

THE UNIVERSITY OF NORTH CAROLINA RECORD

DECEMBER 1920
NUMBER 172

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THE UNIVERSITY RECORD

Number 172

December 1920

Annual Report of the President

*To the Board of Trustees of
The University of North Carolina:*

I herewith submit my report, together with the reports of the other officials of the University, for the current academic year. In making this report may I first of all express my own appreciation and that of the University for the interest and co-operation of your board under the trying circumstances with which the University is struggling.

Since my last report was submitted three of your **TRUSTEES** number have been removed by death. Graham Kenan, a member of the class of 1904, a devoted alumnus and friend, and a member of your visiting committee, died on February fifth. Victor S. Bryant, whose sudden death on September second shocked the University and the State, was a member of the class of 1890, and had served as a member of the executive committee and of the finance committee of the trustees. His personal and public service to the University and to the cause of education and welfare in North Carolina constitutes an enduring memorial to his name. Marmaduke J. Hawkins, trustee, legislator, always interested and influential in public affairs, died on December twelfth. We shall cherish the memory of these friends who have passed to their reward, grateful for the services they have rendered and for the memories they have left.

FACULTY

In reporting changes in the Faculty I should like to call your attention first to the retirement of William Cain, Professor of Mathematics, and head of the department of Mathematics at the University since 1889. Professor Cain's retirement was made possible through the generosity of the Carnegie Foundation. The fact that he was one of a very small group of men in institutions not associated with the Carnegie Foundation, who have been selected as recipients of retiring allowances by the Foundation is a clear tribute to his worth and scholarship. To him who has served the University so faithfully and well we wish long and pleasant years of useful work free from the routine of teaching. Resignations from the Faculty include Charles Lee Raper, Professor of Economics, who has been associated with the University since 1901, and whose work at Syracuse University will be followed with interest by us all; Thomas James Brown, Director of Physical Education; R. B. Cowin, Associate-Professor of Accounting; C. W. Keyes, Instructor in Classics; James S. Moffatt, Instructor in English; Herman Schoeler, Instructor in English; Jefferson C. Bynum, Instructor in Mineralogy; H. M. Sharp, Instructor in Physics; C. M. Hazelhurst, Instructor in Mathematics; C. M. Hutchins, Instructor in French; W. F. Hunter, Instructor in Mathematics; W. E. Price, Instructor in Mathematics; S. S. Jenkins, Instructor in Chemistry; J. A. Moore, Instructor in Histology. Associate-Professors George McF. McKie and S. E. Leavitt, and Assistant-Professor J. W. Lasley have returned from a year's leave of absence. Professors Foerster, Walker, Dey, and Cobb are on leave of absence for the year for study, the latter two on the Kenan Foundation.

Additions to the Faculty have been made as follows: Howard W. Odum, Kenan Professor of Public Welfare; W. C. George, Associate-Professor of Histology and Embryology; W. J. Matherly, Associate-

Professor of Accounting; Otto Stuhlmann, Associate-Professor of Physics; E. E. Peacock, Associate-Professor of Accounting; J. B. Woosley, Assistant-Professor of Economics; C. E. Green, Assistant-Professor of French; J. J. Davis, Assistant-Professor of French; Howard R. Huse, Assistant-Professor of French; Thomas J. Hamilton, Assistant-Director of Music; W. D. McMillan, 3rd, Instructor in English; H. M. Taylor, Instructor in Chemistry; Walter B. Jones, Instructor in Mineralogy; Harry F. Latshaw, Instructor in Latin; Charles W. Camp, Instructor in English; A. C. Howell, Instructor in English; H. G. Baity, Instructor in Mathematics; Frank J. Haronian, Instructor in Spanish.

Several gifts of an unusual sort have come to the **GIFTS** University during the last year. I should like to mention first of all the bequest of seventy-five hundred dollars by the late Victor S. Bryant, which was given for the establishment of a loan fund for the assistance of needy students. The same fine determination that no worthy boy should be deprived of a college education through lack of funds which finds expression in Mr. Bryant's gift has also led to the establishment by Lawrence S. Holt, Jr., of a ten thousand dollar fund for the same purpose, with the provision that the income from the loans which are made shall be used to establish four scholarships,—one for each academic class. Such gifts as these are of immense possibility for good. Who can foretell how many future leaders in the State's life may be assured a liberal education by the fact that these funds exist? Through the kindness of Mr. J. Alwyn Ball, of Charleston, South Carolina, the University has come into possession of a crayon portrait of General William Richardson Davie, made from life in Paris. This likeness of the man who best deserves the title of founder of the University becomes

naturally one of its most cherished possessions. A finely conceived and most appropriate gift is that of the heirs of the late Doctor K. P. Battle, who have given the University Library a collection of thirteen hundred items from his shelves, rich in material of interest and value.

A gift of immense value to the University at a most critical moment has come through the generosity of the General Education Board. This gift, which amounts to about forty thousand dollars, is for the purpose of increasing the salaries of members of the teaching force of the University. The relief which it made possible amounted to twenty-five per cent in the case of full professors on the automatic scale, and approximately the same amount for other teaching members of the staff. The increase made was retroactive to July first, 1920, and the support of the General Education Board will cease on July first, 1921.

SALARIES

In order to make this gift, the General Education Board departed from its rule of not aiding State institutions in matters of salary. That it thus broke away from its precedents in case of the University shows clearly enough both that the situation as regards Faculty salaries is critical in the judgment of an impartial board of national experience, and that to such a board the Faculty of the University is of such quality as that its dispersal would be a tragedy. And that it will be dispersed if salaries cannot be kept at the new level made possible by this gift seems unfortunately clear enough. Within the last eighteen months, twenty of our seventy-three men of Faculty rank have been sought elsewhere at salaries which practically without exception are considerably in advance of our own scale. That most of them have stayed has been because of faith in the future, and if that faith is not justified a situation nothing short

of critical for the future welfare of the University will certainly arise.

I do not think it can be too emphatically stated that the salaries which we must pay to get and keep good men are not a mere question of the cost of living. Within the last two years hundreds of millions of dollars, raised as a result of endowment campaigns and legislative enactments, have been applied to raising the general level of college and university salaries throughout the country. The inevitable result has been that a new standard for such salaries has been created which we must meet unless we are content to sink back to the level of a second-rate institution. At the same time the supply of good men has been greatly diminished both because many men who left teaching during the war have not returned, and because all over the country institutions of higher education are so rapidly increasing in size that the number of teaching positions open far exceeds the number of available men. Under such conditions, competition for good men has become almost a scramble.

Among all the perplexing and vital problems which confront the University this problem of maintaining the quality of its Faculty is fundamental. It must not for a moment be lost to sight in considering the ways and means of building the greater University of the future. Equipment and buildings do not make a university; they are but the material form which may or may not house a living spirit. It is men of quality and training, men on fire with a passion and enthusiasm for teaching, who alone can make a university or any institution truly great. I bespeak, therefore, your utmost efforts in holding salaries at such a level that the University may both keep its present Faculty and add men of strength and learning and personality to its force. During the last year

several important positions have remained unfilled because the right men could not be found at the salaries we were able to pay, and it seemed wholly unwise to fill them with inferior men. Were such conditions to continue, the future of the University would indeed be hopeless. At this time, when it must pass through a rapid period of expansion, when within the next few years the number of its Faculty will very likely be doubled, its usefulness can easily be marred for a generation to come by a policy which attempts to save a few dollars and in so doing weakens the foundations on which the whole structure of the University rests.

**INTERNAL
PROGRESS**

In spite of the great overload with which the University in every aspect of its life has been struggling, the year has witnessed several advances of major importance to which I wish for a moment to direct your attention. There has been, first, a reorganization of the administrative machinery of the University. In the field of discipline, this has taken the form of an enlargement of the work of the office of the Dean of Students. This position, created a year ago, and filled so successfully last year by Assistant Professor Graham, proved altogether too burdensome to be continued as a part-time function. Mr. Graham chose rather to give his whole time to teaching than to the deanship, and his decision was reluctantly accepted. We were fortunate in finding Mr. Francis Bradshaw, of the class of 1917, who, after two years service as graduate secretary of the Y. M. C. A., has taken up the work as the full-time Dean of Students. It is, I think, sound policy that this official should be an alumnus of the University, familiar with its traditions and its student spirit, and should be young enough to have close and sympathetic contact with the student point of view. Mr. Bradshaw's success in this position this fall has been truly gratifying. I

cannot dismiss this subject without voicing my appreciation of the admirable work which was done by Mr. Graham last year, a work which resulted in making possible one of the most satisfactory years from the point of view of campus conditions and spirit which the University has ever known.

A second reorganization has been in the direction of giving freedom to each of the schools of the University in matters which concern its own courses and curricula. Each school has organized an administrative board of which the dean of the school in question is chairman, and the function of which is to deliberate and advise concerning the problems of the school as a whole. By such a method it is possible to get and maintain unity of thought and action in terms of larger units than departments. As the reorganization was only completed in the spring, it is naturally too early for many positive results to have been yet attained, but I believe that more constructive thinking than ever before is going on in the Faculty concerning educational problems because of the tying together in this fashion of departments which have a unity of purpose and a similarity of problems.

A step, the significance of which cannot be overestimated, has been taken in the outlining of a definite policy for the building up of the Graduate School. Dr. Greenlaw, who was made Dean of the Graduate School last winter, has outlined this policy in his report, herewith appended, and has made so clear the importance of a strong graduate school in the University scheme of things that I do not feel that I need add to what he has said. I bespeak for his report a careful reading. There is nothing which so adds to the vigor and vitality of an institution of learning, and which so well reflects the aims and ideals for which university education should stand, as a graduate school of real worth and power. From a larger

point of view, it must always be kept in mind that it is precisely that spirit of the ardent pursuit of truth for its own sake which finds expression in the graduate school which, animating the minds and hearts of men in laboratory and study, has literally made modern civilization a possibility. From a purely practical point of view, it is upon the graduate school that colleges must depend for an adequate supply of faculty material. Young men of promise have this year been given teaching fellowships at the University, which makes it possible for them to devote half of their time to teaching and half to the pursuit of graduate work. This experiment we shall watch with interest. Its success will depend upon the type of men whom such conditions attract. So far its results have been most gratifying.

In accordance with my recommendation to you last winter, a chair of sociology has been established, which is filled by Dr. Howard W. Odum, formerly Dean of the College of Liberal Arts of Emory University. Through the co-operation of the Red Cross there has been organized in connection with this department and with that of Rural Social Science, a School of Public Welfare for the training of community workers, superintendents of public welfare, and Red Cross workers. The need for organized and intelligent work for public welfare has become increasingly clear to thoughtful men in the State and in the nation. It is indispensable that such work should be carried on by intelligently trained workers, animated by truly university ideals. For details as to what has been done and what is planned for the immediate future, the report of Dr. Odum, as director of this school, may be consulted.

Several interesting developments in the University's extension work should be recorded. The beginnings of a form of University service which is of great prom-

ise for the future is the utilization of the University plant for summer institutes for various groups of expert workers. Two such short term institutes, in co-operation with State Department heads, were held this summer: one of workers in the field of adult illiteracy, under the direction of Miss Elizabeth Kelly, and the other in the field of Community Service, under the direction of W. C. Crosby. The Division of Country Home Comforts and Conveniences, working in co-operation with the State Highway Commission, has done admirable work, and is rapidly increasing in extent and multiplying the number of its services. It has already assisted one hundred and seventy-six people in sixty-eight counties. The work with the women's clubs continues to increase in usefulness. Last year one hundred and twenty clubs, as against forty-two two years ago, were at work on definite programmes of study provided by the Bureau. A Division of Design and Improvement of School Grounds has been organized under Dr. W. C. Coker. Twenty-eight special county studies have been made during the year by the Department of Rural Social Science. The Division of Community Drama is rapidly enlarging the scope of its work. These few illustrations of the magnitude and variety of the University's extension work must suffice; for a full discussion of the activities of this Bureau during the year, I refer you to the appended report of its Director.

All such forward steps as those which have just been described are in reality manifestations of one central idea; that the University of North Carolina, to meet the demands which the State makes upon it, must not only grow in numbers, but it must remodel its internal structure, broaden the scope and variety of its activities, develop both in power and in range, if it is faithfully to minister to the increasingly complicated life of its State. What is really happening

**GROWTH
OF THE
UNIVERSITY
IDEA**

is that the University is becoming different, not merely in size, but in quality, from the institution of a generation or two ago; without for a moment losing sight of the fundamental importance of its undergraduate instruction, it is rapidly growing into a true modern university, as distinguished from an undergraduate college.

Such an idea is of no mushroom growth; there has been a steady development for many years toward its realization. It had its first beginnings in 1845, when Judge Battle was made Professor of Law in the University—without salary but with the privilege of retaining the fees paid by his students. The full incorporation of the Law School into the University came in 1899. The School of Medicine, first established in 1879, and later abandoned, was reopened in 1890, and has continued since that time with steady growth. The School of Pharmacy, after one or two tentative trials, was established finally in 1897. Graduate instruction has been given almost since the reopening; the first graduate degrees seem to have been conferred in 1883. Instruction in civil engineering was inaugurated in 1889; in electrical engineering in 1908. Courses leading to scientific degrees are now available in chemistry, electrical engineering, and geology. In 1913, the Department of Education became the School of Education. The Summer School was first established in 1877, the oldest summer school in connection with any college or university in the country. It has for several years given instruction of collegiate and graduate, as well as of normal grade, and it enrolled this year 1200 students. The School of Commerce is now in its second year, with an enrollment of 246 students. The School of Public Welfare has, as noted above, been recently added.

This path to greater usefulness, the University has steadily trod; it conceives of its function in no lesser

terms than those which make it the servant of every worthy cause in which University ideals and training may further interpretation and progress.

But to do work of truly university character, such as the State demands and needs, is, even with the sharpest economy, an expensive task. It calls first for teachers of distinction, but it also calls for equipment, laboratories, libraries, and buildings of specialized type. Books and apparatus are, next to men, the essential conditions of its being. The more complex and specialized the service of any institution becomes, the higher of necessity becomes the cost of instruction. This principle should be clearly recognized in all our thinking.

In my report to you last year I stated that the University had reached in every direction the limit of its present resources. Since that time, your Visiting Committee has not only endorsed that statement, but has recommended, and you have adopted, the resolution that the University should as soon as possible prepare itself for three thousand students. Just what that programme will involve in the way of buildings and equipment has been calculated, and the programme approved by your board. I need not repeat here in detail its items, which are fully stated in the report of the Business Manager.

Nor need I repeat here the figures familiar to you all—figures which tell the tale of the forty per cent overload under which the University is struggling. An institution which is housing 750 men in dormitories designed for 469, feeding 725 in a hall designed for 450, and whose teaching space for 1403 students, outside of its professional and scientific buildings, is limited to 19 classrooms, must obviously spend large sums to bring itself abreast of the present situation before it can materially expand. The State Architect has calculated that an expenditure of about two mil-

**THE GEN-
ERAL SIT-
UATION**

lion dollars would be necessary to enable the University adequately to care for its present number.

Situated as it is, the University must necessarily perform for its students and Faculty a greater number of material services than is the case with institutions located in large centers of population. The University student body is already as large as the town of Chapel Hill, and will soon surpass it in size. It cannot be expected that the town should keep pace with the University in natural growth. As one result of this situation, it has already been necessary to build ten houses for members of the Faculty. These are completed and occupied. But others must be built, or the situation will again become intolerable. I see no escape from the pursuit of such a policy, at least for the immediate future.

The new dormitory, named in honor of that devoted friend and trustee of the University, Col. Walker Leak Steele, the "Steele Dormitory," will be completed by the first of June. It will house 72 men, two men to the room. It is the first of a group of buildings to be built at the southern end of the campus, as a part of a plan to provide for the growth of the University plant in an orderly way. The laundry, now in process of construction, will be finished by spring. Such a plant has become absolutely essential to the health and well-being of the student body.

It is clear that, as the University grows, it must grow symmetrically. It cannot build merely dormitories, or merely classroom buildings. Teaching, living, and eating space must expand together. Library space must be provided; heating and lighting facilities must be extended, the older buildings must be renovated, fire protection provided, hundreds of items fitted into their proper place and sequence. Nothing should be included which is extravagant or useless, but nothing should be omitted which is of vital sig-

nificance to the training and upbuilding of youth. For example, an auditorium in which the student body can come together as a whole is, for the welfare of the college community, as necessary as any other feature of the programme. It has been said again and again that the University has been one of the greatest influences making for unity in the life of the State. But in order to unify it must itself be unified, and as its student body grows it will inevitably tend to break up into groups unless some central meeting place is provided for the daily contact of man with man. Again, the present gymnasium was built when the University was less than half its present size. It cannot longer care for the physical development and training of the students, and surely the University owes them sound bodies as well as sound minds.

What lies ahead is nothing less than the physical remaking of the University—the putting in shape of its present plant as well as the erection of new structures. It is a task which should be approached with care and thoughtfulness, for what is done on the campus in the years ahead will determine the physical University of a century. It is a task which, because of the pressure for expansion which exists, should be proceeded in with the greatest possible rapidity.

I firmly believe that the growth of the University during the decade will be limited only by the rapidity with which it can build up its material plant and enlarge its Faculty. The reason is, I think, clear to us all. It springs from the very success of the State's public school policy. It is no small thing that graduates from high schools have multiplied four times in the last four years, and that graduating classes this next spring, as an investigation of representative schools made by Dr. L. A. Williams reveals, average much larger—46% larger in 17 schools throughout

**UNIVER-
SITY
GROWTH**

the State—than last year. But even such facts fall far short of stating the full situation. To get the full picture one needs to recall that it was only in 1908, twelve years ago, that a state-wide system of public high schools was established, and that our high school system is yet but a rough sketch of what it is destined to become—as witness the fact that in approximately a fourth of the counties of the State no standard high school yet exists outside the larger towns. But as this system builds (and the rapidity with which it is building may be estimated from the fact that our public school expenditures were, excluding special districts, four times as great in 1920 as in 1918) the colleges must build with it, or the system as a whole will suffer. Not only is there desperate need for trained teachers (only 20% of the more than 12,000 white teachers in the State can as yet meet the State's certificate requirements), and not only is it clear that the colleges and normal schools of the State must furnish these teachers, but the State simply cannot afford to erect a barrier at the end of its high school course, and to say to its young people "we can furnish to only a few of you that higher education to which your high school work has led you to look forward, and the zeal for which is burning in your hearts." To so hamper and restrict the future growth and progress of the State would be to deny the faith that is in us all, that no democratic commonwealth can function without a high level of enlightenment for all its citizens, and without trained leadership for the solution of its many baffling material and social problems.

Our educational system is a whole, not a series of unrelated parts. To set in opposition to each other the needs of elementary and high schools, on the one hand, and of institutions of higher learning, on the other, is absurd. No one link can be strengthened

without strengthening all links. To deprive one part on the plea that others must be built up is like starving one member that another may be fed. All must be adequately nourished, or the whole body suffers.

We are coming to see more and more that education is really the one great fundamental task of the modern state, the task which, well done, brings progress and prosperity, and, ill done, brings stagnation and decay. The day of simple problems in private and public affairs is forever past. No longer do the rough and ready methods of an earlier time bring success. Business, teaching, the professions, government, agriculture, more and more find themselves confronted by tasks which only the trained and informed mind can perform. Twentieth century civilization cannot be maintained and forwarded if the older conceptions as to what constitutes a sufficient education are to prevail.

If democracy shall go down in history as a failure, it will be not because of any attacks upon it from without, but because of its own lack of realization that without adequate education for its citizenship it is in this day and time hopelessly unworkable. It is, at the last, by their attitude toward and their faith in education that states and men nowadays must be measured. If this complex structure which we are building is not some day to collapse of its own weight, it behooves us so to train the minds and hearts of men that they shall bring increasingly to their daily tasks that intelligent good-will by which alone our social salvation shall be attained.

No state, however poor it may be, can afford not to educate. And North Carolina is rich enough to educate up to the full limit of her desire. Her present slump in prices has subtracted perhaps two hundred and fifty million dollars from the five billion of raw wealth which she has created since 1915. Her future is secure—a future which will but confirm that leader-

ship among the states of the South which she already holds. What she needs, and all that she needs, is to set herself to develop her unsurpassed human resources in the same spirit with which she has, with such determination and faith, begun to develop her material resources. Let her but do this, and her advance will be swift and sure.

**EDUCA-
TIONAL IN-
VESTMENT**

There is no investment which brings such returns as investment in education. North Carolina has invested in her University since its reopening in 1875 about four million dollars for maintenance, and, through its whole history, less than a million dollars for buildings. Two-thirds of the buildings of the present University plant are the result of private donations. The returns from this investment are literally immeasurable. The plant, all of which is the property of the State, is worth about two millions. But the services of the men who have taught and are teaching at Chapel Hill cannot be measured in money. Nor can the loyalty and devotion and service to the State and to the nation of her sons, who, in public and private life, in the schools, in business, in the professions, in the seats of government, have brought honor and lustre to her and to their State. I verily believe that no state university in the land has made a greater contribution to the advancement of the state it serves.

North Carolina, I have said, is rich enough to educate to the limit of her desire. Last year, she spent each day in the year three hundred and forty thousand dollars for candy, manufactured tobacco, and automobiles—and her expenditures for one day for these three items would have paid the whole appropriation to the University for the entire year, and have left a hundred and twenty-five thousand dollars over for good measure. It is not the ability, but the wish, to educate, that is in question. It is

in terms of the State's real desire and its real faith in the value of education that its decision will be made.

But all that is involved in that decision should be clear. If the State really wants a University from which youth in increasing numbers must be turned away, a University which, because of inferior equipment and a Faculty which can neither be maintained nor recruited with men of quality, can offer only limited and inferior instruction, it should be clear that it is denying, not the University, but itself. It is impairing its own efficiency, sacrificing its own potential leadership, penalizing its own youth, impoverishing its own life. The words of Governor Vance in speaking of the University only increase in significance as the years go by: "More has been done here toward the true greatness and prosperity of North Carolina than anywhere else."

To say that education is a burden is to avoid the issue. There is no worth while thing in life for which the cost must not be paid. But there is in all our civilization nothing so worth while as education for which the cost is so light. Should the University receive tomorrow from the State ten times the sum it is asking for, I venture to say that no single citizen of North Carolina would make a real sacrifice, or suffer any sort of real inconvenience thereby. Last year the average taxpayer contributed just eleven cents to the upkeep of the University—an eleven cent investment in the future usefulness to North Carolina of fourteen hundred youth!

We have emerged from a war to whose service we dedicated the best of our young manhood, for the attainment of the object of which we interrupted their careers, sent them to battle and to death. And they went gladly and eagerly, that human liberty might be secure. There, if you like, was real sac-

rifice, borne lightly and cheerfully for a righteous human cause. And now that we sit safe at home because of what our youth did and suffered, now that the future because of them is ours to do with what we will, shall we deny to youth the best we have? Shall we pour out life and treasure to make democracy safe, and then falter and fumble at the little it costs to make it strong? If we have faith enough in a better world to fight for it, have we not faith enough to pay for it?

STUDENTS

Nowhere in all the land can there be found a finer body of American youth than that which the University has enrolled. Nearly ninety-five per cent of it is from North Carolina stock, nearly one hundred per cent of it is American by birth and ancestry. From ninety-five counties in the State they have come to us; Caswell, Clay, Graham, Mitchell and Yancey alone are without representatives among us. They are men from every section of the State, from every sort of home to be found within its borders. Of the entering class of 424 this fall, 175 were the sons of farmers. In such a vital sense does the University reflect and focus the democracy of the life it serves. Here, in an atmosphere of responsible freedom, they develop not only broad intellectual horizons, but they learn, what every group of democratic citizens must know, how to govern themselves.

FACULTY

The record and the worth of its Faculty are known to you. It has been recognized again and again by learned societies of a national sort, and by agencies and departments of the State. It is largely responsible for the departure from precedent on the part of the General Education Board which has enabled us temporarily to pay living salaries. It is well known—I might almost say, all too well known—to the authorities of other institutions in all sections of the country, as witnessed by the many invitations to join

other faculties extended to them. The record of their publications and addresses for the past year will be found in the last section of this report. In addition to their teaching, many of them are carrying on productive work of distinct quality. The recently issued bulletin of the Graduate School, entitled "Research in Progress," lists nearly a hundred titles of investigations either just completed or still under way. Various groups of the Faculty edit *Studies in Philology*, *The High School Journal*, *The Journal of the Elisha Mitchell Scientific Society*, *The Sprunt Monographs*, *The News Letter*, and *the Carolina Chemist*. These publications have every one taken high rank in their respective fields. The loyalty and devotion of the Faculty to the University and to the State are unquestioned. These things alone have held many of them here during the keen competition of the last two years. It is their hearty co-operation which has made possible the success of the extension work of the University in the State.

It is thus in absolute confidence that students and Faculty alike are ready for the task which lies ahead that I have set before you what it involves. In what I said, I have tried to sum up as briefly as possible the progress which has been made, the needs that confront us, the importance to the State of providing for those needs as an investment in its own future, and the quality of student and Faculty which make it certain that larger opportunities will be worthily met.

All that the University needs, all that she is asking for, is freedom to realize to the full her possibilities of service to the State. For this she asks, not because she is ambitious for herself, but because she is ambitious for North Carolina, and because she is convinced that with ampler resources she can still more extend and vitalize her service to the State, be- **FREEDOM**

cause she verily believes that the State of North Carolina and her University are in very truth "partners in the supreme adventure of achieving in even fuller measure that democracy for which her sons so freely gave their lives—fellow workers in the same high cause, marching shoulder to shoulder toward the same shining goal, as they draw strength and guidance each from each."

H. W. CHASE.

Report of the Registrar

To the President of the University:

I beg to submit herewith my report for the year ending November 30, 1920.

In the Winter and Spring terms of 1920, as usual, we had new registrations in all departments of the University—to the number of seventy-five. Our total for the session was thus raised to 1777 instead of 1702 as it was given in my report last November.

At the Commencement exercises held June 16, 1920, degrees in course were conferred upon 154 persons. The number of degrees conferred in 1918 and 1919 shows the effect of the departure of so many of our students for military and naval service. The number in 1920 returns to approximately that of 1917. Below is given a table showing the distribution of degrees in course for the past five years.

DEGREES	1916	1917	1918	1919	1920
A. B.	73	99	68	46	87
S. B.	15	20	14	20	29
A. B. LL. B.	1	4	2	2	1
LL. B.	9	11	1	4	7
Ph. G.	5	3	9	1	9
Ph. C.	0	0	0	1	1
P. D.	1	0	1	0	0
A. M.	8	16	7	7	17
S. M.	1	2	0	1	3
Ph. D.	2	0	1	2	0
Totals	115	155	103	84	154

Next are given tables showing for a period of five years the enrollment by schools, classes, and departments.

ENROLLMENT BY SCHOOLS

Year	Undergraduates	Graduates	Law	Medicine	Pharmacy	Summer Sc'l Credit Work	Total
1916-'17	746	37	138	64	53	268	1306
1917-'18	690	25	57	57	26	275	1130
1918-'19	985	29	52	55	35	213	1369
1919-'20	1094	40	168	64	59	352	1777
Present	1114	58	139	71	65	437	1884

UNDERGRADUATES BY CLASSES

Year	Senior	Junior	Sophomore	Freshman	Special
1916-'17	98	120	148	325	55
1917-'18	81	90	183	281	55
1918-'19	60	107	165	441	212
1919-'20	100	150	235	410	199
Present	105	165	270	391	183

ENROLLMENT BY DEPARTMENTS

Departments	1916	1917	1918	†1919	‡1920
*Accounting.....	-----	-----	†133	94	64
Botany.....	121	84	79	49	87
Business Organization.....	-----	-----	-----	-----	53
Chemistry.....	501	429	638	483	425
Civil Engineering and Drawing.....	166	111	253	169	198
Economics.....	215	150	267	180	260
Education.....	139	48	45	37	48
Electrical Engineering.....	57	40	203	126	146
English.....	842	827	666	608	614
Geology.....	176	125	188	192	102
German.....	352	272	158	129	117
Greek.....	36	21	8	17	23
History and Government.....	427	247	326	355	442
Latin.....	277	257	108	137	97
Mathematics.....	432	333	391	453	409
Music.....	-----	-----	-----	16	3
**Philosophy.....	145	127	76	150	76
Physics.....	249	242	301	203	180
Psychology.....	-----	-----	-----	-----	139
Romance Languages.....	386	377	545	510	650
Rural Economics.....	57	38	26	8	24
Sociology.....	-----	-----	-----	-----	30
Zoology.....	103	79	85	12	10

*Accounting was given for the first time in 1919.

†In the S. A. T. C. there were 133 students in Accounting for Soldiers.

‡The numbers in all departments are much smaller than they would be under the old bi-semestral system, since the student carries fewer courses and many courses are repeated in the second or third terms or in both. Moreover some courses are to be given in the second or third terms, but not in the first term.

**Philosophy and Psychology previously counted together are this year listed as two separate departments.

The number of women pursuing courses in the University is forty-seven. The restrictions imposed by the Board of Trustees have been carefully met. These students fall under the following groups: in Pharmacy 1, Graduates 13, Special Graduates 2, Seniors 6, Juniors 5, Special Students 10, in lower classes 10—Total 47. The 10 students in the lower classes are, with two exceptions, residents of Chapel Hill and admitted under a special ruling in each case. The two exceptions are pursuing courses in Electrical Engineering and in Chemistry, work that cannot be secured in any college for women.

Next are given figures showing the number of public schools, private schools, and colleges that send us on certificate students of Freshman rank, and the number of students of this rank coming from each kind of school.

	SCHOOLS		STUDENTS	
	1919	1920	1919	1920
N. C. Public Schools	134	138	294	299
N. C. Private Schools	22	16	51	47
Outside Public Schools	7	16	7	23
Outside Private Schools	20	9	52	34
Other Colleges	12	12	22	24

Next is given the division of Freshman students according to the general courses pursued. On account of peculiar conditions incident to the war and the S. A. T. C. I give no figures for the year 1918-19. The most striking feature of the following table is the large increase in the enrollment of students in the School of Commerce.

Year	A.B.	S.B. I	S.B. II	S.B. III	S.B. IV	S.B. V	S.B. Com.	Premed.	Spec.
1916-'17	213	20	17	10	59	1	.....	....	12
1917-'18	202	22	21	12	34	3	.....	24	7
1919-'20	194	19	44	19	29	8	60	70	9
1920	168	6	41	9	28	3	102	60	9

Considering the student body as a whole again we find that 92.9 per cent are from our own State and 7.1 per cent from other states and foreign countries. There are 37 from S. C., 18 from Va., 7 from Ga., 4 each from Ala. and Tenn., 3 each from Fla., Mass., N. J., and Pa., 2 each from Conn., D. C., Ill., and Ky., and 1 each from Canal Zone, Cuba, Idaho, Ind., Japan, Md., Miss., N. Y., Ohio, and Texas.

Only five counties of N. C. are not this year represented in our student body. These are Caswell, Clay, Graham, Mitchell, and Yancey. Counties sending ten or more students are as follows: Alamance 28, Beaufort 16, Buncombe 58, Cabarrus 24, Caldwell 16, Carteret 13, Catawba 23, Chatham 13, Craven 13, Cumberland 18, Davidson 14, Durham 18, Edgecombe 21, Forsyth 37, Franklin 13, Gaston 26, Granville 13, Guilford 69, Halifax 17, Harnett 11, Henderson 12, Iredell 31, Johnston 18, Lenoir 20, Mecklenburg 77, Nash 14, New Hanover 31, Onslow 11, Orange 48, Pitt 21, Randolph 19, Richmond 12, Robeson 18, Rockingham 16, Rowan 36, Sampson 11, Surry 10, Union 20, Vance 16, Wake 46, Wayne 45, and Wilson 27. Mecklenburg leads with 77, Guilford following with 69, Buncombe with 58, Orange with 48, Wake with 46, and Wayne with 45.

