

### A PEN PICTURE OF CLEMSON COLLEGE

#### Works for Welfare in Many Ways.

Picture a county estate of 1,500 acres, with stately buildings placed at elevated points to form a great irregular circle of half a mile in diameter. Inclose in this circle a beautiful grove of native oaks, threaded by smooth drive-ways and paths and cement sidewalks. Turn to the north and for a background outline against the sky at a distance of 20 miles, range after range of mountains, the home of the Highlands, of Caesar's Head, Whitesides and other lofty peaks of the Blue Ridge. Think of these mountains as in summer clothed with verdure, standing out black against the horizon, and in winter often white with snow. Take for the southern boundary a river of Indian lineage and follow in its sweeping crookedness the swift and turbulent Seneca as it twists this way and that to mark the confines of the estate. And to this setting add broad expanses of river bottom lands green with corn, steep hillsides sinuous with level grassy terraces and cool pastures with winding brooks and graceful shade trees and you have a picture of Clemson College, not colored to suit the canvas of an artist, but as seen every year by nearly a thousand young South Carolinians who seek, amid these surroundings, an education that will prepare them for self-respecting, self-supporting citizenship.

#### A Storied Spot.

Clemson College is a unique blending of the old and the new, of the historic with the now. Just across the road from the cadet dormitories, which every session house over 800 young men, and in sight of the new electric power station that day or night beats as the industrial heart of the community, is the white columned mansion of the illustrious John C. Calhoun. One can almost picture the great statesman, as with hands behind him he paces the avenues of cedar and oak, putting into form those matchless ideals of patriotism whose fulfillment he never lived to see.

About 50 yards to the rear of the mansion is a queer little one-story room structure with columned porch to match the mansion. This was the "study" of the great statesman, and here were written many of his great orations. Under this little study, which is about 20 feet square, is dug a deep pit in which ice cut in winter was stored for summer use. How the seasons must have changed, for only during one or two winters of the 20 which the writer has spent in the "up country" has ice formed in sufficient thickness to justify such ample storage.

In the old mansion are many historic relics, including a chair used by Gen. George Washington, and a seven-foot mohair-covered lounge on the back of which is carved the American eagle. It is said that the engraving on our coins was copied from this carving.

The old mansion with its historic memories, the peer of the Hermitage, Mount Vernon and Monticello, is a priceless State and national asset, and should be a perennial source of inspiration to succeeding generations of young South Carolinians who are privileged to live for four years in the shadow of its historic walls.

Many are wont to ask why the college does not bear the name of Calhoun instead of the name of his son-in-law, Thos. G. Clemson. The answer is that nowhere does it appear in the records that Mr. Calhoun ever wished or planned the erection of an industrial and technical college on the old homestead. The complete story of Mr. Clemson's part in the founding of the college is too long to be told here.

#### A Vast Plant.

The college tract contains over 1,500 acres. On the property there are 23 principal public buildings, 70 dwellings and 64 minor buildings. The college has in its employ 401 teachers, officers and laborers. Its inventoried property is \$1,327,728.57. The officers of the college send out yearly over 35,000 letters and over 425,000 other pieces of mail matter, most of which give agricultural information.

In addition to the parent station, the college maintains two branch experiment stations—one near Summerville and the other at Florence. One more to be situated in the sand hill section of the State, just as soon as funds will permit, will complete a system representing the principal soil types of the State.

The enrollment has grown from 448 students in 1893 to 834. Originally there were but two courses of study—now there are 13. In addition to these regular degree courses, there is a four weeks' course for farmers and a one-session practical agricultural course extending from October 1 to June 1 for men over 18.

#### Public Service.

But the trustees of Clemson College have not only organized an efficient system of fertilizer inspection and analysis, by which the farmer gets value received from the tax he pays, and built and maintained a great agricultural and mechanical college, but they have gone a step farther than is required by their compact with the people and have sought to return to those who pay the tax in the shape of direct service, all that could be spared over and above the cost of operation and building. The public service has grown as the fertilizer tax has grown, now reaching an annual total of over \$100,000.

Clemson College, with its plant well developed, its patronage assured and overflowing, its lines of public service popular and efficient, has behind it a creditable record of achievement, and before it a future bright with the promise of usefulness to South Carolina.

### CLEMSON'S HANDSOME Y. M. C. A. BUILDING

Association Structure Now Being Built at Agricultural College Will Cost \$75,000, and Will Rank Among Finest in Entire South.

Just north of the textile school at Clemson College there is being reared a magnificent structure that, when completed, will become an important factor in the social and religious life of the student body at the State's agricultural and mechanical college. It is the building of the Young Men's Christian Association, one of the first association structures in the South, and one of the finest college association buildings in the country. It is costing \$75,000 and was made possible by the generosity of Mr. John D. Rockefeller, who donated \$50,000 on condition that \$25,000 more should be forthcoming. The college trustees appropriated \$15,000, which left \$10,000 still to be raised. This sum was made up by the loyalty and contributions from cadets, faculty, alumni and former students.

