

# State University's Equipment Thoroughly Modern

## Laboratories Best Money Can Get

The departments which conduct laboratories in connection with the class work are all well equipped. The agricultural laboratories are equipped with the best specimens of farm machinery, such as improved plows, reapers, binders, traction engines, farm levels, fiber-testing machines, apparatus for laying tile drains and for making cement fence posts, and the necessary apparatus for making analyses of soils and fertilizers.

In the Animal Industry department the laboratory contains modern cream separators, churns, Babcock testers, sterilizers, milk coolers and other apparatus used by the students in creamery work. In the horticultural laboratory are found models of fruits, flowers and vegetables and connected with the department is a large garden, in which may be found all varieties of fruits and vegetables which grow in Louisiana. The most recent addition to the equipment is a large modern hot house.

The department of Veterinary Science has plaster models of horses, manikins, surgical instruments, charts, and is constantly supplied with living animals, which are brought to the clinic for medical or surgical treatment.

The chemical laboratory is, perhaps, the best equipped one in the south. The apparatus is of the best quality and the most approved design. It contains a large laboratory for general and analytical chemistry and special laboratories for agricultural chemistry, electro-chemistry, sugar chemistry, organic chemistry and engineering chemistry, and four small laboratories for research work. The laboratory will accommodate about 375 students. Much of the apparatus can be manufactured in the laboratory.

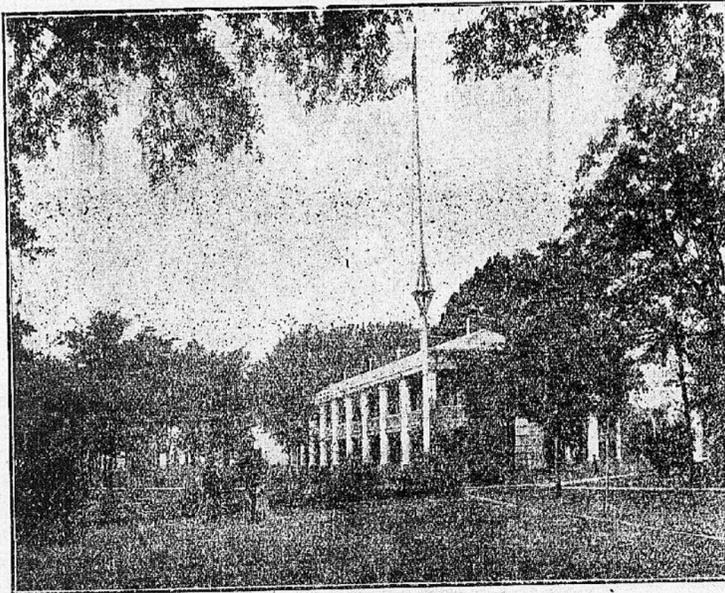
The Civil Engineering laboratory contains drawing rooms, dark rooms, and instruction rooms to accommodate 120 students. All the best engineering instruments are kept, such as transits, compasses, levels, theodolite, plane tables, planimeter, rods, tapes and chains.

The Mechanical Engineering laboratory has accommodation for about 100 students. It contains several steam engines, steam turbines, boilers of various types and designs, and a refrigeration plant, and all other apparatus necessary for the study of mechanical engineering, as well as gas engines, oil engines, gas producers, hydraulic machinery of various kinds, a 50,000 pound strength-testing machine and numerous instruments about which the layman knows nothing.

The laboratory of the department of Electrical Engineering has just been transferred to the basement of Heard Hall. It contains all the latest models of direct-current and alternating-current generators and motors of the latest commercial types and made by the best companies. The laboratories are also equipped with transformers, batteries, voltmeters, wattmeters, galvanometers and many other pieces of apparatus necessary to a well appointed laboratory.

The Mechanical Arts laboratory has accommodations for about 200 students in the drawing rooms and in the wood shops, foundry and forge shops. The wood shop is fitted up with full sets of hand tools for wood work, grindstones for grinding tools, turning lathes, surfacers, wood trimmers, etc. The foundry is equipped for melting iron, brass and other metals and for making castings. The forge shop contains 16 forges with electrical blowers, each forge supplied with anvils and full sets of tools.