Different religious bodies are represented in the following numbers: Methodist 478, Baptist 356, Presbyterian 235, Episcopal 159, Christian 39, Lutheran 33, Jewish 17, Roman Catholic 16, Moravian 10, Reformed 8, Universalist 7, Friends 5, Christian Science 3, Disciple 2, Congregational 1, Reformed Jewish 1, and Unitarian 1.

Classifying the students according to the business or profession of their fathers we find the following numbers: Farmers 375, Merchants 119, Manufacturers 98, Lawyers 71, Doctors 69, Public officials 69, Railroad men 51, Ministers 48, Salesmen 30, Bankers 28, Teachers 28, Contractors 28,

Real Estate dealers 28, Insurance men 23, Druggists 20, Mechanics 19, Tobacconists 18, Lumber men 17, Hotel managers 14, Engineers 13, Brokers 10, Bookkeepers 10, and, with number less than 10, Automobile Dealers, Editors, Jewelers, Stock Dealers, Millers, Fishermen, Dentists, Barbers, Shipbuilders, Telephone Managers, Auditors, Architects, Photographers, Butchers, Bakers, Telegraphers, Liverymen, Accountants, Optometrists, Coal dealers, Electricians, Painters, Florists, Plumbers, Orchardists and Dealers in Naval stores.

As noted last year the three term system was just getting a fair trial. No statistics were given then as to the grades made under the old and the new systems. This year we have made some study of the grades made during the three terms of the session of 1919-'20, compiling the grades for the session and computing the averages made by the student body and by various groups of students large and small. As a whole the grades appear to average poorer than under the old system of two terms. I give below the averages of the session of 1916-'17 and the session of 1919-'20 by Freshmen, the three upper classes, and Fraternity men.

Year	Freshmen	Upper classes	Fraternity men
1916-'17	3.65	3.22	3.20
1919-'20	3.88	3.43	3.64

The average grades of the various divisions of undergraduates are interesting. They are given below for purpose of comparison and to furnish a basis for comparison with similar groups in later years.

College of Liberal Arts	3.49
School of Applied Science (omitting S. B. in Medicine)	3.52
School of Commerce	3.86
S. B. in Medicine and Premedical students	3.86
Whole undergraduate group	3.61

Other interesting groups made averages as follows:—

N. C. Club (Wearers of N. C.)	3.57
The Student Council	2.72
The Campus Cabinet	3.69
The Debating Council	2.42
U. N. C. Women's Association	2.89
Yackety Yack Board	2.80
Tar Baby Board	3.23
University Magazine Board	2.40
Tar Heel Board	2.73
Y. M. C. A. Cabinet	3.24
Musical Clubs (combined)	3.50
Pan Hellenic Council	2.86
Phi Beta Kappa	2.04
The Golden Fleece	2.31
Amphotherothen	2.58
Sigma Upsilon	1.98
Omega Delta	2.87

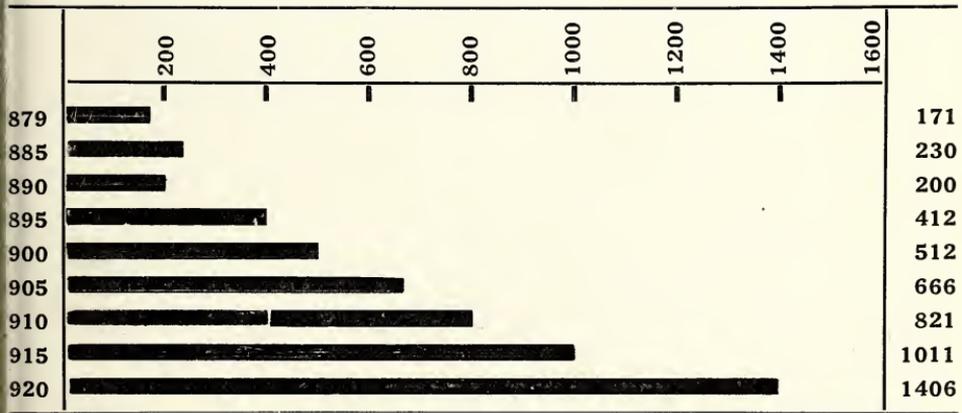
Tau Kappa Alpha	1.91
Satyrs	3.26
Gimghoul	2.87
Gorgon's Head	3.46
Minotaurs	4.40

During the present session we plan to make more detailed studies of grades to compare with those under the old system. With such data in hand we shall be able to deal more wisely with questions of importance connected with our terms and hours of class work.

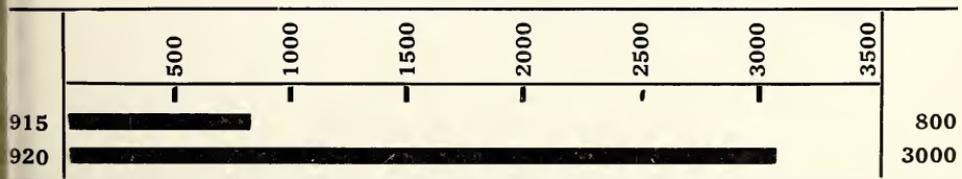
Before concluding my report I wish to express my appreciation of the loyal and effective service rendered in my office by Miss Josephine Pritchard and Dr. G. K. G. Henry. Miss Pritchard began her work in Sept. 1919 and Doctor Henry was added to the force in July 1920. Both have been exceedingly helpful in carrying on the work of the Registrar's office, where the mass of detail has increased enormously within the past few years. The employment of these two has been I am convinced, fully justified by the results accomplished.

Very respectfully,
 THOMAS J. WILSON, JR., Registrar.

UNIVERSITY REGISTRATION SINCE REOPENING, 1879



GRADUATES FROM PUBLIC HIGH SCHOOLS



More than 25,000 in Public High Schools this year

Report of the Dean of Students

To the President of the University:

A survey of the past year discloses much of progress and much of promise. With one or two exceptions, to be noted later, the problems incident to the resumption of campus tradition have been completely met, and the atmosphere and spirit of student thought and student work show the continuity and permanence of the pre-war Carolina.

During last spring an incident on the ball field that might have marred our record of fine sportsmanship and our relations with a sister institution was turned into a complete triumph of the finest things that the Carolina spirit has stood for by a spontaneous repudiation by the students of the incident in question and an offer to cancel the game in which it occurred. The effects of that fine thing spread far and wide and made certain a continuation of our happy relations with the institution in question. The foot ball record of the past fall, deficient in victories and scores, has been full of such expressions of admiration as that on the part of a national daily which called our team "as fierce and clean as a hound's tooth," and that fine tribute paid by the Virginia alumnus to our spirit in defeat as exemplified by our cheer leader and our cheering on Lambeth field Thanksgiving Day. These are the high lights of an athletic season, almost unique in its lack of victory and I think entirely alone in the refusal of the campus to be down-hearted in the face of defeat.

The Student Councils of last year and this year have not only symbolized student standards of honor as an ideal, but they have unflinchingly met the issue in a concrete way in every case presented to them, and have taken action with a sense of responsibility and with a justice that has left nothing to be desired.

The Campus Cabinet has continued to be the constructive organ of the student community. For the last four months it has not only met the ordinary demands for action, but has busied itself in a peculiarly unselfish and constructive manner with the problems incident to the overcrowded conditions. In its constructive and advisory functions, the Cabinet has been supplemented by the advisory council which the President of the present Senior Class has gathered around himself in his task of integrating the interests of the student groups. This plan gives promise of forming a precedent for succeeding senior presidents and of increasingly assisting in meeting problems produced by growth.

There has been no finer achievement of the fall term than that of the dance leaders and their assistants in making the fall dances clean in atmosphere and perfect in organization. The men responsible for these

dances faced their responsibilities with a rare vision and efficiency. Their wisdom and their work was rewarded with complete success.

The students' interest in student enterprises has never been more general and more efficient than during the past fall. The Tar Heel has been published twice a week. The Magazine in a new form and with a new spirit is not only readable but read. The Y. M. C. A. has not only contributed as concretely to the needs of the campus as hitherto, but its needs have been more concretely recognized by the individual student. The result has been the doubling of financial support, as compared with last year. The Philosophy Club and the Senior Committee on Complaints illustrate the progressiveness and initiative of the present campus leaders. These things justify the belief that a democracy in spirit will produce a democracy in initiative and a universality in interest. Promise of further advances in this direction is given by the recent changes made by the Faculty in the matter of holidays and class attendance. Such a spirit of co-operation between the Faculty and students as is indicated in this measure and as will be further developed by it must of necessity produce a new record of fine achievement.

The several administrative problems that have not yet found adequate solution all seem to have as their root the obvious evil of overload, which general condition is of course obvious to all. However the lack of a chapel and the larger size of each instructor's classes make the assimilation of new students and the integration of Faculty and students into one community more and more difficult. The only solution short of the building of a larger chapel and an increase of the Faculty would seem to be a provision of a voluntary chapel for the three upper classes and a constant encouragement of such social contacts between Faculty and students as the various student organizations and the Faculty Sunday nights at home make possible.

Judged in terms of the spirit in which the student lives his day the unselfishness of campus citizenship, the individual interest in the common concern, the carrying over of the honor standard into every student activity, the increasing prevalence of that fine combination of qualities known as sportsmanship, judged in these terms the past year has given fine realization to past hopes and a fine promise for future achievement.

Respectfully submitted,

FRANCIS F. BRADSHAW, Déan.

The College of Liberal Arts

REPORT OF THE DEAN

To the President of the University:

I beg leave to submit the following report of the College of Liberal Arts for the year 1919-1920.

As was foreseen at the time of the last report, the confusion of various sorts that followed in the wake of the war conditions began early in the session to clear away, and by the close of the year had almost entirely disappeared. Measures adopted by the Faculty in anticipation of the adjustments which it seemed likely would have to be made proved adequate to the solution of the majority of the cases presented. Two of these measures, the crediting of the S. A. T. C. courses and the retention of the three-term system, have already been reported. In the course of the year it was found necessary to make provision also for crediting military service both in the training camps and in the field as of academic value for students who had matriculated before the service began. A unit of six months service was counted a credit of three hours. Such an estimate of values was of course wholly arbitrary. Indeed the measure itself was radical, but it was one which found almost universal acceptance by the colleges of the country. In the circumstances it needs no justification.

The three term intensive system as applied to the regular work of the College has now been in operation for more than a year. The longer trial of it fails to reveal any new merits or faults. It seems to be generally agreed that better results are obtained in all courses which are conducted by the method of recitation, but that courses conducted by lectures and reading have become more difficult to handle. Progress has been made in properly adjusting the material of a course to the new time unit, and it is safe to predict that the present session will witness the elimination of this element of the problem. The difficulties of administration—registration, schedule, records, announcements of courses, etc.—continue to be the most obstinate of solution, but in this respect also progress can be reported. Whatever the final conclusion may prove to be, in the present congested condition of the University the continuance of the plan is a necessity. Only by repeating certain elementary courses within the session and by the allotment of space, as for example, in a laboratory, to successive shifts of students can the work of the year be accomplished.

The reorganization of the College of Liberal Arts has been effected in accordance with the plan adopted by the University Faculty last spring. The Administrative Board has been appointed and consists of the fol-

lowing: Professors Toy and Hanford representing the division of Language and Literature, Professors Hamilton and Odum representing the division of Philosophy and Political and Social Sciences, Professors Henderson and Prouty representing the division of Mathematics and the Natural Sciences, Professor McGehee representing the School of Law, Professor Knight representing the School of Education and the Summer School. The Dean is ex-officio chairman.

The Board has taken over the business, so far as it relates to the College of Arts, of the former curriculum committee and of the committee on courses, both now discontinued. In this capacity its work is largely routine in character, dealing with the acceptance of new courses, the administration of exceptional registration, and the substitution of courses within the requirements. Its more important function is that of studying the operation of the curriculum, and the needs, the weaknesses, the methods, and the expansion of the College, for purposes of supplying the Faculty with information as to existing conditions and of recommending any measures deemed advisable for developing and strengthening its work.

Except for one meeting called last spring for perfecting its organization, the sittings of the Board began only with the opening of the current session. It is therefore still too early to report on its work. It is clear already, however, that, provided the Board does its work well, the College will benefit by the plan. Problems peculiar to the College can henceforth be considered thoroughly in detail in a way which was not warranted so long as they were tied up with similar problems of other schools of the University; matters hitherto passed over altogether by joint committees, because they interested only a part of the membership, will receive the attention they deserve; the unwholesome tendency of departments within the College to look upon their work as detached from that of other departments may be expected to give place to much closer co-operation; and common aims and purposes will be given space to reveal themselves.

Administrative matters which concern all divisions of the University equally, and are therefore not the peculiar business of any one of the special boards, are now handled by a committee consisting of the Dean of the College of Liberal Arts, the Dean of the School of Science, and the Dean of the School of Commerce. This group determines methods of carrying out certain general regulations, such as that controlling the dropping of students for failure, the transfer of students from one school to another, etc. Since its composition represents an interlocking of several boards—and it is empowered to make this complete by calling in at any time the deans of the other schools—a means is supplied of comparing methods and policies and of checking results. In this way each group benefits by the experience of every other, and harmony of action is secured.

The College has been enlarged by the addition of a department of Public Welfare offering elective courses in Sociology. Plans are now forming for the establishment of this department as a separate school

with a curriculum of its own for the training of social workers. Its consequent withdrawal from the administration of the College should not result in a withdrawal of its elective courses for students of the College.

Additions to the teaching staff have been made in several departments to keep pace with the increase of students. The most notable increase has taken place in the department of Romance Languages, which is now the largest, in point of number of students, in the College. For the last two years the staff has had to devote practically all of its time to the elementary branches alone, to the neglect of its elective and graduate courses. It was thought that the addition of three teachers would be ample to provide for both types of courses. But again this year the increase of elementary sections has crowded out the higher courses, and further additions are imperative. The department has offered, and the Administrative Board has accepted, several courses of advanced grade in the expectation that provision will soon be made for the necessary expansion. The heavy enrollment in the Romance languages is accounted for mainly by the admission of Spanish to the same standing in the curriculum as that of the other modern languages, by the emphasis placed upon Spanish in the curriculum of the School of Commerce, and by the shift from German directly traceable to the unpopularity of the latter during the war period. The decrease also in the number of students electing Latin is taken up by the Romance languages. While it is probable that German will regain a large part of its loss as time passes, there seems little likelihood that the rate of enrollment in French and Spanish will decrease to any great extent.

The pressure on the department of Romance Languages is of course somewhat abnormal. But such abnormal circumstances in even one department serve to direct attention to the whole question of the proper relation of the teaching staff in general to the demands put upon it by the rapidly increasing enrollment of students. It has been the policy in the past to distribute the increment of students in the elementary courses among existing sections until the classes became so unwieldy as to compel additions to the Faculty. This has meant in many cases the enlargement of sections beyond the point of effective work. And yet it is impossible to exaggerate the importance from every point of view of keeping small the classes in which habits of study are formed and the foundations for the work of the later years is laid. Where the method of instruction is almost exclusively by recitation, the best results are to be achieved only if sections are strictly limited in number. It should be possible for most departments to calculate beforehand with a fair degree of accuracy what the demands will be for the next succeeding session, and to know that these demands can be met.

The policy of adjusting after the fact instead of making provision beforehand leads also to the hasty selection, because under compulsion, of

inexperienced* teachers. Up to this time departments have been comparatively small, and on the whole few serious mistakes have been made. But we are now entering upon a period of rapid growth when the chances of mistakes will be multiplied. It goes without saying that the quality of the teachers having these branches in charge is much more important than all mechanical arrangements of sections. The quality of teachers cannot be assured unless time is given to examine carefully into qualifications of training, experience, and character.

Important as the elementary work is, it should not by reason of its quick growth be allowed to crowd out the advanced courses altogether, or even in large part; nor should it be permitted to force a heavy overloading of the teaching schedule. Concentration year after year on introductory courses and an unbroken succession of class hours tend to make teaching a mere routine and grind. Unless time is allowed for further continuous study and investigation by restricting the load of teaching, the inspiration and enthusiasm so essential to the best results are apt to disappear. Indeed this is the main justification for the encouragement of research on the part of teachers in an undergraduate school.

These considerations are offered not so much in criticism of our past performance as in anticipation of problems which will confront us in the immediate future. There is every indication that in the next few years the enrollment of students will be doubled. That will mean at the lowest estimate a doubling of the Faculty as well. Surely the same foresight and care should be exercised in laying plans for growth of this sort as for the development of the material plant. Department budgets should be estimated in such a way as to give assurance that all definitely foreseen demands will be taken care of in adequate fashion. Statistics as to the rate of increase are available. The Administrative Board in consultation with the heads of departments will be able to arrive at exact figures as to the proper size of sections and as to the proper teaching load in the different branches.

In this connection it seems worth while to call attention to the peculiar position occupied by the College of Arts in its relation to the various schools of the University. The registration numbers for the College cannot be used as a basis for reckoning the teaching load of the staff. With every addition of a new school with its specialized curriculum (Science, Education, Public Welfare) has come a new distribution in the registration, as the opportunities for selection of courses of study have increased. Yet a new school has not meant a new Faculty, but rather only the addition of one or more specialists for the technical courses of the curriculum. The other courses, the great majority in most cases, are taught by the general faculty of Arts and Sciences. For example, the Faculty of the College gives instruction in all courses in language and literature in every school of the University. The same is true of other departments. Thus,

the fact that in a given year there is no marked increase in the registration of students of arts is not an index of the teaching load of the College Faculty. The load can be calculated only from the total registration of the University.

The most pressing and immediate need of the College of Liberal Arts is that of adequate and suitable quarters in which to do its work. This has been emphasized again and again in the past, but as yet no relief has been afforded. Indeed conditions are growing steadily worse all the time. There are not classrooms enough; there are practically no offices for the staff; departments are broken up and scattered over the whole plant; concentration of teaching equipment is out of the question. In such circumstances there is necessarily much lost motion and great waste of effort. Contact between students and instructors is for the most part limited to the scheduled meetings of classes in recitation rooms, which are incompletely equipped, unattractive in surroundings, frequently out of repair, and almost never clean. Members of departmental staffs come together only rarely and when called for the transaction of business: there is almost none of that daily association so valuable for the exchange of experience, the stimulation of interest and the encouragement of study. When efforts are made to devise means of increasing the conference method of instruction, or to encourage co-operation between departments which have like aims and purposes, all progress is at once checked by these insuperable material conditions.

The College is the oldest school of the University, but it is almost the only school which can lay no claim to quarters of its own. It has been crowded out of space once allotted to it not only by new academic developments, but also by the expansion of the business offices of the institution. It has already been pointed out that the new buildings added in the last decade or more have not resulted, as was expected, in making room for the College, since in all instances the added buildings proved almost immediately to be too small for the purposes for which they were built, and since space vacated by existing departments was at once devoted to new activities. The time for such makeshifts is past. The College of Arts should be brought together in one building large enough to accommodate both students and faculty. The need is desperate.

Respectfully submitted,
GEORGE HOWE, Dean.

The School of Applied Science

REPORT OF THE DEAN

To the President of the University:

I have the honor to submit the following report concerning the work of the School of Applied Science for the year ending December 1, 1920.

The enrollment in the School is so far slightly less than that of last year, divided by classes and courses as follows:

Course	Freshman	Sophomore	Junior	Senior	Graduate	Total
B. S. in Chemistry	7	9	11	13	10	50
B. S. in Electrical Eng'g	45	29	14	9	....	97
B. S. in Civil Engin'g	10	15	10	4	4	43
B. S. in Medicine	28	19	3	*15	**195
B. S. in Geology	3	1	2	2	3	11

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*Includes all students now in the first and second years of the Medical School who expect to obtain the degree of B. S. in Medicine.

**Includes 130 pre-medical students taking courses in the School, but not applying for a degree.

Work of the Departments

All departments report progress, but under continuing difficulties. The Chemistry department emphasizes its inability to carry forward plans for new courses and for improvements in courses now being given, until additional facilities in the way of more room, more instructors, and more equipment are available. At the same time, though Chemistry Hall is overcrowded and the personnel is overworked, the high standard of the department is being maintained, and the volume and quality of research work carried on, and results published, shows no lessening.

Because of the fact that the department of Geology was unable to secure teaching force (against the competing lure of the better paid commercial field) to make it possible to offer all the courses scheduled for this quarter, some of them must be postponed until the winter and spring terms. Just where space can be secured for the necessary classes and laboratory sections in the crowded winter quarter is not yet clear.

Dr. Prouty, who is in charge during the absence of Dr. Cobb, has made some progress in releasing space formerly occupied by material which, though valuable, has had to be stored until better times. In spite of all he can do, however, he finds the department "hopelessly hampered" until adequate space and equipment can be secured in a new building.

Professor Daggett reports for the department of Electrical Engineering an increased enrollment, and satisfactory progress along various lines. Gifts of storage batteries and high voltage insulators from several commercial firms are noted. The department is getting more comfortably established in its rooms in Phillips Hall, and in regard to the work in Radio he says: "Our radio receiving station has been practically completed, and we have already received radio telegraph messages from a number of foreign stations, including Norway, France and Germany, as well as stations in South America. We have also picked up several radio telephone conversations, and on the night of November 25 received telephone communications and graphophone music from the steamship Broad Arrow of the Savannah Line when she was one hundred miles out from New York."

Professor Hickerson, acting head of the department of Civil Engineering writes that "The laboratory rooms in Phillips Hall assigned to Engineering are not half equipped. Additional equipment is needed for the Highway Engineering laboratory in order that all the standard tests may be made in the most thorough manner upon bituminous and non-bituminous road surfacing materials. Laboratory apparatus is desired also in connection with courses in Sanitary Engineering. A Hydraulics laboratory is needed for the use of students in Hydraulics and Water Power Engineering. It is not feasible to equip Phillips Hall for this purpose, and a separate building, preferably on Morgan's Creek, would afford the best conditions for instruction in this important branch of engineering. Numerous lantern slides are badly needed for use in many of the Civil Engineering courses. At least one additional member of the teaching staff is needed, particularly one who has had training and experience in Railroad Engineering. A much larger appropriation for the Civil Engineering library in Phillips Hall is desired for the purchase of books and periodicals, and particularly for the completion of files of back numbers of the proceedings of the American Society of Civil Engineers, the American Society of Testing Materials, and the British Institute of Civil Engineers."

With the facilities offered by Phillips Hall the Physics department at last may see the end of its former difficulties and handicaps, and when the building is piped and wired for gas and electricity, and the windows provided with proper shades, the department will be in possession of a series of lecture rooms, laboratories, apparatus rooms, offices, etc., quite up to date in every way, except for paucity of equipment. The new member of the Physics staff, in place of Mr. Harry M. Sharp, resigned, is Associate Professor Otto Stuhlman, Jr., a graduate of Cincinnati, an A. M. of Illinois, and a Ph. D. of Princeton, where he worked under O. W. Richardson. He has had teaching experience at several of the larger universities before coming here. His coming, and our removal to Phillips Hall,

make it possible for us to offer a series of new courses in Physics, both undergraduate and graduate.

Needs of the School

I beg leave to emphasize most earnestly the following recommendations made by the heads and other members of the teaching staff of the departments composing the School of Applied Science:

1. The enlargement of Chemistry Hall, and the increase of its equipment.

2. The appointment for next year of a Professor of Technical Chemistry.

3. The erection of a new building for Geology.

4. Provision of a building on Morgan's Creek equipped for work in Hydraulics and Water Power Engineering.

5. Much additional equipment for Civil and Electrical Engineering, Geology, Mathematics, and Physics, as asked for in the budget. Until this is provided, the work in all these lines will remain greatly hampered.

6. The appointment of an additional member of the teaching force of the department of Civil Engineering, who has had training and experience in Railway Engineering.

7. The installation of telephones in Phillips Hall, now greatly needed.

8. Additional funds for books and journals for all departments, including those now endowed.

9. Adequate provision for the complete equipment of Phillips Hall with the necessary wiring, piping, seating and other furniture, shades for the windows, and for certain necessary repairs connected with the plumbing, which if delayed will greatly injure the building.

10. The provision of needed machinery and supplies for the workshop of the School, with a trained mechanic in charge. This recommendation is earnestly concurred in by several departments.

Besides these definite and urgent recommendations as to immediate needs, I would also urge that the suggestions made last year in regard to courses in Art and Architecture, Forestry, and Mining Engineering be kept in mind in formulating plans for the future of the University.

Respectfully submitted,

ANDREW H. PATTERSON, Dean.

The School of Commerce

REPORT OF THE DEAN

To the President of the University:

I desire to submit the following report for the School of Commerce, together with certain recommendations for its further development.

The first year's work was carried through with a fair degree of success considering the handicaps under which the School has labored. Among these may be mentioned inadequate quarters, lack of equipment, a dearth of qualified teachers, a considerable number of students attracted by mere curiosity to try out a new thing, and a lack of confidence on the part of the business administration of the University itself that the school could be of any practical use in actual business operations. It is a satisfaction to report that such standards of work have already been established that students are convinced that education for business is one of the most difficult courses to master. We have yet to convince them that it is a very fascinating thing and exceedingly worth while when undertaken in the proper spirit.

The enrollment at this date as compared with last year is as follows:

	Last Year	This Year
Seniors	1	13
Juniors	20	37
Sophomores	54	74
Freshmen	63	109
Total	150	246

You will observe that this is an increase over sixty per cent in spite of a definite effort on our part to dissuade students from registering for the course unless they have a very clear "call" to the profession of business. This growth in numbers, of course, calls for more room, more teachers and increased facilities all around. It also requires more effective administrative methods to detect the misfits and to guide discovered talent more definitely. Both of the problems are receiving earnest consideration.

The inclusion of the practical element in our scheme of training in the form of lectures by successful business men and summer apprenticeships has met with encouraging success. A series of eight lectures was provided last year including as lecturers such men as J. E. Latham Esq., cotton merchant of Greensboro, Hon. A. W. McLean, of the War Finance Corporation, Mr. E. F. Hartley, Chief Statistician of the Division of Manufactures of the Census Bureau, and Mr. John C. Whitaker, Employment Manager of the R. J. Reynolds Tobacco Co. It is the purpose to

expand this feature of our work and to maintain the same high standard of excellence attained during the past year.

As regards summer apprenticeships, it is not intended that the school shall function as an employment agency but merely as an advisor and assistant to each upper classman in securing an opportunity to carry out a program of summer work in harmony with his future plans. Every one of our rising Senior class, other than those in summer schools, and a large number of our Juniors were successful in getting such positions last summer. All obtained valuable experience and many made attractive salaries.

An accounting laboratory has been established and some equipment secured. It is the merest beginning, however, in providing such facilities as are found in the accounting department of modern business organizations.

The personnel of the staff has been changed by the appointment of Erle E. Peacock, M. B. A., as Associate Professor of Accounting to succeed Professor Cowin who resigned, and the addition of Walter J. Matherly, M. A., as Associate Professor of Business Administration. Appointments were contemplated in the fields of Banking and Foreign Trade, but suitable men could not be secured at the salaries available, so these positions are left vacant for the time being.

In accordance with the plan of reorganization of the University, the Administrative Board of the School of Commerce has been constituted as follows: Professor Walter J. Matherly, Professor Erle E. Peacock, Dr. Louis R. Wilson, Dr. Sturgis E. Leavitt, Dr. William W. Pierson, Professor John B. Woosley, Charles T. Woollen, Business Manager of the University, and Dudley D. Carroll, Dean of the School, Chairman. This Board is exercising general control over the policy and development of the school, and is serving in a most helpful advisory capacity to the Dean.

One change has been made in the course of study. The requirement of two full courses in one of the physical sciences has been shifted from the Junior to the Sophomore year, and the two and a half courses required in Government have been transferred from the Sophomore to the Junior year. New elective courses have been provided in Business English, Commercial French, Commercial Spanish, Business Statistics, Public Utilities, and Advanced Accounting.

The School has been designated as the collaborating agency of the United States Bureau of Education in making a survey of the business resources of North Carolina. This work will get under way very soon and if properly carried out will supply a sound basis for a more intelligent policy of correlation in the State's business activities as well as a guide for vocational education in our public school system.

The outstanding and pressing needs of the School may be enumerated briefly:

1. A building should be constructed at the earliest possible moment, which should contain adequate space for the following things: accounting

and statistical laboratories; a reading room and filing space for the rich current materials which are constantly accumulating; an industrial museum where the record of the State's amazingly rapid industrial revolution may be preserved; a Student bank for the convenience of the student body and practical training for advanced banking classes; a small auditorium for business lectures; sufficient class room and office space for the rapidly growing student group and teaching staff.

2. The addition of at least two members to the staff for the next scholastic year, one in Banking and Insurance, the other in Marketing and Foreign Trade. An important point in this connection is the provision of salaries adequate to attract men with the proper training.

3. A larger library of business books and magazines. The industrial world is relying as never before on standardized practice as set forth in treatises by recognized authorities while business journals are serving as ready and rapid diffusion agencies of suggestive and helpful information.

With such a program of work and provision for its accomplishment the School should be not only an effective training agency but also an active and regular disseminator of useful business information among the people of the State.

The most casual examination of the present readjustment in local as well as in world commercial relations will make it clear that the test of survival in the markets of the future will be increasingly a matter of organization on sound principles and administration according to tested and standardized practices. This magnifies as never before the task of training the future business men in clear conception, broad point of view, intelligent and careful, and accurate practice.

In conclusion, it may be in order to repeat that the School of Commerce will gladly co-operate with the University Administration in getting at the facts of its own business problems.

Respectfully submitted,

D. D. CARROLL, Dean.

The Graduate School

REPORT OF THE DEAN

To the President of the University:

I submit herewith my report for the current academic year.

The registration in the Graduate School to date is 125. These students come from fourteen states and two foreign countries. We have students from Alabama, Florida, Georgia, Illinois, Iowa, Kentucky, Massachusetts, New Jersey, North Carolina, Ohio, South Carolina, Tennessee, Texas, and Virginia. They are holders of degrees from thirty-four different colleges and universities. Forty-four are holders of degrees from this University. Institutions with next largest representation are Trinity College, with thirteen, and Guilford College, with eleven. A considerable number have already received the Master's degree or have had at least one year of advanced study, and these, with others who are beginning a definite program to extend through several years, give to the personnel of the school a maturity and seriousness of purpose far more significant for the future than the increase in numbers.

Outstanding events in the last year have been the expansion of the old standing committee of the Faculty into an Administrative Board; the revision by the Board of the requirements for advanced degrees and a re-statement of the province of the Graduate School; the establishment of a series of Graduate Bulletins, to appear quarterly; the founding of twenty Teaching Fellowships; and the organization of a Graduate Club.

The Administrative Board

The Administrative Board, which is composed of nine men representing the three divisions under which the departments of instruction are grouped, has for its function not only routine matters, but the initiation of policies looking toward the better administration of the affairs of the School and its further development. More than this, it is a Research Committee, interested in the encouragement and development of productive scholarship at the University. This side of its activities will be greatly expanded, we hope, with the increase of University income, and with a careful survey of the fields of investigation in which the University may expect to do outstanding work. Thus the Administrative Board is not merely a bit of machinery for regulation of courses and degrees but an agency through which the University's contribution to the advancement of learning may be made more effective.

