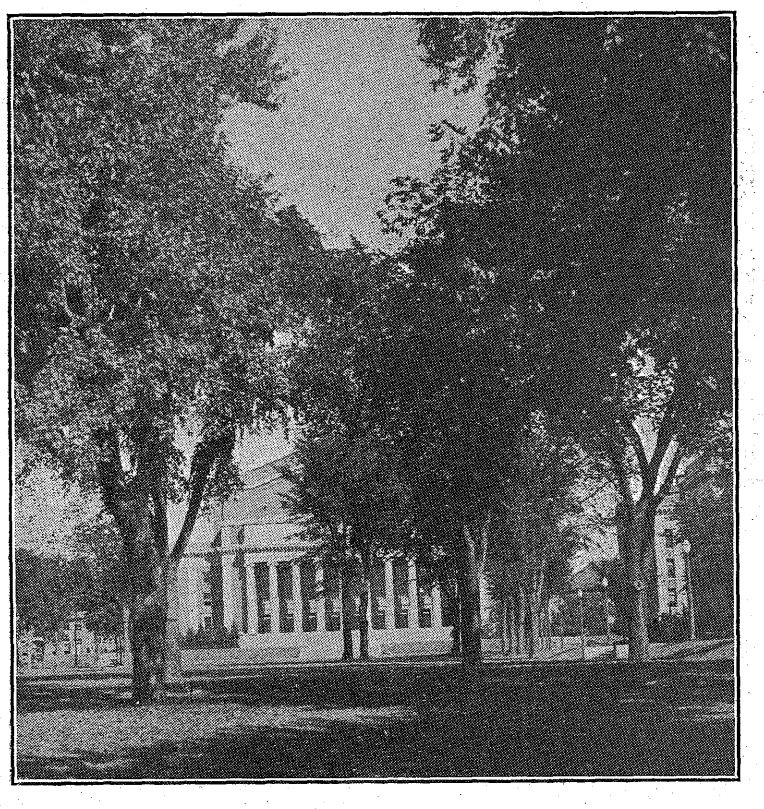
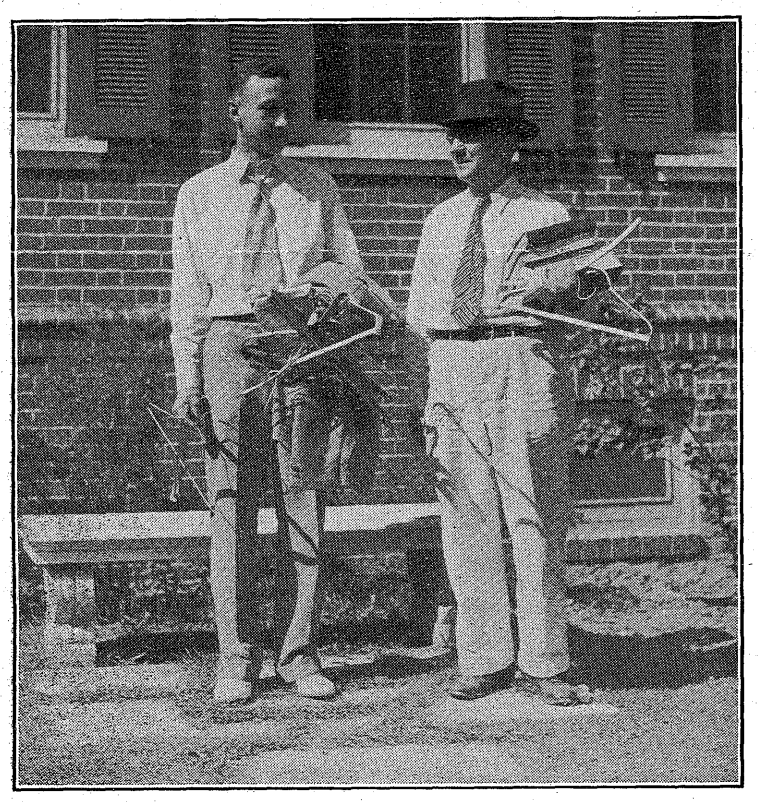
MINNESOTA CHATS

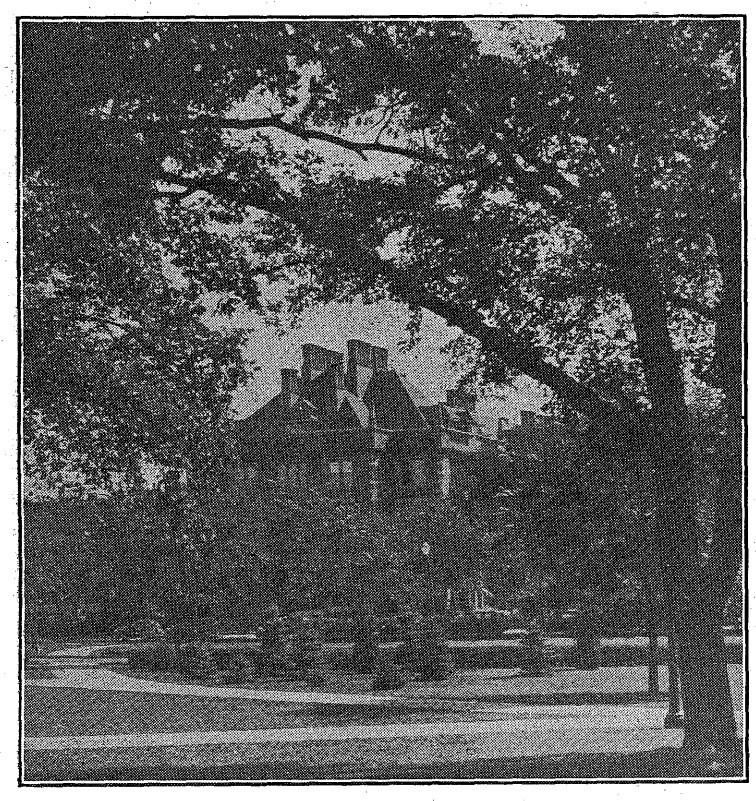
Published by the University of Minnesota for the Parents of Students

VOLUME 18 | OCTOBER 1, 1935 | NO. 1

New Scenes of Minnesota Campus







Above is Northrop Memorial Auditorium seen across the Minnesota Mall. Below is Folwell Hall, Arts College home, taken from the Oak Knoll. In the center Mr. John Herman, musician, of 1824 West Fourth St., Sioux City, Iowa, is helping his son Verner lug coat racks, books, etc., to his room in Pioneer Hall. Verner is a "dent."

'Liberalism and Adult Education' Defined in Talk

John W. Studebaker, U. S. Education Commissioner, Speaks on Campus

TO SUMMER GRADUATES

Pre-Digested Material Not Stuff of Which Real Intellectual Progress Is Made

John W. Studebaker of Washington, D. C., formerly superintendent of schools in Des Moines, Iowa, now United States commissioner of Education, was the speaker at commencement exercises held at the conclusion of the first summer session. In addition to the material presented below, Dr. Studebaker's talk described the plan for adult forums which he developed at Des Moines and which he now strongly advocates as the way to bring the minds of the electorate at least into contact and perhaps into harmony on many of the great issues that now confront the nation.

He said in part:

On every hand it is said that we have become the slaves of the machines we have built. Our capacity to produce the material basis for an abundant life has far exceeded our ability to control and direct the huge powers of a machine age. We are indeed living today in a most paradoxical world.

People are idle, we are told, because they produce too much. They are feverishly preparing for

(Continued on page 4)

Thumbs Down on Stadium Drinking Is 'U' Warning

The University of Minnesota has decided this year to take time by the headgear and do everything it can in advance to avoid the charges of drinking in connection with football games that were brought last fall against many American colleges, though not against Minnesota in particular.

Frank G. McCormick, director of athletics, has issued a statement saying that drinking will not be tolerated at football games. Persons who come to a game intoxicated will be refused admission, and those who carry on drinking in the stands will be put out, McCormick said.

His formal statement is being included in all envelopes in which tickets are being mailed by the university to those who have ordered them.

Mr. McCormick's statement follows:

"The Big Ten Conference was organized to carry on athletics on a high plane. The institutions and their representatives, over a number of years, have successfully carried out this ideal, and they have given athletics an important place in the educational program.

"After last football season the conference directors recognized that drinking at football games was growing and would have to be checked. Each institution agreed locally to take the necessary action to eliminate this trouble. Over-indulgence by a small minority results in conduct disgusting or offensive to other patrons and is tearing down the fine traditions and ideals of college football.

"We wish to take this opportunity to give notice that ushers and officers are being instructed to prevent drinking in the stadium and refuse admission to holders of tickets who are intoxicated. We shall revoke the license conferred by the ticket and eject from the stadium, anyone violating the above restriction. We earnestly request the co-operation of all patrons in order that we may keep football games at Minnesota on the highest possible plane."

President Named In Youth Study

President L. D. Coffman

President L. D. Coffman of the University of Minnesota, is a member of a commission of the American Council on Education which has received an $800,000 grant with which to carry on a five-year inquiry to determine whether the school system is meeting needs created by current social and economic conditions. It will find that its job is to learn what ails youth today and then to prescribe remedies, according to Washington reports. The work will be supervised by Dr. George F. Zook, permanent president of the council, of which Dr. Coffman is chairman for this year.

Among others on the committee are Ralph Budd, formerly of St. Paul, Robert M. Hutchins, president of the University of Chicago, Dorothy Canfield Fisher, author, Newton D. Baker of Cleveland, John W. Studebaker, United States commissioner of education, Will W. Alexander, an Atlanta clergyman and leader in the field of race relations, and Mathew Woll, vice president of the American Federation of Labor.

A first meeting was held recently in Washington.

Federal Help Plan Explained

University May Admit 12% as Many as Last Year's Average Enrollment

Plans under which the University of Minnesota is accepting federal aid students this year have been announced by Dean Malcolm M. Willey, assistant to the president. He calls particular attention to the fact that funds are available this year for graduate as well as undergraduate students.

Among undergraduates not more than one student from a family may be appointed, nor may anyone be appointed if a member of his or her immediate family is on the university payroll. Active members of campus fraternities may not receive appointments to federal help jobs, as it is assumed that one who can pay such social dues is not in imperative need of relief.

The statement issued by the committee of which Dean Willey is chairman follows:

"On August 15 it was announced that the federal government would continue its work-relief program for the assistance of deserving college students. In general the procedures are to be the same as during the academic year 1934-1935, although insofar as the federal and state governments are concerned, there have been changes in administration of the program. During 1934-1935 the federal program was in direct charge of the Federal Emergency Relief Administration working directly with the United States Office of Education, and in the State of Minnesota the program

Continued on page 2, column 5

Sixty-seventh Year of Study Gets Under Way

Courses and Physical Plant But Little Changed From Year Ago

NO NEW BUILDINGS

List of Promotions Approved in Summer Now Made Public

With relatively few changes from the general set-up of last fall, the University of Minnesota began its sixty-seventh year when classes reopened on Monday, September 30. At the same time Dr. L. D. Coffman began the sixteenth year of his presidency.

No new buildings have been erected since the year 1934-'35 closed and none is in immediate prospect, although the university has made WPA applications for additions to several that are now standing, including the women's gymnasium and the new athletic building.

Faculty changes will be few in number. From the School of Mines and Metallurgy Dean W. R. Appelby has retired after having served the university as instructor, professor and dean since 1891. The new administrational arrangement of that college has not yet been announced.

Following a two year absence Professor Alvin H. Hansen has returned to the School of Business Administration. For a year he was secretary of the Commission of Inquiry on National Policy in International Economic Relations. Subsequently he was employed by the state department on problems having to do with reciprocal tariff agreements between the United States and other countries. Dr. Roy G. Blakey will be in Washington this year, conducting economic research for the Bureau of Foreign and Domestic Commerce.

Dr. Dale Yoder, who taught at Minnesota last year on a one year appointment has been elected to a professorship in the School of Business Administration. Before coming to Minnesota he taught at the University of Iowa, where he had been since 1925. His specialty is the field of industrial relations, and his teaching program will be made up of courses in labor problems and labor economics, together with courses in phases of personnel administration. He obtained his doctorate from Iowa.

Political Science Changes

Dr. Lloyd M. Short, a graduate of Knox college who has been professor of political science and assistant dean of the graduate school at the University of Missouri, comes to Minnesota as professor of political science. Retirement of

Continued on page 2, column 2

First Man to Get Ph.D. Degree Dies

Judge Charles Burke Elliott, the first person to receive the degree of doctor of philosophy from the University of Minnesota, died at his home in Minneapolis September 17. Judge Elliott attended the university and was graduated in 1884, just after passing his twenty-first birthday, at which time he entered the practice of law. Later he took up advanced studies in political science, and won the doctor's degree in 1888. Judge Elliott, considered an authority on international law, was formerly a member of the United States commission that governed the Philippine Islands. He was a close friend of General J. J. Pershing. Among his works was a detailed history of the Philippines and of American colonial experiences in those islands. He had been judge of the district court and an associate justice of the Minnesota supreme court.

General College Will Study Self Over Three Years

Staff Enlarged With Money Given by a Foundation; to Test All Procedures

A thoroughgoing three years study of the type of educational procedure represented by the general college of the University of Minnesota is to begin in that college this fall, financed by a bequest from the General Education board. Objects of the study, in which a large group will take part, are both to benefit the general college by the results of examination and to make the same materials available to the many other institutions that are adopting plans similar to the one in use at Minnesota.

According to Dr. Malcolm S. MacLean, director of the general college, the studies will show what is being done that is good, what is being done that should not be done, and will provide suggestions for new procedures. The students themselves will also be the object of study by the special group, whose members will do some teaching but devote themselves chiefly to observation.

Staff Is Enlarged

A number of new persons are being brought in to conduct the newly planned work. These will also provide an informal liason with other university departments according to the fields of their specialties. On the faculty for this purpose will be Raymond Faulkner, instructor in art; Francis S. Appel, assistant professor of English; Elmo C. Wilson, instructor in contemporary affairs; Howard Gilkinson, assistant professor of social studies; Miss Ivol Spafford, assistant professor of euthenics (life in the family and home); William S. Tucker, assistant professor of biological studies; John G. Darley and Miss Kathleen McConnon, research counsellors; Raymond Sletto, instructor in social studies; Miss Marion Wilder, research statistician; Paul Wendt, research worker in visual education, and Alfred L. Vaughan, instructor in sciences.

The general college has grown rapidly in the past two years and its procedures, similar in some respects to those at the University of Chicago, are being copied by a number of institutions.

Not 'Experimental' College

Because many persons confuse the general college at Minnesota with the experimental college that was conducted at Wisconsin at one time, Dr. MacLean has offered an explanation of the wide differences between the two. At Wisconsin the students were selected on a different basis than that used at Minnesota. They were isolated in a special dormitory. Their course was integrated, which is to say, for the first year they studied Greek civilization, and for the second, American civilization. This, he explained, is a totally different thing from what Minnesota is doing. At Minnesota a very large number of subject fields are available; courses are built up to meet pressing and obvious needs of the students in after life, although this does not mean that all the courses are "practical"; students are selected from among those who seem to have no deeply impelling urge towards a long-continued period of higher education. Furthermore, Dr. MacLean pointed out, the Minnesota courses are built up continually from the experience of the faculty as teaching proceeds, and are not planned as fixed procedures, based on prearranged syllabi.

This latter point also describes the main difference between the college at Minnesota and the Chicago plan. At Chicago the courses are offered from rather fixed syllabi, worked out in advance. Minnesota's procedure affords much greater flexibility than that.

Child Welfare Broadcasts

The Betterson Family, which goes on the air each year for the Institute of Child Welfare, will concern itself with "The Bettersons' Neighbors" this fall. October and November broadcasts over WLB and KSTP Thursdays at 11:15 a. m. will be Oct. 3d, "The house and the family;" 10th, School lunches;" 17th, "A Place in the Family;" 24th, "Budgeting the Baby's Day;" 31st, "Weighed Down by Freedom;" November 7, "Baby Learns to Walk;" 14th, "Buying Books for Christmas;" 21st, "The Over-Protective Mother;" 28th, "Leaning on Ourselves."

Ludwig Succeeds Dr. Morris Lambie

Professor C. C. Ludwig

C. C. Ludwig, student of political science and a former city manager of Albert Lea, Minn., has become secretary of the League of Minnesota Municipalities and director of the Municipal Reference bureau, succeeding Professor M. B. Lambie who resigned in June to join the Harvard faculty. Professor Ludwig will also have the rank of associate professor in the department of political science. The league and the bureau are among the activities of the general extension division, which provides the league with an office and administrative facilities.

Sixty-seventh Year of Study Gets Under Way

Continued from page 1, column 5

Dr. Jeremiah S. Young, resignation of Professor Morris B. Lambie, and the leave for a year granted Dr. Oliver P. Field to teach at Harvard necessitated adding to this faculty. Professor William Anderson will head the department this year, having alternated with Professor Harold S. Quigley. C. C. Ludwig, whose appointment is noted elsewhere in this issue, has been named executive secretary of the League of Minnesota Municipalities, and will carry on the functions Professor Lambie directed in that position. In the department of political science he will be associate professor.

David M. Robb, assistant professor of fine arts, will begin his duties this fall in the position vacated last spring by the resignation of Professor Everett Upjohn. A graduate of Oberlin, Professor Robb has done graduate work at Princeton. For two years past he has held a Carnegie fellowship in fine arts, studying one year abroad and one year in the United States. Ralph O. Nafziger comes as assistant professor of journalism. A newspaperman in many cities in the northwest, he has carried on extensive graduate work at the University of Wisconsin and during this year will retain his connection there while teaching at Minnesota on leave of absence. Howard Gilkinson, formerly debate coach at Minnesota, is returning to the faculty to give half time to the department of speech and half to speech instruction in the general college. Miss Sue Mason, a resident of St. Paul with wide experience in social work and Otis D. Duncan, from Oklahoma A. and M. college, have been added to the sociology faculty for special lectureships and supervisory work. Edward F. D'Arms comes to Minnesota as a member of the department of classics to take over part of the courses in Greek. He has been assistant professor at Vassar.

Two new instructors, Elmer S. Miller and Ernst Abbe have been added to the botany department and two, Tom Bard Jones and Thomas E. Drake, to the history department.

Promotions Listed.

A number of people in various departments will begin their work this fall with new rank as a result of promotions made last spring. The total, however, is considerably smaller than in normal times. The list follows: Oliver R. Floyd, principal, University high school, instructor to assistant professor; George O. Burr, botany, to professor; Alburey Castell, philosophy, to assistant professor; Miles A. Tinker, psychology, to associate professor; Howard W. Barlow, aeronautical engineering, to assistant professor; Elmer W. Johnson, electrical engineering, to associate professor; Lorenz G. Straub, hydraulic engineering, to professor; Donald W. Johnson, animal husbandry, to assistant professor; Arild E. Hansen, pediatrics, to assistant professor; Ray Amberg, to be acting director of University hospitals; Walter M. Lauer, chemistry, to associate professor; Henry S. Jerabek, mines, to assistant professor; Alvin C. Eurich, education, to associate professor; Robert A. Kissack, visual education, to assistant professor; Catherine Snell, physical education for women, to assistant professor; Robert C. Gray, medicine, to assistant professor; George Otterness, to track coach; Clifford Kirkpatrick, sociology, to professor; Harold Macy, dairy husbandry, to professor; Clayton O. Rost, soils, to professor; Charles E. Skinner, bacteriology, to assistant professor; Arthur C. Kerkhof, medicine, to assistant processor; John S. MacNie, opthalmology and oto-laryngology, to associate professor; Karl W. Stenstrom, physiology, to professor; Wallace H. Cole, surgery, to professor; Arthur A. Zierold, surgery, to professor; the following members of the medical faculty without salary; Charles B. Wright, medicine, to professor; Reuben A. Johnson, medicine, to associate professor; Robert B. Radl, preventive medicine and public health, to assistant professor; A. R. Colvin, surgery, to professor; Edward A. Regnier, surgery, to assistant professor; Oswald S. Wyatt, surgery, to assistant professor; Julie Miller, nursing, to assistant professor.

On the faculty of the Mayo Foundation at Rochester, the following promotions were made: To professor: L. A. Buie and T. B. Magath; to associate professor, L. T. Austin, J. A. Bargen, V. S. Counseller, C. F. Dixon, P. S. Hench, H. Montgomery, L. M. Randall, N. D. Smith and A. M. Snell; to assistant professor, L. A. Brunsting, H. K. Gray, F. J. Heck, R. M. Hewitt, C. W. Mayo, L. E. Prickman, G. J. Thompson and R. M. Tovell.

Lutherans Seek New Procedures

Representatives of Mid-West Colleges Attended Summer School

In an effort to map out a revised curriculum in the light of present day conditions for Lutheran institutions of higher education, 20 Lutheran educators, representing colleges in New Jersey and nine states in the middle west, met on the University of Minnesota campus during the 1935 summer session for a conference on Christian education.

Out of the conference is expected to come a comprehensive report recommending certain changes in curricula. These changes will be put into effect in the various Lutheran colleges and the results tested for one year, at the end of which time another conference will be held to set up permanent standards. The conference now in session represents all of the Lutheran groups in the middle west.

Special facilities, including the privilege of attending classes without charge or registration fees unless individual members take courses for credit, were extended to the group by the university. Dean Melvin E. Haggerty of the College of Education, Dr. Malcolm MacLean, director of the General College, and Professor Wealey Peik of the College of Education were advisors to the group.

The conference was a part of a current effort on the part of Christian colleges in America to find themselves in relation to present day environment, according to the Rev. O. H. Pennkoke of Quitman, Ga., chairman of the group.

"The colleges have met certain issues in the past, such as the mastery of nature. But through it all they have lost sight of the larger issue in education—namely, that you not only work in a profession, you live in life," he declared.

Colleges represented at the conference include Dana college, Blair, Neb.; Midland college, Fremont, Neb.; Wittenburg college, Springfield, Ohio; St. Olaf college, Northfield, Minn.; Augustana college, Sioux Falls, S. D.; Augsburg college, Minneapolis; Concordia college, Moorhead, Minn.; St. Paul Luther college; Gustavus Adolphus college, St. Peter, Minn.; Luther college, Decorah, Iowa, and Upsala college, East Orange, N. J.

The present University of Minnesota conference represents the second in the group's history. A similar conference took place at the University of Chicago two years ago.

Named Dean of Medical Sciences

Dr. Harold S. Diehl

Medical School Changes

One of the notable faculty changes has been the promotion of Dr. Harold S. Diehl to be dean of the medical sciences, succeeding Dr. Richard E. Scammon. Dr. Scammon becomes distinguished service research professor, having done outstanding work in the medical school for the past 25 years. Three years ago, after helping organize the division of biological sciences in the University of Chicago, he returned to Minnesota as the first to hold the deanship of medical sciences.

Dr. Diehl has been director of the students' health service for more than a decade past and in that capacity has come to be known nationally for the splendid organization he has built at Minnesota for studying and protecting the health of students. He was appointed in September 1921. A graduate of Gettysburg college, Gettysburg, Pa., Dr. Diehl took his medical work at Minnesota. During the war he served with base hospital 26 and with the American Red Cross in Poland. He has developed the department of preventive medicine and public health along with his work in the students' health service, and is professor of preventive medicine and public health.

Ray M. Amberg, business manager of the health service, was promoted at the same time to be acting director of the University hospitals. Mr. Amberg has had a long period of service with the hospitals and at one time or another has performed most of the duties connected with their management. He succeeds Dr. Halbert Dunn, formerly medical statistician at Rochester. Dr. Dunn has gone to Washington to work on statistics.

Evening classes of the general extension division will begin this week, as will the daytime college classes. More than 200 evening courses will be offered in Minneapolis and more than 100 in St. Paul.

The first convocation of the year, devoted particularly to the entering students, will be conducted in Northrop Memorial auditorium at 11:30 a. m. Thursday, October 3. President L. D. Coffman will be the speaker.

Under arrangements now going forward something in the neighborhood of the 1,000 students who attended Minnesota last year with federal and state aid are expected to enroll again this fall. Federal aid of $15 may be supplemented by state money as was true in 1934. This year graduate students also may enter with federal aid, and a considerable number of them are looked for.

Dr. William A. O'Brien will continue this year his weekly broadcasts over WCCO for the Minnesota State Medical Association. He is asociate professor of pathology in the medical school. October subjects will be: First, "Dysentery;" 8th, "Community Nursing Needs;" 15th, "Appendicitis;" 22d, "Water and Health," and 29th, "Dental Care." Dr. O'Brien has lectured on medical subjects for the state association for more than 300 weeks, with scarcely a miss.

Honor Degrees Given to Three

Drs. Mayo and Elbert L. Carpenter Named at June Commencement

The University of Minnesota brought to seven the total number of those to whom it has given honorary degrees when it bestowed the degree of L.L.D. on the Drs. Mayo of Rochester, William J. and Charles H., and the degree, Doctor of Music, on Elbert L. Carpenter of Minneapolis, at the June commencement.

The degrees were awarded in the following words:

"Honored and respected wherever thought is given to medical science, recognized as outstanding figures in an era of unparalleled scientific advancement, founders of a great institution for medical research, unceasing advocates in behalf of better education, known to the world and neighbors alike as brothers, William and Charles, inseparable, upon them, William James Mayo and Charles Horace Mayo, the Regents of the University of Minnesota, upon recommendation of the faculties, confer the degree of Doctor of Law, Honoris Causa, with all the rights and privileges belonging to that degree."

"Because of his devotion to all that is fine in music, and because his unceasing efforts have led to a greater appreciation for and love of music in his community, in the state, and in the nation, the Regents of the University of Minnesota, on recommendation of the faculties, confer on Elbert Lawrence Carpenter, the degree of Doctor of Music, Honoris Causa, with all the rights and privileges belonging to that degree."

The other four to whom honorary degrees have been given are the late William Watts Folwell, first president of the university; Hon. Frank B. Kellogg, former secretary of state of the United States; Dr. George Edgar Vincent, third president of the university, and Miss Gratia Countryman, Minnesota alumna, nationally distinguished for her work as Minneapolis city librarian.

Federal Help Plan Explained

Continued from page 1, column 4

centered in the SERA, working through the office of emergency education of the State Department of Education. During the summer of 1935, the National Youth Administration was created, and the college program was assigned to it as one of its activities. In each state a state director of the NYA has been appointed to administer the youth program, which includes the college aid project. The director in Minnesota is Dr. George Sielke, president of the St. Cloud Teachers' college. He is directly responsible to Mr. Aubrey Williams, executive director of the National Youth Administration in Washington.

"The college aid program for 1935-1936 provides that all non-profit-making collegiate educational institutions may receive a monthly allotment of funds equal to $15 per head on 12 per cent of their full-time registration as of October 15, 1934. The registration figure on which the university allotment will be based is 11,112, which will mean a monthly available sum of $15 multiplied by 1,333 students (12 per cent of the base registration figure). The actual number of students receiving the aid will vary in accordance with the monthly rate at which individuals are appointed, since the income per month for any student from federal funds may be set between a minimum of $10 and a maximum of $20. At the University of Minnesota it has been the practice to reserve the maximum monthly payment for non-Twin City students, whose expenses, because of board and room, tend to be higher, and to appoint Twin City students at $15 a month, on the assumption that by living at homes their needs are somewhat lessened. There are still other students who have made provision for board and room and who may have a slight amount of money to apply on necessary living expenses; these can be appointed at the minimum of $10, which sum will then be applied on tuition and other fees. The number of federal students at the university will probably average about 1,100 during the year.

Old Bulletin of '81 Shows 'U' of Tender Salad Days

1881-82.

THE

University of Minnesota,

—AT—

MINNEAPOLIS

is The University of the State of Minnesota, established by the constitution of the State, and endowed by the general government; being a part of the State system of public instruction. It is open to both sexes, and

TUITION IS ABSOLUTELY FREE

in all departments. The only charge is one of $5.00 per year for incidental expenses.

BOARD OF REGENTS.

HON. HENRY H. SIBLEY, St. Paul, *President.*
HON. WILLIAM R. MARSHALL, St. Paul
HON. THOS. S. BUCKHAM, Fairbault.
HON. RICHARD CHUTE, Minneapolis, *Rec. Sec. & Treas.*
HON. A. J. EDGERTON, Kasson.
HON. GREENLEAF CLARK, St. Paul.
HON. O. V. TOUSLEY, Minneapolis.
And ex-officiis,
The Governor of the State,
HON. JOHN S. PILLSBURY, St. Paul
The State Superintendent of Public Instruction.
HON. D. L. KIEHLE, St. Paul.
The President of the University,
WILLIAM W. FOLWELL, Minneapolis, *Cor Sec*

EXPENSES.

The University has no dormitories. Students live chiefly in families in and about the city. Clubs are also formed.

The current prices for board are:—in families, $4.00 to $6.00; in clubs, $1.50 to $2.50. Self-boarding is a little cheaper.

The average necessary expenses are: for those boarding in clubs, $200; in families, $260. This includes board, washing, fuel, lights, books and stationery, literary society, travel, clothing, and miscellaneous.

TIME TABLE, 1881-82.

First Term (13 weeks) begins	Sept. 6, 1881
Examinations begin, 9 A. M.	" 7, 1881
Recitations begin	" 13, 1881
Second Term (12 weeks) begins	Dec 6, 1881
Third Term (13 weeks) begins	Mar. 7, 1882
Commencement	June 2, 1882

LOCATION.

The University of Minnesota is accessible by means of all conveyances centering in the cities of Minneapolis and St. Paul.

The main entrance to the grounds is at the corner of Third St. (or University Avenue) and 14th Avenue Southeast. The eastern terminus of street railways is one block distant; fare 5 cents.

The Annual Calendar, containing full information, will be sent free upon aplication.

General correspondence should be directed, "President of the University, Minneapolis, Minn."

☞ Applicants for admission should be on hand promptly at the beginning of the year. They themselves suffer great loss by delay, and they embarrass the classes.

CORPS OF INSTRUCTION 1881-82.

WILLIAM W. FOLWELL, Instructor.
Political Science.
JABEZ BROOKS, D. D., Professor.
Greek, and in charge of Latin.
NEWTON H. WINCHELL, Professor.
State Geologist.
CHAS. N. HEWITT, M. D., Non-Resident Professor,
Public Health and Hygiene.
JOHN G. MOORE, Professor.
German.
MOSES MARSTON, Ph. D., Professor.
English.
CHRISTOPHER W. HALL, Professor.
Geology, Mineralogy and Biology.
JOHN C. HUTCHINSON, Ass't Professor.
Greek and Mathematics.
JOHN S. CLARK, Ass't Professor
Latin.
MATILDA J. CAMPBELL, Instructor
German and English.
MARIA L. SANFORD, Professor.
Rhetoric and Elocution
WILLIAM A. PIKE, C. E., Professor.
Engineering and Physics
JOHN F. DOWNEY, Professor.
Mathematics and Astronomy.
JAMES A. DODGE, Ph. D., Professor.
Chemistry.
ALEXANDER T. ORMOND, Professor.
Mental and Moral Philosophy and History.
CHARLES W. BENTON, Professor.
French.
EDWARD D. PORTER, Professor.
Agriculture.
WILLIAM H. LEIB, Instructor.
Vocal Music.
WILLIAM F. DECKER, Instructor.
Shop Work and Drawing.
EDGAR C. BOWEN, U. S. A., Professor
Military Science.

Board and Room Were $4 to $6 per Week and Same Person Taught Several Subjects

How the University of Minnesota described itself in the fall of 1881 for the benefit of those who considered entering for the academic year 1881-1882 is shown in a "bulletin" the size and shape of an envelope insert that was issued at that time. It was found in some old files by Comptroller W. L. Middlebrook.

The university was on the "quarter system, in that there was a first term of 13 weeks, a second of 12 weeks, and a third of 13 weeks, the whole college year extending from September 6 to June 2.

Dr. William Watts Folwell was president, and the president of the Board of Regents was the Hon. Henry H. Sibley of St. Paul. Ex-officio members were the governor of the state, the Hon. John S. Pillsbury, D. L. Kiehl, superintendent of public instruction, and President Folwell.

"The University of Minnesota," said this folder, "is the University of the State of Minnesota, established by the constitution of the state, and endowed by the general government; being a part of the state system of public instruction. It is open to both sexes and tuition is absolutely free in all departments. The only charge is one of $5 per year for incidental expenses."

Under the heading "expenses" the leaflet said: "The university has no dormitories. Students live chiefly in families in and about the city. Clubs are also formed. The current prices per week for board (and room) are in families, $4 to $6; in clubs, $1.50 to $2.50. Self boarding is a little cheaper." Expenses by the year were said to range from $200 to $260.

"How to enter the university" was described as follows:

1. Report promptly for examination at the time and place announced and attend the sessions punctually, observing such directions as may be given.

2. At the hour appointed you will receive a numbered examination ticket. By this number you will be known to the examining professors.

3. So soon as the answers can be read and marked, a statement of the merit obtained in the several studies will be furnished to each examinee.

4. An application for admission may thereupon be filed with the president. On the reverse of the blank application is a blank vaccination certificate, which is required to be filled and signed by some practicing physician who is a doctor of medicine.

5. The successful applicants, having selected their courses of study, and paid the annual fee of $5 for incidental expenses, receive a registration card which admits them to classes.

Today the phrase "practicing physician who is a doctor of medicine" would sound strange.

Matter of Discipline

Said the folder under the heading, "Discipline", "The University presumes that every member intends to do his duty and behave decently. Good order, courtesy, punctuality and attentiveness are established customs of the university, which the student body takes pride in maintaining. The faculty have power to require the withdrawal of students who, in their opinion, are not fulfilling the objects of their residence at the university, or are injuring others by their example."

In those days the "collegiate department was the department of elementary instruction, long since dropped by the university, except for the University High school. The College of Science, Literature and the Arts was listed as having the degrees, "bachelor of arts," "bachelor of science," and "bachelor of literature."

The College of Mechanic Arts offered courses in civil engineering, mechanical engineering, and architecture. There was also a free evening drawing class for mechanics, a forerunner of such things as are now done by the general extension division.

In the College of Agriculture, to which forestry and home economics had not yet been added there was an elementary course, forerunner of the present schools of agriculture, the regular course leading to the degree, "bachelor of agriculture", a farmers' lecture course and three special short courses.

"Furthermore," said the leaflet," the Colleges of Law, Medicine, etc., will be opened when the revenues of the institution may warrant."

Facilities for Instruction.

Listed under facilities for instruction were the main building, agricultural college building, chemical laboratory, completely equipped, an experimental farm of 120 acres (not the present one), a library of 14,000 volumes, with printed catalogues, 150 U. S. cadet rifle muskets with accoutrements, a section of artillery complete, a Students' Christian association and two prosperous literary societies. The legislature of 1881 had just appropriated money for a comprehensive building program, amounting to $30,000 a year, with which were to be erected a farm house, an engineering building, an astronomy observatory, a military building to include a gymnasium (the old Coliseum), a museum and a library.

Dr. Folwell, "instructor" in political science, headed the faculty as president of the university. Professors were Jabez Brooks, Greek and Latin; Newton H. Winchell, state geologist; Charles N. Hewitt, public health and hygiene; John G. Poore, German; Moses Marston, English; Christopher W. Hall, geology, mineralogy and biology; John C. Hutchinson, assistant professor of Greek and mathematics; John S. Clark, assistant professor of Latin; Matilda J. Campbell, instructor in German and English; Maria L. Sanford, professor of rhetoric and elocution; William A. Pike, engineering and physics; John F. Downey, mathematics and astronomy; James A. Dodge, chemistry; Alexander T. Ormond, mental and moral philosophy and history; Charles W. Benton, French; Edward D. Porter, agriculture; Edgar C. Bowen, military science and tactics; William H. Leib, instructor in vocal music, and William F. Decker, instructor in shop work and drawing. James Bowen was an instructor in practical horticulture.

"Applicants for admission should be on hand promptly at the beginning of the year," said the announcement. "They themselves suffer great loss by delay and they embarrass the classes."

Extension Head Sees Big Year

Group of Novel Courses in First Semester Includes Engineering Survey

A sharp rise in enrollment for evening classes at the University of Minnesota this fall was indicated by registrations Monday and Tuesday, the first days in a two weeks' registration period. Dr. R. R. Price, director of the extension division said he looked for at least a 10 per cent gain in both Minneapolis and St. Paul.

A series of 16 lecture by eminent Minnesota engineers, entitled, "Survey of Engineering" will be one of this fall's new courses. Each lecture will be by a different man. Edward P. Burch will begin the series Tuesday night, October 1, speaking on, "Geologic Formations Under the Twin Cities." The course will be offered along with some 200 standard subjects. Casualty insurance, adult mental ability, physics of heat and accoustics, direct mail advertising, philately (stamp collecting) psychology of beauty and art, air conditioning and mathematics of investment are also listed among the more novel subjects. The many recent social security proposals will be studied in another class.

Enrollment may be made up to October 5 either on the university campus or at downtown offices in Minneapolis and St. Paul. Classes will start the week of September 30.

Other lectures in the engineering series will be as follows: October 8, Adolph Meyer, "Hydrology of the northwest;" 15th, Fred C. Lang, "Soils from a highway standpoint;" 22d, C. A. Koepke, "Production control;" 29th, Walter Olsen, "Water conservation problems;" Nov. 5, Dwight F. Johns, "Lock and dam construction on the upper Mississippi;" 12th, C. C. Wilbur, "Tunnel construction in St. Paul;" 19th, George M. Shephard, "Engineer-problems in St. Paul;" 26th, Walter H. Wheeler, "Engineering economics;" December 3d, S. C. Shipley, "The relation of an engineering department to production and sales;" 10th, William J. Titus, "Recent United States governmental activities in road and bridge construction;" 17th, C. A. Hughes, "Recent research in concrete and concrete materials;" January 7th, M. Dwight Bell, "The relation of engineering to mill construction, maintenance and operation;" 14th, G. E. Loughland, "The practical side of the care and operation of hydro-electric plants on an interconnected system;" 21st, Louis Clousing, "Fifty years of government progress;" 28th, A. C. Godward, "Public works, covering past developments and present status."

Will Open Observatory

Twin City star-gazers will again have a chance this fall to gaze on their favorite constellations at the University of Minnesota observatory. Professor Willam Luyton, head of the astronomy department, has announced that the observatory will be open each Monday night, weather permitting, beginning on Monday, October 7th. The open hours will be from 7 to 9 p. m. Those who wish to watch the evening skies are urged to reach the observatory rather early,

'Hooray,' Says Dean Lyon. In Russia To Study, Finds School Is Closed

Letters Home Tell of His Experiences With Many Phases of Famed USSR

In Russia it's easier to take a long trip on the train than to buy a collar button, and strawberries, which are sold in "foreign money stores" are easier to get than cucumbers, which are not, although cucumbers are one of the universal Russian delicacies. These are some of a thousand details written to friends in the University of Minnesota medical school by Dean E. P. Lyon, who with Mrs. Lyon went to Moscow this summer to attend a Soviet summer school. Just after the students, more than 300, chiefly from the United States and England, reached Moscow, the summer school was mysteriously called off. Many of the students were frantic but Dean Lyon didn't particularly care, he wrote, as he had also gone there to attend an international physiological congress which took place.

The Lyons reached Leningrad on August 17 and the school was called off next day. He wrote:

"Just now, during dinner, and before dessert, all summer school people were asked to assemble at once for an important announcement. We wouldn't be jarred so sat the dinner out and then went to the meeting. The announcement was that the summer school is off, the reason given being that the professors have been commandeered for some other public duty. Intourist said we would get our tuition money back."

Later the entire group sought other explanations. Some said a famous American publisher had made so much noise about the summer school that it was abandoned. Most of the visitors finally came to the conclusion that faulty administration was to blame. They decided that the man originally designated to organize the school had refused to do so and that the higher-ups did not find out until too late that nothing was being done. Some of the Americans acted very badly, Dean Lyon wrote. One man, from Oregon, demanded that he be repaid everything, including his fare from Oregon to Russia and back.

Meet a Home Town Boy

"Opposite us at dinner sat a young man who arrived from England today," the dean's letter went on. "He said at length that he was an American studying in England. Asked what American university he had attended, he said, 'Minnesota'. His name? Zon. Was he the son of Professor Zon? Yes. So it turned out that we had run into the son of friends.

"Great experience this morning. Mrs. Lyon and I started off to explore a big store in the next block —an enormous number of shops with nearly everything for sale, literally from A to Z, anatomy to zoology, for in certain windows were skulls, bones, models of dissections and embryology. In others were pickled and dissected fish, starfish, chemical apparatus, physics equipment and the like. There was every kind of goods except 'eats.' We can find no fruit anywhere. Tonight we asked a girl in the Intourist shop of the hotel if she could speak English. 'Oh, yes'. Have you any oranges? 'Certainly', She disappeared into a back room and returned with a can of peaches, put up in America."

Although the store was large they could make no purchases, as it dealt only for native money, which tourists are not allowed to have. Tourists must buy at the foreign money 'Torgsin' stores.

How to Sleep on Train

Dean Lyon evolved a plan for comfort in a Russian sleeping car during the trip from Leningrad to Moscow. He decided it was best to lie on one side until that side became numb, and then to use it as a pad for the rest of the body. He observed that some of those in the train climbed up into the baggage racks and lay down there. He did not testify that they slept.

In an emergency hospital in Leingrad Dean Lyon witnessed the use of blood from corpses for transfusions, something that has recently been discussed to some extent in the press of the United States. Blood from persons killed in accidents is kept and used for as much as four weeks. In one ward in the emergency hospital there were 12 cases of broken backs. There were 700 beds in the vast institution, which included an abortion clinic, one of 12 in the city of Leningrad. In these about 60 abortions a day are performed, of which about half are requested and the others recommended by physicians.

While Russia may have undergone a revolution in most matters, Dean Lyon found that the order in which food is served at meals has remained as fixed as the stars. In good American fashion he wanted his coffee "right off" when breakfast was served, but found he could get it only after the eggs, bread and butter, and whatever else went to make up the breakfast, had been served. Mrs. Lyon once managed, on a bet, to get coffee first thing, but was never able to repeat, no matter how many bets she made.

Russian Mud Bathing

At Odessa the Lyons saw the Russian method of taking mud baths. The dean wrote:

"We saw the celebrated mud baths, believed to be very efficacious. The mud comes from the bay and is black, slimy, rotten and sulphur-odored. People get into a tub of this stuff and stay for 10 to 15 minutes. In some way this is supposed to exhaust the virtue of the mud, which is then run back into the sewer. I asked our guide, a chemistry student, what change could have taken place. My guess is that the Russians are as child-like in matters of therapeutics as in many other things. Anyway, 4,000 people are here 'stuck in the mud' for an average of one month, and 200 doctors are employed. The big idea is emphasized that formerly only very rich people could have these privileges, which now are available to the poorest workers. I think this fact gives the Russians a bigger kick than the therapeutic benefits, whatever those may be. And of course there are the undisputed benefits of rest, sleep, diet and sunlight, plus the 'psychology of mud.'

At Kiev they visited a former monastery that has been turned into an "anti religious museum". Still there, under glass, was the body of a monk who was said to have died and been embalmed several hundred years ago. Originally he was whiskered; now his face is smooth.

Opposite the hotel in which the Lyons stayed in Kiev was a special children's theater, beautifully decorated, seating about 600. Even the seats were children's size and there were diminutive refreshment stands, settees, alcoves, and wardrobes. Admission was one-half ruble. "In Russia, nothing is too good for the little children," they were told.

Thieves broke into the train in the middle of the night while the university people were returning from the south to Moscow. The robbers pried open the doors of compartments with wires and stole purses and clothes while people were sleeping.

"Talk about a hectic time," he wrote. No one was able to speak Russian, although one or two officers stuck their heads out of staterooms, listened, shrugged, and went back to bed. Someone routed out a sleepy-looking woman porter, but none of the tourists was able to tell her what had taken place. When we stopped at a station several began to demand police, soldiers and the like, but nothing was done."

Ukraine Is Like Dakota

"The Ukraine," wrote Dean Lyon, is North Dakota, Manitoba, Saskatchewan, all rolled into one. One difference is the lack of fences. Another, that there are no isolated buildings. Every four or five miles there are villages or groups of huts. In a good many places there were new buildings, which I took to be co-operative farm centers. An enormous crop was being cut around Moscow. Further south at Kharkov the grain had already been threshed. A train with 57 new threshing machines passed us moving north. Sunflowers were being grown as a crop over enormous areas.

"The money problem is all in a mixup. We are not supposed to have Russian money, so get our change for American money in German, French, Swedish and Finnish small money. Today, as part of my change, I received an American three cent stamp. It is a great inconvenience not to have at least a little Russian money, but usually one can't get a bit. The other day an American girl who had got hold of some rubles sold me 25 for a dollar. The system beats us worst on postage. A letter to America costs us 15 cents American, but would cost a Rus-

Continued on page 4, column 5

U. S. Commissioner Discusses Liberal Education

(Continued from page 1)

more ghastly wars, and yet they hate and fear war. They are not well fed, and yet they destroy food. They are poorly clothed, and yet they plow under cotton and run their marvelous textile mills at less than half of their capacity. They lack proper educational facilities for their children because of vast curtailments of opportunity and no proper expansion, and yet they have thousands of trained teachers ready and eager to educate.

I do not intend to discuss a plan by which these dangerous paradoxes may be dissolved. Literally dozens of plans have been proposed. Some of our most careful students of social problems have produced schemes for making the technological era serve the masses of men with abundance and security. You are familiar with some of these programs. Suffice it to say here that even the so-called experts disagree and advocate highly conflicting plans for social change and improvement.

Granted that we are in a muddled situation, that something must be done to make life more reasonable, more sensible, and thus more livable for the masses of the people, the question I want to pose is: What is the function of education? More than that, what is the function of liberalism in education?

There are some educators and more laymen, who assume that any proposal which suggests a new and different way of doing things is liberal. It is almost taken for granted that any movement for social change is an expression of liberalism. Particularly, there is a school of thought now growing which goes under the banner of liberalism and which advocates that it is the business of education consciously to direct the movement for social change in the way that such change should go.

It is pertinent, therefore, that I should speak at some length on this whole question of the function of education and liberalism in a changing world order. I want especially to deal with that phase of education which seems to me of most importance, namely, adult education.

Meaning of Liberalism

First, let us inquire into the meaning of liberalism. The function of liberalism, it seems to me, is to liberate. Liberalism historically has been an attack on despotic authority. It has operated always to release the human spirit from the bondage of superstition, from the inhibiting influences of caste and aristocracy. It fought for freedom of inquiry against all the entrenched powers of the old world.

Liberalism is a temper of mind, a way of thinking. It shuns dogmatism. It urges unfettered, absolutely free investigation of every problem. Liberalism is not afraid to face the facts and to follow where they lead. It welcomes and stimulates criticism.

The very flower of liberalism is the scientific approach. No one need argue the merits of liberalism. We liberals point to the profound results of the scientific attitude of mind in the conquest of the natural world.

Today liberalism demands that men and women apply the scientific attitude to the learning process on matters of social and economic import. Liberalism asks for freedom of inquiry in the belief that the truth about sociological problems cannot be discovered in any other way.

I conceive it as the task of liberal education to liberate the minds of individuals to function effectively in the democratic control of their social life and to prepare them for and to induce continuous growth in personal self-expression and personal efficiency.

Certain educators have analyzed the social ills of our times and have decided that the cure is economic collectivism, sometimes referred to as industrial democracy. They seem to feel that the way to liberate America from the evils of the status quo is to indoctrinate the school children, adolescents, and adults with beliefs in a new social order founded upon the socialized ownership and management of the means of production.

I am not interested at this time in discussing the merits of this vision of a new social order. I am concerned with their suggestion that the building of it, according to the preconceived patterns of pedagogues, become a major part of a planned effort of public education.

Against Indoctrination

Let me not be misunderstood. These educators are not alone in asking that the schools be used to indoctrinate youth with ideas and beliefs concerning the social order. There are others, and some are not as forthright and idealistic as these educators. Everyone is familiar with the facts adduced from the Congressional investigation some years ago about the tactics of the power trust. It is common knowledge that these gentlemen who believe in the continuation of the private ownership and control of electric utilities cleverly inserted their propaganda in textbooks and sought to indoctrinate youth with their views.

Others who believe that ours is the best of all possible economic systems are at work attempting to interfere with the learner's right to read about and to discuss other systems of economics. By a negative process, they try to eliminate all non-status quo inquiry, to create and to preserve ignorance of new systems, and thus indoctrinate youth with their idea that a new social order is distinctly undesirable. Legislation is often sponsored by these people to frighten teachers into presenting only one side of the sociological picture. The aim of this group is indoctrination also.

The juxtaposition of these two groups raises this interesting point: Can the schools and the forces of education remain neutral? Both the new-social-order educators and the old-social-order protectors say that education cannot, or at least that it will not.

In an absolute and complete sense, perhaps not. However, if our new-social-order people are right in their estimation of the power of the protectors of the status quo, these people ought to be a little hesitant in calling for the end of neutrality altogether. It is futile indulgence in the sheerest wishful thinking to believe that these "frontier thinkers in education" will be the ones to dictate the process of indoctrination. When indoctrination becomes the order of the day in education, we may be quite sure that the forces which are able to maintain the social system will be eager and powerful enough to direct the indoctrination along the line of their own beliefs and interests.

Mind you, I am not attempting to say here that the schools should interpret their neutrality as a hands-off policy. Rather, I am contending that freedom of inquiry should be defended against all of its opponents as the essential of liberal education. I do not want to see the educational process used as a bulwark to protect and perpetuate any particular aspects of the existing system regardless of their merits, any more than I want to see education used as an instrument to indoctrinate learners with the radical proposals of some new system.

Must Consider Arguments.

Of course, the educational process will and should deeply affect the future decisions and choices of citizens in a democracy. It must, therefore, often concern itself with highly controversial questions. There need be no side-stepping, no hushing up of discussion about such questions. In fact, ultimately, there cannot be. The most tyrannical governments of the past have not found it possible permanently to suppress the truth and the desires of the people. I predict that the modern dictatorships will some day crash under the revolutionary impact of the masses of people who are being goaded to revolt by suppression and fed on the falsehoods of propaganda, the grown-up brother of indoctrination.

But we want no group of pedagogic reformers on the one hand or self-appointed academic censors on the other, manipulating the learning process so that the learners may more easily be fitted as cogs into a machine conceived in master minds.

Indoctrination implies that infallibility is vested in some one or some group. Liberalism is essentially a revolt against that idea of infallability. The profession of teaching should be in the vanguard disclaiming any belief in infallibility and therefore repudiating the alleged right of organized public education to indoctrinate for any vested interest or for any reform.

Dr. George Coe puts this point rather crisply in his "Educating for Citizenship." He says: "A notion is floating around that leadership of the masses toward any excellence must be bestowed from the outside, that it cannot arise from within. To this a retort might be made that every individual of 'light and leading' has sprung as a matter of fact from the mass, and that qualities like his own continually sprout from the main stock of humanity. What is equally important, within the mass there is some spontaneous and general recognition of excellence together with capacity for growth in apprecaution . . . The tradition of the schools presents the picture of a ruling class, the teachers, imposing their wisdom upon a ruled class, the pupils. Similarly, wisdom in the statesman consists, in part, in making the masses accept what they do not choose nor understand. . . Nor yet do we really intend that the young shall come to full maturity; nor yet do we effectively believe that the people can manage themselves through their own intelligence. . . We can rise by virtue of our own inherent qualities; we do not have to be lifted, and we have no historical reason for trusting any class as authoritative lifters."

That is liberalism to the very roots. To intend honestly that youth shall have untrammeled opportunity to come to maturity by being liberated to use the full force of its inherent abilities: that is liberalism in education.

Let us now examine this problem from a more positive point of view. If not indoctrination, then what? How do educators, or should educators, really function to liberate human capacities for leadership?

First, we teach young children to read and to write. Think how little freedom an illiterate person has in a world of books and written expression! What limitless possibilities lie before that individual who can read the ideas of others, and write his own! True, he may read trash and write ransom notes. On the other hand, he may read Rousseau and write the Declaration of Independence.

Teach Youth Observation

Second, we teach or should teach the young child how to observe the kind of world he lives in, help him by the use of his tools of learning to discover for himself what is in that world, the extent of it, and its inhabitants, their ways of life and customs. How really limited and controlled is that person who has never glimpsed the infinite variety and wide expanse of life on our planet! We call him provincial. In a democracy such as ours with its millions of lines of contact and its interdependence, the person who has no conception of the kind of world that lies out beyond our borders is dangerously unprepared for citizenship. It is the teacher who introduces the young mind to the fascinating quest for an understanding of the nature of our world. That is liberation.

You can readily trace the steps for yourself. But very soon you run into the function of education to teach history. At once the question arises: How shall we teach history? Surely, there has been a very great deal of indoctrination in evidence in the schools in this field. And so there has! The dogma of nationalism in every country has prevailed in the teaching of history to an alarming degree, so that historic fact has been distorted and history book writers frequently have served truth badly for the glorification of the nation. Fortunately the data on which history books are written are available, and the urge for free inquiry has been great. The result is a flood of new history books, healthy controversy, and the opportunity for every teacher to give students a wide selective reading list. The teacher who confines his students to one text book in history is simply depriving them of their right to see for themselves a variety of displays of historic data.

All along the learning process, the teacher is engaged or should be engaged in leading his students to view life from new angles, to probe problems, to seek out the facts for themselves, to discover what may be seen from new horizons.

Must Possess Tools of Thought

Gradually, as youth advances toward academic maturity, it seeks understanding of the more controversial social and economic problems. Finally, the student is liberated by a thorough grasp of the tools of thought. The task of the teacher now is to be his guide and counselor in the process of free inquiry. It is in connection with the teaching of social and economic problems, controversial questions especially, that I believe we need a new vision of the art of teaching. The learner has an inalienable right to know all important points of view, and to know those points of view as the people who hold them want to express them. Too frequently, the teacher thinks he has exhibited sufficient impartiality when he has explained ideas which he opposes as he sees them. I want it established as the right of the learner to get opinions and ideas on controversial questions directly from those who believe in them. When this right is denied, our democracy will be gone. When organized education ceases to protect this right, it is taking the first steps toward the establishment of dictatorship.

The antithesis of indoctrination is freedom of inquiry. The main function of the teacher or professor is to stimulate and guide that free inquiry, to develop critical thinking among his students. That is the process of liberation. Liberalism then trusts critical and intellectually alive people to reach their own conclusions.

But it is my conviction that the learning process must not stop with formal education in high school or college. However, thoughtfully a student may discover for himself the basis for conclusions on important public affairs in his school days, unless he continues the process of inquiry he is soon unqualified to express an intelligent judgment on public questions. The social problems he studies at 18 or 20 are not likely to be the ones on which he will have to register an opinion at the polls and with respect to which he will exercise his personal influence at 25 and in middle life.

Must Instruct Adults

For this, among other reasons, I have urged that facilities for adult civic education be greatly increased as the only sound way of preserving democracy. I have said quite positively that I do not believe that the democratic ideal of orderly evolution can be made to work by using the schools to indoctrinate for the future. But now I must say even more positively that democracy cannot be made to work by following a policy of laissez faire in the realm of public opinion among adults.

Educational laissez faire in the civic education of adults we now have to a large extent with the result that public opinion is the prey of propaganda. Special interest groups of all sorts and ambitious demagogues as well, make a determined effort to lead the general public to accept their programs and ideas without a critical examination of the facts.

There is a highly developed technique for appealing to masses of people to use their democratic rights to rubber stamp the plans of powerful minorities. The formula by which people in a democracy can be manipulated is not new, but certainly it has been perfected and refined with the advent of new means of communication. The trick of propaganda is to associate the ends desired with the lowest common denominator of mass emotion. A single appeal can now reach 50,000,000 people. The man who can create an appeal which will win a large proportion of these millions to his purpose or his product can command almost unlimited salary. The publicity and advertising expert, sometimes called the public relations counsel, has become a powerful influence in the shaping of public opinion.

Now let us contrast for a moment the technique of this sort of propaganda and the process of education. Let me put it in general terms first. Between inducing another to accept your conclusion without himself doing the thinking necessary to validate the conclusion, and inducing him to consider a problem and to seek and weigh evidence, there is all the difference between propaganda and education, between indoctrination and critical thinking.

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 OCTOBER 1, 1935 NUMBER 1

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

'U' Dean Cheers Finds School Out

Continued from page 3, column 5

sian about half a cent of our money at the rate I bought rubles.

"We stopped one day at Kharkov, between Sebastopol and Moscow and found it an interesting example of a booming industrial city. Its 1932 population was called 439,000 and now it has 800,000 people. The factories are mainly tractor works, which are said to employ 16,000. Many new office buildings have gone up, mostly 12 stories high and constructed chiefly of glass. The stadium held 60,000 people but they are starting one to hold 100,000. We could not see any workers' apartments, because they are all occupied, many of them even before they have been completed."

Congress Well Conducted

Dean Lyon was deeply impressed by the physiological congress, which he went to Russia to attend. Each delegate was seated in a special place with earphones, which could be plugged in so that an address could be heard in the tongue in which it was delivered, (the congress was international) or in French, German, English or Russian as the listener chose. One of the speakers was Dr. L. G. Rountree of the Mayo Foundation.

"The most impressive moment of the congress came when Pavlov stated that two distinguished physiologists had died since the last international congress (MacLeod and Schafer) and asked the audience to arise in respect to our late colleagues. At that moment a hidden, magnificent band played Chopin's funeral march exquisitely, feelingly. My eyes were wet and others confessed to the same experience. I really think it was the most impressive memorial service I ever witnessed."

He reported that Mrs. Lyon had learned that the congress was meeting in a building erected by Catherine the Great for her favorite lover, Potemkin.

"Last evening," he wrote, "we went on a very special excursion to Peterhof, site of the old summer palaces, some 20 of them, about 20 miles away. Imagine 400 automobiles, in an unbroken line, every crossing, even out in the country, guarded by white-coated police; every streetcar, bus, truck, wagon and even bicycle stopped until the procession passes. Imagine these miles of streets and country roads lined with thousands of people, mostly children brought in groups to watch the foreign scientists pass, all cheering, waving hands and laughing, while we respond in kind."

When after a two hour inspection of "everything" at the Russian border the party crossed into Poland they were able to buy the first oranges they had seen since leaving Finland for the Soviet Union. "And," wrote the dean, "like the Finnish oranges, these were Sunkissed. They made us think of home."

Named to Choose Aid Students

Six members of the faculty and staff have been appointed by President L. D. Coffman to serve as a committee of selection on Work Relief for Students. They are Dean Harold R. Benjamin, College of Education; Mrs. Dorothy G. Johnson, employment bureau; Dr. W. F. Holman, superintendent of buildings and grounds; William T. Middlebrook, comptroller; Rodney M. West, registrar, and Dean Malcolm M. Willey, assistant to the president, chairman.

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | OCTOBER 22; 1935 | NO. 2

Minnesota Taking Forward Step in Adult Education

New Building to Be Center for Professional Discussions

AID GIVEN BY PWA

Additions to Women's Gym and Athletic Building Planned

Minnesota will launch out on an entirely novel experiment in the field of adult education this winter when ground is broken for the new Adult Education building before December 1. That date has been set for the start of the work by the Public Works Administration, which is contributing about 45 per cent of the $275,000 which the building will cost.

The building will bring to realization a project that has come from the brain of President L. D. Coffman, who for long has believed that some new approach to the problems of adult education must be sought.

Minnesota's new building will be a center to which groups in various professions and callings will be brought for stays of varying length to study, attend lectures and engage in discussions of the subject matter of their field with a view to bringing their information thoroughly up to date. It will contain living quarters for about 80 persons, with a possibility of expansion, a dining room for 130 to 150, an assembly room for 150, class rooms and seminar rooms; also a lounge and the like. Thus it will be in a true sense a "center" for adult education.

Comptroller W. T. Middlebrook has announced that a garage capable of caring for at least 200 cars will be built under the new structure. In this an effort will be made to hold prices to a low enough range to enable students to engage space. Inasmuch as the building is to go up on the parade ground, opposite Pillsbury Hall, in a place where many cars are now parked, it was decided to replace in this manner some of the parking space that will be lost on the grounds. In setting forth his proposal to PWA, Dr. Coffman wrote:

Basis of the Plan

"The plan which we have in mind at the University of Minnesota arises out of the need of providing a continuing program of instruction for persons engaged in professional service in the state. This need comes from the fact that science and knowledge are advancing so rapidly that one can scarcely keep up with them. We have found it necessary to repeat a course in medicine in the senior year that had been given in the freshman year, because of the advances of scientific knowledge in the meantime.

"Various professional groups—doctors, dentists, lawyers, engineers, journalists, school superintendents, teachers, business men and ministers—have told me that they would come to the university from time to time for courses of a "refresher" type if facilities were provided.

"We believe such a building will be in constant use. It seems clear to me that the successful administration of the plan will result in the toning up of every profession, in the raising of professional qualifications, and in improving the quality of professional service given to the people."

Dr. Coffman also believes there are benefits to be derived from having the professional population in the state brought into closer touch with the university and thus come to understand it better.

The plan had been broached to the 1935 legislature, but when that body decided to vote no money for university buildings it was laid before the Public Works Administration. The starting date, December ., is in accordance with that or-

Continued on Page 2, Column 1

Freshmen, Class of 1939, Attend First Convocation

On October 3 the Freshman Class of more than 3,000 students took part in their first formal University of Minnesota function when they marched from the Knoll to Northrup Memorial Auditorium for the Freshman Convocation, addressed by President L. D. Coffman.

Study of Twin City Area Geology Soon to Appear in Survey Report

Dr. G. Schwartz, Author, Doubts Ultimate Dependability of Artesian Water Sources

Lakes, streams, springs, underground water supplies, rivers, and other geological features of the Minneapolis and St. Paul metropolitan area are described in a new report on the geology of that area soon to be published by the Minnesota Geological Survey. The work has been prepared primarily by Dr. George Schwartz of the department of geology, University of Minnesota, who, however, has had the assistance and collaboration of other faculty members. It will be sold by the University of Minnesota Press.

A chapter on artesian waters, at present much discussed with reference to city water supplies, questions the possibility of placing a much greater drain on the undoubtedly large artesian water resources of the area than they are withstanding at present. The bulletin points out that the water one can obtain from artesian sources depends on the sources of replenishment, and states that these are restricted for the twin city area.

Four main facts with reference to artesian water are considered. There must be an adequate source of water supply; there must be a porous rock formation, such as sandstone, to retain the water; next to the porous bed must be an impervious bed to hold the water in, and there must be pressures from higher rock formations nearby to help bring the waters to the surface.

The Containing Formations

In the twin city area there are five sandstone formations that contain artesian water, the St. Peter, Jordan, Franconia, Dresbach and Hinckley sandstones, named from the localities with which they are principally associated. Most important of these is the Jordan sandstone, because it has a relatively high porosity for retaining water and because it underlies the entire metropolitan area at not too great a depth. Furthermore, penetration of the Franconia, Dresbach and Hinckley sandstones would require many additional feet of drilling after the overlying Jordan had been penetrated, while a drilling 500 feet deep is required to reach water in the Jordan when it lies at its usual depth. Of the extent to which water is finding its way back into this principal water source underground the report says:

Where Water Gets in

"Insofar as the Jordan sandstone is concerned, it seems fairly obvious that the demands which are now made on it are quite extensive in view of the relatively restricted area of exposure which is tributary to the basin. It is certain that the Jordan is unable to draw water from the east beyond the St. Croix river. From Afton north to Marine the Jordan outcrops above river level. South of Afton to Point Douglas any possible transfer of water from east to west is prevented by the Afton anticline. From Marine the Jordan (sandstone) appears to occur beneath the (glacial) drift in a broad curve to the west end of Lake Minnetonka, thence south to the Minnesota river. Throughout this extent it is presumably open to receive water from the drift. In view of the general low water conditions in recent years it does not seem that contributions from the surface could be very great. From Chaska to the town of Jordan the sandstone is exposed along the Minnesota valley, where it doubtless receives large amounts of water. In the vicinity of Belle Plaine the dip is reversed, which carries the water southward. From Chaska and Shakopee the Jordan sandstone is exposed only near the Minnesota valley, thence across the pre-glacial valley through Prescott to Big Bend and Hastings. Only along this limited exposure, mainly beneath the drift, can water enter it, as farther south it is covered by other formations, and south of Farmington a reverse dip to the south prevents flow from that direction."

The actual exposed area of the Jordan where water may enter it is said to be "substantially that shown in the report of the water commission of 1932."

Springs of the Region

The many springs in the valleys of the three rivers, Mississippi, Minnesota, and St. Croix, are subjects of comment by the authors of the bulletin. There is special reference to the "boiling springs"

Continued on Page 4, Column 1

Iceland, Grub, Glaciers, Income Convocation Topics

Ten distinguished visiting speakers will address student convocations at the University of Minnesota during the fall quarter, including the Rev. Bernard R. Hubbard, "Glacier Priest," Dr. Harold G. Moulton, head of the Brookings Institution of economic research, and Dr. Morris Fishbein, famous popularizer of medical knowledge. All will speak at 11:30 in Northrop Auditorium, Dean Malcolm M. Willey announced.

Following the Freshman convocation, Thursday, October 3, the first visiting speaker appeared on October 10. He was Langston Hughes, a gifted young Negro poet who has a Guggenheim fellowship for study in Europe this year. Edward J. O'Brien, known for his compilations of "Best Short Stories" and the like, spoke October 17. Dr. Fishbein, appearing this Thursday, October 24, will discuss, "Food Fads and Follies."

The Brookings Institution has recently released a report on the distribution of national income. Dr. Moulton, its president, will discuss that topic and its relation to our national economy when he appears on October 31.

The "Glacier Priest," Father Bernard Hubbard, will have as his subject on November 7, "A voyage into the ice inferno." Asgier Asgierson, former premier of Iceland and minister of education, will speak November 11, his subject being, "Peace and Union." This will be on Monday, Armistice Day. The next convocation will be November 21 and the speaker, Dr. George Nettleton of the department of English, Yale university. "Mark Twain" will be his ever-popular subject. The director of the Cleveland Art Museum, William M. Milliken, will discuss a subject from the fine arts when he appears on December 5.

Dr. Marie Bentivoglio, talented Italian woman who has spent much of her life teaching in Australia, will appear December 12. She will discuss "The Ethiopian Problem," basing her remarks on a summer spent in Italy. The fall quarter commencement address, will be given December 19 by Dr. W. H. Fyfe, principal of Queens University, Kingston, Ont.

President Sounds Note of Advice To New Students

Points Out That Each Human Makes Not One Record But Three

ABILITY NOT UNIFORM

Tells Students Not to Fall Prey to Immediate and Obvious

There are more than eighteen hundred colleges and universities in America. No other country has a corresponding number. And this year they are all crowded with students. One wonders sometimes why so many young men and women are going to college. There are people who think too many youth are seeking a college education, but there can be no just criticism of this large attendance if college students and college graduates put their training to good use. Everyone knows that colleges should not tolerate loafers, the incompetent, nor those who deliberately and willfully abuse their privileges. If colleges fail to graduate more than a reasonable number of active, intelligent, interested citizens; if their graduates side-step personal responsibilities; if they are not stimulated to work; if they have not acquired a wholesome personal philosophy and a cultured taste in language, literature, and the arts; if they have not been imbued with higher conceptions of social and professional service, then the colleges have not lived up to their full opportunities nor fulfilled their high responsibilities. If college graduates are more interested in baseball scores than in the economic structure of the country; if they are more concerned about the prospects for football than about social welfare; if they are more interested in the stock market than in international affairs, in Pop-Eye and Amos and Andy than in government, then something is seriously the matter either with them or with the colleges of the country. If we talk about economic conditions without knowing any economics; if we criticize the government without understanding its problems; if we advocate panaceas and nostrums without having learned at first hand or under the tutelage of a competent scholar what the problems of the country really are, then the college somehow or other has failed to do its full duty.

Of course not every person who goes to college profits by a college education. There are some who will not work, others who lack the ability to do college work and still others who fritter away their precious time in social affairs or in promoting plans naively conceived for the administration of the university or even of the government. Such persons may achieve considerable notoriety but they seldom achieve scholastic distinction.

Attendance at college, I like to think, represents a yearning for something better. Growth in registration is but a manifestation of the demand of "the masses" for a higher minimum standard of life for themselves. People generally are coming to believe that education has something to contribute to life. It is this that leads society to tax itself heavily, and causes parents to make even heavier personal sacrifices to pay the costs that must be borne if young people are to have the opportunity to profit by an education. With all of its shortcomings the American people still believes that there is no satisfactory substitute for the college program as a means of training for life and for citizenship. The average college still serves as the best agency society has devised to develop youth for social usefulness and to test youth's powers of intellectual mastery.

At the beginning of the university year it may be proper to call attention to the fact that every college student makes more than

Continued on Page 3, Column 1

Willey to Study Post-Depression Teacher Status

The effect of the depression and recovery on higher education is the subject of a study which will be made for the American Association of University Professors by Dean Malcolm M. Willey of the University of Minnesota. Dean Willey has been granted almost complete release from other duties at the university for the year to carry on his investigation, which is being financed by the Carnegie Foundation for the Advancement of Teaching.

Besides the obvious and easily perceptible effects of the economic situation, such as changes in enrollment, income, salaries and the like, such matters will be studied as new educational devices, like the General College at Minnesota, and the effects of change on teachers' tenure and status.

Issues such as freedom of speech and of teaching, the development of financial security through retirement plans or insurance arrangements, and the extent to which the duties of teachers have been increased because of financial weakness in institutions will be studied.

A committee of four has been named to be associated with Dr. Willey in his study. These are O. W. Caldwell of Teachers College, Columbia; A. J. Harno, of the University of Illinois Law School; F. K. Richtmyer, dean of the Graduate School at Cornell University, who is chairman of the committee, and S. H. Slichter, professor of economics at Harvard.

Given part-time leave from duties in the College of Education, Dr. Alvin C. Eurich will take over some of the duties temporarily dropped by Dean Willey. The latter will continue to hold several committee chairmanships, including fine arts and convocations. He will maintain headquarters in Minneapolis, but will spend much time visiting other colleges and universities in the United States.

PWA Helps With New Buildings

Continued from Page 1. Column 1

ganization's desire to see people set to work as winter closes down.

Other New Structures

Two other building projects for which 45 per cent of the cost has been obtained from PWA will shortly be begun. One will be an addition to the Women's Gymnasium. This structure has stood unchanged for many years. The addition now to go up will include a new swimming pool, more nearly able to accommodate the present large enrollment, and enclosed play space in the nature of a field house, where outdoors games can be played inside in bad weather.

Work will also be started soon on the new "terrace" that will complete the Athletic Building. This structure, shown in architect's drawings of the building but not constructed at first because of lack of funds, will tie the building to both sides of the Memorial Stadium at its open end. It will complete the architectural effect of both the Stadium and the Athletic building. Dressing and locker rooms for visiting athletic teams and for home teams, equipment rooms, training quarters and the like, now under the stadium, will be transferred to this unit as soon as it has been completed.

Among plans for the perfected athletic plant at Minnesota there now remains only the enclosed skating rink and hockey headquarters that has often been discussed. Because that sport is so particularly adapted to the Minnesota winter climate, such a structure has been declared, "next on the program."

Athletic funds will be used to pay Minnesota's share of the cost of the "terrace." The Adult Education building will become one of the service enterprises, and it is likely that the university will borrow the money for its share from its own service enterprise funds.

All of the new buildings or additions should be ready for use by next summer.

Dr. Rudyard K. Bent, instructor in science at the University of Minnesota High School for the past three years, has resigned to become associate professor of education at the University of Arkansas.

Cooperate in President's Office

Dean M. M. Willey

Dr. A. C. Eurich

Student Grades Highest in Years

Student Affairs Office Announces Yearly Compilation of Standings

Although the margin was narrow, the general average of all students at the University of Minnesota was the best last year that it has been since complete averages have been compiled by the office of Edward E. Nicholson, dean of student affairs. The all-student average at Minnesota was announced as 1.25. This is more understandable by the public as a record of slightly better than "C," as the "C" grade equals an average of 1.0, while the "B" grade provides an average of "2."

The average grade of fraternity men rose more than did the general average, or from 1.10 to 1.15, while the average of all men also rose more than did the average of all students, or from 1.19 to 1.23. The average of all grades won by women fell from 1.30 to 1.28, where it still remained higher than the men's average. Higher also than the fraternity average was the sorority average of 1.23, to which it fell from 1.27 in the year 1933-'34.

The records of members of the professional sororities was 1.46, far above other fraternity and sorority averages. Professional fraternities produced an average of 1.39 honor points per credit, a rise of one one-hundredth and another all-time new high.

Improvement in student grades at the University of Minnesota has been the subject of considerable comment, both by administrative officials and by the press. Most commentators say the rise is due to the greater understanding of the seriousness of life and of the necessity of spending profitably the time fate sets aside for students in college in which to make themselves ready for future accomplishment.

'U' Station WLB Lists Offerings

The University of Minnesota radio station, WLB, broadcasting over 1250 kilocycles, is on the air for approximately four and a half hours a week this fall and winter. Programs are directed by Burton Paulu, who also speaks Tuesday evenings at 7 p. m. on "World Affairs." Among other WLB programs are those of Dr. George P. Conger, speaking at 7:15 p. m. Tuesdays, on "World Religions;" members of the Institute of Child Welfare faculty, speaking at 10:15 a. m. Thursdays; university convocations, broadcast at 11:30 a. m. Thursdays; the student "Newscast" at 7 p. m. Thursdays; discussion of the University Art Gallery at 12:15 p. m. Thursdays; "Inquiring Reporter," T. E. Steward, at 7 p. m., Fridays; French lessons at 7:30 p. m. Fridays by Professor Jules Frelin, and lectures on literature at 7 p. m. Saturdays by Dr. John Walker Powell of the Extension Division.

Dr. Harl R. Douglass, professor of secondary education and Dr. Malcolm MacLean, director of the General College of the University of Minnesota, addressed sections of the Iowa State Teachers' Association at Septon and at Vinton, Iowa, recently.

Dr. A. C. Eurich Helps President

Associate Director of Educational Research Fills Post in Dean's Absence

Dr. Alvin C. Eurich, associate professor of educational psychology, will devote about two-thirds of his time to the president's office during the remainder of this year, assuming the duties of Dean Malcolm M. Willey, who will make a study for the American Association of University Professors. Dr. Eurich is a member of the College of Education faculty, and is associate director of the Committee on Educational Research, to which he will devote his remaining time.

Born in Michigan, Dr. Eurich did undergraduate work at Northwestern College and the University of Michigan. He became an instructor in educational psychology at Minnesota in 1927 and in 1929 received his Ph.D. degree at Minnesota. He was advanced to an associate professorship last spring, having been assistant professor since 1929.

Dr. Eurich also has taught at the University of Maine, and summers at Michigan, West Virginia and Stanford universities. With Dr. H. A. Carroll of Minnesota as joint author, he has written the text, "Educational Psychology," which was published last spring by D. C. Heath and Company.

Preparing experimental examinations that will test the student in the light of an instructor's purposes when he starts a course is the principal work on which the Committee on Educational Research is now engaged. A large number of such examinations have already been prepared for the General College, where further work of the sort is being continued. The committee is now at work on examinations for the departments of mechanical engineering, geography, German, sociology, zoology, and on comprehensive examinations in the core subjects for the School of Business Administration.

Dr. A. F. Thompson of the School of Chemistry and Ira Beals, assistant professor of architecture, drove to the west coast during the summer vacation and made a hurried call at each of 11 national parks in the west. At San Francisco Dr. Thompson attended the meeting of the American Chemical society.

Professor Donald Ferguson

Music Professor's Book Wins Praise

'History of Musical Thought' Written by Donald G. Ferguson of Minnesota

Much attention has been attracted in recent months by Professor Donald Ferguson's book, 'A History of Musical Thought." Laudatory reviews have appeared in many quarters. The following review, written by Basil de Selincourt for the Lond Observer of Sunday, September 22, is herewith reprinted.

How difficult it is to make a big book readable, especially if your subject is of the historico-philosophical kind! Professor Ferguson has done it; has done it, first, because he is a most accomplished writer; but done it, next because there is no aspect of his great subject which does not interest him, and yet each interests him in its place and keeps its perspective and its proportion. Music is more upsetting than poetry even, in the attraction it holds out to enthusiasts. It is difficult if you like the harpischord or the spinet not to like them immoderately, and if you have developed a taste for madrigals you are pretty sure to regard one of Bach's choruses as a degenerate, clumsy thing. Losses undoubtedly do go with the gains as the resources of the art gradually develop; the historian must be able to appreciate both in the light of his prevailing conception of a purpose to be fulfilled.

Mr. Ferguson holds to that sense of a purpose and applies it refreshingly even to the experimental welter of to-day.

> 'Our modern music (he writes) does not know what it is trying to do. Never before has it been required of music to express, in supreme language, a state of spiritual apathy. Instead, therefore, of drawing inspiration from the reality of popular feeling, the artists are trying to lead the way. And they are—at any rate they have been—trying to do that by speculating about the validity of artistic forms! Finding none adequate for the uncongenial task before them, they have thought to destroy the old—perhaps in the hope that destruction itself may generate rebirth. To one who has perused the history of musical thought, that hope appears deluded.'

The special attraction of those words is that they apply as well to poetry as to music; indeed Mr. Ferguson conceives of music, rightly I feel sure, as a kind of exalted poetry. It is interesting in this connection to note that the exaltation is of two kinds, which are, of course, complementary to each other. In poetry our thoughts assume liquid form, in music they assume those swifter and more penetrating adaptations which science associates with the gases. So poetry is, for the land in which it is born, like a river descending from the hills, while music, born of the empyrean, is also the common air that bathes the globe. In a word, the greater intensity and the greater universality go hand in hand.

It is part of the intoxication of music, when we hear it, and part of the fascination of the study, when we read or think about it, that the more the means it can dispose of are perfected and understood, the surer and more searching is its appeal. Men speak many languages, but their thought in all obeys the same principles, there is but one logic and one mind. In music the logic has entered into the very constitution of the language itself; the element of convention is so small that it is, popularly, negligible. Music gives us, therefore, a medium in which by the direct communication of spiritual states, the greatest enhancements and the largest identities of personal experience become possible. Mr. Ferguson quotes with approval Liszt's remark on Schubert that he was "le musicien le plus poete qui fut jamais." When all the inhabitants of the world know, as they can now know, the "Unfinished Symphony," the doctrine of the brotherhood of man will begin to assume a new significance.

Yet you would be wrong to suppose, because my reading of Mr. Ferguson's history has refreshed my sense of these important truths, that he has any inclination to lose himself in cloudy theory. When he comes down to brass tacks, he gives them to you as sharp and shiny as you could desire. Have you, for instance, any idea what a shawn is, or why what we call a bassoon in England is called a fagot in Italy, or why the horn known as English is known so little in this country, and also is not a horn?

These and a hundred other exciting details you may pick up in a very few pages in his chapter on the evolution of modern instruments; similarly, that dreary business of the slow evolution of our scale from its origin in Greece and on through those dead-dry ecclesiastical modes becomes in his hands, coherent and vital—not because it is written up, but because he has mastered the difficult gifts of simplicity and relevance. How did people ever bear music, one sometimes asks oneself, before it became what we know it now to be? And the answer, no doubt, is that it was kept alive by popular inspiration. Nothing, after all, could kill it while the birds have voices.

Music exists because love is ecstacy, because the purer our joy the more passionate is our desire to share it. Again and again, Mr. Ferguson shows, inspiration took classic form and flowered in the genius of some great composer, because a new popular emotion had possessed the world, or, at the least, his part of it. The hymn "Ein' feste Burg" was described by Heine as the "Marseillaise of the Reformation;" on it and the hundred other great chorales which testify to the granite fervour of the old German protestantism, rose up the mountain-genius of J. S. Bach, whose like is unknown in all the history of all the arts for plenty and omnipotence—while later, when men's minds were seething with new hopes, when the Revolution in France challenged the old spiritual and social hierarchy, the voice of Beethoven was heard, equipped by the ferment that preceded him with forms of greater range and elasticity, more closely gripping the actualities of experience; and through him, for the first time in history, the strength of the individual spoke, Promethius-like, from an interior altar.

Filipetti Says N. R. A. Failed

Study of Operation in Northwest Released by Researchers

Factors in the failure of the National Industrial Recovery Act have been analyzed from the point of view of production and from that of merchandising in a two-part study just released by Professors George Filipetti and Roland S. Vaile of the University of Minnesota. The studies cover the entire period of NRA operation, and have reference only to the Northwest.

"So far as the manufacturing industries of the Twin Cities are concerned," wrote Dr. Filipetti, "the NRA has not accomplished the basic, fundamental purposes it set out to achieve. It has not brought about any pronounced improvement in trade practices; it has not increased the purchasing power either of the individual worker, manufacturing payrolls, or of other buyers; it has not established a better organization for the long pull. In other words, it has failed in its main objectives.

"Incidentally and accidentally it appears to have accomplished some things that are worth while. It had disclosed the complexities of the modern industrial organization for production; it has brought out the difficulty, if not impossibility of installing a planned control of the economic system, and it has stimulated thinking in terms of industries and industrial organization rather than in terms of individual plants and plant operation."

In viewing merchandising, Professor Vaile found that the NRA increased the uncertainty of business men with respect to the business picture and thus prevented them from expanding enterprise or taking the business risks that are necessary for revival.

