



GOPHER GRAD

OCTOBER 1957

June 1959

GOPHER GRAD

(Our 57th Year)

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Cover Story

Something old, like these two majestic trees, provide a shade for something new, a couple of freshmen with a few moments to relax. Like the trees, the two



buildings in the background have been on the St. Paul campus quite awhile. The Administration building on the left was built in 1906 and the Agriculture Engineering building on the right was first opened in 1913. But they will soon have other new company. Seven

projects are under construction and 11 more are planned to change the topography and familiarity of the St. Paul campus. (Photo by Warner Clapp)

Views of authors appearing in Gopher Grad in no way reflect the opinions of the MAA or the Gopher Grad.

'M' Club Aid Sought

Editor:

Recently Walter Brown, Jr., owner of the Boston Bruins hockey club and the Boston Celts Basketball team (and, incidentally, considered the best judge of athletic physical flesh in America) said that the best physical athletic material in America is in Canada and northern Minnesota but that he could not use these athletes because they are not properly coached.

The future of football at Minnesota is sunk unless the "M" Club steps in and does something to remedy the situation. In my opinion, the matter is so important that the following steps should be taken at once:

The athletic department should hire a man to take full charge of assisting and helping "M" men get high school coaching jobs.

Each congressional district should have a committee to investigate and report on how many coaching jobs are available.

Make a list of the country newspapers and the names of their editors and keep in touch with them since most football coaching is more or less political.

When these things are accomplished, I feel sure that Minnesota will either be champion or rank among the first five in the country.

George C. Rogers '00LLB
St. Paul, Minn.

Footnote to Presidents

Editor:

In regard to your June story which included a picture of Guy Stanton Ford, Washington, D.C., as the only living ex-president, I should like to add this comment:

When Pres. Coffman was inaugurated in 1920, all four of his predecessors were on hand to help - Folwell, Northrop, Burton and Vincent, a rather remarkable occasion. While I was a student (1900-04), I worked part time in the Registrar's office which was next to the President's office. There, I got to know Dr. Northrop quite well.

My years as 'Y' secretary (1919-31) and as director of the international relations project (1931-35) were during the administrations of Drs. Burton and Coffman. Dr. Ford was acting president during one of those years. I knew Dr. Coffey and now know Dr. Morrill.

So I am happy to say my ac-

quaintance covers the whole span of eight presidents.

Cyrus P. Barnum '04BA
Los Angeles, Cal.

(Accompanying an active interest in University affairs is active participation. Records show Cyrus Barnum Jr., graduated with a BA in '36 and a PhD in '40. At present he is on the medical faculty.)

Service With Capital 'S'

Editor:

I believe many of the '22ers will be glad to know that I am still healthy and working after 35 years of "No-News" and I hope some of my classmates will contact me.

Ever since I graduated in dentistry, I have worked with a definite goal - to introduce modern and scientific dental education to the Chinese, to promote dental service in public health service for the people and to promote military dentistry for the Armed Forces of Free China.

J. L. Wong '22DDS Maj. Gen.
Dean, Department of Dentistry
National Defense Medical
Center
Taipei, Taiwan, China

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The "U" Brings the



Juanita Pacifico Opstein
Editor

An era is beginning in which a college education will be almost as natural as learning the alphabet, when men will learn to fly to the moon and when surgeons will replace a tired heart with a strong one.

"No one laughs any more when he hears these things," says William L. Nunn, director of University Relations. "This is a day when the difficult is done immediately and the impossible takes only a little longer."

What will the University of tomorrow look like? What will be the techniques in its class rooms? What will be the products of its laboratories?

All the answers are not yet known. But statements by a number of Minnesota's educators help bring the future into focus. This is what they say:

Credit for the first and most important step in preparing for the future belongs to the State Legislature — to the people of Minnesota. With a farsightedness that is a credit to political action, the Minnesota lawmakers appropriated \$44,673,708 for the operation of the University, its hospitals and research for the next two years in addition to \$16,503,518 for land and construction of new buildings.

The building fund showed a willingness to face the facts of the future for estimates indicate an enrollment of 47,000 students by 1970. At present there are approximately 26,500 students on campus.

President J. L. Morrill described the appropriation for new buildings as the "first phase" of a long-range \$128 million physical plan development operation which must be completed by 1970.

"We cannot stand still or coast because, at best, coasting means to go down hill. The University is the seedbed of tomorrow's leaders," he says.

Development of these leaders — their moral fiber in an atomic age,

their technological skills in an era of machines, their leisure time in a new age of labor emancipation — is the responsibility which the University of Minnesota has assumed in 1957.

To meet this responsibility, the University's needs are many. Among the most important and apparent are more facilities, an evolutionary type of instruction to keep pace with the times and more teachers.

The campus of tomorrow will be a busy metropolis, larger than most cities in the state. Its heart will be crowded with buildings, tall and long, new and old, wherever the eye can see. Its subdivisions will be big and ever-growing larger. The Minneapolis campus with 31 new buildings, will have expanded across the Mississippi River into the Seven Corners area. The blighted look will be gone and trees and lawns around the new structures will add to both the scenery and the real estate values.

Housing projects will keep pace with classroom building.

Housing developments for unmarried students will be increased. There will be more buildings like the million-dollar 100-unit housing project for married students now under construction near the agri-



cultural and forestry buildings on the St. Paul campus. Planning for such housing began after a 1957 survey reported that 21 per cent of the University students were married.

New athletic facilities and more parking areas also are part of the campus picture for 1970. A double-decked football stadium seating 90,000 persons and nearby parking for 22,500 cars may be available.

Instruction—Status But not Quo

While physical changes of the future will be great, the changes inside the buildings will be equally revolutionary. Within the concrete walls, there will be a reshuffling of the academic process to suit the needs of an unprecedented demand for college training.

For both teachers and students, this forecasts many innovations, only half of which are foreseeable now, according to Prof. C. Gilbert Wrenn, chairman of the University Senate Committee on Education.

In addition, the University's teacher-training program would undoubtedly stress the importance of the personality in teaching.

"Today, we are starting to train teachers—particularly public school teachers—for the time when there will be ever-increasing need to understand personality dynamics—comprehend the personality of each student," says Prof. Wrenn. "Teachers will have to know how the student best adapts to the kinds and methods of teaching. At the same time, we are realizing the importance of having teachers know their own personality and how they affect the student.

Wrenn indicated, also, that students may find college different from what their parents described, adding:

"We will have to modify methods and class arrangements from the traditional to new but tried techniques."

He listed some of the techniques now being tested as the use of one-half hour instead of one hour classes, breaking down a three-hour class into one hour of lecture and two hours in the library, more Tuesday, Thursday and

Saturday classes, more supervised study rather than direct lecture-note taking.

"We may even come up with something extraordinary in educational television," Wrenn said.

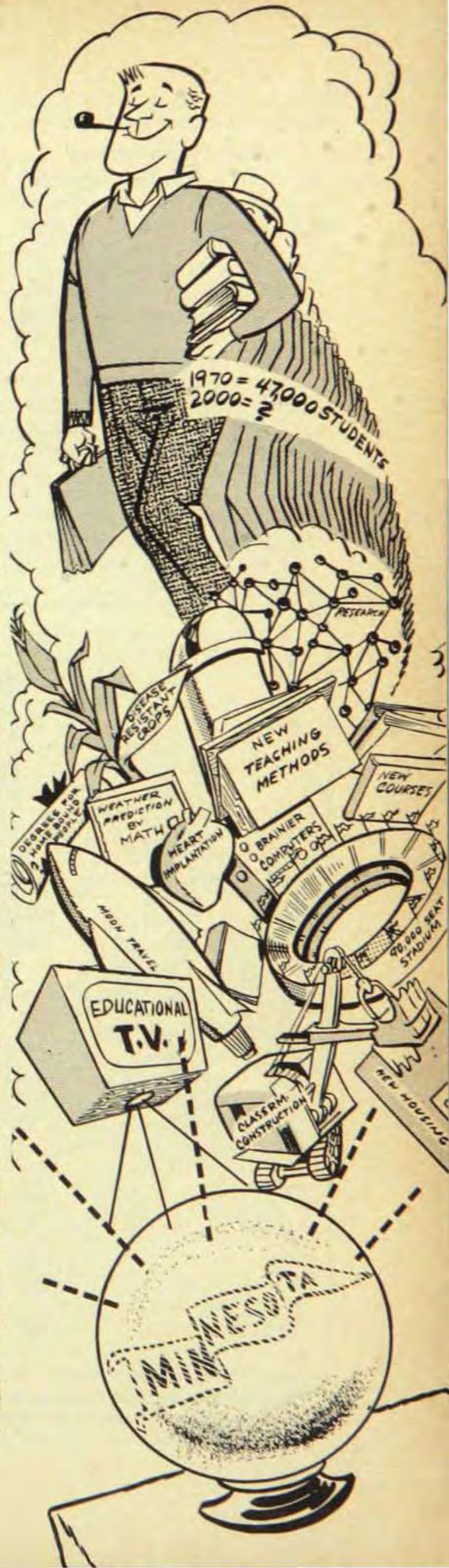
Many others, including Dr. Burton Paulu, '31BA; '43MA, director of University educational television planning, believe television will help stretch the best of teaching talents to the greatest number of students. They claim there is something about a television set that rivets one's attention more firmly than does a professor at a lectern. Pioneering in the field now is the independently-owned educational television station, KTCA-TV.

Educators foresee that the change in methods will be accompanied by a change in the kind of courses taught in college. As one faculty member pointed out, the student body will no longer be a homogeneous group because the trend will put people into college who otherwise would not be there. He predicted, therefore, more variety within courses, more subjects for a greater number of interests, possibly more courses to develop skills as well as brainpower.

Prof. Wrenn, warning against those who believe that "change is bad," said that changing a method does not have to change the quality of the product.

"Present methods suit present needs but who can say that new methods will not be just as effective in maintaining high educational standards. Anyone who says no is afraid of change, itself, and not of its result," he added.

While the student will be subject to the strain of greater competition both in school and out, the teacher will be subject to equal amounts of stress—the greatest of which will be *overwork*. Today's teacher shortage is expected to be magnified in the future because the reasons for the present shortage will also be magnified, according to a report by President Eisenhower's commission on higher education. The reasons cited are rising enrollments, increasing number of graduate students, longer profes-



sional undergraduate study, more attractive salaries in fields outside.

Legislators Foresee Problem

Personnel people have expressed the greatest fear for the loss of PhD's through attractive offers from industry. They point out that as education becomes more complex, the need for teachers qualified at the PhD level will increase *but that 50 percent of the PhD's are now being lost to industry.*

To keep this group within the academic circle, Minnesota legislators voted 15 percent salary increase for 1957-58 and an additional five percent for 1958-59.

However, the luring of teachers away from their profession promises to be a continuing headache for

campus executives who reportedly search for ways to keep their staff while being beset with job offers from industry themselves.

Research—Pandora's Box

Laboratories which made history with the isolation of U-235 and the creation of "dry-heart" surgery will be incubators of spectacular projects.

Heart implantation, flights to the moon and the changing of genes to regulate the characteristics of life will be in one or another stage of planning.

Also in the research mill are projects like preservation of food without freezing, weather control and prediction of weather by mathematics instead of by past his-

tory, and bigger and brainier electronic computers, capable of solving, in a few minutes, a problem which would take years.

Additionally, there is the prospect of disease resistant crops through seeds which have been irradiated prior to planting, diet as a cure for some mental deficiencies and nuclear exploration which may save lives in case of atomic attack.

State Service

University service to the community in the future will undoubtedly include education by television and, in time, possibly college degrees for the home-bound or permanently disabled.

State income in agriculture is expected to increase, as in the past, through developments such as tracing phosphorescent elements into the soil to determine exactly what fertilizer will revitalize a plot of ground. Whereas the eradication of brucellosis (completed only this year after 20 years of trying) will add thousands of dollars to the state's dairy industry, mutation of plant genes is expected to add millions through the discovery of crops which are both bigger and resistant to disease.

On the cultural side, the University of tomorrow may occupy an even more important place as a community center for inspirational art. The increase in leisure, made possible through automation, will permit more and more persons to participate in the after-hours activity uniquely afforded by the University.

(Editor's Note: This overall view of how the University sees the challenges of the future is the first in a series of articles on Minnesota's plans to keep one step ahead of progress while shaping progress itself. Successive articles will tell the exciting story of individual projects, some designed to meet the educational crisis, some to improve the fruits of research and some to help men realize their fondest hopes.)

GRIN AND BEAR IT

By Lichty



"We can't afford a raise, professor, but we'll be glad to grant you a leave of absence so you can try for a fortune on some TV quiz show!..."

(Courtesy George Lichty and the Chicago Sun-Times Syndicate)

Facts and Opinions
From the Alumni Secretary

Potpourri

A lot of things have happened since last spring—

Dear Gopher Grad:

By the time this magazine reaches you, another school year will have begun. The campus will be more crowded than ever. Student enrollment will be up, probably reaching a figure of 26,500—somewhat less than the estimate. All over the country enrollments are not quite reaching peak estimates. This does not mean that the flood will not be as great as estimated. It means that for some reason it has not reached the number predicted. But the picture has not changed; the flood is on the way.

The campuses have a somewhat changed appearance from last June. On the Minneapolis campus, a new mines building is being erected. It joins with the chemical engineering building on the east and the mechanical engineering on the north. A new wing is being added to Comstock hall, women's dormitory; and a new men's dormitory is rapidly taking shape in the block directly east of Centennial hall.

On the St. Paul campus, new construction consists of a soil's building, a dairy products' building, married students' housing, a students' dormitory for men and women, as well as a new student center.

On the Duluth campus, a science building addition is in process and a humanities building is being completed.

Football, of course, is in the air with its excitement and color. For the first time in years the Gophers, with a national rating in the first ten teams of the country, are starting to become golden again. Everywhere there seems to be a feeling of optimism about the Gophers—"this is Minnesota's year!" True, the Gophers do have a large number of returning lettermen. They are deep in every position. They look and act like championship material. The one drawback is that the Gophers have to play a team each Saturday just as big, as tough, as deep and as experienced as they are. They play eight conference games (every conference team but Ohio State).

Four of Minnesota's games are away from

home. On successive Saturdays, the Gophers play away on the home fields of Northwestern and Illinois; later in their schedule on successive Saturdays—again away from home—the Gophers meet Iowa and Michigan State, two of the best teams in the country. Realistically, then, a record of six wins and three defeats would be a very successful season. The Gophers have their job cut out for them even to finish in the first division.

In conjunction with the American Alumni Council meeting in Pasadena at the end of June, Bob Provost (director of the Greater University Fund) and I had the opportunity to meet with alumni on the west coast. Bob and I enjoyed tremendously the hospitality shown to us everywhere we went—and everywhere we went, we met Minnesota alumni.

Bob Swenson, president of the Minnesota Alumni Club of Southern California, held a meeting of his executive committee at his home in Altadena. This club, recently reorganized, is doing an outstanding job. On October 1 they are holding a big homecoming party at the Hollywood Roosevelt hotel. The grand prize is a trip for two (all expenses paid) to the Minnesota Homecoming game on November 2.

In Santa Barbara, Bob and I enjoyed the hospitality of John Hass (1928-32) and John D. Fox (1927-29) as we traveled the area meeting transplanted Gophers. Santa Barbara is a beautiful place and no wonder that so many of our people have settled there. Incidentally, we saw the new Santa Barbara College, a part of the University of California. This is one of the fastest growing branches of the University of California. With its beautiful location overlooking the Pacific Ocean, it has every indication of becoming the country club of all colleges.

The San Francisco area had a series of meetings: a Sunday morning brunch with Ellen Brown '36BA, president of our Northern California Club, as hostess; a Sunday afternoon

(Continued on page 12)

'M' Club Co-Founder E. B. Pierce Dies

Alumni Secretary for 28 years;
Counselor to University Presidents

When the University "M" Club meets next June, one of the organizers and early officers will not be in attendance. He is E. B. Pierce, a man who fondly watched the growth and assisted the progress of the club during more than 45 years. Pierce died June 7.

Pierce was director of alumni relations for the University in 1941, when the first spring banquet honoring 50-year "M" Club Men was held. Ten years later, in 1951, he was one of the men so honored.

At the first banquet, an anniversary pin was awarded to those who received letters during the years from 1881 to 1891. Five of 63 winners listed are still living—George Budd '82, Excelsior; Fred M. Mann '93BCE '98MCE, Healdsburg, Cal.; Harry J. Corliss '89-91, Sumner, Wash.; W. C. Leary '92BA '94LLB, Mpls.; and Edgar C. Bisbee '94BA, Wayne, Ill.

George Budd who, at 92, is the oldest living member of the "M" club, appeared at the annual banquet this spring, both hale and hearty.

Budd won a letter in baseball in 1882. A football letter was won by Mann in 1886, Corliss and Leary in 1888 and Bisbee in 1891.

Of all classes, the eight-member group of letter winners during 1892 (honored in 1942) has no survivors today.

Up until 1946, the 50-year anniversary banquet was on-again-and-off-again, mainly because of the war. Under the guidance of Pierce, however, the anniversary dinner became established as an annual affair in 1946 when all 50-year men not honored during the preceding years ('43, '44 and '45) received recognition. Of the 41 who earned letters in 1893-94-95, five are still living.

In the group of 53 honored between 1946 and 1951, 13 are listed on the rolls today.

Pierce was one of 11 men who celebrated his 50th anniversary in 1951. His class had 21 letter winners.

While 14 "M" men were listed for each of the 1952 and 1953 honor rolls, today only two are left in the 1952 group and eight in the 1953 group. Eight of the 18 letter winners in 1904 are listed on present rolls while 10 of 17 winners in 1905 are recorded along with eight of 20 winners in 1906.

Last spring's 50-year honor roll listed 23 athletes.



George Budd, Excelsior (left), oldest 'M' man, with a letter in baseball won in 1882 swaps a few memories with Sig Harris, Minneapolis, football letter winner in 1902, during recent 'M' banquet. (Photo by Paul Siegel)

Twelve of the 1907 letter winners were awarded pins at the time of the banquet.

University letter winners have entered almost every field of work. Nineteen questioned said they have been employed in some field of law, and six in medicine. The rest have been active in business, agriculture, the lumber industry, and a number of other professions. Almost all are now retired.

In the annals of great athletes, there are many great names, some as familiar around the nation as they are to every student who has ever been on campus. Among these are Johnny McGovern '11LLB, Minnesota's first

(Continued on page 12)

GOPHER GRAD

Ernest B. Pierce—former alumni secretary, counselor to seven University presidents and friend to all eight who have guided the University since its beginning—died June 7 in Whittier, California.

Pierce, alumni head from 1920 to 1948, was 77. Known to thousands as "E. B." he was affiliated with campus affairs for 43 years, an era in which the University grew from relative obscurity to a position of international renown.

After his retirement, he and his wife moved to California where he continued his interest in the University through the MAA of Southern California, serving a term as club president in addition to taking part in other club activities.

Survivors include his wife, Ula; two sons, Harmon, Anoka, and Starr, North Hollywood, Calif.; a daughter, Mrs. John G. MacKay, St. Paul, and a brother, Clifford V., Minneapolis.

Pierce's death marks the passing of one of the few remaining links between the modern scene and the

first days of the University. "E. B." served in an official capacity under every University president except William Watts Folwell, whom he came to know well during the latter's retirement to write Minnesota history.

A forceful writer himself, Pierce was a faithful chronicler of University life in the alumni publication, the *Minnesota Alumni Weekly*.

He recaptured the color and atmosphere of a school with growing pains, recalled the anecdotes of the campus scene, and delved into the foibles as well as the foresightedness of the early leaders.

Through his pen and personality, he spearheaded the campaigns for construction of Memorial Stadium, Northrop Memorial Auditorium and Coffman Memorial Union.

He worked as an assistant in the Registrar's office in 1903 while attending the University. A year after graduation in 1904, he was appointed Registrar. At the same time, he began to participate in the activities of the newly formed alumni association. Sixteen years later, he was named executive secretary of the General Alumni Association, succeeding E. B. Johnson, founder of the *Weekly* who had been alumni secretary.

For his outstanding contribution to alumni relations, Pierce (who saw alumni increase from 1,000 to 6,000 yearly) received the *Builder of the Name* medal in 1948.

When Alumni Secretary E. B. Johnson died in 1928, Pierce honored him with an article in the alumni publication. It was called, "We Mourn the Passing of a Friend." The story, part of which is reprinted here, could have been Pierce's own epitaph:

"A friend is gone; a friend whose advice, whose counsel and whose unselfish friendly help through the years has endeared him to us. Each week, "E. B.", as we here called him, dropped in for a friendly chat. Long and faithfully he served his alma mater. Much he did for her in her early days of trial and trouble; little he asked in return, for the knowledge that he was serving the institution that he loved so well was ample reward.

"And now he is gone."



E. B. Pierce

OCTOBER, 1957

Gophers Gird to "Hoe Down Hoosiers" Nov. 2

Sonia Laube
Homecoming Committee

The Gopher eleven will take to the field hoping to "Hoe Down Hoosiers" in their 1957 attempt to cultivate Pasadena roses. This project in gridiron agriculture will be the football highlight in Homecoming activities set for Saturday, Nov. 2.

Returning alumni have been "extended the hearty hand of welcome" by Homecoming Chairman Gary Carlson. A full week of activities have been slated. The kickoff is the Varsity show, "Oklahoma," October 24 and 25 at Northrop Auditorium.

The 1957 Homecoming Queen will be crowned at the Friday, October 25 performance.

High stepping bands, gala floats and pretty girls, will mark the colorful homecoming parade winding its madcap way through campus and the Minneapolis downtown area, Friday, Nov. 1.

Pre-game fever runs high and will explode the night before the game. The bonfire and pep fest held Friday night combines high spirited tomfoolery with the sentiment always felt when one "comes home."

Spirits will soar as high as the helium filled balloons let off at kick off time when the Golden Gophers take to the field to "Hoe Down Hoosiers."

During half time ceremonies, Leif Strand '29DDS, newly-elected president of the Minnesota Alumni Association, will present the alumni king and homecoming queen to the fans. Many will remember Dr. Strand as a former outstanding line-

man on Dr. Spears' great 1927 team.

After the game hot coffee and free doughnuts will be served alumni and friends in the Women's lounge of Coffman Memorial union.

Med School Alum Plan Reunion

The class of '37 will be honored on its Twentieth anniversary by Minnesota Medical Alumni Association when the group holds its annual homecoming dinner Friday evening, Nov. 1, in the Main Ballroom of the Radisson hotel.

The banquet, a part of the general Homecoming festivities, will be preceded by cocktails and will be the highlight of a two-day reunion for all medical school alumni.

In charge of planning is Neil Palm '50MD, Minneapolis, activities chairman, and Byron B. Cochran '37MD, St. Paul, president of the Association.

Royalty Sought

The 1957 Alumni King is being selected from the some 110 nominations made by the various Minnesota Alumni Association clubs throughout the nation. Letters were sent to the clubs the first week in August.

Reviewing the list of nominees is a six man committee headed by Ed Haislet, MAA ExSecy, and Gary Carlson, Homecoming General Chairman.

Preliminary judging of homecoming queen candidates will take place the afternoon of Oct. 17. Final judging is set for Wednesday, Oct. 22, with the queen to be crowned during intermission of the Varsity Show, "Oklahoma," Friday, Oct. 25.

Donna Darelius, last year's homecoming Queen, was married to James Springer Aug. 17. Besides wifely duties, Donna is teaching kindergarten at Portland school in Richfield, Minn. In April of this year, Donna received an announcement from Marshall Crowley '28-BusA, 1956 Alumni King, explaining why he "attended homecoming sans wife." Mrs. Crowley, he said, had just presented him with twin boys.

The applications for the homecoming queen must be filed by Friday, Oct. 17, the arrangements committee reported.

Alumni Invited to MAA Coffee Hour

Homecoming Minnesota alumni are invited by MAA ExSecy Ed Haislet to come to the Third Annual Alumni Coffee Mixer which will be held in Coffman Memorial union immediately after the Minnesota-Indiana game.

The mixer will be in the Women's lounge on the second floor of the Union.

The alumni office has arranged for hostesses to be on hand for the mixer.

Cut Out and Mail Now!

ALUMNI HOMECOMING COFFEE HOUR NOV. 2

Right After the Game

Women's Lounge, Second Floor, Coffman Union

Thank you for the invitation to be your guest at the alumni coffee hour. I am planning to attend. There will be _____ in my party.

Send to:
Minn. Alumni Assn. Name:
205 Coffman Union
U. of Minnesota Address:

'Oklahoma' Hoedown for Indiana and . . .



Homecoming's

Having a regular Oklahoma! hoedown are 1957 varsity show cast members (left to right) Sonia Laube, Bill Haight, and Jim Horswill, SLA sophomores, and Donna Lidstead, Ed. junior. This hand-clapping, feet-stomping musical will be one of the features of Homecoming festivities.

Campus

Quarterbacks

(Below), Gary Carlson, SLA junior, and Homecoming general chairman, is about to "pin" Pat Olsen, SLA senior and public relations director, the first customer for the "Hoe Down Hoosiers" homecoming button.

(Photos by Don Gangloff)

72 'U' Players Ready Musical For Homecoming

Thirty-seven years ago Northrop auditorium was the scene of an historical beginning. Stage lights were dimmed and the curtain went up on the first all-university Varsity show, "Keep 'Em Happy." Never before had a musical comedy amateur production been included in Homecoming festivities. Weeks of rehearsal produced a show centering around the trials and tribulations of the students of Sky Scraper University, a mythical institution of learning of the year 2,000 A.D.

This year, Varsity show director Josie Paterek, producer Bob Ahlstrom and a cast of 72 will put on the Broadway production, "Oklahoma!" However, thirty-seven years have not made any change in hectic rehearsals, hundreds of costumes, and tricky set maneuvering which are a part of pre-curtain show preparation.

The high spot in the production is the dream ballet sequence where the scenery with the help of wiz-



ardry of stage crew changes from a farm field atmosphere to one of Gothic reverence.

Two performances of the show will be given at 8:00 in Northrop auditorium on Friday, Oct. 25 and Saturday, Oct. 26. The 1957 Home-

coming Queen will be crowned during the intermission on Friday, Oct. 25. Tickets are 90 cents and mail orders will be filled starting Monday, Oct. 14, by writing the Homecoming Office, 113 Coffman Memorial union.

Three Meetings Precede Northwestern Game

Alumni leaders of three out-state units have indicated plans for meetings to be held just prior to the Northwestern game at Evanston, Oct. 12.

ExSecy Ed Haislet said he will be present at the meetings of each group. He also announced that Prof. John D. Akerman, internationally known in aeronautical engineering, will be with him as guest speaker for the two evening gatherings scheduled in Eau Claire and Fox River Valley. High-lights of the 1956 football season will also be shown.

A third get-together is planned as a pre-game victory luncheon in Evanston.

Jack Stromwall '50BA and Manley Monsen '24BS-(EE), co-chairmen of the Eau Claire activity, said alumni will meet at the Holiday room of Hotel Eau Claire at 6:45 p.m., Oct. 9. Tickets are \$3.00 each and checks should be mailed before Oct. 7 to Jack Stromwall, 225 Viking Place, Eau Claire, Wisc.

Bill Playman '37BSCE, Fox River Valley president, and Don Luebke '46BBA invited alumni to the annual meeting at Valley Inn, Neenah, Wisc., 6:30 p.m., Oct. 10. Reservations and checks (\$2.75 each for din-

ner) can be sent to Don Luebke, 710 Kenzie Court, Menosha, Wisc.

ExSecy Haislet said that the Evanston program will be an informal one to "speed alumni on their way to the Northwestern game." Luncheon begins at 11:30 a.m. in the Crest Room of Orrington Hotel, 1710 Orrington Avenue. Athletic Director Ike Armstrong will also be present.

Tickets for luncheon are \$2.30 including tax and gratuities. Guests will be served by reservation only and reservations, accompanied by checks, should be sent before Oct. 8 to the Alumni Office, 205 Coffman Memorial Union, University of Minnesota, Minneapolis 14, Minn.

POTPOURRI

(Continued from page 7)

'M' CLUB

(Continued from page 8)

All-American; Bronko Nagurski '26-'33, a member of the famous teams which stopped Illinois' galloping Red Grange; and Clarence "Biggie" Munn '32BSEd, six-time letter winner who is now Michigan State's athletic director.

Munn received another significant honor this spring when, at the annual "M" banquet, he was given the University's Outstanding Achievement Award.

Eleven intercollegiate sports for which letters are awarded at the University are football, baseball, track, basketball, hockey, gymnastics, swimming, tennis, golf, cross country and wrestling. Letters may be earned by both undergraduates and graduates, and each sport has different requirements for a letter. In addition to actively participating in a sport, the letterman has made a definite contribution to his team.

"M" club members receive life passes to all University athletic events.

Plans are already being made for next June's "M" Club banquet, when 50-year pins will again be presented to honored members, and classmates will again have an opportunity to renew old memories across the same table. More than 2,200 invitations will be sent to lettermen who still fondly recollect their days as University sports figures.

And, although no invitation will be sent next June to E. B. Pierce, that banquet will serve as another memorial to a man who helped start the "M" Club on its way to being a University tradition.

barbecue, chefed by Sheldon Beise, '36BSEd, at his Menlo Park home. On Monday there was a luncheon for all Minnesota alumni.