Revision of the Higher Degrees

The revision of the requirements for higher degrees includes 1. A distinction between admission to the Graduate School and admission to candidacy for a degree. By this means students of maturity and promise may be admitted to courses for which they are qualified irrespective of formal certification. Furthermore, postponement of admission to candidacy permits us to get acquainted with the quality of work done by the student and to prescribe more wisely his course. There is provision for a special committee for each student. This committee acts in an advisory capacity, establishes intimate relations with the candidate and his work, and enables us to give the personal instruction that is necessary in advanced work. 2. New provisions relating to the final examinations and the thesis secure wise specialization. Graduate work is more intensive than undergraduate; it is necessary to secure an amount of concentration that is not expected in more elementary work. By more careful planning of student programs and by examinations on the entire field of study chosen by the candidate, both major and minor, we expect to get away from the pigeon-hole conception by which progress towards a degree is marked by a succession of small units passed and promptly forgotten. The gain in method and sense of relative mastery that the student gains from such union of concentration with breadth of view is no small item. 3. The Administrative Board has sought to improve the standing of the Master's degree and to make its attainment something worth while. It is no longer a matter of so many credit hours accompanied by a perfunctory essay. Various plans of work have been adopted, suitable to students with widely different aims: preparation for the more intensive specialization of doctorate; preparation for work in a professional school such as medicine, law, commerce; preparation for community work of various types, for journalism, for various special interests such as dramatic composition and production; most of all, preparation for teaching. It is proposed to make the degree a teacher's degree as distinct from the technical and departmental characteristics of the doctorate. Men who expect to enter upon various aspects of public education or upon elementary college teaching whose interest is in educational methods and values rather than in technical scholarship, need a preparation different in many ways from that sought by men whose prime interest is in investigation and experiment, the addition to the sum of human knowledge. We need to provide for the research specialist; we also need to provide for the larger number of men whose interest in teaching is of a different kind. Much of the prevailing criticism of the doctor's degree is based upon the fact that we seem to expect precisely the same kind of training for two widely different fields of service. The remedy is to recognize the differentiation and to make the Master's degree one of high dignity and value. To this end the Administrative Board has made certain changes in our requirements. It is proposed eventually to make

the degree a two-year degree. It will be a research degree, like the doctorate, but it will be planned on quite different lines.

The Graduate Bulletins

The third in the list of noteworthy events of the year is the establishment of a quarterly series of Graduate Bulletins. The most important of these is the catalogue number; others are designed to preserve records of the work of the School not suitable for inclusion in the catalogue. For example, we have issued a Bulletin of Research in Progress, to appear annually in August. This bulletin contains department reports or research under way, abstracts of papers published by members of the Graduate Faculty, abstracts of all these accepted for higher degrees, contents of the learned journals published by the University, and the like. There is also to be a Graduate Club Year Book, to contain a record of the activities of this organization, papers on the history of research at the University, news of former members of the School, including faculty and students, and other materials of interest in the record of the life of the Graduate School. These bulletins should do much to increase the interest of Faculty and students in productive scholarship, and to clarify and establish a spirit analogous to that of a professional school.

The Teaching Fellowships

The University Teaching Fellowships, instituted this year, have already demonstrated their value. The stipend of \$500 is attractive to the sort of men we wish to secure. Though our announcement was delayed last spring until most men had made their plans, we succeeded in making some excellent appointments. These fellowships enable us both to hold some of our own promising men and to compete with other institutions, thus bringing here men of high promise who obtained their undergraduate training elsewhere. The effect on our own clientele is marked. We need to differentiate in every possible way between undergraduate and graduate methods of work. The man who has already spent four years here is in danger of looking on further residence as merely a continuation of the undergraduate point of view. To bring able men from other states and institutions is a cure for provincialism. Moreover, these men bring others, friends who do not hold our fellowship. Thus an important means for building a true graduate school is brought within our reach. The effects of the plan, wisely directed by our departments and Administrative Board, are admirable. It is not merely a device for securing additional teaching force, though we do secure that necessary end. The Fellows are required to take advance work in the department to which they are assigned. They teach under careful supervision in elementary courses, side by side with men of the regular staff, or they act as laboratory assistants and aid in the research being carried on by departments. The effect upon the Fellows

themselves is stimulating. They are not merely paying their way; they are putting their advanced study into practice. They learn the relation between the method of higher study and the method of teaching. The plan enables us to train teachers of special subjects under almost ideal circumstances.

The Graduate Club

In the newly formed Graduate Club we have an organization of great usefulness. The purposes of the club are to foster the spirit of research among its members; to bring students and faculty into closer relations; to develop a sense of the worth of learning and of the method of higher study, thus bridging the gap that separates one department from another; to foster a love of the things of the mind and a sense of the value of culture throughout the University; by all these means to seek and to find the meaning of the University and its importance to American life. Monthly meetings are held at which an informal paper is presented, the remainder of the time being devoted to social features and to discussion of the topic of the meeting. The papers or talks are planned in such a way as to arouse general interest either through their subjects matters or as illustrations of the method of research. Highly specialized papers are avoided as being more appropriate to the departmental clubs. Much may be learned as to the method of investigation by these comparative studies, and the meetings are proving of interest to professors as well as to students. The Club is also actively interested in plans for securing permanent quarters, a necessary element in the development of the life of the Graduate School. Finally, the Club will prove of value in attracting here students of the right type.

The Graduate School and the University

The relation of the Graduate School to the University is unique in that its concern is not only with the training of a group of learners but also with the perpetuation of the University itself. It differs from the other professional schools and from the undergraduate colleges in that their function is to prepare men for careers which they enter upon, after completing their preparation, and leave the University behind, while the Graduate School must continually add to the sum of knowledge that is to enrich present life and to be transmitted to posterity, and at the same time must train the workers who are to perform the same service for the succeeding generations. The official relation of the teacher in the professional school or the colleges to his school or college is that of a guide to a body of knowledge or a discipline. But all those members of a faculty who are engaged in the work of adding to human knowledge are as truly members of the Graduate School as the students who are candidates for its degrees. The function of the University is two-fold. It is concerned with the *transmission* of knowledge, bringing the mind of the student into fruitful con-

tacts with the achievement of the race, with *addition* to knowledge, so that each generation may discharge its debt to its successors. The vitality of the University depends upon the proper balance of these functions. Its authority as a teaching institution depends upon its faithfulness to the search for truth, a search that is never completed and in which no Commencement can award a final degree.

There are those who maintain that research is not the province of the state university, which they would limit to utilitarian standards. Such is not the feeling here, where productive scholarship has held high place for more than a century. There are those who maintain that research in the true sense is possible only in the richly endowed universities, in urban centers, where great libraries and laboratories are available. It is profoundly true that scholarship requires, in order to be effective, honor, freedom, and material resources. Contempt for the research man, or a perfunctory attitude toward the work that he does; a burden of committee and classroom work that exhausts his vitality; the lack of the materials whereby he may carry on his investigations—these kill the spirit of research. On the other hand, great library and laboratory equipment may be used only in a perfunctory way, or not used at all. There are all sorts of research men, as there are all sorts of senators, or business men, or physicians. Genius is a matter of the spirit and of the intellect. Where the spirit is present the results somehow come. Rochester, Minnesota, is not a large town, but a good deal of productive investigation has come from there.

At Chapel Hill, in this respect, we have a great heritage. No research worker who goes into the history of the University of North Carolina, whatever his field, fails to find in the history of its relation to research a stimulus that calls to the best that is in him. It is for us to grasp the significance of this heritage and to build upon foundations already laid.

To do this wisely involves three factors: students, fields, and faculty. Our field for service lies in quality, not in numbers. The purpose is not to attract a miscellaneous collection of degree-holders who want another degree, but to find the superior student who will do superior work. A small group of students certain to attain distinction in research will enable the University to render a service impossible if we merely enter upon a race with other universities for numbers. A consequence of this emphasis upon quality as a nucleus for our work is the necessity for vitalizing and intensifying our fields of investigation. We should not try to cover, for this intensive work, the entire realm of knowledge. Within certain limits we can do work that will be everywhere recognized as work of outstanding quality. It is our business to define these limits. This is not a matter dependent on size of departmental staffs. A department with one man as its entire teaching staff, or one man for whom the research that is the heart of his life is quite apart from the natural and legitimate field covered by the department or school to which he gives his teaching time, may be worth far more in the attainment of the high aim here proposed for our

Graduate School than the large departments with a dozen or twenty teachers. There is no greater fallacy than to suppose that size of department in students instructional staff is the test of ability to foster research, unless it be the cognate fallacy that the number of degree-holders enrolled in a graduate school makes that graduate school great.

Therefore the requirement is that we find the fields, few in number, in which we may hope to secure productive scholarship of the highest quality. These fields are not *all* departments, but certain departments; they are not to be found in all branches covered by even a large department, but in special fields within the departmental province; they may be, and in the last analysis they always are, not fields or departments at all, but *men*.

This last sentence names the supreme test to which our Graduate School, and every other graduate school, is to be subjected more relentlessly in the future than in the past. The answer to the question whether this University can build up a great Graduate School or not is a very simple answer. It depends upon our possession of a few great scholars who have one of the rarest attributes of personality: the ability to stimulate the passion for learning in others. Not all great scholars have this personality. It is not a matter of honorary degrees or of wide reputation. It is not a matter of volumes published or discoveries made, though solid achievement is the basis on which this personality, like all personality, is based. Given a group—not a large group, for the world's supply of such men is small—given a group of these men whose innermost life is bound up in research and in the creation of the spirit of research in young men, and our future is assured.

To find what we can best do, with the greatest opportunity for distinguished service, and then to see that the conditions necessary to secure this service are met by the University, constitute our first duty. Ample laboratory equipment must be supplied in these fields in the scientific departments. Not less important is ample library equipment for departments in which the library is the laboratory not in departments as a whole but within the special fields in departments where intensive research is projected. Next, there must be an intelligent management of the time and the facilities for work of the professor who is able to advance knowledge and to stimulate the passion for research in his pupils. There are men whose chief value is in class-room work, or in administration. All service ranks the same, we should feel, but not all service *is* the same. It may be wiser, and the professor may be happier, if a teaching program of twelve or fifteen hours is his regular assignment. But it is wise, also, to find varying methods of defining the term "full work." For there are men who may find their highest usefulness to the University guaranteed by a requirement of five hours teaching for a part of the year, or who ought to be relieved for a quarter or for a year from all class-room work. There is a deep-seated academic fallacy in the idea that all professors, at all times, in all subjects, should meet the same number of classes of the same aver-

age enrollment. There are other forms of test that may be applied, and they should be applied, frankly and courageously, by the administration.

The Graduate School and the Crisis in Education

Apart from the fact that the vitality and authority of all the work of the University depends in no small degree upon the extent to which we possess and recognize the spirit of inquiry, there is a special reason of grave importance for the encouragement and support of our Graduate School. The present crisis in education, without parallel in America, can be met only if young men and women of the first quality are induced to enter upon teaching in our schools and colleges. Some of our teachers, of course, will continue to come from those who have had merely the four year college course, and many, as heretofore, will be sojourners in the field, teaching for a short time before entering a professional school. But the increasing intensity of competition and the need for the utmost professional preparation for those who expect to become physicians or lawyers or business men will reduce the number of these, while the very fact that the nation is in process of becoming throughly alive to the crisis in education because of dearth of teachers and is willing to increase salaries and the dignity of the teacher's position, must result in the establishment of still higher standards of preparation. Moreover, even when salaries are advanced, high school and college teaching cannot compete, in the material rewards that are regarded as tests of a successful career, with commerce and the other professions. The one and only hope for meeting this competition lies in the development of a passion for research, for the things of the mind, for learning as a divine calling. It is a simple, rigorous, unanswerable test: *the future of American education depends upon the Graduate School*. Transformed by a new idealism, it will become the great and abiding hope for bringing about that respect for scholarship that is to enable us to meet the challenge of a material civilization. This idealism we shall not gain if our professors and research men think only in terms of their specialties. They must be masters of these specialties; they must also be concerned with the advancement of learning; they must, in this sense at least, take all learning to be their province.

The Graduate School of the University of North Carolina, therefore, has a grave responsibility to discharge, not only for its own State but, with others, for all the states in the South. I do not have in mind the professional preparation of teachers in the sense in which that term is commonly used. The professional preparation of teachers is not a difficult matter when your candidates crowd upon you, certain of what they desire to do. The more difficult thing is to conserve and direct the idealism of youth in the upper classes of the undergraduate course, so that those who are capable of rendering the service to education that we covet shall be so inspired by the spirit of learning that they may be able to resist the enormous urge towards what is sometimes called the practical life, and

may find, in the Graduate School, the way open to a career. Only the spirit of learning can cope with the spirit of material things. I do not mean to deprecate the important and wholly legitimate desire of the University to render service to the business and professional world. I mean only to call attention to the fact that the pressure of the time is against pure scholarship, and that we must recognize the fact and take steps to overcome it. We must overcome it not in order that the Graduate School may continue to exist, but that civilization itself may continue to exist. A book published in France a few years ago, "The Cult of Incompetence," and a book published in this country last year, "The Degradation of the Democratic Dogma," convey through their titles as well as through their themes the solemn warning that, unheeded, means the death of civilization. We are so busy about trying to raise the general average that we are in danger of losing that superior quality which alone makes the "average" worth anything whatever. Civilization is a matter of vitality, and vitality is of the spirit as well as of the body. Devotion to the great spiritual ends of humanity, of which university research has been for a thousand years one of the loftiest expressions, is the more necessary because of the terrific pressure to which we are subjected from economic conditions, from idolatry of pleasure, and from gross perversions of democratic ideals.

Material Aids that are Necessary

As I have already pointed out, we are rich in the possession of two of the indispensable requirements for the development of a Graduate School at the University that will enable us to retain and intensify our own vitality and to do our part toward meeting the crisis in American education. The first of these is our high tradition of achievement in productive scholarship, handed down to us from the very foundation of the University. The second is the presence in our Faculty of men who have devoted themselves to the advancement as well as to the tradition of learning. The third must be brought to us from outside, from the funds appropriated by the State, and from benefactions of alumni and others who may be brought to see the significance of the service that I profoundly believe we are able to render. I therefore set down a few of the most pressing needs that, in the judgment of the Administrative Board, should be met without delay:

1. There must be a very material increase in our library resources. The library is the laboratory of some of our most important departments. There is a difference between a good working library for general college purposes, such as we now have, and a research library. Our attention must be directed to making large additions in the section of the library in which we are competent to do advanced work. Other state universities are leaving us far behind in this respect. To take but two recent examples, the University of Texas has recently acquired, through the gen-

erosity of an alumnus, one of the richest collections of English literature now in existence; and the University of Minnesota has in press a catalogue, prepared by a trained librarian, of its resources in the single field of seventeenth century history numbering 4500 titles, many of them of excessive rarity. I mention these instances, chosen at random from many that might be cited, to show how other state universities regard their research libraries, and to suggest that apart from appropriations from state funds, great libraries are being built up by alumni benefactions. We must have an immediate increase in funds available for library purposes in order to provide for our advanced students, and also in order to provide for the needs of research men in the faculty. We are in constant danger of forgetting that to a high-power man a call from some other institution is frequently more attractive because of superior library or laboratory equipment than from increased personal income.

2. We should have the means, through State appropriation or special endowment, for the establishment of a number of research fellowships and research assistantships. These fellowships should be distinct from the Teaching Fellowships already established in that they require no service from the holders except faithful study towards an advanced degree. They should pay from \$500 to \$1000 annually, should be open to men of proved ability, and should be for specific purposes. They should be named for great teachers who have made the University the center of inspiration and light that we reverence today. There should, for example, be an Elisha Mitchell Research Fellowship, to be awarded to a scientific department having a candidate of outstanding quality in the field in which it is capable of directing his work. There should be a Battle Memorial Fellowship in History, and a Graham Memorial Fellowship in Letters. Such foundations may well appeal to alumni or other citizens who wish to aid us in securing advanced students of unusual promise. Research Assistants, with stipends of \$750 to \$1000, should be appointed from candidates of high quality who are able to co-operate with professors in carrying on research in a special field. Business organizations are ready to employ brilliant young graduates at salaries a few years ago unheard of. The very type of man who would, other things being equal, devote himself to research, is most certain to be confronted by the subtle temptations of salary and of worldly opinion. Our service depends upon our ability to hold the first-rate man, not the second or third-rate. We should be as sure of our candidate as business is sure of its candidate. Given this assurance, we should be ready to help him get his start.

3. We need special endowments, or gifts of fixed sums, for carrying on research in fields in which we are able to produce work of outstanding quality. In some state universities a research committee is authorized to make special appropriations in aid of projects that promise results of high value. These appropriations are used to meet special expenses for books or laboratory materials, for clerical assistance where necessary, and for

publication of the results. In our Administrative Board we have such a research committee. An appropriation, or a gift, or both, to be expended at the direction of the Board in aid of definite projects not otherwise possible of attainment, would yield results of unquestionable worth.

4. The University Press, already authorized upon the basis of a plan prepared by a special committee appointed by the President, is a necessary adjunct to the work of the Graduate School. Through special appropriations such as the one mentioned in my third recommendation, and through gifts for specific purposes, we may undertake the publication of the results of investigation by professors and advanced students. In addition to the three learned journals now published by the University, we should establish a series of University Monographs. These would consist of books that cannot be printed through ordinary commercial channels, and too extensive to be printed in our journals. They represent the measure of the worth of the University to the advancement of learning. Almost every great state university has such a series of publications; we have under way work comparable in every respect with them; we should publish this work ourselves so that the credit for advanced work done here shall belong forever to this institution. The University Press will take over our journals and give them wider usefulness. It will also publish books outside the field of pure scholarship but produced by members of our Faculty. Through the concentration and consequently greater effectiveness of the publication work we are already carrying on, and through the expansion certain to follow, it will prove of immeasurable advantage in securing to the University the extension of its influence, and will be a source of inspiration in all the fields to which I have called attention in this report.

Respectfully submitted,
EDWIN GREENLAW, Dean.

The School of Law

REPORT OF THE DEAN

To the President of the University:

As Dean of the School of Law, I beg to present the annual report of the School.

The total enrollment at the present time, December 1st, 1920, is 101, of whom 55 are first year students and 46 are second year students. Among the latter are included students who entered the school before the three year curriculum was adopted and who under the old arrangement entitling students to the degrees of LL.B. and A. B. after a five year course are entitled to the degree in Law at the end of the current year. The enrollment a year ago was 104, the largest enrollment in the history of the School. The end of the war and the entry of a number of students whose education had been postponed on account of military duties was accountable. This year our enrollment is almost as large and the distribution among the classes is much better than last year.

As stated in the report of a year ago, the School at the beginning of the academic year of 1919-'20 placed itself upon a three year curriculum for graduation. It was considered wisest to make the transition gradually. Last year, the first of the new curriculum was introduced, this year the first and second year are being given, and next year the whole three year course will be in operation. It follows that the current year gives no opportunity of testing out the three year course, and graduates this year are men entitled under the old system to a degree in two years.

The enrollment in the Summer School was 44. At the August 1920 examination for license to practice law, there were 30 applicants credited to the University, all of whom received license from the Supreme Court.

The School was fortunate in securing Associate Justice William R. Allen of the Supreme Court to give courses of lectures in Property and Constitutional Law at the 1920 Summer School. Judge Allen's presence here, his interest in and kindly intercourse with the students, and his forceful and learned presentation of the subjects upon which he lectured were of the greatest benefit to the school. I sincerely hope that he may be induced to return to the Summer School. Of the regular teaching staff of the School, Professors Winston, McIntosh and Assistant Professor Ebird also took part in the Summer School.

As the Summer School is counted in with the Law School of the next following academic year, the total enrollment of the School at this time is 145.

I should like to urge upon your attention again a matter in which I know that you are in hearty sympathy with the aspirations of the School. This is the deplorable accommodations of the School at the present time and the great need of a new building.

The Law School is the oldest professional school connected with the University. In the seventy-five years of its history it has been enabled through its alumni to be of a great service to the University at critical periods in its development. The last few years have seen its steady and most encouraging growth. There is every reason to hope for its increasing usefulness, with the gradual awakening of the profession and of the people of the State to the importance of wider and more systematic courses of instruction in the profession which lies at the basis of social organization. The character and education of the lawyers are of highest importance, not only to the legal profession, but to the communities in which lawyers naturally take a leading part as advisers of their fellow citizens in matters which are of supreme importance to a republican people—matters of government and of politics (using that word in its best and proper sense).

The present law building is inadequate to the needs of the School at the present time. We need increased facilities for students, a larger stock room for the library, adequate reading rooms, library offices, offices for the faculty and for the work of the students. It is impossible to do anything with the present building. What is needed is a new building which will provide for the present needs of the School and make provision for its natural growth for some years.

With the addition of a third year to the curriculum, there will be need also for an addition to the teaching Faculty.

I desire to mention also the excellent work which the law clubs among the students are doing, for which much credit is due to Assistant Professor Efrid.

I bring again to your attention the need of the School of a regular librarian who may assume also the duties of Secretary of the School.

Respectfully submitted,
L. P. McGEHEE, Dean.

The School of Medicine

REPORT OF THE DEAN

To the President of the University:

I have the honor of submitting the following report of the School of Medicine.

The large number of premedical students in all colleges last year made inevitable a large number of applications for admission to the Medical School this year. There were approximately eighty-five applicants for admission to this school.

Obviously an effort to provide for so large an increase in the number of medical students was inadvisable and some just plan of restricting the number admitted became imperative. The medical building was planned to accommodate forty students in each class and the teaching staff is barely sufficient for this number. The admissions were therefore limited to forty.

The policy of restricting the number of students to the capacity of the laboratories is sound in principle and has been generally adopted by medical schools. As affecting this school under present conditions limiting the number to forty in each of the two classes is unavoidable, but continuing the policy may be questioned on two grounds. The per capita cost of maintenance is inversely proportionate to the number of students and the overhead expense of operation is relatively higher in the small school. This difficulty may be met in a measure by an increase in student fees, but in competition with the larger schools there are limitations to this measure. However, an increase of fees from the present one hundred and fifty dollars to one hundred and ninety-five a year seems entirely reasonable and is recommended.

A more serious ground for criticism may be found in a consideration of the supply of physicians for the State. In the five year period, from 1913-1917, there were four hundred and twenty-five licenses granted by the State Board of Medical Examiners,—an average of eighty-five each year. With a normal increase we may assume that an average of one hundred for the next five year period would not be in excess. There are now in the University approximately two hundred students registered in the several premedical courses, this, in view of a total registration of more than fourteen hundred, seems not an unreasonable proportion. We may infer that there are at least as many of like mind in the several colleges within the State. An ample supply of students from the colleges is therefore in sight, but with the number of students admitted to the Medical

School limited to forty the University is clearly not providing instruction for its quota.

The grade of work done in the Medical School is commended by our students who have gone to representative medical schools in the country. They have apparently not been embarrassed in the keen rivalry for class honors or hospital appointments, in which they have been gratifyingly successful. The spirit of serious, consistent work which has continuously prevailed among them inspires the wish and the hope that we may furnish them better opportunities for work. The Medical Faculty is aware of the difficulties of following the lead of the best medical schools in the methods of instruction, difficulties growing out of our location, the scarcity of teachers, and the lack of material facilities, but it is confident that with adequate funds all of the difficulties are surmountable.

The school is now in much better condition in all respects than ever before. Within the past year the departmental library has been very greatly improved, the laboratory equipment substantially increased and the teaching staff enlarged. Dr. W. C. George who was appointed Associate Professor of Histology and Embryology two years ago assumed his duties last fall. The chair of Associate Professor of Pathology established last spring could not be filled, but we hope to find a satisfactory man before the beginning of the next session.

Dr. MacNider was invited by the National Council on Medical Research to undertake certain investigations of the diseases of the kidneys on which he is now engaged. In order to do this work he asked to be released from the teaching of Bacteriology. Dr. Bullitt has taken over the subject temporarily. If a teacher can be secured the subject should be permanently in the Department of Pathology.

The work in Biological Chemistry is still in an unsatisfactory condition. Let me urge again the importance of establishing a professorship for this work.

Respectfully submitted,
I. H. MANNING, Dean.

School of Pharmacy

REPORT OF THE DEAN

To the President of the University:

I have the honor to submit herewith my annual report of the School of Pharmacy:

The School of Pharmacy began its twenty-fourth year of service with a total enrollment of sixty-four students. This number exceeds by two the maximum registration heretofore. The students are divided into the following groups:

Juniors (regular)	28
Juniors (special)	22
Seniors (regular)	12
Seniors (special)	1
Graduate students	1

The Junior class of fifty students is larger by ten than any the School has ever before registered. The increased number of beginners is typical of pharmacy schools throughout the country and in our own case is taxing our accommodations beyond their normal capacity. If the Juniors return for further work next year in the usual proportion and the first-year class at that time equals in size that of this session, I do not see how we can carry the load without additions to our teaching staff, equipment, and room space. Furthermore there will be introduced in the coming Legislature a bill requiring graduation from a reputable school or college of pharmacy as a prerequisite for registration as a licensed pharmacist in North Carolina. The sentiment of druggists generally is favorable to this advanced requirement and very little opposition is expected. It is imperative for us, therefore, to anticipate a larger enrollment in our second-year classes in the immediate future and to secure such additional equipment as to meet the increased demand.

We are still fixed in our purpose to offer graduate work that will appeal to second-year men, but are helpless to realize this determination until we can enlarge our teaching staff by one associate professor and our room space by an additional laboratory.

The high school credits presented by the class average 12.6 units. This average is reduced by a few special students who were admitted for a nine-months' course. The average of the regular students is about 14 units.

It is interesting to note that the pharmacy schools of the United States holding membership in the American Conference of Pharmaceutical

Faculties—and about seventy-five per cent of the entire number hold such membership—have pledged themselves to require high school graduation for entrance by 1924. This will be reached progressively in that two years of high school work will be an entrance requirement in 1922, three years in 1923, and graduation in 1924. For the most part, the pharmacy schools have anticipated this step and already require three to four years of such preparation. Another interesting action of the Conference schools is to require by 1925 three years instead of two for the standard Ph. G. degree.

At the June examination of the North Carolina Board of Pharmacy all of the applicants from the University save one were successful, our percentage being 95.6. Mr. P. J. Melvin, Ph. G. 1920, led all the applicants for license in excellence of examination and was awarded the Beal Prize.

I wish to acknowledge the receipt of a number of valuable and very interesting exhibits supplied the School by manufacturers of products entering into the commerce of pharmacy. The display of these products is very helpful in demonstration work and we are grateful to the contributors. The permanent preservation of these exhibits requires suitable cases in the museum and I wish to mention the need of an appropriation for this purpose.

Our needs for the next biennial period were itemized in the budget report recently submitted to you, but I wish to repeat here that the following requirements are urgent:

1. An additional student assistant at \$150 per year.
2. Twenty pairs of scales at an estimated cost of \$200.
3. Eighteen sets of laboratory equipment for Junior students at a cost of \$270.
4. Ten sets of laboratory equipment for Senior students at a cost of \$250.
5. An increase of \$100 annually for the maintenance of the laboratories.
6. Additional shelving in the stock room.

I wish also to emphasize again the need of a new building for pharmacy. I have in previous years outlined the reasons why a modern building is essential.

Respectfully submitted,
E. V. HOWELL, Dean.

School of Education

REPORT OF THE DEAN

To the President of the University:

I have the honor to submit my annual report of the School of Education for the past year.

I am glad to announce that the number of students who wish to prepare to teach is steadily increasing and that young men of capacity and love for the work of the teacher are being attracted to service in the teaching profession. This is due to the fact that teacher's salaries are higher now than formerly and to the further fact that even present salaries may be increased by any teacher who by special study shall improve his professional training. In thus making a teacher's salary dependent upon his academic and professional improvement, the State Department of Education has done a great deal to attract into the teaching profession young men of capacity and natural taste for teaching. In the future teaching will be a much more popular calling with those who have a natural aptitude for it.

Observation Schools

Our students are fortunate in having access to our town graded school for whites, our town graded school for colored children, and a one-teacher school for white children in the country near Chapel Hill. The chairman of the school committee for the colored graded school of the town is an instructor in the School of Education and another instructor is the directing head of the one-teacher school referred to above. In these schools our students may personally observe and study methods of teaching and school administration. It is evident that our having access to these three types of schools gives us unusual opportunity for the observation and study of many problems awaiting those who are to enter upon teaching after they leave us.

Extension

This work has gone on without any relaxation. The instructors have responded to many calls to address educational meetings, to attend conferences with school authorities on problems in school organization and administration, and to make special surveys in aid of better organization of the local school system. There has been increased demand for standard scales and measurements, for the various bulletins of the department on the teaching of school subjects, and for personal aid and suggestion in solving problems of the schoolroom.

High School Journal

The High School Journal is published eight times a year and is growing more popular from month to month. It is highly praised by its readers who are to be found in every state of the Union. It is the determination of the department to make this publication of greatest service to school authorities and high school teachers.

Summer School

Through the Summer School this department has been able to do some of its best service for the schools of the State. The instructors remain here in the summer rather than accept flattering offers from other summer schools. By remaining here they keep in vital relation with the educational interests of our State. The fact that they prefer to work with their own people even at a lower salary is worthy of commendation and I take pleasure in calling your attention of their action.

Administration

The following members of the Faculty constitute the newly established Administrative Board of the School of Education: M. C. S. Noble, Dean; L. A. Williams, N. W. Walker, E. W. Knight, G. K. G. Henry, W. D. Toy, A. H. Patterson, A. W. Hobbs, H. McC. Dargan, F. P. Graham.

Future Growth

This department cannot grow as it should until the University can house a greater number of students. The schools need teachers but many of those who wish to prepare to teach cannot come to the University for want of lodging places. I believe that the people are willing to do anything to get trained teachers for their children. I therefore ask for a teacher's dormitory which will house at least one hundred students. It would be filled as soon as finished; in fact, we could bring double that number here if we had the room. Surely the State needs teachers and will give us this dormitory if we ask for it.

Respectfully submitted,
M. C. S. NOBLE, Dean.

The School of Public Welfare

REPORT OF THE DIRECTOR

To the President of the University:

I have the honor to submit the following brief report of the work done by the School of Public Welfare for the past-year of its operation, from June 23rd, the opening of the summer session, to the end of the first quarter of its regular University work.

The Plan of Work

In accordance with the purposes of the School as set forth by the President and Trustees of the University at their mid-year meeting, 1920, at which time the new department of Sociology and School of Public Welfare were authorized, plans for effective organization were begun and tasks entered upon during the Summer School of 1920. To meet the specific needs of the State and the University, and to some extent the South, a four-fold service was planned. The *first* emphasizes *instruction* in Sociology and Social Problems, including teaching in the College and University, extension teaching through the Bureau of Extension or outside communities, and through general instruction and promotion of citizenship. The *second* emphasizes *training for social work and community leadership*, with special reference to town, village and rural communities, and with special application to the State of North Carolina and the South. This division hopes to meet the very urgent demands of the State for trained men and women for its county superintendents of public welfare and other official positions and of many communities throughout the South for Red Cross secretaries and other community workers in the mill villages and elsewhere. The *third* aspect of the work emphasizes direct and indirect *community service*, or social engineering through the avenues of community leaders, county superintendents of public welfare, local and district conferences, and community planning for leaders, industrial managers and others. The *fourth* aspect emphasizes social research, scientific inquiry, and publication of results estimated to be of value to the State, the University, and to the general field of public welfare and social progress. A *fifth* general purpose, kept constantly in the foreground, provides that the School maintain close and cordial co-operation with the State departments, with other departments and schools of the University, with local and national voluntary agencies, and for the coordination of all of its purposes and relationships in the promotion of social progress, in the setting of standards, in the study of problems, and in the creation of the correct mode of enthusiasm for constructive work in the State.

Beginnings Made

In each of the aspects of the work mentioned, some beginnings have been made. In the matter of *instruction*, classes have been conducted in the principles of Sociology, Social Problems, Community Organization, Recreation, Community Health, Family Case Work, Child Welfare, Juvenile Delinquency; courses already announced for the following terms include Statistics, Social Pathology, Immigration, Educational Sociology, the Negro Problems, the Problems of the Mill Village, and Labor Problems. Three groups of students have registered; graduate students pursuing courses for advanced degrees, undergraduate collegiate students, pursuing regular courses and electing the subjects, or majoring in Sociology, and students working primarily for professional training in social work.

In the field of *training for social work* perhaps the best beginning has been made, with to date an enrollment of some seventy-five students, including the county superintendents enrolled during the Summer Session. Seven of the states are represented in these groups and thirty-eight North Carolina counties. In the field of *community service* a number of local and district conferences on public welfare have been held, and community organization carried on in some ten communities. In the matter of *publication*, two bulletins have been prepared for the Bureau of Extension, both dealing with community citizenship. The first, "Constructive Ventures in Government" was prepared for the Women's Clubs, while the second, "Community and Government," was an enlarged and special edition of the same bulletin prepared primarily for the schools. Three special articles have been published and others have been prepared, for the *High School Journal* and for the *Bulletin* of the State Department of Charities and Correction. One of the most significant contributions of the day is the book, now in press, by Doctor J. F. Steiner, Professor of Social Technology, entitled "Education for Social Work." Dr. Steiner has also contributed an article for the current number of the *Annals* of the American Academy of Political and Social Science and other articles elsewhere. Minor reviews, promotion stories and items of interest to those engaged in this work have been contributed from time to time. In the matter of *co-operation and co-ordination* special appreciation is expressed for the cordial assistance rendered by the State Commissioner of Public Welfare and his staff, the State Superintendent of Public Instruction, and the Secretary of the State Board of Health, as well as the University Bureau of Extension and other departments of the University, especially the Department of Rural Social Science.