The Botanical laboratory includes a sufficient supply of compound microscopes and all other apparatus necessary in the botanical and bacteriological work, as well as a fine herbarium, containing about 7,000 sheets of mounted specimens.



LOOKING TOWARD PENTAGON FROM AVENUE.

## Literary and Scientific Work

In addition to the literary and scientific work of the University faculty, as published in the several University publications, the professors and instructors have done in recent years much other work. For three years Professor Coffey has edited the Louisiana School Review, which is the organ of the State Teachers' Association and the State Department of Education. Dr. Dalrymple edits the agricultural section of the Tri-Weekly Picayune.

Other members of the faculty and student body have made frequent contributions to literary and scientific magazines on chemical subjects, Sugar Technology, History, Economics, English and Literature, Law and Political Science.

Several members of the faculty have published valuable works giving the results of investigation in their respective subjects. Professor Scroggs has just finished a work on Alabama Finance and a life of William Walker, the filibuster. Captain Sorley has published a history of his regiment,

the Fourteenth United States Infantry. Dr. Dalrymple has published one book on veterinary science and has another in preparation. Professor Fleming has published several volumes relating to the Civil War and Reconstruction, has about completed a history of the Louisiana State University and has in preparation a life of Jefferson Davis.

Mr. Hailigan, of the Experiment Station, has published a textbook on Agriculture and has in preparation two other volumes on agricultural subjects. Professor Hughes, of the Law Department, is the author of standard works on Evidence, Criminal Law, Criminal Pleading and Procedure and Business Law. Dr. W. A. Read has written several articles on Southern Speech and is now expanding them and revising them for publication in book form. Dr. A. G. Reed published last year a thorough-going report of the investigation of the teaching of English in Louisiana schools, and is now editing a play of Shakespeare.

Dr. H. M. Blain has in preparation a work on the Southern Humicols. Professor Kidder will soon publish a work on the Soil Surveys of Illinois. Professors Scroggs and Fleming have made various contributions on History and Economic subjects to the various new encyclopedias, to the South in the Building of the Nation, to the Photographic History of the United States and to historical and economic periodicals.

Professor Scroggs was for a time one of the American editors of the Encyclopedia Britannica. This position he resigned to come to Louisiana State University. Professor Coffey has in preparation a work on the History of Education and another on Social Psychology. Professor Odell publishes articles in the chemical journals; also writes fiction for a different class of magazines.

The results of the Experiment Station investigation are published in bulletins, one of the most notable recent issues being Professor Kerr's report on Bagasse.

## Experiment Station Work

### SERVICE IN SCIENTIFIC AND AGRICULTURAL ASSOCIATION.

1. The Louisiana Experiment Stations are represented either in the list of officers or on committee assignments in nearly all leading National Agricultural and Scientific Associations, and these members contribute some of their time to official work, committee work or preparation of papers for these organizations.

### FEED STUFF AND FERTILIZER CONTROL.

The samples of feed stuffs, fertilizer and Paris green taken by the State Board of Agriculture are analyzed by the Experiment Stations, and the farmers are thus protected from fraud in these products.

2. A great many analyses are made for the benefit of the farmers of the state.

### HOG PRODUCTION.

Some of the most valuable work of the stations has been done in determining the succession of crops best suited for cheap production of pork:

1. In determining the best winter grazing crops for hogs.
2. In demonstrating the increased soil fertility from the pasture method of feeding crops.
3. They have demonstrated that a crop of corn and cow peas together grazed by hogs is worth twice as much as a crop of corn alone fed to hogs.
4. They have demonstrated that an acre of sweet potatoes, followed by a crop of oats, will produce as much pork as would 75 bushels of corn.
5. They have demonstrated that all of the colored breeds of hogs thrive in the state.
6. They have demonstrated that much of the poorer uplands planted to peanuts and potatoes will produce more pork than will much of the rich alluvial land when devoted to corn.
7. The Experiment Stations originated the organization of Boys' Pig Clubs.

### EXHIBITS.

1. The stations have furnished a large part of the agricultural exhibits, showing the possible production of the state, at various land shows and expositions.

2. Members of the station staff have been leading lecturers at fairs, land shows and expositions on the agricultural resources of Louisiana.

