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AGRICULTURAL AND MECHANICAL
COLLEGES

INCLUDING STATISTICS FOR 1917-18

By

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AGRICULTURAL AND MECHANICAL COLLEGES.

The Report of Agricultural and Mechanical Colleges for 1917-18 exhibits certain deviations from the tendencies shown in previous reports. This is doubtless caused in some measure by the disturbed conditions of the country which have resulted from the war and the subsequent readjustments of peace.

TEACHING FORCE AND STUDENT ENROLLMENT.

The teaching force in the land-grant colleges has increased considerably in number for the year 1917-18, and although many institutions have suffered serious losses from the higher ranks of the teaching personnel, these losses have been overcome in a measure by substitutes.

The student enrollment shows a marked decline for the past year; 122,053 white students were enrolled in 1916-17; this number dropped to 114,913 in 1917-18, or a loss of 7,140. The enrollment of colored students was 9,340, or 2,012 less than in 1916-17.

The divisions which suffered the most were those of agriculture and mechanic arts. The division of home economics showed a gain, likewise the special and the short courses.

A striking decrease is apparent in the number of students who received first degrees. In 1916-17 those who received the bachelor's degree numbered 11,361; in 1917-18 only 7,741 were graduated. The most striking loss appears in the graduate departments; 1,313 received advanced degrees in 1916-17; the number fell to 471 in 1917-18.

MILITARY EDUCATION.

Notwithstanding the decline in general attendance the enrollment in the Reserve Officers' Training Corps courses was more than twice that of the year preceding. The total enrollment in the usual military training courses has not appreciably changed.

INCOME.

The report shows little variation in the amount and the growth of income. This fact is significant, as it indicates that the land-grant institutions are on stable foundations, which enable them to pass through periods of crisis with much less harm than many institutions which rely primarily on private gifts and tuition fees.

The report includes for the first time the income spent under the conditions of the Smith-Hughes Act for vocational teacher training.

This money is not administered by the land-grant colleges, but inasmuch as the majority of teachers receiving this fund are stationed at the land-grant colleges the fund has been included as a part of the total income of the land-grant institutions.

CHANGES IN THE 1917-18 REPORT.

More specific information is offered with respect to the scope of specialization in the main divisions of instruction. The table on page 5 of the last report is continued for this year and followed by the revised form. The new tabulation is not so complete as is desired, but it is expected that the colleges will give more definite information regarding the different kinds of specialization permitted in the different divisions.

Specialization in agriculture is classified as follows: Agricultural education, agricultural engineering, agronomy or farm crops, animal husbandry, dairy husbandry, forestry, horticulture, pomology, poultry husbandry, rural economics, soils and fertilizers, veterinary science, general agriculture, and miscellaneous. Under engineering and mechanic arts are given: Civil engineering, electrical engineering, mining engineering, textile engineering, chemical engineering, sanitary engineering, general engineering, and unclassified. Under home economics are found: Foods and cookery, textiles and clothing, industrial management, cafeteria management, teachers' course, and general course. Besides these divisions there are departments of architecture, pharmacy, general science, etc.

ALASKA AGRICULTURAL COLLEGE AND SCHOOL OF MINES.

On May 3, 1917, the legislature of the Territory of Alaska passed a law establishing the Alaska Agricultural College and School of Mines in harmony with the act of Congress passed March 4, 1915. Sixty thousand dollars were appropriated for buildings. The college is located at Fairbanks, about 400 miles from the coast. In 1918 the main building was erected, but inasmuch as there was a failure to appropriate funds for administration and general maintenance the college will have to postpone its opening until the next session of the legislature in 1921. The Territory of Alaska is the last of the States and Territories of the United States to accept the conditions of the Morrill Act in behalf of education in agriculture, mechanic arts, and home economics.

UNITED STATES AND TERRITORIAL LAWS PERTAINING TO THE ESTABLISHMENT OF THE ALASKA AGRICULTURAL COLLEGE AND SCHOOL OF MINES.

The following laws touching the establishment of the Alaska Agricultural College and School of Mines are herewith appended:

AGRICULTURAL AND MECHANICAL COLLEGES. 7

ACT OF CONGRESS OF THE UNITED STATES.

AN ACT To reserve lands to the Territory of Alaska for educational uses, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That when the public lands of the Territory of Alaska are surveyed, under direction of the Government of the United States, sections numbered 16 and 36 in each township in said Territory shall be, and the same are hereby, reserved from sale or settlement for the support of common schools in the Territory of Alaska; and section 33 in each township in the Tanana Valley between parallels 64 and 65 north latitude and between the one hundred and forty-fifth and the one hundred and fifty-second degrees of west longitude (meridian of Greenwich) shall be, and the same is hereby, reserved from sale or settlement for the support of a territorial agricultural college and school of mines when established by the legislature of Alaska upon the tract granted in section 2 of this act: *Provided,* That where settlement with a view to homestead entry has been made upon any part of the sections reserved hereby before the survey thereof in the field, or where the same may have been sold or otherwise appropriated by or under authority of any act of Congress, or are wanting or fractional in quantity, other lands may be designated and reserved in lieu thereof in the manner provided by the act of Congress of February 28, 1891 (Twenty-sixth Statutes, p. 791): *Provided further,* That the Territory may, by general law, provide for leasing said land in area not to exceed one section to any one person, association, or corporation for not longer than 10 years at any one time: *And provided further,* That if any of said sections, or any part thereof, shall be of known mineral character at the date of acceptance of survey thereof, the reservation herein made shall not be effective or applicable, but the entire proceeds or income derived by the United States from such sections 16 and 36 and such section 33 in each township in the Tanana Valley area hereinbefore described, and the minerals therein, together with the entire proceeds of income derived from said reserved lands, are hereby appropriated and set apart as separate and permanent funds, which shall be expended only for the exclusive use and benefit of the public schools of Alaska, or of the Agricultural College and School of Mines, respectively, in such manner as the legislature of Alaska may by law direct.

Sec. 2. That section numbered 6, in township numbered 1 south of the Fairbanks base line and range numbered 1 west of the Fairbanks meridian; section numbered 31, in township numbered 1 north of the Fairbanks base line and range numbered 1 west of the Fairbanks meridian; and section numbered 36, in township numbered 1 north of the Fairbanks base line and range numbered 2 west of the Fairbanks meridian be, and the same are hereby, granted to the Territory of Alaska, but with the express condition that they shall be forever reserved and dedicated to use as a site for an agricultural college and school of mines: *Provided,* That nothing in this act shall be held to interfere with or destroy any legal claim of any person or corporation to any part of said lands under the homestead or other law for the disposal of the public lands acquired prior to the approval of this act: *Provided further,* That so much of the said land as is now used by the Government of the United States as an agricultural experiment station may continue to be used for such purpose until abandoned for that use by an order of the President of the United States or by act of Congress.

Approved, March 4, 1915.

ACTS OF THE TERRITORIAL LEGISLATURE OF ALASKA.

AN ACT To accept the grants of land and of money for the benefit of an agricultural college and school of mines for the Territory of Alaska.

Be it enacted by the legislature of the Territory of Alaska:

SECTION 1. The grants of lands for an Agricultural College and School of Mines for Alaska authorized by act of Congress approved March 4, 1915, and of moneys for the benefit of State and Territorial colleges of agriculture and mechanic arts authorized

by acts of Congress approved August 30, 1890, and March 4, 1907, being made subject to the legislative assent of the several States and Territories to the purpose of said grant, the assent of the Territory of Alaska is hereby given to the purpose of said grants and the conditions of the above specified acts of Congress are hereby accepted by the Territory of Alaska, and the treasurer of the Territory of Alaska is hereby designated as the officer to whom said moneys shall be paid.

Sec. 2. In accordance with the provisions of the act of Congress approved August 30, 1890, the Alaska Agricultural College and School of Mines is hereby designated as the beneficiary under the provisions of said act, said college to be located by the board of trustees within the boundaries of the four sections of land specified by the said act of Congress approved March 4, 1915, to be reserved and dedicated to use as a site for said institution.

Approved, May 3, 1917.

AN ACT For the establishment of the Alaska Agricultural College and School of Mines in accordance with the provisions of the act of Congress approved March 4, 1915, and to grant a charter to the Alaska Agricultural College and School of Mines.

SECTION 1. *Be it enacted by the legislature of the Territory of Alaska,* That as soon as the trustees are appointed as set forth in section 2 of this act they and their successors in office shall be and are hereby constituted a corporation under the name and style of "The Alaska Agricultural College and School of Mines," and by that name shall be capable in law of suing and being sued, taking and holding real and personal property, contracting and being contracted with, adopting and using a corporate seal and changing such seal at their pleasure, and doing and causing to be done all matters necessary for the purposes of any function as herein set forth.

Sec. 2. *And be it further enacted,* That the government of the Alaska Agricultural College and School of Mines shall be vested in a board of eight trustees, citizens of the Territory of Alaska, who shall be appointed by the governor thereof by and with the advice and consent of the Senate, and who shall serve without compensation, but shall be paid their reasonable necessary expenses while engaged in the discharge of their official duties. Two of said trustees shall be appointed to serve until the first Monday of April, 1919; two to serve until the first Monday of April, 1921; two to serve until the first Monday of April, 1923; two to serve until the first Monday of April, 1925; and their successors thereafter shall be appointed for a term of eight years from the first Monday of April of the years in which they are appointed, to serve until their successors are appointed and have qualified, and any vacancy in the board shall be filled by appointment made in the same manner as in the original appointment, but only for the unexpired term thereof.

Sec. 3. *Be it further enacted,* That the Alaska Agricultural College and School of Mines shall hold all properties and all funds herein granted to it and all other property and funds hereafter acquired by it, and shall use the same for the purpose of conducting a college where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture, the mechanic arts, and household economics in order to promote a liberal and practical education. All departments of said institution shall be open to both sexes for equal educational opportunities. The said trustees are hereby empowered to conduct a college extension service, the leading object of which shall be to carry information on rural life subjects to the people of Alaska.

Sec. 4. *Be it further enacted,* That the trustees of the Alaska Agricultural College and School of Mines as herein constituted shall meet and organize, and for the orderly conducting of the business of said corporation said trustees shall have the power and authority, from time to time, to elect such officers as may be required and prescribe their duties and tenures. The meetings of the board of trustees of the college shall be open to the public and the press, and all records of such meetings and of all proceedings

of such board shall be open to the inspection by the public and the press at reasonable times thereafter; *Provided*, That said board may hold executive sessions, the findings of said sessions to be made a part of the record of the proceedings of said board.

SEC. 5. *Be it further enacted*, That the board of trustees of said corporation shall have full power and authority to determine the time and place of meeting and the manner of notifying its members to convene at such meetings, and also to elect by a majority vote of the whole board, an executive head of the said college, who may attend all meetings of the board. The said board of trustees shall establish the position and fix the salaries and emoluments of the executive head of the college, all heads of departments, professors, teachers, instructors, and other officers; and the said board of trustees is further empowered to make or ordain, as the occasion may require, reasonable rules, orders, and by-laws not in conflict with the Constitution of the United States nor the laws of the Territory of Alaska, with reasonable penalties, for the good government of the said corporation, for the regulation of their own body; and also, by and with the advice of the executive head of the college, to determine and regulate the course of instruction in said college; but no instruction, either sectarian in religion or partisan in politics, shall ever be permitted in any department of the college; and no sectarian or partisan test shall be allowed or exercised in the appointment of trustees or in the appointment of any instructors or other officers of the college, or in the admission of students thereto, or for any purpose whatever; and the board of trustees shall confer such appropriate degrees as they may determine and prescribe. The trustees shall have the care, control, and management of all the real and personal property and all moneys of the said college, and shall keep a correct and easily understood record of the minutes of every meeting and all acts done by them in pursuance of their duties, and shall cause to be kept a complete record of all money received and disbursements thereof. They shall make a written report to the legislature of the Territory of Alaska at the beginning of its regular sessions of the conditions of the college property, of all receipts and expenditures, and of the educational and other work performed, provided, nevertheless, that no corporate business shall be transacted at any meeting unless at least five of the trustees are present.

SEC. 6. *Be it further enacted*, That the executive head of the Alaska Agricultural College and School of Mines shall have authority, subject to the approval of the board of trustees, to give general direction to the work of the institution in all of its departments. He shall have power to appoint the heads of departments and such other professors, assistants, instructors, tutors, and other officers of the said college to the positions established by the board of trustees; and he shall define their duties, and supervise the performance thereof, except that the dean of the college shall be nominated and appointed by the majority vote of the board of trustees. The trustees shall have power to remove from office any of the officers of the institution, by a majority vote of the whole board, when in their judgment the good of the college requires it, provided also, however, that the power to suspend and expel students for misconduct or other causes and to reinstate same is vested solely in the executive head of the college.

SEC. 7. *Be it further enacted*, That all powers, duties, and obligations devolving upon the said Alaska Agricultural College and School of Mines, in connection with or by reason of the various and several acts of Congress of the United States of America now enacted or which may be hereafter enacted in relation to agricultural colleges and agricultural or mining experiment stations, extension work in agriculture and instruction and extension work in the mechanic arts, are hereby granted and conveyed to and imposed upon the Alaska Agricultural College and School of Mines, to be enjoyed and carried out by it in compliance with the acts of the Congress of the United States and of the legislature of the Territory of Alaska, or, as may appear to the best interests of the purpose or purposes for which they were created; and the Alaska

Agricultural College and School of Mines is hereby named and appointed by the legislature of the Territory of Alaska to receive all moneys, appropriations, and grants now or hereafter coming to the Territory of Alaska from the United States Government, under any acts of Congress now in force or hereafter to be passed for the purpose or purposes herein named.

Sec. 8. That for the purpose of constructing buildings, for the purchase of equipment such as is necessary to the institution herein named, the sum of \$60,000 is hereby appropriated from the treasury of the Territory of Alaska; *Provided*, That one-half of this said amount only shall be turned over to the board of trustees of the Alaska Agricultural College and School of Mines during the calendar year of 1917.

Approved May 3, 1917.

AN ACT To provide for leasing the school lands granted by law for the benefit of the Alaska Agricultural College and School of Mines.

Be it enacted by the legislature of the Territory of Alaska:

SECTION 1. That the trustees of the Alaska Agricultural College and School of Mines are hereby authorized to execute, in the name of the Territory for mining, agricultural, or other purposes, leases to the land granted for the benefit of an agricultural college and school of mines for Alaska by the act of Congress of March 4, 1915, for such time and for such rent or royalty as to them shall seem just, subject, however, to the terms and conditions that are now or may hereafter be prescribed by law.

Approved May 1, 1919.

AN ACT Authorizing the Governor of Alaska to make all necessary certificates to entitle the Territory of Alaska to the grant of moneys for the benefit of State and Territorial colleges of agriculture and mechanical arts authorized by acts of Congress approved August 30, 1890, and March 4, 1907, and declaring an emergency.

Be it enacted by the legislature of the Territory of Alaska:

SECTION 1. That the Governor of Alaska is hereby authorized to make all certificates required by law or the regulations of the Department of Agriculture or the Department of the Interior necessary to be made in order to entitle the Territory of Alaska to the grant of moneys for the benefit of State and Territorial colleges of agriculture and mechanical arts, authorized by acts of Congress approved August 30, 1890, and March 4, 1907.

Sec. 2. That an emergency is hereby declared to exist, and this act shall take effect and be in force from and after its passage and approval.

Approved May 3, 1919.

THE ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

The thirty-second annual convention of the Association of American Agricultural Colleges and Experiment Stations was held in Baltimore, Md., January 8-10, 1919.

The program, on which appeared the Hon. D. F. Houston, Secretary of Agriculture, was one of unusual significance, inasmuch as reconstruction problems in agricultural and technical education were discussed.

The following extracts contain some of the more important statements pertaining to the educational policies of the land-grant institutions. Certain summaries and recommendations are included also.

For full report of the Baltimore meeting see the proceedings of the thirty-second annual convention of the Association of American Agricultural Colleges and Experiment Stations.

REPORT OF THE COMMITTEE ON COLLEGE ORGANIZATION AND POLICY.

(Presented by President W. M. Riggs, of South Carolina.)

When America entered the war the organization and policy of the land-grant colleges immediately became centered in the utmost effort to help win the war. The action of the Federal Government in establishing the Student Army Training Corps merely enlarged the use of the college machinery for military purposes. The training of officers and of men for special service, plus efforts to help increase the food supply, have constituted almost the complete round of our task this year. It will not profit much to discuss the wisdom of the "S. A. T. C." plan. The cessation of hostilities has brought new problems of transition. We are handicapped by reason of the reduction of our staffs. Each institution is adapting itself as best it can to the situation.

The act creating the land-grant colleges was passed during a great national crisis much like the one through which we now are passing. That the intent and purpose of the act was not only the advancement of the interests of the several States, but the promotion of the Nation's security, is evident by the special provisions for the encouragement of agriculture, the mechanic arts, and military science—all elements of preparedness. The present war has shown the wisdom of such a policy, and in addition it has called attention to another important factor from the standpoint of national security—the economic use of food and clothing. The land-grant colleges through their departments of home economics have dealt with this problem, but the war has shown that it is a much larger problem than it was formerly regarded.

The land-grant colleges, therefore, are keenly interested in the promotion of a national program of education. This program includes the promotion of (a) agriculture; (b) industry; (c) the economic use of food and clothing, including in each case the social and economic problems involved. The service includes also a conspicuous share in the Nation's program for military training, including the necessary physical education.

Your committee desire to call attention to matters which to us seem in need of serious and immediate consideration.

1. *An agricultural program.*—The all-important problem is the development of a more comprehensive, definite, and inclusive program for the improvement of agriculture and country life. We have many programs emanating from the active agencies of agricultural development but we have no unified program. We need to relate our American agricultural plans to the new world demands. Our colleges surely should have a good deal to say about this program, and we ought to be particularly well equipped to give counsel concerning the great needs of our agriculture and country life and the manner in which they may be met. A recent letter sent to over 100 men prominent in agricultural leadership in this country, perhaps two-thirds of them members of the staffs in our agricultural colleges, brought replies from the majority containing material of the utmost suggestiveness and value. There was practically unanimous agreement as to the need of a more comprehensive agricultural policy and the breadth and scope of the suggestions made are a splendid commentary upon the intelligent foresight and keen insight of our agricultural leaders.

2. *An industrial program.*—As land-grant institutions we are concerned with a definite agricultural program, but we are equally concerned with a definite industrial program, and while our institutions have not been called upon so extensively by

industry as by agriculture, the need for cooperation in industrial life, as in rural life, is very great. Has the time not arrived when an industrial program, broad enough in scope to unify the efforts of the various independent agencies engaged in the promotion of industry and the interests of its workers, should be formulated?

3. *The food supply the field of the agricultural college.*—It is almost a truism that our agricultural colleges have in the past dealt very largely with the problems of producing food and other agricultural raw materials. Research and teaching in the economic and social fields have been relatively recent developments. Many of our institutions have for years rendered a very large service through the departments of home economics in helping to solve the problem of food use in the home. The war, however, has carried us even farther into the whole field of food supply. Your committee believe that the time has come for our agricultural colleges to plan to include in their programs of research, of teaching, and of extension, the entire range of food needs and resources, of food production, of food distribution, of food manufacture, and conservation, as well as the household use of food; and we include all soil-grown products in the province of our activities. This policy places the land-grant college squarely before the public as the one State-supported educational agency that proposes to do all that an educational institution can do, in both the technical and economical aspects of all subjects relating to the food supply.

4. *Enlargement of research.*—This broad scope of service of the agricultural colleges calls for a very great enlargement of investigational work. We should have more information concerning our food needs and the possibilities of our food supply. We should greatly enlarge research in home economics. We should do more in a scientific way in the major problems connected with the conservation of food and the other raw materials of agriculture. The war has called conspicuous attention to the need for scientific research in the field of engineering. Some of the land-grant colleges have done notable work in this direction and many rendered valuable service during the war emergency. To insure its continuation and expansion, provision should be made at an early date for the support of this work.

5. *Investigations in the economic and social field.*—It is in the realms of economic and business problems on the one hand, and of the country life field on the other hand, that we find perhaps the greatest need for an extension of investigational work. These fields belong particularly to the land-grant college, but lack of funds prevents enlargement of scientific research, especially in connection with the complex machinery of the economical and fair distribution of farm products, and also in the still more-complex and less clearly defined field of country life.

6. *The land-grant colleges and democracy.*—The efficiency of democracy turns in the last analysis upon the character of the leadership on behalf of the common welfare. We must enlarge our vision of the type of training that we will give our students. Heretofore we have been too content to make them proficient in their technique. We have laid too little emphasis upon the purpose to make the specialist understand his real service to society and his obligations to the democratic commonwealth. For the same reason we must come into closer touch with the world-wide movement for truly democratic education. We doubt if there is any other part of the American educational system so thoroughly democratic as is the work of the land-grant colleges.

The extension service frankly aims to reach every man on the land. We emphasize the importance of our teaching of better methods of production, and should not minimize our teaching of the principles of a sound and just method of marketing, credits, and other forms of farm business. Moreover, has not the time come when the land-grant colleges should seriously undertake extension service to the industrial worker? The task is difficult, but that is no reason why the land-grant colleges should not become veritable fountainheads of knowledge and of inspiration for all classes in the commonwealth, in behalf of a true democracy, political, economical, and social.

7. *Leaders in a democracy.*—On the teaching side, both on the campus and in the field, and in all departments of the land-grant colleges or universities, we need to have a very definite purpose in the training of men and women for leadership, in order that we may bring to bear upon the problems of our progressive democracy the informed mind and the clear insight of our best young men and young women.

8. *Army overseas educational commission.*—We would call especial attention to the proposed work of the Army overseas educational commission, and to the evident desirability of close cooperation between the commission and the land-grant colleges. The problem of wise vocational guidance to soldiers, many of whom look forward to different occupations than they have heretofore followed, must have our thought and cooperation. It is especially incumbent upon us to provide special opportunities to our own students and alumni in war service to rehabilitate themselves educationally on their return to America and before they resume active occupations.

9. *An educational program.*—An educational program, like an agricultural program, is in the making. What part are we to take in it? The time has arrived for the coordination of this part of our system of agricultural education into a real unit, and its further coordination with our general agricultural policy. The most important step in this direction that we can take as an association is to seek a closer cooperation of the agencies of agricultural education already in existence. We are already required to deal with the States Relations Service in the Department of Agriculture as well as with other bureaus in the department; with the Bureau of Education in the Department of the Interior; with the Federal Board for Vocational Education; and in many States, in addition, with the State boards or commissioners of education. In almost every State there are relationships still to be worked out with the administrative agencies such as the State board or commissioner of agriculture, the State board of health, the bureau of animal sanitation, and so on; and, last but not least, with the rapidly growing system of county farm bureaus, which in some States are already organized as public agencies not under direct control of the college. The relationship of the authority and activities of all these bodies is a most puzzling thing to follow. Vigorous action should be taken looking toward coordination of their work.

In order to carry out, as far as practicable, the suggestions that have been made by your committee, we present the following resolutions:

Resolved, First. That we urge the closest possible cooperation at this time among all agricultural agencies and organizations, public and private, in a supreme effort to prepare a more adequate program for the development of American agriculture and country life.

Second. That we recommend that, under the general guidance of the executive committee of this association, each of its standing committees, together possibly with committees especially appointed to cooperate in preparing for the next meeting of this association, report concerning such changes in the work and activities of the land-grant colleges as shall enable them to adapt themselves more completely to the demands of the reconstruction period. Specifically, we desire to have laid before this association plans for the enlargement of the field of research in the whole realm of food supply, in the economic and social aspects of agriculture and in engineering. We further desire plans for the enlargement of the extension service to provide for the needs of the industrial worker. We desire to have before us a statement of the need and form of Federal appropriations for these purposes, as well as suggestions for more complete correlation of research effort as between the different institutions and between all of them and the Federal departments. We seek light on plans for the wider development of training in the problems of citizenship for all students in all divisions of our land-grant colleges.

Third. That we urge upon the faculties of all the institutions in this association the need of very great emphasis being laid upon enlarging the opportunities afforded in courses of study, both for degrees and in short courses, dealing with fundamental

problems of a democratic society the world over, the need of extension of the teaching in these fields. We further urge the need for a reexamination of present methods for admission with a view possibly to the adoption of a qualitative test and to the end that no worthy and qualified individual shall be deprived of the opportunity for collegiate training up to the limit of his ability and resources.

Fourth. That we urge the institutions in this association to form the closest possible relationships with the work of the Army overseas educational commission.

Fifth. That we suggest that the executive committee take steps to secure the coordination of the authority and activities of the various National and State departments, bureaus, and boards that deal financially or otherwise with the land-grant colleges.

Respectfully submitted for the committee,

K. L. BUTTERFIELD,
Chairman.

THE REPORT OF THE COMMITTEE ON INSTRUCTION IN AGRICULTURE.

One of the leading objects of the committee on instruction in agriculture was to evaluate the experiences gained during the war emergency. The following paragraphs contain the more important observations and suggestions:

Summary and suggestions.—The instructional work of the agricultural colleges called for less revision to meet the war emergency than that of any other class of higher educational institutions. For years they had been teaching food production, farm management, veterinary practice, military tactics, and the sciences related to these practices. A little more emphasis on the production of grains for human food, a little on modifications in crop rotations and in farm practices to meet the labor and fertilizer shortages, a few additions to the special courses and short courses relating to these changed conditions and on the more general use of farm-power machinery—these were about the only modifications in the college instruction in agriculture. In other lines of work—extension teaching, farm bureau organization, service on emergency commissions, and the like—there were more radical departures from the normal program. * * *

But it should not be assumed that the college authorities were entirely satisfied with what they were able to do toward meeting certain emergency demands made upon them. They realized that many things needed to be done that could not be done while the war was on, and so were not attempted. Now that fighting has ceased and the colleges are returning to a peace basis, they may have time to give to some of the following considerations:

1. *Vocational instruction.*—One thing clearly demonstrated by the war was the weakness, or perhaps we should say the lack, of vocational training and vocational leadership. This was true not only in the mechanical trades, but also in agriculture. There was a large demand that could not be filled for operators of farm-power machinery, for leaders in home and school garden enterprises, for county agricultural agents, and for teachers of vocational agriculture. In the making of plans to overcome this weakness, so far as it concerns agriculture, the college of agriculture should take a prominent part. Much of the actual vocational teaching, it is true, will be done in schools below college grade, but the colleges should certainly have a strong influence in shaping policies. If they are to do this, they must now be alert to occupy the position of leadership that belongs to them. They are State institutions, many of them connected with State universities having direct organic relationship with the public school systems, and so will be in a position to influence the development of vocational instruction in at least three ways: (1) By assisting the public schools officers in plan-

ning and developing vocational courses and laboratories; (2) by assisting in preparing subject matter; and (3) by training teachers for this work.