While in the area, we stopped at the Berkeley campus of the University of California. We saw the plans for the expansion of the physical education and recreation facilities with Dr. Carl Nordly as our guide. Carl, who for so many years was on the Minnesota staff, is now head of the Department of Physical Education at Berkeley.

While on the Berkeley campus, I also had a chance to go through the new \$400,000 Alumni House which was completed only a year ago. This is the finest alumni facility in the country. It was built by funds donated by 4,000 alumni. Not only has it greatly increased alumni activity on campus, but it is rapidly becoming a center of student and faculty activities.

More and more separate facilities are being built to house alumni activities. It encourages alumni to meet on the campus — gives them their own place and identity. As the number of alumni increase (200,000 at Minnesota by 1970), a place of their own will become more important. In the Big Ten, houses for alumni have been built at Michigan, Ohio State, Northwestern and Iowa. This is a facility badly needed on our own campus.

Most cordially,



GOPHER GRAD

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Ten awards are open to candidates interested in studies leading to a Doctor of Philosophy or Doctor of Engineering degree or in conducting post-doctoral research.

Each Fellowship provides a cash award of not less than \$2000 . . . a minimum salary of \$2500 for summer or part-time work . . . up to \$1500 for tuition, books, and research expenses . . . and moving and transportation costs. Eligibility is based on the completion of one year of graduate work in physics or engineering, and qualification for graduate standing at California Institute of Technology, University of California (Berkeley), or Stanford University. Application closing date: January 15, 1958.

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A Top-Flight Physicist

Dr. Elmer Hutchisson, dean of the Graduate school and director of the research division of the Case Institute of Technology since 1955, on being named director of the American Institute of Physics. A teacher and administrator giving marked impetus to the use of physicists by industrial firms, he is founder of the "Journal of Applied Physics," and former professor and head of the department of physics at the University of Pittsburgh. During World War II, he was chief technical aide of the National Defense Research Committee. Dr. Hutchisson holds the Distinguished Service Citation of the American Association of Physics Teachers. He received his PhD degree from the University in 1926 and, in 1951, was given Minnesota's Outstanding Achievement Award.


A Doctor General


Brigadier General S. F. Seeley on being assigned to a new position in the office of the Army Surgeon General, reported to be the chief of the professional division. Gen. Seeley will serve as consultant in all phases of Army medicine and supervise Army medical practices in this country and abroad. Gen. Seeley, 30-year veteran of the Army Medical Service, prior to his new assignment was commanding general of the Valley Forge Army Hospital. He has been chief of the surgical service at both Brooke Army Hospital, Fort Sam Houston, Tex., and Walter Reed Army Hospital, and is a former director of the division of surgery of the Army Medical Department Graduate School. Formerly chief consultant in surgery for the U.S. Army in Europe and a winner of the Legion of Merit, Seeley received an MD from the University in 1927.



An Educational 'Executive'

Prof. Charles C. Winding on being named director of Cornell's School of Chemical and Metallurgical Engineering. An authority on rubber, plastics, heat transfer and fluid flow and assistant director since 1947, he is frequently consulted by industrial firms, including at present Rome Cable Corporation and B.F. Goodrich Company. He has written a number of technical articles in these fields, and is co-author of a book on "Plastics, Theory and Practice." During World War II he directed a government-sponsored research project at Cornell, on synthetic rubber. He is a fellow of the American Institute of Chemists and a member of numerous other professional societies. He received a BCE in 1931 and PhD in 1935. He joined the Cornell faculty in 1935 as an instructor.



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Robert P. Provost
Director of the Greater University
Fund (GUF)

"Should I give money to a state supported University?"

What would you give as an answer to this question?

To help you develop your answer, several more questions are in order. They would include:

Does annual giving by alumni represent potential dollar resources that could be of value to a state university with a budget of sixty million dollars a year?

Do tax-supported funds provide for all programs and facilities of a large tax supported institution?

Is giving to higher education a responsibility or an opportunity?

Let's start with the potential of alumni giving. One has only to do quick mental arithmetic to realize the huge gift dollar potential of a 100,000 alumni. A contribution of \$10 would mean a million dollars.

The second question deals with the use of gift money in a tax-supported institution. Small gift resources combine with budget funds to multiply the University's effectiveness in teaching, research and service. Gifts support all student aids (scholarships, fellowships, prizes and loans), finance many valuable research projects, provide needed equipment and enable construction of facilities that would otherwise be impossible.

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There is a certain responsibility existing in all Americans. We are the most generous people on the face of the earth. We give to a variety of projects and causes.

Higher education, by its very nature, rises above the ordinary request for contributions. It presents a challenging opportunity to see our dollars combined with other gifts and with the existing tax resources to complement the greatness of a great University.

GOPHER GRAD

Did you choose the right career?

Answering these questions may help you decide whether you should consider a change.

1. Is your financial advancement in line with your years of experience? YES NO
2. Do you have sufficient freedom in your work? Can you move on your own — make independent decisions? YES NO
3. Does your job stimulate you to make full use of your education and abilities? Is it providing the training necessary for future growth? YES NO
4. Are you receiving adequate security? Is your future protected by group insurance and retirement benefits? YES NO
5. Is there social and professional recognition attached to your present field? YES NO
6. Do you have the satisfying knowledge that your work is important — that it contributes to the welfare of others? YES NO

How many negative answers did you give to the above? Too many for your own satisfaction? Then perhaps you should explore the opportunities offered by a career with Massachusetts Mutual Life Insurance Company.

BECAUSE the market for life insurance is expanding at an unprecedented rate and because Massachusetts Mutual is one of the leaders in the field, there is an unlimited opportunity to make financial progress. Representatives who have been under contract five years or more average over \$12,000 annually — with one out of ten averaging over \$25,000. And along with stable income they are receiving group medical and life insurance plus retirement benefits.

AT Massachusetts Mutual, there is no ceiling on growth. You are like an independent businessman, free to chart your own success.

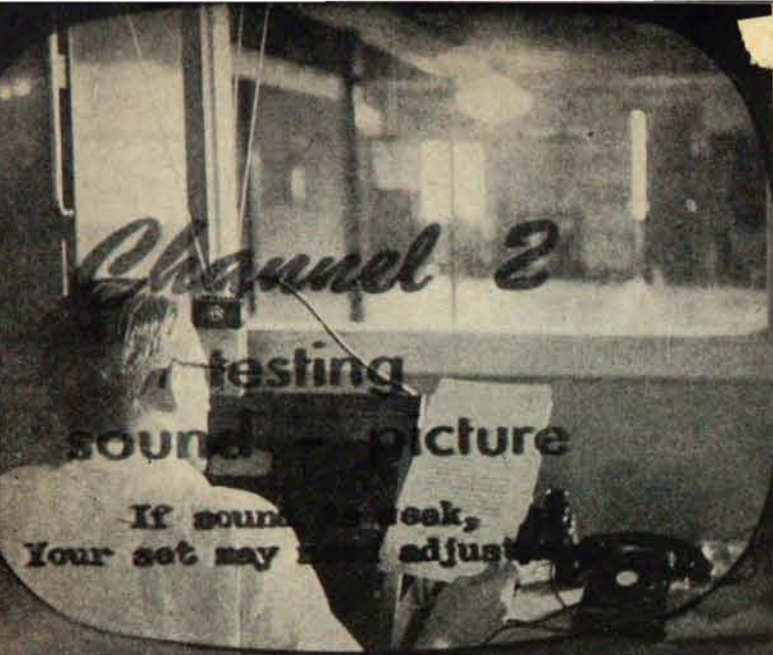
AND as a financial counselor, not only will you be encouraged to make utmost use of your present abilities — you will be taught to develop new ones. Massachusetts Mutual offers one of the most outstanding field-tested courses in life insurance selling to help you become successful.

INDIVIDUAL training plus clinics and conferences will help you move rapidly ahead in a professional career that is recognized by your entire community as performing a beneficial service.

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Viewers saw this on their sets before Sept. 16.

(University television program listings can be secured at the 'U' Television Production Center, Rm. 1, Eddy Hall)

Chief Engineer Bert Holmberg '44BEE (left) and Wayne Mayer '55BS(IT) check the monitors during a test program.



Television Goes To College

Television has grown up and is starting out in college this fall. KTCA-TV, channel 2, the Twin Cities educational television station, took to the eye and ear in a lively inaugural ceremony in the middle of last month. Studios are in a temporary building on the St. Paul campus.

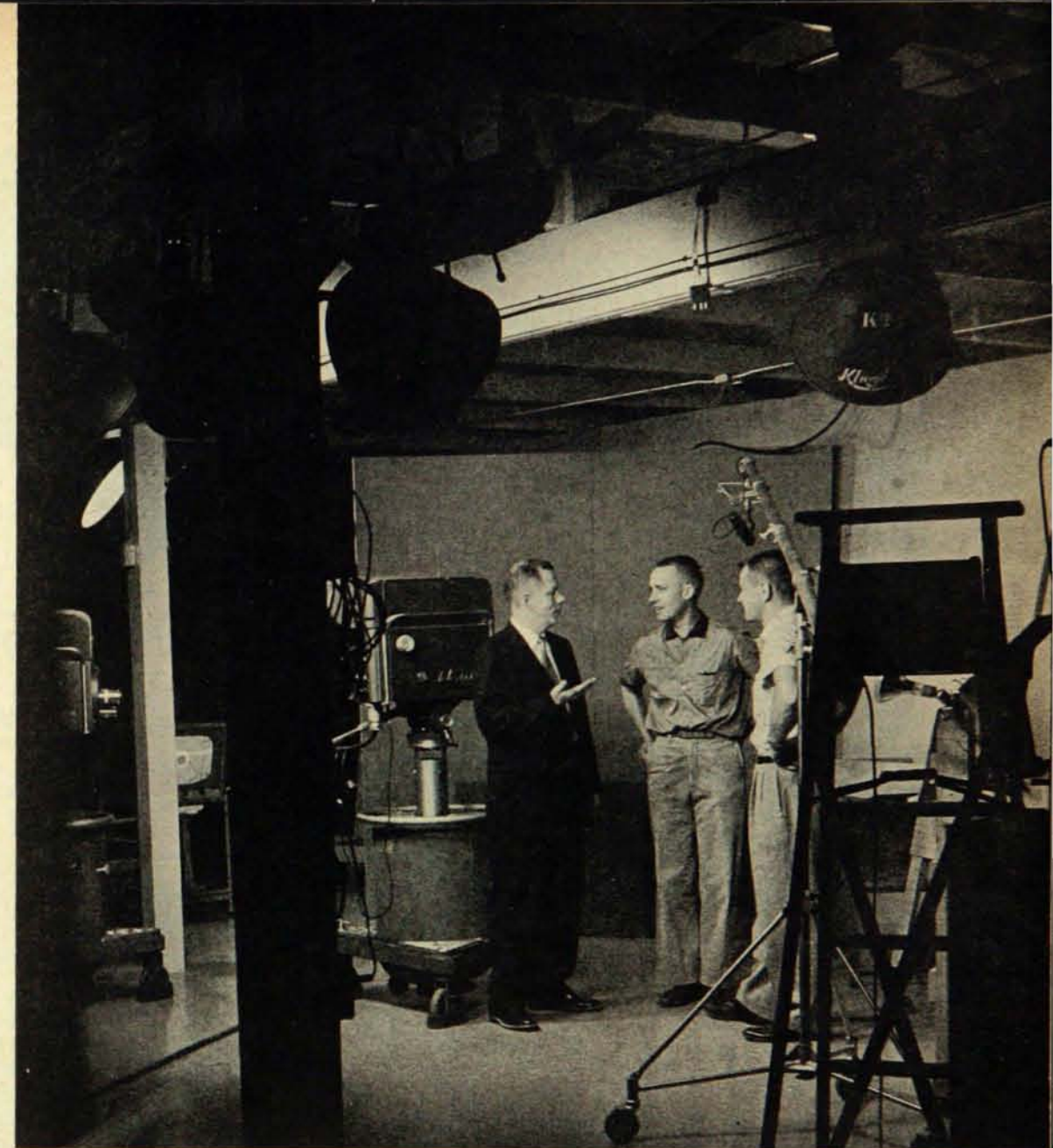
The University has contracted with the privately-owned station for one hour from 9:00-10:00 p.m., Monday through Friday.

Living room information is being offered on the arts, government, sciences, gardening, wild-life and social problems. A program series generally runs for 13 weeks.

Dr. Burton Paulu '34MA, head of KUOM and director of University television planning, has announced that some programs are begin given for credit. At the present time, one of these programs is in progress—a course on government conducted by Asher N. Christensen, popular political science professor.

Photographer Dan Perlmutter of Media News Pictures recaptured a view of what goes on behind the eye of the camera.

Russ Winjen (center), sophomore who is both transmitter engineer and supervisor, talks over his problems with Holmberg (left) and Mayer.



Director of the University's hour on KTCA-TV is Dr. Burton Paulu.

Part of the volunteer force which helped KTCA-TV prepare for telecasts included Barbara Blunt, Edina, (left), and Nancy Eitts, Mpls.





MEET MAA'S NEW OFFICERS AND EX' COMMITTEE

Leif Strand '29DDS (fourth from left) new president of the MAA, and his executive committee took time out during a recent meeting to be photographed as a unit. Pictured (left to right): Ed Haislet, executive secretary of the Minnesota Alumni Association; George L. Faber; Catherine Coffman Knudtson, secretary; Pres. Strand; J. D. Holtzermann, first vice president; Wendell T. Burns, second vice president; Leslie E. Westin; and Sam W. Campbell, treasurer. Faber is from Chicago, Westin is from St. Paul and the other members are from Minneapolis. Missing from the photo is Roy W. Larsen. (Media News Photo, Perlmutter)

Leif R. Strand, St. Paul, a 1929 graduate in dentistry, has been elected president of the Minnesota Alumni Association. Strand, a former football guard, succeeds Glenn E. Seidel '36BME, vice president in charge of engineering for Mpls.-Honeywell Regulator Co.

Other officers named by the MAA Board for the coming year are J. D. Holtzermann '21BA, first vice president; Wendell T. Burns '16BA, second vice president; Catherine Coffman Knudtson '23 BSEd, secretary; and Sam W. Campbell '25BA '27LLB, treasurer.

All new officials are from the Twin City area. Holtzermann is a director of Fourth Northwestern National Bank and manager of Holtzermann, Inc., imports and foods, Mpls. Burns, who lives in Excelsior, is senior vice president of Northwestern National Bank. Mrs. Knudtson, daughter of the late

Lotus B. Coffman, former University president, is a Mpls. homemaker.

Campbell is an investment broker with Jamieson & Co. and for-



MAA President Strand

merly a lawyer in the Attorney General's office.

The new officers began the coming year's work at a meeting held in the alumni offices Sept. 3.

Serving with the new officers as a part of the executive committee are Leslie E. Westin '40BSEd, St. Paul, state senator who is also with the NW Mutual Life Insurance Co. of Milwaukee; Roy W. Larsen '13BA, Mpls., president of Twin City Federal Savings and Loan Association; George L. Faber 1916-17, Chicago, manager for King Midas Flour Mills, and Glenn Seidel.

Larsen, with many years of activity in alumni affairs, is also chairman of the Henry L. Williams Memorial Scholarship Committee for athletes which is part of the Greater University Fund.

MAA ExSecy Ed Haislet announced that the 20-member board of directors has 3 new members as

GOPHER GRAD

Strand Names MAA Committees



W. G. Benjamin
New on Board



Janet Widseth
New on Board

a result of the annual MAA nationwide election held this spring. The newcomers, elected for a four-year term, are Janet Hart Widseth '39BS (HE), Mpls. homemaker who is chairman of the local government committee for the League of Women Voters; Walter G. Benjamin '18BS '20BM '21MD, Pipestone physician and surgeon; and Russell E. Backstrom '25BSME '27MS-ME, Mpls., manager of the western industrial district for Wood Conversion Company in St. Paul.

Backstrom is a former constituent group president having headed the alumni association of the institute of technology last year. This is his second term on the MAA board of directors; he was a member from 1940 to 1943.

Haislet also announced that the two incumbents for the MAA board of directors were balloted in during the annual election. These alumni, who will serve a three-year term, are Wendell T. Burns (since named the second vice president of the organization), and Charlotte Winget Chope '27BA, Wayzata, associated with Dewey Newcombe appraisal research.

MAA President Leif Strand '29-DDS has announced that Sam W. Campbell '25BA '27LLB will succeed Wendell T. Burns '16BA as chairman of the association investment committee.

Burns will vacate the chairmanship to take the position of second vice president of the MAA but, as a long-time member of the investment committee, shall remain with the group.

The two remaining members of

the MAA executive committee meeting are:

Honors (nomination of alumni for special recognition) — Betty Sullivan '22BSChem '35PhD, chairman; Algot Johnson '10EM, and Arnulf Ueland '17BA;

University scholarship — Milton H. Kuhlman '40MA, Francis (Pug) Lund 1931-35, and Harriet Thwing Holden '33BA;

Marie A. Wensel '48BA was named to the Union Board of Governors and Owen K. Hallberg '46-BSAg '47MS to the St. Paul Campus Union Board.

Members on regular committees, with the exception of Hallberg, live in Mpls. Hallberg's home is in Chicago City.

President Strand also announced the names of thirteen who will comprise the past presidents' committee. The newest member is Glenn E. Seidel, '36BME, last year's MAA head. Others in the group include William F. Braasch '00BS '03MD, Rochester; Victor Christgau '24BS-Ag, Washington, D.C.; George Earl '06BA '09MD, St. Paul; Arthur R. Hustad '16BA, newly-appointed chairman, Mpls.; Hibbert M. Hill '23BSCE, Mpls.; Arthur O. Lamp-land '30BBA '34LLB, St. Paul;

Francis (Pug) Lund 1931-35, Mpls.; Harvey Nelson '22MD, Mpls.; Ben W. Palmer '11BA '13-LLB '14MA, Mpls.; Erling Platou '19BS '21MD, Mpls.; Wells J. Wright '36LLB, Mpls., and Edgar F. Zelle '13BA, Mpls.



Betty Sullivan
Honors Committee
Chairman



Sam Campbell
Investments
Chairman

the committee, both reappointed this year, are James C. Harris '47-MBA, associate vice president of Northwestern National Bank, and Paul Reyerson '17BA '19LLB, trust department of First National Bank. All committeemen are from Mpls.

Other appointments announced following the September meeting of



Charlotte Chope
Re-elected with
Burns



Russ Backstrom
New on Board
of Directors



Marie A. Wensel
Union Board
Representative



Arnulf Ueland
Honors Committee
Member



Glenn E. Seidel
Past Pres.
Committee



Arthur R. Hustad
Chairman
Past Pres.

Gross and Hatch Re-named to GUF

Louis Gross '25LLB, Mpls., chairman of the Greater University Fund administrators, and Lloyd A. Hatch '23BSChem, St. Paul, have been reappointed to the Board of Trustees.



Louis Gross

In an announcement, MAA President Leif Strand indicated that the two alumni will be serving three-year terms.

Other members of the GUF Board are Betty Sullivan '22BS-Chem '35PhD, Mpls., and Edwin A. Martini '30LLB, Duluth, whose terms expire next year; and C. R. Carlson, Jr. '23BSAg '24MS, Mpls., whose term expires in 1959.

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MAA Election Vote From Sea

Among the votes mailed in for the spring election of MAA board of directors was one cast from the USS Monticello.

In accordance with the Australian ballot, who cast it for whom is a secret but the vote brings the number of areas participating outside the U.S. up to three (England and Canada were the others).

Members from 28 states in the U.S. also sent in ballots, the greatest number coming from Minnesota (242). Heaviest vote by cities (excluding Mpls. and St. Paul) came from Chicago, Los Angeles, Seattle, Manitowoc and San Francisco, in that order.

The ten class years from which came the greatest number of ballots were from 1921 to 1930.

While the greatest number of votes was cast by the class of 1956, the classes of 1922 and 1924 tied each other while running a close second.

R. J. Swenson Southern California President

A fanciful champagne flight to the Minnesota homecoming game was the theme of a dinner held by the Southern California MAA recently.

Two members won airplane and football tickets in connection with the club's scholarship program.

New club officers are R. J. Swenson '29BBA, president; Harland Benike, vice president; James N. Murphy, secretary; and Dr. Fredin '46DDS, treasurer. Directors include William Luther '30-35, Bud Lee '46BBA and Dr. John Wm. Perry '44MD.

Members of the class of 1907 and of any class prior to that year were honored with lifetime memberships. Members of the class of

1932 are given a one-year paid membership, according to Pres. Swenson.

Coordinating the program were Harland J. Benike '48BEE and Harry White '56BA.

New Life Members

Dr. Charles A. Aling '26BS '28MB '29MD

Minneapolis, Minn.

John A. Anthes '34BChE '39PhD
Bridgeville, Pa.

David H. Canfield '28BBA
Santa Fe, New Mexico

Jacob Frederic Goossen '49BA
'50MA '54PhD
St. Cloud, Minn.

Lloyd A. Hatch '23BSChemE
St. Paul, Minn.

Freeman A. Nichols '31BME
Neenah, Wis.

Mayer C. Stiebel '53BA
Chicago, Ill.

Mrs. David L. Tilton (Mary C. Knudtson) '50BA
Santa Barbara, Calif.

LaVerne V. Vorachek '55BBA
Lankin, North Dakota

Mrs. Howard F. Wells (Sally Henrikson) '28BSED
San Diego, Calif.

Laurane Evelyn Wold '38BSED
Alexandria, Minn.

Alumni Representatives For Senate Posts

Names of alumni to represent the Association on Senate committees have been presented for Senate approval of Pres. J. L. Morrill, MAA President Leif Strand said.

Present members on Senate committees are Deborah Dahl Proffitt '38BSED, Mpls., student affairs; Lawrence (Duke) E. Johnson '29BArchE, Mpls., athletics; and Richard A. Rohleder '46BA '50LLB, Mpls., military affairs.

The University Senate will name one additional member for each of the three committees.

NORTHROP NEW BUILDING IN OPERATION

Engineering Center Opens New Horizons

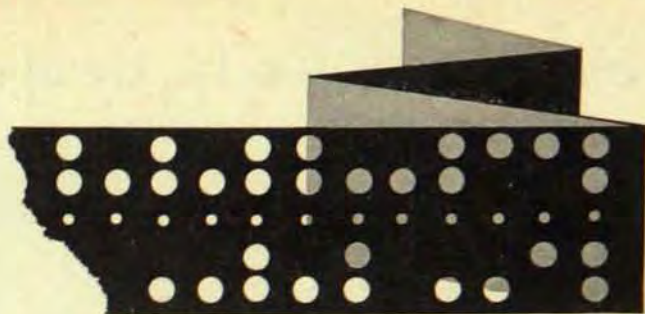
(HAWTHORNE, CALIF.) Doors opened recently at Northrop's new Engineering and Science Center here in Hawthorne, signaling the start of a new era in research and development for Northrop Aircraft. Into the multi-million-dollar structure moved some



three thousand of the nation's top creative engineers. These are the engineering teams that proved their capabilities with the design and development of the USAF-Northrop F-89, atomic-rocket-firing long range interceptor; the USAF-Snark SM-62, the nation's first production intercontinental guided missile; and the recently disclosed USAF-Northrop T-38, the world's first aircraft designed specifically as a supersonic twin-jet trainer.

The magnificent sprawling facility is the most recent addition to the already superlative engineering and science complex at Northrop. In recent months an environmental test laboratory, engineering test unit, engine test cell and subsonic wind tunnel have become operative. With these impressive plant additions Northrop will continue to pioneer new aeronautical concepts. Now, this advanced complex is ready to move Northrop even farther ahead of the field in the research, design and development of advanced missiles and supersonic jet aircraft.

To its scientists and engineers, who are its mind and heart, Northrop dedicates this beautiful new building, the Northrop Engineering and Science Center.



computers

Northrop needs computing analysts, qualified either by experience or education, to work in their ever-expanding Computer Center at Hawthorne, in Southern California. If you are qualified, there is an interesting position as well as a bright future for you at Northrop.

Applied mathematicians and engineers are needed as computing analysts for assignment to Northrop's analogue computing facility, as well as their enlarged digital electronic computer department which provides unparalleled service in the practical solution of complex engineering problems.

Your assignments will be fresh and stimulating, and you will have frequent opportunities to advance in your field. Besides an excellent salary, you will receive company-paid benefits that are unexcelled in the entire aircraft industry. Your colleagues will be the brilliant engineers who developed the USAF-Snark SM-62 intercontinental guided missile and the new USAF-Northrop T-38 supersonic twin-jet trainer. These men are congenial and helpful, and will respect your ability and individuality just as Northrop expects them to do. And you and your family will fully enjoy Southern California's many attractions and its delightful all-year climate.

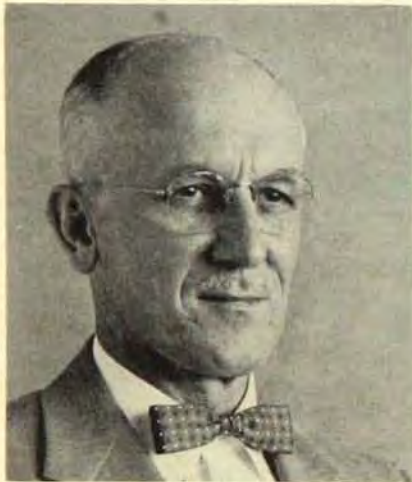
If you qualify for any phase of computer research, design, or application, we invite you to contact the Manager of Engineering Industrial Relations, Northrop Division, Northrop Aircraft, Inc., ORegon 8-9111, Ext. 1893, or write to: 1041 East Broadway, Dept. 4600A7, Hawthorne, Calif.



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Frank Stodola



Ira Cram

Milton C. Wunderlich '19BSEng '20BME, president of the alumni association of the institute of technology, announced that the Board of Regents will honor Ira H. Cram, senior vice president for Continental Oil Co., Houston, and Dr. Frank H. Stodola, Peoria, leading chemist in the field of fermentation, U. S. Department of Agriculture, with the University's highest award at the annual meeting of Institute alumni Oct. 4.

Cram received a BA from the University in 1923 and an MA with specialization in geology in 1924. Stodola who, in June, won the Department of Agriculture's Distinguished Service Award from Secretary Ezra Taft Benson, graduated with a BS in 1928 and earned a PhD in 1933.

Annual Meeting Nov. 1 For Business School

Orem O. Robbins '36BBA, Mpls., president of the alumni association of the school of business administration, has announced that the annual meeting will be held on campus Nov. 1.

Tentative plans include a luncheon, an afternoon discussion group and a 6:30 p.m. dinner in the junior ballroom of Coffman union.

Putnam O'Grady '47BA, chairman of the program committee, has indicated that a speaker of national reputation is being sought for the evening dinner meeting.

Moderator and keynoter for the afternoon panel session on "Engineering Training" will be Hibbert M. Hill, '23BSCE, chief engineer in charge of engineering and design for the Northern States Power Co., Mpls.

The day-long meeting will be held in the mechanical engineering building. Panel discussions are scheduled for 2:30 p.m. in Rm. 4. Climaxing the session will be a dinner meeting at 6:30 p.m. in the junior ballroom of Coffman union.

Dad's Day Celebration Scheduled for Nov. 23

Plans for a full Dad's Day program, including the traditional honoring of fathers of "M" men, promise a bigger and better celebration for University fathers who, this year, will be honored Nov. 23, according to Carlton Cronin, Mpls.

Cronin, president of the Dad's Association, said the program is under the direction of Norman Nelson '24BA, Mpls.

Education Alumni Elect President

Nolan C. Kearney '24BSEd '32-MA '48PhD, St. Paul, has been elected president of the college of education alumni association for the coming year. He succeeds Emmet D. Williams '48BSEd '50MED, St. Paul. Kearney, who has been a lecturer on campus during University summer sessions, is the assistant superintendent in charge of research and curriculum for the St. Paul public schools.

Other new officers are Louis Adolphsen '46-50, Albert Lea, vice president; and Mrs. Howard W. Merriman '38BSEd, Hopkins, secretary-treasurer. Adolphsen is the principal at Albert Lea high school and Mrs. Merriman (nee Roth) works with Hennepin County Red Cross.

New board members include Clarence Hemming '47BSAgEd of Alexandria, and Mrs. Viola S. Thompson '52BSEd '54MA of Minneapolis. Also on the board is Arnold Woestehoff '48MAEd of Minneapolis.

Retiring president Williams continues in an executive capacity



Nolan Kearney

with the group as the honorary ex-officio member of the board. Also serving in advisory capacity is Dr. Walter W. Cook, dean of the college of education.

GOPHER GRAD

Good news traveled fast at Michigan State

It started with Bob Yackels. Bob began his career with New England Life even before he graduated from Michigan State. While still a senior, he worked part-time with our General Agent in Grand Rapids and knew this was the company for him. Soon he had won success as a full-time agent and was promoted to District Agency Manager in Lansing.

The good news about Bob traveled fast. Some of his classmates decided to follow suit. Now each year more men from the graduating class confidently turn to New England Life for a career in life insurance. Thirty-eight Michigan State men are now representing us. Ten of them, pictured on this page, already hold management positions.

