceutical Association Scholarship of two hundred dollars was continued. While attending the association meeting at Dallas, I was more than pleased to hear the School of Pharmacy spoken of in highest terms.

I am pleased to report that the instruction in Botany given by Mr. Milburn has been good, far better than could be expected with short time allowed to it, and other inconveniences to contend with. I cheerfully recommend Mr. Milburn for re-election as Lecturer in Botany for 1902-1903.

The field work in Botany has not been what it should be, nor can it be made so unless some provision be made for growing many of the medicinal plants.

The flora on Galveston Island is just beginning to resume its condition prior to 1900 storm. The late appearance of wild plants, together with unusual weather, has prevented as many excursions in the fields as should have been made. The lack of apparatus and laboratory space for vegetable microscopy is, if it be possible, more keenly felt now than in the The course in Botany can be made highly interesting and propast. ductive of much good to students of all departments, as well as to the school, if a small amount of money be set aside to help build up this department. I believe it would be better for the students, and would certainly relieve the Pathological Laboratory of an inconvenience it has been kindly permitting, if a portion of the east end of the general laboratory of Pharmacy be fitted up for Vegetable Microscopy, Pharmacology, and Systematic Botany. I have looked into the matter and believe that by an expenditure of two hundred and fifty dollars this can be done. I am anxious to see the Department of Botany do better and more advanced work, which it can easily do if it be relieved of the cramped condition it has been in since the organization of the School of Pharmacy. This department can and should prepare an herbarium showing specially the medicinal plants of Texas. The campus can be very much beautified by planting flowers in fence corners, along the division fences, and in corners of the building. With this idea in view I have been collecting samples of flowers and shrubs, which I shall gladly turn over to the school if provision be made for their care and growth. By putting in about twenty-five dollars worth of soil these plants and shrubs can easily be made to grow. The plants and flowers would not only beautify the grounds, but also provide the material necessary for Botanical Histology and Taxonomy.

Of the forty-seven students in the first year of the School of Pharmacy, ten are high school graduates, six have first-grade teachers' certificates, and eleven have had almost complete academic education at the University of Texas, Agricultural and Mechanical College, Southwestern University of Georgetown, Henry College, or Baylor, leaving only twenty out of forty-seven who had to stand the entrance examination. A comparison with previous years shows a constant and rapid increase in the percentage of students who do not have to stand our entrance examination. The same remarks apply to the fourteen students in the Graduating Class of the School of Pharmacy. I have exacted of both classes a larger amount of work, work of a more advanced nature, and with both classes have begun some research work, and notwithstanding such requirements the results from both classes have been much more gratifying than in past years. I have specially pushed the members of the Junior Class so that they are about one and one-half months ahead of last year's Junior Class.

The increase in the attendance in the School of Pharmacy, together with the increase of work in prescription, compounding and dispensing, in Pharmaceutical Technology and Analytical Pharmacy, together with the introduction of research work, necessarily resulted in a larger amount of material used, bringing on the necessity of larger expenditures.

I am convinced from the high esteem in which our graduates are held, both at home and abroad, and because of the preference expressed by druggists for graduates of our school, that the increased expenditures are more than warranted. While at Dallas I had a number of young men, who had graduated elsewhere, tell me how much they regretted not having come to our school; that they had intended doing so, but had been prevented by their parents, through a misunderstanding of conditions in which we had been left by the September storm. They told me of several of our first-year men who had graduated elsewhere and whose standing and full information had been quite an advertisement to our school.

If reliance can be reposed in what students tell me and reports from druggists throughout the State, we will have an attendance in 1902-1903 of twenty-two or twenty-three students in the Senior year and fifty-five or maybe sixty in the Junior year. I believe we can safely count on an increase of at least twenty-five per cent. It is more than likely that the number of medical students taking the course in Pharmacy will also be larger next year.

In view of certain increase in students and in increase in amount of work done, I beg to say that I shall need a larger appropriation than that of last year, if work outlined for next year is to be carried out.