The development of work under the Smith-Hughes Act will also have a strong bearing on the relationship of the colleges of agriculture to vocational instruction in agriculture and will compel them to give consideration to it in their entrance requirements and their college courses of instruction, particularly with reference to the training of teachers for this work.

2. *Training teachers of agriculture.*—In view of the provisions of the Smith-Hughes Act the committee pointed out the responsibility of the land-grant colleges in the training of teachers of agriculture and emphasized “the importance of building up strong departments of agricultural education.”

3. *Instruction in rural economics and rural sociology.*—The importance of strengthening the work of the agricultural colleges in the field of rural economics was forcibly demonstrated during the war. There were persistent demands for information concerning the cost of producing milk, wheat, rice, cotton, and other farm products, but we were compelled reluctantly to admit not only that reliable cost statistics were not available, but also that we were not agreed as to a method of determining such costs.

Marketing is another branch of rural economics that has been too long neglected by the agricultural colleges. Farmers are criticizing these institutions for giving so much attention to production and so little to the grading, standardization, packing, shipping, and marketing of products. We believe that in a measure this criticism is merited and that the colleges should take prompt steps to strengthen their departments of rural economics.

Closely related to the marketing problems are those of rural cooperation, which thus far the colleges of agriculture have hardly begun to study. Farming is almost the only business or occupation that is not effectively organized to present its claims; farmers, the only important group that has failed, with a very few notable exceptions, to cooperate for the promotion of its financial interests. This, too, is a field that the colleges of agriculture should survey and cultivate intensively.

The war has also intensified the social problems of rural communities. Hundreds of thousands of young men in the Army and of young women in industry have acquired new standards of life. The war has brought new institutions into country life, some of which may have a permanent place. War activities have aroused the community spirit and a new sense of the possibility of a better social organization. Extension workers, teachers, and other trained leaders of rural affairs are realizing the need of a more adequate knowledge of human nature and of a scientific approach to the social organization of country life. As yet there has been no general recognition by colleges and rural secondary schools of the need for instruction in rural social problems. The agricultural colleges, with their facilities for research and their extension organizations reaching more and more effectively into every rural community, are not only preeminently fitted, but they have a distinct obligation to take the lead in studying these problems and in giving comprehensive consideration to them in the curricula for training rural leaders.

A. C. TRUE,
J. F. DUGGAR,
G. A. WORKS,
For the committee

POST-WAR DEVELOPMENT OF NATIONAL AGRICULTURAL POLICIES AND OF AGRICULTURAL RESEARCH.

Dr. A. C. True, in his report as bibliographer of the association, presented a list of 77 British, French, and American publications which treat on national policies regarding agriculture, forestry, and the placement upon the land of men recently in the national service.

The most important contributions come from England and her colonies. Special mention is made of the Report of the Agricultural Policy Subcommittee of the Ministry of Reconstruction of Great Britain, which plans a reconstruction of the agricultural system. The report of the Association Nationale d'Expansion Économique de France emphasizes the unity of agricultural and industrial interests.

ADDRESS OF PRESIDENT DAVENPORT.

President Eugene Davenport, in his paper discussing the need of "A National Policy in Agriculture," called attention to the serious neglect of the farmers' interests. He pointed out—

That considerations of fairness and of public safety both demand a higher regard for the affairs and interests of the open country and for the welfare of the farmer and his family; that in a real democracy the farmer must stand higher than hitherto in public esteem, not because of demands he may make upon society but by reason of his worth and his service; and that he should count for more in the management of public affairs not administratively, in which he has little skill, but in matters requiring counsel, in which he is comparatively wise and relatively unprejudiced.

Agriculture, whether considered as a profession or as a mode of life, has never figured adequately in world affairs, being regarded by publicists mainly as the source of cheap food for cheap labor and of raw materials good for commerce and for manufacture, both convenient for holding the balance of trade upon the right side of the ledger. The farmer himself has been generally considered as an unskilled laborer, a humble producer rather than a typical citizen.

One of the most important needs of the farmer is an equal chance with his city brother in obtaining the necessary educational privileges. The farmer—

will probably say first of all that he wants better educational opportunities for his children, for as matters stand now they must leave the parental roof at a tender age or else he must uproot his home, abandon his business, and go to town if his children are not to fall behind those of the butcher, the baker, and the candlestick maker—to be more specific, of the carpenter, the plumber, and the day laborer.

But we have the Smith-Hughes bill which in itself is evidence that the public has not only recognized but acknowledged the conditions and begun to correct them—in a wise way too, for in a democracy the people must take the lead or at least carry a part of the burden of all progress. This plan which we have begun is a logical extension of the land-grant idea into the domain of secondary education.

We are evidently headed in the right direction at this point, but our progress will be insufficient until we succeed in providing for the children of the farm as wholesome, as adequate, and as cultural, if not as varied, educational opportunities as are provided in the most-favored cities. There are obstacles to be overcome of course, chief of which are the low tax-paying ability of the open country as compared with

the congested city, and the high per capita cost of instruction. But if we are to remain a democracy and be safe, this burden must in some way be assumed by the public and not remain a permanent handicap upon the profession of farming. If it is not so assumed as a national policy and as a part of a national plan, even to the extent of heavily subsidizing rural education, it is inevitable that we shall ultimately have a peasant population on the farms, and colleges such as ours will have no students of collegiate grade except from among land-holding city residents. It requires no prophet to foresee that when such a time comes democratic institutions will begin to crumble at the foundations.

Fundamentals of a national policy.—Among the achievements necessary to insure the proper development of American agriculture whether from a private or a public point of view, the following at least are of sufficient significance to be considered as fundamental in a national policy:

First. Subsidization of country schools to an extent that will insure to every child born upon the farm the opportunity of a good high-school education admitting to college, with choice of differentiation along agricultural, mechanical, commercial, scientific, or literary lines—and this without leaving the father's roof or breaking up the home and the business.

Second. Public recognition of the fact that the farmer is neither a capitalist nor a laborer, as the terms are understood in the commercial world, but a managing operator of a small business of which the home and the family are integral parts, and therefore entitled to stand in the public esteem as a typical democrat, not as a "rube," or even as an eminently useful laborer that should be "contented with his lot."

Third. Recognition of the fact that the American farmer, as a typical citizen representing our largest and most fundamental industry, and as our greatest home builder, is entitled to an income comparable with his labor, his investment, and his managerial skill.

Fourth. The assurance of this income, not by arbitrary price fixing in defiance of the economic law of supply and demand, not by force, but by conference between producer, distributor, and consumer.

Fifth. Requirement by law of minimum housing conditions upon rented farms, such conditions to be maintained under a system of adequate inspection.

Sixth. The obligation not only to maintain but to increase the fertility of land, this obligation to be equally binding upon landlord and tenant and enforced by public license.

Seventh. Recognition of the fact that as between the owner and the operator of the land the sympathy and support of the public should be with the operator.

Eighth. Recognition of the fact that as between the owner-operator, the tenant, and the speculator, the sympathy and support of the public should be with the owner-operator as the typical farmer.

Ninth. The elimination from the public mind of the idea that tenantry is to be regarded in America as typical land occupancy or as the ideal road to ownership, theories for nationalization and mutualization of land to the contrary notwithstanding.

Tenth. The appropriation of public funds for financing young men in prospective ownership as soon as they shall have fully established a reputation for thrift and shall have accumulated say 10 per cent of the purchase price of productive lands.

Eleventh. The establishment of interest rates on funds loaned upon land for home-building purposes that shall be based upon those of the most favorable bond issues, not upon current banking rates for short-term loans—rates that can not be generally realized in farming and that ought not to be realized in the business of producing the staple foods.

Twelfth. Discouragement of speculation in land, by means of graduated taxation, and if necessary by prohibiting the accumulation of large numbers of farms or other

acquisition of land with no intention of occupancy; in other words, the absolute dissociation of real estate speculation from farming and from the production of the food of the people. If we are to retain the principle and practice of private ownership, we must not abuse the privilege.

Thirteenth. Recognition of agriculture in all its phases as a matter of deep public concern, whether regarded as the machinery for the production of the food of the people or as the means of providing ideal conditions for the rearing of children.

Fourteenth. Finally, the determination to maintain upon the land the same class of people as are those who constitute the prevailing type among the mass of American citizens.

REORGANIZATION OF THE ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

The following report by W. E. Stone, president of Purdue University, gives the principal reasons for a reorganization of the association:

The presidents of the land-grant colleges have had under careful consideration the subject of a more representative and efficient organization of these institutions.

Without disparagement of the Association of American Agricultural Colleges and Experiment Stations, or any criticism of those who have so ably conducted its affairs, it is self-evident that the present form of organization has become too complex: that it is no longer well adapted to the needs of the land-grant colleges as a whole.

The ideal organization of the land-grant colleges should have the prime purpose of securing unity of action on all matters pertaining to the common aims of the institutions in their relations to the Government and the public. No other group of institutions has so much in common; none other has so much at stake in the action of Congress and legislatures; none is so much in need of a strong central organization for promoting their mutual interests by concerted action.

Originally our association was adapted to this end, but through the growth of attendance and development along certain lines, it is apparent that it no longer represents the varied interests of the colleges or meets the fundamental need for deliberation and action upon questions of institutional administration and policy. The annual meetings bring out an attendance too large, too varied in its interests, and too limited in authority to secure careful discussion and responsible action on questions vital to the welfare of the land-grant colleges.

The present organization of the association provides no place for many important interests in the land-grant colleges. Were it to do so, however, it would only increase the present confusion and difficulties as regards careful discussion and action on institutional affairs as a whole; the organization separates authority from responsibility; the very name of the association is indicative of its one-sidedness.

Having these things in mind, the presidents of the land-grant colleges believe that it is now necessary to secure some form of organization which, without interfering with the general features of the association now existing, shall promote its efficiency. They see two ends to be attained—namely, to fix the responsibility for legislation relating to the policies and administration of the land-grant colleges upon those who are charged with the management of these institutions, and to retain those present features of the organization which have become its outstanding characteristics—namely, the meeting in sections for the discussion of matters pertaining to the working of the various departments of the colleges.

To this end the presidents recommend that a reorganization of the association be provided for, which shall accomplish the following ends:

1. The name to be the Association of Land-grant Colleges.

2. The legislative functions of the association to be lodged with the presidents of the land-grant colleges belonging to the association.

3. The retention of sections as at present for discussion and for recommendation and report to the legislative body of the association.

The presidents are deeply convinced that such a reorganization will be to the best interests of our institutions in all departments. They urge the adoption of this recommendation and the appointment of a committee to arrange the details of putting the same into effect with the least possible delay.

At a later meeting the committee on the revision of the constitution of the association recommended among other things the changes indicated in the preceding paragraphs.

According to the constitution these recommendations must "lie on the table until and be printed in the call for the next convention," when final action will be taken on the question.

ENGINEERING EDUCATION.

The respective merits of the revised Newlands bill and the modified Smith-Howard bill in behalf of engineering experiment stations were discussed by the engineering division of the college section. In view of the lack of unanimous support of any one of the proposed legislative plans, the debate was led back to the original grounds of discussion by President R. A. Pearson, of Iowa State Agricultural College, who made the following statements:

I want very briefly to mention five points which it seems to me are fundamental. We ought to get back to the first principles.

1. We need this bill because of the service it would give to our national industries, comparable with that which our agricultural experiment stations are giving to agriculture. We need it to complete the plan of the land-grant institutions which were started by our Government in good faith. The land-grant colleges are national institutions within State borders. We have a right to ask Congress for an appropriation to finish the structure which it began to build nearly 65 years ago.

2. The opposition to this measure has centered in a half dozen separate State universities. Several of these institutions are not interested and some, I am convinced, favor this measure which recognizes the land-grant colleges. As I see it, there are 48 institutions in favor of, perhaps six that oppose, this measure actively and a few more have been led into more or less indifferent antagonism. These several measures are receiving popular support in the main because the institutions are being circularized and in a manner which presents only one side of the question. If both sides were adequately presented much of this so-called support received by some of these measures would dwindle away.

3. The Federal Government has established the principle of recognizing one institution in each State for the conduct of agricultural and engineering work. Considerable appropriations are being made to these institutions. Now if at this late date, Congress recognizes another institution in any or all of the States and thereby divides the Federal aid it will establish a new precedent that will cause us trouble in connection with the Morrill, Nelson, Hatch, Adams, and Smith-Lever appropriations. Thus far we have been recognized without question as governmental agencies in the different States in agricultural and engineering lines. If now the Government decides to divide the engineering funds and recognize another class of institutions, then we may expect that these other institutions will seek the division

of the agricultural funds long in our hands and we will have an annual battle on our hands.

Many ingenious arguments have been advanced in favor of recognizing other institutions. One of them which has appealed to some of our best scientists is that in some given State the land-grant college is less well fitted to handle the work than is another institution. To offset that it may be said that it is easily possible to decrease the value of our Federal appropriations by oversupervision. If perchance it did happen in some State that the Federal money was spent in work done at an institution weaker than its competitor, the total losses of that character would not approximate those which would apply to all of the strong institutions throughout the country if they were bound down by such detailed supervision and red tape as is indicated by these various bills.

It is said that it would hurt the separate State universities if the land-grant colleges get this money. Not at all. If two institutions have been established in a given State, its legislature, if it chooses, can reduce the State appropriation to the land-grant college by an equivalent amount and add a similar sum to the appropriation allotted to the State university. It is entirely within the power of the State to adjust such a situation.

4. President Thompson pointed out to us last year that when a State decided to establish two institutions rather than one and to place engineering at the land-grant institution, it estopped itself from interfering with that arrangement at a later date. Too much stress can not be laid on the importance of this point of view.

5. We ought to stand firmly for the principle of the limitation of Federal appropriation to land-grant institutions. We should be more active than we have been in making this position plain to the Council of National Research and others, so that they will understand the two sides of this question. I can not help but think that they then will be more strongly our supporters than they have been. I gravely question the desirability of bringing the National Research Council into this matter in any administrative way. There is considerable departmental overlapping in Washington and each stands firmly for what it deems to be its own. And what has happened? Another organization has been created. The National Research Council to-day, I understand, is a self-perpetuating body. I query whether Congress will put into its hands the authority to supervise the expenditure of Federal funds. I hope that it will become so related to this work that its advice and counsel may be available, but we should insist that a recognized governmental department should exercise such supervisory powers as may be necessary, such as we are now accustomed to in connection with the use of the agricultural appropriations, leaving to the States the utmost freedom possible in developing the use of these funds.

WHAT CAN ENGINEERING DEPARTMENTS DO TOWARD TRAINING ENGINEERS FOR WAR SERVICE?

By MAJ. GEN. W. M. BLACK, Chief of Engineers, United States Army.

A military engineer must have a knowledge of the science and art of war, and must be skilled in the application of the principles of engineering to military work. He must be a soldier and an engineer.

It is hard to define in precise terms just what is a soldier. The New Standard Dictionary gives several partial definitions:

"(1) A person engaged in military service; a member of an army or organized military body.

(2) Emphatically, a brave, skilful, or experienced warrior; as, a soldier through and through."

These definitions are insufficient: a lot of words are used but they do not mean much. Might not a better definition be as follows:

"A man skilled in the science and art of war, having a trained and disciplined body and mind which fit him to act as a component part of an army of similarly equipped men."

To my way of thinking the essential quality a man must have to fit him to be called a soldier is the thoroughly trained spirit that makes his body and will ready at all times to respond immediately and promptly to the call of duty, no matter how repugnant or hazardous the performance of that duty may be.

A soldier is frequently spoken of as a disciplined man, and only too frequently the wrong meaning of "discipline" is foremost in the mind when this word is used. The Standard Dictionary gives two definitions for the verb "discipline":

"(1) To train to obedience, subjection or effectiveness; put through systematic exercise or practice; drill; educate; as, to discipline children; to discipline an army; to discipline the passion; to discipline the mind.

"(2) To punish or chastise; especially, to visit with censure, penance, or loss of privileges from a church or other organization."

To be a real soldier a man must have disciplined himself in accordance with the first of these definitions. The application of the second definition would show simply that such self-discipline had not been attained.

It will be noted that this definition of the word "discipline" is applicable just as fully to training for civil life as to that for the military career. It is insisted upon for the military career simply because to attain success an army must have a maximum of efficiency. The results of war are so stupendous to the human race that this necessity for a maximum of effectiveness in an army has always been recognized, and hence the word "discipline" has been largely connected with army work.

But, after all, is it not equally necessary or should it not be equally necessary in civil life? If discipline is the prime essential for a soldier, and if discipline is equally beneficial for the civilian, does it not then become a primary duty of each educator to see to it that each human intelligence sent to him for training shall be turned out trained and disciplined? And if such be the productions of the schools, can there be any higher service rendered to the country for peace or for war? Can there be a greater mission given to you as educators of the youth of our land?

It is not generally known that, of all the educational institutions of our country, the United States Military Academy numbers among its graduates who are not in the service the largest proportion of men who have obtained distinction in civil life. The effectiveness of its methods in training men as soldiers has long been recognized.

One result of the training given at the Military Academy is that the graduate cadet has a mind so well trained and a spirit so under discipline that he is ready to tackle any task that may be set before him as a duty, and, being ready, generally makes a success of his performance. It is not claimed that the curriculum of the Military Academy is the best possible, or that all the studies taught there are thoroughly understood, but the general results are good and the efficiency of the academy and of its graduates is undoubted.

I have alluded to the fact that not all of the graduates of the academy fully apprehend the subjects taught there, and recent experience would go to show that this defect is one not confined to the Military Academy. For a number of years past the Corps of Engineers of the Army has been endeavoring to obtain a certain number of its members each year from the graduates of our civil technical institutions. The law prescribes, among other things, that men desirous of entering the Corps of Engineers as second lieutenants shall be required to pass such a technical examination as the Secretary of War may prescribe. Year by year these examinations have been held. Some years none of the candidates have reached the standard prescribed in the regulations. The percentage of failure has ranged from 50 to 100 per cent and in order

to get enough men from civil life, each time an examination has been held it has been necessary to admit certain men who came nearly up to the standard required but have not quite attained it.

Two years ago, in order to determine whether fair questions were asked, a list of those propounded at the last preceding examination was sent to the faculty of the Virginia Military Institute and also to the faculty of Columbia College with a request for criticism. They were returned with a few minor and just criticisms, but the dictum of each body was that the students who had learned the course taught at these institutions should have been able to pass the examinations.

The failures were not all in the difficult subjects. On the contrary some of the simpler subjects proved stumbling blocks; descriptive geometry seemed to be apprehended but little. Even the principles of topographic surveying had not been learned, and ideas as to what a contour line means seemed very hazy. It was evident, therefore, that there was something wrong.

Frequently specialization in the engineering profession is gone into, not after a full knowledge of all that specialization implies, but from a passing inclination or even from sheer ignorance, only to result in a permanent misfit in life. Has there been a tendency to specialize too early? Has there been sufficient attention given to the fundamentals? Is it insisted upon that all men should know English, general history, the principles of law? If a man is to rise to the head of his profession in any of the specialized branches of engineering, must he not have as a foundation a thorough knowledge of civil engineering, of his own language, and better, in addition, of one or two languages besides his own? Should he not know enough of the history of the progress of the world to be able to judge in advance of the effects of such movements as are now agitating Russia and Germany, and of the general course of advancement of the human race? Should he not be well enough grounded in law to be able to appreciate to the full its special application to the works with which he will be engaged? I would plead for a more thorough primary education before specialization is permitted.

I have come to the conclusion, judging from my own experience, personally, as a cadet, the experience of other of our officers, and from the experience gained through these examinations, that the method of teaching is defective. The courses of almost all of our institutions are quite sufficiently comprehensive. The text books contain the information which the student wants, but the student does not get it. Dr. Mann, in his most excellent report, recently published, brings out these same facts and suggests certain remedies. Some of these suggested remedies are now being tried out at a school recently established at Camp Humphreys, the pupils of which are 62 young men, who, under the stress of war, were graduated from West Point after having completed only two of their four-years' course. In this school at Humphreys we are trying to see whether by a rearrangement of the courses better results can not be attained by the students.

For example, to a student in civil engineering a knowledge of mechanics is necessary—necessary as a tool which must be mastered for use in the solution of the problems of engineering in real life. Therefore, we are trying to teach mechanics as a tool and not as an end in itself. The study of the composition and resolution of forces is taught first of all by having a student make his own analysis of a bridge and make up his mind for himself why the bridge stands up under its load; why certain members are of one material and form, and certain other members are of another material and form. He is encouraged to work out for himself, first by experiment and then algebraically, the principles of the composition and resolution of forces. And so through mechanics the problem is shown him and then he is helped to learn the principles of mechanics on which the solution of the problem depends.

Earlier in this paper I have touched upon the great importance of discipline as a means toward efficiency. You know how much time is lost at the schools through

unpunctuality, through disorder, and through the many minor ways in which the lack of discipline makes itself felt. Can not this condition be bettered? * * *

Discipline of the mind requires an effort of the will—an effort not carried out for one or two hours a day, but an effort carried out through the entire day and the entire week and the entire college year. If students are earnest in seeking an education and become convinced that this kind of training tends toward efficiency, not only in gaining an education but also in forming habits of efficiency valuable in later life, will they not be willing to subject themselves to the restraints necessary to bring about this habit of mind and body? Can there not be aroused in the student body a college spirit that will go far toward bringing this desired end? Will not earnest young men voluntarily submit themselves to the necessary restraints? Can there not be obtained by the action of the student body itself the restraint necessary for this self-discipline? College spirit in its best form is largely dependent on the feeling of comradeship, of work done together, of hardships willingly undergone together. It is hard to get a thoroughly good college spirit if the men are broken up into cliques and classes. The formation of these cliques or these minor classes is frequently due to the simple lack of acquaintanceship. The financial condition of the students varies. If unrestrained the young man with plenty of money will live in such a way that the young man with an insufficiency of money can not associate with him.

Why not have plain living enforced? Why not have forced restriction on the way in which the men are to live, on the amount of money they can have to spend, on the kind of clothes which they wear? Probably you all know that these restrictions are enforced in some of the best of our institutions for young people with little fewer years than those of colleges. I allude to institutions such as Gmton, where simplicity of living is insisted upon and where lavish expenditure by any student is absolutely forbidden, and all are restricted to the same and a very small money allowance. To attain this end it is necessary that the students be required to live in dormitories and that the same table be provided for all. Can not this be done advantageously? Do you think there will be any lack of patronage of a school where such things are insisted upon as necessities for training, provided that school shows by the excellence of its work that it is worthy of being patronized? Is there any good reason why there should not be fixed hours for study, during which the young men must remain in their rooms, as well as fixed hours for recitation? Is there any reason why punctuality in the performance of duty should not be made a sine qua non? Military drills and military uniforms are aids toward these ends, but they are not essential, and a mere knowledge of military drill is far from the training necessary for a soldier. Military drill is chiefly valuable from a psychological point of view—viz, the constant suggestion of authority and the recognition of authority. This result is lost unless the same relations of authority and discipline are carried out at all times in the relations between students and instructors, which is not the case in most institutions where there are only a few hours of military drill each week. In the training of thousands of officers and men in the training camps the most difficult of the military essentials to teach were the principles of discipline and recognition of authority. Every educational institution can help to correct this. It was not difficult to teach the average man the elements of the art of war.

A real technical training can be given to a soldier only by experts. Just as born instructors for civil duties are few, so it is with instructors for military training. The higher the class of training desired the more difficult it is to find fit men. It has been my experience that it is better not to attempt a course of training than to attempt it with the wrong class of instructors. The Regular Army is insufficient in numbers to fulfill the duties devolving upon it. This is especially true of the Corps of Engineers of the regular establishment. Until the size of the Army is increased and in that increase is included a provision of officers for instructors at civil institutions and time is allowed for the training of such instructors, the Army can not supply them.

If the civil institutions of learning can not obtain military instructors from the numerous officers who received a partial training during the war, and who are now returning to civil life, it is my judgment that courses in the military art should not be attempted. Before such an instructor is selected, great care should be exercised in determining his qualifications. A man fit to be an instructor usually is fitted for many other classes of work, and the office must seek and secure the man.

All students should be taught the evil consequences to our country which have followed our policy of general unpreparedness. Any good world history should teach this. For our own Nation our common histories are misleading. "Upton's Military Policy of the United States" teaches the lesson conclusively. A study of this book should be made a part of the curriculum for every student in the land.

See to it that each man is a master of English, that he can express his ideas clearly on his feet and with his pen. For this the study of literature is requisite. See that he has the breadth of vision which the study of history gives. See to it that he is trained in the principles and the application of the principles common to all branches of engineering work before he is allowed to specialize. You do not want to train men to become life-long subordinates, but to give them that sure foundation on which a life structure of the highest form can be built.

Then in answer to the question, "What can the engineering departments do toward training engineers for war service?" I would say, see to it that your graduates are thoroughly trained in the principles of engineering, and that this training is founded upon that general education which every man must have in order to do his full part as a citizen. See to it that young men leave your schools with a high sense of devotion to duty and with that training of mind and body which will enable them to tackle any task that may be set before them with a will always to do their best. I think if you can give us graduates of this kind you will do far more for the Army than you could in sending out a lot of young men with a small knowledge of drill-book tactics, but otherwise not fulfilling the definition given of "a soldier."

ENGINEERING IDEALS.

By DR. J. A. L. WADDELL.