Not all of our agents from Michigan State joined us immediately upon graduation. Not all participated in the fine life insurance course there while in college. But they've all had one thing in common right along — an awareness of how New England Life gives a man a firm foundation, from the start, in a challenging and lucrative business.

There's room in the New England Life picture for other ambitious college men who meet our requirements. You get income while you're learning. You can work anywhere in the U. S. A. Your future is full of substantial rewards.

You can get more information about this career opportunity by writing Vice President L. M. Huppeler, 501 Boylston Street, Boston 17, Mass.



ROBERT YACKELS
Agency Manager
Davenport, Iowa



GEORGE RUTENBAR
General Agent
Nashville, Tennessee



JOHN BUDA
Agency Manager
Detroit, Michigan



BILL HARRISON
Asst. to General Agent
Oakland, California



HARVEY YUDELL
DAD Plan Manager
Flint, Michigan



RON STEVENSON
District Agent
Lansing Dist. Agency



RON CRAVEN
Agency Supervisor
Dayton, Ohio



JAMES SIEMERS
District Agent
Battle Creek, Michigan



DONALD H. SIZER
Sales Director
Detroit, Buda



ROBERT L. CALHOUN
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Detroit, Pomeroy

NEW ENGLAND

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BOSTON, MASSACHUSETTS

THE COMPANY THAT FOUNDED MUTUAL LIFE INSURANCE IN AMERICA — 1835

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Bruce J. Robinson, '27, Indianapolis
Louis M. Schaller, '29, Minneapolis
Mailand E. Lane, Sr., '32, Minneapolis
Richard H. Luby, '34, Phoenix
Hubert D. Wheeler, '34, Gen. Agt.,
Duluth

Francis L. Lund, CLU, '35, Gen. Agt.,
Minneapolis
Howard D. Burdick, '39, Dallas
Morton C. Mosiman, '40, Minneapolis
Lloyd V. Shold, '42, Duluth
Robert R. Abroahams, '44, Minneapolis
Earl H. Mosiman, '47, Minneapolis

Robert D. Myhr, '48, Chicago
Ariel H. Oberg, '48, Los Angeles
Theodore J. Lee, '49, Duluth
H. Larry Wilson, Jr., '52, Minneapolis
John B. Heimkes, '54, Minneapolis
Ben F. Day, '51, Milwaukee
William G. Sullivan, '56, Minneapolis

Fall Enrollment at 26,500

Approximately 26,500 students are enrolled for classes for the fall quarter, according to Dean R. E. Summers of the department of admissions and records.

The enrollment is an increase of more than 1000 over last fall when 25,307 students were registered, 2,123 of them on the Duluth campus.

Present estimates in over-all University planning indicate that the University will have 47,000 students by 1970.

Enrollments in both summer sessions also increased this year.

221 Promotions Announced By President J. L. Morrill

Promotion in either academic rank or administrative position of 221 University faculty members has been announced for the coming year by Pres. J. L. Morrill.

In a reorganization of the school of mines and metallurgy, a part of the institute of technology, Prof. Strathmore R. B. Cooke will become head of the school and chief of the newly designated division of metallurgical engineering. Prof. Eugene P. Pfeider will continue to serve as chief of the school's division of mineral engineering, formerly the division of mining.

The mines experiment station will become a division of the school, and Henry H. Wade, who has served as acting director since the retirement of E. W. Davis in 1955, will become station director.

Pure research in the science of metallurgy will be carried on in a new department of metallurgy being established within the school of chemistry, also a part of the institute of technology. Professor Morris E. Nicholson, former chief of the division of metallurgy, will be head of the new department which along with chemistry and

E. W. Ziebarth, dean of summer sessions, reported that 8,898 or 672 more students than last year registered for the first session and 6,119 or 183 more than a year ago registered for the second session. A total of 850 graduated during the summer.

The 93 graduates of UMD's first summer term set a new high for the Duluth campus. The previous record was 75, recorded in the first term of 1956.

Approximately 6,000 new students participated in the annual orientation-registration program prior to the opening of school.

chemical engineering will now make up the school of chemistry.

Heading the redesignated college of veterinary medicine, formerly the school of veterinary medicine, is Professor William T. S. Thorp who now will have the title of dean of the college. He formerly was assistant dean of the institute and director of the school of veterinary medicine. Henry J. Griffiths, professor of parasitology and assistant director of the school, will become assistant dean of the new college.

Among other promotions were Alan Donagan, assistant to associate professor and department chairman in philosophy.

Pres. Morrill also announced that Gale Sperry will become acting bandmaster, replacing Gerald Prescott who retired this summer after directing the University band for the past 25 years.

Earlier this year, E. W. McDiarmid, dean of the college of science, literature and the arts, said that Prof. Robert H. Cameron would replace Prof. R. W. Brink who retired this June after being chairman of the mathematics department since 1939.

New Naval ROTC Professor Reports

Colonel Robert O. Bowen, United States Marine Corps, has reported for duty at the University of Minnesota as professor of naval science and commanding officer of the Naval Reserve Officers' Training Corps. He succeeds Captain Frank



Col. R. Bowen

Bruner, who retired from the Navy in June.

Colonel Bowen entered the Marine Corps upon graduation from the Naval Academy in 1933. He is a 1947 graduate of the Naval War college.

Health Service Addition

Health Service facilities will be increased by almost one-third with the addition of another wing to the present building next year.

Dr. Donald W. Cowan, assistant director of Health Service, said the addition and remodeling of the present building will cost approximately \$700,000.

"We're looking ahead to the predicted enrollment," he said, "but are currently faced with cramped conditions."

He said the present building, occupied since 1950, "looked big" when it was completed and seemed large enough for "any possible enrollment."

GOPHER GRAD

NOW...ON WESTERN AIRLINES!

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Now Western brings to its breakfast flights to major cities in the West a new high in gracious service – the same superb quality you already enjoy on its celebrated luncheon and dinner “Champagne Flights.”

Once aloft, you are served a breakfast tray of fruit, eggs or potatoes, and hot coffee.

Then from the silver chafing dishes of the “Hunt Breakfast” cart, an attentive stewardess serves your choice of breakfast delicacies – steaks, broiled chops, tempting slices of Canadian bacon, sausages and Danish pastries or muffins.

Truly the “Hunt Breakfast” makes it a flight to remember... and only on Western Airlines!



Hunt Breakfast

FLIGHTS

- ★ Seattle/Tacoma to San Francisco and Los Angeles.
- ★ Portland to San Francisco and Los Angeles.
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- ★ San Francisco to Salt Lake City, Denver and Minneapolis-St. Paul.
 - ★ Los Angeles to San Francisco.
- ★ Los Angeles to San Francisco, Portland and Seattle/Tacoma.
 - ★ Los Angeles to Salt Lake City and Minneapolis-St. Paul.
- ★ Minneapolis-St. Paul to Denver, Salt Lake City and San Francisco.

WESTERN
AIRLINES

With 26 Lettermen

Football Squad Big 10 Favorite

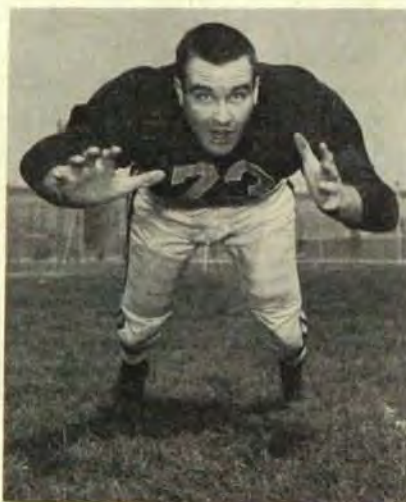
"This is the year for the Minnesota football team." And that is the statement read and heard most often as the Gophers start an unprecedented schedule of eight Big Ten games, beginning with Purdue on Oct. 5 in Mpls.

The pressure is on Coach Murray Warmath and his veteran squad of 26 lettermen. Sports experts are pointing to Minnesota as the favorite to win the Big Ten championship and the accompanying trip to the Rose Bowl. Some even say the Gophers will challenge fantastic Oklahoma for national honors.

Home fans got their first look at Minnesota's 1957 squad Sept. 28, in a non-conference game with Washington in which veterans dominated the play. Sophomore halfback Bill Martin currently appears to be the only newcomer having a chance to win first team assignment. Yet the fierce fighting for starting positions indicates Minnesota will be protected from "senioritis," a contagious malady resulting in over-relaxation from over-confidence when veterans have no competition from reserves.

In the backfield, All-American candidate Bobby Cox has Dick Larson and Jim Reese pushing him. Bob Soltis will have to do some fancy stepping to maintain the left halfback post from lettermen Ken Bombardier, Norm Anderson and from Martin.

At right halfback, Bob Schultz is getting competition from veterans Bill Chorske and Dave Lindblom. Sophomore Arlie Bomstad, who gained quite a reputation as a ball carrier while in the army, also is expected to press the three lettermen for the right halfback.



Mike Wright
Tackle

Powerful Bob Blakely seems to have momentarily ousted Dick Borstad, 1956 regular, from the starting lineup at fullback. Rhody Tuszka, a third veteran, also is in the fight.

The same story of competition is true among the linemen. One of the most spirited battles is at center among Bill Jukich, Mike Svendsen and sophomore Jerry Shetler.

Minnesota suffered its greatest loss at tackle when All-American and Phi Beta Kappa Bob Hobert received his degree. Presently on the first team at the tackles are 248-pound Frank Youso and 234-pound Norm Sixta. Paul Barrington, who also performs at guard, massive Ed Buckingham at 273 pounds and sophomores Mike Wright and Francis Brixuis are the leading competitors of Youso and Sixta.

Dave Burkholder and Bob Rasmussen have the edge on the guard candidates. Their foremost challeng-

ers for starting berths include veterans Dave Herbold (who also plays tackle), Ev Gerths, Kelvin Kleber, leading punter in the Big Ten two years ago and sophomores Dean Odegard, Jon Thesinga, Jim Phillipe and Jerry Wallin.

At the ends, Captain Jon Jelacic and Perry Gehring have been running with the first team. But Ken Schultz, brother of halfback Bob Schultz, and Bob Schmidt have enough experience to keep the regulars from loafing. Sophomores Tom Moe and Jerry Friend also are considered outstanding prospects.

Martin, Wright, Bomstad and Moe are rated by Warmath and his coaching aides as the best of the new players. According to many football observers, Martin has the potential to become the finest Minnesota halfback since Paul Giel.

The Gophers' line is almost as big as the legends about Minnesota lines. It will average about 218 pounds. Perry Gehring at 196 pounds is likely to be the only man under 200.

Among the backfield men, Martin, Anderson and Bombardier are probably the fastest. But Blakely, who combines speed with tremendous power, has the "greatest potential," according to the Gopher coaches.

Cox, who put the "go" in the Gophers with his signal calling and his waltz-in-and-out huddles last year, already has been selected for four pre-season All-American teams. Tim Cohane of *Look* magazine, Fred Russell of *Saturday Evening Post*, Mel Allen of *Sport* and Francis Wallin of *Playboy* all chose Cox as the nation's No. 1 quarterback.

Reunion Set for 1927 Gophers

A two-day celebration honoring the 1927 Gopher football team which stopped Illinois' fabulous Red Grange has been set for Oct. 25-26 in Mpls.

All Minnesota team members have been invited through an arrangements committee consisting of George MacKinnon '29LLB, Sholly Blustin '28PhmC, Roger Wheeler '28BSCHEM, Leif Strand '29DDS, Robert Tanner '30BA, Herb Joesting '1924-28, Duke Johnson '29-BArchE and Malvin Nydahl '35MD '45MS.

Activities preceding the Minnesota-Michigan game (Oct. 26) include a stag dinner Friday evening and a pre-game luncheon in the junior ballroom of Coffman union. ExSecy Ed Haislet announced that the stag dinner will be held at the Nicollet hotel, headquarters for the 30th anniversary celebration of the team.

Coach Doc Spears, special guest for the occasion, will be honored

NCAA Denies Request To Televis Sellout

The National Collegiate Athletic Association told Athletic Director Ike Armstrong the Minnesota-Michigan football game cannot be televised unless it is elected as the game-of-the-week Oct. 26.

Armstrong had requested permission to televise the game over KTCA-TV for the benefit of fans who were unable to purchase tickets for the sellout contest.

The NCAA denied the request because "appreciable damage" would be done to the St. Cloud Teachers-River Falls game at St. Cloud, the Macalester-Hamline contest in St. Paul and a St. John's game at Collegeville.

According to the "hurt" clause of the NCAA TV code, "Location of a concurrently conducted, non-televised college game within the 90-mile radius shall be considered sufficient evidence of 'appreciable damage'".

during the football stag dinner which begins after cocktails at 7:00 p.m. in the Hennepin room at the Nicollet hotel.

Spears, called the "greatest coach in the country" with a "1000 percent team," led an undefeated eleven which theoretically tied with Illinois for the Big Ten Championship with a record of 6-0-2.

1957 Football Schedule

Home Games

Oct. 5	Purdue
Oct. 26	Michigan
Nov. 2	Indiana (Homecoming)
Nov. 23	Wisconsin (Dad's Day)

Games Away

Oct. 12	Northwestern
Oct. 19	Illinois
Nov. 9	Iowa
Nov. 16	Michigan State

Section for Alumni At Games Away

Minnesota alumni living out-state who plan to attend one of the four away-from-home games this fall are being given an opportunity to be seated together as a group.

The alumni office announced that, through the courtesy of the athletic department, out-state alumni who made applications for tickets within a specified period received preferential treatment for seats located in a section with other Gophers.

Alumni in Davenport, Racine, Milwaukee, Madison, Chicago and Evanston received tickets for the Northwestern game, Oct. 12; those in Rockford, Chicago, Evanston, and Davenport were sent tickets for the Illinois game, Oct. 19; those in Iowa, including Davenport, received a mailing for the Iowa game, Nov. 9; and Gophers in Michigan as well as Cleveland, Ohio, received ducats for the Michigan State game, Nov. 16.

Tell You What We're Gonna Do...



UMD'S Co-captains Dick Forbort (left) and Marv Heikinen (right) get a rundown on strategy from Head Coach Lloyd Peterson as the Bulldogs enter the 1957 football season with a 4-4-0 record from last fall. At home, UMD plays St. John's, Oct. 5; Augsburg (homecoming), Oct. 26; and Gustavus, Nov. 2. In St. Paul, the team plays St. Thomas, Oct. 12, and Macalester, Oct. 19.

Around and About With the Alumni

'98

J. G. DeMars '98PhMD is still working daily. He owns and operates a pharmacy in Ada, Minnesota.

'06

Charles McMahon '06MD was presented a 50-year pin by the Nebraska State Medical Association at a meeting held in Omaha.

'17

D. K. Gannett '17BS of Denville, N.J. celebrated his 40th service anniversary with the Bell Telephone system in June. He is currently in charge of a group of engineers who are studying waveguide systems at the Bell laboratories for future use in furnishing long distance communication facilities. A steady contributor



D. K. Gannett

to technical journals, Gannett has been awarded more than 50 patents.

Samuel C. Gale '17BA, recently retired vice president of General Mills, Inc., Minneapolis, received the highest award, the Medallion of Merit of his fraternity, Phi Sigma Kappa, at its biennial convention this summer. Gale, a member of the University chapter of Phi Sigma Kappa for 42 years, gave the principal address at the convention dinner. Formerly in charge of public services and advertising for General Mills, he is currently a consultant on the staff. The Medallion of Merit award is made annually by the fraternity to a member who has distinguished himself through public service in any of the arts and sciences, and whose achievements have commanded national recognition in a business or professional field.

Arnulf Ueland '17BA, president of Midland National Bank, was recently appointed volunteer state chairman of the Minnesota Savings Bonds committee. He is former president of the Minneapolis chapter of the American Institute of Banking, Ueland also recently became a member of the MAA honors committee.

'23

Miner J. Markuson '23BS, associate professor of agricultural engineering, University of Massachusetts College of Agriculture, retired in August after 32 years on the faculty. Markuson taught structures, drawing, drainage and house planning—the first course of its kind in the United States. His total teaching career spans 37 years.

'25

Capt. George A. Nelson '25BS retired in July after a career of more than 31

years with the Coast and Geodetic Survey, U.S. Department of Commerce. His last assignment prior to retirement was the field inspection of the Columbia River and the coast of Washington for the revision of the Coast Pilot volume covering that area.

Edwin W. Molander '25BSArch recently opened his new architect office in Spokane, Wash., Edwin W. Molander and Associates, with his son, John B. Molander, one of his associates.

'26

Fred Heaberlin '26BA has been appointed executive editor of the St. Paul Dispatch.

'33

Dr. Ernest O. Herreid '28MS, '33PhD, professor of dairy technology at the University of Illinois, was one of nine American scientists winning Borden Company Foundation awards for outstanding research achievements during 1956. Each of the winners received a gold medal and \$1,000. Dr. Herreid, who was on the University faculty from 1928-35, was named for the Borden Award in Dairy Manufacturing by the American Dairy Science association. He was cited for his work on a wide variety of problems related to the processing of dairy products.

Dr. Irvin Kerlan '34MD recently accepted an appointment as Honorary Consultant on the Acquisition of Children's Books for the Library of Congress, for the period April 15, 1957, to April 15, 1958. In this capacity, Kerlan will advise on the acquisition of notable and representative children's books, especially in regard to those published abroad.

'37

Dr. Cleo Brunetti '32BEE, '37PhD was appointed executive assistant to executive vice president and manager of the Food Machinery and Chemical Corporation Ordnance Division at San Jose, California, in July. In his new position, Dr. Brunetti will be responsible for formulation of long-range objectives and coordination of development in new product lines. Currently the division is producing M59 armored personnel carriers, and M84's, a mortar carrying version of the M39, for the Army. A former University faculty member, Dr. Brunetti has been managing director of engineering, research and development for General Mills, Inc., Mpls., since 1953.

'39

Frederick L. Hines '39BS was recently appointed assistant national director of

Coming up: 64th Reunion for '94's!



Five of nine living graduates in Class of '94—six met last year—held their annual meeting this year, keeping a pledge to convene "as long as two members survive." Pictured at the Fridley estate of Class President Roberta Pratt Locke '94BA (seated, second from left) are (standing) Judy Crabtree, mascot; F. F. Strathern '94MD, St. Peter; F. M. Manson '94MD, Worthington; Mrs. Lorraine Chalmer Fenwick. Seated are Dr. Strathern's granddaughter, a guest; Mrs. Locke, Mrs. Frank Maloy Anderson and Mr. Frank Maloy Anderson '94BA '96MA, Washington, D.C. J. B. Gilman '94BCE, Minneapolis, was unable to attend this year because of injury from a fall which occurred shortly before the group met this summer.

the National Council of Boy Scouting Services. A physical education major, Hines has been active in Boy Scout administrative work since receiving his degree.

Albert Nelson Dingle '39BS was appointed associated professor of meteorology in the University of Michigan Department of Civil Engineering for the 1957-58 academic year. He formerly held the position of lecturer and associate research meteorologist.

'40

Dr. John A. Anderson '33BS '33MB, '34MD '40PhD, professor and head of the University of Minnesota pediatrics department, has been named vice president of the newly-organized National Council on Infant and Child Care, Inc. The purpose of the council is to "assist those organizations concerned with mass media of communication toward improving infant and child care. Anderson also has been named as one of three professors to lead 'U' research into the causes of cerebral palsy, mental retardation and allied neurological disorders. Studies will be conducted under a \$221,747 grant from the U.S. Public Health Service.

'42

Dr. Lucille Aust Hunt '42MS, formerly of the Northwestern University faculty, has been appointed associate professor of home economics and chairman of the department, University of California, Santa Barbara College.

Dr. Coy W. Waller '42PhD has been appointed director of chemical research in the Mead Johnson & Co. research division, Evansville, Ind. He will direct and coordinate the newly-created division in the Company's search for new pharmaceutical and nutritional specialties.

Walter Y. Fish '42BEE has been elected vice president in charge of engineering for the Arnoux Corp., Los Angeles. Before joining Arnoux, Fish was in charge of the CONVAIR Florida Missile Test Operations, Patrick Air Force Base.

Dr. Norbert '42MD, a consultant in medicine in the Mayo Clinic, Rochester, has been appointed an instructor in the Mayo foundation, University of Minnesota graduate school.

John S. McNown '42PhD, professor of engineering mechanics at the University of Michigan since 1954, has been named Dean of the School of Engineering and Architecture at the University of Kansas. Before going to Michigan, McNown was a member of the faculty of the State University of Iowa, where he served as associate director of the Iowa Institute of Hydraulics Research. During 1950-51 he was a Fulbright Research Scholar at the University of Grenoble, France, where he was awarded a doctor of science degree in physics.

'47

Col. Raymond J. Karpen '32BS, '47MS has been assigned as a sanitary engineer with the Army Environmental Health Laboratory, Army Chemical Center, Md. Col. Karpen has served in the Middle East, the Far East and Europe. Prior to his new assignment, he was on duty with the First Army Headquarters, N.Y.

Clyde A. Johnson '47BBA has been promoted to the post of secretary in the Group Department of Pacific Mutual Life Insurance Company, Los Angeles, Cal.



SPECIAL REPORT

Mr. WILLIAM E. BOYER NEW YORK LIFE AGENT

at SHREVEPORT, LOUISIANA

BORN: October 15, 1930.

EDUCATION: Tulane University, School of Business Administration.

MILITARY: U.S. Air Force (Intelligence Officer)
August '52—July '54. Korea Service.

PREVIOUS EMPLOYMENT: Summer jobs during school.

REMARKS: Son of a former Governor of the State of Louisiana and son-in-law of a New York Life agent, William Boyer followed the latter's lead and joined New York Life in September, 1955 under a special sales trainee program. This was Mr. Boyer's first full-time job—coming immediately after his consecutive stints at Tulane University and with the U.S. Air Force. A year later he became a full-fledged agent. His intense interest in life insurance has led him to completion of 2 advanced life insurance underwriter courses since becoming a New York Life agent. And his first-year sales record of \$1,121,447 is a further indication of this young man's outstanding success potential with New York Life.

Note

Gopher Grad
OCTOBER, 1957

William E. Boyer, after only 2 years as a New York Life representative, is already well established in a career that can offer security, substantial income, and the deep satisfaction of helping others. If you'd like to know more about such

a career for yourself with one of the world's leading life insurance companies, write:

NEW YORK LIFE INSURANCE CO.
College Relations Dept
51 Madison Avenue, New York 10, N.Y.

Classes Come to you

when you take
**HOME STUDY
COURSES**

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Over 300 credit and non-credit college and high school courses offered by mail to those unable to come to the campus.

+

Write for Bulletin L

+

**University
of
Minnesota**

**Correspondence Study
Department
Minneapolis 14**

Marvin L. English '47MS was appointed associate professor of mechanical engineering, University of Cincinnati College of Engineering, effective September 1. He formerly taught engineering thermodynamics and heat power laboratory at North Carolina State College.

'50

Darrell Coover '50BA has been named executive secretary to Governor J. Hugo Aronson of Montana. A cum laude graduate of the University of Minnesota, Coover won the 1954 Stern Foundation fellowship in political science. He was formerly legislative assistant to Senator Barry Goldwater of Arizona.

Robert G. Share '50LLB recently joined the firm of Moses and Friedell, Mpls. attorneys at law.

C. Robert Landgren '50PhD has joined the staff of the Esso Research and Engineering Company's chemical development division at Linden, N.J.

'51

Dr. Haym Kruglak '51PhD has been promoted to professor of physics at Western Michigan University, Kalamazoo, where he has been teaching since 1954.

Leon Clement Carr '51BA has accepted a position on the copy desk of the St. Paul Pioneer Press.

'52

Robert B. Klaverkamp '52BA, former United Press business representative in Chicago, was recently appointed manager of the United Press Bureau in Minneapolis. He is a former employee of the Faribault, Minn., Daily News, the Cincinnati Post and the Mankato, Minn., Free Press.

John William Lawrow '52MS received an MD degree from State University of N.Y. College of Medicine in Syracuse in June. He will intern at Buffalo General hospital.

Richard P. Jacobson '52BBA is currently employed as sales representative for Personal Products Corp., Division of Johnson & Johnson after being transferred from Green Bay, Wis.

'53

Dr. Herbert Hannam '53MSEE recently was appointed physicist in the General Electric Research Laboratory's applied physics section.

Donald A. Borchardt '53BA, a graduate student at the University, directed the recent current Rochester Civic Theater production of Eugene O'Neill's "Beyond the Horizon." He also conducted two public workshop courses in Rochester. Borchardt has spent six weeks touring for the University Repertory Players and has been touring with the University's "Midsummer Night's Dream" as Peter Quince.

Alumnus Brings 'U' Greetings to Bierut



Dr. G. A. Garabedian, left, represented the University this summer at the inauguration of Dr. John Paul Leonard as fifth president of the American University of Bierut, Lebanon. With Garabedian '53PhD is Vice President A. Crawford who, from his choice of pennants, appears to be from Wisconsin.

A Voice of Experience behind the "Voice with a Smile"

Day and night in your telephone company central office there are courteous, efficient women like Jean Bullene to help handle any unusual situation, and make sure your calls go through quickly and easily.

Know-how and team spirit make Jean (Mrs. Jack) Bullene well suited for her responsible job.

She helps train new telephone operators and is ready with immediate answers to any questions that arise in connection with the many local and long distance calls that go through each day.

She's a Voice of Experience behind the Voice with a Smile.

"I love this work," says Jean, "because I get a real feeling that I'm helping people in a very personal way. I know how important their telephone messages are and I'm proud to have a hand in keeping my neighbors in touch with family and friends here in Garden Grove and out of town."



JEAN BULLENE LENDS AN ASSIST. As a supervisor in the Garden Grove, Calif., telephone office, Jean conducts training and works with her group of operators in providing the best possible service.

Jean combines her telephone company work with a neighborly role in the life of her community. She has often observed that the spirit of service in the telephone company is contagious. And her many off-duty activities bear this out. When she's not busy with music, gardening and remodeling her attractive home, she pitches in on Cub Scout work.

As you can well imagine, Jean never has time to be lonely. But on the subject of loneliness she has this to say: "No one ever needs to be alone when there's a telephone handy. It's so easy to keep in touch with your neighbors or friends who are miles away."

PHOTOGRAPHS BY ANSEL ADAMS



JEAN APPLIES WAR PAINT to her son as his Cub Scout den embarks on an Indian lore project. She has also worked with the Girl Scouts.



'54

Dean E. Erickson '54BA has joined the advertising and promotion art staff of Better Homes & Gardens and Successful Farming magazines.

Dr. Donald M. Medley '54PhD recently represented the University of Minnesota at inauguration ceremonies at St. Joseph's College for Women.

Robert E. Bagwill '54BS graduated

from the American Institute for Foreign Trade in May, and began a foreign trade career with Goodyear International Corporation.

Dean Elwood Erickson '54BA recently joined the Meredith Publishing Co., Des Moines, Iowa, as a book and promotion artist.

Charles R. Bolmgren '54BS has joined the Bettis Plant, Westinghouse Electric Corporation atomic power research laboratory, Pittsburgh, Pa. He will work

on the scientific development of the nuclear reactor for a large naval surface ship for the Atomic Energy Commission.

Donna Lou Johanson '54BS was married to Bob Gene Whitley in April.

'55

Dr. Bertram Wilson Downs, Jr. '49MS has returned to Cornell University after a year of research at the Department of Mathematic Physics, University of Birmingham, England.

Howard Haugerud '55BA has joined the staff of Sen. Hubert H. Humphrey (D., Minn.). He will serve as a general legislative and correspondence assistant in the senator's office.

Robert D. Brown '49BS, '52MA, '55PhD has accepted an assistant professorship with the Industrial Arts Department of Northern Illinois University. He previously held a similar position at Long Beach State College, Long Beach, California.

Lucius A. Butler, Jr. '55MA, a missionary under the Baptist General Conference of America, is currently attending the Tokyo School of Japanese Language. His present missionary assignment is another year in Tokyo studying the Japanese language.

'56

Dr. Joseph J. Garamella '56PhD, clinical instructor in surgery at the University of Minnesota medical school, has been named the first appointee to the Rappaport Professorship of Cardiac Research at Mount Sinai Hospital, Mpls. As a thoracic surgeon, Dr. Garamella has devoted the last two years to the investigation of surgical aspects of coronary heart disease and allied problems at Mount Sinai.

Dr. Tracey G. Call '56PhD, who has been teaching pharmacy for the past 15 years, has accepted a position with the research department of Sunkist Growers. He will be located at Corona, Cal., where he will be engaged in chemical and pharmacological research. He will also do consulting work for the pharmaceutical profession.

'57

J. J. Bujold '57BS has recently been employed in the Office Routine & Records departments of the Dow Chemical Company, Midland, Michigan.

Margaret Noble Lahey '53MA, '57PhD, former dean of women at Colorado State College, has been appointed associate dean of students at Kansas State College, Manhattan. Miss Lahey was a counselor and part-time instructor at the University's college of education from 1950 to 1953 while working on her master's.

Gerard W. Thorgeson '57BME recently accepted a position with the Insulation Division Sales Training Program of the Armstrong Cork Co.

Betty L. Coen, '57BA recently arrived in Nurnberg, Germany, for assignment as a service club director with the Army's Special Services staff in Europe.

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Alexander Ingraham '93LLB, July 16, 1955, at Minneapolis.