Classification of Courses

Five groups of courses are offered. The first may be described as those courses which serve as majors for regular collegiate students working for the baccalaureate degree. This group assumes four years. The

second is a two year course for graduate students, leading to the Master's degree—conferred by the Graduate School. The third is the one-year professional course, for which a certificate is issued. The fourth provides for special students of maturity and experience who desire and need training but who may not leave official work for more than a full term. The fifth group includes students, largely county superintendents of public welfare, who attend the Summer Institutes for Public Welfare during the regular University Summer School. In each of these groups of courses the length of hours, class-room requirements, and methods of instruction are alike credited in the University. Extra field and laboratory work in communities is required, and a distinctive method of effective instruction is being developed to the extent made practicable by facilities. It will be seen, therefore, that no special degrees need be given at this time by the School of Public Welfare. Since the requirements for admission to the full time courses assume a college degree, all such students should register in the Graduate School and pursue work toward advanced degrees. While a number of regular graduate students are electing Sociology toward the Master's degree which may be obtained in one year, it will be necessary for a graduate student who takes all work in this field to take two years on account of the added field and laboratory work required. The enrollment, therefore, for the School of Public Welfare cannot show on the Registrar's books, since some are in the collegiate department and some in the Graduate School. A special list is being provided for the Registrar at his request.

The Summer Institutes for Public Welfare

The first work undertaken by the new School was the summer institutes for public welfare in co-operation with the American Red Cross, beginning with the opening of the summer session and extending through an entire term to September 13th. The summer work was divided into two sections; the first, primarily for county superintendents of public welfare, extended through the first six weeks and terminated with the Summer School. This group enrolled thirty-two county superintendents of whom twenty-two paid the full fees and took courses regularly. The second group, extending to September 13th included primarily Red Cross secretaries and enrolled some twenty-five, of whom nineteen remained to the end. One of these students was a superintendent of public welfare and one preparing for similar work. Of special assistance was the attendance on these conferences of Commissioner Beasley, Mrs. Clarence Johnson, and Mr. Harry Newman, division directors, who aided by lectures, by conferences and otherwise whenever needed. The American Red Cross was largely responsible for the summer institutes and provided, in addition to Mr. Newman, Professor Burnett, Miss Kathryn Farra, Mrs. Mary Burnett, and representatives from the National Headquarters. Coming at the invitation of the University were Dr. Bernard Glueck, Professor of Mental Hygiene in the

New York School, Professor Samuel McCune Lindsay of Columbia University, and others. The summer institutes resulted in a seemingly unanimous request for even more adequate courses next summer and for a larger attendance.

Special Conferences and Work

The special institute for the workers of the Community Service Bureau, under the direction of Mr. W. C. Crosby of the State Department of Education, was one of the most satisfying conferences in which we have co-operated. In this group some twenty-two workers enrolled for two weeks and pursued systematic work with great diligence and enthusiasm. A similar short conference, under the direction of Miss Elizabeth Kelley, for the workers in adult illiteracy teaching enrolled twenty-five, including a representative from South Carolina and Alabama. This group also accomplished definite results. In these conferences Doctor Branson was largely responsible for whatever of success the University contributed. Both groups have requested a return conference next summer. Special district conferences for public welfare have been held at Salisbury, Fayetteville and New Bern, with some eight to twelve counties represented. A fourth will be held at Durham in January. In these Commissioner Beasley has co-operated and led off with the opening address in each instance. Another piece of special work is that of assisting the county superintendent of public welfare in Orange county, Mr. Wiley B. Sanders, in his ambitious program for public welfare. The county commissioners and county board of education, at the urgent request of the school of public welfare, have made appropriation for this work and the school of public welfare is obligated to render much service wherever possible.

Present University Facilities and Work

At the present time the members of the staff of the School are housed to good advantage in the Peabody School building where instructor and student may work out problems together. Adjoining is Professor Branson's seminar and reading room, which is invaluable in the prosecution of special studies and research. Special thanks should be extended to Professor Branson for his courses in Rural Sociology, to Dean Carroll for his course in Social Reforms, and to Professor Saville for his course in Municipal Utilities and Sanitation. Following the death of Professor Burnett and the resignation thereby of Mrs. Burnett the Red Cross sent us Miss Kathryn Farra as field supervisor to continue her work of the summer, and Mr. Harry Newman who had assisted in the Summer Session and also came from Mr. Beasley's department of public welfare as director of the division of community organization. For the next term we are especially fortunate in the added staff which includes Dr. J. F. Steiner, director of Educational Service for the National Red Cross, Dr.

Frances Sage Bradley of the Children's Bureau at Washington, and Miss Evelyn Buchan, who comes directly to us from the University of Chicago School, at the invitation of the Red Cross. The salaries of these workers are met by the American Red Cross. Miss Buchan will be supervisor of field work, while Doctor Bradley will give instruction, plan field work and co-operate in child welfare work in the communities. Doctor Bradley, whose distinctive work here and abroad merit special mention, has been loaned by the Children's Bureau, for which service appreciation is expressed.

Dr. J. F. Steiner

Of special interest, not only to the University, but to the State at large, is the acquisition of Doctor J. F. Steiner, who comes as Professor of Social Technology. Dr. Steiner has been director of the Education Service of the National Red Cross for the last few years in the midst of its pioneering efforts and extensive service. His experience abroad, his training at Harvard and doctorate at Chicago, his practical civic efforts, his teaching experience, his directorship of education service on so broad a scale, his able contributions through books and periodicals, his general qualities of leadership, all make him an invaluable asset to the University and the State whose problems and aspirations he has adopted with enthusiasm and sympathetic appreciation. His confidence in the State's programs and the University's substantial reputation were the factors which influenced him to come here rather than to other institutions to which he had been called.

The Outlook

In the efforts of the School to project the ideals of a University professional school into the programs of public welfare, toward the working out of a curriculum with administrative unity, toward the development of trained leadership, and toward careful, if slow, plans for permanent contributions, we are appreciative of the sympathy and support of the Board, the President, and the Faculty of the University. There is ground to believe that a substantial beginning has been made and that the opportunities ahead are such as to challenge us to successful efforts. We need adequate scholarships; university scholarships in addition to the dozen Red Cross scholarships now given; I hope that at least two graduate fellowships can be awarded this School for next year. With these and the present force and facilities there is no reason why the University of North Carolina should not do distinctive work in this new field now being recognized in a professional way by the larger and smaller universities alike. Eighteen new students are enrolled for registration in the next term and these students represent communities from five or six states other than Carolina, and include a number of mature men whose experience will contribute to the methods of work being developed. It is this

class of students whom we wish to encourage alongside an increasing number of University boys who are keenly interested in the North Carolina problems of democracy. That the Red Cross extends its scholarships to students capable of leadership, that Dr. Steiner will be in charge of this aspect of the work, previously carried on with enthusiasm by Dr. Klein, is substantial guarantee of good training for social work and community leadership. I shall look forward with pleasure to the prospect ahead and with keen anticipation to detailed recommendation which we may be permitted to make from time to time.

Respectfully submitted,
HOWARD W. ODUM, Director.

Report of the Professor of Secondary Education

To the President of the University:

Herewith I beg to submit my report as professor of Secondary Education for the year ending November 30, 1920.

Change of Relationship and Activities

On January 1st, 1920, I retired as Inspector of High Schools for the State Department of Education in order to devote my whole time to University duties. This change was made possible by the generous action of the General Education Board of New York when it offered, in December, 1919, to provide the salaries of two men who should devote their time and attention to the secondary school field, instead of one as heretofore—one to be located at the University as Professor of Secondary Education, whose primary duty should be the training of high school teachers, the other to be attached to the State Department of Education as Supervisor of High Schools.

In this connection it may not be out of place to recall that in 1905 the Trustees accepted an offer of the General Education Board to provide the salary and traveling expenses of a Professor of Secondary Education at the University whose duty it should be to undertake to stimulate the development of a system of public high schools in North Carolina. (A similar offer was made, then or later, to a number of the State Universities of the South—it was made to most of them, in fact—and was accepted by their respective boards of trustees). The professor of Secondary Education was expected to devote his time and efforts primarily to field problems and was to give only such of his time to actual teaching and lecturing in the University as might not be required for field work. The position, therefore, was dual in its nature—or rather, by the terms of the offer that was made and accepted—and the professor of Secondary Education was in fact responsible to both the President of the University and the State Superintendent of Public Instruction. Under this arrangement an unusual opportunity was afforded for correlating such activities of the University and of the State Department of Education as were directed towards improving high school facilities, for focusing their interest and attention on a common problem of fundamental importance to the civic welfare of the State, and for enlisting both of these agencies in a joint effort to build up a State system of public high schools. I need not dwell further on this point now, since it is my purpose to publish at a later date a somewhat

detailed study of the development of public high schools in the South from 1900 to 1920, wherein I shall try to set forth the significant facts concerning the whole high school movement.

Suffice it to say, then, that in 1905 it was my good fortune to be chosen by the Trustees, on the recommendation of President F. P. Venable and State Superintendent J. Y. Joyner, to fill this position. In 1907 the public high school law was passed, and I was officially appointed by State Superintendent Joyner as State Inspector of High Schools. From 1907 to 1920 the development of public high schools went forward somewhat rapidly as will be shown, in a brief way, by reference to Supplement A of this report. The field work soon required so much of my time I could find no time for teaching, and so in 1910 had to give up my class work in the University. From 1910 to 1920 practically all my work for the University, aside from inspecting accredited schools and editing certain publications, was of an administrative sort. During these ten years the amount of work in the high school field was constantly increasing as will be seen from my annual reports to the President of the University and to the State Superintendent of Public Instruction. In 1920, particularly after the new legislation of 1919, it had reached the point where it was entirely impossible for one man to do justice to the two phases of it. At this point the General Education Board offered, as stated above, to finance two positions for a period of five years. The offer was accepted by the University and by the State Department of Education.

Leave of Absence Granted

At the time the foregoing change of relationship, which involved an important change of work, was under consideration, you were good enough, Mr. President, to express the desire, as did my colleagues in the School of Education, that I should remain with the University. I gladly consented to do so, and requested that a year's leave of absence be granted me and that my teaching duties should not begin until September, 1921. This you readily consented to, as did both the General Education Board and the Board of Trustees of the University. Since September, therefore, I have been at Cambridge, Mass., where I am spending a year in the Graduate School of Education of Harvard University. For this opportunity I wish to express to you and to the two boards above mentioned my sincere gratitude. The experience is certainly proving valuable to me, and my hope is that I may be able to make it count for something worth while for the University.

Miscellaneous Activities

At the time the foregoing arrangement was consummated, there were many unfinished odds and ends of work connected with the office that occupied much of my time during the remainder of the academic year. In addition to giving the necessary attention to these numerous matters, I con-

tinued to serve as Chairman of the State Committee on High School Text-Books until the work of that committee was finished and its report rendered; from time to time I gave such assistance as I could to my friend and successor as High School Inspector, Professor J. Henry Highsmith; since last June, when I was appointed by Governor Bickett, I have served as a member of the State Educational Commission. For the University I continued to edit the High School Journal until October when Dr. Edgar W. Knight assumed this responsibility during my absence, and to serve as Director of the University Summer School, a separate report of which I have rendered.

Accredited Schools

It was deemed best not to issue a new list of accredited schools for the year 1920-'21 for two reasons: (1) There was no member of the School of Education who in my absence could give the necessary time to the matter of inspecting additional schools that might desire to be accredited; (2) The State Department of Education and the University may be able, and I think they will be, to co-operate in this matter to the advantage of both as well as to advantage of the high schools themselves and the other colleges of the State. There are possibilities here that are worthy of consideration, at any rate. For the foregoing reasons, I am bringing forward in this report (See Supplement B) the list of schools accredited by the University for the year 1919-'20.

Respectfully submitted,

N. W. WALKER,

Professor of Secondary Education.

EXCERPT FROM THE HIGH SCHOOL JOURNAL, APRIL, 1920.

To the Superintendents and High School Principals of North Carolina:

As was recently announced in the daily press of the State, Professor J. Henry Highsmith, a member of the State Board of Examiners and Institute Conductors, has recently become Inspector of High Schools for the State Department of Education, succeeding in this position the undersigned, who, with headquarters at Chapel Hill, has served the State Department in this capacity since 1907, when the public high schools were established. As the school officials of the State know, the work of looking after the administrative details of the high schools has so increased in volume that it has become impossible for one person to handle it with any degree of satisfaction, especially if other duties have any claim on his time and energies. Furthermore, the administration of that part of the State fund apportioned to high schools under the new school laws enacted by the Legislature of 1919 is so closely tied up with the administration of the State funds for elementary schools that it becomes necessary for the office

of High School Inspector to be at the State Department of Education. A division of the duties, therefore, which hitherto have been centered in the office of Professor of Secondary Education in the University became not only advisable but absolutely necessary. And so instead of continuing to serve both as Professor of Secondary Education in the University and as Inspector of High Schools for the State Department, hereafter I am to devote my time wholly to the University, continuing to serve as Professor of Secondary Education.

In this position I shall work specifically on the problems of a qualitative sort that relate to high school instruction. In addition to conducting courses for high school teachers in the School of Education, I shall be in the field a part of the time at work with teachers in service, and, as heretofore, shall be available for lectures, addresses, and for any other educational service I can render the school workers of the State. In all these efforts I shall work in full co-operation with the State Department of Education without perhaps having official connection with it. A more detailed announcement of the Department of Secondary Education will be made later. In this connection, a few facts showing to what extent the high school work has developed since I became High School Inspector may not be out of order.

Prior to the year 1907-'08, the first year the public high schools were in operation, the high school facilities of the country districts were so meagre that the State Superintendent in his biennial report was constrained to characterize them as "pathetic, almost tragic." Separate statistics for the high school grades were not published until 1907-'08. There were for the year 1906-'07 perhaps from 50 to 75 public schools in the State that could have been classed as high schools, the majority of them offering only one or two years of instruction, which was in most cases but an extension of the grammar grade work with here and there a few high school subjects. There were perhaps 3,000 boys and girls in the public schools who should have been classed as high school pupils. The growth of the high schools from then until now is briefly shown by the following facts, the figures being for the years ending June 30, 1908, and 1919, respectfully:

	1908	1919
High Schools in operation	177	391
School offering 4-year courses	17	250
Teachers	323	1,172
Spent for maintenance (County High Schools alone)	\$0,415.99	\$368,406.35

But enough of this. A detailed report of some length (now in course of preparation) will be published in a few months, showing the development of public high schools from 1907 to 1919.

I think I know whereof I speak when I say that in accomplishing successfully the large but pleasant task that he has assumed, Mr. Highsmith will not only need but will appreciate the same sympathetic cooperation on

the part of superintendents and high school principals which these officials have so generously accorded his predecessor. I know he deserves it and I am sure he will have it.

LIST OF SCHOOLS ACCREDITED BY THE UNIVERSITY OF NORTH CAROLINA, 1919-1920

These schools are classed as accredited upon the following basis or their equivalent: (1) a four-year curriculum based upon an elementary course of at least seven years; (2) three full-time teachers; (3) minimum recitation period of 40 minutes; (4) 15 units required for graduation; (5) the minimum time allotment per unit, 120 60-minute hours.

Schools printed in **bold** are private schools. Those starred (*) are accredited by the Association of Colleges and Secondary Schools of the Southern States.

Andrews:	Canton:
High School	High School
Ashboro:	Carthage:
High School	High School
Asheville:	Cary:
*Asheville School	High School
*Bingham School	Chadbourn:
*City High School	High School
*Grove Park School	Chapel Hill:
*Normal and Collegiate	*High School
Institute	Charlotte:
*St. Genevieve's Academy	City High School
Aulander:	*Horner Military School
High School	Cherryville:
Ayden:	High School
Freewill Baptist	China Grove:
Seminary	High School
Belhaven:	Clayton:
High School	High School
Boiling Spring:	Clinton:
High School	High School
Bryson City:	Columbus:
High School	Stearns High School
Buie's Creek:	Concord:
Buie's Creek Academy	High School
Burgaw:	Conover:
High School	Concordia College
Burlington:	Durham:
*High School	*City High School
	*Trinity Park School

East Durham	High Point:
High School	High School
Edenton:	Huntersville:
*High School	High School
Elizabeth City:	Jamestown:
*High School	High School
Elm City:	Jonesboro:
High School	High School
Enfield:	Kings Mountain:
High School	High School
Farmville:	Kinston:
High School	*High School
Fayetteville:	Lake Junaluska:
High School	Snyder School for Boys
Forest City:	Laurinburg:
High School	*High School
Franklin:	Lawndale:
High School	Piedmont High School
Franklinton:	Leaksville:
High School	High School
Fremont:	Lenoir:
High School	Davenport College
Glade Valley:	High School
High School	Lexington:
Goldsboro:	High School
*High School	Lincolnton:
Greensboro:	High School
Apostolic Holiness University	Linwood:
*High School	Churchland High School
Greenville:	Mars Hill:
High School	* Mars Hill College
Hamlet:	Matthews:
High School	High School
Harmony:	Monroe:
High School	*High School
Hays:	Montreat:
Mountain View Institute	Montreat Normal School
Henderson:	Morganton:
High School	High School
Hendersonville:	Mount Airy:
*High School	High School
Fassifern School	Mount Olive:
* Blue Ridge School for Boys	High School
Hickory:	
High School	

Mount Pleasant:	Spencer:
Collegiate Institute	High school
Mont Amoena Seminary	Statesville:
New Bern:	High school
High School	Tarboro:
Newton:	*High School
Catawba Academy	Teachey's:
Startown High School	High School
Oak Ridge:	Thomasville:
* Oak Ridge Institute	High School
Pleasant Garden:	Union Mills:
High School	Round Hill School
Raeford:	Vanceboro:
High School	Craven County Farm-Life
Raleigh:	Vass:
*High School	Sand Hill High School
Reidsville	Wadesboro:
High School	High School
Rich Square:	Washington:
High School	High School
Roanoke Rapids:	Washington Collegiate Institute
High School	Weldon:
Rocky Mount:	High School
*High School	Wendell:
Red Oak High School	High School
Rowland:	Whiteville:
High School	High School
Rutherfordton:	West Durham:
High School	High School
Westminster School	Williamston:
Salisbury:	High School
High School	Wilmington:
Saint Pauls:	*High School
High School	Wilson:
Sanford:	Atlantic Christian College
High School	*High School
Scotland Neck:	Wingate School
*High School	Winston-Salem:
Selma:	*High School
High School	* Salem Academy
Shelby:	Zebulon:
High School	Wakelon High School
Smithfield	
*High School	

Report of the Director of the Summer School

To the President of the University:

I have the honor to submit herewith my report as Director of the University Summer School for the year 1920. The school ran, as usual, for a term of six weeks* exclusive of the days set apart for registration and for the examinations. It began June 22nd and ended August 5th.

The facts and figures set forth below are intended primarily to direct attention to three things: (1) the general scope and character of the work undertaken; (2) the extent to which the various lines of work appealed to the several groups of students for whom they were specifically designed; and (3) some of the problems the Summer School now faces. It will be found, I think, on comparing the figures with those of former years, that the work of the thirty-third session (the thirteenth session since I assumed directorship of it) measured up favorably. Not only was the Summer School of 1920 larger than any of its predecessors in point of number; it also offered a wider range of courses, and it was consequently more complex in its organization and administration. Attention is called to a few of its outstanding features.

There were enrolled 1147 students as against 922 for the preceding year. There were 319 men and 828 women; 756 were teachers; 151 were preparing to teach; 66 were high school students; 48 were registered for Public Welfare Institutes; 436 were studying for college or university credit; 21 were preparing to enter college; 600 pursued normal and preparatory courses.

There were 1101 students from North Carolina, representing 95 counties. The counties not represented were Ashe, Graham, Mitchell, Swain and Watauga. South Carolina sent 10 students; Virginia, 9; Florida, 8; Georgia, 6; Tennessee, 4; Alabama, 2; District of Columbia, 2; Louisiana, 1; Massachusetts, 1; Michigan, 1; Pennsylvania, 1; Porto Rico, 1. Orange County was represented by 110; Guilford, by 32; Mecklenburg, and Sampson, by 30 each; Rowan, 29; and Alamance, by 28.

North Carolina Counties Represented. The counties represented and the students enrolled from each are as follows: Alamance, 28; Alexander, 4; Alleghany, 7; Anson, 7; Avery, 2; Beaufort, 20; Bertie, 12; Bladen, 7; Brunswick, 1; Buncombe, 10; Burke, 6; Cabarrus, 12; Caldwell, 6; Camden, 1; Carteret, 23; Caswell, 7; Catawba, 20; Chatham, 11; Cherokee, 2;

*One of the two Institutes for Public Welfare (see below) ran for a term of twelve weeks.

Chowan, 1; Clay, 1; Cleveland, 16; Columbus, 14; Craven, 8; Cumberland, 16; Currituck, 7; Dare, 2; Davidson, 8; Duplin, 13; Durham, 22; Edgecombe, 13; Forsyth, 23; Franklin, 7; Gaston, 20; Gates, 4; Granville, 17; Green, 1; Guilford, 32; Halifax, 15; Harnett, 12; Haywood, 2; Henderson, 4; Hertford, 6; Hoke, 5; Hyde, 5; Iredell, 18; Jackson, 2; Johnston, 18; Jones, 2; Lee, 6; Lenoir, 5; Lincoln, 17; Macon, 3; Madison, 7; Martin, 4; McDowell, 3; Mecklenburg, 30; Montgomery, 15; Moore, 13; Nash, 12; New Hanover, 17; Northampton, 10; Onslow, 9; Orange, 110; Pamlico, 3; Pasquotank, 7; Pender, 3; Perquimans, 6; Person, 10; Pitt, 20; Polk, 1; Randolph, 16; Richmond, 10; Robeson, 14; Rockingham, 11; Rowan, 29; Rutherford, 8; Sampson, 30; Scotland, 11; Stanley, 18; Stokes, 2; Surry, 8; Transylvania, 7; Tyrrell, 2; Union, 17; Vance, 8; Warren, 10; Wake, 24; Washington, 15; Wayne, 21; Wilkes, 10; Wilson, 12; Yadkin, 4; Yancey, 4;.

Institutions Represented. The following institutions doing work above high school grade were represented in the Summer School by students in the number shown: The University of North Carolina, 218; North Carolina College for Women (State Normal), 125; Meredith, 42; East Carolina Teachers' Training School, 40; Greensboro College for Women, 28; Guilford, 28; Flora Macdonald, 27; Trinity, 26; Elon, 22; Wake Forest, 15; Oxford, 13; Chowan, 12; Queens, 12; Davenport, 10; Lenoir, 10; Littleton, 10; Louisburg, 8; Peace Institute, 8; Catawba, 7; Mitchell, 7; Salem, 7; Asheville Normal and Collegiate Institute, 6; Atlantic Christian, 6; Blackstone (Va.), 6; Carolina, 6; Davidson, 6; St. Mary's School, 6; Mont Amoena, 5; Rutherford, 5; Cullowhee Normal, 4; Limestone (S. C.), 4; Maryville (Tenn.), 4; George Peabody College for Teachers (Tenn.), 3; Sweet Briar, (Va.), 3; Weaver, 3. The following 2 each—Farmville Normal (Va.), Brenau, (Ga.), Emory University (Ga.), Erskine (S. C.), Westhampton (Va.), Young Harris (Ga.), Bessie Tift (Ga.), Radcliff, Women's College (Due West, S. C.), Columbia University (N. Y.); the following 1 each—Converse (S. C.), Randolph-Macon Woman's College (Va.), Lynchburg (Va.), Tusculum (Tenn.), Marshall (W. Va.), University of Chattanooga (Tenn.), Indiana Normal (Ind.), Southern (Fla.), Emory (Va.), Marion (Va.), Roanoke (Va.), Mars Hill, Harrisonburg Normal (Va.), Smith (Mass.), Elizabeth, Medical College of Va. (Va.), Union Theological Seminary (Va.), N. C. State Agriculture and Engineering, Fredericksburg Normal (Va.), Lander (S. C.), John B. Stetson University (Fla.), Park (Mo.), Georgia Robertson Normal, University of Maryland (Md.), Vassar, University of Tennessee (Tenn.), Lewisburg (W. Va.), Indiana University (Ind.), University of Va. (Va.), William and Mary (Va.), Martha Washington (Va.), University of Chicago (Ill.), McLean, Linwood, Mercer University (Ga.), Harvard University (Mass.), Baltimore College of Dental Surgery (Md.), Virginia (Va.), Clemson (S. C.), Mount Pleasant Collegiate Institute, Louisiana State Normal (La.), Emory and Henry (Va.), Columbia (S. C.). 806 out of

1145, or 70.6 per cent., had received training above high school against 73.6 per cent. last year; 436 out of 1145, or 38.1 per cent., were studying for college or university credit against 38.2 per cent. last year, 34.5 per cent. in 1918 and 31 per cent. in 1917.

Denominations Represented. There were 1104 students who indicated their church affiliation as follows: Methodist, 415; Baptist, 328; Presbyterian, 176; Episcopalian, 67; Christian, 35; Lutheran, 33; Friends, 18; Moravian, 1; Disciple, 9; Reformed, 5; Adventist, 1; Roman Catholic, 4; Jewish, 5; Congregationalist, 2; Universalist, 2; Unitarian, 2; Christian Scientist, 1.

First among the important new lines of work undertaken must be mentioned the two Institutes for Public Welfare conducted in co-operation with the Southern Division of the American Red Cross and the North Carolina State Department of Public Welfare. Both institutes began at the opening of the Summer School, June 22nd, the first running for six weeks and the second for twelve. These institutes were under the direction of Dr. Howard W. Odum, Kenan Professor of Sociology and Director of the New School of Public Welfare.

The first institute was planned primarily for County Superintendents of Public Welfare. While this institute was in session Mr. Roland F. Beasley, State Commissioner of Public Welfare, came to Chapel Hill with a good part of his office force and spent the time here with his field workers—the county superintendents of public welfare—who were here for the new courses relating to their work. Mr. Beasley's presence, his interest, and his co-operation contributed more to the success of this institute than any other single factor. Without his help this institute could not have been held.

The second institute was planned for a different group of workers—Red Cross secretaries and prospective secretaries particularly, and for various other social and welfare workers needing special training such as research agents, civic secretaries, settlement workers, probation and juvenile court officers and workers, directors of playgrounds, etc.

The courses offered in the institutes included: Family Case Work, Social Problems, Laboratory in Social Research, Rural Social Problems, Juvenile Delinquency and Probation, The Small Town, Child Welfare, Social Psychiatry, Rural Economics, Laboratory in Rural Problems, Play and Recreation, Survey Methods, Public Health, Home Dietetics, Home Hygiene, Administration, of Social Work, Record Keeping, General Economics, Theories of Economic Reform, Public Finance, Cooking, Problems of the Country School, Child Psychology, Introduction to Psychology, Social Psychology, etc. Several of these courses were regular courses in the Summer School that were open to students of institutes. Five courses were required of all students in the first institute, as follows:

(1) Family Case Work—24 hours; (2) Public Health—12 hours; (3) Social Problems—18 hours; and Rural Problems 18 hours; (4) Juvenile

Delinquency and Child Welfare—12 hours. Electives—18 to 42 hours. In the second institute all students were required to take four courses, as follows: (1) Family Case Work—36 hours; (2) Public Health—12 hours; (3) Social Problems—32 hours; (4) Rural Problems—36 hours. Electives—44 to 92 hours. In addition to the class work required, all students were required to do a considerable amount of field work under the direction and guidance of special instructors.

Among the instructors and lecturers were some of the most noted specialists, in their respective fields, of the United States. Instead of giving a list of them here, I beg to refer the reader to Summer School Bulletin (1920) No. 4—"Institutes for Public Welfare"—by reference to which a more definite knowledge of the institutes can be had.

I must express my personal sense of appreciation, as well as that of the University, to Dr. Phillip Klein, Director of Education and Research, Southern Division of the American Red Cross, for his interest and co-operation in this undertaking, and also for the financial assistance rendered through him by the Red Cross, and to Miss Kathryn Farra, Supervisor of Field Work for the American Red Cross, for the efficient service she rendered the institutes and the Summer School.

These institutes, which mark the initial stage in the development of the University's School of Public Welfare, constitute one of the most important and forward-looking steps in public welfare work ever undertaken by a southern university. Dr. Odum, Director of the institutes, and Dr. E. C. Branson, whose wisdom and foresight and enthusiasm are really responsible for the whole project, are to be congratulated on the abundant success of this first effort in a new and (in the South) untried field that is so rich in opportunity and promise.

Reorganization of Normal Courses

In the spring of 1920, the State Board of Examiners and Institute Conductors adopted rules and regulations governing the credits that teachers of the State would be given towards the issuance renewal, and extension of certificates. Those having the required academic training for State certificates, and holders of such certificates who wished to receive additional credits, were expected to attend "State Summer Schools;" those who did not have the required academic training, and holders of the lower classes of certificates, were expected to attend County Summer Schools. Under this plan the University Summer School undertook to provide training for only a limited number of teachers of the more limited qualifications. (See under "Orange County Summer School" below.) This arrangement made it unnecessary for the Summer School to provide the usual large number of elementary courses for the less well prepared teachers whom we had hitherto undertaken to provide for. Consequently our program of studies was considerably modified as will be seen by reference to the Announcement for 1920. (See Summer School Bulletin Number 3.) Much of

the work therefore was on a higher plane than in the past. In adopting this program, we have worked in complete harmony with the State Department of Education, and the arrangement has worked to our mutual advantage.

Orange County Summer School

At the request of the Orange County Board of Education the Orange County Summer School was operated for those teachers of this county who were not eligible to attend a "State Summer School," as defined by the State Board of Examiners, and receive credit for their summer school work. The courses were planned and conducted in accordance with the requirements which the State Board of Examiners and Institute Conductors set up governing "County Summer Schools." Only a limited number of teachers were admitted from other counties. This division of the Summer School was under the direction of Dr. Edgar W. Knight. Those in attendance upon it, some 76 in all, were given all the privileges accorded students in the other divisions of the Summer School. In view of the fact that hundreds of teachers capable of doing a higher grade of work had to be turned away because of a lack of accommodations, I believe it will be inadvisable to undertake again to operate a "County Summer School" while the University Summer School is in session. We must, however, do all we can to assist the county school authorities in their efforts to improve the schools of the county, and we stand ready, of course, to co-operate with them in every way possible. The solution to this problem is to conduct the Orange County Summer School, if it is to be continued, immediately after the close of the University Summer School proper.

Other Significant Features

Among other significant features of the Summer School that contributed in no small measure to the sum total of its efficiency and success (several of which were retained from former sessions and improved upon) brief mention may be made of the following:

1. *Physical Welfare of the Students.* As have been our custom for several years, we exercised especial care to safeguard the health and the general physical welfare of the students. The physician in charge of this department was Dr. Eric A. Abernethy who has served in this capacity for the past several years, excepting the two previous years when he was overseas with the A. E. F. Mrs. Flora Rice, R. N., with an assistant nurse, and such additional help as was needed, was in charge of the Infirmary. The report of the physician shows: "A total of 395 reported sick and were seen in consultation over one thousand times. Of this number 125 were admitted to the Infirmary for a total of 350 days. There were 13 serious cases, 6 of which were chronic heart disease. Two students were sent home as physically unfit to continue their work. There were no deaths." The report of the physician adds: "The general health of the

student body was good. Although a large number reported sick, most of them were suffering from minor complaints. A large number developed malaria, contracted elsewhere, but I am happy to report that we had no typhoid fever."