"The NIRA is not the only aspect of the present recovery program about which there is uncertainty," he wrote. "The policy of the administration has reduced individual confidence regarding at least three things: First, the inviolability of contracts and property rights; second, the degree of change likely to be instituted in the regulation of private business by government, and third, the degree to which government will actually engage in business competition with private institutions."

President Sounds Note of Advice To New Students

Continued from Page 1, Column 5

one grade. He makes the grade that the college records in its books. This is a grade which he can carry around with him and show to his family, his friends, and to prospective employers. It is an important record because it shows what the student has done in each course; it is a measure of his intellectual ability and of his achievement; it is the only visible evidence that the college has of his growth.

Every student makes another record, one which is not written on the books nor filed in the archives of the institution. It is the opinion that the staff, his fellows and associates have of him. No matter what class grades one may have entered on the books, if he is known to be unstable, loose in his conduct, shoddy in his manners, and deceptive in his relations, he will lose steady in the esteem of those whose confidence he should covet. Learning without substantial character and sound reputation will not get one far. While one comes to college primarily to study and to learn, he should not forget that everything he does makes its impression upon others. In the long run society would rather have in charge of its affairs men who have sound character and good reputations but little learning, than men of wide learning but of poor character and shady reputation. But society does not need to be satisfied with ignorant men who have sound character and good reputations; it can have, indeed it is constantly demanding, men of right habits, of wholesome dispositions, and of wide learning. Consequently the impressions one makes on others, as well as the grades on the report card, are indices of future promise and recognition.

Every college student makes a third record. It is a record which registers only upon himself. He may "get by" in his studies because he is bright; he may be amiable and pleasant to others; but he knows, as no one else does, whether he is doing his best or whether he is doing what he should be doing. The reflex of one's actions upon himself is the most important record of all. Professors may occasionally be mistaken in the grades they give; friends may misjudge; but the impressions recorded in one's nervous system can never be erased. The record one makes on himself, he must live with always; the grade on the books may be lost, and that which he makes on his friends may fade from memory; but wherever he goes and whatever he does, what he has done to himself remains with him. It is his. He becomes it and it becomes him.

Whatever reason you students may have for coming to the university, these three records—records which are certain to be made—will show what you really are, as well as determine what you are really worth.

In recent years we have been hearing much about the new leisure mankind is to enjoy. I have just finished reading a stimulating book on the challenge of the new leisure. College students, however, must not be deceived by the current discussions of the subject; the concept of leisure does not apply to a university community—as the professors—nor does it apply to the world in general as much as some may think.

Men want work more than they want leisure. They know that idleness, whether it be indulged in by youth or by mature persons, is a devastating experience. The inability of thousands to find work is bringing us to a realization of the profound satisfactions we find in work. Usually we give no credit for happiness to work itself. It is only when we have nothing to do that we suddenly realize how idleness disintegrates personality. We observe its worst effects in the decline and early death of men who retire from a life time occupation before they have achieved a substitute mastery. These pitiful persons frequently are the victims of the misconception that life is an unbroken holiday. Work, they have been taught, is a curse, and the object of life is to escape it. I have known students who thought that eternal vacationing was closely akin to paradise—poor misguided souls, if any dwell among us, how tragic will be their awakening some day!

There is a popular theory in education that one should never do anything that he does not like to do. And yet every thinking person knows that his richest satisfactions are in the fields in which he has greatest mastery. The pleasures of life that are not accompanied by understanding, are for the most part ephemeral and worthless. Between doing the things one likes to do and the things he may not like to do but which are necessary, there is a wide gulf. Temporary and fleeting pleasures are usually associated with immediate desires, while the more enduring pleasures are usually associated with hard learning. Let us not deceive ourselves, an individual who never does anything that he does not wish to do, will be willful and unstable. A society in which there is no discipline will be anarchy. No university can, nor or should have, a separate course for everybody, nor should a university respond to every whim and caprice of those who pass its way. And yet I should be unfair to a principle which I believe to be fundamental in all education, if I did not say that one of the highest functions of education is to fit the young into the work-pattern best adapted to their capacities and most promising for their future happiness.

The dearest wish of every individual is to be respected. We are all creatures of the herd, and when confronted by the scorn of our fellows, we shrivel up. Work is our most obvious means for joining in a common enterprise. To marshall one's energies and to feel oneself as part of a common undertaking, is the first requisite to being human. The quiet pride derived from doing something well surpasses any other feeling of exhileration that we may experience. We invite you to become real members of the University community and to help us advance its interests and its work.

Long ago educators learned that human abilities cannot be reduced to a common level. It is not possible by legislation or otherwise to equalize the brain capacities of a hundred and twenty million citizens, any more than a college can reduce talent to a common level. The keenest and most industrious brains will always come to the top. The ablest will always do the most and the best work. Against every attempt at apportioning work and levelling freedom to an individual security scale there is aligned the strongest force of human nature, the fundamental inequality of brains. The human urge to achieve distinction is as fundamental as the demand for equality itself. Security is not a sufficient goal for civilization any more than registration in a university is a guarantee of intellectual growth. What men covet most is opportunity, free to all and social in its operation—opportunity that demands from each of us the best we can give.

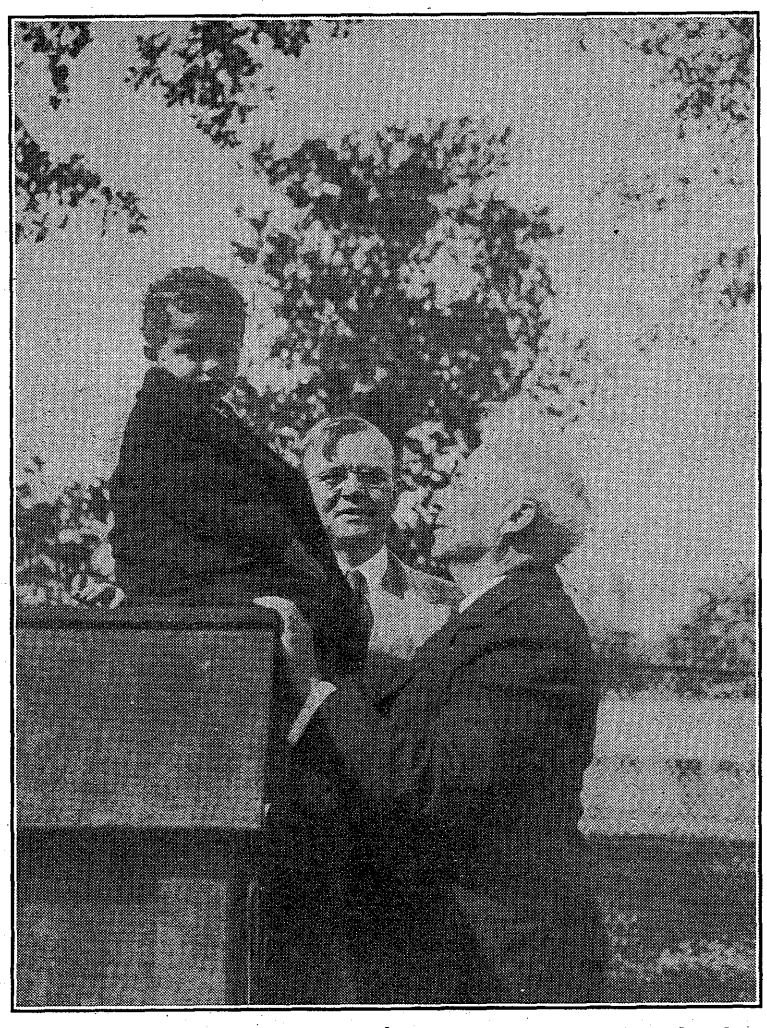
John Stuart Mill in his famous lecture "On Liberty" uttered a profound truth to which we may well pay attention this morning. He said: 'It will not be denied by anybody that originality is a valuable element in human affairs. There is always need of persons not only to discover new truths, and point out when what were once truths are true no longer, but also to commence new practices and set examples or more enlightened conduct, and better taste and sense in human life. . . There are but few persons, in comparison with the whole of mankind, whose experiments, if adopted by others, would be likely to be any improvement on established practice. But these few are the salt of the earth; without them, human life would become a stagnant pool.

Not only is it they who introduce good things which did not before exist; it is they who keep the life in those which already existed.'

When all is said, the truest and most lasting satisfaction is found in creative work, in the thrill of attainment, in the honor and adulation of real accomplishment. Achievement in college is the surest means to academic happiness.

In this discussion I have failed to talk to you about the chaotic state of the world, the experiments of the American government, or the governmental philosophies that are contending for world supremacy. I have said nothing about war and its terrible consequences, nothing about the wreckage that follows in the wake of conflict, nothing about unemployment, nor have I tried to picture a new world, the kind of world we should like to live in. I have not neglected these matters because they are unimportant, but rather because they involve problems you have come here to learn about and to study. If my advice is followed, old-fashioned as it may appear to be, we shall gather wisdom as we become informed, and eventually we shall know better how to solve many of the problems that now appear difficult and perplexing. Just as universities never surrender to the present, so students should never fall prey to the immediate and obvious. If students put first things first, there will be no question as to the value of the records they make here.

Faculty Grandchild Enters Minnesota



"That's news," chortles Carlyle M. Scott, proud grandparent, as he gazes at younger generation.

It's not uncommon for a faculty member to have a son or daughter in the University of Minnesota, but when a grandchild enters—that's news. Witness the picture above of Professor Carlyle M. Scott, head of the music department, beaming upon young Scott Foster, his grandchild, while Dr. John E. Anderson, head of the Institute of Child Welfare, looks on, also beaming. Scott, a matriculant in the institute, is the son of Mr. and Mrs. Kenneth Foster, 3431 Garfield avenue south. In the picture he seems somewhat less keen about the proceedings than his two elders are.

Enrollment at Minnesota Over 13,000; All Registration Records Go Down

University Receives More Than 3,000 Freshmen and 1,500 by Transfer

An experience such as it had not undergone since the close of the world war and the recovery from the depression of 1920-'21 proved to be in store for the University of Minnesota this fall when last year's increase of more than 11 percent was augmented by a further gain of nearly fourteen percent.

Figures released by Rodney M. West, university registrar, at the close of the first week of college showed that the enrollment had reached 12,934, an all-time high for the opening of a college year, and a gain of 1,506, or 13.2 percent over the fall of 1934. Still further enrollments were in prospect, as graduate registration proceeds slowly and at least 300 more students were expected in that division. This would bring the total well above 13,000 college students.

The figures given are for college and graduate students only. They do not include enrollments in four schools of agriculture, in the University high school, nor in the General Extension Division.

Among the 1,506 additional students to enter Minnesota men outnumbered women in a ratio of two to one, although the regular relationship is about seven men to four women in the university. Thus it may be that among those who defer college attendance until conditions permit them to enter, men are more likely to keep up their determination than are women. This has been shown by other evidence. In the university as a whole on October 5 there were 8,190 men and 4,744 women, the gain in men over last year being 1,070 and of women 436.

Apart from very small declines in the College of Pharmacy and the College of Education, the former caused by changed entrance requirements, every regular college in the university showed an increase except the School of Nursing. Its registration declined by 83 students, or 19.2 percent.

Smallest gains were recorded by the Medical School and Law School, which grew 1.5 percent and 3.8 percent respectively. These are strictly professional schools which maintain a relatively balanced attendance, registration in the medical school being limited to available laboratory facilities. Nevertheless this school has shown a small but actual growth in most of the past ten years.

Mr. West's figures show that there was a gain of 434 in the number of students entering from high school, an increase of 424 in the number of those entering with advanced standing, which is to say, transferring from other institutions, such as junior colleges, and a gain of 646 in the number of students who had previously attended the University of Minnesota. The last figure, however, includes a number who transferred from one college to another within the institution, so does not all represent increased enrollment.

Of the total of 12,934 some 8,294 had previously been enrolled at the university, while the remainder came in as freshmen and transfers. There were 3,103 freshmen and 1,535 advanced standing students.

UNIVERSITY OF MINNESOTA ATTENDANCE

Unit	Men	Women	Total	% gain or loss
University	16	31	47	—2.1
General S. L. A.	590	353	943	4.5
Unit	**Men**	**Women**	**Total**	**% gain or loss**
Gen. College	590	353	943	4.5
Uni. College	16	31	47	—2.1
Science, Lit., Arts	2,682	2,340	5,022	23.8
En. & Arch.	1,117	12	1,129	10.5
Ag., F., HE.	747	460	1,207	36.4
Law	314	14	328	3.8
Medicine	552	92	644	1.5
Nursing	.....	336	336	—19.8
Dentistry	291	2	293	7.7
Dental Hy.	.....	78	78	36.8
Mines, Met.	223	.....	223	9.3
Pharmacy	130	18	148	—1.3
Chemistry	377	12	389	8.1
Education	325	783	1,108	—3.6
Business	341	92	433	6.1
Graduate	485	121	606	11.2
Total	8,190	4,744	12,934	13.2

All percentage figures are plus except those marked minus.

Administrative officers said this year's increase was even more significant than that of a year ago. In the fall of 1934 there was an influx of 1,000 federal students. This year there will be just about the same number of federal students, so that the gain is entirely of students entering on their own account.

Fisheries Debate First Thesis Topic

Library Yields Copy of Paper That Yielded Early Ph.D. Degree

Search in the card index of the University of Minnesota Library has shown that the first Ph.D. thesis ever written at Minnesota, for which that degree was given the late Judge Charles Burke Elliott, was entitled, "The United States and the Northeastern Fisheries." Judge Elliott's study concerned itself with the century-long squabble of Americans and Canadians over fishing privileges in the Gulf of the St. Lawrence and other inland waters lying off Canadian territory.

This squabble, it seems, had been settled at one time by the treaty of 1783, which later was considered to have been nullified by the War of 1812. Then the convention of 1818 established a new agreement, or rather, basis of continued disagreement, between Americans and Canadians, over which the countries and representatives were still wrangling when Judge Elliott wrote in 1887.

By that time the fisheries dispute had come down to wrangling over whether Canadian fish should be admitted duty free in United States ports if American vessels were to be permitted to fish inland Canadian waters. And there was also a difference of opinion as to the relationship between fishing privileges and the duties on eggs.

Judge Elliott's conclusion was that fishing had developed so successfully in other directions that the Canadian inshore fisheries were of little value to United States fishermen. He declared that this country was paying much more for the fishing privileges than they were worth.

"In 1873," he wrote, "fishing vessels caught 77,011 barrels of mackerel in Canadian waters, of which 25,670 came from within the three-mile limit. In 1877 sixty vessels caught 7,319 barrels, and in 1882, one vessel caught 275 barrels, of which not over 100 barrels came from waters opened to American fishermen by the reciprocity treaty. These 100 barrels were worth $2,337.50 and the United States paid for the privilege of catching them the sum of $458,333 in addition to the remission of duty on many million pounds of Canadian fish."

Elsewhere he said:

"The real difficulty in the way of a final settlement of the dispute is its intimate connection with other grave problems. With the Americans, the quarrel over the northeastern fisheries is closely connected with domestic differences relating to tariff and revenue reform. The Canadians cannot separate it from the great questions of commercial reciprocity and imperial unity."

St. Olaf Honors Professor Blegen

Professor Theodore Blegen

Theodore Blegen, superintendent of the Minnesota State Historical Society and member of the university's history faculty, was honored recently by St. Olaf College, which awarded him the degree, Doctor of Humane Letters.

Washington Report Praises Agricultural Experiment Station

The work of the Minnesota Agricultural Experiment Station has a large place in the summary of 1934 activities of state experiment stations, recently issued by the United States Department of Agriculture. The results of the work of the Minnesota station, cited in the summary, cover a wide range, from the introduction of the new Thatcher wheat, which stood up so remarkably against the inroads of black stem rust this summer, to investigations of the cooking qualities of Minnesota grown apples, fish culture, use of rubber tires on farm tractors, farm accounting, and chinch-bug control.

The station has under way nearly 300 different projects, every one of which has a definite bearing on Minnesota's farm or home problems, and on the future of Minnesota farm and home life.

The report describes Thatcher wheat as awnless, stiff-strawed, high-yielding, stem-rust-resistant, and apparently satisfactory for milling and baking. The new wheat this year has demonstrated that the description is accurate, strikingly so in its resistance to stem rust. Its performance in the 1935 rust invasion has been outstanding, according to numerous reports received at the Minnesota station.

The Minnesota station's three-way corn cross, Minhybrid, in the report also comes in for praise, as "well adapted to southern Minnesota, where it has given increased yields over commonly grown varieties of approximately 20 per cent."

In the field of cropping activities, again, the summary mentions "a marked shift from cereals to forage in Minnesota, especially increased use of sweetclover and reed canary grass in place of rundown bluegrass pastures, as a result of the work of the Minnesota station extending over many years." Mention is also made of the Minnesota station's contribution to the solution of the problem of livestock disorders resulting from the use of grasses and other forage deficient in mineral constituents. Minnesota's work in this field was one of the outstanding contributions of the late Dr. C. H. Eckles, former head of the dairy division at University Farm.

A contribution to the horticulture of the state in the Parker pear also receives attention. This pear, developed by the Minnesota station from seed obtained from Manchuria, says the report, "appears to be decidedly winter hardy and of good commercial value for the state."

Among several stations making systematic cooking tests of local varieties of apples, Minnesota gets credit for the publication of lists of Minnesota apple varieties "most suitable for sauce, for baking, and for coddling or cooking in sugar syrup. By using this list as a guide, the housewife can select the best methods of cooking apples available on the farm, or, when purchasing apples, can buy the variety that should give the best results with the method of cooking that she prefers." The division of home economics, in making such studies, this year has added a study as to the best varieties of Minnesota apples for pies, the results of which will soon be available.

Another contribution of special interest to homemakers, cited in the report, has been the development of recipes for the use of dry skimmilk, a product of increasing importance in a state given so largely to dairying.

Methods of preventing cheese flavors in unsalted, sweet-cream butter, are also credited to the Minnesota station, and the additional information is added, that the methods are now being adopted by creameries making sweet cream butter, with "the result that losses in butter have been avoided and better prices obtained."

The results of studies carried on at the Minnesota station, among other stations, point to the rapid increase in the use of rubber tires on farm tractors. "The results of these studies," says the report, "have been practically 96 per cent in favor of low-pressure pneumatic tires over steel tires for wheel tractors of the general-purpose type in the performance of numerous routine operations of the average farm under favorable soil conditions. They have indicated appreciable savings in fuel. There were about 920,000 tractors on the farms of the United States in 1930, the larger proportion of which were of the wheel type."

Citing Minnesota's farm-accounting studies, the Washington report says: "The station's findings are being widely used by extension agents in reorganizing and improving the operating plans of many dairy farms in Minnesota."

Minnesota, again, along with stations in many other states, is given credit for studies with regard to the chinch-bug, as a basis for devising emergency control measures, such as will enable farmers better to cope with the chinch-bug menace.

Studies of the use of cut-over lands in northern Minnesota also receive commendation. These studies have resulted in the districting of the cut-over area in accordance with physical and economic factors, which is the initial step toward land-classification and is basic to land zoning. Information provided as to public expenditures and services in the area points to possible reorganizations and economies."

The report as a whole and that part of it which deals with Minnesota's contributions are believed by experiment station men to give an excellent idea of the very practical and valuable nature of the research work being carried on by the country's experiment stations and by the Minnesota station.

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 OCTOBER 22, 1935 NUMBER 2

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

Gopher Center Wins Applause

Rennebohm's Serious Persistence Has Brought Him into Ranks of Best

Dale Rennebohm has achieved success as a football player at Minnesota by being the opposite of sensational.

There have been no long, open field runs on intercepted passes and the like to distinguish the trimly built Gopher center. Few fans take any particular note of his play on the field. When the Stadium quarterbacks get together to discuss the Gopher stars, Rennebohm's name is seldom mentioned.

And yet, in spite of the absence of that quality popularly known as "color," Rennebohm is considered by the Gopher coaches to be one of the outstanding men of the 1935 team. That is because he is regarded by them as a consistently good football player. In keeping Rennebohm in the lineup as the first string center, Coach Bernie Bierman has rated "consistency" over "color."

Rennebohm's career as a football player at Minnesota provides a slant on why coaches consider him one of the most valuable cogs in the Gopher gridiron machine. It is also an indication of why coaches and teammates alike respect the judgment and ability of the Austin lad. In the recent Nebraska game he starred brilliantly.

Like several other members of the 1935 Gophers, Rennebohm reported to the Minnesota squad after a high school career that found him playing in half a dozen different positions. In his first year on the Austin, Minnesota, high school team, he was an end. The second year he played tackle and the third year he played guard. In his senior year, Dale finally got around to playing center and that year Austin won the Big Eight high school football crown.

When he reported for the team at Minnesota, Rennebohm was under a distinct handicap. Whereas Bierman likes his centers to be tall and rangy, Dale was only 5 feet, 8 inches in height and weighed only 170 pounds. Yet he is now playing his second year as regular center.

Farm, Home Week Dates Are Jan. 6-11

Dates for the 1936 Farm and Home Week—an announcement thousands of rural people all over Minnesota have been waiting for—are being made public this week by Dean W. C. Coffey of University Farm. The big event will take place January 6 to 11 and will again be in charge of a committee headed by L. A. Churchill.

The dates chosen are about two weeks earlier than the short courses of recent years, but as usual the week will coincide with the annual meetings of many leading farm organizations, including the Minnesota Farm Bureau, the Minnesota Crop Improvement association, the Minnesota Livestock Breeders' association, breed associations and many other groups allied with agriculture. All of these organizations will hold part or all of their meetings on the University Farm campus.

Though the University Department of Agriculture is the official sponsor and host of Farm and Home Week, the rural people of the state are themselves very active in promoting its success. Nearly every county will have a local Farm and Home Week attendance committee to spread information about the short course, encourage attendance and organize trips.

Twin City Area Geology Studied

Continued from Page 1, Column 3

on the Hattenberger Farm, three and a half miles west of Savage. The report says:

"The water is of normal temperature and the 'boiling' is merely an upwelling of water under pressure. It is probably due to a very fine suspended clay in the pool, which settles down and confines the water until the pressure builds up sufficiently to burst through the clay. This would also explain why the bubbling shifts from place to place in the pool.

The River Courses

Rivers of the twin city area have followed many different courses, most of the old valleys having been filled by glacial drift as the great ice sheets pushed down across them.

"In general the principal preglacial valleys have been recognized," says the report. "A very large valley, usually assigned as the pre-glacial course of the Mississippi, trends under the western part of Hennepin county, including a portion of Lake Minnetonka. Thence it runs southeastward across the present Minnesota Valley into Dakota county, which it crosses to join the present Mississippi valley at Pine Bend. A second major valley enters the area near Forest Lake and follows a chain of lakes to Phalen Lake, thence along the general route of Johnson parkway to join the Mississippi east of Dayton's Bluff. Another but smaller, valley enters the Mississippi at the Union Station in St. Paul. A well-known valley trends from the present Mississippi above the Great Northern Station in Minneapolis through Lake of the Isles, Lake Calhoun and Lake Harriet, thence southward to the present Minnesota river. This valley is said to have been formed in inter-glacial times rather than in pre-glacial time.

"The St. Croix river follows a pre-glacial course along much of its present route, but it also may have followed other courses in earlier stages, possibly at one time joining the Mississippi river in western Hennepin county. It may also have followed the course noted from Forest Lake southward."

The Glacial Periods

The glacial periods in the geologic history of the Twin City area come in for attention in this report.

"Glaciation in the not-distant geologic past was not peculiar to Minnesota or even North America, as similar large ice sheets covered a large portion of North Europe," the writer says. "Glaciation, as previously stated, did not consist of a single ice invasion, but of a series of invasions, separated by time intervals which are believed to have been much longer than the time occupied by the actual ice invasions. The fact of the various intervals between ice sheets is proved by the erosion and weathering of previous deposits, accumulation of soil, peat, and the like.

"The earliest ice sheet to invade Minnesota is known as the Nebraskan, sometimes referred to as the pre-Kansan. The ice came from the northwest and left deposits which are little known because they have been largely covered or destroyed by later invasions.

"The Kansan sheet advanced into Minnesota from the Keewatin center west of Hudson's bay, and crossed the state from northwest to southeast. It apparently covered more of the state than any other ice sheet, as the deposits are found in the extreme northwestern part of the state and nearly to the extreme southeastern part. The drift deposited by this sheet is mainly gray and is often referred to as the 'old gray drift.' The withdrawal of the Kansan ice sheet was followed by a long period of time, the Yarmouth interglacial stage, during which there was no glaciation.

"The stage of glaciation known as the Illinoian sent a tongue of ice into Minnesota in southern Washington county which spread out over an undetermined area. The ice was thin and left very little drift, so that not much is known about it in Minnesota. It is very important in Illinois, however, as the name indicates. This ice probably came from the Labradorean center. The interval of time between the Illinois stage and the next ice invasion was considerable, but probably not as long as the one which preceded it.

"The Wisconsin stage was perhaps the most extreme of all the glacial periods, as ice moved out from all the centers in Canada with tongues or lobes advancing and retreating at various times. The Wisconsin is usually divided into two parts, an earlier and a later.

"During the Wisconsin stage Minnesota was invaded by a sheet of ice travelling south and depositing material from the Superior region, which is mainly red, wherefore it is referred to as the young red drift. Later a southeastward movement brought ice from the northwest, with a lobe passing north of Minneapolis and St. Paul and extending eastward to Grantsburg, Wis. This glacier brought material from the northwest which is mainly gray and is called the 'young gray drift.' The withdrawal of the second Wisconsin ice sheet brought the glacial period as we know of it, to an end. The withdrawal from the metropolitan area took place somewhere around 20,000 years ago. The principal changes since that withdrawal have been the establishment of the present rivers and streams in their valleys and the migration of the Falls of St. Anthony from a point near the present Fort Snelling to their position today."

Dr. William H. Emmous, head of the department of geology, has written an introduction to the report. He is director of the Minnesota Geological Survey.

New Director of Campus Hospitals

Ray M. Amberg

Ray M. Amberg was promoted by the Board of Regents in June to be acting director of the University Hospitals, succeeding Dr. Halbert Dunn, resigned. Mr. Amberg has a long record of service with the university, having been assistant director of hospitals and at various times manager of the dispensary and business manager of the Students Health Service. He held the last-named position just prior to his appointment. A former resident of Grand Rapids, Minn., Mr. Amberg is a graduate of the University of Minnesota.

Finds Rare Indian Vase

Delving into an ancient Indian burial mound near Marshall, workers, under direction of Dr. Albert E. Jenks, University of Minnesota anthropologist, found a "middle Mississippi" vase that is expected to add another chapter to the story of Minnesota's primitive past. The vase, of clay, together with some pulverized shells, all clutched in the skeletonized hand of an Indian, were returned to the University of Minnesota anthropology department for reconstruction and further examination. Exact age of the vase and the mounds have not yet been determined, Dr. Jenks said. But the geometric markings on the vase presumably identify it as of "middle Mississippi" origin, he said. The find was a rarity, university anthropologists said, because "middle Mississippi" pottery is usually discovered only below Wisconsin. It indicated the migration of southern tribes westward through Minnesota. Minnesota pottery, known as "upper Mississippi," contains no shells, it was pointed out.

Triple A's to Meet

The American Association for the Advancement of Science, which met on the Minnesota campus in June, will conduct its winter meeting in St. Louis, December 30 to January 4, inclusive. In a letter to Dr. Coffman, Dr. Henry B. Ward, permanent secretary, has expressed the hope that many papers will be contributed by members of the Minnesota faculty.

Otterness Hopes To Boost Track

George Otterness, the newly installed Gopher track coach, will try to increase interest in track at Minnesota this fall by holding a series of competitive meets for everyone, from the lettermen down to the freshmen. Otterness, who is serving as head track coach in the absence of Sherman Finger, on leave, sent out his first call for candidates yesterday. They will work out daily until October 18 when a preliminary inter-squad meet will be staged. A second inter-squad contest is scheduled for October 24, with a final meet to be held at a later date. In starting track practice at this early date, Otterness hopes to get a better line on the material he will have available once the regular season gets under way.

Homecoming Plans To Feature Bunyan And Northwestern

The famous Paul Bunyan motif will dominate student plans for Minnesota's alumni Homecoming on the University of Minnesota campus Friday, October 25 and Saturday, October 26. Decorations of fraternity and sorority houses will carry out that theme, seeking the prize that will be awarded after a judging Friday evening.

Principal events of the Homecoming, apart from the Northwestern - Minnesota football game, will be the Homecoming dinner in the Minnesota Union at 5:30 Friday; the bonfire on the Parade Ground at 8 p. m., and the annual Homecoming parade at 11 a. m. Saturday morning.

A group of 21 students have registered in a beard competition to see who can outwhisker his fellows after a two-weeks forcing period. There will be many dances in the evening, and open house will be in order everywhere just after the game.

Wilbur Schilling is chairman of the 1935 Homecoming committee with Henry Lykken, Hugh Gage and Marjorie Morrill as assistant chairmen; Virginia Way and Bill Plymat, associate chairmen, and Ellis Harris, publicity chairman. Chester Finstad is Farm Campus chairman.

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | NOVEMBER 12, 1935 | No. 3

Would Elevate Art Interest To New Level

University of Minnesota Seeks to Broaden Cultural Outlook of Students

TO OPEN ART ROOM

Gallery and Loan Prints Will Be Supplemented by Unique Experiment

In an entirely new experiment intended to stimulate actual emotional response to the fine arts as well as intellectual understanding of them, the University of Minnesota will open this fall a students' art room in which will be hung a single picture. Students will be encouraged to visit the room to enjoy the experience that can come from appreciative contact with an object of beauty in a mood undisturbed by other pressures.

The committee on fine arts, of which Dean Malcolm M. Willey is chairman, describes the purpose of the room in this statement:

"The beauty of a single picture has the best chance to make its imprint upon the emotional life and experience of the individual if the circumstances are such that the individual and picture come into what for a lack of a better term may be called 'emotional rapport.' Such rapport is not achieved in a gallery or classroom. Galleries and classrooms are not places for relaxation, contemplation and repose."

Dean Willey explained that the students' art room will bear the same relationship to student interest in art that the Arthur Upson room has to the student who goes there to browse among the world's best books.

The room will be on the third floor of Northrop Auditorium, and the first picture to be hung will be, "Oak Leaves, Pink and Gray," a work by Georgia O'Keefe. It is still life, accurately described by its title. Miss O'Keefe, a native of Wisconsin, has won an established position in modern American art by her paintings of the past twenty years. On the committee with Dean Willey are Mrs. Ruth Lawrence, curator of the University Gallery, Ray Faulkner, and Professors F. M. Mann, S. C. Burton, Harriet Goldstein, Ruth Raymond, Dwight E. Minnich, Faith Thompson and David Robb.

"During the academic years 1933-1934 and 1934-1935 the University of Minnesota made beginnings with several projects that were introduced with the intention of stimulating among the student body a greater and more intense interest in the fine arts," said a statement by the committee. "Work in the fine arts is offered in the various departments of the university, and on a level that commands attention. The new projects, however, were not conceived as a part of formal instruction with credits and examinations leading to a degree or a certificate; rather they were primarily outside the curriculum and set up for the entire student body regardless of specific courses of instruction. They were conceived in the hope that they would attract the attention and interest of many undergraduates whose contact with the fine arts had never been developed to a point where a painting, a piece of sculpture or an etching had sufficient depth of meaning to evoke true enjoyment. The various projects were based on the assumption that no matter how adequate may be the formal instruction in the fine arts, there is still need for intimate contact between the students and the work of the artists—a contact that has less of the intellectuality of the classroom and more of the emotional response that is subjective and personal.

"The first of these projects is the University Art Gallery, opened in the spring of 1934. At the University Gallery, in planning exhibitions, an attempt was made from

(Continued on page 2, column 4)

Bearded Undergraduates Rival Bunyan's Virility

Skipper Spencer, left, and Gene, University barber, foreground, are shown judging the whiskers of Minnesota students who engaged in a Paul Bunyan competition prior to Homecoming.

Motto Selected for Auditorium Entablature

A motto, long sought and studied, has at last been selected to go above the collonnade of Northrop Memorial Auditorium on the University of Minnesota campus. It will be carved in the white limestone space above the columns. It will read:

The University of Minnesota
Founded in the Faith That Men Are Ennobled by Understanding
Dedicated to the Advancement of Learning and the Search for Truth
Devoted to Youth, the Hope of the State and Nation

It will be the only motto placed on any University of Minnesota building constructed in recent years.

Gifts Build Up Library Resources More Than Purchases, Walter Says

University Librarian Hopes Time Will Come for Big Book Donations

Gifts, even more than purchases, have built up the book resources of the greatest American university libraries, Frank K. Walter, librarian, declares in his annual report for the past fiscal year. He cites particularly the libraries of Harvard, Cornell, Yale, Columbia, Princeton and Pennsylvania as examples of those which have profited greatly from donations. In some degree he attributes the greater volume of book gifts in the east to the fact that the region has been settled longer and great private book collections have had more opportunity to come into existence.

The Minnesota library, nevertheless, received 42,008 items of all kinds by gift and exchange during the past year, of which 8,512 were sufficiently important to be catalogued and others will be added to the catalogs later.

The librarian suggests that eventually Minnesota should form an organization of "Friends of the Library," adding that "it might be considered an alumni interest as worthy as the loyal support of a winning athletic team."

Several reasons are given by Librarian Walter for a decrease of 6,247 volumes in the number of library accessions as compared with the year before. The university's fund for the purchase of books could not be made to go so far, as book publishers reduced discounts and many states and political units which used to give away their publications began the practice of charging for them.

"In the second place," Mr. Walter explained, "we must note the greatly diminished buying power of the dollar in buying the many foreign books and periodicals required for advanced class and research work. This was bad enough in English books, which advanced from 20 percent upward, but even worse in the case of French and German books. The franc advanced from about three cents to nearly seven, more than 100 percent, and the mark from about 20 cents to between thirty-five and forty. Similar conditions in other countries have reduced the budget's purchasing power materially.

"It is pleasant to report," he continued, "that only 140 volumes were lost from the General Library in 1934 (an euphemism which includes 'stolen') as compared with 353 in 1932. Fifty-seven of these were paid for on request by those who had lost them."

Citing reading lists for single courses that would have required the expenditure of from $1,000 to $2,000 for books, had the money been available, the librarian points out that conducting a "non-laboratory" course does not save the money that would be needed for laboratory equipment, but merely transfers it to book need. "The opposite ends of an educational seesaw cannot be kept level if either end is pressed down," he comments.

Among notable exhibits placed on view in the University of Minnesota library last year were a selection of original manuscripts from the famous Boswell collection of Col. Ralph H. Isham; early newspapers, arranged by the Department of Journalism; Fifty best books of the year, by courtesy of the Unnamed Book Club of Minneapolis; Typical sections from the winning arrangements of the Student Library contest, sponsored by the University of Minnesota Press; nature books, Six centuries of printing; an exhibit of mutilated books from the library and a showing of early biological books arranged for the American Association for the Advancement of Science.

The matter of library gifts is also referred to in the report to the head librarian of Thomas P. Fleming, head of the order department, who said:

"It would be interesting for

(Continued on page 2, column 2)

Student Total Still Climbing

Undergraduates at the University of Minnesota Near 14,000 Mark

Students registered in all activities conducted by the University of Minnesota since the beginning of the college year now number 21,878, according to figures released by the registrar, R. M. West. This includes, along with 13,865 students of college grade, 1,532 students in five high schools run by the university and 6,773 students in evening extension, correspondence and short courses.

Enrollment in units other than collegiate are: Nursery school, Institute of Child Welfare, 52; Central School of Agriculture, University Farm, 311; North Central school, Grand Rapids, 71; West Central school, Morris, 346; Northwest school, Crookston, 352, and University high school, 400.

In evening extension courses 4,896 are enrolled; in correspondence courses, 1,804, and since the first of the year short course attendance has been 73.

Among the 13,865 college students and graduate students are 8,769 men and 5,096 women. In the extension and sub-college grades are 3,218 men and 3,555 women. In the schools are 941 men and 591 women. In the grand total men outnumber women by 12,711 to 9,161.

The figures are as of the close of the date, October 19.

Board of Regents Forms Institute Of Technology

Engineering, Architecture, Chemistry and School of Mines Included

DR. LIND NAMED HEAD

New Organization Completes Plan Considered for Sixteen Years

The Board of Regents of the University of Minnesota, meeting on October 19, put into effect a plan long contemplated when they created the University of Minnesota Institute of Technology, under which title were combined the College of Engineering and Architecture, the School of Chemistry and the School of Mines and Metallurgy, of which last the Mines Experiment Station is an adjunct.

Dr. Samuel C. Lind, director of the School of Chemistry since 1926, was promoted to the deanship of the new institute as of November 1, in which position he will be at the helm of the three major colleges that are included.

The change came following the retirement in June of Dean W. R. Appleby, who had headed the School of Mines and Metallurgy since its establishment. Adjustments will be made in the duties of Dean O. M. Leland of the College of Engineering and Architecture to conform with the new setup, and Dean Lind is empowered to appoint such assistant deans as may seem necessary.

Dr. Lind was the first member of the University of Minnesota faculty to be appointed to the American Academy of Science and is one of three who now hold that distinction. He came to the university nine years ago from government service in Washington, D. C., where he was associate director of the Fixed Nitrogen Research Laboratory. He holds degrees from Washington and Lee University, Massachusetts Institute of Technology and the University of Leipzig. For many years he was associated with the United States Bureau of Mines, for which he has been superintendent of the Station for Rare Metals, Golden, Colo.; superintendent of the Reno Station for Rare and Precious Metals, and chief chemist of the Bureau of Mines, 1923-1925. In recent years his specialty has been research in the field of radium and radio-activity. He won the Nichols medal in 1896.

Statement by Regents

Following is in part the statement approved by the Board of Regents at the time the Institute of Technology was created:

"In 1919 President M. L. Burton advocated the creation of an Institute of Technology consisting of the college of engineering and the schools of chemistry and mines, and the Regents of the University voted to correlate the administration of the College of Engineering and Architecture and the School of Chemistry under one administrative head, with the understanding that it would give consideration at some future time to the inclusion of the School of Mines and Metallurgy in the plan. The arguments which were advanced by President Burton for the consolidation and unification of these three schools into one organization are more valid today than they were then. The interests of these three schools are similar; their work is becoming more and more inter-related; they all lie in the general field of technology; their curricula are based on mathematics and physical sciences. It should be possible for students to move freely from one curriculum to another within the group without serious difficulty. The general objectives of the students are similar in many respects and the teachers and supervisors are con-

(Continued on page 3, column 3)

Donations for Zoology Fellowship Honoring Chas. P. Sigerfoos Sought

Would Provide Funds to Send Minnesota Student to Seashore or Tropics

TO honor a retired professor who perhaps is remembered with affection by more graduates of the University of Minnesota than any other former teacher, the Charles Peter Sigerfoos Fellowship in Zoology is being started by admirers of Dr. Sigerfoos among the faculty and alumni.

A primary purpose of the fund will be to afford to some outstanding student in zoology a chance to study at the seashore or in the tropics. Minnesota's remoteness from both, and the importance of marine and tropical life to zoology, make such a fellowship doubly desirable, according to Professor Dwight E. Minnich, chairman of the zoology department.

Dr. Sigerfoos' studies gave him long and intimate contact with marine life, and this training was of great importance in his career, Dr. Minnich said, making it particularly fitting that the primary purpose of the fund should be to encourage study of marine and tropical life.

Thousands of alumni remember Professor Sigerfoos as the man who can recall their names whether they graduated in the class of "Naughty naught" as they used to say in peg-top days, or slid out with the long-faced graduates of 1931.

Friend of His Students

Dr. Sigerfoos became one of the outstanding zoologists of the country during his career at Minnesota, but was known also as a member of that group that comes to be recognized on every campus as the great teachers—those whose interest is primarily in the young people who come under their influence.

The subject of his doctor's thesis at Johns Hopkins University in 1897 was "Shipworms," and Dr. Sigerfoos states with pride offset by a gleam in his eye that he has had a shipworm named after him. When he came to Minnesota in the fall of '97 he chose this institution rather than another state institution that offered a higher salary because, as he explains, he had always hoped to teach in the Middle West and had formed in advance a romantic liking for the University of Minnesota. He came as assistant professor of animal biology, under Professor Henry F. Nachtrieb as department head, and in 1900 was promoted to be professor of zoology.

Professor Sigerfoos, who is still very much alive and "in the pink," the memorial having nothing to do with post-mortems, was born on a farm near Arcanum, O., in 1865. When he was six his parents "moved to town," but not until the future professor of zoology had received a licking in the country school, one which he was then unable to account for and can't explain to this day. Perhaps the teacher merely believed in impartiality and in preparing in advance for what was probably, he thought to come.

Country Boy's Life

He recalls the life close to nature that is the happy lot of the average small town boy; the delicious shiver of the first spring plunge into the old swimming hole; the soft heat of the dusty country road on bare feet, and the satisfaction of pockets well stored in autumn wth thornapples and wild grapes.

After working in a brickyard summers between the ages of fourteen and sixteen young Sigerfoos entered the preparatory department of Ohio State University in 1883, and remained on that campus for six years in preparatory and college departments. There he boarded himself, and he recalls with satisfaction that many of the students who were willing to make that effort for an education became eminent in various professions. Then there were but 300 students in all departments of the university, but a number of eminent men were members of its faculty.

Becoming interested in zoology, he served as an assistant in that department during his junior and senior college years and in his last year had charge of classes in histology and comparative anatomy. For two years after graduation he continued to teach at Ohio State. In 1891 and 1892 he was instructor in biology at the University of Virginia.

Goes to Johns Hopkins

That fall, 1892, he went to Baltimore, still undecided whether he should stay there to study zoology or go to New York for medicine. At that time Johns Hopkins had the principal graduate school in the country and the influence of its great teachers, Brooks, Howells, Welch and Flexner, held him to Baltimore where he took his doctor of philosophy degree in 1897. It was then, as has been told, that he came to Minnesota.

Classes were small during Dr. Sigerfoos's early days at Minnesota and he taught many subjects in the field of zoology. Later, as class sizes increased, he restricted his teaching for the most part to courses in general zoology, protozoology, and special courses for medical students, in which field he always has taken a particular interest.

Dr. Sigerfoos has always made a point of knowing students as individuals, and to this end he has accompanied them on thousands of field trips and has entertained at his home hundreds of his class members, especially young men and women from out of town.

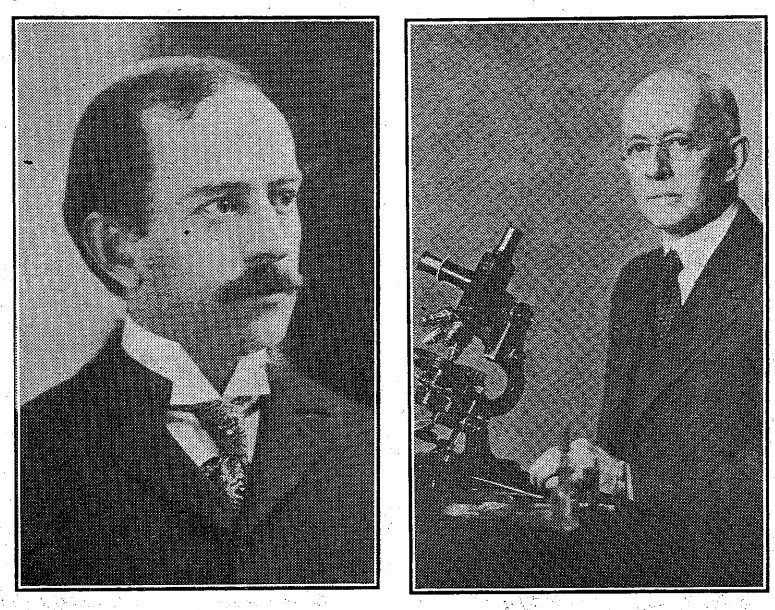
"I always tried to have as much, or more, fun in my classes as my students did," he explains, "yet I have been told that I was never lax in discipline and that I had no reputation as a soft marker."

The veteran zoologist has taken great pride in watching the growth of the institution to which he has devoted his active life.

"During my thirty-eight years at Minnesota it has been one of my greatest pleasures to see the university grow into one of the greatest institutions of the nation; and to see my former students take their places in prominent and useful positions in the nation," Professor Sigerfoos concluded.

Dr. Minnich, chairman of the zoology department, has asked that any who are interested in contributing to the Sigerfoos Memorial fellowship make checks payable to the University of Minnesota and send them to the comptroller, William T. Middlebrook.

C. P. Sigerfoos, Past and Present



At the left is shown the former head of the zoology department in the late nineties. At the right, as he is today.

Gifts Build Up Library

(Continued from page 1, column 3)

donors to know how carefully their donations are handled, that checking and sifting of a gift collection are matters of concentrated study by several members of the staff, and that there are several uses to which a book, a pamphlet, a periodical, a group of letters or a photograph of historical interest may be put. There are instances where even advertising material, which might seem ephemeral, will have artistic printing or unusual set-up which will elevate it to a collection on typography or trends in art. Or a small pamphlet penned by some enthusiastic campaign worker, some radical organization or some psychopathic individual may in later years help some research worker in throwing light on passing winds of social or political thought."

Among the notable additions to the library collection during the past year were a number of newspaper items purchased out of the Herschell V. Jones fund. These were as follows: American Traveller (Boston), 1825-1826; Boston Gazette (in photostat) 1726-1729; Chicago Daily Times-Herald, 1898-'99; Cincinnati Daily Gazette, 1874-'75; Edinburg Advertizer, 1771-1802; Evening Gazette and General Advertizer (Boston), 1814-'17 and 1820; General Evening Post (London), 1791-1820; Pennsylvania Gazette, two weeks, 1739; London Journal, numbers between 1723 and 1726; London Telegraph, January to March, 1868; New York Tribune, various numbers from 1844 to 1912; New York Times, January-May, 1913; New York World, July 1, 1862, to June, 1864 and 1891 to 1897; Salem Gazette, 1815 and 1828; Salt Lake Daily Telegram, 1917-1934; Wienerisches Diarium, 1704-1789.

Will Direct Editors' Meeting

An escape from mid-winter is in the offing for Professor Barnhart, who has been requested to prepare a two-day program for the Washington Newspaper Institute, the Washington equivalent of our Editors' Short Course, to be held in Seattle in late January. The invitation came through the department of journalism of the University of Washington.

Higher Learning Conference Topic

50 Leading Educators Spend Week on Campus in Discussions

Leading educators of the United States attended a conference at the University of Minnesota the week of September 9 to discuss problems confronting higher education in America.

The meetings comprised of the second Minnesota Conference on Higher Education, financed by the Carnegie foundation and attended by more than 50 of the country's leading educators, including John J. Tigert, former United States commissioner of education and several university presidents.

Instruction, curriculum, objectives, internal organization, regionalism, personnel and student guidance are the principal topics for discussion under which the conference is proceeding. The sessions, conducted at Pioneer Hall, will continue through Saturday.

Among those at the conference are E. W. Knight, University of North Carolina; R. W. Leighton, Oregon; Elins Lyman, Northwestern; C. S. Marsh, American Council of Education; M. S. McLean, President L. D. Coffman, Dean M. E. Haggerty and C. W. Boardman, Minnesota; L. M. Chamberlain, University of Kentucky; Donald P. Cotrell, Teachers' college; W. H. Cowley and Edgar Dale, Ohio State; Homer L. Dodge, Oklahoma; A. C. Eruich, Minnesota; Coleman R. Griffith, Illinois; J. W. Haberson, Pasadena; Harry Hammond, Brooklyn Polytechnic institute; Fred Hovde, Minnesota; Earl Hudelson, West Virginia; Palmer O. Johnson, Minnesota; E. J. Jones, Buffalo university; Isaac Kandel, Teachers college; T. L. Kelley, Harvard; T. R. McConnell, Cornell; Earl J. McGrath, Buffalo; Frank McElroy, Mankato State Teachers' college; F. B. O'Rear, Teachers' college; C. H. Oldfather, Nebraska; W. E. Peik, Minnesota; Homer P. Rainey, Bucknell; H. H. Remmers, Purdue; Ralph B. Spence, Teachers' college; Thomas B. Staples, Hendrix college; John J. Tigert, University of Florida; J. E. Todd, Carleton college; M. R. Trabue, Washington, D. C.; J. G. Umstatd, Minnesota; I. D. Weeks, South Dakota; E. B. Wesley, Minnesota; M. M. Willey, Minnesota; D. A. Worcester, Nebraska; Gilbert C. Wrenn, Stanford; C. S. Yoakum, Michigan; Harold Benjamin, Minnesota; L. B. Wilson, Rochester and O. M. Leland, Minnesota.

Advertising Club Takes Bow

Re-organized, and equipped with a constitution and all the modern touches, the University Advertising club, successor to Campus Advertising club, got under way this week with a starting roll of 24 charter members. The re-organization was directed by Thomas F. Barnhart, Department of Journalism, and Roland S. Vaile, School of Business Administration. Membership in the club is composed largely of journalism and business administration students.

Two pages of pictures of the 1934 national championship Minnesota football team appeared in the October American Boy, under the by-line of Mitchell V. Charnley of the department staff.

Would Elevate Art Interest

(Continued from page 1, column 1)

the beginning to suggest the social significance of art. The word art was given a broad interpretation. The gallery has not been unduly formal, from the start the intention has been to impress upon students that, if they will but let themselves, they may derive great pleasure from the various exhibitions that have been brought to the campus.

"The second project is closely related to the University Art Gallery. In the summer of 1934 the University purchased nearly 500 colored reproductions of famous pictures, and recently has added nearly 200 more to the collection. These vary in size and quality, but all of them have been framed with sufficient variation to prevent monotony and with mouldings adapted to each particular picture. Each print is being labeled and a brief historical and critical statement affixed to the back. For twenty-five cents each term a student may withdraw one of these framed prints for hanging in his room at home or in the university residence halls. The prints are centralized at the University Art Gallery and a selection of them is ordinarily kept hanging in a small room set aside for the purpose. It is interesting to observe that in general the students prefer prints dating chiefly from the time of Cezanne.

"The university has also purchased as the nucleus for a small collection of American art a few pictures by contemporary artists which will be hung in various university buildings at points where students will have frequent contact with them. These include a George Bellows lithograph and a water color by John Marin.

"Building around one of these purchases the university is this fall beginning its most interesting experiment in art appreciation. This experiment seeks to go one step beyond formal classes and even the informal gallery. Galleries must present numerous objects in limited wall or case space, and furthermore, since the University of Minnesota gallery is not for permanent exhibitions, there is always a time factor limiting the students' enjoyment of what is shown. Museums are essential, and so are fine arts courses that take one from the paleolithic to the present in three quarters, but the appeal of both tends inevitably to be intellectual. The conditions of presentation, in either case, are not right for full emotional participation. It is probably sound theory that appreciation and real pleasure and understanding in fine art can best be engendered through contact under a closer approximation to ideal conditions than classroom or gallery present.

"It is felt that there should be for the students a place to which they may retire, step aside for brief periods, and forget the rush of the campus—this in the presence of a fine example of contemporary art. In the field of literature there is recognition of a somewhat similar idea. The browsing reading rooms are evidence of this. At the University of Minnesota the Arthur Upson room, used exclusively for recreational reading, is enjoyed by hundreds of students each week. In such reading rooms a distinction is recognized between a working library as such and a room where one may at leisure browse through books and draw from them what their pages contain. Is not a similar type of room in the fine arts feasible? Would it not contribute to similar ends?

"The University of Minnesota is now about to put this hypothesis to the test. In Northrop Memorial Auditorium, the central building that dominates the entire campus and serves as the cultural center of the University, a room has been set aside as a students' art room. It is now being specially decorated in simple but excellent taste. The tone is modern. It is distinctly American in its conception. It will be well lighted and comfortable. Every effort is being made to make this room in itself an attractive thing and a good example of interior decoration. Here will be placed a few well selected books and magazines in fine art, but the picture will be the central attraction."

Cherry on Board Named by Hughes To Revise Rules

Procedure in Cases in Equity and Law Actions Sought by Supreme Court

Professor Wilbur H. Cherry, in charge of courses in procedure in the University of Minnesota Law school is one of a committee of 14, composed of eminent members of the legal profession in various parts of the United States to draw up for the United States Supreme Court uniform general rules for federal courts to follow in all states. At present state rules of procedure vary so greatly that the federal courts have difficulty in adjusting themselves, although they are supposed to do so under the law that established them in 1789, which requires that they conform as nearly as possible to the procedure in the state in which the court is sitting. The new rules will apply to all but criminal cases.

Professor Cherry received his appointment from Chief Justice Charles Evans Hughes. "I take pleasure in informing you," wrote the chief justice, "of your appointment by the court as a member of the advisory committee to assist the court in the preparation of a unified system of general rules for cases in equity and actions at law, in the federal courts, so as to assure one form of civil action and procedure for both classes of cases."

The work of the committee is expected to take several years.

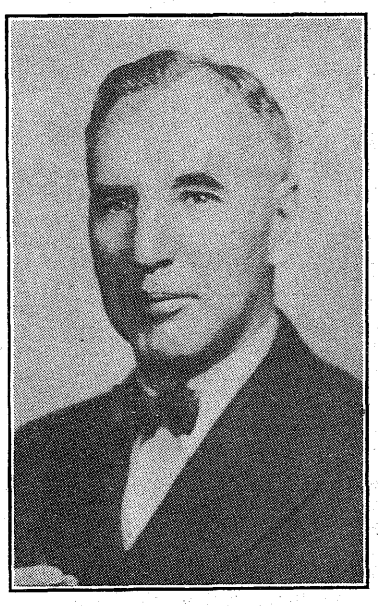
The chairman of the committee is William D. Mitchell, formerly of St. Paul, now head of a New York law firm, who was attorney general under President Hoover. Others are: Scott M. Loftin of Jacksonville, Fla., president of the American Bar association; George W. Wickersham, Taft's attorney general, president of the American Law Institute; Charles E. Clark of New Haven, dean of the law school at Yale; Armistead M. Dobie, dean of the law school at the University of Virginia; Robert G. Dodge of Boston; George Donworth of Seattle, Wash.; Joseph G. Gamble of Des Moines; Monte M. Lemann of New Orleans; Edmund M. Morgan of Harvard, formerly a member of the Minnesota faculty; Warren Olney of San Francisco; Edson R. Sunderland of the University of Michigan and Edgar B. Tolman of Chicago, Ill.

Otterness Assumes Track Coach Duties

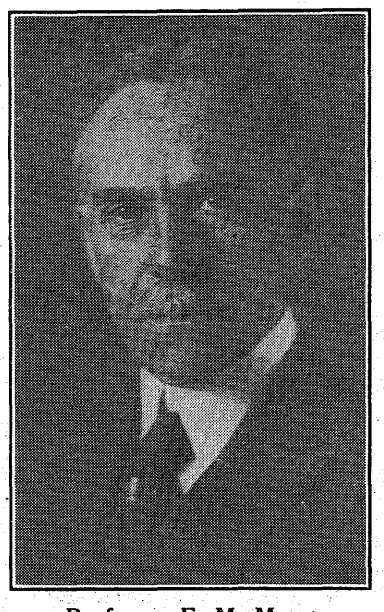
George Otterness, assistant basketball and track coach at the University of Minnesota, has been appointed varsity track coach for a one-year period to fill the vacancy caused by the sabbatical leave of Sherman W. Finger. Otterness will carry on his new duties during the next year while Finger is traveling abroad. He has assisted in coaching the track and basketball teams since his graduation from the university several years ago. During his athletic career from 1926 through 1929 he was a member of both the basketball and track teams and captained the Gopher basketball team during the 1928-29 season. He was an outstanding pole vaulter. Marshall Ryman, former Gopher hockey and baseball player, has been appointed as an assistant in the intramural office of the department and will teach physical education and assist in coaching football and hockey, Frank McCormick announced.

What Can an "M" Man Do for University of Minnesota?

Carol Geddes



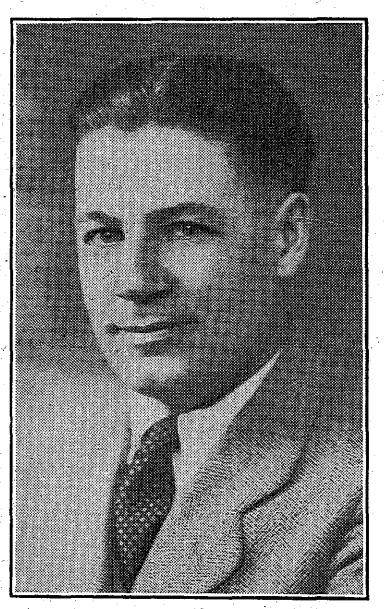
E. B. Pierce



Professor F. M. Mann

George Otterness

Professor Parker O. Anderson



Dean Otis C. McCreary

Many Former Athletes Find Field of Service on University Campus

Old baseball players seem to run poolrooms; old prizefighters, restaurants; but "old" college athletes, as the world knows, are likely to become anything, from distinguished attorneys or ministers of the gospel to school teachers, coaches, farmers, or successful business men.

Even a brief survey of the University of Minnesota campus shows former "M" men on the list of faculty and employees in such diverse positions as head of the School of Architecture, purchasing agent, and assistant dean of school affairs.

The Minnesota faculty includes a number of prominent members who have been athletes at other colleges, among them President L. D. Coffman who played baseball at Indiana, and Dean G. S. Ford, who played baseball at Wisconsin, along with J. M. Thomas, dean of the senior arts college, who was a trackman at Michigan. Colbert Searles played football at Wesleyan. Perhaps there are a score of others who have kept one-time athletic prowess dark, but not everyone knows, either, of the Minnesota lettermen on the campus.

Dr. F. M. Mann, head of architecture, played on one of the most famous of Minnesota's football teams back in 1887 and 1888 with Judge Wm. C. Leary, Alfred Pillsbury, Will Willard of Mankato, and other early greats. This is well known, but fewer know that Roy Callaway, purchasing agent of the university, won his letter as a gymnast back in the days when he could do things that would sound like a torn collar if he attempted them today.

Dr. Henry Williams, Jr., a physician in the Students Health Service, played football and won his letter in the 'teen decade, while his father, Minnesota's famous Dr. Williams, was coaching the Gophers to championships.

Ernest B. Pierce, alumni secretary and chairman of the committee on intercollegiate athletics, represented Minnesota as a member of at least two teams, basketball and tennis, when he was on the campus as a member of the Class of 1904, and toured the eastern United States with the famous undefeated basketball team coached by Dr. L. J. Cooke.

Otis McCreery, assistant to E. E. Nicholson, dean of student affairs, was a first class fullback at Minnesota at the time when Bill Spaulding was first taking up the coaching reins as successor to Dr. Williams. When four to eight yards were needed for a touchdown, McCreery could crack them off, and crack them off he did.

Perhaps no player has come into prominence at Minnesota more sensationally than did Fred Hovde, now assistant director of the General College, when he played during the regime of Dr. Clarence Spears. Making the first team in his senior year after coming up from the squad unheralded as a star, Hovde proved to be one of the most sensational running backs in Minnesota history. It is probable that only the suddenness of his arrival and the fact that his career was ended by graduation after one season, prevented him from reaching All-American rating.

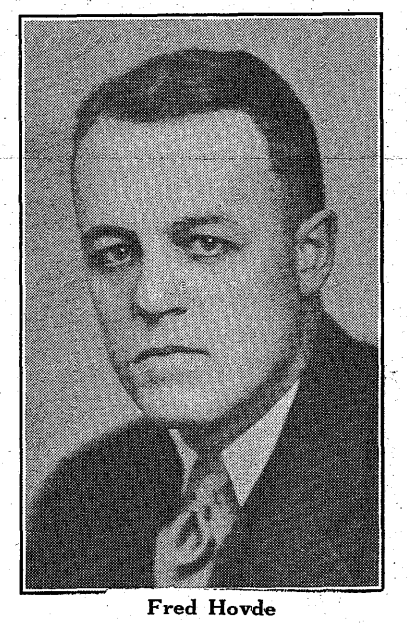
Parker O. Anderson, extension specialist in forestry and widely known as a conservationist, said at one time to have refused the state commissionership for fish and game, was a halfback on the famous 1916 team on which Bierman, Hauser and Baston achieved such great glory. He has been in the employ of the University since his graduation.

Two men at least who hold honorary letters are on the staff of the university. One is James Paige, who still gives some time to the Law School. "Jimmy" was given a letter when he retired from the post of conference faculty representative for Minnesota a year ago last spring. Carol Geddes, financial supervisor of student activities, won the "M" for yeoman service as a student athletic manager.

There are also, of course, those famous letter men who are now connected with athletics at Minnesota. Best known of these are Bierman, Hauser and Baston, already mentioned, George Tuttle, freshman coach, George Otterness, now track coach, who was a basketball and pole vaulting star half a dozen years ago, and Lloyd Stein, trainer.

Youngest Man Enters Minn.

Aged 15 years, John Philip Claybourn of Albert Lea is the youngest student in the University of Minnesota and one of the youngest in any college in the Northwest. He is enrolled in the School of Chemistry. He insists, however, that he is not a prodigy and does not wish to be thought of as one. In the Albert Lea high school class of 1935 John was valedictorian. He also is an accomplished musician, playing the xylophone and trap drums. Mr. and Mrs. Mort Claybourn of Albert Lea are his parents.



Fred Hovde

Form Institute Of Technology

(Continued from page 1, column 5)

cerned to a very large extent with related professional fields.

Need for Closer Relations

"With the expansion of knowledge and its subsequent specialization, it has become clear to educators and to professional practitioners alike that steps must be taken to bring the various divisions of an educational institution into closer relationship with each other. The smaller the administrative unit, the more restricted the field of learning; the greater the isolation, the greater the intolerance and narrowness of those being trained in it. Departmentalization and college autonomy often prevent the recognition of the broader relationships that should be considered in any training program, and they tend to give one a perverted sense of values.

"Gradually the specialists in the various fields of human knowledge are learning that they need the cooperation, assistance and advice of persons in related fields in the conduct of their researches. They have become convinced that many of the important researches lie in the overlapping areas of fields of learning. They know, too, that engineers, for example, should not be concerned with the engineering specialties alone; they need instruction in economics, in political science, in industrial relations, and perhaps in law; so that new programs for the training of men who expect to enter the various specialties of engineering must be devised.

Facing New Problems

"We do not believe that all of the important things in technology have been accomplished. New problems are constantly arising, new investigations are being promoted, new achievements are being made, the level of training is constantly being raised, and new courses of instruction corresponding to types of service are being introduced into college programs. All in all, it seems that the time has come when the various technological fields should be more concerned with inter-departmental relations and that administrative devices should be set up which will insure inter-departmental and inter-college co-operation. By this means we shall foster graduate work and research in related fields; we shall have greater co-operation in the outlining of teaching programs; we shall multiply the co-operative relationships of the engineering units with the humanities; we shall provide increased co-operation of the technological sciences with industry; and above all we shall improve scholarship and raise standards all along the line. The whole program should tend in the direction of simplification and unification. Now with these general objectives in mind, the Board of Regents approves the following resolutions:

Statement of Plan

"1. There shall be created within the University an Institute of Technology consisting of the College of Engineering and Architecture, the School of Chemistry, and the School of Mines and Metallurgy.

"2. The responsible officer of the Institute shall be a Dean. All heads, chairmen, and chiefs of departments, divisions, and other units which may be included in the future, shall be directly responsible to the Dean.

"3. The Dean shall have the powers which are usually ascribed to the responsible head of any college or school of the University, that is, he shall have jurisdiction over the budget, appointments, and other administrative matters of direct concern to the organization, management, and administration of the Institute of Technology. He shall have associated with him such assistant deans of the included college and schools as may be needed from time to time.

"4. There shall be an administrative board which shall consist of assistant deans or directors of the three schools, and one member each from the major departments, divisions, or other units, to be appointed annually by the President, each from two nominees chosen by informal ballot by each department, division or other unit. No one shall be eligible to serve for more than three years. This board shall be responsible for administrative matters in the Institute as defined in the regulations of the Board of Regents.

"5. The general faculty shall consist of assistant deans, and all the members of the teaching staff above the rank of assistant professor, and in addition the full professors of the departments of Physics, Geology, and Mathematics. The general faculty shall be the policy-making body for the Institute, subject to rules and regulations governing the University as a whole. It shall hold a meeting in April each year and at any other time on the call of the Dean.

Robb Succeeds Upjohn in Art Professorship

To have been born in China, to have grown up in Topeka, and to have been educated at Oberlin, Princeton, and in European art centers, is the cosmopolitan experience behind David M. Robb, assistant professor of fine arts, who came to Minnesota this fall to succeed Everard M. Upjohn, first to hold the position when it was created five years ago.

After receiving the degree of M.A. at Princeton in 1931, Professor Robb taught at Colgate university from 1930 to 1935. Meanwhile he had been Carnegie Fellow in Fine Arts from 1927 to 1930, the last year, 1929-'30, in Europe. Professor Robb is married and has one child, Martha Elizabeth Robb. He and J. J. Garrison as collaborator have published two recent books, "A Survey of Western Art," which appeared in 1933, and in 1935, "Art in the Western World," published by Harper & Bros.

He also is author of a series of articles on medaeval art which appeared from 1931 to 1935 in The Art Bulletin.

Moulton Tells Way of Progress In Distribution

Head of Brookings Institution Outlines Result of Economic Study

MASSES NEED GOODS

Lowering Prices to Permit Buying One Way Out of Dilemma

Harold G. Moulton, president of the Brookings Institution at Washington, gave the results of long economic study into the relation of the distribution of national income to economic progress when he spoke in Northrup Auditorium on October 31. Because of the length of his paper, the first half is presented here and the second will be run in the following issue of Minnesota Chats.

The subject which we are to consider is, I believe, of more fundamental significance than any other with which mankind is concerned. Upon our ability to discover the means of making continuously effective use of our productive resources and of progressively stimulating further technological advancement, depends not only the economic and social welfare of the masses of the population, but also the very perpetuity of our economic and political institutions.

In the short interval of time since the founding of the American republic man's power over nature has been increased vastly more than in all preceding history. If we were to let the span of human history be represented on the face of a clock, the period elapsing up to the last two centuries would be the equivalent of the time from noon to ten minutes before twelve, midnight. The last ten minutes represents the period during which the capitalistic system, as we know it, has evolved. Economic progress in these last ten minutes has greatly exceeded that in the preceding 710 minutes.

This phenomenal development is, of course, not to be ascribed entirely to the system of free enterprise, which unleashed the powers of inventiveness and opened wide the doors of opportunity for the development of individual talents and capacities. Great scientific discoveries, the opening up of new highly productive areas, and the momentum gained as each new generation builds upon the achievements of the past have all been powerful factors.

The focal point of our present interest, however, is not the rate at which progress has been achieved during the modern era, but rather the forces which appear to be responsible for its apparent retardation at this particular juncture in history. When one stops to think closely about the question, it would seem that the rate of economic progress should be a constantly accelerating one. The larger the margins achieved above the requirements for subsistence, and the greater the accumulation of scientific and technical knowledge, the more rapid should be the rate of economic growth and the higher the standards of living—provided, of course, the rate of population increase is restrained. In other words, the first thousand years were the hardest, and in each succeeding century the forward road should become easier.

A great many observers have in recent times been concerned over the fact that the rate of economic progress appears, superficially at least, to be lagging rather than accelerating. Somehow the older and more mature economically a nation becomes, the less rapid—for one reason or another—appears to be the rate of its economic growth. We do not seem to be able to make a full utilization of our existing productive facilities. This fact has seemed to some to indicate that we have reached a stage of permanent overproduction—necessitating restriction of output and more leisure instead of more wealth. To others it has suggested that there must be some underlying difficulty which seriously impedes the operation of the economic system.

It was with a view to throwing light upon the great problem thus briefly suggested that the Brookings Institution—organized for the purpose of ascertaining and interpreting the facts about great economic and governmental problems—submitted three years ago to the Maurice and Laura Falk Foundation of Pittsburgh—created for

(Continued on page 4, column 1)

Tells Why of Progress in Distribution

(Continued from page 3, column 5)

the purpose of promoting human welfare—a project for investigating the relation of the distribution of income to economic progress.

The very wording of the title, The Distribution of Income in Relation to Economic Progress, suggested the fundamental lines along which the investigation would be projected. The fact that business enterprises seldom produce at full capacity, that the greatest problem of business managers appears to be to find adequate markets for their products raised in the minds of many business men and economists the question, "Is not the primary difficulty a lack of purchasing power among the masses?" and this led at once to the correlative question, "What is the bearing of the distribution of income among the different groups in society upon the demand for the products of industry?"

In the view of many people it seemed obvious that since producers groan under the burden of "excess capacity" at the same time that consumers complain of unsatisfied wants, the trouble must evidently lie in the failure of the system to transmit purchasing power broadly to the masses. In sharp contrast, others contend that the center of the economic system is production. While temporary maladjustments may restrict productive output, it is urged that, as a normal long-run procedure, we produce all that we can, and that our consumption is simply determined by the amount that the economic machine is able to turn out. In the light of such divergent views the need of a searching study into the interrelations between production and consumption, as revealed by data and information drawn from the actual world of affairs, was evident.

As you are all aware, our investigation has covered a number of more or less distinct, though interrelated, subjects, and the final volume on which I am reporting this evening is an interpretive synthesis of the entire investigation.

The four resulting publications are: "America's Capacity to Produce," "America's Capacity to Consume," "The Formation of Capital" and "Income and Economic Progress."

Since many of you are familiar with the conclusions reached in our studies of production, consumption, and capital formation, only incidental reference need here be made to the first three phases of the investigation. In order, however, that you may have before you in succint form the successive steps involved in the inquiry as a whole and be able to judge for yourselves whether the investigation has been carried out in a thoroughly scientific manner, I shall give a very brief recapitulation.

I use the term "scientific" deliberately, because of a widespread impression that the subject of economics does not readily lend itself to scientific determination. It is our belief that owing to the extensive factual and statistical information about the business world that has been accumulated in recent times that it has been possible to pursue the present investigation by methods which are quite as scientific in character as those prevailing in the natural sciences. In some connections, to be sure, it has not been possible to make as accurate measurements as one might wish but the lack of precision we believe in no wise affects the fundamental validity of the conclusions reached. In order to present our findings as succinctly as possible and at the same time to reveal the methods employed I shall describe the several steps in the analysis as a whole.

Use of Productive Resources

The first step was to ascertain the degree to which our productive resources are ordinarily utilized. We found that in the prosperity period of the twenties our productive facilities were used to only about 80 per cent of capacity. This phenomenon of excess capacity was characteristic of the whole period from 1900 to 1929, with no definitely discernible upward trend for the period as a whole. During the depth of the depression in 1932, the rate of output for the economic system as a whole was scarcely more than 60 per cent of capacity, while in many lines of manufacture it was as low as 20 or 30 per cent.

Step Two

The second task was to determine whether the failure to utilize our productive capacity fully might be explained by any impediments or maladjustments within the productive mechanism itself. We were unable to discover any bottleneck, weak link, or defective part in the productive system. That is to say, there was no impediment in the way of a shortage of raw materials, industrial plant and equipment, power or fuel, transportation facilities, money and credit, or labor, which might explain the failure of the system as a whole to operate on a capacity basis. The source of difficulty had, therefore, to be sought outside the productive machinery.

Step Three

As the next step, it was therefore necessary to study the distribution side of the economic system. Might the difficulty be found in a maladjustment between productive capacity and purchasing capacity? To throw light on this question it was necessary to show how the national income is divided among the various groups which comprise the body politic.

We found, in brief, that the great masses of the population had incomes insufficient for primary requirements and that there exists a potential demand vastly greater than could have been supplied had we operated our economic system at full capacity. At the higher end of the scale, incomes were not only in excess of consumptive requirements, but in many instances in excess of practical consumptive possibilities. Over the period from 1900 to 1929 the poor were not growing poorer, but richer. But the rate of income growth was nevertheless more rapid in the upper income strata.

Step Four

The fourth step was to determine the effect of the unequal division of income upon the allocation of the total income as between spending for consumption and saving for investment. We found that the savings of those in income groups below $2,000 were negligible, while those in the higher income brackets saved a substantial percentage of their total income. Out of 15 billion dollars of individual savings in 1929, as much as 13 billions were made by 10 per cent of the population. Since the number of people in the higher income groups was increasing, the percentage of the total national income that was diverted to investment channels was increasing.

Step Five

The fifth step brought us to the crucial question, namely, whether the restricted flow of funds into consumption channels, resulting from the unequal distribution of income, served in any way to impede the operation of the economic system. To answer this question it was necessary to study the forces which govern the transformation of the money savings of individuals into new capital equipment.

According to traditional views, the greater the amount of money that is directed into investment channels the better, for it will all be used to expand plant and equipment, thereby increasing productive capacity—and hence consuming capacity in the future. Our analysis showed, however, that since new capital is constructed with a view to making profits out of the sale of the products of such capital, an expansion of plant and equipment will not take place in any large way unless consumptive demand is at the same time increasing.

Our study of the facts of industrial history disclosed further that the growth of new plant and equipment is closely adjusted to the rate of increase of consumptive demand rather than to the volume of savings available for investment purposes. In the prosperity period of the twenties, for example, only a portion of the money savings rendered available in the markets was utilized by business men for the purpose of building new plant and equipment. The excess went to bid up the prices of securities already outstanding, thereby producing serious dislocations in the financial markets. In short, we found that on the one side the flow of money into consumptive channels was inadequate to call forth the full use of the existing plant and equipment; and that, on the other side, the excessive flow of funds into investment channels produced a security market boom, the ultimate collapse of which was an important factor in precipitating the depression of 1929.

As a result of the investigation of production, consumption, and the process of capital formation, we reached the following basic conclusions:

First, the unbalanced distribution of income—and consequent restricted flow of purchasing power through consumptive channels—explains our inability to find markets adequate to absorb the full output of our productive establishments.

Second, the slow rate of growth of consumptive demand serves to retard the rate at which new capital is constructed and hence the rate of economic progress.

Possible Lines of Progress

With the basic source of maladjustment disclosed, our problem shifted from diagnosis to prescription. By what means might the flow of the income stream to the various groups in society be modified so as to expand progressively the effective demand for consumption goods and call forth an ever greater volume of production? What are the possible lines of attack on this problem? In what directions is economic progress most likely to be found?

As a preliminary to a discussion of this problem, it should be clearly understood that a mere redistribution of the existing income of society will not accomplish the desired results. If the entire income of the nation had been divided absolutely equally in the most prosperous year we have ever known each person would have received about $665. If all of the income derved from investments in 1929 and in addition all of the salaries received by corporation officials had been conscripted and distributed to the masses, the per capita income would have been increased by only about $140. The amount that could conceivably be redistributed at the present juncture without bringing the economic system to a halt is so small as to be of negligible significance.

The paramount requirement is to increase progressively the total amount of income to be divided. Only if the aggregate income increases from 80 billion dollars a year to 100 billions, to 150 billions, to 200 billions, will it be possible to achieve the goal desired. What we need is a dynamic society in which ever increasing quantities of newly created goods and services will become available for everyone. The distribution of income from year to year is thus of significance not for its momentary effects upon the well-being of the masses, but for its possible cumulative effects in promoting a fuller utilization of our productive facilities and a consequent progressive increase in the aggregate income to be available for division.

Numerous persons, aware of the character of the conclusions reached in the first three volumes of our investigation, have evidently been expecting us to suggest some clever device, or panacea, with which to remedy the existing maladjustments. One of the most striking attributes of the human mind is its desire for some simple or single solution to the problem with which it is confronted. Any number of such "conclusive remedies" have come to my desk, as no doubt to yours, in the course of recent years. But anyone who has had a broad and varied experience, either in the world of business or as a professionally trained student of the actual operation of the complex economic system, knows that there is no easy formula by which the economic machine may be automatically, instantaneously, and perpetually perfected.

In our analysis we have given careful attention to several alternative, though not necessarily mutually excessive, lines of attack upon the problem. In each case we have sought to determine both the potentialities and the limitations. By a process of elimination we have reached a judgment as to the particular road along which progress, as we conceive it, is most likely to be achieved. At the same time we have indicated other contributing means and suggested the places at which further investigation is required.

Methods of bringing about a different division of income are of two broad types—the one direct and the other indirect. The direct method involves a modification of the income stream at its source—that is, in the disbursing offices of business enterprises. The indirect method involves an unmodified initial distribution and then a subsequent redistribution through the medium of taxation machinery. I shall say just a few words about the latter first.

Tax-Financed Services

Taxation has already played a role of no small significance in raising the standards of living of the masses. For many years, federal, state, and local governments have collected taxes for the purpose of providing educational and recreational facilities and, increasingly, public health service. These free services have not only contributed very materially to the well-being of the masses; but since such services come free the result is a larger margin for expenditures on other types of consumption goods. As the years pass, the furnishing of such services out of funds derived from taxes may well be made very much more important than has been the case heretofore.

On the other hand, many types of public expenditures—which provide incidental employment—are not of great direct significance to the masses. If the people had free choice in the matter they would clearly not express themselves in favor of additional public works, as compared with better food, clothing, shelter, and more necessities and conveniences in the home. However important the construction of public works may be in a period of depression, such enterprises can be justified as permanent policy only if they yield larger satisfactions to the people than might be rendered through increasing the output of basic necessities. As long as widespread underconsumption exists, a program of public works will not solve the basic need. Not unless the government were to take over the production of food, clothing, and other basic necessities, would it be possible thus to give the people what the people most stand in need of. We conclude, therefore, that taxation has a place in a program for redistributing income—an increasing place as the years pass—but not a place of primary or fundamental importance.

Alternatives to Consider

Turning now to the direct methods: There are two principal alternatives to be considered. The first is the increase of money wages without proportionate increases of prices, and the second, or opposite, is the reduction of prices without a reduction in money wages. Before considering these alternatives, let me emphasize that our analysis is concerned, not with the economic situation as it presents itself in the midst of depression, when normal price and wage relationships have been seriously disturbed, but rather under normal long-run conditions.

It is readily apparent that if there should be a general increase in money wages unaccompanied by offsetting increases in prices the purchasing power of the wage earning classes would be enhanced. It is clear also that if prices generally were reduced while money wages remained unchanged, the real income and purchasing power of the masses would also be increased. It is clear also that wage increases, accompanied by corresponding price increases do not increase purchasing power, and that price reductions achieved by cutting wages do not give to the laboring classes any added purchasing power. The relationship between wage levels and price levels must be modified if the workers' income and purchasing power is to be expanded.

Wisconsin Man Joins Journalism

Ralph O. Nafziger

Ralph O. Nafziger, assistant professor of journalism at the University of Wisconsin, has been appointed to the staff this year of the Department of Journalism, University of Minnesota. He is on leave of absence from Wisconsin.

Professor Nafziger was graduated from the University of Wisconsin in 1921. From July 1921 to 1925 he was employed in Fargo, North Dakota, in the press bureau of North Dakota State college, reporter on the Fargo Forum, and editorial writer on the old Fargo Tribune. He started the first journalism course offered at North Dakota State college.

From 1925 to 1928, Professor Nafziger was employed on the staff of the Omaha World-Herald where he worked successively as reporter, on the copydesk, state desk, and Sunday department. In 1928 he returned to the University of Wisconsin, where, for two years, he was editor of the press bureau and for five years a member of the journalism faculty.

He was granted the degree of master of arts in 1930 and has completed all requirements for the Ph.D. in political science, with the exception of his thesis, upon which he is engaged at present. Professor Nafziger is working on "Public Opinion and the Press in the United States During the World War."

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 NOVEMBER 12, 1935 NUMBER 3

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

John McGovern At Homecoming

The University of Minnesota's first All-American football player visited the campus and sat in Memorial Stadium to watch Minnesota win from Northwestern.

He is John F. McGovern, now a Washington, D. C., attorney, who from 1908 to 1910 thorned the sides of Big Ten opposition continually to earn the quarterback position on Walter Camp's 1909 All-American eleven.

McGovern is the pioneer of Gopher All-Americans. Behind him came such greats as Bronko Nagurski, Clarence Munn, Butch Larson and Pug Lund. Before him no Gopher gridder caught the eye of the former dean of football, Walter Camp.

Lauds 1934 Gophers

A lawyer by profession, but a life-and-death football fan at heart, McGovern makes every effort to view his alma mater's gridiron troupe each year. Last fall he flew from the nation's capital to Pittsburgh to watch Minnesota's triumph over the Panthers. He has viewed the Gophers in action against Tulane and will be on seat's edge today to witness a hoped-for rout of Northwestern.

"Last year's team was a wonder," sighed All-American McGovern as he gazed on Memorial Stadium from the office of Dr. L. J. Cooke in the new athletic building. Northwestern occupied the field and the ominous size of the Wildcat warriors brought a touch of doubtfulness in his eyes. But it was soon gone.

"From what I've seen of this year's team, it could have been just as good as last season's if the breaks hadn't gone the wrong way. It's demoralizing to any team to have to experiment all of the time when it should be perfecting its mechanism. But I have a feeling Minnesota will go through the season undefeated again, and more power to Coach Bierman.

"There's a resemblance between Captain Seidel's career and mine," McGovern mused as his glance continued to rest on the Northwestern giants in the stadium. "When I was captain of the team in 1909 I broke my collar bone. And, like Seidel, it was in the last few minutes of a game. It was against Chicago.