John A. Bohland '95BCE on Jan. 11.

Dr. Chester Nathan Gould '96BA, '00MA, associate professor emeritus of German and Scandinavian literature, University of Chicago, on June 15 in Durham, North Carolina.

Florence M. Weston '97BS on March 31 in Miami, Florida.

Robb E. Lincoln '97BS, 81, of a coronary thrombosis on Feb. 28.

M. A. Lehman '98BS on June 19.

Joseph Warren Beach '00BA, 77, professor emeritus of English at the University, at Northwestern Hospital, Mpls. this summer. He was head of the English Department from 1939 to 1948, when he retired after being on the University staff since 1907. He spent the next six years teaching in Europe. Surviving are his wife, two sons, and a sister. There are five grandchildren. Well-known as a poet, novelist, and essayist, Beach received the University of Minnesota's Outstanding Achievement Award in 1951.



J. W. Beach

Sjur Peter Ness '02LLB, July 9, 1955, at Portland, Oregon.

Jacob Arthur Rickert '02LLB at Wahpeton, No. Dak. on Jan. 12.

Dr. Harold Lyon '00BS, '01BS, '03PhD, 77, at his home in Makiki, Hawaii on May 15. Director emeritus of the Hawaiian Sugar Planters' Association Experiment Station and director of the Foster Gardens and Manoa Arboretum, he had devoted 50 years to sugar research and forestry in Hawaii. He was known throughout the world as an authority on plant diseases, particularly of the cane plant. Last year he received the George Robert White gold medal, the nation's highest horticultural award, from the 128-year-old Massachusetts Horticultural Society. He was awarded the University of Minnesota gold medal for Outstanding Achievement in 1951.

Patrick J. Ryan '04LLB, July 11, 1955, at St. Paul.

Gustavus Loevinger '06LLB, 76, retired Ramsey County District Judge August 28 in Miller Hospital, Mpls. He served as district court judge just 10 days less than 24 years, retiring in February, 1955. He is survived by his wife, three sons and two daughters.

Albert Troutfether '06BA, of Windom, Minn.

John Chester Lewis '06LLB, of Two Harbors, Minn.

Day Okes '08BS, retired partner of Okes Construction Co., St. Paul, recently in St. Paul. Mr. Okes was a veteran of World War I, serving as a major in the corps of engineers. He was a member of the American Society of Civil Engineers and the Society of Military Engineers. Survivors include his wife, and three daughters.

Leroy Franklin Borrowman '08CE, 72, former assessment commissioner at Winnipeg, Manitoba, Canada, on April 8 at his home there.

Dr. Arthur C. Strachauer '08MD, 74, in Mpls. on August 26. He served as chief of surgery at the University from 1918 to 1930. He is survived by his wife, a son and four grandchildren. He was the son of the late Dr. Clarence Strachauer, a dentist, who helped found the Minneapolis Symphony Orchestra.

George Charles Wheeler '09LLB at Mayville, Wis. on Jan. 19.

Edward S. Nelson '09CE of St. Paul, last April.

William E. Herring '10EM, of Minneapolis.

Frank J. Williams '11LLB, July 24, 1955, at Minneapolis.

Christian Knatterud '13BS, 69, from a heart condition at Winona General Hospital, Winona, Minnesota, on April 21.

Leighton R. Simons '11BA, '14LLB in an auto accident at Mt. Iron, Minn. on July 29, 1956.

Ethel Schrepel '15BS on Feb. 6 at Corvallis, Oregon.

Stanley J. Noltimier '16FS on Jan. 1 at St. Paul Park, Minnesota.

Carl Frederick Traholt '16DDS, April 8, 1956.

Frederick H. C. Dubbe '17BS, '19MB, '20MD on Nov. 30, 1956 at New Ulm, Minn.

William Penn Dyer '20MA at New Britain, Conn. on August 14, 1956.

Dr. Harlow Nedrud '22DDS on Jan. 15 at Minot, No. Dak.

Herbert Jerome Opheim '23BSEd, of Elk River, Minn.

Dr. Walter H. Ude '23BS, '24MB, '25MD at Mpls., Minn. on Feb. 10, 1956.

Orin J. Wardwell '25LLB, of Northwood, Ia., last summer.

Paul V. Betters '28BSEd in Washington, D.C. on May 12, 1956.

Andrew A. Love '23DDS, '27BS, '29MB, '30MD on June 12, 1956 in Hollywood, Calif.

Edward James Kotrich '30LLB at Arlington, Va. in June.

Roman N. Soupal '30BEE, of Owatonna.

Thomas Cunningham Parks '32-34 in Dallas, Texas, on Oct. 12.

Lt. Col. John Zimmerman '40BA '41BSEd in Manassas, Virginia, on May 11.

Pearl Adell Gilmore '42BSHEED, of Wells, Minn., area.

Mrs. Seth E. Gordon (Audrey Louise Nelson) '42GN on May 20, 1956 in Mpls.

William Alec Hay '42LLB, of Seattle, Wash., recently.

Beatrice Johnson Hannah '21MA, '31MA, '42PhD on May 13, 1956 at Rockford, Ill.

Nancy Moran Vaughn '44GN, of Great Falls, Mont., in January, 1956.

Lt. Harry G. Veland '54BA, 25, in a Navy jet plane crash near Jacksonville, Florida on July 30.

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GOPHER GRAD

NOVEMBER 1957

GOPHER GRAD

(Our 57th Year)

Continuing the Minnesota Alumni Weekly which was established in 1901, and the Minnesota Alumni Voice. Published monthly from October through June by the Minnesota Alumni Association, 205 Coffman Union, University of Minnesota, Minneapolis 14. Member of the American Alumni Council.

Vol. 57 November, 1957 No. 2

JUANITA PACIFICO OPSTEIN '47BA..... *Editor*
EDWIN L. HAISLET '31BSEd..... *Managing Editor*

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Cover Story

The anniversary of Minnesota's 43rd Homecoming will be graced by a beautiful court of campus beauties presided over by Anita Valor, SLA senior,



who received her crown the weekend before the Indiana Homecoming game from the other reigning dignitary, King Cliff Sommer '32BA of Owatonna. In the past two weeks, Sommer has spent more time on campus than moonwatchers have spent on Sputnik.

In his spare time he's a bank president, (see page 7).

(Photo by Media Newspictures—Perlmutter)

Views of authors appearing in Gopher Grad in no way reflect the opinions of the MAA or the Gopher Grad.

GOPHER GRAD

Back Talk

Tribute to Pierce

Editor:

Just finished reading the issue of the magazine honoring E. B. Pierce. Like all those whose lives he touched, even briefly, I was sorry to hear of his passing.

He wouldn't have remembered me—I was only one of some 60 members of the University Choir that he and Mrs. Pierce chaperoned on a spring tour in 1927—but he did such a good job of his chaperoning that I have never forgotten him.

Winona Wheelock Sparks
Poplar, Mont. 1926-28

Editor:

I had been determined to drop my subscription because all of interest to me was the death notices but, when I looked at the picture of our dear old registrar, I weakened.

Mary E. McIntyre '05BA
(Alumna McIntyre refers to E. B. Pierce, former alumni secretary, who always rated a formidable reputation for enrolling alumni in the MAA—Ed.)

Re W. D. Mitchell

I should like to add some data relative to William D. Mitchell, whose brief notice of death appeared in a recent magazine:

William D. Mitchell was a son of Hon. Chief Justice Wm. Mitchell of the Minnesota Supreme Court, one of the ablest judges who ever sat on that court and one who possessed a national reputation for the cogency of his decisions.

W. D. Mitchell was U.S. Solicitor General under Calvin Coolidge from 1925-29 and was U.S. Attorney General under Herbert Hoover from 1929-33.

He was also chairman of the U.S. Supreme Court Advisory Committee for the revision of the federal rules of court procedure.

Owen P. McElmeel '04LLB
Seattle, Washington

Praise for Troupe

... As an alumna of the University, may I say I was proud of the representatives of the University who have just been here in Bahias.

The two plays which they brought ("Midsummer Nights' Dream" and "Our Town") were enormously successful with the English-speaking people here. Everyone, myself included, was impressed with the high quality of the productions.

The members of the company were also very popular with the Bahianos, both Brazilian and foreign varieties. The U.S.A. couldn't ask for better emissaries abroad than these people.

Marian Foster Fraser '43BA
Salvador—Bahias
Brazil

(The above letter originally was sent to the office of the President—Ed.)

Man vs. Automation

Editor:

I want to go along with Mr. John C. Brackett's letter (in the May issue), insisting on non-subsidization of athletes and Dr. Cleo Brunetti's article entitled, "The Promise of Automation."

The latter I read with much interest and have only one suggestion: if I were to rewrite the last paragraph, I might remark that philosophically speaking, man eventually gets what he wants, including a government and laws controlling his betterment. He, as nature's most advanced mammal, might well prefer, in his own interest, the promise of automation rather than the misguided and often lawless view that progress can be created for him by labor guidance that frequently ignores the fundamentals of man's advancement. Such conflict of viewpoint must be at least mitigated before a

lot of the good things prophesied for automation are to come true.

Harold J. Wasson '14EM
Conway, Arkansas

(Alumnus Wasson's comment is in reference to Brunetti's last paragraph "In our modern era, man has become highly specialized in his role. He remains superior as the master but he is no longer the muscle of the age. Machines can do things man can't do. Man will design and build and supervise these machines and create new jobs by so doing. But he will never again compete with the performance of the machine and, in truth, will not want to."—Ed.)

(We welcome the opinions of alumni, whether in letters or in articles. While articles are invariably submitted to the appropriate department on campus to evaluate a point of view, the letters are reviewed only by those to whom they are addressed—Ed.)

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STUCK OUT LIKE A SORE THUMB AMONG
HIS DAYTIME COLLEAGUES. TEN YEARS
AGO, HE WAS THE RETURNING VETERAN
WHO PUT THE BULGE IN COLLEGE ENROLL-
MENT. TODAY, HE'S EQUALLY AT HOME IN
A NOON-HOUR RUSH DOWNTOWN OR
ON THE UNIVERSITY CAMPUS. . .

By

Eleanor M. Salisbury
Assistant Professor
General Extension

As approximately 26,000 students return to a sun-drenched campus this fall, about 10,000 others are joining them as silent partners in the venture of learning.

These are the night owl scholars—the evening class student. You can tell him by the little bit of grey in his hair. His step is a little more firm as he heads for his lectures. His brow is knit a little more deeply because he is figuring not only a mathematical problem but how to pay next month's rent, when to seed the lawn and whether to have the baby's eyes tested.

He is not exactly what you'd call a "College Joe" but maybe deserves the name more because he is probably ten times as serious.

However, this particular Joe cannot be considered 'typical' because, among night-owl scholars, there is no such thing. Too many different kinds of men and women, in all income brackets—up to and including top management and high salaried professional people—take evening classes.

Fewer than five in 100 students are not high school graduates. More than two-thirds have had some college and one in four has graduated from college. Almost half of those students with the drive to take a University evening class have taken other kinds of training to improve themselves in some way—trade school, business school, on-the-job training, or some specialized course.

They are as young as 11 and as old as 81.

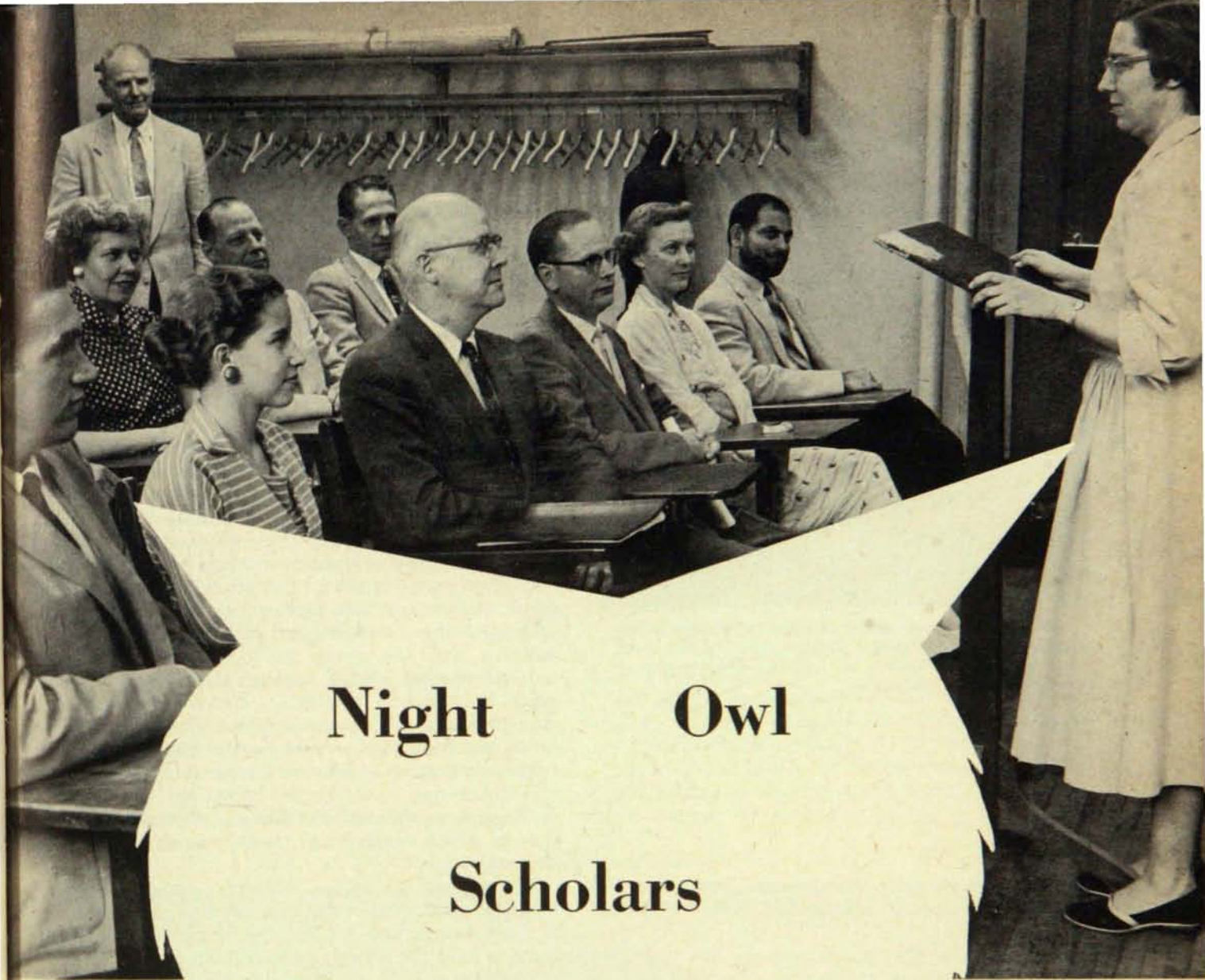
Joe is about 32 years old. He is married and has children. Mrs. Joe worked for a short time after she married, but stopped when her family started coming. They live in Minneapolis, near Lake Calhoun, having recently moved there from the area around the University.

Joe is a college graduate, but not of this University. He has taken evening classes for a year. In that year, Joe took a course in business law and one in industrial engineering and management to sharpen him up in important fringe areas on the job. He also started an advanced course in ancient history last fall, just for his own amusement, and found it so good he talked his wife into joining the class for the spring semester.

The two of them had lots of company in their night school endeavors this last year. Some 15,000 other individuals participated in more than a thousand classes after dark. Over one-half of the classes were held on the Minneapolis campus. But good selections of courses were offered in the downtown St. Paul Extension Center and at the Duluth Extension Center. Special classes in art were held at the Minneapolis School of Art, the St. Paul Gallery of Art and the Walker Art Center. And many classes, particularly in education subjects, were given in towns and cities throughout the state.

When Joe and his wife are asked why they are spending their time, money and energy on evening classes, they frequently find it difficult to give a very clear answer. In taking business law, Joe obviously

GOPHER GRAD



Night Owl

Scholars

is thinking about his job, as are about half the students in his classes. But in the history course, they are doing what two in three evening students are doing—simply enriching their leisure time, along with their minds.

Probably a third of the members of both the law and history classes entertains hope that they will ultimately get those bachelors' degrees they didn't get when they were of college-age. They try not to think how long it will take to do it this way—the "hard way". But most of them know that it *can* be done and that the ten to 12 students each year who are granted degrees with most of their work in night school usually include several graduating with honors.

Some of these students shared classes with Richard O. Long, for example, who is with the credit depart-

ment of the First National Bank of St. Paul. Dick Long took all his work on the Bachelor of Business Administration degree in night school. He was graduated *with high distinction* and was elected to Beta Gamma Sigma.

He is married, has five children and is very active in St. Paul civic affairs, including Community Chest and Junior Achievement.

Robert E. Armstrong was just awarded the B.B.A. degree *with distinction*. He, too, earned the entire degree in evening classes and was elected to Beta Gamma Sigma. Armstrong is manager of the Wisconsin and Montana/Dakotas Division of the State Farm Insurance companies. In addition to the degree, he has passed all the examinations for the Insurance Institute of America and the professional Chartered



Student looks over fabric selected for display in advanced course in interior design. Many in this class are working in drapery or furniture departments or are themselves decorators.

Property and Casualty Underwriters designation. The Armstrongs have four children and a very busy household.

Elfriede Struss Meyer, Minneapolis, was graduated *cum laude* last year, granted the Bachelor of Arts degree and elected to Phi Beta Kappa. Mrs. Meyer is a home maker and grandmother and took every one of the 180 required credits in night school.

Evening classes are taught, for the most part, by regular faculty of the University. Most of them carry credit toward University degrees. But, unlike day students, evening students do not have to meet admission requirements in order to take evening classes—until they decide that they want to pursue degree programs. It might, therefore, be assumed that evening students as a group are several notches below day students in aptitude for college-level study. This is, apparently, not true. Studies are continually being done around the country, comparing academic aptitudes of the two groups. There seems to be very little difference between them in potential.

Many reasons are advanced for this fact, one probably being a simple matter of economics, with slight overtones of social custom. Going to college is becoming more and more "the thing to do," and the average day student is given financial assistance—if only in part—by parents or some other source. The

evening class department at this University is entirely self-supporting, receiving no tax money from the State. Evening students not only pay their own way, but it is an expensive way. Past performance has shown that they are not going to pay and then waste their money by not doing their best.

The economic factor has its other side too. More and more people, men in particular, are running into barriers to their advancement—"This job needs a college man," or "This position calls for special training in industrial relations (or some other field)." These barriers are being torn down by hundreds of evening students with all kinds of educational and career backgrounds.

Special certificate programs in a wide range of fields, business, engineering, public administration, industrial relations, and others, testify to an employer that their holders can handle specialized jobs—with or without college degrees. These programs have been in effect for years and are recognized and supported by industry and business. Indeed, it was at the request of industry that they were started and new ones are being considered and initiated as new needs arise.

Need is what started evening classes in the first place. Way back in the 1880's, a University of Minnesota professor of drawing stepped out of his ivory tower and conducted a night class in his field, at the request of a group of citizens. Classes in business law and engineering soon followed and in 1913 the Board of Regents established the General Extension Division, of which evening and special classes became a department.

The demand for courses is always greater than can be filled. As in other areas of education, teachers are in short supply, and it takes a particularly *good* lecturer to hold the interest and keep ahead of a group of alert and critical adult students. Oddly enough, the requests for classes that are most audibly expressed are not in the areas in which the enrollments (and, therefore, the interest) is greatest. Requests come most often for technical or practical courses, such as advanced mathematics, some special field in engineering, business letter writing.

But nearly half of evening class registrations are in the general field of liberal arts courses.

Business classes take about one in four enrollments and engineering classes fewer than one in five.

It is easy to jump to conclusions, but maybe Joe and his wife were closer to the heart of the purpose and real goal of adult education in their frank enjoyment of a course like ancient history. They were finding fulfillment of an unexpressed and unexpressible need—satisfaction of the inner man—a need which the University cannot expect, but can only hope, to fill.

In a true sense, evening students are among those alumni with whom you can be most proud to associate. They do not believe the learning process stops and they are proving it, every evening, on your campus.

Clifford C. Sommer Overruled by Architects

When Clifford C. Sommer '32BBA, new MAA president of the Steel County unit and chief executive of the Security Bank and Trust Co., Owatonna, called in his board of directors two years ago to discuss remodeling the bank building, he found almost every architect in the state sitting in on his plans.

Sommer knew, of course, that the bank had been designed by Louis H. Sullivan, the only man Frank Lloyd Wright had ever called "master." He knew, also, that others often referred to the structure as "the most beautiful banking building in America." Too, a famous Dutch architect called the building "immortal."

For the more practical considerations of the living, however, Sommer felt compelled to do something to reinforce the walls of the 49-year-old bank. In addition, he needed more space for the fast-growing concern.

But as soon as remodeling plans were made known, architects from everywhere wanted to know what was going on to deface the work of a master who was born 100 years ago last fall.

In the end, the carefully-designed plans of the bank

administrators were modified in the name of art and in consultation with a *committee of six* representing leading professional organizations of architects and artists in the state. Included in the consulting group is the University's school of architecture.

Sommer will reign as Homecoming King at the Minnesota-Indiana football game.

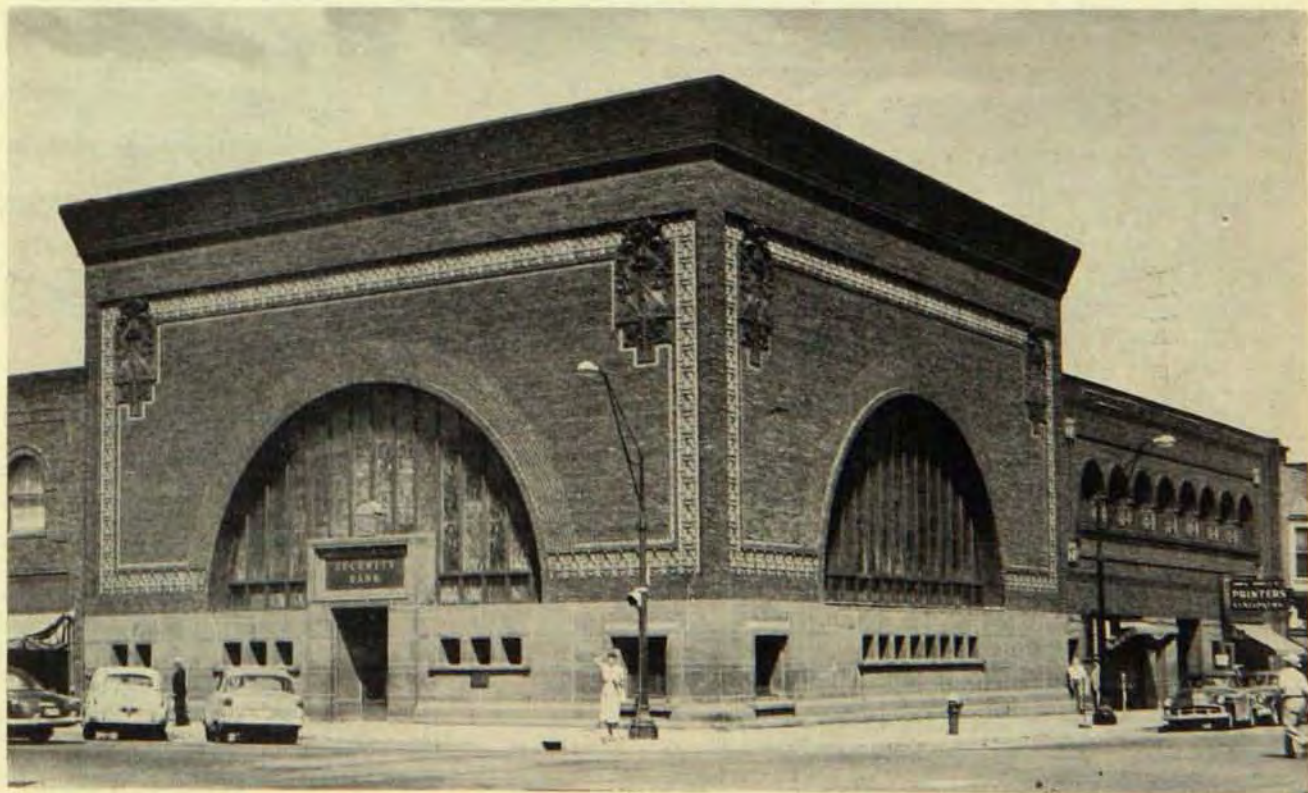
When the bank shows its new quarters to the public next April, the space inside will be nearly doubled but not a hand will have been laid to the 40-foot high walls. Nor will the four glittering chandeliers have been touched, except to clean them.

And Mr. Sommer, who is the bank president in every other transaction but just a bystander in this new bank business, said:

"It's been a great experience for me to find that suddenly we are handling the remodeling of one of the most famous bank buildings in the world.

"Sometimes it gets a bit disconcerting not to have a hand in your own business but, in the final analysis, this is the way we want it."

The Owatonna bank building as it looks at present.



Dr. Harold S. Diehl, dean of the University college of medical sciences for more than 20 years, will begin work this month on another phase of a long career in medicine.

His new position as senior vice president for Research and Medical Affairs and Deputy Executive Vice President of the American Cancer society is viewed as an important contribution to a "speed-up" offensive against cancer, according to Dr. David A. Wood, American Cancer society president.

Diehl accepted the new position on a leave of absence basis until his successor is appointed. He will return to the campus periodically through next June to supervise completion of current projects and to assist with the transition to a new administration.

The University's loss at the retirement of Diehl was expressed, in part, by Wood in announcing the appointment. He said:

"We are extremely fortunate in obtaining Dr. Diehl's great talent and rich experience as a medical administrator to head up the medical and research assault against cancer. He has earned wide renown for his contributions as dean of Minnesota's College of Medical Sciences, one of the most outstanding institutions of its kind in the world."

Wood added that "a considerable number of physicians and surgeons throughout America will be encouraged by the news that their former dean is at the medical helm of this cancer-fighting organization."

Looking forward to his new post with mixed emotions, Diehl recently said that he is "sad to think of leaving the friends and work that have been such an important part of my life." But he expressed enthusiasm at the thought of "starting something new."

"The appointment is an opportunity that permits me to look ahead with enthusiasm," he said. "I am close to the retirement age here. The cancer society appointment will permit me to continue my work."

Diehl also appreciates the broad field of medicine covered by his new work. "The study of cancer is the study of growth," he said, "and growth touches every facet of medicine."

The University is losing Diehl's services a little less than three years ahead of his compulsory retirement in June, 1960. He was 66 on August 4.

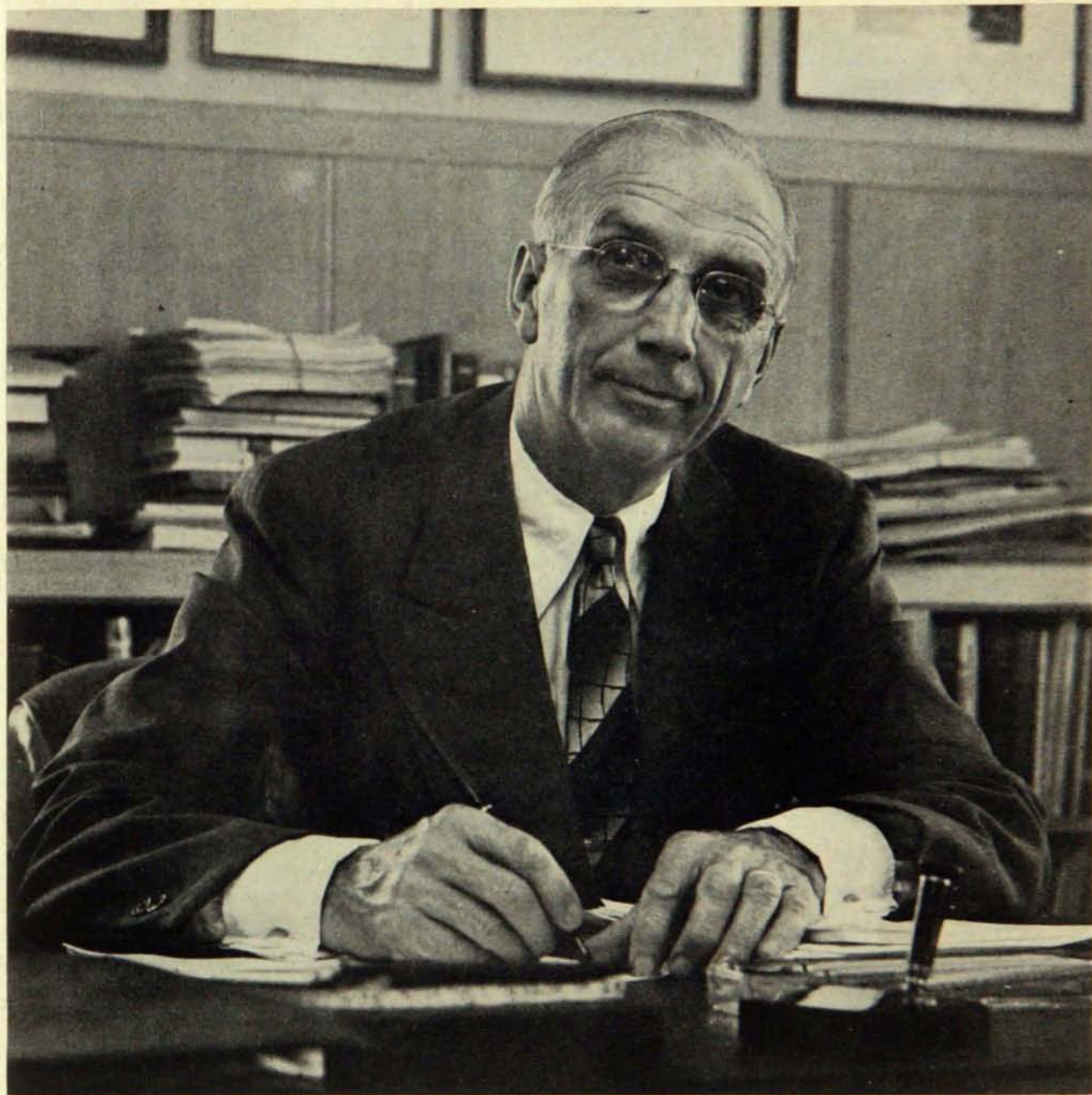
For Diehl, acceptance of the new position has meant a number of adjustments. In addition to completing projects at the University, there is the problem of making a new home. The Diehls recently sold the home they had built and lived in for 32 years. "Our new home will be an apartment at 11 Riverside Drive in New York," Diehl said. "Its view on the Hudson compensates, in part at least, for our old view over the Mississippi."