Work on the building is progressing well and the contract calls for completion before January 1, 1916. The work is not being done by the college, but by contract. The successful bidder is Mr. Thomas W. Cothran of Greenwood. The architect is Prof. R. E. Lee, head of the division of drawing and architectural engineering at Clemson. It is a coincidence that Prof. Lee and Mr. Cothran are both graduates of the class of 1896, the first class to finish at Clemson College.

The building is to be in the Italian Renaissance style of architecture, of vari-colored texture brick, with colored tile inserts, terra cotta and limestone trimmings and red tile roof. The interior finish will be of yellow pine. It is to be two stories in height, with a basement and mezzanine floor. It will have a frontage of 120 feet and will contain about 36,000 square feet of floor space. It will be heated by steam and lighted by electricity.

The basement will contain a large room, 35 by 64 feet, suitable for basketball games, wrestling, exercising, banquets and social gatherings. Adjoining the hall will be a kitchen of ample size with modern equipment, a quick lunch room and private dining room. This will be fitted up in rathskellar style and will appeal to both students and members of the faculty. A store for the sale of cold drinks, candies, etc., located in the center of the basement, completes this feature.

Space is provided for three bowling alleys and for spectators. Two of the alleys will be installed at present.

Bathing facilities will be located in the basement and will consist of a locker room of ample size, shower baths and swimming pool. The pool is to be 21 by 60 feet, a standard size which will permit of official records in swimming and other aquatic sports. It will be finished throughout with ceramic tile.

The main toilet for the building will be located in the basement, adjoining the locker room.

The mezzanine floor will contain spectators' galleries, storage space for the store, a large room for college publications, a committee room, a locker room for visiting teams, a ladies' retiring

room, and a men's retiring room, each with toilet.

The first floor will have as an entrance a loggia 12 feet wide, floored with quarry tile. From this loggia one will enter a large lobby flanked with rooms for games, reading and correspondence, lounging and smoking. A ladies' room for club and church meetings is provided on this floor. The main offices of the building will be located directly in front of the main entrance on the rear side of the lobby.

An auditorium with a seating capacity of 400 is to the rear of the lobby.

The lobby and adjoining rooms are to be fitted out with large, comfortable chairs and lounges and are to be made attractive and homelike. The game room will have French windows opening upon the terrace over the swimming pool.

On the second floor will be a large hall, specially planned and suitably equipped for the use of literary societies and other student organizations.

On the south side of the building nine well equipped bed rooms will be provided, one of which will be reserved for the secretary and one as his guest room. The others will be reserved for the use of the alumni when they visit their alma mater. The north side of this floor will be devoted to Bible study rooms and a hall for the use of the local lodge of Masons.

The entire building is to be made as attractive as possible for the cadets, giving them a homelike place where they can spend their unemployed time pleasantly and profitably. While providing primarily for the cadets, ample provision has also been made for the alumni, faculty and people of the college community.

### SUMMER SHORT COURSES

#### A Pleasant and Profitable Vacation.

Clemson College is this summer offering a four weeks' course in agriculture and cotton grading. The course begins August 9th and ends September 4th.

The school will be arranged so that one can get just what he most needs. During the first week the subject of dairying will be taught, the second week animal husbandry, and the third horticulture. For the last week of the course agronomy, which includes field crops, soils, fertilizers, etc., will be the chief subject.

Any one interested in agriculture will find it to his advantage to attend this school when the subject he is specially interested in is being taught.

A special course for teachers of agriculture has been arranged and four weeks spent at Clemson will result in greatly increased efficiency. Four weeks' instruction will also be given the winners in the Boys' Corn Club work of the State.

Clemson College inaugurates the first summer school in the South for ministers interested in rural affairs. A ten-day course—August 9th to August 20th, inclusive—has been specially designed for them.

The entire equipment of the agricultural department will be at the disposal of those taking the four weeks' courses. The farm, dairy, dairy barn and all the laboratories will be open for use in instruction.

Popular lectures will be given each evening by some member of the faculty or other lecturer prominent in State or national affairs. The college library will be open during the whole four weeks with its 30,000 books and many popular magazines.

Persons wishing to spend a vacation under the direction of a competent faculty, with the advantages of well equipped laboratories, will find Clemson College an ideal place for summer.

#### "Reinforcing" Manure.

Manure is the best of all crop producers, but manure needs "reinforcements" to bring out its greatest value and to supply matter in which it is deficient. Besides, the farms are few and far between that produce enough manure to fertilize all the land, even by the most careful live stock farming and by adding brought feeds to the crops grown and returning all manure to the soil. Manure is especially deficient in phosphoric acid and where a crop is fertilized entirely with manure the addition of acid phosphate will increase the yield. On sandy lands, manure will not contain enough potash to produce the best crops.