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | DECEMBER 3, 1935 | No. 4

Weaknesses Told To Students in Social Sciences

Dr. Brigham Also Describes New and Attractive Graduate Fellowships

College graduates who are preparing for a life work of scholarship in the field of the social sciences have been giving too little attention to mathematics and modern languages, Dr. Carl C. Brigham of Princeton University told graduate students at the University of Minnesota at a recent conference. He is chairman of the Social Science Research Council's committee on personnel (fellowships), which has the gift of many thousands of dollars in fellowship money in its hands. Dr. Brigham is also chairman of the College Entrance Examination board. Dean Malcolm M. Willey of Minnesota is also a member of the committee.

Among recent applicants for fellowships a considerable number have failed of selection for earlier lack of attention to languages and mathematics, and some, upon graduation, have been unable to pass typical examinations set up by the college entrance board for college admission, he reported.

"The fact that a man has put his mathematics and French to bed does not mean that he can not take up those subjects again, but it makes it difficult for him to go on immediately with work in the social sciences," Professor Brigham said.

Professor Brigham met with three groups on the campus, including candidates for Ph.D. degrees in social science, the Psychology department, the Graduate School Faculty and attended a Graduate School dinner.

Three series of fellowships are now offered by the Social Science Research Council, Professor Brigham said. In addition to the fellowships given to scholars who have the Ph.D. degree and field fellowships going to persons who have completed all work for the doctor's degree with the exception of a thesis, the committee now offers a new group of fellowships to persons who have completed undergraduate work but have not done more than one semester of graduate work and are not more than twenty-five years of age. These fellowships are available to brilliant students throughout the nation. It also has begun to offer a new series of pre-doctoral fellowships.

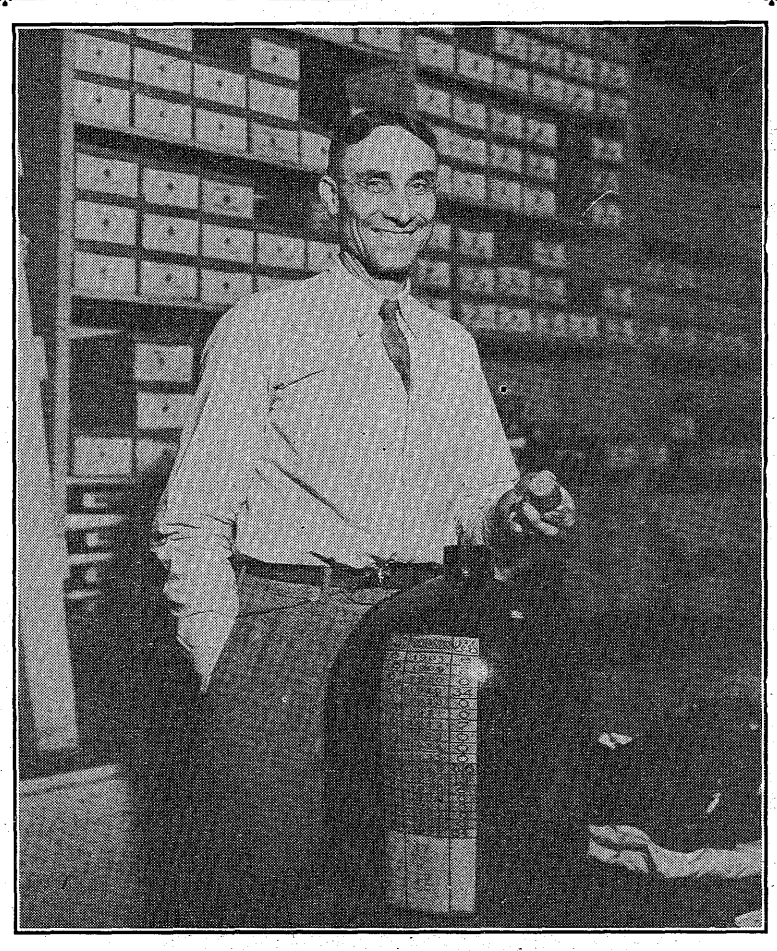
"A previous study of the availability of fellowships for graduate work made by the council had shown that, while many colleges made provision for advanced work, very few offered adequate support at the first year level," said a report issued by the committee on personnel. "The council's new series of fellowships was designed to aid exceptionally promising students of the social sciences to obtain research training beginning with the first year of graduate study.

"The stipend offered was $1,000 plus tuition and travel from the home to the place of study. A fellow was not allowed to continue his studies at the institution from which he received his bachelor's degree, but was required to choose another institution for study.

"Although the council circularized institutions and individuals extensively in announcing these new first-year fellowships, together with the new pre-doctoral field fellowships, information concerning them was not as widespread as the committee hoped. Fellowship announcements seem to reach a final resting place on bulletin boards where he who runs may not read."

The report also explains the examinations for fellowship applicants, which consisted of a social science examination in two parts, examinations in French and German and a scholastic aptitude test.

Most Celebrated Trophy and Its Dad



Because it became famous spontaneously and as a masterpiece of its kind, the Little Brown Jug commemorating the Minnesota-Michigan series, is admittedly in a class by itself. Bacons, buckets, statues and the like, the country over, are based on the jug idea. Here Oscar Munson, ageless custodian of equipment at Minnesota, who stole the jug in his big moment back in 1903, is shown protecting his pal. Minnesota doesn't always have it.

Research Identifies Seven Types Among Minnesota's 10,000 Lakes

Dr. Samuel Eddy, Zoologist, Calls Them One of Major Resources of State

The lakes of Minnesota are one of our most important resources in the actual, practical sense as well as in the more sentimental reasoning of the nature lover in the opinion of Samuel Eddy, assistant professor of zoology at the University of Minnesota, who is nearing the end of a comprehensive study of "the 10,000" on which he has been engaged for several years.

The corn grown on land redeemed from drained lake or river bottoms will never, in the long run, add as much to the state's wealth as would have been added by the natural life had the area been left as it was, Dr. Eddy believes.

Some Minnesota lakes are now past redemption, useful hereafter for nothing better than raising duck food, but under a sane policy of conservation and use, including the planting and protection of fish, most of the lakes in the state can be maintained as splendid fish producers or restored to something like the status they once had, he says.

Seven types of lakes have been identified in Minnesota by Professor Eddy and his assistants, among whom were representatives of the U. S. Forest Service, State Conservation Commission and the CCC camps. These are the river lakes, such as Lake Pepin and Lake St. Croix, in which the characters of rivers and lakes are combined; rich lakes, namely, lakes rich in oxygen-producing plant life, which therefore maintain a rich animal life; poor lakes, which means poor in the sense that they are cold, usually deep, and have, relatively, much less plant and animal life than the rich lakes; a group that might be called "enriched poor lakes," which retain the characters of poor lakes but have a fairly abundant plant life; big lakes that are shallow, particularly Mille Lacs, Red Lake and Winnibigoshish, which have characters of their own that will be described; Lake Superior, pretty much in a class by itself, and bog lakes. This last type has not yet been studied by the Minnesota zoologist, but they will be studied.

Purposes of the broad study included a classification of the lakes, as stated, according to the animal organisms they support and a search for answers to questions such as, "What fish and food organisms should be present in the lakes?" "What supports those that are present?" and, "What is the reason for the absence of organisms and forms not found?"

Why Some Lakes Are Blank

Everyone who has visited a considerable number of lakes in Minnesota knows that there are a good many which would appear to offer good fishing but are found on examination to contain little life. Professor Eddy finds several reasons for this condition. The three most important ones are—lack of adequate spawning beds, lack of proper bottom conditions, and winter killing of the fishes due to lack of a sufficient amount of oxygen to maintain life.

Spawning takes place best in relatively shallow bays where the waters warm up rather rapidly in the spring and the eggs and fry are protected from the hazards of deeper waters. Some lakes, particularly rock-bound ones shaped "like a dishpan" with steep walls and flat bottoms, often lack such bays. Again, in lakes that once had a number of shallow bays, drainage or natural recession may have caused a drop until these bays have become dry land and spawning areas have been ruined.

Lakes with bottoms that are too soft, particularly if they are shallow, can not well support fish life, in the scientist's opinion. When bottom conditions are such that plants and tiny organisms can not live there, that area of the lake becomes useless to the fish, which are forced to remain in the higher regions of water. Then, if these are shallow lakes, the upper waters become too hot in midsummer, and the fish, with no adequate refuge

(Continued on page 4, column 1)

Good Dairy Prices Seen for 1936

Extension Economist at University Farm Makes Predictions for Coming Year

"Higher net returns are in prospect for Minnesota dairymen in 1936," says J. B. McNulty, extension agricultural economist, University Farm, in commenting on the 1936 agricultural outlook. "Feed costs are lower and butter prices are likely to be slightly higher than the 23 to 29-cent level that prevailed from May to November, 1935," continues Mr. McNulty. "However, dairying will probably not be quite as profitable as the beef cattle, hog, and poultry enterprises for the coming year.

"The number of milk cows in the United States on January 1, 1936, is expected to be about 1,600,000 less than on January 1, 1934. Great reductions in cows have taken place owing to the drouth, to the federal tuberculosis and Bang's disease testing programs, and to relatively high prices for low grade beef in recent months. Still the number of milk cows per thousand of human population will be about the same as for the past 10 years. The recent reductions have merely tended to balance off the great increases that took place between 1928 and 1934.

"The amount of milk produced in 1936 is likely to be close to the 10-year average, and somewhat higher than in 1935. Production in the winter of 1935-36 will probably be less in the midwest, but somewhat greater in the eastern section. Butter storage holdings, though high in September, are expected to be close to the average by next spring. Less butter imports are expected, since foreign butter prices have had a substantial increase.

"Industrial payrolls for the United States as a whole are expected to be somewhat greater than in 1935 and this is expected to strengthen the demand for butter. All in all, therefore, the outlook is for some improvement over 1935."

Pictures Given Of Men Formerly In "U" Affairs

Oil paintings of two men who have played important parts in the life of the University of Minnesota have been donated to the institution recently through the medium of the Board of Regents. A painting of the late George H. Partridge, regent from 1914 until 1931, was presented by his daughters, Mrs. J. G. Ordway and Mrs. Curtis Griffith Noble. The other picture is a painting of the late John Nichols, formerly of St. Paul, who was one of three members of a "special board of regents" named in the sixties, when the university was heavily in debt, to examine the land grant properties and sell enough tracts to cancel the obligations and permit the final opening of the institution in 1869. Other members were O. C. Merriman of St. Paul and John Pillsbury of Minneapolis. Due to their efficiency a proposal in the legislature that the University of Minnesota be turned "into an asylum for the insane" was dropped. The picture came from granddaughters of Mr. Nichols, Mrs. R. McC. Brady of Detroit and Mrs. Mabel H. Wilson of Pasadena.

Lang Will Speak

F. C. Lang, professor of highway engineering, discussed "Soils and Subgrade" at the Western Conference of Highway Engineers, held at Helena, Mont, November 12. He also will attend in the near future a meeting of the committee on high joints in concrete paving when it meets in Kansas City. Professor Lang is a member of the highway research board of the National Research Council.

Dr. Tate Chosen In Group to Aid Applied Physics

New Organization to Work to Give Industry Help of Scientists

HONOR TO MINNESOTA

Dozen of Nation's Largest Concerns Show Interest in Plan

More scientific regard for the application of physics and the discoveries of physicists to industry is contemplated by American physicists which created a National Advisory Council on Applied Physics. Dr. John T. Tate of the University of Minnesota's department of physics is one of forty members named on the new council. The United States Bureau of Standards, the National Research Council, thirteen important industrial laboratories and seven universities, including Minnesota, are represented on the committee, of of which the head is Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, Cambride.

Two main purposes will be sought through creation of the Council on Applied Physics. First is consideration of the ways in which the contributions of physical science can be brought to the attention of industries not yet well aware of them. The other is creation of a unit particularly in the interests of those whose special interest lies in applied physics, and providing better opportunities for them to publish their researches.

Universities represented other than Minnesota were Harvard, Cornell, Massachusetts Institute of Technology, Columbia, Pennsylvania State College and the University of Pittsburgh. Industries represented were Bausch and Lomb, The Bell Telephone Company, Brooklyn Edison Company, Eastman Kodak Company, Westinghouse Electric and Manufacturing Company, Eppley Company, General Electric Company, Gulf Oil Company, E. I. Dupont de Nemours Company, Dow Chemical Company, Fixed Nitrogen Research Laboratories, Chemical Foundation, Union Switch and Signal Company, and the United States Steel Corporation.

Further to serve the interests of scientists whose particular interest lies in applied physics, the Advisory Council on Applied Physics recommended creation of a division of applied physics within the American Physical Society. A motion embodying this and other proposals was presented by Dr. Tate of Minnesota and was adopted.

Explaining the basic purpose of the new steps, Dr. Tate said:

"In the past public attention has been focussed largely on the very fundamental contributions of physics to industry, such as Faraday's discovery of electro-magnetic phenomena, which provided the basis of the modern industrial age, and more recently the discovery of the X-ray and of the electron, the basis of the radio industry. Everyone appreciates what physics has done in providing society with these new tools. But it has not been recognized so widely that physics is also playing a very important role in the everyday life of modern industry.

"There has been a tendency, once a fundamental discovery in physics has been made, to regard it as something turned over to industry for its own development and utilization. Nevertheless there are a great many ways in which physics, in the everyday course of affairs, can show the way to increased efficiencies, particularly in the use of materials and in design. It is mainly to these latter points that attention is being directed in applied physics today."

The American Institute of Physics was formed several years ago as a medium of co-operation for five organizations working in the

(Continued on page 2, column 1)

Television Due 'U' Professor Tells Public

Dr. Webb Says Demonstration Sets Will Be in Many Places Soon

Television, long considered by many to be no more than a dream as far as the general public is concerned, will be an actuality by spring, according to Professor James Webb of the department of electrical engineering in the University of Minnesota.

After spending last summer working in eastern electrical laboratories, Dr. Webb returned to Minnesota with assurances that television has been conquered. During the late winter, he said, important manufacturers will place twenty or thirty actual television sets in important public places in the east, such as hotel lobbies, railroad stations and the like. Programs will be sent to these sets from a central transmitting outfit and the general public will be given an opportunity to witness a continuous demonstration of the new science.

The receiving outfits will be relatively small, Professor Webb explained, the picture screens probably measuring something like eighteen by twenty-four inches. Very short wave lengths will be used in transmitting the images. He said he believed that sound will accompany the pictures.

One of his most unusual predictions was that the change will probably alter the desirability of radio wave-lengths now available to stations. Television will go over the shorter wave-lengths, which therefore, will increase greatly in desirability. He believes that within a very few years television sets will be available at a price thousands can afford, and predicts that even the first sets will be probably no more expensive than were the better early radio sets.

Tate Chosen in In Physics Plan

(Continued from page 1, column 5)

physical sciences, namely, the American Physical Society, Accoustical Society of America, Optical Society of America, the Society of Rheology and the American Physics Teachers Association.

In his statement recommending that a division of applied physics be formed in the American Physical Society, Dr. Tate said:

"Among natural sciences physics is unique in that it is basic to all. Full understanding of natural phenomena—and hence also maximum efficiency in their utilization and control—must inevitably come about through successfully interpreting these phenomena in terms of the fundamental laws of physics.

"However remote we may be from the realization of this ideal, we are steadily moving toward it, consciously or unconsciously. The so-called "pure" physicist is setting the house in order by finding out what are the fundamental elements of matter and of energy and their relationships. The applied physicist is reaching out into the fields of the other sciences, into engineering practice, into industry and is attempting to apply physical methods and principles to the solution of problems in those fields.

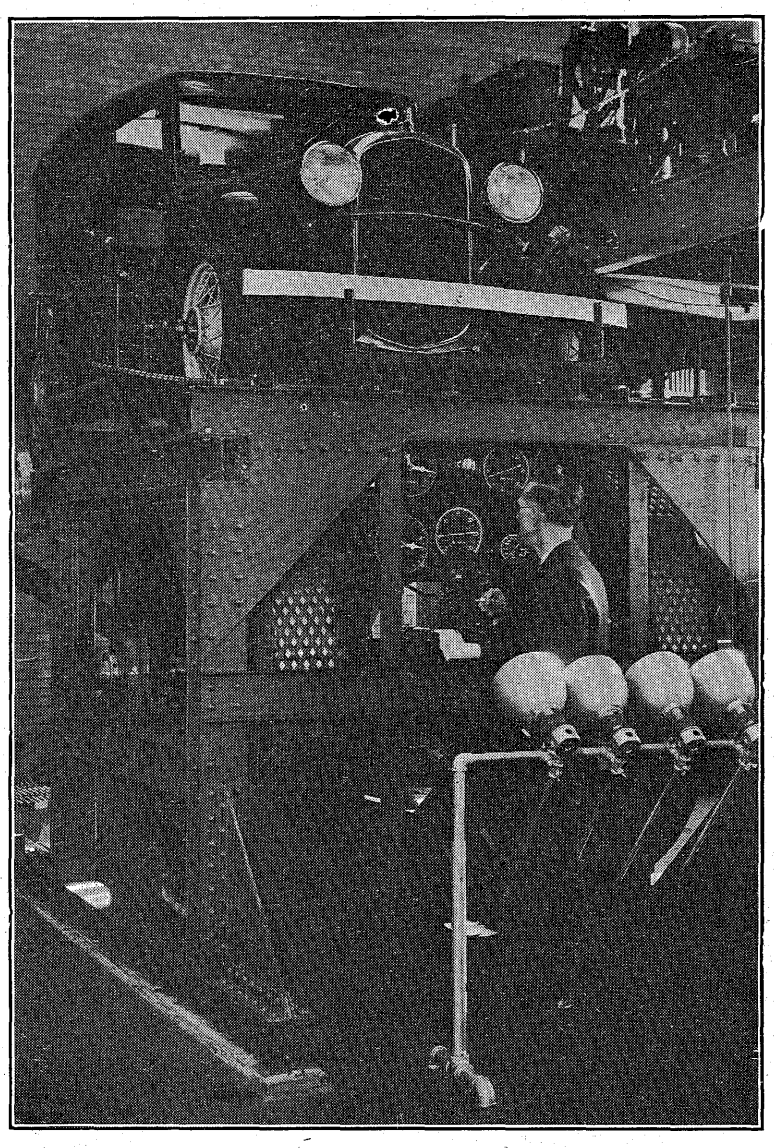
"The Advisory Council on Applied Physics has been called together to consider the interests of applied physicists. Who are they?

"Applied physicists appear under a variety of titles, such as physicist, physical chemist, chemical physicist, biophysicist, geophysicist, astrophysicist, rheologist, metallurgist, or as any one of a variety of engineers. Although some of them have common interests such as in chemistry, in the biological sciences, in different engineering fields, their sole common ground is in physics. For purposes of definition we may agree that anyone is an applied physicist who is applying physical methods and principles to fields outside of physics and who at the same time is also interested in physics as a science."

Discuss Federal Legislation

Six University of Minnesota faculty men spoke and three acted as leaders of discussion when the Minneapolis Civic and Commerce association put on a Symposium on the general subject of current federal legislation.

Pavement Whirls; Car Stands Still



E. W. Davis, superintendent of the Mines Experiment Station, is shown watching the apparatus with which he is testing the qualities of castiron pavement blocks.

Five New Fruits Produced at 'U'

New Plums, Apples and Berries Will Soon Make Appearance

Minnesota seems well on the way to taking a still more important place among the fruit-producing states, according to a report from the fruit-breeding station of the University of Minnesota.

W. H. Alderman, chief of the division of horticulture, University Farm, St. Paul, and in general charge of the fruit-breeding station near Excelsior, Minnesota, and F. E. Haralson, superintendent of the station, said recently that a new apple and a new plum, both of outstanding qualities, were now about ready to be named and given to the public, having stood rigid tests both at the station and among growers. The report also said that in a group of twenty or more other seedling apples, three stood out prominently, and promised soon to have places "of equality at least with any of the commercial varieties grown elsewhere in the United States;" also, that "five large, red, high-quality varieties of plums seemed to show particular promise," together with a sweet, crisp-flesh sand cherry hybrid.

Other fruits under test that seemed to show much promise, said the report, were a pear of the Seckel type, grapes, currants, June-bearing strawberries, black raspberries, and cherry-like fruits.

Emphasizing the necessity of being conservative in estimates of the values of new fruits, the report had this to say of the new apple and the new plum, ready to be named before long, and made available to the public through nurserymen:

"Minnesota No. 423 is a fall apple, ripening with, or a few days later than, Duchess, which will keep for a month after harvest, even without cold storage facilities. It is a highly colored, all red variety, of better quality for eating than Duchess, and is an excellent cooking apple. It is felt that the test should run for another year, but there seems to be no question that it will prove worthy of introduction.

"Minnesota No. 83 is a late plum of good size and exceptionally fine dessert and canning qualities. It is yellow, with an attractive red blush. It has two valuable and outstanding characteristics; it hangs to the tree tenaciously even at full maturity, and, after picking, will keep in good condition for two or three weeks."

Of the three other apples, mentioned in the report as giving great promise, the report says: "All three have one characteristic essential to a good commercial variety for Minnesota conditions—the ability to stick to the tree in spite of the winds which are so often prevalent in this state in late September."

The report in closing emphasized the need of long and careful testing of new varieties of fruits, in order to protect the fruit-growing public and the nurserymen against disappointment and loss. The fine records made by the five most recent introductions from the fruit-breeding station were cited as justification for the long-test policy. These new introductions are the Chief raspberry, the Parker pear, the Superior plum, the Red Lake currant, and the Flame crab.

The Minnesota State Medical Association broadcasts weekly at noon Monday over station WCCO, Minneapolis and St. Paul. The speaker is William A. O'Brien, M.D., associate professor of pathology and preventive medicine, Medical School, University of Minnesota. The program for the month will be as follows: December 9th, Growth Disturbances; 16th, Swallowing Difficulties; 23d, Fighting Tuberculosis; 30th, 1935, Medically Speaking.

Heads National Regent Group

Dr. O. J. Hagen

Can't Speed Car on 'U' Campus, Researcher Makes Pavement Whirl

Mines Experiment Superintendent Tries Out Qualities of Iron Surfacing

Unable to find a stretch on the Minnesota campus over which he could run an automobile at high speeds to test car performance under varying conditions on the cast iron road pavement he is investigating, Edward W. Davis, superintendent of the School of Mines Experiment Station, has done the best next thing. He has mounted the pavement on a pair of huge flywheels and rolls it under the tires of a stationary car, reaching a speed of sixty-eight miles.

The ultimate purpose of the experiment is to find what pattern or design in the surface of the castiron pavement will best serve for safe and efficient automobile operation. Skidding, swaying, braking efficiency, wear and tear and vibration are among the things in which Mr. Davis is interested.

He can change the design of the pavement surface as much as he likes, for only a relatively few blocks are needed to cover the surface of the two huge one-ton flywheels on which the castiron is rolled beneath the revolving tires of the automobile. Mr. Davis points out that in maintaining safe and efficient contact between a pavement and the tire of a motorcar, design is all-important. He particularly wants a design that will allow water to run off, pointing out that a motorcar wheel revolves so fast that on a wet pavement a car is practically operating on a film of water, which greatly increases danger. The design should also be one that will reduce skidding to a minimum and permit prompt braking action without undue wear. In these purposes he is seeking much the same ends that are sought by tire manufacturers in making their designs.

The Minnesotan emphasizes the point that castiron pavement is directly in line with the current nationwide drive for greater safety in automobile operation.

Mr. Davis two years ago began experimenting with castiron pavement, which has already been used extensively in England, Belgium and France. Certain patents on the pavement supports are held in England, but American firms have arranged to operate under the British patents, among them the Interlake Iron Company. If the new type of pavement is widely adopted in the United States it will lead to an enormously increased demand for Minnesota iron ore, he said. About 1,500 tons of iron will be required to pave a mile.

Under present price conditions, castiron pavement could be laid more cheaply than such high grade and durable pavements as brick or granite block, he explained.

Incidentally, the experiments have added one more item to the long list of remarkable things that the University of Minnesota purchasing department is called on to buy each year. In this instance it was a second hand automobile, to roll on the pavement.

The Minnesota legislature appropriated $7,500 a year for two years to conduct the researches on which Mr. Davis is now at work.

Dr. Hagen Heads National Body Of 'U' Governors

Dr. O. J. Hagen of Moorhead, member of the University of Minnesota Board of Regents, was elected president of the Association of Governing Boards of State Universities at its recent meeting in Lincoln, Nebraska, which he attended as Minnesota's representative.

Dr. Hagen is the board member who last summer attended summer school on the campus, together with his daughter and one of his sons. His enterprise in thus testing the wares of his own institution, while at the same time bringing himself up to date in political science and certain phases of chemistry, attracted wide attention at that time. He has been a member of the Board of Regents for five years.

Identified with educational work in Minnesota and North Dakota throughout his adult life, Dr. Hagen began his career by working his way through St. Cloud Teachers College and the University of Minnesota. At 20 he was an instructor in Concordia College and later he served as superintendent of schools for Richland County, N. D. After completing his medical course he studied further at Harvard and in Berlin.

Among important posts he has held other than membership on the Board of Regents have been service on the Moorhead Board of Education, resident director of the Moorhead State Teachers College, president of the Northern Minnesota Medical Association, state counsellor of the American College of Surgeons, and others. He is a member of the Fargo clinic.

Army Promotes Major Adam Potts

Serving as head of the University of Minnesota R.O.T.C. unit seems to be reason enough for a promotion in the eyes of the United States War Department, as Adam E. Potts, commandant, is the third successive man in that post to be promoted to the rank of lieutenant colonel while stationed on the campus. He received his promotion from major to lieutenant colonel recently.

Majors Bernard Lentz and John Hester are others who were promoted from major while serving at Minnesota.

Colonel Potts has been in the army for 26 years, counting his student years at West Point, and has been at Minnesota since August, 1934. He is the first commandant to serve at Minnesota since drill was made optional by the Board of Regents.

Hayes to Speak Before Agronomists

The College of Agriculture and the Experiment Station of the University of Minnesota were well represented at the annual meeting of the American Society of Agronomy, in Chicago, December 5 and 6. Dr. H. K. Hayes, chief of the division of agronomy and plant genetics, is president of the Society of Agronomy, and in that capacity he delivered the presidential address at the society's annual banquet. Others from University Farm who took part in the meetings of the society were Dr. I. J. Johnson, Dr. H. K. Wilson, Prof. A. C. Arny, Dr. E. R. Ausemus, Dr. F. R. Immer, R. F. Crim, and W. M. Myers, all of the division of agronomy and plant genetics; Dr. C. O. Rost of the division of soils, and Chien-liang Pan, a student from China, here taking graduate work in genetics.

Jones Goes to Idaho

Archie N. Jones, for seven years head of the department of public school music in the College of Education and the Department of Music, left Minneapolis recently to become head of the department of music in the University of Idaho. Mr. Jones was active in musical circles and club life in Minnesota, having been president of the Torch club, director of the choir at Simpson Methodist church and president of the Choir Masters association. He holds degrees from the Universities of Nebraska and Minnesota.

Band Presents Annual Concert

The University of Minnesota Concert band, under the direction of Gerald R. Prescott, presented its third annual fall concert on December 3 in Northrop auditorium.

The program numbers were: "Sleepers Wake," Bach; "Tannhauser" Overture, Wagner; "Espana" Rhapsody, Chabrier; "Ariane" Overture, Boyer; "Liebestraume," Liszt; "Alma Mater" medley overture, Hadley; "March and Procession of the Bacchantes" from "Sylvia," Delibes.

The concert last year was attended by 4,500.

Talks on Mark Twain

Dr. George H. Nettleton, professor of English literature at Yale, discussed "Mark Twain" at the University of Minnesota convocation Thursday, November 21. Dr. Nettleton is one of the leading American scholars in the field of literature. He headed the department of English literature at Yale from 1921 until 1930.

Williamson Says Guidance Should Be More in Use

Head of Minnesota's Testing Bureau Analyzes Present Status

SAVES HUMAN MATERIA

Spread of Fixed Professional Standards Making Task Easier

While we require the physician to use a thermometer with standard units of measurement and insist that even the tailor's yardstick be so accurate as to deviate only a few millimeters from the standard in Washington, we continue to permit teachers to ignore scientific developments in human measurement and to judge students by rule of thumb and so-called common sense judgment. These were among statements regarding guidance made by Professor E. G. Williamson, director of the University of Minnesota Testing Bureau, in a recent talk before the Missouri State Teachers Association, Guidance Section.

Guidance of students, he said, is demonstrably necessary if a tremendous waste of teaching effort and human material is to be avoided, but there are so many obstacles in the way that effective guidance is making slow headway. Among the obstacles are, he said, fear in secondary schools that they will be dominated by the colleges, which seems unlikely; pressure of other administrative duties because of the size of our institutions; and the fact that some guidance work has been done so unskilfully that local disrepute of such procedures has sometimes resulted.

We made a strong plea for the extension and support of scientific guidance of students, including the development of adequate mechanisms, their use in diagnosis of a student's bent, use of the materials obtained in prognosticating future accomplishment, and then continuous counseling of the student to help him hold up to the level of his abilities.

"The first step in guidance," said Dr. Williamson, "is the development of diagnostic instruments which will yield objective means of comparing students with those who have demonstrated their ability to profit from opportunity to learn, meaning those who are succeeding in something. That such comparisons should be made at all is based on the assumption that certain occupational groups are relatively homogeneous in their characteristics, that these characteristics differ from one occupation to another, and that students who exhibit the characteristics of a particular profession have better chances for success in that profession than in any other.

Prescribed Standards Help

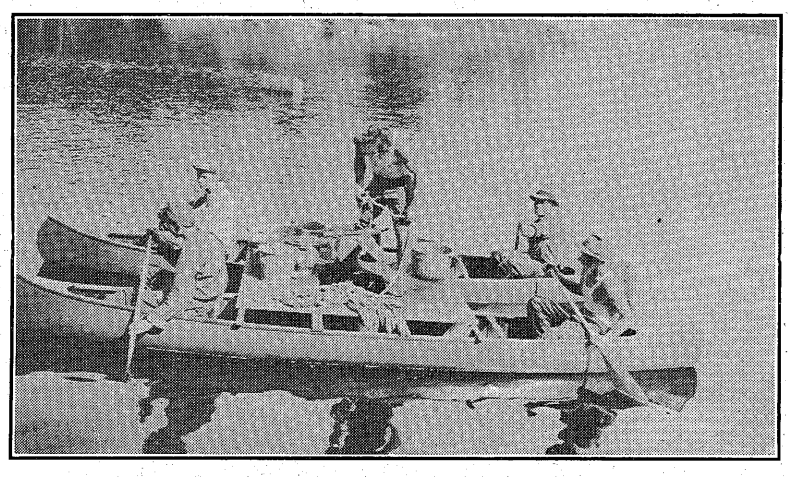
"But such direct comparisons between students and professional adults may not always be possible or necessary. Society has prescribed by law the minimum qualifications for medicine, law, dentistry, nursing, accounting, teaching, and in some cases for medical technology, dental hygiene and architecture. In these occupations it is not necessary to identify the qualities which contribute toward the successful completion of the training requirements for participation in these professions.

"As society prescribes the requirements for more and more occupations on the professional or sub-professional level, it will be possible to adjust education, and therefore guidance, to the comparison of students with those who have successfully passed the requisite training program. Whether or not a student may become a successful and satisfied physician must give way to the question: Will this student become a successful candidate for the medical degree? The successful doctor must be first a successful medical student. The recognition of this prior academic hurdle makes the task of guidance much easier, since the measurement and guidance of medical students is far easier than similar measurements of medical men themselves.

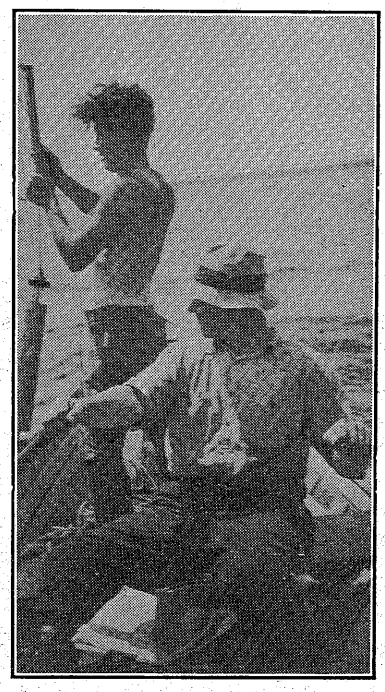
"Adequate measurement of essential characteristics involves the application of the same measuring instruments to students at various levels of the school system. But personnel research workers have not yet developed perfect diagnostic tools for measuring all characteristics, nor have they yet provided a sufficient amount of meaningful norms. They have confined their labor, in large part, to educational achievement and to mechanical aptitudes. Moreover, certain very important aspects of human behavior have thus far defied analysis. It is axiomatic in guidance circles that mediocrity in aptitude is often compensated by tenacity, or what the psychologists call motivation. Conversely, students with extremely high aptitudes sometimes fail to live up to their academic and professional possibilities simply because they lack this factor. Parenthetically it may be noted that some guidance workers indict the school system for this latter type of case. They maintain, not without some justification, that such potential geniuses have been forced to conform to the mediocre standards of a prescribed curriculum, and have thereby developed attitudes of indifference, and from sheer ennui, ignored their obligations and their possibilities."

Of the complaint sometimes heard that guidance instruments have not yet become perfect, Dr. Williamson remarked that education uses many tools that lack perfection, but is accustomed to employ the best methods available until improvements on current processes present better methods.

Zoologists Classify Minnesota Lakes



In the upper picture is shown the outfit of two canoes lashed together with a platform between, from which the depths of Minnesota lakes were dredged; below a deep-sea thermometer is shown being brought up from a hole 240 feet deep in Canadian waters of Lake Saganaga.



Grubs Nuisance On Golf Greens

Greenskeepers on Minnesota golf courses have something else to worry them; something in addition to the complaints of over-particular players whose putts fail to drop and who lay the blame on the condition of the greens. The something else that is worrying the greenskeepers is a small beetle. It has no common name, but is known to scientists as Ataenius cognatus. The appearance of deadened areas of grass on the greens of one of the oldest courses in the Twin Cities, led the greenskeeper to appeal to the entomologists of the Minnesota Agricultural Experiment Station, University Farm, St. Paul. Dr. A. A. Granovsky, who has spent years in studying beetles and grubs, and economic losses charged to them, with C. H. Hoffman, from University Farm, inspected the greens on the course and found that the trouble was caused by this grub. One six-inch square of deadened grass, when removed, revealed 29 grubs—larvae of the beetle, eight pupae, and one freshly emerged adult. Another square of about 10 inches revealed 42 grubs and 29 pupae. For the most part, the grubs were just below the surface. In order to prevent serious attacks by the beetles on golf courses, Dr. Granovsky says grass cuttings and excess fertilizer should never be permitted to accumulate in heaps beside the greens. They should be removed to a distant compost heap where, if scattered thinly enough, they will dry and become unsuitable for the development not only of the beetles but of the common housefly.

Otto S. Zelner, professor of civil engineering and chairman of the eligibility committee for intercollegiate athletics, is this year serving another term as president of the University of Michigan Glee Club alumni group. At a class and glee club reunion last June, Zelner sang the Michigan State song, "Goddess of the Inland Seas" so well that his re-election immediately followed.

Bierman Made All-American Coach by Rice

Produces "Season's Leading Feature," Says Collier's Authority

Not content with having the All-American drum-major in George Aagard and probably a considerable assortment of All-American players among the various selections, of which there are no-end, Minnesota now has the All-American football coach; and his name is Bernie Bierman.

This selection has been made informally by none other than Grantland Rice, who is the admitted All-American picker of All-Americans, because he wears the very purple toga of the late Walter Camp, "father of football" in his capacity as selector for Collier's Weekly.

The veteran and authoritative Rice had this to say recently in a column which he syndicates to papers:

The season's leading feature belongs to cool, unruffled Bernie Bierman and his Minnesota outfit.

Figure this out—from last season's star team, Bierman lost Larson and Tenner, his two crack ends—Pug Lund, Kostka and Clarkson from his backfield—Bevan and one or two others from his line. Just after the 1935 season opened, Alfonse, his fast moving halfback, fell by the scholastic wayside, and Seidel, his captain and quarterback, broke a collarbone.

This was enough to wreck almost any football round-up. It was a devastating departure of exceptional talent.

But Minnesota still had enough left to beat Nebraska, Iowa, Tulane, Purdue and Northwestern—enough left to pile up 40 points against Michigan, with the Gopher backfield just as good as the one that moved away.

Bierman, at Tulane, was one of the smartest coaches in football. This was especially true from the offensive side. His attack has always eben smart, fast and hard to break up. At Minnesota, he has had the man-power to build up a strong defensive team without weakening his offensive. His teams are not only rigged out with all the fundamentals—especially tackling and blocking—but they also have their share of finesse and smoothness.

Almost an entirely new cast has moved in since last fall, but the new cast is clicking just about as well as the old, with an even greater touch of speed.

Bierman is one of the quietest and most retiring of all the coaches. You rarely see one of his teams show any undue excitement after a touchdown play. They merely play football—and let it go at that.

Four Points Enough to Win Game On Gridiron, Statistical Demon Says

In Nearly Five Hundred Contests Losers Averaged Under That Number

How many points are necessary to win a football game?

And what score, on the average, does a winning team, or a losing team, make? Statistics on 203 games played November 9th and 236 games played November 16th would indicate that the average fan probably would be far off in his estimate of these figures.

Winning football teams are distinctly superior to losing teams and make on an average more than five times as many points as would be required for victory, as losing teams averaged but 3.4 points on November 9 and only 2.4 points on November 16.

Four points, it would seem, are enough to win a football game.

Winning teams, showing consistent performance on the two Saturdays, made an average total of 19.04 points on November 9 and an average of 19.3 points on November 16th. Thus with only four points needed for victory, the average team runs up almost twenty points.

The statistics were taken from a large newspaper which prints the scores of all available games, the country over. Only college games were included.

Minnesota, in the running for Western Conference and perhaps national leadership, runs remarkably true to form. In seven games to date the Gophers have averaged 23 points to 4.4 for their opponents. Inasmuch as the national figures are averages this indicates better than average scoring by the Gophers against opponents which, it hardly need be pointed out, have been far above the national average.

In only two of the 439 games calculated did losers make 20 points or better, and in only one was more than 20 made. Losers scored in double figures in only 25 out of 203 games on the earlier Saturday and in only 13 out of 236 games last Saturday. Thus, with the season one week older on the second Saturday, winners made slightly higher scores, losers slightly lower scores, and fewer losers were able to score in two figures. This despite the probability that teams were somewhat more likely to be in the same class on the later date. Seemingly the better teams keep on adding to their margin of advantage, even though slightly.

Losers were unable to score in 111 of the 203 games on November 9th and went scoreless in 143 out of 236 games on November 16th. The highest winning score on November 16th was 62 points. On November 9th one team made 60 and two made 59.

Scores under six were rare among winners, although many won by six or seven to nothing. Two games, counting both Saturdays, went by four to nothing. six by three to nothing; one by two to nothing, and three by eight to nothing.

Girl Athletes Get More Space At Minnesota

Women's Gymnasium Being Enlarged to Meet Greater Needs

While University of Minnesota athletic teams are winning national distinction, women students at the university are also showing an increasing interest in sports and in physical well-being, and the institution is fostering this interest by adding to the girls' athletic plant.

Financed in part by a PWA grant, a large addition to the Women's Gymnasium is being constructed which will help to provide more nearly adequate accommodations for the many women students who take part in sport.

A principal feature of the addition will be a new swimming pool, but there will also be an enclosed play space, in the nature of the men's Field House, although much smaller, where games played outdoors in fair weather may be continued under a roof when Minnesota days grow cold.

The present Women's Gymnasium has stood for more than twenty years while the number of women to be provided for in gymnastic classes and women's sports, has tripled. Even with the present addition, the difference will be only about half made up.

No tax money will be used in building the addition, as the part not financed by PWA will be taken from athletic funds. Work has already been started and the enlarged gymnasium will be ready for use by spring.

Minnesota Index Sees Business Up

Except for the factor introduced by the abnormally heavy run of meat packing at South St. Paul in the summer of 1934, which produced an abnormally high composite index of business, business in the Northwest was far better in July, 1935, than the year before according to the index of business activity published by Laurence R. Lunden of the School of Business Administration, University of Minnesota.

Country bank clearings were 114.4 as again 94 last year; physical volume of agriculture marketing 98.6 from 93.9; Northwest flour production, 81.1 from 71.0; meat packing, 77.8 from 128.6; building contracts 53.5 from 56.0; country lumber yard sales 66.6 from 41.6; electric power consumption 69.1 from 71.5; daily average miscellaneous carloadings 60.1 from 55.1; wholesale hardware sales 82.0 from 63.5; department store sales 73.1 from 62.7; life insurance sales 47.2 from 39.5. For these relative figures normal business is considered as 100. The composite index was 70.9 for the Northwest as against 77.1 in 1934, to which the meat packing during the time of government-controlled slaughter of livestock had raised it. The Annalist index for business in the United States, published by the New York Times Company was 80.6 for July 1935, as against 73.2 for July, 1934.

Published as part of the monthly financial and investment review the index of business activity is a valuable yardstick. Price indices, crop movements, financial statistics and statistics of trade and employment in the United States are also included in the review. Erwin A. Gaumnitz is associated with Mr. Lunden in publishing the bulletin.

Forced down when ice formed on the wings of the plane in which he was a passenger to Chicago, Dr. Malcolm S. MacLean caught a bus at La Crosse and reached his destination in time to keep an appointment. He had exactly eight minutes to make a four mile taxi run in La Crosse to reach the bus, and made it.

Four-H Clubs Will Have Safety Program

A safety program for members of 4-H clubs in Minnesota has been announced by T. A. Erickson, state club leader, University Farm, St. Paul. In announcing the program, he said:

"In order to encourage 4-H club members to help decrease the appalling number of automobile deaths and to observe safety measures in their every-day life, a new program for 4-H club members has been arranged, as a part of the regular 4-H health work. It is to be known as the "4-H Safety program." Boys and girls alike will be encouraged to be more careful in handling all home and farm equipment in order to avoid accidents. Special attention will be given to safety rules in driving automobiles and in avoiding accidents, caused by careless drivers, while walking on roads and streets.

"Each 4-H club member, at the end of the season, will send in a report of what he has tried to do to prevent accidents. Furthermore club members will have opportunity to present demonstrations of safety methods before their clubs, at county events, and elswhere. The winners from each county qualifying will take part in the demonstration program at the Minnesota State Fair next fall."

Zoologist Finds Seven Types of Minnesota Lakes

(Continued from page 1, column 3)

in the depths, die as the heat drives down the percentage of oxygen in the water.

Winter Conditions May Kill

Winter killing from a shutting off of oxygen after freeze-up has long been recognized as a cause of fish depletion, and Dr. Eddy recognizes this cause as important. He gives as an example a shallow lake that has abundant underwater vegetation. As long as the sun shines the plant life will give off enough oxygen to keep alive a considerable number of fishes. When, however, January snows cover the ice and shut off the light of the sun from the aquatic plants, growth and oxygen production stop and the fish are left to die.

Professor Eddy used as an example of this a lake near Minneapolis where all types of fishes had died out except bullheads, while these had become extremely numerous, so that they would bite even on a bare hook. These conditions were found in late summer. An unusually severe winter followed, with heavy snows, and by spring practically all of the bullheads had died out. This was a lake in which decaying vegetation had been consuming the natural oxygen to such an extent as to make life impossible for the minute creatures on which fishes feed and for fishes themselves except the very hardy bullheads.

Nature of River Lakes

River lakes, such as Pepin and St. Croix, retain primarily the characters of rivers, but the lake element is introduced in that they support a more abundant and varied aquatic life than does the river, either above or below the lake. In this regard Lake Pepin is a more pronounced example than Lake St. Croix, the difference between Lake Pepin and the river above and below it being greater than in the smaller lake on the St. Croix river. Lake Pepin, for example, has some 25 varieties of clams, whereas in the ordinary lake three or four varieties, at most, are found. The variety of fishes is greater. Sturgeon, paddlefish, river herring and the like, are found in the river lakes, but seldom in the rivers. In Lake Pepin there are even certain types of whitefish, although that species is found chiefly in much deeper and colder waters. Dr. Eddy believes these whitefish to be a heritage from ancient times when there was a connection between the cold waters of Lake Superior and the rivers of southeastern Minnesota, for it is known that Lake Superior once drained down the St. Croix valley and into what is now the Mississippi.

Leaving the big river lakes, the Minnesota scientists took up the study of the local lakes in the vicinity of Minneapolis and St. Paul and found that they were of the type most suitable for the maintenance of a rich fish life. These lakes are of the "rich" type, with conditions favorable to the existence of vegetation, of minute life forms, and, with these as a feeding base, of fish life available to human beings. Furthermore, they found that this type of lake is the one most extensive and common throughout the state of Minnesota from its southern boundary to the Superior Forest, but not in the forest nor on the border. Rich lakes support life both at the bottom and near the surface, with abundant oxygen in both of those areas; are likely to have plant life in shallow waters, good spawning grounds, and to be adjusted so as to supply oxygen the year around to the fauna that live in them. It is these lakes, primarily, Professor Eddy believes, in which extensive fish life can be maintained under scientific management, conservation and care. He points out, also, that some lakes that attain great depths, as much as 130 feet in the middle or at certain points, have inshore areas with all of the characters of rich lakes and so support much life.

Superior Forest Lakes

During the past summer Dr. Eddy and his helpers completed a study of lakes in the Superior Forest area, where they had government assistance. Confronted with deeper lakes, they rigged up a clamshell dredge on a platform between two canoes and took systematic samplings of the bottom. Another crew made a minute study of inshore waters. They staked off areas of one square meter, dredged each thoroughly, and recorded everything found living there. They made comparisons of the animals on different types of bottom and of those on similar types of bottom in different lakes. In general their conclusions were that the animal population of a lake, fishes primarily, under the scientific use of the word animal, varied in direct ratio with the amount of food available. Another crew from that which studied the food made an examination of the actual fish population of the lakes by means of seines and nets, and Dr. Eddy's technical assistant, Lloyd Smith, made chemical analyses of the waters in the various lakes.

Lake Saganaga, the so-called "Big-Sag," was taken as typical of the "poor" lakes of the border. That is to say, it revealed no such abundance of food and therefore no such abundance of animal, chiefly fish, life as is present in the richer lakes of the southern part of the state. On the other hand, they found that the distribution of oxygen in the waters of such a lake as Saganaga is much more uniform than it is in some of the warmer and shallower lakes, and they saw in this an advantage that partly offset the relative lack of good spawning grounds. Many of the northern and border lakes were found to be of the "dishpan" formation, with rather precipitous sides running down to a deep bottom, and the bottom flat. Relatively, there is very little animal life in such lakes, and the fishes present are of certain definite types, mainly lake trout, which are numerous, whitefish of different types, and some pickerel. Wall-eyed pike have been planted in some lakes in the Pigeon river watershed, namely that group of the border lakes where the water flows east, but as yet there is no final judgment on the success of the venture. In these lakes there are also large numbers of suckers, and some suckers were found of new types not included in University of Minnesota collections. The water of these lakes is much colder than that of lakes elsewhere in Minnesota, and at the bottom they have a practically uniform temperature the year around of four degrees centigrade, namely, four degrees above freezing.

Lake Depths Overstated

The depth of many border lakes has been overestimated, according to Dr. Eddy. The deepest spot found in Saganaga, for example, was 240 feet, and that was in waters on the Canadian side. Little over 100 feet was recorded in Minnesota waters. The deepest lake in Minnesota has long been reputed to be Lake Winchell, in the Superior Forest southwest of Poplar lake, and soundings by the university party bore this out although they failed to bear out the depths that have been claimed for Lake Winchell. Lakes 800 feet deep have been "reported" in Minnesota. Lake Winchell had been reported to have a depth of 340 feet. The Eddy party recorded 187 feet, by use of careful sounding methods and Dr. Eddy believes that is the extent of it. Reputedly very deep spots in Burntside lake also were found to be much shallower than had been stated, mainly from 120 to 130 feet in depth.

At such depths as the 240 feet found in Canadian waters of Saganaga the scientists discovered certain abyssal forms of life, such as tiny shrimps and the like, that had never before been seined from the abysses but had been known because of their recovery from the stomachs of fishes. A considerable collection of these was made from the deeper border lakes.

A halfway type of lake between poor and rich was identified in the shallower lakes of the northern area. More plant life was found as the depths increased and the amount of deposits on the bottom increased, but for the most part they kept their poor lake characters. At the same time, geographical location was found not to determine the classification of a lake altogether, as many lakes in the Mesabe Range district were of rich type.

Mille Lacs Best Fish Type

A new classification was made for the lakes of which Mille Lacs, Winnibogoshish and Red Lake are typical. Dr. Eddy found that these big shallow lakes are the best fish producers and have ideal conditions. Because of their shallowness and the size of the waves that are kicked up, due to their breadth, the water is churned from top to bottom, and in this way oxygen is equally distributed. They have clear sandy bottoms, without an undue amount of vegetable material and shore lines ideally suited for spawning. Because of these conditions they can support a tremendous amount of animal life, and it seems likely that these three lakes, in particular, will remain among the finest fishing lakes in the state. To some extent, but less than is true of the three mentioned, Cass Lake and Leech Lake are similar.

Another category, the bog lakes, has not yet been studied. These have cold and rather stagnant waters, and Professor Eddy believes that new matters of interest with respect to aquatic animal life will be found in them.

Did Deepest Fresh Water Dredging

Two years ago he and his assistants made a study of Lake Superior similar to the one they have just finished of the inland and border lakes. Clamshell type dredges were let down as much as 900 feet in some areas, and then pulled up again by hand, the rope being piled in the dories as high as the men's heads. Using winches was not practicable because they had to rent boats as they were, and because the winches would have had to be so large to carry so much rope. On an average it took two hours to let a dredge down and pull it up again from the deeper areas. Frequently the workers were out of sight of land or were surrounded by dense fog, and there was constant worry at such times lest they be run down by a lake steamer, for they were in the lanes of travel. Navigation was done by means of the compass. The dredging they did at that time is said to have been the deepest freshwater dredging ever done in America. In that expedition they had help from the state board of health and from the Duluth water department, which draws its supplies from Lake Superior.

One of the interesting things they learned in working Superior was that cyclical changes in the numbers of various types of creatures present in Lake Superior occur with greater regularity than in other lakes. This is because of the small variations in water temperatures. In shallower lakes of other types unusually warm or cold summers would affect the lake populations, but not so with Superior. At the bottom it maintains that constant temperature, four degrees above freezing, and the surface is not very much warmer. Even on the hottest days surface waters warm up for only the briefest periods. Many interesting types of abyssal life, such as were found at 240 feet in Lake Saganaga, were dredged from Lake Superior depths. The scientists studied the lake at Grand Portage, Grand Marais, off Beaver Bay and near Duluth. They found that Superior has abundant oxygen and fish life all the way up and down. The main varieties of fishes are trout, whitefish, including the so called herring, ling or lawyers and suckers.

Dr. Asgeirsson Lectures

Dr. Asgeir Asgeirsson, Iceland's minister of education, called one of the year's most important foreign visitors to the United States, lectured on the University of Minnesota campus Monday, November 11, delivering an Armistice day convocation address on the subject, "Peace and Union." Following the address President L. D. Coffman entertained at luncheon a group of Minnesotans of Icelandic descent and of faculty members. Part of Dr. Asgeirsson's speech will be printed in the next issue of "Minnesota Chats."

Four members of the University of Minnesota faculty and one science teacher from Hamline university are speaking in a lecture series on, "The progress of life through the ages" which is being put on at the Minneapolis Public Library by its Museum of Natural Science. The talks will be made Wednesday evenings from 7 to 9 p. m. The remaining lectures will be: November 13, "Life under the sea" by W. A. Kenyon of Hamline; November 20, "Bees—their amazing life work" by Dr. Maurice Tanquary, College of Agriculture, Forestry and Home Economics, University of Minnesota, November 27, "Parasites—robbers in our bodies," by Reed O. Christenson, zoology department, University of Minnesota. Two addresses already delivered were by Ralph W. Dawson, University of Minnesota, who spoke on, "Will insects rule the world" and A. R. Ringoen, University of Minnesota, whose subject was, "The cell structure of my body."

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 DECEMBER 3, 1935 NUMBER 4

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

Douglass Directs Eight in Theses

Eight theses relating to secondary education have recently been completed by graduate students working under the direction of Dr. Harl R. Douglass of the College of Education. They are the following:

"Qualifying Examinations for Teachers in Training at the University of Minnesota," Rudyard K. Bent, associate professor of education, University of Arkansas, Ph.D.

"Teaching Loads in Montana High Schools," W. W. Tayler, Lewis-Clark High School, Spokane, Washington, M.A.

"A Study of Failures Among Superior Negro Junior High School Pupils," Joseph H. Collins, Principal, Northeast Junior High School, Kansas City, Kansas, M.A.

"The Effect of Participation in Boy Scout Work on School Work and Development of Character," Albert R. Monson, Senior High School, Minot, South Dakota, M.A.

"The Training of Minnesota High School Teachers of Science," Raymond B. Strand, Minneapolis, Minn., M.A.

"A Junior High School Course in Mathematics Adapted to Modern Needs," Ida Mything, instructor in Mathematics, Jordan Junior High School, Minneapolis, M.A.

"The Education of Teachers of High School Mathematics in the United States," Harvey O. Jackson, Senior High School, Minot, North Dakota, M.A.

"Characteristics of Small High Schools of Minnesota, H. W. Mortinson, Superintendent of Schools, Bricelyn, Minn., M.A.

Gophers Debate Oxford Team

Richard U. P. Kay Shuttleworth and A. J. W. Greenwood, Oxford University debaters, who have come to this country to meet American college teams, made their first two appearances in Minnesota, meeting a team from the Duluth Junior college at Duluth Tuesday evening, November 5, and meeting a University of Minnesota team in Northrop Memorial Auditorium Wednesday evening, November 6.

The debate question at the university was: "Resolved—That a written constitution is a hindrance rather than a safeguard to social progress."

Members of both the Oxford and the Minnesota teams are graduate students, Kay-Shuttleworth being proficiency expert for the Oxford air squadron, while Greenwood has been president of the Oxford Union, famous debating club and head of the Oxford University Labor club. He is a graduate law student.

Minnesota's debaters, both members of the Law School, are Leo Loevinger, son of Judge Gustavus Loevinger of St. Paul, and Millard Ahlstrom. Ahlstrom has been a member of the national championship debate team entered in the Phi Delta Kappa contest for teams from all parts of the country. Before entering the Minnesota law school he attended Gustavus Adolphus College. One of Mr. Ahlstrom's debates appeared a year ago in the Debaters Annual as an outstanding argument by an American college debater. Loevinger has been active in student affairs and has headed the Board of Publications and been a member of the All-U Council.

Dr. Karl Nurnberger, assistant professor of roentgenology in the University of Minnesota Medical school, has accepted a position at the University of Peiping, where he will teach during the coming year. It is an institution largely supported by the General Education board. Both Dr. and Mrs. Nurnberger have been keenly interested in foreign students.

New Plan Used For Measuring Surface of Body

Three small children attending the Nursery School at the University of Minnesota made contributions to biological science that are now published by Dr. Edith Boyd, assistant professor of anatomy at the university. Her book, "The Growth of the Surface Area of the Human Body," will be released this week by the University of Minnesota Press.

Dr. Boyd describes how, in an attempt to establish a new and reliable method for determining measurements of the surface area of the body, she and two other experimenters, Dr. R. E. Scammon and technician Donovan Lawrence, got plaster casts of their small subjects.

The children, quite willing to be put to bed in "white mud" to make "snow angels," were first thoroughly greased to prevent the plaster from sticking to their bodies. Their hair and eyes were protected. Then they were laid in the plaster bath until a sufficiently firm mold was made. The whole process took several days to complete, since the children "worked" for only short periods of time. When the entire surface of a child's body had been cast, the pieces were joined together and the model was finally taken out of the surrounding plaster.

Many mishaps occurred to the models, Dr. Boyd reports, but none to the children. She and her coworkers succeeded in making nine models from the three children.

Concerning the significance of this piece of research, Dr. Boyd explained that in medicine the extent of the surface area of the body is frequently needed in order to estimate the proportion of skin involved in burns, the heat production of the body, the amount of water loss through perspiration and other forms of bodily activity.

Caterpillars May Make Trouble in '36

A. G. Ruggles, state entomologist, University Farm, St. Paul, says that the forest tentless caterpillar, which caused a lot of excitement and worry this year in the northwestern part of Minnesota, is likely to be worse, or, at least, as bad in 1936.

"The infestation is most severe in and around the national forests," he said. "Federal entomologists are much interested in the problem. They and I have investigated the situation with two ideas in mind. The questions in our minds have been whether another outbreak is likely to come in 1936, and whether anything can be done about it, if one does come. We have found that unless something unforeseen happens, the outbreak will be worse in 1936 than it was this year. One of the control measures suggested is the airplane dusting of the infested areas.

"An airplane dusting should be done by the federal bureau of entomology, persons who are vitally interested should take the matter up with the Bureau of Entomology, Washington, D. C., with the secretary of agriculture, or with senators and congressmen, as funds are not now available for such work."

Barnhart Book Accepted

A book by Professor Thomas F. Barnhart, of the department of Journalism on "Weekly Newspaper Management" has been accepted for publication in mid-January by the D. Appleton-Century Company. The volume covers the subjects of advertising and circulation, and accounting and bookkeeping are treated thoroughly enough to provide a grounding. Professor Barnhart refers to it as a "hand-book for publishers and students." It has already been adopted by the schools.

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | DECEMBER 24, 1935 | NO. 5

Wholly Modern Farm and Home Week Arranged

Latest Wrinkles Will Be Demonstrated in Field of Rural Interest

"SINGING SCHOOL," TOO

Long List of Visiting Specialists Will Bring Added Information

Thirty-six years old this year, yet as up-to-date as tomorrow's front page, will be the 1936 Farm and Home Week for Minnesota's rural men and women at University Farm, January 6 to 11.

Though following the general pattern of previous short courses and repeating certain traditional features of outstanding popularity, the program will be thoroughly modern in the content of lectures, demonstrations and exhibits. An example is the half day's program in agricultural engineering, which will be devoted to rural electrification, including an explanation of the federal farm electrification project and several discussions on farm wiring and use of electricity. An extensive exhibit will display the latest in farm electrical equipment and appliances.

Several divisions will cooperate in presenting a program dealing with soil erosion control. One of the most modern of educational mediums, motion pictures, will be extensively employed in presenting facts about scientific insect control, the manufacture and use of farm machinery, and various other subjects. A special 2-day conference will be devoted to the problems and relationships of Minnesota farmers with the AAA.

The latest wrinkle in the preparation of potatoes for market—dry cleaning—will be explained. Malting barley, the new stem-rust-resistant Thatcher wheat, germination studies on the 1935 wheat crop, newer practices in animal breeding—these are but a few of the topics that reflect the strictly up-to-the-minute character of the program.

To give instruction in two outstanding cultural subjects in which there is increasing rural interest, music and dramatics, Farm and Home Week has engaged J. R. Batchelor of the National Recreation Association, Chicago, as special instructor for the separate conferences on community leadership, on 4-H leadership and on rural youth affairs.

One feature which by itself alone many farmers would consider worth the trip will be a colt-breaking demonstration to be staged by Harry Linn, nationally famous fieldman for the Iowa Horse and Mule Breeders' Association. Mr. Linn can take a green colt that is not even broken to halter and within 2 hours teach it to lead, harness it, hitch it and drive it to a wagon.

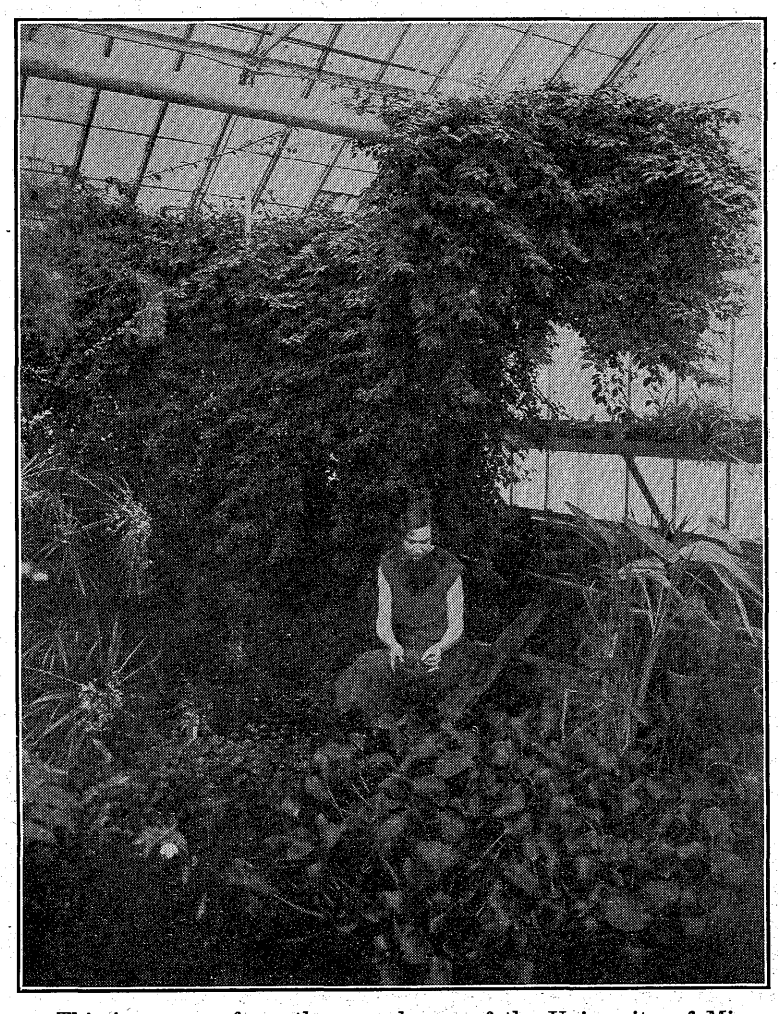
Two dairy judging contests for both men and women visitors will enliven the dairy program, one contest to be in dairy products judging and the other in dairy cattle. Opportunity for judging general livestock will be given by the animal husbandry department.

An evening livestock show and program will be one entirely new feature of the evening entertainment schedule for Farm and Home Week. Agricultural college students will parade some of the bluebloods from experiment station flocks and herds, and also present some entertainment numbers. Professors W. H. Peters, and J. B. Fitch, heads of the animal husbandry and dairy husbandry divisions, will speak. Music and other entertainment will round out the program.

This year for the first time the short course will offer daily from 6:15 to 7 p. m. an old-fashioned singing school, where all who wish may gather in the auditorium to "whoop it up" under a crack song

Continued on Page 3, Column 5

Tropical Verdure in Minnesota Winter



This is a scene from the greenhouse of the University of Minnesota Botany department. Why not take up botany instead of going to Miami?

College Heads Call Dr. Sigerfoos Great Teacher and Student Friend

Dr. Coffman and Deans Ford and Johnston Urge Fellowship Project

Contributions to the Charles Peter Sigerfoos Research Fellowship in zoology, which is to be established to honor Professor C. P. Sigerfoos, veteran retired member of the zoology faculty, may still be made according to Dr. Dwight E. Minnich, chairman of the department. The income from the funds received will be used to pay for a fellowship to send one or more zoology students to the seashore or to tropical places to study aspects of zoology that are not available at a place as far inland as the University of Minnesota.

Dr. Sigerfoos has the reputation of being one of the most popular teachers among his students ever to teach at Minnesota. He is famed, too, for his remarkable memory which enables him to recall the names of persons who were in his classes many years ago.

President L. D. Coffman, Dean Guy Stanton Ford of the Graduate School, and Dean John B. Johnston of the College of Science, Literature and the Arts, all have made statements approving the Research Fellowship and praising Dr. Sigerfoos. They follow.

By Dean John B. Johnston

Mr. Sigerfoos had two purposes in his teaching: (1) to make the experience of students in his subject serve for their growth in intellectual qualities and in personal character, (2) to help as many people as possible to understand the facts and principles of biology, which he considered an important contribution to individual and social intelligence. His eminent success in these purposes is attested by his former students and by his colleagues in the University. I heartily commend the plan to carry on to future students the influence of this outstanding teacher.

By Dean Guy Stanton Ford

In my trips about the country I meet many former students of the University of Minnesota. There are men among its teaching faculty whose names rise to their lips in appreciation and gratitude and among others no name oftener than that of Professor Sigerfoos. They have no college nickname for him. But the affection is heightened by the respect with which they express their debt to him as a great teacher and a kindly friend. From some of them I learn what Professor Sigerfoos has so often concealed from us, his support that has made a college career possible to a student discouraged in spirit or deficient in means. Some of them have in their turn multiplied the good deed by seizing their opportunities to help another.

The immortality of the scholar and teacher in the Valhalla of his students' grateful memories is certainly assured to Professor Sigerfoos, and all of us who are his colleagues know that none deserves it better.

By President L. D. Coffman

A few years ago Mrs. Coffman and I met the alumni groups on the Pacific coast. The first question asked by the old alumni invariably had reference to some member of the faculty. None was asked about more frequently than Dr. Sigerfoos. It soon became clear to me that the alumni remembered favorably those members of the staff who had a personal interest in them as students and who expected them to get their lessons and to recite them.

Dr. Sigerfoos has been associated with the University of Minnesota thirty-eight years. Thousands of students have been taught by him, and they have responded with an

Continued on Page 3, Column 5

Piccard, Strato Student, Will Teach at Minn.

The University of Minnesota will have the first chair of instruction in the knowledge of the stratosphere yet established in America, and to fill it during the spring quarter, beginning in April, has appointed Professor Jean F. Piccard, famous the world over as one of the two brothers who made the first stratosphere flight in Belgium and who subsequently has made stratosphere flights that have added tremendously to the scientific world's knowledge of the upper area.

Announcement of his appointment for a quarter of three months was made at a meeting of the Board of Regents on December 12.

Professor John D. Ackerman, head of the division of aeronautical engineering, said that Professor Piccard will conduct courses in the study of the stratosphere with reference to heavier than air craft, with which actual stratosphere travel must be carried on. Ascents into the stratosphere up to now have been made in balloons, which are lighter than air, although it is probable that some heavier than air craft have reached the stratosphere, among them the late Wiley Post.

He will also conduct studies relating to the stratosphere itself, to examine its nature and its relations to other parts of the upper air and to the earth.

Professor Piccard, whose wife is with him in this country, is a graduate of the Swiss Institute of Technology at Zurich. He has Technology at Zurich.

Professor Awes Colleagues and Gives Birds Hope

"It's just the Norse in me," quoth Clifford Haga, assistant professor of English in the College of Engineering and Architecture, when he returned to college last fall wearing a set of whiskers that spoke well for the future of winter bird life in Minnesota.

Professor Haga was quite frank about his motives for producing the crop. He had, it seems, spent the summer up in northern Minnesota, near Cloquet, and there were such luxuriant growths of everything else in the fertile countryside that he could not help following suit.

He also wished to surprise his child, of whom he is very proud, by shaving the whiskers off and watching the incredulous look upon the infant's tiny map.

Only the most persuasive words, however, served to make him keep the foliage on until he could be photographed.

One day he said: "I want to keep them to show to Harlow Richardson, my old school teacher."

Professor Clifford Haga

Professor Richardson, head of the department of which Haga is a member, was then returning from a trip to the Land of the Midnight Sun.

Next day Haga had changed his mind.

Said he: "I want to shave them off before Richardson gets back. He is a sensitive person, and there is no telling what might happen."

Students who entered the room where Professor Haga was helping with registration tip-toed out in awed silence. They believed they had come upon Odin in one of his whimsical moments, but none of them dared say so for fear of being considered imaginative.

Choose Medicine As Subject for Sigma Xi Talks

Popular Annual Series on Science Will Start January 24

FINE PROGRAM SET UP

Subject Perhaps Most Widely Pertinent That Science Affords

Perhaps the most distinguished scientific event of the college year and certainly the one in which the Twin City and Minnesota public takes greatest interest, the Sigma Xi annual lecture series, will be conducted this year in four weekly lectures beginning January 24 and ending on February 14. The dates will be those of four successive Friday evenings during the period when the Minneapolis Symphony Orchestra is on tour, leaving Northrop Memorial Auditorium available for the lectures. Announcement of this year's plans has been made by Dr. C. A. Mann, head of the division of chemical engineering, president of the Minnesota chapter of Sigma Xi, and by Henry E. Hartig, professor of electrical engineering, secretary of the chapter.

"Medical Science and Human Welfare" is the general title selected for the 1936 lectures, which will be delivered by three department heads from the Medical School and one professor from the Mayo Foundation, which is a part of the graduate medical course of the University of Minnesota. The speakers, with their subjects and dates, will be:

January 24, Dr. Walter C. Alvarez, professor of medicine in the Mayo Foundation: "The Stone age doctor who survives in our midst."

January 31, Dr. Owen H. Wangensteen, head of the department of surgery: "Benefactions of surgery to man."

February 7, Dr. E. T. Bell, head of the department of pathology: "Natural defenses of the body."

February 14, Dr. Irvine McQuarrie, head of the department of pediatrics: "Endocrine glands in health and disease."

The lectures will begin at 8:15 p. m.; and for a half an hour before each lecture the University Symphony Orchestra, directed by Professor Abe Pepinsky, will play.

During a number of years past the Sigma Xi lecture series has drawn practically a capacity audience to Northrop Auditorium for each number in the course. Visiting scientists have told university representatives that nowhere else in the United States is there a popular presentation of science that has caught the public fancy and interest to the extent that these lectures have.

Sigma Xi is a national, honorary scientific society, equivalent in the field of science to Phi Beta Kappa in the field of arts subjects. Membership requires high scholastic standing and also completion of some piece of distinguished research work.

There is no charge for the lectures, and approximately 5,000 persons can be seated in Northrop Auditorium. The excellent accoustics of the hall and the use of a lapel michophone by the speakers makes it possible for those in every seat to hear.

Moulton Says Lower Prices Would Close Up Gap in Buying Power

Doubts Wisdom of Business in Holding to Price Levels at Recent Terrific Cost

Minnesota Chats recently published the first half of an address delivered on the campus by Dr. Harold G. Moulton, head of the Brookings Institution, in which he examines the possibility of bringing consumption more nearly abreast of production by bringing down the prices of things that people must have, or would much like to have if they could afford them. The second part of Dr. Moulton's talk is presented herewith.

Since public interest has been focussed chiefly upon the wage increase method of raising the income of the workers, this method must be given first consideration. In order to simplify our discussion, let us ignore the practical difficulties involved in bringing about a general increase in wages unaccompanied by price increases. What we are chiefly interested in for the moment is in determining to what extent this method, if successful, would reach to the heart of the problem of raising the income of the consuming masses.

The industrial labor population of the United States constitutes only one portion of the great consuming public. Out of a total population, at the latest census, of 122,775,046, as many as 44,636,770 were classified as farm population, while another 9,183,453 lived in towns having less than 2,500 inhabitants. The urban population was 68,954,823, of which 4,717,590 lived in towns of between 2,500 and 5,000 inhabitants. There is a substantial part of this urban population which would receive no benefits from the wage increase method of distributing income. Persons employed in connection with government activities, educational, philanthropic, and charitable organizations, or in personal or domestic service, would not necessarily obtain increased salaries. These workers, together with the professional groups, constitute a population of something like 20 million people.

The wage increase method of disseminating the benefits of technological progress would, therefore, not extend to more than 40 per cent of the total population. Moreover, the importance of the farm population is not fully revealed by the number of people involved. The farmers as a class have the lowest incomes of any important group in the body politic. The per capital income of the farm population as a whole in 1929 was only $273. Any method of distributing income that leaves the farm population out of the picture obviously falls far short of the desired goal.

Moreover, the increase of money wages tends to promote a basic maladjustment between two great divisions of our economic life and thus to impose a serious barrier to economic progress. The struggle to obtain higher living standards through the medium of higher money wages has been the cause of a long and deep-seated conflict between the agricultural and urban populations. The people of the cities have fought for higher wages even though it has meant somewhat higher prices for industrial products. The farmers have long fought for lower prices on the commodities which they have to buy. The struggle underlies the so-called granger movement of the seventies; it explains the traditional opposition of the agricultural South to high protective tariffs; and it lies at the basis of farmer opposition to trusts, monopolies, and combinations in all their forms. It explains finally the present agricultural program of restricting output as a means of restoring "price parity" between agriculture and industry.

Investigation and analysis clearly reveal that the money raising method of increasing the purchasing power of the labor population has over a long period of years been instrumental in giving to them higher standards of living. The objection to the method is simply that it is not sufficiently inclusive in scope and thus produces maladjustments which serve to impede the most effective functioning of the economic system as a whole.

In contrast, when prices are reduced (without a reduction of wages) the benefits automatically accrue to the entire population. That is to say, it not only adds to the purchasing power of the labor employee group, but it increases the real income of the non-wage urban populations and of the farm population as well. Since the benefits are distributed throughout the entire economic system a better balance is maintained between the different divisions of our economic life.

In considering these alternative methods of disseminating the benefits of progress, attention must also be directed to their bearing upon international competition. In so far as an increase in money wages is accompanied by increasing prices, the ability of American manufacturers to meet competition in foreign markets is obviously impaired. And even though prices should show no increase, the competitive power of the American manufacture would be affected in a negative way. That is to say, he would not be in a position to reduce his selling price with a view to expanding foreign sales.

On the other hand, a progressive lowering of the prices of commodities strengthens a nation's competitive position in foreign markets. The greater the technical progress and the lower the consequent selling price the greater will be the chance of expanding foreign sales. Success in international competition will in the long run depend upon productive efficiency and not upon the level of money wages.

In short, the broad highway along which economic progress must be sought is the avenue of price reductions. When this road is followed the benefits of technological improvements are automatically conferred upon all divisions of the population. Maximum expansion of purchasing power is obtained and equilibrium is maintained.

Business Policy and Economic Progress

The problem thus briefly outlined is the fundamental issue confronting the business men of this and other countries. It is the business man's problem, for the simple reason that business policy is the determining factor in the making of prices. We are concerned here with a crucial question of economic organization under the capitalistic system. In order that there may be no failure to appreciate the vital significance of this problem from the standpoint of the functioning of the economic system, let me briefly recall the fundamental principles upon which the capitalistic system depends for its successful operation. These principles have not only been long ago set forth in economic literature, but they have long been imbedded in the thinking of business and governmental leaders as well. They tend, however, to be forgotten in the every-day world of practical affairs.

The general theory underlying the system of capitalistic production and distribution clearly recognizes the necessity of an ever expanding mass purchasing power in order to absorb the expanding capacity of the productive establishment. Certain clearly defined principles were set forth which it is believed could be relied upon to bring automatically the desired results. Let me briefly summarize these principles.

First, it is pointed out that under a system operated for private profit each business manager naturally seeks to reduce costs by increasing the efficiency of production. He may accomplish this by the construction of a larger and more efficient plant, by the installment of improved equipment, by the introduction of superior internal management, by improved methods of marketing, by integrating various stages in the productive process, or by a combination of various methods.

Second, having reduced costs of production he is in a position to increase his profits in one or another of two ways. He may continue to sell at the same price as before, enjoying the advantage of a wider margin between cost and selling price; or he may expand the volume of his business by means of price concessions. It was reasoned that since the increase in efficiency which is responsible for the reduction in costs commonly involves an expansion of productive capacity, and since the maximum economies can be obtained when operating at full capacity, the greatest profits will result if the output is expanded by means of a reduction of prices. The wise alternative is to expand sales by offering the products at a lower price.

In short, increased efficiency makes possible lower prices, while the profit incentive insures the actual reduction of prices. The greatest profit to the business enterpriser is thus derived through giving to the masses the most for their money. The interest of the profit maker therefore coincides with the welfare of the community.

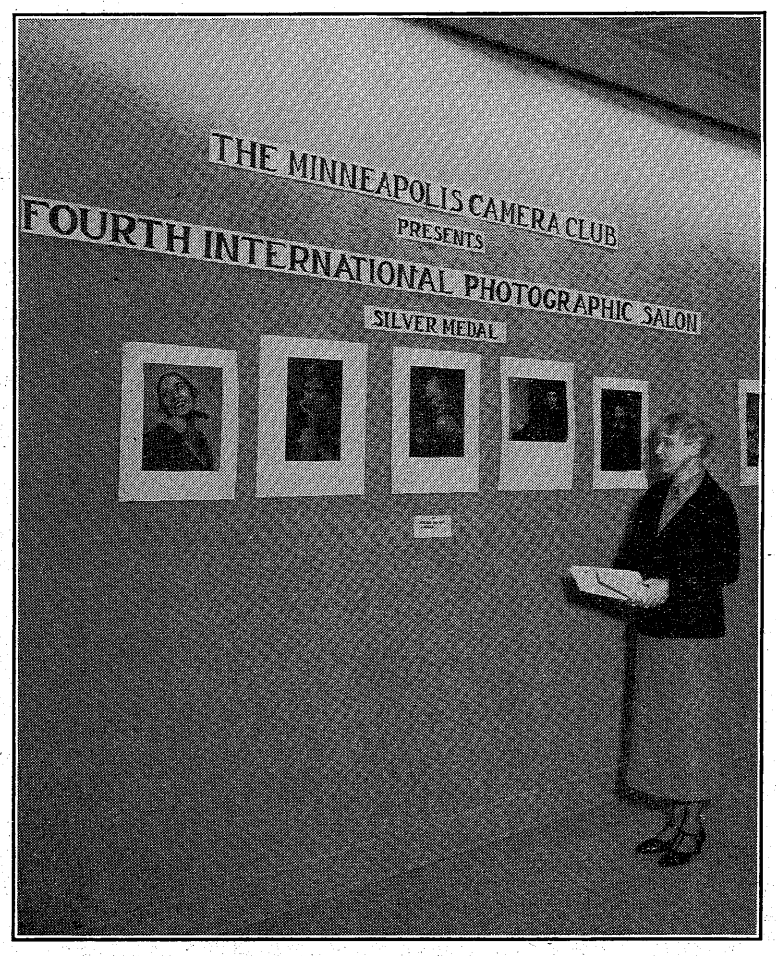
Third, the process naturally involves the continuous elimination of obsolescent or otherwise inefficient, high cost, or marginal establishments. The fit, as gauged by ability to sell at a minimum price, alone survive; moreover, the efficient of today promptly become the inefficient of tomorrow. A particular business man, firm, or corporation may indeed survive over a long period of years, but only if the production methods employed keep always abreast of changing times. Note that this theory of progress requires the maintenance of money wages—for if they are not maintained the real purchasing power or income of the laboring class will not be expanded. The reduction of prices which is significant is that reduction which results from increased productive efficiency.

I submit that these fundamental requirements for progress under the capitalistic system have never been subjected to challenge. I submit that they cannot be refuted. As we increase productive efficiency we must, if our productive resources are to be fruitfully employed, match it with increased consumptive power among the masses.

I submit also that in the actual operation of the business system these principles have not always been adhered to. Certain prevailing practices have tended to nullify the benefits of technological improvements and to retard the rate of economic progress. First, the importance of maintaining the general level of wages as a part of the process has too often been forgotten. Indeed, the system it-

Continued on Page 4, Column 1

Photographers Exhibit Best Prints



The Silver Seal exhibition of photographs taken by the Camera Club of Minneapolis has been on exhibition at the University Gallery, in Northrop Auditorium, during most of the month of September and has attracted wide interest among the student body and faculty.

In a competition that has become nationwide and attracted entries from many foreign countries, the club each year selects two exhibitions, one, called the Gold Seal group, is shown at the Minncapolis Institute of Arts, and the other at the University of Minnesota. Arrangements for the showings on the campus were made by Ruth E. Lawrence, director of the gallery.

The University Gallery, formerly known as The Little Gallery, is on the top level of the Northrop Auditorium. It is open from 12:30 to 5:30 daily during the week and is also open an hour before the symphony concerts on Friday evenings, during the intermission, and for a period after the concert.

An exhibition of contemporary American art that has attracted wide attention in some other cities will be brought to the gallery some time in February.

Murchie Goes to Washington

Robert W. Murchie, professor of sociology at Minnesota, has been called to Washington, where he will be on leave from the university to serve as financial adviser to the federal rural rehabilitation commission, serving under Rexford Tugwell. His work will be primarily on the set-up to aid drought stricken farmers.

Woman Lecturer Talks on Ethiopia

In an attempt to "give the American people a better understanding of Italy's position," Dr. Marie Bentivoglio, Italian woman professor in the University of Sydney, New South Wales, spoke at a University of Minnesota convocation on Thursday, December 12. Dr. Bentivoglio made several addresses at the university about a year ago and has since spent a year in Italy. Her subject was, "Italy Today." She also spoke befor the Foreign Policy association. Among her predictions is one that Italian women, while they do not have the vote, will soon be sitting in parliament. Dr. Bentivoglio is active in women's affairs in Australia. In 1934 she was vice-president of the Australian Federation conference of university women at Adelaide.

