

## ORCHESTRA LAYS PLANS TO ASSIST MESSIAH CHORUS

Annual Christmas Concert Will  
Combine Orchestra, Organ  
And Voices.

The University symphony orchestra is to provide the accompaniment at the presentation of *The Messiah* on the fifteenth of this month. This concert will be given in the new music auditorium and the profits are to be turned over to the Orange County unemployment fund. The admission price will be fifty cents.

The personnel of the orchestra to play at the performance as given out yesterday by Professor McCorkle includes first violins, T. Smith McCorkle (concertmeister), Orlando Cates, Thomas M. Johnson, Ray W. Foster, and J. M. Shachtman; second violins, Benjamin G. Winig, Henry Gartzman, Katherine Wheaton, F. G. Jacocks; cellos, Crosby G. Blackwood, Lawrence Hatlestad; violas, Hugo Guduz, Loretz Ramseur; bass, James Pfohl; oboe, Lydane Miller; clarinets, R. Flynt, Walter Prescott; bassoon, W. F. Fergar; flutes, Lamar Stringfield, R. M. Chamberlain; horn, William Abernethy; trumpets, C. H. White, Jr., H. A. Brooks; trombone, George Lawrence; tympani, F. B. McCall. Mrs. A. S. Wheeler will act as pianist, and Professor Nelson O. Kennedy as organist.

The concert is planned to be a combination of orchestra, organ, and voices.

All of the artists have been secured except the bass. Those secured. Those selected are Edward Molitore, tenor, Mrs. Camilla Molitore, soprano, Mme. Emily Berger Cullum, contralto. The chorus has been practicing and J. Foster Barnes, bass. The chorus has been practicing under the direction of Dr. Dyer for the last two months.

## PHI TEAM REGAINS FORENSIC MEDAL

Hamilton Hobgood Recipient of  
Mary D. Wright  
Award.

The Mary D. Wright memorial debate medal returned to the Phi Assembly after a two-year stay in the possession of the Di Senate when Hamilton Hobgood, of the Phi, won the prize Tuesday night in Gerrard hall. The victorious Phi team upheld the affirmative side of "Resolved: that the state of North Carolina should levy a luxury tax for the support of its institutions of higher learning." Billy Uzzell teamed with Hobgood. McBride Fleming-Jones and Clyde Shreve, representing the Di, presented the negative argument. J. C. Williams, winner of the medal last year, presided.

Throughout the debate, the speakers centered their attention upon the feasibility of a luxury tax as a means for remedying the lamentable financial condition surrounding North Carolina's institutions of higher learning at present. The affirmative saw in such a tax the long-sought-after proper distribution of the burden of taxation for educational purposes. This contention met with the approval of the judges, who declared the affirmative the winner and Hobgood the abler speaker of that team.

## Council After Good N. C.-Duke Relations

Members of the student council are this week making talks in chapel for freshmen and sophomores in regard to the athletic relations which have existed between Carolina and Duke in the past.

Mayne Albright, secretary of the student council, spoke yesterday, and Red Greene, president Student Union, will speak today and Friday.

The idea that the speakers are trying to put across to the student body is that the University is just now beginning our relations with the real Duke University, both in athletics and other fields. The precedent which is established next Saturday will have a great effect on our relations in the future. The two rivals can profit greatly from each other and a clash or possible severance in athletics would destroy their mutual advantages in other fields. However it is hoped that no such situation will arise.

While Carolina is teaching her students good sportsmanship for her close rival, the student council of Duke University is doing the same thing along this line.

## PRESS RELEASES TWO NEW BOOKS

Etchings By Steene and Stories  
By Cheshire To Be Published Soon.

The University of North Carolina Press will publish two books of interest to Carolina students. Six etchings of the University of North Carolina by William Steene and a book, *Nonnulla*, by Joseph Blount Cheshire will be released in the next few days.

William Steene is a member of the Salamagundi Club, the national society of Mural Painters, American Federation of Arts, and several other artists clubs. He has exhibited or been represented in the National Academy of Design, the Architectural League of America, Grand Central Art Galleries, Milch Galleries, and several other galleries and at several universities. He has been living and working in Chapel Hill for several years and has studied the scenes represented in the six etchings which are to be published. The etchings are the Old Well, the Episcopal Chapel, the Playmakers Theatre, Old East, Davie Poplar, and the Kenan Stadium.

Bishop Cheshire is well known as a great story teller. He has at last been prevailed upon to put some of the best of his stories in writing. The book is more than a collection of stories. It is woven of the very warp and woof of North Carolina the book could answer well to a roll-call of North Carolina's great names, with illustrating estimates and anecdotes. In presenting these "Not Nothings," as he calls them, Bishop Cheshire has given us a "cross-section" of North Carolina life and legend.

## Tickets Exchanged

Football tickets for the Carolina-Duke game are being exchanged for passbooks today and tomorrow at the Y. M. C. A. As has already been announced students may sit with their dormitory or fraternity groups by getting their tickets in blocks or asking for seats in their group section.