### HOG CHOLERA AND HOW TO CONTROL IT

There are two principal methods of preventing hog cholera; one by the use of serum, and the other by taking care to avoid the methods of spreading the disease, which are here outlined briefly.

Hog cholera is spread by failure properly to dispose of the carcasses of dead hogs. Buzzards, dogs and other animals feeding upon these carcasses can carry infection to other premises. All carcasses should be burned or buried immediately, and buzzards should be destroyed in communities where they are not protected by law. In communities where these scavengers are thus protected, the law should be repealed and the birds destroyed.

Another very common method of spreading hog cholera is walking through yards or fields where sick hogs are kept and carrying the infection on shoes and clothing to other premises where healthy hogs are confined. It should be remembered that discharges from hogs infected with cholera are very infectious, and the owners should not go or allow any of their help to go on premises where there are sick hogs. Neither should they allow their neighbors to go among their hogs when cholera exists in the community. Healthy hogs should be cared for by persons who have not been where the disease exists, and no one else should be allowed near the healthy drove.

Cholera may be spread by streams receiving drainage from infected premises, by buying hogs from premises where the disease exists, or from public stock yards, or by failure to isolate newly purchased hogs until their freedom from disease has been ascertained. These three matters deserve careful attention.

When cholera exists in a neighborhood every hog owner should establish a strict quarantine on his individual premises. When the disease exists on adjoining farms hogs should be protected by injection with anti-hog cholera serum.

The sudden death of one or two hogs should lead the owner to suspect cholera. If upon examination of the carcasses cholera lesions are found, all healthy hogs should be moved at once to new lots or pens until they can be injected with serum.

A farmer finding cholera among his hogs should at once apply to the Veterinary Division, Clemson College, for serum, which is to be had at actual cost of manufacture, and should secure the services of his county farm demonstration agent, who has been instructed in the use of serum.

It is the duty of all citizens to see that the State law relative to prompt disposal of carcasses is strictly enforced.

### BUTTERMILK THAT IS BETTER AND CHEAPER

All bacteria do not make trouble and doctors' bills. Some of them make buttermilk and buttermilk is a friend to health. It is a cheap beverage and a good one, and is an excellent food besides. Its nutritive value is high, two quarts of buttermilk being equal to about one pound of beef steak. It has also a good medicinal effect.

Good buttermilk can be made artificially as follows: Add to every gallon of skim milk about half pint of whole milk and enough "starter" or clabber to curdle the mixture in six or seven hours at ordinary living-room temperatures. When the mixture is thoroughly curdled put it in a churn and churn it for half an hour. After churning, cool the mixture down to well water temperature to prevent its getting too sour. After cooling, strain through cheese cloth to remove any lumps or curd.

This simple process will give a good, refreshing, tasteful beverage that is both enjoyable and healthful.

To produce good crops of cotton and corn, frequent and shallow cultivation is necessary. Failure to cultivate properly is one way of farming at a loss.

It is never too late to use the split log drag. This is one of the best implements ever invented for improving roads and, accordingly, making life on the farm pleasanter.

Hogs fattened on peanuts and finished off on corn make hams that rank in quality and flavor with the finest meat that can be obtained.

### TICK ERADICATION.

Great progress was made last year in tick eradication. A larger area (approximately 4,000 square miles) was released from State and Federal quarantine than in any one year since the work was organized along systematic lines. Still greater progress is anticipated as a result of this year's work. This is made possible by the close cooperation of the State, through Clemson Agricultural College, and the Bureau of Animal Industry, United States Department of Agriculture, in their systematic manner in conducting the work, on the one hand, and the hearty cooperation of the live stock owners and progressive citizens of the State on the other.

This work is supervised by Dr. W. K. Lewis, inspector in charge, Columbia, S. C. He and his able corps of assistants are pushing the work with all energy and speed commensurate with the appropriations made by the State and Federal governments, that the entire State may be released from quarantine as soon as possible. Twenty-one counties have been released; the work is in progress, along systematic lines, in ten other counties and will be conducted along preliminary lines in the remaining thirteen counties this year.

In the free areas a great interest is being taken in live stock improvement; pure bred sires are being imported to improve the present strains; more cattle are being fed during the winter months, and with the very satisfactory method of marketing that is being conducted by the South Carolina extension department in cooperation with the department of agriculture in Washington, the live stock industry in these sections is well on to the road of success. In other words, the eradication of the cattle tick is making a profitable live stock industry possible.