Dr. Marie Bentivoglio

Literary Review Slays Gallant Six Hundred

"O, he climbed up on the engine
With his orders in his hand,
And he took a little journey
To the promised land."
(Folksong)

If it weren't for the persistent undergraduate predelection for the rawly shocking, and for using the medical case book type of punch to make stories "effective," the current issue of The Literary Review supplement of The Minnesota Daily would be one of the best productions of undergraduate writing ever seen on this campus. Perhaps it is anyway, but I must retain the perhaps, for in its columns one poor degenerate washes himself in the toilet bowl meant for other purposes; one sketch has little point but that the central figure goes blind from brain tumor; one woman strives to gain attention (gains it too, I'll say) by smelling, oh so very badly while she dies of—let me look back—yes, yes, peritonitis brought on by a kick in the stomach; and one poor fellow, lying in a hall bedroom, just dies, inconsequentially and not too effectively, seemingly without any special reason, although it is made clear enough that he had no special reason for living, either.

After the orgy of people groaning, writhing and dying as if some malign god had sent an Olympian tank crunching across the poor gray world, it is a relief to return from realism to reality and read Peter Edmond's interview with Nadjezda Semonovna Grinko, even if she does turn out to be only a burlesque dancer who finally scampers off in chilly deshabille. The Grinko's life story is interesting, and Edmonds makes her come alive, creating a vivid impression. Maybe she does dance in a burlesque house; maybe she does; and she very probably will catch cold, but thank heaven she has escaped brain tumor, peritonitis, and the suicidal dumps.

Arnold Severeid's, 'Gulliver Among the Yahoos," a review of, "It Can't Happen Here," by Sinclair Lewis is professionally excellent. Mr. Severeid is more than a good writer; he is a gifted writer, seemingly destined to express exceptionally well those matters that impress him as he goes through life. Miss Lynn Greenwood's analysis of current satire is also soundly done and is refreshing by contrast with the morbidness of the sketches and fiction.

As full of fancy and color as anything in the eight pages of the year's first "Review" is Sherman Dryer's, "His Heart Mourneth the Pharaoh's Beloved, Re." One seldom reads anything more incisively pictorial and at the same time charged with comprehensible emotion than is this poem. Mr. Dryer's imaginative powers are superb in this brief example of his writing.

May it be that as one passes forty-five he loses forever the ability to enjoy such festive literary delicacies as brain tumor and death by gangrene? Of course, life may look worse in prospect than it turns out to be later.

Dr. Judd, Mayo Head, Dead of Pneumonia

Dr. Edward Starr Judd, chief of the surgical staff of the Mayo Clinic, at Rochester, Minnesota, and a graduate of the University of Minnesota, died recently in Chicago, where he was taken ill with pneumonia while on a trip east. Dr. Judd is the donor of the endowment under which the annual Judd lectures on surgery are given in the medical school on the Minneapolis campus. In the Mayo Foundation, graduate medical division of the University of Minnesota Medical School, he held the rank of professor of surgery. Dr. William J. Mayo, of the Mayo Foundation, called Dr. Judd, "the most skillful surgeon" of whom he knew.

Honor Minneapolis Banker

Ralph W. Manuel, president of the Marquette National Bank, Minneapolis, has been made an honorary member of the University of Minnesota chapter, Beta Gamma Sigma, honor society in Schools of Business Administration.

'Well Educated' Man Necessary Dr. Fyfe Says

University Serves Society in All Types That It Produces

SPECIALIST NEEDED TOO

Canadian Educator, Soon to Head Scottish University, Speaks

Dr. W. H. Fyfe, principal and vice-chancellor of Queens University, Kingston, Ontario, delivered the fall quarter commencement address at the University of Minnesota, Thursday, December 19th, when some 250 young men and women received degrees. "Idols and Ideas in Education" was his topic. Dr. Fyfe, whose position corresponds to what would be called president on an American campus, has recently been honored with election to be principal and vice-chancellor of the University of Aberdeen, second greatest Scottish University. In his talk to the Minnesota graduates he said:

I count it a privilege to be allowed to offer to you my hearty congratulation on becoming graduates of a great University. You have acquired a title and a gaily-coloured hood—and what else, I wonder? I expect you have acquired a certain amount of knowledge, either of the kind which people call useful or of the kind called useless. But that is really a false distinction. To speak accurately there is no such thing as useless knowledge. "A little knowledge" may be dangerous and much knowledge may be more dangerous still, because all knowledge may be misused, but knowledge is always useful if we have the good sense to use it rightly. It is the function of a University to provide both the knowledge and the good sense. The combination of the two spells education.

First must come the laborious acquisition of knowledge. That is inevitably a steep and stony path. But there is no other path to the high places where a man may get a good view of his world. There are no short cuts in education. The future physician must memorize innumerable bones before he can practise his great and fascinating profession. There are bones no less dry for the scientist, the historian and the student of literature—formulae, dates, syntax. You can't make bricks without straw, and straw is a dry diet. The early stages of all education involve an inevitable grind, and that grind is almost wholly futile unless the student is learning at the same time to use the knowledge he acquires. The mere acquisition is of little value and of still less value is it to attend lectures and to pass examinations without acquiring anything except the name of a degree. And yet the means of education are often mistaken for the end. It is an odd mistake—as though a man's physical strength should be judged not by his powers of effort and endurance but by the number of training exercises completed. It is obvious that physical exercises have no value unless they produce health and strength. Educational exercises are equally useless unless they produce the capacity to acquire knowledge for oneself and to make profitable use of it in one way or another. I need hardly add that I do not confine the word "profitable" to the sense of monetary profit.

Not All to Do Research

I think you will make profitable use of the knowledge you have acquired, if in the process of acquiring it you have caught the spirit of research. Some of you no doubt will be specialist researchers in some branch of science or of literature or of history. That means that you have begun to acquire the delicate and difficult technique of discovering truth and that you are going to devote your lives to that object. In the modern world specialists are necessary and fulfill a function of high importance. But few men have the acumen, the patience and the passion that are necessary for specialist research. A university must produce some such researchers or stand condemned, but it must also produce and produce in larger numbers men who can turn their knowledge to any purpose according to the demands that life may make on them—men, and of course women too, who can tackle any problem that turns up, and apply to immediate problems the knowledge which the specialists supply. The world needs equally the specialist and the "well-educated man" and it needs the latter in larger numbers.

If this is a sound view of university education, it suggests an answer to the question often raised whether in these days too many men and women enter a university. The president of a great university in the United States lately issued a warning that there was a limit in the number of men and women who could be absorbed into the professions and that at present the point of saturation had been reached. It is true that many professions are overstocked already and there is a limit to their capacity of expansion, but there is, I maintain, no limit to the value of education. A university certainly provides the best milieu in which to train for a profession but the education it provides is not of value only to what are called professional men. There is no limit to the value of the capacity to get knowledge and to use it; there is no walk of life in which a man does not profit by the university education which widens his horizon, and develops his capacity and character. Whether a man follows the plow, or digs in a mine or teaches Latin or manages an insurance company he is the better human being and the better at his job because of his contact at a university with literature and science and history. There is no saturation point for higher education.

Hoods Are Not Enough

When I say "higher education" I mean higher education in the sense I have defined. It may happen that as the registration of a university increases the standard of education declines. That is of course the road to national disaster. What we want is to educate as many people as possible whatever may be the work by which they earn their living; there is no conceivable advantage in lowering the standard and then attaching a B.A. hood to the necks of thousands who remain uneducated because the standard has been lowered. No combination of colors, however ravishing, can justify that fraud.

In England during the war we had to eat margarine instead of butter. It was successfully disguised to look like butter and some people maintained that it tasted like butter, but however successful the camouflage, margarine lacked always one quality of butter, the essential vitamin which stimulates growth in the young. It is by the presence or absence of that vitamin that university education should be judged. Educational margarine may be served to students numbered by the million, but it does not stimulate their intellectual growth and is therefore much worse than useless. It is a delusion and a fraud. True education is rich in the growth factor and differs from butter only in this respect that you can never have too much of it.

I feel safe in saying that throughout your course it has been the object of your professors to supply that vitamin so far as one human being can do that for another. They have tried and I hope they have succeeded in whetting your appetite and strengthening your digestion. That is the utmost they could do for you. You must do the rest for yourselves.

If, then, you are now ready, as graduates of the university, to begin the lifelong process of education, you must have developed certain faculties with which to tackle the adventure of living. And first of these faculties I should place wonder. Wonder is an essential element in education. It is a great growth factor of learning. It is sometimes depressing to discover how many young people come to the university defective in the faculty of interest or wonder. Their aim, they will tell you, is to earn a good living, "to get on in the world," but their methods would horrify a business man. A moderate fee opens to them the infinite treasuries of knowledge—and their only demand is for fewer subjects of study and a lower standard in each. You certainly cannot accuse them of commercial instincts! They seem eager to get as little as little as possible for their money.

Must "Begin to Take Notice"

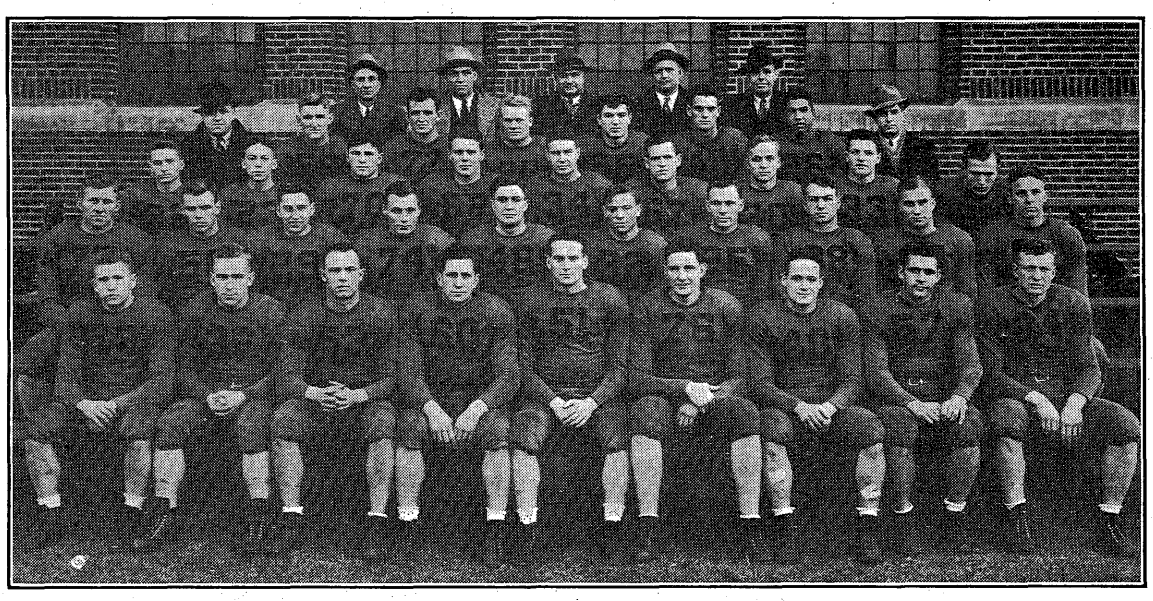
But you have grown out of that stage; and a symptom of your growth is the greater variety of your interests. You are less easily bored. Boredom is a sure sign of defective education. And another sure sign is a refusal to face facts and a weak-kneed reliance on the phantasies of wish-fulfilment. Men or women whose wonder is aroused in many directions have "begun to take notice" they have come to realize that the universe in which they live is wholly unresponsive to their wishes; they are concerned not to bash their heads against its laws and to whimper at the inevitable reaction, but to explore and to understand as many aspects of the universe as possible. I hope that your university course has somehow helped you to develop a wide-ranging curiosity and a sturdy self-reliance in satisfying its demands. I hope your professors have knocked a whole new range of windows into your souls, and when you come to years of discretion—the age at which men and women begin to get over their university education—I hope you will be able to say something like this: "I have forgotten all I ever learned and what I know I discovered for myself; and for the power of discovery I am incalculably indebted to the University of Minnesota.

But if you are to wield that power of discovery you will need not only a child's wonder but also the scepticism of maturer years. You must have learned not to take too much on trust in a world that so largely lives by advertisement and propaganda. You must have learned to suspect half-truths and popular explanations and cheap compedia of knowledge—those vaunted shortcuts which are really notices of No Thoroughfare. You must distinguish argument from ornament and fact from flapdoodle, and escape the delusion that oratory is a useful substitute for action. Wonder needs the astringent company of scepticism—as oil needs vinegar—but wisdom is not achieved unless to wonder and scepticism there is added another quality, and that is faith. You must believe in something.

I don't suggest that you should borrow your faith at second-hand. That sort of clothing seldom fits and never wears well. But your efforts will be unfertile, you will become in middle age the lackeys of produce and half-measures; unless you put your trust in some ideal standard. Fortunately the cult of the hard-boiled is out of date. It was never really sincere.

Continued on Page 4, Column 4

Here Are Minnesota's 1935 National Champions



Reading from left to right: front row: (28) George Rennix, hb; (36) Vernal LeVoir, qb; (53) Frank Dallera, g; (60) Sheldon Beise, fb; (51) Captain Glenn Seidel, qb; (76) Richard Smith, t; (40) Dale Rennebohm, c; (57) George Roscoe, hb; and (64) Vern Oech, g.

Second row: (77) Ed Widseth, t; (56) Earl Svendson, c; (29) Clarence Thompson, hb; (74) Ray Trampe, t; (46) B. W. Smith, t; (32) Andrew Uram, hb; (25) Malcolm Eiken, hb; (38) Sam Riley, g; (24) Stan Hanson, c, and (61) Dominic Krezowski, e.

Third row: (22) Sam Hunt, qb; (23) William Matheny, hb; (70) Louis Midler, t; (62) Charles Wilkinson g; (34) Ray Antil, e; (30) Rudy Gmitro, hb; (33) Frank Warner, e, and (52) Bob Weld, g.

Fourth row: Lloyd Stein, trainer; (58) Ed Kafka, g; (72) Russ Wile, e; (20) Harvey Ring, qb; (55) Vic Spadaccini, fb; (49) Ray King, e; (26) Dwight Reed, e, and Clark Snyder, student manager.

Top row: Oscar Munson, custodian of equipment; Dr. George Hauser, line coach; Bernard W. Bierman, head coach; Frank G. McCormick, athletic director, and Bert Baston, end coach.

Lowell Dawson, backfield coach, was not present when this picture was taken.

Honor Given Dr. Coffman By Foundation

President L. D. Coffman

Appointment of Dr. L. D. Coffman, president of the University of Minnesota, as a trustee of the Carnegie Corporation of New York for a five year term was reported to the Board of Regents at its December 12th meeting by President Coffman.

Notification of his appointment was sent to Dr. Coffman by Elihu Root, famous as a former secretary of state of the United States. He told the Minnesota president that the corporation was formed "to promote the advancement of knowledge and understanding among the people of the United States," adding, "the problems of the future seem to me to be of peculiar interest and significance, and it would give us all the deepest satisfaction to feel that the corporation could count upon your help in dealing with them."

The Carnegie Corporation is the central organization of the many Carnegie benefactions that include the Carnegie Foundation for the Advancement of Teaching, the Carnegie Foundation for International Peace, and the Carnegie Institution of Washington. For several years past Dr. Coffman has been a trustee of the Carnegie Foundation for the Advancement of Learning.

English Chairman And Faculty Wit Going to Harvard

Dr. John N. D. Bush, professor of English, and head this year of the department of English during the absence of Professor C. A. Moore, has notified Dean John B. Johnston of his resignation. Next fall he will become associate professor of English at Harvard.

In addition to his distinguished scholarship, Professor Bush has won a reputation at Minnesota as the wittiest speaker among the faculty. A colleague, Professor Joseph Warren Beach said, "It is most unusual to find such a combination of wit, precision, and breadth along with outstanding scholarship."

Dr. Bush came to Minnesota in 1927 as an assistant professor and rose rapidly to a professorship. A graduate of the University of Toronto, he took his graduate work at Harvard and taught there before coming to Minnesota eight years ago.

Never Heard of Straw Students Confess

Three University of Minnesota students, all members of the same class in economics, didn't know what straw was when the subject was introduced by Victor G. Pickett, economics lecturer and formerly a milling expert in Waseca, Minn.

Mr. Pickett told of his experiences during a discussion of student interests.

"I was certainly surprised to find out that in one of the great agricultural states there should be students who didn't actually know what straw was. They said they wouldn't know straw if they saw it," he declared.

Asked if the same students knew beans Mr. Pickett admitted he had not made inquiry.

Farm and Home Week Arranged

Continued from Page 1, Column 1

leader. New, also, will be daily morning assemblies featuring heart-to-heart chats by Dean W. C. Coffey, whose Sunday morning talks to students of the School of Agriculture have long been popular.

Summarizing, briefly, the program will open Monday noon and run forenoons, afternoons, and evenings through Friday. Except on Tuesday afternoon, subject matter lectures and demonstrations will run for 2 hours each forenoon and 3 hours each afternoon, with a dozen programs going on at once in the many lines of agriculture and in homemaking. Of the many offerings each hour, each visitor has his choice. Tuesday afternoon, there will be no classes, the entire program being given over to the Minnesota Farm Bureau, which each year holds the opening day of its annual convention on the University Farm campus.

As always, the entire instructional and entertainment program of Farm and Home Week will be free, except that when necessary there will be a cost-charge for food. Registration is free and the course is open to anyone interested. Further details, or a copy of the complete program may be had from L. A. Churchill, general chairman, University Farm, St. Paul.

Call Sigerfoos Great Teacher

Continued from Page 1, Column 3

appreciation which has ripened in affection with the passing years.

The Sigerfoos memorial which it is now proposed former students and alumni establish, is a fitting recognition of the unselfish service of Dr. Sigerfoos to his students and to the university; it will help perpetuate the importance of good teaching, fine fellowship, and a personal interest in students—qualities so essential and so difficult to find in any one teacher—all of which, however, were ever present in Dr. Sigerfoos.

Contributions to the fund should be sent to the comptroller of the University of Minnesota, W. T. Middlebrook, Administration building.

Would Lower Prices Solve Problems?

Continued from Page 2, Column 3

self has exerted a powerful pressure on business managers to reduce wages. When confronted with markets inadequate to absorb the full potential output of his factory, the individual business manager is naturally tempted to cut wages as a means of reducing costs; for with lower costs he can make price concessions and expand his sales. But if all business men cut wages as a means of reducing costs and selling prices they have not thereby expanded the purchasing power of wage earning population. The contention of labor leaders that labor is something more than a commodity is correct; labor is also a consumer. Fortunately this fact is becoming more and more widely recognized as the years pass.

In the second place, the primary mechanism which the system relies upon to distribute the benefits of technological progress has increasingly not been permitted to operate. Instead of reducing prices as a means of expanding markets, there has been a growing tendency to maintain prices and to let well enough alone.

Interferences with competitive price movements have occurred as a result of the development of at least three major types of business organization. The first is the unified monopoly or industrial combination under single management. The second, found chiefly in Europe, is the cartel or "collective monopoly" under which there is group control of production with a view to stabilizing prices in a given industry. The third is the trade association which seeks, usually through informal co-operation to stabilize certain conditions within particular industries without interfering with the control of production. There are, of course, many different types of trade associations and not all of them are able to exert an influence upon prices; but by and large trade associations consciously or unconsciously promote price stability. These associations, unlike consolidations, have generally been viewed with favor by the United States government as a means of stabilizing business.

Thus industrial policy, as it has evolved in this and other countries in recent times, has tended to impede the free functioning of the price system. Over an ever widening area the process of persistently expanding purchasing power by means of price reductions has been checked. We do not wish to imply that competition has entirely disappeared; for in broad sections of the industrial system prices are still reduced as productive efficiency increases. But as industry reaches a more mature stage of development, and as production becomes concentrated in larger units, the policy of maintaining prices to stabilize conditions and safeguard profits prevails increasingly.

The necessity of progressive price reductions as a means of expanding purchasing power and markets appears to have been forgotten alike by business managers and economic statesmen. Yet the conclusion is inescapable that, in so far as the effort to stabilize prices is effective, we are blocking the broad distribution of income and thereby throttling economic progress.

The results of these policies have been most clearly manifested in the decade of the twenties. This was a period of remarkable technological advancement. Both the amount of capital and the efficiency of its use increased in nearly all lines of production. But the benefits of this increasing efficiency were not automatically passed on to the masses of consumers either through the medium of proportional wage increases or proportional price reductions. Wholesale prices of manufactured commodities declined a scant 5 per cent and retail prices did not decline at all. In some lines of industry there were, to be sure, substantial decreases in prices. In other lines there was virtually no change, while in some there was a substantial increase.

Faced with productive capacity in excess of existing consumer demands business men in the main sought a solution of the problem along the following lines: First, by stimulating consumptive desire through extensive advertising campaigns; second, by sales on the installment plan; and, third, by sales in foreign markets.

Competitive advertising could do little to increase the consumptive demands of the masses, since it did not increase their purchasing power and the volume of their savings which might be diverted to consumption was of negligible significance. Installment selling could give a bulge to immediate purchases but it could not increase aggregate purchasing power over a period of years. Exports could be expanded relatively to imports only so long as foreign credits could be extended.

The remaining alternative, that of expanding markets for all the great necessities and conveniences of life, through a reduction of prices, came largely to be ignored. Instead of endeavoring to put additional consumptive power back of each new addition to productive power we sought, by and large, to maintain the price structure with a view to the stabilization of existing conditions. In thus attempting to stabilize existing conditions, not only was economic expansion held in leash but the seeds were sowed for economic instability in the future.

The question will be raised, however—Is not price stability essential to the stability of business conditions? Does not price cutting inevitably tear down the business structure and demoralize the markets and thus do vastly more harm than good?

In order to look at this issue in clear perspective, it is necessary to distinguish carefully between the situation that prevails in a period of acute depression and that which exists in times of prosperity. When in a period of business reaction prices in general are falling sharply, with each new decline intensifying business uncertainty, further general price reductions do not constitute a remedy for the existing demoralization. Stabilization, at some point, always has to be reached before recovery begins. It is our vivid experience with the destructive price warfare in disorganized periods of general deflation, that makes men fearful of the effects of price reductions.

In a period of prosperity, on the other hand, a reduction of prices—made possible by improvements in productive efficiency—would have no demoralizing effects. In the nature of the case, such price reductions would be gradual in character, and since they would not be accompanied by either a restriction of output or a decrease in buying power, they would contribute to stability of an enduring character.

Industrial policy which rivets attention merely upon the maintenance of a favorable existing situation is shortsighted industrial policy. The maintenance of the status quo in prices is a barrier to progress. Unless wage increases or other offsetting factors intervene, economic growth is measured by the extent to which prices are reduced.

The Effect on Profits

The reduction of prices during a period of increasing technological improvement will not destroy profit for businesses which are increasing their efficiency. If the reduction in prices is matched by the increase in efficiency—which means a reduction in costs—the margin of profits is obviously not reduced. On the contrary, in so far as the reduction in prices expands purchasing power and permits a larger volume of sales, the unit cost of production is reduced and profits may be increased.

It is scarcely necessary to call to the attention of this audience the relation between volume of production, unit costs, and profits. But I must emphasize the danger of assuming that the cost of production is something that is rather definitely fixed by the existing costs of labor, materials, etc. In view of the overhead cost factor, unit costs decline with an increase in volume even though the direct expenses remain unchanged. Thus, there are two means by which costs may be reduced. First, by increased efficiency in the productive process, and, second, by reaping the advantages inherent in capacity operation. If the latter type of gain is to be realized, the policy of price reductions must be an aggressive and not a lagging one.

In other words, price reductions should not be delayed until reductions in cost are clearly established. Focussing attention upon obtaining the largest possible return in a given year, serves to prevent the making of larger returns in years to come. Excessive profits derived from high prices, moreover, invite over-expansion, and lead to instability later. Even if price reductions resulted in a more moderate rate of profit, the policy would pay as a result of the long-run stability of earnings which would result.

Industrial history teaches that those industrial enterprises which rapidly install more efficient equipment and aggressively endeavor to expand the volume of business through lower prices need have no fear on the score of profits. It seems to me I recall that Andrew Carnegie once said in effect: "I know nothing about the making of profits; I only know about the making of steel." No doubt he was not unaware that the profits would in the long run take care of themselves.

Upon the way in which the business men of this country meet the challenge thus presented will, in my judgment, largely depend the future of private initiative in this country. If the private business system, as a result of short-sighted price policies, fails to provide that broad distribution of purchasing power upon which not only the welfare of the masses but the prosperity of the business system itself depends, then I am quite certain that we shall have increasing efforts on the part of the government to exercise control over the activities of private business.

It is no part of my purpose to set forth at this time any detailed program for accomplishing the objectives which have been outlined. Indeed, any single plan for bringing about a general and systematic reduction in prices would necessarily involve governmental regulation and control. The immediate need is for the business leaders of this country to face squarely the issues involved with a view to revamping basic price policies in their own businesses and in connection with voluntary codes or other forms of agreement.

There are difficulties to be sure; but the greatest initial difficulty is psychological in character. So long as the disposition is to find all the reasons possible why prices cannot be reduced, not much may be expected. The first requirement is a basic change of attitude about prices, and then systematic study of ways and means whereby all along the line prices may be gradually and cumulatively reduced. I say cumulatively because in an interrelated business structure reductions at one place facilitate the making of reductions at other stages in the productive process. Reductions in the price of basic materials which enter into later stages of manufacture are thus of especial importance.

In conclusion let me again emphasize that this analysis relates not so much to conditions of the moment as to longer run possibilities. But even now it may well be possible in many lines to stimulate an increased volume of business through downward price adjustments. In any event, this is the great challenge which is presented to American business men in the months and years that lie ahead.

English Teachers Honor Dr. Smith

Dr. Dora V. Smith

Dora V. Smith, associate professor of English in the College of Education and a Minnesota alumnus, was elected recently to be president of the National Council of English Teachers, when they met at Indianapolis. She succeeds Professor Charles S. Thomas of Harvard.

Widely known among teachers of English and those especially concerned with methods in the teaching of English in lower and secondary schools, Dr. Smith has been much in demand as a speaker at meetings throughout the country. Within three years past she has spoken at such meetings in Maryland, Indiana, Illinois, Wisconsin and North Dakota, besides making many addresses at Minnesota gatherings.

Dr. Smith received her bachelor's degree from Minnesota in 1916 and her doctorate of philosophy in 1929.

Among her courses at Minnesota are subjects ranging from Children's and Adolescent literature to graduate courses for teachers. She also conducts a course in the supervision of English in the elementary school, which is for principals and supervisors.

In 1930-'31 she served as consulting specialist in English to the National Survey of Secondary Schools. During leaves of absence she has taught in the Lincoln School, Teachers College, and at St. George's College, London, England. For the past three years she has been chairman of the research committee of the National Council of Teachers of English, and for two years has been first vice-president of that organization, to the presidency of which she has now been elected.

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 DECEMBER 24, 1935 NUMBER 5

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

Old Fashioned Nonsense

MANY parents with sons or daughters in college, possibly even some students, would do well to read carefully certain passages in the commencement address recently delivered at the University of Minnesota by Dr. W. H. Fyfe, head of Queens University, in Kingston, Ontario. Said he:

There are no short cuts in education. The future physician must memorize innumerable bones before he can practise his great and fascinating profession. There are bones no less dry for the scientist, the historian, and the student of literature—formulae, dates, syntax. You can't make bricks without straw, and straw is a dry diet. The early stages of all education involve an inevitable grind, and that grind is almost wholly futile unless the student is learning at the same time the use of the knowledge he acquires.

It is sometimes depressing to discover how many young people come to the university defective in the faculty of interest, or wonder. Their aim, they will tell you, is to earn a good living, "to get on in the world," but their methods would horrify a business man. A moderate fee opens to them the infinite treasuries of knowledge, and their only demand is for fewer subjects of study and a lower standard in each. You certainly cannot accuse them of commercial instincts. They seem eager to get as little as possible for their money.

No doubt a very dour Scot, with many old fashioned ideas.

They have recently led to his selection to head the great Scottish University at Aberdeen, one of the leading educational posts in Great Britain.

'Well Educated' Man Necessary Dr. Fyfe Says

Continued from Page 3, Column 4

No one ever genuinely valued money and power above all other things. Not even millionaires. There was always something they valued more—beauty or knowledge or pity or personal affection. If you want to find out what you really value most, ask yourself what are the things you would rather die than do. That is the real way to "take care of yourself." And it is your own self that really matters. It is not very difficult to win the whole world or some part of it—and lose one's own self in the process. The pages of history record the lives of many who have made that fatal bargain. The really important question for each man and woman is: What are you yourself like? And my parting advice to each one of you is: Find yourself, know yourself, be yourself.

To know yourself you must sometimes sit quiet and listen for the voice of truth, examining the secret springs of motive. Remember, "the soul is dyed the color of its leisure thoughts." To be yourself you must often stand aside from the ready-made crowds with their mass-produced uniformity of taste. To find yourself you must lose yourself in something greater than yourself, in the service of some fine ideal.

That ideal you must each find for yourself, and I need hardly remind you how insistent is the challenge to your service at the present time. The future of all civilized communities is more uncertain than it has been for at least a hundred years. This alone is obvious—that the present structure of society is unstable and that changes are coming quickly. The nature of those changes depends on you, on your intelligence and honesty and the influence of your character. Of all the giants that confront your path, the most formidable are Greed and Fear, the old, inveterate enemies of human happiness. All our hopes for the future depend upon the progressive conquest of those two deadly motives; and to aid that victory you must—in a literal sense—make the most of yourselves, for victory can only be achieved by the all-round development of human personality, moral, intellectual and aesthetic, under the influence of a firm faith in high ideals.

There is no short cut to the Heavenly City and no other road towards it.

Teacher Stands Awed Saw Baths of Court

Back from Washington, where he attended meetings of the committee co-operating with the United States Supreme Court to improve procedure in cases at law, Professor Wilbur Cherry, University of Minnesota Law School, said he was more impressed by the shower baths in the new Supreme Court building than by most things he saw.

"Chief Justice Charles Evans Hughes, who appointed our committee, showed us through the palatial new Supreme Court building," said Professor Cherry. "Those shower baths! I could see that the chief justice was proud of them, and as for me, I stood speechless."

"After spending ten days in that marble palace, I find it hard to adjust myself to Minneapolis and University of Minnesota buildings," Professor Cherry said. "I feel that I must be back on earth."

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | JANUARY 14, 1936 | NO. 6

Evening Classes Of Spring Term Set for Choice

Adult Public of Twin Cities Offered Splendid Fare of Subjects

NEW ITEMS ANNOUNCED

Enrollment in Evening Classes Just Under 5,000 and Near Peak

Only a small gain in the number enrolled in the General Extension Division of the University of Minnesota will be enough to bring the totals to the highest point ever reached, that of the autumn of 1930, according to Irving W. Jones, student work chairman, who announced that registration for the spring semester would begin January 27 and continue through February 15, classes to start on February 10. There are now just under 5,000 in evening classes.

The spring semester will begin one week later than usual this year, due to the new practice of missing two class meetings during the midyear holiday period.

Many subjects associated with the oncoming of spring and summer are among those announced for the new semester. Dr. Thomas Roberts, assisted by William Kilgore, curator of the Museum of Natural History, will repeat his course on Minnesota Birds, and a course in Minnesota Plant Life will be taught by N. L. Huff of the department of botany. Robert A. Phillips, also a botanist and gardener, will repeat last year's popular course on Home Gardens. When this course was begun a year ago it was so crowded that it had to be cut into two sections.

Those who are interested in the new techniques of communication will be offered a chance to learn Radio Script Writing in a course to be taught by Luther Weaver, a St. Paul advertising man.

Vocabulary building, an unusual course offered by the Extension Division, has been attracting some of the largest class enrollments in the history of the department. Dr. R. R. Price, director of extension, takes this to mean that the public is especially eager to improve its command of spoken and written English. A great majority of those who enroll for this subject are said to be office workers. This semester the class will be in St. Paul.

Also along the lines of writing and expression, will be the course in writing Articles for Newspapers and Magazines, which has been given to many students in former years. A course in which the instructor will review current literature will also be offered, the instructor being Miss Melba Hurd.

Art for Everyday Life will be the subject of a class by Ray Faulkner of the department of art education, which will be repeated. Leah Lewis's classes in interior decoration, both the regular course and a special short course of eight weeks for housewives, will be continued. Associated with these courses will be one in Psychology of Art and Beauty which will be taught by Miss Kate Hevner of the psychology department.

Alburey Castell, assistant professor of philosophy, will again teach his course in ethics, this time in St. Paul, and in Minneapolis will teach an evening course entitled, Political and Social Ethics.

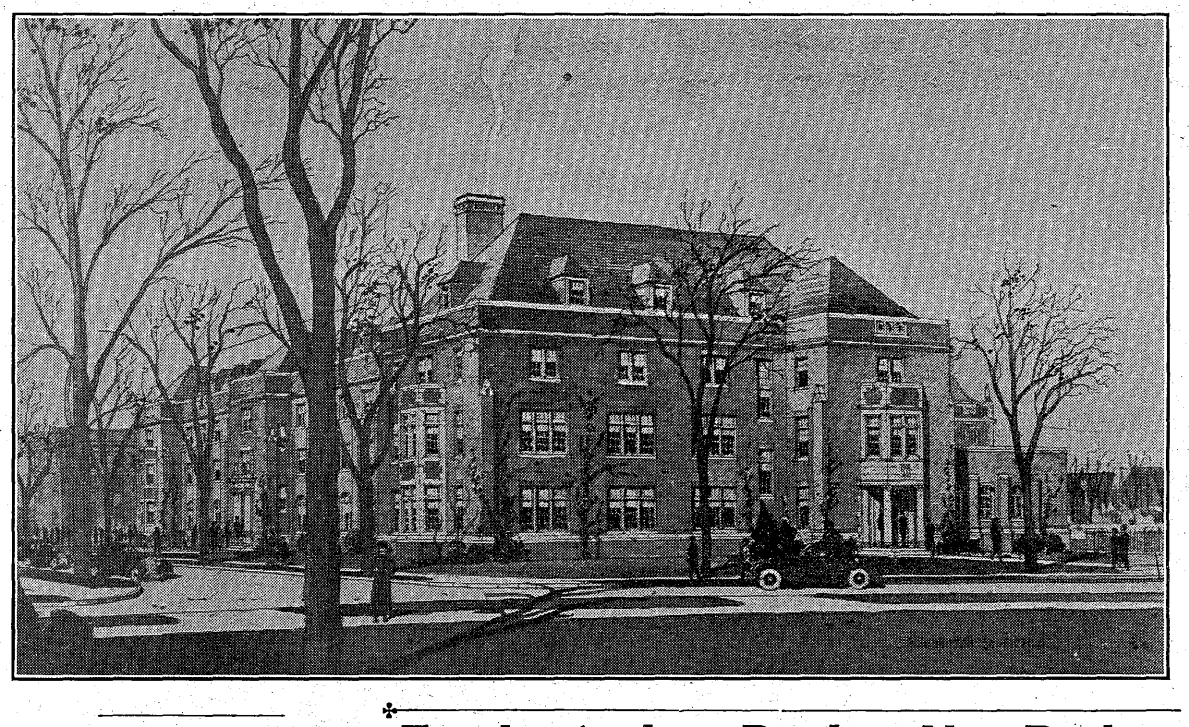
From the field of sociology will come courses in Criminology, taught by Professor George B. Vold, and in Population Problems, taught by Dr. Calvin Schmid.

Social Security Proposals, such as are so numerous at the present time, will be viewed and analyzed by Professor Emerson P. Schmidt of the School of Business Administration in a special eight-weeks short course. Public Finance will come in for consideration in a course to be taught by Arthur Borak, assistant professor of economics.

Sports interests have always been liberally recognized in the General Extension Division, and this semester a new subject, Life Saving for Women, will be introduced. Taught in the Women's Gymnasium, it will be directed by members of the department of physical education for women. Swimming for Men will be taught by Niels Thorpe, swimming coach, and his assistants. Golf for Women and Golf for Men will be offered by W. R. Smith, head of intramural athletics, assisted by Walter Mund, professional at the University Recreation field. Theory will be taught indoors at first, and later meetings of the class will be on the university course.

Besides the courses mentioned here, approximately 200 regular courses such as are taught each year will be offered in Minneapolis and St. Paul, divided into the fields of arts and sciences, business, engineering, and education. The term of a university Extension Class is sixteen weeks, plus an examination, carrying a course from the second week of February to the first of June.

Work Begun on New Structure for Adult Educatiin



University Will Invite Professional Groups to Attend Special Courses to Bring Information Up to Date.

Work began January 9 on the new and unique Adult Education Building that is to be constructed facing Pillsbury Hall on the campus of the University of Minnesota.

It will be used for intensive "refresher" courses for large professional and vocational groups in the state. Dentists, physicians, lawyers, teacher, newspapermen, engineers, and the like, will be invited to form groups to come to the university campus for specially prepared courses of lectures aimed to bring them up to date with recent progress in their fields of work.

When the building was proposed to the board of regents Dr. L. D. Coffman, president of the University of Minnesota, pointed out that in medical science, for example, progress is so rapid that a course has had to be repeated in the senior year that students in the first year had taken. Changes were so great that the second studying was required.

The building will be three stories high and will be devoted to living quarters, classrooms, an auditorium and a dining hall. A tunnel will connect the building with the Minnesota Union, from which the food will come.

Beneath the building will be a 200 car garage that will partially offset parking space lost when the Parade Ground is covered by the new structure.

Faculty Authors Produce New Books On Subjects Covering Wide Range

Chinese Alumnus Heads Dental School in China

A Minnesota alumnus who is dean of the medical department in the National Central University, at Nanking, China, has written to Dean William F. Lasby, of the College of Dentistry, university of Minnesota, asking materials to help the school and suggesting that a number of vacancies for young men capable of teaching dentistry exist in that institution.

The new college is offering a four years dental course leading to the degree, Licenciate of Dental Surgery and to degrees in oral hygiene. The new dean is Dr. J. L. Wong, Minnesota, 1922, who has been a dentist in China since his graduation. In his letter to Dean Lasby he points out that ten years passed between the first proposal to start a national dental college and the time of its organization in September.

"At present," he writes," the dental class has twenty-one students, seven girls and fourteen boys. The oral hygienist class will take thirty-five girls. They must be high school graduates and pass the university entrance examination.

The college is in urgent need of teaching staff, text books, demonstration models and charts, laboratory models and charts, infirmary and laboratory working-cards. I sincerely request that you will kindly help me by sending me a complete list of them, and if possible, send me a sample of each, parcel post C. O. D. I will be only too glad to pay for same. In regard to the teaching staff, I sincerely request that you kindly make announcement to your graduating students, and under-graduates, especially the Chinese dental students, that there are vacancies for instructors in oral surgery, prosthetics; operative; crown and bridge, oral hygiene and prophylaxis, and roentgenology. If interested, they may write me direct or through your good office. I hope many of your students will answer the call to serve dentistry in China!

State Medical Broadcasts

Dr. William A. O'Brien, associate professor of pathology in the University of Minnesota Medical School will continue in January the series of radio broadcasts on health that he has been making on behalf of the Minnesota State Medical Association. His subjects will be: 6th, Fever treatment; 13th, Hysterical paralysis; 20th, Bronchiectasis; 27th, Pyorrhea and gingivitis.

Electric Machinery, Health, Local Government, River Formation, On List

A book on "Alternating Current Machinery" by Professor John M. Bryant head of the department of electrical engineering, and Elmer W. Johnson, associate professor, one on "Healthful Living," by Dr. Harold S. Diehl, dean of the medical sciences, one on "Local Government and Finance in Minnesota" by Professor William Anderson, head of the department of political science, and an "Economic History of Europe" by Dr. Herbert Heaton, professor of economic history, together with a Minnesota Geological Survey report on "The Upper Mississippi River in Late Wisconsin and Postglacial Times" by Professor William S. Cooper, department of botany, make up an incomplete list of recent volumes written by members of the University of Minnesota faculty.

Professor Bryant's book, published by the McGraw-Hill Book company, provides a companion volume to his earlier, "Alternating Current Circuits" written with James A. Correll of the University of Texas, now in its fourth impression. The newer volume is a theoretical and practical discussion of alternating-current machinery in which the authors offer a broad treatment based on fundamental developments rather than illustrations and descriptive matter. It includes a detailed account of transformers, synchronous machines, induction machines, and synchronous converters. Commutator type a-c motors and mercury-arc retifiers are also discussed.

Just as a year or so ago he cast a reproachful eye and loosened a regretful pen against the overwhelming number of local governmental units in the United States at large, so now has Professor William Anderson, head of the department of political science, viewed similarly the local government situation in the state of Minnesota. Minnesota has. he tells us, only some 10,500 local government units in its 86 counties, but he is persuaded that that number is too large.

Too Much Local Government

The book discusses the advantages and disadvantages of local government and of centralization, reaching the conclusion that there is at present no need to abolish any whole class of local units, but recommending their reduction, and the consolidation of school districts, in sparsely settled areas.

Professor Anderson expresses the opinion that a movement is needed in the direction of a sim-

Continued on page 2, column 4

Business Head Makes Finance Report on "U"

Income from State, Federal Trust Fund and Other Sources Stated

BUILDING AID LISTED

Maintenance from Legislature About Stationary Over a Decade

Receipts of the University of Minnesota, including $3,525,738.67 from state sources, $526,358.97 from the federal government, $338,405.09 from permanent funds and $1,818,658.29 produced by the institution in course of operation, reached a total amount of $8,700,254.41 during the fiscal year that closed on June 30, 1935, it is shown in the annual report of Comptroller William T. Middlebrook, the university's chief business officer.

Included in the total is something more than $2,000,000 made up of receipts from revolving funds within the institution not representative of new money. This includes the maturity of trust fund bonds, and receipts from dining halls and the like which are practically balanced by outgo. Income from the revolving funds and service enterprises came to $1,531,592.97 and that from trust funds to $577,922.82.

Athletic income of the University of Minnesota was $281,577.60 in the fiscal year 1934-'35, as compared with $212,934.57 the year before. Most of this came from the 1934 football games. Last fall's games fell in the current fiscal year that will not end until next June.

P.W.A. Helped Buildings

Public Works grants for buildings at the university came to $178,390 during the year and the university borrowed $100,000 on certificates of indebtedness to help finance the second unit of Pioneer Hall. Of the cost of this dormitory $84,000 came from the government, which also contributed $86,000 to the new athletic building and $8,300 for improvements to the Student Health Service. Federal appropriations for agricultural extension work, agricultural experimentation and the like, were maintained.

The permanent university fund yielded interest of $251,424 during the year and the principal increased just under $400,000. The increased income came to $16,000 or just about four percent on the gain in principal.

State receipts for the University of Minnesota were $2,800,000 as the yearly appropriation for the biennium; $346,182.61 from the fractional millage tax; $155,805.77 as the state's share of the cost of indigent patients in Minnesota General Hospital; $153,780.77 as the cost of special experimentation, chiefly in agriculture, low grade iron ore and medical science, and a remainder of $69,969 due on the building fund now cancelled. Student fees in all departments and divisions came to just under $1,107,000.

On the side of expenditures, which came to $8,643,988.34, by far the greatest item was that of $4,553,056.52 designated as the "Expense of instruction and research." This includes teachers' salaries, laboratory and classroom costs, and the like.

Administrative expenses were held to less than one and nine-tenths percent, amounting to $162,298.31. Under this head come the offices of the president, comptroller, registrar, deans with university-wide functions, and some other general offices.

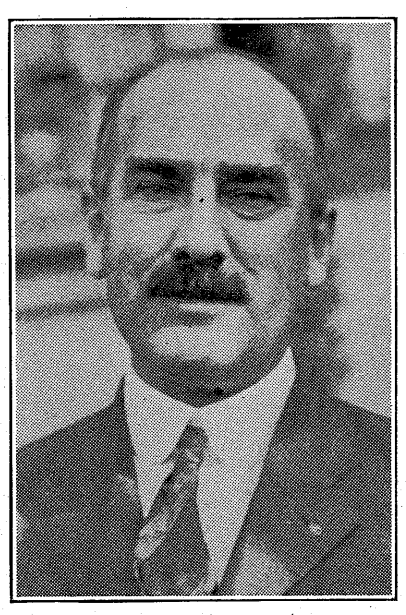
Physical plant operations, including heating, came to $653,382.50, and cost of plant extension was $576,722.45. Together with this $160,000 in outstanding certificates of indebtedness were retired, $100,000 being for the first unit of Pioneer Hall and $60,000 for the Athletic Building.

Continued on page 4, column 5

Speakers and Officers Conducting Sigma Xi Science Lectures at Minnesota

Dr. Owen H. Wengensteen

Dr. E. T. Bell



Dr. C. A. Mann

Dr. Irvine McQuarrie

Dr. Walter C. Alvarez

Intercollegiate Debate Stimulates Student; Treats of Reality, Says Coach

Competition of the Forum an Experience of Value in Training for Life

If any educational project on a university campus can be considered free of justifiable grounds for criticism as too cloistered and theoretical, or too much a mere rehearsal of the teacher's lectures, or too much subject to uncriticised tradition, that activity is intercollegiate debating, according to a statement by Franklin H. Knower, director of debating at the University of Minnesota.

Mr. Knower's argument for debate is that it deals with living materials, awakens the student to the realities of the social problems of the moment, and stimulates him through the joy of matching wits with his fellows:

"I should like to discuss at the outset some common misconceptions regarding the nature and purpose of intercollegiate debating," Mr. Knower said.

"Although the debate is in its very nature a contest, we do not sponsor this activity as a stunt to glorify the participants or the institution in victory. Inter-collegiate debating is best thought of simply as an interesting method of getting an education and training in the technique of making education interesting to others. The institution which exploits its debaters for purposes of advertising, or the director who sacrifices sound educational methods and ideals through undue emphasis on the contest feature of the activity are guilty of abuses not inherent in the system. Moreover the fact that the arguments of debaters are frequently uninteresting is not a necessary limitation of the method. The dullness of many professional academic lecturers is not an adequate excuse for dull debating. The debater who thinks that he must be dull to be logical is either a novice or misinformed.

"The collegiate debater does not pose as an expert on the subject under discussion, but even so American university debaters make a much more thorough study of the questions they discuss than our much praised visiting debaters from English universities. We usually spend a minimum of six to eight weeks on the study of our debate propositions, while I am told the debaters at the Oxford Union discuss a different question every week. The debater excels not as the expert who has built up a background of a number of years of professional study on a problem, but in the broad perspective which he brings to each new proposition from his study of varied but similar problems in other fields. Few indeed, are the holders of public office who can be considered experts in the scholarly study of principles of government, yet such men are commonly called by the people into positions of leadership. The debater is to be considered a layman in the field for discussion; a layman who has had training in the analysis and discussion of various social problems; a layman who has made a more extensive study of the particular problem than his fellows, and who is therefore prepared to present intelligently and interestingly the more important arguments for or against a proposed measure.

"The well trained debater does not overlook the importance of an effective rhetorical style, but good debating is not mere verbal trifling for elaborate literary effects. The good debater must know how to speak well on the public platform, but the debater who is the perfect elocutionist, though he be full of sound and fury, soon learns in debating that these alone avail him nothing.

Values in Debate

What then are the values of debating? Before answering this question it may be well to explain briefly the organization of debating activities on the campus. Debating is carried on under the auspices of the University Senate committee on debate and oratory. This is an all-university committee cutting across the lines of university organization into colleges and departments. The committee determines policies relating to the selection of participants, the scheduling of contests and the carrying on of activities. Members of the debate squad are selected by competitive tryouts advertised in the University Bulletin. The squad usually contains representatives from most of the major colleges on the main campus. During the last year the colleges of Law, Business Administration, Education, Medicine, Engineering, and Science, Literature and Arts have been represented. The university belongs to the Western Conference Debate League, an organization comprising the major mid-western universities. Men students hold eight debates and women students hold two debates with representatives of these institutions during the year. Debaters are given added experience in debates with as many additional colleges as conditions such as time for preparation of subject matter, size of the squad, and budget permit. Last year the squad participated in 39 intercollegiate debates and an additional 21 public intrasquad debates. At least four propositions and sometimes more are debated each year. The propositions are selected by various intercollegiate forensic organizations and always deal with timely subjects.

Points in Favor of Debate

"In attempting to state the purposes of intercollegiate debating in an affirmative way I do not believe I can do better than state them as the positive aspects of the points of criticism leveled at modern education. In the first place, intercollegiate debating is a training ground for the meeting of social, civic and political responsibilities. I have previously mentioned the colleges of the university from which the debate squad personnel is drawn. When these men go out into the communities in which their various occupational and professional activities will be carried on, their training on the public platform will serve not only to make it possible for them to render greater service as lawyers, doctors and engineers, but their knowledge of public problems gained through the preparation of debates will also make it possible for them to serve more intelligently as the leaders they should be in meeting the problems of the social state. The number of social questions which these future citizens find an opportunity of studying in debate may be illustrated by mentioning some of the subjects debated at the University during the last three years.

"The list includes capitalism, the relative merits of the social philosophies of the Republican and Democratic parties, government control of radio, higher income taxes, cancellation of the war debts, greater federal control of banking, greater powers for the President of the United States, the continuation of the Agricultural Adjustment Act, the University of Chicago plan of education, the report of the Lytton Commission on the Manchurian situation, federal aid for primary and secondary education, governmental control of the manufacture of armaments, unicameral state legislatures, the Constitution and collective bargaining by labor organizations. The preparation of debates on these questions involved the study of such fields of knowlege as international relations, forms of government, finance, taxation, capital, labor and education. Students doing this work not only study the standard references in the field but also read the up-to-the minute articles in current technical magazines and follow

Continued on page 3, column 4

Dr. Henry Hartig

On four Friday evenings beginning January 24 the public will be given its annual opportunity to hear current scientific subjects of unusual interest popularly discussed by members of the University of Minnesota faculty, representing the honor society in science, Sigma Xi. The speakers and their subjects will be: January 24, Dr. Walter C. Alvarez, professor of medicine, Mayo Foundation, "The emergence of modern medicine from ancient folklore;" 31st, Dr. Owen H. Wengensteen, head of the department of surgery, Medical School, University of Minnesota, "Benefactions of surgery to man;" February 7, Dr. Elexious T. Bell head of the department of pathology, "Natural defenses of the body;" February 14, Dr. Irvine McQuarrie, head of the department of pediatrics, "Endocrine glands in health and disease." The lectures will be free. Each will begin at 8:15 p. m., following a 15 minute program of music by the University of Minnesota Symphony orchestra. The events will be in Northrop Memorial Auditorium. Dr. Charles A. Mann, head of the division of chemical engineering is president of Sigma Xi and its secretary is Dr. Henry Hartig of the department of electrical engineering.

Faculty Authors Produce New Books Covering Wide Range of Subjects

Continued from page 1, column 4

plified, responsible form of government. He favors, with some reservations, the plan of city managers responsible to elected councils, and also shows how the "county manager" plan has succeeded in certain states. He recommends that Minnesota create a civil service commission to select better candidates than are now often given positions under local governments, extend its system of certification of public servants to cover additional groups, and set up in the state capitol a legislative reference service and an agency to provide information and assistance to those drafting bills for submission to the legislature. The author makes an historical survey of the development of local units in the state as a preliminary to his discussion of the situation today. Other questions taken up include the legal status of local governments; the organization of the 10,500 separate local units existing in the state; the personnel of local units, including teachers in the public school system; revenues of local governments, with special reference to the probable administration of new taxes that may be introduced; expenditures and expenditure control, with some comment on local budget making; the debts of local government and their regulation; state aid; the range of local services; education under local units; health and welfare activities; police courts, and law enforcement; highways, roads and streets. The Twin City metropolitan area is the subject of one chapter, while the concluding section is devoted to the author's survey of "The Outlook for Local Government."

"Local Government and Finance in Minnesota" is the title of this work, which has been published by the University of Minnesota Press.

Early Mississippi Geology

How the so-called "pit" lakes of Minnesota, including many in the immediate neighborhood of Brainerd, such as Gull Lake, were formed, is one of many interesting details on the early geological history of Minnesota given in the volume, "Upper Mississippi River in Late Wisconsin and Postglacial Times," recently published by Professor W. S. Cooper of the University of Minnesota. One glacier had nearly melted, he explains, leaving domes of ice here and there, when another advanced, covering these domes with sand and detritus. When the second glacier melted and the earlier ice was again exposed, it melted and left a hole where the ice had prevented filling by action of the later glacier. These holes promptly filled with water and became "pit" lakes.

Dr. Cooper takes issue in this book with the idea that the great sand plain extending across much of Anoka and Isanti counties from near St. Cloud to the St. Croix river was formed by the action of wind. At various places on the surface of the plain, he admits, there are sand dunes of considerable extent. But he produces evidence that has convinced him that the sand plain itself was deposited as outwash of waters from retreating glaciers in central Minnesota.

His book shows that at one time the present Mississippi was a tributary of the Minnesota River and at another of the St. Croix. Each of these had a great glacial lake at its head which maintained a huge column of flow even after the nearer ice was melted, but when these lakes Agassiz to the west and Duluth to the east, subsided, there was a better natural water source at the headwaters of the Mississippi, and it became the dominant stream.

He explains the way in which the Mississippi selected its course between Brainerd and the Twin Cities. On one side was a huge morain, or mound of earth left by the glacier, while to the east was a great ice sheet itself. The melting water from the sheet had no choice but to cut a channel between these two, and that came to be the present channel of the Mississippi river as far as Minneapolis. The book was produced by the University of Minnesota Press.

Diehl Discusses Health

Invited by Dr. Morris Fishbein, secretary of the American Medical Society to write the first volume in a series of popular books on health and medicine which he is editing for the McGraw Hill Book Company, Dr. Harold S. Diehl, dean of Medical Sciences in the University of Minnesota wrote his new book, "Healthful Living." "Healthful Living" appeared early last fall and has been favorably reviewed in scores of American publications, scientific as well as popular.

In it Dr. Diehl writes for the average man or woman and presents an abundance of sound advice under such titles as "Longer Life and Better Health;" "Mental Health;" "Exercise, Fatigue and Rest;" "Sunlight and Health;" "Weight and Its Control;" "Specific Disease Prevention," and the like. No passage in his book is more interesting than that on, "Choosing a Health Adviser." Here he says:

"Several years ago a letter was sent to the deans of the leading medical schools of this country asking them how they would advice a person who was new in a community to select a competent physician. Some of the deans replied that there is no way in which this can be done, but others made interesting suggestions. Among these was that one should ask the superintendent of a leading hospital for recommendations. This is sound advice, for the better hospitals choose carefully the physicians on their staffs; hence, one would be quite certain to get a competent physician if one made a selection from this group. Another suggestion was that one get a list of physicians from the secretary of the county medical society, with the school from which each graduated, his hospital experience, postgraduate training and length of time in practice. Another suggested that a person ask his friends what physician they would call if their own doctors were not available. Such recommendation would be free from the element of personal friendship which so frequently exists between patient and physician. Another was that they inquire who takes care of certain doctors families when they are ill."

Dr. Diehl also made the point that in small communities, where everyone knows everybody else,

Continued on page 4, column 3

Social Planner Must Beware of The Unforeseen

Minnesota Sociologist Makes Presidential Address Before National Body

"Social Theory and Social Action" was the subject of the presidential address read before the American Sociological Society at its New York meeting, December 30, by Dr. F. Stuart Chapin, head of the department of sociology at Minnesota and president of the national organization.

The following is an abstract of Dr. Chapin's paper:

"The New Deal experiments were started to fight the depression. Many government structures piled up and suddenly froze into rigid patterns. Complications followed in business and in social relations, until results that were not intended at the beginning entangled us in a network of restrictions. Now people ask, how did it come about?

"The social theorist has this answer. Whenever different social actions are separately planned and independently carried out in a civilization with machine communication, there are bound to be major results not intended by the originators of the different social experiments. No matter how carefully the original plans were made, as long as they were done independently of one another, the cross-currents of communication lead to confused complications. It is the task of the social scientist to try to predict these unplanned combinations of actions that were independently planned at the outset.

"In some fields this can be done with a measure of success. It was pointed out by sound money theorists that the currencies of China and Mexico would be adversely affected by the separate plans of the silver bloc in Congress and the Federal Government's theory of silver purchase. This has happened as predicted although this result was not intended by Congress or by the Federal Government.

"This leads to the theory that social plans which are independently initiated by leaders, or put in operation by political and government machinery, or agitated by impulsive social reformers as in the Townsend old age pension movement, are likely to lead to unplanned consequences often with disastrous results.

"Unfortunately it is not yet possible for social scientists to predict always and with assurance just what the unintended consequences will be. The reason for this inadequacy of present-day social science is not lack of human ability. It is due rather to the limitations of our social knowledge. We do not yet know enough to forecast exactly what will happen to the security market as the enormous reserves collected under the Social Security Act are invested in times of prosperity and liquidated in depression periods, but we can expect serious repercussions.

"On the other hand if we follow utopian social theories which emphasize desired goals and if we neglect to consider the impersonal consequences of unwise means, we can be reasonably certain of unplanned results. And these unplanned results are as likely as not to be harmful. All of these considerations suggest the need of scientific analysis of the assumptions that underlie these attractive utopian theories. All social action has its implicit assumptions. These need to be examined. The corrective seems to be in having a sound social theory before social action is undertaken.

"Who can tell what sound social theory is? Sound social theory looks to the remote results of present social action. It is slowly built up out of years of small experiments and continued testing. Although our present knowledge of social cause and effect is limited to the scientific observation of short-run experiments, this should not blind us to the need of study of long-run trends and remote results.

"The development of sound social theory is limited by inertia, bias and prejudice as much as the superstitions of past ages held back the discoveries of physical science. One such bias that stands in the way of social science is the belief that the method of experiment is limited to the physical laboratory. The reason for this obstructive belief is the idea that to conduct an experiment you must manipulate people. The fact is that it is now actually possible to measure the effects of public opinion, social traditions and the radio. Such studies do not resort to physical manipulation of people. That is not necessary. Control groups are selected by social scientists for comparison with experimental groups on measured characteristics. In this way the effects of penal treatment on criminals have been studied and measured. Prediction of success in marriage begins to be possible. How the radio affects listeners has been investigated.

"These few scattered references illustrate the discovery of methods of research which will gradually build up a rational basis for predicting social behavior. As state planning boards are established, it should be possible to use these discoveries to the end that social action may be based more upon science and less upon hunches or utopian theories.

French Water Color in University Gallery

Three important groups of water color paintings are to remain on view until January 21 in the current exhibition at the University Gallery on the fourth level of Northrop Auditorium. The painting reproduced here is one of 16 being shown from the brush of the French water colorist, Lascaux. Other groups on display are by Cleveland artists and a collection loaned by artists in New York.

Must Your Child Be a Goldfish?

"Must your child be a goldfish?" has nothing to do with heredity as the question is used by Mrs. Marion Faegre in the first of a series of child welfare broadcasts that will be made over KSTP this winter by faculty members of the University of Minnesota's Institute of Child Welfare. Mrs. Faegre and Miss Pearl Cummings will give twelve talks starting January 9 and running through March 26. They will speak Thursdays at 11:15 a. m., their voices going over both KSTP and the university station WLB.

Following Mrs. Faegre's first talk on January 9, of which the subject has been stated, others will be: January 16, "Poor Grades," Miss Cummings; 23rd, "Is efficiency comfortable?" Mrs. Faegre; 30th, "Learning to be orderly," Miss Cummings; February 6, "Should the school child help at home?" Mrs. Faegre; 13th, "You are too young," Miss Cummings; 20th, "Housewife or homemaker?" Mrs. Faegre; 27th, "Buying good behavior," Miss Cummings; March 5, "The movies again," Mrs. Faegre; 12th, "What can I do, mother?" Miss Cummings; 19th, "How many evenings out?" Mrs. Faegre; 26th, "Family affection," Miss Cummings.

The characters in these broadcasts are members of The Betterson Family, which has been broadcasting in the persons of the two speakers, for several years. The Bettersons' Neighbors is the general title of the series.

Botanists Attend Meetings

Twelve members of the botany department at the University of Minnesota went to St. Louis recently to attend meetings of the botany section, American Association for the Advancement of Science. Besides Dr. C. O. Rosendahl, department chairman, those who went are Drs. F. K. Butters and W. S. Cooper, Dr. George O. Burr, Dr. and Mrs. Ernest Abbe, Dr. Alan Trelcar, Dr. Ola Lakela, Martin L. Grant, Etlar Nielson, O. A. Dahl, J. B. Mayle and A. E. Schultze.

W. P. Kirkwood Leaves University

W. P. KIRKWOOD

Veteran Agricultural Editor Was Founder of Short Course at 'U' Farm

After more than 21 years of service to the University of Minnesota, Professor W. P. Kirkwood retired early in January from his duties as chief of the division of publications at University Farm.

Credited with many lasting achievements for the University and Minnesota newspaperdom, Mr. Kirkwood looks forward to his retirement, which he says will give him an opportunity to try some things he has long been wanting to do. In part, he will engage in free-lance writing for agricultural journals and magazines.

Joining the University Farm staff August 1, 1914, Mr. Kirkwood not only took over the work of editing bulletins, but developed a news agency to furnish the daily, weekly, and farm press with informational articles for the benefit of rural readers.

In the course of his work as bulletin editor, Mr. Kirkwood organized the first courses in journalism ever offered by the University of Minnesota. Out of these courses has grown by degrees the present department of journalism. Mr. Kirkwood also was responsible for starting the printing department of the University.

From his earliest connections with the University, Mr. Kirkwood maintained close relationships with editors of the Minnesota country press, devoting much time and effort in assisting in the improvement of newspapers. In 1916, the Editors' Short Course was established with the co-operation of several of the state's editors and has been held annually with growing interest and attendance. Through the Editors' Short Course and other efforts, the Minnesota Editorial Association was assisted in effecting a reorganization as a business-building association with a paid field manager—a change that has benefited the newspapers of the state and the communities that they serve.

Born near Steubenville, Ohio, in 1867, Mr. Kirkwood received his early schooling in eastern Ohio, later coming to Macalester College, St. Paul, from which he was graduated in 1890. He then entered daily newspaper work, serving on The Minneapolis Journal and on The Minneapolis Tribune.

In 1907, he left The Journal to do free-lance writing and seven years later joined the Department of Agriculture of the University of Minnesota.

Debate Deals With Reality

Continued from page 2, column 2

the daily press for the latest available data.

"Experts on the topic studied, here on the campus and wherever the debaters travel, are interviewed to obtain authoritative reactions to existing conditions, and I am happy to say that people have always been generous in the time they have given the intercollegiate debaters. In these ways the education of the future specialist becomes liberalized and integrated with the problems of the world in which we live. This constant discussion of current social problems brings to the debater a vivid sense of history in the making and a realization few college students get of what men may do to shape their destiny.

Leads to Public Service

"The debater starts his career of active public service while still in school. During an average year he goes beyond the confines of the campus to appear in public forums made up of such audiences as members of luncheon clubs, women's clubs, church clubs, high school convocations, and farmers' organizations. There are also debates over the radio. In this process the debate renders not only a real public service but also learns to do what many a man who poses as a public lecturer has never learned to do, and that is to adapt his mode of address so that he may make whatever he has to say of interest to the particular audience in question. On a recent trip a university debating team on four successive days presented four essentially different lines of argument to a high school convocation audience, a business men's luncheon club, a radio audience and an audience made up of university students. In these situations the speaker is always under fire from his opponents in debate and frequently from questioners on the floor. Through this activity debaters also come to realize with Macaulay that 'Men are never so likely to settle a question rightly as when they discuss it freely,' and with Justice Holmes who said, 'The best test of truth is the power of thought to get itself accepted in the competition of the open market.'

"A second major value to be gained from training in intercollegiate debating is that it not only permits but compels students to think for themselves. The first step in this process of learning to think is the realization that most social questions are truly many-sided, that the opinions of others are just as likely to be correct as one's own. A mind diseased by blind defense of basic attitudes so unreasonable that they will not stand the light of critical analysis needs and may profit by the health-giving sunlight of public discussion. Debating may well be called an intellectual clinic for personal prejudices.

"The debater goes on to learn the technique of collecting and assembling the materials for argument. Each bit of material is tested for both logical and persuasive value. Propositions are torn apart

Continued on page 4, column 5

Quigley Urges New Procedure For Open Door

United States Might Help Save Asiatic Market Under Proposal

Softening the celebrated Open Door policy of the United States government in China was proposed to the American Political Science Association at Atlanta by Dr. Harold S. Quigley of the University of Minnesota.

Present American policy in the Far East is ineffectual, he said, because it requires force to support it. Under modifications, however, the policy might bring Japan to welcome our co-operation in the economical development of China, he said.

Three steps would be necessary in the "denaturing" policy, Dr. Quigley asserted. We could abandon extraterritoriality, withdraw our troops from China, and cease trying to hitch that country to our financial system.

"Of the three theoretical alternatives open to the United States: renunciation of the policy of the Open Door, attempted maintenance of the policy by war, or attempted maintenance by diplomacy, the last-named being our present procedure, the first alone is consonant with neutrality, meaning thereby impartiality," said Dr. Quigley. The second would discard neutrality, while the third is logically, though not legally, inconsistent with it. If we continue to follow the third alternative, the president should not be, as at present, bound by an automatic proclamation of neutrality in the presence of serious hostilities between two foreign states.

"President Roosevelt has not seen fit to apply the Congressional resolution of August 31, 1935, requiring a declaration of neutrality and an embargo upon arms 'upon the outbreak or during the progress of war' to the controversy between China and Japan," he said. "Although the actual warfare in the Far East has been recognized by no government, American reluctance to proclaim neutrality is no doubt based upon our special policy toward China, known as the 'Open Door' and 'Integrity of China' policy. Under these policies we have rights and obligations which run counter to a program of neutrality, though the obligations probably do not go so far as to render our neutrality in a Sino-Japanese war a breach of treaty.

"Under the Open Door policy, which was derived from the determination of the United States to enjoy equality of commercial and industrial opportunities with other powers in the development of China, the American government opposes the apparent program of Japan to establish political control over China, to partition that country, and to make the Chinese economic satellites of Japan. But its protests and its non-recognition of Manchukuo have been ineffectual because they have not been supported by force nor threat of force. The peace movement in America is growing stronger and may demand that the Open Door policy be discarded.

"Our present procedure is ineffective in discouraging the plans of Japan but it is unlikely that we can, by agreements or embargoes against her with other signatories of the Pact of Paris or through arrangements with the League of Nations, bring effective pressure upon her.

"What we can do is to denature the open door policy surrendering extraterritoriality in China, withdrawing our troops, and refraining from efforts to hitch China to our financial system or to influence her to adopt our form of government. Public opinion is opposed to war, yet it would be difficult to renounce so well-rooted a policy as that of the Open Door. Our present program, therefore, is the proper one, but it needs to be accompanied by such moves as those suggested above to reassure Japan. If Japan is relieved of apprehension for her own security there is reason to believe that she will welcome our co-operation in the economic development of China."

The Modern Curriculum in English

By Dr. Dora V. Smith
Associate Professor of Education

The modern curriculum in English aims to keep close to life. It puts first in its program of instruction those aspects of speaking, writing, and reading, in which the world of today demands proficiency. In the realm of expression it recognizes a three-fold responsibility, to give boys and girls something to say, a valid social purpose in saying it, and the necessary technical equipment to say it effectively. A large part of the course is therefore directed toward the broadening and deepening of experience and toward the stimulation of thought concerning problems meaningful to childhood and adolescence as well as to the larger social world. A program of activities calling for such expression undergirds, therefore, the present day course in English, for it is the conviction of the modern school that sincerity and effectiveness of expression grow out of a social urge to speak and write far more readily than from the artificial stimulus of the set assignment of themes.

Studies of the use of language among both children and adults indicate the activities in which they normally engage—informal conversation, committee or small group discussion, presenting one's point of view or reporting information to a group, sharing personal experiences, and the like. On the assumption that it is the business of the schools to teach boys and girls to do better the desirable things they are going to do anyway, these informal uses of language are being substituted in modern courses of study for forfer lengthy units in such rhetorical elements as narration, description, exposition, and argument.

There is a tendency also in recent programs in English to judge pupil progress in terms of ability to use language rather than in terms of adroitness in labelling the parts of speech or in any of the other activities of the old time course in formal grammar. Increasingly common also is the positive emphasis upon effectiveness of expression instead of mere negative stress upon the elimination of error.

Certain pupils in our schools show a marked degree of talent in the creative aspects of expression. For them, courses in creative writing are being organized that they may develop their powers to the utmost. At the same time, pupils whose major concern is with the utilitarian aspects of expression are not subjected to these more literary tasks.

Similarly we assume responsibility for three phases of instruction in reading. We wish to send out boys and girls from our high schools who know how to read, who know what is good to read, and, most important of all, who want to read what they know is good to read. When we speak of knowing how to read, we mean much more than mere ability to get the thought from the printed page. We want our pupils to read intelligently, to be able to reflect upon their reading, to organize their ideas, and to apply them to the purpose in hand. Furthermore, we hope they will be skilled in those practical aspects of skimming newspapers and magazines vital to any real grasp of current affairs, and in addition, able to make ready use of books and libraries and recognized sources of reference.

As pupils of widely different social background and of varying degrees of intelligence enter the high schools of this country, the problem of proper guidance in reading becomes increasingly complex. The old program of a few set classics is totally inadequate for pupils of any level of ability, and utterly beyond the powers of many. Intelligent readers of today follow with interest a wide variety of themes in reading. Science and nature study, discovery and exploration, social and economic problems, the radio and motion picture, the realms of art and music, of literature and the stage, the stories of leaders in many walks of life—these and more demand attention from the alert and informed reader in America today. Good books, many of them of high literary value though not in the realm of the classics, deserve a place in the broadened program of literature. Fiction, drama, and poetry of our own day demand equal consideration with those of the past, for only thus can standards of evaluation be achieved. If boys and girls are to know what is good to read, and to desire to read what they know is worthy of their attention, an extended program in literature commensurate with their needs and their interests is a paramount necessity today. Educators are at work studying those interests, and at the same time, the demands of a twentieth century world. They would remember the broader social purposes of secondary education. They would remember also the need for the enrichment of personal living which comes through intimately associating with one's daily experience the thoughts and experiences of those great spirits of today and yesterday who have much to share. They would, above all else, develop some kind of program in the teaching of literature which would insure among the boys and girls of America a life-long habit of association with good books.

Such a program demands library facilities greater than most schools and communities possess.

The immediate necessity is to surround boys and girls with a wealth of good books to offset the effect of newsstand and corner drug-store. If we know anything about children's habits in reading, it is that they read whatever is accessible. That is their challenge to home, school and community. We have convinced our communities that we cannot teach cooking without stoves, and that we cannot teach typewriting without typewriters. It remains for us to convince them that we cannot teach a love of reading without books.

The National Council of Teachers of English

The National Council of Teachers of English is entering upon its twenty-fifth year of existence as an organization concerned with promoting fellowship, mutual understanding, and improved courses and methods of instruction among teachers of English at all levels of our educational system. It has an elementary, a high school, and a college section, the latter including instructors in both colleges and universities and in teacher training institutions. Its membership includes the leaders in the profession from all sections of the country. Its official organ at the high school and college level is The English Journal. The Elementary English Review goes to its members in the elementary school.

Standing committees on research, on reading and literature, on usage, on creative writing, on teacher training in English, and on the relationship of English to the radio and motion picture show something of the scope of its work.

Publications of the Council include reading lists for the junior and senior high school and for the college level also, with one in preparation for the elementary school, a checklist for the evaluation of text books in composition, a guide to play production, and the Leonard Memorial Monograph on Current English Usage. Its most recent contribution of this fall is the publication by a commission of one-hundred experts in English of An Experience Curriculum in English from the kindergarten to college, a document which will undoubtedly exert a powerful influence upon the teaching of English in the immediate future. The college section of the report appeared last year under the direction of Professor O. J. Campbell, formerly of the University of Michigan, now of Columbia.

The headquarters of the National Council are at 211 W. 68th Street, Chicago.

The last three presidents were Charles Swain Thomas of Harvard, (1935), O. J. Campbell of Columbia, (1934), and Rollo L. Lyman of Chicago, (1933).

To Open Natural History Museum

The Museum of Natural History in the Zoology building at the University of Minnesota will be open to the public Sunday afternoons during January, February and March. Hours of opening will be from 2 to 5 p. m. according to William Kilgore, the curator. Besides the large habitat group of important Minnesota animals, such as deer, beaver, aquatic birds and the like, scores of small groups of wild creatures are on display in the museum.

Learned Societies Honor Minnesota Faculty Members

A number of important honors have recently come to members of the University of Minnesot faculty. Dean Guy Stanton Ford was elected first vice-president of the American Historical Association at its recent meeting in Chattanooga, Tenn. This means his automatic advancement a year hence to the presidency of this organization, which is one of the outstanding learned societies of the United States.

Dunham Jackson, professor of mathematics is the winner of the Chauvenet prize of the Mathematical Association of America, awarded for the period 1932-'34, it was announced by Professor William Hart, department head. The prize was established in 1925 "to promote and stimulate publication of expository articles in English in mathematical journals." It is awarded by a committee whose duty it is to select the author of a noteworthy mathematical exposition published in a specified three-year period. Dr. Jackson's articles, on which the award is based, were three related essays on "the convergence of Fourier series and related topics in the theory of series of orthogonal polynomials, and series of orthogonal trigonometric sums." The award was made at the recent meeting of the Mathematical Association of America in St. Louis.

When the American Association of Teachers of Journalism met recently in Washington, Dr. Ralph D. Casey, department head, was elected to a three year term on the association's council on research in journalism. Professor Ralph Nafziger was chosen for a one-year term on the same council.

First Graduate In Extension Back in Class

The General Extension Division of the University of Minnesota has its first post-graduate student. He is Karl Koehn of St. Paul, who last spring was the first man to obtain a regular degree, as distinct from a certificate, for work done in extension. He won his degree "cum laude."

The division has hundreds of students who are college graduates, but has never had a graduate student of its own before, because it had never had a graduate.

Mr. Koehn, who took work in the Extension Division for thirteen years before he got his degree, specialized in French while he was an undergraduate. Now he is taking up algebra. He has had algebra, but is determined to review the whole field. He is also continuing with advanced French. Koehn, the first graduate student, is an employee of the Minnesota Mining and Manufacturing company of St. Paul.

According to Irving Jones, who tells the Koehn story, another degree will be granted next spring to another night student who is specializing in French. This, he says, will be as interesting as the first case, as the student, a Minneapolis optometrist, will graduate from the extension division at the same time that his son is graduated from the Medical School.

Faculty Men Write New Books

Continued from page 2, column 5

it is no great problem to find the better physician, whereas in a large city, with many physicians and specialism highly developed, the task is more difficult and also more necessary.

There is also sound advice with sight.

"Eyes will stand considerable abuse, but if one expects efficient service from them day after day and year after year they must be given reasonable care. When used for close work the eyes should be rested at frequent intervals by looking at a blank wall or at some distant object. During illness and convalescence they are susceptible to fatigue and so should be used sparingly. They need protection during infectious diseases, particularly measles.

"Reading in bed frequently produces eyestrain because the book, magazine or paper is not held in a proper position, and lighting is inadequate and poorly placed.

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 JANUARY 14, 1936 NUMBER 6

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

Uniqueness of Human Individual Discussed by Dr. John E. Anderson

Single Experience Important to Extent That It Affects Life Stream

The fact that every human being is unique may require a new explanation by psychologists, namely that individual behavior is a result of perfectly lawful and natural processes, not that each individual's behavior is a "variant," psychologists in Section I of the American Association for the Advancement of Science were told today by Dr. John E. Anderson, director of the Institute of Child Welfare at the University of Minnesota. Dr. Anderson spoke as retiring vice-president of the psychological section.

"As the outcome of the interrelation of the organism, man, and his environment, each individual comes to possess the quality of uniqueness," Dr. Anderson said. "This is not accidental, but is the result of lawful forces operating throughout the developmental period. Starting with differential heredity, moving into a differential environment and subjected at all times to a differential selective process that sorts over all his capacities and skills, he comes to be unique and different from every other of his kind."

He traced the way in which human responses are altered from the general responses of infancy to the more and more specific responses that come to be required by the demands and restrictions of environment. Thus, stimulating the skin of an infant in any of a number of spots will lead the child to make sucking motions, but a man who wishes to make a 200 yard drive off a golf tee must do something highly specific, no matter if the situation also makes him wish to wiggle his toes.

Man is continually learning, or responding to new situations and stimuli, but for any segment of learning, significance for later behavior depends upon the manner in which experience affects the developmental stream. Thus, he explained, it may be that a boy of 10 can learn to swim more easily than a boy of six, but if a boy learns to swim at six he may become so interested in swimming, may learn to swim so skillfully, and may develop so many other interests related to swimming that his having learned at the earlier age makes a vast difference in the development of the "uniqueness" which he ultimately possesses.

As an example of the effects of like acts on the stream of history he cited two discoverers of America.

"One, Leif Ericson, made the more hazardous voyage and the greater accomplishment when considered in terms of the moment," he said. "The other, Columbus, made by far the greater accomplishment in terms of the ultimate outcome. For in the first case there was no effect upon the developmental stream of history; in the second case the effects continued throughout centuries and will continue through many centuries more.

"Children," said Dr. Anderson, possess one characteristic that is essential for the understanding of human behavior: they are always 'becoming.' Difficult as is the task of writing descriptions of human behavior in dynamic terms, hard as it is to get away from classification and terminology, nevertheless there are many indications that we are now moving rapidly away from the conception of elements of behavior, as we earlier moved away from the conception of elements of sensation, into the realm of human dynamics. To such interpretations of behavior the child psychologist has something to contribute, for he studies and deals with human behavior in the making."

Finance Report On "U" Issued

Continued from page 1, column 5

In student loan funds cash balances gained about $20,000 to $95,849 during the year and outstanding loans declined $11,000 to $237,015.94. This latter was due partly to available federal and state scholarships of which about 1,000 students availed themselves, Mr. Middlebrook explained.

The report showed that no new departments were added to the university, either in 1933-'34 or in 1934-'35. Student totals gained heavily in all departments, and were said to be 50 percent greater than in 1925, during which period there had been no increase in support from State of Minnesota sources. There were 16,425 college students, 3,029 non-college students and 9,029 extension students as against, in 1933-'34 15,141 college students, 3,935 non-college students and 7,275 extension students.

Debate Deals With Reality

Continued from page 3, column 5

through analysis until the fundamental issues, the real causes for difference of opinion, are brought to light. Habits of thinking such as generalization on the basis of of meager experience, erroneous inferences regarding casual relationships, careless interpretation of statistical evidence, and blind worship of tradition are broken down in favor of the use of more objective methods of thinking. Compartmentalized patterns of thought give way to a consistent and integrated attack of the entire thinking process on the problem at hand.

"As discussion proceeds the debater learns to distinguish the significant from the insignificant, the irrelevant in the material that is present. But it is not enough to assemble and test the evidence applicable to the proposition. The debater must take a stand on the basis of the accumulated evidence; he must decide whether or not the evidence justifies his approval or disapproval of the proposition. The evidence must be woven into a case for which the individual accepts responsibility. Thus, positive attitudes toward social problems are developed. Education of this type does not lead to inaction through creation of the inhibitions of doubt. Although convictions are generated on the basis of information, the debater also learns to agree with Emerson who wrote, 'A foolish consistency is the hobgoblin of little minds.' No one recognizes more quickly than the well trained debater when he is beaten in argument, and if his training is thorough, he has learned how 'to take it.' Convictions are recognized as a legitimate basis for action only so long as the ever-present ever changing panorama of evidence continues to justify the action. When a rennaissance in information occurs a reformation in action must result. Quite contrary then to the idea that education leads to inactivity, the education of the debater is such that he is led constantly to the making of positive adjustments to his environment. Because the debater's convictions are intelligently formulated, not only does he learn how to change his attitudes but he also learns how to maintain his position when the new evidence does not justify change. By learning to recognize quickly when others obscure thought by use of purely emotional appeals or faulty reasoning, the debater provides himself with a kind of insurance against gullibility."

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | FEBRUARY 4, 1936 | NO. 7

Cultural Studies Principal Need Of Pre-Medics

Investigation by National Group Describes First Year Students

"B.A." IS BEST START

Two Years of Preparation Shown Not So Good as More

Cultural studies, and particularly a series of cultural studies pursued to the B.A. degree constitute the best preparation for the study of medicine according to an investigation by Fred C. Zapffe, secretary of the Association of American Medical Colleges, published in the Journal of that association. Attention to the facts revealed has been called by Dean E. P. Lyon of the University of Minnesota medical school.

Minimal preparation for admission to medical school is becoming increasingly less satisfactory, Mr. Zapffe reported, and preparation that stresses science as against arts subjects, although students with the B.S. degree rank next to those with the bachelor of arts degree, is less satisfactory than cultural preparation. These statements all are based on the accomplishments in seventy-five American medical colleges by first-year students with the different types of preparation. Between these two latter groups, however, the difference as expressed in percentages is not great.

The worst showing in medical schools is made by students who have attended college four or more years but have not obtained a degree before entering medical school. The next worst showing is made by those entering with a minimum of preparation, namely sixty to ninety hours of college work. Those who have spent from three to four years on premedical work are next in a progression toward the top, students with the bachelor of science degree next and students with the bachelor of arts degree best.

The data may be considered authoritative inasmuch as it covers 6,468 students in 75 medical schools, not counting those from Johns Hopkins, Yale and Chicago, who are not representative because practically all of them have a college degree before taking up medicine.

How Minnesota compares with other medical schools in the numbers entering with various amounts of preparation is shown in the following table.