I beg to report that Mr. John Kemp's assistance permitted me to do the increased amount of work, and advanced work given my classes. He was diligent, efficient, and attentive to a degree more than I had a right to expect, inasmuch as he had his own work as a student. I cheerfully recommend him for re-election and beg to suggest that, inasmuch as he will, next year, give his entire time, during the whole year, his salary be made equal to that of other demonstrators. Upon my advice, Mr. Kemp, my present Demonstrator, will spend the coming summer and the next at Harvard. He goes there to take a post-graduate course in Botany. Mr. Milburn having undertaken the study of Medicine and having expressed the desire of being relieved of Botany in a year or two, I, after consultation with the Dean, advised Mr. Kemp to prepare himself, not only to take this work in hand, but to be able to go from our school to a call as professor or government expert. Mr. Kemp is an ambitious, intelligent, and diligent young man, and has enthusiastically entered upon his work. He is anxious to make a specialty of Botany and during his connection

with our school can do much in medicinal Botany that will help our school; and I believe his work might also, in connection with that of the Chair of Botany at Austin, do much for the State of Texas. The work which I have planned for Mr. Kemp will in no wise interfere with his work in Pharmacy. In addition to assisting me with my classes, I shall continue with him some research work already begun.

I have carefully gone over the various amounts needed for the Chairs of Pharmacy and Botany and respectfully beg to submit the following as necessary to do the work planned for next year.

Permit me to again remind you that the items for the Chair of Pharmacy are larger than for the previous years:

First.—Because of a certainly larger attendance.

Second.—Because of greater amount of work and more advanced nature of work for both classes.

Third.—Because of research work undertaken.

AMOUNT OF MONEY NEEDED FOR EACH OF NEXT TWO YEARS FOR CHAIR OF PHARMACY.

Chemical apparatus, to be bought in Germany	.\$300	00
Chemicals and apparatus, to be bought in America	. 300	00
Chemicals, to be bought in Europe		
Fixtures and repairs, including freight and custom hous	e	
charges		00

Under the head of fixtures and repairs will be included the repainting of pharmaceutical laboratories. We have found it so dark in the basement that we have decided to paint all furniture white. Under this head is also included such repairs as are yearly required to prevent destruction of property on hand—replacement of rusted locks, etc. The increase in the Graduating classes will require some addition to the Senior Prescription Laboratory, such as gas jets at each of thirty desks, several water sinks and some shelving.

AMOUNT NECESSARY FOR CHAIR OF BOTANY.

Shelving, tables, microscopes, staining material, alcoves, chairs,
and fixing of east end of general Pharmaceutical Laboratory
for accommodation of Vegetable Histology, Pharmacology, and
Vegetable Taxonomy\$250 00Soil for yard25 00

RECAPITULATION.

Chair of Pharmacy.

	Wante	ed.	M	inimu	ım.
Apparatus to be bought in Germany\$	300	00	\$	250	00
Chemicals to be bought in Germany	250	00		250	00
Chemicals and apparatus to be bought in America	300	00		250	00
Fixtures and repairs				100	00
	1000			050	
Total	1000	00	\$	850	00

Chair of Botany.

	Wanted.	Minimum.
Partitioning, painting, etc., part of general lab-		
oratory of pharmacy, shelves, tables, chairs,		
stains, microscopes for seventy or more Phar-		
macy students, Medical students	3 250 00	\$ 200 00
Filling and soil for cultivation of plants		
- Total	275 00	\$ 200 00
10(41	<i>N</i> 10 00	φ 200 00
Despectfully submitted	1	

Respectfully submitted,

R. R. D. CLINE,

Professor of Pharmacy.

PHYSIOLOGY.

President Prather.

SIR: I beg to submit herewith the annual report of the Chair of Physiology in the Medical School of the University of Texas.

The instruction in this branch during the present session has been far more satisfactory than heretofore. This is partly due to the more practical methods of teaching made possible by the recent equipment with apparatus, and in part to the assistance of a demonstrator. Without the latter the former would be of little use.

The course in Chemical Physiology for first year students has not been changed. As far as the lectures are concerned there has been practically no alteration in the second year course, but the laboratory teaching the real teaching—has been greatly improved. Formerly this consisted of demonstrations before the students in which the latter took no part. These demonstrations followed and illustrated the subject-matter of the lectures.