The benefits to be derived from this work are of such a far-reaching nature that it behooves every public spirited citizen to lend his moral and active support to those engaged in conducting it, that our grand old State may forge to the front in live stock raising, a position that she is especially adapted for and one that she justly deserves.

### THE COTTON RED SPIDER.

During dry weather one will notice reddish areas on leaves of certain plants. It is especially noticeable on violets. The leaves soon turn brown and become dry and brittle. Many people call it rust, but if one stops to examine into the matter closely he will find little reddish colored mites on the under surfaces of the leaves. The characteristic web can also be easily noticed. This is the red spider. It is a dry weather insect, and if not stopped, it often does serious damage.

The cotton red spider is one of our most important cotton pests during June, July and August. This, so far, appears to be a favorable year, and farmers should watch their cotton for the first appearance of this pest. The damage occurs in spots in the field.

Poke weed and violet plants should not be allowed in and about plantations, while underbrush should be kept down as far as practicable.

As soon as the first infested plants are discovered they should be carefully removed and burned. Blood red spots will show on the upper surface of leaves attacked. If this is not done then the insects will spread from plant to plant and in a short time cause the ruination of a large area of cotton. This migration has to take place on foot, as the insects have no wings. This makes it at once apparent that to a great extent at least it is everybody's own problem, regardless of his neighbors.

Whenever the infestation spreads and the infested spots become larger, one of several sprays may be given.

### Clemson's Graduates.

The one thousand men who have been graduated from Clemson College are holding lucrative and responsible positions in thirty-three States and the District of Columbia, in Cuba, Canal Zone, the Hawaiian, Philippine Islands, Germany and British East Africa. Strong evidence of the qualifications of its agricultural graduates is found in the fact that numbers of them have been given employment by the United States Department of Agriculture, while Clemson engineering men are to be found in the largest electrical corporations in America.

### THE ONE-YEAR COURSE IN AGRICULTURE

Realizing that many young farmers throughout the State could spare neither the time nor the money to take a four-year college course, Clemson College inaugurated three years ago the one-year course in agriculture. Many a young farmer after finishing his home school finds it impossible to take a four-year college course. The one-year course is intended to give the simple scientific principles upon which good farming rests. It begins October 1st and ends June 1st.

Its purpose is to take a young man already a farmer and make of him a better farmer.

The requirements for admission are that the applicant must be 18 years of age, must have worked on the farm for at least three years and have had a common school education through about the seventh grade.

During the three sessions in which the course has been given, 171 young men have been enrolled. These men were between 18 and 30 years old.

In order to assist worthy young men who have accomplished something along agricultural lines, there are 51 scholarships provided for out of the yearly income of the college. These scholarships are worth \$100.00 per session and free tuition and are awarded on competitive examination.

One feature of the course is that it seeks to make community leaders. In addition to agricultural subjects each student is given instruction in parliamentary practice and gets experience in organizing and presiding over meetings, institutes, etc.

It is hoped that in a few years these men will become leaders in all things looking to the good of their communities and of the commonwealth.

### RESULTS OF TOP-DRESSING

#### Best Times to Apply Nitrate of Soda to Corn and Cotton.

Results obtained at the South Carolina Experiment Station show that a top-dressing with nitrate of soda gives good results on cotton, corn and small grains. The increase is most marked during a wet year, because this nitrogen is already in an immediately available form, while the rotting of the organic sources does not proceed as rapidly as usual on account of the excess of moisture in the soil. The amount to apply per acre varies with the fertility of the soil and the previous fertilization, but we would suggest from 50 pounds per acre on poor land up, according to the fertility of the soil.

Early applications are coming into favor. We recommend that the soda be applied to corn when it is between knee and waist high, to cotton just as the shapes begin to form, and to small grain in March. Care should be taken not to sow nitrate of soda on wet plants, because it is likely to scald them. It is best to apply it just after a rain, when the moisture has dried off the leaves of the plants, then cultivate with a mulch forming implement as soon as the ground is dry enough to plow.

### BAGGING GRAPES.

Grapes can be grown in almost any section of South Carolina. After the grapes have set, they should be sprayed with Bordeaux mixture (see circular No. 25 issued by Clemson College), and then be bagged to protect them from disease, birds and bees. Bagging also prolongs the ripening season and after ripening the grapes will hang on the vines for a longer time without spoiling. Strong Manila paper bags (sizes No. 2 and No. 3) should be used so as to resist the weather and the sharp beaks of birds.

The bag should be slipped over the bunch and pinned or wired closely about the stem. A pin hole in the bottom of the bag will drain off the rain water.

An inexperienced hand can put on 500 bags a day, and an experienced worker 2,000. It will pay you to bag your grapes.

Farmers in the coastal plain of South Carolina should remember at this season the value of the bean, which is one of their friends and which appears to be specially adapted in all ways that region.