2. *Social Activities.* All social activities at the Gymnasium, including the dances given on "Social Evening" once a week, were placed under the direction of a special committee. This committee formulated its own rules and regulations for the proper conduct of such activities, which were published to the entire Summer School, chose the chaperones for such occasions, and exercised general supervision to the extent of seeing that the rules and regulations were complied with. This committee, under the chairmanship of Dr. R. B. Lawson, Director of the Gymnasium, served an important purpose and rendered great assistance in administering this phase of the Summer School's activities. The little friction that arose on two occasions was caused not by students of the Summer School but by others who desired to attend the dances. In one instance, maybe the committee was a little rigid in administering its rule; the other case seemed to be due to the deliberate violation of the rule by an outsider. However, I am sure, this matter can be handled satisfactorily in the future. The whole question involved is whether or not the institution shall exercise any control whatsoever over social functions attended by the students. If it is to exercise control, to what extent shall it go, and how shall the matter be administered? To let down the bars absolutely would result in filling up the institution with people more interested in social functions than in serious study. More than one summer school has gone to wreck on this rock. To abolish social activities—that is to say dancing for this is the crux of the matter—would be unjustifiable for reasons that are perfectly obvious. The Summer School has pursued a middle course. That is to say, it has provided for one dance each week while the school is in session that shall be free to all students who wish to attend. This is under the chaperonage of ladies chosen by the committee. The committee's rules do not permit attendance upon more than one dance a week by students of the school. Every effort has been made to make the dances as democratic as possible and to keep them within respectable limits as to time, character, etc. In this the committee has succeeded though it has at times a thankless task. It has succeeded I think in making clear the necessity for the control of such activities by the institution rather than by persons who may not always have its best interests at heart or who may not appreciate the difficulties involved in absolutely lifting the bar. In this the committee has done a good piece of work, notwithstanding certain human mistakes, and it deserves the thanks of the Summer School which are hereby rendered.

3. *Y. W. C. A.* The Y. W. C. A. under the secretaryship of Miss Elsie B. Heller, assisted by Miss Mary Weaver, did most valuable and effective work in the Summer School of 1920. This organization provided on "Social Evening" programs that were both entertaining and instructive

for those students who did not care to attend the dances; it conducted regular weekly study groups; took charge of the vesper services each Sunday evening, in addition to rendering assistance in numerous other ways.

4. *Lectures and Entertainments.* A rich and varied program of public entertainments was provided in the way of public lectures, musical programs, motion pictures, and dramatic performances. I need not give a complete list of these but mention may be made of the following by way of indicating their general character:

Violin Recital by Irma Seydel.

Two performances by the Carolina Playmakers.

Three lectures on "The Golden Age of Spanish Jewish Literature" by Rabbi Sidney Tedesche who came under the auspices of the Jewish Chautauqua Society of America.

A series of afternoon "Readings" once a week under the direction of Dr. James F. Royster.

The Choral Concert under the direction of Professor Paul John Weaver, assisted by outside artists.

Community Singing on the campus (weekly) directed by Professor Weaver and Mr. Breach.

Two performances by the McEntee players of New York.

Lectures by Professor H. H. Williams, Dr. E. C. Brooks, Dr. Collier Cobb, Dr. George W. Hunter, Superintendent John J. Blair, Dr. Samuel McCune Lindsey, Dr. Philip Klein, Commissioner Roland F. Beasley, Dr. E. C. Branson, Dr. E. W. Knight, Dr. Harry Clark, Dr. E. L. Morgan, Dr. J. F. Steiner, Dr. Howard W. Odum, Dr. Mary R. Noble, Mrs. Ira D. Hasbrouck, Dr. Bernard Glueck, and others.

Some of these were delivered at chapel, and others at the usual evening hour. They were scheduled, insofar as possible, so as to interfere as little as possible with the more serious work of the student. Some of them, of course, were scheduled for special groups only.

5. *A Citizenship Course for Women.* One unique feature of educational value was a citizenship course for women. This consisted of a course of lectures on special topics by prominent thinkers; discussion of present-day civic problems; and an election which was conducted just as a regular State election. Three issues were voted on which had been thoroughly discussed *pro et con* in the campaign: (1) The League of Nations, (2) The Susan B. Anthony Amendment, (3) The State Revaluation Act. The entire program was staged and carried out just as it would be done under the general election law of the State, with, of course, such modifications as were necessary for our purpose. The project proved to be not only interesting but highly profitable as well.

6. *Other Features.* The Teachers Bureau and the Demonstration School were conducted as usual, and both proved to be helpful and worth while. The former was under the direction of Superintendent H. B. Marrow, of

Smithfield; the latter was under the direction of Superintendent F. W. Morrison, of Chapel Hill. Both of these gentlemen rendered valuable assistance both to the Summer School administration and to the teachers in attendance.

Lack of Adequate Accommodations

While the Summer School was in session the accommodations of the campus and the town were taxed to their limit of comfort—if not beyond that point. Before the school opened over 400 applications for admission had to be declined because we were unable to find rooms enough to take care of them. Had our accommodations been adequate, the attendance upon the 1920 session would have reached 1800 or 2000. But here I am pointing out a problem that is just as acute in the regular session, and I need not dwell further upon it.

In Conclusion

Again it gives me pleasure to be able to record the fact that the same spirit of co-operation characterized my associates in the Summer School of 1920 that I have been privileged to acknowledge in my former reports. But this is the spirit that characterizes the University so generally that it does not need additional emphasis from me at this point. In closing this report, I cannot refrain from expressing to you, Mr. President, my deep and sincere appreciation of your sympathetic understanding of the problems that the Summer School has to face each new year and of the whole-hearted support you have at all times given its Director.

Respectfully submitted,
N. W. WALKER, Director.

Supplement A—Courses Given, Instructors, and Number of Students

Department and Catalogue Num- ber of Course	Description of Course	Instructor	No. Registered for Courses	No. to complete course and take examinations
BIOLOGY:				
s1.....	Social Hygiene	Dr. George W. Hunter.....	4	3
CHEMISTRY:				
sA.....	Household Chemistry	Dr. J. M. Bell	6	2
s1.....	General Descriptive Chem.....	Dr. J. M. Bell.....	22	15
s31.....	Qualitative Analysis	Dr. A. S. Wheeler.....	13	11
s44.....	Quantitative Analysis	Dr. J. M. Bell.....	22	15
s50.....	Research in Chemistry	Dr. A. S. Wheeler.....	2	2
s70.....	Organic Chemistry	Dr. A. S. Wheeler.....	20	14
DRAWING:				
s1, I.....	Primary Division	Mrs. Mamie S. Sease.....	48	46
s1, II.....	Primary Division	Supt. J. J. Blair.....	65	56
s2, I.....	Grammar Division	Supt. J. J. Blair.....	56	49
s2, II.....	Grammar Division	Mrs. Mamie S. Sease.....	16	14
s3.....	Advanced Division	Supt. J. J. Blair.....	8	6
ECONOMICS:				
s11.....	General Economics	Prof. D. D. Carroll.....	10	9
s12.....	Economic Problems	Prof. D. D. Carroll.....	5	5
s16.....	Theories of Economic Reform	Prof. D. D. Carroll.....	9	9
EDUCATION				
s1, I.....	Primary Methods	Miss Helen A. Field.....	67	65
s1, II.....	Primary Methods	Miss Helen A. Field.....	63	60
s1, III.....	Primary Methods	Miss Helen A. Field.....	15	14
s1, IV.....	Primary Methods	Mrs. Mariana C. Gareissen	44	43
s3.....	General Methods in Gram- mar School Subjects	Supt. E. D. Pusey.....	50	48
s6, I.....	Story Telling—Prim. Div.....	Miss Henriette Masseling...	155	145
s6, II.....	Story Telling—Gram. Div.....	Miss Henriette Masseling...	56	53
s6, III.....	Story Telling—For Super- visors	Miss Henriette Masseling...	22	22
s7, I and II.....	Physical Education—Pri- mary and Gram. Div.....	Miss Masseling and Dr. R. B. Lawson.....	80	78
s7, III.....	Physical Education— For Supervisors	Dr. R. B. Lawson.....	22	22
s8, I.....	North Carolina Sch. Law	Supt. H. B. Marrow.....	131	131
s8, II.....	North Carolina Sch. Law	Supt. George Howard, Jr....	38	37
s11.....	Principles of Secondary Education	Dr. Harry Clark.....	26	26
s12.....	High School Methods	Dr. Harry Clark.....	56	54
s13.....	Constructive Supervision	Prof. L. C. Brogden.....	49	47
s15.....	Class Management	Dr. L. A. Williams.....	96	87
s16.....	Tests and Measurements	Dr. L. A. Williams.....	42	39

SUPPLEMENT A—Continued

Department and Catalogue Number of Course	Description of Course	Instructor	No. Registered for Courses	No. to complete course and take examinations
s17.....	History of Education in North Carolina	Prof. M. C. S. Noble.....	18	18
s18.....	The History of Elementary Education	Dr. S. G. Noble.....	3	3
s24 (Or s5).....	Child Psychology	Dr. S. G. Noble.....	98	93
s25.....	The Junior High School	Dr. Harry Clark.....	21	20
s29.....	Public Sch. Education in the South	Dr. E. W. Knight.....	14	13
30.....	Rural School Organization and Administration	Dr. E. W. Knight.....	32	31
s31.....	The Teaching of General Science and Biology in the High School	Dr. G. W. Hunter.....	8	7
s32.....	School Management	Supt. E. D. Pusey.....	13	12
s33.....	Supervised Study	Supt. E. D. Pusey.....	10	9
s34.....	Principles of Public School Administration	Dr. L. A. Williams.....	11	9
s35.....	Problems in Administration Grades	Dr. L. A. Williams.....	17	16
ENGLISH:				
s1.....	Grammar and Composition	Dr. J. S. Moffatt, Jr.....	35	31
s2, I.....	Language Work in the Grades	Miss Mary A. Sheehan.....	47	44
s2, II.....	Language for Primary Grades	Mrs. Mariana C. Gareissen	69	65
s3.....	Literature in the Grades	Miss Mary A. Sheehan.....	13	13
s4.....	The Teaching of English in the Grades	Miss Mary A. Sheehan.....	45	44
s5.....	Dramatization for Children.....	Miss Grace Griswold.....	79	57
s6.....	Dramatic Interpretation and Play Production	Miss Grace Griswold.....	18	7
s11.....	The Teaching of English in the High School	Dr. James F. Royster.....	54	45
s13.....	The Comedies of Shakespeare	Prof. F. H. Koch.....	30	27
s14, I.....	American Literature	Prof. C. A. Hibbard.....	29	27
s14, II.....	American Literature	Prof. C. A. Hibbard.....	25	23
s18.....	The Rise of Modern Democracy as Reflected in English and American Literature	Dr. J. S. Moffatt, Jr.....	10	7
s19.....	News Writing	Prof. C. A. Hibbard.....	12	11
s20.....	Chaucer	Dr. James F. Royster.....	18	17
s26.....	Play-Writing	Prof. F. H. Koch.....	9	8
s28.....	Tendencies in Recent English and American Poetry	Dr. James F. Royster.....	41	36

SUPPLEMENT A—Continued

Department and Catalogue Number of Course	Description of Course	Instructor	No. Registered for Courses	No. to complete course and take examinations
FRENCH:				
s1.....	Elementary Course	Prof. C. M. Hutchings.....	16	12
s2.....	Elementary Course	Prof. C. M. Hutchings.....	5	3
s11.....	Advanced Course	Prof. H. Staab.....	10	9
s12.....	Advanced Course	Prof. C. M. Hutchings.....	10	10
s13.....	The Teaching of French in the High School	Dr. C. E. Green.....	10	8
GEOGRAPHY:				
s1.....	Elementary Geography	Miss Mary V. Carney.....	30	29
s2.....	The Teaching of Geography.....	Prof. M. C. S. Noble.....	35	35
GEOLOGY:				
s11.....	Introductory Geology	Prof. Collier Cobb.....	14	14
s12.....	Elementary Mineralogy	Prof. E. O. Randolph.....	9	8
s15.....	Commercial and Industrial Geography	Prof. Collier Cobb.....	8	8
s17.....	Historical Geology	Prof. E. O. Randolph.....	9	9
s54.....	Advanced Geological Field Work	Professors Cobb, and Randolph	2	2
GERMAN:				
s1.....	Elementary Course	Prof. W. D. Toy.....	2	2
s2.....	Elementary Course	Prof. W. D. Toy.....	4	3
s11.....	Advanced Course	Dr. Kent J. Brown.....	5	4
s12.....	Advanced Course	Dr. Kent J. Brown.....	4	4
s13.....	German Literature	Prof. W. D. Toy.....	2	2
s17.....	The Teaching of German in the High School	Prof. W. D. Toy.....	2	2
HISTORY:				
s1.....	A Review Course in History	Miss Mary V. Carney.....	20	20
s2.....	The Teaching of History in the Grades	Miss Mary V. Carney.....	22	21
s3.....	.....	Dr. S. G. Noble.....	6	6
s16.....	Modern Europe	Dr. E. L. Fox.....	18	14
s17.....	Contemporary United States History	Dr. E. L. Fox.....	15	14
s26.....	The Teaching of History in the High School	Dr. Pierson and Dr. Fox.....	20	14
s27.....	Comparative Government	Dr. W. W. Pierson, Jr.....	17	15
s29.....	Modern Imperialism and World Politics	Dr. W. W. Pierson, Jr.....	22	18
HOME ECONOMICS:				
s2.....	Elementary Course in Cooking	Miss Frieda Rentchler.....	10	8
s3.....	Domestic Art	Miss Frieda Rentchler.....	6	5

SUPPLEMENT A—Continued

Department and Catalogue Number of Course	Description of Course	Instructor	No. Registered for Courses	No. to complete course and take examinations
s4, I (First half).....	Red Cross Course in Home Nursing	Miss Martha I. Giltner.....	18	17
s4, III.....	Red Cross Course in Home Nursing	Miss Martha I. Giltner.....	21	15
s4, IV.....	Red Cross Course in Home Nursing	Miss Martha I. Giltner.....	13	6
s4, I (Second half).....	Red Cross Course in Home Nursing	Miss Martha I. Giltner.....	17	17
s4, II (Second half).....	Red Cross Course in Home Nursing	Miss Martha I. Giltner.....	13	11
	Red Cross Course in Home Nursing	Miss Martha I. Giltner.....	25	16
LATIN:				
s1.....	Elementary Latin	Dr. G. K. G. Henry.....	4	2
s11.....	The Teaching of Latin in High School	Dr. George Howe.....	24	22
s15.....	Seminar Course	Dr. George Howe.....	2	2
s17.....	Latin Prose Literature	Dr. G. K. G. Henry.....	1	1
LIBRARYSCIENCE:				
s11.....	The Use of Books	Dr. L. R. Wilson.....	6	4
MATHEMATICS:				
s1.....	Review of Arithmetic	Supt. S. L. Sheep.....	17	15
s2.....	Teaching of Arithmetic in Elementary School	Prof. M. C. S. Noble.....	18	17
s3.....	Geometry for Teachers	Dr. A. W. Hobbs.....	4	4
s4.....	Solid Geometry	Mr. J. B. Linker.....	20	19
s11.....	College Algebra	Prof. A. S. Winsor.....	13	13
s13.....	Plane Trigonometry	Mr. J. B. Linker.....	22	20
s15.....	The Teaching of Mathematics in the High School	Dr. A. W. Hobbs.....	15	14
s16.....	Analytic Geometry	Dr. A. W. Hobbs.....	8	6
s17.....	Differential Calculus	Prof. A. S. Winsor.....	5	3
MUSIC:				
s1.....	Public School Music Methods	Prof. William Breach.....	30	29
s2.....	Community Music	Prof. Paul J. Weaver.....	13	10
s3.....	Appreciation of Music	Prof. Paul J. Weaver.....	10	7
s4.....	Sight-singing and Ear-training	Prof. Paul J. Weaver.....	27	23
s5.....	Voice	Prof. William Breach.....	10	10
s6.....	Piano	Prof. William Breach.....	8	8

SUPPLEMENT A—Continued

Department and Catalogue Number of Course	Description of Course	Instructor	No. Registered for Courses	No. to complete course and take examinations
PHYSICS:				
s2.....	Astronomy	Prof. A. H. Patterson.....	3	1
s11.....	Advanced Course	Prof. A. H. Patterson.....	23	21
s12.....	Advanced Astronomy Course	Prof. A. H. Patterson.....	21	19
PSYCHOLOGY:				
s19.....	Introductory Psychology	Dr. J. F. Dashiell.....	45	38
s21.....	Social Psychology	Dr. J. F. Dashiell.....	19	16
s23.....	Educational Psychology— Psychology of Learning	Dr. J. F. Dashiell.....	43	43
RED CROSS:				
s1.....	Home Hygiene and Care of the Sick	Miss Martha I. Giltner.....	69	63
s2.....	Home Hygiene and Care of the Sick	Miss Martha I. Giltner.....	38	27
RURALECONOMICS AND SOCIOLOGY:				
s11.....	Rural School Problems	Dr. E. C. Branson.....	49	46
s12.....	Rural Economics	Mr. S. H. Hobbs, Jr.....	26	25
s13.....	Laboratory Course in Rural Social Problems	Mr. S. H. Hobbs, Jr.....	15	13
SOCIOLOGY:				
s11.....	Social Problems	Dr. Howard W. Odum.....	33	29
SPANISH:				
s1.....	Elementary Course	Prof. H. Staab.....	7	6
s2.....	Elementary Course	Dr. C. E. Green.....	5	4
s11.....	.....	Dr. C. E. Green.....	2	2
WRITING:				
s1.....	Free-Arm Movement	Miss Mary Poore.....	21	20
s2, I.....	Palmer Method Writing	Miss Mary Poore.....	65	20
s2, II.....	Palmer Method Writing	Miss Mary Poore.....	65	63
s2, III.....	Palmer Method Writing	Miss Mary Poore.....	54	48
ZOOLOGY:				
s20.....	Principles, Data, and Me- thods of General Zoology.....	Dr. W. C. George.....	1	1
s21.....	A continuation of the Zoo- logy s20	Dr. W. C. George.....	4	3
HIGH SCHOOL COURSES:				
	English I.....	Miss Eleanor Stratton.....	9	8
	English II	Miss Eleanor Stratton.....	5	4

SUPPLEMENT A—Continued

Department and Catalogue Number of Course	Description of Course	Instructor	No. Registered for Courses	No. to complete course and take examinations
HIGH SCHOOL COURSES:				
<i>Continued</i>				
	English III.....	Miss Eleanor Stratton.....	8	6
	English IV	Miss Eleanor Stratton.....	3	2
	French I	Mrs. Laurabelle Dietrick....	7	3
	History II	Miss Maude Minish.....	4	4
	Latin I	Mrs. Laurabelle Dietrick....	11	9
	Latin II	Mrs. Laurabelle Dietrick....	10	6
	Latin III	Mrs. Laurabelle Dietrick....	5	5
	Latin IV	Mrs. Laurabelle Dietrick....	4	4
	Latin V	Mrs. Laurabelle Dietrick....	6	5
	Mathematics I (1st yr. Math.)	Miss Myrtle Green.....	3	3
	Mathematics II (Academic Algebra)	Miss Myrtle Green.....	7	4
	Mathematics III	Supt. S. L. Sheep.....	8	4
	Mathematics IV	Supt. S. L. Sheep.....	10	6
	Mathematics V	Miss Myrtle Green.....	12	9
	Mathematics VI	Miss Myrtle Green.....	13	9
	Science I	Mr. J. S. Babb.....	5	5
	Science II	Mr. J. S. Babb.....	6	6
	Science III	Mr. J. S. Babb.....	5	4

The Bureau of Extension

REPORT OF THE DIRECTOR

To the President of the University:

I have the honor to submit the report of the Bureau of Extension from November 1, 1919, to October 31, 1920.

Rural Engineering

In the report for 1919 mention was made of the establishment of the division of Rural Engineering through which the North Carolina Highway Commission and the engineering departments of the University proposed to offer assistance to rural communities in the installation of water power and water systems, electric power and lighting systems, and telephones. During the year the work of organizing has progressed steadily with the following results:

1. The division was organized with Professor P. H. Daggett as Director, Professor J. H. Mustard in charge of electric light and power, Professor J. E. Lear in charge of telephones, Professor Thorndike Saville in charge of water power and sanitation, Professor E. C. Branson in charge of rural social science, Mr. W. C. Walke, field engineer, and Miss Alice Noble, secretary.

2. Calls from 176 people representing 68 counties have been answered, of which 103 related to general power developments, 44 to water power, 24 to water supply, 3 to telephones, 2 to housing.

3. Personal visits were made in 101 instances, 26 surveys were carried out, 27 streams were gauged, plans and blue prints were furnished for 32 projects, and 72 cost estimates were prepared.

4. Demonstrations of the uses of water and electricity in the home were given at various county and community fairs, and publicity was given to the whole question of country home comforts and conveniences through three special Extension Leaflets and 38 special articles in the *News-Letter*.

5. A laboratory for the testing of electrical power outfits for farm purposes has been equipped, numerous electrical appliances have been assembled and tested, and a record of the efficiency of different types of installation has been worked out for the guidance of North Carolina purchasers.

The experiment has more than demonstrated its value to the State and every effort should be made to extend the scope of activities of the division as rapidly as possible.

Community Drama

The division of Community Drama was provided for in 1919. Its work has grown steadily and its activities for 1919-20 are summarized as follows:

1. Through this division the Raleigh Tercentenary Pageant-Drama, *Raleigh: the Shepherd of the Ocean*, written by the Director, Professor F. H. Koch, was produced at Raleigh, North Carolina, on October 19, 20, and 21.

At Wilmington, a Pageant of the Cape Fear has been written in collaboration under the personal supervision of the Director and a similar Historical Pageant of Halifax County is being written by the teachers of that county. Plans are also under way for the production of an original Community Drama of Flora Macdonald at Red Springs, to commemorate the two hundredth anniversary of the birth of Flora Macdonald.

2. The increasing demand by schools and communities for advice in the selection and production of plays necessitated the retaining of Miss Elizabeth A. Lay, assistant in charge of play service, as full time secretary of the Community Drama division for 1920-1921. Last year forty packages of plays were sent out in response to requests. A bulletin, *Plays for Amateurs*, was prepared to aid in the selection of plays for schools and communities.

3. To stimulate interest in community drama throughout the State, the Director gave lectures at Raleigh, Wilmington, High Point, Henderson, New Bern, Flora Macdonald College, Davidson College, Winston-Salem, Oxford, Greensboro, and Lenoir.

4. The School of Public Welfare received the co-operation of this division in promoting interest at various points in the State in recreational activities, through lectures by the Director and personal assistance by the Secretary.

5. In Greensboro on May 7, the Carolina Playmakers presented a series of their original Folk-Plays. The unusual reception given the Playmakers there has brought from other cities of the State urgent requests for similar performances. To this end a tour is planned with a view to demonstrating to other communities of the State the possibilities of native playmaking.

Community Music

Under the direction of Professor Paul John Weaver, Director of the division of Community Music, progress was made during the year in the improvement of community music in North Carolina. The first effort of the division was that of stimulating the teaching of singing in the public schools. Two particularly gratifying results have been obtained thus far. The city schools of Winston-Salem, in co-operation with other organizations, have employed a skilled musical director for the schools and the community at large. During the summer session Professor

Weaver conducted large classes composed of teachers, and laid the foundation for similar instruction through the teachers in the schools of the State.

Other activities of the division were as follows: The publication of an *Extension Leaflet* entitled *Community Music*; participation in the Institute for the Bureau of Community Service Workers; lectures before schools and other organizations; community sings, and recitals.

Special Institutes

Through the co-operation of Professors E. C. Branson and H. W. Odum, two institutes of unusual importance were held for the first time during the summer. The first was the institute for the Bureau of Community Service, under the direction of Mr. W. C. Crosby, of Raleigh. A ten day program was carried out during which special instruction was given in visual instruction through Professor W. H. Dudley, of the University of Wisconsin; in story teaching and games, by Miss Henrietta Masseling, of the city schools of Atlanta; in community music, rural engineering, and community service, by Professors Weaver, Daggett, Branson, Odum, and L. R. Wilson of the University Faculty.

The second institute was held at the instance of Miss Elizabeth Kelly of the State Department of Education for the benefit of the teachers engaged in the campaign of adult illiteracy. Twenty-five or more teachers, with representatives from South Carolina and Alabama, were present for the three-day conference.

Design and Improvement of School Grounds

For several years the University, through the assistance of Dr. W. C. Coker, has occasionally aided North Carolina schools in the beautification of their grounds. In order to make this service more extensive the division of Design and Improvement of School Grounds was definitely established in September with Dr. W. C. Coker as Director and Miss Eleanor Hoffman as Secretary. Miss Hoffman has made a number of trips throughout the State and is now preparing an extensive bulletin which will contain designs of school grounds, together with photographs and illustrative plantings from various sources as the University Arboretum, private grounds, mills, and community houses.

Work With Women's Clubs

A comparison of the reports of the division of Women's Clubs for 1919-20 with that of the preceding year will show that 120 clubs followed definite courses this year as against 42 last; 1,900 members were enrolled, of whom 1,000 were North Carolinians, as against a total of 806 the year before. Similarly, 1,500 books and pamphlets were loaned for the study of particular topics, as against 1,000 in 1918-1919. Thirty-seven towns in North Carolina pursued the courses as well as cities in 13 other states.

Two programs were issued in printed form for 1919-1920, one on Americanization, by Mrs. T. W. Lingle, and one on Citizenship, by Professor D. D. Carroll. For 1920-1921, two new studies are being used, "Our Heritage," by Professor J. H. Hanford, and "Constructive Ventures in Government," by Professor Howard W. Odum. A third is in process of preparation, "Modern Drama," by Miss Elizabeth A. Lay.

In view of the increasing interest in this division, it seems advisable to extend its services over broader fields and to that end it is recommended that a survey be made of all women's activities in the State, and to cooperate with other organizations in a way similar to that extended to literary and civic clubs of the North Carolina Federation.

General Work Summarized

As already indicated, the work of the divisions of the Bureau has developed steadily. Briefly summarized, it has been as follows for the year:

1. *General Information.* In response to requests for information 1190 letters were written during the year, and 2309 books and pamphlets were loaned direct to borrowers throughout the State. In a number of instances lists of books were prepared, and a constant effort was made to make the library available to the public. Package libraries were collected relating to public health and other subjects and were distributed upon application.

2. *Public Discussion and Debate.* The eighth annual contest of the High School Debating Union was held in Memorial Hall on April 23rd, 1920, with representatives from 44 high schools present. A total of 200 schools representing 75 counties, participated in the preliminary contests, the finals at Chapel Hill being won by Arthur Kale and Clifton Ervin, of Asheville. The subject of restricted immigration was debated, for the study of which a one hundred and one-page handbook was prepared. The handbook on collective bargaining, the subject for 1921, is now in press and plans for the coming contests are rapidly being carried out.

3. *Home Study Courses.* Twenty-four students from nineteen counties were enrolled in correspondence courses during the year under the direction of Professor L. A. Williams. In view of the new program of teacher-training instituted by the State Department of Education, the courses for the coming year have been prepared particularly for teachers. Special instruction was also given to county teachers' associations by members of the School of Education through regular weekly or monthly visits.

4. *Lectures.* At the beginning of the year a bulletin setting forth the subjects of lectures was issued by the division of Lectures. In this bulletin an enlarged program of lecture courses was offered, a series of lectures being submitted on each of the following: Citizenship, Americanization, The Problems of Democracy and Reconstruction, and Com-

munity Service. In addition, the division of miscellaneous lectures was considerably enlarged.

Four community centers undertook programs involving the assistance of the University. These were Rocky Mount, Salisbury, Greensboro, and Red Springs. Of these, Rocky Mount was the only one which had had a community center during the previous year. Salisbury, taking the course on Americanization, followed closely the program outlined in the bulletin. The other study centers made up courses of their own selection. Serial courses of lectures were proposed by Oxford, Burlington, Edenton, Henderson, and Asheville, but in no one of these places did the plans develop beyond individual lectures. At Henderson there was an interesting request for guidance in a local campaign for a community building.

In addition to the lectures delivered directly under the auspices of this division, a total of more than one hundred and fifty were delivered by various members of the Faculty in response to direct requests for assistance through their particular departments.

5. *Social and Economic Survey.* The field activities of the department of Rural Social Science at the University during the last year are as follows: (1) Thirty-three addresses by E. C. Branson, head of the department, and three by S. H. Hobbs, Jr., department assistant; (2) Twenty-eight special county studies, including four county bulletins already in print—Gaston, Halifax, Beaufort and Pitt; (3) Thirty-two studies of State-wide range, twenty-seven of which have been given to the public in the *University News-Letter*; (4) Work in behalf of State and national federation of country life institutions and agencies; (5) Daily letters in answer to inquiries about life and business in North Carolina; (6) Daily work with one hundred and two students in laboratory studies, mainly upon North Carolina social situations and problems; (7) State reconstruction studies with the North Carolina Club, a bulletin of which will be ready for publication in January; (8) A syllabus of State reconstruction studies, with reading references—*University Record* No. 170.

The News Letter appeared fifty times during the year, carrying many special studies worked out in the laboratory. Its circulation has been increased to approximately 20,000.

The departmental library has been steadily enlarged and material from its shelves and files has been constantly used throughout the State during the year.

6. *Municipal and Community Reference.* Through the departments of Economics, Rural Social Science, and the School of Education, various investigations were carried on relating to North Carolina municipalities. Publications of the boards of trade of the State and other states were assembled by the Library, and inquirers have been given information in response to their requests for assistance.

Through the coming of Professor H. W. Odum, Director of the School of Public Welfare, the work of the division of Municipal Reference has

been enlarged to include Community Welfare. In addition to his courses in the institutes previously mentioned and the publication of his handbook, *Constructive Ventures in Government*, Professor Odum has engaged in the following field work; (1) conferences, in connection with the State Commissioner of Public Welfare, with three districts of county welfare officers embracing 43 counties; (2) six lectures before community organizations; (3) six articles or bulletins on public welfare subjects; and (4) participation in local county affairs through the Superintendent of Public Welfare of Orange county.

7. *Educational Information and Assistance.* The survey has long been recognized as a means to the end of improving conditions. The School of Education, through Professor L. A. Williams, has recognized this principle and has devoted itself to the making of several exhaustive surveys of school conditions in North Carolina. During the year detailed studies of the public school systems of Wake county and of the town of Roanoke Rapids were begun by Professor Williams and a bulletin on the construction of schoolhouses has been prepared by him for the use of North Carolina school authorities. While it has not been published as yet, the information it contains is available and Professor Williams has frequently been called in consultation on building matters.

Throughout the year members of the School of Education gave information on a wide variety of subjects concerning education and served state and national organizations interested in the promotion of legislation affecting schools and educational interests.

Through the addition to the School of Professor E. W. Knight, advisory service has been extended to school organizations and county superintendents. Professor Williams has continued his co-operation with teachers in the making of standard tests and regularly meets groups of city superintendents for conference concerning city school administration.

Members of the Faculty of the School of Education have made during the year about the usual number of addresses at teachers' meetings, high school commencements, educational rallies, etc., and have aided many schools both through correspondence and by personal visitation.

8. *Good Roads Institute.* Owing to the fact that the date of the special session of the legislature conflicted with that of the State and County Council and the Good Roads Institute, these activities were omitted during the summer. Provision for both has been made for the coming year.