Class	75 Colleges	Minn.
Two to three years of preparation	20.4%	54%
More than three years but no degree	32.9	32
With degrees before entering	45.5	14
Others	1.0	.....
	100.0%	100%

Minnesota is therefore above the average with respect to the number of its students who enter medical school immediately after the completion of a minimal pre-medic course of two years. This difference is to be explained in part by the fact that in the eastern states a great many students attend colleges that have no medical course, and these students complete an undergraduate course before they decide what profession to follow. Large numbers of them go into medicine, and usually they are among the best students.

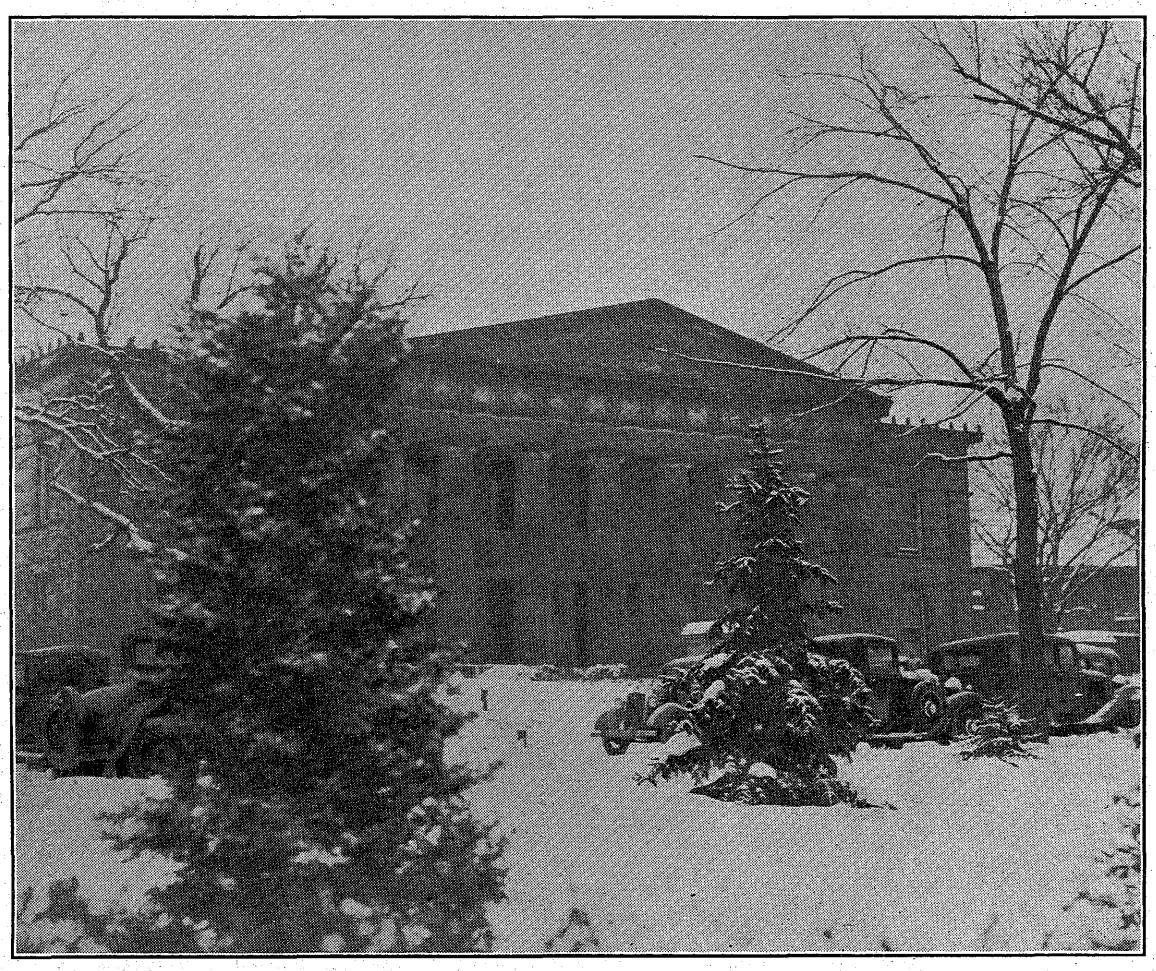
"Minimal preparation does not permit of taking much more than the prescribed subjects (premedical) hence it is more scientific than cultural, and not a great deal of the former" says the Zapffe report. "Students who have taken more cultural than scientific courses, with careful selection of subjects, apparently have the best preparation for the study of medicine—if their accomplishment in medical school is a fair criterion for judgment. The findings are a good argument against minimal preparation and for more cultural training.

"The largest percentage of clear records was made by the B.A. group, 74.4 per cent. The same group shows the lowest percentage of failure, 8.0. The minimal group shows the smallest percentage of encumbered records, 12.9, but except for the four years or more group, in which there were no bachelors degrees, it also shows the largest percentage of failures, 14.9, and again, except for the four year plus group the smallest percentage of clear records, 68.8.

"The A.B. group, which is the largest, has the best record in every way, hence it may be assumed to represent the best type of training for the study of medicine. The B.S. group ranks second.

"The 'other degrees' group contains many Ph.Ds. They do not seem to do well in medical school. The lack of knowledge as to the subjects in which these men majored does not permit of making deductions as to possible factors or reasons for such poor accomplishment, but the small percentage of failures in this group 4.6, might lead one to infer that the accomplishment of this group in the subsequent years of the medical course may be considerably better than it was in the first year. These men may orientate themselves later and show much improvement in scholastic standing, probably ranking high."

Winter Snow Decorates "Parthenon" of Minnesota



Burton Hall, formerly the library of the University of Minnesota, is said to be an exact duplicate in most respects of the famous Parthenon in Athens. It is subjected, however, to a somewhat different climate, so has been much more carefully enclosed.

"Education for Social Control" Theme of Papers by Campus Writers

Dr. Harold Benjamin of College of Education Edits Important Volume of Contributions

"Education for Social Control" is the title of an issue of the "Annals of the American Academy of Political and Social Science" that has been edited during the past year by Harold Benjamin, professor of education and assistant dean of the College of Education in the University of Minnesota. Different ones among its many articles ask whether education shall aim at social control, discuss phases of education in the United States as they bear on social control and narrate the efforts and accomplishments of other countries as they have sought social control through education.

Dean Benjamin is himself the author of two of the articles, as well as the foreward, his discussions dealing with education in Denmark and in Mexico. A leading article, "The Paramount Service of Education to Society" is by Dean Melvin E. Haggerty of the College of Education at Minnesota. Edgar B. Wesley, associate professor of education contributes an essay on, "A Socialized Education for a Socialized Age," and Lucien B. Kinney, a Minnesota school superintendent, writes on, "Education for Economic Security."

"On the cobblestones of Rhenish villages, along the winding roadways of Prussia, Saxony and Bavaria, there resounds today the steady clump, clump of youthful feet," writes Dr. Benjamin in his "Foreword." "With 'Heil Hitler' and 'augen hoch' salutes, the young people of Germany are responding to a mass education whose goal is the good of the totalitarian state. In every city and hamlet of Italy, the little sons of the Roman wolf, with martial scowls upon their baby faces, receive the fundamentals of an education which their elder brothers are carrying to its logical conclusion in Ethiopia. In Russia the schools and other educational agencies are directed toward a predetermined goal from which no deviation is allowed. In these as in many other, less conspicuous instances, the members of the ruling class have no doubts about the power of education to exercise social control and produce social change.

"In the United States as elsewhere, the problem of education for social control is exhibited in many troublesome questions. May the education of schools be used in a direct attempt to reconstruct society, or must that task be left to such other educational agencies as the press, the radio, the motion picture theater, the political party and a host of special organizations, each with a little axe for the learning youth to grind? Shall the school be allowed to change its pupil's ways in any respect it considers desirable, or only in a few respects? Is it working within its proper province when it changes man's informational ways, but working outside its proper field when it changes his emotional ways?"

Answers to these and other questions are attempted in the many articles in the volume.

Academic freedom, freedom to teach and to learn, is one of the major school topics of the present, and it is dealt with by Dean M. E. Haggerty in the concluding passages of his article on, "The Paramount Service of Education to Society." Here he writes:

Issue of Academic Freedom

"If we accept the idea that the schools shall use debatable issues as a necessary instrument of education, we come at once upon complex problems of instructional method on the one hand and of the social control of educational institutions on the other. Neither of the two aspects of this matter is well

Continued on page 3, column 2

Former Teacher At University Reaches Ninety

Mrs. Mathilda Wilkin, who taught German in the University of Minnesota from 1877 until 1911, was honored by members of the University Baptist church Monday, January 27, on the occasion of her ninetieth birthday.

Mrs. Wilkin, who lives at 601 Sixth street southeast is a native of Maine but came to Minneapolis—then St. Anthony—in April, 1870. After teaching in the public schools three years she attended the University of Minnesota and was graduated in 1877 as class valedictorian. From 1877 to 1911 she was a member of the university faculty. The Rev. George F. Wilkin, whom she married in 1882, died in 1924. Since her retirement in 1911, Mrs. Wilkin has been active in University Baptist church affairs, the W.C.T.U., Women's College club, Faculty Women's club, Minnesota Alumnae club, Minneapolis Council of Federated Church Women and Delta Gamma sorority.

'Words' as Used By Great Writers Topic of Address

Dr. Colbert Searles Speaks as Head of Modern Language Body

ASKS NEW ATTITUDE

Concern With Details of Literary Private Lives Overdone He Says

"Words" was the subject of the presidential address before the Modern Language Association of America delivered at its Cincinnati meeting in December by Professor Colbert Searles of the Department of Romance Languages in the University of Minnesota.

The greater part of the address, in which he makes an appeal, among others, that critics and students of literature pay less attention to the personal details, often unsavory, of the lives of great literary artists, and devote themselves more to the comprehension and enjoyment of their works, is printed below.

When one reads, even in translation, what is left of ancient Greek literature one marvels at the sensation of directness which the words convey. These words are more than symbols of things, thoughts and sentiments: they are things, thoughts and sentiments. The sense emanates from them much as the tone of a violin in the hands of a virtuoso seems to hover in space, quite detached from the instrument and the artists. Is it not perhaps because we know so little of the Greek poet and the conditions under which he wrote? Take, for example, the line and a half from the Bacchae of Euripedes where the poet, speaking of Dionysius, says:

"He giveth night that sinks the fretful day
In cool forgetting."

Would we have the same instantaneous and grateful recognition that we find here, luminously expressed, a sensation that comes often into the experience of all who live? And should we feel to the same extent the divine fitness of those adjectives, "the fretful day," "cool forgetting" if our memory made us read them through a barrage of more than prosaic details about the private life of Euripides, his troubles with his landlord, with the censors, the actors and his amours? If we had to read him for example as we can hardly escape reading "Le Misanthrope" of Moliere?

Ancients Not Concerned

The ancients indeed seem to have had very little curiosity in regard to the private life, the personality or even the moral qualities of their poets. Perhaps, believing that the poet is privileged to hold intercourse with the gods, they fancied that such distinguished persons should be treated with discretion and respect. Perhaps they were satisfied with merely enjoying truth and beauty, cast in artistic word patterns, and did not care to grub in the soil out of which these fine things came. The recurrence or even the imitation of such simplicity has without doubt been made forever impossible by the progress of modern civilization.

And yet the study of language and literature is still classified as one of the humanities, a term which, according to Webster, is used to designate the "branches of polite learning." It is at all events a study which deals with human phenomena and it should be feasible to preserve one's scientific attitude and still treat human phenomena in a human way. Poets and writers in general are made of the same stuff that those who study them are made of; the only difference is that the former generally see things more quickly and clearly, feel them more keenly and express them in words which are better chosen and more skillfully arranged. The fact that they be-

Continued on page 4, column 1

Dr. Willey Reports On Teacher Status

Preliminary Findings Told in Study of Depression Conditions

Publicly supported educational institutions cut teachers' salaries sooner than private colleges did when depression years came on, but the private colleges and universities have been somewhat slower to restore salary decreases than have the public ones. This, together with the fact that college and university faculties are today somewhat larger in size than they were before the depression were among findings presented to the American Association of University Professors recently by Dr. Malcolm M. Willey of the University of Minnesota at St. Louis, Mo. He and Dr. F. K. Richtmyer of Cornell reported on the association's study of the effect of depression and recovery on higher education to which Dr. Willey is devoting most of his time this year.

Minnesota has given Dr. Willey leave of absence this year to serve as director of this study on behalf of college and university teachers. He called the study important because "the welfare and achievement of higher educational institutions will not evolve far beyond the general welfare and the achievement of the faculties."

The survey questions used in the preliminary report covered 96 institutions that answered, out of a total of 752 exclusive of territorial and racial schools and junior colleges. These had 13,932 faculty members.

Dr. Willey pointed out that in economic reactions to general conditions educational institutions seem to show a lag of about two years behind the date of changes in the business and financial picture.

Every one of the western institutions that replied to the questionnaire had cut salaries, as had more than 93 percent of the southern institutions, but in the east 68.8 per cent reduced salaries. Because the western institutions were almost all tax supported the report suggested that the sensitiveness of publicly supported institutions to temporary public opinion may have been too great in view of the large number of cases in which these reductions have since been restored. Dr. Willey asked if this difference of attitude was not a favorable factor in the competition between public and private universities for the ablest teachers.

"Does not the private institution in its search for able men have here a bargaining factor that will inevitably appeal?" he asked.

The younger members of university faculties suffered somewhat more than did the older men, and in three ways, reduction in the number of teaching positions in the lower ranks in the first depression years, relatively greater salary cuts when a flat percentage figures rather than a graded one was applied to all salaries, and in the somewhat prevalent practice of not filling vacancies when they occurred.

Nearly half of the eastern institutions that made cuts have made restorations, the report showed, while in the west slightly more than one third have taken that step.

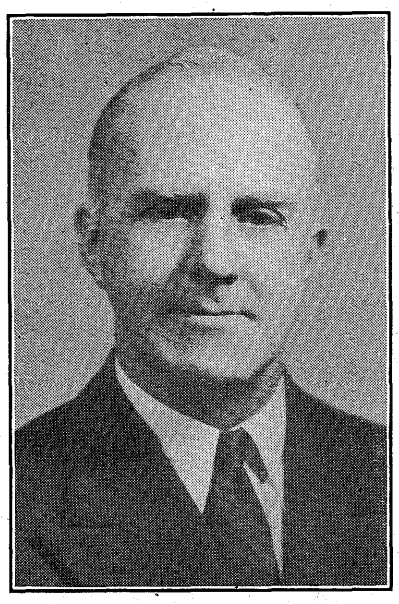
Some promotions with pay increases were made throughout the while period of the depression, but they were relatively few and their number provides a chart of the sentiment of higher education towards general conditions year by year. Thus in 1931-'32 among the entire 96 institutions 190 faculty members received promotions with pay increases; in 1932-'33 only 59; in 1933-'34 some 76; in 1934-'35, 124 were made and during the present year, '35-'36 there have been reported 234.

"Promotions with pay are obviously being resumed," the report said, "yet at many institutions all advance with corresponding salary increase has been blocked for five years. This cannot fail to engender discouragement, especially among the younger members of the staff.

These promotions were made at 53.5 per cent of the public institutions and at 71 per cent of the private colleges. The east and south showed better records than the west.

The report showed that the term of appointment also militates strongly to draw faculty members from public and church institutions to private institutions. Thus 64 per cent of public institutions appoint for one year only, as do 55 per cent of the denominational, while only 22.6 per cent of private colleges follow that policy.

New Men Fill Two Coaching Posts



Laurence Armstrong

David Bartelma

Two new coaches, both with outstanding records in their respective sports, have been appointed to the University of Minnesota coaching staff and will send their first teams into competition this year. They are Laurence S. Armstrong, who will serve as the Gopher's new hockey coach, and David C. Bartelma, who will coach wrestling.

Armstrong has succeeded Frank Pond, hockey coach since 1931, who retired to devote his time to business. Bartelma was appointed to fill the position as wrestling coach left vacant by the resignation of Blaine McKusick, who had been associated with the department of athletics and physical education since 1922. McKusick will devote his time to his duties as an attorney and as a member of the teaching staff at South high school in Minneapolis.

Minnesota's new hockey coach comes to the university with an excellent record as a coach, having been associated with hockey in St. Paul for several years. He was appointed manager of the St. Paul team in 1930 and directed it to a league championship. He retired temporarily from coaching to enter business in St. Paul, but was called back into service as manager and coach of the Saints last season and directed the team to another title.

Mr. Armstrong received his first experience in championship hockey as a member of the old St. Mathews Club of Winnipeg. He is also one of Canada's all-time track stars and twice represented the Canadian team in Antwerp.

During the 1934 Olympic games in Paris, Mr. Armstrong was decorated by the president of France for being the oldest man ever to compete in the Olympic sprints. He was 38 years of age at the time. Mr. Armstrong is a resident of St. Paul.

Mr. Bartelma comes to the university after several years spent in coaching wrestling at Iowa Falls and Cresco, Iowa. During the 10 years of coaching he directed six undefeated teams and his teams won the Iowa state high school championship in 1933 and in 1935; the Northwest Iowa district team championships for five consecutive years and several other titles. Some of the high school men he coached won bouts from college champions.

During the time he was coaching at Cresco, Mr. Bartelma directed his teams to victory in 48 out of 50 dual meets, including a string of 34 consecutive victories. He is a graduate of Iowa State Teacher's college and received his master's degree from the University of Iowa. In 1927, while wrestling in tournament competition, Bartelma won third place in the 135 pound class of the National A. A. U. contests.

President Names Institute Board

Administrative Body for New Technological Group Selected

Sixteen members of the faculty of the University of Minnesota have been appointed by President L. D. Coffman to serve as an administrative board of the newly created Institute of Technology, headed by Dr. S. C. Lind, who formerly was director of the School of Chemistry. The Institute takes in the College of Engineering and Architecture, with its experiment station, School of Mines and Metallurgy, with its experiment station, and the School of Chemistry.

Those named and the departments they represent are: Professors Frederic Bass, civil engineering; John M. Bryant, electrical engineering; Edward W. Davis, Mines Experiment Station; Charles A. Mann, chemical engineering; Lee I. Smith, organic chemistry, for three years.

John R. DuPriest, mechanical engineering; William Kirchner, drawing and descriptive geometry; Frank H. MacDougall, physical chemistry; Walter H. Parker, mining; Frank B. Rowley, Engineering Experiment Station; and M. Cannon Sneed, inorganic chemistry, for two years.

John D. Ackerman, aeronautical engineering; William E. Brooke, mathematics and mechanics; Isaac Kolthoff, analytical chemistry; F. M. Mann, architecture, and Levi B. Pease, metallurgy, for one year.

Assistant deans of the several units will also serve.

State Will Try New Dairy Cattle

In co-operation with the United States Department of Agriculture, the Minnesota Agricultural Experimental Station, at its branch in Waseca, will try out for the federal government a new breed of dairy cattle in breeding experiments. The new breed is known as the "Danish Red" and has been developed within the last fifty years, according to word received at University Farm, St. Paul, from Washington.

Twenty-two heifers and two bulls, obtained from the Virgin islands, are being shipped to Waseca. The breed, however, was developed in Denmark from a foundation of Scandinavian red cattle improved with selections from the leading breeds of continental Europe. The heifers in the shipment are two-year-olds and the bulls are yearlings. The dams of the heifers have averaged 525 pounds of butterfat a year. The dam of one of the bulls has averaged 768 pounds, and of the other, 637.

Red Danish milk cattle make up about 95 per cent of the dairy cows in parts of Denmark, and the greater part of the cows on the east coast of Jutland. Nearly 50 per cent are in control associations which keep careful production records, and are similar to the dairy herd improvement associations in this country.

Graduate Student Named

Stanley P. Swenson, who for the past several years has been a graduate student and assistant in the division of agronomy and plant genetics at University Farm, has taken up a position with the South Dakota State college as Associate Professor of Agronomy and Assocaite Agronomist. Mr. Swenson was granted a master of science degree from the University of Minnesota last year and has completed most of his work toward a Ph.D., according to Dr. H. K. Hayes, under whom Swenson was studying.

Campus Oratory and Debate Prizes Are Among Oldest of 'U' Traditions

Dads Officers Offer Assistance

Communities Wishing to Form Chapters Asked to Send for Data

Organization of county chapters of the University of Minnesota Dads Association is going forward at a rate a little better than one a month according to Edward F. Flynn, president of the association.

In a report to the officers and directors at the association's recent annual meeting, Mr. Flynn urged that Minnesota Dads anywhere in the state who were interested in forming additional local associations, write to the secretary, Edward L. Eylar, 223 South Fourth street, Minneapolis, or to Mr. Flynn, care of the Great Northern Railway, St. Paul.

Meanwhile, reports of the university committee on Dad's Day showed that more than 900 had attended the annual banquet in November, including representatives as members or guests of more than 40 states in the Union and from all of the 87 counties in Minnesota.

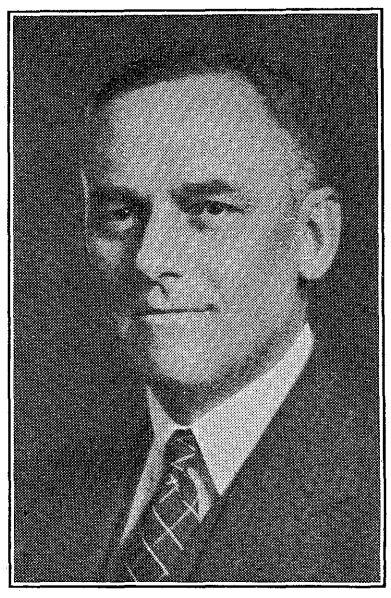
Up to now 34 Minnesota counties have formed chapters of the Dads Association, Mr. Flynn reported, and he is eager to extend the organization to cover the entire state.

Fourteen associations were formed during 1935, beginning on March 4 and concluding on October 20. They were in the following cities and counties: Appleton, Swift county; Willmar, Kandiyohi county; Minneapolis, Hennepin county; St. Paul, Ramsey county; Granite Falls, Yellow Medicine county; Hutchinson, McLeod county; Jackson, Jackson county; Fairmont, Martin county; Olivia, Renville county; Redwood Falls, Redwood county; Winona, Winona county; Wabasha, Wabasha county; Mora, Kanabec county, and Milaca, Mille Lacs county.

Communities that wish to form an organization will be given assistance by the central body if they write to either of the persons mentioned above.

Mathematicians Award Prize to Dunham Jackson

Professor Dunham Jackson of the department of mathematics in the University of Minnesota is the winner of the Chauvenet Prize of the Mathematical Association of America, recently awarded for a term covering the years 1932-'33-'34. The award was announced at a recent mid-winter meeting of the association in St. Louis. This prize, granted at three year intervals, was established by the Mathematical Association in 1925 to stimulate the publication of expository articles in English in mathematical journals. Only members of the Mathematical Association under fifty years of age are eligible to receive the prize. It is awarded by a committee which selects the author of a noteworthy mathematical exposition that has been published during the period. Dr. Jackson won the prize for a series of three related articles dealing with the convergence of Fourier series and related topics in the theory of series of orthogonal polynomials, and series of orthogonal trigonometric sums.



Dr. Dunham Jackson

Pillsbury Contest and Freshman Sophomore Debate Soon to Be Held

The interest long ago of two well known Minneapolis men in promoting excellence of composition and oratory among University of Minnesota students will enable several ambitious and talented students to share again this year in annual prizes from the contests then originated.

A former governor of the state of Minnesota and university regent, the late John S. Pillsbury, donated the first prize money for the best work in the department of rhetoric. That was in 1888. Today, the prizes are still being offered to members of the junior and senior classes for the best three orations on subjects selected by the individuals.

The first contest was conducted on June 6, 1889, when T. G. Soares, O. L. Triggs and Henry Johnson were judged the winners. In 1892 the winners of the contest were made the university representatives in the state oratorical contest by virtue of their success in the Pillsbury contest. This plan was continued until 1901 when Minnesota dropped out of the state contests.

Two outstanding men in the political history of the state are included in the long list of contest winners. They are the late Senator Thomas D. Schall, who won the contest in 1901 and 1902, and Theodore Christianson, former governor and present congressman, who was the winner in 1905. Joseph Warren Beach, professor of English, was one of the winners in 1898 and 1899.

This year, three prizes of $100, $50 and $25 will again be offered as prizes by Mrs. E. C. Gale and Charles Pillsbury, children of the former governor. The contest will be open to any member of the junior or senior classes. The deadline for the preliminary submission of orations has been set for February 15 by the Department of Speech, and the length of the papers fixed at 2,000 words. The winner of this year's contest will have the opportunity of debating at a later date against representatives of universities in the Northern Oratorical League, including Michigan, Wisconsin, Northwestern, Iowa and Western Reserve.

A $100 prize will go to the team winning the annual freshman-sophomore debate as the result of a prize contest set up in 1901 by Frank H. Peavey and continued annually by his two daughters, Mrs. F. T. Heffelfinger and Mrs. F. B. Wells.

For many years, $75 of this money was used to reward the winning debate team, while $25 of the amount was combined with a like amount taken from the Dunwoody contribution and awarded to the winner of the Peavey-Dunwoody oratorical contest. This latter contest was discontinued in 1910 and at the present time the entire $100 goes to the winning team in the freshman-sophomore debate to be divided equally among its members.

"Resolved: That the preservation of the unfit endangers the survival of our civilization," has been selected as the topic for the 1936 debate, which will be conducted near the close of the winter quarter. Both contests are directed by the Department of Speech, of which Professor F. M. Rarig is the head.

Forest Service Meant the 26th

Being sworn in on time is seemingly very important to the United States Forest service, to judge from the experience of Robert Richardson, graduate student in forestry at the University of Minnesota, who recently went west to take a job. Told he must be in Colorado Springs to be sworn in on December 26th, he found his schedule was a little slow and wired for instructions. He was told he must be sworn in on the 26th, as stated, and advised that a small town 80 miles from Omaha, was the only available place this side of Colorado Springs. By hiring a drive-self car in Omaha, he made it on time and was sworn in. Then he went on, half wondering if the requirement had been a first test of his ability to meet an unusual situation.

Faculty Man's Cousin Has Place Among Leading U. S. Business Women

Hortense McQuarrie Odlum Becomes President of New York City Department Store

A cousin of a member of the University of Minnesota faculty has recently been appointed to one of the most important business posts held by any woman in the United States.

She is Hortense McQuarrie Odlum, and her position is that of president of Bonwit-Teller, one of the leading department stores in New York City. In a recent letter to her cousin, Dr. Irvine McQuarrie, head of the department of pediatrics in the Medical School, Mrs. Odlum said that business has increased tremendously in recent months. As she wrote she was sailing for Europe to examine the offerings of merchandise in which her American customers might be interested.

As was Dr. McQuarrie, Mrs. Odlum was born in Utah. She is the wife of Floyd B. Odlum, organizer and president of Atlas Corporation, which is ranked by many business and financial experts as the most successful investment trust in this country. Atlas Corporation has absorbed more than a score of other investment trusts, large and small, which were unable to carry their inventories when market values of their securities sank so far below the acquisition price during the period of greatest stock market deflation.

Although she had had no great amount of business experience before she became president of Bonwit Teller, Mrs. Odlum now directs an organization of more than 800 employees. In an article about her printed in a Boston paper it is stated that her success has come from her ability to see a large merchandising establishment from the customer's point of view.

"I acknowledge no caste system here," she is quoted as saying. "There is one rule for all, from those who clean the floors to those who determine policies, and that is the faithful discharge of duties. We are all equals because every piece of assigned work is essential to the operation of the store." The illustration of this that came into her mind evidently amused her. "One afternoon it was raining pitchforks when I was ready to go home," she explained. "My car was parked at some distance from the store and I had no umbrella, so I sent the doorman to get the car for me. After he had departed a taxi drove up with two customers burdened with a number of packages, so out I ran and helped them in. Why not? When the doorman returned the cat was out of the bag and we all had a good laugh.

"My office is barricaded by no red tape. Any employee can find me here and I have made it a rule that all discontented customers shall be referred to me. I find out the cause of the trouble and then it is easy to remedy it. One day not long ago an old-time patron of the store abruptly closed her account to register her indignation at the way the adjustment desk treated her complaint regarding a lace dress which tended to tear away under heavy appliques. 'She was so rude, so rude,' this customer kept reiterating. Yet the remarks she quoted did not seem to me rude. I probed and probed and finally the truth popped out. 'The adjuster said I did not know lace,' she exploded. It was all clear. Wounded vanity! I assured her that of course she did know lace and had been buying it for many years. Then I went with her to the repair department and superintended the arrangements for the necessary mending and promised her that service whenever the weight of the appliques was too much for the mesh. 'Oh, but I did so want the dress to wear tonight,' she wailed. 'You shall have it,' said I. She lived in a neighboring suburb to my own, so I took the frock home with me that afternoon and sent it out to her residence by my chauffeur."

Such policies and attitudes go far to explain the fact that, in percentage of sales increase, Bonwit Teller is said to have led every large store in New York City during the first six months of 1935, and that sales volume continues to gain.

Book Describes Education for Social Control

Continued from page 1, column 4

understood by the general public, and many teachers seem far from clear upon the issues involved. As an aspect of popular education, the issue of freedom is to some extent new. At least it has risen in our day in forms that give it a novel aspect. In recent years freedom to teach has most often been challenged in the area of the social studies, in economics, in government, in social problems generally. The older generation will easily recall the fury that raged in the nineties about such questions as the theory of evolution and the verbal inspiration of the Bible. Vicious as was the assault upon the schools at that time, it is now not much more than a memory. The Dayton trial was a dying gasp. Not so in the realm of the social studies. Here the battle raged today, and one of the great tasks of adult education in our time is to lead the public to an attitude of enlightened social intelligence toward the problems involved. Clear thinking on the part of teachers would be of immense aid to this end.

"It should be recognized first and held in mind constantly that the issue of academic freedom relates primarily to pupils rather than to teachers. The issue is whether children and youth shall have freedom to learn, to go through the educative process of fashioning the pattern of their minds so that they will recognize evidence, weigh facts, and draw useful conclusions. The denial of academic liberty is the denial of intellectual opportunities to youth. It is upon this group that the battle must be waged. It almost always happens that when a question of freedom of teaching arises, the discussion centers about the teacher, as if the infringement of his rights and liberties were the important stake. This tendency always throws the emphasis in the wrong place and the whole issue out of clear focus. Attention should be kept where it belongs, upon the interests of students. Shall they be denied the processes of educational experience?

Calls Competence Predominant

"It should be accepted as a principle by teachers, and relentlessly defended, that the liberty to teach shall be founded upon the competence of the teacher to deal with the subject matter in issue. The teaching of controversial issues should be undertaken only by persons who because of scholarship and experience possess an understanding of them. This condition is not easily observed, since genuine competence in such matters as the complicated economic problems of our time is difficult to achieve. It is unfortunately true and should be at once admitted that only a small percentage of teachers now in the public schools are sufficiently trained in the field of the social studies to enable them to be sure and self-reliant guides to young people in their learning problems. Knowledge in our time is extensive and highly specialized, No less in the social studies than in the natural sciences, and only a fraction of teachers who are called upon to teach in these fields have that first-hand mastery of subject matter to make them indispensible teachers. It should be accepted as an inviolable principle that liberty of instruction is conditioned by genuine competence on the part of the instructor, and teachers must develop that academic conscience which restrains them from essaying freedom outside the realm of sound knowledge. Like any other person, a teacher is a mere layman in most intellectual areas, and is no more entitled to recognition outside his special field than is any other intelligent and educated person. The failure of some teachers to observe the limitations imposed by their incompetences confuses the public mind and constitutes a dire disservice to academic liberty. Economic science, confusing as it may be to most of us, rests upon special bodies of knowledge as certainly as does medicine. Its specialization should be understood and respected by teachers as a first condition for the public's support of instructional freedom in these fields.

About the Liberty to Learn

"Again, it should be recognized that the liberty to learn should be sincerely understood and interpreted in the conduct of the classroom. The student is entitled to those instructional conditions that enable him to acquire the information that he needs and to make the judgments which the evidence and his own intellectual needs require. It is his mind that is at stake, his mental pattern that is in process of being formed. He is entitled to realistic view of the factual world. His problem is to learn to think his way through such a world. The student should not be victimized by authoritative instructional pronouncements, delicious as these may seem to an instructor, because the student is not headed for a world dominated by authority, but for a world in which human reason struggles to prevail.

"Some persons who shout loudly for academic freedom do not mean intellectual freedom at all. What they mean is the substitution of one authoritative pattern of thinking for a prevailing pattern that they do not accept. They mistake the freedom to teach as the liberty to propagandize. Such persons do not contribute to genuine academic liberty. The child as a developing mind is no better served by one authoritative pattern than he is by another. What his needs require is the subjection of authority, the full view of evidence, and the unhampered freedom to exercise his own intellect in drawing inferences and conclusions. For an academic freedom which achieves these ends, both teachers and public-minded citizens can unite in an unyielding defense.

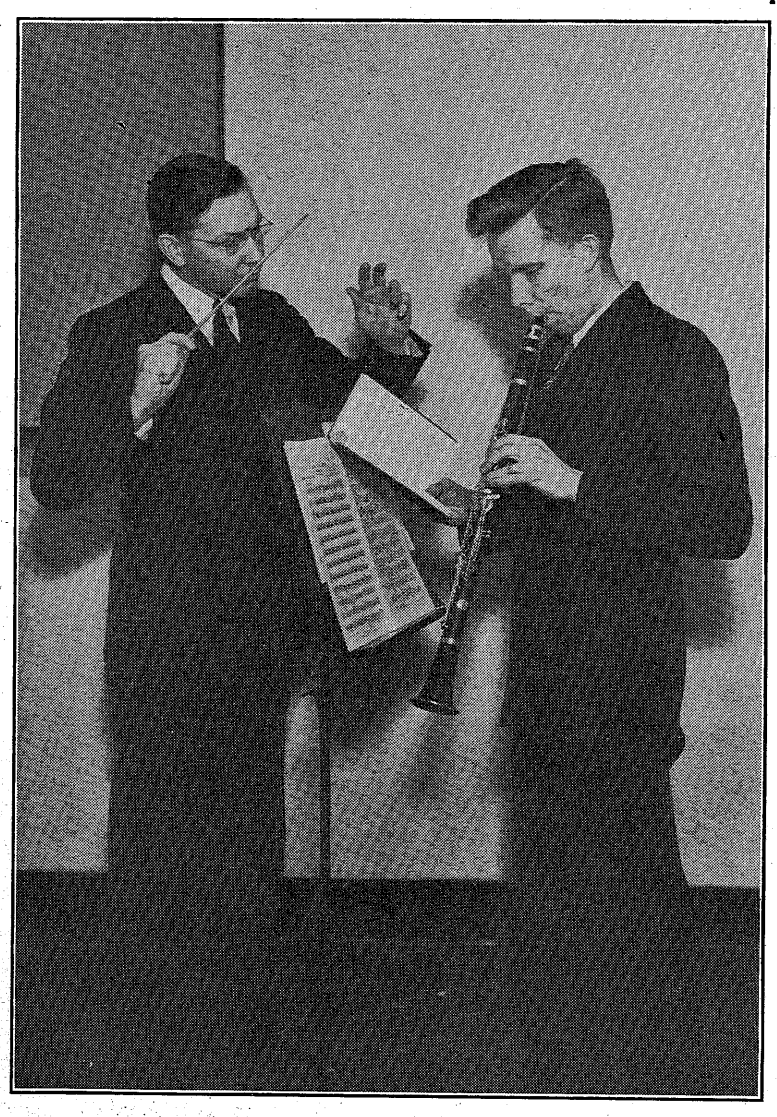
"One further obligation must be laid upon a teacher. He should respect the degree of mental maturity of his students. We may accept the view that before his schooling is finished a pupil should be confronted with the range of life's problems. It does not follow that he is ready for all of them while he is in the grades or in the secondary school. He is entitled to deal with problems at the level of his individual maturity. In this matter he is dependent upon his teacher.

The Public's Attitude

"In thus pointing out certain restraints and essential practices on the part of teachers and of those who administer the schools, we are seeking to describe the necessary condition upon which the public may fairly be asked to accept liberty of instruction in the schools as a sound social principle. For it must never be forgotten that the final sanction for academic freedom is social sanction. Teachers and teachers' organizations that demand liberty to teach as a phase of their individual or group rights "see through a glass darkly," and their overinsistence upon their so-called rights does harm. Important as such rights may be, they are trivial as compared to the rights of children and the welfare of society. The school should be free because only in free schools can individual pupils acquire the mental patterns that will fit them for life. Only free schools can fully serve society.

"To be sure, teachers and school administrators constitute the first line of defense for academic freedom. Their position is strategic. From it they cannot retreat either individually or collectively without betraying both the pupils in the schools and the highest interests of society. But the role they play is less a cause in itself than a symbol of a great social function. The evil influence of pressure groups that seek to coerce instruction should be resisted, since only by so doing can the common welfare be made secure. As this broad objective becomes increasingly clear in the public mind, it may be expected that society itself and its governing agencies will take over the defense of freedom in the schools. If this can happen, teachers relieved of the embarrassing role of self-defense may be free to direct their energies to the purpose for which schools have been created—the cultivation of youth."

Band Clarinetist Likes His Literature



Gerald T. Prescott, leader of the University of Minnesota band, is shown having an awful time with James Featherstone, 1606 Fourth St. S. E., Minneapolis, his star clarinet soloist. Featherstone, a student in English, recently won the Dewitt Jennings Payne Memorial Scholarship in English, of $200, the biggest single prize awarded at Minnesota. Now Featherstone studies all the time, including rehearsal periods.

"Blow, durn ye," says Prescott, urging his pupil on.

"O, boy," says Featherstone, "Just hear what Shakespere has to say about spring."

Printmaker Pictures Shown

The Ninth Annual Exhibition of the American Printmakers, comprising etchings, lithographs and woodcuts will be on display in the University of Minnesota Gallery, Northrop Auditorium , for one week beginning Thursday, January 23. Peggy Bacon, J. Stewart Curry, Ernest Fiene, Yasuo Kuniyashi, Prentiss Taylor, Reginald Marsh and Howard Cook are among those whose works will be shown. The gallery is open daily from 12:30 to 5:30 p. m. and will also be open before and after the Sigma Xi lectures on four Friday evenings beginning Friday, January 24.

William E. Brown of Los Angeles will speak in Burton Hall Auditorium, Tuesday evening, February 18, on, "Christian Science." The lecture, which will be public, is being sponsored by the Christian Science organization among students on the university campus.

Bass to Head Board of Health

Professor of Civil Engineering Has Had Wide Experience in Field

As a climax to an interest that has brought him into more or less constant contact with public health work in Minnesota since 1908, Professor Frederic Bass, head of the department of civil engineering has been elected president of the State Board of Health, directing body of the Minnesota State Department of Health, to serve during the year 1936.

From 1908 until 1915 Professor Bass was director of engineering for the board, a part-time position which he carried in connection with his University of Minnesota duties, and at that time he formed an interest in public health matters that has never wavered.

"For that matter the whole field of public health and sanitation is one of the main laboratories of civil engineering, and such problems as the tapping of water sources and construction of water systems, the disposal of waste and sewage, sanitation through the prevention of pollution, and many such matters involve the services of the civil engineer and so are of interest to teachers and students in the department of civil engineering."

Professor Bass has had charge of the construction of sewage disposal plants in a number of important Minnesota communities of the type of Rochester and Austin.

Part of the work of the State Department of Health is carried on upon the University of Minnesota campus in the building shared by that department and the university's department of psychology. This structure has long since been outgrown by the departments that use it, and the State Board of Health has hoped to obtain funds from the special session of the legislature for additions, but did not do so. A PWA grant of approximately $100,000 had been promised if state funds could be obtained.

"The way in which the division of sanitation under Dr. Harold Whittaker and the [illegible]ion of preventable under Dr. Orianna McDaniel have managed to systematize their swiftly expanding work so as to adapt it to their small quarters is one of the most remarkable things that has ever come to my attention," Professor Bass said. "I have made computations which show that between 1907 and 1934 the space of these departments increased only 16 per cent while their staffs increased 531 per cent, their field work, 1760 per cent and their laboratory work 3570 per cent."

One of the principal matters now facing the state board of health has to do with its relations to the federal government under the Social Security Act. This provides $10,000,000 annually as additional help for public health work in the states and each state is drawing up a statement of its case looking to the receipt of some of this money. Minnesota is apparently entitled to about $150,000 apart from any building program that may materialize.

The State Board of Health is also at work on a program for training public health workers in co-operation with the University of Minnesota.

The board is made up of nine members, under whom operates the secretary and executive officer, who is Dr. A. J. Chesley. There are also the divisions of sanitation, administration, vital statistics, preventable diseases, hotel inspection and child hygiene. The two divisions already mentioned are on the university campus.

Professor Bass called Dr. Chesley "probably the outstanding man in the field of state public health work in this country."

Not Really Dead, "Tickled to Death"

"The chief" is tickled to death, according to Police Sergeant Herman Glander, University campus standby, and best friend and severest critic of the student body.

During the Minnesota football season, not a single car parked on or near the campus was broken into, and not a woman lost her pocketbook.

Herman does not claim entire credit for the record but thinks it reflects favorably on present conditions of law and order.

Herman also is pleased.

Calls to Order Amateur Psychiatrists of Literature

Continued from page 1, column 5

come famous and die hardly abolishes the privilege of treating them as one gentleman treats another. It is significant as well as pathetic that a poet like Burns should feel called upon to plead for the tolerant consideration that most men spontaneously accord to each other:

One point must still be greatly dark
The moving why they do it,
And just as lamely can ye mark
How far perhaps they rue it

Then at the balance let's be mute
We never can adjust it,
What's done we partly may compute
But know not what's resisted.

It is still more significant that a so distinguished and judicious man of letters as Wordsworth should have protested against indiscriminate prying into the lives of authors, not out of consideration for them, but in the interests of literature itself. A then recent biography of Burns which devoted much attention to the moral lapses of the poet was the occasion of Wordsworth's pronouncement upon this point.

"Assuredly," he wrote, "there is no cause why the lives of that class of men should be pried into with the same diligent curiosity and laid open with the same disregard of reserve which may sometimes be expedient in composing the history of men who have borne an active part in the world." Speaking specifically of Burns, he goes on to say: "Neither the subjects of his poems, nor his manner of handling them, allow us long to forget their author. On the basis of this human character he has reared a poetic one which with more or less distinctness presents itself to view in almost every part of his earlier and, in my estimation, his most valuable verses. This poetic fabric, dug out of the quarry of genuine humanity, is airy and spiritual; and although the materials, in some parts are coarse, and the disposition often fantastic and irregular, yet the whole is agreeable and strikingly attractive. Plague, then, upon your remorseless hunters after matter of fact (who, after all, rank among the blindest of human beings) when they would convince you that the foundations of this admirable edifice are hollow and that its frame is unsound! Granting that all which has been raked up to the prejudice of Burns were literally true; and that it added, which it does not, to our better understanding of human nature and human life—how poor would have been the deduction made by this extrinsic knowledge from the intrinsic efficacy of his poetry to please and instruct;" then, by way of general conclusion Wordsworth adds: "Our business is with their books, to understand and enjoy them, and, of poets more especially is it true that if their works be good, they contain within themselves all that is necessary to their being comprehended and relished."

It may be said that this contention of Wordsworth applies rather to readers than to students, teachers, historians and interpreters of literature. But does it? Students of literature have only an incidental interest in what an author was, their principal concern is with what he has done and the way in which he has done it. In so far as his work can be narrowed down to a presentation of thoughts and feelings peculiar to himself it is a thing of very little importance. It appeals only to the type of mind for which the recent "confession" magazines have been invented. For all except the pettily or morbidly curious, the real interest lies in the effectiveness with which the poet has portrayed in words human traits which are characteristic not only of himself but of his contemporaries and of all humanity.

'Slum of Chosen Reality'

Literature in sum is chosen reality; for fiction and the stuff dreams are made of, as well as matters of fact, are reality to him who writes literature. It is the element of choice which differentiates literature from the daily newspaper which prints everything fit to print and somewhat more. The student of literature is concerned with what his author has chosen to present. The public has or will decide whether the choice be good or bad, whether it is, or is not representative of humanity. The problem then is to determine to what extent and by what art of presentation this chosen reality has stirred the heart, kindled the imagination and affected the thought and action of men at a given moment and during a more or less extended period. There would be little reason for example, to occupy one's self with the ideas and personal details offered by Jean Jacques Rousseau if they merely served to justify his claim that he was "made like no one of those who exist." If the claim be true or false, what of it? It would be at best a problem for a pathologist. But that there should have been in what he chose to say and in his way of saying it a certain "vibration," as Lemaitre puts it, which enabled his books while he yet lived to "deflect the life of a people to which he did not belong," and to "transform a literature and a history" that came after him, that is a prodigious literary phenomenon worthy of almost endless investigation.

Literary art, the art of selecting and arranging words is then often much more important than the subject matter. It has many rules and precepts which may or may not be followed. But its efficacy depends upon the one fundamental principle so admirably suggested by Montaigne in his Essay "On some verses of Virgil;" "When I see these brave forms of expressing one's self, so vivid, so profound, I do not say 'Tis fine speaking; I say 'Tis fine thinking.'" Now, the peculiar characteristic of this "fine thinking" is that it is a perfectly normal, human process, for it is thinking in terms of common sense upon matters of universal experience by men who were not at all professional historians, nor systematic philosophers, nor trained psychologists.

Creators of literature have, to be sure, sometimes penetrated by sheer force of intuition more deeply than those specially trained into scientific phases of the subject matter being treated. Doestojevsky, for example, is credited by Dr. Collins with having seen more clearly in abnormal phychology than the abnormal psychologists of his time. Nevertheless, Doestojevsky was preeminently a man of letters, a novelist, perhaps unconscious that he was even an amateur in a field of research which his novels exemplified and illuminated. Students, teachers and interpreters of literature are, like those whose works they investigate, laymen in all that does not pertain to the understanding or the creation of literature. It is obviously dangerous to try to reduce a smattering, or an impression of the technique which is requisite in other sciences into a type of research which in the long run must succeed or fail in producing enduring results as a consequence of procedures more or less peculiar to itself.

It is of course indispensable to have the authentic text of an author's work and extremely desirable to know the essential facts of his life in so far as they affect his right to be considered a representative of a race, of a time and of a social milieu. It is essential to know the order in which the author's work appeared and something of the reception accorded them by the public of his time if one would trace the evolution in the "fine thinking" by which the author transformed his sense of reality into accepted literature. When a literary work owes its genesis to some special event or to some special motive, one needs to know that special event and that special motive but always with reference to the work produced. For the work of an author, taken in its entirety is the author as far as we are concerned. The object of our researches is to discover whether the material which he presents comes from the quarry of universal humanity and how it is made into the poetic fabric of which Wordsworth speaks.

Why Exhume Non-Essentials?

To exhume non-essential elements, to seek sources of inconsequential details merely to find sources, to exhume even essential elements without reference to the structure to which they belong is hardly more than an effort of well intentioned Sammelfleiss. It serves, as often as not, to clutter up rather than make clear that which is being investigated. To project one's self by the exercise of amateurish psychiatry into the life of a writer or into the work which he has created is one of the most vicious of modern pseudo-scientific vices. The study of a source or of an "influence," to use a much abused term, has its raison d'etre only when it is undertaken in the reasonable hope of discovering some persistent thought or feeling which forms a part of the mental and spiritual life of an individual, a society, a nation or a race and which endures and changes as does life itself.

The professor of language and literature is not merely a student and interpreter of literature. He is, in most cases by his personal tastes, in all cases by his self interest, a promoter of literature. He is striving to create a demand for the object of his labors. Many literary works have held a high place in the minds and hearts of men in spite of academic promoters. Their assistance alone has never been able to give a long existence to a work of art. Their function is to facilitate the appreciation of that which they investigate. Dr. Schultze, in his recent book entitled "Academic Illusions," has made a statement which would have brought us no little comfort some thirty years ago. "It is no more essential," he writes, to agree in "liking" or "disliking" a poem or a picture than in liking or disliking a chemical experiment or a mathematical demonstration. It is necessary in the first place only to know specifically in each case the essential elements of the structure and the directions, proportions and weights or degrees of force of their integral values. It matters, in other words, to understand. The proper understanding of poetry and art requires the highest mental powers of discernment, generalization and order."

That is to say, I take it, that if fine thinking dominates in one who creates what is accepted as literature, then fine thinking is necessary on the part of one who would understand it and still more on the part of one who would explain it. It is obviously neither scientific nor reasonable to treat a piece of literature as if it were a chemical compound. The one is an inert mass, the other a product into which have entered the thoughts, the ideas, the sentiments and the [illegible] of very human beings. It is the peculiarity of our type of research that, in it, matters of fact may be very treacherous things. Because of their connection with personalities, they carry with them a nimbus which blurs their outline, distorts their shape and magnifies or diminishes their stature. We can rarely say that one and one make two, for we rarely have one and one. We deal with almost constant variables as far as thought and feelings are concerned and those are major components of the substance which we treat.

These thoughts and feelings are as complicated and mysterious as the ultimate laws of chemistry and physics. But we have, to study them, units which are perhaps as tangible as the atoms and ions of the chemist and physicist. The words which enter into the composition of ideas are our atoms and ions. A patient study of usage can come very near to establishing their "integral value" at a given moment. Grammar and rhetoric directed by clear thinking enable us to calculate their "directions, proportions and weights or degrees of force. The most essential object of the study of literature is to make clear the power of words put in their place.

The year upon which we are about to enter marks the tercentenary of the founding of the French Academy. No one can deny that the French Academy by insisting upon the quality of words, by holding up a standard of literary art and literary discipline has contributed greatly to the intellectual culture of France. No American corps of scholars is better placed than the Modern Language Association of America to realize a similar destiny.

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 FEBRUARY 4, 1936 NUMBER 7

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

Something of a Parallel

Not so far fetched as it seems at first glance would be mention of a relationship between the 100th anniversary of the birth of Andrew Carnegie, patron of libraries and education, and the 2,000th anniversary of Quintus Horatius Flaccus, the great Roman poet whom we call "Horace." Both are being celebrated this year. Just as the several Carnegie Foundations, institutions and endowments are the product of wealth directed to social improvement, so the fame of Horace is to be traced by the interest taken in him by one Maecenas, a very wealthy Roman, whose name today stands as a synonym of great wealth because of its repeated inclusion in Horace's poems. To call a man a "Maecenas" is to name him rich anywhere in the world today, although twenty centuries have passed since he gave Horace the small but lovely "Sabine Farm," where that jolly, frank and realistic writer delighted to relax when he grew weary of the wine banquets and inanities of urban Rome. Modern education is, of course, democratic, and should and will remain so, but it would be most unjust to overlook the contributions to education made by socially minded men who respond to the obligation of using some of their money for the benefit of all. Few who seek long-lasting fame will ever make such an investment in reputation as Maecenas did when he gave Horace the Sabine Farm, nor will many be repaid with lines like "Dulce et Decor Est pro Patria Mori,"* which Carnegie's Foundation for International Peace might disapprove; yet it is to be assumed that private donations will always play an important and desirable part in the support of education and research.

*Fair and fitting 'tis to die for the land of one's birth.

Friends Honor Four-H Leader Of University

T. A. Erickson, state 4-H club leader, University Farm, St. Paul, was elected a life member of the Minnesota Agricultural Society, the organization governing the Minnesota State Fair, in a resolution passed by the organization at its annual meeting.

The resolution commended Mr. Erickson for his contribution to Minnesota's agricultural progress and the success of the Minnesota State Fair through his leadership in the 4-H club movement. Incorporated in the resolution was an editorial from the Lake Wilson, Minnesota, Pilot, entitled, "A Builder of Character." In part it read:

"When the roll of truly great men in Minnesota is called, it should include the name of T. A. Erickson, leader in the boys' and girls' club movement in this state. Kindly, sympathetic, and cultured, he has left the imprint of clean, decent citizenship and character on the minds of thousands of farm boys and girls with whom he has come in contact during the last 15 years."

Born on a farm near Alexandria, Minnesota, in 1871, Mr. Erickson was graduated from the high school of that city in 1891, and for several years taught country and village schools, continuing his formal education as his circumstances permitted. In 1904, he was graduated from the University of Minnesota with the degree of Bachelor of Arts. From 1902 to 1912, he served as superintendent of schools of Douglas county.

Law Professor Goes to Washington

Ralph Dwan, professor of law in the University of Minnesota Law school, left recently for Washington, D. C., where he became a legal adviser in the office of the counsel general of the treasury department, Herman Oliphant. A native of Duluth and a graduate of Minnesota, Professor Dwan had been a member of the law faculty since 1926, when he received a graduate degree at Harvard. In 1931 he was promoted to a professorship. Dean Everett Fraser of the law school said Mr. Dwan desired a wider experience in the law than he had had as a teacher, having been on the campus from the time of his graduation.

Ralph Dwan

Bairnsfather War Cartoonist Speaks on Campus

Although Bruce Bairnsfather, British cartoonist who cheered millions, in and out of the trenches during the World war, has as his famous character "old Bill," who advises his friend Alf' to seek a "Better 'ole" if he isn't satisfied with the shell-hole he's standing in, Bairnsfather doesn't think much of comic strips based on gangster themes. Even if the strips are intended to glorify what are called "G-men" he thinks they are overdone, crude and a wrong influence on children.

Bairnsfather is impressed by the work of such American cartoonists as Darling, Rollin Kirby and the late Sidney Smith. He thought the Gumps were tops while Smith was drawing them.

Recently he has signed a contract with a leading newspaper syndicate owned by the Scripps interest to do a regular feature on Old Bill. It will appear in many American newspapers.

It took Bairnsfather only a very short time to change the price of his drawings from $15, which he got for the first, to $2,500. His caricatures gained almost instant popularity, so much so while the war was still going on that the French general staff "borrowed" him and later loaned him to Italy, in which country he had a count as a chauffeur while he drove about making sketches and cheering on Bersaglieri and such.

When Bairnsfather spoke at convocation in Northrop Auditorium recently he was positively stormed by students at the end of his talk. They made a rush at the easel on which he had made many charcoal sketches while he spoke, and few who tried went away without some sort of a souvenir. Some of the drawings were torn to bits, but the cartoonist stood his ground and smiled. He didn't try to seek a "Better 'ole."

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | FEBRUARY 25, 1936 | NO. 8

Inflation Prospect Ably Considered By Authorities

Existing Situation, Controls Failing, Could Become Very Serious

MUST BALANCE BUDGET

Strong Policies and Use of Existing Powers May Stop Too Great a Rise

Speakers at a Conference on Monetary Problems, conducted by the School of Business Administration of the University of Minnesota came to agreement that unless the national budget is balanced, some form of marked price inflation will take place. The following account gives in some detail the addresses by two of the visiting speakers. Professor Alvin H. Hansen of the University of Minnesota declared that, assuming a balanced budget, we should not have severe inflation because business will not demand and put to use the credit for which the base now exists. Professor James Harvey Rogers of Yale felt, on the other hand, that monetary controls over inflation would likely be effective. Dr. Arthur Marget, of Minnesota, saw greater safety in a balanced budget but was not so sure as Dr. Hansen was that a seeming lack of justifiable business demand for credit would prevent its seeping into speculative commitments that would cause a large price rise.

Agreeing that a recovery period and the early stages of an inflation look so much alike that economists can not tell them apart as the two things are evidenced in statistics of credit base, bank credit, excess reserves and the like, nationally known economists, speaking at a conference on Monetary Policy at the University of Minnesota, disagreed on many other points.

James Harvey Rogers of Yale University showed on a map a monetary and credit situation which, he said, made the prospects for inflation extremely good unless adequate controls were maintained.

Melchior Palyi, University of Chicago economist who recently came to this country from Germany, said inflation was not only in prospect, but was here. Almost never, said he, has a government succeeded in checking inflation once it has gotten under way. In five hundred years, he declared, two governments have tried to cut off an inflation before it ran its course. Violence resulted.

Both agreed that an inflation is an expansion of buying power in the form of money and bank credit that is greater than the business structure requires for its successful operation. If new enterprises and the rebuilding of old were to expand the actual business structure to absorb the expansion of credit and money, the result would be sound. If credit and money are to be expanded and still to operate on the existing business structure, a speculative rush to buy commodities and securities will result and the final condition will be the thing we call inflation.

Precedents Cited

In Germany, said Dr. Palyi, as the money supply was increased by the printing presses, everyone grabbed for commodities, the rich speculating in steamships and steel plants and the poor buying even empty match boxes. They thought each article would be worth more marks or pfennigs tomorrow.

In an inflationary period strange results may come from the steady rise of prices, Dr. Palyi warned. He told how one of the "Big Five" among English banks, during the stable period from 1900 to 1912, failed although its investment policy called for carrying vast quantities of "consols," the "consolidated" public debt of Great Britain. These were supposed at the time to be the safest investment in the world. But it was a period of rising prices, and as prices rose the "consols" bearing a low rate of interest, fell in price until the

Continued on page 2, column 1

Surgery Head Wins National Prize

Wangensteen Gets Honor in Surgery

Head of Minnesota Department Receives Samuel D. Gross Prize for Work

Award of the Samuel D. Gross prize in surgery to Dr. Owen H. Wangensteen, professor of surgery and head of the department of surgery in the University of Minnesota. Medical school has been announced by Guy Stanton Ford, graduate dean of medical sciences in the University of Minnesota. Given every five years by the Philadelphia Academy of Surgery, the prize carries $1,500 cash and national distinction, it being one of the outstanding honors available to American surgeons.

Dr. Wangensteen was given the Gross prize for researches and discoveries relating to the treatment of intestinal obstruction, his actual paper being entitled, "A Therapeautic Problem in Bowel Obstruction." It was awarded, he said, not for any one piece of work but for the accumulated work of about a ten year period of concentration on the treatment of bowel obstruction.

The fundamental discovery which went far toward bringing the honor to the University of Minnesota man was that the employment of mechanical suction in the bowel could often remedy obstruction where it was due to reflex nervous phenomena. The suction changes the distribution of air volume in the intestine and relief follows.

Funds from which the prize is drawn were given to the Philadelphia Academy of Surgery by Samuel D. Gross, long professor of surgery in the Jefferson Medical College in Philadelphia, who died in 1884. Dr. Gross was the founder of many scientific organizations including the American Surgical Association.

Dr. Wangensteen is a native of Minnesota who received his bachelor of arts degree at the University of Minnesota in 1919 and his M.D. in 1922. He was a Mayo fellow in Rochester from 1923 to 1925 and from August 1927 until September 1928 spent his time studying in European clinics, chiefly under Professor de Quervain at Berne, Switzerland. He became director of the department of surgery in January 1930 and is now professor of department head.

Dr. Wangensteen's prize winning paper must be printed, under terms of the grant, and a copy deposited in the library of the Philadelphia Academy of Surgery.

Much of his research has been supported by grants from the Graduate School fund for medical research of the University of Minnesota.

Magic in Medicine Continuing Threat Lecturer Declares

"Descendants" of Witch Healers Still Pretend to Deal With Sickness

PUBLIC IS GULLIBLE

Future Progress to Depend on Co-operative Work in Laboratories

Ancient folkways in medicine and practitioners who depend on superstitions, hopes of recovery by magical means or by means that lack the sanction of scientific knowledge are still to be encountered in every community outside the ranks of regular medicine, Dr. Walter C. Alvarez of the Mayo Clinic declared in his talk on "Emergence of Modern Medicine From Ancient Folklore," which was the first of this year's series of four Sigma Xi addresses in the field of popularized science. "Medical Science and Human Welfare" was the general topic of the four addresses.

Progress in medicine today and hereafter must be made almost exclusively in the laboratories of universities, Dr. Alvarez said. "There is not one chance in a million that the cure for cancer will be found by a layman or some obscure physician working nights in his basement," he declared. "Just as in mining, so in medicine, the time for picking up big nuggets is gone. Now the finding of a cure for cancer calls for much work by groups of highly trained and well equipped investigators, and the cure is most likely to come through a series of discoveries, all made in big university laboratories."

Dr. Alvarez continued:

Two Types of Healer

And so it is that wherever on this earth one encounters primitive people one is likely to find that the most respected and most feared man in the tribe is the witch doctor. He is a sort of Pooh Bah who exercises the functions of physician, seer, prophet, priest, sorcerer, mastor of ceremonies, and perhaps even king. Sometimes, he represents the finest flower of the development of his people, and then again he may be little more than a juggler and as assassin who will kill for a price.

But what happens when a savage falls out of a tree and breaks his legs, or comes back from a raid with part of his scalp hanging over his ear, or what is done to help the man who gets constipated or has a boil that needs lancing? Will the witch doctor bother with such small practice? No, that is usually beneath his notice, and hence in every tribe there is another kind of healer, a man or woman who can clean wounds and bring the edges together, who can splint a broken leg or pull a dislocated bone back into place, who can incise an abscess or knock out an aching tooth, who can massage stiff muscles or give a sweat bath, and who knows the lore of medicinal plants.

And here I get to the central theme of my talk, and this is that

Continued on page 3, column 5

Abundant Tree Life of Minnesota Provides Fascinating Study Subject

Far Fewer Know Shrubs and Trees Than Are Familiar With Other Plants

Perhaps of all forms of natural life, the wild shrubs are the least known, even among the semi-initiated, who wander through wood and meadow and identify readily many of the birds, wildflowers, and animals native to Minnesota. Even in the identification of trees in the forest, most of us are pitiably incompetent. Far from being able to tell a Norway pine from a white or jack pine, many call all evergreen trees "pines" with no sense of the differentiation into pines, firs, spruces and other groups that even an elementary familiarity with the conifers should provide. Likewise with other trees, such as the oak, the maple, or the elm, even an awareness of variety is often lacking, and an actual knowledge of the different types these trees take is rare.

It is for this reason that such a book as "Trees and Shrubs of Minnesota" by Drs. C. O. Rosendahl and F. K. Butters of the department of botany in the University of Minnesota is so valuable. Many a person seeking some new interest in life through the development of a hobby would discover an almost unlimited field for his inquiries and observations if he made up his mind to familiarize himself with the plants of these two types that grow in Minnesota. The great majority of them are readily accessible, even after the long term of lumbering and land clearing that has denuded so much of our forest land. Minnesota has a vast extent of "woods" in many of the southern and central parts of the state and wide sweeps of actual forest, even though much of it has been cut over, in the north. Making a hobby of learning to identify the many shrubs and trees would involve no expense whatever if one were traveling around on other missions.

"Trees and Shrubs of Minnesota" describes 47 families, 107 genera, 324 species, 40 varieties and 18 hybrids, according to a foreword written by the late Dr. J. Arthur Harris, former head of the botany department, when the volume first appeared in 1928. One of the most attractive of the books put out by the University of Minnesota Press, it carries illustations of 250 species and varieties, and also includes data enabling the reader to understand botanical terminology used in the classification of the plants studied.

Minnesota Book Useful

"Minnesota Chats" refers to "Trees and Shrubs of Minnesota" at this time not because the book is new but because the season is approaching when the amateur can take up an inquiry of this kind on his visits to any of the wild lands of the state. This is a volume that the tourist, the camper or the person departing for a summer cottage on one of Minnesota's beautiful lakes could hardly do better than to take with him. Even if he identify only a dozen or fifteen new types during his first summer of interest he will have made great progress, and will at least have come to a realization that "pine" is not a word that covers all evergreens nor "cottonwood" something that will do for the great variety of poplars that may be found in Minnesota.

As a peep into the interest provided by this book, we may look at the brief description given of the Minnesota evergreen forests. Say these writers:

"The evergreen forest originally covered the northeast one-third of the state, extending south to a line about halfway between Duluth and Minneapolis and west nearly to the Red River Valley. These evergreen forests were continuous with those of Ontario on the northeast, and with those of Wisconsin and upper Michigan on the east. The characteristic trees of the mature upland forests of this region are the three native pines, white spruce, balsam fir and white birch, while the swamps are filled with black spruce, tamarack and white cedar. Deciduous trees, other than the white birch, are generally minor or temporary factors in the vegetation. Thus throughout the region such trees as the balsam

Continued on page 2, column 2

Dr. Warren Waite Goes to Geneva

Economist at University Farm to Be on Nutrition Study

Chosen to represent the United States government at the initial meeting, February 10, of a newly organized Nutrition Committee of the League of Nations, Dr. Warren C. Waite, professor of agricultural economics at University Farm, has sailed for Geneva.

Notice regarding his assignment to represent the United States at the first meeting of the League's nutrition committee was sent to Dr. Waite by P. Stoppani, director of the economic relations section of the League. Broadly speaking, the purpose of the committee will be to consider nutrition in relation to public health and to study the effect which improved nutrition would have on the consumption of agricultural products.

Comprised of experts on agriculture, economics and health from leading nations, the committee is to submit a general report at the next meeting of the League of Nations Assembly. Governments of the different countries are asked to collect, summarize and publish measures taken in all countries for securing improved nutrition. Governments are also asked to examine practical means of securing better nutrition.

The report which the committee is to prepare will consider three major aspects of the nutrition problem. First, nutrition in relation to public health, labor, income and education, with special attention to food prices and factors affecting them; second, possible action by governments and public authorities with relation to these problems, and third, economic effects of nutrition problems and policies, with a special view to estimating the possible stimulation of demand for agricultural products through improved nutrition throughout the world.

Inflation Prospect Ably Considered By Authorities

Continued from page 1, column 1

bank's net worth had been dissipated.

Today, Dr. James Harvey Rogers said, five situations exist that make the prospects for inflation "good" unless controls are applied. These are: First, the very large gold supply; second, excess bank reserves, the greatest in the history of the United States; third, the temporary stabilization fund that was created by devaluation of the dollar; fourth, a highly undervalued United States dollar, and fifth, the large and continuing budget deficit.

Excess reserves of $3,000,000,000 furnish an enormous possibility of expansion of member bank deposits, he said. . . A four or five fold expansion of bank credit is possible on the basis of present reserves, bank credit representing buying power that would act to force prices up.

Two Billions "Sterilized"

Dr. Rogers pointed out that the impounding of approximately $2,000,000,000 in the devaluation profit has so far been an effective check on expansion, in that the sum is sterilized and has not entered into the credit base.

He said that after devaluation the country had so much gold that it was in about the same situation with respect to gold as the world had been after the huge gold discoveries of the late nineties, in Alaska, in South Africa, and elsewhere. These led to a long period of "good times," and rising prices.

An influence working strongly for inflation, he said, is the unbalanced budget. This is true because the government obtains purchasing power through bank credits; in other words, the government obtains purchasing power without reducing purchasing power anywhere else, as would be done if the government bonds were sold to individuals and brought about a decrease in individual bank balances.

"For this very reason an unbalanced budget, with a deficit, is a good thing in a deflationary crisis; but the crisis is past in this country and a budget deficit is likely to produce much too much credit under present circumstances."

Controls Over Inflation

Passing to the possible controls over inflation Dr. Rogers repeated that the treasury policy of sterilizing the devaluation profit is a definite control. Congress must not take or spend this fund, he said, as holding it checks a major threat.

For the rest, a situation is likely to develop in which the Federal Reserve Board is attempting to apply controls and the United States treasury is trying to avoid them. The normal means of reducing member bank reserves is for the Federal Reserve Banks to sell some of their assets, namely government bonds, to member banks. But in adopting such a policy the Federal Reserve Banks probably would come into conflict with the treasury, which is selling new bonds to member banks and would dislike competition.

Use of the discount rate to oppose expansion is practically impossible at present, he said, because money is so plentiful and interest rates so low that the discount rate is inconsequential.

Reserves May Be Raised

The new Banking Act permits the Federal Reserve Board to raise reserve requirements of member banks by as much as 100 percent. Application of this policy would be an effective control on too great a credit expansion, but would be extremely unpopular with bankers. At the same time, it is possible and may have to be used.

As influences working against the application of cited control measures he gave first the large treasury financing due to a continuing budget deficit. As excess reserves of member banks are reduced by any policy, their power to buy new government issues is contracted, and the treasury will therefore be likely to oppose any such contraction if Federal Reserve policies seek it.

"I foresee an inevitable fight between the Federal Reserve Board and the treasury department," he said. "If we can get the national budget into control we can discuss the prospects of inflation control. But the treasury department is likely to win such a battle, and we must remember that it was a budget deficit that led every European government into inflation."

Dr. Palyi's Views

Dr. Melchior Palyi repeated his statement that a rise in prices and in the volume of money to permit the handling of a sound expansion in business in inflation, but not bad inflation. It is expansion of money and credit in relation to speculative commitments that is so dangerous. This leads people to make all sorts of long-term commitments on terms that ultimately they are unable to meet.

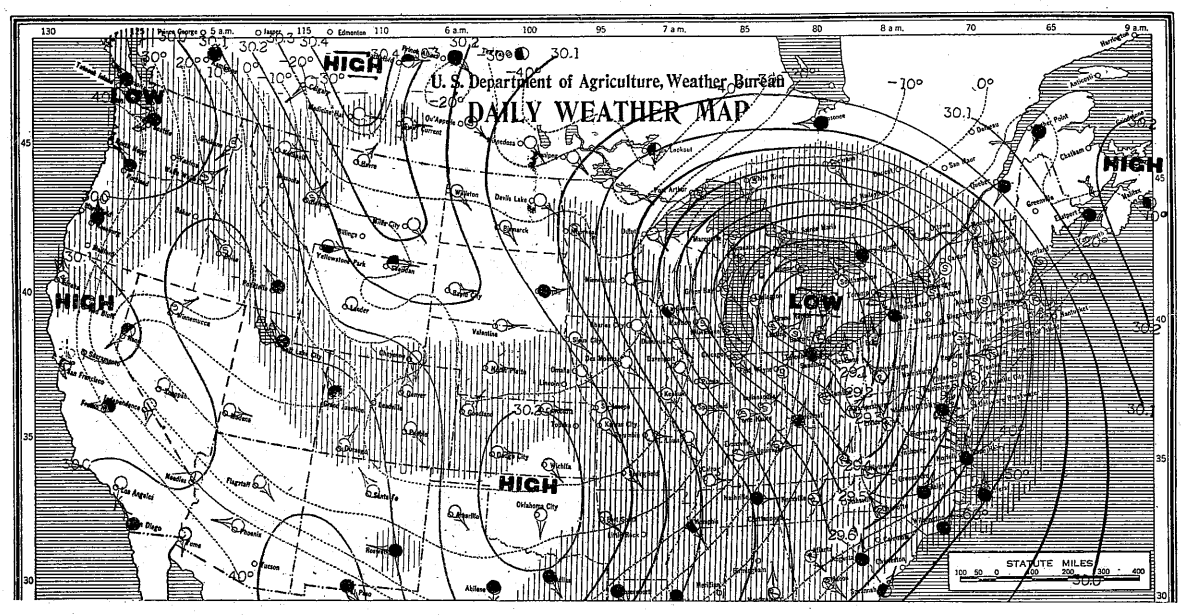
"Once inflation has begun the bankers are likely to say that there is no need to do anything about it," he warned. "Once the early stages are passed people declare they 'don't want you to interfere with their nice business.' They will say it is a good little inflation. But even 'good little inflations' get out of hand presently, and once started the thing must run its course. Few statesmen have ever had the hardihood to try stopping a currency inflation. And when devaluation runs concurrently with other inflationary influences it becomes very serious."

May Round Famous Corner

Stating that up to now we have been enjoying what might be described as recovery without visible expansion of business, suggesting inflation, Dr. Palyi pointed out that nevertheless we may be on the verge of an actual expansion in business of many kinds such as would warrant a greater volume of money and credit. Corporations that have been using their own funds will soon have to borrow from the banks. There are indications that a boom in middle-class housing is not far away, although the large office building situation is amply taken care of. Engineering projects are soon to increase in a manner that will increase the demand for credit; railroads will be in the market for new rolling stock; there will be production of military supplies, not only for our own needs but possibly for foreign buyers, and airplane manufacture may increase as motorcar manufactures have. So we shall have many forms of natural and wholesome demand for credit. On the other hand, said he, let us not forget the psychological effects of a long period of easy money rates or of such policies as that of the federal reserve banks, which are inclined to rediscount almost any kind of paper. These matters still carry the possibility of a great expansion."

As a final statement he said: "It appears to me that the checks and balances have been removed to such an extent that we need not discuss the 'prospects' for inflation, but rather what business men can do to adapt themselves to it."

"O, Wer't Thou in the Cauld Blast"



"Minnesota Chats" prints herewith the typical, meteorological picture of a blizzard. The map represents weather conditions on the morning of February 4, on which day one of the severest of the winter's windstorms swept through the Twin Cities. The causes of this storm are vividly represented on the map by the area to the east marked "Low," and the area to the northwest marked "High." Ordinarily the violence of a wind depends on the extent of difference in pressure between the low pressure area, into which the wind blows, and the high pressure area, from which winds blow outward. In this instance the low pressure area over Lake Erie shows the abnormally low reading of 29.1 inches barometric pressure, while the "High" shows a reading of 30.4 inches. Minnesota was caught between the two in the direct path of a torrent of cold air moving from the "High" to the "Low." The shaded lines mark regions in which precipitation occurred as the moisture in the warmer air around the area of low pressure was precipitated as snow or rain by the colder air that blew in upon it from the northwest. The colder air becomes the less moisture can it retain.

Says Zoology Yields Culture

Dr. Minnich, Department Head, Points to Human Values in Subject

Because man is an animal, zoology is the best science to study from the point of view of general culture, Dr. Dwight E. Minnich, head of the zoology department in the University of Minnesota, told the undergraduate Zoology club at a recent meeting.

Ordinarily, students think a course in general zoology is primarily for pre-medic and pre-dentistry students, Dr. Minnich said. In his talk on jobs and opportunities for zoology graduates, he made it clear that he looks on study in elementary zoology as highly beneficial for all college students, irrespective of their specialized interests.

Last year approximately 1,500 students in the university received instruction in elementary zoology, according to Dr. Minnich, and he credited several men in the department with making the course popular. In his opinion, Minnesota has a larger number of students taking such a course than any school in the country.

No graduate student with a zoology degree from Minnesota has ever gone without employment, as far as Dr. Minnich knows. Mentioning the various fields in which a zoologist might find employment, he stated that new government conservation work has created an enormous demand for technical workers in the field.

Though the peak of this particular demand will wear off presently, nevertheless a strong demand will remain, the professor believes. The situation in this respect is analogous to that in forestry at the present time, he pointed out.

While about half of all zoology students eventually go into teaching, other fields in which Minnesota graduates have found employment in recent years are: medical or dental technology, technical government bureau work, occasional research or museum work and medicine or dentistry.

Austrian Educator Speaks on Campus

"Recent educational changes in Middle Europe" was the subject of a lecture in Borton Hall, University of Minnesota Monday, February 17, by Dr. Paul L. Dengler of Vienna, director of the Austro-American Institute of Education, which was created soon after the World war by the Carnegie Foundation for International Peace. Dr. Dengler has been its director from the first. He has made several tours of the European countries and America and has spoken at Minnesota two or three times before. Dr. Dengler is also a director of the Austrian commission, Institute of Intellectual Co-operation and Austrian representative of the New Education Fellowship.

Peck Looks for Better Times In Farm World

High Prices for Beef Cattle and Pork Seen Continuing in 1936

Improved conditions in price, market, product and credit for Minnesota farmers in 1935 are prophesied in a survey of the state's agricultural outlook made by F. W. Peck, director of the extension division of the department of agriculture, University of Minnesota. Mr. Peck recently returned to Minnesota after serving in Washington for two years as an official of the Farm Credit Administration.

This will be due, the survey states, to increased consumer incomes throughout the country, lower farm taxes, better and cheaper farm credit, increased supplies of feed of all kinds, and substantial if not entire elimination of crop and product surpluses that for several years have pushed prices down and demoralized markets. Factors which in particular will contribute to Minnesota farm income with accompanying increased living power are listed as:

An abundant supply of feed for livestock of all kinds, due to carryover from the abundant crops of 1935 and 1935 prospects. Minnesota production of hay, oats, corn, and barley was twice that of 1934.

Dairy cattle have been culled to normal numbers, the animals are better grade due to the culling, butter surpluses are low, consumer demand increasing so that with prospects for better and cheaper production, prices continue attractive.

Beef cattle supplies are short not only in Minnesota but throughout the country, insuring a dependable basis for profitable price especially with the feed situation as favorable as it is.

Pork in storage is lowest in 20 years so that present high prices for hogs are certain to continue through 1936 at least.

The carryover of wool is the smallest for several years and the estimated lamb crop is the smallest with one exception since 1929, insuring a stable basis for fair prices for both wool and mutton.

Eggs and poultry in storage are lowest since 1924 with single exception of 1932.

The carryover of wheat in the United States is about back to normal. Price situation of course is speculative but nothing in particular to indicate serious price reductions.

Farm real estate taxes, while higher than in 1913, were one-third less in 1934 than in 1930 with a general prospect in the state of no particular increase unless relief needs force it.

The gross cash income in 1935 in general about 59 per cent greater than in 1932 and the outlook for 1936 is for a continuation of this upward trend, the survey says.

Horticulture Short Course Set

W. H. Alderman, chief of the division of horticulture at University Farm, has announced that the annual Horticultural Short Course will be held on March 25, 26, and 27. This course will be open to vegetable and fruit growers, florists, nurserymen and home gardeners who want the latest and best information relating to the culture of fruits, vegetables and ornamental plants. Copies of printed programs will be ready about March 1, and may be obtained by writing to University Farm. Registration at the 1935 Horticultural Short Course was about 300, and fully as many are expected at the course next month.

Trees and Shrubs Interesting Study

Continued from page 1, column 3

poplar, aspen, red maple, pin cherry, black ash, yellow birch, and mountain ash are more or less frequent, but except where there has been interference with natural conditions they form a quite subsidiary part of the vegetation. The destruction of the coniferous forests by fire or lumbering is usually followed by a rapid growth of poplars or birches, which for a time form the dominant vegetation. If there is no further interference, this growth is in time replaced by a return of the conifers except where the original destruction has been so thorough and so widespread that there is no available source for seed. However, in many places in the northern part of the state, fires have been so frequent as to keep the vegetation more or less permanently in the birch-poplar stage, and finally, by consuming most of the soil, so to limit the growth that it is reduced to mere thickets.

"Here and there throughout the region of coniferous forest there are definite inclusions of genuine hardwood forest, characterized by the dominance of such trees as the hard maple, basswood, American elm, and red oak. These patches of hardwood timber are usually found on rich morainal soil, and in situations which are relatively free from late spring forests, adjacent to large lakes, or on ridges where there is free air drainage, They are sometimes quite without admixture of evergreens, but frequently contain some large white pines mingled with the deciduous trees. This type of forest is particularly well-developed in the vicinity of Mille Lacs, and between that lake and Aitkin.

"The shrubs as well as the trees of the evergreen forest are characteristic. Here are found the white-flowered thimble-berry, the mountain maple, dwarf birches, elders, sweet-fern, several kinds of bush honeysuckle, high-bush cranberry, rosa acicularis, and most characteristic of all, numerous heaths, such as leatherleaf, Labrador tea, trailing arbutus, wintergreen, dwarf kalmia, and several kinds of blueberries and cranberries."

State's Hardwood Areas

Of the deciduous forests of the southeast corner of Minnesota, the introduction says;

"The bottom lands and bluffs of the Mississippi were well forested, and in the southern counties the forests extended back twenty or thirty miles across the broken upland lying west of the river. A large part of this woodland is still standing in a more or less modified form. These are the most varied forests in the state. Besides the trees that occur further north, there are found here such characteristic species as the black oak, shell-bark hickory, and black walnut on the uplands, and the river birch, swamp white oak, Kentucky coffee tree and black maple in the bottom lands. Throughout this district white pines are fairly common on northfacing bluffs, and several natural groups of other conifers are known. . . . To the westward these forests gradually merge into the praries, through a region of prairie groves and savannas, while to the northward the strip of forest becomes very narrow."

Today Minnesota is probably at its low point in respect of effective forest land. It was at one time a bonanza region of trees of many types. In the future, as sane forestry policies are carried out by persons trained in skill and understanding by such institutions as the division of forestry at University Farm, Minnesota will again have far greater forest areas than she has today. One who wishes to understand something of the natural beauty as well as the economic importance of the perennial, woody plant life of the state, its shrubs and trees, can make an almost perfect beginning by reading and studying the book that is here described. It is available through the University of Minnesota Press.

Hydraulics Study To Expand at 'U' In New Laboratory

City Grants Rights to Site and Power on Hennepin Island

WPA TO GIVE FUNDS

Dr. Lorenz Straub Says Layout Will Be One of Country's Best

The site of the old East Side pumping station on Hennepin Island will be used by the University of Minnesota for construction of one of the most up-to-date hydraulic engineering laboratories in the United States, work on which will be begun as soon as weather permits.

Plans for the new laboratory are complete, Lorenz G. Straub, head of the division of hydraulic engineering announced today.

Following passage of an enabling act by the short session of the state legislature, the Minneapolis City Council deeded the site and accompanying water power rights to the university and the Northern States Power company leased additional land for a period of 50 years to the Board of Regents.

Forty to fifty cubic feet of water per second will be available for experiments even at low water, rising to as much as 300 feet per second in high water period. Eight "mill-powers" averaging about 75 horsepower apiece at that point will be involved in the experiments.

The laboratory will stand on a piece of land about one block downstream from the Third Avenue bridge.

Funds for the laboratory have been allotted by the Works Progress Administration, coming to $80,214, while the University of Minnesota will spend $15,000 for materials and equipment.