Engineering as an occupation can be traced back to the dawn of history; as an art it has existed for 2,000 or 3,000 years; but as a profession it is not yet half a century old. In truth, it is still lacking in some of the essential requirements of a profession, owing, possibly, to the fact that a large proportion of its members regard it merely as a means of earning a living and not as the mainspring of the world's activity and progress, and consequently as the most important calling of mankind. Until such time as at least a majority of its members shall consider it in the light of a truly noble vocation instead of a sordid business or trade, engineering as a learned profession will fail to attain to its wonderful possibilities. It is true that the work of its great leaders will keep it from languishing, and that material progress will soon be effected because of the striking object lessons of the existing world war in respect to the engineer's usefulness and necessity in all lines of endeavor; but ideal progress will not be accomplished until it becomes customary for engineers to take a more intense interest in the advancement of their profession than they do in their own individual welfare. Such a spirit of loyalty in times past has existed in certain organizations; and it undoubtedly continues to exist in this country, in spite of the seemingly apparent universality of self-interest. Evidence of this has been given of late by the willingness of the American youth to risk health and life in order to fight for an ideal—namely, the future welfare of all mankind. It is not too much to hope that ere long there will be developed very generally among engineers such a true, deep love for the

profession that, in all his business activities, the individual engineer will think first of how his actions will affect the interests of his chosen calling before considering how they may militate concerning his own. To attain such a desideratum and to make our profession truly efficient it will be necessary for us all to foster, stimulate, and establish many engineering ideals.

This brings us back to the subject of my address and raises the question as to what are engineering ideals. They may be divided into two groups—ethical and utilitarian.

In the first group may be included the following items: Code of ethics; loyalty; honor above wealth; expert evidence; goals for ambition; advancement by merit; outspokenness concerning evils; treatment of subordinates; improving the morale of students; advice to young engineers; publication of special knowledge.

In the second group may be listed: Economics; technical investigations; definition of the term "engineer"; publicity; Federal licensing of engineers; Federal department of public works; extra checking of plans of important projects; taking initiative in public affairs; teaching how to study; accurate thinking; improvement of engineering literature; independent engineering weekly without advertisements; propaganda to secure highest class of students for engineering; securing higher-grade teachers for engineering; study of vocational ability; study of Spanish by engineers; closer cooperation with foreign engineers; establishment of minimum charges for technical services.

To each of these lists might be added many items of minor importance.

Space does not permit the individual discussion of each item as brought out in the complete paper.

THE RELATIONS OF ENGINEERING DEPARTMENTS OF LAND-GRANT INSTITUTIONS TO THE TRAINING OF TEACHERS FOR TRADES AND INDUSTRIES UNDER THE SMITH-HUGHES ACT.

By J. C. WRIGHT.

The obligation which rests upon the land-grant colleges is a serious one. Many of them have been designated to cooperate with the State boards in the organization of these classes. If you look at the job seriously and realize its effect upon our national industries, upon the economics of the entire country, you will feel that it is an obligation upon your part to take hold of this work and to follow up the teachers after they have been placed in the schools and see that the instruction given them is actually put into practice.

A few principles which enter into this problem are:

1. Trade and industrial teachers must know the subject matter and must be skilled in the art of teaching to the same degree that teachers in any other schools or classes are prepared for their work.
2. Engineering institutions, if they are to be successful in training teachers for trades and industries, must place men in charge who not only are prepared as teacher trainers, but who are in full sympathy with the problems of vocational training.
3. The technique and processes of industry are so varied that no institutions can ever hope to possess an equipment that will give all the experiences of the trade.
4. Many men are to-day at work in industry who do not possess college or even high-school educations, and who, if given instruction in the art of teaching, become good teachers of shop or related work.
5. Teachers must be trained. The demand is great. State boards are charged with the responsibility, and land-grant colleges through their engineering departments should cooperate with them. Even though the outcome now seems somewhat uncertain, they should persevere to the end.

RESEARCH WORK IN HOME ECONOMICS AT AMERICAN COLLEGES.

The report of C. F. Langworthy shows that 15 institutions made investigations in nutrition and dietetics; 13 institutions made investigations in foods and cookery; 13 institutions made investigations in sugar and sugar substitutes; 10 institutions made investigations in flours and breads; 11 institutions made investigations in preservation of fruits and vegetables; 7 institutions made investigations in fats and oils; 4 institutions made investigations in meats and substitutes; 1 institution made an investigation in milk bacteriology; 5 institutions made investigations in fuels; 4 institutions made investigations in textiles; 5 institutions made investigations in household management; 1 institution made an investigation in house planning; 1 institution made investigation in calorimeter experiments.

EXTENSION PROBLEMS OF RECONSTRUCTION.

By K. L. BUTTERFIELD.

The one big, inclusive, almost overwhelming task of the extension service during the coming years is to keep the farmers of America in school. In a successful democracy, all the people must be alert to all the problems of the time. Education is the life-blood of democracy. All the kingdoms of knowledge are to be open to all the people. Study, reading, discussion, conference, must be added to experience and meditation in the daily work and life of the multitude. The farm press and other periodicals, the grange and other farm organizations, friendly conference, and travel are important means of rural education. But perhaps the extension service has a greater obligation than any of the others. It is a public agency for the public good.

We should take to heart the doctrine of a democratic education announced by members of the British labor party: "The most important of all the measures of social reconstruction must be a genuine nationalization of education which shall bring effectively within the reach not only of every boy and girl, but also of every adult citizen, all the training, physical, mental and moral, literary, technical and artistic, of which he is capable." This is the democratic theory of education up to capacity. The farmer has a right to much besides education for more efficient production. The whole range of his interests as worker, as citizen, as man must be watered from the springs of knowledge and inspiration. * * *

Systematic teaching.—Another problem of our extension service is the effort to evolve much more rapidly than we have been doing the systematic teaching of farmers. You extension people have discarded the old-fashioned farmers' institute, thrown it on the junk heap, very largely because you assert that it was superficial in its character; but you have not yet developed the real systematic study that would contrast with the "touch and go" of the institute. You are doing a splendid work in teaching the individual farmer on his farm and through demonstrations, but you are still far short of success in making the average farmer a real student of his problem. Now, I know something about the difficulties in doing this because I have tried it. It is still hard to persuade most farmers to read books systematically and thoroughly. Nevertheless, the extension school, the study club, the reading club, the correspondence course, and similar devices for getting small groups of farmers and farmers' wives into the habit of systematic, consecutive, and profound study of fundamental problems is one of the big problems in the near future. I do not belittle the edu-

cational value of general discussion, of observation, of demonstration, of shared experience. I simply assert that we are neglecting the other aspect of education—that which comes from much thinking by oneself, from the study of what other men have said and written, and from a systematization of knowledge in one's mind. Are we going to try to make the farmers students? That is the question. Many of them are students, but not enough of them. And it is to a great extent our fault if the thing is not done. * * *

The Smith-Lever Act is probably the greatest piece of democratic educational legislation ever enacted in any country, for it has within it the potentiality of a systematic effort to keep the entire 7,000,000 of American farmers and their families in school after school days are over. It seems providential that this act is almost in full operation at this critical time, when we need supremely a national program of education in the great issues of the new epoch. The mission of the extension service during reconstruction is nothing less than to serve mightily in helping to lay the foundations for a fuller and more real American rural democracy.

COMMUNITY ORGANIZATION FOR EXTENSION SERVICE.

By DWIGHT SANDERSON.

The extension service is unique in its organization, for of all our institutions it alone involves legally established cooperation of the Federal, State, and county governments with the people. Its organization differs from that of established educational institutions in that its mechanism is created and periodically modified for most effectively meeting the needs and problems of those actually engaged in agriculture and home-making, rather than being developed for systematic study of various phases of knowledge pertaining to these subjects. It is organized on a project basis for attacking specific problems. It has a functional organization, and in the degree that it maintains this form of structure will it constantly renew its youth, grow and live.

The extension service is equally unique in its educational methods, and from the standpoint of educational efficiency the method rather than the organization is the distinctive and essential feature of any educational movement. Three features of the method of extension work stand out as characteristic:

- (1) Its chief educational method is that of the demonstration;
- (2) Its program of work is determined by the local people with the advice of experts employed by them and the State and bringing to them the experience and knowledge of the States and the Nation; and
- (3) This program is carried out through the discovery and development of personal leadership in local groups and communities with the support of their public opinion. It is a form of collective or group education.

If we recall the beginnings of extension work we shall appreciate that this conception of extension work is radically different from that commonly held only a decade ago, and that our whole attitude toward its organization must be modified accordingly.

It is unnecessary to discuss the merits of the county as the unit of organization. Historically, in the beginning of the Farmers' Cooperative Demonstration Work the county was found to be the best unit for the work of one demonstration agent, and so he became the county agent. As local support developed the county was the smallest political unit which had authority to appropriate public funds for this work. So the county became the basic unit of organization, as it is with most of our institutions. Yet we should clearly recognize that though the county is a political and administrative unit, frequently it is not a natural social unit; many of the communities forming

it may not be associated by other than political ties. Herein lies the need of an "organized county" for extension service. At first we emphasized the need of a county organization for the support of the county agent. We soon found that only by working through an organization and enlisting the assistance of its members in promoting the work in their localities could the agent be of most service. Finally we have come to see that if extension work is to have a permanent basis it must be an institution of the people, organized to maintain it and not merely dependent upon paid professional leaders frequently changing; the permanent success of any rural institution must depend upon its resident leadership rather than upon its employed agents.

THE OFFICERS OF THE ASSOCIATION.

The outgoing president of the association was Eugene Davenport, dean of the College of Agriculture of the University of Illinois.

The officers of the association for 1919 are as follows:

President, C. A. Lory, of Colorado; vice presidents: Brown Ayres, of Tennessee; A. M. Soule, of Georgia; J. G. Lipman, of New Jersey; A. F. Woods, of Maryland; R. W. Thatcher, of Minnesota; secretary-treasurer, J. L. Hills, of Vermont; bibliographer, A. C. True, of Washington, D. C.; executive committee, W. O. Thompson, of Ohio, chairman; R. A. Pearson, of Iowa; W. M. Riggs, of South Carolina; W. H. Jordan, of New York; H. L. Russell, of Wisconsin.

FEDERAL ACTS FOR THE BENEFIT OF THE COLLEGES OF AGRICULTURE AND THE MECHANIC ARTS.

The principal acts providing for the support of instruction in these institutions are three in number.

(1) The act of July 2, 1862, granting public lands to the States, known as the "first Morrill Act," and the act of March 3, 1883, amending the previous act and providing for the investment of capital.

(2) The act of August 30, 1890, making yearly appropriation to the States and Territories in aid of colleges of agriculture and the mechanics arts, known as the "second Morrill Act."

(3) The act of March 4, 1907, known as the "Nelson amendment," increasing the annual appropriation to \$50,000 per year to each State and extending the conditions for the use of the funds.

In addition to the three acts supporting instructional work, there have been three acts granting Federal aid for experimentation and extension work:

(1) The act of March 2, 1887, the "Hatch Act," granting \$15,000 to each State for agricultural experiment stations.

(2) The act of March 16, 1906, the "Adams Act," increasing the annual payment for experiment stations to \$30,000 for each State.

(3) The act of May 8, 1914, the "Smith-Lever Act," making an annual appropriation to each State for agricultural extension work.

There are also a number of subsidiary acts and amendments, such as the acts authorizing the detail of Army officers to the colleges as instructors in military science and tactics, the act authorizing free postage on reports, etc.

The benefits of the act of 1862, or of later acts in lieu of it, are received by every State, and 53 institutions are thereby aided—one in each of 43 States and two each in Massachusetts, Mississippi, South Carolina, Virginia, and Kentucky. Massachusetts divides its fund between the Agricultural College and the Institute of Technology, while Mississippi, South Carolina, Virginia, and Kentucky divide the funds between institutions for white and colored students.

The amount of the appropriation under the acts of 1890 and 1907 is now fixed at \$50,000 for each of the 48 States and the two insular possessions—Porto Rico and Hawaii. Sixty-eight institutions are aided. Seventeen States maintain special colleges for colored students, which receive part of this fund.

Professors, instructors, extension workers, and experiment station staff.

	1913-14	1914-15	1915-16	1916-17	1917-18
In institutions for white students.....	9,019	9,742	9,961	9,800	11,503
In institutions exclusively for colored students.....	511	629	635	644	476
Total.....	9,530	10,371	10,496	10,344	11,979

Student enrollment.

	1913-14	1914-15	1915-16	1916-17	1917-18
In institutions for white students.....	105,803	114,905	119,886	122,053	114,913
In institutions exclusively for colored students.....	9,251	10,170	10,613	11,352	9,340
Total.....	115,054	125,075	130,499	133,405	124,253

Students in regular college courses in certain subjects in institutions for white students.

Subjects.	1913-14	1914-15	1915-16	1916-17
Agriculture.....	13,249	13,833	15,025	14,348
Horticulture.....	512	1,053	634	941
Forestry.....	485	989	374	347
Veterinary science.....	598	1,294	841	773
Household economics.....	4,018	4,431	5,177	5,055
Mechanical engineering.....	4,066	4,189	4,340	4,417
Civil engineering.....	3,473	3,289	3,015	3,832
Railway engineering.....	55	326	517	48
Electrical engineering.....	3,277	3,335	3,921	3,256
Mining engineering.....	677	713	671	671
Chemical engineering.....	778	871	1,095	1,505
Sanitary engineering.....	132	495	355	79
Textile engineering.....	90	99	150	157
General engineering.....	2,612	2,383	2,143	2,166
Architecture.....	1,045	844	890	964
Chemistry.....	614	715	713	831
Pharmacy.....	143	249	168	277
General science.....	4,356	4,842	5,673	5,969

Students in four-year college courses of agriculture and the mechanic arts, 1917-18.

1. IN AGRICULTURE.

Agricultural education.....	359	Poultry husbandry.....	63
Agricultural engineering.....	88	Rural economics.....	59
Agronomy of farm crops.....	771	Soils and fertilizers.....	21
Animal industry.....	1,166	Veterinary science.....	533
Dairy husbandry.....	151	General agriculture.....	6,337
Forestry.....	152	Miscellaneous.....	606
Horticulture.....	450		
Pomology.....	73	Total.....	12,426

2. IN ENGINEERING AND THE MECHANIC ARTS.

Civil engineering.....	3,535	Sanitary engineering.....	31
Electrical engineering.....	3,267	General engineering.....	1,879
Mechanical engineering.....	3,622	Unclassified.....	621
Mining engineering.....	660		
Textile engineering.....	188	Total.....	15,131
Chemical engineering.....	1,685		

3. IN HOME ECONOMICS AND IN ARCHITECTURE, PHARMACY, GENERAL SCIENCE, ETC.

Foods and cookery.....	140	Pharmacy.....	721
Textiles and clothing.....	94	General science.....	1,874
Industrial management.....	79	Unclassified.....	1,363
Cafeteria management.....	59		
Teachers' course.....	1,411	Total.....	4,499
General course.....	2,837	Total for both groups.....	9,647
Total.....	5,191	Grand total for divisions of agricultural and mechanical colleges.....	37,243
Agriculture.....	514		

Students in military science and tactics.

Institutions.	1913-14	1914-15	1915-16	1916-17	1917-18
In institutions for white students.....	26,600	28,746	31,268	33,704	36,230
In institutions exclusively for colored.....	2,136	2,029	2,177	1,415	1,803
Total.....	28,036	30,775	33,445	35,119	38,033
In Reserve Officers' Training Corps courses.....				8,035	17,550
Grand total.....				43,154	55,583

Enrollment in the principal divisions in institutions for white students.

Departments.	1913-14	1914-15	1915-16	1916-17	1917-18
Agriculture.....	14,844	17,169	16,874	16,409	13,445
Home economics.....	4,018	4,431	5,177	5,055	5,858
Mechanic arts.....	16,215	16,554	17,097	16,201	14,840
Short and special courses.....	15,510	14,067	12,181	16,477	11,925
All departments.....	105,803	114,905	110,286	122,053	114,913

AGRICULTURAL AND MECHANICAL COLLEGES.

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Enrollment in institutions exclusively for colored students.

Departments.	1913-14	1914-15	1915-16	1916-17	1917-18
Preparatory.....	3,973	1,884	5,802	5,993	4,930
Industrial.....	420	420	573	1,048	862
Collegiate.....	2,135	2,020	1,981	903	743
All others.....	3,361	3,537	3,290	3,408	2,805
Total, excluding duplicates.....	9,251	10,170	10,613	11,352	9,340
Agriculture.....	2,200	2,368	2,053	2,054	1,900
Household arts.....	5,487	5,652	5,758	4,118	3,398
Industrial arts.....	2,848	3,024	2,883	2,825	2,234

¹ Reduction is due to a more rigid classification.

Bachelor or first degrees.¹

Courses.	1913-14	1914-15	1915-16	1916-17	1917-18
In agricultural courses.....	1,903	2,311	2,584	2,803	1,704
In mechanical courses.....	1,939	2,145	2,279	2,404	1,540
In home economics.....	436	653	754	787	853
All other courses.....	4,205	4,302	4,573	5,397	3,647
Total.....	8,503	9,471	10,190	11,361	7,744

Advanced degrees.

In agricultural courses.....	117	150	229	221	218
In mechanical courses.....	153	202	238	186	125
In home economics.....	17	5	7	9	112
All other courses.....	800	755	825	897	18
Total.....	1,107	1,112	1,299	1,313	471

¹ Not including institutions exclusively for colored students.

Value of property.

	1913-14	1914-15	1915-16	1916-17	1917-18
Endowment funds.....	\$59,066,160	\$61,283,123	\$63,704,947	\$66,367,086	\$57,737,425
Farm and grounds.....	20,981,085	19,062,872	16,649,798	30,937,913	31,563,069
Buildings.....	51,825,766	65,524,849	72,575,218	65,619,208	65,591,190
Apparatus and machinery.....	16,842,273	18,524,284	18,603,947	22,198,115	21,079,128
Library.....	5,990,787	6,111,788	6,441,133	6,685,958	6,098,743
Live stock.....	1,090,292	1,283,681	1,444,395	1,599,928	1,760,318
Total.....	160,298,353	171,800,597	179,519,438	193,408,218	184,428,798

GIFTS, BUILDINGS, AND IMPROVEMENTS, 1917-18.

University of Arizona.—A new mechanical arts building costing \$25,000, and a women's dormitory building, \$100,000.

University of California (Berkeley).—The Jane K. Sather campanile, erected of steel and stone, the total cost to be approximately \$225,000. A new chemistry building, of steel and concrete, known as Gilman Hall, to cost \$198,000. Hilgard Hall, of steel and stone, for the agricultural department, to cost \$365,000. The addition to and

completion of the original university library building, the total cost of the entire structure to be \$1,240,000. A brick addition to the original power plant building, including new buildings, etc., at the cost of \$90,000. Addition to Wheeler Hall, to be used for classrooms, offices, and auditorium; built of steel and stone, total cost of the completed building being \$710,000.

At San Francisco.—A new university hospital building constructed of steel and stone, at a total cost of \$672,000.

At Riverside.—The completion of the brick and frame laboratory building, which is to cost altogether \$100,000, and also the completion of the brick and frame residence for the director, and the construction of cottages and outbuildings at the citrus-experiment station.

At Davis.—Additions to buildings, and various new, small frame buildings.

Colorado Agricultural College.—Additional shops and a large wooden dining hall were built for the soldier-training course.

Connecticut Agricultural College.—There were constructed eight new dwelling houses, well, and reservoir, coal bunker, poultry buildings, piggery, and three garages. The central heating plant was completed.

Delaware College.—A wing of a new dormitory of the Women's College of Delaware, to be known as Sussex Hall, the wing to cost \$125,000.

University of Florida.—The erection of temporary wooden dormitory and a garage for use of soldiers; approximate cost, \$8,000.

College of Hawaii.—A farm laborers' cottage, besides poultry house and yards.

University of Idaho.—An annex to the engineering building, a dairy building, and barns for horses, hogs, and sheep.

Purdue University, Indiana.—There was completed an armory, costing \$188,000, consisting of a drill shed, 160 by 240 feet, and an administration building, 50 by 170 feet, having two stories and basement.

Iowa State College of Agriculture and Mechanic Arts.—The hospital, the women's dormitory, and the animal husbandry laboratory were completed. Wooden buildings were constructed for use as barns.

Kansas Agricultural College.—Wooden buildings were constructed for barracks, which will be used after the war for barns, tractor shafts, and for the housing of machinery. Three hundred and ninety-five acres of land were purchased by means of the State appropriation of \$80,000.

Maryland State College of Agriculture.—The agricultural building, begun in 1917, was completed this year at a cost of \$174,000.

University of Minnesota.—A new barn was constructed to take the place of the one destroyed by fire in 1917. A new seed storehouse

was also constructed. An addition has been made to the main engineering building for the purpose of housing 120 men. The electrical building has also been remodeled, and a large garage was built for the use of Army trucks and automobiles for the course in automechanics.

Mississippi Agricultural and Mechanical College.—Twenty thousand dollars was spent for equipment in agricultural engineering and \$10,000 was spent toward the completion of a dormitory annex.

Montana State College of Agriculture and Mechanic Arts.—A new chemistry building, to cost \$125,000, is in course of construction.

University of Nebraska.—A new agricultural engineering building was completed during the year.

University of Nevada.—A new \$80,000 agricultural building is about to be completed.

New Hampshire College of Agriculture and Mechanic Arts.—A new wing has been added to the shops for the purpose of carrying on instructional work. An annex has been added to Smith Hall, the women's dormitory, giving space for 34 additional women. The Commons building, at a cost of \$100,000. The barracks building, constructed for the Students' Army Training Corps, has been made into men's dormitories. A large number of small buildings have been erected for instructional work.

New Mexico College of Agriculture and Mechanic Arts.—A new automobile shop has been built.

North Carolina State College of Agriculture and Engineering.—The power house has been enlarged, and additions have been made to the steam and water plants.

North Dakota Agricultural College and Experiment Station.—There has been completed a new laboratory for automechanics and engineering work.

Oklahoma Agricultural and Mechanical College.—A residence for the president, costing \$6,000.

Oregon State Agricultural College.—A veterinary hospital, \$9,867; a horticultural biproducts building, \$15,332; a laboratory building, costing altogether \$120,961.

Pennsylvania State College.—A new engineering unit for wood shops, costing \$56,000.

University of Tennessee.—Additions have been made to the engineering building at a cost of \$15,000, and to farm buildings at a cost of \$45,000.

The Agricultural College of Utah.—The irrigation and drainage building and the plant industry building are in course of construction.

State College of Washington.—One hundred and sixty acres of land were added to the farm at Pullman, and 50 acres to the experiment

station at Puyallup, Wash. A new book stack was added to the library building. Two new greenhouses for the department of horticulture and the outfitting of a new floor in the agricultural building.

University of Wisconsin.—Improvements at Camp Randall, \$18,357; the women's field house, \$1,464; a physics building and equipment, \$82,931; a soldiers' building and equipment, \$23,915; a dairy barn and addition, \$8,971; heating station, \$5,266; branch stations, \$2,814; pumping system, \$5,780; electrical distributing system, \$1,971; Lincoln statue, \$6,320; horticultural greenhouse, \$2,086; the university farm, \$1,534; the Bradley memorial, \$1,349; infirmary, \$1,231; other improvements, \$3,884.

University of Wyoming.—A new model rural school building of frame, lath, and plaster; a music hall, brick veneer and shingle roof; a tunnel system for a part of the campus heating system.

INSTITUTIONS FOR COLORED STUDENTS.

State College for Colored Students, Delaware.—The school took possession, January 1, 1918, of an adjacent farm of 105 acres.

Florida Agricultural and Mechanical College for Negroes.—A dairy barn and a horse barn have been built. Addition has also been made to the mechanic arts building for machine shop practice.

The Southern University and Agricultural and Mechanical College of Louisiana.—A dairy barn building to accommodate 18 cows is being constructed at a cost of \$3,000.

The Alcorn Agricultural and Mechanical College, Mississippi.—A new brick trades building has been built.

State Agricultural and Mechanical College, South Carolina.—A new dormitory for boys has been completed this year, taking the place of the one destroyed by fire.

The Agricultural and Industrial State Normal School, Tennessee.—A new implement shed has been constructed.

Prairie View State Normal and Industrial College, Texas.—A new, three-story brick, fire-proof building, to be used for agricultural work and for the officers of the extension department, costing \$60,000.

The Hampton Normal and Agricultural Institute, Virginia.—Ogden Hall, to be used for assembly purposes, having a capacity of about 2,400 people, and a new administration building.

CHANGES IN COURSES AND METHODS OF INSTRUCTION.

University of Arkansas.—Courses have been added in wireless telegraphy, accounting, stenography, typewriting. On June 15, 1918, the training of soldiers of the United States Army in vocational work was begun.

Colorado Agricultural College.—In order to close the college early for the purpose of releasing students for work, class work was carried

on during holidays and vacations. A series of short courses was held in connection with our summer school for the training of club leaders, community leaders for food conservation, and extension work.

University of Florida.—Organization of classes for the instruction of 300 enlisted soldiers was undertaken.

Georgia State College of Agriculture.—Provision was made for a degree course in home economics.

College of Hawaii.—The program in mechanical engineering was discontinued. Cooperative arrangements were made with the experiment station of the Hawaii Sugar Planters' Association, whereby students in sugar technology receive part of their training at the experiment station and on various plantations.

Iowa State College of Agriculture and Mechanic Arts.—Numerous changes in courses and methods of instruction were made on account of the war.

Kansas State Agricultural College.—The attendance has been greatly reduced by the war. Great interest has been taken in the subjects which have direct military value.

University of Kentucky.—A written constitution has been prepared for the university. Courses in home economics have been reorganized. Certain departments have been changed. New departments of zoology, botany, economics, music, art, drawing, and farm mechanics have been established.

Maryland State College of Agriculture.—The educational system of the college has been unified by classifying the curricula under divisions of plant industry, animal industry, engineering, language and literature, general science, and vocational education.

University of Minnesota.—The collegiate work of the department of agriculture has been organized as the college of agriculture, forestry, and home economics. A series of courses in general agriculture has been introduced under the direction of the agricultural educational division. The procedure for the selection of a line of specialization has been modified to provide for more individual advice from the dean and the heads of the departments. New lines of specialization in home economics have been provided as follows: (1) A teachers' course in foods managements; (2) dietetics; (3) institutional management.

Mississippi Agricultural and Mechanical College.—Courses of study were modified to meet war conditions and the training of soldiers in the Students' Army Training Corps.