Publications

Fifteen publications exclusive of the *News Letter* and costing approximately \$3,000 were issued during the year. Ten of these were issued as Extension Leaflets and received special recognition throughout the nation as having distinctive merit. The demand for many of the numbers has been such as to exhaust the supply. The director wishes to acknowledge here the very distinctive services rendered by those members of

the Faculty who prepared manuscripts for the publications, the list of which follows:

EXTENSION BULLETINS

No. 33.	The State and County Council	2,000
No. 34.	Immigration Restriction	3,500
No. 35.	State Reconstruction Studies of the North Carolina Club....	2,000
No. 36.	Community Drama Service: 1. Plays for Amateurs	3,000
No. 37.	Further Use of Standard Tests and Scales as a Basis for a Co-operative Research Plan	1,500

EXTENSION LEAFLETS

Vol. III, No. 1.	Studies in Citizenship for Women	3,000
No. 2.	Country Home Comforts and Conveniences, Parts I and II.	10,000
No. 3.	Extension Courses and Lectures	2,000
No. 4.	Physical Education	2,000
No. 5.	Community Music	2,000
No. 6.	The Consolidation of Rural Schools	2,000
No. 7.	Our Heritage	4,000
No. 8.	The Consolidation of Rural Schools. Revised Edition	2,000
No. 9. and No. 10.	Development of Farm Water Power Country Home Comforts and Conveniences Series. Part III	5,000
The <i>News Letter</i> issued fifty times a year.....		15,000-20,000

Other Activities

The Bureau has participated in a number of other activities during the year. Rally day (a neighborhood fair) was held on the campus; contests in baseball, basketball, football, tennis and track athletics were arranged for the schools of the State, and members of the faculty participated in the activities of the various State organizations. Through Professor T. J. Browne, the Bureau participated in various athletic and recreational programs and published a special Leaflet on Physical Education.

Expenditures

For the ten and a half months, August 16, 1919 to June 30, 1920, constituting the new fiscal year of the University, a total of \$11,963 was spent for printing the *New Letter*, the Extension Leaflets and Records, for letter heads, envelopes, postage, clerical assistance, for the conduct of the High School Debating Union, for traveling expenses, and other purposes. Receipts from the sale of publications and for traveling expenses for lecturers amounted to \$2,827.28 of which \$109.53 was in the form of stamps and \$2,717.75 in funds which, when placed to the credit of the Bureau made the net expense of \$9,245.97.

The detailed receipts and expenditures as kept by the Secretary of the Bureau follow:

RECEIPTS

Sale of Leaflets: Americanization	\$ 348.57
Sale of Leaflets: Citizenship	145.18
Fees from Our Heritage	200.10
Sale of Academy Movement in the South	15.50
Sale of Other Publications (County, Gov., etc.)	234.57
Women's Clubs, (fees, fines, books, etc.)	154.60
Home Study (fees, fines, books, etc.)	184.55
Traveling expenses repaid	794.28
Gift Southern Life & Trust Co.	25.00
Gift A. H. Boyden	10.00
Gift Highway Commission to increase mailing list	520.00
Journal transfers	203.40
Total gross receipts	\$ 2,827.28
Less stamps received	109.53
Total net receipts	\$ 2,717.75

DISBURSEMENTS

Bulletins	\$ 1,486.25
Clerical assistance	267.77
Debate	522.68
Express	43.68
Freight	2.68
Home study	418.38
High school athletics	229.13
Leaflets	1,178.60
Membership fee	25.00
Miscellaneous	5.00
News Letter	4,117.96
North Carolina Club	140.72
Postage	233.62
Salaries	225.00
Slides	114.24
Stationery	267.10
State and County Council	181.12
Supplies	438.26
Survey	105.00
Telegraph	65.93
Telephone	49.26
Women's clubs	695.67
Women's clubs books	85.28
Travel	989.79
Undistributed items brought forward from 1918	75.40
Total disbursements	\$11,963.72

Business Organization

At the beginning of the year 1918 19, a definite plan of organization was adopted by the Bureau by means of which an accurate account of all orders and expenditures is kept. Complete receipt and disbursement records

have been provided, as a detailed distribution record are available at all times. Miss Nellie Roberson has been appointed Secretary of the Bureau and all orders and accounts pass through her hands.

Changes in Personnel

Several important changes in the personnel of the Bureau have taken place during the year. Professor L. A. Williams was placed in charge of the Home Study Division, which was organized to replace the Correspondence Course division. Professor W. W. Pierson, Jr., succeeded Professor J. H. Hanford as manager of the division of Lectures, and Miss Nellie Roberson succeeded Mrs. T. W. Lingle as Secretary of the division for Women. At different times Misses Lillian Long, Mildred Moses, and Ione Markham have assisted the director and have had charge of the package library service. As already indicated, the Bureau has been strengthened during the year by the addition of Professors Knight, Weaver, and Browne, and the appointment of Miss Elizabeth Lay as assistant in charge of play service. The division of Country Home Comforts has been established under the direction of Professor P. H. Daggett, who is assisted by Professors Mustard, Lear, and Saville. In the autumn of 1920 the division of Design and Improvement of School Grounds was organized by Professor W. C. Coker and Miss Eleanor Hoffman, and the division of Municipal Reference was transferred to Professor H. W. Odum.

Recommendations

After having had charge of the work of the Bureau of Extension for the past eight years, and having studied its development carefully, I wish to make the following observations:

1. The policy of utilizing men within departments for extension work is thoroughly sound, but it has definite limitations. Men regularly engaged in teaching cannot be expected to serve both as teachers and administrators, and there is a limit to the amount of time which instructors can profitably spend away from their classes in field work.

2. The expansion of the work in several divisions of the Bureau has reached such a stage as to demand the additions of administrative and clerical assistance, particularly administrative assistance in work out in the State.

In order that the work of the Bureau may be further developed without reducing the efficiency of the departments involved, I offer the following recommendations:

1. That an additional administrative officer be employed whose special duties it shall be to be the field representative of the Bureau particularly in connection with the divisions of Home Study and of Lectures. Such an officer could also be of great service in making known to the communities, organizations, clubs, etc., the various services which the University offers.

The Bureau must establish personal contact with the public, rather than depend on letters and printed material, if it is to increase its work materially.

2. That the division for Women be expanded as rapidly as the demand for its services warrants, that clerical assistance be provided, and that necessary books, periodicals, and pamphlets be supplied as required.

3. That the division of Country Home Comforts and Conveniences be further organized, and that assistance be given the North Carolina Highway Commission in such matters as it refers to the University. Proper developments of this division calls for the immediate employment of an additional field representative and the use of extensive laboratory and field apparatus, these to be supplied by the Highway Commission.

4. That information bearing upon every phase of municipal government be assembled and placed at the disposal of North Carolina municipalities.

5. That the University, through Professors Branson, Koch, Weaver, Coker, Odum, and the School of Education, extend its instruction in those subjects which are conducive to the improvement of community and civic life.

6. That particular effort be made to develop extension teaching in University subjects in the cities and towns of the State.

Respectfully submitted,
LOUIS R. WILSON, Director.

Report of the Librarian

To the President of the University:

I have the honor to present the report of the Library from August 16, 1919, to the end of the new fiscal year adopted by the University, June 31, 1920.

Functions of Committees Changed

The most important development in the activities of the Library for the year were the changes proposed and adopted as to the functions of the two committees of the Library which have formerly concerned themselves with the appropriation of Library funds and the purchase of books and periodicals for the General Library.

After careful consideration of the needs of the Library it was decided that beginning with 1920-1921 the Library Appropriations Committee should be replaced by a Library Budget Committee, composed of the Librarian, the President of the University, and the Deans of the College of Liberal Arts, the School of Applied Science, the Graduate School, the duty of which should be to work out a complete Library budget scheme for the various departments and schools of the University in order to promote a comprehensive Library service to all the interests of the campus. It was further decided that the title of the Library Committee should be called the Library Book Committee and should concern itself solely with the purchase of books and periodicals for the General Library. The responsibility for the administration of the Library was definitely placed upon the Librarian and the Library staff working with him.

Budget Principle Adopted

Complete details of the budget program have not been worked out. However, the general principle has been laid down that in the future the Budget Committee will ask for a sufficiently large appropriation from the University to provide adequately for the various departments and schools and the General Library. In setting aside funds for their use, the Committee will keep in mind the number of students to be served by the departments and schools, the character of their work, and such other matters as should be considered in making allotments. It will also hold in reserve sufficient funds to enable the Library to make special allotments for unusual needs or purchases when occasions arise, and all requests for funds for special Library purposes will be made to this committee rather than to the President of the University.

Recommendations

In order that this program may be carried out and that the growth of the Library may be provided in other necessary ways I offer the following recommendations:

Increased Library Funds. I recommend first that the University appropriate out of its general maintenance fund the following amounts for allotment by the Library Budget Committee for use by the Library for the acquisition of books and other publications, the same to be in addition to the present income from students fees and endowment: 1921—\$10,000; 1922—\$12,500. I also recommend that the Library fee for regular students be increased from \$4 to \$6 per year and for Summer School students from 25 cents to \$1.

For your information let me say that from 1907-08 until the present date, the regular income of the Library has been practically stationary, being derived from an endowment fund of \$55,000 yielding approximately \$3250 annually and student fees yielding from \$2552 in 1907-08 to \$5200 in 1919-20. Each year this has been supplemented by special appropriations for the benefit of single departments or for the acquisition of special collections, the amounts for these purposes being for the past three academic years \$2,068.67; \$9,003.50; and \$14,250.00 or a total of \$25,340.17.

The double point I make in offering this recommendation is (1) that the fixed income from the endowment and student fees is totally inadequate to meet the demands of the Library as recognized by the necessity in the last three years of having to appropriate from general funds some \$25,000, and (2) that a definite increase such as that indicated should be set aside as a part of the Library budget so that the Library through its budget committee can plan for its regular, steady growth, rather than have to depend upon individual departments to present requests for funds for library purposes without relation to the Library.

In further support of this proposition let me draw your attention to the following facts. First of all, the departments and schools of the University have steadily grown in number until they are double the number in 1907-08. At present the departments of Botany, Chemistry, Economics, Electrical Engineering, Medicine, and Zoology spend every cent of their allowance for journals and have no funds whatever for the purchase of books. These departments, as well as practically all of the others, are in great need of additional journals and certainly should have funds with which to buy encyclopedias, reference books, and such texts as are essential to scholarly work. Furthermore, provision should be made by which purchases could be made of complete files of journals as these are in many instances indispensable in investigation and research.

Secondly, it must be remembered that everything that enters into the making and binding and printing of books has increased tremendously in

recent years. In 1914 bindings of standardized journals averaged 90 cents. Today they average \$2.50. Similarly, standard new fiction cost net, in 1914, \$1.00 as against \$1.50 and \$1.75 today. Subscriptions to daily papers and periodicals have shown a like advance. And to add to the cost, freight and express have gone steadily up, and catalogue cards and library stationery, book plates and supplies have increased in price.

In the third place the income from student fees has not begun to keep pace with costs or with the necessity of purchasing duplicate copies for special readings, not to mention the matter of additional books and periodicals for recreational reading.

Again, it is simply impossible to equip the new Schools of Commerce, of Public Welfare, and the enlarged Graduate School without greatly increased books and journals. The School of Commerce, with between 150 and 250 students enrolled, is attempting to cover the field of business with some 80 volumes. And the Graduate School, which this year has enrolled 120 or more students from 13 states, depends absolutely for the effectiveness of its work upon the resources of the Library.

So far, I have not mentioned the needs of the General Library. For years it has been apparent that it should have for the use of the entire campus such outstanding bibliographical aids as the Catalogue of the Library of Congress, the Catalogue of the British Museum, and the catalogue of special libraries, both American and continental, and the scientific catalogues issued by the Royal Society of London. I have also not mentioned the need of scholarly encyclopedias, dictionaries, and works of reference which cannot be purchased at present, the lack of which not only cripples the effectiveness of the Library but frequently makes impossible the bringing of new worthwhile men into the Faculty or the holding of such men when they are called away by other institutions. At present the amount left the General Library, after the 31 departments, schools, and special funds have received their allowances ranging from \$90 (for Greek, the lowest) to \$500 (for Law, the highest)—the average is \$160—is so small that the acquisition of such sets is absolutely impossible.

And, finally I want to remind you of the relation the Library bears to the whole matter of instruction in the University. We have upon the campus a half dozen or more specially planned and equipped laboratories for the use of students in the sciences and professions. All of these students require books and journals to make their work effective. But in the case of students in English, French, German, Latin, Spanish, Greek, in fact in all the languages and literatures, in History, in Economics, in Education, in Politics and Government, in Sociology—in all these, the Library is the laboratory. It constitutes their whole equipment, and to the extent that it does it should be properly supported.

Material Equipment. I recommend second that (a) for 1921 the large basement room under the Reference room be cemented, ceiled, and equipment be placed in it for use as a special workroom. This will cost \$750.

During the year the interior of the building should also be repainted as the walls have received no attention since they were finished thirteen years ago and are badly in need of attention. This will cost \$500. The present catalogue case, tables, and chairs were bought in the fall of 1907 to provide for a catalogue of 50,000 volumes and a student body numbering 731. A new catalogue case unit should be immediately added as cards representing 100,000 volumes will have to be inserted before the end of the academic year 1920-21. Furthermore, on account of the doubling of the student body, and the crowded condition of the dormitories, additional chairs and tables must be provided. The catalogue unit will cost \$500 and an equal amount should be spent for chairs and tables.

(b) For 1922 the addition of chairs and tables and open shelves should be continued in the lobby of the second floor so that an opportunity for quiet reading may be made for the student body. At present the general reader is forced either into the Periodical room, or Reference room, neither of which is intended for general reading and both of which are already overcrowded. At least \$1000 should be provided for this purpose.

Personnel. I recommend third that in 1921 an additional assistant be secured to supervise the work of the loan desk. This task has steadily increased and cannot be properly handled by student assistants. The addition of such an assistant at \$1500 would release Mr. Baker for the very urgent need of attention to the departmental libraries and the work of reference librarian. For 1922, provided the increased book fund is secured, it will be necessary to add a typist to assist in the cataloguing room in the preparation of the cards and records incident to the acquisition of a larger number of books. From \$1200 to \$1500 should be set aside for this purpose.

Salaries for the Staff. I recommend in the fourth place that the salaries of the present staff be increased. In this connection I wish to emphasize the necessity for providing more adequate salaries for the members of the Library staff if the services of college trained assistants, with additional library training, are to be retained. Professional training, experience, and ability should be rewarded adequately on the part of the personnel of the Library as well as that of the instructional force.

Departmental Libraries. Within the next two years a definite policy will have to be worked out for caring for the departmental libraries. Seemingly, it is best at present to allow the departments concerned to work out the details of administration in connection with scholarships, fellowships, and secretaryships. But later a policy in which the General Library participates must be worked out and followed.

Increased Endowment. The endowment of the Library has not been increased since 1907. Inasmuch as increased revenues are required by the Library it is highly desirable that efforts should be made to secure additional endowment funds for Library purposes.

New Library Building. Within the next few years the Library will

outgrow its present building. Inasmuch as the entire campus looks to the Library for service, the University should begin at once to consider ways and means to double the capacity of the present building.

The North Carolina Collection and Publication. In recent years the Library has made a special effort to develop its collection of material relating to North Carolina. A complete canvass of the State should be made and all local collections acquired which may be available. At the same time a series of publications might be undertaken through which important papers and manuscripts in the collection could be made accessible to the public.

Library Courses. The University should consider the advisability of establishing sufficiently extensive courses in library science and administration as to equip young men and young women as librarians. Courses in literature, history, the ancient and modern languages, and science, together with special course in library methods might well be given to this particular end and a definite service rendered to the State and to the South.

The North Carolina Collection

Interest in the North Carolina Collection has steadily grown in recent years. As a result of the assistance of Mr. John Sprunt Hill, of Durham, Miss Mary L. Thornton was continued as Librarian of the Collection during the year.

The collection has been added to materially through acquisitions from the family of the late Col. A. B. Andrews, Mrs. Thomas McDowell, the family of the late Kemp Plummer Battle, the family of Mrs. June Spencer Love, Dr. Charles Lee Raper, Edwards and Broughton Printing House, The Seeman Printery, Hackney and Moale, The Charlotte Observer Printing House, the State Library, and the North Carolina College for Women. An extremely valuable purchase was made from Miss Christine Fisher, of Salisbury.

Battle, Andrews, and McDowell Collections

The Battle Collection, presented by the family of former President Battle, contained a total of 1300 titles, embracing particularly the following important fields: (1) North Carolina history and biography; (2) Southern history and biography; (3) the Confederate States of America; (4) the University of North Carolina; (5) the Episcopal Church of North Carolina and the Confederacy.

The Andrews Collection comprised more than 600 books, pamphlets, and maps and was particularly rich in publications relating to the history of North Carolina and the railway development of the state and the South.

The gift from Mrs. Thomas McDowell contained 92 pamphlets concerning the State and a number of old newspapers and letters.

Administration

The Library has been administered during the year by the librarian, four assistant librarians, a secretary to the Librarian, and six student assistants. In accord with a recommendation made by me last year, provision was made for an assistant librarian for 1919-20, and for a full time secretary to the librarian. Mr. Charles M. Baker, a graduate of the New York State Library School, has been secured, and Miss Ione Markham has been appointed secretary to succeed Miss Mildred Moses. To all members of the Library staff and Library committee I am indebted for their faithful service throughout the year. I wish to express my special appreciation of the service of Dr. Charles Lee Raper whose resignation from the University in June terminated his connection with the Library which he had served as member of the Library Committee for the past 19 years.

Library Statistics, 1919-1920

The following statistics indicate the activities of the Library during the year.

Acquisitions

Gifts from individuals, private North Carolina societies, and societies and institutions from other states.....	616
Gifts from United States Government and Departments.....	355
Gifts from North Carolina Government and Departments.....	41
Bound volumes from binderies.....	534
Volumes through purchase.....	2,533
Weeks collection accessioned and catalogued.....	1,509
Total number of volumes received this year.....	5,598
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Total number of volumes in the Library.....	93,914

Extension

Pamphlets and books mailed through the Library.....	2,309
Letters from Library relating to Extension.....	1,190
Pamphlets and books from Library sent to Women's Clubs.....	1,500

Library Finances, 1919-1920

RECEIPTS

Balance for 1918-1919	\$ 459.99
Botany	24.13
Endowment	2,928.25
Extension	252.17
F. H. Faxon refund	23.00
Fees	5,200.00
Fines	15.00
John Sprunt Hill Fund	845.00
E. V. Howell	24.75
School of Commerce	250.00
Miss M. L. Thornton	25.00
Treasurer refund	61.38
L. R. Wilson	25.00

Y. M. C. A. refund	4.16
Zoology Department	200.00
University appropriation for History Dep't.....	300.00
University appropriation for Weeks Collection	12,500.00
University appropriation for light, heat, water, and janitor.....	1,000.00
University appropriation for salaries	8,626.54
	<hr/>
	\$32,764.37
By deficit	1,300.32
	<hr/>
	\$34,064.69

DISBURSEMENTS

Binding	\$ 701.25
Books and periodicals for endowed departments	2,692.02
Books and periodicals for unendowed departments	2,559.59
Books for general Library and Summer School	1,220.05
Building and equipment	404.45
Express and freight	423.55
Extension	366.29
German exchange	500.00
Graham Memorial	1.25
Light, heat, water, janitor	1,000.00
Miscellany	26.31
Periodicals for general Library	721.80
Printing	74.25
Salaries charged to Library (\$1,063.13), Univ. (\$8,626.54)	9,689.67
Supplies	401.91
Telephone and telegraph	32.30
Weeks Collection	13,250.00
	<hr/>
	\$34,064.69

Desk Account

RECEIPTS

From 1918-1919	\$ 7.38
By fines, fees, etc.	385.11
	<hr/>
	\$ 392.49

DISBURSEMENTS

To expense itemized in Librarian's book	\$ 338.86
Deposit with Treasurer	15.00
Balance due 1919-1920	38.63
	<hr/>
	\$ 392.49

New Periodicals

The following new periodicals were added: *Addisonia*, *American City*, *City edition*, *American Forestry*, *Art in America*, *Asia*, *Bankers Magazine*, *Beiträge zur Chemischen Physiologie*, *Bulletin de la Société Mycologique de France*, *Commerce and Finance*, *Community Center*, *The Editor*, *Educational Issues*, *Engineering*, *Engineering Index*, *English Journal*, *Factory*, *Journal of Commerce*, *Journal of Educational Research*, *Journal of Indus-*

trial Hygiene and Abstract of the Literature, Journal of Laboratory and Clinical Medicine, Lawn Tennis, Manchester Guardian, Medical Science Abstracts, Mississippi Valley Historical Review, Die Natürlichen Pflanzenfamilien, Pan-American Magazine, Physikalische Berichte, Proceedings of the Engineers' Society of Western Pennsylvania, Republic, Railway Age, Revue de Philologie, Social Hygiene Bulletin, Southern Review, Spirit of Missions, Sunset Magazine, The Surveyor, Transactions of the British Mycological Society, Visual Education, World Agriculture.

List of Donors

In addition to the gifts previously mentioned, the Library has received gifts of books, pamphlets, papers, etc from the following sources: the A. B. Andrews Estate, American Museum of Natural History, American Walunt Manufacturer's Association, Association Press, members of the family of Dr. K. P. Battle, Thomas H. Battle, Brazil Minister of Foreign Affairs, University of California, Carnegie Endowment for International Peace, Carnegie Institution of Washington, City of Chicago, University of Chicago, Chile Biblioteca Nacional, Dr. W. C. Coker, Colver Lectureship of Brown University, Mrs. F. J. Cressy, family of Henry Gassoway Davis, Dialectic Society, Doubleday, Page & Co., Robert L. Doughton, Ferdinand J. Dreer, J. L. Edwards, Edward Clarence Farnsworth, General Library of the University of Georgia, Dr. Edwin Greenlaw, Ralph Moore Harper, Henry R. Harrower, Charles Holmes Herty, Herman Harrell Horne, Houghton Mifflin Co., Illinois State Historical Society, Superintendent of Government Printing of India, Robert H. Ingersoll & Bro., International Boundary Commissioners, Iowa State Historical Society, Italian Minister of Foreign Affairs, Edgar Bryan Jenkins, Kansas State Historical Society, W. R. Kenan, Frederic E. Kip, Mrs. William Kirksey, Frederick H. Koch, Korean Commission, C. E. Kramer, League for Industrial Rights, Dr. S. E. Leavitt, Mrs. Thomas MacDowell, Angus Wilton McLean, Manufacturer's Aircraft Association, Massachusetts State Health Department, Massachusetts State Library, Menorah Society, Michigan Historical Commission, Library of the University of Michigan, Frank E. Miller, National Bank of Commerce in New York, National Consumers' League, New Zealand Government, Ohio Tax Commission, Pan-American Union, University of Pennsylvania, Philanthropic Society, Clarence Poe, Princeton University Library, G. P. Putnam's Sons, Dr. C. L. Raper, M. E. Ravage, Rochester Chamber of Commerce, Rockefeller Institute, Russell Sage Foundation, Mildred Lewis Rutherford, Mrs. I. N. Sanders, Seeman Printery, Mrs. Isaac N. Seligman, A. W. Shaw Co., Dr. C. Alphonso Smith, R. W. Sparger, Dr. James Sprunt, Teachers College, Columbia University, H. R. Totten, Fraternities of U. N. C., Vassar College, T. G. Vickers, Virginia Education Commission, Virginia Governor's Office, Superintendent of Public Instruction of Virginia, Welby Carter Chapter, U. D. C., Rev. N. H. D. Wilson, University of Wisconsin, Yale University Press.

American Artisan and Hardware Record, American Economist, American Journal of Clinical Medicine, Biblical Review, Boston Public Library Bulletin, Bulletin of the Pennsylvania Department of Labor and Industry, Carters' Weekly, Chapel Hill News, Charity and Children, Commerce Monthly, Constitutional Review, Corporation Journal, Deaf Carolinian, Dearborn Independent, Fayetteville Observer, Forbes Magazine, France-Etats-Unis, Good Government, Hickory Daily Record, Illustrated Review, International Conciliation, Japan Society, Kinston Daily News, League Bulletin, Lenoir News-Topics, Massachusetts Library Club Bulletin, Millard's Review, Minnesota Library Notes and News, Missionary Voice, National History, North Carolina Library Bulletin, L'Opinion, Our Dumb Animals, Pratt Institute Free Library Quarterly Booklist, Public Service, Red Cross Briefs, Red Cross Bulletin, Rocky Mountain Herald, Rosenberg Library Bulletin, St. Louis Public Library Monthly Bulletin, Smithfield Herald, Tar Baby, Tar Heel, University Magazine, West Coast Leader.

Respectfully submitted,
LOUIS R. WILSON, Librarian.

Report of the Business Manager

To the President of the University:

I have the honor to submit the following report of the Business Manager's office for the year, covering the details of operation of the various service plants, the care and management of University property, together with balance sheet and supporting schedules showing the status of the University as of June 30, 1920

The work assigned to this office covers the general management of University business and property and includes:

- (1) Supervision of business offices;
- (2) Supervision of new construction;
- (3) Supervision of buildings and grounds;
- (4) Management of the University power plant;
- (5) Management of the University dining halls;
- (6) Management of University book exchange;
- (7) The purchase of all materials, supplies and equipment for the University.

The highest registration in the University's history this year increased the already acute problem of a much overloaded plant. We have had to crowd into each dormitory room twice the normal number of occupants; the dining halls are trying to feed twice as many as they were designed for; every possible place has been utilized for classrooms and laboratories, many of them ill-suited to the work. Satisfactory service under these conditions is practically impossible.

That it is impossible for the University to continue its work under such conditions was strongly emphasized in the report of the Visiting Committee of the Board of Trustees, which made a careful survey of the situation during the spring quarter, and recommended a building program for three thousand students, which was adopted by the Board of Trustees at the June meeting.

This program would probably require five years to complete. The cost, estimated on figures obtained from reliable construction firms, would be about five and a half million dollars.

Two fifths of this amount will be needed for adequate accommodation for the number now registered at the University. The rapidly increasing number of High School graduates indicates that the additional buildings will be needed before we can get them erected.

Building Program Based on 3,000 Students

Dormitories

For 1275 men at \$1200 per man	\$1,530,000.00
Capacity present dormitories	469
Capacity dormitory under construction	72
Present town capacity	611
Probable addition to town capacity	75
Probable provision through private capital	500
	1,727
Additional dormitory capacity needed	1,273
	3,000

Dining Halls

Swain Hall designed for	450
University Inn	75
(An old wooden building purchased fifteen years ago with a veiw to tearing down and replacing with permanent bldg.)	
Town boarding houses now feeding	574
Town boarding houses estimated additions	176
	1,275
Leaving the University to provide for	1,725
	3,000

This means quadrupling the capacity of Swain Hall dining room, kitchen, pantries, refrigerators, bakery, storage, etc., 4 units @ \$125,000 each\$ 500,000.00
 Law Building 150 ft. x 50 ft. x 50 ft. equals 375,000 cu. ft. @ 40c.....\$ 150,000.00

The Law Department since it was established in 1845 has been moved about the campus to space released by other departments. It is at present housed in the building constructed for a library in 1849. The one long room has been divided by board partitions to make three lecture rooms, library and offices.

The visiting committee of the Trustees in their report at Commencement, 1920, said: "It is a disgrace to the State of North Carolina that the Law Department is compelled to try to teach under such conditions."

Class Rooms

The University has for several teaching purposes, outside its professional and scientific buildings, only 19 class rooms. This includes the Peabody Educational Building in which the class rooms are in general use.

These 19 class rooms are divided among the following 17 departments with a combined registration of 2,766 students:—English, History, French, Economics, Rural Economics, Sociology, Music, Philosophy, Spanish, Latin, German, Business Organization, Accounting, Greek, Education, Psychology, Public Welfare.

It is easy to see that the University has reached the limit of its teaching space, and before more students can be admitted more class rooms must be provided.

To care for this situation two buildings will be needed:

(a) *Language Building* to provide class rooms and office space for all the language departments with a present combined registration of 1581 students; estimated cost, 150 ft. x 50 ft. x 50ft. equals 375,000 cu. ft. @ 40c.\$ 150,000.00

(b) History and Social Science Building, to care for the departments of History, Commerce, Rural Economics, Philosophy, etc., with a combined registration of 1185; estimated cost, 150 ft. x 60 ft. x 50 ft. equals 450,000 cu. ft. @ 40c.\$ 200,000.00

These two buildings will take care of the immediate needs, but a third building will be needed to take care of the increase of these departments of the Liberal Arts College before the University reaches the 3,000 mark. Estimated cost, 150 ft. x 50 ft. x 50 ft. equals 375,000 cu. ft. @ 40c.\$ 150,000.00

Physical Education Building and Gymnasium

It is the aim of the University to provide for the physical development, hygiene and health of every member of the student body, so that he will leave college with a healthy body as well as a trained mind. The present small gymnasium was erected in 1904, when the student body numbered only 500. A much larger building is needed to meet the necessity of supplying adequate physical training. Estimated cost, 240 ft. x 80 ft. x 40 ft. equals 768,000 cu. ft. @ 40c.\$ 300,000.00

Auditorium

(Seating capacity 3,000) 200 ft. x 100 ft. x 40 ft. equals 800,000 cu. ft. @ 37½ c.\$ 300,000.00

There is no place on the campus where the entire student body can assemble for daily chapel exercises and other meetings throughout the year. The chapel seats only 560, which means that only the Freshman class can be required to attend chapel exercises. Memorial Hall with a larger seating capacity has very defective acoustics, making it almost impossible to hear; has no heating equipment, and because of its peculiar type of construction cannot be satisfactorily heated, and cannot be enlarged.

The morning chapel exercises and assembly periods afford the only opportunity of getting directly in touch with the entire student body. Through these meetings, as in no other way, can be cultivated the high ideals and aspirations of the student body.

Geology Building

150 ft. x 50 ft. x 50 ft. equals 375,000 cu. ft @ 40c.\$ 150,000.00

The Department of Geology has been attempting to teach 250 students with laboratory and class room space adequate for less than 100.

Chemistry Building, Additions to:

2 wings each, 120 ft. x 60 ft. x 40 ft. equals 576,000 cu. ft. @ 40c. (less wall.)\$ 200,000.00

This department has reached the limit of its space and has to limit its registration. It is proposed to add two large wings to the present building.

Medical Building, Additions to:

120 ft. x 60 ft. x 40 ft. equals 288,000 cu. ft. @ 40c.\$ 100,000.00

The building at present can accommodate only 80 students, and the School of Medicine had to turn down a number of applicants this year. These men were forced to enter schools outside the State. The proposed additions would double the capacity of the School of Medicine.

Pharmacy Building

150 ft. x 50 ft. x 50 ft. equals 375,000 cu. ft. @ 40c.\$ 150,000.00

The Pharmacy School is now housed in very inadequate quarters. Its registration this year is the largest in its history and the new requirements for Pharmacy license will increase its numbers and the scope of its work.

Additions to Library Building

120 ft. x 60 ft. x 35 ft. equals 252,000 cu. ft. @ 40c.\$ 100,000.00

Students and departmental demands upon the Library already exceed its facilities. The proposed addition would double its capacity.

Infirmary

120 ft. x 50 ft. x 30 ft. equals 180,000 cu. ft. @ 40c.\$ 75,000.00

Our Infirmary is very small, having a capacity of only 20 beds. Ample hospital facilities should be provided for the greatly increased student body.

Administration and Extension Building:

150 ft. x 60 ft. x 50 ft. equals 450,000 cu. ft. @ 40c.\$ 200,000.00

Properly designed quarters should be provided to facilitate the efficient conduct of the administrative work of the University and the Extension Division. The present quarters in the Alumni Building are entirely inadequate.

Woman's Building:

Dormitory Dining Hall, Study and Reception Rooms, 125 students
450,000 cu. ft. @ 40c.\$ 200,000.00

The University has made no provision for the proper housing of the increasing number of women students applying for admission to the upper classes and professional schools. The 47 women students now attending the University are living in the village under very unsatisfactory conditions.

Dwellings for Faculty and Employees:

Fifteen to eighteen houses will be needed for additions to the
University staff\$ 100,000.00

Renovation of Old Buildings:\$ 250,000.00

The five oldest buildings on the campus—Old East, Old West, South, New East, New West—are in need of complete renovation. The estimated cost is \$50,000.00 each.

Heat, Light, Power and Water Extensions:\$ 250,000.00

Electric Service:

Duplicate Transmission lines from substation.
Underground lines—electric service—on campus.
Lighting campus walks and drives.
500 H. P. boiler.
200 K. W. Generating Unit, condenser, cooling pond, switchboard,
piping, etc.