Problems to be studied in the hydraulics laboratory will cover a wide variety of subjects, including transportation of river sediments, erosion and deposition. Types of soil saving procedures, on which agriculture has recently been focussing attention will also be taken up, and sanitay problems, such as the likelihood of back siphonage between sewage and water systems. Professor Straub and his assistants also will cooperate on the study of problems set by such research organizations as the United States engineering corps, the University of Minnesota department of agricultural engineering and the Minnesota state department of conservation.

One of the most important fields of study to be opened up at Minnesota by the new laboratory will be that of the characteristics of turbines in hydro-electric activities. These studies have not hitherto been possible. The volume of water passing through the laboratory, and the fact that it will drop forty-eight feet between the head and the tail of the channel will provide probably the best set-up in the United States for problems of this sort. The fact that water can be put through the lower channel of the laboratory at a rate of 40 feet per second will make possible studies of special problems in "hydraulic surges" and "hydraulic pump" according to Dr. Straub.

Land deeded to or leased by the University of Minnesota amounts to 40,027 square feet. The main testing laboratory will be 300 feet long and fifty feet wide, of simple reinforced concrete construction. Beneath the floor will be two channels, one for experimental purposes and one a waste channel to carry off water used experimentally. There also will be an upper channel, inside the building. The main channel, eight feet wide and six feet deep will run the full length of the building. Adjoining the long building will be another, 90 by 40 feet, to be used as a machinery laboratory.

Many hydraulic projects now conducted in the Experimental Engineering building on the university campus will be transferred to the Hennepin Island laboratory. The new laboratory will be the most important addition to technical experimental equipment on the campus since the Mines Experiment Station and Electrical Engineering buildings were erected more than ten years ago.

Dr. Straub conceived the idea of using the Hennepin Island site abou a year ago. He personally supervised negotiations that got the enabling act through the legislature and the final transaction through the city council. He will be director of the new laboratory.

Spanish Nurse Sent to Campus By Foundation

Course in Public Nursing Gains Swiftly in Recognition

Having sent 14 foreign recipients of nursing fellowships to the University of Minnesota for brief periods during the past year, the Rockefeller Foundation was sufficiently pleased with their work to assign their most recent fellow to full time study at Minnesota. She is Miss Ynez Oyarzabal of Madrid, Spain, who has been taking work since the first of December in the division of Public Health Nursing, directed by Miss Eula B. Butzerin.

Miss Oyarzabal, who took nursing training in Boston about twenty years ago, will work on the campus during the winter quarter, examine rural health nursing projects in Minnesota during April, and then following an eight weeks tour of other nursing centers in this country, will return to Minnesota for the first summer session.

In her Minnesota field work Miss Oyarzabal will have the cooperation of Miss Olivia Peterson, state superintendent of county health nurses.

Countries which have sent nursing students to Minnesota for briefer periods during the past year include Czecho-Slovakia, Jugo-Slavia, Puerto Rico, Spain, China, Japan and Canada, besides other states in the United States.

Both the excellence of the training offered on the campus and the fact that Minnesota has state supervised rural nurses in some twenty counties make this state an attractive one for foreign students.

Miss Butzerin said that in recent years Miss Mary Beard, nursing representative of the Rockefeller Foundation has made two visits to the Minnesota campus and has become thoroughly familiar with the work that is being done here.

Minnesota has also been selected as a teacher training center for the summer courses of the American Red Cross, Miss Butzerin has been informed. A considerable number of nurses will be sent to the campus to study home hygiene and care of the sick. Minnesota is strategically located for this as the nearest similar courses are in Ann Arbor, Seattle, at the University of Washington, and Nashville, Tenn.

German Philosopher Discusses Hegel

Richard Kroner, German professor of philosophy and one of the best known authorities on the philosophy of Hegel, spoke at the University of Minnesota both Thursday and Friday, January 23 and 24. His Thursday lecture dealt with, "The philosophy of life and philosophy of history." Friday he spoke on "The significance of Hegel for modern thought. Dr. Kroner was the founder of the International Hegel society, and retained his presidency of it until 1934. In that year he also resigned from the chair of philosophy in the University of Frankfort. Born in Silesia, he served in the World war from 1914 until 1918. He is a former student in the Universities of Berlin, Heidelberg and Freiburg. At present he makes his home in Berlin and devotes himself to researches in philosophy.

Canadian Philosopher Speaks Here

A distinguished Canadian philosopher, Professor C. W. Hendel of McGill University, Montreal, P. Q., visited the University of Minnesota, January 13, to deliver two lectures. One lecture was popular in nature and had as its subject, "The place of philosophy in university education." His other talk was on "David Hume and scientific thought." Formerly head of the philosophy faculty at Princeton, and born in the United States, professor Hendel is head of the department of philosophy at McGill. His works on philosophy and analyses of the thought of important philosophers have been published by the Oxford University Press. His philosophical trend is that of a modern interpretation of idealism.

New Laboratory Under His Care

Dr. Lorenz G. Straub

Lind Appoints Institute Board

Committees to Draw Up Requirements in Technical Unit Named

Three special committees to organize the newly created Institute of Technology at the University of Minnesota have begun a study of methods of combining entrance requirements in its three branches to go into effect next fall.

Committees were appointed by Dr. S. C. Lind, head of the school of chemistry, who was named director of the institute by the Board of Regents last October.

The groups will study entrance requirements, a common curriculum for first year students and registration for the institute. The Institution of Technology is composed of the College of Engineering and Architecture, the School of Chemistry and the School of Mines and Metallurgy.

M. Cannon Sneed, chief of the division of inorganic chemistry, is chairman of the committee on registration, entrance requirements and curriculum for first year students. Other members of the committee are Prof. Elting H. Comstock of the mines faculty; Robert W. French and I. W. Geiger, associate professors of drawing and chemistry, respectively, and Charles A. Koepke, associate professor of mechanical engineering.

Prof. Geiger, W. E.Brooke, head of the Department of Mathematics and Mechanics; Howard D. Meyers, associate professor of engineering; Prof. W. T. Ryan, electrical engineering, and Prof. Comstock, will study entrance requirements.

Chairman of the group studying a common curriculum for all first year students in the institute is Prof. W. H. Kirchner, head of the department of drawing and descriptive geometry. Others are Professor Comstock, Henry C. Eggers, assistant professor of drawing; F. M. Mann, head of the school of architecture; R. E. Montanna, associate professor of chemical engineering; Prof. John R. DuPriest, head of the mechanical engineering department, and Dean Ora M. Leland of the College of Engineering and Architecture.

Carleton Brown Receives Honors

Former Minnesotan Praised in Modern Language Publication

Carleton Brown, formerly professor of English in the University of Minnesota, a graduate of Carleton College, and for fourteen years secretary of the Modern Language Association of America, is honored in that association's current quarterly, which calls him "the upbuilder" of the Modern Language association. During his secretaryship he built the organization from about 2200 members to a membership of more than 5,000, making it one of the strongest learned societies in the United States. Dr. Brown taught at Minnesota from 1917 to 1921, when he went to Bryn Mawr to teach English. Since 1927 he has been at New York University.

Announcement of the honor to Professor Brown was made by Professor Colbert Searles, of the department of Romance Languages at Minnesota, who is this year president of the Modern Language Association. Professor Searles will deliver the presidential address when the association holds its Christmas meetings in Cincinnati, Ohio.

German Scholar To Study at 'U'

Plant Scientist from Bonn Will Conduct Researches Here

Dr. Ernst Schaffnit, a noted German botanist, is expected to come to Minnesota soon to spend a year at University Farm as an honorary fellow, giving lectures and doing research work in plant physiology and plant pathology. He also will visit several other American universities.

President Lotus D. Coffman has approved the request of Dr. Schaffnit to come to the University of Minnesota following his retirement as head of the Institute for Plant Diseases at the University of Bonn, in Germany. He is a brother of the Reverend F. Schaffnit who for many years has been head of the Wartburg Hospice in Minneapolis and is widely known as an unofficial assistant to the German consulate located at Chicago.

Dr. Ernst Schaffnit is the founder and editor of the widely known German scientific publication on plant diseases, "Pflanzen Krankheiten," and is recognized as one of the leading authorities both on plant pathology and plant physiology, particularly with reference to hardiness and winter killing of plants.

Dr. Schaffnit's interest in coming to the University of Minnesota arises from his friendship for Dr. R. B. Harvey, University Farm plant physiologist, and from the fact that the University of Minnesota has the best equipment for low temperature studies with plants in the United States. In 1928 Dr. Harvey studied at the Bonn university as a Guggenheim Fellow, where he worked with Dr. Schaffnit on problems relating to hardiness and winter killing of plants.

W.P.A. Approves White Collar Jobs

Approval of a works progress administration program for white collar workers to go into effect at once at University Farm has been received from Washington by Dean Malcolm M. Willey of the University of Minnesota. It calls for employment of a maximum of 130 people over a period of three and a half months, involving a total expenditure of $33,000. It is one of the projects intended to take off relief persons with technical training and special skills. Dean Willey said the men and women would be assigned to help on going research projects. Some will be chemists, other statisticians, draughtsmen laboratory technicians and the like. A majority of the workers probably will be college graduates. Pay will range from $71.50 to $103.40 per month. A similar program on a somewhat larger scale has been requested for the main campus and has presidential approval but has not yet come through in final form.

Speaker Describes Medical Progress

Dr. Walter Alvarez

Magic in Medicine Continuing Threat Lecturer Declares

Continued from page 1, column 5

from the time when man first stepped down out of the trees and made himself a stone axe down to the present moment, there have always been in every community, two types of medical practitioner: One a believer in some supernatural or similarly unprovable and ready made explanation of disease as a whole; the other, a student of the many diseases as he finds them; the one disdainful of the study of the structures and workings of the human body; the other a deep student of these sciences; the one treating by means of charms and spells, ceremony, hocus pocus, exorcism, and sacrifice; the other treating with physical and chemical measures; one whose forte is the cure of nervous troubles and self-limited diseases; the other whose greatest success is found in the healing of those lesions such as deep wounds or bad fractures in which Mother Nature, unaided, either fails to cure or else ends up with a bad result.

The Conservatism of the Witch Doctors

As one would expect, the descendants of the witch doctor have not changed their technic very much through the ages, and if tomorrow they were to be called upon to cope with some terrible epidemic their methods would be practically the same as those of their savage ancestors. They would doubtless begin as they did in biblical times, in the middle ages, and in the terrible winter of 1918, by fixing the blame on some group of persons who had offended the deity. Then there would be sacrifice and ceremony, solemn processions and pilgrimages, and the making of vows, all undertaken with the hope of expiating sin and propitiating an angry God.

The average individual would keep his windows tightly closed at night to keep out the flying demons of disease, and he would certainly wear a protective amulet. If during the epidemic, a savage were to come to our shores with some explorer, he would see nothing new in all this and could only approve heartily of every detail.

The Progress Made by the Herb Doctors

But now let us see what the descendants of the herb doctor did when, some thirty years ago, they were asked to send men to India to try to stop the bubonic plague which was raging there as it has done so many times in the past.

Did the physicians who were sent go into the temples and offer sacrifices before the hideous goddess of epidemic diseases? No, they went to work with microscopes and guinea pigs. First, reckless of their lives, they opened the bodies of people dying with the plague, and learned to recognize the characteristic changes in the organs. Then they put under the microscope a little juice from the enlarged glands in the groin and always they found there millions of tiny germs such as are never found in the tissues of normal persons. Then the investigators grew these germs in glass tubes; they injected a drop of the resulting culture into guinea pigs, and when these animals sickened and died, the autopsy always showed lesions like those of the patients. And so, gradually, it became clear that the cause of the scourge was a living thing, a tiny germ which went into a man and multiplied until it killed him.

The next question was: How did this germ get into the people? Did they drink it or eat it or did it travel through the air? At this point the physicians were helped by a bit of knowledge that had been available for centuries, namely, that always preceding an epidemic of plague, rats crawl out of their holes and die. Accordingly, hundreds of rats from the affected regions were caught and dissected, and in the sickly ones, again there were the same lesions and the same little germs that had been found in the guinea pigs and in the patients. But how were the germs getting from the rats into the people? Soon the rats' fleas fell under suspicion, and when some were removed from a rat dying of the plague and dissected, there were the germs.

Then the scientists combed fleas off of sick rats and put them on guinea pigs, and the pigs sickened and died of plague. They always got the disease also when they were left in cages on the floors of

Continued on page 4, column 1

Tells of Emergence of Medicine from Folklore

Continued from page 3, column 5

the huts where men were dying of plague and their fleas were hopping about looking for a new host. But when the cages were made of a wire gauze too fine for the passage of fleas, or when ordinary cages were suspended some distance off the floor, too high for a flea to jump in, none of the guinea pigs succumbed.

At last, then, the essential facts about the disease were available, and bubonic plague could no longer rage as a terrible scourge up and down this earth. Now, whenever a few cases appear in a city, health officers rush in and destroy rats and fleas, and the epidemic is stopped before it can get well started.

I wish I had time to tell you more of the fascinating stories of the wonderful detective work that has been done in tracking down one little messenger of death after another, and learning so much about its life habits that health officers can destroy it or stop it from propagating, but I must hurry on. Those of you who have read Zinsser's delightful book on "Rats, Lice and History" and De-Kruif's "Microbe Hunters" already know the fascination of some of these stories.

Every Worth While Discovery Used

I must hurry on to point out a fact which to me is a source of pride, and this is that every worthwhile discovery ever made and remembered and every accurate bit of information ever picked up and used by the ancient herb doctors and by all true students of disease throughout the ages, is used in scientific medicine today. Every well educated regular physician today is the lineal descendant and heir of the old herb doctors and primitive surgeons, just as every faith healer and every irregular practitioner who treats all cases alike, and every ignorant quack who treats by hocus pocus of one kind or another is a lineal descendant of the witch doctors of ancient days.

In my library I have translations of the two oldest medical books in the world. The original papyri were found together in the tomb of what was probably an Egyptian physician. So far as scholars can tell, these two books date back to between two and three thousand years before Christ. The Smith papyrus was written by a remarkably modern surgeon who described the several types of fracture of the skull and the symptoms that go with each so clearly that we can follow him today. He sutured wounds and brought their edges together with adhesive tape; he knew that an injury to one side of the brain caused paralysis of the other side of the body, and he was able to prophecy that some patients would die and others would probably get well. If he could only wake up today, to crawl out of his sarcophagus and come to the University of Minnesota, I believe that in him Dr. Wangensteen would find a helpful associate, and would defer to his judgment in the handling of many a wound.

The other ancient book, The Ebers papyrus, is not so satisfying today because it is largely a collection of prescriptions in which drugs are often mixed with unpleasant things such as the dried excorement of men and animals. Why did they use such things? In order to make the indwelling demon of disease so disgusted that he would get out and not come back. Actually some of the prescriptions were labelled "for the expelling or terrifying of the disease."

For the same reason, in China today, when a man lies desperately ill his relatives will sometimes hire orchestras to keep up such an infernal din all day and all night that the devil causing the disease will get worn out from lack of rest and sleep and will depart for a quieter place.

Mixing Magical and Practical

But to get back to the Ebers papyrus. As I have already pointed out, one finds there many instances of a very common medical practice, and this is the mixture of the magical and the practical. As one would expect, all through the ages the two systems have been combined more or less unconsciously by practitioners of the two types. The witch doctor or the mental healer has used manipulations and even drugs, and the old herb doctor has taken care to gather his plants with a certain ritual or while mumbling spells, and only during certain phases of the moon. Furthermore, the herb doctor has often fallen from grace, scientifically speaking, and has prescribed a drug not because experience showed him that it was useful but because the astrologers believed that it and the disease to be treated were both under the protection of the same sign of the zodiac. Or perhaps because a walnut looks like a brain with all its convolutions, the old doctor gave powdered walnuts for insanity; or from a similar course of reasoning he gave red medicines for anemia and yellow ones for jaundice. Or he shaved elder bark downward to get a cure for vomiting and upward to get a cure for diarrhea.

Similarly, today, the faith healer called in an obstetrician to help with a difficult case of labor, the osteopath prescribes diet and insulin for a diabetic, and the regular physician cures many a hysterical patient with a combination of pills, electricity, suggestion and personal magnetism.

And as we might have expected we find letters in the archives of an ancient king of Nineveh showing that when one of the magicians was very ill he called for a physician, and when the king was not recovering properly from an illness his physician admitted that he did not know what was the matter and suggested that while they might continue giving the medicine they had better call in a magician!

The Gathering of Drugs

One of the most interesting things about the Ebers papyrus is that it shows us that away back in that ancient time physicians were already well acquainted with many of the drugs that we use today. Aloes, senna, castor oil, epsom salts, and figs were being given for constipation, and peppermint and fennel for gas. To me one of the most curious prescriptions in the collection is the one for soothing a crying child. What do you think it contained? Nothing other than the opium which our government had to ban from American patent soothing syrups some twenty-five years ago. Incidentally, you ladies might be interested to try out one of the old Egyptian formulas for Countess So and So's facial cream, guaranteed to remove wrinkles! You will be interested to know also that the nearby Assyrians treated halitosis, they dyed their gray hair, they used mustard plasters, and they put a piece of raw meat on a bruised eye!

And all this leads up now to another one of the points I wish to make and this is that the regular physician today uses without prejudice every drug and every method of healing that he can hear of that was ever found really useful by anyone anywhere. Just go into a drug store and glance over the shelves. There you will find the castor oil, senna, ox gall, aloes and opium which were used in ancient Egypt; another purgative, magnesia, came originally from an ancient city of that name in Greece, jalap comes from Mexico; cascara comes from California, the aspirin which so many of you use is first cousin to the oil of wintergreen which your grandmothers used to put on flannel and tie around aching joints, (some of them may have gotten the idea from the American Indians); and quinine and cocaine and ipecac come from South America. Digitalis, our greatest heart medicine, came to us from an old English herb woman. When, a hundred years ago. Dr. Withering found that this woman was curing some patients whom he had failed to help, he went to her and paid a good price for her secret. Then like the true physician that he was, he first purified it and then gave it freely to the world.

Lest this story about Withering serve to strengthen the belief that some of you have that it pays sometimes to go to a Chinese herb doctor or to an American Indian or to a Hindu or some other foreign healer because he must know many things that the American physician does not know, especially about medicine of vegetable origin, I will say that there may have been something in this idea long ago but there is not much in it now after all the years that pharmacologists have spent in studying drugs from all over the world. So far as Chinese medicine goes I know of at least three scientific treatises on the subject.

Interestingly, when in September some of you begin to sneeze, the ephedrine which you will probably find helpful was isolated only a few years ago from an old remedy used by the Chinese. It was purified by a young Chinese chemist, Dr. Chen, working in the laboratory of an American university.

Are Physicians Too Conservative?

Incidentally, thousands of people believe wrongly today that if some layman were to discover the cure for cancer we regular physicians would have none of it for years until we could no longer stand out against it. I am sure this is not true if only because a study of the history of medicine in the last seventy-five years shows that our leaders have almost always grasped eagerly at the gifts that have come from men outside our ranks; from a physicist like Roentgen (x-rays) or from a chemist like Pasteur (bacteriology) or from a dentist like Morton (anesthesia). In fact one of our worst tendencies is to snatch the gift away from the giver before he has had time to perfect it or to test it properly.

Many times a year, we at the Mayo Clinic receive a letter from someone who assures us that he has the cure for cancer and asks that we help him in getting it before the world. What these people fail to see is that if a man were to cure only a dozen patients with cancer scattered through the body, he wouldn't need to come to us for help, instead he would be appealing to the police for a detail to keep the crowds in order on his front lawn.

Actually, of course, there is not one chance in millions that the cure for cancer will be found by a layman or some obscure physician working nights in his basement. Just as in gold mining, so in medicine; the time for picking up big nuggets is gone. Now the finding of a cure for cancer calls for much work by groups of highly trained and well equipped investigators, and the cure is most likely to come through a series of discoveries, all made in big university laboratories.

The Father of Medicine

But to get back to the beginnings of medical writing, let me tell you a little about the greatest of all the ancient books. Really it is a series of books written in large part by Hippocrates, he whom we now call the "Father of Medicine." He lived and worked in Greece some 400 years before Christ. He was a modern type of scientific physician in that he observed closely with a surprisingly open mind; he described what he saw, he recorded his failures as well as his successes, and he used everything of curative value that he could find. As one would expect from this, much of what he wrote so long ago is still of interest and value today. The few parts that are of little value are the ones, possibly written by disciples, in which the facts of observation were warped to fit one of those unprovable theories of disease which are still so popular with irregular practitioners today.

As many of you know, the Greeks looked upon the world as made up of four elements: fire, air, earth and water, and the body of four humers, blood, phlegm, yellow bile and black bile. These humers were affected by the four qualities of matter: heat, cold, dryness and moisture.

You who know something of modern chemistry and physics will say: "How silly," and yet those ideas deminsted and restricted and largely sterilized medical thought for two thousand year. Even today, they affect our speech, and we say that a man is of a sanguine, a phlegmatic, a choleric, a bilious, or a melancholy nature, or that he has a warm or a cold temperament, or that he is as cool as a cucumber.

We physicians revere Hippocrates because he was the first man to see clearly two things: One, that many diseases clear up best if the physician does not muddle too much, the other, that medicine advances only as it breaks away entirely from magic.

Gradually, through the two milleniums before Christ, physicians had been coming to see that some diseases are due to injury and contagion and the wearing out of parts, but so far as we have a record, Hippocrates was the first to go the whole way and state that no disease is purely miraculous in origin. He would not exclude even epilepsy, which then was called the sacred disease, because of those terrifying fits which seem so obviously to be due to the intervention of a god or of a devil.

And if religiously minded people had only listened to Hippocrates and his successors and had given them the freedom to dissect, to perform autopsies, to experiment on animals, and to report honestly and fearlessly what they found, how almost certain it is that today medical knowledge would be hundreds of years ahead of where it is, with tuberculosis and cancer and arthritis perhaps only memories of the past.

The Ever-Present Opposition

But all through the ages a large section of the people in every country have kept saying, "No, you mustn't do that," thus making it hard for research workers to carry on their beneficent work for the relief of human suffering.

Really, aren't we human beings curious in our mental processes? In the Middle Ages they loved to hitch a dray horse to each of a man's hands and feet and drive these horses off in four different directions; they loved to strip off a man's skin while he was still alive, or to break his bones on the wheel or to roast him over a slow fire, but just let the crowd which had looked on so approvingly discover that an eminent teacher of medicine, trying to learn how better to help suffering humanity, had dissected what was left of the poor prisoner after the hangman was done, and they would turn in wrath to rend the impious wretch who had dared "to so desecrate a human body!"

This might be amusing now in an abstract way were it not for the fact that today, it still is hard to get human bodies for dissection, and so bitter is the opposition of animal lovers to the progress of scientific medicine, that in some cities the pound man does not dare to sell even a dead dog for study in the local medical school.

Just think of Aristotle, the greatest naturalist, and one of the greatest physicians of all time, having to admit that, even with the backing of his pupil and patient, Alexander, the most powerful ruler of the then known world, he had been unable to dissect even one human body, and he had never seen a man's kidney or a woman's uterus!

Fortunately, in the sixteenth century, the opposition to the dissection of the human body died down sufficiently in a few Italian cities so that Vesalius was able to see how a man is made inside, and to publish in 1543, the first accurate book on anatomy. Obviously until such knowledge was secured, the practice of surgery was impossible.

The next big step in the progress of medical science came in 1628 with Harvey's great discovery of the circulation of the blood. This work established the study of physiology or the science of the functions of the many organs of the body. In 1683, Leouwenhock, a shopkeeper, but a wonderful scientist for all that, discovered bacteria, and in 1719 Mergagni founded the science of pathology, which deals with the changes that are to be found in the bodies of persons dead of disease.

Later there came much progress in the differentiation of diseases by careful study of the symptoms and the physical findings, until physicians were able to distinguish malaria from typhoid fever, measles from German measles, diphtheria from croup, and appendicitis from ordinary stomachache. Around 1877 Pasteur discovered the role that germs play in the causation of disease; protective vaccines began to be made, and Lister showed how to banish suppuration from surgical wounds. In 1846, Morton and others discovered anesthesia, and surgery was able to forge rapidly ahead. Finally, with the full development of bacteriology there came wonderful triumphs in the prevention and cure of many of the infectious diseases that have plagued mankind.

The Latest Phase of Medical Progress

Today we are entering on a marvelous phase of medical development, and many seeming miracles are already being performed. The physiological chemist is having his inning, and every few months, someone isolates from some one of the glands of the body a new substance which has uncanny powers in the way of controlling growth and development. One of these substances makes giants another makes midgets, another produces goiter, another makes the breasts of a virgin animal fill with milk, and others produce cancer at the will of the investigator. I feel sure that we are but on the threshold from which we shall soon glimpse even greater wonders.

As yet we do not know how to use curatively all those gifts of the chemist, and many are not yet even on the market, but with time and experience, there must surely come from some of them great benefits to the human race.

Protecting Research Workers

All of these great gifts of science are for you and your children. No one of you knows on what day some disease, as yet incurable, is going to strike down some one dear to you; and when that day comes the only hope your physician may be able to give you will be that in several laboratories in this country or abroad, devoted men and women are working late into the night, hot on the trail of a cure for this very disease which has struck so close to you. Under those circumstances the one thing left for you to do will be to pray that the discovery will not come too late.

Surely when such days of sorrow and anxiety come you do not want to have the door of hope slammed shut in your face with the announcement that certain people who cared for animals more than they cared for men and women and little children have succeeded in passing a law that stopped work in those very laboratories in which this beneficient and most promising work was going on. I am sure that most of you men and women would never consent to such a thing if only you understood the problem, and if only you believed your university authorities when they assure you that today laboratory animals are well taken care of, and, when operated on, are always kept under surgical anesthesia.

In summing up, now, I will ask you to keep in mind the two types of medical practitioners that have been with us from the beginnings of the race; one the witch doctor with his reliance on magic, the other the herb doctor and primitive surgeon with his constant efforts to improve his knowledge of the body and its diseases, and his constant search for efficient methods of treatment.

Throughout the ages and even today these two types of medicine have existed side by side, and strange mixtures of the two have always been compounded. Today, although scientific medicine is forging rapidly ahead and bringing in its train miracles of healing, it still has to fight its way against opposition from the many people who still believe that disease can easily be treated by one who has little or no training in the science of medicine.

They say that once upon a time a man of God was treed by an angry bear who started to climb up after him. At first the minister prayed, "Oh Lord, help me" but as the bear kept on coming he gasped out, "Oh Lord, if you won't help me, at least don't help the bear." And so I close with the plea that if some of you are not interested in helping the teachers of medicine and the research workers who are trying to advance the progress of medical science and to supply you with ever better and abler and finer physicians, at least will you please not help those who would lower standards of education and close the research laboratories. As Dr. John Abel, that grand old man of pharmacology, once said, "Greater even than the greatest discovery is to keep open the way to future discoveries."

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 FEBRUARY 25, 1936 NUMBER 8

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | MARCH 17, 1936 | NO. 9

Endowed Athletics Seen for Future As Regents Act

End of Athletic Construction Program Implied in Resolution

TO HOLD NET RECEIPTS

After Reserve Has Been Built Interest to Be Available in Emergency

First steps were taken March 6 by the University of Minnesota toward a policy of endowed athletics when the Board of Regents unanimously voted to place 60 per cent of each year's net athletic income into a new physical education and athletic fund.

The fund will be used to support the physical education program for men and women, the intramural sports program, and intercollegiate athletics.

The action of the board is in line with the most advanced policies now being adopted by certain leading universities outside the Western Conference.

President L. D. Coffman proposed the resolution in executive session after the board had heard him discuss his plan. It was adopted without dissent.

Ends Building Program

Clearly implied in the resolution seems to be the prospect that the athletic building program at Minnesota is at an end. Since 1924 Minnesota has added the Stadium, several acres of playing field, the Field House, the New Athletic Building and terrace, and has built an addition to the Women's Gymnasium. Proposals for a hockey building, enclosed, and for the introduction of the expensive sport of rowing have been made from time to time. To these ideas the new endowment fund seems to be a negative answer.

If an athletic endowment fund large enough to support the physical education and sports program of the university is developed, the University of Minnesota will be in the situation, enviable for an American educational institution, of being relatively free from public pressures with regard to many phases of athletics. This is an ideal toward which many colleges and universities in this country have been working.

Plant Free of Debt

In response to an inquiry by Regent George W. Lawson of St. Paul, secretary of the Minnesota State Federation of Labor, Comptroller W. T. Middlebrook told the Board of Regents that the university was now completely free of debt on its athletic plant, the final $100,000 of indebtedness on the new Athletic Building having recently been liquidated.

In many respects the action of the board may be taken as opening a new period in the history of Minnesota athletics, at least as to point of view.

The resolution as it was presented to the regents is as follows:

"Noting with interest that some universities already have taken steps to endow intercollegiate sport and that a number of others are considering doing the same thing, believing fully that the physical education and sports program of the University of Minnesota should not be dependent permanently upon receipts from games, and believing at the same time that the promotion and encouragement of a sound program of physical education and sports are desirable and will represent permanent features of the educational work of any well-organized university, the regents of the university do hereby resolve:

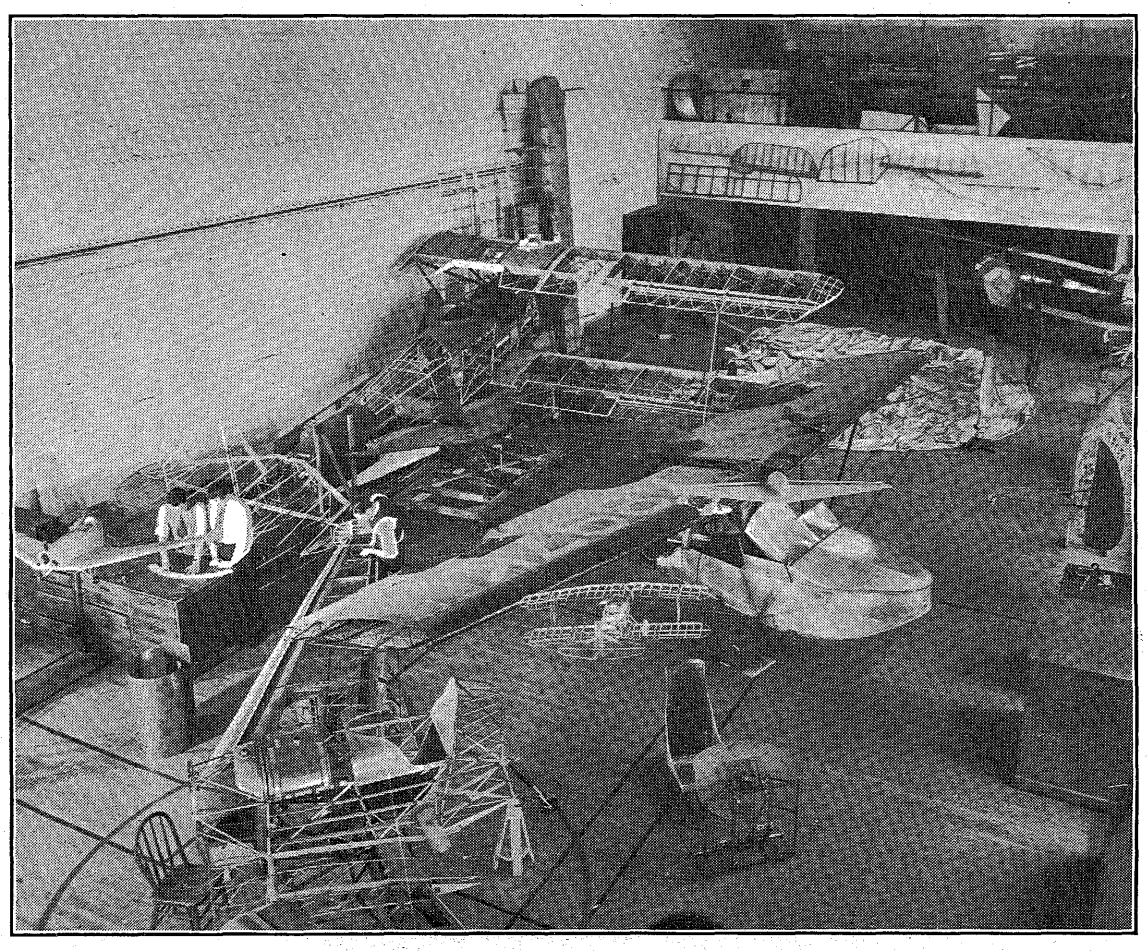
Plan $40,000 Reserve

"No. 1—That not less than 60 per cent of any net income accruing in the intercollegiate athletic fund shall on June 30, 1936, and each June 30 thereafter be placed in a physical education and athletic fund to accumulate for the further support of the physical education program for men and women and the intramural sports program for men and women and such intercollegiate sports as the university may decide to maintain.

No. 2—That not less than 40 per cent of any net income accruing in the intercollegiate athletic fund shall on June 30, 1936, and each June 30 thereafter be placed in an athletic reserve fund for emergency and contingency purposes until such time as there is established and maintained a $40,000 reserve fund, provided that on any June 30 when the reserve fund amounts to $40,000 any sum in excess of the $40,000 reserve shall be added to the principal of the physical education and athletic funds.

No. 3—That the principal of the physical education and athletic endowment fund so established shall be invested and held intact and that the interest from this fund shall be added to the principal, provided, however, that the income may be used for operating and other purposes in case some emergency arises."

Minnesota Laboratory for Aviation Study



What to Know About Stratosphere Called Chief Thing to Be Learned

J. D. Akerman Confirms Arrangement for Courses by Piccard

The principal thing we need to know about the stratosphere is "what we should learn about it," according to Professor J. D. Akerman, head of the department of aeronautical engineering, and that, he says, is one of the matters to which Professor Jean Piccard, the famous stratospherist, will study when he comes to Minnesota at the end of this month to spend a quarter in studies and lectures.

Incidentally, said Professor Akerman, it is Mrs. Piccard who is the balloonist, her husband being the scientist. She is the only woman who has ever been in the stratosphere, and is an American, a Bryn Mawr graduate. Dr. Piccard is also an American now, having become a naturalized citizen.

Whether the Piccards will make a stratosphere flight from the Twin Cities will depend on their success in financing the project, which would be far too expensive for the University of Minnesota to undertake, Professor Akerman explained. At last reports, however, pledges of material to cover about two-thirds of the total cost had been received.

In any case new and interesting studies of the stratosphere will be made here, he explained. Among them will be a study of transparent materials for balloon bags. This is something new. One of the great obstacles at present to experimental excursions into the stratosphere is that with dark colored bags the action of the sun on the supporting gases causes such expansion and radiation that the period of a flight is limited. With transparent bags it is believed that much greater uniformity can be achieved. Using small experimental bags and possibly a bag of transparent material if a major flight is attempted, Dr. Piccard will try out the reasonableness of this theory while he is at Minnesota. The decrease in radiation might make it possible for a balloon "to stay up a week," the Minnesota instructor declared.

Aeronautic Work Progresses

Meanwhile the regular work of the department of aeronautical engineering is progressing steadily and the department is pleased that one of its last year's graduates, Thurman Erickson, has been named assistant to the chief engineer of Pan-American Airways for its South American route.

As soon as weather permits the University Flying club is going to try out a new glider which has

Continued on Page 2, Column 2

Sociology Visitor Comes from Temple

In line with its policy of recent years, the Department of Sociology has engaged a prominent sociologist to come to the campus for the spring quarter as visiting lecturer. This year the visitor will be Dr. James W. Woodward of Temple University. Dr. Woodward is president of one of the important sociological organizations of the country. He is a specialist in economic theory and in the scientific aspects of sociological measurements. The Board of Regents also appointed as a professorial lecturer in the Law School for the period February 1 to June 30, Benedict S. Deinard of Minneapolis, a well known attorney, member of the firm of Leonard, Street and Deinard.

Schoolmen's Week To View Education For State Future

What the future of education should be in an agricultural area, namely Minnesota, which is nevertheless keenly interested in having contact with and understanding of the vast problems, social, economic, and political that the world is facing, will be the general topic of the twenty-third annual Schoolmen's Week at the University of Minnesota, April 6 to 8. Plans for the week, with which will be combined the annual Superintendents and Principals Short Course, have been announced by Dean Melvin E. Haggerty of the College of Education.

"Social Problems: Minnesota faces the future as a mature state" will be the Monday topic, on April 6. That for Tuesday will be "Education and the nation," and that for Wednesday, "Education and the world situation."

Principal visiting speakers will be Dr. James T. Shotwell, professor of political science in Columbia University, and long an active participant in League of Nations affairs and Dr. Francis David Farrell, president of Kansas State College, a distinguished agricultural educator. Louis F. Brownlow of Chicago, who was to have come, has been forced to cancel his engagement.

Many prominent members of the Minnesota faculty will take part, including, on the Monday problem, Professors E. W. Davis, Clyde H. Bailey, Ralph T. King and Lloyd H. Reyerson, and on the Wednesday topic, world affairs, Professor Lloyd M. Short, Harold Quigley, both from the department of political science, and Dr. Shotwell.

President L. D. Coffman, Dean Haggerty, Dean Walter C. Coffey of the department of agriculture, Dean E. M. Freeman of the College of Agriculture, Forestry and Home Economics, Professor Alvin H. Hansen, and many others will take part.

Together with Schoolmen's Week many organizations of persons engaged in education will meet. Among the session will be those of the High School Principals, State Deans Association, Minnesota Society for the Study of Education, County Superintendents of Schools and the State High School Conference.

Responsibility For Education Should Be Local

Central Control No Necessary Corollary to Federal Aid

U HEAD STATES VIEWS

Interest in Project Managed at Home Vital Factor in Problem

The thesis that federal support in certain fields of education, already provided and now in process of some expansion, should not carry as a consequence centralized national control of education policy, was stated by Dr. L. D. Coffman, president of the University of Minnesota, when he spoke recently before the Department of Superintendence of the National Education Association. The meeting took place in St. Louis, Mo. Leading educators from the University of Chicago and from Columbia University took part in the three-paper symposium. President Coffman's subject was, "Federal Support and Local Responsibility for Education." Much of his paper is reprinted herewith:

The most important document ever issued in this country dealing with federal support of public education, was the report of the National Advisory Committee on Education in 1931. This committee, consisting entirely of educators, was created by President Hoover to prepare "the proper chart by which to steer our educational course," insofar as the Federal Government is concerned. This historic document has had little influence in determining national policies with reference to public education. To be sure new and unforeseen circumstances since 1931 may have been partly responsible for diverting the attention of the government from the recommendations of the commission.

The need for the report arose from the fact that the Federal Government, through its various departments and agencies, was already supporting or aiding many lines of education over which it was exercising varying degrees of control and also from the fact that many new demands for federal appropriations for education were being pressed on the Congress. It was clear from the policies already adopted and the new support being urged, that large sums would be needed in the future if Congress acceded to the demands of the pressure groups for appropriations for some aspect of education. There was no clear-cut definition of policy that the Federal Government should follow in the face of these demands and no well-defined areas as to the nature and extent of the jurisdiction it should exercise once appropriations were made.

The commission favored the use of federal funds for public education. It disapproved federal laws that provide for the matching of monies; it opposed giving federal authorities the right to approve or reject state plans; it called upon the government to restrict all federal grants for special types of education; it urged that studies be made to determine how far and by what methods the people are justified in using the federal tax system to supplement state and local taxes in support of public education; it requested that all future grants to states be made only after thorough educational studies had shown to the satisfaction of the appropriating power that such federal aid was justified, that future grants be apportioned on the basis of need rather than in terms of an equal amount for each state, and that such grants be subjected to review every ten years. It advised further that federal control be restricted to audits of the funds; and finally it recommended that more liberal appropriations be made to the Office of Education

Continued on Page3, Column 1

Birds, Business and Behavior Among New Faculty Book Topics

Barnhart Discusses Newspaper Management; White Tells of Dealing With Folks

Hundreds who intended to buy a copy of Dr. Thomas S. Roberts' "Birds of Minnesota" but didn't get around to it until the edition was exhausted will be pleased to read the announcement of the University of Minnesota Press that the book is to be reprinted in two-volume form. Probably, however, it will not appear before next June. Meanwhile a new assembly of the color plates of birds in the original book is being published in a spiral binding with hard cover. This is the sixth format in which the pictures have appeared.

In March the Press will issue a second revised edition of Roberts' "Manual of Identification of the Birds of Minnesota and Neighboring States," which has black and white illustrations but no color plates.

"On Newspaper Work"

Thomas F. Barnhart, associate professor of journalism, is the author of a new book, "Weekly Newspaper Management" (Appleton) which will be a distinct and important help to those hard working people who conduct papers in towns of weekly paper proportions and will also be of no little service to many who publish larger papers. Minnesota happens to be a "weekly newspaper state" because of the size of its communities, most of which are somewhat too small to provide support for a paper that appears every day. Perhaps Minnesota has more weeklies than any other commonwealth. Professor Barnhart is now engaged in writing a history of the Minnesota Editorial Association, made up principally of weekly editors.

"Special attention is given here to discussions of the sources and classifications of newspaper advertising and kindred problems," he says in his preface, "to the types of circulation desired by an advertiser and ways to obtain it, and to the most important aspects of office management and records. Much space has been devoted to the discussion of principles and to the illustrations of plans used by publishers. Many illustrations are essential. It is intended that the discussions and statements be sufficiently extensive to help those who are studying journalism as well as those who are in active newspaper work.

"The application of 'merchandising in advertising' to newspapers is just now developing. Publishers now realize the possibility of applying to the advertising department the methods which have proved so beneficial in merchandising itself. Likewise, circulation and office administration methods are forging ahead. It is hoped that the present work will help in these developments."

Dealing With People

Wendell White, assistant professor of psychology in the General Extension Division, has another new book, "The Psychology of Dealing With People." In it he has attempted with success to reveal a great number of practical applications of psychology to everyday life. He shows how one may learn to use what psychologists have discovered, in making business, social and other relationships with people both more frictionless and more effective. Of this problem Dr. White says:

"Successful living necessitates ability to deal with people. In our personal strivings and in our attempts to help others, we need to be adept at getting people to respond favorably to us and to our suggestions. This is especially so in an intricate social order.

"The importance of regarding another's desire for feelings of personal worth is widely realized," Dr. White writes. "We can make either positive or negative appeals to the want for a feeling of personal worth.—No sweeping generalization regarding the merits of positive and negative appeals can be made because these methods are not equally suitable in all cases.

"Not all persons can attain the same degree of success in attempting to persuade others by giving them feelings of personal worth. There are, on the one hand, those individuals who are so prone to emphasize their own importance and who are so envious of others who enjoy self-regard that they cannot act naturally when attempting to further the pride of others. Their insincerity is easily detected, and, when apparent, causes much resentment.

"There are, on the other hand, persons who have strong feelings of generosity, and who enjoy seeing their fellows experiencing self-regard and do not think first of chiselling a monument to themselves out of every human relationship. Such persons are recognized as being sincere. They are among those who are called "born" psychologists. They are successful because their magnanimity is genuine."

Dr. Harris Honored

In memory of a Minnesota botanist who died in 1930, the University of Minnesota Press will publish early in March "J. Arthur Harris: Botanist and Biometrician." The book, which consists partly of biographical material and partly of scientific papers by Dr. Harris, is edited by three of his associates at the university—C. Otto Rosendahl, chairman of the department of botany; Ross Aiken Gortner, chief of the division of agricultural biochemistry; and George O. Burr, professor of botany.

Plan to Study Stratosphere

Continued from Page 1, Column 3

been obtained and is waiting safely in the laboratory. Requests for use of the Wold-Chamberlain field for the take-offs have not been cordially received for fear of interference with regular traffic, but another satisfactory field has been located and the plans will go ahead.

The Minnesota department has specimens of engines of all the major airplane types, including the earliest and the most recent. For the most part these have been "permanently transferred" by branches of the United States military service, but with the proviso that these engines must be used for laboratory purposes only, not flown. Large amounts of other types of equipment also are on hand for study purposes, including expensive instruments, transferred by the army or navy, materials, many of them given by the manufacturing firms; parts, including wings, rudders, frames, fuselages and the like, together with wheels and parts of every description.

The course as offered by the University of Minnesota in its character as a teaching institution includes no flight training, and to make up for this condition the Flying club has been formed as a student activity, with regular recognition as such from the senate committee on student affairs.

Course in Seventh Year

The course is now in its seventh year and two hundred and eight students are enrolled according to Professor Akerman. Thorough training for laboratory positions is offered at Minnesota, but the department head is also advising his men to seek practical work at the outset by joining the ground forces at aviation fields. There are approximately ten men on the ground for each one in the laboratory, Professor Akerman explained. An outlet for employment that is now increasing is in the meteorological branch of the aerial navigation service, making special weather observations and serving as couriers.

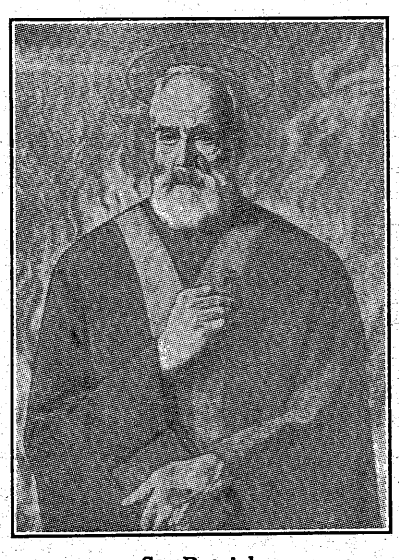
Strange as it seems, the main complaint of the men studying aeronautical engineering in their new laboratory, situated where the old swimming pool stood in the Armory, is that they can't make all the noise they would like. Other classes are conducted in the building and there is a limit to the racket that can be raised.

While the present federal aid for college students continues Professor Akerman will have the help of a group he calls his "G-men," federal students who work out their time allotment in his laboratories. With their aid he has rearranged part of his establishment and set up equipment in several new classrooms.

About ten departments of aeronautics are now giving courses of university caliber leading to degrees, Professor Akerman said. Surveys show, he declared, that there are a good number of openings for trained men in operation and manufacture.

The idea of having Dr. Piccard spend a period at Minnesota came to the department head a year ago when Dr. Piccard was lecturing at Minnesota.

St. Patrick's Day and St. Patrick



St. Patrick

By Dr. A. C. Krey
Professor of History

March 17 is celebrated in honor of Patrick, patron saint of Roman Catholic Ireland. It is recognized as a festival date by the whole church, but is peculiarly dear to the Irish and their descendants scattered throughout the world. The enthusiasm of the Irish for their patron saint is so contagious that his memory is held in affectionate regard by many who are not Irish or even Roman Catholic.

The fifth century in which Patrick lived and did his work was long ago. It was a much troubled age whose written records were relatively few to begin with, and fewer still have survived. Ireland, the scene of Patrick's labors, was not then in the habit of keeping extensive written records. In fact only two of the saint's own writings have come down to our own time, those of course through copies. Authentic historical information about his career is very meager indeed, mostly lacking. But what written records have failed to do has been more than made up by the traditions developed among his followers. It would have been ungrateful indeed in a people whose bards are so famous in imaginative literature to have neglected the memory of their own patron saint. And certainly no one can justly accuse the Irish of such neglect. Few saints have had their memory more richly embellished with legend than St. Patrick.

It would be vain for the meticulous historian to assert that most of the positive statements that can be made about the life of St. Patrick are negative. There is scarcely a corner of Ireland which does not treasure its local association with his life and work. The visitor can still be shown at Skerries harbor the footprint in the hard rock where Patrick landed. Many of the natural peculiarities of Ireland have some explanation associated with his career. Wasn't it Patrick who drove the snakes out of Ireland? And wasn't it the shamrock by means of which Patrick drove the last lingering doubts from the minds of the kings of Ireland about the truth of the Christian doctrine of the Trinity which clinched their goodwill at the great gathering at Tara? How the magic of the Druids failed before the prayers of the Christians at that gathering! The great Druid priest who was lifted high into the air and crashed to death upon the rocks as he fell. And the darkness which fell over the gathering only to be dispelled by the prayers of Patrick. Indeed, it would take many, many books to include all the legends which have grown up around his memory.

Scientific history takes unkindly to legends and spends much of its time in exposing their lack of foundation in fact. This has happened, too, in the case of St. Patrick. The process has been going on for many years. At one time it almost seemed as if the instruments of historical research were to be used to destroy even the authenticity of Patrick himself. At this point one of the ablest of the scientific historians of modern times, J. B. Bury of Cambridge, took up the problem. He sifted fact from legend with all the tools of historical scholarship and left us a fairly substantial historical figure. There may have been Christians in Ireland before 432 and Irish Christians, too, before that date. But there was also overwhelming opposition, and the Druids still held sway over the kings. It was this opposition which Patrick overcame not only in that dramatic moment at Tara, but by his life work.

Born of parents who were Britons, Roman citizens and Christian, probably in 389 A. D., Patrick grew up somewhere in what is now England. He was taken captive by Irish raiders when he was sixteen. For six years he tended sheep and swine as a slave. He escaped finally.

The resolve to devote his life to religion seems to have been formed during his captive years. After his escape he went to Gaul, spending several years at the monastery of Lerins, then famous as a religious school, and several years at Auxerre, a leading missionary center. Despite his years of captivity, he seems to have cherished a strong liking for the Irish people and a desire to return to them. The opportunity came in 432 upon the death of Palladius, whom Pope Celestine I had sent to Ireland as missionary. This mission was now entrusted to Patrick. Accompanied by several priests and servants he reached Ireland in the summer of that year. The knowledge which he gained during his captivity must have been of great aid to him. At any rate his work was attended with great success almost from the outset. The climax of his career came soon, at the meeting of the Irish kings and leaders at Tara already mentioned. Having overcome their opposition, the task remaining was that of converting the people, building churches, and establishing the religious organization of the island. He visited many parts of Ireland in the course of his work and met with various adventures which legend has adorned. Armagh was especially dear to him. There he fixed his bishopric. But his death occurred elsewhere, and his remains were probably placed in Saul, where he had built his first church. By the time of his death Ireland was a Christian land never to return to heathenism even when the Vikings nearly overran the land. In fact the more than two centuries of intimate contact between Ireland and Norway were probably a factor in hastening the conversion of the Vikings.

Minnesotans Help Save Ducks from Lead Poison Death

National attention of sportsmen is being attracted by a recent research by Dr. Ralph Dowdell, professor of metallurgy in the School of Mines and Metallurgy, and Dr. R. G. Green, conservationist and research man in the department of bacteriology, Medical School, who have developed a new type of duck shot which will dissolve in water within 48 hours.

The purpose of the new shot is to end the lead poisoning, resulting from the practice of Minnesota ducks of eating many of the millions of shot that lie on the bottom of marshes and the shallow margins of lakes. Dr. Green, who has made long studies of the problem, estimated that one-third as many ducks meet an end from lead poisoning as die from what might be called the external lead poisoning of a direct hit. Ducks afflicted by lead poisoning gradually lose the power of flight and so fall prey easily to their natural enemies even before the disease would have terminated their lives.

He and Dr. Dowdell found by experimentation that a shot must be developed that would absorb and be eliminated within 48 hours after a duck had eaten it if the poisoning was to be avoided. Dr. Dowdell went to work on the problem and tried many alloys, finally hitting upon an alloy of two percent of magnesium, mixed with the lead of the shot metal. This proved to be the solution. The shot with magnesium added are a little harder, if anything, than the straight lead shot, but begin to effervesce and dissolve almost immediately upon hitting moisture, whether water or within a duck's stomach.

National conservation organizations have expressed wide interest in the solution proposed. The Minnesota researchers will go to an eastern manufacturing plant and make a considerable amount of the shot, No. 3, dropping the metal in a shot tower 150 feet high. In falling that distance shot becomes round and by the time it reaches the bottom has solidified. It falls into water which cools it.

Although shot metal contains an infinitesimal amount of arsenic and at one time that was thought to be possibly the cause of the poisoning, that contention has now been disproved. The metal contains about one-tenth of one percent of arsenic.

Story of Surgery and Contributions Told by Lecturer

All Great Advances Have Come Following Anesthesia and Asepsis

BASED ON RESEARCHES

"Chirurgeons" Once Used Only for "Bleeding" and Treating Wounds

"Benefactions of Surgery to Man" was the subject of a Sigma Xi address delivered at the University of Minnesota last month by Dr. Owen H. Wangensteen, head of the division of surgery in the Medical School. It was the second in the winter series of four on "Medical Science and Human Progress."

Dr. Wangensteen traced the history of surgery from the days when the surgeon was of wholly secondary importance to the physician, and in two ranks, surgeons of the short robe and surgeons of the long robe attended respectively to the duties of blood letting, in the first case, and the treatment of wounds in the second.

However, said he, the science of medicine is wholly a modern science, nothing having come down to us from the ancient physicians, while some of the things known to the surgeons before 1800 are still of value in the world of modern medicine, based on scientific observation and investigation.

In part Dr. Wangensteen said:

The Development of Surgery

To attempt to tell you in sixty minutes how surgery has benefited man through the centuries is admittedly a difficult task. My duty is somewhat lightened, however, in that up until about sixty years ago the chief anxiety of surgery was with the treatment of wounds. In the intervening years, surgery has emerged from a handcraft concerned with wound management to occupy an important position in the treatment of disease. It is with this latter significant chapter of surgery that we are here concerned. Before reviewing some of the accomplishments of surgery attained by modern methods, let us briefly peep into the common practices prevalent well up toward the middle of the nineteenth century.

Anesthesia and asepsis were unknown. Bacteriology had never been heard of. Of the Hotel Dieu the great municipal hospital of Paris, probably the oldest hospital in existence in the world, Warren writes: "In the surgical ward there were, on January 6, 1776, 273 patients, there being but 106 beds in the ward. The walls were soiled with expectorations and the floors with evacuations of the bowels and bladders, as also with blood and discharges from the wounds. The wood-supply and the washing were kept in this ward, and every afternoon there was also an out-patient clinic. There were four rows of beds in a ward 34 feet wide, and the report states: 'It is difficult to maintain the purity of the air on account of the blood and pus that stain the floor, which is impossible to clean, owing to the crowding of the beds.'" (Tenon's committee.)

War played an important role in the development of early surgery. Crude and imperfect as were obviously the ministrations of the surgeons of this time, their services on the battle field were held in high esteem by kings, generals and soldiers alike. The examples of Ambrose Pare and of Barron Larrey afford striking illustrations of the happy influence which the military surgeon of an earlier day exerted over the minds of soldiers in time of war, inspiring confidence in their leaders and assuring them of greater security and safety when struck down by accident or disease. When the French surgean Pare appeared at Metz, the soldiers of Charles V, exhausted by fatigue and hunger, crowded around the great surgeon exclaiming, "we have no longer any fear of dying even if we should be wounded, Pare our friend is among us." And Larrey who accompanied Napoleon through all his campaigns was loved by the soldiers and Bonaparte declared him the most honest and upright man he had ever known. Larrey must have been a most kind and thoughtful man, yet perusal of his books affords no description of the untold suffering borne by these men during operative procedures. On one day, he amputated more than 200 limbs upon the field of

Continued on Page 4, Column 1

Responsibility Should Be Local

Continued from Page 1, Column 5

for educational research and information service designed to stimulate and improve the various types of education in the states.

Nothing has happened in the last five years that would materially change these recommendations. My paper, therefore, might be concluded at this point were it not for the fact that recent events make it imperative that we renew our faith in these principles. For the first time in the history of this country there exists a serious challenge to many of our most familiar institutions and our most essential traditions and beliefs. We stand at one of those junctures of history where men are called upon to defend the things they have taken for granted or to support proposals that call for sweeping changes in their mode of life and in their ways of thinking.

Facing a Challenge

If any social, political and educational institutions or traditions are challenged by the drift of events, then all institutions and traditions will be affected alike. And yet through the changing currents of events there may be certain philosophic consistencies and fundamental principles that remain or should remain unimpaired. It is this thought that I should like to explore for a moment in analyzing the assumption that federal support without federal control is desirable for public education.

From colonial times down to the present, one of the most powerful forces and traditions in America has been local responsibility. Local communities have had certain clearly understood jurisdictional responsibilities; they have made laws for their own government, levied taxes for the support of their institutions, cared for their poor, policed their property, maintained roads, and provided schools. And they have shared with the state its responsibility in maintaining all those agencies, institutions, and activities that would promote their common welfare. No force has been more potent in the building of this nation than this conception of state and local responsibility. It has left communities free to test their strength and to experiment with ideas that they thought would contribute to their welfare. It has helped the people to maintain an interest in government, for they saw it at work every day. Since they shared directly in creating the patterns of government that served them, its mistakes became quickly visible to them and they were in a position to experiment with the correctives that should be applied.

Should Local Autonomy Go?

Now it is maintained that local autonomy has outlived its usefulness. Attention is called to the fact that local government has broken down in many communities. With improvement in travel and communication we are made patently aware that communities no longer exist as neighborhoods in the way they formerly did. Then, too, our conception of public welfare has been expanding. The states have assumed more authority and the federal government has grown more powerful. It now regulates industry, banking, insurance, transportation; it engages in vast public works; it erects federally-owned utility plants; it lends money, builds houses, feeds the poor. Even a novice knows that local communities have lost some of their early prestige and glory and that the federal government, in particular, has moved swiftly to consolidate power in the hands of its administration.

But the conception of local responsibility is not dead and the federal government has not become supreme. There are still millions of persons in this country who have lingering in their breasts the democratic belief and aspiration that the future welfare of the country resides in preserving local responsibility and individual liberty. On the other hand there are millions of citizens who declare with equal fervor that the public welfare, including universal education, is of such grave national concern that the federal government must, through appropriations and otherwise, assume greater and greater control over it. They point out that illiteracy, health, and a knowledge of new citizenship problems are matters of national concern, and that no satisfactory solution of them can ever be arrived at if their care is left to local committees.

The conflict between these two conceptions of sovereignty is not confined to the future status of education. It includes every one of the traditions and conceptions that we have cherished as free people and all of the aspirations that we hope to achieve through greater co-operation and collective action. This conflict is something more than the superficial clashing of matters of little consequence. It may be the mightiest struggle between two contending philosophies that the world has ever witnessed.

The assumption of greater power by the central government over private business and the welfare and educational institutions of men is not confined to America. The movement has expressed itself even more vigorously in a number of other countries than it has here. In some countries the domination of private business, of the schools, of the church, and of other humanitarian institutions, has become complete. Many recent experiments in government, including the New Deal in this country, represent a distinct move in the direction of control by the central government of the life and thought and associations of men. In America, at least, this tendency to centralize power represents a protest against the excessive use of liberty by individuals and the exploitation of the masses by industry. It also represents a desire on the part of people in general for greater protection and greater security.

Of this I think we may be certain, we shall not return willingly to the days of unrestricted exploitation. We may also be equally certain that Americans do not wish and will not long support a program which deprives them of all liberty, of the right to private ownership, of free competition under fair conditions, of a voice in the management of their own affairs, and of the education of their own children. These conditions are indigenous to the American soil.

Liberties May Be Endangered

In the desperate struggle to achieve economic security, Americans are face to face with the ever constant danger, rendered more acute during a financial crisis, of losing their liberties and of restricting unnecessarily their opportunities. Our government was designed to prevent this catastrophe; by its very nature it is intended to avoid two dangers—the danger of unlicensed liberty which culminates in anarchy, and the danger of a dominating dictatorship which culminates in regimentation. We have tried to preserve enough freedom to insure and to maintain the self-respect of our citizens on the one hand, and enough control to insure order and the promotion of their community interests, on the other. If the Federal Government swings too far in the direction of individualism we assume that the broader social and political interests of the people will operate to check it; if it undertakes the role of a dictator and seeks to regiment the life of individuals and of business, sooner or later the people will seek a restoration of their personal liberties.

So long as these fundamental principles are deeply imbedded in our democratic philosophy, we shall not undertake to obtain economic security by depriving men of the right to earn, nor shall we command that business be operated without profit, nor that wealth be acquired through gratuitous distribution. There is in society, as between man and man, a wide diversity of individual gifts and functions, and so, perforce, there must be distinction of rewards. We may put legal restrictions upon our inalienable rights and traditional liberties, but it is neither desirable nor possible to destroy them by legislative fiat.

A government in a republic is by its very nature experimental. We expect it to adjust and to adapt itself to new needs and to new conditions, bearing in mind at all times that it will not arrogate too much authority to itself nor attempt to strangle the opportunity for achievement by individuals and by private enterprises. For several years now we have been moving in the direction of greater governmental control of nearly every phase of life. This movement, symbolized by the New Deal, is now being subjected to its first barrage of criticism, some intelligent and some conspicuously partisan and narrow in scope. The critics maintain that the program repudiates industry, promotes indolence by paying men not to produce, and is making the American farmer, once the most independent human being on earth, a cog in a vast governmental machine. They also claim that this revolution in American traditions and values is based upon the hateful principle of coercion. On the basis of all this, perhaps the least we can deduce is that the changes, apparent or implicit in present federal policies, are causing not only doubts and misgivings but something akin to outright fear in the minds of vast numbers who are accustomed to thinking of our country as it has always been.

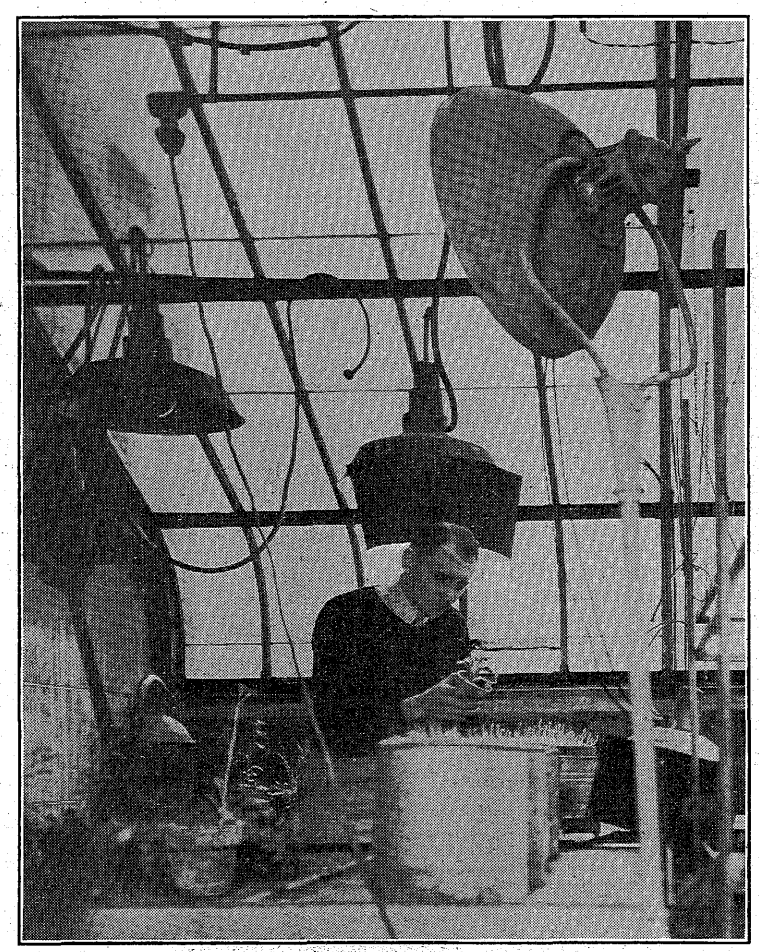
Education Is Involved

And we must not be misled: Education is enmeshed in the struggle. From colonial times to the Civil War, the federal government encouraged education in both the lower and the high school by making grants of money or of land, but it never undertook to regulate teaching. Not until the enactment of the Morrill Act in 1862 was there a change. With the passage of that law and since then, in a succession of acts, the federal government has assumed a directive control of specialized types, and more recently over other aspects of education. I am not at the moment concerned with the granting of federal funds for public education, for as I have frequently stated I fully believe they should be granted; but I am concerned with the manner in which they shall be used. In my judgment federal funds can be used to improve the schools without dominating instruction or without depriving the states and communities of their rights to experiment with education.

I have observed with no little anxiety the continued and increasing pressure of the federal government to dictate the educational program of the country. Until comparatively recently all federal grants were made for specific purposes. In each of these there always lurked the danger of complete control. Federal authority and money are powerful forces to place in the hands of those who wish to federalize the schools of America,. Long before the depression questions were being raised by educationists and laymen as to how far the policy of subsidization for specific purposes could be carried, for signs and hints of conflicts and subordination were beginning to appear.

Continued on Page 4, Column 3

Special Lights Help Grow Plants



Robert A. Phillips, superintendent of the Botany greenhouses, is shown examining some plants that are being raised by botany researchers with the aid of Neon lights. Results obtained so far indicate that these lights advance growth more than ordinary electric lights. Artificial light, of course, enables a plant to grow at night as well as in the daytime.

Expand Summer Athletic Courses

A short course in athletic coaching, offering a week of intensive instruction in football, basketball, track, swimming, gymnastics and athletic training, will be offered by the University of Minnesota department of physical education and athletics from June 15 to 20, officials of the department have announced. It will supplant an intensive course heretofore devoted to football only.

Varsity coaches at the university will form the teaching staff and will conduct classes for 10 hours each day of the seven-day course. Bernard W. Bierman, head coach of football; Dr. George Hauser, line coach, and others, will form the staff for the classes in football. Basketball will be under the direction of Coach Dave MacMillan and others, track under Coach George Otterness and others, swimming under Niels Thorpe, and athletic training under the direction of Dr. L. J. Cooke, assistant director of athletics; Dr. Hauser, and Lloyd Stein, trainer.

In order to get the entire course into the one week period, classes will be scheduled for 10 hours each day, going into session at 8 a. m. and continuing until 9 p. m. with brief intermissions.

Nafziger Made Associate Professor

Ralph O. Nafziger, who joined the University of Minnesota journalism faculty last fall on a year's leave of absence from the University of Wisconsin, has been made an associate professor in the department.

Professor Nafziger has been in educational work since 1928 and prior to his first association with the University of Wisconsin staff he had wide experience in newspaper work. He holds three degrees from Wisconsin, bachelor of science, 1920, bachelor of arts, 1921, and master of arts, 1930. He is completing his dissertation for the doctor of philosophy degree in political science, with a minor in journalism.

Although his undergraduate work was interrupted by the war, when he served in the American forces in the Archangel campaign, Nafziger completed his school of journalism training and then joined the North Dakota State College faculty where he taught two years. In the summer of 1923 he edited the Enderlin (N. D.) Independent, and later became a reporter for the Fargo (N. D.) Tribune. He joined the Fargo Forum staff, serving as reporter and then editorial writer. From 1925 to 1928 he held various staff posts on the Omaha (Neb.) World-Herald, ranging from general assignment man to Sunday department feature editor. In 1930 he became a full-time teacher in the school of journalism, serving until his appointment at Minnesota last fall.

He is a member of the editorial staff of the Journalism Quarterly and contributes the section devoted to bibliographical subjects on journalism. Since his discharge from the American forces in Russia, he has held a commission in the Reserve Corps. At present he is communications and intelligence officer of his regiment.

'U' Seeks to Build Town Sports Plan

Nordly Uses Litchfield and Glencoe as Laboratories

What is a model program of physical education and wholesome games and sports for a medium sized community? When should the boys play, and at what? What would be best for the men of the community? Golf? Baseball? Organized games? Isn't there something the older people could profitably do?

These are some of the many questions which the Department of Physical Education and Athletics in the University of Minnesota is endeavoring to answer in a study financed from athletic funds that is now being conducted in the cities of Litchfield and Glencoe, both something less than 100 miles west of Minneapolis. Perhaps not an ideal or model program of sports and recreation for such a town, but one that can be used as a model, to be revised from time to time as additional data are obtained from the study, is the general purpose of the research.

Carl L. Nordly, formerly a famous athlete at Carleton, later a teacher there of physical education and an assistant athletic coach, also at one time physical director in the Rochester, Minn., schools, is the man who is doing the work. Returning to Minnesota last summer after a year of study at Columbia, he was engaged by Frank G. McCormick, director of athletics, to undertake the building of such a program.

Most progress in the program at Litchfield is being made in the elementary and secondary school program. There are two meetings a week for Grades VII to X, together with intramural and interscholastic athletics.

The Rogers Physical Capacity Test is utilized for intra-class classification of pupils to provide homogeneous grouping. Weight records are systematically kept and changes noted in the fall and spring. In addition skill tests in athletic activities and tests on rules of games are given. Each class is divided into four squads which are in charge of leaders who assist the teacher in class instruction in a program of games, stunts, and other athletic activities. Some competition is offered in classes and results are posted on bulletin boards. However, the major emphasis is on instruction in skills in activities for which opportunity for competition is provided in intramural athletics.

Approximately fifty per cent of the secondary school pupils are transported from the vicinity of Litchfield to and from school in busses. A noon-hour intramural program is organized to satisfy the recreational interests and needs of such pupils. The teams are organized according to the locality in which members live. In the fall, schedules of touchball and horseshoes are played. Eight teams played a schedule which consisted of forty-two games in which one hundred twenty boys participated. Winter indoor activities include schedules of basketball and volleyball in the gymnasium. Twelve teams played a schedule of eighty-one volleyball matches in which one hundred thirty-four players participated. After a supervised lunch period the lunch room is converted into a recreational room where pupils of different age levels engage in a wide variety of recreational activities. Tournaments in table tennis involved thirty-two players and a shuffleboard tournament attracted fifty participants.

Pupils who live in Litchfield also participate in an intramural program. Their activities are scheduled for afternoons after school. Schedules and tournaments have been played in the fall in football and soccer, and this winter in basketball. In addition a tumbling club of twelve junior high school boys has been formed. The team made a creditable showing at the Northwest Gymnastic Meet. Tumbling and stunt films were shown to the boys this winter for instructional purposes and to stimulate additional interest. The spring after-school intramural program will include softball, track, horseshoes, golf, and tennis. Complete records are kept of the amount of participation of each pupil in all intramural athletic contests.

Frank O'Rourke, coach of the football, basketball, and baseball teams, and his assistant, Harold Grande, track coach, take an active part in the program.

Story of Surgery and Contributions Told in Lecture

Continued from Page 2, Column 5

battle—all without anesthesia.

Coming of Anesthesia

The horror of an operation without the beneficient agency of anesthesia is terrible to contemplate. Probably very few persons are now alive who were eye witnesses to such distressing scenes. The advent of administration of ether for the alleviation of pain, an American invention by the dentist Morton in 1846, was one of the great medical triumphs of all time. At the scene of its first supervised trial at the Massachusetts General Hospital in Boston on October 16, 1846, John Collins Warren, the operating surgeon, on conclusion of the successful experiment, spoke those prophetic words, "Gentlemen, this is no humbug."

Never in the history of medicine has a therapeutic principle been so quickly put into practice. Man had long hoped for such an antidote for pain but it had seemed to be alone a celestial blessing not to be attained in an earthly existence. Oliver Wendell Holmes, our physician-poet, for whom medical men in particular have an especial affection coined the word anesthesia.

Story of Antisepsis

Working quietly but feverishly in his laboratory in France was a chemist, Louis Pasteur, the medical Moses who was to revolutionize medicine and surgery and lead it out of the bondage and fear of suppuration. Life had confronted him with a number of practical tasks. With a genius for taking infinite pains, he had been able to solve the mystery of tartaric acid by demonstrating the presence of two tartars with the same chemical formula—one with laevoratatory, the other with dextrerelatory behavior toward a plane of polarized light. In turn, he discovered that micro-organisms were the cause of the spoiling of beers and wine, and that a parasite was responsible for the catastrophes in the silk industries of southern France. These studies led him into an investigation of the nature of chicken-cholera, anthrax and the general problem of infection. He crushed for good and all the doctrine of spontaneous generation and his successful vaccination of hydrophobia crowned his achievements. This man of humble origin did his best work after he had been stricken down with apoplexy at 46. Fortune dealt kindly with our medical Moses, for he lived to get more than a glimpse of the promised land from Mount Pisgah. He crossed the Jordan and when he died in 1895 the world acclaimed him as the greatest public benefactor of all time. He had kept the covenant.

The torch lit by Pasteur was to burn brightly in the hands of Lister, our surgical Joshua. He, it was who, by the application of antiseptics to the skin, demonstrated that incisions could be made and that wounds would heal without the anticipated consequence of suppuration. For centuries, inflammation had continuously harassed the surgeons and frustrated their efforts. It is not amazing therefore that this new prophet, though his divinations were true, like Cassandra was not believed. The walls of age long prejudice were not to topple and fall like those of Jericho. The exultant shout of victory over all opposition was delayed well up toward the close of the last century.

The New Science of Bacteriology

In brief, this is the story of the origin of present-day surgery. The microscope and the employment of analine dyes taught us in the new medical science of bacteriology why wounds suppurated. Man then quickly developed technical procedures which have gradually made it possible to invade and attack diseased processes in every body cavity and almost every tissue. The growth of medical knowledge during the time which parallels the discovery and development of bacteriology has been unprecedented in the annals of medical history. An ever increasing flood of illumination has penetrated into the mysterious darkness of disease. A small faint source of flickering light, in which one groped blindly about, unable to read or see the cause of disease had suddenly become incandescent and brilliantly bright. The lamp lit by Koch, the father of bacteriology, has continued to burn but the light has not always been so luminous, and has been inadequate to permit of satisfactory vision in the dim recesses of many diseases.

Within a few years, a score of bacterial diseases which had defied probing and understanding by the tedious, inexact and inaccurate methods of noting the symptoms present and the tissue effects produced, became clarified. The employment of a new approach to old problems had succeeded overnight in differentiating with precise methods what centuries of speculation and plodding effort had failed to do.

Surgery, Then and Now

The contrast afforded in the preparation for and conduct of an operation in the pre-antiseptic era and that of present day practise is startling. Then, surgeons washed their hands after operation instead of before. The surgeon took his instruments out of his case much as a plumber removes his tools from his kit. Without more ado, he put them on the table, took off his street-coat, when in the hospital, donned a frock-coat which usually hung on its owner's hook in the operating room. The sleeves and other parts of this garb often bore too obvious traces of previous encounters with free hemorrhage. It was customary to put out only a pair of hemostats with which to close the mouths of bleeding vessels before they were secured with ligatures. Marine sponges taken from the same kit were put out on the table and were employed to sponge up the blood accumulating in the wound. The surgeon frequently carried his sutures and needles in the lapel of his operating frock. Though Lister had addressed the International Medical Congress which met in Philadelphia in 1876 upon the subject of antiseptic surgery, his words fell largely upon deaf ears.

Role of Experimental Surgery

How anesthesia and asepsis reformed surgery is a revelation; how in turn the new surgery improved medicine, afforded abundant opportunity for observation of diseases processes and supplied new methods of bringing relief to man suffering from serious bodily disorders are but natural consequences of that great stimulus. The most significant advances in medicine are now coming about through the employment of surgery in the experimental study and investigation of disease. The anatomical structure of organs could be studied upon the dead body, but how these organs function is only to be ascertained during life. The new surgery served this objective admirably, and played an important role in the development of our knowledge of digestion, the circulation, respiration and the function of the ductless glands. Now Harvey by animal experimentation proved that the blood circulates, even before the rise and development of the new physics and chemistry, attests the great significance of the experimental method in the study of normal function. For centuries speculation had been rife as to what the relationship was between the heart, the lungs, and blood vessels. These disputations had only succeeded in complicating and confusing the issue. A few simple experiments in the hands of an accurate observer brought enlightenment that left no room for further argumentation.

How much sooner Lister would have succeeded in dispelling the cloak of ignorance had be employed the advantages of animal experimentation. John Hunter recognized the superiority of the experimental method over logic. To Edward Jenner, of small-pox vaccination fame, Hunter said, "Try the experiment, don't think." Rationalism too often proves deceptive, not because the logic is fallacious, but rather because the knowledge of the factual data bearing on the matter is incomplete or the initial premises themselves may be wrong. History has repeatedly taught how apparently sound reasoning and deduction have led us astray. If all the factual data bearing on an issue were known and available to the one attempting its rationalization, a logician who would take the time to become thoroughly acquainted with the subject under discussion could deliver a satisfactory and accurate answer to any question propounded him. Direct experimentation will always have an important place in all human activity. How speculation and vacuous arguments have retarded human progress! The crucial test of experiment deletes our textbooks of medical and surgical barnacles and ancient errors that have been recopied for generations.

The few years which have run through the hour glass of time within the experience of the youngest of this audience have witnessed two innovations of experimental surgery that have brought life and happiness to thousands of homes throughout the world.

We hear prejudiced people raising their voices against animal experimentation. But when man no longer slays animals for food or clothing or holds them subservient to his will, the significance of truths learned in animal experiments will fully justify their performance for the protection and prolongation of human life. One of the most valued instruments in the relentless search for the cause and alleviation of disease is the experimental method. Matters of such vital importance to health and happiness can not be left to chance. Biological research employing the scientific method must go on; its discoveries and benefits are available to all men irrespective of creed or birth or whether rich or poor; through its agency more lives are saved than all the wars of all the ages have thrown away. Like a divining rod, the experimental method wrests truths from nature, which would otherwise percolate for centuries through the slow filters of time.

The Future of Surgery

What of the future of surgery? Any child who can speak can ask questions which none of us can answer. Just now, endocrinology in its broad aspect, in which activity surgery plays an important role, seems to hold forth a promise almost equal to that of bacteriology of 50 years ago. Whether advances in surgery will be made at a snail-like pace or in rapid strides will be determined not alone by discoveries in medicine as a whole but by developments in general biology and the physical sciences. The two greatest benefactions of surgery to man are in reality gifts of chemistry to surgery. To be sure, ether and nitrous oxide inhalations were mere chemical playthings of the lecture hall until surgeons demonstrated their great value in the relief of pain. The value of chemical antiseptics and asepsis in the prevention of infection were wholly unknown till empirical trial and the discovery of micro-organisms declared their true worth. Anesthesia made operations possible; antisepsis and asepsis have made them safe. Discovery of the x-rays by Roentgen and of radio activity by Becquerel and Radium by the Curies have been a great boon to medicine—gifts from physics. The new science of bacteriology was essentially an outgrowth of chemistry, microscopy (physics) and medicine. No man can, like Francis Bacon, take all knowledge for his province. It is, however, still true that some of our most valuable and useful information in the warfare on disease is to be learned at outposts stationed in the interphases of activity between greater medicine and our biological and physical sister sciences. Only through the activity of alert eyes and minds in these interphases, will the great lag between discovery and application be eliminated.

Responsibility Should Be Local

Continued from Page 3, Column 4

Every school superintendent knows that during the last three years there have been as many as three, and sometimes more, federal officers seeking jurisdiction over some of the youth of his community. Every educator knows, too, that there has been established in each state a federal officer in charge of adult education and another in charge of the education of unemployed youth and that these officers were appointed in many instances without the knowledge or consent of the state superintendents and that they may operate entirely independently of them. In setting up the National Youth Administration the educational officers, federal, state and local, were ignored; authority was centralized in the hands of persons inexperienced for the most part in educational work, there was a duplication of agencies, federal and state, with attendant expense and machinery.

Dr. Coffman then analyzed in some detail the program of the National Youth Administration and the policies being supported by appropriations under the Bankhead-Jones Act, in agricultural extension. In both instances, he said, policies are being laid down in Washington with too little consultation with local educators, and in the case of Bankhead-Jones money, a considerable part of it is supposed to be spent to persuade farmers of the soundness of current government policies. This, he stated, is not the function of a university, which should examine a policy and state its free conclusions, without respect to government policies.

Example of a Tendency

I have recited these facts, he continued, relating to federal support of higher education because they emphasize the drift in the direction of federal domination. I am not certain that the American people understand fully what is happening. Once they do understand I do not believe that they will long permit an agency in Washington to dictate what shall be taught to children in each of the states and in their respective communities. I do not believe that they will permit a central government to define nor to limit their educational programs; they will insist upon the right to control and to experiment and to expand their schools according to local needs and wishes.

From colonial times the people of this country have sought to keep their educational system free from political control. School districts are for the most part coterminous with political areas, but independent of political direction. We have made our schools as flexible and as responsible as possible to varying circumstances and to the aspirations of local communities. That there have been dangers in this policy, that some schools have been poor and incompetent, must be admitted. But who would trade these dangers and inadequacies for a system that will mean the teaching of the political philosophy held by the ruling power, whether conservative, liberal or radical, to the youth of the country. Such a trade will mean a radical change in our educational program every time new rulers are established in Washington. It will mean more than that; it will mean the schools will no longer be the hope of democracy, for democracy cannot survive if the product of the schools is sent into the world indoctrinated with any theory or as the protagonists of any program. If they are denied the instruction that demands a careful consideration of all facts and of all issues, and if they are denied that training which insures free thinking and free acting as individuals, the doom of democracy is sealed.

Preserving for the states and the local communities a share of responsibility in maintaining education does not mean that the schools will be unprogressive nor that the federal government can do nothing to help them. Everyone knows that changes in our educational program are inevitable and should be encouraged. Everyone knows that with the improvement in transportation and communication, larger administrative and taxing units for the schools are generally necessary. Everyone knows, too, that the Federal Government is well equipped to collect monies from the entire country and to distribute them to the states for the aid of education. We believe that this can be done without destroying the essential spirit of localism and intimacy.

While the federal government is appropriating considerable sums of money for education in special fields, it is providing no money for liberal education and no money to train the young people of the nation in the exercise of their powers as self-governing citizens. Hitherto we have believed that the chief means of control in a democracy is a system of popular education which includes everyone within its scope, while the chief means of control in an autocracy is some sort of central power. We have cherished and built up our system of free schools because the power to administer them has resided with the people. Self government will vanish in proportion as the people relinquish their rights of sovereignty over the education of youth.