Montana State College of Agriculture and Mechanic Arts.—On October 1, 1917, the college changed to the plan of four terms of 12 weeks each, instead of two semesters of 18 weeks each. The training of teachers in agriculture, home economics, and trade in industry under the Smith-Hughes Act has been assigned to this institution,

and courses of study have been adopted accordingly. A new department of vocational education has been established.

University of Nebraska.—The most important change was the introduction in June, 1918, of a war vocational training unit of 900 men, which by lectures and laboratory methods was given instruction in mechanical and electrical engineering.

New Hampshire College of Agriculture and Mechanic Arts.—This institution changed from the two-semester plan to the three-term plan. New courses were added in home economics.

New Mexico College of Agriculture and Mechanic Arts.—A change was made from the two-semester plan to the three-term plan.

University of Tennessee.—During the year the teacher training work under the Smith-Hughes law was begun in agriculture, industrial arts, and home economics.

Agricultural College of Utah.—The institution has gone on the four-quarter basis.

University of Vermont and State Agricultural College.—Through an arrangement with the State board of education, the training of teachers in agriculture and home economics is to be conducted by the college of agriculture.

Virginia Agricultural and Mechanical College and Polytechnic Institute.—A new course in agricultural education has been added; also courses in trades under the Smith-Hughes Act.

University of Wisconsin.—No foreign-language requirements are made for graduation in either engineering or agriculture.

INSTITUTIONS FOR COLORED STUDENTS.

The Kentucky Normal and Industrial Institute.—New courses have been added to comply with the Smith-Hughes law.

The Alcorn Agricultural and Mechanical College.—New teacher training courses have been added in harmony with the provisions of the Smith-Hughes law.

Agricultural and Industrial State Normal School, Tennessee.—Courses in agriculture, domestic science, and domestic art modified to meet war conditions.

The Hampton Normal and Agricultural Institute.—The war classes, numbering about 250, were started June 15, 1918.

INCOME, 1917-18.

In reporting the income of the colleges, the items are separated into four distinct groups—funds for instruction and administration, funds for the experiment stations, funds for the extension service, and funds for vocational teacher training. In Table 9 is given the first of these groups, funds for instruction and administration, and in Table 10 are given the other two groups, together with the grand total income.

The following tables give the income under the old classifications for the years 1914-1917, inclusive, and the income under the new classification for the year 1917-18.

Income for five years.

Source of income.	Funds for instruction and administration.				
	1914	1915	1916	1917	1918
State funds:					
From endowments granted by the State	\$479,050	\$104,986	\$135,444	\$160,766	\$248,305
From mill tax levy for support	4,010,234	3,733,316	3,842,112	6,441,533	4,237,245
From mill tax levy for permanent improvements	615,183	624,467	629,419	692,116	737,806
From appropriations for support	9,178,464	10,774,782	11,829,281	10,300,845	11,911,896
From appropriations for permanent improvements	3,716,834	2,768,576	2,833,204	3,783,702	3,788,135
Total State aid	17,997,765	18,006,107	19,269,460	21,378,962	20,923,477
United States funds:					
From land-grant fund of 1862	846,087	856,838	884,514	930,170	979,379
From other land-grant funds	264,111	196,239	193,573	241,840	366,411
From Morrill-Nelson funds of 1890 and 1907	2,500,000	2,500,000	2,500,000	2,515,171	2,504,748
Total Federal aid	3,592,198	3,552,077	3,578,087	3,687,181	3,850,538
College funds:					
From college endowment funds	1,151,511	1,216,672	1,144,075	1,399,607	1,725,122
From tuition, fees, board, and lodging	3,059,358	3,565,771	3,741,429	6,077,958	5,841,282
From departmental earnings	(¹)	(¹)	(¹)	2,970,412	2,888,329
From private gifts for support	(²)	(²)	(²)	312,054	360,946
From private gifts for permanent improvements and endowment	(¹)	(¹)	(¹)	901,340	1,065,552
Miscellaneous	9,090,392	5,621,138	10,541,771	1,113,836	1,928,913
Total college funds	13,301,261	10,403,561	15,427,275	12,775,117	13,790,644
Total income for instruction and administration	34,891,224	31,961,765	38,274,822	37,841,260	38,564,655

FUNDS FOR EXPERIMENT STATIONS.

State funds	\$1,068,441	\$1,129,709	\$1,059,018	\$1,588,883	\$2,063,408
United States funds	1,347,459	1,369,288	1,362,000	1,369,789	1,372,483
Private gifts	(¹)	(¹)	(¹)	242,629	71,861
Experiment station earnings	(¹)	(¹)	(¹)	1,213,216	1,271,825
Total funds for experiment stations	2,415,900	2,498,997	2,421,018	4,414,419	4,779,557

FUNDS FOR EXTENSION SERVICE.

State funds, Smith-Lever, and others	\$1,292,273	\$1,075,005	\$1,364,356	\$2,325,563	\$2,376,341
United States funds	491,238	491,238	1,113,490	1,411,816	2,134,139
County, city, or association funds	(¹)	(¹)	(¹)	696,314	900,504
Private gifts and miscellaneous	(¹)	(¹)	(¹)	79,985	278,783
Total for extension service	1,292,273	1,566,243	2,477,846	4,513,718	5,689,767
Total for experiment stations and extension service					10,469,324

FUNDS FOR VOCATIONAL TEACHER TRAINING (SMITH-HUGHES).

From local funds					\$34,444
From State funds					63,112
From Federal funds					107,876
Total vocational					205,432
Grand total income of institutions	\$38,899,397	\$36,027,003	\$43,173,696	\$46,780,397	\$49,369,919

¹ Receipts from board and lodging included for the first time in 1917.

² Included in miscellaneous.

³ Not reported.

MORRILL-NELSON FUND.

[Funds appropriated under Acts of Congress of Aug. 30, 1890, and Mar. 4, 1907.]

The total appropriation for the year ending June 30, 1918, from the United States Treasury in aid of colleges of agriculture and the mechanic arts under the provisions of the acts of Congress of August 30, 1890, and March 4, 1907, was \$2,500,000, each of the 48 States and the two insular possessions receiving \$50,000. In Table 11 are given the details for the year 1917-18. In addition this table shows \$14,748.55 received from bank interest on daily balances during the year and added to the principal. The annual installment has been fixed at \$50,000 to each State since the year 1911-12. The following tables give the amount expended under each schedule and the proportion each year:

Morrill-Nelson funds.

(Acts of Aug. 30, 1890, and Mar. 4, 1907.)

Subjects.	1913-14	1914-15	1915-16	1916-17	1917-18
Agriculture.....	\$592,920	\$579,374	\$611,006	\$587,411.01	\$593,902.96
Mechanic arts.....	700,149	717,501	694,147	702,838.54	717,991.21
English language.....	222,844	219,011	211,949	207,928.46	217,114.22
Mathematics.....	219,057	207,045	197,022	199,002.88	194,175.85
Natural and physical science.....	600,413	565,881	581,797	581,734.37	578,795.69
Economic science.....	168,771	179,519	184,813	184,991.49	187,970.52
Training of teachers in special subjects.....	30,474	33,329	34,777	44,270.48	24,524.53
Total.....	2,534,619	2,501,662	2,516,551	2,518,237.17	2,509,430.02

Percentage of appropriations expended for instruction in various subjects.

Subjects.	1913-14	1914-15	1915-16	1916-17	1917-18
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Agriculture.....	23.7	23.1	24.1	23.3	23.4
Mechanic arts.....	27.7	28.7	27.5	27.9	28.6
English language.....	8.6	8.8	8.4	8.3	8.6
Mathematical science.....	8.3	8.3	7.8	7.9	7.7
Natural and physical science.....	23.6	22.6	23.1	23.1	23.0
Economic science.....	6.7	7.2	7.4	7.3	7.3
Training of teachers in special subjects.....	1.2	1.2	1.4	1.8	1.0

LAND-GRANT FUND OF 1862.

(Income from funds created by the land-grant act of 1862.)

Under the act of Congress of July 2, 1862, 10,920,000 acres of public lands have been allotted to the different States; of these, 1,187,090 acres remain unsold. From the sale of these lands permanent funds have been created amounting to \$19,979,008, yielding an income of \$994,360 for the benefit of the colleges. In Table 12 are given the details of income and expenditure for the year 1917-18. The figures below are the totals for the past three years.

Land-grant fund of 1862.

	1915-16	1916-17	1917-18
Principal of fund.....	\$15,105,925	\$15,254,900	\$19,979,008
Income for year.....	916,151	980,100	974,360
Expenditures for year.....	928,048	931,079	924,390

AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE I. Statistics of colleges of agriculture and the mechanic arts endorsed by Acts of Congress approved July 3, 1862, August 30, 1890, and March 3, 1907, for 1917-18.

Institutions.	President.	Date of opening of Institution.	Acres allotted to States under Act of July 3, 1862, or Act of August 30, 1890.		Acres of land grant of 1862 still unsold.	Acres of land grant of 1890 still unsold.	Acres in farm and grounds.	Acres under cultivation.	Library.	
			4	5					6	7	8	9	10
Alabama Polytechnic Institute, Auburn, Ala.	Charles C. Thach, LL. D.	1872	240,000	0	0	325	90	33,550	5,200	
University of Arizona, Tucson, Ariz.	Rudolf B. von Klein Smid, Sc. D.	1891	150,000	170,000	0	605	510	30,000	1,500	
University of Arkansas, Fayetteville, Ark.	John C. Fulrad, M. A.	1872	150,000	0	0	120	40	31,000	11,000	
University of California, Berkeley, Calif.	Benjamin Ide Wheeler, LL. D.	1870	150,000	1,402	320	1,775	897	440,000	178,000	
Colorado Agricultural College, Fort Collins, Colo.	Charles A. Jory, LL. D.	1870	90,000	40,000	0	1,818	472	42,301	25,000	
Connecticut Agricultural College, Storrs, Conn.	Samuel C. Mitchell, Ph. D.	1881	90,000	0	0	1,066	215	15,230	1,000	
Denver College, Newark, Del.	Samuel C. Mitchell, Ph. D.	1881	90,000	0	0	277	260	24,900	3,200	
University of Florida, Gainesville, Fla.	Albert A. Murphree, LL. D.	1884	90,000	0	0	604	230	52,500	20,000	
Georgia State College of Agriculture, Athens, Ga.	Andrew M. South, Sc. D.	1872	270,000	0	0	957	348	50,000	40,000	
College of Hawaii, Honolulu, Hawaii.	Arthur L. Dow, Ph. D.	1908	(1)	0	0	91	20	23,833	30,733	
University of Idaho, Moscow, Idaho.	E. H. Lindley, Ph. D.	1892	90,000	0	0	336	300	42,000	800	
University of Illinois, Urbana, Ill.	Edmund J. James, LL. D.	1869	480,000	0	0	1,923	1,653	410,373	53,000	
Purdue University, Lafayette, Ind.	Winthrop E. Stone, LL. D.	1874	300,000	0	0	567	567	44,000	30,000	
Iowa State College of Agriculture and Mechanic Arts, Ames, Iowa.	Raymond A. Pearson, LL. D.	1869	240,000	0	0	1,356	0	631,000	30,000	
Kansas State Agricultural College, Manhattan, Kans.	W. M. Jardine, LL. D.	1867	90,000	7,686	0	1,137	696	61,350	22,000	
University of Kentucky, Lexington, Ky.	Frank L. Mevey, LL. D.	1865	390,000	0	0	714	375	33,869	2,500	
Louisiana State University and Agricultural and Mechanical College, Baton Rouge, La.	Thomas D. Boyd, LL. D.	1860	210,000	0	0	725	375	48,430	1,500	
University of Maine, Orono, Me.	Robert J. Aley, LL. D.	1868	210,000	0	0	473	175	56,300	.....
Maryland State College of Agriculture, College Park, Md.	A. F. Woods, D. Agr.	1859	210,000	0	0	280	270	17,500	.....
Massachusetts Agricultural College, Amherst, Mass.	Kerbyon L. Butterfield, LL. D.	1867	361,000	0	0	568	430	50,080	.....
Massachusetts Institute of Technology, Cambridge, Mass.	R. C. Macdunn, Sc. D.	1865	(1)	0	0	.....	.....	120,811	48,270
Michigan Agricultural College, East Lansing, Mich.	Frank S. Sedgwick, Sc. D.	1867	210,000	0	0	1,505	681	42,271	9,133	
University of Minnesota, Minneapolis, Minn.	Harmon J. Mayo, Baron, LL. D.	1857	120,000	40,350	0	4,963	1,785	296,110	60,000	
University of Minnesota, St. Paul, Minn.	W. H. Smith, B. S.	1851	210,000	0	0	2,270	0	30,125	153,061	
Mississippi Agricultural and Mechanical College, Agricultural College, Miss.	A. Ross Hill, LL. D.	1880	210,000	47,287	0	888	700	223,470	71,928	
University of Missouri, Columbia, Mo.	.....	1841	330,000	0	0	.....	.....	.....	.....

¹ For the number of acres actually received, see Table II.
² Hawaii and Porto Rico do not participate in this grant.
³ Entire grant given under Massachusetts Agricultural College. Income divided; two-thirds to the Massachusetts Institute of Technology.



AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 1.—Statistics of colleges of agriculture and the mechanic arts endowed by Acts of Congress approved July 2, 1862, August 30, 1890, and March 4, 1907, for 1917-18.—Continued.

Institutions.	President.	Date of opening of institution.	Acres allotted to States under act of July 2, 1862, or equivalent act.	Acres of land grant of 1862 still unsold.	Acres of other land grants still unsold.	Acres in farm and grounds.	Acres under cultivation.	Library.	
								Volumes.	Manuscripts.
Montana State College of Agriculture and Mechanic Arts, Bozeman, Mont.	James M. Hamilton, M. S.	1893	140,000	63,085	35,686	420	420	17,117	1,000
University of Nebraska, Lincoln, Nebr.	Samuel A. Avery, L. L. D.	1871	90,000	8,396	12,571	369	250	136,490	7,000
University of Nevada, Reno, Nev.	John W. Miller, L. L. D.	1874	150,000	0	338	250	250	38,000	45,000
North Carolina College of Agriculture and Mechanic Arts, Durham, N. C.	Ralph D. Hetzel, L. L. D.	1868	150,000	0	0	523	200	38,000	14,000
Rutgers College, New Brunswick, N. J.	W. H. S. Demarest, L. L. D.	1864	210,000	0	0	375	200	93,720	20,000
New Mexico College of Agriculture and Mechanic Arts, State College, N. Mex.	Austin D. Crile.	1890	150,000	241,900	0	530	175	18,323	34,297
Cornell University, Ithaca, N. Y.	Jacob Gould Schurman, L. L. D.	1868	900,000	0	0	1,568	600	537,671	100
North Carolina College of Agriculture and Mechanic Arts, West Raleigh, N. C.	Wallace C. Riddick, L. L. D.	1889	270,000	0	0	490	400	9,000	100
North Dakota Agricultural College, Agricultural College, N. Dak.	F. F. Ladd, L. L. D.	1891	130,000	39,406	0	943	803	2,995	4,300
Ohio State University, Columbus, Ohio	William O. Thompson, L. L. D.	1873	630,000	0	0	782	457	184,268	100,450
Oklahoma Agricultural and Mechanical College, Stillwater, Okla.	J. W. Cantwell, A. M.	1891	250,000	250,000	250,000	1,000	600	25,000	100,450
Oregon Agricultural College, Corvallis, Oreg.	William J. Kerr, Sr., D.	1865	80,000	930	0	550	350	42,773	115,225
University of Oregon, Eugene, Oreg.	Paul G. Miller, Ph. D.	1899	70,000	0	0	1,265	827	60,388	10,000
University of Puerto Rico, San Juan, P. R.	Paul G. Miller, Ph. D.	1903	120,000	0	0	243	183	7,500	1,500
Rhode Island State College, Kingston, R. I.	Howard Edwards, A. M., L. L. D.	1883	120,000	0	0	169	180	22,600	5,000
Clemson Agricultural College, Clemson, S. C.	Walter M. Riggs, L. L. D.	1883	180,000	0	0	1,541	500	18,650	27,800
South Carolina College of Agriculture and Mechanic Arts, Orangeburg, S. C.	Elwood C. Parrish, L. L. D.	1884	180,000	141,138	0	560	400	28,364	6,000
Tennessee State College of Agriculture and Mechanic Arts, Knoxville, Tenn.	Brown Ayres, D. C. L.	1784	300,000	0	0	1,025	900	44,204	43,315
Agricultural and Mechanical College of Texas, College Station, Tex.	William B. Bizzell, D. C. B.	1876	180,000	0	0	2,416	499	18,009	12,000
Agricultural College of Utah, Logan, Utah	E. G. Peterson, Ph. D.	1900	200,000	515	24,969	148	148	31,990	11,994
University of Vermont and State Agricultural College, Burlington, Vt.	Guy Potter Benton, L. L. D.	1801	150,000	0	0	338	140	96,960	34,857
Virginia Polytechnic Institute, Blacksburg, Va.	J. D. Eggleston, L. L. D.	1872	900,000	0	0	484	380	29,000	80,000
State College of Washington, Pullman, Wash.	E. O. Hollman, Ph. D.	1892	91,000	77,870	75,000	491	250	41,000	45,000
West Virginia University, Morgantown, W. Va.	F. B. Trotter, L. L. D.	1908	190,000	0	0	1,670	550	63,300	17,000

AGRICULTURAL AND MECHANICAL COLLEGES.

University of Wisconsin	F. A. Birge, LL. D.	1870	210,000	10	150	95	191	251,000	52,000
University of Wyoming	Justin F. Soule, A. M.	1887	90,000	21,000	3,000	1,000	191	10,000	
Total			100,000,000	1,187,000	839,200	15,152	21,834	1,811,819	1,351,679
<i>Institutions for colored students.</i>									
State Agricultural and Mechanical College for Negroes, Alabama	Walter S. Buchanan, A. M.	1875*					90	7,500	1,200
Brunswick College, Pine Bluff, Ark.	J. G. Ish, Jr., superintendent	1875				50	30	2,150	580
State College for Colored Students, Dover, Del.	William C. Jason, D. D.	1872				104	90	1,000	500
Florida Agricultural and Mechanical College for Negroes, Tallahassee, Fla.	Nathan B. Young, A. M.	1887				250	130	4,000	2,200
Georgia State Industrial College, Savannah, Ga.	R. R. Wright, LL. D.	1891				135	51	200	5,000
Kentucky Normal and Industrial Institute for Colored Persons, Frankfort, Ky.	E. P. Russell, LL. D.	1887				390	264	3,701	15,000
Southern University and Agricultural and Mechanical College, Baton Rouge, La.	J. S. Clark	1880				200	210	1,370	500
Princess Anne Academy, Princess Anne, Md.	J. O. Spencer, LL. D., Baltimore	1887				118	55	1,000	1,500
Alcorn Agricultural and Mechanical College, Aloom, Miss.	J. J. Kowal, Ph. D.	1871	(1)			1,000	290	1,000	
Lincoln Institute, Jefferson City, Mo.	Clarence Richardson	1866				60	40	5,914	1,000
Negro Agricultural and Technical College, Greensboro, N. C.	James B. Dudley, LL. D.	1894				129	90	2,700	55,000
Ohio Agricultural and Normal University, Langston, Okla.	J. M. Marquess	1897				319	201	350	255
State Agricultural and Mechanical College, South Carolina	Robert S. Wilkinson, Ph. D.	1896	(1)			130	90	1,000	1,500
Agricultural and Industrial State Normal School for Negroes, Tuskegee, Tenn.	William J. Hale	1913				166	100	1,452	575
Frost, View State Normal and Industrial College, Frost, View, Tex.	I. M. Terrell, A. M., principal	1879				1,435	390	2,200	500
Hampton Normal and Agricultural Institute, Hampton, Va.	James E. Gregg, B. D.	1868	(1)			1,001	735	6,187	17,150
West Virginia Collegiate Institute, Institute, W. Va.	Byrd Trillerman, A. M.	1872				85	40	800	500
Total			10,980,000	1,197,000	833,500	31,112	24,089	4,910,273	1,637,859
Grand total									

1 Hawaii and Porto Rico do not participate in this grant.
 2 Only 90 of the 100 acres are included; the remaining 100 acres is land which has been leased.
 3 Total grant to State given under Mississippi Agricultural and Mechanical College.
 4 Total grant to State given under Clemson Agricultural College, South Carolina.
 5 Total grant to State given under Virginia Polytechnic Institute under act of 1894.



TABLE 2.—Professors, instructors, and station staff in

Institutions.	College of agriculture and mechanic arts or similar divisions.																				
	Resident instruction.													Extension service.							
	Agriculture.			Mechanic arts.			Home economics.			Total (includes some teachers not classified under the 3 divisions here given).	Agriculture.										
	Secondary schools.		Collegiate.	Secondary schools.		Collegiate.	Secondary schools.		Collegiate.		Full time.	County agents.			Part time.						
	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.			Men.	Women.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Alabama Polytechnic Institute		32					31						63		21			89		12	
University of Arizona		15					5						20		5			14		10	
University of Arkansas		19					20						39		5			106		16	
University of California	44	112	2				50						206		13			18		22	
Colorado Agricultural College	9	41	6	6			10						56		7			28		3	
Connecticut Agricultural College		28	2				1						29		1			17		2	
Delaware College		11					8						19		3			3		1	
University of Florida		23					13						31		6			31		10	
Georgia State College of Agriculture		21											21		2			123		12	
College of Hawaii		2					3						4		15						
University of Idaho	14	36	5				8		4	4			44		12			43		8	
University of Illinois	103	6					117	3					220		23			27		17	
Purdue University, Indiana	19						47	1					96		9			70		47	
Iowa State College	50	1					113	28					221		65			161		171	
Kansas State Agricultural College	21	7	103	13	24	7	76	12	10	10	49	50	144	51	34			60		22	
University of Kentucky	19	1					58	10					77		3			47		5	
Louisiana State University	12						42	10					54		13			74		2	
University of Maine	13						25						38		2			19		6	
Maryland State College of Agriculture		33					16						49		16			31		1	
Massachusetts Agricultural College		60	2										60		2			15		16	
Massachusetts Institute of Technology							291	3					294		3					3	
Michigan Agricultural College		28	2				26						54		15			28		2	
University of Minnesota	66	27	68	3			68				1	21	201	55	18			88		74	
Mississippi A. and M. College		21					10						31		30			100		7	
University of Missouri		56	1				75						129		6			51		12	
Montana State College	8	12		6			10						25		9			25		3	
University of Nebraska	59	57	1				41			21			109		25			50		6	
University of Nevada		17	2				11	1					18		3			7		3	
New Hampshire College		16					19						35		8			18		3	
Rutgers College, New Jersey		17					24						41		2			18		3	
New Mexico College	7	18		6			6			2			36		1			27		3	
Cornell University, New York	202	35										16	202		51			82		19	
North Carolina State College		15					8						23		12			92		11	
North Dakota Agricultural College	0	6		12			7						13		9			40		4	
Ohio State University													420		61						
Oklahoma A. and M. College	1	15		4			11						31		9			85			
Oregon Agricultural College		36	1				24						60		14			20		7	
Pennsylvania State College		79					160						239		13			55		7	
University of Porto Rico	9	1		1	10	6	14	2					28		7			4		1	
Rhode Island State College		18	3				15						36		1			4		6	
Clemson Agricultural College		25					14						39		16			48		10	
South Dakota State College	38	15	30	10			6						43		14			76		8	
University of Tennessee		27					23	2					38		7			54		3	
Agricultural and Mechanical College of Texas		58					49						107		45			83			
Agricultural College of Utah	5	30		4			7						44		9			30		30	
University of Vermont		17					25						41		3			14		3	
Virginia Polytechnic Institute	30	41					35						55		18			87		28	
State College of Washington	1	26	1	4			18						49		10			72		21	

1 Included with men.

colleges of agriculture and mechanic arts, 1917-18.

Colleges of agriculture and mechanic arts or similar divisions—Continued.																			
Extension service—Continued.										Experiment station.									
Mechanic arts.					Home economics.					Total.	Agriculture.	Mechanic arts.	Home economics.	Total.	Total for college of agriculture and mechanic arts.		Total for entire institution.		
Full time.	County agents.	Part time.	Men.	Women.	Full time.	County agents.	Part time.	Men.	Women.						Men.	Women.	Men.	Women.	Men.
22																			
23																			
24																			
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46																			
47																			

* Under collegiate are included 75 men and 28 women in industrial science.

TABLE 2.—Professors, instructors, and station staff in colleges.

Institutions	College of agriculture and mechanic arts or similar divisions.																				
	Resident instruction.													Extension service.							
	Agriculture.			Mechanic arts.			Home economics.			Total (includes some Teachers not classified under the 3 divisions here given).	Agriculture.										
	Secondary schools.		Collegiate.	Secondary schools.		Collegiate.	Secondary schools.		Collegiate.		Full time.	County agents.			Part time.						
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.			Women.	Men.	Women.							
1	2	3	4	5	6	7	8	9	10			11	12	13		14	15	16	17	18	19	20	21
West Virginia University			25				18						4	33	4	16		7		8	
University of Wisconsin	30		79	1					2				16	104	19	5		27		6	
University of Wyoming			7		1		6						6	19	5	10		24			
Total	30	53	209	108	82	12	1654	75	14	67	64	339	4063	616	794	91	2439	301	64	119	
<i>Institutions for colored students.</i>																					
(Industrial classes)																					
State A. and M. College for Negroes, Alabama			1		12				1	7				20	7	2					
Branch Normal College, Arkansas														9	8						
State College for Colored Students, Delaware	1				1		1		1		1		2		1						
Florida A. and M. College for Negroes	3		3		7		7		10		6		10		10						
Georgia State Industrial College	4				9				2				13		2	8					
Kentucky Normal and Industrial Institute	12	9	12	2	7	2	5		2	8	2	6	12		9						
Southern University, Louisiana	3		3		5		5		4		4		8		4			3		1	
Princess Anne Academy, Maryland	4	2			4	2							8		4						
Alcorn A. and M. College, Mississippi													22		4						
Lincoln Institute, Missouri													15		18						
Negro Agricultural and Technical College, North Carolina	10		3		3		4						20		2						
Colored Agricultural and Normal University, Oklahoma	2	4	2				3						4		7						
State A. and M. College, South Carolina	6	9	6	9	11		11		3		3	17	12	6	9	7	2	3	3		
Agricultural and Industrial State Normal School for Negroes, Tennessee	4		2		4				1	8			12		17		2			4	2
Prairie View State Normal School, Texas	3		3		10	4	10	4	5		5	13	9								
Hampton Normal and Agricultural Institute													61		66						
West Virginia Collegiate Institute	2				6				5				8		15						
Total	60	24	35	12	79	11	43	4	4	53	2	25	245	188	13	11	10	3	8	5	
Grand total	429	77	2104	120	161	23	1697	79	18	120	68	304	4308	804	779	102	2449	363	636	119	

¹ Figures of 1916-17.

of agriculture and mechanic arts, 1917-18—Continued.