The "mixed feelings" expressed by Diehl at leaving the University are shared by the people of the state of Minnesota. In a July 27 editorial the Minneapolis Star said:

"The whole State is honored that the American Can-

Farewell, Medicine Man

**He had a 'cure'
for every ache and a
formula
to build a
world famous school**



Dr. Harold S. Diehl, dean of medical sciences. (Photo by Bob Kozar)

cer Society has seen fit to pick Dr. Diehl as its chief medical and research officer and deputy vice president. It is a wise choice indeed. It will not be easy to fill his place at the University."

Diehl, who received his doctor of medicine degree from the University in 1918, was appointed Health Service director in 1921. He established the Department of Preventive Medicine and Public Health in 1922; and assumed deanship of the Medical Sciences in 1935.

The development of the University college of medical sciences has been described as a *history of men,*

ideas and money. Diehl, one of the men, had ideas regarding the medical school even before he was appointed dean. And, since 1935, he has done an outstanding job in obtaining the money necessary to operate and expand the medical school.

An incident that has become a part of the Diehl legend points this out. Not too many years ago the president of a large American university asked Diehl how the University medical school has been able to obtain eight to ten times more money than the schools in other states. Diehl simply answered: "It just comes."

But the concensus seems to be that the money "just

came" because of Diehl's efforts. Recognized as one of the ablest administrators in the business, the dean has constantly sought and obtained non-University grants and endowments for his school.

Endowments, grants, gifts, state and federal funds in the amount of \$1,954,066 were given to the medical school last year. Of this, \$789,721 was from non-governmental gifts and \$140,851 was from private endowments. A total of \$297,269 was spent for research in surgery alone.

During Diehl's years as dean, the Mayo Memorial was constructed. In 1949, the Variety club heart hospital was built under the sponsorship of the Variety club of the Northwest. Additions were made to Powell Hall, the nurses' dormitory, and the Minnesota chapter of the American Cancer society contributed \$307,963 to the Elias P. Lyon laboratories on the campus, built at a cost of \$855,862.

But much of the construction initiated by Diehl will be completed in the next few years. Currently, the Variety club is engaged in a project to add a research floor to the Heart Hospital. The Masons of Minnesota are sponsoring a Memorial hospital for patients with advanced cancer and the Veterans of Foreign Wars are raising funds for a Cancer Research Institute. Plans are underway to construct a new medical-biological science library. Millard and Jackson Halls will be remodeled.

But the extensive physical expansion is only a part of Diehl's work. This particular effort would fall under the last of what has come to be known as Diehl's "three points." His philosophy — never neglect the patient; never neglect the student, and never neglect anything having to do with growth and development of the organization.

A great deal of effort has been put into expanding and strengthening the medical school faculty under the leadership of Diehl. Now a considerable number of professorships are supported by endowments or special gifts, not University funds.

Diehl's three points are all a part of the "atmosphere" he has so successfully created for the medical school. Also, through his efforts, the school has become an integral part of the total university scene.

How has this rather indefinable thing called "atmosphere" been created? Faculty members of the medical school and other members of the University staff are in close touch daily, making easy the deepening and broadening of intellectual interests. Diehl is of the opinion that this type of atmosphere produces better doctors and better teachers.

The school also makes an effort to keep and encourage able, younger men. In the words of Ray Amberg, director of University hospitals for more than a quarter of a century, there is "less friction, less jealousy, less rivalry here than in any other medical school I know of. Dean Diehl has planned marvelously for the development of younger men."

As expressed by Diehl himself, "The first function of a medical school, unquestionably, is to train good doctors; but a medical school, also, has an obligation

to contribute to medical knowledge and progress.

"One thing that impresses me is the splendid reputation the alumni of the medical school have made, wherever they have gone throughout the world. We are proud of them, as we know they are proud of the medical school."

Perhaps the phase of Diehl's work with which the public is most familiar is the tremendous advances made in medicine during his years as dean. Making page one news all over the world have been the University's accomplishments in heart surgery, cancer research, fat and diet studies, "deep freeze" surgery studies of brucellosis and other medical projects that have had a far-reaching effect on human life.

In a series of newspaper articles entitled "A Story of Men and Ideas," Jay Edgerton, of the Minneapolis Tribune editorial page staff tells this story very well:

"Recently a science writer for a national news magazine saw the now renowned surgery team of Drs. C. Walton Lillehei, Richard Varco, Herbert E. Warden and Morley Cohen close up a hole in the heart of a child—a child that otherwise would have been doomed to early death or lifelong invalidism.

"Coming out of the operating room, close to amazement, this writer remarked, 'Say—this is the first team.'"

"It comes as something of a shock to New Yorkers that the first team, medically and surgically speaking, is not on the island of Manhattan but in Minneapolis. As one of them summed it up, "It's hard to believe—but I guess if I had to be sick I'd want to be sick in Minnesota."

To Diehl, a spare man with a pleasant drawl, this sort of tribute has made administration of a giant among medical schools a rewarding experience. And he has watched the progress and development of the University medical school with almost fatherly interest.

In a sense, both Dr. Diehl and the school have grown in recognition since 1918 when he graduated from that school. Following graduation, he went to France and World War I and then served with the American Red Cross in Poland.

Then followed Minnesota fellowships and faculty positions in internal medicine, in pathology and in public health.

During his years at the University, he has held many posts of state and national significance. In recent years he has been vice chairman of the Health Resources Advisory Committee, United States Office of Defense Mobilization. He helped initiate post-World War II veterans' hospital reforms, was American delegate to two World Health Assemblies, and served as chairman of the state Medical Association's Committee on hospitals and Medical Education.

Some of the projects initiated by Dr. Diehl will have flowered by the time he assumes his new position full time next June. One of his deepest regrets is that he cannot see them all through to fruition. But they write a suitable conclusion to the story of a man who has left an indelible imprint in the history of the University medical school.

Delectables from the Campus



Checking samples of Nuworld cheese are, left to right, Howard Morris, W. B. Combs and J. J. Jezeski.

Your dinner table any evening may be graced with an array of delectables that, in one way or another, can be traced directly to the University of Minnesota's St. Paul campus.

If you have some *Nuworld* cheese on the bill of fare, you're eating a product developed jointly by the Universities of Minnesota and Wisconsin.

The bread on the table was probably produced from wheat that has undergone extensive baking tests in the University's agricultural biochemistry department. It's possible that the potatoes are a variety that was subjected to cooking tests by University cooperators. And if the vegetable side of the menu includes corn, chances are that the kind you have was tested in the frozen food laboratory on the St. Paul Campus.

Industry, too, has benefited from this development and products-testing research. These tests have given food manufacturers impor-

By

PHIL TICHENOR
University Farm & Home News

tant information needed to produce better products to put on the shelves in grocery and dairy stores.

Let's take a closer look at the work behind some of these products.

Nuworld was the first cheese to be developed in university laboratories anywhere in the U.S. A Wisconsin scientist in 1949 had developed several new cheese-producing organisms which showed promise in cheese curing.

At Minnesota, Dairy Scientists W. B. Combs, J. J. Jezeski '40BSAg, '42MS, '47PhD, and Howard A. Morris '49MS '52PhD went to work testing these organisms. After experimenting with several cultures, they found a cheese with a

light cream color, soft buttery texture at room temperature, a flavor that was neither too sharp nor too mild and blended smoothly with other foods.

The result was *Nuworld*—a new cheese that resembles blue cheese, except for the color. It has a flavor that is somewhat of a "blend" of blue camembert, and brick cheeses.

Nuworld is all-white, meaning that it can be used in processing cheeses without changing the color. It has been tested extensively for consumer acceptance by laboratories in Toledo, Ohio. In recent years, it has become popular for salads, cheese spread, luncheon dishes, casseroles, croquettes, salad dressings and in vegetable sauce.

Another development by University dairy scientists led to *Spreez*, a new blue cheese product that is now widely sold. Several years ago, Minnesota researchers found that blue cheese left over from research work could be made

into a spread that students and faculty members around the campus enjoyed. The spread was made by mixing the cheese with dried skim milk and cream, pasteurizing and

who is in charge of the food processing laboratory.

Winter is also in charge of the frozen foods laboratory, which homemakers throughout Minne-

the results to Turnquist. From these tests, University specialists are able to advise consumers about characteristics of the different varieties and growers are able to select varieties for production that will meet with better favor on the market.

Many Minnesota-grown potatoes were developed at the University under the potato breeding project led by Fred A. Krantz Sr., '18BSAg, '21MS '24PhD, horticulturist.

In a special laboratory in the agricultural biochemistry building, every variety of wheat recommended to farmers in the upper Midwest receives a baking test. The philosophy behind these tests is that the bakeries and consumers must be kept in mind before a variety is ever grown. Some wheats don't measure up to necessary standards, so growers need to know which ones to use.

Baking tests are "built into" the wheat variety developing and testing program. W. F. Geddes '28MS '29PhDd, head of the agricultural biochemistry department, explains that "in developing improved wheat varieties, the plant breeder must not only seek high yield and resistance to drouth, plant diseases and insects, he must also develop a wheat that will meet the requirements of the milling and baking industries."

Calvin Norris, 48BSAg junior scientist in agricultural biochemistry, puts flour from some 44 wheat varieties through these baking tests every year.

As far as baking quality is concerned, Geddes points out that the best way to test the wheat is by putting it through a baking process modeled after the process used in most commercial bread baking plants. That is just what Norris does in the baking lab. He bakes bread in miniature "test" loaves—about 1/18 of a pound in weight.

Under carefully controlled conditions, Norris mixes the dough, lets it "rise," presses all the gas out of the batch and puts it in an oven, which, in miniature, closely resembles those in large bakeries. The baked loaf is then checked for vol-

Campus experts 'raise' spuds, apples, cheese, appetites

homogenizing, and cooling in a container.

Blue cheese itself has been the subject of research for years in the dairy laboratories on the St. Paul campus. Experiments on making blue cheese started at the University in 1933. Since the years just before World War II, consumption of blue cheese has more than tripled, thanks to the fact that Minnesota scientists found ways to economically produce it.

Haralson—the most common apple raised in Minnesota—was developed at the University's fruit breeding farm near Excelsior. Since work at this farm started 50 years ago, University horticulturists have developed and introduced 64 varieties of tree fruits and small fruits that grow well in the rigorous climate of the Upper Midwest. Minnesota-developed fruit varieties now make up about 60 percent of all fruit acreage in the state. This work is being led by A. N. Wilcox '22MS '29PhD, horticulturist, assisted by T. S. Weir '41MS, assistant superintendent of the fruit breeding farm and Emil Andersen, horticulturist.

Well known among these fruits, in addition to the *Haralson* apple, are the *Latham raspberry*, *Red Lake currant*, *Meteor* and *Northstar cherries*. Well liked by consumers, they are also profitable to growers.

Latham raspberries, since they were introduced 30 years ago, have meant \$25 million to Minnesota fruit producers.

This testing is under the direction of J. D. Winter '23BSAg '29MS,

sota regard as the place for advice about any problem on freezing edibles.

As part of the research in the frozen food laboratory, Shirley Trantanella '46BSEd (HE), assistant to Winter, conducts taste panel tests on the same foods used in the freezing tests. From eight to 10 students and as many homemakers do taste panel work under her direction. The panels are conducted about twice daily to evaluate samples of food in a particular research project. The food is judged for flavor, color, texture and other characteristics.

Whenever you buy Minnesota-grown potatoes, you can be sure the variety has received a thorough "in the kitchen" test, conducted by a selected homemaker working in cooperation with the University's Agricultural Extension Service.

This is part of a test program carried out annually and coordinated by Orrin C. Turnquist '37BS '40MS '51PhD, extension horticulturist. From 11 to 16 varieties are raised in a half dozen important potato-growing areas of the state every year in tests for yield, disease resistance and condition of the tubers. Then, at harvest time, specialists check samples of each variety from each location for specific gravity (weight per unit volume). Generally speaking, the higher the specific gravity, the higher the dry matter of the spud and the better the cooking quality.

Cooking tests for potatoes are informal but valuable. Cooperating homemakers boil, bake and fry samples of the spuds and report



Calvin Norris, junior scientist, takes a loaf of bread from the oven in the bread baking laboratory of the department of agricultural biochemistry. He bakes both full-size and 'baby' loaves, in tests designed to determine baking quality of flour made from new and experimental wheat varieties.

ume and other characteristics, and the crumb is checked for grain and texture the following day. One of the important parts of the baking tests is for "strength" of the flour, which depends mainly on the quantity and quality of the gluten, or bread protein. Like a rubber balloon, the cells in the bread dough must be strong enough to hold a large proportion of gas.

One way Norris tests for strength is with a machine that simply stretches a quantity of dough until it breaks. A recording arm on the device measures the resistance to stretching and the length to which the dough is stretched before breaking.

Butter quality in general has been improved, thanks to work done in dairy industry laboratories on the St. Paul campus. This work has included studies on keeping quality, texture and spreadability.

S. T. Coulter '30MS '33PhD, dairy scientist, in recent years has led the research work around the nation in design of spray driers used for drying milk, and in discovering new principles for milk driers.

Ice cream—both the way it's made and packaging methods—is

undergoing careful tests by E. L. Thomas '43MS '50PhD and his co-workers. Thomas found that aluminum foil packages were more effective than paper materials for ice cream. Foil packages have since found widespread use where ice cream is sold in self-service outlets.

Home economists at the University are steadily seeking out answers to this question: How do different household methods of cooking affect the nutritive value of Minnesota-grown vegetables?

Widespread use of methods which would conserve vitamin C, particularly, would be beneficial to the nation's health. Recent surveys have shown that many families consume less than the recommended quantity of this vitamin.

A project under the leadership of Isabel Noble, home economists, has made substantial contributions to the existing knowledge of the extent to which household meth-

ods of cooking affect the nutritive value of vegetables.

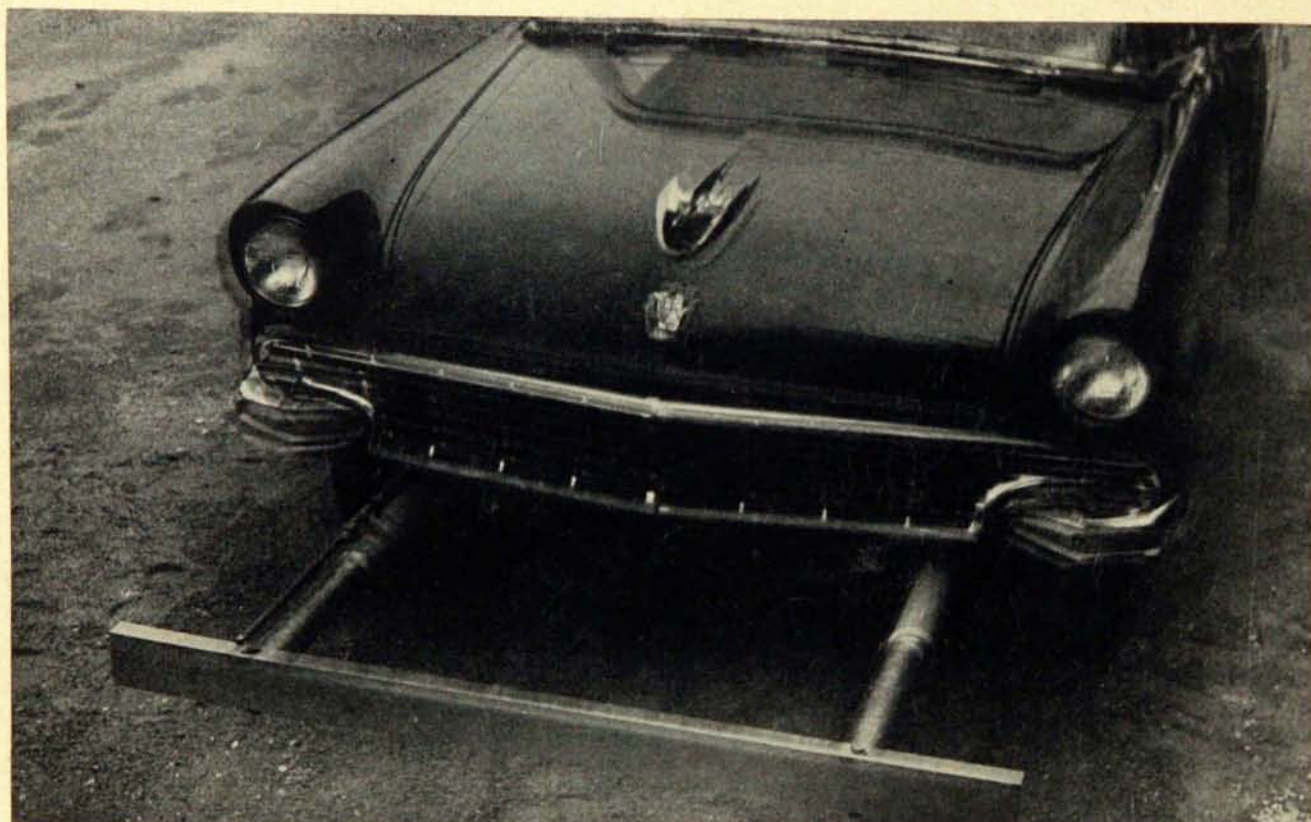
A study recently completed on potatoes by Home Economists Jane M. Leichsenring '32-34 Helen L. Pilcher and Loana M. Norris '35BS (MDT) showed that neither baking, boiling nor pressure cooking changed significantly the vitamin C content of potatoes, if they were not overcooked and were served promptly. On the other hand, the researchers found that potatoes refrigerated for 24 hours after baking, boiling or pressure cooking retained markedly less of the vitamin than the freshly cooked product.

In freezing fruits and vegetables, many problems confront the homemaker on the effect different practices may have on nutritive value and quality of products she puts on the table. One of the current home economics research projects was designed to find answers to as many of these problems as possible. For example, work in one project shows a fact especially valuable for every homemaker—*vegetables won't freeze and store successfully unless they are scalded.*

W. J. Aunan '42BSAg '47MS '51 PhD and P. A. Anderson, University meats workers, are studying the amount of fat, lean and bone on animal carcasses, and how these carcasses are affected by different feeding and breeding practices. These studies are conducted with consumer preferences in mind, so that livestock men will be more able to produce meat that will meet consumers' demands.

As in research done in crop and livestock production, the search for better food products and ways to improve these products for the consumer is a never-ending one. Only by constant testing and re-testing can these improved products be found.

A University home economist said Americans are spending about a half million dollars annually for health foods, health aids and diet supplements—all products of no real value.



Crashing for Safety's Sake

(or 'between snorts and suction')

Crashing cars into cement barricades sounds foolhardy, especially when done in the name of safety, but that is what a group of University professors and students are doing.

They're not interested in the thrills but rather in an opportunity to test safe equipment for cars. The series of experiments, conducted by the mechanical engineering department, are headed by Dr. James J. Ryan, professor of mechanical engineering.

Ryan runs a car into a barricade at 10, 15 and 20 miles per hour, carrying special equipment to record the force of the impact and other data. This material is then studied with an eye toward improving safety factors and minimizing hazards involved in automobile accidents.

Among safety devices: hydraulic bumper and collapsible steering wheel which works by suction. The drivers wear crash helmets with steel face guards, have foam rubber protectors taped to their knees and are fastened in with safety belts.

Prof. James J. Ryan, right, flashes an Indianapolis race track smile before he rams his well-padded auto into a concrete barricade. Above, the bumper which bumps first and is one of the auto's basic safety features.

(Photo by Media Newspictures—Perlmutter)



Higher Education Is Everybody's Concern

Dear Gopher Grad:

The rush to the colleges and universities has started. It is evidenced by the increased number of students, the crowded classrooms, by the shortage of faculty, the lack of parking space. It was also evidenced by the number of calls and letters I received from our graduates, asking about entrance requirements of the University for their sons or daughters.

It is not too difficult yet to get into an institution of higher learning. Believe me, though, it is many times more difficult than it was when I went to college. I am sure that many of us who went to college yesterday would never qualify today, and this will be true for those who enter college tomorrow. Increasingly it is going to become more difficult to get into a college. Why? Because an increasing number of high school graduates go to colleges. By 1967-70, our college enrollment will double.

This confronts the colleges and universities with the difficult task of not only finding proper facilities and equipment for the students but also trying to find enough staff and faculty. As difficult as the job will be of expanding the facilities, more frightening indeed is the task of finding enough qualified college teachers. Finding staff means establishing salary levels which will attract and hold larger numbers of talented teachers. Doubling the size of facilities means far-reaching plans, huge capital expenditures, and greatly increased support funds.

It is time that we realize the worth of higher education to the country. Most of the fundamental research in the country is done in our universities and colleges. Our institutions of higher learning are the source of our educated

manpower. Never before has the need for educated leaders been so acute. Problems of the family, community, of business, government, of science and technology as well as those of the military matters become increasingly complex. Yet, at this moment, there is a critical manpower shortage in education itself — in medicine, in science and engineering, in business, in the ministry, in nursing, in social welfare. Today, more than ever, the life blood of our country — *of our very way of life* — depends on our colleges and universities to bring forth better educated, better trained, and more competent leaders.

Today we have the same stake in higher education as we have in the national defense. Yet, we are not really supporting the higher education. Since 1900 the people of this country have put a steadily diminishing percentage of its national income into education — *less than one percent in 1956*.

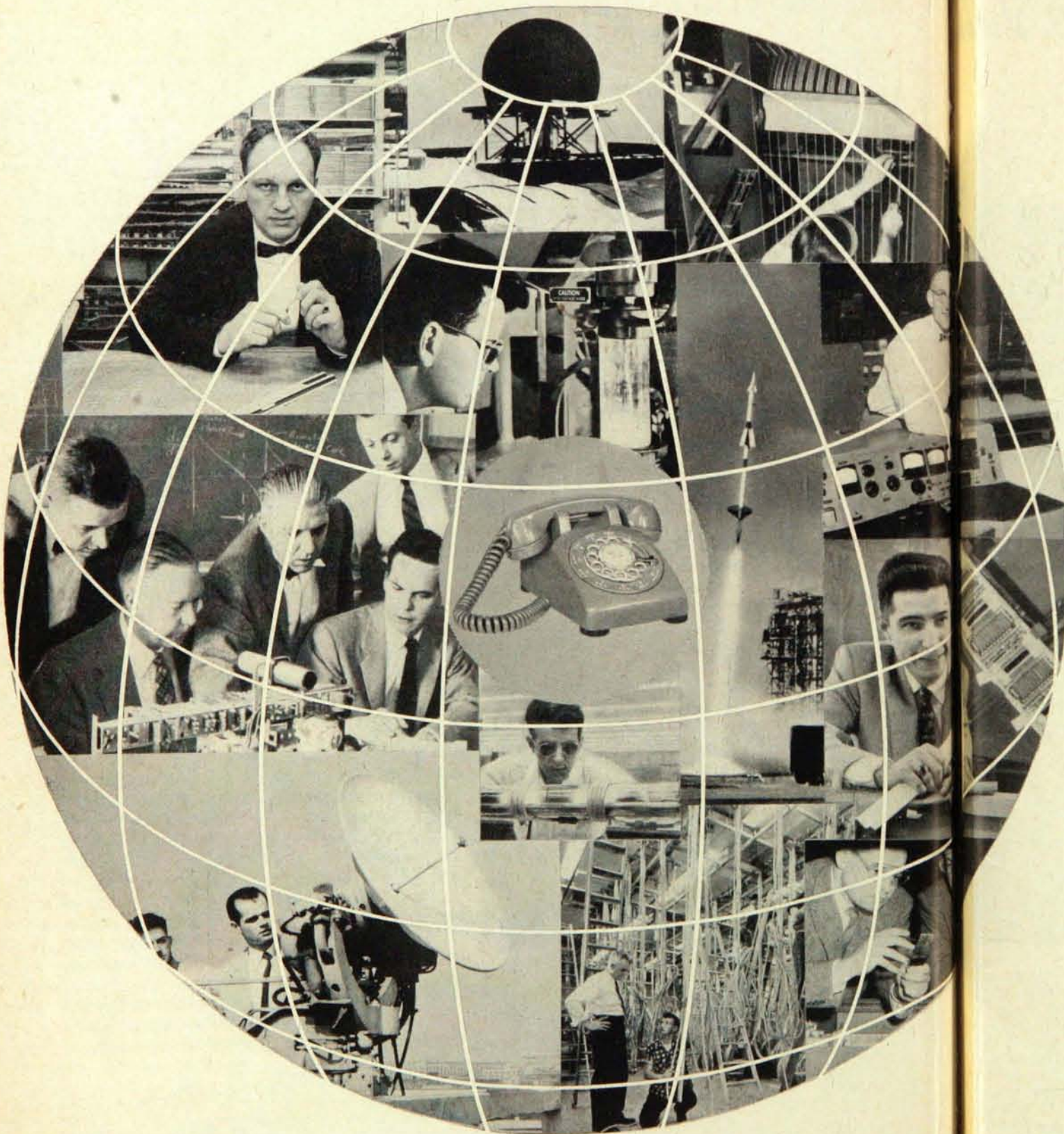
The future of our country depends to a large degree on how effectively we as a people can nourish and strengthen the quality of learning as provided in our colleges and universities. It is time we realize that higher education has been the *foundation of our national life*, that the leadership of our country requires a dynamic and free society which we have had in part because of the fact that *we provide more kinds of educational opportunity for more people than any other nation in the world*. This is a fact that must not change if we are to remain free.

To support the needs of higher education is the job of everyone. Higher education is everybody's concern. As a college graduate, it certainly is yours.

Most cordially,

Ed Hausler

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As the world's largest manufacturer of communications equipment our continued progress depends greatly on our engineers. They have a key role in the production of some 50,000 types of apparatus and component parts that Western Electric makes in a given year.

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In the course of their technical work, engineers participate in such broad managerial functions as production, merchandising, installation, and many others. What's more, we have a record of promotions from within. It's not surprising, therefore, that fifty-five percent of the college graduates in our upper levels of management have engineering degrees.

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Western Electric
 MANUFACTURING AND SUPPLY UNIT OF THE BELL SYSTEM



At the IT meeting, Pres. Morrill (center) presented Outstanding Achievement Awards to Dr. F. H. Stodola '28BS '33PhD, chemist from Peoria with the US Dept. of Agriculture (left) and Ira H. Cram '23BA '24MA, geologist from Houston with the Continental Oil Co.

Spice of the varied
Autumn schedule

Where There's Fall There's . . .

Football

Fall on campus combines the vigor of renewed academic activity with the camaraderie of renewing old acquaintances. Whether the meetings with alumni are formal or informal, because it is fall, after the serious business comes the fun of the football season. Thus, when the alumni association of the institute of technology met last Oct. 4, the Purdue game the next afternoon was on the silent agenda for the annual IT session. When, on Oct. 25-26, the famous 1927 football team had a reunion, the Michigan game was one of the highlights of the program. For the Dad's Day luncheon on Nov. 23, the Wisconsin match will take second place only to an address by Dean of Students E. G. Williamson and a welcome by Association Pres. Carlton Cronin. And, when all loyal alumni converge on campus for a hand in Homecoming Nov. 2, the biggest show of a star-studded festival will come as the Hoosiers pit their prowess against the Gophers in the Minnesota- Indiana game.

Among those who enlivened the 1927 team reunion were four who attended five years ago — Mally Nydahl '35MD '36MS, All-American Bronko Nagurski, Leif Strand '29DDS (newly-elected president of the MAA) and Herb Joesting, 1927 captain and All-American fullback.



Donovan L. Olsen, 23, Civil Engineering senior, this fall began his fourth consecutive year as Drum Major for the 140-piece Minnesota Football Marching Band. Don, who is 6'4" and weighs 190 pounds, began his career as a drum major while in high school. He was twirler for the Michigan State Spartan Band while studying pre-engineering for a year before enrolling at the University of Minnesota.
(Picture courtesy of *The Minnesota Engineer*)



A little bit of tomfoolery between the Gopher and the Hoosier is expressed through the imagination of Photographer Don Gangloff in cooperation with Minnesota Football Band Mascot and SLA Soph Jim Horswill.



