

Agricultural Plant Valued at More Than \$1,000,000; One of the Most Modern and Serviceable In America

The purpose of the School of Agriculture, according to E. J. Kyle, dean of the School, is to train young men for positions of leadership in agricultural business, research and educational endeavor. Special work is offered in (1) Agriculture, which prepares young men for the business of modern farming and ranching, for scientific agricultural investigation, for work as county demonstration agents and extension service specialists, and for teaching in high school and agricultural colleges; (2) Agricultural Administration, which aims to prepare men as agricultural economists, for positions with the Farm Credit Administration, business leaders, statisticians, accountants, agricultural advisors, county agents, and instructors and research students in economic and commercial subjects; (3) Agricultural Engineering, which gives the student training in engineering from an agricultural viewpoint; (4) Landscape Art, which trains the student in the development of outdoor areas. In brief, courses of study in the School include accounting and statistics, agricultural economics, agricultural engineering, agronomy, animal husbandry, dairy husbandry, poultry husbandry, and rural sociology.

With the completion of the agricultural engineering, animal industries, horse barn and dairy buildings, the School of Agriculture will have a physical plant valued at more than a million dollars—easily one of the most modern and most serviceable of any agricultural plants in the United States. A few of the more recently constructed buildings are: the agricultural building, erected in 1922, which includes administrative offices, class rooms, and laboratories for various agricultural departments; agricultural engineering building (1933) in which are the class rooms, offices and laboratories for the study of gas engines, tractors, and farm machinery; animal husbandry pavilion, (1916) contains a large judging arena surrounded by concrete seats for 1600 spectators, around the edge of which are class rooms and offices; animal industries building (1933) provides offices, class rooms, and laboratories for

the departments of animal husbandry, genetics, and poultry husbandry; the college creamery (1923) contains the dairy laboratories and creamery, which is equipped for the manufacture and distribution of ice cream, butter, cheese, and market milk; beef cattle, hog and sheep barns provide facilities for the handling of the various classes of livestock; the dairy barns (1916 and 1926) are modern barns with a capacity for 125 cows, feed rooms, milk rooms, and offices; horse barns (1933) contains stalls and equipment for fifty horses; poultry administration building (1925) houses laboratories for egg candling, baby chick brooding rooms, and two class rooms for judging poultry. Many other buildings and up-to-date equipment are at the student's disposal, as courses of study in the School of Agriculture branch into a number of different departments.

The success of any school is properly judged by the quality of its human product. Graduates of the School of Agriculture are now filling practically every agricultural position of importance in the state, as well as many of the more important positions in the United States. Some of the outstanding government positions now being held by A and M men are: the director of the Federal Land Bank; president of the Bank for Co-operatives; directors in the Farm Credit Administration; vice-president of the Bank for Production Credit; principal economist of the National Agricultural Experiment Station; Washington, D. C.; president, secretary, and economic advisor for the Farm Credit Administration; state director of the C W A project for the study of farm tax delinquencies; head of C W A project to survey farm living costs; state director of C W A pest mosquito control project; head of C W A soil survey project in Oklahoma and Texas; landscape architect for the State Park Board; landscape architect for the School of Park Improvement project; eight foremen on the National Park in Alabama; landscape engineer for the State Highway Commission; landscape foreman on State Parks in Oklahoma; head of the Base Map Survey; head of Homestead Substitution Movement in Texas.

President of Texas A and M College Addresses State High School Students



By Dr. T. O. Walton, president of Texas A and M College and president of the Land Grant Colleges.

Thousands of young men throughout Texas and other states of the Nation are now nearing the completion of their high school years. College days are just over the horizon for them. For many the prospect has the appeal of a new and exciting adventure, a period of new friends and new scenes, new paths of learning, new heights of mental development and achievement.

This is as it should be, for the college days of a young man can and should make up a period of high adventure in his preparation for life. They are days of tremendous importance in the training of both his mind and his body for the tasks ahead. They make up his final period of systematic intensive training for the battle of life to come.