Since the equipment of twelve (12) tables with complete sets of physiological apparatus for practical exercises, we are now able to have this work done by the students themselves instead of merely seeing it done by others, as heretofore.

For this purpose the class is divided into sections, and two students are assigned to a table so that twenty-four (24) are able to work at one time. In this way most of the experiments on the blood, heart and circulation, nerve, muscle and the central nervous system have been conducted by the students, thus insuring closer individual instruction than can be obtained in any other way. There are some experiments that can only be shown on mammals, and these are demonstrated, as it is impracticable, for various reasons, for students to perform these.

Although there may not be any decided improvement in the grades attained in the examinations, there can be no doubt of the advantages of this method of teaching. In the first place, students are studying from nature and not getting knowledge second or third-hand from textbooks and lectures alone. This gives to the subject increased interest and commands closer attention than any other method of teaching. As a result, subjects which are difficult are understood more thoroughly and with less effort on the part of the student. Facts learned practically in this way are retained far better than those which are merely memorized for examination. Careful laboratory teaching will do away with "cramming" for examinations more than anything else.

Another distinct advantage of this laboratory course is that students learn to use apparatus of precision and accuracy, and this manual dexterity is useful to them. Perhaps as great a benefit as any from this laboratory training is that it teaches students to observe closely and interpret carefully. Nothing could be of greater help than this in any subject of medicine, so that the fundamental subjects may become useful in this way for the advanced subjects, no matter what the latter may be. Men well trained in careful methods from the beginning are not likely to jump to conclusions and do slip-shod work later.

During the coming session we hope to improve our methods of teaching somewhat, as Mr. Plant, Demonstrator of Physiology, is unable to devote his entire time to the work at present, but will be able to do so after his graduation.

For the coming session I beg to recommend the following amounts as necessary for this chair:

Concerning the former, it may be stated that increased equipment increases the cost of maintenance, as many more frogs, etc., must be purchased now than formerly.

Concerning the Demonstrator's salary, I beg to remind you that last year his salary was \$600, in view of the fact that he could not devote his entire time to the work. After his graduation at the coming Commencement it is quite certain that he would not continue for less than is paid the other demonstrators. As Mr. Plant is now well trained and well fitted in every way for the work, and his services have been eminently satisfactory in every way, it is hoped that his salary may be increased. Very respectfully,

W. S. CARTER, Professor of Physiology.

SURGERY.

President Prather.

SIR: During the session 1901-1902 the School of Surgery has advanced materially in its equipment. There has been an efficient X-ray apparatus installed in the Sealy Hospital, which is capable of executing work of the best quality. It has been of great service to the students, not alone in the study of diseases, but also, owing to great advancement along the line of X-ray therapy, the students have been practically instructed in the uses and limits of the machine for various diseased conditions. Owing, however, to the fact that the only electric current of sufficient strength to do fine skiagraphic work is available at night, this part of their education has necessarily been neglected.

The Eye and Ear Department have also been equipped properly for the first time in the history of the institution. Work in this department has been of very great excellence. The clinics have increased in quality and in the number of patients. This department has never been better managed.

A number of cystoscopes have been purchased for the Genito-Urinary Department. These being all modern instruments of the best type, will prove a great acquisition.

The didactic teaching has progressed satisfactorily in every way. The clinical teaching has been somewhat interfered with by the want of accommodation for colored patients. As the colored hospital is now completed there will not be in future any such lack of clinical cases. Considering the depressed condition of the city and the diminished number of inhabitants, the falling off of the clinics has no particular significance. Next year will see affairs in the old condition.

NEEDS OF THE SCHOOL.

Owing to the loss of 25 per cent. of the amount at first appropriated for permanent equipment, a number of pieces of apparatus were not able to be bought. It is hoped that it will be possible to reappropriate this amount, as well as a further amount of \$250, to meet current expenses. The total amount will thus be \$500. The reason that \$250 is asked for the annual maintenance of the chair is that the School of Surgery has not been able to purchase enough bodies from the Anatomical department to run the operative course as it would have liked. Also a number of instruments will need to be purchased for this department. Otherwise, the needs fall in line with those of the Anatomical and Pathological Departments, which have, up to the present, been very generous with help and supplies.

> JAMES E. THOMPSON, Professor of Surgery.