College of agriculture and mechanic arts or similar divisions—Continued.																													
Extension service—Continued.												Experiment station.																	
Mechanic arts.						Home economics.						Total.			Agriculture.			Mechanic arts.			Home economics.			Total.		Total for college of agriculture and mechanic arts.		Total for entire institution.	
Full time.		County agents.		Part time.		Full time.		County agents.		Part time.		Total.		Agriculture.		Mechanic arts.		Home economics.		Total.		Total for college of agriculture and mechanic arts.		Total for entire institution.					
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.				
12	13	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47				
107	133	299	321	330	333	335	337	339	341	343	345	347	349	351	353	355	357	359	361	363	365	367	369	371	373				
34	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10				
16	10	3	179	874	153	4018	1761	1532	78	40	131646	927823	221411503	2774															
						1					2	1										22	8	22	8				
													9	8								9	8	9	8				
													2	1								2	1	2	1				
												10	10	10	10	10	10	10	10	10	10	10	10	10	10				
												3	3	3	3	3	3	3	3	3	3	3	3	3	3				
												12	9	12	9	12	9	12	9	12	9	12	9	12	9				
												12	2	17	11	11	11	11	11	11	11	11	11	11	11				
												8	4	8	4	8	4	8	4	8	4	8	4	8	4				
													22	4	22	4	22	4	22	4	22	4	22	4	22				
												15	18	15	18	15	18	15	18	15	18	15	18	15	18				
													22	22	22	22	22	22	22	22	22	22	22	22	22				
												4	7	4	7	4	7	4	7	4	7	4	7	4	7				
												24	30	24	30	24	30	24	30	24	30	24	30	24	30				
												2	12	17	12	17	12	17	12	17	12	17	12	17	12				
												13	9	13	9	13	9	13	9	13	9	13	9	13	9				
												61	69	61	69	61	69	61	69	61	69	61	69	61	69				
												8	15	8	15	8	15	8	15	8	15	8	15	8	15				
11								6	2		4	30	45	4							4	250	214	255	221				
27	10							185	878			1574148	18001530	78	40							4	131660	927823	221411503	2774			

* Includes 75 men and 28 women in industrial science.



TABLE 3.—Enrollment of students during the year ending June 30, 1918.

A. DIVISIONS OF AGRICULTURE.

Institutions.	Students in collegiate courses of less than 4 years.		Regular undergraduate students in courses.		Graduate students.		Special in-class students.		Summer school students.		Total matriculated students.		Students in secondary paratory courses.		Short-course students.		Extension or correspondence students.		Total enrollment, including duplicates.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Alabama Polytechnic Institute.....	25	1	192	1	3	0	0	0	0	0	350	1	0	0	0	0	0	0	350	1
University of Arizona.....	4	0	23	3	1	0	0	0	0	0	31	4	0	0	0	0	0	0	35	0
University of Arkansas.....	0	0	44	0	0	0	0	0	0	0	45	0	0	0	0	0	0	0	187	0
University of California.....	0	0	322	22	22	3	11	3	0	0	314	25	218	190	0	0	1,916	0	5,561	25
Colorado Agricultural College.....	0	0	203	1	0	0	2	0	0	0	235	1	0	0	0	0	0	0	423	0
Connecticut Agricultural College.....	0	0	95	0	0	0	4	0	0	0	101	0	49	0	0	0	0	0	150	0
Delaware College.....	0	0	49	2	0	0	0	0	0	0	49	0	0	0	0	0	0	0	49	0
University of Florida.....	31	0	55	0	1	0	0	0	0	0	90	0	0	0	0	0	107	0	241	0
Georgia State College of Agriculture.....	52	0	153	0	4	0	3	0	0	259	211	260	0	0	0	0	0	0	316	0
College of Hawaii.....	0	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0
University of Idaho.....	0	0	63	0	0	0	0	0	0	0	63	0	19	0	0	0	0	0	113	0
University of Illinois.....	0	0	514	32	0	0	9	1	0	0	511	32	0	0	0	0	2,700	0	3,245	0
Iowa State College of Agriculture and Mechanic Arts.....	0	0	442	0	0	0	0	0	0	0	441	0	267	0	0	0	0	0	2,824	0
Kansas State Agricultural College.....	26	0	46	0	0	0	0	0	0	0	72	0	0	0	0	0	0	0	108	0
University of Kentucky.....	0	0	404	0	10	0	12	0	0	0	416	1	58	0	0	0	0	0	615	0
University of Kentucky and Agricultural and Mechanical College.....	0	0	107	5	0	0	2	0	0	0	109	5	0	0	0	0	0	0	120	0
University of Maine.....	0	0	129	1	4	0	2	0	0	0	135	1	0	0	0	0	2,085	0	2,221	0
Maryland State College of Agriculture.....	0	0	114	2	0	0	0	0	0	0	114	2	17	0	0	0	0	0	131	0
Massachusetts Agricultural College.....	22	1	99	2	10	0	0	0	0	125	109	2	13	0	0	0	0	0	173	0
Michigan Agricultural College.....	52	1	389	23	28	1	52	7	0	0	521	38	0	0	0	0	0	0	684	0
Michigan Agricultural College.....	0	0	416	2	8	0	0	0	0	70	346	2	0	0	0	0	0	0	813	0
University of Minnesota.....	0	0	239	0	29	5	3	0	0	0	311	5	726	26	1,431	0	0	0	2,747	0
Mississippi Agricultural and Mechanical College.....	65	0	406	0	12	0	37	0	0	163	683	0	0	0	0	0	0	0	744	0
University of Missouri.....	0	0	306	28	20	0	24	6	38	313	326	26	0	0	0	167	14	46	547	0
Montana State College of Agriculture and Mechanic Arts.....	0	0	57	0	11	0	0	0	0	0	68	0	89	0	0	0	0	0	157	0
University of Nebraska.....	0	0	249	0	1	0	12	0	3	0	251	0	297	0	0	0	0	0	692	0
University of Nevada.....	0	0	17	0	0	0	0	0	0	0	17	0	13	0	0	0	0	0	110	0

AGRICULTURAL AND MECHANICAL COLLEGES.

Institution	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	Total	
New Hampshire College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rutgers College, New Jersey.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cornell University, New York.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Carolina College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Carolina College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ohio State University.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oklahoma Agricultural and Mechanical College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oregon Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Porto Rico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhode Island State College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clemson Agricultural College, South Carolina.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Tennessee.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural and Mechanical College of Texas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural College of Utah.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Vermont and State Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Virginia Polytechnic Institute.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State College of Washington.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia University.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Wisconsin.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	577	12	10,382	546	408	39	1,041	1,381	12,307	1,078	2,596	492	7,145	1,966	11,382	2,188	36,966	5,940					

Institutions for colored students.

Agricultural and Mechanical College for Negroes, Alabama.....

Branch Normal College, Arkansas.....

State College for Colored Students, Delaware.....

Florida Agricultural and Mechanical College for Negroes.....

Georgia State Industrial College.....

Kentucky Normal and Industrial Institute for Colored Persons.....

Southern University and Agricultural and Mechanical College, Louisiana.....

Princess Anne Academy, Maryland.....

Alcorn Agricultural and Mechanical College, Mississippi.....

Shorter Institute, Missouri.....

The Negro Agricultural and Technical College of North Carolina.....

1 Includes all graduate and undergraduate students who have fully satisfied collegiate entrance requirements.

2 Includes short courses of 10 days or more.

3 Women included in this item.

4 Not classified by divisions.



TABLE 3.—Enrollment of students during the year ending June 30, 1918—Continued.

Institutions.	A. DIVISIONS OF AGRICULTURE—Continued.												Total enrollment, excluding duplicates.								
	Students in collegiate courses of less than 4 years.		Regular undergraduate students in 4-year courses.		Graduate students.		Special or unclassified students.		Summer school students.		Total matriculated students.			Students in secondary not preparatory courses.		Short-course students.		Extension of correspondence students.			
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.		Men.	Women.	Men.	Women.	Men.	Women.		
1	2	3	4	5	6	7	8	0	10	11	12	13	14	15	16	17	18	19	20	21	
<i>Institutions for colored students—Continued.</i>																					
Colored Agricultural and Normal University, Oklahoma	11	47	2	0	0	0	3	2	22	212	36	236	57	134	0	0	0	0	131	417	
State Agricultural and Mechanical College, South Carolina	271	311	46	41	0	0	0	0	19	274	46	41	21	24	0	0	0	0	357	1,656	
Agricultural and Industrial State Normal School for Negroes, Tennessee	10	0	21	0	0	0	0	0	29	102	35	0	10	0	0	0	0	0	62	102	
Prairie View State Normal and Industrial College, Texas	0	0	10	0	0	0	83	123	42	115	135	228	0	0	0	0	0	0	135	228	
Rampton Normal and Agricultural Institute, Virginia	0	0	57	0	0	0	0	0	37	33	0	0	37	0	0	0	0	0	57	0	
West Virginia College Institute	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16	0	
Total.	433	498	328	183	5	0	87	125	265	1,011	617	649	534	425	31	39	4	2	1,424	1,976	
Grand total.	1,000	1,448	10,710	689	413	36	487	184	1,844	2,392	12,774	1,727	3,130	917	7,176	2,005	1,386	2,190	38,290	7,916	
B. DIVISIONS OF MECHANIC ARTS.																					
Alabama Polytechnic Institute	15	0	348	0	3	0	0	0	0	0	363	0	0	0	15	0	0	0	363	0	
University of Arizona	0	0	45	0	0	0	0	0	0	0	45	0	0	0	0	0	0	0	45	0	
University of Arkansas	10	0	98	0	0	0	4	0	0	0	112	0	0	0	38	0	0	0	150	0	
University of California	0	0	579	6	25	3	12	0	138	136	604	9	54	0	0	0	0	0	694	0	
Colorado Agricultural College	0	0	65	0	0	0	2	0	9	0	76	0	0	0	0	0	0	0	130	0	
Connecticut Agricultural College	0	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0	
Delaware College	0	0	9	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9	0	
University of Florida	0	0	67	0	0	0	0	0	0	0	67	0	0	0	0	0	0	0	67	0	
Georgia State College of Agriculture	0	0	29	0	0	0	0	0	0	0	29	0	0	0	160	0	0	0	189	0	

AGRICULTURAL AND MECHANICAL COLLEGES.

49

College	1916-17	1915-16	1914-15	1913-14	1912-13	1911-12	1910-11	1909-10	1908-09	1907-08	1906-07	1905-06	1904-05	1903-04	1902-03	1901-02	Total	Women	Men
College of Hawaii.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Idaho.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Illinois.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Furde University, Indiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iowa State College of Agriculture and Mechanical Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kansas State Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Kentucky.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Louisiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Maine.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maryland State College of Agriculture.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Massachusetts Institute of Technology.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Michigan Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Minnesota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mississippi Agricultural and Mechanical College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Missouri.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Missouri School of Mines and Metallurgy.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Montana State College of Agriculture and Mechanical Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Nebraska.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Nevada.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Hampshire College of Agriculture and Mechanical Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rutgers College, New Jersey.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico College of Agriculture and Mechanical Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cornell University, New York.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Carolina College of Agriculture and Mechanical Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Dakota Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ohio State University.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oklahoma Agricultural and Mechanical College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oregon Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pennsylvania State College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Porto Rico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhode Island State College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stemson Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota College of Agriculture and Mechanical Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Tennessee.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural and Mechanical College of Texas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural College of Utah.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Vermont and State Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Virginia Polytechnic Institute.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State College of Washington.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State College of Washington.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia University.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Wisconsin.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total.....	73	10	13,756	218	264	35	326	20	446	219	14,580	300	503	32	958	0	8,029	0	24,437

* Women included with men.

† Not classified by divisions.

1. Figures of 1916-17.



AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 3.—Enrollment of students during the year ending June 30, 1918—Continued.
B. DIVISION OF MECHANIC ARTS.—Continued.

Institutions.	Students in collegiate courses of less than 4 years.		Regular undergraduate students in 4-year courses.		Graduate students.		Special instruction students.		Summer school students.		Total matriculated students.		Students in secondary not preparatory courses.		Short-course students.		Extension or correspondence course students.		Total enrollment, excluding duplicates.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
<i>Institutions for colored students.</i>																				
Agricultural and Mechanical College for Negroes, Alabama.....	0	0	2	1	0	0	2	0	0	0	0	4	56	0	0	0	0	0	60	0
Branch Normal College, Arkansas.....	19	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	50	0	
Braxton College for Colored Students, Delaware.....	4	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	37	0	
Florida Agricultural and Mechanical College for Negroes.....	0	0	1	0	0	0	0	0	0	0	0	0	136	0	0	0	0	104	0	
Georgia State Industrial College.....	0	0	24	0	0	0	0	0	0	0	0	0	88	0	0	0	0	270	0	
Kentucky Normal and Industrial Institute for Colored Persons.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Southern University and Agricultural and Mechanical College, Louisiana.....	50	0	16	0	1	0	0	0	17	69	67	0	33	0	0	0	0	82	0	
Platt College, Maryland.....	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	0	
Albany Agricultural and Mechanical College, Mississippi.....	140	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	163	0	
Louisiana Institute, Missouri.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
The Negro Agricultural and Technical College, North Carolina.....	0	0	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	0	
Colored Agricultural and Normal University, Oklahoma.....	5	17	0	0	0	0	1	0	0	0	7	20	18	6	0	0	0	12	37	
State Agricultural and Mechanical College, South Carolina.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Agricultural and Industrial State Normal School for Negroes, Tennessee.....	1	0	66	0	0	0	0	0	31	50	64	0	76	0	0	0	0	178	0	
Pratts View State Normal and Industrial College, Texas.....	0	0	12	2	0	0	196	664	64	458	296	1,122	0	0	0	0	0	260	1,122	
Hampden Normal and Agricultural Institute, Virginia.....	0	0	210	0	0	0	1	0	0	0	210	0	0	0	0	0	0	210	0	
West Virginia College Institute.....	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0	0	80	0	
Total.....	219	17	473	3	1	0	200	664	112	677	635	1,143	695	98	0	0	0	1,961	1,159	
Grand total.....	202	17	14,239	221	265	35	528	684	578	798	15,225	1,413	1,100	100	956	0	4,029	20,098	1,453	

AGRICULTURAL AND MECHANICAL COLLEGES.

C. DIVISION OF HOME ECONOMICS, AND GRAND TOTAL ENROLLMENT FOR THE INSTITUTIONS IN ALL DIVISIONS.

Institutions.	Students in college finite courses (less than 4 years).		Regular under-graduate students in 4-year courses.		Graduate students.		Special classes and depts.		Summer school depts.		Total matriculated students.		Students in secondary preparatory courses.		Short-course students.		Extension correspondence course students.		Total enrollment, excluding duplicates.		Total enrollment in divisions of agriculture, mechanics, and home economics.		Enrollment in other colleges or schools of the institution.		Enrollment in preparatory department.		Grand total for the institution, excluding duplicates.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Alabama Polytechnic Institute.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	990	881
University of Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	365	350
University of California.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,408	14,540
California Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,260	1,260
Connecticut Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,044	577
Dakota Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,604	560
University of Florida.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,411	376
Georgia State College of Agriculture.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,060	(1)
College of Agriculture and Mechanic Arts of the Territory of Hawaii.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	75
University of Idaho.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	368	224
Purdue University, Indiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,909	1,941
Iowa State College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,594	271
Kansas State Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,014	1,385
University of Kentucky.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,873	1,835
Louisiana State University and Agricultural and Mechanical College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	862	314
University of Malaya.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,074	1,312
Maryland State College of Agriculture.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	713	833
Massachusetts Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213	101
Massachusetts Institute of Technology.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	634	128
Michigan Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,714	19
Michigan Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,146	416
University of Minnesota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,146	416
Mississippi Agricultural and Mechanical College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,779	6,334
.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	831	241
.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	256	2
.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,087	77

1. Includes all graduate and undergraduate students who have fully-satisfied collegiate entrance requirements.
 2. Includes short courses of 10 days or more.
 3. Women included with men.
 4. Excluding summer school students.



AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 3.—Enrollment of students during the year ending June 30, 1918—Continued.

C. DIVISION OF HOME ECONOMICS; AND GRAND TOTAL ENROLLMENT FOR THE INSTITUTIONS IN ALL DIVISIONS—Continued.

Institutions.	Students in college courses of less than 4 years.		Regular graduate students in 4-year courses.		Oredu- to stu- dents.		Special cur- ricu- lar stu- dents.		Summer school stu- dents.		Total matricu- lated stu- dents.		Stu- dents in second- ary not prepar- atory courses.		Short- course stu- dents.		Exten- sive cor- resp- on- dence course stu- dents.		Total enrollment excluding dupli- cates.		Total en- rollment in divisions of agriculture, mechanics, and home eco- nomics.		Enrollment in other colleges or schools of the insti- tution.		Enroll- ment in prepara- tory de- part- ments.		Grand total enrollment, including duplicated.											
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										
University of Missouri.....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)										
Michigan State College of Agriculture and Mechanic Arts.....	0	0	0	0	71	0	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
University of Nebraska.....	0	0	0	0	213	0	7	0	40	16	0	0	204	0	0	0	0	0	0	481	915	462	1,709	2,013	0	0	0	2,645	2,468									
University of Nevada.....	0	0	0	0	71	0	0	0	0	0	0	0	69	0	0	0	0	0	0	71	151	72	170	250	0	0	0	261	259									
New Hampshire College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	61	628	61	322	354	0	0	0	983	268									
Rutgers College, New Jersey.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
New Mexico College of Agriculture and Me- chanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Cornell University, New York.....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)							
North Carolina College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Ohio State University.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
North Dakota Agricultural College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Oklahoma Agricultural and Mechanical College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Oregon Agricultural College.....	0	0	0	0	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Prager Agricultural College.....	0	0	0	0	243	0	28	0	0	0	0	0	395	0	18	0	0	0	0	413	737	421	1,299	997	0	0	0	2,056	1,417									
University of Puerto Rico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Rhode Island State College.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Clemson Agricultural College, South Caro- lina.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
South Dakota College of Agriculture and Mechanic Arts.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
University of Tennessee.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural and Mechanical College of Texas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AGRICULTURAL AND MECHANICAL COLLEGES.

Table with columns for enrollment figures (e.g., 110, 30, 140, 140, 301, 536) and rows for various institutions such as Agricultural College of Utah, University of Vermont, and West Virginia University. Includes a 'Total' row at the bottom of the main table.

Institutions for colored students. (Industrial classes.) Agricultural and Mechanical College for Negroes, Normal College, Arkansas...

* Includes 3 students in general science. * Includes 3 students in general agriculture. † Below ninth grade.



TABLE 4.—Students graduating and not graduating in four-year college courses of agriculture and the mechanic arts, 1917-18.

A. AGRICULTURE.

Institutions	Agricultural education.		Agronomy.		Animal husbandry.		Dairy husbandry.		Forestry.		Horticulture.		Pomology (fruit growing).		Poultry husbandry.		Rural economics.		Soils and fertilizers.		Veterinary science.		General agriculture.		Miscellaneous.		Total in agriculture.				
	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.	Not Graduates.	Graduates.			
1	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Alabama Polytechnic Institute.....	107	162	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182	
University of Arizona.....	1	5	3	9	3	3	9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
University of Arkansas.....	12	4	10	5	5	12	5	5	12	3	2	4	1	5	2	13	14	3	4	3	4	1	34	5	30	27	27	27	27	27	
University of California.....	116	3	13	5	28	7	28	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Coleman Agricultural College.....	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Conant Agricultural College.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
University of Florida.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Georgia State College of Agriculture.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
College of Illinois.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
University of Illinois.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Purdue University, Indiana.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Iowa State College of Agriculture and Mechanic Arts.....	20	16	42	7	50	14	41	64	20	16	16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Kansas State Agricultural College.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
University of Kentucky.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Louisiana State University and Agricultural and Mechanical College.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
University of Maine.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Maryland State College of Agriculture.....	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Massachusetts Agricultural College.....	6	4	3	2	21	6	3	3	3	4	2	7	3	3	25	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Michigan Agricultural College.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
University of Minnesota.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mississippi Agricultural and Mechanical College.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
University of Missouri.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Montana State College of Agriculture and Mechanic Arts.....	6	1	1	1	2	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

University of Nebraska.....	1	11	3	13	8	40	10	2		13	3		92	23	9	221	35													
University of Nevada.....							21									18														
New Hampshire College of Agriculture and Mechanical Arts.....																23	12													
Rutgers College, New Jersey.....													54	12		54														
New Mexico College of Agriculture and Mechanical Arts.....						14	2	5	1	1			54	1,068	199	1,068	253													
Cornell University, New York.....																52	27													
North Carolina State College of Agriculture and Engineering.....	9	4				10	5	12	5	(1)			4	2		99	6													
North Dakota Agricultural College.....	1					5	2	9	3	2			11			466	54													
Ohio State Agricultural College.....																110	14													
Oregon Agricultural College.....						5	8	5	6	1						425	33													
Osaka Agricultural College.....	12	6				115	26	78	15							196	194													
University of Porto Rico.....										25	3	43	17	3	1	27	7													
Rhode Island State College.....						46	5									46	6													
Caribbean Agricultural College, South Carolina.....						27	27	10	10							364	68													
South Dakota State College of Agriculture and Mechanical Arts.....						18	7	10	5	7	2					48	14													
University of Tennessee.....																411	129													
Agricultural and Mechanical College of Texas.....																411	129													
Agricultural College of Utah.....																31	13													
University of Vermont and State Agricultural College.....	2	3	5			6	8	9								113	6													
Virginia Polytechnic Institute.....									4	1	1					243	15													
State College of Washington.....	6	5				9	2	1	6	2						132	17													
West Virginia University.....	1					3	8		25	4						214	81													
University of Wisconsin.....										1	6					16	1													
University of Wyoming.....																10,687	1,739													
Total.....	304	55	60	22	662	109	545	311	91	70	132	20	340	110	43	30	49	14	40	19	8	13	969	164	5,468	471	300	106	10,687	1,739

! Included in animal husbandry.



AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 4.—Students graduating and not graduating in four-year college courses of agriculture and mechanic arts, 1917-18—Continued.

B. MECHANIC ARTS AND ENGINEERING.

Institutions.	Civil engineer-ing.		Electrical engineer-ing.		Mechanical engineer-ing.		Mining engineer-ing.		Textile engineer-ing.		Chemical engineer-ing.		Saniitary engineer-ing.		General engineer-ing.		Unclassified.		Total.	
	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.	Not Gradu-ates.	Graduates.
Alabama Polytechnic Institute.....	32	5	179	22	235	10	6	2			25	3							392	42
University of Arkansas.....	30	2	9	4	19	1	1				9	12			44				112	4
University of California.....	117	17	294	16	3	1	106	5			145	12			45				602	6
Colorado Agricultural College.....	8	6	5	3	3	1													61	10
Connecticut Agricultural College.....																			5	
Delaware College.....	17	6	24	4	18	3					21	2			11				94	15
University of Florida.....	5	5	11	1	4						5				42				67	1
Georgia State College of Agriculture.....	26	1	3																29	7
College of Hawaii.....	15																		19	7
University of Idaho.....	13	1	14	4	11		12	1			7	2							29	7
University of Illinois.....	163	22	228	31	259	26	18	5			15	17							665	115
Purdue University, Indiana.....	167	23	279	33	312	30	6	1			18	10							849	108
Iowa State College of Agriculture and Mechanic Arts.....	115	26	190	23	213	11	6	1			35	3			131				519	72
Kansas State Agricultural College.....	19	6	51	13	64	17	17	2											245	32
University of Kentucky.....	45	3	157	27	184	27	13	2											241	25
Louisiana State University and Agricultural and Mechanic Arts College, Maine.....	7	2	37	4	43	9	1				9	1			53				201	12
University of Maryland.....	54	5	89	12	101	26	6				110	8			16				338	31
Maryland State College of Agriculture.....	12	2	17	11	29	7	11												33	2
Massachusetts Institute of Technology.....	259	47	219	48	267	72	89	6			27	43							1,305	212
Michigan Agricultural College.....	27	13	15	6	23	17	11				11	2			21				1,279	34
University of Minnesota.....	78	129	129	19	148	5	74	10			99	9			36				597	57
Mississippi Agricultural and Mechanical College.....	15	4	45	11	56	4	4												230	19
University of Missouri.....	89	4	22	2	11	2	74	11			21				304				86	10
Montana State College of Agriculture and Mechanic Arts.....	12	3	40	3	43	22	4				4								222	21
University of Nebraska.....	65	6	95	8	103	6	41				7								222	21
University of Nevada.....	40																		13	
New Hampshire College of Agriculture and Mechanic Arts.....																			8	
Rutgers College, New Jersey.....	26	2	16	3	19	2													61	5

AGRICULTURAL AND MECHANICAL COLLEGES.

1	260	1	42	7	83	1	612	3	60	5	22	1	1	1	26	945		
2	57	2	14	14	170	4	15	30	3	108	14	3	3	23	284			
3	144	3	8	7	105	12	41	3	15	97	20	6	112	73				
4	23	2	85	2	32	21	25	8	3	375	24	31	319	12				
5	61	23	132	32	81	20	33	8	4	34	7	107	729					
6	6	3	13	2	23	4	13	3	3	50	11	11	57					
7	18	11	2	2	67	34	13	4	4	218	33	53	326					
8																		
9																		
10	12	1	23	2	5	6	6	3	3	57	20	1	119					
11	126	6	132	7	73	2	16	1	39	1	20	1	426					
12	29	3	17	2	21	2							416					
13													57					
14																		
15	43	2	119	13	75	3	34	13	34	7	264	18	264					
16	23	7	43	7	41	1	13	2	13	1	150	12	150					
17	54	4	44	4	31	31	15	5	17	17	168	13	168					
18	19	19	26	26	26	2	5	2			533	90	533					
19	5	52	2	2	12	2	5	2			24	6	24					
20																		
Total	2,147	388	2,887	390	3,215	407	593	67	162	27	1,517	108	30	1,779	598	25	13,622	1,506

TABLE 4.—Students graduating and not graduating in four-year college courses of agriculture and mechanic arts, 1917-18—Continued.