3. The stations have furnished a very considerable portion of the exhibits at the State Museum at New Orleans.

### CONSERVATION.

1. The stations have taken a prominent part in the conservation of our natural resources and have directed the survey of oil fields, sulphur and salt deposits, and have issued extensive publications on salt and oil.

2. They have made a survey of the underground waters of the state, publishing an extensive report on the same.

3. They have co-operated with the national government in soil and topographic surveys of different portions of the state.

### ENTOMOLOGICAL WORK.

1. In addition to reference already made to special cases, the stations have worked out the life history of many injurious insects and made suggestions for helping control them.

2. This department carries on extensive inspection of nursery stock to prevent the spread of injurious insects.

### ANIMAL DISEASES.

The stations are carrying on experiments on animal diseases, and, prior to the organization of the Live Stock Sanitary Board, conferred with the local authorities in the control of outbreaks of destructive diseases among live stock.

### CONTRIBUTIONS.

1. Members of the station staff write a great many special articles for agricultural and scientific papers and magazines, published not only in the South, but throughout the nation.

Sheriff William Reeves, Jr., of Harrison county, will resign today, it is said, and his brother, Izum, appointed.

## Courses of Instruction

The University offers 439 courses of instruction to the students of the regular session. Summer school courses and the short winter courses are excluded in the following list, which shows the number of term courses offered in each subject during the regular session:

Agriculture	23
Animal Industry	20
Latin	13
Greek	9
Botany and Bacteriology	24
Chemistry	29
Civil Engineering	18
Accounting	9
Geography	3
Stenography	2
Comparative Medicine	5
Economics	8
Sociology	3
Education	16
Electrical Engineering	8
English	30
Public Speaking	4
History	23
Horticulture	11
Forestry	3
Law	3
Law	36

Mathematics	15
Mechanical Engineering	21
Mechanical Arts	10
Drawing	3
Military Science and Tactics	2
French	9
German	13
Spanish	6
Physics	10
Political Science	14
Veterinary Science	5
Zoology	11
Philosophy	8
Psychology	6

The above list does not include the laboratory courses, which are attached to the lecture courses in the respective subjects. Not all of the courses are given every session, the more advanced courses in Latin, Greek, Economics, English, History, German, Education, Philosophy, Political Science and Psychology being given in alternate years. Most of the courses are three hours a week throughout the term and the lectures are arranged for alternate days thus enabling a student to attend about six series per week of lecture and laboratory courses.

## Enrollment of Subjects

The following table shows the enrollment of the regular session students in each subject, in the collegiate classes and in the School of Agriculture:

Academic Departments.	
Agriculture	97
Latin	55
Greek	3
Botany	86
Chemistry	132
Civil Engineering	27
Commerce	49
Drawing	154
Economics	76
Education	37
Electrical Engineering	29
English	369
French	190

German	22
History	164
Horticulture	39
Mathematics	350
Mechanical Engineering	63
Philosophy	37
Physics	155
Psychology	60
Political Science	105
Sociology	17
Spanish	98
Veterinary Science	38
Zoology	74
Law	58
Military Science	42
Drill	372

School of Agriculture.	
Agriculture	19
Arithmetic	20

Botany	26
Breeding	36
Breeding and Stock Judging	21
Account's	19
Dairy	29
Drawing	27
English	86
Feeds	20
Geography	17
Grading	22
History	30
Horticulture	34
Mathematics	80
Physics	31
Physiology	15
Shopwork	57
Soils	25
Zoology	19

## Practical Results

### CORN PRODUCTION.

The Experiment Stations have been one of the leading factors in making Louisiana a corn producing state by:

1. Determining the best varieties for the different portions of the state.
2. Determining the best fertilizers for the different soils, and the best methods of application.
3. Demonstrating the effectiveness of seed selection.
4. Initiating the organization of the State Corn Growers' Association and Boys' Corn Clubs.
5. The stations have distributed small quantities of seed of some of the best varieties.

### FORAGE CROPS.

1. The stations have grown some varieties of nearly every forage crop used in the various countries of the world to determine those suited to Louisiana.

2. They have had much to do with the extension of the culture of lespedeza, peanuts, cow peas, clovers and alfalfa.

3. They have rendered great service in determining the merits of stock beets, stock carrots and other root crops for feed for cattle and hogs.