Perhaps the most important phase of all in the training that college affords is that relating to preparation for good citizenship. To reach the most worth while goal in life, a man must have within him the instincts of good citizenship which are but the instincts to live properly among his fellow men and to give patriotically of his thought and his actions to the welfare and the development of his state and country. In keeping with the doctrine promulgated by the fathers of the Republic, we have assumed and are following the principle that the State, in order to progress, must insure the right of educational opportunity to its citizens. We have emphasized this principle but in doing so it is possible that we have not emphasized enough the duty toward the State of the citizen who is educated at public expense. Young men as well as young women have a very definite responsibility in this respect. Acceptance of the State's bounty automatically imposes upon them an obligation to give a part of their time and talent to the service of the State. Thus the training for good citizenship should be a very definite part of their work in college.

There is in addition to the cultural advancement and the opportunity to prepare for the duties of citizenship, a more practical side to college training. This has to do with specific preparation for cer-

tain fields of endeavor, a definite training of the talents in order that the individual may attain success in material fields. Through this training a young man may sharpen his mental tools and gain skill in their use to the end that his efforts will bring him in greater returns than those enjoyed by the unskilled and the untrained.

The selection of the particular college to attend is a matter that deserves careful consideration on the part of the prospective student. Several things are to be considered. First, perhaps, is the question of where the particular training desired is the most complete. There is in addition the question of friendships and contacts, for college friendships as a rule are the most enduring and the most lasting of life. If a young man intends to live and work in his own state, it behooves him to develop friendships among those with whom he will have opportunity to come in contact after college days are over. There is also the economic question, the question of expense, a very vital question to many young men today.

For the young man of Texas who wants specific training in a particular field, training for good citizenship, for service, the Texas Agricultural and Mechanical College, Texas' oldest state supported institution of higher learning, has a very definite field of opportunity to offer. Nearly 6,000 young men, trained in mind and body for the upbuilding of their state and nation, have gone out from this institution during the fifty-seven years of its operation. They have gone into agricultural, industrial, commercial and professional fields of service and the imprint of their hands has been written in large letters across the scroll of progress of Texas and the Southwest.

It is in this particular field of coordinated training, the development of mental talent and the upbuilding of physical vigor to apply it, that the Texas A and M College functions most completely. The complete field of service of the college includes instructional, research and extension activities. The instructional program is made up of four years in five undergraduate schools, and the graduate school that offers the degree of master of science and professional degrees in engineering.

These undergraduate schools include the school of agriculture with a broad program, the school of engineering, the school of arts and sciences, the school of veterinary medicine and the school of vocational teaching. The college also offers a two year course in cotton marketing and classing.

The military phase of the college is an outstanding feature and with the strong physical education program offers discipline and body training that are so essential in the battles of life. The student makes up one of the largest senior ROTC units in the United States. Sixteen regular Army officers instruct in military science and tactics and students completing the required four year course receive commissions in the Officers' Reserve Corps of the U. S. Army. Six units are represented in the corps, infantry, cavalry, field artillery, coast artillery, signal corps and corps of engineers.

Student life at Texas A and M College reflects the essence of democracy. Every student stands on his own feet. The size of his purse or his social standing are incidental to his standing with his fellows. What he is and not who he is is the thing that counts. Self-reliance and the ability to get results in spite of obstacles are stressed. Many of the outstanding students of the college are young men who are earning their way as they go.

The spirit of Texas A and M College is a thing that has made itself a force in the state. It reflects the loyalty and the pride of the men who have attended the college toward the institution where they received their training. Texas A and M College has played an outstanding part in the development of the state, in a practical as well as a cultural way. Its teaching staff includes men who are blazing trails in educational endeavor; it graduates men who have translated training into service.

New social and economic trends are evident in our national life today. To meet these, practical and scientific training and sane thinking are required. This is encouraged at Texas A and M College where the hard facts of life are stressed as well as the need of cultural values.