Distributing lines in town.

Automatic telephone system connecting all offices and departments.

Water Service:

- Pumping Station.
- 8 in. raw water line, pumping station to filter; 6500 ft.
- Duplicating filter 500 M. gal. daily capacity.
- Storage reservoir 2,000,000 gal. capacity.
- Extending mains on campus.
- Extending mains in town.
- Water meters for all service connections.

Heating:

- Additional hot water heaters.
- Additional circulating pumps.
- Additional heating mains.
- Reinsulating present heating mains.
- Hot water service for bathing.

The increase in the service demanded of the central heating station, the water works, electric power and lighting station will call for an expenditure estimated at\$ 250,000.00

Fire Protection:

A test conducted this summer showed that with the water supply pump working at full capacity the pressure was not great enough to throw two hose streams on top of the University's buildings. Neither the University nor the town owns a fire pumping engine.

Most of our hydrants have been in over twenty years and need replacing. With the exception of some temporary wooden ladders placed on three buildings by the S. A. T. C., there are no fire escapes on the campus.

To provide fire escapes and fire fighting apparatus to remedy these defects the estimated cost is: engine, \$13,000; hose, \$1000; 20 hydrants, \$1000; alarm and automatic pump control, \$1000; Fire Escapes, 26 at \$400, \$10,400; Engine House, \$3600.\$ 30,000.00

Dormitory Furniture:

For 1500 men \$50.00\$ 75,000.00

Seating Furniture and Fixtures for Proposed Buildings:

Law Building:\$ 11,200.00
Language Building:\$ 11,104.00
History and Science:\$ 11,104.00

Gymnasium:

1500 lockers at \$10 \$15,000.00
 Shower baths and hot water heaters and storage 3,000.00
 Gymnasium apparatus 6,000.00
 Furniture and fixtures 1,000.00
\$ 25,000.00

Auditorium:

3000 seats at \$3 \$ 9,000.00
 Organ 10,000.00
 Piano 1,000.00
 Projection outfit 700.00
 Stage furniture and fixtures 4,300.00
\$ 25,000.00

<i>Geology Building:</i>	\$	10,648.00
<i>Chemistry Building:</i>	\$	20,000.00
<i>Medical Laboratories:</i>	\$	13,400.00
<i>Pharmacy Building:</i>	\$	13,800.00
<i>Library:</i>	\$	26,000.00
<i>Infirmary:</i>	\$	10,200.00
<i>Administration and Extension Building:</i>	\$	10,500.00
<i>Alumni Building:</i>	\$	4,240.00
<i>Departmental Apparatus and Equipment:</i>	\$	125,000.00

\$25,000 per year for 5 years.

The large part that demonstration and laboratory work play in modern teaching, calls for much scientific apparatus and class room equipment. These are the tools with which the instructor and the student work.

<i>Permanent Improvement to Grounds:</i>	\$	100,000.00
Grading	\$	15,000.00
Walks and roadways		25,000.00
Planting		10,000.00
Sewer lines		50,000.00
		\$5,585,000.00

New Construction

Phillips Hall

Phillips Hall has been completed, and is now occupied by the departments of Physics, Engineering and Mathematics. This building was planned four years ago to meet the needs of these departments for at least ten years, but the increased registration found the building out-grown when it was completed.

Laundry

The laundry building designed by the State Architect is now under construction. The contracts for the building and equipment were placed through the State Building Commission. The plant is designed to serve 2,000 people. If all the equipment can be delivered on the schedule promised, the laundry should be in operation for the Summer School.

New Dormitory

After numerous delays, work on the new dormitory is finally under way. Practically all the material is on the ground and the builder is under contract to finish the work by June 1st.

The design for this building was prepared by the State Architect in conference with the University's Consulting Architect.

The Committee on the Development of University Property, which was requested to select a name for this building, suggested that it be named the Steele Dormitory, in honor of Walter Leak Steele, of the class of 1844, an ardent friend of the University all his life, and in the reorganization of the institution after the Civil War, one of its strongest supporters.

Faculty Houses

Following the presentation in your report to the Board of Trustees on January 27th of the urgent need of providing faculty houses, the Board recommended the immediate erection of houses, the total cost not to exceed \$100,000.00.

They also approved the plan which had previously been approved by the Finance Committee, to finance the building by transferring endowment funds to this investment, the University to give such guarantee as would insure the present rate of income plus a safe sinking fund.

The Faculty Advisory Committee and the Committee on Buildings and Grounds were called into consultation in order to determine the location and select the best type of house for this development. After inquiry among the members of the Faculty applying for these houses it was decided to build one-story, six room houses. Of the locations available the one which seemed to offer the best possibilities is the strip of University land lying East of the property sold to E. K. Graham and South of the property of Mrs. J. W. Gore, Dr. R. B. Lawson, Dr. C. H. Herty and the Chapel Hill Insurance and Realty Company.

The Town of Chapel Hill agreed to open the extension of Boundary Street and the University reserved a thirty-three (33) foot street adjoining the E. K. Graham estate. These two will give the proposed site an outlet to Franklin Street in the residential section and to the campus. Shortage of material, freight embargoes, strikes, labor shortage necessitating the daily transportation of workmen to and from Durham, all combined to delay the completion of the work; but we managed to get every family in for the new term.

These houses are located at an elevation that does not permit their connection to the Chapel Hill sewer main; so the plans of the development include an Imhoff type disposal unit. Lack of funds will delay the construction of this unit until January.

Water supply for these houses is limited to a two inch feeder, which is the largest supply main in this section.

Grounds

The exchange of property with the Sigma Nu, Sigma Alpha Epsilon, and Delta Kappa Epsilon fraternities has been carried out as directed by the Board of Trustees. Through this exchange the University acquires three lots adjoining the campus near the Library and prevents again endangering the Library by the burning of fraternity buildings on these sites.

These lots were formerly a part of the campus, and their acquisition helps in the restoration of the part of the campus which was sold off in the University's early years.

Options have been secured on the Seaton Barbee, Herbert Lloyd and J. D. Webb properties, which now block the opening to the main street

of the village of a prominent part of the campus. Securing this property would materially widen the present restricted frontage of the campus.

Work of the combined committees of the plan for Campus development has been continued during the year and considerable progress has been made. The plan submitted by McKim, Mead and White for the development of the section south of Cameron Avenue has been adopted by the University Committee and the State Building Commission, and the first building in this group is now being erected. Plans are being worked out for the section between Cameron Avenue and the village.

Business Organization

Following the request in your 1919 report for the relief and expansion of the Business Manager's department, the Board of Trustees appointed a committee to confer with the President and Business Manager to that end.

Suggestions covering the reorganization of this department and the adoption of a budget system for the expenditures of University funds were presented to the committee and conferences were held in which details were worked out for a plan which, if adopted, will increase the efficiency of the department and greatly facilitate the handling of University business.

Business Statement

The attached balance sheet and schedules are made to conform, as far as possible, with the standard entries recommended by the Carnegie Foundation, in order to facilitate comparison with other institutions.

Very respectfully submitted,
CHAS. T. WOOLLEN,
Business Manager.

SUMMARIES

INCOME AND EXPENSE

Total receipts for year, all funds.....	\$ 981,518.47
Total disbursements for year, all funds	955,387.57
	<hr/>
Net cash surplus for year.....	\$ 26,130.90

ASSETS AND LIABILITIES

Current assets at end of year, Schedule D-1-2-3.....	\$ 172,355.78
Current liabilities at end of year, Schedule E-1.....	172,766.87
	<hr/>
Surplus of current liabilities.....	\$ 411.09
Investment assets at end of year.....	269,040.04
Investment liabilities at end of year.....	269,040.04

EDUCATIONAL PLANT

Value of land, buildings and equipment.....	\$1,535,869.92
Debt: Bonds against plant	119,760.14
	<hr/>
Net investment in educational plant.....	\$1,426,109.78

BALANCE SHEET JUNE 30, 1920

1. CURRENT ASSETS		1. CURRENT LIABILITIES	
Cash in banks and on hand	\$ 26,130.90	Notes payable	\$ 75,000.00
Notes and Accounts receivable	119,270.26	Accounts payable	34,649.32
Inventories	26,954.62	Other current liabilities	63,117.55
Surplus of current liabilities	\$172,355.78		
	411.009		
Total	\$ 172,766.87	Total	\$ 172,766.87
2. ENDOWMENT INVESTMENT		2. ENDOWMENT FUNDS	
Securities	\$ 254,200.00	Funds for general and designated purposes	\$ 269,040.04
Real estate	13,000.00		
Uninvested balance in bank	1,840.04		
Total	\$ 269,040.04		
3. EDUCATIONAL PLANT ASSETS		3. EDUCATIONAL PLANT LIABILITIES	
Value of land	\$ 139,060.13	Bonds on buildings and machinery	\$ 80,000.00
Value of buildings	987,990.47	Notes and accounts payable	39,760.14
Value of equipment	408,819.32	Total liabilities Educational Plant	\$ 119,760.14
Total	\$1,535,869.92	Net balance unencumbered	1,416,109.78
			\$1,535,869.92

PRESIDENT'S REPORT

RECEIPTS (B-1)

Maintenance fund	\$411,849.14
Improvement fund	304,029.24
Deposit funds	265,640.09
Total income	\$981,518.47

DISBURSEMENTS (C-1)

Maintenance fund	\$386,758.84
Improvement fund	271,814.04
Deposit funds	296,814.69
Total expense	\$955,387.57
Cash balance	\$ 26,130.90

CASH BALANCE (D-1)

Bank of Chapel Hill	\$ 13,435.13
Citizens National Bank, Raleigh.....	15.01
Peoples Bank, Chapel Hill	12,372.28
First National Bank, Durham	208.48
Cash in safe (petty cash fund).....	100.00
	\$ 26,130.90

NOTES AND ACCOUNTS RECEIVABLE (D-2)

Notes receivable	\$ 5,003.70
Kenan Professorship Fund	47,457.32
Power Plant Customers	7,096.48
Faculty Housing Fund	31,725.10
Sundry Funds for Advances	27,987.66
	\$119,270.26

INVENTORIES (D-3)

Dining Hall	\$ 10,745.36
Carpenter Shop supplies	860.32
Steam and Plumbing supplies	3,472.80
Power Plant, coal and supplies	5,227.64
Laboratory supplies	4,000.00
Sundry supplies	2,648.50
	\$ 26,954.62

CURRENT LIABILITIES (E-1)

Notes Payable	\$ 75,000.00
Accounts Payable	34,649.32
Student Loan Fund Balances	5,155.18
Special Funds not available for 1919-1920.....	57,962.37
	\$172,766.87

Report of the Treasurer

To the President of the University:

I have the honor to submit the following report of the Treasurer's office for the year 1919-1920. The report includes an account of all receipts and disbursements, and exhibit of all loans and of all University securities now held by me.

J. A. WARREN,
Treasurer.

RECEIPTS FOR MAINTENANCE FUND

FROM STUDENTS—

Tuition	\$	51,825.34
Registration Fees		30,791.33
Room Rent		13,949.00
Diploma Fees		767.00
Laboratory Fees		12,244.99
		\$109,577.66

FROM ENDOWMENTS—

Alexander Memorial Fund	\$	90.00
Chair of History Fund		1,371.03
Ledoux Fellowship		180.00
Library Fund, Balance August 15th, 1919.....	\$	459.99
Library Fund, Receipts August 15th, 1919 to July 1st, 1920		2,838.25
		3,298.24
McNair Lecture Fund, Balance August 15th, 1919	\$	1,579.22
McNair Lecture Fund, Receipts to July 1st 1920		852.62
		\$ 2,431.84
Mason Fund		60.00
B. F. Moore Fund		305.12
Murchison Fund		135.00
D. F. Ray Scholarship Fund		58.24
F. J. Smith Fund		840.00
Mary and Anne Smith Fund		2,220.00
Mary S. Speight Fund		600.00
Weil Lecture Fund, Bal. Aug. 15th, 1919.....	\$	903.70
Weil Lecture Fund, receipts to July 1st, 1920		923.41
		1,827.11
Weil Scholarship Fund		82.58
		\$ 13,499.16

GIFTS FOR CURRENT EXPENSES—

Carr Fellowship balance Aug. 15th, 1919.....	\$	400.00
Carr Fellowship, gift for the year		300.00
		700.00
Dupont Scholarship		750.00
General Education Board		2,425.00
Library		942.75
Mangum Medal		10.00
Sprunt Publications		4.22
		\$ 4,831.97

FROM OTHER SOURCES—

Commencement	\$ 459.80
Dramatics	1,090.45
Infirmary	17.15
Interest on Daily Bank Balances	524.10
Library Fines and Transfers	806.84
Military	74.39
Mitchell Journal	50.00
Power Plant	25,308.65
Press	45.00
Rents Other than Dormitory	1,431.19
Reserve Officers Training Corps	76.15
Sale of Supplies	407.40
Special Appropriation for Books	300.00
Special Appropriation for Weeks Library	12,500.00
State and County Council	605.10
Subscription to Studies in Philology	378.55
Summer School	30,160.79
University Extension	2,717.75
University Lectures	231.24
	<hr/>
	\$ 77,187.55

STATE TREASURER ON MAINTENANCE APPROPRIATION..... 199,166.60

\$404,262.94

CREDIT BALANCE AUGUST 15TH, 1919 7,586.20

\$411,849.14

LESS CREDIT BALANCES NOT AVAILABLE FOR 1919-1920—

Carr Fellowship	\$ 400.00
McNair Lecture Fund	2,029.84
Sprunt Publications	4.22
Summer School	30,160.79
Weil Lecture Fund	1,250.47
	<hr/>
	\$ 33,845.32

Net Receipts for Maintenance Fund from August
15th, 1919 to July 1st, 1920 \$378,003.82

DISBURSEMENTS FOR MAINTENANCE FUND

Advertising	\$ 912.86
Arboretum	939.56
Auditing	1,403.47
Campus	8,989.99
Carr Fellowship	300.00
Co-Ed Club	18.78
Commencement	1,083.74
Dramatics	1,070.37
Dupont Scholarship	749.88
Express .....	.98
Guardian Account (E. K. Graham, Jr.).....	1,375.00
Gymnasium	288.17
High School Debates	287.90
High School Journal	379.11
Inauguration	1,128.08
Infirmary	5,793.13
Insurance	162.09
Interest on Carr Dormitory Bonds	1,080.00

Interest on Power Plant Bonds	2,760.00
Interest on Smith Dormitory Bonds	960.00
Interest on Money borrowed during the year.....	1,075.00
Laboratory Supplies	22,057.17
Ledoux Fellowship	300.02
Library	24,438.15
McNair Lectures	402.00
Mangum Medal	10.00
Mason Farm	428.74
Membership Fee, American Colleges in Europe.....	250.00
Membership Fee, American Colleges	75.00
Membership Fee, Electrical Engineering Association.....	10.00
Membership Fee, State Universities	25.00
Membership Fee, Separate State Universities.....	25.00
Mmembershp Fee, American Colleges and Secondary Schools...	15.00
Membership Fee, American Colleges of Pharmacy.....	25.00
Membership Fee, Association of College Registrars.....	6.00
Military	167.87
Mitchell Journal	140.37
Music	999.55
News Service	422.20
Office Supplies	187.47
Physical Education	917.18
Postage	1,365.84
Power Plant	44,211.87
Practice School	900.00
Press	193.18
Printing	5,014.06
Rents	483.90
Reserve Officers Training Corps.....	387.28
Rural Economics	406.34
Salaries	215,001.77
School of Commerce	414.77
Special Appropriation for Weeks Library.....	12,500.00
Special Appropriation for Books.....	300.00
State and County Council	711.38
Studies in Philology	1,151.74
Sundries	1,018.01
Supplies	3,151.69
Telephone Rents	167.50
Traveling Expenses	4,003.88
Treasurer's Bond	125.00
Truck Repairs	9.63
University Extension	11,963.72
University Lectures	613.70
University Sermons	55.00
Weil Lectures	576.64
Western Union Telegraph Co.	372.11
	<hr/>
	\$386,758.84
Less Debit Balance, Library	1,300.32
	<hr/>
Total Maintenance Disbursements for 1919-1920.....	\$385,458.52
Total Maintenance Receipts for 1919-1920.....	378,003.82
	<hr/>
Deficit June 30th, 1920	\$ 7,454.70

PRESIDENT'S REPORT

RECEIPTS FOR DEPOSIT ACCOUNTS

Alumni Loyalty Fund Bal. Aug. 15th, 1919.....	\$ 273.96	
Alumni Loyalty Fund receipts for year.....	2,843.86	
	<hr/>	\$ 3,117.82
Athletics, balance Aug. 15th, 1919.....	35.00	
Athletics, receipts for year	22,759.49	
	<hr/>	22,794.49
Book Exchange, Balance Aug. 15th, 1919.....	3,974.54	
Book Exchange, Receipts for year.....	46,977.94	
	<hr/>	50,952.48
Mildred Williams Buchan, Scholarship Endowment.....		1,000.00
Class of 1907		1,000.00
Damage Fees, Balance Aug. 15th, 1919.....	291.72	
Damage Fees, Receipts for year.....	2,622.00	
	<hr/>	2,913.72
Deems Fund, Balance Aug. 15th, 1919.....	4,096.44	
Deems Fund, Receipts for year.....	6,804.28	
	<hr/>	10,900.72
Dining Hall		86,436.49
Edmonds Memorial Fund, Bal. Aug. 15th, 1919....	45.00	
Edmonds Memorial Fund, Receipts for year.....	30.00	
	<hr/>	75.00
Graham Memorial Fund		41,485.25
Graham Memorial Volume		400.36
Highway Commission		845.00
Hogue Fund, Balance Aug. 15th, 1919.....	764.53	
Hogue Fund, Receipts for year.....	129.77	
	<hr/>	894.30
Hewitt Fund, Balance Aug. 15th, 1919.	571.67	
Hewitt Fund, Receipts for year.....	1,068.23	
	<hr/>	1,637.70
Martin Fund, Balance Aug. 15th, 1919.....	455.97	
Martin Fund, Receipts for year.....	967.51	
	<hr/>	1,423.48
Notes Payable		25,000.00
Old Tuition Notes, Balance Aug. 15th, 1919.....	8,257.47	
Old Tuition Notes collected during the year.....	1,480.88	
	<hr/>	9,738.35
Reinvestment Fund for Chemistry		897.12
Room Deposits		760.00
Sprunt Fund		6.00
Students Deposit Account		50.00
Surplus Food Supplies		3,311.81
	<hr/>	\$265,640.09

DISBURSEMENTS FOR DEPOSIT ACCOUNTS

Alumni Loyalty Fund	2,352.78
Athletics	22,706.96
Book Exchange	50,522.89
Mildred Williams Buchan Scholarship.....	1,019.00
Damage Fee	1,002.95
Deems Fund	7,506.45
Dining Hall	114,684.93
Graham Memorial	33,048.38
Graham Memorial Volume	836.29
Hewitt Fund	1,017.91

Highway Commission	955.33
Hogue Fund	100.00
Inn, Dining Hall	7,888.93
Kenan Professor Salaries	47,457.32
Memorial Hall	457.56
Martin Fund	1,076.66
Sprunt Publications	272.51
Surplus Food Supply	3,872.84
Students Deposit Account	35.00
	<u>\$296,814.69</u>

RECEIPTS FOR IMPROVEMENT FUND

Escheats, Balance August 15th, 1919.....	\$ 4,199.66	
Escheats, Receipts for year.....	559.65	
		<u>\$ 4,759.31</u>
Notes Payable		50,000.00
Fire Protection		337.80
State Appropriation, Balance August 1st, 1919.....	\$ 93,932.13	
State Appropriation for year	155,000.00	
		<u>\$248,932.13</u>
Total Credit Balances for Improvement Fund.....		\$304,029.24

DISBURSEMENTS FOR IMPROVEMENT FUND

Building Extension	\$ 2,405.14
Campus Extension	1,781.38
Dormitory (A)	15.20
Electric Extension	1,365.07
Equipment, Account General	1,721.60
Equipment, Botany Department	1,108.57
Equipment, Chemistry Department	2,949.80
Equipment, Civil Engineering	465.00
Equipment, Dormitory	3,671.96
Equipment, Electrical Engineering	5,404.48
Equipment, Geology	278.46
Equipment, Gymnasium	65.59
Equipment, Hydraulics	3,306.09
Equipment, Inn	1,133.33
Equipment, Infirmary	26.89
Equipment, Law Building	419.00
Equipment, Library	7,775.95
Equipment, Medical Building	1,969.39
Equipment, Music	700.00
Equipment, Pharmacy Building	165.47
Equipment, Physics Department	1,633.34
Equipment, Physics and Engineering Building	2,647.07
Equipment for Physical Education	2,978.71
Equipment, for Swain Hall	2,565.02
Equipment, for School of Commerce	345.45
Equipment, Zoology Department	131.32
Faculty Housing	31,725.10
Fire Protection	303.00
Furniture	7,547.32
Heating Extension	3,079.14
Heating Mains	3,563.85
Land Purchase	11,778.75

PRESIDENT'S REPORT

Laundry Building	2,921.89
New Power Plant	35.00
Office Equipment	558.81
Pharmacology, Special	171.29
Physics and Engineering Building	138,589.78
Power Extension	2,857.82
President's House	1,915.37
Repairs	12,436.60
Research Laboratory	142.20
Sanitary Equipment	120.03
Scientific Equipment	240.57
Special Appropriation for Electrical Engineering.....	1,796.51
Tools	225.27
Water Extension	133.41
Wiring Chemistry Building	4,643.05
Total Disbursements for Improvement Fund.....	\$271,814.04
Credit Balance June 30th, 1920.....	\$ 32,215.20
Credit Balance not available for 1919-1920.....\$ 33,845.32	
Credit Balance June 30th, Improvement Fund.....	32,215.20
	<u>\$ 66,060.52</u>
Debit Balances June 30th	39,929.62
	<u>\$ 26,130.90</u>

BANK BALANCES

Bank of Chapel Hill	\$ 13,435.13
Citizens National Bank, Raleigh, N. C.....	15.01
First National Bank of Durham, N. C.....	208.48
Peoples Bank of Chapel Hill, N. C.....	12,372.28
Petty Cash	100.00
	<u>\$ 26,130.90</u>

ENDOWMENT SECURITIES: FISCAL YEAR ENDING JUNE 30, 1920

Description of Securities	Balance at Beginning of Year	Purchases	Sales	Balance at End of Year	Interest
ALEXANDER MEMORIAL FUND:					
1 Southern Life & Trust Co. bond.....	1,000.00	-----	-----	1,000.00	60.00
1 Southern Life & Trust Co. bond.....	500.00	-----	500.00	-----	15.00
1 Winston-Salem Leaf Tobacco Co.....	-----	500.00	-----	500.00	15.00
ALUMNI LOYALTY FUND:					
2 Liberty Storage Co. bonds.....	2,000.00	-----	-----	2,000.00	120.00
1 Mayo Mills Co. bond.....	1,000.00	-----	-----	1,000.00	60.00
4 Hanes Rubber Co. bonds.....	2,000.00	-----	2,000.00	-----	60.00
1 Hanes Rubber Co. bond.....	1,000.00	-----	1,000.00	-----	30.00
2 Hanes Hosiery Mills bonds.....	1,000.00	-----	-----	1,000.00	60.00
2 Arista Mills bonds.....	1,000.00	-----	-----	1,000.00	60.00
1 Kenilworth Home Co. bond.....	-----	500.00	-----	500.00	15.00
1 U. S. Liberty Bond.....	50.00	-----	50.00	-----	1.00
4 Winston-Salem Leaf Tobacco Co. bonds.....	-----	4,000.00	-----	4,000.00	120.00
1 Liberty Storage Co. bond.....	-----	500.00	-----	500.00	15.00
2 Victory Bonds.....	-----	200.00	-----	200.00	4.75
CHAIR OF HISTORY FUND:					
1 University of North Carolina bond.....	18,000.00	-----	-----	18,000.00	1,080.00
4 Hanes Rubber Co. bonds.....	2,000.00	-----	2,000.00	-----	60.00
3 Hanes Rubber Co. bonds.....	3,000.00	-----	3,000.00	-----	90.00
5 Winston-Salem Leaf Tobacco Co. bonds.....	-----	5,000.00	-----	5,000.00	141.03
DEEMS FUND:					
1 Deed of Trust.....	4,000.00	-----	-----	4,000.00	240.00
6 Liberty Storage Co. bonds.....	6,000.00	-----	-----	6,000.00	360.00
5 Winston-Salem Leaf Tobacco Co. bonds.....	-----	5,000.00	-----	5,000.00	150.00

ENDOWMENT SECURITIES: FISCAL YEAR ENDING JUNE 30, 1920—Continued

Description of Securities	Balance at Beginning of Year	Purchases	Sales	Balance at End of Year	Interest
EDMONDS MEMORIAL FUND:					
1 Arista Mills bond	500.00	---	---	500.00	30.00
HEWITT FUND:					
1 Arista Mills bond	500.00	---	---	500.00	30.00
4 Forsyth Country Club bonds	400.00	---	---	400.00	24.00
1 Hanes Hosiery Mills bond	---	500.00	---	500.00	15.00
2 Hanes Rubber Co. bonds	2,000.00	---	2,000.00	---	(0.00)
6 Hanes Rubber Co. bonds	3,000.00	---	3,000.00	---	50.00
5 Kenilworth Home Co. bonds	2,500.00	---	---	2,500.00	150.00
3 Liberty Storage Co. bonds	1,500.00	---	---	1,500.00	90.00
3 Liberty Storage Co. bonds	300.00	---	---	300.00	18.00
1 Deed of Trust	7,500.00	---	---	7,500.00	450.00
1 Liberty Storage Co. bond	---	500.00	---	500.00	15.00
2 Winston-Salem Leaf Tobacco Co. bonds	---	1,500.00	---	1,500.00	45.00
4 Mayo Mills Co. bonds	---	3,500.00	---	3,500.00	105.00
HOGUE FUND:					
1 House and Lot	4,000.00	---	---	4,000.00	100.00
LIBRARY FUND:					
50 Shares American Tobacco Co. stock	5,000.00	---	---	5,000.00	225.00
80 Shares Erwin Cotton Mills stock	8,000.00	---	---	8,000.00	240.00
50 Shares Gibson Manufacturing Co. stock	5,000.00	---	---	5,000.00	350.00
50 Shares Holt-Granite Manufacturing Co. stock	5,000.00	---	---	5,000.00	300.00
20 Shares Neuse Mfg. Co. stock (Pfd.)	2,000.00	---	---	2,000.00	120.00
20 Shares Neuse Mfg. Co. stock (Com.)	2,000.00	---	---	2,000.00	350.00
80 Shares Neuse Mfg. Co. stock (Com.)	---	8,000.00	---	8,000.00	Stock Div.

25 Shares Compania Met. Mex. stock.....	2,500.00	-----	2,500.00	-----	2,500.00
6 Hanes Hosiery Mills bonds.....	6,000.00	-----	6,000.00	-----	360.00
7 Hanes Hosiery Mills bonds.....	700.00	-----	700.00	-----	42.00
4 Liberty Storage Co. bonds.....	4,000.00	-----	4,000.00	-----	240.00
4 Liberty Storage Co. bonds.....	400.00	-----	400.00	-----	24.00
1 Harris Rubber Co. bond.....	1,000.00	-----	1,000.00	-----	30.00
1 Osage Manufacturing Co. bond.....	1,000.00	-----	1,000.00	-----	30.00
2 Mayo Mills bonds.....	1,000.00	-----	1,000.00	-----	60.00
7 Shares Raleigh Cotton Mills stock.....	700.00	-----	700.00	-----	70.00
1 Southern Life & Trust Co. bond.....	1,000.00	-----	1,000.00	-----	60.00
1 Southern Life & Trust Co. bond.....	500.00	-----	500.00	-----	15.00
2 Southern Life & Trust Co. bonds.....	800.00	-----	800.00	-----	25.25
2 Southern Life & Trust Co. bonds.....	800.00	-----	800.00	-----	48.00
6 Wilkes County bonds.....	6,000.00	-----	6,000.00	-----	150.00
6 Winston-Salem Leaf Tobacco Co. bonds.....	6,000.00	-----	6,000.00	-----	-----
3 Winston-Salem Leaf Tobacco Co. bonds.....	300.00	-----	300.00	-----	9.00
2 Winston-Salem Leaf Tobacco Co. bonds.....	1,000.00	-----	1,000.00	-----	30.00
1 Winston-Salem Leaf Tobacco Co. bond.....	1,000.00	-----	1,000.00	-----	30.00
1 Mayo Mills bond.....	1,000.00	-----	1,000.00	-----	30.00
LEDoux FELLOWSHIP FUND:					
2 Southern Life & Trust Co. bonds.....	2,000.00	-----	2,000.00	-----	120.00
1 Southern Life & Trust Co. bond.....	2,000.00	-----	2,000.00	-----	-----
2 Hanes Rubber Co. bonds.....	1,000.00	-----	1,000.00	-----	30.00
2 Hanes Hosiery Mills bonds.....	1,000.00	-----	1,000.00	-----	30.00
MARTIN FUND:					
3 Arista Mills bonds.....	1,500.00	-----	1,500.00	-----	90.50
6 Hanes Rubber Co. bonds.....	2,500.00	-----	2,500.00	-----	75.00
2 Hanes Hosiery Mills bonds.....	1,000.00	-----	1,000.00	-----	60.00
2 Madison County bonds.....	2,000.00	-----	2,000.00	-----	120.00
3 Peace Institute bonds.....	300.00	-----	300.00	-----	18.00
2 Shares Raleigh Cotton Mill stock.....	200.00	-----	200.00	-----	20.00
1 St. Mary's School bond.....	500.00	-----	500.00	-----	30.00
1 Southern Life & Trust Co. bond.....	1,000.00	-----	1,000.00	-----	60.00

ENDOWMENT SECURITIES: FISCAL YEAR ENDING JUNE 30, 1920—Continued

Description of Securities	Balance at Beginning of Year	Purchases	Sales	Balance at End of Year	Interest
3 Southern Life & Trust Co. bonds.....	1,500.00	-----	500.00	1,000.00	75.00
6 Liberty Storage Co. bonds.....	-----	3,000.00	-----	3,000.00	90.00
1 Liberty Storage Co. bond.....	-----	500.00	-----	500.00	15.00
1 Winston-Salem Leaf Tobacco Co. bond.....	-----	500.00	-----	500.00	15.90
	10,500.00	-----	-----	10,500.00	-----
MCNAIR LECTURE FUND:					
20 Shares Neuse Mfg. Co. stock (Pfd.).....	2,000.00	-----	-----	2,000.00	120.00
20 Shares Neuse Mfg. Co. stock (Com.).....	2,000.00	-----	-----	2,000.00	350.00
80 Shares Neuse Mfg. Co. stock (Com.).....	-----	8,000.00	-----	8,000.00	Stock Div.
2 Peace Institute bonds.....	200.00	-----	-----	200.00	12.69
3 Southern Life & Trust Co. bonds.....	3,000.00	-----	-----	3,000.00	180.00
2 Hanes Rubber Co. bonds.....	2,000.00	-----	2,000.00	-----	70.62
2 Hanes Rubber Co. bonds.....	1,000.00	-----	1,000.00	-----	30.00
6 Winston-Salem Leaf Tobacco Co. bonds.....	-----	3,000.00	-----	3,000.00	90.00
B. F. MOORE FUND:					
1 Arista Mills bond.....	500.00	-----	-----	500.00	30.00
1 Hanes Rubber Co. bond.....	500.00	-----	500.00	-----	15.00
1 Peace Institute bond.....	1,000.00	-----	-----	1,000.00	60.00
2 Peace Institute bonds.....	200.00	-----	-----	200.00	12.00
2 Mayo Mills bonds.....	1,000.00	-----	-----	1,000.00	60.60
6 Southern Life & Trust Co. bonds.....	3,000.00	-----	2,500.00	500.00	38.19
1 Liberty Storage Co. bond.....	-----	500.00	-----	500.00	15.00
2 Winston-Salem Leaf Tobacco Co. bonds.....	-----	2,000.00	-----	2,000.00	60.00
1 Winston-Salem Leaf Tobacco Co. bonds.....	-----	500.00	-----	500.00	15.00
KENNETH M. MURCHISON FUND:					
15 Shares Erwin Cotton Mill stock (Pfd.).....	1,500.00	-----	-----	1,500.00	90.00
3 Hanes Hosiery Mills bonds.....	1,500.00	-----	-----	1,500.00	45.00

MASON FUND:									
1	University of North Carolina bond	1,000.00	---	---	1,000.00	---	---	60.00	---
1	Farm, 800 acres	9,000.00	---	---	9,000.00	---	---	---	---
DONALD FAIRFAX RAY SCHOLARSHIP FUND:									
1	Liberty Storage Co. bond	1,000.00	---	---	1,000.00	---	---	58.24	---
MARY ANN SMITH FUND:									
2	University of North Carolina bonds	37,000.00	---	---	37,000.00	---	---	2,220.00	---
FRANCES JONES SMITH FUND:									
1	University of North Carolina bond	14,000.00	---	---	14,000.00	---	---	840.00	---
MARY S. SPEIGHT FUND:									
1	University of North Carolina bond	10,000.00	---	---	10,000.00	---	---	600.00	---
WEIL MEMORIAL SCHOLARSHIP FUND:									
1	Southern Life & Trust Co. bond	1,000.00	---	1,000.00	---	---	---	60.00	---
1	Winston-Salem Leaf Tobacco Co. bond	1,000.00	---	1,000.00	---	---	---	22.58	---
WEIL LECTURE FUND:									
1	Deed of Trust	3,000.00	---	---	3,000.00	---	---	180.00	---
4	Hanes Hosiery Mills bond	4,000.00	---	---	4,000.00	---	---	240.00	---
4	Hanes Rubber Co. bonds	4,000.00	---	4,000.00	---	---	---	120.00	---
1	Hanes Rubber Co. bond	500.00	---	500.00	---	---	---	15.00	---
1	Southern Life & Trust Co. bond	1,000.00	---	---	1,000.00	---	---	60.00	---
1	Southern Life & Trust Co. bond	2,000.00	---	2,000.00	---	---	---	60.30	---
1	Winston-Salem Leaf Tobacco Co. bond	500.00	---	---	500.00	---	---	30.00	---
2	Liberty Storage Co. bonds	---	---	---	---	---	---	71.71	---
4	Mayo Mills bonds	---	---	---	---	---	---	71.70	---
1	Mayo Mills bond	---	---	---	---	---	---	30.00	---
2	Winston-Salem Leaf Tobacco Co. bonds	---	---	---	---	---	---	30.00	---
1	Hanes Hosiery Mill bond	---	---	---	---	---	---	15.00	---
MILDRED WILLIAMS BUCHAN SCHOLARSHIP FUND:									
1	North Carolina Granite Corporation bond	---	---	---	---	---	---	---	---
1	Winston-Salem Leaf Tobacco Co. bond	---	---	---	---	---	---	---	---
Totals		\$241,050.00	\$ 67,000.00	\$ 40,850.00	\$267,200.00	\$ 13,757.00			

Plus—Interest payable on July 1st, for the reason that the close of our fiscal year was changed from August 15th to June 30th.