The American schools have not pursued a wholly laissez faire policy. They have made steady progress. Their controls have resided for the most part in voluntary societies of professional educators. No other country has had such agencies in like number or of like influence. These societies have been free agents, studying, investigating and modifying the educational program of the country, with but one object in mind, that of improving it. Every experiment in education soon somes to be known throughout the country; it is studied, examined, evaluated and if found good, soon imitated.

The New Zealand Instance

In a federalized system there will be little or no need for agencies of this character. Federalized societies of teachers will be concerned with the promotion of partisan interests and with carrying out the federal program of education. I have seen such systems at work. One of the most noteworthy of them is in New Zealand. New Zealand has probably gone farther with social legislation than any country in the world. It has carried such legislation to the point where there is almost no private money for the schools or for charity. The school are bureaucratized. The number of persons in training for teaching is limited by the central office; teachers are assigned to their school posts; their salaries are fixed at headquarters; no one is ever permitted to become a candidate for a teaching position; the curriculum is laid down and the teachers are required to follow it scrupuously, the supervision is inspectorial, designed to determine whether pupils can pass the examinations set by the government. Parents are not expected to visit the schools, parent-teacher and alumni associations are unknown, the teachers' meetings are held only to petition the government for higher wages or to seek interpretations of the the rules and programs sent out by the government.

Such a system is not without its advantages. It insures efficiency and thoroughness and a mastery of the things necessary to pass the state examinations. But, is there any one who believes that America should follow this pattern?

What of the Future?

Our schools of the future will be determined by the political philosophy we accept and the kind of government we adopt. The American people are now engaged in making that decision. There are only three ways that they can go: Move in the direction of greater federal control, which means more regimentation of life; move backward to the days of absolute free choice and of personal independence, which, I am convinced, are and should be gone forever; or insist upon a steady course in preserving our theory of government of checks and balances—a theory essentially and uniquely American, which provides that government shall be voluntarily determined and voluntarily altered to meet changing conditions, but which-never, at any time, shall permit unlicensed liberty on the one hand nor absolute domination on the other. Such a government will distribute school funds according to educational needs for the purpose of insuring insofar as possible a knowledge and mastery of the things men should know and understand in discharging their duties as citizens. Such a government will provide liberally for the study and dissemination of information about education in this country and abroad. Its leadership will be intellectual, not partisan; and the children of the nation will be regarded as future citizens, not as wards of the state.

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 MARCH 17, 1936 NUMBER 9

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 APRIL 28, 1936 NO. 10

'U' Farm Book Warmly Praises Doctor Coffman

Student Publication of Central Agricultural School Dedicated to Him

COFFEY PENS TRIBUTE

Head of Institution Called Nationally Outstanding in Field of Education

The Agrarian, yearbook of the Central School of Agriculture at University Farm, is dedicated this year to President L. D. Coffman of the University of Minnesota, and in it are printed tributes to Dr. Coffman by Dean Walter C. Coffey of the Department of Agriculture and by J. O. Christianson, principal of the Central school.

"The work of building and guiding a great university upon enlightened principles is a most valuable service, and one, which in its influence for good, long endures," Professor Christianson wrote. "Through such leadership the president of our university has brought outstanding recognition to himself and to the state, throughout the nation and among the universities of the world."

He quoted Bill Nye, saying Dr. Coffman was a man, "pleasant to be thrown amongst."

Dean W. C. Coffey's tribute follows:

"While I was visiting with the president of another great state university recently, he asked, 'How is President Coffman? I do not see how he manages to serve in so many capacities and keep his health. In meetings of university presidents some of us draw little fire when we speak, but everyone takes notice when Coffman expresses himself.'

"This observation made by a fellow educator in the course of a casual conversation clearly shows how President Coffman is regarded in the field of higher education. His office as President of the University of Minnesota, as significant as that position is, indicates only in part his influence in the educational world.

"President Coffman grew up in about the same manner as many others who have achieved distinction for their leadership in America. He was born on a farm near Salem in Southern Indiana. In that part of the country, the soil is not very fertile. Most of the people are of the poor and happy type and are, in their peculiar way, interesting and unique. It is a region, however, from which have come a goodly number of men and women of ambition and with the power to accomplish worthwhile objectives. These distinguished sons and daughters manifest sincere loyalty and devotion to dear old Southern Indiana, and hence we conclude that they must have had the advantage of a favorable early environment. As for President Coffman's immediate home surroundings, we can be sure this was true, for it is the writer's good fortune to know his mother, who at once impresses one by her outstanding personality which in every respect reveals strength of character.

"As a farm boy, President Coffman attended a country district school. We have no record of how hard he had to work mornings and evenings doing farm chores or of the number of days he had to miss school in the fall in order to help with special farm tasks such as sowing wheat or gathering corn. When he was a boy, parents could keep their children out of school for any reason whatsoever, and, although the school term was seldom longer than six months, many farm boys were 'kept out' for the first four or six weeks. As for the morning and evening chores, we can safely guess, in case a heavy assignment was given young Coffman, that they were performed early in the morning and late in the evening, for it

Continued on page 3, column 4

University of Minnesota Head

President L. D. Coffman

F. J. Wulling, Pharmacy Dean, Will Retire at End of This Year

Came to Minnesota in 1892 to Establish First Instruction in Subject

Unique in many ways is a dean at the University of Minnesota who is to retire at the end of the present college year, but in no way more unique than in holding the first and only honorary doctor of science degree ever awarded by Columbia University to a worker in the field of pharmacy. Obviously, the man is Dean Frederick J. Wulling, who came to the University of Minnesota in May 1892 to look over the prospects for establishing a college of pharmacy, decided it could be done, went back to Brooklyn, N. Y., packed his things, returned to Minnesota, and has been running the aforesaid college ever since. In most of these respects his case is a parallel for that of Dean William R. Appleby of the School of Mines and Metallurgy, who retired last year. Dean Appleby came to Minnesota from New York a year earlier than Dean Wulling, but like the latter, established the college and served it until his period of active professional work came to an end.

Not only distinguished in the field of pharmacy, Dean Wulling holds two law degrees from the University of Minnesota, and at one time in his life completed the college work for a medical degree in both "allopathic and homeopathic medicine" but always refused to accept an actual degree in either because he felt that his main interest should be in pharmacy.

After graduating from the New York College of Pharmacy at the head of a class of 108, young Wulling became a professor in the Brooklyn College of Pharmacy, and it was while he was there that one of his old teachers, Professor P. W. Bedford of Columbia, called on him.

No One More Surprised

"Good bye, my boy, you are going to Minnesota," was the astonishing greeting of Professor Bedford.

"Why, my goodness, Dr. Bedford, what does that mean?" Wulling stammered.

Professor Bedford explained that influential representatives of the University of Minnesota had been conferring with him to get recommendations for a man who was to head a new department of pharmacy. Frederick Wulling had been at the head of his class and Professor Bedford was recommending him.

"When I came out to Minnesota in May to look the place over I was not much impressed," Dean Wulling recalls. "I hadn't liked the letter that invited me to come for a conference, and I found that the institution did business in a peculiar way. However, after I had been on the campus a few days and had found everyone considerate and friendly, I changed my mind. I went back to Brooklyn, promising to give the offer further consideration and to report."

The upshot of it was that he came at what he supposed to be a salary of $3,500 a year. He found when he got here that there was some difference of opinion between the president of the university and the dean of the medical department over the salary figure and there was also some uncertainty whether pharmacy was to be an independent unit or a part of the medical school. There was, however, an act of the legislature at that time appropriating $5,000 a year for maintenance of a course in pharmacy, and by pointing that out Dr. Wulling was able to obtain that entire sum as a budget for the operation of pharmacy courses.

Between Two Fires

Pharmacy was first housed in a long building that used to stand about where there is now an open space between the Library and Wesbrook Hall. It was a long narrow structure later used as a university store house. In the front part were the offices of Dr. Charles Bell of the medical school. The central section was devoted to pharmacy, and the rear part contained offices for Drs. Lee and R. O. Beard, then both on the medical faculty. Both from the front and from the rear, he recalls, these other departments endeavored to encroach on the space of pharmacy. Finally, when old Millard Hall burned, the medical school was moved across the campus and the burned building, remodeled in its present form, became the College of Pharmacy. There the school has been housed from those days until now.

Something that can be said of few, that he is one of the best known men in his field in the entire world, may be said of Dean Wulling. The list of his publications covers many pages. His name occurs in between 40 and 50 publications listing men and women distinguished in education and science, and he has delivered well over 1,000 addresses on the subject of his greatest interest. He organized and from the first has been the dominating factor in the scientific and practical section of the Minnesota State Pharmaceutical association. The medicinal plant garden at Minnesota is wide-

Continued on page 4, column 3

Dean Wulling Serves 42 Years

In 1936

About 1900

Editors Course At U Farm Will Stress Modernity

"Modernity" is the keynote of the program arranged for the annual Editors Short Course to be held at the University Farm, April 30 and May 1 and 2, under the auspices of the departments of agriculture and journalism. The newest developments in merchandising-advertising, typography and make-up, news selection and display, and printing processes will be discussed.

Important new relationships between retail merchandising and local advertising will high-light the Friday afternoon program, May 1. Three speakers will conduct a symposium on this subject. C. W. Bryant, former director of the Retail Research Association of New York, whose work has given him an insight into merchandising problems of small towns and village stores, will speak on "How the Publisher Can Advise His Merchants." Miss Leila Bon, advertising manager of John W. Thomas Company, Minneapolis, will discuss "Writing Advertising for 85 per cent of the Buyers." A third speaker will analyze buying habits in the small town.

Mr. Bryant is now assistant general manager of the Milwaukee district of Sears, Roebuck and Company.

The news and editorial program will include a talk by Elmo Scott Watson, editor of Publishers' Auxiliary, on "Modernity in Features for the Rural Press."

Mothers to Visit Campus on May 9

Mothers of all students in the University will soon receive an invitation from President L. D. Coffman to attend and take part in Mothers Day on the campus, Saturday, May 9. For the past ten years an annual Mothers Day each spring has served to familiarize thousands of the mothers of students with the aims and facilities of the university and has given them an opportunity to meet faculty members and administrators, or to visit classes, fraternity houses and rooming houses where the students live. In the neighborhood of 1,000 will attend the Mothers Day banquet in the Minnesota Union that night.

Teeter States Summer Plans Of University

Large Attendance at Both Vacation Sessions Called Probable

NEW OFFERINGS LISTED

Courses in Art to Be Given at Owatonna; Coaching School on New Basis

More than a score of new courses especially designed to meet the needs of teachers and summer students will be offered by the University of Minnesota during its two summer terms, running from June 15 to July 27 and from the latter date to August 29. Complete preparations have now been made for the summer quarter according to announcement by Professor T. A. H. Teeter, associate director.

Between 4,000 and 5,000 students are expected for the first term, while the total enrollment of both terms will rise to the neighborhood of 6,000, it is indicated.

During the two summer terms various departments will offer, along with courses of the type taught during the regular terms, work of value to teachers and supervisors interested in adult education and subjects allied to that problem. Parental education in child care, nursery school procedure, problems in home economics, with reference to adults, health problems, rural organization and rural social work will be among many topics treated in relation to the adult field.

Among scores of other subjects in which courses are to be offered are world politics, constitutional development, play production and stagecraft, direction of choruses, bands and orchestras and subjects in speech, mathematics, languages, journalism and history.

Two types of art courses will be offered at Owatonna by the faculty of the Owatonna Art Education Project, and, as was done a year ago, the forestry station at Lake Itaska will be taken over during the second term for a field station in biological study. Under an experienced faculty, courses in botany, zoology, wild life management, entomology and the like will be taught, with field trips and opportunities to observe wild life under natural conditions as an incentive to attendance.

A full staff in the department of sociology will devote its time to a special program in education for social work as in recent years. The expanding activities of government in the field of social welfare has greatly increased the demand for trained people in that field. A complete series of courses, one of the most thorough in the summer program is being provided.

Similarly the home economics faculty will offer a dozen or more interesting courses during the first summer term, including a unique opportunity to combine travel in Scandinavia with college work yielding five full credits. The tour will be under the direction of Miss Gudrun Carlson and will run from July 1 to August 27.

Graduate courses in economics will be the particular offering of the School of Business Administration. Many of its leading faculty members will teach. Particularly noteworthy will be courses concerned with the current economic situation which will examine income and consumption, industry and public policy, and provide an analysis of recent economic legislation. A graduate seminar in business cycles and unemployment will be offered.

Students with interests in the field of child study and guidance will find many courses offered by the Institute of Child Welfare, which will have teaching programs in both sessions. A study of the problems of the modern kindergarten, newly offered in the first

Continued on page 4, column 5

Human Body's Natural Defense Told in Lecture

Science Furthers Processes Often Set in Motion by Nature

IMMUNE BODIES FACTOR

Sigma Xi Speaker Describes Healing of Wounds and Conquest of Germs

"The Natural Defences of the Body" were described for an appreciative audience by Dr. E. T. Bell, M.D., head of the department of pathology in the University Medical School in a recent Sigma Xi lecture. In part he said:

In simple language natural defence means what the patient can do without medical assistance. In scientific language it means those protective mechanisms in the body which tend to heal wounds and to destroy bacteria and other parasites that get into the tissues. Doctors are a luxury of modern civilization. Primitive man had "medicine men" but they knew nothing about disease and usually did their patients more harm than good. Aside from minor procedures there was very little control of disease or helpful treatment before the beginning of the 19th century, and even at the present time fully one-third of the population of the world still depend upon primitive medicine, which means that natural defence is their only protection.

Wild animals have always depended entirely on natural defence for their protection against disease. Epidemic diseases often destroy wild animals in enormous numbers, for example, a few years ago tularemia destroyed most of the rabbit population of northern Minnesota. Domesticated animals are fairly well protected against epidemic diseases, but otherwise must rely largely on their own defences.

How did the world get along before the doctors knew how to prevent or cure disease? We know that the death rate was very high but some people always survived, even through the worst epidemics of bubonic plague and small pox. One-hundred-and-fifty years ago the average life in the most civilized countries was about 25 years, and today it is about 58 years. The average length of life is still very low in most uncivilized or semi-civilized communities.

This great saving of human life has been accomplished by our learning the causes of various infectious diseases and how each disease spreads through the community. For example we have learned that yellow fever and malaria are transferred from man to man by certain mosquitos, that typhus fever is spread by body lice, that typhoid fever is spread by the excreta of the patient, that tubercle bacilli are coughed out of the lungs by the diseased person and breathed in by others.

The control of epidemic diseases and the proper care and feeding of children are chiefly responsible for the great increase in the average life. This knowledge has come from various scientific sources, such as, biology (including bacteriology and entomology), medicine, chemistry, physics and sanitary engineering. The spread of popular education and the improvement in economic and social conditions have also played an important role.

The prevention of infectious diseases therefore saves many more lives than the treatment of the individual after he has contracted the infection. But how does the body protect itself against injuries and infections? Let us first discuss the healing of wounds.

When a cut is made through the skin the tissues fall apart, blood pours into the space and out upon the surface of the wound. The flow of blood is soon stopped by the formation of a clot in the wound. This is a fundamental protective mechanism, viz., the control of hemorrhage by clotting of the blood. A certain protein in the blood, fibrinogen, is quickly converted into threads which tangle and hold the red blood cells. The blood on the surface dries to form a scab which protects the surface of the wound while it is healing. There is a sound reason for not picking the scab off of a wound.

When a large artery is cut the blood rushes out so forcibly that a clot cannot be formed, the protective mechanism fails and the patient bleeds to death. Here the doctor may save a life by tying the bleeding artery.

How Healing Proceeds

After the clot is formed, healing starts immediately. The epithelium begins to grow over the wound surface under the scab. Resting connective tissue cells that are hardly visible in the normal tissue increase rapidly in size and undergo division rapidly so that they are greatly increased in number. They move rapidly into the clot and continue to divide so that the clot is soon filled with young cells. Blood capillaries also bud out from those near the wound and grow into the clot. The young connective tissue cells that replaced the clot soon begin to form fibers and within a week the edges of the wound are firmly held together. Later on the fibrous union becomes even stronger than the normal tissue and this is called a scar. It is to be noted that healing cannot take place unless epithelium can join epithelium on the surface of the wound. This is why the surgeon is so careful to fit the skin together accurately when he closes a wound. It remains as an ulcer exposed to infection until the epithelium grows over the surface.

How does the body protect itself against the invasion of bacteria and other parasites? The outer layer of the epidermis is composed of hard cornified cells and practically no bacteria can get through a perfectly normal skin; but some animal parasites may do so, for example, the hook worm larva. Virulent bacteria may however grow in depressions of the skin or the pockets around the roots of the hairs and succeed in getting through the epidermis. This is the way that boils and carbuncles are formed. Any little scratch or abrasion of the skin may, however, afford an entrance for bacteria. Infections may enter around hang-nails on the fingers. Almost any severe injury of the skin tears off this protective layer.

Bacteria Pass Mucous Membrane

The great majority of infections enter through the mucous membranes which do not have the protective layer of cornified cells. The hard layer of the skin stops at the edge of the lip. The lips have a pinkish color because of the thinning out of this layer, and on the inside of the mouth where the hard layer is completely absent a definite reddish color is noted. All the mucous membranes in the body have this appearance. The mucous membranes line the inner surfaces of the hollow organs, viz, the mouth, esophagus, stomach, lungs, bladder and the like. Bacteria can enter much more easily through mucous membranes and the germs of a great many infectious diseases gain entrance in this way, among them, tuberculosis, measles, scarlet fever, typhoid fever, syphilis and others.

When the bacteria gain access into the tissues, two defensive mechanisms come into play. These are the blood plasma and the white blood cells. The blood plasma and the leucocytes must act together to destroy the bacteria; neither is able to kill bacteria when acting alone.

In the case of ordinary non-pathogenic bacteria and those that are only slightly pathogenic there is enough of non-specific immune bodies in the blood to destroy bacteria with the assistance of leucocytes; but in the case of pathogenic bacteria, those that ordinarily produce disease in the human body, a specific immune body must be present. The bacteria are then acted upon by the immune body, which injures them in some way, and are then taken up and destroyed by leucocytes. The leucocytes resemble amebae and destroy bacteria in the same way, as an ameba, namely, by eating them.

Principle of Vaccination

Vaccination consists in giving the patient small amounts of bacterial poison to stimulate the formation of specific immune body, so that if he is exposed to the disease he is ready for it, and the germs make no headway in his body. This is the principle in vaccination against typhoid fever. Again, we may vaccinate the horse, and after he has formed immune bodies, we take his blood plasma and inject it into a man who has the disease, giving him ready-formed immune bodies. This is the principle of the antitoxin treatment of diptheria. To vaccinate a child against diptheria, the the normal child is given small amounts of diptheria toxin until he forms his own immune bodies; but when the child has diptheria we give him immune bodies formed by the horse.

You can see how a knowledge of the natural defences of the body has taught the physician how he can intercede and help nature.

Researchers Evolve Modern Shot

Professors R. G. Green, left, and Ralph Dowdell, right, are shown at work on one of the tests they have made in the process of developing a duck shot that will dissolve. Ducks eat so many spent shot that they suffer from lead poisoning and die unless the shot is highly soluble so that it vanishes either in the water or soon after it has been eaten. The two Minnesotans believe they have solved this problem.

U Enrollment At New Peak

Never Before So Many Students in Spring Quarter, Says President

Considerably the largest enrollment it has ever had in its spring quarter has been recorded at the University of Minnesota since the close of the spring vacation, President L. D. Coffman recently told a meeting of the deans. The total figure was given as 11,858 students of actual college standing, in residence and, counting all enrollments in schools, extension, short courses and by correspondence, 17,367.

Normally there is a decline throughout the year, with the largest enrollment in October, which is reduced by graduations and the dropping of courses as the year progresses. This has been true this year, also, but to a lesser degree than usual.

In regular college classes there are 7521 men and 4375 women, maintaining the usual ratio of about seven to four, but in evening extension courses the ratio is about fifty-fifty, with 2500 men and 2562 women, according to a report by R. R. Price, extension director.

Presence of more than 1,000 federal aid students on the campus has no effect on the comparison between this year and last, as there was an equal number on the campus in 1934-'35.

Every branch of the university has more students than in the spring quarter last year, except for small decreases in two departments, nursing and pharmacy. Extension and correspondence enrollments are materially larger than a year ago. Better economic conditions are assumed to be one of the reasons for the increase. This, no doubt, has also been coupled with a more optimistic outlook on the part of young people.

U Committee Studies Health Science Fields

The relationships between medicine, dentistry and pharmacy, together with the likelihood, or wisdom of bringing about closer co-operation in teaching these three branches of health science are being considered by a special committee at the University of Minnesota, recently appointed by President L. D. Coffman.

When he appointed the committee Dr. Coffman pointed out that at one time specialization made it desirable for each group to work along its own lines, but that the development of science has now brought about a situation in which the knowledge possessed by each group is necessary to all the others. A much greater interdependence exists than did formerly.

No definite policy for the future has been decided upon, but the committee has been asked to inspect possibilities and see how far further co-operation among the health sciences can be carried.

Recently at Minnesota the College of Engineering and Architecture, the School of Chemistry and the School of Mines and Metallurgy were consolidated into the new Institute of Technology.

Nursing, fourth of the health sciences, is already included in the set-up of one of the existing colleges.

On the committee are two from each of the health groups, under chairmanship of Dr. Guy Stanton Ford, dean of the Graduate School. Members from Pharmacy are Professors Gustav Bachman and Charles H. Rogers; from Dentistry, Professor Charles E. Rudolph and Carl O. Flagstad, and from Medicine, Professor E. T. Bell and J. C. McKinley.

The project is another of the many steps the University of Minnesota is continually making to study its own organization and seek improvements in its procedures.

Jones to Help On Housing Plan

Robert T. Jones, professor of architecture, has been appointed one of ten members of a committee of the American Institute of Architects "to achieve a higher national housing level and improve building and mortgage standards" in the United States. This, the announcement says, is to be approached through co-operative efforts of architects, builders, government agencies and financial institutions.

Stephen F. Voorhees, president of the institute, estimated that 3,000,000 new small homes were needed and that 4,000,000 dwellings were in need of modernization.

"Architects, faced with the charge that they are neglecting a sphere in which great social and economic developments are impending, are assuming the responsibility of correlating diverse elements to achieve a common end," Mr. Voorhees said. Sixty-eight chapters of the American Institute of Architects will give their aid in the new project, according to Professor Jones.

Professor Jones is also actively interested in the development of the low-cost housing project now being carried out in North Minneapolis.

Sirich to Travel Abroad for Year

Prof. Edward H. Sirich of the French department has been granted a leave of absence for the year 1936-37 in which he expects to travel around the world. Professor and Mrs. Sirich will visit relatives in Canton, China. They expect to pass through Siam, Singapore and other points of interest along the route to India. From India they will sail for Paris, where Professor Sirich expects to spend 5 or 6 months in research work before returning to the United States.

Casey to Judge Research

Dr. Ralph D. Casey, chairman of the department of journalism in the University of Minnesota, has been named one of the five judges for the second annual journalism research contest sponsored by the Research Committee of Sigma Delta Chi, national professional journalistic fraternity, according to announcement made here today by Dr. Alfred McClung Lee of the University of Kansas.

Amateur Holds Athletics' Hope Hovde Asserts

'M' Club President Also Favors Strong Intra-Mural Program

It is by drawing rigid lines between the professional and the amateur that English college sport has been relieved of the problems that arise in this country when athletics become big income producers, in the opinion of Frederick L. Hovde, assistant director of the General College, who next fall will become assistant to the president of the University of Rochester. Mr. Hovde is president of the Minnesota "M Club" and his departure will necessitate an election to that position.

As an undergraduate, he was a star quarterback on the football team and took part in other sports. Awarded a Rhodes scholarship for his undergraduate work in chemistry, he spent three years at Oxford, and while there had broad opportunities for observing English education and English amateur sport, especially in the universities.

With many others who have given the subject careful attention, Mr. Hovde believes that the future of intercollegiate sport in America depends on the boldness of the line that lies between the amateur and the professional, just as the course of English sport has been decided in that way.

"If the line is sharply drawn, there is hope for the continuance of intercollegiate sport on an amateur basis, but if present tendencies continue, institutions engaging in an intercollegiate program will continue to be burdened by mutual distrust, charges of unfair competition, loose interpretation of eligibility rules and the like," he declared. "In the long run, such things can only work harm to intercollegiate athletics."

Next to an insistence on amateurism, a successful athletic plan in a college or university depends on the development of a successful intramural program, Hovde says. Of the intramural program at Minnesota, he says, "Minnesota's program is astonishingly good in view of the handicaps it must overcome." Among these he lists the relatively small membership in many individual social groups, such as fraternities, making it difficult to organize teams; the large number of students who live at home in the Twin Cities and do not seek recreation on the campus; the fact that many students hold part-time jobs, which reduce their playtime almost to nothing, and the obstacle presented by the heavy work programs in, for example, the professional schools. Men from such colleges as medicine, law, and engineering seldom have the ability to carry on their college work and engage in athletics at the same time.

"Sport in England is looked upon as a socializing influence, a means of keeping fit," Mr. Hovde said. "It also satisfies the need for competition. Our athletic program in American colleges is based almost wholly on the idea that competition rather than participation is the essence of the thing, and it is the problem of meeting competition that has brought on what we term the evils of athletics."

He explained that he considers competition in itself an excellent thing, especially when it is wholesomely developed through an intramural athletic program, and it was then that he made his points about the importance of games between the students. Mr. Hovde believes that the great value of study abroad is its broadening effect and points out that those seeking technical training for use, say, in industrial research, can find better in the United States.

"The main thing one gets from study and travel abroad is the understanding that there are many ways of doing things, and that the ways that we are likely to think of as 'foreign' may be as good as, or better than, our own. At the same time, we must not think that people in England and Europe live better than people in this country. That this is not true is something one inevitably learns if he spends much time overseas.

"I believe," he said, "that the top notch American universities, generally speaking, provide every bit as good training as one can get abroad." At the same time he pointed out the fine opportunities in English and continental universities to study in fields such as literature, philosophy, and politics.

Minnesota Plan For Fraternities Called Success

Increasing Number Take Advantage of Guidance and Accounting Aid

By L. D. Coffman

President of the University of Minnesota

College fraternities although criticized in recent years can be potent educational forces in a university community. Their constitutions and rituals establish high aims of service and scholarship. Sometimes their activities have betrayed the ideals to which members have pledged themselves and have not always advanced the best interests of the colleges and universities. A number of years ago a cleavage developed between the fraternities on one hand and the educational institutions on the other. The fraternities declared their independence and along with that declaration relinquished any sense of responsibility toward the institutions that nurtured them.

This condition has been changing slowly during the past twenty years. Colleges have recognized the potential value of fraternities, have sought to understand their problems and needs and have attempted to help them. The fraternities, too, have begun to realize that they cannot exist apart from the college to which they owe their loyalty and thus they have begun to study their weaknesses and failures and to consider seriously various methods for improving their status.

As a result a spirit of mutual understanding and co-operation has developed. Interfraternity councils have been formed. They have held local and national meetings to which college presidents, deans and other members of the faculties have been invited. The fraternities have joined the colleges in promoting high scholarship and in setting up methods for selecting new members who will be a credit to the college and to the social group.

I am happy to report that these trends are clearly evident at the University of Minnesota. The fraternities now desire a closer relationship with the University, they emphasize scholarship to a greater extent than heretofore, and they are gradually adopting improved methods in the conduct of their business affairs. An awakening spirit of social service is also evident. A few days before each Christmas, the men's groups invite under-privileged boys to the fraternity houses for dinner and, following the dinner, to the Minnesota Union for an evening of fun. At approximately the same time, the sororities arrange a party to raise money and to gather clothes and other useful articles that they distribute through regular social agencies to those in need. By arranging another large party or ball during the year, the sororities raise additional money to supply scholarships for needy members.

To advance further this spirit of mutual understanding and helpfulness, a group of fraternity alumni, undergraduates and representatives from the office of the Dean of Student Affairs met frequently throughout last year to consider the following two important problems that are fundamental in the successful management of fraternity affairs:

1. The financial problem.
2. The problem of guidance, advice and leadership, especially as it affects the new members of the group.

Out of these considerations grew "The Minnesota Plan" for closer co-operation between the fraternities and the University.

The Minnesota Plan

The Minnesota Plan consists of two sections—one pertaining to financial guidance of the fraternity chapters, the other pertaining to scholarships guidance and morale building of the fraternity groups. Either or both of these sections may be adopted by any chapter, as it elects.

1. Financial Guidance
   a. Monthly maintenance and audit. In cases where there has been neglect and groups desire closer contact with experienced business service there will be offered:
      1. Installation of proper and complete accounting system if needed.
      2. Monthly audit of records.
      3. Monthly advice on maintenance of a budget.
      4. Adjustment of creditor claims.
      5. Collection of bad accounts of members registered in the institution.
      6. Training and personal advice to organization financial officers.
      7. Complete audit and setting up of statements. This service is on an hourly cost basis to the group. It is expected that in normal cases this should not exceed a total of $125 for an entire year.
2. Leadership and Scholarship Guidance.

In order better to provide such guidance, it has been deemed wise that those groups subscribing to the "Minnesota Plan" shall, in co-operation with the University, select a counsellor. The counsellor shall be a graduate student, preferably a member of that fraternity which he is to serve. If that is not possible, he may be a young instructor chosen from the staff, or he may be selected from the non-fraternity group.

a. Selection of counsellors shall be made by the unanimous vote of a committee of three—the president of the chapter, the Dean of Student Affairs, and an appointee of the chapter alumni organization. The name of the specific alumni organization having the right to appoint the third member (the alumni representative) of the committee of selection shall be recorded in writing at the time the chapter files formal adoption of the plan. In case of dissention regarding the appointment of this alumni adviser, or member of the selection group, the matter shall be referred to the national office and their nomination for this position accepted.

b. Compensation. The counsellor shall in all cases receive his room free of cost. He shall be given credit on the chapter books each month of an amount equal to one dollar per active member, such credit to apply on his board. Such credit shall not exceed in any month an amount equal to the regular charge for board per month.

c. He shall, on call of the office of the Dean of Student Affairs, provide reports as to the progress of his group.

d. The position may at any time be declared vacant by a unanimous vote of the committee.

e. So far as it can be arranged, the counsellor shall have open to him all of the facilities of vocational and scholarship guidance of the University.

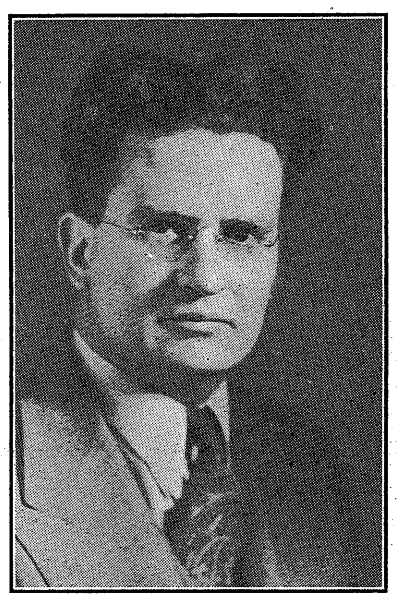
Each chapter desiring to enter into this co-operative plan with the University will file with the office of the Dean of Student Affairs a written agreement, one copy of which shall remain in the office of the Dean of Student Affairs, and one copy with the president of the chapter. Such agreement shall cover the terms and scope of the co-operation which is entered into. At the time of filing this agreement, the chapter shall state the association or group which is to name the alumni member of the selection committee.

The fraternities and the sororities on the campus have responded voluntarily to this plan. Twelve groups have availed themselves of the counsellor feature and ten of financial guidance. The following six groups are co-operating in both features of the plan: Alpha Tau Omega, Phi Gamma Delta, Sigma Alpha Epsilon, Sigma Phi Epsilon, Chi Psi and Sigma Nu. Several other groups will participate as soon as the necessary adjustments can be made to take part in the financial features.

The adoption of "The Minnesota Plan" will enhance and strengthen the position of the fraternities at the University of Minnesota. It is clear that co-operation of this nature will enable them to move forward with vigor and new life in contributing to the education and social vision of youth.

Three Faculty Men Win Guggenheim Fellowships

Dr. Ernest S. Osgood



Dr. Clifford Kirkpatrick

Dr. Lennox A. Mills

Three Minnesota faculty members, Professor Kirkpatrick, sociology, Assistant Professor Ernest Staples Osgood, history, and Assistant Professor Lennox A. Mills political science, have been granted John Simon Guggenheim Memorial Fellowships, carrying $2,000 a year each, to enable them to carry on research work in the United States or abroad without other duties during the coming year. These are among the most important scholarships now available to American students. The statement of purposes of their researches were as follows:

Dr. Kirkpatrick: To make an investigation in Germany and Austria of the cultural status of women and of clinical and psychoanalytical methods in relation to marital adjustments.

Dr. Osgood: To prepare a book on Montana, as a study of the evolution of a typical far western state.

Dr. Mills: To make a comparative study of the post-war political, governmental and economic situation in Hong Kong ,the Straits Settlements and Malay States, with comparisons and contrasts drawn from the Philipines and Java.

A brother of Dr. Kirkpatrick, Ralph Kirkpatrick, a harpsichordist, received a fellowship to study source material of seventeenth century music in Europe. Glanville Smith, Minnesota writer and graduate of the University of Minnesota, was a non-academic recipient of a fellowship. He will go to the West Indies to write a book on their development and character.

Geography Department Activities

With the recent election of Samuel N. Dicken to membership in the Association of American Geographers, the geography department has the distinction of one hundred per cent membership in the organization. Dr. C. E. Cooper of the Botany Department is also a member of the same body. Membership in the Association is based upon outstanding contributions to geography and closely related fields. All University of Minnesota members read papers at the meeting of the group held in St. Louis during the Christmas holidays. Mr. Cooper discussed, with colored movies, Alaskan coast glaciation, Mr. D. H. Davis read a paper on the Amana, Iowa, community, Mr. Hartshorne discussed terminology in political geography, R. H. Brown read a paper on the Roswell region, New Mexico, and Mr. Dicken presented a study of the Sierra Madre Oriental in Mexico.

'U' Farm Book Warmly Praises Doctor Coffman

Continued from 1, column 1

would not have been like him to miss any of the school games and sports.

Taught Country School

"After completing his high school training in Salem, President Coffman got his first experience as a teacher in country schools. He continued his education by attending the State Normal school, Terre Haute, Indiana, and after graduation from that institution he served as superintendent of the Salem and Connersville, Indiana, schools. In the meantime he worked toward his bachelor's degree in Indiana State University, receiving the degree in 1906. He received his Master's degree from the same institution in 1910. In 1907 he went to the Illinois State Teacher's college at Charleston as director of teacher training. He spent the year 1909-10 working for the degree of Doctor of Philosophy in Columbia University and received the degree in 1911, following a year of service as lecturer in that institution. In the fall of 1911, he returned to the Illinois State Teacher's college for one more year. While connected with that institution, President Coffman formed a warm and lasting friendship with President L. C. Lord, who was a fine educator and was gifted with unusual power to inspire young men. He took great pride in the work and career of President Coffman.

President Coffman's career as a state university educator began in 1912 when he received appointment as professor of education in the University of Illinois. There he was associated with William C. Bagley, a strong man in the field of education, who recognized the ability of Dr. Coffman and predicted great things for him when he left for Minnesota in 1915 to become dean and professor of education. This prediction was good, for 'Dean' Coffman impressed his Minnesota associates so much by his educational leadership that five years later, upon the resignation of President Marion LeRoy Burton, he was elected President of the University.

His Many Activities

President Coffman's most distinguished contribution has been his service to the University of Minnesota, but an enumeration of some of his connections outside may not be amiss in indicating the breadth of his interest and influence in activities pertaining to education. He has been president of the National Association of State Universities, of the National Association for the Study of Education, of the Association of Urban Universities, and of the National Association of College Teachers of Education. He has served as chairman of the Committee on Land Utilization in Minnesota, whose special function was to study not only land problems but educational and other social problems in the cut-over counties. President Coffman also served as chairman of the Committee of Inquiry on Public Service Personnel, created in 1933 to make a nation-wide study of that problem. He is a trustee of the Carnegie Corporation, which is the parent organization of the various Carnegie endowments and institutions, and he is chairman of the American Council of Education.

He has been active and holds membership in a great many other educational associations and enterprises. Only recently he became a member of the American Youth Commission in the American Council of Education. Of special interest among his activities away from Minnesota was his tour of Australia, New Zealand, and the Philipines in the winter of 1931-32, when he was visiting lecturer for the Carnegie Endowment for International Peace.

It is impossible to enumerate here the contributions of President Coffman to the great university of which he is head. To attempt to do so might result in putting the emphasis in the wrong places.

"President Coffman's approach to educational problems is open, direct and frank. He has the ability to get promptly at the heart of a matter. This doubtless accounts in part for his capacity to carry on with so many diverse enterprises at the same time. He believes that it is the function of a university to develop knowledge and to foster scholarship and the university should be kept free from propaganda built up by this, that or the other group. He insists that great teachers and researchers are the best advertisement of a university and that sound educational policies constitute the proper basis on which to appeal for public and financial support. He believes that the experience of the past has taught us some things of lasting value in education, but that the policies and methods of education are not fixed. Education, he believes, must be adapted to changing conditions, and he has been a great influence in making the University of Minnesota outstanding in its studies of education.

"Three times in recent months, the writer has happened across educators outside of Minnesota who have commented essentially as follows: 'When one visits Minnesota, he at once gains the impression that he is seeing a University and not a loose, faintly defined federation of colleges.' This, the writer feels, is the highest possible compliment that can be paid to Dr. Coffman as President. It indicates ability not only to formulate sound policies and to integrate various lines of work in higher education, but also to inspire confidence and loyalty on the part of the university staff.

"In recent years many educational institutions have recognized President Coffman's career by awarding him honorary degrees. Indiana State University, his Alma Mater, and Carleton College gave him the degree of Doctor of Laws in 1922. He received the same degree from Columbia University in 1929, from the University of Michigan in 1931, and from Northwestern University in 1933. In 1930 he received the degree of Doctor of Humane Letters from the University of Denver, and Doctor of Science in Education from George Washington University, Washington, D. C. He has written many books and articles, his most recent volumes being, 'The State University,' a compilation of addresses, and the report on 'Personnel in the Public Service,' based on the year of study conducted by the commission of which he was chairman.

"Any estimate and appreciation of the work of President Coffman would be incomplete without making mention of Mrs. Coffman. Her deep and stimulating interest in his work and her untiring efforts in behalf of the welfare and happiness of the students and of the families of members of the staff are positive factors in his success and leadership in his chosen field of work."

'U' Man Studies Investment Policies

A study of the investment policies of a score of large eastern educational institutions and foundations was made by Laurence R. Lunden, investment advisor to the University of Minnesota Board of Regents, during a two weeks trip from which he returned yesterday. Mr. Lunden spent time going over the investment portfolios of such institutions as Harvard, Yale, Dartmouth, Cornell, the Carnegie Foundation, some of the Rockefeller endowments and special funds held on behalf of educational institutions by some of the New York banks. On his return, he said that those charged with the custody of large endowment funds are today watching financial developments more carefully than they have for some time and are watching every swing of the pendelum as between the different types of securities.

Education in an Agricultural Commonwealth

The following address was one of several delivered during Schoolmen's Week on the thesis, "Education for an Agricultural Society." It is by Dr. E. M. Freeman, dean of the College of Agriculture, Forestry and Home Economics in the University of Minnesota. About the first half of the address is presented here.

Assuming that Minnesota may be characterized as an agricultural commonwealth, does it follow that this fact affects in any way the educational objectives and procedures of the state as a whole? I firmly believe that it does, and that it ought to have a larger consideration in our educational philosophy.

At the outset let me make clear that I am not exclusively or even primarily concerned in this discussion with agricultural education in the sense of an education for the practice of agriculture. But I am concerned with all the educational opportunities extended to all citizens of the state insofar as these facilities relate to our fundamental industry of the soil. No citizen of the state, wherever he may reside or whatever his occupation, can escape a concrete relation to our economic dependence on agriculture. However remote that relation may seem to be, it is nevertheless real and important. An intelligent recognition of the place of agriculture in our common weal must have some bearing on the educational policies of our commonwealth.

The educational system of any state has, or ought to have, a considerable influence on the collective thought and judgment of its citizens. A realization of our common interest in agriculture is just as important in metropolitan centers as it is on Main Street or on the farm. While no one class merits advantages to the exclusion of other economic or social groups, the prosperity of the dominant interests reflects upon all. It is important that all citizens of the state realize that we live in an agricultural commonwealth. It is important that all voters study national and state legislation in the light of an agricultural commonwealth. Agriculture needs the best thought of city and country for the solution of its difficult problems. Such thought can be valuable only if based on a clear understanding of mutual interests and on sincere co-operation in the solutions of mutual problems. Our educational system, if it is to function in the best interests of the whole state, must not only be aware of these facts but must take them into account in its educational procedures. The youth of Minnesota have a right to a clear understanding of the fundamental social and economic conditions in which they will live. Their future attitudes toward state and national legislation, their understanding of social and economic movements affecting the state as a whole, and the importance of such movements to themselves as citizens of an agricultural commonwealth are in no small degree a function of state educational policies.

The youth of our state have another more personal relation to our state's agricultural background. Their choice of occupational training should be made with an understanding of that relationship. If commercial, industrial, and professional interests are dependent on agricultural prosperity, then these are vital matters to be considered by every young man or woman in the choice of a business or profession.

The greatest single natural resource of our state—or nation, for that matter—is the productiveness of the soil. In contrast with iron mines, coal mines, and oil wells that productivity may be preserved and even enhanced by wise and intelligent use. It is a possible heritage for all posterity. It is, of course, our duty as educators at whatever level, to teach the wise utilization of all our natural resources. There may be disagreement between the advocates of capitalistic individualism, on the one hand, and of socialistic public control, on the other, on the modus operandi. There can be no disagreement as to significance and the importance of wise use, whatever the methods, in our present and especially our future prosperity. If the boasted intelligence of the human race is not more than a selfish indulgence in the comforts and pleasures of the present, if it does not visualize and strive for the progress and comfort of future generations, it ought at least not be characterized as a God-given trait.

No child in the state of Minnesota has been properly educated, no child has been properly oriented to his future social and economic environment who comes to maturity without a clear understanding of the importance of the soil to the society in which he is to live and with which he must share prosperity or the lack of it.

But the farmer in a very real sense is not the sole arbiter of the use of the soil. That use is conditioned by credit from banks and industry, by markets and distribution, by educational agencies, and by supplementary and contributing occupations and professions. How widespread that responsibility is conceived to be is illustrated vividly by the public concern at the present moment in the rehabilitation of our national agriculture. That concern cannot be dismissed merely as a normal political reaction to an impending presidential election. The dire results of maladjustment of agriculture during the past 20 years have been only too obvious to thinking men of every creed and every party. Legislation may play its important part in the adjustment of agriculture, especially in such emergencies as those of very recent times, but individual initiative, intelligence, and efficiency will still be factors in operation. In the final analysis most of the problems of agriculture will be solved by education. That education will be not merely the technical training in schools or colleges of agriculture for the practice of agriculture, the research of experiment stations, the training of a large array of specialists in every field of soil use, crop and animal control, but it will also include education for every field of social, political, and economic activity that influences the use of the soil. Education in an agricultural commonwealth must envisage not merely the importance of its agriculture but must inculcate an appreciation of the relations of all its social, political, and economic forces to this basic industry.

That Minnesota appreciates the importance of her basic industry is clear from a brief survey of those institutions contributing specifically to agricultural education and practice.

At the top of this agricultural system stands the Minnesota Agricultural Experiment Station, an institution devoted to research in almost every field of agriculture. Research is education at the highest level. The investigator is both student and teacher. He learns by teaching himself. Educationally speaking, he lifts himself by his own pedagogical bootstraps. By experiments and excursions into the unknown he adds to our sum of dependable knowledge. Improvements in soil and farm management, the breeding of better varieties of crops and better breeds of livestock, the control of old and new pests and diseases of crops and animals, the adjustment of agriculture to changing economic forces, and the improvement of social conditions are objectives requiring a large staff of highly trained scientists, economists, and specialists in many fields of knowledge. Minnesota has provided generously for this capstone to our agricultural educational system. Its close affiliation and co-operation with the numerous departments and colleges of our great university of which it is an integral part, its great central station at University Farm with its seven branch stations scattered over the state, its generous financial support from state and federal sources are evidences of at least a recognition of the possible values and actual services rendered to the state's chief industry. From this fountainhead of agricultural knowledge there flows, through the various station and department publications and through the large agricultural extension service and its affiliated county agents, the latest and most reliable agricultural information to the farmers and all interested citizens. The importance and use of such a research institution to the agriculture of Minnesota are obvious to this audience, I am sure.

The College of Agriculture, Forestry, and Home Economics is also an educational agency maintained by the State of Minnesota chiefly in the interests of agriculture. As one of the standard four-year colleges of the university, it offers to the youth of the state a wide range of educational opportunities at the college level. Its contribution to the state's agriculture is closely linked with the work of the Experiment Station. In spite of its long history as one of the four original colleges of the University of Minnesota, established in 1868, and in spite of its rapid growth, its manifold relations to agriculture and the related industries and activities and especially its numerous opportunities in vocational and professional training are still imperfectly understood among the youth and schools of the state.

Perhaps the most outstanding misconception of the place of this college in our state educational system is that it is engaged only in training young men for the actual practice of farming. The college does and should provide adequate training on the college level for all who desire that preparation for practical application. But the college has other very important functions. This and other state colleges of agriculture are the chief and almost only source of training for the large number of specialists in scientific, economic, and technical fields who must carry on the work of the state experiment stations, the federal department of agriculture, and the various state and federal enterprises that demand such highly specialized preparation.

Moreover, agriculture does not end at the farm fence or orchard hedge. Many related industries and commercial organizations contribute to the success of agriculture. The mills and elevators and the transportation systems are also gears in the complex machinery of grain production. Stock yards and packing plants, transportation and marketing affect the production of livestock. Creameries are essential in our great dairy business. Co-operatives for production and marketing, for credit and finance, play a most important role in the success or failure of agriculture. The technical training to meet the wide range of demands for expert service in these and many other related governmental, industrial, social, and economic activities covers almost the whole range of the natural and physical sciences. It also includes a large field of economics, much of sociology, a great deal of engineering, and the almost innumerable technical specialties which have to do with plant and animal production and improvement, plant and animal protection against insects and disease, management of every type of farm unit with all that that involves. The manifold contacts with bordering fields of knowledge and training are illustrated in the fact that the College of Agriculture, Forestry, and Home Economics offers to students at the university six major curricula for specialized training that are administered jointly with other colleges or units of the university, namely, with Education; Science, Literature, and the Arts; Engineering and Architecture; Business Administration; and the Institute of Child Welfare.

It needs no argument to justify the maintenance of such a college in an agricultural commonwealth and the generous support it has received. It is of considerable importance that the entire school system of this state understand the scope of that college and the opportunities offered by it to the youth of the state. And it is of even greater importance that the schools of the state appreciate the significance of the fact that the educational activities of this college are centered in that industry of our commonwealth which is basic to our prosperity, which is as permanent as our social and economic life itself, which offers abundant and diversified employment in times of prosperity and well sustained employment even in times of depression.

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 APRIL 28, 1936 NUMBER 10

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

Verne E. Joslin Heads M. E. A. For Coming Year

Verne E. Joslin

Verne E. Joslin, president of the Minnesota Editorial Association for 1936, comes from one of the few Minnesota communities having a permanent exhibition at the University of Minnesota. Mr. Joslin is editor of the Heron Lake News, Heron Lake, Minnesota. One of the exceptionally interesting habitat groups of wild animal life in the university's Museum of Natural History is called the Heron Lake group and is made up of the typical aquatic and shore birds found, originally in vast numbers, in southwestern Minnesota and particularly at Heron Lake.

Mr. Joslin, who is very popular with his fellow editors in Minnesota, was born in Royalton, and like so many editors of weekly papers, was a printer before he became a publisher. After becoming a reporter he worked on papers in Long Prairie and Little Falls, Minn., and for three years was editor of The Bismarck Tribune. He purchased the paper at Heron Lake in 1928. Under his direction the paper has won a number of important prizes from editorial associations, local and national, for the excellence of its makeup and news handling. In 1935 his paper won first in the National Editorial Association's General Excellence contest, weekly newspaper division, for towns of less than 1,000 population.

Mr. Joslin is an associate member of the University of Minnesota chapter of Sigma Delta Chi, honor society in journalism. He is also president of the Jackson County Publishers association.

F. J. Wulling Will Retire

Continued from page 1, column 4

ly famous, and attained especial distinction during the world war for the remarkable purity of the digitalis extract it produced for the use of American soldiers.

How Dean Wulling happened to take up law as well as pharmacy he explains like this: His father was a business man and an architect. In these capacities he had made two fortunes, but he was always willing to listen to the other fellow.

"His investments were poor," said Dean Wulling. "I resolved that I should be prepared for whatever personal business I had to transact. If I knew the law myself, I should be able to oversee my property in a businesslike way. I have never regretted studying law, although I never had any idea of practicing it."

Helped Doctor on Rounds

His interest in medical sciences resulted from a contact of early youth. An intimate friend of the family in Brooklyn was a doctor. The future dean used to go on his rounds with him, sometimes being called upon to help with bandages and like minor operations. He gained the idea that there was more to be learned by society at large in the health sciences than in any other; and the progress that has been made in those fields during the past fifty years seems to have borne out his opinion.

Dean Wulling recalls that D. R. Noyes of St. Paul was the man through whose influence the Legislature appropriated money for the courses in pharmacy and that David L. Kiehle of the board of regents went to Brooklyn to persuade him to come to Minnesota. Governor John S. Pillsbury was then chairman of the board of regents and it was through him that Dean Wulling sometimes gained advantages for his department.

"He and President Cyrus Northrop were always my best friends," he recalls. "You were an angel to come to Minnesota," Dr. Northrop told him when he arrived to begin work. "Just the same, I should not have fared very well without an independent income," he added.

Recipient of Many Honors

Almost all honors that can be bestowed on one in his field have come to Dean Wulling. He has been president of the American Pharmaceutical Association and of the Association of Pharmaceutical Colleges. He has traveled widely in Europe and conferred with pharmaceutical authorities on that continent. By exchanges of publications and letters he keeps in touch with botanical and pharmaceutical gardens in all parts of the world. Never a year passes without bringing to the College of Pharmacy in the University of Minnesota distinguished visitors from abroad.

Many of the forward educational steps in colleges of pharmacy have been started at Minnesota. It was the first to require three years in pharmacy, first to offer an optional four year course and first, finally, to make the four year course obligatory.

One of Dean Wulling's interesting experiences was a visit from Knute Nelson, then governor of Minnesota, who called on him one day and said he wished he might obtain a salary increase for the dean but didn't know how to go about it. Since then educational institutions have developed so that matters of internal policy are left in the hands of those to whom they have been delegated.

Dean Wulling has one of the outstanding personal collections of art in Minneapolis. A son, Emerson Wulling, also has specialized in art.

Teeter States Summer Plans

Continued from page 1, column 5

summer term, will be of interest. A nursery school and kindergarten will be conducted by the institute during the first term.

In the department of physical education and athletics for men an intensive coaching course in all major sports will be conducted during the first six days of the session, June 15 to 20 inclusive, with Bernie Bierman and George Hauser in football as outstanding faculty attractions. This is a change in policy from last year when the various sports were taught consecutively. Regular courses in physical education, aside from the intercollegiate sports, will be offered during the remainder of the first session, June 22 to July 25. Also in the first term will be offered a full series of courses in physical education for women. The regular journalism faculty will present courses in the first term, including offerings in writing, advertising, supervision of school publications and newspaper problems.

Finney Wins Music Prize

Ross Lee Finney, son of the late Ross L. Finney, professor of Sociology at the University of Minnesota, has been awarded a prize of $200 for the best new work this year by a composer resident in the Connecticut Valley. Mr. Finney is a member of the music faculty at Smith College. A brother, Nat Finney, is city editor of the Minneapolis Star. The award was made at the first annual music festival in Hartford, Conn.

According to present plans, the Homecoming football game next fall will be that with Iowa on November 7. The Purdue game, October 24, has been chosen for Dad's Day. Minnesota will open its season against the University of Washington, at Seattle.

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | MAY 19, 1936 | NO.11

Minnesota Will Offer Graduate Business Degree

Graduate School Lists Program Asked by Dean R. A. Stephenson

ECONOMISTS RANK HIGH

Campus Group Wins Wide National Recognition as Scholars

A graduate degree in business administration will be offered at the University of Minnesota beginning next year, Dean Russell A. Stephenson announced. Courses of study have been outlined leading to the degree, Master of Business Administration. Although a majority of the students will come from the School of Business Administration the degree will be awarded by the Graduate School. An opportunity to work for this degree will be open also to students from colleges not part of the University of Minnesota and to Minnesota Students in Science, Literature and the Arts as well as in business. Minnesota becomes one of relatively few universities to offer a graduate business degree, Dean Stephenson said. The Minnesota plan will be more like that in effect at the Wharton School in the University of Pennsylvania than like either the Harvard or Stanford advanced study plans, and will be strictly of a graduate character, all students having to meet Graduate School entrance requirements.

Business Strong Here

This step in advance further strengthens the already strong position of the School of Business Administration as one of the outstanding institutions in the field of education for business. Evidence has been piling up from many quarters in recent years that Minnesota is second to none in Business Administration, and at national meetings of economists it is said to be agreed that Minnesota is at the top in economic theory as a result of the tenure on its staff of Professors Alvin Hansen, Frederic B. Garver and Arthur W. Marget.

The same person is reported to have said, "Dr. Hansen is the outstanding economist in the United States today. I have heard it said that this is known nationally, and it is strange that he is not more widely recognized in his home state."

In other branches of economics the faculty of the School of Business Administration holds well up to the standard set for them by the trio in economic theory, although widest national recognition has undoubtedly come to the men mentioned by name.

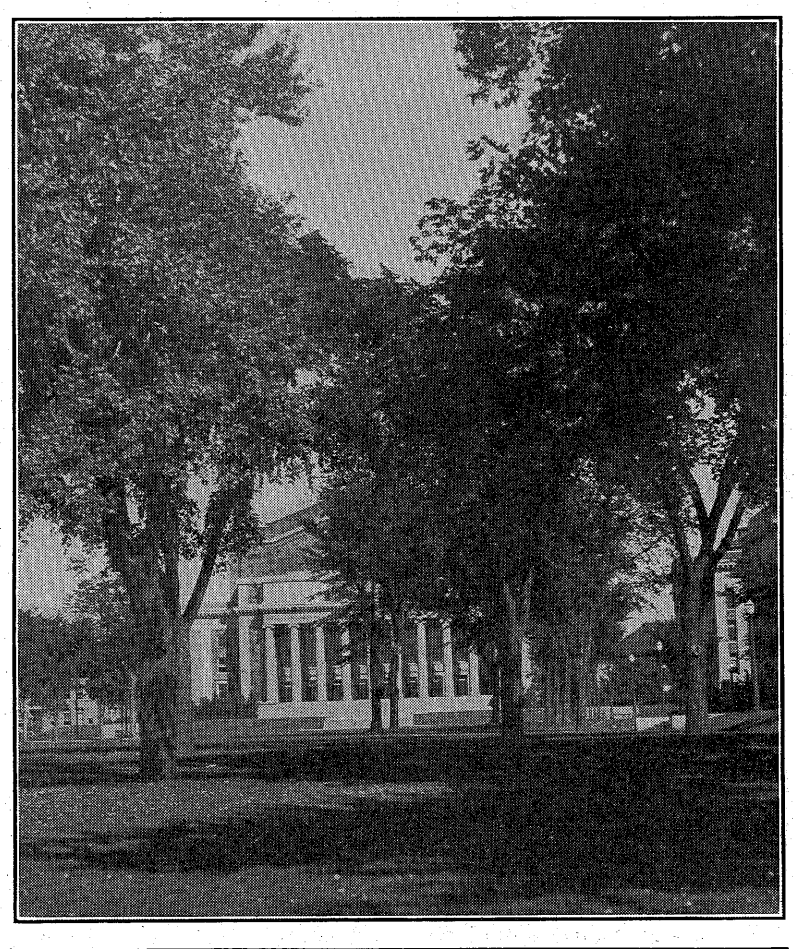
Dean Russell A. Stephenson, for several years chairman of the committee on business education at the collegiate level of the Association of Collegiate Schools of Business has recently been made chairman also of a special committee of the association composed of those schools that are parts of state universities. This committee will study the relationship of business schools in state universities and the federal government, with a view to furthering the cause of cooperative researches between these two. In June a committee from these thirty schools will go to Washington to discuss with the Department of Commerce and other government departments studies that are needed and that can be conducted co-operatively. At that time Professor Roy G. Blakey, now on leave to serve as director of research in the Bureau of Foreign and Domestic commerce, will take part in the proceedings.

Helps Accounting Group

Dean Stephenson is also a member of a committee of the American Accounting Association which is co-operating with certain business agencies in developing a body of accepted theory that will result in greater uniformity. For example, he explained, under the Securities Exchange Commission a corporation must conform to certain regulations in making the reports on the basis of which its securities are listed on the New York Stock Exchange. As accounting is conducted now, not all firms of accountants would mean exactly the same thing by some of the statements in their reports. Under the plan this committee is working out, all such reports will be equally intelligible. This board is holding monthly meetings in Chicago.

Dr. Bruce D. Mudgett, professor of economic statistics, is spending the present year in research in various European centers of business and research. Word has recently reached the dean, also, that Professor Blakey, now in Washington, will probably ask to have his leave extended so that he may remain with the Bureau of Foreign and Domestic commerce until December and then take a sabbatical year.

Minnesota Campus Center in Summer



University Scientist Describes Nature of Ductless Glands in Man

Conquest of Diabetes, Greatest Recent Medical Triumph, Summarized

Functions performed in the human body by the glands of internal secretion, for which the scientific term is "endocrine glands" were described by Dr. Irvine McQuarrie, head of the department of pediatrics in the University of Minnesota Medical School, who delivered the fourth and last of this year's Sigma Xi lectures. Because of the length of the lecture, Minnesota Chats is limited to reprinting the introductory discussion of the endocrine glands, and a selected passage concerning the functioning, or non-functioning, of one of these glands, namely, the pancreas. Inasmuch as the disease involved, diabetes, is said to be one of those now most rapidly increasing throughout this country, Dr. McQuarrie's discussion of it should prove of great interest.

Dr. McQuarrie said:

In addition to those marvelous natural agencies of bodily defense which were so clearly described in an earlier lecture, there are other equally amazing physiological mechanisms which more or less automatically govern the inner lives of both mice and men from the moment of individual conception to the time when a new generation has been insured. These mechanisms depend upon the activities of two great co-ordinating agencies, the involuntary or autonomic nervous system and the widely separated but functionally interrelated structures known as the endocrine or ductless glands. While the functions of these two systems are so intimately interrelated that they are frequently considered together under the qualifying term "neuro-endocrine," it is beyond the scope of the present review to make any but the briefest reference to the special role of the nervous system.

Most of our knowledge concerning the endocrine glands has been acquired during the past half century—indeed, the major portion of it within the last twenty-five years. At the present time new discoveries in this important field are being reported in the biological, medical and chemical literature at so great a rate that no single investigator can possibly keep himself completely informed on every phase of the subject. What a full century of progress along the same lines and at the same pace might mean for the hu-

Continued on page 3, Column 1

'U' Ranks High In Fellowships

The University of Minnesota is fourth in the number of its staff members who have received Guggenheim Memorial fellowships and third among American universities in the number of former Guggenheim fellowship holders who are now teaching as members of its faculty. Thirty two have been appointed to fellowships from the University of California and twenty each from the University of Chicago, Harvard, and Minnesota. California has appointed 29 former holders of fellowships to its staff, Chicago twenty-four and Minnesota nineteen, Harvard being fourth with 16. In the eleven years that the fellowships have been granted, 27 persons holding degrees from the University of Minnesota have been awarded Guggenheim fellowships. In this respect Minnesota is tenth, California, Michigan and Wisconsin are the other state universities in the first ten. The statistics were received from the foundation by Dr. Guy Stanton Ford, dean of the Graduate School.

Dads Association To Meet May 27

Hennepin and Ramsey county chapters of the Minnesota Dads Association, made up of fathers of students in the University of Minnesota, will conduct a joint annual meeting in the new Physical Education building on the campus Wednesday, May 27, at 7:30 p. m. After officers and directors for the coming year have been elected the dads will watch a program of sports and athletics that is being arranged by the director of the department, Frank G. McCormick. Arrangements for the meeting have been made by Edward Eylar of Minneapolis, secretary-treasurer. The aim of the association is co-operation with the university in promoting the welfare of the student body.

States Key for Enjoying Life

The prime essential for the making of a full and complete life—which making is the artistic creation par excellence—is a belief in the unity of all life. This was advanced as the condensation of his theme by J. Middleton Murry, English critic and essayist, when he spoke at the University of Minnesota recently.

Upon request Mr. Murry condensed his address to these words:

"The specifically human aptitude is that of changing the emotional quality of immediate experience in retrospect. Past pains, by this alchemy of consciousness, become present joys, and past joys present pains. The art of enjoying life must be based on the development of this human aptitude, which is the perfected expression of the consciousness by which humanity is distinguished from the animal world.

"The enjoyment of life which is based on this faculty of detachment from the immediate quality of experience is indeed an art; it is ultimately aesthetic, or rather this delight denotes the attainment of a point at which art and religion and philosophy and science become one. This art of enjoying life culminates in the perception of "the beauty of the truth," of which the great poets have spoken, and of which great works of art are the embodiment.

"In other words, the full enjoyment of life depends on the development in ourselves of the aesthetic capacity of detached and disinterested observation of life as it actually is; and nothing is more inimical to its achievement than the indulgence of illusion. A great French poet said that the prime essential for the creation of an enduring art is a belief in the unity of the universe: this may, and should be extended. The prime essential for the making of a full and complete life—which is the artistic creation, par excellence,—is a belief in the unity of all life."

Visitors See 'U' Gallery

Mothers who visited the University Art Gallery on Mothers Day found an exhibit of student work on display. Started in 1933, the gallery has expanded its service to students interested in art until today in addition to frequent exhibits of the best American artists the gallery includes a Fine Arts room, an Arts reading room, and an extensive print rental service.

The Fine Arts room was opened in January. It is furnished in the modern manner, with a restful blue predominationg in the color scheme. Books on art, pictures and prints are on hand for the enjoyment of patrons.

Another service is the rental system by which students may borrow prints in full color of the world's masterpieces. The charge is nominal. Already hundreds of students have applied to the Gallery for prints with which to brighten up drab rooming-house quarters.

Newest of the gallery's services to students is the Arts reading room, in which they may read books and articles on art topics. Plans for this room followed the Carnegie Foundation's grant of an extensive library to the Gallery.

Plans Laid for Commencement On June 15th

Baccalaureate Sermon Will Be Preached in Auditorium Day Before

ALUMNI TO BANQUET

Graduation Will Be Outdoors Again if Weather Continues Kind

The University of Minnesota will complete its sixty-sixth teaching year on Sunday and Monday, June 14 and 15, with Baccalaureate exercises in Northrop Memorial Auditorium Sunday morning and Commencement exercises out of doors in Memorial Stadium Monday evening, June 15. The annual banquet of the General Alumni Association will be held in the ballroom of the Minnesota Union early Monday evening, to give alumni who attend a chance to reach the stadium in time for Commencement.

Degrees probably will be granted to between 1500 and 1600 students Monday evening. Among these will be all of the degrees Minnesota grants, not only the bachelors degrees, but masters of science, masters of arts, the various, professional degrees in law, medicine, dentistry and pharmacy, engineering, chemistry and agriculture, and doctorates of philosophy to those who have finished the long task of preparing themselves for college training.

Dr. Charles N. Pace, president of Hamline University, St. Paul, will preach the Baccalaureate sermon in Northrop Auditorium Sunday morning. He is one of the most recent additions to the company of those who serve as presidents of colleges in the state of Minnesota.

Following the usual procedure of recent years, President L. D. Coffman will be the speaker at the Commencement Exercises and the deans of the various colleges will present their candidates for degrees.

Although the University will be completing its sixty-sixth year, this will be the sixty-fifth commencement. When the institution had been in operation two years, a small group of students who had entered with advanced standing were granted their degrees. The first full-fledged commencement was held, of course, at the end of the institution's fourth year of operation.

While June graduates are going through the final formalities of completion on Monday, registration for the first summer session will get under way and actual class work will begin on Wednesday. The first summer term will run until July 27 and the second from that date until August 29. On this schedule summer sessions will close in time to allow public school teachers to reach home for the beginning of school terms about September 1.

MacLean Flies to Speak

Leaving Minneapolis at 7 a. m. one day and getting back at 9:30 a. m. the next, Dr. Malcolm S. MacLean, director of the General college, spoke meanwhile in St. Louis, Mo., before the national organization of teachers of physical education for women. Home two days, MacLean left again for a two day meeting in Buck Hill, Pa. of the executive and advisory committees of the Progressive Education association. Also on the program of this association was Dr. Ivol Spafford, home economics expert in the General college.

Managing Wild Resources Urged In 'U' Farm Talk

Ralph T. King Sees Wealth and Happiness of State Increased

OLD METHODS FAILING

Scientific Training and Professional Attitude Need of Managers

Six basic principles for the management of wild life were set down by Ralph T. King, of the department of entomology and economic zoology at University Farm when he spoke on "Game Management" in the recent series of scientific lectures at University Farm sponsored by Alpha Zeta, management" in the recent series honor society in agricultural science.

These were:

Wild life is an organic resource and can be managed on a sustained yield basis.

Wild life is an environmental product and as such is manageable in nature.

Wild life is a commodity and as such is answerable to the ordinary rules of investment.

Wild life can not be considered separate and apart from its environment, and as a consequence its management must make provisions for satisfactory environments.

Wild life environments in most instances have value in themselves in addition to their value to wild life.

Income from wild life may in some instances be sufficient to offset carrying charges accruing on wild life environments that are being managed for purposes in addition to wild life production.

"Through proper management we can retain this resource, for it is a resource, with its wealth of variety and all its desirable qualities of wildness, in sufficient amount to allow for its utilization by various groups with different interests," said Professor King.

He enumerated the several values in wild life as commercial, recreational, biological, aesthetic, social and scientific.

Our Vanishing Furs

As an example of the wild life resources of this country he pointed out that whereas the United States once had fur as a principle article of export, it is now fifth on the list of our imports, despite a continuing annual output that is still considerable. Intelligent management of areas capable of maintaining fur bearing animals and efficient supervision of those areas, with control of the annual catch, would greatly increase our fur output, he said.

"We are now importing in excess of $200,000,000 worth of raw fur each year and producing less than $20,000,000 worth, less than one-eleventh of the amount we use. We still have the land and climate necessary for fur production. Much of the United States is ideally adapted to the production of high quality furs, and even now Louisiana produces each year more fur than all of Canada and Alaska combined, while New York is a close second."

He also called attention to the benefits bestowed on hunters, fishermen, and the like, and the economic return supplied by their activities.

"It is impossible," he said, "to state aesthetic values in terms of dollars and cents. There is, nevertheless, a very real value present in the aesthetic contributions of wild life to our welfare. Someone has said: 'Whatever tends to make the world better and happier; whatever ministers to the aesthetic longings of the human soul; whatever leads the thoughts of men and women for the moment from the sordid pursuit of gain or from the race for personal aggrandizement to beauty in any form; whatever entices tired and care-worn people for a time from the shop, or store, or office, or mine or quarry and brings them into closer contact with the beauty, grace and charm of things out of doors, is of direct material value to the human race, even though that value may not be measurable in yards, tons, bushels, or dollars'."

"Certain of the values of wild life consist more in the maintenance of quality rather than quantity, and like many other really important things, this conception of quality eludes easy definition," he said. "It is perhaps easier to illustrate than to define it. Various committees of economists and sociologists investigating national problems have assured us that the next few years will see larger and larger areas of land reverting from private to public ownership; land that would, according to former conceptions, be wholly idle. These same committees inform us that each year will see an increase in leisure time on the part of the American public because of shorter working days and working weeks. At the same time they point out that the American public has no traditional methods of utilizing leisure time. Doesn't this idle land and leisure time offer the possibility of a combination that will react to the advantage of both?

Provides Needed Adventure

"Another of the social values of wild life we shall do well to remember is the sense of adventure it helps provide. The tradition of the pioneers is inculcated in most American children even before they start their schooling. All through their formative years they read about the glorious adventures of the American explorers, frontiersmen and soldiers, and often they relive in games and imagination the stirring frontier days. Many of them grow up looking for real adventure and are not satisfied to get their thrills in such vicarious forms as the lurid movie, the cheap novel, the blood-curdling radio skit. A depressingly large number of the more energetic of these try to appease their unfulfilled yearning in the pursuit of crime and racketeering. Others long for a war in the hope that in battle they may capture some of the rightful thrills of life. Outdoor recreation with opportunities for association with wild animal life offers one means of meeting this psychological urge for adventure."

The lecturer also called attention to the three ways of treating any natural resource, explaining the theory of the management method. He said:

"Any natural resource may be mined; it may be farmed, or it may be managed.

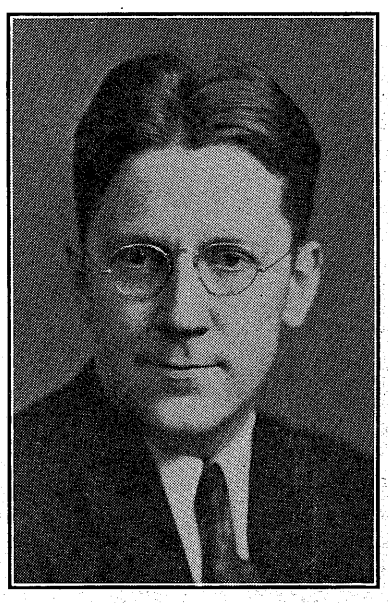
"Mining implies the removal and utilization of a resource with no regard for its continuance and no possibility of replenishing the original source. It must always result in eventual depletion.

"Farming involves usually a highly elaborate technique and results in a very much artificialized set of conditions; it endeavors to remove or reduce to a minimum every factor which competes with the product it seeks to produce.

"Management relies largely on natural methods and seeks to modify slightly or influence factors or trends in a manner that will favor the product with which it is concerned; it seeks to insure the continuance of certain products and, at the same time, to avoid a highly artificial and expensive method of control."

Methods of wildlife conservation employed in the past, have led only to depletion.

Research Coordinators Make General College Study



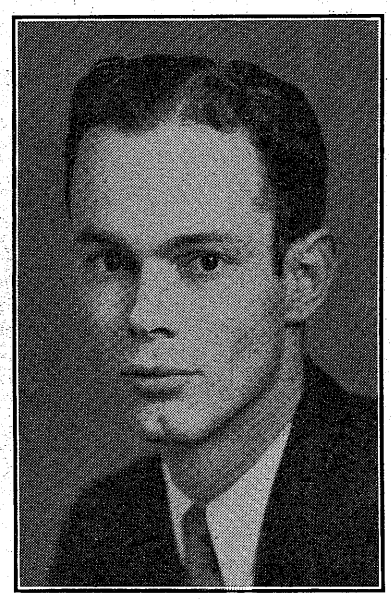
Wm. B. Tucker, M.D.

Raymond Faulkner

Arthur Upgren

Thos. J. B. Wenner

Ivol Spafford



John G. Darley

Shown above are six in a group of research coordinators who are serving the General College in the University of Minnesota under special grants from the General Education Board and the Carnegie Corporation of New York. Serving as staff members of the college, this group is making a detailed study of all the procedures in General College with a view, first, to understanding the students and their needs, and, second, improving their courses, methods of teaching and examinations.

Not only will their findings be of value to the University of Minnesota but to the swiftly increasing number of institutions that are establishing colleges similar to the venture directed on the Minnesota campus by Dr. Malcolm S. MacLean

Every General College procedure comes under the careful scrutiny of these workers, who attend the lectures, take complete notes, study the examinations and confer with the students and teachers. Each is a specialist in some particular area of learning, and to the studies in his own field each gives especial attention.

The coordinators and the fields in which they work are: Ray Faulkner, art appreciation; Arthur Upgren, economics; Raymond B. Tucker, M. D., human biology, health and hygiene; Ivol Spafford, euthenics and home life; Thomas J. B. Wenner, political science and history; John G. Darley, counselling and student personnel; Frances S. Appel, English; Raymond V. Sletto, social problems; Alfred Vaughan, physical sciences; Cathleen McConnon, personnel; Howard Gilkinson, speech; Elmo C. Wilson, contemporary affairs, and Paul Wendt, visual education. Most of these staff members hold the doctor of philosophy degree.

Mr. Faulkner and Mr. Wendt are on projects in art and visual education that are financed by grants from Carnegie Corporation of New York.

Interesting among the projects is that conducted by Dr. Darley who is making a study of the student population in the General College to learn, in a broad sense, what kind of things they should be taught. The processes of counselling, the relations of the students with various university agencies, their family and economic status, vocational interests and aptitudes, their adjustment in home life, their attutudes and their morale are among his interests. Miss McConnon is at work on the same problem with respect to the women students.

According to Dr. MacLean Minnesota is unusually fortunate in the personnel of this group of instructors, most of whom have had wide experience, and many of whom have refused offers to leave Minnesota since accepting their General College appointments. Dr. Tucker, born in China, and a graduate of Oberlin and Chicago, was at Bennington College in Vermont last year, having held before an important post in the University of Chicago hospital. Dr. Wenner has held scholarships that enabled him to spend time in study and observation at Geneva and in Paris. He received his Ph. D. degree at Cornell University, where he held the Andrew D. White fellowship.

Dr. Ivol Spafford is one of the recognized leaders in the field of home economics and euthenics, which means the study of effective home life. She has been supervisor of home economics work in the state of Alabama and holds a Ph. D. degree from Ohio State University.

Much attention has been attracted by the student art laboratory developed in General College by Mr. Faulkner and many visitors to the campus have found pleasure in watching the art students absorbed in their work.

To Teach Public School Musicians

Alton O'Steen a native of Georgia where he attended Emory University, has been appointed assistant professor in the College of Education at the University of Minnesota to assume direction of the work in public school music, formerly conducted by Professor Archie N. Jones. Mr. Jones resigned last fall to go the the University of Idaho. Mr. O'Steen, who will come to Minnesota in September, expects to complete work for the doctor's degree at Teachers College, Columbia University, this summer. He was active in music during undergraduate days and had spent the last several years in advanced study of music, both at Columbia and under the Juillard Foundation. His appointment was announced today by Dean M. E. Haggerty.

Alton O'Steen

Geographer to Rebuild Past

Dr. Ralph Brown Will Study Historical Phases of East

The historical geography of eastern North America will be studied by Dr. Ralph H. Brown of the department of geography during a year's sabbatical leave beginning next fall. He will examine the sites in which he is interested and will consult documents in many libraries.

"Historical geography," he says, means the geography of the past which can be reconstructed at a later time by the study of contemporary maps, descriptions and statistical material. Old maps and regional descriptions cannot always be taken at their face value because they may be inaccurate simply because of incompetent observation or map-making. Nevertheless, most early descriptions and maps of such regions as New England and Tidewater Virginia tell what contemporaries believed about them and they also show the kind of geographic thinking that was current at the time.

Some of our present ideas about past geography are at fault because our views are likely to be colored by the character of regions in more recent times. For example, most people believe that the coast of Massachusetts south of Boston, besides being "stern and rockbound," must have been densely forested in 1620. The diaries of Bradford and others, however, show that this was not true. Indians for untold ages had cleared land for agriculture and had semiannually burnt the forest to aid them in hunting activities. The Indian of the Atlantic seaboard has been unfairly maligned by writers who have pictured him as a great deterrent to "peaceful occupation of the land' and ready at all times to kill the hapless settler from ambush. So far as his beneficial contributions to the white man are concerned the American Indian is truly the 'forgotten man.' Among his contributions were: cleared land, food plants, methods of tillage, trails and village sites. Many of the first white settlements were facilitated by the existence of earlier Indian villages, as in the case of Montreal which grew from the roots of the Algonquin village, Hochelaga, and St. Marys, which similarly arose where an indian village was at the time of the arrival of the Dove and the Ark.

"Another interesting phase of past geography is the identification of regions and 'lands' of earlier times with those of today. What was meant by the region called 'Norumbega?' This name, now attached to an amusement park outside of Boston, came within an ace of becoming a regional word of common usage. Other regional names which have been used in reference to Atlantic seaboard sections are: Estotiland Baccalaos, Apalacen, Guale, Mocosa, and Markland. These names are believed to be descriptive words, recording what the region looked like to those who beheld a new land from the deck of a small vessel or from a greater acquaintance The historical geographer is interested in identifying such regions and setting approximate limits to them."

What Ductless Glands Do for Body Described

Continued from page 1, Column 3

man race, you may estimate for yourselves at the end of our discussion.

For the sake of orientation a few preliminary remarks may be made regarding some basic peculiarities of the complex living body which these glands serve. As everyone knows, the stuff of which we are made is extraordinarily unstable and yet we are capable of surviving the vicissitudes of a rigorous, ever-changing, external environment to far outlive most other continuously working machines, though the latter are constructed of the most durable metals. This survival is made possible by a high degree of functional specialization on the part of our many organs and by the unique power of self-repair possessed by the vast multitude of tiny cells which compose them. In addition, of course, there must be constant and complete co-operation between the organ systems or the whole mechanism might go into a veritable "nosedive." It is the joint function of the involuntary nervous system and the endocrine glands to co-ordinate these varied activities.

Our Aquatic Nature

Although we are accustomed to regard ourselves as air-inhabiting creatures, we are, as a matter of fact, as truly aquatic as the ameba or the gold fish. The dead epithelial cells of our skin form a dry, scaly outer coat which protects the underlying live cells from the air. Like the freely floating corpuscles of the blood, the stationary living cells composing our different organs are constantly bathed by waterly lymph and blood plasma. From these continuously moving fluids they derive their entire sustenance and into it they discharge their wastes and certain of the special secretions which they may elaborate. The fluids of the body, therefore, constitute an internal environment for all living cells. As first suggested by the great pioneer of modern physiology, Claude Bernard, it is the maintenance of relative constancy in the temperature and the chemical composition of this internal environment, which makes possible the free and independent life of the higher organism.

A few illustrations of the delicate adjustments required for normal life may be referred to. For instance, whether the atmospheric temperature is 30 degrees below zero or 130 above, that of the body's internal environment is normally maintained within the narrow limits between 98 degrees and 100 degrees F. This degree of constancy is made possible by the body's elaborate heating and cooling systems, which are under the control of a most vigilant physiological thermostat. The blood pressure and the volume of circulating blood must be kept within certain well known limits to provide adequate transportation facilities between the various organs. The concentration of colloidal substances in the blood serum, particularly the proteins, must be maintained above a certain critical level or we develop edema; that is, the body becomes dropsical or water-logged. A delicate balance between the mineral elements of the body fluids governs the irritability of our nerves and muscles and in large part determines the rhythmical action of our hearts. When for any reason the amount of calcium in the blood serum falls far below its normal concentration of about one part in ten thousand, without a corresponding shift in the other mineral elements, distressing muscular spasms occur and generalized convulsions may result.

In health the maintenance of a more or less constant amount of sugar in the circulating blood insures a readily available supply of energy for the cells of the body at all times. The excess of sugar derived from the diet goes to the liver and muscles, where it is converted into animal starch or glycogen and stored for future use. When the sugar requirements of other actively working organs is greater than that which can easily be satisfied by the amount already in the blood, the liver somehow "gets wind" of this and, like a good neighbor, splits some of its stored glycogen into simpler molecules of the soluble sugar, glucose and sends it by way of the rapidly circulating blood to meet the emergency. If this co-operative mechanism fails, a condition known as hypoglycemia, or too-low blood sugar soon develops, giving rise to a train of bizarre subjective symptoms and finally to convulsions or even death, unless sugar is administered.

Maintaining Oxygen Content

The oxygen content of the arterial blood must be steadily maintained above a certain level or queer things may happen to us, such as fainting. The hydrogen ion concentration of the body fluids, that is, their degree of acidity or alkalinity, is so delicately adjusted that any deviation beyond the relatively narrow range represented by distilled water on the acid side and ordinary tap water on the alkaline side results at once in alarming symptoms, because practically all of the essential chemical reactions of the body depend upon the stability of this factor. The foregoing examples represent but a small fraction of the long list of special adjustments, which together constitute the so-called "steady state" of the body or what Professor Cannon of Harvard prefers to call "homeostasis."

All such phenomena as these and others yet more complex, including reproduction, lactation, digestion, growth and development, are now recognized as being either directly or indirectly dependent upon the automatic activity of specific chemical regulators. Intelligence, as used in the ordinary sense, contributes but little to the harmonious operation of these processes. While one small group of our chemical regulators, the vitamins, are obtained from the diet ready made, by far the larger number are fabricated by our own endocrine glands, which may now be considered.