A and M Engineering School Rated Among Best In U. S.; Eight Complete Engineering Courses Are Offered

Several of the larger newspapers of the country recently carried a series of articles analyzing the several vocations and professions which are open to young men. The author of these articles had made a rather comprehensive investigation of the opportunities in the principal professions and his conclusions may be taken as representing the present situation. He makes this statement: "Engineering may be overcrowded today, but tomorrow will be another story. It is the only one among all the professions where this writer discovered undiluted optimism."

The engineers' services are required not only in the design and the construction but also in the maintenance and the operation of most industrial and public utility enterprises as well as in public works. The part that the engineer has taken in planning and constructing great engineering undertakings has been so well recognized that the public has not always realized the important part that he is playing in their continued successful operation. The shift in emphasis in the engineering profession from construction to the refinement of existing mechanisms and processes was in evidence long before the present depression caused a stoppage of construction. The work of the engineer in improving processes and methods is in evidence in every phase of industry. Engineering is an old profession. It has played its part in the development of our civilization.

Engineering is a broad profession. Someone has said that the engineer works with Methods, Materials, Money, and Men. His use of the first two must be based on the experience of himself and of others.

It is the function of the architect and the architectural engineer not only to plan buildings but they must prepare specifications and detail drawings, then they must procure estimates and direct the letting of contracts and finally supervise the construction of the buildings. A man trained in architecture has excellent preparation for any branch of the construction industry. As is always the case, a financial depression causes a ces-

ation of most construction but not only is this creating a gap in our normal construction which must be filled later, but the surveys which have been made in connection with relief work indicate that more than 50% of the American homes fall short of the minimum standards and there is a substantial shortage of modern low-cost housing.

Civil Engineering is the oldest branch of the profession but it still finds a broad field in which to operate. Highway development and the growing demand for men trained to apply engineering methods in prevention of disease and the improvement of sanitation are but two of the branches in which there is an active demand. Our modern situations have found need for engineers in practically every phase of their governmental operation. The civil engineer is not concerned with mass production. Each of his problems must be worked out individually.

Electrical Engineering is still young enough to be in an active state of development. The production, transmission, distribution, and utilization of electricity involve many technical problems and require the services of trained engineers. In another branch of the profession may be found an equally great opportunity in the development and operation of electrical communication systems. The comparatively recent development of the vacuum tube has opened up an entirely new vista, not only for the communication engineer, but for its application to electrical power as well.

The mechanical engineers are to be found wherever power is used and wheels turn. This profession offers a wide choice of occupation from the design of delicate instruments to locomotive building. The mechanical engineer who specializes in industrial engineering finds outlet for his activities in manufacturing and in improving manufacturing processes.

Those who have studied the present trend feel that competition is demanding better trained men for the several branches of engineering. A technical college training is becoming more and more an absolute prerequisite for success in the field.

New Veterinary Medicine Building



VETERINARY MED SCHOOL CONSIDERED OUTSTANDING ONE IN WORLD BY MANY

The School of Veterinary Medicine in the Agricultural and Mechanical College of Texas is one of the six of its kind in the United States. It is undoubtedly one of the leading schools for Veterinary Medicine and is considered by many authorities as the outstanding one in the world. The dean of the school is Dr. Mark Francis who is perhaps the world's leading authority on horses. He came to Texas A and M about forty-five years ago, when the school was first established.

Graduates in Veterinary Medicine from this institution hold some of the leading positions in this science in the country. Many have made a success as private practitioners, establishing hospitals of their own. Other A and M graduates hold positions with The Bureau of Animal Industries, in state and municipal works, teaching and in research work in state agricultural and veterinary colleges and experiment stations, in the army, and with private corporations doing administrative and scientific work.

The School of Veterinary Medicine was established at Texas Agricultural and Mechanical College as a direct result of the menace of the Texas Cattle Fever. Dr. H. J. Detmers, who was born and educated in Germany and was one of the outstanding pathologists of his day, was sent by the Secretary of Agriculture to Texas to study

the Texas cattle fever. The Board of Directors became interested in his work and decided to begin instruction in Veterinary Medicine, so they asked him to take charge of the Veterinary School. Since he was the head of the Veterinary School at Ohio State University at Columbus, he could not accept the offer. He suggested Dr. Mark Francis, who later became one of the foremost veterinarians of this country.