Carlton Cronin will welcome Dads.

Associations-Clubs

Veterinarian Group Joins MAA

Eiler D. Frederiksen '52DVM, Windom, has been named president of the College of Veterinary Medicine Alumni Association which was welcomed into the MAA as a constituent group last month.

MAA ExSecy Ed Haislet announced the formation of the new constituent group following action of the Executive Committee Oct. 7.

The new association of alumni who majored in veterinary medicine represents the fourth college to combine the membership of its alumni association with that of the

Second Guessers Aplenty For Monday Grid Films At St. Paul Q'back Club

The man who has been running the show which brings together St. Paul football fans each Monday to review the Gopher game of the previous week says he thinks sell-out games will not increase the size of the Monday luncheon crowd.

Elmer Englebert, Sr., '20BSB, says if the fall sellouts do increase the group, "pretty soon we won't have a place to eat."

Regular quarters for the St. Paul Quarterback club, originated in 1936, are at the Minnesota Club in St. Paul.

At each meeting, one of the Gopher coaches gives an account of the previous week's game whose films are furnished through the courtesy of the MAA.

An average of 225 alumni and friends of the University attend each gathering, Englebert said.

New Life Members

Dr. Marshall W. Mueller '41DDS
St. Paul, Minnesota

William G. Werner '29FS '35BSA9
Windom, Minn.

Louis Christiansen '51BSED
St. Paul, Minn.

MAA. Frederiksen, as president, automatically became a member of the MAA Board until January.

Last spring, the Board of Regents voted unanimously to upgrade the school of veterinary medicine to college status. Dr. W. T. S. Thorp, director during most of the school's 10 year operation as a unit of the institute of agriculture, was appointed the dean at that time.

Present constituent groups of the MAA include the school of business administration, (Orem O. Robbins '36BBA, Mpls., president); the institute of technology, (Robert A. Hoel '43BAeroE '47MS, Mpls., president); and the college of education, (Nolan C. Kearney '24BSED '32MA '48PhD, St. Paul, President).

Gopher Flies West



A Gopher was reported to have flown west for the second annual all-class reunion sponsored by the Southern California MAA recently and to have received a hearty welcome from Bob Swenson '29BBA, club president, and Kathy Marlow, film starlet from Minnesota.

Dads Buy Jackets For Campus Singers

Eighty blazers for members of the Men's glee club will be purchased by the Dad's Association, according to Norman Nelson '24BA, chairman in charge of the project.

Cooperating with the dads will be the D. B. Rosenblatt Co., Mpls., which is offering the blue blazers at cost.

Jackets ranging from sizes 38 to 44 will be delivered in time for the Dad's Association annual meeting on Nov. 23.

The glee club gift is one of several helping-hand projects which University dads sponsor each year. Another is a student-loan program known as the 'Emergency Fund.'

Pre-Game Lunch for Dads

University of Minnesota dads will be guests of honor at a luncheon preceding the Wisconsin game, Nov. 23, according to Carlton Cronin, president of the Dad's Association.

Luncheon in the main ballroom on campus begins at 11:30 a.m. where, as in past years, special tables will be arranged for dads whose sons will be in football uniform during the afternoon game.

'M' club president-elect Loane Randall '38BSL '40LLB will be among the speakers for the short luncheon program.

9 Business Graduates

Qualify as CPA's

Nine University graduates with degrees from the school of business administration were among the 17 who passed the spring examination to qualify as Certified Public Accountants.

According to Dean Richard L. Kozelka '31PhD, the group included Gerald E. Anderson '52, Fred L. Brucciani '40, Theodore S. Hanson '47, O. J. Hellen '52, J. F. Horning '53, Leigh A. Jones '54, A. S. Malmon '51, Charles J. Opheim '52 and Donald M. Mattsson '57.

1927 E. Engineers Plan Homecoming

More than 25 Gophers or about 50 percent of the 1927 graduates in electrical engineering are planning to attend a dinner meeting Nov. 2, Homecoming day, according to J. H. DuBois, vice president of Mycalex Corp. of America, Clifton, New Jersey.

DuBois, chairman in charge of organization, said headquarters for the Thirtieth anniversary will be at the Leamington hotel, where the dinner meeting will be held. He indicated that the group has made ticket arrangements for the Minnesota-Indiana game and that classmates will attend the game as a unit.

Local coordinators of the reunion are Gus Johnson, a vice president of Northern States Power Co., Minneapolis, and MAA ExSecy Ed Haislet.

Falls MAA Sets Meet

Seventy five alumni of the International Falls MAA completed plans for a late November or early December meeting at a recent gathering addressed by Dr. John Gruner, geologist from the University.

Gruner, associated with the U.S. Atomic Energy Commission for nine years, illustrated his talk with slides of uranium mining in Utah, Colorado, New Mexico and Arizona.

J. R. Thompson '23BSB, club president, concluded the meeting by paying tribute to the R. C. Shaw family of that locality. Both Mr. and Mrs. Shaw as well as their five children are graduates of the University, Thompson said. He also mentioned that some 20 relatives of the Shaw family have also attended or graduated from the University.

GUF Trustee Carlson Resigns

MAA President Leif Strand '29DDS announced that C. R. Carlson, Jr. '23BSAg '24MS, formerly vice president and general manager of Deere and Webber Co., Mpls., has resigned from the board of trustees of the Greater University Fund.

Strand, in presenting the resignation to the MAA Executive Committee during the first fall meeting of the group, indicated that no successor has yet been chosen.

Carlson said he resigned from the GUF because he was leaving Minneapolis to assume the position of vice president of Deere & Co., Moline, Ill.

Two problems pertaining to the ever-increasing number of alumni were among those discussed at the MAA meeting. President Strand emphasized the necessity of a study of automation in regard to keeping alumni records and said that automation was "the number one

project to be accomplished this year." Strand also appointed a committee, headed by former president Glenn Seidel, to study the matter of office space for the MAA.

Members voted to recommend to the Senate Committee on Inter-collegiate Athletics that they consider an award to be given to the basketball player of the year in honor of E. B. Pierce, the late former alumni secretary who died in June.

MAA ExSecy Ed Haislet announced that the next meeting would be held Dec. 2.

Education Alumni Seek More Members

A concerted drive for membership was mapped out at the first fall board meeting of the College of Education Alumni Association during which Nov. 22 was indicated as the date of the next executive session.

Pres. Nolan C. Kearney '24BSEd '32MA '48PhD reported that a membership drive letter had been prepared for mailing to alumni early next spring. Among the several suggestions to increase membership were an annual newsletter as well as a means of representing the education association at other professional meetings held throughout the state during the year.

Alumni in Michigan Area Meet Before State Game

MAA President Leif Strand and Athletic Director Ike Armstrong will be guest speakers at a pre-game luncheon in the Michigan State student union, Sat., Nov. 16, at 11:30 a.m. in room 21.

ExSecy Ed Haislet, in making the announcement, said that all alumni in that area are cordially invited to attend. Reservations can be made by mailing a note with check on or before Nov. 14 to the MAA, 205 Coffman Memorial union, University of Minnesota.

A report on the Peik Fund (the college of education's scholarship fund) indicated that there was little or no money left after three \$200 scholarships had been awarded this fall.

In other business, members suggested that an announcement of next year's annual meeting (at present planned for the second Wednesday in the first summer session) be included in the summer session bulletin.

Engineers Elect Robert Hoel

Robert A. Hoel '43BAeroE '47MS, Mpls., was elected president of the Alumni Association of the Institute of Technology at an annual meeting of the group during which Dean Athelstan Spilhaus shortened his greetings to 100 members for an impromptu discussion on the historic Russian satellite launched into space that day, Oct. 4.

Clifford L. Jewett '31BSChem, Mpls. was named first vice president; Edwin A. Willson '30EEE, Mpls., was elected second vice president and Otto J. Pfeifer '29BME '35MSME, Mpls., was voted secretary-treasurer.

New chairmen representing various departments are Robert A. Holdahl '43BAE '47MFAE, Hopkins, aeronautical engineering, replacing Andrew E. Abramson '48BAeroE '49MSAeroE; Arndt J. Duvall '25BSC, St. Paul, civil engineering, replacing Robert C. Dunn '48BCE '48BBA; and Alden Elstrom '32-BME, Mpls., mechanical engineering, replacing Pfeifer.

Committee chairmen who will continue at their posts for the coming year include Fred W. Kesler '34AgE, St. Paul, agricultural engineering; Richard F. Hammel '44BArch, St. Paul, architectural engineering; Paul W. Salo '32BCE, Mpls., chemical engineering; Ernest G. Albrecht '25BSEE, Mpls., electrical engineering and Peter Warhol '29MetE, Mpls., mining and metallurgy.

President Morrill, in behalf of the Board of Regents, presented Ira H. Cram, senior vice president for Continental Oil Co., Houston, and Dr. Frank H. Stodola, Peoria, leading chemist in the field of fermentation, U.S. Department of Agriculture, with Outstanding Achievement Awards.

Cram received a BA from the University in 1923 and an MA with

An educator says a college education is worth \$100,000 in earnings over the average graduate's lifetime. Of course, you have to subtract what he pays in to the alumni fund, which leaves only \$99,997.50.

specialization in geology in 1924. Stodola who, in June, won the Department of Agriculture's Distinguished Service Award from Secretary Ezra Taft Benson, graduated with a BS in 1928 and earned a Ph.D in 1933.

Moderator and keynoter for the afternoon panel session on "Engineering Training" was Hibbert M. Hill, '23BSCE, chief engineer in charge of engineering and design for the Northern States Power Co., Mpls.

Appearing with Hill, former MAA president, were Robert W. Jarvis '48BEE '49MBA, Minneapolis, engineer test supervisor, Minneapolis-Honeywell Regulator Company, who spoke on the young engineer's viewpoint; George S. Hanson '42BEE, St. Paul, chief engineer, military engineering division, Remington-Rand UNIVAC, who gave the industry viewpoint and William G. Shepherd '33BEE '37Ph.D, St. Paul, head of the electrical engineering department, who discussed the University's Engineering Curriculum.

Climaxing the session was a dinner meeting at 6:30 p.m. in the junior ballroom of Coffman union.

Three Iowa Alumni Units Plan Meetings for Nov.

Alumni of three out-state units are organizing meetings just prior to the Iowa game at Iowa City, Nov. 9.

MAA ExSecy Ed Haislet announced that he has been invited to attend meetings Nov. 7 at Des Moines and Nov. 8 at Davenport and Cedar Rapids.

Haislet's schedule also includes a stop in Ames on Nov. 6 to observe the IBM record-keeping system of the Iowa State University alumni association.

Aid to Education Drive Increases

Hibbert M. Hill '23BSCE, chairman of the alumni committee for information on higher education, announced that November has been chosen as one of the months to accelerate the local campaign for increased financial aid to higher education.

The state-wide committee has indicated plans to contact 33 daily newspapers in Minnesota, along with radio and TV stations, to solicit cooperation in the use of advertisements for the national campaign.

The group to bring the needs of higher education to public attention is organized under the Association of Minnesota Colleges whose president this year is J. L. Morrill, University of Minnesota president.

More than 15 alumni from public and privately-supported schools are members of the committee on information. MAA ExSecy Ed Haislet is acting as executive secretary of the committee.

Business Alumni Change Nov. 1 Date

Orem O. Robbins '36BBA, president of the alumni association for the school of business administration, has announced that the annual meeting of the group has been moved up from Nov. 1 to Nov. 22.

Speaker for the occasion will be Mr. J. Cameron Thomson, chairman of the board, Northwest Bancorporation, Mpls., and a member of the committee for economic development (CED).

Robbins said that the membership shall receive additional information on the meeting as soon as plans are complete.

Cal. Dinner Dec. 14

Hugh Morrison '27-30, secretary of the MAA of Northern California, has announced that the annual dinner for the club is being planned for Dec. 14, in San Francisco at Fisherman's Wharf, tentatively at A. Sabella's restaurant.

The Real Mac Guf

Robert P. Provost
Director of the Greater University
Fund (GUF)

The board of directors of the Minnesota Alumni Association voted on September 23rd to "recommend to the University Senate Committee on Intercollegiate Athletics consideration of an award to be given to the outstanding basketball player of the year and that this award be named the E. B. Pierce Award".

If this award is approved by the Pierce family, a specially designed trophy would be presented to the University of Minnesota. The cost to engrave the name of each year's winner would be assumed by the Greater University Fund.

The establishment of such an award would be a fitting tribute to the athletic interest and ability of Minnesota's former alumni secretary. His interest in athletics and in scholarship will be the two requisites necessary to be eligible for this award. ("E. B." played forward on the 1903-04 national championship basketball team coached by Dr. Cooke. He lettered in track as well as basketball.)

In addition to the award for the outstanding basketball player annually, the memorial contributions to "E. B." will have another unique purpose: These contributions will be used to encourage University undergraduate students to become better acquainted with the MAA while they are on campus. Use of funds will be through the Executive Committee of the MAA.

If you are interested in making a memorial contribution to E. B. Pierce, you may do so by forwarding your check (made payable to the University of Minnesota) to room 205, Coffman Memorial Union. Your gift will count as an annual contribution to the Greater University Fund.

NOVEMBER, 1957

23

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On the Campus

Mines, Metallurgy School Revamped

The University board of regents approved the reorganization of the school of mines and metallurgy (a part of the institute of technology). The school now comprises the divisions of mineral engineering, metallurgical engineering and the mines experiment station.

Prof. Strathmore R. B. Cooke is head of the school and chief of the division of metallurgical engineering; Eugene P. Pfeider, chief of the division of mineral engineering, and Henry H. Wade, director of the mines experiment station.

Physical metallurgy has been transferred to the school of chemistry where it will function as the department of metallurgy under Prof. Morris E. Nicholson.

Separate curricula now are available in metallurgical engineering, geological engineering, mining engineering and geophysics (school of mines and metallurgy) and in metallurgy (school of chemistry).

Well, Bowl Me Over—Automation!

Alumni returning to the University campus for the Homecoming festivities will find something new has been added at Coffman Memorial Union.

Coffman Bowling Lanes are now equipped with AMF Automatic Pinspotters on all 16 alleys.

By way of introduction to the new equipment, Coffman Union will present two silver trophies to the highest scoring man and woman alumnus bowling on the lanes during the Homecoming Week celebration. The lanes will be open every day, including Sunday.

Beginning bowlers are especially encouraged to try their hand with the Automatic Pinspotter which makes scoring easy by indicating whether the bowler is rolling the first or second ball, in addition to

New Student Center Readied for 1958

Award of contracts totaling \$912,832 for the construction of a new Student Center building on the University of Minnesota's St. Paul campus was announced recently by William T. Middlebrook, University vice president for business administration.

Construction of the new building, which will be erected just north of Coffey hall (the St. Paul campus administration building) should be completed by Oct. 1, 1958.

The three-story Student Center will house lounges, conference rooms, student organization offices, a ballroom and banquet hall, a grill and snack bar, a crafts workshop and games facilities.

With equipment and other expenses added, the building is expected to cost a total of \$1,095,112. Funds totaling this amount are available from gifts, student union funds accumulated from student union fees and a \$400,000 loan.

'U' Theatre Sells Out Before Opening Night

For the first time in its history, the University of Minnesota Theatre has closed its sale of season tickets before the first seasonal performance.

Ticket sales for the 1957-58 season closed on October 31. The early closing date was made necessary by the large number of ticket orders to date.

Plays to be presented this season are "Teahouse of the August Moon," Nov. 7-9 and 12-17; "The Taming of the Shrew," Nov. 28-30, Dec. 3-8; "The Glass Menagerie," Feb. 6-8 and 11-16; "The Rivals," Feb. 27 and March 4-9, and the Centennial production, May 15-17 and 20-25.

registering strikes, fouls and flashing the number of each pin left standing after the first ball.

Bandmaster Resigns For Teaching Duty

Gerald L. Prescott, bandmaster at the University for 25 years, has resigned that position to devote his time to collegiate teaching.

Prescott, who regards teacher education as his main interest, said he found adequate individual instruction sometimes impossible because his classes were overcrowded. In view of this, he decided to give up his band activities and help strengthen the University's instruction program.

As associate professor of music, he teaches instrument technique, conducting and organization of bands. Currently he is working on his thesis for a doctor of philosophy in education degree.

As director of the University's football marching band, Prescott arranged a program for every home football game. Prescott was the first salaried bandmaster at the University after the administration decided to give the band an official position within the music department in the University college of science, literature and the arts.

Assuming Prescott's position on an acting basis is Gale L. Sperry, who played under Prescott and was his graduate assistant with the band before becoming assistant bandmaster.

Six Engineers Receive Industry Scholarships

Six University of Minnesota students in the institute of technology recently were awarded scholarships sponsored by private firms. The awards were made on the basis of academic aptitude, vocational promise, character, leadership and financial need.

The winners and sponsoring firms are: Richard Christenson, St. Paul, and Roger E. Swanson, Taylors Falls, University Oil Products; George Stever, Winona, Texaco company; Glenn Evavold, Battle Lake; Edward Opitz, St. Cloud, and Duane F. Sanborn, St. Clair, William H. Ziegler company.

GOPHER GRAD

FIRST SNARK SQUADRON ACTIVATED

Snark Guided Missile Becomes Operational

HAWTHORNE, CALIF.—The United States Air Force has announced that its first Northrop Snark SM-62 intercontinental guided missile squadron will be activated late this year. The Snark will be the first such missile to come into operational use.



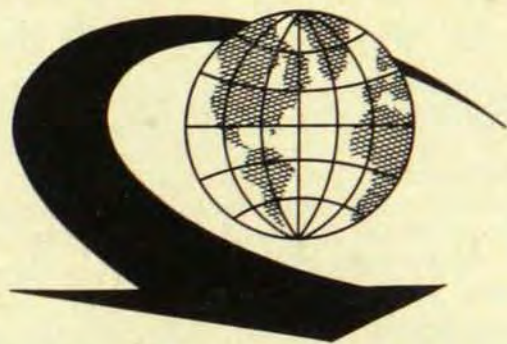
The squadron, to be assigned to the Strategic Air Command, will be equipped with the high-altitude, jet-propelled Snark missile capable of delivering a nuclear warhead.

The exact site for the new missile unit was not disclosed but SAC officials emphasized that missile units will be so positioned as to reduce problems of noise and to insure that missiles, if ever fired, will not pass over heavily populated regions.

No missiles will be launched from operational sites except in case of attack. For training purposes missile crews will practice actual firing at an established range such as Patrick Air Force Base, Florida.

The Snark missile squadron will be manned by some 500 officers and men. Personnel are now undergoing training in the operation and maintenance of the Snark at Northrop.

The engineering division at Northrop continues in its development work on the Snark while they are in production. Other advanced projects in manned and pilotless flight are also in various stages of development at Northrop's new multi-million dollar engineering and science center in Hawthorne... all of them vital to the defense of America and other countries of the free world.



missile engineers

As space becomes the missile engineer's province the demand for highly competent talent is ever present. Each development uncovers other areas for advanced study.

Beneath the imposing skyline at Northrop, engineers in the new multi-million dollar Engineering and Science Center are tackling today the problems of tomorrow's flights into space.

Scientists and engineers at Northrop have many accomplishments to their credit, including the USAF-Northrop SM-62 Snark intercontinental guided missile, first such weapon system to become operational with the Strategic Air Command. Research continues on preliminary and advanced projects involving missile guidance and controls, propulsion, flight test engineering, and similar areas of prime importance.

Northrop's 18 years of experience in pilotless flight is seldom matched by other manufacturers in the aircraft or missile fields. This reputation is a principal reason why experienced engineers and scientists have joined the Northrop Engineering Division. As work progresses on the USAF Snark and other vital missile projects career opportunities become available for qualified missile engineers.



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BUILDERS OF THE FIRST INTERCONTINENTAL GUIDED MISSILE

\$64,488 Raised by Student 'Promoters'

University students raised or donated a record-breaking total of \$64,488 to social service projects during the past school year, according to the student activities bureau. This tops by \$8,000 the previous record of \$56,289 set in 1953-54.

This year students working in 179 campus organizations managed 673 projects of all kinds—work programs, collection of money or articles and donations.

Approximately half of the \$64,488 was raised in all-campus events for all students. Largest moneymaker was the Campus Carnival in April, which grossed some \$15,000 for University scholarship funds. Other all-campus events raised the following amounts: Greek Week, more than \$10,000 for Camp Courage, camp for crippled children; Campus Chest, \$3,500.

Memorial Fund Gets UMD Representatives

Two UMD representatives have been appointed to the administrative committee of a new memorial program—the University of Minnesota Memorial Fund—to honor the memory of University staff and faculty members, their families and friends.

The UMD representatives on the governing body are Mrs. Ward Wells, president of the UMD Faculty Wives club, and Provost R. W. Darland. In Mpls., the Faculty Women's club has accepted the responsibility in accomplishing the fund's objectives.

A special project of the Greater University Fund, the fund in the few months of its existence has grown beyond \$4,000, according to Robert P. Provost, GUF director.

Grant Awarded for Brain Damage Study

The University has been awarded a \$221,747 grant from the United States Public Health Service for research into the causes of cerebral palsy, mental retardation and allied neurological disorders.

The University is one of 11 medical schools and hospitals working with the Service's National Institute of Neurological Diseases and Blindness in the long-range nationwide study which is specifically concerned with brain damage occurring during the period covering pregnancy and about one month after the birth of a baby.

Factors such as lack of oxygen, brain injuries, blood incompatibility (the Rh factor) and infections during pregnancy will be studied.



SPECIAL REPORT

Mr. JIM BYRD NEW YORK LIFE AGENT
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BORN: April 14, 1929.

EDUCATION: Georgia Institute of Technology, B.E., 1951.

MILITARY: U. S. NAVY—LT. JG June '51—May '53.

PREVIOUS EMPLOYMENT: July '53 to March '54—
Industrial Engineer for shoe manufacturer.

REMARKS: Former Navy Lieutenant Jim Byrd became a New York Life representative on March 16, 1954. His entry into the insurance field came soon after graduating from Georgia Tech as an engineer. Largely as a result of a helpful, friendly manner in his business activities and a logical approach to his clients' insurance problems—Jim Byrd's switch in careers, from industrial planning to insurance planning, proved notably successful. His impressive record in the nearly 4 years with New York Life—which includes qualifying for the Company's Star Club in 1954; Top Club in 1955, 1956; and the industry-wide Million Dollar Round Table in 1956, 1957—is a good indication of Mr. Byrd's future success potential with the Company.

Note

Jim Byrd, after nearly four years as a New York Life representative, is already well established in a career that can offer security, substantial income, and the deep satisfaction of helping others. If you'd like to know more about such a

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Hawkeyes, Spartans, Badgers

S'November Football Troubles

By WILL SHAPIRA
Minnesota Daily Sports Editor

Minnesota Novembers have been known to cause all kinds of unpleasant situations. The temperature is just starting to get down to that snowy 20-30 degree mark, and the weight from last Thanksgiving Day dinner has not yet been taken off, despite the New Year's resolution.

It's the time of year for football worries, too. And looking at the Minnesota slate for the month of November, one sees logical cause for concern.

For it's then that the Gophers swing into the stretch run . . . against Michigan State, Iowa and Wisconsin.

These three teams are all capable of causing trouble. (That may be the understatement of the Gopher football year.)

Let's look at these three foes and see just what kind of a threat they pose:

Michigan State: Here is a team that has not quite played up to expectations at times this year; namely, in its upset loss to Purdue.

But—unfortunately for the Gophers—the Spartans are a pass-minded ball club. This alone gives them a great chance to beat Minnesota, for it's no secret that the Gopher pass defense—as in other years—leaves something to be desired.

Jim Ninowski is the man with the golden arm for Michigan State and Dave Kaiser is the chief receiver. They also have a man named Walt Kowalczyk who has been known to warm up for a game by ramming through concrete walls.

This one is at East Lansing, too, which does not exactly enhance the chances of a Gopher victory.



Two good men in a pinch: veteran halfback Bob Schultz (left) and a newcomer, end Tom Moe.

Ranking along with the Spartans as a top November hazard are the Iowa Hawkeyes. Consider merely the name "Iowa" and you realize no matter what the caliber of either the Gophers or Hawks, it's bound to be a terrific game.

Iowa's line is a veteran crew, and in Alex Karras and Dick (Sleepy) Klein, Forest Evashevski's team has the nation's two best tackles.

Actually, this one could amount to two games: the Gophers vs. the Hawkeyes and Frank Youso vs. Karras and/or Klein.

Unhappily, it's at Iowa City. Moreover, Iowa quarterback Randy Duncan has improved steadily from game to game this year . . . especially in the passing department.

And with end Jim Gibbons still around (you must remember what he did to us last year), it's nothing but trouble.

Wisconsin seems like the easiest of the three November foes— but only on an often-invalid comparative basis.

They've been one of the real surprises of the league this year and the chief reason is a fast-rising quarterback named Sid Williams, who already has exceeded Milt Bruhn's fondest dreams. Danny Lewis can go at halfback, too, and so can the Hobbs boys.

All in all, it looks like a tough November for the Gophers—except for the Nov. 2 tilt with Indiana for Homecoming.

Around and About With Alumni

'90

Dr. Fred A. Carrell '90MD, pioneer Minnesota physician, celebrated his 99th birthday last month. In a recent story in the St. Paul Dispatch, Carrell described himself as a "gentleman of leisure," and recalled his early days of practice, when he drove a team of broncos over the prairies around Rushmore to make his patient calls and sometimes slept on the ground in a dug-out when he couldn't get home at night.

'16

Mrs. R. G. Blakey (Gladys McAlpine Campbell) '16MA was recently named chairman of voters' service for the Santa Monica League of Women Voters.

'21

Lloyd A. Elmer '21BSME this summer celebrated his 35th service anniversary with the Bell Telephone System. He is a member of the Bell technical staff and is involved in military electronics development.

'24

Margaret Streaker Eder '24BSHE recently received a master of science degree from Ohio State University.

'30

Dr. Karl S. Quisenberry '30PhD last year was named director of crops research in the U. S. Department of Agriculture's Agricultural Research Service.

'31

Stuart Dunn '23BS, '31PhD, plant physiologist, was featured in the May Issue of the University of New Hampshire alumni magazine. The story outlined his research on growing plants without sunlight by using fluorescent light.

'33

S. J. Buckman '31BS, '33PhD currently is president of his own company, Buckman Laboratories, Inc., an organization of manufacturing chemists, located in Memphis, Tenn. Since graduation he has been working in the field of industrial microorganism control.

'34

Edward E. Litkenhous '34PhD has returned to the faculty of Vanderbilt University. He was formerly program director for engineering sciences, National Science Foundation.

'37

Fred H. Berggren '37BS, formerly sales manager for Olbury Products, Hooker Electrochemical Co., Niagara Falls,

N.Y., has been promoted to product supervisor of chlorate chemicals.

'38

Dr. Jack W. Warfield '38MA has been named assistant professor of telecommunications at the University of Southern California. Prior to accepting his new position, he served as dean of the College of Theater Arts, Staff Director, director of television at the Pasadena Playhouse and, more recently, as staff director of television at station KTLA in Hollywood.

Ralph E. Comstock '34BS, '36MS, '38PhD, formerly a faculty member at North Carolina State College, joined the University of Minnesota staff as a professor of animal husbandry in July.

'39

George W. Abel '39BSFor has been appointed director of technical forestry for the Mill Division of Owens-Illinois Glass Co. His headquarters will be in the company's general offices in Toledo, Ohio. Abel previously was a forest economist and assistant professor at the University of Arkansas, and a management research forester at the Southern Forest Experiment Station, U.S. Forest Service at State College, Miss.



Albert Nelson Dingle '39BS was recently appointed associate professor of meteorology in the University of Michigan Department of Civil Engineering. He was formerly a lecturer and associate research meteorologist.

George W. Abel '39BSFor was recently named director of technical forestry for the Mill Division of Owens-Illinois Glass Co. He will supervise technical phases of management on Owens-Illinois' timberlands in Wisconsin, Michigan, Georgia, Florida and the Bahamas.

'40

John P. Edwards '40BSChE has been appointed sales manager for Hetron (R) polyesters in the Durez Plastics Division of Hooker Electrochemical Co., North Tonawanda, N.Y.

'41

Mrs. Marion P. Alves '36BS, '41MA is currently directing the University of California, St. Barbara College Child Development Laboratory, where home economics students observe and participate in a program of pre-school activities for

three and four year old children. She also instructs the department's child care courses.

John B. Carroll '41PhD was appointed a professor of education in June by the Harvard University Graduate School of Education. A psychologist, he heads the Harvard Laboratory for Research in Instruction.

'42

Dr. Robert S. Marvin '39BChE, '42MS has completed a paper on "Direct Measurement of Dynamic Bulk Modulus," which describes his work for the National Bureau of Standards of the U. S. Department of Commerce.

'44

Dr. A. H. Moseman '38BS, '44PhD has accepted a position with the Rockefeller Foundation as associate director for agricultural programs. He was formerly director of crops research in the U.S. Department of Agriculture's Agricultural Research Service.

Myron O. Carlson '44BCE was appointed chief chemist for Oliver Iron Mining Division's Canisteo District in August of this year. He was formerly assistant chief chemist.