C. HOME ECONOMICS, ARCHITECTURE, PHARMACY, GENERAL SCIENCE, ETC.

Institutions.	Foods and cookery.		Textiles and clothing.		Industrial management.		Caterina management.		Teachers' course.		General course.		Un-classified.		Total.		Architecture.		Pharmacy.		General science.		Unclassified.		Total excluding home economics.		
	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	Not grad- ates.	Gradu- ates.	
Alabama Polytechnic Institute.....																											55
University of Arizona.....	1																										69
University of Arkansas.....									36	4																	36
University of California.....	45	35																									87
Colorado Agricultural College.....											177	24										6	3				6
Connecticut Agricultural College.....					20				19													10	2				10
Delaware College.....											36	9															36
University of Florida.....																											224
Georgia State College of Agriculture.....											9	1										208	2				11
College of Hawaii.....											42	9										45	3				45
University of Illinois.....																											742
University of Iowa.....	22								70																		406
Pennsylvania State University.....											188	29										286	46				77
Iowa State College of Agriculture and the Me- chanic Arts.....											519	92										81	12				81
Kansas State Agricultural College.....	4	3	4	1							269	87	4									198	14				413
University of Kentucky.....											84	6															84
Louisiana State University and Agricultural and Mechanics College.....																											59
University of Maine.....																											11
Maryland State College of Agriculture.....																											168
Massachusetts Agricultural College.....																											42
Massachusetts Institute of Technology.....																											114
Michigan Agricultural College.....																											132
University of Minnesota.....											286	64										74	10		58		3
Mississippi Agricultural and Mechanical College.....																											31
University of Missouri.....	3	2																									1
Montana State College of Agriculture and Me- chanic Arts.....										1	15	46															61

Rutgers College, New Jersey.....	11	5	2	1	18	1	1	1	1	278	3	2	3				
New Mexico College of Agriculture and the Me- chanic Arts.....					18	34				1			265				
University of Nebraska.....	21	28	1		45					1							
University of Nevada.....																	
New Hampshire College of Agriculture and Mechanic Arts.....																	
Cornell University, New York.....																	
North Carolina State College of Agriculture and Engineering.....	21	1	44	5	65	6		1	39	3	23	4	63				
North Dakota Agricultural College.....					215	18		4	5		161	26	161				
Ohio State University.....			119	14	115	57				85	358	18	511				
Oklahoma Agricultural and Mechanical College.....			413	27	142	26		68	4	275	29		292				
Oregon State Agricultural College.....			142	26	30	18		14		15			31				
Pennsylvania State College.....			30	18	42	6		2			42	3	42				
University of Porto Rico.....	42	6											8				
Rhode Island State College.....													2				
South Dakota State College of Agriculture and Mechanic Arts.....					101	19		19	59	7			98				
Tennessee.....					5								20				
University of Tennessee.....					5			20	1				1				
Agricultural and Mechanical College of Texas.....													6				
Utah.....													5				
Agricultural College of Utah.....					40	5							46				
University of Vermont.....					10	6				18		28	5				
Virginia Polytechnic Institute.....								10				456	51				
State College of Washington.....					64			49	11				21				
West Virginia.....					64			21	1				1				
West Virginia University.....	10	10	11	15	28	66		3					3				
University of Wisconsin.....					24												
University of Wyoming.....																	
Total.....	139	51	83	12	1	78	26	33	1,040	365	2,418	139	1,731	145	1,265	128	4,037

1 Included under agriculture.

TABLE 5.—Students in various courses in colleges of agriculture and the mechanic arts for the colored race, 1917-18.

Institutions.	Agriculture.	Carpentry.	Mechanics shop.	Blacksmithing.	Shoemaking.	Broom making.	Woolenwrighting.	Bricklaying.	Painting.	Printing.	Harness making.	Tailoring.	Plastering.	Sewing.	Cooking.	Laudering.	Nursing.	Millinery.	Plumbing.	Dressmaking.	Household arts.	Miscellaneous.	Military drill.	
State Agricultural and Mechanical College for Negroes, Alabama	12	12	12	7	8	10	10	2	2	4	10	10	10	45	79	17	17	39	17	39	40			
Branch Normal College, Alabama	33	42	18	34	7	10	10	10	2	2	2	2	2	275	300	26	26	16	25	25	1	1	40	
State College for Colored Students, Delaware	11	9	2	5	5	5	5	7	7	11	20	20	100	100	125	16	5						85	
Florida Agricultural and Mechanical College for Negroes	121	12	13	7	7	5	5	70	7	60	93	60	50	20	20	20	20	43					330	
Georgia State Industrial College	130	85	50	50	75	11	11	10	12	6	171	189	22	171	189	22	43						160	
Kentucky Normal and Industrial Institute for Colored Persons	185	25	18																					
Kentucky University and Agricultural and Mechanical College, Louisiana	65	32	14	14	2	2	2	20	3	16	20	20	20	162	128	30	42							
Princess Anne Academy, Maryland	5	10	8	8	8	8	8	37	9	9	16	16	16	107	107	57	7							
Alcorn Agricultural and Mechanical College, Mississippi	317	44	19	19	9	5	19	5	9	9	16	16	16	116	66	14	7							
Lincoln Institute, Missouri	34	18	19	19	9	5	5	5	5	5	5	5	5	215	215	215								75
Negro Agricultural and Technical College, North Carolina	39	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5							139
Colored Agricultural and Normal University, Oklahoma	215	22	10	11	11	11	11	11	11	11	11	11	11	215	215	215								75
Colored Normal, Industrial, Agricultural, and Mechanical College, North Carolina	136	37	11	11	2	2	2	18	23	4	11	19	19	111	98	29	15							186
Agricultural and Industrial State Normal School for Negroes, Tennessee	15	53	49	2	2	25	33	17	3	3	3	3	17	209	189	149	15	33						129
Prairie View State Normal and Industrial College, Texas	65	70	11	85	26	48	35	33	12	11	26	31	22	209	180	130	18	18						588
Hampton Normal and Agricultural Institute, Virginia	228	51	30	10	5	4	4	16	14	13	16	16	16	85	78	78								105
West Virginia Collegiate Institute	28	25	23	23	23	23	23	23	23	23	23	23	23	23	23	23								105
Total	1865	563	177	334	190	94	191	338	84	161	37	188	154	2254	2088	770	84	94	96	17	39	51	1863	

TABLE 6.—Number of degrees conferred by colleges of agriculture and the mechanic arts, 1917-18.

Institutions.	Undergraduate courses.										Graduate courses.									
	Agricultural courses.		Mechanical courses.		Home economics.		All other courses.		Total.		Agricultural courses.		Mechanical courses.		Home economics.		All other courses.		Total.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Alabama Polytechnic Institute.....	45	1	41	1	52	3	134	4	10	11	12	13	14	15	16	17	18	19	20	21
University of Arizona.....	7		6		13		13													
University of Arkansas.....	46	3	50	3	195	425	291	428	5	4	5	2								
University of California.....	27	11	38	11	2	6	37	30												
Cornell University.....	11	8	19	8	2	20	32	30												
Delaware College.....	8	4	12	4	9	9	24	24												
University of Florida.....	6	6	12	6	21	7	28	24												
Georgia State College of Agriculture.....	7		7		1		7	1												
College of Hawaii.....	2		2		2	17	17	26												
University of Idaho.....	107	4	111	4	94	259	142	411	8	1	9	11								
University of Illinois.....	72		72		10	36	180	65	7											
Purdue University, Indiana.....																				
Iowa State College of Agriculture and Mechanic Arts.....	123	4	127	4	36	6	211	92	15											
Kansas State Agricultural College.....	63	1	64	1	6	11	56	6												
University of Kentucky.....	20		20		12	12	12	12												
Louisiana State University.....	25		25		10	1	57	10												
University of Maine.....	12		12		1	14	14													
Maryland State College of Agriculture.....	64		64		40	2	64	2												
Massachusetts Institute of Technology.....	83		83		100	181	196	245												
Michigan Agricultural College.....	39		39		64	64	74	74												
University of Minnesota.....	83		83		19	152	243	177	10											
University of Missouri.....	55		55		25	131	152	243	177	10										
University of Nebraska.....	4		4		15	2	7	16	22	22	32	32	24	24	199	199	24	24	24	24
University of Nevada.....	35		35		100	165	159	199	199	199	199	199	199	199	199	199	199	199	199	199

TABLE 6.—Number of degrees conferred by colleges of agriculture and the mechanic arts, 1917-18—Continued.

Institutions.	Undergraduate courses.						Graduate courses.													
	Agricultural courses.		Mechanical courses.		Home economics.		All other courses.		Total.		Agricultural courses.		Mechanical courses.		Home economics.		All other courses.		Total.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
1	3	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
New Hampshire College of Agriculture and Mechanic Arts.....	23	13	13	13	11	11	22	22	47	22	7	1	14	4	8	4	4	8	4	66
Rutgers College, New Jersey.....	12	5	5	5	13	13	30	30	30	30	7	1	1	1	1	1	1	1	1	3
New Mexico College of Agriculture and Mechanic Arts.....	3	3	3	3	1	1	3	3	448	150	75	6	6	6	6	6	6	6	6	81
Cornell University, New York.....	194	59	99	99	(1)	1	155	91	3	4	4	9	9	9	9	9	9	9	9	3
North Carolina State College of Agriculture and Mechanic Arts.....	22	26	26	26	4	6	107	167	345	212	1	3	3	3	3	3	3	3	3	66
North Dakota Agricultural College.....	6	54	73	73	45	18	10	16	36	34	1	1	1	1	1	1	1	1	1	3
Ohio State University.....	14	12	12	12	57	20	2	2	103	60	3	5	5	5	5	5	5	5	5	10
Oklahoma Agricultural and Mechanical College.....	52	1	107	107	26	18	6	6	214	33	5	5	5	5	5	5	5	5	5	2
Pennsylvania State College.....	93	1	7	7	18	18	19	19	19	6	6	6	6	6	6	6	6	6	6	6
University of Porto Rico.....	5	5	11	11	6	6	3	3	113	113	113	113	113	113	113	113	113	113	113	113
Rhode Island State College.....	5	5	11	11	6	6	3	3	19	19	19	19	19	19	19	19	19	19	19	19
Clemson Agricultural College.....	58	53	53	53	19	19	3	4	20	23	3	3	3	3	3	3	3	3	3	3
South Dakota State College of Agriculture and Mechanic Arts.....	11	14	13	13	1	1	1	1	27	27	27	27	27	27	27	27	27	27	27	27
University of Tennessee.....	14	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Agricultural and Mechanical College of Texas.....	29	17	17	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
University of Vermont and State Agricultural College.....	13	6	7	7	5	42	28	28	62	33	1	1	1	1	1	1	1	1	1	2
Vermont Polytechnic Institute.....	6	13	13	13	5	5	5	5	29	29	29	29	29	29	29	29	29	29	29	29
State College of Washington.....	14	1	12	12	21	17	34	34	43	56	3	3	3	3	3	3	3	3	3	3
West Virginia University.....	17	1	13	13	66	264	272	272	413	319	18	8	8	8	8	8	8	8	8	26
University of Wisconsin.....	90	1	96	96	66	264	272	272	413	319	18	8	8	8	8	8	8	8	8	26
University of Wyoming.....	1	1	6	6	1	1	1	1	7	7	7	7	7	7	7	7	7	7	7	7
Total.....	1,627	17	1,539	1,539	1	847	1,851	1,816	3,011	2,730	218	125	112	10	359	112	10	359	112	112

1 Included under agriculture.

2 Honorary.

AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 7.—Value of property of colleges of agriculture and the mechanic arts, 1917-18.

Institutions.	Land-grant fund of 1862.	Other land-grant funds.	Other permanent funds.	Unsold land grant of 1862.	Other unsold land grants.	Farm and grounds.	Buildings.	Apparatus and machinery.	Library.	Live stock.	Total.
	2	3	4	5	6	7	8	9	10	11	12
Alabama Polytechnic Institute.....	\$253,500		\$31,000	\$450,000	\$1,790,000	\$10,000	\$325,000	\$105,000	\$40,000	\$22,279	\$1,004,500
University of Arizona.....	132,067		\$10,500			191,950	653,500	30,000	54,051	2,000	3,301,661
University of Arkansas.....	732,485		250	11,809		11,401,301	2,285,888	2,285,888	50,000	85,973	19,920,020
University of California.....	202,784	\$74,962	4,757,945	400,000		470,001	498,955	204,490	54,126	26,900	1,857,464
Colorado Agricultural College.....	135,000		121,000			63,315	974,500	113,000	22,500	28,000	1,360,381
Connecticut Agricultural College.....	83,000		380,864			185,000	428,000	27,000	70,000	6,500	886,300
University of Florida.....	242,212		20,000			585,000	625,000	90,200	70,000	22,759	2,135,259
Georgia State College of Agriculture.....	(1)					126,116	70,499	79,707	54,012	5,450	1,694,181
College of Hawaii.....	700,000	800,000				60,000	625,000	300,000	81,165	30,009	2,566,166
University of Idaho.....	460,013		104,500			1,057,636	1,153,746	687,071	733,818	108,382	4,399,636
University of Illinois.....	680,530					200,000	1,800,000	550,000	(2)	2,944,500	2,944,500
Purdue University, Indiana.....	680,530					231,841	2,844,922	863,068	182,065	19,464	4,521,861
Iowa State College of Agriculture and Mechanic Arts.....	491,741			38,430		341,350	888,664	479,502	120,000	164,418	2,028,294
Kansas State Agricultural College.....	144,075		40,000			227,749	787,663	211,716	48,568	17,577	1,343,646
University of Kentucky.....	182,313	134,009	133,750			11,000	573,790	223,812	49,000	12,018	1,225,331
Louisiana State University.....	118,200		9,000			85,700	573,399	529,836	8,000	6,500	2,202,662
University of Maine.....	115,944		142,000			2,454,010	6,266,000	375,000	95,943	30,776	10,406,000
Maryland State College of Agriculture.....	219,000			265,000		110,377	1,269,650	375,000	90,000	70,000	3,167,286
Massachusetts Agricultural College.....	996,241	206,140	1,783,570			2,459,320	6,000,417	239,949	820,923	104,051	14,571,719
Massachusetts Institute of Technology.....	579,690	141,212				157,328	810,000	453,969	56,070	98,974	1,805,380
University of Minnesota.....	98,573	222,000	721,458	190,148		801,356	1,907,470	704,355	423,200	66,206	5,481,012
Mississippi Agricultural and Mechanical College.....	368,861			630,550		391,773	333,145	194,365	26,550	28,997	2,641,820
University of Missouri.....	690,250		571,907	354,900		941,639	2,346,018	461,948	253,000	100,000	6,004,294
University of Nebraska.....	67,131		170,870	5,776		20,200	274,578	203,024	50,000	45,000	1,214,061
University of Nevada.....	121,746	57,817	570,000	16		45,000	790,970	90,000	76,000	13,000	1,661,000
New Hampshire College of Agriculture and Mechanic Arts.....	170,000		894,274	241,909		449,500	998,573	294,000	100,000	15,000	2,681,277
Rutgers College, New Jersey.....	116,000					40,000	310,000	130,000	51,468		534,468
New Mexico College of Agriculture and Mechanic Arts.....	688,576		14,221,996			373,259	6,729,483	1,400,253	21,405		14,833,572
Cornell University, New York.....	125,000					110,000	645,000	374,000	20,000	15,000	1,235,000
North Carolina State College of Agriculture and Engineering.....											

¹ Included in farm and grounds.

² Included in apparatus and machinery.

³ Includes live stock.

⁴ Hawaii and Porto Rico do not participate in this grant.

TABLE 7.—Value of property of colleges of agriculture and the mechanic arts, 1917-18—Continued.

Institutions	1	2	3	4	5	6	7	8	9	10	11	12
	Land grant fund of 1862.	Other land grant funds.	Other permanent funds.	Unsold land grant of 1862.	Other unsold land grants.	Farm and grounds.	Buildings.	Apparatus, machinery, etc.	Library.	Live stock.	Total.	
North Dakota Agricultural College.....	\$1,221,777	\$218,797	\$222,704	\$408,120		\$85,000	\$985,000	\$1,281,170	\$413,479		\$24,307	\$2,491,987
Ohio State University.....	524,176			500,000	\$500,000	2,013,405	3,044,763	\$1,281,170			85,000	7,913,020
Oregon Agricultural and Mechanical College.....	212,664			9,000		60,000	538,517	287,817	121,011		61,975	1,987,324
Oregon Agricultural College.....	517,000					451,962	1,062,540	287,372	119,000		50,000	2,170,200
Pennsylvania State College.....			10,854			148,190	962,088	780,702	22,038		2,429	3,568,570
University of Porto Rico.....						51,002	281,449	85,900				453,760
Rhode Island State College.....	80,000					14,855	324,450	106,059	40,541		3,500	539,406
South Dakota State College of Agriculture and Mechanic Arts.....	361,941	(1)			1,411,380	170,702	913,450	399,013	21,800		32,094	1,700,064
University of Tennessee.....	491,000					70,000	450,000	57,000	21,800		15,000	2,415,971
Agricultural and Mechanical College of Texas.....	299,000		5,000			749,300	465,554	202,346	98,380		43,583	1,994,363
Agricultural College of Utah.....	135,000	100,000	852,544			191,565	763,190	322,224	18,690		59,944	2,622,603
University of Vermont and State Agricultural College.....	344,312					21,200	643,700	174,153	33,513		17,115	991,691
Virginia Polytechnic Institute.....	349,627	416,884				25,000	1,150,000	122,722	163,500		9,500	2,608,236
State College of Washington.....	115,104			1,557,385		147,129	276,529	278,900	26,800		17,000	1,238,312
West Virginia University.....	203,585	223,028	167,768			300,000	840,000	272,907	50,884		27,627	1,894,243
University of Wisconsin.....	54,725	45,968		746,964		2,137,311	789,489	4,090,980	59,980		19,500	1,334,694
University of Wyoming.....					340,150	110,000	465,000	215,000	80,000		10,000	2,077,797
Total.....	15,089,351	3,267,193	26,981,367	15,727,451	6,055,959	31,776,707	65,088,259	21,598,094	7,153,067	1,743,421	194,994,900	
<i>Institutions for colored students.</i>												
State Agricultural and Mechanical College for Negroes, Alabama.....						35,000	137,300	31,000	6,750		800	210,850
State College for Colored Students, Arkansas.....						60,000	28,500	25,212	3,500		1,200	118,432
State College for Colored Students, Delaware.....						30,000	30,000	1,500	200		5,000	66,700
Florida Agricultural and Mechanical College for Negroes.....						20,000	97,000	19,000	2,500		5,000	143,500
Georgia State Industrial College.....								5,000	1,000		2,000	8,000
Kentucky Normal and Industrial Institute for Colored Persons.....						21,000	90,000	8,872	500		5,555	138,927
Southern University and Agricultural and Mechanical College.....						2,000	17,100	9,338	400		2,500	108,658
Princess Anne Academy, Maryland.....						10,000	30,000	5,000	2,500		500	46,000
Alabama Agricultural and Mechanical College, Mississippi.....						6,000	22,000	25,000	2,000		1,500	56,500
Lincoln Institute, Missouri.....	113,000	98,000				10,000	291,000	25,000	3,870		9,374	212,016
Negro Agricultural and Technical College, North Carolina.....						85,000	111,000	30,222	6,000		7,000	193,222
Colored Agricultural and Norman University, Oklahoma.....						18,000	170,000	20,000	6,400		4,500	210,900
State Agricultural and Mechanical College, South Carolina.....	85,500					40,000	287,000	23,000	1,000		12,000	440,500

Agricultural and Industrial State Normal School for Negroes, Tennessee.....	24,027	69,703	17,074	1,170	5,731	170,717
Frairie View State Normal and Industrial College, Texas.....	127,000	294,230	1,149	3,140	10,000	344,220
Hampton Normal and Agricultural Institute, Virginia.....	40,000	1,040,000	157,104	13,500	29,132	4,010,850
West Virginia Collegiate Institute.....	40,000	260,000	4,500	1,500	1,700	287,700
Total.....	987,777	2,981,401	400,253	48,885	101,562	7,192,098
Grand total.....	32,404,484	98,043,060	21,998,379	7,201,952	1,845,423	191,987,607

Includes all permanent funds.

AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 8.—Value of additions during the year to equipment of colleges of agriculture and the mechanic arts, 1917-18.

Institutions.	Value of additions during the year to equipment of colleges of agriculture and the mechanic arts, 1917-18.								
	2	3	4	5	6	7	8	9	Total.
Alabama Polytechnic Institute.....	0	0	\$1,000	\$2,000	\$3,000	0	0	0	\$6,000
University of Arizona.....	0	0	4,252	6,017	2,338	0	0	0	\$11,076
University of Arkansas.....	0	0	738	0	0	0	0	0	738
University of California.....	\$122,178	0	436,883	23,355	119,851	0	0	0	901,867
Colorado Agricultural College.....	0	0	1,000	0	0	0	0	0	1,000
Connecticut Agricultural College.....	80,057	0	39,700	0	0	0	0	0	100,557
Delaware College.....	0	0	125,000	0	0	0	0	0	125,000
University of Florida.....	0	0	2,014	0	1,055	0	0	0	4,130
Georgia State College of Agriculture.....	0	0	5,468	3,340	3,340	0	0	0	12,148
College of Hawaii.....	0	0	1,500	1,400	2,485	0	0	0	5,385
University of Idaho.....	0	0	3,351	1,065	2,485	993	0	0	7,894
Purdue University, Indiana.....	0	0	65,209	2,960	3,485	1,175	0	0	74,829
Iowa State College of Agriculture and Mechanic Arts.....	195,593	0	69,379	19,469	11,584	12,848	0	0	312,638
Kansas State Agricultural College.....	0	0	3,606	8,121	2,350	4,988	0	0	19,065
University of Kentucky.....	0	0	86,365	13,775	1,561,316	16,275	0	0	1,778,721
Louisiana State University and Agricultural and Mechanical College.....	0	0	15,445	2,475	6,106	0	0	0	24,026
University of Maine.....	0	0	49,000	900	0	0	0	0	50,900
Maryland State College of Agriculture.....	0	0	291	1,834	355	0	0	0	2,480
Massachusetts Agricultural College.....	0	0	174,040	2,016	3,211	511	0	0	177,768
Michigan Agricultural College.....	0	0	6,023	2,014	15,153	340	0	0	23,530
Minnesota Agricultural College.....	307,040	0	6,287	0	67,068	3,049	0	0	383,444
Mississippi Agricultural and Mechanical College.....	47,497	0	1,000	3,080	0	0	0	0	51,577
University of Missouri.....	20,131	0	84,819	12,462	12,462	0	0	0	132,874
Montana State College of Agriculture and Mechanic Arts.....	157,184	0	37,000	12,833	2,080	1,800	0	0	209,897
University of Nebraska.....	31,580	0	730,000	2,046	17,352	16,849	0	0	808,787
New Hampshire College of Agriculture and Mechanic Arts.....	22,821	0	0	0	0	0	0	0	22,821
Rutgers College, New Jersey.....	194,432	0	0	0	0	0	0	0	194,432
New Mexico College of Agriculture.....	0	0	0	0	0	0	0	0	0
Cornell University, New York.....	0	0	1,778	31,423	2,274	125	0	0	37,500
North Carolina State College of Agriculture and Engineering.....	0	0	1,299	2,497	2,274	125	0	0	6,195
North Dakota Agricultural College.....	0	0	4,250	0	0	0	0	0	4,250
Ohio State University.....	13,722	0	20,874	17,769	5,248	4,259	0	0	57,672
Oklahoma Agricultural and Mechanical College.....	0	0	1,311	5,965	3,240	2,640	0	0	13,156
Oregon Agricultural College.....	0	0	168,340	0	0	0	0	0	168,340
University of Porto Rico.....	543	0	23,142	8,175	14,941	0	0	0	46,361
Rhode Island State College.....	0	0	1,200	2,400	14,941	600	0	0	19,141
University of Tennessee.....	0	0	0	0	0	0	0	0	0
University of Texas.....	0	0	0	0	0	0	0	0	0
University of Wisconsin.....	0	0	0	0	0	0	0	0	0
University of Wyoming.....	0	0	0	0	0	0	0	0	0
Total.....	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000

AGRICULTURAL AND MECHANICAL COLLEGES.