Report of the Director of the Gymnasium

To the President of the University:

I have the honor to submit the following report:

The duties of the director began when the football squad reported for practice early in September, three weeks before the college term opened. The sixty-three men who answered the call were given physical examinations and permitted to report for the work. A training table was started at the Inn and hard practice indulged in twice a day. The squad seemed unlucky in regard to the number of injuries during the whole season, for there occurred seven fractured collar bones, four fractured ankles, eleven fractured noses, nine shoulder injuries, three fractured ribs, three fractured fingers, and a large number of minor injuries.

Freshman Examinations

The Freshmen examination started on the first registration day and continued for seven weeks. Four hundred and fourteen received a complete and thorough physical examination. A large number of physical defects were found among this number, many of which were the result of our recent war. Totally blind 3; blind in one eye 11; with amputated limb 6; showing some degree of ear defect 8 per cent; showing some defect of the eye 14 per cent; with hernia 21; with varicocele 14; with spinal curvature 3. No tubercular or specific diseases were noted.

Physical statistics for the Freshmen are as follows:

Age 19 years plus; weight 132 lbs; height 5 ft. 7¼; neck 14 inches; chest 34; expansion (lungs) 2½; waist 29; hip 34; thigh 20; leg 13.

In addition to the above examinations, 88 Freshmen were re-examined, excused from the gymnasium work and given permission to play football.

Since my first report, seventy nine Freshmen have also been examined for the Freshmen basket ball squad; these men will be excused from all other physical work so long as they are represented on the Freshmen squad.

Forty-six Varsity basketball candidates have recently been examined and are now working nightly under Major Boye.

A little less than one hundred upper classmen were examined upon request. Twenty-three women students have also been examined, seventeen being yet to report.

Gymnasium

The number of lockers in the gymnasium will not house one fourth of the students. The same may be said of the shower baths. The department is struggling along under heavy disadvantages in regard to the two last named items. It is hoped that this almost unbearable condition can be corrected in the very near future.

Respectfully submitted,
R. B. LAWSON,
Director at Gymnasium.

Report of the University Physician

To the President of the University:

The following report for the Infirmary is submitted:

Considering the crowded conditions under which students have lived the general health of the student body has been excellent. No serious epidemics have occurred. During February and March, when influenza was epidemic throughout the State, there was a total of 49 cases of influenza, 11 of which were serious. There was one case of influenza-pneumonia.

A total of 831 students reported sick at the Infirmary, and were seen a large number of times. Of this number 282 were admitted as bed cases, spending 833 days in the Infirmary.

There were 58 serious cases as follows: Pneumonia 4, Fractures 8, other injuries 12, Heart lesions 3, Paralysis 1, Acute rheumatism 1, Sepsis 2, Diabetes 1, Nephritis 1, Scarlet Fever 1, Hernia (acute) 2, Tuberculosis (contracted elsewhere) 2, Appendicitis 3, Ptomaine poisoning (developed elsewhere) 1, Ulcer of Stomach 1, Burns 2, Epilepsy 1, Middle Ear Infection 2, Influenza 10.

11 students were sent home because they were physically unable to carry on their work, 5 of whom later returned.

There were no fatalities.

Respectfully submitted,
ERIC A. ABERNETHY,
University Physician.

Report of the Advisor to Women

To the President of the University:

The statistics for registration of women as given in the report of the Registrar show the same number of women students at the beginning of the present year as the total enrollment for the year 1919-1920.

It is interesting to know something about the women of the institution—their seriousness of purpose, their fine spirit and excellent scholarship. They are, for the most part, girls who have attended other colleges, and are here for some special work in a professional way, or for more advanced courses than they found in the colleges for girls. About fifty per cent have taught and are here on their resources; several are doing remunerative work of some kind in order to meet expenses.

The student spirit is of the highest type. The North Carolina Woman's Association has for its mission the promotion of high standards, both academic and social, and seeks to arouse the individual members to a feeling of responsibility in making the Association a real factor for good in University life. It is hoped, too, that the Woman's Association may become a means of co-operation and a link of service between the University and the Alumnae as they go out to their respective fields of usefulness.

In scholarship the women students have not been lacking, since the records show that a general average of 2.89 was made. Eight of the forty-seven students were on the roll of honor. Two were recipients of prizes in Law and Pharmacy, and two were elected to membership in the Phi Beta Kappa Society.

This year, however, has not been without its problems. The increased number of women students, and the preference for boys shown by the boarding houses, have made the problem of suitable housing impossible. The living arrangements of the women are, to say the least, very undesirable. And for those who are eager to come, there is absolutely no room. Such difficulties as location and physical condition of houses are no longer considered. The students are scattered from one end of the town to the other, and lose much valuable time going back and forth to boarding places a great distance away. They have few comforts, and in their social life none of the finer things which come from contact with one another, and which are necessary for a well-rounded college life. University supervision or direction for the students under these conditions is very difficult, if not impossible.

No provision has yet been made for the physical welfare of the women. A partial examination of each student has been made, but no form of physical exercise has been provided. The women students are eager for

out-door life, and are asking for tennis courts, basket ball fields, etc. They should have them.

To whom shall we go with these problems? The University, in its policy of expansion, is adding courses which are attracting women to the institution; the new School of Public Welfare, for example, has registered eight women students, and fourteen more are seeking admission for the next quarter. The University has consented to admit women for this supplementary and professional work, but has it made a place for them? It seems to me, that the time has come when the State must take up this problem and follow one of two courses,—that of elimination or that of provision. Elimination means that many of our North Carolina girls will never attain that scholarship, usefulness and success to which they aspire, while others will go to Northern and Western universities that have adapted themselves to the education of women, and will probably be lost to their State forever. Can the State afford this?

We are earnestly looking forward to the erection, at an early date, of a woman's building—a real home which will provide amply for the physical and social welfare of the young women to whom the University opens its doors and offers a richer and larger field of service.

Respectfully submitted,

MRS. M. H. STACY,

Advisor to Women.

Publications and Addresses of the Faculty

JAMES M. BELL:

A Rapid Volumetric Method for the Determination of Arsenic in Arsenates. Journal of Elisha Mitchell Scientific Society. Vol. XXXV.

Studies on Nitrotoluenes (Research work carried out at the request of the National Research Council), viz.:

V. *Binary Systems of Orthonitrotoluene and Another Nitrotoluene.* (With E. B. Cordon, F. H. Spry; and Woodford White.) Journal of Industrial and Engineering Chemistry.

VI. *The Three-Component System: o-Nitrotoluene, p-Nitrotoluene, 1, 2, 4-Dinitrotoluene.* (With E. B. Cordon.) Journal of Industrial and Engineering Chemistry.

VII. *The Three-Component System: o-Nitrotoluene, p-Nitrotoluene, 1, 2, 4, 6-Trinitrotoluene.* (With F. H. Spry.) Journal of Industrial and Engineering Chemistry.

VIII. *The Three-Component System: o-Nitrotoluene, 1, 2, 4-Dinitrotoluene, 1, 2, 4, 6-Trinitrotoluene.* (With Woodford White.) Journal of Industrial and Engineering Chemistry.

J. M. BOOKER:

Industrial Partnership. The Yale Review, January.

Syntax and Citizenship. School and Society, October 30.

John Millington Synge. Greensboro, March.

E. C. BRANSON:

The Outlook in Race Relationships. Salisbury Travellers Club, January 9.

The Federation of National Social Work Agencies. New York, American Country Life Association, January 12.

Law and Order Leagues. Orange Grove and Hillsboro, January 18.

Rural Social Engineering. Gulf States Division of the American Red Cross, New Orleans, February 2.

Three-Storey Men. Tulane University, New Orleans, February 9.

A Country Girl with a Vision, A Country School with a Vision, A Country Church with a Vision. Oxford Seminary, March 10.

The Economic Foundation for Social Enterprise in North Carolina. State Social Work Conference, Goldsboro, March 24.

The Community Center as a School for Citizenship. Henderson Woman's Club, March 26.

The Federation of Rural School Agencies. American Country Life Association, March 30-31. New York.

Rural Social Organization. National Social Work Conference, New Orleans, April 14-21.

The Country Teacherage. State Educational Conference, Greensboro, May 4-6.

Robert E. Lee—Gentleman. Memorial Day Address, Chapel Hill, May 8; Springfield, Mass., October 19.

Farming as a Vocation. Chapel Hill, May 17.

The Physical Disabilities of the University. Burlington Alumni Banquet, July 9.

Woman's New Job: Civic Housekeeping. Chapel Hill, July 12.

Country Home Conveniences. Efland, August 14.

Small Town Problems in the South. Springfield, Mass. October 15-19.

Social Structure of the Southern Countryside. Agricultural College, Amherst, Mass.

The Rural Life Movement. Presbyterian Church, Agawam, Mass., October 17.

Fair Play and a Square Deal. Inter-Racial Conference, Atlanta, November 17-18.

Small Town Problems in Texas, and the Social Problems of Countryside Texas. San Antonio. November 19-21.

The Place of the Country Weekly in Social Life. District Committee Meeting, State Press Association, Raleigh, December 3.

Community Organization in Rural Areas. American Country Life Association, New York, December 7.

JAMES B. BULLITT:

Influenza and Pneumonia. Paper based on twenty-five autopsies. North Carolina Medical Society.

FRANCIS F. BRADSHAW:

The Needs of the University. Rutherford County Alumni Association, Rutherfordton, October 12.

D. D. CARROLL:

An Outline of a Course in Foreign Trade. South Atlantic Foreign Trade Conference.

Education for Business. Chamber of Commerce, Greenville; Twin-City Club, Winston-Salem.

The Strategic Position of the Commercial Secretary. The State Association for Commercial Secretaries.

The Function of the Retailer. State Merchants' Association.

COLLIER COBB:

The East Coast of South America. Burlington, January.

The West Coast of South America. Burlington, January; Greensboro, March.

Geographical Research and Business Opportunity. Wilson, April.
Along the Inland Waterway from Boston to Beaufort. Raleigh, April.
Recent Changes in Currituck Sound. Raleigh, April.

Education for Service. Parkton, May.

Geographical Research in Relation to Commerce. Greenville, May.

Sand Reefs of the Carolina Coast. Chapel Hill, July.

America's Opportunity in the Orient. N. C. Association of Geography Teachers, July.

Geographic Research versus Fool Luck in Business. Alaska Steamship Company, August.

Admiral Wilkes and Puget Sound. Ranier Club, September.

Shifting Sands as an Asset. University of Washington, October.

Physiographic Factors in the Making of Seattle. Seattle Chamber of Commerce, October.

W. C. COKER:

Notes on the Lower Basidiomycetes of North Carolina. Journal of the Elisha Mitchell Scientific Society. XXXV. 67 plates.

Azalea atlantica Ashe and Its Variety luteo-alba n.var. Journal of the Elisha Mitchell Scientific Society, XXXVI. 2 plates (one in color.)

A New Species of Achlya. (With J. N. Couch.) Journal of the Elisha Mitchell Scientific Society, XXXVI.

Genera of Lower Basidiomycetes not before Reported from North America. Paper presented before the 19th Meeting of the Academy of Science. Abstract in Journal of the Elisha Mitchell Scientific Society: XXXVI.

P. H. DAGGETT:

A Comparison of Mechanical Features and Operating Principles of Farm Lighting Sets. (With W. C. Walke.) University of North Carolina Extension Leaflets Vol. III, No. 2.

First Annual Report of the Director of the Division of Country Home Comforts and Conveniences. Published by the State Highway Commission, Raleigh.

The University of North Carolina Record, No. 174. The Catalogue. Edited.

A Series of Lectures on *Farm Electric Sets.* Before the Community Service School, August 10 20.

A Series of Letters on *Country Home Conveniences.* The University of North Carolina News Letter, Vol. VI.

H. M. DARGAN:

The Contemporary Novel. Women's Club, Greensboro, January 31.

J. F. DASHIELL:

A Multiple Unit System of Maze Construction. Psychological Bulletin.

The Relation of Interests to Abilities. Psychological Bulletin.

Complete versus Alternate Methods of Learning Two Habits. Psychological Review.

Effects of Practice upon Two Mental Tests. Journal of Educational Psychology.

The Need for Analytical Study of the Maze Problem. Journal of Psychobiology.

Some Psychological Phases of Internationalism. American Journal of Sociology.

Transfer Factors in Maze Learning by the White Rat. Journal of Psychobiology.

W. M. DEY:

Note on the Old French Por- in English. Studies in Philology, vol. XVII, No. 1. January.

W. C. GEORGE:

Sponges of Beaufort (N. C.) Harbor and Vicinity. (With H. V. Wilson.) Document No. 876, U. S. Bureau of Fisheries, December.

EDWIN GREENLAW:

Review of H. E. Cory's *Edmund Spenser: A Critical Study.* Modern Language Notes, XXXV.

Spenser's Influence on "Paradise Lost." Studies in Philology, XVII.

Spenser and Lucretius. Studies in Philology, XVII.

Foreword, in Raleigh: the Shepherd of the Ocean (Koch.)

Foreword, in Our Heritage (Hanford.)

Studies in Philology. Volume XVII, edited.

HANFORD, JAMES HOLLY:

Our Heritage, A Study through Literature of the American Tradition. University Extension Leaflet.

The Date of Milton's "De Doctrina Christiana," Studies in Philology, XVII.

Research Methods Applied to Milton Manuscripts. The Graduate Club of the University of North Carolina.

Addresses at Greensboro and Winston-Salem.

J. G. deROULHAC HAMILTON:

The Papers of Thomas Ruffin, Vol. III. North Carolina Commission. *America and International Relations.* Randolph-Macon College, January 17; Richmond College and Westhampton College, January 30; Guilford College, May.

The Study of International Relations. North Carolina College for Women, March 23; Trinity College, April 12; Meredith College, May.

The New Education. Wendell, April 30.

The Master Citizen. Charleston College, May 11.

What Lies Before Us. A memorial address delivered in Chapel Hill upon the occasion of the presentation of diplomas by the French Government to the nearest of kin to those who died in service.

Nineteen-Twenty and After. Greensboro News and News and Observer, February 22.

John Archibald Campbell. Review of book by Judge Henry G. Connor. Greensboro News, News and Observer, and Charlotte Observer, of April 11.

President Wilson. Review of book by Daniel Halévy in Mississippi Valley Historical Review for December.

Vitality in State History. Presidential Address before the State Literary and Historical Association, Raleigh. Dec. 2.

G. A. HARRER:

Tacitus and Tiberius. American Journal of Philology, XLI.

A Thirteenth-Century Fragment of Justinian's Digest. (With J. S. Moffatt). Studies in Philology, XVII.

Review of Studies in the History of Hadrian by W. D. Gray. Classical Weekly, Jan. 19, 1920.

Review of "A Short History of Rome" by Ferrero and Barbagallo. Classical Weekly, Oct. 18.

Contributions to the "Latin Column" in The High School Journal.

ARCHIBALD HENDERSON:

For the Faculty. Inauguration of President H. W. Chase, April.

Address before Mecklenburg County Alumni Association, Charlotte Chamber of Commerce, October 12.

C. A. HIBBARD:

Japanese-American Relations. Travellers' Club, Salisbury, January.

Journalistic English in High Schools. N. C. Teachers' Association, Raleigh, January.

Concerning the Cartoon. Current Topics Club, Rocky Mount, March.

T. F. HICKERSON:

A New Method for Locating Circular Curves by Deflections from the P. I. Journal of the Elisha Mitchell Society, XXXVI., Engineering and Contracting Magazine, June; Public Roads, October.

Relation of the Engineer to Successful Highway Location, Construction, and Maintenance. Road Institute, University of South Carolina, March; Good Roads Magazine, May; Southern Good Roads Magazine, June.

Road Alignment Problems. Engineering Society of Western North Carolina, Asheville, April.

Circular Curves Simplified. North Carolina Academy of Science, Raleigh, May.

S. H. HOBBS, JR.:

- Developing Country Life in Orange County.* Chestnut Ridge, March.
Community Ideals. Flat Rock, April.
Some Problems in Gates County and Their Solution. Gatesville, May.
Gaston County: Economic and Social. Bulletin.
Rural Life and the Church. The Mission Herald.
Pitt County: Economic and Social. Bulletin.
Halifax County: Economic and Social. Bulletin.
Beaufort County: Economic and Social. Bulletin.

GEORGE HOWE:

- Four Lectures at the University of South Carolina, Southern Exchange Lectureship.
An Applied Literature. Studies in Philology, XVII.

WALTER B. JONES:

- Mineral Resources of Alabama for 1918.* Bulletin No. 21, Alabama Geological Survey, February.

EDGAR W. KNIGHT:

- Public Education in the South.* School and Society, January 10.
Ideals in Education. The New England Journal of Education, December 18, 1919.
The Academy Movement in the South. March 1920. The High School Journal, November and December, 1919, and January, 1920.
Reconstruction and Education in South Carolina. The South Atlantic Quarterly, October, 1919 and January, 1920.
Consolidation of Rural Schools. University Extension Leaflet, February, Second Edition, April.
The Teachers' New Opportunity. The Christian Science Monitor, January 15.
The County Training School. North Carolina Education, January, 1920.
Better Country Schools through Consolidation. North Carolina Education, February.
The State University and the Rural Schools. High School Journal, October.
Some Plain Talk. High School Journal, January.
Some Means of Moral and Civic Training. High School Journal, February.
Education and Moral Initiative. High School Journal, February.
Recent School Legislation in North Carolina. High School Journal, October.
The High School Journal. Book Reviews, Notes and Comments, 1919-1920; edited during Fall of 1920.

A New Type of County Superintendent. North Carolina Teachers' Assembly, Raleigh, November.

The Curriculum of the Rural School. Before Educational Conference, Greensboro, May.

The Community and Its School. Epsom High School, January 30 .

The War and Its Lessons for the Teacher. Henderson, January 10; Chapel Hill, February 7; Lexington, March 26.

The Challenge of the Rural School. Berea College, Berea, Kentucky, May 10.

The College Woman and Teaching. Louisburg College, March 17.

The Negro and Public Education. Slater Normal School, Winston, May.

Women and Education. University Summer Session, July, 1920.

Community Co-operation. Chatham County Fair, Siler City, October.

Some Advantages of Consolidation. Alamance County, July 3.

Commencement Addresses. Cokesbury, Woodland, Menola, Rural Hall, Booneville, Walnut Cove, Asheboro, Oxford, Chapel Hill. April, May, and June.

Addresses before County Teachers' and Committeemen's Meetings. Bertie county, Vance county, Orange county, Rowan county, Stanley county, Chatham county.

FREDERICK H. KOCH:

Raleigh: The Shepherd of the Ocean, a Pageant-Drama. Tercentenary volume published at Raleigh, North Carolina, by Edwards and Broughton.

The Creative Impulse and Playmaking. The English Journal, May, 1920.

Folk Playmaking. Theatre Arts Magazine, April, 1920.

The Play and the School. High School Journal, April, 1920.

Plays for Amateurs. (With Elizabeth A. Lay.) University Extension Series.

A Pageant of the Cape Fear. Wilmington, October 11.

The Raleigh Tercentenary. Raleigh, November 6.

The Comedy of Shakespeare. Chapel Hill, November 13.

Communal Playmaking. Davidson College, March 30.

The Carolina Playmakers. Flora Macdonald College, April 9.

Players of the People. University of Chicago, August 23.

Folk-Playmaking in North Carolina. University of Chicago, August 24.

J. W. LASLEY, JR.

Some Simple Examples of Invariants and Covariants. Junior Mathematical Club, University of Chicago, February.

Some Transformations of the Flecnode Congruence. The Mathematical Club, University of Chicago, May.

The Contribution of Descartes. Mathematical Club, University of North Carolina, November.

R. B. LAWSON:

The Object and Scope of Physical Training. University of North Carolina Summer School.

Ideal Hygienic Condition of the School Room. University of North Carolina Summer School.

Apparatus for a Play Ground. Charlotte.

JOHN E. LEAR:

Construction of Rural Telephone Lines. Extension Leaflets, October, 1920.

STURGIS E. LEAVITT:

La Bibliografía de Palma. Mercurio Peruano (Lima, Peru) October.
Ricardo Palma (A biography.) Hispanic American Historical Review. February.

WALTER J. MATHERLY:

Antidotes for Bolshevism. Lexington (Ky.) Herald.

The Democratization of Industry. Lexington (Ky.) Herald.

Kentucky's New Blue Sky Law. Lexington (Ky.) Herald.

Idlers—A Social Menace. Lexington (Ky.) Herald.

The Decline in Prices. Lexington (Ky.) Herald.

The Public as a Factor in Industrial Disputes. Lexington (Ky.) Herald.

The Why of Tobacco. Commerce and Finance.

The Driving Force in Industry. Industrial Management.

Hard Work. Industrial Management.

Six Lectures on *Citizenship.* Woman's Club of Georgetown, Ky., Maysville Chautauqua, Maysville, Mo.

The Latchstring of American Democracy. King City (Mo.) Chautauqua.

Industrial Morale. Council of Superintendents and Foremen, R. J. Reynolds Tobacco Company, Winston-Salem.

WM. deB. MACNIDER:

A Study of the Toxic Effect of the General Anaesthetic in Naturally Nephropathic Animals. The Prevention of the Toxic Action. American Journal of Surgery, XXXIV.

A Study of the Anurias Occurring in Normal Animals During the Use of the General Anaesthetics. Journ. Pharmacol. and Exp. Therapeutics, XV.

A Study of Renal Function and the Associated Disturbance in the Acid-Base Equilibrium of The Blood in Certain Experimental and Naturally Acquired Nephropathies. Archives Internal Medicine, XXVI.

A Study of Various Tests for Renal Function. Durham County Medical Society, October 18th, 1919.

The Prevention of the Delayed Kidney Injury in Acute Mercuric Chloride Poisoning. Southern Medical Association, Asheville, N. C., Nov. 21, 1919.

The Effects of Acids and of Alkalis on Renal Function and Pathology. American Pharmacological Society, Cincinnati, Ohio, Dec. 29, 1919.

Concerning the Influence of the Age of an Animal in Determining Its Ability to Regenerate Renal Epithelium. American Society of Experimental Pathology, Cincinnati, Ohio, Dec. 30, 1919.

On the Susceptibility of the Renal Epithelium in a Chronic Kidney Injury to an Acute Injury. The Prevention of the Acute Injury. North Carolina Medical Society, Charlotte, N. C., April 21.

The Fat Content of the Kidney and the Liver in Animals of Different Age Periods. Elisha Mitchell Scientific Society, Chapel Hill, May 4.

M. C. S. NOBLE:

Addresses at Davidson County Fair, Lexington Alumni Association, Elizabethtown, Coats, St. Paul, Macclesfield, Randleman, Hamptonville, and Pittsboro.

Biographical sketches of Professor John Graham and Colonel Robert Bingham. The High School Journal.

HOWARD W. ODUM:

The College and University in Relation to Public Welfare. Converse College, Spartanburg, South Carolina, August 11.

College and Community Co-operation. Rotary Club, Spartanburg, South Carolina, August 11.

Working Together. Carrboro High School, October 15.

Community Service. Chapel Hill Community Club, October 29.

Community, County, and Democracy. All County Perquimans Rally, Hertford, November 11.

Civic Co-operation in Community Building. Raleigh Woman's Club, November 18.

Constructive Ventures in Government. University Extension Leaflet, September.

Community and Government. University Extension Leaflet, December.

University Co-operation in Public Welfare. Bulletin North Carolina State Board of Charities and Public Welfare, July-September.

Educational Sociology. High School Journal, November.

The Tercentenary and Democracy. High School Journal, December.

A Different Sociology. South Atlantic Quarterly.

ANDREW H. PATTERSON:

The Carolina Spirit. Rockingham County Alumni Association, Reidsville, January 3.

The Gyroscope and its Modern Applications. Current Topics Club, Rocky Mount, January 12.

The Theory of Relativity. Presidential address, North Carolina Academy of Science, North Carolina State College of Agriculture and Engineering, April 30, published in *The Journal of the Elisha Mitchell Scientific Society*, September.

The Perfect Law of Liberty. Belfast School, Wayne County, May 14.

The Theory of Relativity. University of North Carolina, May 18.

Liberty and the Citizen. Sunbury, May 20.

Recent Work on Spiral Nebulae. Elisha Mitchell Scientific Society, November 9.

W. W. PIERSON:

Alberdi's Views on the Monroe Doctrine (Read before the American Historical Association at the Conference on Hispanic-American history, December 1919.)

An article of the same title published in *The Hispanic-American Historical Review*, Vol. III, August 1920.

A Syllabus of Hispanic-American History. (Third edition. Published by the University of North Carolina.)

Book Reviews.

J. H. PRATT:

What We Can Learn From French Forestry. North Carolina Forestry Association, Asheville, *Manufacturers' Record*, July, *Charlotte Observer*, June, 20.

Forest Protecting Laws a Necessity. *The Music Trades*, August.

Iron Mining in North Carolina. *Engineering and Mining Journal*, November.

Hard Surfaced Roads. North Carolina Good Roads Association, Asheville.

Good Roads. Retail Merchants' Association, Asheville.

Forestry Legislation. Society of American Foresters, Washington, D. C., September.

WM. F. PROUTY:

Review of the Graphite Industry of Alabama for the Year 1919. *Engineering and Mining Journal*, January.

Geology of Clay County, Alabama. Elisha Mitchell Scientific Society.

Flotation Processes Used in Graphite Manufacture. Alabama Technical Society, August.

E. R. RANKIN:

Immigration Restriction. Extension Series, No. 34. (edited.)

THORNDIKE SAVILLE:

National Public Works Department. Kiwanis Club, Greensboro, Raleigh.

Relation of Flood Control to Drainage. N. C. Drainage Congress, Washington, North Carolina Geological and Economic Survey, October.

Relation of Water Resources to Forestry. N. C. Forestry Association, Asheville, Press Bulletin (172) North Carolina Geological and Economic Survey, The American City, September, Public Works, August.

Electro-Endosmosis of Clays. N. C. Academy of Science.

Water Power Situation in North Carolina. N. C. State Chamber of Commerce, Wrightsville Beach.

Relation of Geography to Water Powers. Association of State Geologists, Chapel Hill.

Sewage Pumping Station at Langley Field, Virginia. Journal Boston Society of Civil Engineers, May. Reprinted in Canadian Engineer, July.

Are Teachers Paid What They are Worth? High School Journal, May.

Development of Rhone River for Water Power and Navigation. Engineering and News Record, August.

The Water Powers of North Carolina. Press Bulletin (175) North Carolina Geological and Economic Survey.

The Port of Marseilles and Rove Ship Tunnel. Engineering News-Record, November.

OTTO STUHLMANN, JR:

A Note on the Correction of Contact Difference of Potential Developed in Compton's Modification of the Quadrant Electrometer. Physical Review, Vol. 16.

On the Photoelectric Long Wave-Length Limit of Platinum and Silver. American Physics Society, Washington; Physical Review, Vol. 15.

H. R. TOTTEN:

Single Spore Cultures of Coprinus Radiatus. North Carolina Academy of Science. Raleigh.

A Peculiar Mycorrhiza-Forming Rhizopogon on the Roots of Pine. North Carolina Academy of Science, Raleigh.

OLIVER TOWLES:

Forms of Asseverative and Adjurative Prepositional Phrases in Old French. Studies in Philology, January.

Prepositional Phrases of Asseveration and Adjuration in Old and Middle French. Dissertation, Paris, 1920.

F. P. VENABLE:

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Productions of The Carolina Playmakers

Third Series, produced at Chapel Hill, The Play-House, December 12 and 13, 1919.

The Hag, a Comedy of Folk-Superstition, by Elizabeth A. Lay.

The Third Night, a Mountain Play of the Supernatural, by Thomas Wolfe.

Who Pays? a Tragedy of Industrial Conflicts, by Minnie Shepherd Sparrow.

Fourth Series, produced at Chapel Hill, The Play-House, April 30 and May 1, 1920.

The Last of the Lowries, a play of the Robeson County Outlaws, by Paul Greene.

The Bell Buoy, a Tragedy of the North Carolina Coast, by Dougald MacMillan.

"Dod Gast Ye Both!" a Comedy of Mountain Moonshiners, by Hubert Heffner.

Commencement Performance: Chapel Hill, The Play-House, June 15.

The Last of the Lowries.

"Dod Gast Ye Both!"

Summer School Performance: Chapel Hill, The Play-House, July 22 and 23.

The Last of the Lowries.

The Bell Buoy.

"Dod Gast Ye Both!"

Besides their original Folk-Plays, The Carolina Playmakers produced *Twelfth Night*, by William Shakespeare, in The Forest Theatre, in Battle Park, on July 29. Also on March 1 and 2 they produced Oscar Wilde's *The Importance of Being Earnest*, in the Play-House in Chapel Hill.

Articles concerning the work of The Carolina Playmakers in their original playmaking have appeared in the American Review of Reviews, September 1919; The Theatre Magazine, October, 1920; The Theatre Arts Magazine, April 1920; The Red Cross Magazine, April 1920; and The English Journal, May, 1920.