## SCIENTISTS CONDUCTING QUEST FOR CAUSE BACK OF OILINESS

For Years Research on Problem Has Been Going On With the  
Final Result That Machinery Has Been Devised to  
Measure Degrees of Slipperiness.

By Hendley N. Blackmon, General Engineer Westinghouse Corporation

Mankind, in general, regards a treacherous banana peel underfoot as the pinnacle of slipperiness. Just another case of prejudice though; because oil, such as used to lubricate electric machinery, would give him a farther and faster ride than the best banana skin in the country. No one knows just yet what makes oil so oily, but research engineers are hot on the trail.

Scientists have long known that oil makes a good lubricant—but soap suds, or steel on ice, is better if slipperiness is the only aim. Despite the profound technical knowledge of the twentieth century, man does not know exactly what makes oil oily. Ordinary chemical and physical tests merely check the uniformity of oil shipments, but tell nothing of the lubricating value.

A group of scientists, isolated in a building of their own, have been stalking the answer to "what makes oil oily", for the past few years. Unlike tasting a pot of porridge for seasoning there is yet no test nor instrument that will tell the answer. In the past to determine this elusive property the lubricant was placed in service until the oil wore out; i. e., lost its oiliness. Researchers getting to the roots of the problem, finally devised machines for measuring this slippery property—they can tell the degree of "oiliness"; but just what makes one oil more slippery than another is still a worrisome question.

Crude oil, as it comes to the laboratory from wells scattered throughout the world, is tested for oiliness and then broken up into its chemical elements. Tedious comparative studies are made of samples which behave exactly alike except for oiliness; doggedly striving to find what makes the difference. It is not the degree of refinement of the crude oil—the same commercial oils are much more refined than others. If oils are too pure they become water white (like the widely advertised Nujol) and lose their lubricating usefulness.

A person on ice skates rides on one of the best lubricating surfaces known. The almost effortless propulsion is possible because the weight of the skater melts the ice under the runners.

## BOGGS TO ATTEND FOLK-LORE MEET

Dr. A. P. Hudson, professor of English, R. S. Boggs, assistant professor of Spanish and probably Dr. G. R. Coffman head of the English department, will attend the meeting of the meeting of the North Carolina Folk-Lore Society in Raleigh, Friday, December 5. Mr. Boggs is to deliver a paper entitled "The Legend of the Half-Chick."

This meeting, as in previous years, is being held in connection with meetings of the North Carolina State Art Society and the State Literary and Historical Association, of which Dr. E. W. Knight, professor of education here, is First Vice-President. The last two meet today, though the Art Society opened an exhibition on December 2.

and he scoots along on a film of water, not ice. Little globules of water cling to the steel runner, another layer is on the surface of the ice, leaving a free layer of water in the middle which gives almost frictionless movement of the skates.

In electrical rotating machinery, an oil film surrounds the moving shaft and acts like the water film under the skate runner. Tiny globules of oil adhere to the revolving journal, other oil molecules stick to the babbitt bearing and the load rides merrily on the free film of oil in between.

Automobile bearings need only a small fraction of a thousandths of an inch oil film; large electrical machines require an oil film about .0012 inches thick—the same part that 3-4 inch represents in a city block. Measurement of the oil thickness in big electrical machines shows that the shaft wanders about in the oil film very curiously, climbing up one side and slipping down the other. Though microscopic in size, the film is always thick enough to keep the metals from direct contact. Trouble begins as soon as the film is ruptured and the metals touch, which happens sometimes due to minute imperfections in machined surfaces, misalignment of shaft and bearing, and warping of the bearing shell by excessive heating.

Never stingy, Nature has been exceedingly open handed in her gift of oils—vegetable oils are widely used in cooking, animal oil glistens from sleek black hair; and mineral oils produce our gasoline. Vegetable and animal oils are more oily and therefore the best lubricants; but their family tree makes them more susceptible to oxidation when in service. Straight mineral oils, preferably with a paraffine base, last longer as a lubricant despite their lesser degree of oiliness. Like a sprig of mint in tea to enhance the flavor, soap is sometimes added to mineral oil to bolster its lubricating properties.

Oil leads a tough life, however. For instance, machinery on shipboard must be well lubricated. The boat crosses the equator and a month later is anchored in Alaska—the oil must never become so soft it will run away nor too hard to become useless.

## SLADE LECTURES TO MATH SEMINAR

Yesterday afternoon at three o'clock the mathematics seminar was held in Phillips hall. Professor J. J. Slade, of the school of engineering, conducted the seminar with his own treatment of the "Differentiation and Integration of one-integral orders with application of the theory to the solution of Abel's problem of the tautochrone." The problem is given: a bead on a smooth curved wire. The bead is to fall from point A to point B in a specified length of time. The question is to determine the curve in the wire which will enable the above conditions to be fulfilled. This problem was solved by Abel over two hundred years ago and has been solved often since.