'45

Billie Kolb '45BA, former Life magazine presentations writer, has been promoted to home furnishings merchandising manager.

'46

George F. Humphrey '46MS successfully completed all examinations for the designation of chartered life underwriter recently.

Carmen V. de Medina '46MS received her MA degree from New York University in June.

'47

Paul F. Sharp '47PhD has been named fourteenth president of Hiram College, Hiram, Ohio. He was formerly a professor of history at the University of Wisconsin.

'48

Bob McCall '48BA is now residing at 325 W. 55th St., Hialeah, Florida.

Welles B. Eastman '48BBA was recently promoted to assistant secretary in the comptrollers department of the First National Bank of Minneapolis.

Capt. John Q. Erickson '48BA recently took over new duties as information services officer at U.S.A.F. Bentwaters, England. He was reassigned to Bentwaters from R.A.F. Station, Molesworth.

GOPHER GRAD

'49

Carl E. Seterstrom '49BMechE has been appointed sales engineer in Minnesota, North and South Dakota by Inland Steel Products Co., Milwaukee, Wisc.

Claude L. C. Thompson '49BMechE has been appointed production engineer, Perlite, by the United States Gypsum Co., Chicago, Ill.

John T. Westrom '49BBA was recently named an officer at First National Bank of Minneapolis. He is now an assistant secretary in the comptrollers department.

Paul Leblang '49AB received his MBA degree from New York University in June.

'50

Janet A. Johnson '50BA received an LLB degree from New York University in June.

Harland Johnson '50BS recently returned to his work as principal of a 700-pupil elementary school in Ketchikan, Alaska. He spent the summer doing graduate work at Duluth Branch.

Hsu Kuan-Jan '50PhD has been named head of a new laboratory in Peiping, China, for research in the application of atomic energy to agriculture. In 1956, he was a research fellow in the department of agronomy and plant genetics in the University farm school, where he worked with Dr. E. R. Auseumus on development of rust-resistant wheat strains by means of atomic radiation.

John L. Terry '50BSME is currently employed as an engineer in Mechanical Equipment Branch of the Army Engineer Research and Development Laboratories, Fort Belvoir, Va.

Dr. William J. Rees '50MSPH has accepted a position in the medical division of the Upjohn Company, Kalamazoo, Michigan.

Norman Levin '50AA was named director of the Fairbanks, Alaska, USO Club in July.

William F. Kinderwater '50BA was recently appointed assistant director of public relations for DeWalt Inc., manufacturer of wood and metal-working equipment, Lancaster, Pa.

'51

William J. Ellena '51MA, formerly a Duluth teacher, was recently appointed director of educational research and planning for the Baltimore, Md. county school system. For the past three years, Ellena has been a member of the staff of the National Education Association in Washington.

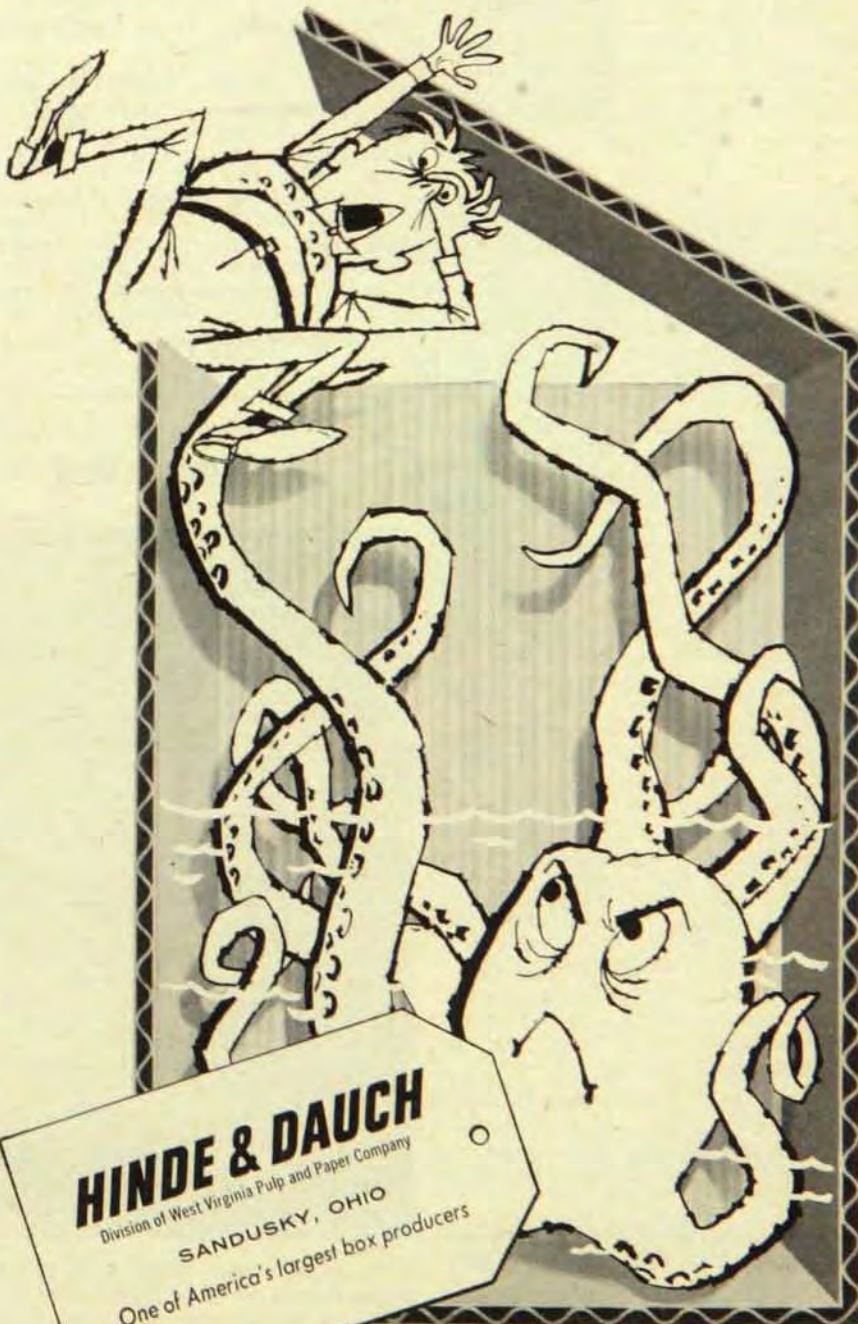
Gene M. Nordby '51BEE has been appointed program director for engineering sciences, National Science Founda-

tion. He will supervise the Foundation's national program for research in engineering sciences.

Richard C. Kirby '51BEE, chief of the Ionospheric Research Station, Boulder Laboratories, National Bureau of Standards, has been awarded the Department of Commerce Gold Medal for

exceptional service in advancement of the science of radio wave propagation and long-distance radio communications.

Shirley M. Price '51BSEd taught school the past year at Norbury Manor secondary school in London, England, as a recipient of a Fulbright exchange scholarship.



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'51

Robert H. Owens '51BS has been promoted to manager of The Trane Company sales office in St. Paul, manufacturer of air conditioning, heating, ventilating and special heat transfer equipment.

Dr. Irving S. Cooper '51MS, '51PhD was recently promoted from assistant professor of neurosurgery to professor of clinical neurosurgery, of New York University Post-Graduate Medical School. He is internationally recognized for his discovery and development of two surgical procedures for the relief of the involuntary movement disorders in persons afflicted with certain types of Parkinsonism and cerebral palsy.

'52

Robert W. Beaupre '52BBA has been appointed an auditor by the First National bank of Minneapolis.

Keith G. Felcyn '52AB has been appointed manager of Business Week magazine's Milwaukee news bureau. He was formerly employed as a reporter for United Press in Minneapolis and Detroit.

Ruth Zuelke '52BS is currently employed in Europe as a civilian member of the Special Services program for the United States Army. She is responsible for supervising 7 crafts shops and 6 photo labs in Wuerzburg, Germany.

'53

Capt. Jason A. Aronson '49BA, '51BS, '53MD recently was graduated from the military medical orientation course at the Army Medical Service School, Fort Sam Houston, Texas. He has been assigned to Walter Reed Army Medical Center in Washington, D.C.

John H. Cleland Jr. '53BA, recently was promoted to first lieutenant on Okinawa, where he is assigned to the 97th Antiaircraft Artillery group.

Paul G. Zerby '53BA of St. Paul has received a scholarship to Harvard Law School for the current academic year.

B. Marlo Dirks '53PhD recently joined the research and development staff of the food products division of the Proctor & Gamble Co.

Dr. D. Peter Carlson '53BS has joined the staff of Du Pont's Polychemicals Department research division as a chemist at the Experimental Station in Wilmington, Del.

David Goldfarb '53AM received his MA degree from New York University in June.

'54

Thomas S. Fern '52BS, '54MA was recently appointed as instructor in art by Berea College, Berea, Ky.

'55

Thomas H. Hodne '55BArch has been appointed assistant professor of architecture in the School of Design, North Carolina State College, Raleigh, North Carolina. He will also participate in a city-planning project in Cleveland, Ohio, as a principal in the firm of Klein and Hodne, consultants for the Ohio City Planning Project.

Earl Matthew Morgan '55BA was recently graduated from the American Institute for Foreign Trade at Thunderbird Field, Phoenix, Arizona.

Charles F. Johnson '55BSEd has accepted a position as insurance salesman for Provident Mutual Insurance Co., Mpls. office.

Mrs. Robert D. Tennison (Suzanne Johnson) '55BSEd will be teaching third grade in the Minneapolis Public School system during the 1957-58 year.

Jean Selma Anderson '55BS(HE) recently received an MS degree at the State University of Iowa.

'56

First Lt. Allen I. Sacks '56LLB, formerly assistant U. S. district attorney, recently graduated from the infantry officers basic course judge advocate general corps at Ft. Benning, Ga. He is now at Judge Advocate General School at Charlottesville, Va.

Doloris Barnes '56BSPHn recently began work as public health nurse for Rice County, Minnesota.

Second Lt. John Untinen '56BBA recently graduated from the Adjutant General Officer Basic Course and is now working at the U.S. Army Recruiting Station, Indianapolis, Ind.

D. R. Longren '56AeroE is now an engineer with Northrop Aircraft, Inc. Longren's duties consist of conducting stability and control analysis in support of the Preliminary Design department.

Second Lt. William C. Paulsen '56BSPHm recently arrived in Japan and is now chief of pharmacy at the Tokyo Army hospital.

Alumnus Deep in the Heart of Texas



Vincent R. DiNino '41BS, right, accepts a "Texas-size" check for \$20,000 from Herman Jones, national president of the Ex-Students' Association of the University of Texas. The gift from University of Texas alumni sets up a permanent endowment fund to provide scholarships in the Longhorn Band, which DiNino directs. Assistant director of the University of Minnesota Band from 1939 to 1941, he was director of the Alexandria, Minn., high school band when he was invited to come to the University of Texas.

Good news traveled fast at Michigan State

It started with Bob Yackels. Bob began his career with New England Life even before he graduated from Michigan State. While still a senior, he worked part-time with our General Agent in Grand Rapids and knew this was the company for him. Soon he had won success as a full-time agent and was promoted to District Agency Manager in Lansing.

The good news about Bob traveled fast. Some of his classmates decided to follow suit. Now each year more men from the graduating class confidently turn to New England Life for a career in life insurance. Thirty-eight Michigan State men are now representing us. Ten of them, pictured on this page, already hold management positions.

Not all of our agents from Michigan State joined us immediately upon graduation. Not all participated in the fine life insurance course there while in college. But they've all had one thing in common right along — an awareness of how New England Life gives a man a firm foundation, from the start, in a challenging and lucrative business.

There's room in the New England Life picture for other ambitious college men who meet our requirements. You get income while you're learning. You can work anywhere in the U. S. A. Your future is full of substantial rewards.

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DONALD H. SIZER
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Detroit, Buda



ROBERT L. CALHOUN
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Detroit, Pomeroy

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A. Irving Brinberg, '22, St. Paul
Bruce J. Robinson, '27, Indianapolis
Louis M. Schaller, '29, Minneapolis
Mailand E. Lane, Sr., '32, Minneapolis
Richard H. Luby, '34, Phoenix
Hubert D. Wheeler, '34, Gen. Agt.,
Duluth

Francis L. Lund, CLU, '35, Gen. Agt.,
Minneapolis
Howard D. Burdick, '39, Dallas
Morton C. Mosiman, '40, Minneapolis
Lloyd V. Shold, '42, Duluth
Robert R. Abroahams, '44, Minneapolis
Robert M. Larsen, '47, Minneapolis

Earl H. Mosiman, '47, Minneapolis
Robert D. Myhr, '48, Chicago
Ariel H. Oberg, '48, Los Angeles
Theodore J. Lee, '49, Duluth
H. Larry Wilson, Jr., '52, Minneapolis
John B. Heimkes, '54, Minneapolis
William G. Sullivan, '56, Minneapolis

Summa Cum Laude

to



An Idea Man

H. A. (Ben) Eastman on being named creative director of Sidney Clayton & Associates, Chicago advertising agency. His new duties include serving on the agency's marketing committee and direct supervision of copy, art, production and traffic departments. For twelve years, Mr. Eastman was advertising copy chief for Carrier Corporation, Syracuse, N.Y., manufacturer of air conditioning, refrigeration and heating equipment. A University student from 1931 to 1933, he also was copy chief and then a divisional sales manager for Sears, Roebuck and Co.

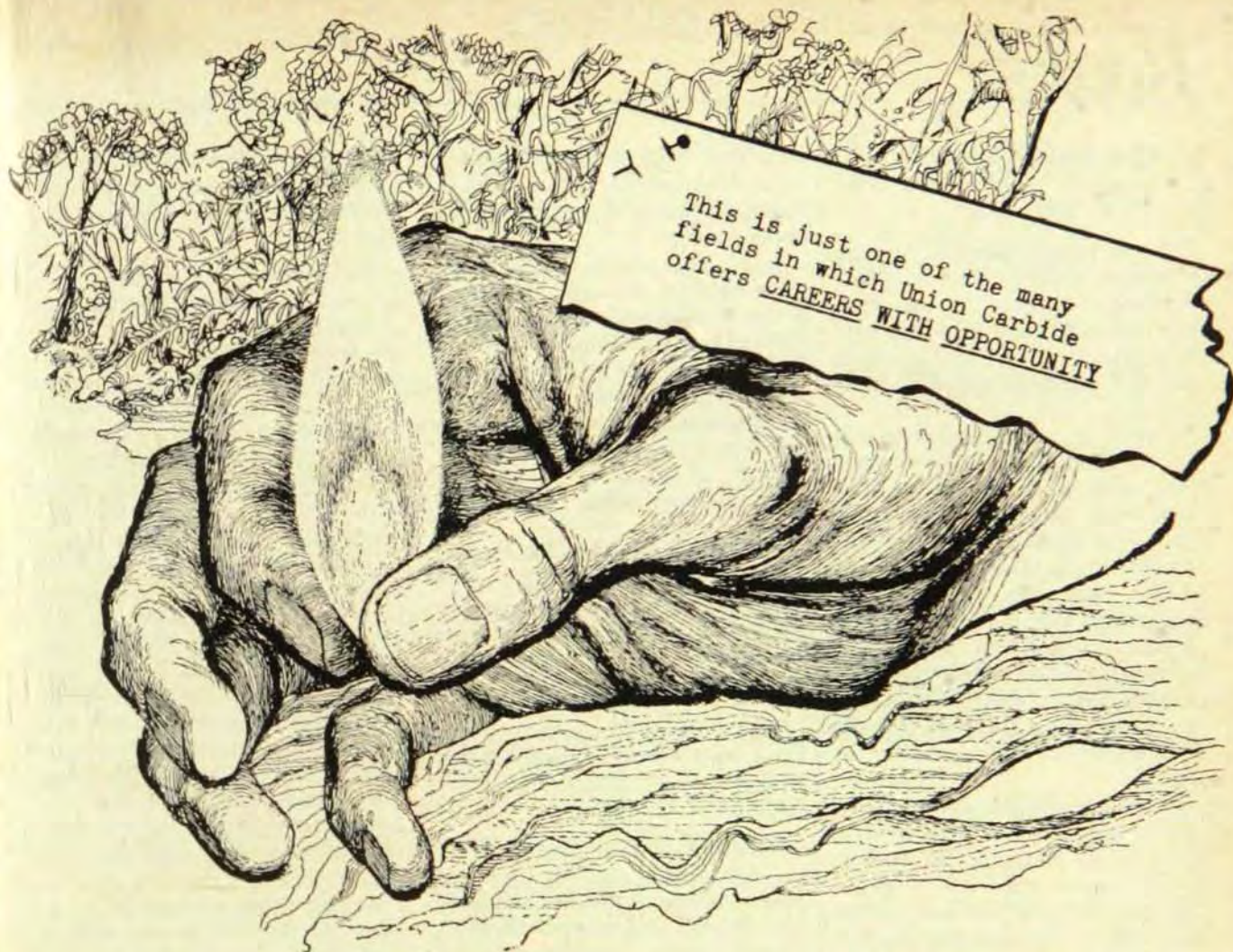
Chemistry Boss

Roger W. Strassburg on being selected manager of the general chemical laboratories for The B. F. Goodrich Co., Akron, Ohio. Mr. Strassburg previously worked with the Des Moines Ordnance plant, Des Moines, Iowa, and taught mathematics at the Naval Academy Preparatory School, Bainbridge, Md. Since 1950 he has been a member of the organic chemistry staff at the Goodrich Research Center in Brecksville, Ohio. Graduating from Iowa State College, Ames, Iowa, in 1942, he received a BS in chemical technology. In 1950 he was awarded his PhD in organic chemistry from the University.



And Research Director

Dr. Warren E. Snyder on being appointed manager of the Engineering Division of Midwest Research Institute. The authority on gas turbines has been senior research engineer and supervisor of fluid dynamics, gas turbine department, General Motors Research Staff, since 1952. Previously he was with the Naval Research Laboratory, assistant head of the Mechanical Engineering Department at the University and associate professor as well as chairman of the Mechanical Engineering Department at the University of Kansas. Dr. Snyder is a member of the American Society for Engineering Education and the American Society of Mechanical Engineers. He received his PhD in 1950 from the University.



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Books

Baffling Eyes of Youth, by John K. Donahue '30BA, Association Press, N.Y., 1957, \$3.50.

Parents with teen-agers as well as youth-serving agencies will find something of value in this true story of a probation officer's struggle to lure a gang of St. Paul boys from the brink of juvenile delinquency.

Written in easy-to-read style, the book is absorbing and, more than once, comical in the tradition of *Huck Finn*. At the same time, the book is no comedy. However, this account of the formation of youth by the unhealthy forces which spring from poverty and illiteracy combines pathos with humor. The accurate reporting eventually helps create a picture which adds much to understanding the boy, both as an individual and as a member of a gang.

For the sociologist, the book is a natural case history because it is based on the diary of the author. For the parent, the book offers insight into the *why* and *how* of that malleable portion of a growing boy—his 'group' personality.

While the poetry of Carl Sandburg inspired the title, only a consuming love for boys and unlimited faith in the good of people could have inspired the life work which reveals itself through this interesting biography of a gang. The story, in turn, has been awarded the \$1500 Leadership Book Award in an Association Press contest.

Donohue has been chief probation officer of Ramsey County for the past 17 years.

Rally Round the Flag, Boys, by Max Shulman '42BA, Doubleday & Company, Inc., N.Y., 1957, \$3.00.

This is a story you'll laugh at while you'll wonder if your humor is so spontaneous because maybe it is founded on some basic truths about suburban living, a stage of life or life in general.

Set in a Connecticut commuting village, the narrative concerns

folks who work hard at achieving social approval. Meantime, each of the principals is being beset with undercurrents.

Into this mass of complex humanity are brought additional persons, additional worries and additional laughs. The U.S. Army installs a Nike guided missile base and that community pillar known as "civic pride" manifests itself in everything from a plea against radiation as well as against the plunging real estate and moral values.

There is no conclusion to this story; this is what critics often call "a slice of life." But looking at it through the new, mature pen of the author will prove a hilarious experience.

The Making of Auden Canon, by Joseph Warren Beach 'OOBA, University of Minnesota Press, 1957, \$4.75.

This study of revisions made by W. H. Auden in his collected poetry is one of the last works of Mr. Beach, professor of English, literary critic, novelist and poet who died on August 13 at the age of 77.

Considering the volume *Collected Poetry*, published in 1945, as the Auden canon or authorized version, Mr. Beach examines the process by which Auden selected, eliminated, and revised his poems for inclusion in the canon. Through this analysis, Mr. Beach reveals the poet's changing philosophy over a period of years.

Among the most widely known of Mr. Beach's books is *The Concept of Nature in Nineteenth-Century English Literature*.

Philadelphia—PhT degrees (putting him through) were conferred on 105 LaSalle College seniors' wives at the third "commencement" exercises honoring students' wives. Special honors went to Mrs. Thelma O'Donnell, mother of 13 children.

—Courtesy of Stan Wenberg

The Indian Wars of Minnesota, by Louis H. Roddis '13MD, The Torch Press, Cedar Rapids, Ia., 1956, \$5.50.

The Indian Wars, selected by a nationally known review column as one of the "Dozen Best Western Books of 1956", is a clear and consecutive narrative on the important and dramatic events associated with the Indian population in the early days of Minnesota.

The Sioux uprising in the valley of the Minnesota River in 1862 was one of the most extensive Indian outbreaks to occur on the North American continent. It overflowed from Minnesota into Iowa, Nebraska, and the Dakotas and the campaigns against these Indians continued to almost 1866. Thus during the crucial years of the Civil War considerable military effort was diverted from use against the Southern armies, a fact that has been largely overlooked even by historians of the western frontier during the war between the states.

Among other subjects is an account of the last Indian uprising in the United States, that at Leech Lake, Minnesota, in 1898. This episode has the distinction of having been the last time that regular troops of the U.S. Army were engaged in actual combat with the red man. The Spirit Lake massacre in northwestern Iowa, and the attack on Springfield in Minnesota in 1857 are described, as are a "Blueberry War" and a campaign in a cornfield.

Dr. Roddis is primarily a medical historian but has had a lifelong interest in the Indian wars of his home state. He received his M.D. from the Univ. of Minn. and was appointed an Asst. Surgeon in the U.S. Navy from that state. In 1950, he retired as a Captain, Medical Corps after extensive service. He is the author of several books on medical history and biography including, "Edward Jenner and the Discovery of Smallpox Vaccination," "A Short History of Nautical Medicine" and others.

GOPHER GRAD

Deaths

Graduates Before 1910

Edwin Thomas Reed '95BS, of Corvallis, Oreg.

Arthur Peydon Guy '98LLB, at Minneapolis in October of last year.

Daniel John Lothrop '99BA, '03MA, in August, 1956.

Richard S. Beardsley '00BS, 77, retired mathematics teacher on May 9 at his home in Chicago, Ill. Survivors include his widow, four sons, a daughter and 14 grandchildren.

Mrs. Perry D. Sherwin (Edna Matchan) '02BA, at Utica, Mich. a year ago.

Robert E. Ford '03EE, of Minneapolis, in 1955. Mr. Ford was a former MAA Board member.

Robert Kincaid Stuart '05LLB, '06LLM, in August, 1956, at Hillsborough, Calif.

Gabriel E. Garber '06ME, of Minneapolis.

William Rathjen '06FS Sept. 18, 1956.

Maurice J. Finberg '28MetE on Sept. 18, 1956.

Dr. B. R. Karn '07MD, this year at Ortonville, Minn.

Henry Anton Erikson '96BA, '08PhD, professor emeritus of physics at the University of Minnesota, in June at his home in Coral Gables, Fla., after a long illness. He was professor and chairman of the University Department of Physics in 1915, retiring in 1938. He is the author of "Elements of Mechanics," a basic textbook, and of "A Manual of Physical Measurements." He is well known for his contributions to work on the ionization of gases. At the time of his death he was working on a theory of the nature of the universe. He is survived by his daughter, Mrs. Cushman K. D. Minar '28BS, Minneapolis, and by his son, Henry B. Erikson '34BS, Miami, Fla., and five grandchildren.

Dr. William Frank Maertz '08MD on January 3, 1956 in Mpls., Minn.

Clarence Edgar Lommen '09MD at Fordville, No. Dak. in February of 1956.

Mrs. Irene C. Buell '09LLM, at Hollywood, Calif. in September of last year.

Edward S. Pattison '08LLB, of Durand, Wisc.

Andrew P. Hustad '08CE, of Minneapolis, in June 1955.

George Alfred Stockland '10LLB at Mpls., Minn. on April 14, 1956.

Norman P. Goodrich '10EM at Trojan, So. Dak. on Sept. 13, 1956.

I. L. Bishop '11ME, a year ago in Woodland, Calif.

Frank A. Steiner '11PhmB, of Minneapolis, on April 28 of this year.

Otto Ramstad '12BA, 74, Ithaca, N.Y., of a heart attack on June 23 of this year while in Minneapolis to attend the 45th reunion of his class at the University. Survivors include his wife, Otilia Ellertson Ramstad '13BA; and four sons: Paul E., '39BS, '42PhD and Ralph L. '47, both of Minneapolis; Dean D. '44BA, '49LLD, New York City, and the Rev. Philip J. Ramstad '50BA, Pittsburgh, Pa., and nine grandchildren and a brother in Norway.

James Martin Ford '12LLB, in May, 1954.

Dr. Raymond H. Barnard '23BSEd, in Denver, Colo. in January of this year.

Maurice D. Judd '23BSCE, of Mason City, Iowa, in August, 1956.

Dr. Walter H. Ude '25MD, of Minneapolis, in February, 1956.

John Fell '25FS, a year ago.

Reuben I. Seder '27MA, a year ago.

Mrs. Clay E. Phillips (Pauline Marie Hedberg) '25BSEd, in June, 1956, after a prolonged illness.

Wickliffe Litchfield '25BS of a heart attack in Cherry Grove, Oregon on March 8. Surviving are his wife, Dorothy Strong Litchfield '19BA, and his son Theodore W. '52BS.

Arthur Tohill '26PhD, in March, 1956.

Clarence A. Schroeder '26BSEE, of Chicago, in January of last year.

Paul Vernon Betters '28BSEd in Washington, D.C. on May 12, 1956.

Clarence Arthur Wiese '30BSFor, of Watertown, Wisc.

Helmer E. Brockhoff '33BArchE, of Minneapolis, a year ago.

Dr. R. J. Mooz '36MS, in November of last year at Rockford, Ill.

Herbert F. Betsinger '37MS, of Anandale, Minn., in April, 1956.

Capt. Lawrence C. Lundberg '40BSEd, a year ago when his F80C developed engine trouble and crashed in a field in Dakota County. At the time of his death he was employed in Minneapolis as an airport supervisor for the Metropolitan Airports Commission.

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- C. RCA Victor Record featuring University of Minnesota Full Combined Concert Band and Chorus. Price, postpaid, for members, \$3.75; others, \$5.00.

- D. Minnesota Chair for home, office or studio. Black, with Minnesota seal silk screened in gold. Price, \$27.50. Express collect.

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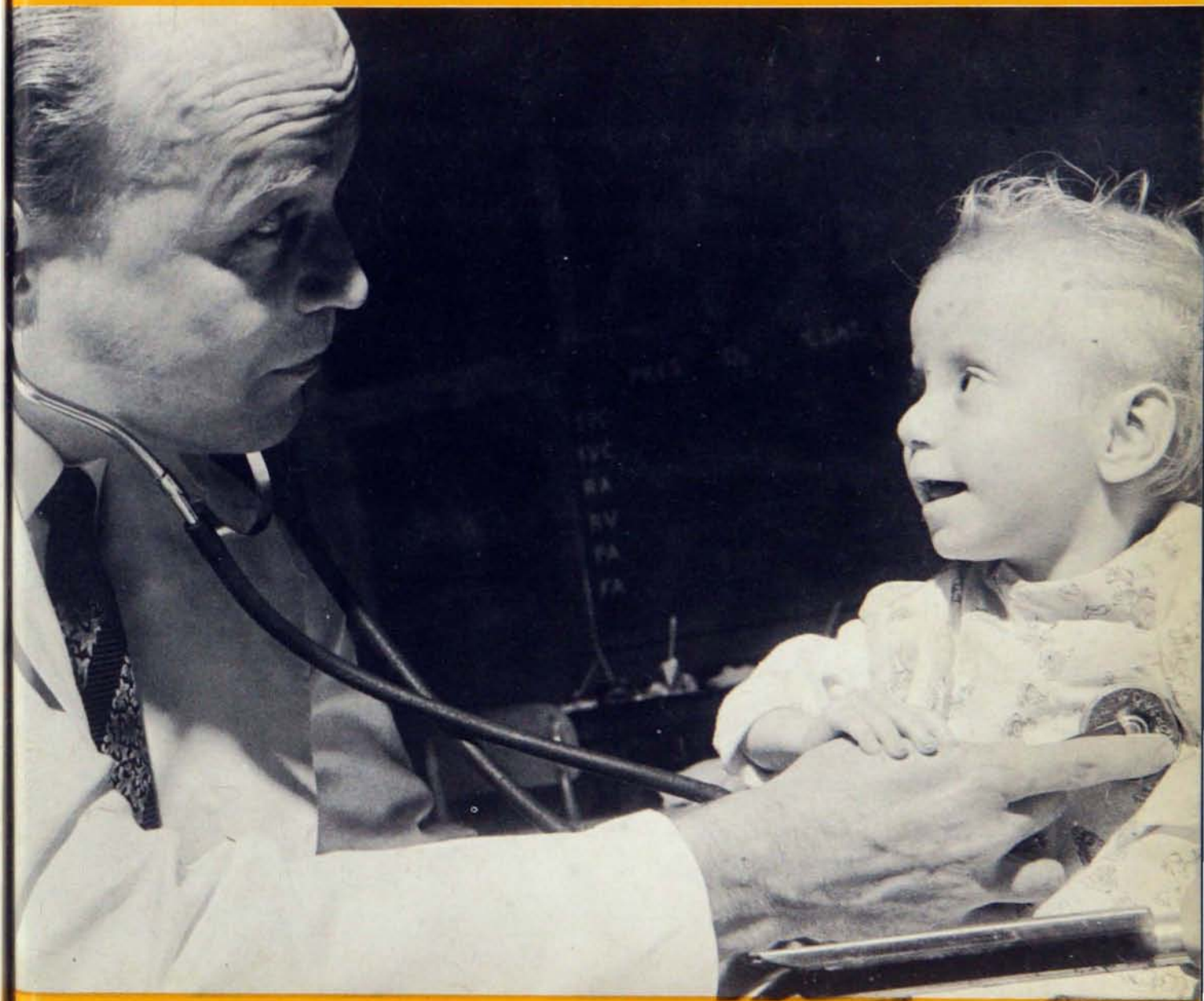
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GOPHER GRAD

DECEMBER 1957

GOPHER GRAD

(Our 57th Year)

Continuing the Minnesota Alumni Weekly which was established in 1901, and the Minnesota Alumni Voice. Published monthly from October through June by the Minnesota Alumni Association, 205 Coffman Union, University of Minnesota, Minneapolis 14. Member of the American Alumni Council.