Institution	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Total
Clemson Agricultural College, South Carolina.	0	0	0	0	0	0	0	0	0	0	0	26,172
South Dakota State College of Agriculture and Mechanic Arts	0	0	0	0	0	0	0	0	0	0	0	5,160
University of Tennessee	0	0	0	0	0	0	0	0	0	0	0	46,797
Agricultural and Mechanical College of Texas	0	0	0	0	0	0	0	0	0	0	0	335,286
Agricultural College of Utah	0	0	0	0	0	0	0	0	0	0	0	192,034
University of Vermont and State Agricultural College	0	0	0	0	0	0	0	0	0	0	0	1,500
Virginia Polytechnic Institute	0	0	0	0	0	0	0	0	0	0	0	23,325
State College of Washington	0	0	0	0	0	0	0	0	0	0	0	124,766
West Virginia University	0	0	0	0	0	0	0	0	0	0	0	169,779
University of Wisconsin	0	0	0	0	0	0	0	0	0	0	0	279,204
University of Wyoming	0	0	0	0	0	0	0	0	0	0	0	175,663
Total	1,551,288	4,753,705	299,131	498,452	382,471	214,377	1,033,525	8,721,041	1,033,525	8,721,041	1,033,525	8,721,041
<i>* Institutions for colored students.</i>												
State Agricultural and Mechanical College for Negroes, Alabama	0	0	0	0	0	0	0	0	0	0	0	421
Branch Normal College, Arkansas	0	0	0	0	0	0	0	0	0	0	0	2,312
State College for Colored Students, Delaware	0	0	0	0	0	0	0	0	0	0	0	22,080
Florida Agricultural and Mechanical College for Negroes	0	0	0	0	0	0	0	0	0	0	0	8,389
Georgia State Industrial College	0	0	0	0	0	0	0	0	0	0	0	8,221
Kentucky Normal and Industrial Institute for Colored Persons	0	0	0	0	0	0	0	0	0	0	0	0
Southern University and Agricultural and Mechanical College	0	0	0	0	0	0	0	0	0	0	0	4,000
Princess Anne Academy, Maryland	0	0	0	0	0	0	0	0	0	0	0	0
Alcorn Agricultural and Mechanical College	0	0	0	0	0	0	0	0	0	0	0	0
Negro Institute, Mississippi	0	0	0	0	0	0	0	0	0	0	0	0
Negro Agricultural and Mechanical College, North Carolina	0	0	0	0	0	0	0	0	0	0	0	0
Colored Agricultural and Normal University, Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0
State Agricultural and Mechanical College, South Carolina	0	0	0	0	0	0	0	0	0	0	0	0
State Agricultural and Mechanical Normal School, Tennessee	0	0	0	0	0	0	0	0	0	0	0	0
Princeville State Normal and Industrial College, Texas	0	0	0	0	0	0	0	0	0	0	0	0
Hampton Normal and Agricultural Institute, Virginia	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia Collegiate Institute	0	0	0	0	0	0	0	0	0	0	0	0
Total	64,341	307,774	3,683	5,685	18,240	10,016	91,919	610,832	91,919	610,832	91,919	610,832
Grand total	1,615,629	5,061,479	302,814	492,147	400,671	224,393	1,125,444	9,331,873	1,125,444	9,331,873	1,125,444	9,331,873

1 Includes machinery.
2 Includes apparatus.
3 Includes equipment.

4 Includes land.
5 Includes library, apparatus, machinery, and livestock.
6 Includes buildings, library, apparatus, and machinery.

7 Farm of 100 acres.
8 Total inventory shows depreciation.

TABLE 9.—Income of colleges of agricul

A. FUNDS FOR INSTRUCTION

Institutions.	Funds for instruction and administration.					
	State funds.					United States funds.
	From employ- ment granted by the State.	From mill-tax levy for support.	From mill-tax levy for permanent im- prove- ments.	From appropria- tions for support.	From appropria- tions for permanent im- prove- ments.	From land- grant fund of 1862.
1	2	3	4	5	6	7
Alabama Polytechnic Institute.....	\$1,190.00	\$11,645.11	0	\$40,800.00	0	\$30,280.00
University of Arizona.....	0	0	0	217,747.50	\$100,000.00	17,789.24
University of Arkansas.....	0	0	0	140,315.50	0	6,183.33
University of California.....	49,825.19	0	0	1,909,625.52	205,864.17	40,481.11
Colorado Agricultural College.....	0	123,971.49	0	0	0	17,027.84
Connecticut Agricultural College.....	0	0	0	52,500.00	92,067.43	6,750.00
Delaware College.....	0	0	0	49,930.00	125,000.00	4,980.00
University of Florida.....	0	0	0	53,854.07	14,593.91	7,790.00
Georgia State College of Agriculture.....	0	0	0	70,000.00	0	16,951.11
College of Hawaii.....	0	0	0	22,592.98	11,363.39	0
University of Idaho.....	0	0	0	75,000.00	36,000.00	43,956.33
University of Illinois.....	0	0	0	499,139.86	0	32,450.67
Purdue University, Indiana.....	0	392,776.47	\$109,615.39	0	0	17,000.00
Iowa State College.....	0	0	0	783,350.00	412,500.00	33,901.34
Kansas State Agricultural College.....	0	0	0	490,000.00	780,000.00	24,877.23
University of Kentucky.....	0	53,632.38	0	197,805.83	0	8,644.50
Louisiana State University.....	0	0	0	115,000.00	0	9,115.69
University of Maine.....	0	0	0	127,500.00	0	5,915.00
Maryland State College of Agriculture.....	0	0	0	40,000.00	174,000.00	6,513.18
Massachusetts Agricultural College.....	8,313.32	0	0	273,500.00	0	7,390.00
Massachusetts Institute of Technology.....	100,000.00	0	0	0	0	3,650.00
Michigan Agricultural College.....	0	430,000.00	70,000.00	0	0	70,502.19
University of Minnesota.....	0	39,214.26	0	1,197,364.29	70,000.00	19,357.79
Mississippi Agricultural and Me- chanical College.....	0	0	0	133,243.64	0	5,914.61
University of Missouri.....	33,960.40	0	0	536,174.90	48,014.19	18,139.06
Montana State College.....	0	0	0	72,000.00	50,000.00	42,861.98
University of Nebraska.....	0	490,384.90	367,797.04	157,500.00	112,750.00	38,004.60
University of Nevada.....	0	129,379.07	0	0	0	6,411.18
New Hampshire College of Agricul- ture and Mechanic Arts.....	0	0	0	52,000.00	0	4,800.00
Rutgers College, New Jersey.....	0	0	0	114,949.00	0	5,890.00
New Mexico College of Agriculture and Mechanic Arts.....	0	0	0	35,134.31	0	0
Cornell University, New York.....	0	0	0	1,131.22	\$2,239.28	34,428.60
North Carolina State College of Agri- culture and Engineering.....	0	0	0	122,500.00	0	7,500.00
North Dakota Agricultural College.....	0	511.49	61,800.00	0	0	73,181.26
Ohio State University.....	17,227.63	0	0	1,187,148.20	287,474.04	31,450.59
Oklahoma Agricultural and Mechi- cal College.....	0	0	0	303,348.00	4	37,000.00
Oregon Agricultural College.....	0	261,473.96	0	0	0	10,973.29
Pennsylvania State College.....	0	0	0	488,467.01	73,036.93	30,000.00
University of Porto Rico.....	1,865.48	0	0	51,180.04	0	0
Rhode Island State College.....	0	0	0	40,000.00	485,500.00	2,500.00
Clemson Agricultural College, South Carolina.....	0	0	0	0	0	5,754.00
South Dakota State College.....	0	0	0	110,040.00	299,860.00	40,285.49
University of Tennessee.....	0	0	0	57,584.93	900,000.00	23,960.00
Agricultural and Mechanical College of Texas.....	6,953.09	0	0	422,595.00	110,270.00	10,450.00
Agricultural College of Utah.....	0	107,978.10	0	0	59,753.72	14,055.12
University of Vermont.....	30,000.00	13,600.00	7,300.00	350.00	0	8,130.00
Virginia Polytechnic Institute.....	0	0	0	82,500.00	16,666.66	20,658.72
State College of Washington.....	0	362,322.36	(?)	0	0	24,658.76
West Virginia University.....	0	0	0	352,500.00	46,500.00	7,011.88
University of Wisconsin.....	0	1,292,801.42	0	106,727.12	163,497.25	13,613.07
University of Wyoming.....	0	94,554.22	81,493.19	0	0	16,031.51
Total.....	244,204.11	4,237,245.12	737,895.53	11,919,832.00	3,676,000.97	670,226.86

1 Agricultural and engineering colleges only.
* Purchase of land.

* Includes \$5,816.63 from Smith-Hughes fund.
* Smith-Hughes fund.

AGRICULTURAL AND MECHANICAL COLLEGES.

ture and the mechanic arts, 1917-18.

AND ADMINISTRATION.

Funds for instruction and administration -Continued.								
United States fund— Continued.		From college endowment funds.	From tuition fees, board, and lodging.	From departmental earnings.	From private gifts for support.	From private gifts for permanent improvements and endowment.	Miscellaneous.	Total income, excluding extension, experiment stations, and vocational teacher training.
From other land grants.	Morrill-Nelson funds of 1890 and 1907.							
8	9	10	11	12	13	14	15	16
	\$28,450.00		\$11,671.55				\$18,791.61	\$139,901.57
\$17,789.21	50,000.00	\$659.10	33,337.19	\$9,499.36			18,164.31	483,185.97
	36,363.61		7,000.00					189,871.74
1,071.94	50,000.00	131,933.10	229,409.01	309,478.51	\$75,284.73	\$165,175.77	253,099.19	3,415,833.29
22,237.43	50,000.00		21,433.33				41,724.45	289,491.54
6,730.00	50,000.00		50,232.95	126,662.61	20,460.00			405,412.99
10,000.00	40,721.41	21,225.00	48,213.15			30,000.00	5,917.00	336,006.56
2,061.00	25,000.00		36,210.03	1,000.00	3,750.00			154,292.01
	33,333.34	1,400.00	5,295.00	48,370.94				175,353.42
	50,000.00		112.16	3,118.40			1,879.01	89,085.97
57,319.67	50,000.00		5,695.00	8,000.00				299,941.00
	50,000.00			201,535.83				753,126.38
	50,000.00		63,555.45	33,990.49			21,304.37	781,542.02
	50,000.00		118,131.59	155,353.56		1,000.00	3,168.92	1,557,408.38
	50,000.00		71,362.70	2,012.06			15,606.48	994,858.47
45,805.83	42,750.00	2,000.00	38,144.48				5,709.72	251,792.74
5,440.00	28,856.23		13,491.80				58,730.80	230,694.54
	50,000.00		67,279.61	1,306.81		1,000.00	23,669.20	282,870.62
	40,000.00		29,916.15					290,459.33
	34,333.33		63,011.78	75,483.77			5,587.68	461,559.86
	15,000.67	411,613.13	778,177.09	18,237.32	11,245.00	524,509.93	122,125.86	2,017,225.78
	50,000.00	38,417.10	11,777.96			37.39	151,465.30	986,700.46
38,693.98	50,000.00		9,088.31	312,292.19				2,502,010.82
8,172.75	22,730.73		110,358.52	56,160.20			95,912.91	473,123.46
13,201.45	50,000.00	33,237.13	149,817.96	59,994.10	3,904.00	34,131.74	8,660.09	930,235.66
(3)	50,000.00		21,877.55	8,578.73			914.21	219,532.50
19,092.30	50,000.00	93,411.52	182,315.81				56,754.60	1,567,981.10
2,606.15	50,000.00	6,016.00	25,396.88	18,786.64			250.00	238,845.92
	50,000.41	35,965.83	43,510.39	27,119.13	28.00	125.00	9,332.68	222,011.33
	50,000.00	34,811.68	46,881.85		29,568.35	22,821.04		308,844.94
	50,000.00	22,993.35	17,818.80	33,818.51				159,769.00
	50,000.00	678,351.86	929,271.83	306,670.92	34,758.90	73,104.01	211,402.36	3,085,419.21
	33,500.00		84,733.36	24,603.43			28,915.48	501,812.27
	50,000.00		21,337.70				38,715.88	218,736.36
12,311.05	50,000.00		188,389.59	39,513.01	50.00	401.88	209,505.81	2,023,710.16
	45,000.00		35,333.03	38,612.00				459,323.03
	50,000.00		82,071.02	32,332.81				430,854.15
	50,000.00		62,372.08					703,876.02
15,799.11	50,000.00		1,272.89	2,484.76				152,612.31
	50,000.00		45,683.17	12,744.88			5,204.21	241,612.20
	25,000.00		190,222.12			3,512.36	7,560.50	500,770.66
40,265.49	50,000.00		16,485.87	32,148.98			29,877.16	608,992.99
	34,000.00	2,292.47	54,279.15	12,906.38	3,650.00		4,155.00	1,096,827.53
	37,500.00		197,718.32	142,577.41			152,374.58	1,090,438.43
	50,000.00		9,553.75	9,209.67			1,880.05	252,430.62
	50,000.00	35,889.64	131,869.02			1,379.03	52,018.19	333,465.90
	33,333.31		116,690.81				161,141.00	431,290.53
29,657.69	50,000.00		31,455.61					501,294.42
	40,000.00	6,461.85	82,638.38					508,110.06
12,421.94	50,000.00		591,744.79	341,589.57	21,863.43		9,713.64	2,571,972.11
6,673.81	50,000.00		29,030.01				21,059.46	218,832.20
60,633.66	2,269,338.51	1,592,813.60	5,553,019.57	2,827,856.92	21,592.43	80,201.83	1,889,916.04	37,016,078.98

* Included in land-grant fund.
* For 2 years.

† Included under mill-tax levy for support.
* Includes \$12,421.94 interest.

TABLE 9.—Income of colleges of agricul

A. FUNDS FOR INSTRUCTION

Institutions.	Funds for instruction and administration.					
	State funds.					United States funds.
	From endowment granted by the State.	From mill-tax levy for support.	From mill-tax levy for permanent improvements.	From appropriations for support.	From appropriations for permanent improvements.	From land-grant fund of 1862.
1	2	3	4	5	6	7
<i>Institutions for colored students</i>						
State Agricultural and Mechanical College for Negroes, Alabama	\$1,000.00	0	0	0	0	0
Branch Normal College, Arkansas	0	0	0	\$10,000.00	0	0
State College for Colored Students, Delaware	0	0	0	8,000.00	0	0
Florida Agricultural and Mechanical College for Negroes	0	0	0	11,000.00	\$6,484.36	0
Georgia State Industrial College	0	0	0	8,800.00	0	0
Kentucky Normal and Industrial Institute for Colored Persons	0	0	0	21,000.00	0	\$1,255.00
Southern University and Agricultural and Mechanical College	0	0	0	12,500.00	0	0
Princess Anne Academy, Maryland	0	0	0	5,000.00	500.00	0
Alcorn Agricultural and Mechanical College, Mississippi	0	0	0	8,000.00	2,000.00	6,814.50
Lincoln Institute, Missouri	0	0	0	32,852.91	0	0
Negro Agricultural and Technical College, North Carolina	0	0	0	15,000.00	0	0
Colored Agricultural and Normal University, Oklahoma	0	0	0	50,337.00	0	0
State Agricultural and Mechanical College, South Carolina	0	0	0	0	35,000.00	5,754.00
Agricultural and Industrial State Normal School for Negroes, Tennessee	0	0	0	26,650.35	0	0
Prairie View State Normal and Industrial College, Texas	0	0	0	30,655.00	68,150.08	0
Hampton Normal and Agricultural Institute, Virginia	0	0	0	800.00	0	10,329.30
West Virginia Collegiate Institute	0	0	0	51,950.00	0	0
Total	4,000.00	0	0	292,184.26	112,134.44	24,152.80
Grand Total	248,306.11	\$4,237,245.12	\$737,895.53	11,911,896.86	3,786,125.41	979,379.42

ture and the mechanic arts 1917-18—Continued.

AND ADMINISTRATION—continued.

Funds for instruction and administration—Continued.								Total income, excluding extension, experiment stations, and vocational teacher training.
United States funds—Continued.		From college endowment funds.	From tuition fees, board, and lodging.	From departmental earnings.	From private gifts for support.	From private gifts for permanent improvements and endowment.	Miscellaneous.	
From other land grants.	Morrill-Nelson funds of 1890 and 1907.							
8	9	10	11	12	13	14	15	16
0	\$21,550.00	0	\$1,234.70	\$1,235.56	0	0	\$2,461.33	\$30,484.59
0	13,636.36	\$735.00	245.50	1,100.17	0	0	0	25,777.03
0	10,000.00	0	4,439.00	1,079.00	0	0	81.00	21,602.00
0	25,000.00	0	20,427.80	504.00	\$300.00	0	0	61,015.36
0	16,694.66	0	0	4,226.89	0	0	312.78	30,016.33
0	7,250.00	0	11,743.83	5,596.41	0	0	0	46,845.24
0	21,143.75	0	17,350.74	1,424.46	0	0	0	52,418.95
0	10,000.00	0	9,345.00	1,350.00	0	0	226.00	26,421.00
\$5,777.77	27,269.27	0	23,370.03	0	0	0	0	73,231.57
0	3,125.00	0	1,842.00	1,493.00	0	0	0	39,312.97
0	16,500.00	0	12,116.41	11,898.49	0	0	0	55,544.90
0	5,902.14	0	14,005.86	750.10	0	0	0	71,195.10
0	25,000.00	0	8,431.50	0	0	0	0	74,185.50
0	12,000.00	0	21,927.32	3,472.15	0	0	882.35	64,940.82
0	12,500.00	0	117,327.98	0	0	0	45.90	228,078.86
0	16,666.66	131,511.31	5,765.00	0	119,054.12	\$205,350.86	36,042.89	555,123.20
0	10,000.00	0	18,661.00	6,540.00	0	0	310.00	87,391.00
5,777.77	254,209.84	132,309.31	288,263.67	40,070.29	149,354.12	205,350.86	39,998.15	1,548,565.57
966,411.33	2,504,748.55	1,726,122.91	5,841,288.24	7,468,829.21	360,945.55	1,005,552.19	1,928,913.20	38,564,655.26

AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 10A.—Income of colleges of agriculture and the mechanic arts in 1917-18 for experiment stations and extension work.

Institutions.	Funds for the experiment stations.						Funds for the extension service.						Total extension and experiment station income.
	2	3	4	5	6	7	8	9	10	11	12		
Alabama Polytechnic Institute.....	\$12,000	\$20,000	\$5,000	\$18,000	\$88,000	\$7,301	\$67,311	\$21,785	8,131	\$19,407	\$217,164		
University of Arizona.....	31,577	30,000		6,251	83,272	1,251	11,251	8,131		25,322	100,394		
University of Arkansas.....	40,233	30,000		78,961	140,000	61,143	29,133	30,806		193,887	271,181		
University of California.....	30,000	30,000		7,842	100,000	35,000	17,253			163,272	312,732		
Colorado Agricultural College.....	52,000	30,000		30,000	100,000	25,000	25,000			55,000	81,116		
Duquesne Agricultural College.....	10,000	30,000		30,000	71,110	33,012	13,012			46,824	87,043		
University of Florida.....	12,316	30,000		8,427	50,633	27,134	27,298	61,113	2,903	118,337	169,190		
Georgia State College of Agriculture.....						191,629	77,129	193,858	1,034	396,678	349,578		
College of Hawaii.....		30,000			32,187	35,910	18,200			34,240	86,117		
University of Idaho.....	195,500	30,000		67,051	292,551	30,000	30,000			80,085	372,639		
University of Illinois.....	91,000	30,000		281,199	383,199	81,572	60,382	67,106	11,163	228,304	613,503		
Purdue University, Indiana.....	175,500	30,000		26,251	435,000	100,000	18,811	30,322	7,502	138,710	423,781		
Iowa State College.....	59,500	30,000		45,757	135,257	24,800	66,255			131,651	288,921		
Kansas State Agricultural College.....	25,253	30,000		13,517	68,017	25,000	47,635			201,779	160,714		
University of Kentucky.....	21,500	30,000		17,100	68,841	11,702	21,702			33,411	132,227		
Louisiana State University.....	30,000	30,000		16,251	75,251	31,625	30,000			25,324	128,288		
University of Maine.....	21,771	30,000		30,825	101,596	34,000	16,001	7,300		25,324	128,288		
Marion State College of Agriculture.....	30,000	30,000											
Massachusetts Agricultural College.....	41,000	30,000		30,825	101,596	34,000	16,001	7,300		25,324	128,288		
Massachusetts Agricultural College.....	30,000	30,000		30,825	101,596	34,000	16,001	7,300		25,324	128,288		
University of Minnesota.....	25,028	30,000		57,330	319,428	25,000	58,082			98,413	164,137		
Mississippi Agricultural and Mechanical College.....	42,270	30,000		22,111	91,381	61,205	61,215			87,189	416,157		
University of Missouri.....	40,194	30,000		36,256	126,190	31,473	71,421	8,800	71,680	104,100	288,161		
Montana State College.....	65,270	30,000		11,000	106,270	18,501	17,891	26,656		134,787	231,237		
University of Nebraska.....	53,770	30,000		11,997	128,717	7,578	38,575			93,022	199,372		
University of Nevada.....	57,110	30,000		1,146	31,086	13,271	12,221			76,133	204,000		
New Hampshire College of Agriculture and Mechanic Arts.....		30,000		19,621	40,000	5,689	15,059			27,136	58,922		
Rutgers College, New Jersey.....		30,000		30,000	30,000	20,124	30,124			21,378	61,000		
New Mexico College of Agriculture and Mechanic Arts.....		30,000		3,650	40,000	9,131	19,131			90,819	90,848		
Cornell University, New York.....	7,022	30,000		1,60	27,000	67,111	72,680	68,343		96,517	137,349		
North Carolina State College of Agriculture and Engineering.....		30,000		8,087	38,087	71,207	71,207			142,411	180,301		

AGRICULTURAL AND MECHANICAL COLLEGES.

North Dakota Agricultural College.....	62,000	30,000	37,426	129,456	37,627	26,659	26,475	84,761	214,217
Oregon Agricultural and Mechanical College.....	5,000	30,000	4,224	39,224	80,591	78,119	51,550	219,262	219,262
Oregon Agricultural College.....	43,000	40,450	15,218	109,668	41,318	53,318	61,117	157,851	197,057
Pennsylvania State College.....	1,550	30,000	2,418	91,433	163,658	108,483	32,650	145,006	343,014
University of Porto Rico.....		30,000	6,090	35,090	1,211	10,362		11,825	16,885
Rhode Island State College.....	16,000	30,000	2,839	22,839	11,314	26,145	21,883	63,696	126,325
South Dakota State College, South Carolina.....	115,000	30,000	16,354	152,354	11,314	26,145	21,883	79,641	112,000
South Dakota State College.....	250,958	30,000	13,797	138,797	54,506	68,536	43,292	173,792	332,200
University of Tennessee.....	18,000	30,000	40,691	307,088	99,217	100,401		226,851	536,311
Agricultural and Mechanical College of Texas.....	27,229	30,000	9,098	42,000	27,229	16,068		56,262	113,450
Agricultural College of Utah.....	27,229	30,000	7,914	65,148	8,000	16,068		19,489	31,480
Virginia Polytechnic Institute.....	65,000	30,000	21,438	109,817	59,397	61,301	63,250	184,038	249,181
State College of Washington.....		30,000	203	110,010	51,316	27,393	4,310	55,989	165,706
West Virginia University.....		30,000	15,010	30,000	212,966	63,106	1,910	118,989	228,994
University of Wisconsin.....		30,000	1,988	34,455	11,331	13,311	15,850	200,482	329,682
University of Wyoming.....		30,000	1,988	34,455	11,331	13,311	15,850	43,512	77,867
Total.....	2,196,994	4,372,450	71,711	4,732,890	2,368,161	2,133,179	991,504	278,783	5,680,626
<i>Institutions for colored students.</i>									
Florida Agricultural and Mechanical College for Negroes.....									
Southern University and Agricultural and Mechanical College, Louisiana.....									
State Agricultural and Mechanical College, South Carolina.....									
Total.....	26,199		150	26,619	8,190	960		6,140	6,140
Grand total.....	2,063,493	4,372,450	71,861	4,779,339	2,376,341	2,134,139	990,504	278,783	5,686,766

* Farm sales.

* Included under funds for administration.

AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 10B.—Income of colleges of agriculture and the mechanic arts in 1917-18 for vocational teacher training as administered under the Smith-Hughes Act; also grand total income of the colleges.

Institutions.	Agriculture.				Trades and Industries.				Home economics.				Total income for vocational teacher training.	Grand total income of institution.
	From local funds.	From State funds.	From Federal funds.	Total.	From local funds.	From State funds.	From Federal funds.	Total.	From local funds.	From State funds.	From Federal funds.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Alabama Polytechnic Institute.....		\$72.02		\$144.04										\$356,271.00
University of Arkansas.....		1,367.41		2,734.82										573,924.01
University of California.....	\$3,416.00	965.00	1,000.00	5,381.00	\$481.31	\$481.31		\$1,962.62	\$7,451.00					11,897.31
Cornell Agricultural College.....		742.86		1,485.72	980.12	980.12		1,960.24	1,050.23					428,303.84
Delaware College.....		55.00		110.00										3,920.75
University of Florida.....		1,240.14		2,480.28										430,961.00
College of Hawaii.....	1,136.59			2,273.18										430,961.00
University of Idaho.....		873.17		1,746.34										89,096.77
University of Illinois.....	1,690.00			3,380.00	\$68.29	68.29		136.58	3,040.23					3,043.00
Purdue University, Indiana.....	1,427.33			2,854.66	330.85	330.85		661.69	1,902.85					89,096.77
Iowa State College of Agriculture and the Mechanic Arts.....		2,677.76		5,355.52										3,043.00
Kansas State Agricultural College.....		2,677.76		5,355.52										3,043.00
University of Kentucky.....		2,677.76		5,355.52										3,043.00
Louisiana State University.....		2,677.76		5,355.52										3,043.00
University of Maryland.....		2,677.76		5,355.52										3,043.00
University of Michigan.....		2,677.76		5,355.52										3,043.00
Massachusetts Agricultural College.....		2,677.76		5,355.52										3,043.00
Michigan Agricultural College.....		2,677.76		5,355.52										3,043.00
University of Minnesota.....		2,677.76		5,355.52										3,043.00
Mississippi Agricultural and Mechanical College.....		2,677.76		5,355.52										3,043.00
University of Missouri.....		2,677.76		5,355.52										3,043.00
Montana State College of Agriculture and Mechanic Arts.....		2,677.76		5,355.52										3,043.00
University of Nebraska.....		2,677.76		5,355.52										3,043.00
University of Nevada.....		2,677.76		5,355.52										3,043.00
New Hampshire College of Agriculture and Mechanic Arts.....		2,677.76		5,355.52										3,043.00
New Jersey (Hughes).....		2,677.76		5,355.52										3,043.00
New Mexico College of Agriculture and Mechanic Arts.....		2,677.76		5,355.52										3,043.00
Ohio State University.....		2,677.76		5,355.52										3,043.00
Oregon State University.....		2,677.76		5,355.52										3,043.00
University of Tennessee.....		2,677.76		5,355.52										3,043.00
University of Wisconsin.....		2,677.76		5,355.52										3,043.00
University of Wyoming.....		2,677.76		5,355.52										3,043.00

AGRICULTURAL AND MECHANICAL COLLEGES.