## Lawsons' Visitors Extensively Feted

Mr. and Mrs. Kenneth S. Graves of Geneva, New York, have been visiting in the home of Dr. and Mrs. R. B. Lawson for the last two weeks and have been entertained extensively.

Mrs. Graves was entertained at a bridge luncheon Tuesday morning by Mrs. Alex Koonce, and Tuesday evening President Frank Graham and Miss Kate Graham entertained at dinner in compliment to Mr. and Mrs. Graves. Last night Miss Helen Shell entertained at a buffet supper and bridge at the Irving apartments in Durham. Today at one o'clock, Dr. and Mrs. Collier Cobb will entertain at a luncheon for Mr. and Mrs. Graves. This afternoon from four to six o'clock, Miss Estelle Lawson will entertain at a tea in honor of Mrs. Graves and Miss Kate Graham.

Friday afternoon Mrs. T. S. McCorkle will entertain at bridge in compliment to Mr. and Mrs. Graves, and Friday evening Mr. and Mrs. J. M. Bell will entertain them at a bridge party. Next Wednesday night Mrs. Carrington Smith will entertain at a theatre party.

## OFFICERS CHOSEN BY POLITY FORUM

Dungan Elected President and  
Sitterson Chosen Secretary  
at First Meeting.

Jack Dungan was chosen president of the polity forum in an organization meeting Tuesday night on the second floor of Saunders building. Lyle Sitterson was elected secretary of the group.

The meeting, which was called by Beverly Moore, temporary chairman, was attended by thirty-five students. The purpose of this forum is to interest persons on the campus in national politics, and it is the plan of the organization to bring many noted statesmen to the campus. Foreign relations will also be one of the topics of discussion by the forum. In this connection Professor Calvin Hoover, of Duke University has been asked to address the next meeting of the group Thursday, December 11.

So far as can be ascertained, the organization on this campus is the only one of its kind in the south. There are but few others existing in the entire United States.

Professor Calvin Hoover, who is to address the next session of the forum, will speak on the subject of "Russia." Mr. Hoover has for the past fifteen months been living in this country and is well acquainted with conditions there.

It is the plan of the president to bring such men as Norman Thomas, Senators Borah and Reed, Secretary of Navy Adams, and Rabindrath Tagore to speak to the organization.

## Freshman Smoker

The first freshman smoker of the year will take place tonight in Swain hall at nine o'clock. Eats and smokes will be served. As yet no speaker has been secured, but Pat Patterson, president of the senior class, who will preside over the smoker, states that one will be obtained in time for the occasion. Music will be furnished by the Carolina Buccaneers.

## LOCAL DELEGATES ATTEND NATIONAL FRATERNITY MEET

John Cooper and Jack Ward Active in Proceedings of Interfraternity Council.

At a meeting of the National Interfraternity Conference held during the Thanksgiving holidays in New York City, John Phil Cooper, of the Sigma Nu fraternity and Jack Ward, of the Kappa Alpha fraternity, were the representatives from this campus. Both of these delegates were placed on several of the committees of the convention. 150 schools sent representatives to the meeting.

Pat Nelson of the University of South Carolina, and representative of the S. A. E. chapter at that institution, was elected president of the convention. Bill McKinze, Phi Gamma Delta, from Brown University, was chosen secretary, and John Phil Cooper, Sigma Nu of the University of North Carolina, was voted chairman of the executive committee.

Jack Ward, of the Kappa Alpha fraternity, the second delegate sent from this campus, was placed on the scholarship committee, and Cooper, received another position by being placed on the committee on morals.

This convention was attended by men from schools all over the country, who met for the purpose of discussing some of the problems which confront the different fraternities. The abolition of "Hell-Week," system of rushing, relations among fraternities on the different camps, and other such difficulties were discussed by the representatives.

Cooper, as one of the speakers on the program, made a talk on the subject of "Where fraternities' duties should yield to those of the university, and vice-versa." A bill was also presented by the Sigma Nu representative.

## GREENE SPEAKS ON GOVERNMENT

Radio Speech Over WPTF Wednesday Explains Student Government

The student government of the University of North Carolina has been an individual growth, and it has developed a personality of its own," said Red Greene, president of the student union in a radio address yesterday.

Greene went further to say that it depends largely upon the state of student opinion and student interests. He told of the work of the Student Council, its function, and its value. His object was to show the state high schools the value of student government in order that they might thoroughly understand it, should they establish such government in their schools. In summing up his remarks he explained that at Carolina there is no system espionage. When some act of misconduct is committed, the students will spontaneously act upon it and the form of action is to submit it to the Student Council, which is the controlling body of the student government.

John A. Lang, president of the North Carolina Federation of Students followed Greene's talk by explaining how the council was attempting to instill good sportsmanship among the students, for the Carolina-Duke game.