4. They have fully demonstrated the practicability of silos in Louisiana and determined the best crops for ensilage.

### TRUCK CROPS.

1. The stations have done most valuable work in testing varieties of a great diversity of truck crops suitable to Louisiana.

2. The stations have determined the best succession of crops for continued supply of vegetables for home use.

3. They have carried on many tests of different methods of packing and marketing crops.

4. They have demonstrated the value of irrigation to commercial truck production.

5. They have worked out the means of controlling bean pod spot.

6. They have practically succeeded in controlling the bacterial leaf blight of the bean.

7. They have shown that resistance to the wilt disease of tomatoes can be greatly increased.

8. They have shown that Irish potatoes can be increased in yield 40 bushels per acre from three years of seed selection.

9. They have demonstrated that the very finest quality of grapes of three or four varieties can be grown in North Louisiana.

10. They have demonstrated the influence of fertilizer on quality of cantaloupes, watermelons and many other truck crops.

11. They have worked in co-operation with the National Department of Agriculture to produce a commercial orange immune to freezes of Louisiana.

12. They have assisted in organization of Truck Growers' Associations in different portions of the state.

13. They have carried on quite a number of experiments in the production of hot house plants in winter time for commercial purposes.

### LIVE STOCK.

1. The Experiment Station at Baton Rouge took the lead in developing methods of immunization of cattle from Texas fever.

2. It was this station that originally worked out the life history of the cattle tick and suggested means for its possible eradication.

3. The station has also helped materially in perfecting the present effective solutions and methods of dipping to the eradication of the tick.

4. They topped the Chicago market in price with a carload of steers, showing that the best quality of beef can be produced on lespedeza hay, cotton seed meal and rice polish.

5. They have demonstrated that the stomach and intestinal worms that formerly destroyed our sheep can be almost completely controlled.

6. The Tick Eradication League was organized by a member of the Experiment Station staff.

### DAIRY INDUSTRY.

1. The stations have worked in co-operation with dairymen in several portions of the state encouraging methods of checking the amount of cost of production and marketing.

2. They have helped farmers to determine the unprofitable cow.

3. They have demonstrated in commercial dairies that increased profits come from feeding balanced rations.

4. They have secured valuable data as to what may be expected in improvement of stock by the use of good sires.

5. They have shown the great value of root crops to the dairyman and advocating a more extended use of stock beets, stock carrots, etc.

## ADVANCE STANDARDS

For the last four years the University has been steadily advancing the standard of admission to the University, as well as the standard of work in the University. In 1907 the state high school course of study was less thorough than it is at present and the University entrance requirements were correspondingly low. As the state high schools have improved and as the new state course of study for high schools has gone into effect the admission requirements to the University have gradually been raised. In 1907 the admission requirement of preparatory work was valued at ten units; in 1908 this was raised to 12 units, and beginning with September, 1911, 14 units will be required for admission. This is the present value of

the state high school course. Following the custom of other colleges and universities, the Louisiana State University has allowed a student to enter with a minimum of nine units, conditioning him in three units. Hereafter the admission requirement will be 14 units and the minimum required for conditioned admission will be 11. During the past three years the character of high school work has improved so much that the University has been able to obtain a higher admission standard than the official one. The records show that members of the present Freshman class were admitted on units as follows: Six with nine units, six with ten units, 20 with 11 units, 17 with 12 units, 22 with 13 units, 118 with 14 units, 15 with 15 units.

## University Publication

The official publications of the University include the University Bulletin, the Experiment Station Bulletin, the Louisiana State University Quarterly, and the University Press News. The University Bulletin is published monthly and is mailed to the public schools, to Louisiana State University graduates, and to all others who ask for it. In this series are issued the University catalogue, the announcements of the various departments, and reprints of articles published elsewhere by University people. Among

the last mentioned are the following bulletins of some literary or historical interest, which will be sent, as long as they last, to a 1 who apply: Cadet Life at Louisiana State University, by Captain L. S. Sorley; The Southern "R," by Dr. W. A. Reed; Jefferson Davis at West Point; Jefferson Davis Camel Experiment; The Religious Views of Jefferson Davis; and Jefferson Davis and the Negro Problem, by Professor Walter L. Fleming; Early Trade and Travel in the Lower Mississippi Valley, by Professor W. O.



GARIG HALL, FROM NEW ALUMNI BUILDING.