Oklahoma Agricultural and Mechanical College.....	3,697.50	7,305.00	412.50	313.33	525.00	5,015.71	1,010.76	4,026.20	13,114.90	959,327.00
Oregon Agricultural College.....	695.81	1,391.62	751.25	791.78	1,781.50	1,690.00	1,520.00	2,700.00	5,174.75	381,845.00
Pennsylvania State College.....	1,935.91	3,911.75	800.00	800.00	1,000.00	1,000.00	1,000.00	1,000.00	6,511.75	1,071,845.00
University of Porto Rico.....										172,612.00
Rhode Island State College.....										298,197.00
Clanston Agricultural College, South Carolina.....	1,105.18	2,210.36						3,448.30	2,210.36	650,704.00
South Dakota State College.....										754,481.49
Tennessee Agricultural and Mechanical College of Texas.....	4,268.32	8,536.64								1,429,127.00
Agricultural College of Utah.....	4,316.00	8,632.00								8,536.64
University of Vermont.....		6,315.00								965,861.00
Virginia Polytechnic Institute.....										435,600.00
State College of Washington.....	386.75	773.49								680,472.00
West Virginia University.....	675.00	1,350.00								667,774.00
University of Wisconsin.....										736,154.85
University of Wyoming.....										6,589,982.00
Total.....	13,438.27	27,876.54	116,105.77	489.78	489.78	979.56	1,959.52	1,959.52	10,771.85	3,501,801.00
<i>Institutions for colored students.</i>										
State Agricultural and Mechanical College for Negroes, Alabama.....										39,184.39
Branch Normal College, Arkansas.....										25,777.63
State College for Colored Students, Delaware.....										123,602.00
Florida Agricultural and Mechanical College for Negroes.....										64,816.18
Georgia State Industrial College for Colored Persons.....										39,016.33
Kentucky Normal and Industrial College for Colored Persons.....										46,845.24
Southern University and Agricultural and Mechanical College, Louisiana.....										38,558.05
Alexander Agricultural and Mechanical College, Mississippi.....										26,245.00
Lincoln Institute, Missouri.....	12.50	25.00								73,256.57
Negro Agricultural and Normal University, North Carolina.....										39,312.97
Colored Agricultural and Normal University, Oklahoma.....										55,544.90
State Agricultural and Mechanical College, South Carolina.....										71,186.10
Agricultural and Industrial State Normal School for Negroes, Tennessee.....										103,835.29
Pringle V. State Normal and Industrial College, Texas.....	690.00	1,380.00	170.00	170.00	900.00	1,280.00	1,280.00	2,560.00	1,780.00	69,721.17
Hampden Normal and Agricultural Institute, Virginia.....										228,078.56
West Virginia College Institute.....										555,123.20
Total.....	13,438.27	27,876.54	116,105.77	489.78	489.78	979.56	1,959.52	1,959.52	10,771.85	3,501,801.00
Grand total.....	13,438.27	27,876.54	116,105.77	489.78	489.78	979.56	1,959.52	1,959.52	10,771.85	7,003,602.00

AGRICULTURAL AND MECHANICAL COLLEGES.

Table 11.—Disbursement of funds received under acts of Congress approved August 30, 1890, and March 4, 1907, by colleges of agriculture and the mechanic arts for the year ending June 30, 1918.

Institutions.	Balance on hand July 1, 1917.	Appropriation for year ended June 30, 1918.	Total amount available.	Disbursement.						For preparation of teachers of the elements of agriculture and mechanic arts.	Total.	Balance on hand July 1, 1918.	
				For instruction:									
				Agriculture.	Mechanic arts.	English language.	Mathematical sciences.	Natural and physical sciences.	Economic science.				
1	2	3	4	5	6	7	8	9	10	11	12	13	
Alabama Polytechnic Institute.....	0	\$28,450.00	\$28,450.00	\$1,900.00	\$13,323.00	\$2,108.21	\$4,073.00	\$6,041.67	0	0	0	\$28,450.00	0
University of Arizona.....	\$1,167.67	50,000.00	51,167.67	4,521.18	14,301.83	5,012.78	4,680.00	12,434.89	\$9,656.99	0	0	31,167.67	0
University of California.....	0	50,000.00	50,000.00	7,782.91	17,868.91	3,675.00	3,675.00	7,478.32	4,998.04	0	0	50,000.00	0
University of Colorado.....	0	50,000.00	50,000.00	11,375.44	12,121.68	5,088.19	2,468.36	6,231.82	6,391.49	0	0	50,000.00	0
Connecticut Agricultural College.....	0	50,000.00	50,000.00	23,645.03	2,700.00	3,873.00	2,000.00	10,701.71	1,073.16	0	0	50,000.00	0
Delaware College.....	1,055.13	40,000.00	41,055.13	9,509.78	12,076.96	6,170.78	3,533.88	8,042.39	1,039.14	0	0	40,333.72	\$0.45
University of Florida.....	0	25,000.00	25,000.00	3,840.00	7,200.00	2,670.00	2,780.00	7,780.00	1,730.00	0	0	25,000.00	0
Georgia State College of Agriculture.....	0	33,333.34	33,333.34	6,901.10	5,000.00	5,000.00	4,800.00	14,289.21	2,400.00	0	0	33,333.34	0
College of Agriculture and Mechanic Arts of the Territory of Hawaii.....	28.47	50,000.00	50,028.47	6,862.88	11,418.30	2,848.17	2,283.33	22,908.42	2,860.65	0	0	50,027.45	1.02
University of Idaho.....	0	50,000.00	50,000.00	11,017.56	4,939.70	5,180.00	2,705.00	15,334.58	6,020.00	\$283.36	0	50,000.00	0
University of Illinois.....	0	50,000.00	50,000.00	21,831.73	18,533.01	0	1,990.00	6,116.96	3,158.27	0	0	50,000.00	0
Purdue University, Indiana.....	0	50,000.00	50,000.00	11,291.83	15,915.01	3,523.00	1,990.00	10,079.56	1,922.00	2,175.00	0	50,000.00	0
Iowa State College of Agriculture and Mechanic Arts.....	0	50,000.00	50,000.00	11,616.87	10,271.98	2,666.64	1,800.00	16,416.66	2,724.83	2,500.00	0	50,000.00	0
Kansas State Agricultural College.....	0	50,000.00	50,000.00	3,457.22	31,518.27	2,233.33	8,649.38	4,018.31	3,991.07	0	0	50,000.00	0
University of Kentucky.....	0	42,750.00	42,750.00	3,371.84	15,818.27	6,050.00	3,283.00	12,323.00	0	0	0	42,750.00	0
Louisiana State University and Agricultural and Mechanical College.....	0	28,858.25	28,858.25	8,900.00	3,881.27	4,400.00	2,171.98	7,400.00	2,800.00	1,600.00	0	28,858.25	0
University of Maine.....	0	50,000.00	50,000.00	11,000.00	11,000.00	4,400.00	4,400.00	11,700.00	2,800.00	1,600.00	0	50,000.00	0
Maryland State College of Agriculture.....	0	40,000.00	40,000.00	10,522.91	12,332.08	4,519.86	719.97	9,772.18	1,133.00	1,650.00	0	40,000.00	0
Massachusetts Agricultural College.....	0	33,333.33	33,333.33	11,000.00	15,332.08	1,500.00	719.97	13,900.00	1,533.33	0	0	33,333.33	0
Massachusetts Institute of Technology.....	6.70	16,676.07	16,676.07	16,673.43	0	3,200.00	3,960.00	2,000.00	0	0	0	16,670.00	3.43
Michigan Agricultural College.....	0	50,000.00	50,000.00	9,729.20	17,156.40	3,023.30	4,191.10	13,333.00	1,566.20	0	0	50,000.00	0
University of Minnesota.....	0	50,000.00	50,000.00	21,530.00	11,800.00	5,200.00	2,900.00	3,700.00	1,150.00	1,100.00	0	50,000.00	0
Mississippi Agricultural and Mechanical College.....	27,730.73	0	27,730.73	8,031.15	5,408.18	3,263.73	2,733.28	3,263.39	1,733.40	0	0	27,730.73	0
University of Missouri.....	0	35,156.25	35,156.25	22,239.31	11,183.31	0	0	11,183.31	1,733.40	0	0	35,156.25	0

AGRICULTURAL AND MECHANICAL COLLEGES.

Missouri School of Mines and Metallurgy.....	500.67	11,718.75	12,579.12	36,000.00	4,512.27	1,102.61	2,625.02	4,500.00	0	0	0	12,579.12	0	0	0
Maine State College of Agriculture and Me- chanic Arts.....	0	50,000.00	50,000.00	12,039.00	13,251.22	1,102.61	2,129.17	11,250.72	0	0	0	50,000.00	0	0	0
University of Nevada.....	0	50,000.00	50,000.00	11,258.22	19,330.64	6,082.61	1,253.34	1,570.35	1,500.00	1,500.00	1,500.00	50,000.00	0	0	0
New Hampshire College of Agriculture and Me- chanic Arts.....	0	50,000.00	50,000.00	15,010.14	12,471.21	1,102.61	7,702.28	21,475.23	0	0	0	50,000.00	0	0	0
Rutgers College, New Jersey.....	0	50,000.00	50,000.00	2,333.61	3,913.81	6,346.00	1,501.21	1,501.21	1,000.00	1,000.00	1,000.00	50,000.00	0	0	0
New Mexico College of Agriculture and Me- chanic Arts.....	0	50,000.00	50,000.00	16,230.64	11,570.27	1,000.00	1,000.00	8,000.00	0	0	0	50,000.00	0	0	0
Cornell University, New York.....	0	50,000.00	50,000.00	19,166.63	20,000.00	0	0	5,000.00	0	0	0	50,000.00	0	0	0
North Carolina College of Agriculture and Me- chanic Arts.....	0	50,000.00	50,000.00	12,625.00	15,275.00	0	0	5,000.00	0	0	0	50,000.00	0	0	0
Ohio State University.....	1.75	50,000.00	50,000.00	9,321.87	10,192.73	4,020.00	4,520.04	11,170.00	0	0	0	50,000.00	0	0	0
Ohio State Agricultural and Mechanical College.....	0	45,000.00	45,000.00	11,500.17	13,337.07	4,301.15	2,616.74	9,977.18	0	0	0	45,000.00	0	0	0
Oregon Agricultural College.....	0	50,000.00	50,000.00	11,890.81	9,799.84	2,000.00	8,419.94	10,161.10	0	0	0	50,000.00	0	0	0
Pennsylvania State College.....	461.61	50,000.00	50,000.00	15,000.01	6,000.00	5,162.02	6,700.00	13,500.00	0	0	0	50,000.00	0	0	0
University of Porto Rico.....	3,113.61	50,000.00	50,000.00	10,070.60	21,878.51	4,411.19	3,238.27	1,192.83	0	0	0	50,000.00	0	0	0
Rhode Island College.....	0	50,000.00	50,000.00	12,063.79	10,590.13	0	0	1,192.83	0	0	0	50,000.00	0	0	0
South Dakota College of Agriculture and Me- chanic Arts.....	0	25,000.00	25,000.00	2,701.19	10,560.62	3,583.49	3,712.93	4,109.75	0	0	0	25,000.00	0	0	0
University of Tennessee.....	0	50,000.00	50,000.00	10,890.14	11,105.50	2,000.00	5,700.00	17,304.36	0	0	0	50,000.00	0	0	0
Agricultural and Mechanical College of Texas.....	0	37,300.00	37,300.00	15,770.64	13,528.19	2,716.08	2,300.00	10,033.76	0	0	0	37,300.00	0	0	0
Agricultural College of Utah.....	407.60	50,000.00	50,000.00	15,017.36	14,898.20	5,200.00	2,325.00	4,379.10	0	0	0	50,000.00	0	0	0
University of Vermont and State Agricultural College.....	0	50,000.00	50,000.00	8,737.61	8,350.11	5,200.00	3,631.27	10,982.41	0	0	0	50,000.00	0	0	0
Virginia Polytechnic Institute.....	0	50,000.00	50,000.00	7,730.00	13,300.00	1,500.00	4,100.00	15,200.00	0	0	0	50,000.00	0	0	0
West Virginia University.....	0	50,000.00	50,000.00	4,700.00	10,500.00	2,000.00	3,700.00	10,800.00	0	0	0	50,000.00	0	0	0
University of Wisconsin.....	0	50,000.00	50,000.00	11,332.91	11,398.10	6,792.53	2,046.76	2,320.75	0	0	0	50,000.00	0	0	0
University of Wyoming.....	0	50,000.00	50,000.00	2,528.51	29,536.87	6,983.35	200.00	6,313.21	0	0	0	50,000.00	0	0	0
Total.....	7,136.28	2,216,492.30	2,231,928.54	341,758.71	635,456.21	181,091.04	104,022.83	631,764,604.12	21,637,612,252.18	28	1,615.31	12,579.12	0	0	0
<i>Institutions for colored students.</i>															
Agricultural and Mechanical College for Ne- groes, Alabama.....	270.55	21,550.00	21,753.55	1,841.88	3,926.46	1,105.91	2,111.56	2,696.03	0	0	0	19,428.63	0	0	0
Branch Normal College, Arkansas.....	0	15,526.24	20,337.24	5,193.00	3,937.00	1,125.00	2,101.64	1,431.88	0	0	0	15,765.18	0	0	0
State College for Colored Students, Delaware.....	1,137.22	10,000.00	11,137.22	3,813.43	2,588.07	1,510.28	840.82	1,312.27	0	0	0	11,123.04	0	0	0
Florida Agricultural and Mechanical College for Negroes.....	225.04	25,000.00	25,225.04	5,987.32	5,900.14	4,122.33	1,820.00	2,232.00	0	0	0	25,221.13	0	0	0
Georgia State Industrial College for Colored Persons.....	1,468.87	16,986.66	18,127.36	2,578.21	4,562.10	3,311.25	1,491.75	3,330.24	0	0	0	18,127.36	0	0	0
Southern University and Agricultural Me- chanical College, Louisiana.....	2,305.39	21,143.75	23,449.14	3,755.70	5,622.12	5,037.57	2,267.04	3,222.54	0	0	0	22,400.40	0	0	0
Princess Anne Academy, Maryland.....	9.78	10,000.00	10,009.78	2,319.16	2,516.24	1,837.56	700.00	117.56	0	0	0	9,940.51	0	0	0

AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 11.—Disbursement of funds received under acts of Congress approved August 30, 1890, and March 4, 1907, by colleges of agriculture and the mechanic arts for the year ending June 30, 1918.—Continued.

Institutions.	Balance on hand July 1, 1917.	Appropriation for year ended June 30, 1918.	Total amount available.	Disbursements.						For preparation of the element of agriculture and mechanics.	Total.	Balance on hand July 1, 1918.	
				Agriculture.	Mechanic arts.	English language.	Mathematical science.	Natural and physical science.	Economic science.				
	1	2	3	4	5	6	7	8	9	10	11	12	13
<i>Institutions for colored students—Continued.</i>													
Albany Agricultural and Mechanical College.....	\$2,315.78	\$7,220.27	\$29,015.05	\$5,185.12	\$9,210.81	\$2,772.11	\$2,678.15	\$2,000.00	\$1,328.30	\$200.00	\$27,881.15	\$2,130.90	0
Lincoln Institute, Missouri.....	0	3,123.00	3,125.00	751.90	2,400.00	0	0	0	0	0	0	3,125.00	0
The Negro Agricultural and Technical College of North Carolina.....	0	16,400.00	16,400.00	3,913.80	6,238.70	1,980.00	745.00	0	0	0	0	16,500.00	0
Colored Agricultural and Normal University, Oklahoma.....	902.11	5,135.28	6,035.12	184.01	69.10	0	0	0	0	0	0	288.71	5,781.71
State Agricultural and Mechanical College, South Carolina.....	990.04	25,000.00	25,990.08	6,209.45	9,345.50	3,833.24	2,152.62	1,651.92	2,868.00	0	0	26,865.81	35.05
Agricultural and Industrial State Normal School for Negroes, Tennessee.....	2,440.00	12,000.00	14,440.00	1,550.00	3,183.91	2,110.00	1,335.00	830.00	3,273.00	0	0	12,284.51	155.55
Prairie View State Normal and Industrial College, Texas.....	0	12,000.00	12,000.00	2,716.61	3,110.21	1,806.61	1,194.92	2,000.00	1,700.00	0	0	12,500.00	0
Emporia Normal and Agricultural Institute, Wisconsin.....	300.07	16,666.00	16,666.00	3,325.04	8,325.04	630.00	0	0	1,118.00	2,718.66	0	16,066.66	0
West Virginia Collegiate Institute.....	19,051.78	233,110.98	272,092.76	52,114.72	82,335.04	28,110.04	21,327.22	20,164.93	42,276.10	0	2,890.89	257,216.74	15,216.02
Total.....	23,188.08	292,400.00	315,588.08	71,360.00	117,991.21	217,111.22	187,170.85	187,970.52	21,921.53	2,500.00	21,921.53	300,000.00	16,891.43

* Includes \$131.28 interest.



AGRICULTURAL AND MECHANICAL COLLEGES.

Table 12.—Income from the fund derived from the land grant of 1862, or from land grants made in lieu of the grant of 1862, for the year ending June 30, 1918.

Institutions.	2	3	4	5	6	7	8	9	10	11
	Acres received under the grant.	Acres unsold.	Amount of fund.	Income for year ending 1917-18.	Balance remaining unexpended July 1, 1917.	Total available for the year ending June 30, 1918.	Expended for salaries.	Expended for facilities.	Total expenditures.	Balance July 1, 1918.
Alabama Polytechnic Institute.	210,000	0	\$27,240.00	\$29,290.00	0	\$29,290.00	\$29,290.00	0	\$29,290.00	0
University of Arizona.	130,000	0	17,780.24	17,780.24	0	17,780.24	4,684.15	\$13,108.24	17,666.47	\$1,391.08
University of Arkansas.	120,000	0	112,044.07	46,181.33	\$75.00	46,181.33	40,484.14	0	40,484.14	394.97
University of California.	91,000	40,000	292,793.68	17,921.84	9,422.57	29,443.71	29,050.44	0	29,050.44	394.97
Colorado Agricultural College.	180,000	0	135,000.00	5,980.00	0	5,980.00	6,736.88	0	6,736.88	13.12
Connecticut Agricultural College.	80,000	0	153,900.00	7,790.00	.33	7,790.33	8,980.00	0	8,980.00	.33
University of Florida.	270,000	0	242,202.17	10,954.14	0	10,954.14	13,552.79	1,401.35	14,954.14	12,000.00
Georgia State College of Agriculture.	400,000	0	700,000.00	43,650.33	3,614.99	47,265.32	12,000.00	21,245.61	39,245.61	13,335.71
University of Idaho.	480,000	0	640,012.01	32,450.00	0	32,450.00	32,450.00	0	32,450.00	0
Indiana University.	300,000	0	340,000.00	17,000.00	0	17,000.00	17,000.00	0	17,000.00	0
Iowa State College of Agriculture and Mechanic Arts.	204,300	0	689,529.37	35,904.34	0	35,904.34	33,904.34	0	33,904.34	0
Kansas State Agricultural College.	90,000	7,666	491,746.74	41,877.23	16,167.10	58,044.33	33,904.34	30,613.00	64,517.34	1,101.34
University of Kentucky.	330,000	0	144,075.00	8,044.50	0	8,044.50	3,044.50	3,000.00	6,044.50	0
Louisiana State University and Agricultural and Mechanical College.	200,000	0	182,213.03	9,115.00	0	9,115.00	1,115.00	0	9,115.00	0
University of Maine.	210,000	0	133,750.00	5,915.00	0	5,915.00	3,915.00	0	5,915.00	0
Maryland State College of Agriculture.	210,000	0	0	6,843.18	0	6,843.18	0	1,347.18	6,843.18	0
Massachusetts Agricultural College.	360,000	0	219,000.00	7,300.00	0	7,300.00	7,300.00	0	7,300.00	0
Massachusetts Institute of Technology.	(*)	(*)	(*)	3,000.00	0	3,000.00	0	2,000.00	3,000.00	0
Michigan Agricultural College.	234,000	30,329	898,116.00	70,000.00	0	70,000.00	70,000.00	0	70,000.00	0
University of Minnesota.	200,000	0	370,430.20	9,357.70	12,245.18	21,592.88	28,976.51	0	28,976.51	2,613.73
University of Missouri and Mechanical College.	277,000	0	190,278.00	6,914.01	0	6,914.01	5,914.01	0	5,914.01	0
University of Missouri.	277,000	0	190,278.00	6,914.01	0	6,914.01	13,796.16	4,588.52	18,384.68	.00
Montana State College of Agriculture and Mechanic Arts.	140,000	0	680,250.00	42,861.98	55,373.35	98,235.33	30,175.80	0	98,175.80	32,061.47
University of Nebraska.	90,000	8,397	617,130.65	38,044.60	4,006.82	42,051.42	31,562.84	0	31,562.84	8,118.69
University of Nevada.	90,000	1	801,835.02	0,411.18	268.72	0,679.90	2,683.62	682.50	3,366.12	2,310.78
New Hampshire College of Agriculture and Mechanic Arts.	150,000	0	116,000.00	1,800.00	0	1,800.00	1,800.00	0	1,800.00	0
Rutgers College, New Jersey.	210,000	0	0	5,800.00	0	5,800.00	0	0	5,800.00	0
New Mexico College of Agriculture and Mechanic Arts.	150,000	211,000	0	0	0	0	0	0	0	0
Cornell University, New York.	660,000	0	688,876.12	34,428.80	0	34,428.80	34,428.80	0	34,428.80	0

\$12,000 to the North Georgia Agricultural College.
 * Total grant to the State given under Massachusetts Agricultural College.
 † The interest on the land-grant fund has been less than 5 per cent, or the amount required by law. The board of regents have made up the deficit for the past four years by setting aside \$28,000, the deficit being \$35,048.27.
 ‡ The School of Mines.



AGRICULTURAL AND MECHANICAL COLLEGES.

TABLE 12.—Income from the fund derived from the land grant of 1862, or from land grants made in lieu of the grant of 1862, for the year ending June 30, 1918.—Continued.

Institutions.	2	3	4	5	6	7	8	9	10	11
	Acres received under the grant.	Acres unsold.	Amount of fund.	Income for year 1917-18.	Balance remaining unexpended July 1, 1917.	Total available for the year ending June 30, 1918.	Expended for salaries.	Expended for facilities.	Total expenditures.	Balance July 1, 1918.
North Carolina College of Agriculture and Mechanic Arts	270,000	0	0	\$7,500.00	0	\$7,500.00	\$7,500.00	0	\$7,500.00	0
North Dakota Agricultural College	130,000	\$20,408	\$1,853,777.29	73,181.29	61,645.50	79,926.79	37,442.61	\$40,965.57	78,438.18	\$1,398.61
Ohio State University and Mechanical College	625,000	0	524,176.50	31,450.59	0	31,450.59	21,450.59	0	31,450.59	0
Oregon Agricultural College	250,000	250,000	0	37,001.00	1.02	37,001.02	29,900.00	7,400.00	37,000.00	1.02
Pennsylvania State College	780,000	0	0	30,073.00	1,671.63	12,645.02	4,557.44	0	4,557.44	8,087.58
Puerto Rico State College	120,000	0	517,000.00	30,000.00	0	30,000.00	30,000.00	0	30,000.00	0
Rhode Island State College	120,000	0	50,000.00	2,500.00	0	2,500.00	2,500.00	0	2,500.00	0
South Carolina State College of Agriculture and Mechanic Arts	180,000	0	85,800.00	5,754.00	0	5,754.00	5,754.00	0	5,754.00	0
University of Tennessee	160,000	11,138	1,411,380.00	40,255.49	2,336.89	42,616.38	38,400.00	4,004.45	42,404.45	151.93
Agricultural and Mechanical College of Texas	300,000	0	480,000.00	23,960.00	0	23,960.00	6,413.94	17,546.04	23,960.00	0
University of Utah	190,000	0	0	10,450.00	0	10,450.00	7,965.03	0	7,965.03	2,484.97
Agricultural College of Utah	200,000	575	5,585,662.64	14,055.13	0	14,055.13	14,055.13	0	14,055.13	0
University of Vermont and State Agricultural College	119,920	0	0	8,130.00	0	8,130.00	8,130.00	0	8,130.00	0
Virginia Polytechnic Institute	300,000	0	344,312.00	20,658.73	0	20,658.73	20,658.73	0	20,658.73	0
State College of Washington	68,438	77,900	786,521.50	54,516.45	17,461.13	71,977.58	55,159.03	0	55,159.03	16,818.55
West Virginia University	150,000	0	13,104.17	7,011.86	537.50	7,549.35	7,549.35	0	7,549.35	1,777.07
University of Wisconsin	240,005	0	13,613.07	13,613.07	0	13,613.07	13,613.07	0	13,613.07	0
University of Wyoming	89,552	0	16,031.51	16,031.51	0	16,031.51	14,849.94	1,181.57	16,031.51	0
Total	10,928,265	911,409	20,014,847.25	985,072.04	102,631.71	1,087,931.54	821,498.90	187,408.03	989,058.50	96,872.73
Institutions for colored students.										
Kentucky Normal and Industrial Institute	(7)	0	0	1,255.50	0	1,255.50	0	0	1,255.50	0
Alabama Agricultural and Mechanical College, Mississippi	(6)	0	113,000.00	6,814.20	6,814.50	13,762.70	2,008.30	0	10,856.46	733.94
State Agricultural and Mechanical College, South Carolina	(9)	0	95,900.00	5,754.00	6,103.50	11,837.50	1,334.00	0	9,900.00	2,547.50
Hampton Normal and Agricultural Institute, Virginia	(10)	0	172,156.00	10,329.36	0	10,329.36	10,329.36	0	10,329.36	0
Total	10,928,265	911,409	20,395,903.25	6,089,228.10	116,749.77	1,125,002.67	835,170.40	189,420.41	1,022,828.49	102,174.21
Grand total										

* All grants combined.
 † Total includes the \$340,024.99 of the grant of 1862.
 ‡ Total grant to the State given under University of Kentucky.
 § Total grant to the State given under Mississippi Agricultural and Mechanical College.
 ¶ Total grant to the State given under Clemson Agricultural College, South Carolina.
 †† Total grant to the State given under Virginia Polytechnic Institute.