Dr. Mark Francis had graduated in June 1887 from the University of Ohio and had spent the remainder of '87 and the spring of '88 in the American Veterinary College in New York. He was working in the Veterinary Hospital of Dr. J. C. Meyer of Cincinnati at the time he received word about the position at this institution. He accepted the position and arrived at College Station in the summer of '88.

Since Dr. Francis has been connected with this institution, he has been instrumental in discovering the cause and means of prevention of some forty diseases of domestic animals. One of his most important pieces of research work that he has done was his discovery of the cause and means of prevention of the Texas fever in cattle. This discovery has saved untold thousands of cattle and pointed the way to the means of controlling not only the Texas fever in animals but also malaria and yellow fever of man.

Aggie Athletic Plant Most Complete In South-West

HEAD FOOTBALL COACH



H. H. Norton has an enviable record as a football mentor and is head of the A and M Athletic department.

A well rounded education must include adequate systematic physical training. With this in mind, the Texas A and M college has provided in Kyle Field, the center of the athletic activities of the College, one of the best equipped athletic plants in the South. Every kind of athletics are provided for the students of the college and every possible facility is maintained by the college for the training and use of the students. In addition to the material, the college has provided the athletic department with a personnel that cannot be bettered anywhere in the United States, and one that has a record of achievements that cannot be approached by any other staff of coaches and instructors in any Southern school.

At the head of the Texas A and M coaching staff is Homer H. Norton. From 1927 to 1934 at Centenary College, beginning with less than one hundred boys in the school and ending with less than three hundred, he compiled a

LINE COACH



Cal Hubbard, who for many years was an All-American professional football star, is first assistant to Coach Norton.

New Agricultural Engineering Building



AGRICULTURAL ENGINEERING STUDENTS IN GREAT DEMAND BY U. S. GOVERNMENT

Agricultural Engineering at A and M College includes the study of practically every type of engineering problem which concerns modern farm practice, such as farm buildings, irrigation and drainage, and farm machinery and power. This department has one of the several new buildings recently completed at the college, giving it the most modern in the United States, including adequate class room space and the various necessary laboratories for the practical study and use of the modern equipment. Another important asset of the department is the use of the two large agricultural engineering farms included in the limits of the college property.

Seven modern laboratories are available to the students in this department, equipped with all the necessary and modern tools and machinery for graduate and undergraduate study. The gas engine laboratory has many types of farm engines, automobiles and trucks, and the student learns the use, operation and maintenance of these pieces of machinery.

All of the important features taught in the laboratory classes are practiced on the two large farms by the students. The farms are 100 acres and have two large lakes on them. Experience in planting, terracing, testing of and practical uses of the machinery is obtained, being considered from the standpoint of economy. The large combine is used for harvesting and the students learn the uses of it. Putting all these fea-

tures together, the Agricultural Engineering Course at A and M College is recognized as one of the best in the United States.

Agricultural Engineers go into many fields of practice after graduation. Some of these locations are listed here: such as, home loan banks, salesmen of farm buildings and machinery, governmental employ, soil erosion work, drainage and irrigation work, rural electrification, and teaching of the same work. All the graduates in this course from A and M have been located, and on a recent request from the government for 25 agricultural engineers, none were available as they were all steadily employed.

There are three regular professors in the department and three graduate assistants who help with the teaching. Donice Scoates, who is head of the department, received his Master of Science degree and his Bachelor's degree from the Iowa State College, receiving his Professional degree since graduation there. He is past president of the American Society of Agricultural Engineers, and has been consulting editor on the McGraw-Hill Publications Staff for the Agricultural Engineering Series for eight years. F. R. Jones is a graduate of the University of Wisconsin, getting his Master of Science degree at Iowa State University. He also has written "Farm Gas Engines and Tractors" which has been most widely read. M. F. Thurman graduated from Baylor U and received a Master of Science degree from A and M.