A gland is an organ whose cells elaborate some special substance or group of substances. Higher animals are equipped with two general classes of glands, those having definite systems of ducts to convey their special secretions from the organ and those which possess no such ducts but which pour their chemical products directly into the lymph and blood streams. Familiar examples of the first class are the salivary glands, the pancreas, and the liver. It is the second type, i. e., those without ducts, which are designated as the endocrine glands or the organs of internal secretion. Their secretory products which are carried in the blood stream to exert their influences on distant organs, are spoken of as hormones or chemical messengers. These for the most part are comparatively simple chemical substances. A number of them have already been isolated in crystalline form and their chemical structures have been elucidated. In comparison with ordinary drugs, they are amazingly potent, certain of them exerting physiological effects when present in the body fluids in concentrations as low as one part in one billion.

How We Have Studied Glands

Our knowledge concerning the special functions of the various endocrine glands has been obtained by two methods: first, that of observing the results of Nature's own experiments, namely, the effects of naturally occurring disease of individual glands and, secondly, that of direct experimentation. The latter has been particularly fruitful. In the case of each gland, efforts have been made to learn not only its normal function but also the effects of both under-activity and over-activity. When such information began to accumulate, it soon became apparent that the glands did not function independently but worked in unison, as if belonging to a common system. Recognition of this interrelationship has aided greatly in the interpretation of phenomena, which would otherwise have remained in the realm of mystery.

The various endocrine glands may be pointed out in the order in which they will be discussed. The **thyroid** is a two-lobed structure situated over the front or anterior aspect of the neck just below the level of the larynx or voice box. Lying back of the thyroid and closely adherent to it at points which might be said to represent its four corners are the four tiny **parathyroids.** Just beneath the sternum or breast bone the **thymus gland** spreads out over the upper part of the heart, covering the great vessels and the trachea. The **pineal** gland, a small body shaped like a pine cone, as the name indicates, is attached to the base of the brain. Just above or slightly in front of the upper poles of the kidneys are the two grotesquely shaped **adrenal glands** which bear a superficial resemblance to the cocked hat of colonial times. The **pancreas** or "sweet-bread" gland lies across the upper portion of the abdominal cavity with its so-called "head" bent downward in close apposition to the duodenum or upper part of the small intestine and its tail extending toward the spleen on the left. The major portion of the pancreas does not function as an endocrine gland but widely scattered within its substance are numerous small groups of islands of specially differentiated cells, which have no connection with the duct system of the gland, but which empty their secretion directly into the blood capillaries. These so-called islets of Langerhans are true representatives of the endocrine system. The hypophysis or **pituitary gland,** probably the most important of all, is securely situated at the base of the brain in a saddle-shaped, bony depression, known as the sella turcica or turkish saddle. It is connected with the brain structures above by means of a small pedicle, known as the pituitary stock. In addition to the producing germ cells, the **glands,** ovaries in the female and testes in the male, elaborate special hormones which serve a variety of functions. The lower or pyloric end of the **stomach,** and probably the **liver,** also, produces a substance which is essential for the normal manufacture of red blood cells in the bone marrow. Deficiency in the production of this antianemic factor is the cause of the one-time fatal disease, pernicious anemia. The inner lining of the duodenum or upper end of the **small** intestine elaborates at least three hormones which perform essential functions in the automatic control of the motor and secretory activites of the digestive tract.

The Pancreas and Diabetes

The disease, sugar diabetes, now known to be due to a deficiency in the internal secretion of the pancreas, was apparently known to the writer of the earliest medical document which we possess, the papyrus Ebers, dating from approximately 1500 B. C., three centuries before the birth of Moses and a thousand years before Hippocrates, the father of medicine. Before the beginning of the Christian era Greek physicians had described some of the cardinal symptoms and signs of uncontrolled diabetes, such as excessive thirst, drinking and passing of enormous amounts of water, marked loss of weight and feeling of weakness in spite of the inordinate consumption of food. Sweetness of diabetic urine was first mentioned in the sixth century A. D. by a Hindu writer who called the disease **Madhumcha,** meaning "honey urine." This quality of the kidney secretion of diabetic patients was discovered quite independently by Thomas Willis, an English medical worthy of the seventeenth century. His curiosity led him to taste the urine voided so copiously and, much to his surprise, he found it "wonderfully sweet, as if imbued with honey or sugar." A century later the surmise of Willis was confirmed, when Dobson evaporated diabetic urine and obtained a cake of sugar.

The next great step toward the solution of the mystery of diabetes was taken when Minkowsky and von Mehring, working in the world-famous diabetic clinic of Doctor Naunyn of Strassburg removed the pancreas to determine whether or not it is essential to life. When he observed that flies settled where the depancreatized dogs had passed urine, Naunyn is said to have advised his assistant, Minkowsky, to test the animals' urine for sugar. The tests showed the urine to contain large amounts of sugar. As so frequently happens in scientific research, the important observation here was a by-product of an investigation designed for another purpose—another example of "chance favoring the prepared mind." Thereafter, the pancreas was known to be the seat of trouble in diabetes mellitus, and not the kidneys, as previously held. The next important contribution to the subject was the discovery by Opie, a young American pathologist, that certain specialized structures in the pancreas, the islands of Langerhans, are the particular seats of trouble in diabetes. Microscopic examination of the pancreas in people dying from the disease showed pathological changes in these parts of the gland only. He found also that by tying off the pancreatic ducts the main or acinar portion of the pancreas could be made to undergo atrophy without injury to the Langerhans cells, which have no connection with the duct system. Dogs treated in this way did not develop diabetes.

Discovery of Insulin

In spite of many attempts to isolate the active antidiabetic principle from the pancreas in sufficiently pure condition for treatment of patients, no satisfactory method was devised until 1929. Banting and Best of Toronto then took up the problem by making an extract of dog pancreas which had previously been prepared by ligation of the ducts to destroy all but the islet tissue. They succeeded in obtaining an extract which would reduce the amount of sugar in the blood and urine of other dogs which had been made diabetic by complete removal of the pancreas. With the aid of the biochemist, Collip, they were soon able to prepare the hormone in a form which could be injected under the skin of human diabetics. This final success was heralded the world over and within a few years thousands of previously doomed sufferers were daily employing this life-saving remedy which was given the name, "insulin." Before the advent of this great boon, practically all children who developed diabetes died within five or six years in spite of the most skillfully prepared diets. Surgical operations on diabetic patients in the pre-insulin era were attended with the greatest danger. Today, however, neither of these special situations concerns the doctor seriously because he is enabled by the proper use of insulin to control the diabetic tendency. In the days before insulin was available, the majority of diabetic patients who died from the disease developed a severe form of acidosis due to accumulation in the body of acid products resulting from the incomplete or faulty burning of fats, which is a secondary manifestation of active diabetes. Even today this serious stage may be reached before the victim is aware that he has diabetes. The symptoms of this complication are deep, rapid breathing, excessive loss of body water and alkaline minerals and later uncontrollable drowsiness. Unconsciousness then supervenes and the patient ultimately dies in this comatose state, if insulin is not administered. One of the most dramatic and gratifying results that a practicing physician is privileged to experience is that of literally snatching such a patient from the brink of the grave by the proper use of insulin.

Just as the thyroid is overactive in exophthalmic goiter, so the islands of Langerhans may show a hyperfunctional reaction to tumor or increased growth of its specialized cells. Under this conditon, spoken of as hyperinsulinism, the amount of sugar in the circulating blood is decreased to such a low level only a few hours after a meal that the brain, muscles and other organs suffer from a veritable fuel shortage. As a result, the victim develops a typical series of distressing symptoms exactly like those produced by an overdose of insulin.

Business Students Dine in Union

Oliver S. Powell, assistant reserve agent of the Minneapolis Federal Reserve Bank, spoke on "Easy Money," and Orem Robbins, student, won the "tomato can" award made annually by the School of Business Administration when it held its banquet in the Minnesota Union recently. Some of the faculty members and students who attended are shown above.

Regents Appoint Public Health Man

Kenneth F. Maxcy, professor of preventive medicine and bacteriology in the University of Virginia, has been appointed to the professorship of preventive medicine and public health in the University of Minnesota which carries with it the headship of the same department. He will begin his new duties in the fall. In this chair he succeeds Dr. Harold S. Diehl, who last spring was promoted to be dean of the medical sciences.

A native of Saco, Me., Dr. Maxcy holds degrees from George Washington university and Johns Hopkins, from which he took the degree, doctor of public health, in 1921. He saw service in the surgeon general's department during the World War and for a number of years afterward was connected with the United States Public Health Service. He represented that government department at the malaria conference of the League of Nations in Geneva in 1928.

At the University of Virginia he reorganized the teaching of bacteriology and established the courses in public health.

Dr. Kenneth F. Maxcy

Women Athletes Meet on Campus

National Association's Spring Convention Brings Girls from Many Colleges

Topics relating to athletics and physical education for women in colleges and universities provided the discussion theme for some 300 coeds from all parts of the United States as they met in Minneapolis for a three day session, April 23, 24, 25. The occasion was the eighth national conference of the Athletic Federation of College Women and the hostess was the University of of Minnesota Women's Athletic Association.

Miss Helen W. Hazelton, director of physical education and athletics for women at Purdue University; Miss Blanche M. Trilling, who holds a similar position at the University of Wisconsin, and Dr. William A. O'Brien, associate professor of pathology at Minnesota, were the principal speakers at a formal banquet on Friday evening, April 24.

Miss Genevieve Goldblum of Minneapolis, the national president of the federation, presided at one of the numerous meetings and welcomed the delegates in the name of the University of Minnesota group. Miss Goldblum is a senior in the College of Education at Minnesota.

A tour of the campus, including a demonstration of games in the women's gymnasium, an informal tea for delegates at Shevlin hall, a dinner in the Minnesota Union and a dance recital in the Music auditorium were included in the program for the first day.

Writer Revives Proposal for United States University

A proposal for the creation of a University of the United States, which has been broached repeatedly over a period of more than 150 years, and has been encouraged by eight presidents, including George Washington, is being renewed among American educators, and is the subject of a book just published by Dr. Edgar B. Wesley of the University of Minnesota, entitled, "Proposed: A University of the United States."

The idea of such a university dates back to Dr. Benjamin Rush of Pennsylvania, American surgeon general during the Revolutionary war, who advanced the plan in 1787. Washington urged it in his first annual address, January 8, 1790, and at his death left securities worth $25,000 with which to start an endowment fund for the university. So far as historians have been able to discover, this gift was never turned over to the government and no trace of the proceeds has been found.

Except for a rather long period in the middle of the Nineteenth Century more or less insistent agitation for the creation of such a university has been continuous, the records show, and Dr. Wesley says that "in the period from 1872 to 1933 about sixty bills for the establishment of a national university have been introduced in Congress, about two-thirds of them having been introduced in the Senate."

No Vote Taken

That neither house of Congress ever voted on a measure to create a University of the United States seems a mystery in view of the abundant opportunity there has been for reporting such a bill for action. This the present writer partly explains by saying: "Congress has not opposed; it has merely waited for the voice of authority that has not yet spoken. When the people want a national university, Congress will give its official sanction."

Two major reasons for the failure of proposals to establish a truly national university are made clear in Dr. Wesley's book. One is that down through the years the idea has had forceful opposition from the heads of important, privately-endowed institutions of higher education. Harvard, Yale, Columbia and Johns-Hopkins may be listed among these.

The second is that a number of incidents that might have resulted in the creation of a national university, have been diverted to the establishment of more highly specialized foundations and institutes such as the Smithonian Institution, the Carnegie Institution of Washington, the Brookings Institute, or the National Academy of Science, with its related National Research Council.

The current proposal is that Congress appropriate an adequate endowment; $20,000,000 was suggested by John Quincy Adams more than one hundred years ago, with which to support an institution of graduate study and research, where a selected student body could work with the tremendous advantages of all of the libraries, laboratories, research establishments, government records and practical experts in every line of endeavor that are to be found in Washington.

Facilities In Washington

There is, for example, the library of Congress, one of the finest in the world. The United States Department of Agriculture has been called the biggest research scientific establishment ever created. The Pan American Union brings together in a common point of contact the interests of the Americas. The many branches of the Smithsonian Institution are in themselves an outstandingly efficient battery of scientific instruments. A group of important educational institutions in Washington such as the American University, the Catholic University of America, and Georgetown University would contribute important contacts to the faculty and students in the University of the United States, although there would be no official connection between these.

According to the present plan, a new University of the United States would not only coordinate opportunities for advanced students to use all of the exceptional facilities in Washington, but the establishment would at once be of benefit in forwarding plans for giving superior training to the public service personnel of the United States government. No undergraduate instruction would be carried on in the proposed university, and maturity and ability would be factors in deciding who should gain admission. Possibly the master of arts degree from a recognized institution of higher learning would be required. In no sense would the establishment be "another college."

Professor Wesley states his belief that when James Smithson, the Englishman, left his fortune to the cause of promoting education in the United States he had in mind establishment of a great national university. At that time, 1829, doubts as to the constitutionality of establishing such an educational institution were voiced, and indeed, the constitutional issue has been raised repeatedly by opponents of the national university idea. Before beginning his present study, therefore, Dr. Wesley made inquiry from constitutional authorities on that point and declared himself satisfied that there is little likelihood of the constitutional issue being raised today.

Over a period of forty years, from the close of John Quincy Adams' administration until just after the close of the Civil War in 1869, almost nothing was heard of the movement for a national university. In the latter year the plan was brought up before the annual meeting of the National Education association, and that body has been a leader in advocating the idea from that time on.

John W. Hoyt's Part

One John W. Hoyt, who had a varied career in teaching, agriculture, and politics in the decades after 1870, was the principal proponent of the national university plan for many years. Encouraged by his enthusiasm and by the stand of the National Education association, both President Grant and President Hayes urged creation of the university, even though it was vigorously opposed by President Charles W. Eliot of Harvard, Nicholas Murray Butler of Columbia, and Jacob Gould Schurman of Cornell. In the first decade of the twentieth century many prominent heads of state universities took up the plan and strongly advocated a national university, contrary to the ideas held by private university heads. James of Illinois, Van Hise of Wisconsin, William Oxley Thompson of Ohio State, Benjamin Ide Wheeler of California and James B. Angell of Michigan all took a stand in favor of the proposal.

A touch of modernity is given the long story of the campaign by the revelation that Senators Borah and Fess have been ardent supporters of the plan. Bills to create the university were introduced in the Senate by Senator Fess in 1917, 1919, 1921, 1923, 1925, and 1927. In 1935 Congressman Ford of California introduced a bill for the creation of a national Civil Academy.

Popular Inertia Blamed

Along with the two reasons for failure of the plan already stated, Dr. Wesley points to popular inertia, which he says, may have been most important of all.

"It is difficult to convince the typical citizen that a university devoted to advanced study and research is of any significance to him," he says. "Only in mechanical lines is such a demonstration feasible, and even then the citizen is likely to regard such advance as a final word. But the indifference has not been confined to the typical citizen. Few educated men have the energy or imagination to vision an educational era very different from the one in which they live."

Government of the university would be in the hands of Congress, delegated after a preliminary organization period to a board of fifteen regents Ten of these would be appointed by the President of the United States, of whom five would be from the people at large and five from among the experts in government bureaus at Washington. The remaining five would be elected by the faculty of the University of the United States from among its own members, once a permanent and stable faculty had been developed. The Wesley book includes a complete plan of organization and even a bill for an act to create the university, duly drawn by a legal and constitutional authority, Professor Oliver P. Field of the University of Minnesota, now a visiting professor at Harvard.

In one of his most interesting chapters Dr. Wesley enumerates the truly impressive number of research establishments, scientific projects and institutions of study learning and investigation that are available at Washington. As a catalogue of these alone, and without reference to the fact that these would be available to students in the projected university, this part of the book is of unusual interest.

Interesting too is his account of the bequest in George Washington's will and surmises as to its fate. Of this he writes:

Washington Tried to Help

"In 1797 Washington retired to private life, but he was yet to perform a signally unselfish act, an act which will forever prevent the American people from forgetting the subject of the national university.

"The State of Virginia wished to express its pride and gratitude by giving Washington a number of shares in the Potomac and James Navigation companies. After some hesitation he decided to accept them with the understanding that he was at liberty to bestow them upon some worthy object or to devote them to some worthy cause. Washington asked several persons for advice as to the most advantageous use to make of the Virginia gift. In 1795, after consultation with the governor and Assembly of Virginia, he decided to devote the shares in the James River company to the establishment of a seminary in Virginia. It was his understanding that this institution should be of collegiate rank and that its graduates could go on to the national university for further training. The seminary has been known successively as Augusta Academy, New Liberty Academy, Washington College and Washington and Lee University. He decided to grant the fifty shares which he held in the Potomac River company to Congress for the purpose of helping to establish and maintain a national university. In his will, dated July 9, 1799, he made provision for the transfer of these shares to Congress.

"What became of these shares remains an unsolved mystery. Various guesses have been made. The stock may have become worthless. It may not have been turned in when the company was reorganized. It may have been destroyed in the great fire in 1814 at the City of Washington, or it may never have been legally accepted by Congress. In fact it may be regarded as established that the United States never received any money from Washington's estate. In answer to a Senate resolution requesting what was done with the money, L. M. Shaw, secretary of the treasurer, replied on February 15, 1905, that, "There is no record in the treasury department showing that the shares thus bequeathed or any moneys arising therefrom were ever received by the General Government.' Thus from the standpoint of the history of the national university the problem may be regarded as solved."

In a foreword Dr. Wesley's resurrection of the national university idea and championship of it is strongly endorsed by President L. D. Coffman of the University of Minnesota. Dr. Coffman also made available the funds that enabled Dr. Wesley to spend time in Washington investigating the history and status of the project. The book is soon to be published by the University of Minnesota Press.

Students Art Work Chosen

Ten University of Minnesota students had pictures of architectural drawings selected for inclusion in the traveling "Big Ten" exhibition of student work that is now touring the various universities. Announcement of the winners was made by Ruth Lawrence, curator of the University Gallery. They were: William F. Bodine, with two abstractions, "In Fall" and "Picnic Lunch;" L. Fisher, with a still life; Fergus Retrum, "Human Figure in Charcoal;" Ernst I. Dahle, head in water color; Lillian Silver, human head in charcoal; Ernst F. Menge, abstract composition; Hope Edson, head of man in charcoal; Catherine A. Winter, charcoal drawing; and two architectural renderings, Robert Auvinen, plan of a YMCA and Thomas Schmit, plan of an astronomical building.

Edits List of Experts

To promote acquaintanceship in exchanges of publications among plant physiologists throughout the world, the American Society of Plant Physiologists has just published its "International Address List of Plant Physiologists" compiled by Dr. R. B. Harvey, noted plant physiologist, University Farm, St. Paul. Nearly 2,000 workers from 50 countries are listed. Dr. Harvey compiled the first list in 1925 and edited a revised list in 1930, the aim of the Society being to publish a new one every five years.

Hartig Speaks at North Dakota

Dr. Henry E. Hartig, professor of electrical engineering, was guest speaker of the University of North Dakota chapter of Sigma Xi on April 23, when he made two addresses. At a morning convocation under auspices of the scientific society he discussed "Recent Progress in Electrical Communication." He spoke in the evening on "Hearing Aids for the Deaf."

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 MAY 19, 1936 NUMBER 11

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

Next Hundred Years Hardest Man Once at 'U' Says in Book

C. C. Furnas Points Out Vast Array of Problems Facing Science

What science has a chance to do, what it has done and the points at which it has failed, so far, are described by C. C. Furnas, formerly at the University of Minnesota, now at Yale, in a recent book, "The Next Hundred Years." At Minnesota, Furnas was connected with the United States Bureau of Mines. While here he wrote speculative and scientific articles of the type that make up his new work. As a student at Penn State he was a champion two-miler. He teaches chemical engineering at Yale.

Of the book, News-Week says: "Like a scientific Sphinx he propounds the riddle facing his colleagues in five different fields: biology, chemistry, physics, engineering, and the social sciences.

"Biology: 'If hogs, dogs, poultry, cows and horses can be bred up to some ideal, why not humans? If a plant breeder decides to change red American Beauty roses into a true-breeding strain of yellow ones he will have difficulties, but at least he will know what he is trying to do and that is more than a genetic sociologist knows."

"Biological science cannot rightly hold up its head in pride as long as it has to admit that it does not know what causes the common cold or how to cure it."

"So far as any practical knowledge of the causes of senility is concerned, the world seems to be as ignorant now as in the days of the Caesars."

"Chemistry: 'We need road surfaces that will last a century and roofs that will never leak. We need a super-conductor for electricity and a perfect insulator for heat. We need artificial teeth that are as good as natural, a perfect, non-corrosive, non-chip, non-breakable, heat-resisting inexpensive food container, paper as permanent as parchment. . . ."

"Physics: 'The idea seems to be that if the atom were smashed, this immense reservoir of energy would immediately become available and controllable like the kernel of a nut. Unfortunately it is not so simple. . .The last word has yet been said but do not buy any stock in an Atomic Energy Development Company."

"Engineering: 'We will all be much better off when agriculture develops into a highly specialized large-unit industry employing all scientific engineering and financial ability available. Farming has been on a mere subsistence level for 50 centuries. That is too long to stay in one place.'

"When the average farmer becomes convinced that he can well afford to exchange some of his mythical independence for a better standard of living. . .he will seriously begin to consider co-operative work in large units. . .Farm wastes in this country total about a billion tons a year."

"The weather analysts study data and say that weather runs in a series of repeating cycles. . .Altogether 138 cycles have been proposed. You can prove almost anything with 138 cycles."

Social Sciences: "We have taken away security and added automobiles but that security. . . is the king-pin of our social existence. We must have it back."

Oh Hum; Oh Hum Gophers Will Have Easy Time

A schedule of eight major games, not one of which can be classified as easy, is "all" that stands in the way of the University of Minnesota's ambitions for a fourth consecutive undefeated season in 1936.

The Minnesota record is 24 games without defeat since 1932 and 17 consecutive wins. The University of Washington, Nebraska, Michigan, Purdue, Northwestern, Iowa, Texas and Wisconsin are the potential stumbling blocks in Minnesota's bid for a fourth undefeated year.

Six regulars are missing from the 1935 team, including Beise at fullback, Roscoe at halfback, LeVoir and Seidel at quarterback, Rennebohm at center, Oech at guard and Dick Smith at tackle.

Offsetting these losses, however, is the fact that 26 lettermen are eligible to return and that the new men up from the freshman squad are big and rugged. Six lettermen ends will be available this fall, headed by Dwight Reed and Ray King, the regulars of last season. Ed Widseth, 220-pound tackle on last year's team, will be back in the role of co-captain and Lou Midler, a letterman who saw considerable action in 1935, will also be available. Among the new candidates at tackle are Howard Parkinson, a 220-pound St. Paul athlete; Marvin LeVoir of Minneapolis and Eldred Miller of Hutchinson.

Charles Wilkinson, who won all-conference recognition at guard in 1934 and 1935, has been shifted into the backfield because of the prevalence of good men at these positions. Bob Weld of Minneapolis, who played more or less regularly last fall, leads the list. Dale Hanson, a member of the squad two years ago, is back, and Horace Bell, Akron, Ohio; Francis Twedell of Austin; Charles Schultz of St. Paul, and Stan Sitarz of Minneapolis are among the more promising new men.

Earl Svendson and Stan Hanson, both lettermen, are outstanding candidates for the vacant position at center. John Kulbitski, a 200-pound graduate of the freshman squad from Virginia, Minnesota, seems to be the best of the newcomers.

During the spring practice sessions, Wilkinson at quarterback has been impressive. Sam Hunt of Red Lake Falls and Harvey Ring of Minneapolis are veteran candidates for the signal calling position, while Harvey Struthers and George Faust of Minneapolis are promising first year men.

Julius Alfonse, Andy Uram, Clarence (Tuffy) Thompson and Rudy Gmitro are the veteran halfbacks. Alfonse, out last year, is back as co-captain. Lawrence Buhler of Windom and Wilbur Moore of Austin may break into the lineup.

Two veterans and two newcomers are in the thick of the competition for the fullback position. The veterans are Whitman Rork of Eau Claire and Vic Spadaccini of Keewatin, Phil Belfiori of Buhl and Marty Christianson of Minneapolis are the sophomores out for fullback.

MINNESOTA CHATS

Published by the University of Minnesota for the Parents of Students

VOLUME 18 | JUNE 9, 1936 | NO. 12

Thoreau Talks While Rowing on The Merrimac

In line with its policy of reprinting from time to time excerpts from great writing, Minnesota Chats is reproducing the following passage from Henry David Thoreau's "A Week on the Concord and Merrimac Rivers." He and his brother spent the week in a rowboat, exploring the two streams in about 1843.

WE occasionally rested in the shade of a maple or willow and drew forth a melon for our refreshment, while we contemplated at our leisure the lapse of the river and of human life; and as that current, with its floating twigs and leaves, so did all things pass in review before us, while far away in cities and marts on this very stream, the old routine was proceeding still. There is, indeed, a tide in the affairs of men, as the poet says, and yet as things flow they circulate, and the ebb always balances the flow. All streams are but tributary to the ocean, which itself does not stream, and the shores are unchanged but in longer periods than man can measure. Go where we will, we find infinite change in particulars only, not in generals. When I go into a museum and see the mummies wrapped in their linen bandages, I see that the lives of men began to need reform as long ago as when they walked the earth. I come out into the streets and meet men who say the time is near at hand for the redemption of the race. But as men lived in Thebes, so they live in Dunstable today. "Time drinketh up the essence of every great and noble action which ought to be performed, and is delayed in the execution." So says Veeshnoo Sarma; and we perceive that the schemers return again and again to common sense and labor. Such is the evidence of history.

"Yet I doubt not through the ages one increasing purpose runs,
And the thoughts of men are widened with the process of the suns."

There are secret articles in our treaties with the gods, of more importance than all the rest, which the historian can never know.

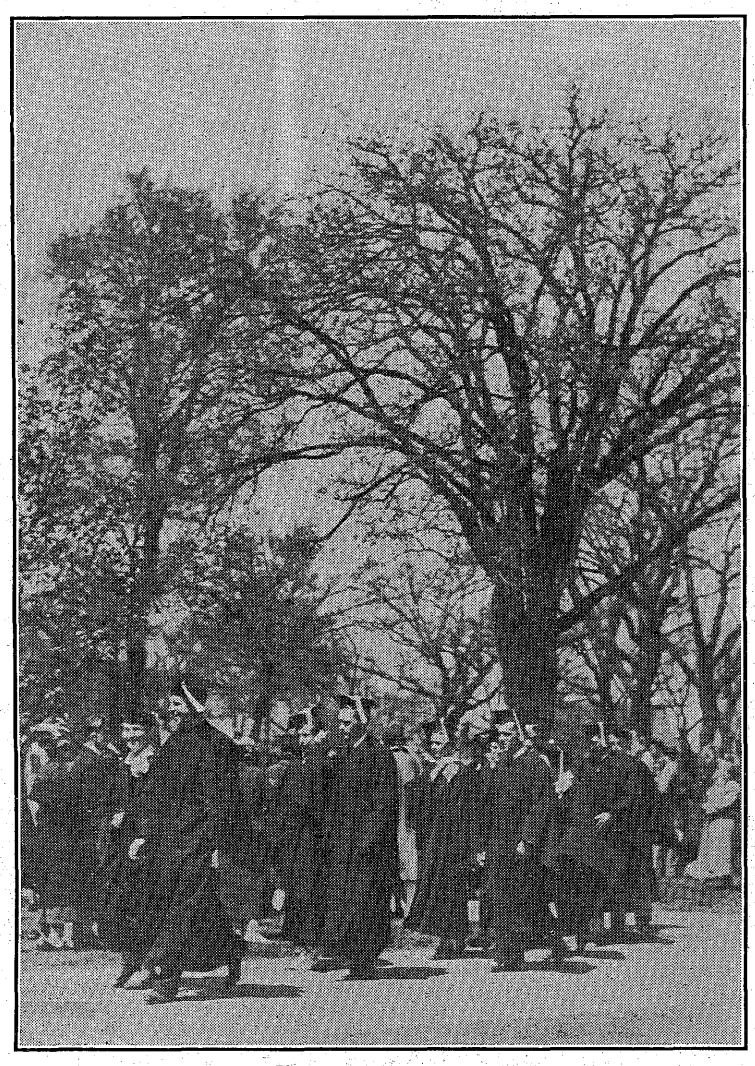
There are many skillful apprentices, but few master workmen. On every hand we observe a truly wise practice, in education, in morals, and in the arts of life, the embodied wisdom of many an ancient philosopher. Who does not see that heresies have some time prevailed, that reforms have already taken place? All this worldly wisdom might be regarded as the once unamiable heresy of some wise man. Some interests have got a footing on the earth that we have not made sufficient allowance for. Even those who first built these barns and cleared the land thus, had some valor. The abrupt epochs and chasms are smoothed down in history as the inequalities of the plain are concealed by distance. But unless we do more than simply learn the trade of our time, we are but apprentices, and not yet masters of the art of life.

Now that we are casting away these melon seeds, how can we help feeling reproach? He who eats the fruit should at least plant the seed; aye, if possible, a better seed than that whose fruit he has enjoyed. Seeds, there are seeds enough which need only to be stirred in with the soil where they lie, by an inspired pen or voice, to bear fruit of a divine flavor. O thou Spendthrift! Defray thy debt to the world; eat not the seed of institutions, as the luxurious do, but plant it rather, while thou devourest the pulp and tuber for thy subsistence; that so, perchance, one variety may at last be found worthy of preservation.

There are moments when all anxiety and stated toil are becalmed in the infinite leisure and

Continued on page 2, column 3

Seniors Parade in Academic Garb



University Building Plan Good Says Retiring Architecture Head

Professor F. M. Mann Has Directed School of Architecture from the First

The Cass Gilbert Plan for the development of the University of Minnesota campus is excellent and will no doubt be carried to completion, in time, with structures that will continue the mall on the river side of Washington avenue, where there will be a paved plaza and a campanile, in the opinion of Professor F. M. Mann, who this year is retiring as head of the School of Architecture.

Discussing Minnesota buildings, Professor Mann rose to the defense of the architectural style of the new buildings against those who have accused them of monotony of design.

"One must remember that we have been building a monumental group of buildings, not a series of separate units," he said. "When the Cass Gilbert plan is finished, with a double row of structures along the mall and a plaza at the opposite end from the Memorial Auditorium, Minnesota will have as dignified and effective a group of buildings as could be asked, considering the demands of utility."

The proposed campanile, he pointed out, was not the idea of Cass Gilbert, but of Marion Leroy Burton, president of Minnesota from 1917 to 1921. Since he suggested it the idea has had such general acceptance that most people assign it to the inclusive plan of the great Minnesota-born architect.

Professor Mann will retire at the end of this year after having been professor of architecture and head of the department since its establishment in 1913. He was one of a considerable group of people who were brought to Minnesota in that year from the University of Illinois by Dr. George Edgar Vincent, who succeeded "Prexy" Northrop in the presidency of Minnesota. In the group from Illinois were Dr. Coffman, Dean Ford, Professor Mann and Professor A. C. Krey of the department of history. Also a newcomer in that year was Dr. R. R. Price, head of the General Extension division, who was brought to Minnesota from the University of Kansas.

Professor Mann attended the University of Minnesota from which he was graduated in engineering in 1892, He was a lineman on the famous 1888 football team, captained by Alfred M. Pillsbury, one of the fathers of Minnesota football, and is shown in the famous early day photograph of that team. After graduation he went to work as a civil engineer for the Northern Pacific railway, and after working in the West for two years had saved enough money to put himself through the course in architecture at the Massachusetts Institute of Technology. From

Continued on page 3, column 4

Willey Named to Social Science Body

The Social Science Research Council has recently appointed a special committee for promoting research on the social aspects of the depression. The committee membership is Professor William F. Ogburn of the University of Chicago, chairman; Dr. Shelby Harrison of the Russell - Sage Foundation, New York; and Dr. Malcolm M. Willey of the University of Minnesota. The general purpose of the committee is to organize a program for the purpose of assembling selected information of signficance for evaluating the social effects of the depression in a limited number of fields, exposing important points where new research is needed, and stimulating and promoting such research. Dr. S. A. Stouffer of the University of Chicago will be in general charge of the committee's work. Professor Willey is now engaged on a study of the effect of depression and recovery upon higher education. This project is sponsored by the American Association of University Professors. His membership on the committee of the Social Science Research Council serves in some measure to integrate the work of the two organizations.

Year Will End Monday June 15 With Festivities

Commencement exercises at the University of Minnesota will be conducted in Memorial Stadium the evening of Monday, June 15. Seats will be available for between 25,000 and 30,000 persons, and there will be no charge. The Baccalaureate sermon will be preached in Northrop Memorial Auditorium the morning of Sunday, June 14, by the Rev. Charles N. Pace, president of Hamline University. Monday, Commencement Day, will also be alumni Day and the General Alumni Association Banquet will be served at 5:30 p.m. in the ballroom of the Minnesota Union. The Class of 1911, twenty-five years out of college, will be the host class and the fifty year class will be 1886. All classes ending in "one" and "six," spaced five years apart, will conduct reunions, 1931 being the "Baby" class, five years out of college.

Outdoor Study In Itasca Park Now Planned

Field Station for Botany, Biology and Forestry Promises Growth

Believing that ideal conditions are provided in Itasca State Park, source of the Mississippi river, for a field instruction in forestry, botany, entomology and biology, the University of Minnesota is offering an enlarged program of studies for the second year of its Forestry and Biological Station on the shores of Lake Itasca.

For many years the station has been used for forestry students in the early part of the summer. Last year courses in biology, entomology, botany and the like were added in a special five weeks period following the close of the special forestry courses. Enrollment was small in the first year, but inquiries now coming in indicate to Dr. A. A. Granovsky, in charge of the station, that much greater interest will be shown this time. The station will conduct courses from August 3 to September 5.

On the faculty will be Dr. William A. Riley, head of the division of entomology and economic zoology, Professor Josephine E. Tilden in botany, Dr. Granovsky, Dr. John P. Turner in zoology, Ralph T. King, specialist in wild life management, Ned L. Huff and Martin L. Grant, of the botany faculty, Clyde Christensen in plant pathology, and two visiting teachers, Dr. Henry Oosting of Duke University, and Dr. Albert M. Holmquist of St. Olaf College.

Students enrolling for the course will live in the cabins and eat in the dining hall that are part of the forestry station equipment. Much of the work will be done in the field. Itasca Park teems with wild life in the form of animals, birds and fish, and also has an abundant flora, and one of the finest remaining stands of pine in Minnesota. Nearby lies the Chippewa forest and there are numerous lakes within easy driving distance. Costs will be kept low, with a $35 fee covering everything but food and a total estimate of $65 for the five weeks.

O'Brien to Make Health Talks

Dr. William A. O'Brien, associate professor of pathology, will continue, during June, his weekly health broadcasts for the Minnesota State Medical Association. He will speak over WCCO each Tuesday at 9:30 a. m. Remaining topics will be: June 9, the liver treatment of anemia; 16th, the expectant mother; 23rd, adult education; 30th, carbohydrates and dental caries. WCCO has a wave length of 810 kilocycles.

Chief Problems Of Education Placed on View

Learning and Teaching Are What Matters in Last Analysis

CAP AND GOWN ADDRESS

President Coffman Expresses Faith Students Will Hold to Ideals

In his annual Cap and Gown Day address, in which he discussed the problems of universities and of education, President L. D. Coffman said in part:

A most impressive and significant cartoon recently appeared in an eastern newspaper. It was labelled "Modern Education at Bay." The cartoon portrayed a four-headed dragon approaching a school building. The heads were labelled persecution, ignorance, bigotry, and intolerance. Between the dragon and the school building stood a man, representing education; with sword upraised he was trying to repel the advance of this monster, which nevertheless pressed relentlessly on, hissing venom from each of its horrible heads.

Persecution, ignorance, bigotry and intolerance may not be the only evil forces that would destroy modern education, but they are four of the worst. The schools never purposely or consciously teach ill-will or disrespect; they never deliberately try to advance human welfare by appealing to superstition nor by resorting to sophistries; they never exalt feelings of self esteem and arrogant supremacy; and they never treat opinions with disdain. The schools never teach war; they never promote class interests; they do not try to perpetuate ignorance; they refrain from dictation; and they abhor intolerance. Those in whose hands rests the welfare of our schools believe that human progress must be based upon a community of interests, upon mutual understanding and confidence; upon continuous learning, upon humility of spirit, and upon respect for the opinions of others. Virtues of such high importance can not survive in an educational system where there is no freedom of learning. It is for this reason that the schools must hold steadfastly to the ideals for which they were established and are maintained.

It is not always easy to do this because the schools are constantly faced by the danger of falling prey to the prejudices or the demands of special groups. Self-interest—which is but another name for prejudice—is present to a greater or less degree in every one. If an individual adopts habits or points of view which are not entirely compatible with ours, it is probable that he will be referred to in an uncomplimentary way, the more so if the preservation of some fundamental matter is involved. This characteristic of human nature is so deep-seated that obedience to law has become a personal matter and intolerance still persists in the field of religion. A minimum of this feeling exists in education, although even here it sometimes shows its unpleasant countenance. Yet in the long run there is little probability that prejudice will survive permanently in educational circles, for those who treasure education will protect it from the onslaughts of those who would prevent it from achieving its fundamental purposes.

Group Interests Powerful

Personal interests are never so powerful as group interests. Indeed it may be said that all social change results from the clash of conflicting social groups. We have always had pressure groups in society; we shall, of course, always continue to have them. They are as indispensable to social progress as air and food are to individuals. The extent to which they have actually advanced or hindered hu-

Continued on page 2, column 2

University 'P. O.' Important Center Of Service in Life of Campus

Organization Is Long Established and Efficient Under Poucher

To a university attended by an average number of more than 12,000 students a two-cent stamp can become a very important thing. Long ago, although numbers were not then so great, the University of Minnesota decided that it would not pay to buy 8,000 or 10,000 two-cent stamps for the sake of sending to students notices that read: "The entire student body will be expected to attend convocation on Thursday, May 10, at 11:30 a. m." Furthermore, in an institution where only a small fraction live in readily accessible dormitories, such mail could not be delivered by messenger, as it could to students living on a small and compact campus.

The natural outcome of such a situation was that Minnesota developed a postoffice. And to the credit of the University it may be said, that it was not long in seeing the point. The postoffice, much in the form in which it operates today, was created a good many years ago.

From the time when the postoffice was begun, back in 1912, in the basement of the building that now houses the School of Business Administration, until today, when it has 12,140 boxes, serially numbered and all easily accessible, the postoffice has been under the supervision of Joseph C. Poucher. Today Mr. Poucher is at the head of all of the university's "service enterprises," ranging from dormitories to the cold storage plant and inter-campus streetcar line.

Many Items Delivered

Into those 12,140 boxes go many kinds of mail. "The Minnesota Daily," student newspaper to which all students subscribe on account of the "official bulletin" is delivered at the "P. O." Notices from deans and instructors find their way to students there. Personal mail goes through the postoffice. Only a few types are banned. The university does not feel that it can afford to pay employees to distribute commercial circulars through the postoffice, and no political party is expected to propagandize students through the "P. O."

Twenty cents a quarter or sixty cents a school year of three quarters is the cost of the postoffice to each student. This is an increase of only ten cents a year from the original half-dollar charge twenty-four years ago, and is small in proportion to the savings, both to the students themselves and to their friends.

"The postoffice was established chiefly because of the uncertainty of communication with students at their home addresses," Mr. Poucher explained. "There are many official notices for which students are held responsible. Therefore it seems only reasonable that some sure fire way of reaching them should be maintained. By means of the official bulletin in The Daily and the postoffice boxes, where that paper and other communications are delivered, this problem has been solved."

Also a Government Branch

Furthermore, the Minnesota postoffice is today a real postoffice, having a government "contract station" branch of the United States postoffice. Mail may be dropped in slots marked either "campus" or "United States" and will be dealt with accordingly. At the postoffice window one may obtain a stamp, free delivery to a campus box, a money order or special postal service, such as registry, may inquire for a lost key or umbrella, or may purchase a ticket for the "inter-campus car" that runs from the Main Campus to University Farm.

Because the "P. O." is in the administration building, which houses such offices as those of the registrar, president, comptroller, Extension Division, and College of Science, Literature and the Arts, much the greater part of all mail is delivered to it automatically by simply dropping it into a chute. For other campus buildings there is a regular pick-up and delivery system, with calls at stated times of the day. To University Farm the mail is carried on the inter-campus cars that run each fifteen minutes.

Costs to the university, apart from that of the space, include $1,260 a year to one regular government employee, $1,060 for extra clerical help, $2,200 for messenger service, namely, delivery and pick-up, and some incidental costs. The government pays $250 a year for the space of the contract station and the sixty cent student fees cover the other expenses.

Practically all of the money spent for carriers and for extra clerical help, several thousand dollars in all, goes to students who are working their way through college, so that every cent spent by the students may be thought of as doing triple duty, namely, serving themselves, greatly increasing the efficiency of the University of Minnesota, and helping fellow students through college.

In addition the postoffice lobby has become automatically, one of the most popular gathering places on the campus. After classes most students will say they are going, either to the library or the postoffice. This centralization has made that room the natural place for setting up many services, student and university. The campus magazines are sold there; student football tickets are ordered or delivered, and student yearbooks are placed on sale. Here also students come to have taken those funny-looking little "passport pictures" that go inside their special athletic books and prevent their transfer. Bulletin boards hang on the walls, bearing information seemingly endless but all important to someone, for better or for worse.

Quite a place, that postoffice. It has been so successful that many other universities have asked details as to just how it is run. Among these may be mentioned the University of Washington, University of Pittsburgh and the University of Oklahoma.

Retires as Head Of Architecture

Professor F. M. Mann

Chief Problems Of Education Placed on View

Continued from page 1, column 5

man welfare is a question for study that is of great human interest. Today, as in the past, groups have to a deplorable extent rationalized their purpose and appealed to the emotions of their public. Knowing the instinctive reaction to mass appeal, they have sought control by resorting to slogans, symbols, stereotypes, and cartoons. If illustrations from bygone days do not come readily to mind, all we shall need to do in demonstrating the truth of the statement is to observe the tactics of the political campaign this fall when from the press and the radio there will flow a constant stream of insinuations, innuendoes, and unsupported charges.

Schools Not Always Clear

It would be untrue to suggest that the schools of our country have always been kept free from outside persons or groups who wish to use them to promote some special cause. But there was never a time in my experience when there were so many such self-seeking groups as now. I am informed by the director of the American Youth Commission that there are three hundred organizations, national in scope, now trying to enlist the support and good will of the youth of this country. Millions of the young people of this country will shortly be enrolled in one or more of these organizations,—if they are not already so enrolled. Indeed I have given my support to some of these organizations. At the same time I have tried to distinguish between my responsibilities as a member of the university community and my responsibilities as a member of society in general. I realize fully that there are many sincere and good people who think that this distinction cannot be drawn. But such persons are not always as deeply sensitive to a university's obligations as they should be. I know that education has been imperilled many times in the last one thousand years by those who sought to use the schools for some special purpose. The history of education records many instances of direct action and it also records the grim sacrifice of teachers who tried to save the spirit and traditions of education at such times. In every instance, however, the schools eventually triumph as the true citadels of human liberty.

Must Keep Freedom of Learning

I hope we face nothing in America so disastrous as the loss of freedom of learning. Yet it must be said that twenty states now impose loyalty oaths upon their teachers although they impose no such oaths upon any other class of citizens. This is a clear infringement of a liberty cherished and fostered and exemplified by the teachers of America since the days of our forefathers. It must also be said—and you will recall that I devoted myself to this matter a year ago—that freedom of learning at the college level is now jeopardized by the demands of many groups as it has never been jeopardized in the history of America.

You may be surprised to hear me say it, but a large share of my time and strength is spent in preventing or in trying to prevent such self-seeking groups from invading and establishing themselves within the University. But, you may ask, have we not always had all sorts of societies and groups among the students?

The answer, of course, is yes. And we shall continue to have them. But they do not make a university; they are not the indispensable factor. There are many good universities in the world where no such organizations exist. Furthermore, if a university were stripped of one factor after another until only its most essential features were left, there would only remain the search for truth through research and instruction. It is these, and these alone, that mark a university.

Persecution, ignorance, bigotry and intolerance are weapons of barbarism. We can drive them into permanent retreat only if we dedicate ourselves to the task of keeping the lamps of learning aflame and undimmed. I have great faith that the majority of the students here and elsewhere will equip themselves to join in common battle against a common enemy, ignorance, and that civilization will be advanced by their study and understanding of its problems.

Greatest among us will be those idealists who can pass along to others their own unruffled faith and understanding, despite the whining and bitterness of cynics. Every university possesses a faithful hierarchy, whose confidence in the future of the university and readiness to fight for it against massed attacks of prejudice, ignorance and self interest, is sufficiently profound and sincere to insure the integrity of the university. Education cannot be transformed into a propaganda without stifling the freedom of the university. The chief business of a university is to seek enlightenment; it carries no banner for anything except the right to learn.

Thoreau Talks While Rowing

Continued from page 1, column 1

repose of Nature. All laborers must have their nooning, and at this season of the day we are all, more or less, Asiatics, and give over all work and reform. While lying thus on our oars by the side of the stream, in the heat of the day, our boat held by an osier put through the staple in its prow, and slicing the melons, which are a fruit of the East, our thoughts reverted to Arabia, Persia, and Hindostan, the lands of contemplation and dwelling-places of the ruminant nations.

Men do not fail commonly for want of knowledge, but for want of prudence to give wisdom the preference. What we need to know in any case is very simple. It is but too easy to establish another durable and harmonious routine. Immediately all parts of nature consent to it. Only make

Bierman's Summer Seems to Be Full

"Guess I'll just give up college coaching and go into the coaching school business," said Bernie Bierman, Gopher headcoach, and he tossed over his desk a list of summer engagements that total five coaching schools and will keep the gray fox of Minnesota on his toes most of the time from the middle of June to the end of August. First, Bernie will teach football in the intensive combined coaching course that will be given at Minnesota from June 15 to 20 inclusive. A quick hop will take him to Boston where he will teach football at Northeastern University June 25, 26 and 27. It will be his first coaching school in New England.

Huntsville, Texas, will draw Bernie for a week beginning July 16, when he will teach football coaching at Sam Houston State Teachers College until the 23rd and will have a chance to get in on the centennial celebration. On July 27 he will hop to Denver, and for the week following will teach at the University of Denver.

Bernie's second conference assignment will come on August 19 and last for ten days. Then he will be coaching in the Northwestern University summer coaching school. It may be also that his name will be put up at that time for coach of the All-Stars game in Chicago, but that is a matter that remains to be seen.

something to take the place of something, and men will behave as if it were the very thing they wanted. They must behave, at any rate, and will work up any material. There is always a present and extant life, be it better or worse, which all combine to uphold. We should be slow to mend, my friends, as slow to require mending, "Not hurling, according to the oracle, a transcendant foot towards piety. "The language of excitement is at its best picturesque merely. You must be calm before you can utter oracles. What was the excitement of the Delphic priestess compared with the calm wisdom of Socrates, or whoever it was that was wise? Enthusiasm is a supernatural serenity.

As in geology, so in social institutions, we may discover the causes of all past change in the present invariable order of society. The greatest appreciable physical revolutions are the work of the light-footed air, the stealthy-paced water, and the subterranean fire. Aristotle said, "As time never fails, and the universe is eternal, neither the Tanais or the Nile can have flowed forever." We are independent of the change we detect. The longer the lever, the less perceptible its motion. It is the slowest pulsation that is the most vital. The hero then will know how to wait, as well as to make haste. All good abides with him who waiteth wisely; we shall sooner overtake the dawn by remaining here than by hurrying over the hills to the west. A man is not his hope, nor his despair, nor yet his past deed. We know not yet what we have done, still less what we are doing. We wait till evening, and other parts of our day's work will shine than we had thought at noon, and we shall discover the real purport of our toil. As when the farmer has reached the end of the furrow, and looks back, he can tell best where the pressed earth shines most.

Science Academy Growing Rapidly

About 150 new members were admitted to the Minnesota Academy of Science at its fourth annual meeting at Northfield, on April 18. The present membership is about 250, the society having grown rapidly since it was reorganized in 1933, according to the secretary, Dr. H. K. Wilson of the University of Minnesota. Carleton and St. Olaf colleges were hosts for the meeting, the forenoon and evening sessions were held at Carleton College and the afternoon sessions at St. Olaf.

Kolthoff to Lecture in Prague

Dr. I. M. Kolthoff, head of the division of analytical chemistry in the University of Minnesota, has accepted an invitation to deliver a series of lectures on chemistry in the University of Prague, Czechoslovakia, and left for that capital on May 28. Following his lectures at Prague he will represent the University of Minnesota at the tercentenary exercises of the University of Utrecht, Holland.

Calls Science Not Militarist

Dr. I. M. Kolthoff Says It Contributes to Defense as Well as Attack

Science contributes no more to the aggressive side in the race for warlike equipment and preparedness than it does to the side of defense and must under no circumstances be accused as "a threat against civilization," Dr. I. M. Kolthoff, head of the division of analytical chemistry in the University of Minnesota, declared in a recent lecture in the chemistry auditorium. He spoke before Phi Lambda Upsilon, honor society in the field of chemistry.

"Many people in various countries have attributed most of our present woes, including unemployment in industry, the danger of war and the horrors of modern warfare to the recent rapid advance in scientific knowledge," Dr. Kolthoff said. "Even if it were true that science was becoming a threat to human civilization, it is not clear what could be done about it. 'It is obvious that a country which called a halt to scientific progress would soon fall behind in every other respect as well; in its industry, in its economic position, in its naval and military defenses, and not least important, in its culture,' said Sir James Jeans.

"I would add that if science has made the attack more deadly in war it has also made the defense more efficient in the long run. Again quoting Sir James Jeans, 'Science shows no partiality in the agelong race between weapons of attack and of defense. This being so it would, I think, be hard to maintain that its activities are likely to make wars either more frequent or more prolonged. It is at least debatable that the more deadly a war is likely to be, the less likely is it to occur.

"In the earlier stages of civilization," said Dr. Kolthoff, "the weapons used in the struggle for self-preservation were simple and primitive. As civilization progressed these weapons became more refined and effective in their destructive action. Unfortunately, human nature changes slowly, if at all, and so forever lags behind human knowledge, which accumulates very rapidly. Thus, as far as knowledge is concerned each generation stands on the shoulders of its predecessors, but in respect of human nature, both stand on the same ground.

"Would abolition of science or of the dissemination of knowledge improve the situation? Would anyone advocate the return to precivilization periods or to the life of the primitive tribes such as are still found in the jungles of Asia and Africa?

"I think the unanimous answer would be no; this would not lead to a solution of human problems. By admitting the fact that the accumulation of knowledge and the distribution of knowledge may constitute a threat to mankind, we should not infer that mankind in any way would be safer by bringing the progress of civilization to a standstill. As the president of the British Association for the Advancement of Science said in 1932: 'We cannot ignore the tragic fact that science has given man control over nature before he has gained control over himself.' The tragedy does not lie in man's scientific control over nature but in the absence of moral control over himself."

Hybrid Corn Yields High

That hybrid varieties of corn developed by plant breeders at the Minnesota Agricultural Experiment Station are superior to the ordinary farm varieties has been proved in hundreds of demonstrations conducted under actual farm conditions during the last three years, says Ralph F. Crim, extension agronomist, University Farm. The tests show that hybrid varieties yield more, mature earlier, and are more resistant to lodging than ordinary farm varieties. Mr. Crim's records for 1933-35 showed that "Min-hybrid 301," a three-way cross between Minnesota 13 and Reid's Yellow Dent, outyielded farm varieties in southeastern Minnesota by 22.4 per cent; in south central Minnesota, by 18.4 per cent; and in southwestern Minnesota, by 10 per cent. Similarly, in central Minnesota, two double-crosses of Minnesota 13 and Rustler White Dent outyielded farm varieties during a recent five-year period by an average of more than 12 per cent.

Florence, 'A City That Art Built,' Was Home of Master Craftsmanship

Dr. A. C. Krey Points Out That 'Art' There Was Matter of Doing Job Well

How Florence came to be the greatest center of artistic production of the Italian Renaissance and how its people acquired the skills and the motivation that resulted in such unexcelled performance in so many arts are matters analyzed by Professor August C. Krey of the department of history in a pamphlet, "A City That Art Built," which the University of Minnesota Press has recently published.

Dr. Krey's paper was originally a lecture delivered as one of the activities of the Owatonna Art Education Project, whereby the University of Minnesota is studying the possibilities of vitalizing art and sensitizing the people to artistic performance and enjoyment in a typical medium-sized city. For this purpose Owatonna was chosen.

Art in Florence was not so much the result of supreme craftmanship as it was, in fact, the performance of that very craftmanship. In other words, it was a serious and sincere activity, immediately applied in practical manner to the regular purposes of life. Those who were engaged in it were doing their utmost to produce a church decoration as nearly perfect as possible, an urn, a statue, a painting, a piece of brocaded cloth, that measured up as nearly as possible to the very high standards of the time; not only standards these workers set for themselves, but those of the people of the community. In Dr. Krey's Book is no more enlightening passage than that telling of the sonnets attached to works of art in praise of them, and of one unfortunate production to which were attached more than 100 sonnets in condemnation and ridicule. The populace of Florence was as much interested in the fine arts as the population of Chicago is in a world's series or a fight between Louis and Schmeling.

There was no necessity in Florence of trying to jolt the public into art consciousness by turning out the ugly, the distorted and the grotesque. Each object produced was for its use in its fitting milieu, and, as these were not artificial uses, nor appreciation of the objects artificial, there was no need and no demand for the precious and the fantastic. Unsaid in the booklet by Dr. Krey, these things are made obvious by it.

How Craftmanship Developed

Florence laid a natural groundwork for the master craftmanship that was to give its name one of the enduring connotations of history. A small town lying on a plain, it was inhabited by humble folk. Only five miles away lay Fiesole, on higher ground, a home of the nobles and military leaders, a city of castles, ramparts, moated walls, wealth, chivalry. In Fiesole people loafed and displayed their wealth. In Florence people worked.

The district was poor in raw materials. This, the author believes, may have had a good deal to do with the extreme care the workers applied to the cloth they wove or finished, the objects of silver and gold turned out by the goldsmiths and the other products of that early, simple Florence to which fame and wealth had not yet come.

Little by little Florentine goods won a wider and wider appreciation. Florence became a trading center of fame on the basis of its quality manufactures. Its wealth increased. Difficulties on other roads made the route into northern Europe from Rome that passed through Florence the most desirable one. As many as 1500 travellers a day stopped at the inns and taverns of the city. Presently the Florentines began to feel their power, and one day they went over and scattered Fiesole all around, forcing the nobles from that romantic spot to come to Florence to live. This was a reversal of the modern city districting policy which tells merchants where they may do business. Florentine merchants made their best customers step over and live nearby. They have been called "the Scots" of Italy.

Workers Had Versatility

Striking among the things that Dr. Krey tells us of Florence is the fact that its artists were not especially painters, nor sculptors, nor architects. They were people so thoroughly trained in the technique of art and so in love with its performance that the best of them could work in all those media. In the first instance most of them were goldsmiths. Of this the author says:

"In the very persistence of the idea of craftsmanship and in the lack of specialization may, indeed, lie the secret of the versatility of Florentine artists. To us, who live in an age of specialization, the versatility of Leonardo da Vinci and Michelangelo, who were painters, sculptors, architects, engineers and poets, is a never-ending source of amazement. But the training of Florentine craftsmen, especially of goldsmiths, was not narrowly specialized, and this was only less true of masons, carpenters and metal and leather workers. All of them had to draw, design, and consider color, form and composition. Nearly all these crafts required an acquaintance with many materials, from precious stones and metals to the baser materials, such as stone, wood, leather and clay. They likewise required skill in the use of tools and a knowledge of the techniques necessary to obtain the best results with a given material.

Premium on Originality

"Originality in design and perfection in finish were doubtless cultivated because each task involved problems peculiar to itself. And every job was a competitive one, whether the composition lay in greater customer appeal on display counters or in the more direct competition for a public contract. This premium on originality and perfection kept the Florentine craftsmen ever young and on the alert for new ideas any where in life or literature or learning, both sacred and profane. As Florentine craftsmen frequented their favorite gathering places they learned theology and humanism, philosophy and history, poetry and mythology, mechanics and mathematics. Always learning, even at the age of seventy, is it any wonder that these Florentine craftsmen, or artists, displayed great versatility? The Florentines expected their craftsmen to be versatile. Giotto, back at the beginning of the period, who chatted with Franciscan and Dominican theologians, with Dante and Villani, was just as versatile as the craftsmen-artists at the end of the period. He too was a painter, architect, sculptor, engineer and poet."

A passage from J. A. Symonds, "Life of Cellini" telling of the reception of that master's "Perseus" by the public is quoted to show the "art consciousness" of the sixteenth century Florentines, near the end of the city's great period.

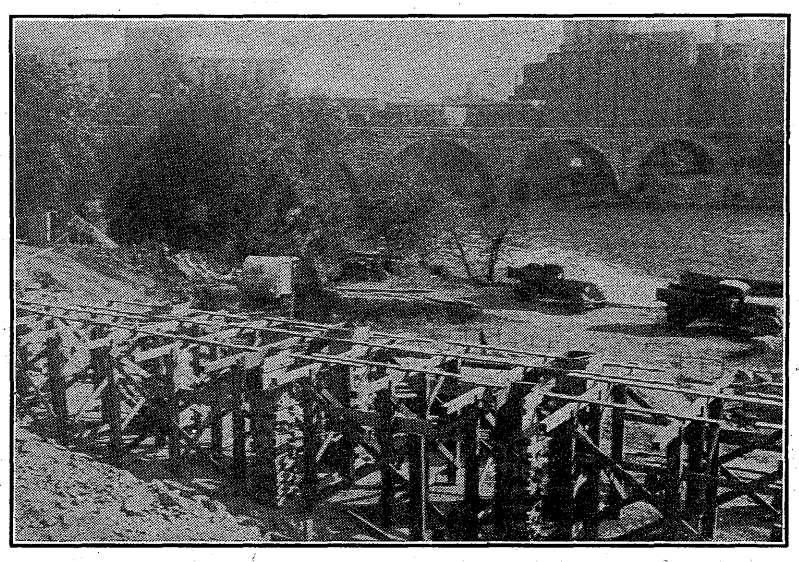
"Now it pleased God that, on the instant of its exposure to view, a shout of boundless enthusiasm went up in commendation of my work, which consoled me not a little. The folk kept on attaching sonnets to the posts of the door, which was protected with a curtain while I gave the last touches to the statue. I believe that on the same day when I opened it a few hours to the public, more than twenty were nailed up, all of them overflowing with the highest panegyrics. Afterwards, when I once more shut it off from view, every day brought sonnets, with Latin and Greek verses; for the University of Pisa was then in vacation and all the doctors and scholars kept vying with each other who could praise it best. But what gratified me most—was that the artists, sculptors and painters alike, entered into the same generous competition."

Dr. Krey points out that art was not something apart in Florence. He says:

"In view of all the evidence, whether derived from the history of Florence before 1300, from the study of its artists after 1300, or from the attitude of its people throughout the period, it must be concluded that in Florence during the time of its highest artistic production art was never an activity apart from the affairs of ordinary life. Instead it permeated and transfused every ordinary occupation. The art of Florence was the work of craftsmen who were supreme in their crafts, crafts that had been developing in Florence for centuries before 1300.—Furthermore, each of them continued to be a craftsman to the end of his days, and most of them, despite one or two interesting exceptions, were also good business men. They were a part of the fabric of life in Florence and reflected the same spirit that characterized the city itself, a spirit that made little or no distinction between art and utility but sought, as it were, to unify both aspects of reality.

"Whatever other explanations may be offered for this extraordinary development, it will be difficult to deny the largest share to the sustained effort of the people of Florence to do whatever they did as well and as beautifully as possible. If that is art, then Florence of the Renaissance may well be called a city that art built."

Hydraulics Lab. Gets Under Way



Above is a view of the start of work on the Hydraulics Laboratory which the University of Minnesota is building with WPA assistance on an island in the Mississippi River, a little downstream from the Third Avenue Bridge. Lorenz G. Straub, professor of hydraulic engineering, has said that it will give the university opportunities for the study of river hydraulics that few institutions possess.

Glenn Seidel Gets Conference Medal

Glenn E. Seidel, retiring captain of the 1935 Minnesota championship football team, is the winner this year of the annual Conference Medal for the "highest degree of achievement in his athletic as well as his scholastic work." The announcement was made at the Cap and Gown Day exercises in Northrop auditorium on the university campus.

Three years as quarterback on the Minnesota teams of 1933-'34-'35 coupled with a scholastic average that placed him in the upper one-quarter of the senior class in engineering were the qualifications that won the award for Seidel. During the three seasons that he directed the Minnesota team on the field it was undefeated and his teammates honored him in 1935 by electing him captain.

Coach Bernie Bierman considers Seidel one of the soundest and most intelligent quarterbacks he ever coached. His strategy and field generalship especially in the Pittsburgh game of 1934, won the favorable comment of many observers.

Seidel also participated in hockey, playing regularly on the 1935-36 Minnesota team at a defense position. He was recently appointed backfield coach at Tulane University, New Orleans, and cut short his membership on the hockey squad to take over his new duties.

Coincident with the announcement of the Conference Medal award came the announcement of Seidel's election to membership in Tau Beta Pi, national honorary engineering fraternity. Membership in the organization is limited to men from the upper one quarter of the senior class in engineering, architecture, chemistry and mines.

Robert Tenner, an end on the 1934 football team and a student in the medical school, won the award last year at Minnesota.

Three other Minnesota athletes have been named to honorary societies it was announced. Carl Dech of Minneapolis, a member of the championship Minnesota gymnastic team, was also elected to Tau Beta Pi. Reynold Bjorck of Minneapolis, captain-elect of the hockey team, was elected to Chi Epsilon, honorary civil engineering fraternity. Donald Dailey of Pipestone, a member of the wrestling team, was named to membership in Gamma Sigma Delta, honorary society of the College of Agriculture, Forestry and Home Economics.

Mann Comments On University

Continued from page 1, column 3

1895 until 1901 he was on the faculty at the University of Pennsylvania; from 1901 until 1910 on the faculty of Washington University, St. Louis, which he organized, and from 1910 until 1913, when he came to Minnesota, he was at the University of Illinois.

Approached by Shenehon

Professor Mann first learned of plans for organizing a department of architect at Minnesota from F. C. Shenehon, who was then dean of engineering at Minnesota. Dean Shenehon sought his advice about the founding of the department, and their conversations grew into a proposal made to Mann by President Vincent, that he come back to his home campus and organize the department. Both the desire to return to Minneapolis, which he always loved, and the opportunity for extending his professional experience appealed to Professor Mann, and he consented to come.

When he arrived at Minnesota he found one instructor in architecture, Lewis Walton. The following year he persuaded Roy C. Jones, now professor of architecture, to come to Minnesota from Illinois. Subsequently, Professor R. T. Jones, also from Illinios, was brought to Minnesota.

The engagement of Leon Arnal, professor of design, to come to Minnesota produced one of the most interesting experiences of Professor Mann's career here. It was in 1914 that a long correspondence resulted in a cable going to Professor Arnal from Dr. Vincent, urging him to accept a Minnesota post. Professor Arnal was on his way to the cable office in Paris to cable his acceptance when the notice of mobilization of the French Army for the world war was posted. He was, of course, unwilling as well as unable to leave France under those circumstances, and throughout the war he served as an intelligence officer, much of the time attached to the British armies in northern France. But Minnesota had by no means lost interest in him; Professors Mann and Arnal kept up a correspondence for the entire period of the war, and after it came to a close in 1918 the appointment was confirmed and accepted at last and Professor Arnal came to Minnesota in the fall of 1919.

Estimates Campus Buildings

In his professional role as an architect, Professor Mann has his opinion of University of Minnesota buildings. He thinks that Pillsbury Hall is very good, despite its old fashioned appearance and awkward interior arrangement. It has dignity and effectiveness of contour and design. The Union building, originally built for chemistry, is also good. He agrees with the common opinion that Jones Hall is the worst building on the campus—inexcusable—and thinks the Armory is not good. He sees no excuse for the architecture of Burton Hall — the old library — where the front of the Parthenon has been attached to a building of square and awkward general design. The Music building, which he likes, is of a design different from the new buildings on the mall because it is not a part of the mall group, and to have had it follow that design would have broken the unity of the larger assemblage of buildings.

Of the future of architecture Professor Mann is very hopeful, in fact, confident.

"Building is so much more complicated today than it used to be that the academically trained architect has become a positive necessity," he said. "There was a time when most of the young men in architects' offices were apprentices, not men from the schools. Today their number is rapidly decreasing. About half of the practicing architects are still not college men, but from now on the percentage with scientific training will rise rapidly.

"Teachers like myself are not the only persons, either, who forsee more work and wider acceptance for trained architects. Agencies that lend money on mortgages, such as life insurance companies are insisting more and more on good architectural design in the buildings on which they make loans, and real estate men are coming to understand that the well-designed and carefully built home is good security.

Administration In Public Office To Be Taught

University Is Given Four Year Grant by Rockefeller Foundation

A gift of $85,000 to be used over a period of five years to conduct a program of training in public administration has been received by the Board of Regents of the University of Minnesota from the Rockefeller Foundation. The program will begin July 1 and continue to July 1, 1941. It makes possible a start on a project which Professor William Anderson, head of the political science department, President L. D. Coffman, and other members of the university have been looking forward to for several years. Twenty thousand dollars a year will be available annually for the first three years, with diminishing amounts later.

Two types of fellowship will be created under the grant, with about six recipients in each group. In the first group will be about six men who have just been graduated with a bachelor's degree. They will be appointed for one year of intensive study of some phase of public administration at the University of Minnesota, after which Dr. Anderson will endeavor to place them in an interneship in actual government service, national, state, or city, for an additional year.

The second group will be chosen from people now in government service. These, if they can obtain leave from their posts, will be invited to come to the Minnesota campus to spend a year in the study of some administrative problem.

"In giving the men in training their practical experience on the job, we plan to work in the closest possible co-operation with public officials," Dr. Anderson said. "Each man probably will conduct his studies in the field in which he is actually employed by a government agency."

Indicating the fields in which most public service lies, the committee that will direct the course is made up of Professor Anderson, chairman, and Professor Lloyd M. Short, political science, secretary; Deans G. S. Ford, graduate school, E. M. Freeman, agriculture, J. B. Johnston, arts college, R. A. Stevenson, business, S. C. Lind, technology, and H. S. Diehl, medical science; and Professors F. S. Chapin, sociology and social work; C. C. Ludwig, secretary, League of Minnesota Municipalities, and Horace E. Reed, law.

Interneships will be sought in actual government offices. To these will be sent the recent graduates who have completed a one year's fellowship. Some official, such as a county auditor, who has a problem of interest not only to himself but to other county auditors, will be asked to accept one of the public administration internes, who will attempt a solution. On the basis of his year's work he will write a report making the information available to all officials. This plan has been worked successfully at Harvard and at Syracuse, which latter has sent internes to many of the principal cities in New York state.

Two other phases of the public administration project are now before other foundations, and Dr. Anderson believes further grants may be received for them.

A Tribute to the Memory of Caleb D. Dorr, University Benefactor

By the Hon. Fred B. Snyder of the Board of Regents

The following tribute to the late Caleb D. Dorr, whose gift for scholarships in agriculture was the largest the University of Minnesota has ever received for student aid, was delivered at the Recognition Day exercises at University Farm by Fred B. Snyder of the Board of Regents. Mr. Snyder has been a regent since 1912 and has served the institution in various friendly capacities throughout his lifetime, since his graduation in 1883.

I wish to speak tonight to the students and especially to members of the Senior Class, rather than to members of the executive and teaching staff and visiting friends of mature age who, by their own lives, exemplify the wisdom of being guided by the experiences of those who have met the problems of life courageously, honestly, frugally and with unfaltering confidence in their own ability to succeed in whatever sphere they chose to act.

Time is a strange thing. In the abstract it is duration without limit. It is intangible, invisible, and without form or substance; yet, as it passes on it leaves impressions of things, people and events, in the memory of men, like pictures hanging on a wall, to charm, to comfort, to warn and to guide those who receive them, and those to whom they become known in the path of a more abundant life than they otherwise would have travelled, and eventually to become a part of history, to serve in a like manner, succeeding generations.

As we enter this gallery of pictures we find among others that of a small farm in what was once East Great Works, now Bradley, in Maine. It is the home of the Dorr family consisting of the father and mother and five children, in modest circumstances, industrious, respected, and trusted, and living the simple life of worthy farmers. One of the children is Caleb D. Dorr, a youth of promise, strong physically and of upright principles. He attends the village school during the three winter months each year, which is the only schooling he ever had. As he reaches maturity the small farm becomes crowded and its resources over-taxed. To ease the situation he hires out as a laborer in nearby lumber mills and acquires a knowledge of cutting and lending timber, and the rafting of logs to the mill.

The next picture is that of a young man in love, restless and champing at the bit as it were over local restraint, or as some of you might say in picturesque slang, "rearing to go." News of far away St. Anthony Falls, in what was then Wisconsin, was being spread abroad with the fact that the land was soon to be opened for settlement. The later appeal of Horace Greeley to young men to go west was already stirring him. The spirit of adventure moved him to action. We find him next with his pack on board the train from Albany to Buffalo, thence by way of the Great Lakes to Milwaukee, and on to Galens, and by river steamer up the Father of Waters and in its upper reaches "amid scenery" described by the Rev. Albert Barnes of Philadelphia in 1848, as "unsurpassed in beauty probably in the world" and further, "you look out instinctively for the house and barn; for flocks and herd, for men and women and children, but they are not there. A race that is gone seems to have cultivated these fields, and then to have silently disappeared—leaving them for the first man that should come from the older parts of our own country, or from foreign lands, to take possession of them." And the heavens as he must have seen them are thus described by Maury, Superintendent of the National Observatory at Washington:

"At the small hours of the night, at dewy eve and early morn, I have looked out with wonder, love, and admiration upon the steel-blue sky of Minnesota, set with diamonds, and sparkling with brilliants of purest ray. The stillness of your small hours is sublime. I feel constrained, as I gaze and admire, to hold my breath, lest the eloquent silence of the night should be broken by the reverberations of the sound, from the seemingly solid but airy vault above."

He disembarked at St. Paul, and from the best information obtainable went, with pack on his back, on foot by trail to St. Anthony, stopping I am sure on the bluff over the river now a part of the University Campus to stand awe stricken and amazed as he first saw the turbulent waters of the falls, in their majestic setting, and its Spirit Island where Indians came to mourn the sad ending of Ampatu Sappa-win, the Black-day woman who, because her spouse took unto himself a new woman went over the brink of the falls in a canoe with her two children to their death.

Caleb D. Dorr landed in St. Anthony in 1847. The only habitation was a log cabin and a moss shack. Fifteen others came that year. These and a few later newcomers were the builders of the Town. We think of them as hoary pioneers. How forgetful we are: They were young men. Dorr was 23; Marshall, afterwards Governor, was 24; Farnham, 27; Col. Stevens, 29; Northrop, 22; and so on down the line. Round about him was a wilderness full of Indians, buffalo and wild animals. The Post Office was in St. Paul and the only commerce was by water to the south and by Red River carts to far away Pembina to the northwest, over an Indian trail beset with dangers. The chief food for those who made the long trip was Pemican, made of dried and pounded buffalo meat, put into bags of buffalo hide with melted tallow poured over it.

The next picture we look at shows men laboring like beavers to harness the Falls. This was constructive work suited to the dreams of young Dorr. He was one of the most active workers. His experience in the mills and in the woods in Maine fitted him as a leader. Construction of the first saw mill was started. It must have logs. He went with crews into the forests, cut down, banked, drove and boomed the logs. He became a party to the sawing of the timber into lumber for the building of homes. The town boomed. He had found himself. He had made good. In July 1849 he went back to Maine, married Miss Celestia A. Ricker, brought her to live in his new home in St. Anthony. Their first home was a block or so from the first building of the University, built close by to what is now known as the old Exposition Building in East Minneapolis. Their later home was on the block of land on University Avenue facing the main campus of the University, between 13th and 14th Avenue Southeast. A few days ago I conversed with a gentleman who had personally visited this home. At that time a running stream of water flowed down the draw now occupied by railroad tracks. Beside this brook he had a pleasant summer house and leading into his house from 13th Avenue was a driveway bordered on either side by an exceptionally fine hedge of arborvitae, and about the house were the vegetable and flower gardens.

As we move through this gallery of the past we find him constantly moving along the line of good citizenship. That he was popular, trusted and favorably known is evidenced by his election as one of the first aldermen of the town. He is venturesome and progressive in business. He engages in manufacturing lumber. The promotion and organization of boom companies and later, after they are merged, he is elected Boom Master of the Mississippi and Rum River Boom Company, a position of trust filled by him for many years. Only a man of high integrity having the confidence of timber men who floated their logs into the general booms of the company, where they were intermingled, could be Boom Master, because he was the head of the crew which separated the logs according to ownership as shown by the log marks, cut into the logs, and turned them into their owner's slip.

He went through three periods of great financial distress, that of the late fifties, the seventies, and the nineties. He weathered them all. He bucked up, took the gaff and in the end came out on top. The last few years have given an abundant opportunity for men of this generation to follow his example, and if they labor with the same faith he had in himself, in his community, and in the laws of the land, and with the same sacrifices, thrift, courage and optimism, they too will in the end come out on top.

By slow degrees he accumulated wealth. He invested wisely; not all eggs in one basket, but many baskets with nest eggs, so that a lost nest now and then did not much impede the accumulation of a fortune which was appraised in his estate at $257,700. It should be noted that most of his investments were in local ventures. Evidently he wanted them where he could now and then look into the nest.

To me he seemed a man of reserved strength, of strong will, and independent in thought, resolution and action. In 1916 at the age of 92, then a widower for a number of years, he wrote his will. That he was of enduring mind and mindful of his obligations to his home town, one has but to read the will to bespeak its praise. He had no children. In gifts of from $500 to $5,000 he remembered some thirty-five relatives and friends. He made gifts from $5,000 to $10,000 each, to a dozen public institutions, all local, covering the fields of religion, the aged and the infirm, the sick, juveniles, homeless children and for the retirement of teachers. He left a trust fund for the protection and propogation of fish in Hennepin County. He remembered his friends in the St. Anthony Commercial Club with a fund to establish a club house.

He paid a last affectionate tribute to his wife by providing funds for the erection of a Guild House at the Episcopal Church, "Holy Trinity," in East Minneapolis, in these words:

"She was my faithful and affectionate helpmate for almost sixty years; to her I feel that the health, happiness and prosperity which I have had through a long life has been largely due."

But the keystone of all his bequests was to the University for its use in bestowing gifts, prizes, scholarships, fellowships, medals, loans, and grants, to "indigent and worthy students, and as will best promote good character industry and intellectual attainments among the students, and best encourage and assist them in continuing their studies in the college and School of Agriculture, and in best fitting themselves for usefulness in life."

Why Gift Was Made

I have been asked what prompted Mr. Dorr to make his munificent and enduring bequest, as he did not, during his life time seem to show any well defined interest in the University, beyond the gift of the Dorr fountain. I have no personal knowledge. I believe it was largely due to his first hand knowledge of the struggle through which the University passed during its early days,—the struggle of a body corporate to live, not unlike his own early efforts to succeed. He saw his friends get its Charter from the State in 1851, and contribute the funds to build its first building near his own home. He saw it moved to its present location; and he built a new home for himself just across the street. He witnessed the utter collapse of the finances of the institution in 1857-62 before it had ever opened its doors as a University. He knew that the Governor of the State had suggested to the Legislature that it should be turned over with its endowed lands, to its creditors to pay its debts. He knew that the new University building was looked upon by some members of the Legislature as a favorable place for the housing of the insane, and he lived to see the institution saved, by other men of his own type, from its debts, animadversions and hopelessness, and gradually grow into a strong institution offering to youth a liberal education at a minimum of cost. I believe these things were potent in the benefaction.

The Present Fund

The Caleb Dorr fund now amounts to $117,363.39. Distributions for its objects since its first allotment in 1920-21, exclusive of those for 1936-37, amount to a total of $39,880. The number of distributees, men and women, including 1936-37, will be close to 300, selected from the several schools located at St. Anthony Park, Crookston, Morris, and Grand Rapids. The income for the year ending June 30, 1935, was $6,826.53.

Caleb D. Dorr has left to the people of Minnesota a heritage of right living, of loyalty to home and country, a good example of sustained optimism in the fundamentals of life, liberty, family, happiness, intensive grit, thrift and worthy citizenship. In his passing he stretched out a helping hand to the worthy needy, seeking nothing in return but an appreciation, exemplified in their life work, rather than in thankyous by word of mouth.

MINNESOTA CHATS

Published every three weeks from October 1st to June 7th, except during vacation periods, by the University of Minnesota as an informal report of its activities to the fathers and mothers of its students.

VOLUME 18 JUNE 9, 1936 NUMBER 12

Entered as second-class matter at the Minneapolis, Minn., postoffice. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

T. E. Steward, Editor, 217 Administration Building
University of Minnesota, Minneapolis

First to Win Dorr Fund Aid

Dr. A. N. Wilcox

Erosion Danger May Ruin Farms

Sheet erosion is a real enemy of farmers living in rolling country. It works almost unnoticed, possibly for years, and then suddenly the farmer becomes aware that it has robbed him of his greatest asset—the rich top soil of his acres. How sheet erosion works is clearly indicated in a bulletin on Soil Erosion Control, by H. B. Roe of University Farm, who says:

"In many cases the depth of soil removed yearly by sheet erosion from Minnesota fields has not exceeded one-eighth of an inch; in others it has been as much as one-half of an inch, and in a few cases, in seasons of unusual rainfall, it has been as much as two inches. On at least one field observed, the rich top soil has been removed to a depth in excess of 30 inches in less than 60 years of cultivation, leaving only a thin layer of sandy unproductive subsoil over the parent rock.

"The removal of one-fourth of an inch of soil in a year, which is probably the more common experience in the southeastern and other rolling parts of Minnesota, may seem negligible, but even one-fourth of an inch a year, through the life of the average farmer, is enough to remove all or nearly all of the virgin top soil."

There are many ways to prevent soil erosion and the bulletin describes these. Copies of it may be obtained free from county agents, teachers of agriculture in high schools, or the bulletin office, University Farm, St. Paul.

LaFarge Praises Architecture Here

C. Grant LaFarge, son of John LaFarge who painted the celebrated mural decorations in the Minnesota State capitol building in St. Paul, recently spent several days at Minnesota, familiarizing himself with the School of Architecture here on behalf of the American Institute of Architects. He left with high praise for the Minnesota department, according to Professor F. M. Mann, head of architecture. While in Minneapolis Mr. LaFarge was the guest of Professor Roy C. Jones. Mr. LaFarge is the father of Oliver LaFarge, the writer.

Dorr Scholars Honor Helper

Faculty Man, First to Hold Scholarship, Speaks for 300

Speaking for some 300 students who have been helped through scholarships awarded from the bequest of Caleb Dorr, Dr. A. N. Wilcox presented to the university a life-sized portrait of the pioneer Minneapolis lumberman at the annual Recognition Assembly of the College of Agriculture, Forestry and Home Economics, May 13. The photograph was purchased with a fund donated by recipients of Caleb Dorr awards, and Dr. Wilcox was chosen to make the presentation because he was the first to receive one of the fellowships which have been given annually since 1921. Altogether nearly $40,000 has been given from the fund in fellowships for graduate students and in scholarships and prizes for undergraduates of the college and for students in the several schools of agriculture.

Said Dr. Wilcox, "Although we who have received fellowships, scholarships and prizes from the Caleb Dorr fund acknowledge an indebtedness which cannot be satisfied by material contributions, we present this picture to our university as a symbol of our deep appreciation of Caleb Dorr's beneficence."

Graduated from the University of Wisconsin in 1919, Dr. Wilcox was a part-time assistant in horticulture in the University of Minnesota when he received a Caleb Dorr graduate fellowship in 1921 which enabled him to complete work toward his doctorate which he was granted in 1929. He has been on the staff continuously since May 1, 1922, but took sabbatical leave in 1933-34 to study at the John Innes Horticultural Institution at Merton Surrey, London, as a national research council fellow. There he studied under J. B. S. Haldane, prominent English scientist, paying special attention to new phases of fruit breeding research.

"The human values of the Caleb Dorr grants, enabling so many students to continue and to improve their education under favorable conditions and at the same time encouraging general student scholarship and worth, cannot be measured by sums of money. By these values are the name and the beneficent spirit of Caleb Dorr perpetuated," said Dr. Wilcox.

Dr. Wilcox regards as particularly significant the fact that the Dorr awards are given to worthy and indigent students with no particular strings attached except that recipients must continue to study. To graduate students the fellowships are particularly helpful because they make it unnecessary for the recipients to do any outside work.

Chicken Could Earn $1.77 During 1936

What the well managed poultry flock could earn in 1935 has been revealed in figures obtained by Miss Cora Cooke, extension poultry specialist, University Farm, from 57 farm flocks scattered throughout the state. These flocks average 238 hens, the smallest flock having 54 hens and the largest more than 800. Most of them were farm flocks and both heavy and light breeds of chickens were represented.

Earnings of these 13,555 chickens totaled more than $24,000, which was an average of $1.77 for each hen kept. This figure represented return over all expenses except labor. It included depreciation on buildings and equipment and 6 per cent interest on investment.