Vol. 57 December, 1957 No. 3

JUANITA PACIFICO OPSTEIN '47BA..... *Editor*
EDWIN L. HAISLET '31BSEd..... *Managing Editor*

THE MINNESOTA ALUMNI ASSOCIATION

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Term expires 1959: Clara MacKenzie Bierman '17BA, Hibbert M. Hill '23BSCE, Maurice E. Salisbury '08BA, Leif R. Strand '29DDS, Leslie E. Westin '40BSEd.

Term expires 1960: Wendell T. Burns '16BA, Charlotte Winget Choeppe '27BA, Bernhard W. LeVander '39LLB, Malvin J. Nydahl '28BA '35MD.

Term expires 1961: Russell E. Backstrom '25BSME '27MSME, Walter G. Benjamin '18BS '21MD, Janet Hart Widseth '39BS(HE).

Representative on Coffman Union Board of Governors: Marie A. Wensel '48BA. *Representative on St. Paul Union Board of Governors:* Owen Hallberg '46BSAg '47MS. *Representatives on University Senate Committees:* Athletics, Lawrence Johnson '29BArchE, Hibbert M. Hill '23BSCE; *Military Affairs,* Richard A. Rohleder '46BBA '50LLB, Richard E. Kyle '25BA '27LLB; *Student Affairs,* Deborah Dahl Profit '38BSEd; *Cornelia Taylor McCune '29BA '30MA '33PhD.*

MAA Standing Committee Chairmen: Honors, Betty Sullivan '35PhD; *Investments,* Sam W. Campbell '25BA '27LLB; *Past President,* Arthur R. Hustad.

Representing the Constituent Alumni Associations: Orem O. Robbins '36BBA, *School of Business Administration Alumni Association;* Robert A. Hoel '43BAeroE '47MS, *Alumni Association of the Institute of Technology;* Nolan C. Kearney '24BSEd '32MA '48Ph.D *Alumni Association of the College of Education;* Eiler D. Frederiksen '52 DVM; *College of Veterinary Medicine Alumni Association.*

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Past Treasurers: Thomas F. Wallace '93BA '95LLB; Arnulf Ueland '17BA, Wendell T. Burns '16BA.

Honorary Life Association Members: Dr. J. L. Morrill, President of the University; Gerald T. Mullin, retired state senator (35th district).

Entered as second class matter at the post office in Minneapolis, Minn. under Act of Congress of March 3, 1879. Annual dues of the Association are \$4 of which \$3 constitutes a year's subscription to the Gopher Grad. Subscription for non-alumni: \$4 per year. National advertising representative: American Magazines Group, 22 Washington Square N., New York 11, N.Y.; phone GRamercy 5-2039.

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Cover Story

To a little French girl, Marie-Line Christian, this year's holiday season will always be especially significant. For her, it has meant a gift of life. The two-year old girl from Boulogne, France, underwent a delicate



heart operation at the Variety Club Heart Hospital at the University. The operation was performed by Dr. C. Walton Lillehei '39BS '41MB '42MD '51PhD '51MS. It was one of many heart operations for which the Minnesota surgeon has become famous in the

past three years. (Photo by Media Newspictures - Perlmutter)

Views of authors appearing in Gopher Grad in no way reflect the opinions of the MAA or the Gopher Grad.

Back Talk

Thoughts on Football

Editor:

I am very disappointed in Minnesota's showing this year. I feel that Minnesota has lost a great deal of prestige in the Big Ten.

It isn't that we have to win every game but a school and a team the size of Minnesota should not be completely outplayed the first half of every game such as happened with Illinois, Michigan, Iowa and Michigan State.

I also felt Ike Armstrong was looking for a second-rate coach and, honestly, I feel the coaching staff at the University of Minnesota has not done the type of job they could have done with the material they had at hand this year.

C. D. Nelson '33
Mankato

(We should like to point out that Murray Warmath has a reputation as a fine coach, very good with boys. It is generally conceded that our material was greatly over-rated and, while it was good material in comparison to what we have had in recent years, it was not good enough to win in the Big Ten. Also, key injuries in the quarterback spot and in the line made a great deal of difference. There's little doubt that a healthy team all the way through would have done better - Ed)

Greetings from Canada

Editor:

For some years, we have been neglectful of old ties through the alumni association so I am enclosing a check for a five year membership.

Minnesota has become so huge it almost appalls me when I see the campus, but we are very proud of its amazing growth and success.

Isabella Chenery Anderson '10BA
Toronto, Ont., Canada

I have looked in vain in your recent issues for a resumé of the 50th anniversary celebration of the class of 1907. I was greatly disappointed that I could not be present, owing to the illness of my husband. But, I

thought I would have the pleasure of reading about the celebration and possibly seeing a picture of the group which attended.

No doubt many others, too, will be as disappointed as I have been. What can be the reason for this omission?

Mrs. Douglas Cownie '07
Montreal, Canada

(Alumna Frieda Cownie is not the first person to have wondered about a follow-up story on the Cap and Gown Day celebration which

brought together alumni from all over the nation. We welcome this opportunity to explain publicly, therefore, that the reunion was held on May 23, too late for the June issue. From June to October, the publication has no regular edition while new activities are piling up waiting to fill the pages of the first fall magazine. Thus, in an effort to keep our magazine news up to date, we devoted two pages to the reunion before it happened by running a story in May. - Ed.)



When he's ready for college... will college be ready for him?

He's a bright kid. And he should go to college. Will he?

By 1967 college applications will double. No matter how well qualified and able a student may be, it could be tough for him to get in college - anywhere.

More and better paid professors and instructors are needed to maintain scholastic standards. Already classrooms and laboratories are overcrowded. Colleges and

universities are doing their best to expand facilities, but they lack the funds.

America needs educated people as never before. For the sake of your children and the future of your country, help the colleges and universities of your choice - now!

If you want to know what the college crisis means to you, write for a free booklet to: HIGHER EDUCATION, Box 36, Times Square Station, New York 36, New York.

Minnesota Alumni Association



When the "beep beep" of the short wave radio in early October announced that the Space Age had begun, the imagination of the world was so captured by the prospect of flying to the moon that no one gave a thought to the most important feat of all — *how are you going to get back?*

The cause of the initial excitement was a satellite launched by Russia. Commonly known as "Sputnik," the Russian "Fellow Traveler" has met with mixed reactions from the people of the world.

In the opinion of three University faculty members, the time gap be-

Return Trip Vexes Space Scientists

tween the launching of the satellite and the first manned rocket trip to the moon could be a matter of only about 12 years. Two years were cut from this estimate by another faculty member following last month's launching of a second — reportedly six times heavier — Russian satellite. According to Dr. Athelstan E. Spilhaus, dean of the institute of technology and a member of the United States national committee for the International Geophysical Year, the second Russian success means that space travel for man will be possible within 10 years.

Spilhaus has also predicted that the Soviets will succeed if and when they launch their first rocket to the moon. His three colleagues, James P. Hartnett, associate professor of mechanical engineering; Thomas F. Irvine, Jr., assistant professor of mechanical engineering; and Roger Eichhorn, instructor of mechanical engineering, recently made some predictions along the same line.

However, all estimates of Russian scientific prowess undoubtedly were affected by a curly-haired dog named Laika, hermetically sealed in the second satellite in a container equipped with an air-conditioning system. In early Moscow radio reports, the Soviets announced that data received from the baby moon showed the "functioning of scientific instruments and control of the living activities of the animal are taking place normally." But later they announced that Laika's last supply of food had been poisoned.

Preceding this report was the suggestion that the dog would be returned to earth unharmed.

These hints on the part of the space pioneers strike at the real problem of space travel: how is one going to return to the earth's atmosphere? And, once in this atmosphere (with a whole world to choose from), how is one to get back to the point of embarkation?

While the latter seems to present wider range for error, the former presents the tremendous obstacle of finding a way to keep the space ship from melting like wax under a flame.

Baffling scientists today is the same sort of unknown world that confronted those who broke the sound barrier to open the age of high speed.

(continued on page 11)

By

Bev Mindrum
Staff Writer

'U' scientists say
return from moon
could toast
passengers



And to your health, too . . .



J. Hartnett

*“Twice as much fuel
to come down . . .”*



R. Eichorn

*“You have to jump
the thermal
thicket . . .”*



T. Irvine

Only now, the obstacle described by Hartnett is a heat barrier — the thermal thicket which is created by a *hurtling spaceship* coming back to earth through an atmosphere of increasing density.

The terrific heat transferred by the air friction to the rocket on re-entering the earth's atmosphere would probably be beyond the limit of the metal of which it is made, Hartnett said. A possible solution to this difficulty would be a “high drag” vehicle described by Hartnett. Such a rocket would not be streamlined, he said, since a “blunt” rocket would slow down readily even when the atmosphere is still thin.

There are other possibilities. The skin of the rocket could be made so thick it would absorb and store the heat so that the occupants would not be harmed. Or the rocket could have a porous covering through which a



History-making gondola, shown under fabrication at General Mills in 1946, was originally built to carry Dr. Jean Piccard (right), University of Minnesota, and a Navy pilot to a record 100,000-foot altitude in Project Helios, sponsored by the Office of Naval Research. The contemplated flight was never made, but such research has laid the groundwork for flight into outer space.

cooling fluid could be ejected. Another alternative would be to make the skin out of a material that will vaporize under heat. For example, a heavy coat of graphite would absorb the heat and vaporize as the vehicle entered the earth's atmosphere. The rocket itself would not be harmed, according to Hartnett.

The fuel problem involved in the return trip is also more complex than that of sending a rocket to the moon. The slowing down process necessary to solve the problem of friction and allow men to survive in a returning rocket will take at least twice as much fuel.

The two types of rocket fuel in use today are chemical, according to the University scientists. These are liquid fuels such as a combination of gasoline and liquid oxygen, and solid fuels, such as smokeless powder. Both types are proposed for the American satellite launching, Hartnett said, when a series of three stages will be sent up. The first two rockets will use liquid and the third — the one reaching greatest height — will use solid fuel.

(Continued on page 11)

University Operation '56-'57: Sixty-three Million Dollars

Dear Gopher Grad:

A brief summary of financial operations for the year ending June 30, 1957, has been sent to all members of the alumni association from the office of William T. Middlebrook, Vice President for Business Administration.

Items to be noted are: that the percentage of income from state funds *decreased* from 39.1% a year

ago to 36.4% this year — a drop of 2.7%; that percentage-wise all other sources of income are up slightly over a year ago; that the *overall* cost of operation increased over 2½ million dollars.

It is gratifying to note that a greater percentage of income was spent on instruction than ever before. The summary in comparison with 1955-56 is herein listed:

Source of University Income

	1955-56	%	1956-57	%
From the State.....	\$23,963,355.27	39.1%	\$23,124,586.22	36.4%
From Trust Funds.....	12,086,956.29	19.7%	12,768,666.10	20.1%
From University Services & Revolving Funds....	10,666,778.11	17.4%	11,900,800.04	18.7%
From Fees and Receipts.....	10,303,699.34	16.8%	11,094,272.92	17.4%
From the Federal Government.....	1,897,551.05	3.1%	2,269,805.06	3.5%
From Intercollegiate Athletics.....	1,211,490.47	2.0%	1,287,807.36	2.2%
From the Permanent University Fund.....	1,113,110.02	1.7%
	<u>\$61,304,737.40</u>	100%	<u>\$63,559,047.72</u>	100%
Free Unencumbered Balance.....	5,421.01		\$ 4,543.03	
	<u>\$61,310,158.41</u>		<u>\$63,563,590.75</u>	

Expenditures of University Operations

For Instruction & Research.....	\$25,444,570.44	41.5%	\$27,269,897.57	42.9%
For Trust Fund purposes.....	8,828,466.15	14.4%	10,822,456.57	17.1%
For University Services & Revolving Funds.....	9,069,500.47	14.8%	10,540,334.86	16.6%
For Physical Plant Extension.....	4,113,961.67	6.9%	5,682,651.85	8.9%
For Physical Plant Operations.....	3,843,078.06	6.2%	4,106,294.59	6.5%
For the General University.....	2,158,207.44	3.5%	2,286,080.72	3.6%
For Administration of the University.....	1,564,601.07	2.5%	1,610,639.84	2.5%
For Intercollegiate Athletics.....	808,904.53	1.3%	898,164.41	1.4%
For Transfers & Adjustments.....	5,402,325.55	8.9%	342,705.52	.5%
	<u>\$61,305,615.38</u>	100%	<u>\$63,559,225.93</u>	100%
Free Unencumbered Balance.....	4,543.03		4,364.82	
	<u>\$61,310,158.41</u>		<u>\$63,563,590.75</u>	

Sincerely,

Ed Hauget

How Serious Is Atomic Fallout?

Particular emphasis has been placed, and rightly so, on the fallout from nuclear weapons testing because such tests involve our whole population *without its direct consent*.

The questions we must answer are —

(1) Is the risk of genetic damage from fallout small enough to accept in the name of progress?

(2) Is this risk small enough to accept in the name of national security?

I am not in a position to evaluate properly the intricacies of atomic energy and national security but, in regard to the genetic risk, it is my opinion that exposure from fallout is not approaching levels which might be considered dangerous.

The principle fission products from a nuclear explosion are radioactive strontium and cesium. Of these isotopes, strontium-90 is considered to be the most dangerous of all fission products because the body absorbs and retains it much like calcium. To assess the possible harm from this isotope, measurements have been made of its concentration in various soils, plant, milk and in the bones of the still-born and deceased.

Studies show that the amount of strontium-90 increases with the number of nuclear explosions. Furthermore, there are differences in concentration depending upon the geographical location. As it happens, the Northern Hemisphere has more strontium-90 per square mile than the Southern Hemisphere and, within the Northern Hemisphere, the upper Midwest appears to be a relative 'hot spot.' (The reasons are related to the sites of detonation of



Dr. Merle Loken

the bombs along with prevailing winds and rainfall.)

In order to assess the possible hazard of fallout to our population, we must compare the extent of ionizing radiations given us from bomb testing to the natural radiation that comes from our environment — i.e., cosmic rays, natural radioactivity of the earth, building materials and in our bodies.

The average environmental or natural radiation is about three milliroentgens per week or 150 milliroentgens per year. In high altitudes such as at Denver or in areas containing relatively high amounts of natural radioactivity like Sweden, the radiation may be as much as eight milliroentgens per week.

This natural exposure compares to fallout exposure in this manner: measurements show that, on the average and at the present time, adults receive less than one milliroentgen per year from fallout. Children receive about 1.5 milliroentgens per year. (Children take in more strontium-90 because this iso-

*Not at dangerous level,
Says Radiologist Merle
Loken*

tope is absorbed more readily by growing bones. Also, children drink more milk than adults and, outside of direct injection of the isotope, milk is considered one of the most potent sources of strontium-90.)

A direct comparison shows, therefore, that exposure to present levels of strontium-90 are 50 to 100 times less than from sources of natural radiation in our environment. If nuclear weapons testing is permitted to continue at the present rate for the next 13 years, the estimated concentration of strontium-90 will be increased by a factor of eight. This will yield exposure to strontium-90 radiation *which will still be considerably below* the radioactivity we receive daily in our natural environment.

(The figures quoted here are average. A small fraction of the population — about one tenth percent — receives about twice the strontium-90 as the average.)

Studies conducted to determine whether there might be a higher
(continued on page 14)

GOPHER GRAD

*Nuclear testing threatens
mankind . . . Biologist
Herbert Hirsch*



Dr. Herbert Hirsch

According to an analysis of data by the Atomic Energy Commission, the present radiation and strontium-90 levels are probably safe. There are, however, two sets of factors which militate strongly against the position that it will be safe to continue nuclear testing. These factors come under the headings of

(1) imponderables or the unknown and

(2) false assumptions.

Amongst the *imponderables* are two which I shall refer to specifically. One instance is the biological concentration by killer clams of cobalt-60 described in a recent study by Weiss and Shipman. The second is the lack of information which we have on human genetics.

Despite recent preoccupation of scientists with both subjects, it is apparent we know too little of the hazards from byproducts of nuclear tests and of the sensitivity of human genes to radiation. At the same time, whatever we discover varies so greatly from one animal to another that it is virtually impos-

sible to present conclusions which could apply to all living matter. In this context, I might refer, for example, to the observation by one scientist that the genes of mice are about 10 times more sensitive to x-rays than the genes of *Drosophila*, the fruit fly. By the same token, scientists estimate that the effects of genetic damage after exposure are calculated to increase for *ten generations* before beginning to subside.

Thus we do not know all the imponderables involved in this matter and, it seems to me that, in any given situation where all factors cannot be evaluated, it is always the better part of wisdom to err on the safe side — and with a wide margin. Such a view would lead directly to the necessity of abandoning additions to the existing radiation load.

As to the second point, *false assumptions*: present assumptions as to the safety of the populace are based on the fact that radiation and strontium-90 levels will remain

safe if nuclear testing continues at the *present rate*. This view is invalid because we do not know that nuclear testing will continue at this rate and because the present trend by the nations is toward increasing reliance on nuclear armaments.

The recent military decisions of Great Britain are a case in point as are the declarations, reported in the press, by Mr. Hage Larsson, head of the Swedish Defense Research Institute that Sweden could have its first A-Bomb ready by 1963.

Developments such as these foreshadow the day when many nations may be in a position to manufacture these weapons — a development which, together with increased radiation dosages from peaceful atomic energy installations and, even in the absence of war, will contribute to eventual unsafe radiation levels.

If history teaches us anything, it is that man has not learned (and is not likely to learn in the near future) how to avoid war. It is logical to assume that, as increasing reliance is placed on nuclear armaments, an eventual war will be fought with these weapons. History also teaches us that the Roman dictum of "si vis pacem, para bellum" has not prevented wars. The logic of the situation calls, therefore, for a halt to the nuclear arms race before it is too late. This again calls for a halt to nuclear testing now in order to stop a drift toward a vicious cycle which will result in the eventual nuclear arming of all nations.

I realize, of course, that the AEC — which has signaled tests to continue — has tremendous responsibilities in this matter, while I have
(continued on page 14)

A Bridge for Education

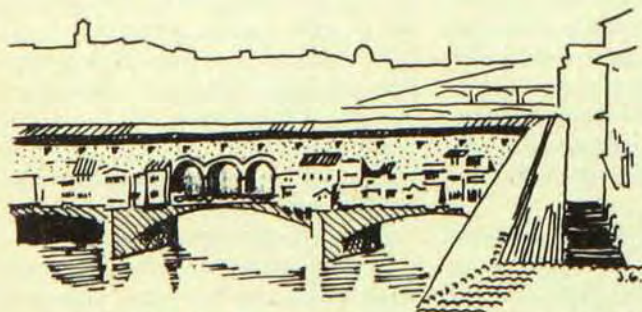
A two-level bridge with a moving sidewalk will span the Mississippi River by 1960 or 1961 in place of the old Washington Avenue bridge if plans of University administrators move according to schedule.

The new bridge is not intended to be simply a replacement for the present bridge, although it might be imperative for that reason alone since the Washington Avenue river crossing is always closed for safety reasons on football days. The projected bridge with two-way moving sidewalks is needed to connect the present campus with the future campus west of the river.

Minnesota's legislators, with considerable foresight, allocated funds this year for the purchase of 17½ acres of land across the Mississippi river. The appropriation was made in anticipation of the 47,000 students the University expects to have by 1970, 38,681 of them on the Minneapolis campus.

William T. Middlebrook, business vice president of the University, and Winston Close, University Advisory architect, said the moving sidewalk was a logical solution to the problem of getting students from one part of the campus to the other in the 10 minutes existing between classes.

"Any students who are seeking just a ride will be out of luck," Middlebrook joked. "The speed of the moving sidewalk will be such that the student will not reach class in time if he just rides along. He will make double time if he walks with the moving sidewalk, however."



A view of the 'Ancient Bridge,' over the River Arno, Florence, Italy.

**Double-decker
with moving sidewalk
planned
as link between
East
and West banks**

Not only will the new bridge cross the river into the area of the expanded campus but, with its moving sidewalks, it also will extend to the mall of the present campus between Coffman Memorial union and Northrop auditorium.

On the level below the mechanical sidewalks will be four lanes for automobile traffic.

Architect Close said the new bridge, which should rank with the world's greatest, "may be the first of its kind anywhere."

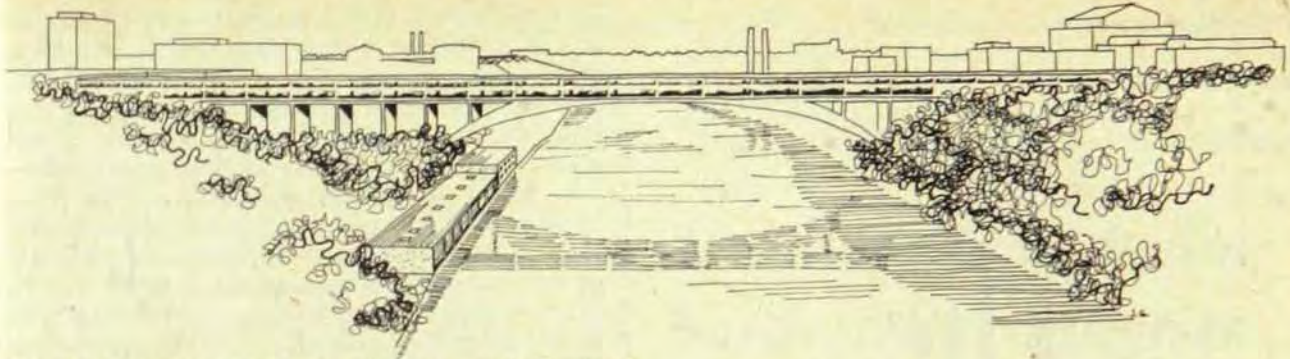
The top level of the bridge will be enclosed and protected from the sharp winds that whip persons crossing the present Washington Avenue bridge.

Detailed plans have not yet been developed. One idea advanced was to build classrooms on the bridge itself after the manner of small shops of Florence, Italy's *Ponte Vecchio* which spans the Arno river.

Close says city and state officials will play a major part in deciding about the bridge and its design.

"The bridge will be of such importance as a symbol for the University, the city and the state that the occupation of all agencies involved is needed to make this bridge one of the finest in the world."

Cost of construction need not necessarily limit plans for the bridge, Close said. "European experience has



An artist's conception of the new structure — Jack Geretz of the school of architecture draws a one-span bridge, resting on a single girder that will leap from bank to bank. On the upper of the two levels, the artist (on a much larger model) marked in the 'running' sidewalk which would help the walking student to get to his classes in half the time. (This portion of the bridge is expected to be enclosed.) On the bottom half of the bridge will be the traffic area, four lanes wide. (The sketch of *Ponte Vecchio*, opposite page, is by Geretz, also).

demonstrated that the most beautiful bridges are not the most expensive ones," he added.

The University intends to ask the State Legislature for building construction funds for the west river area in 1959. The bridge will become a necessity as soon as these buildings are put into use.

Student traffic from one side of the river to the other is expected to be heavy. With an overall enrollment of 47,000 students anticipated by 1970, the University will be the fourth largest community in Minnesota. (St. Louis Park, a Minneapolis suburb, currently is the fourth largest city with a population of approximately 39,000.)

"There will be more people moving from one place to another than in any city of comparable size," Close said. "Students change classes every hour, so traffic cannot be compared to a city of similar size where business people are relatively stationary and housewives are at home."

Middlebrook, who emphasized that his primary concern was that the bridge be *utilitarian*, explained the necessity for the bridge has arisen at this time as a result of the University's effort to meet a continually increasing enrollment.

"Without a growing student body, the Washington Avenue bridge might have been sufficient for another few years. Traffic could have been shunted to other avenues at times of congestion. Eventually, however, the bridge would have to be replaced. Even now, it requires almost continuous repair," Middlebrook added.

"The University is doing its best to meet the demands of everyone in the state who is seeking a better education for his children.

"We have the active cooperation of commissioner Loyal Zimmerman of the Highway Dept., Hugo Erickson, Mpls. city engineer, and Arnett Leslie, president of the Mpls. planning commission. "We need the cooperation of private citizens as well as city and state officials if we are to succeed," he said.

Space Scientists

(Continued from page 6)

Another puzzler concerns the methods to send up a manned rocket, deemed by scientists as far more complicated than launching a Sputnik.

One possibility would be to establish a space platform, carrying up the components on balloons. Rockets could be sent from this permanent platform to the moon. But the problem of assembling such a platform are even more difficult than those of sending a rocket directly from earth to the moon, Hartnett said. The project would cost billions of dollars a year for many years.

The other alternative would be to attack the moon directly with a vehicle launched from earth or from a balloon.

An example of the use of balloons is the current project at Eniwetok Atoll in the Marshall Islands. In "Project Farside," scheduled for further tests in the next few months, American scientists will send a General Mills balloon to the outer edges of the earth's atmosphere. This balloon will carry a power plant to launch a vehicle on its way to the side of the moon which cannot be viewed through man's telescopes. If the project is successful, it will result in the first pictures man has ever taken of the other side of the moon.

It is hoped that the pictures will be good ones for volunteers are likely to be few for a one-way trip. Current manuals on space travel omitted the chapter on how to get home.

European Tour for Alumni

Next month, the Gopher Grad will announce the tentative plans for a proposed Minnesota Alumni Association tour of Europe. The projected date is for the summer of 1958. According to present proposals, two tours will be held — one for 17 days and the other for 23 days. One tour will depart in early summer on June 25 and the other later in the summer on Aug. 16. Alumni will tour eight countries and travel, for the most part, by air.

Why the teacher
may become

The Vanishing American

H. T. Morse

'28BA '30MA '39PhD

Dean

The General College

Dean H. T. Morse who was the youngest 'U' dean when he became head of General College in 1946, is well known for his constructive thought in special problems of education. He completed this article before embarking on an educational assignment in India. (For the light side of faculty life in India, see page 14.)

The colleges and universities of the nation, the University of Minnesota among them, face a continuing crisis in recruiting and retaining competent faculties. The problem is a critical one, indeed, because it affects not only the colleges, but all the areas served by persons who must get their specialized training in college. As the report of Educational Policies Commission *Manpower and Education*, points out, "The teacher shortage has unique potency for breeding shortages in other areas where trained manpower is sorely needed. Failure to solve the problem . . . will aggravate shortages generally and its effects will be cumulative."

Why should there be a shortage of college teachers? The most simple reason is that, because of low birth rates in the 1930s and early 1940s there will be a smaller proportion of people in the wage-earning ages in all fields until the post-war population boom changes this cycle.

Concurrently, both a larger *proportion* and sharply increasing *numbers* of college-age young people are attending college. This increase naturally requires more staff members. But at the same time there is stronger competition from business, industry, and government activities for the services of specialists, and the inducements for such services are often more compelling than those of college teaching.

The primary inducement, of course, is that salary levels of college teachers have lagged far behind those of other groups in keeping up with increased costs of living. Studies have shown, for example, that in 1954, in terms of what their salaries would buy, faculty members as a whole were actually worse off, by five per cent, than they had been fourteen years earlier. Fortunately, however, there has been a general upswing in salary levels since 1954. The Minnesota State Legislature has shown its awareness of the importance of maintaining a competent faculty at the University by making funds available for a 20 per cent increase in faculty salaries in the biennium 1957-59.

But the problem is still acute. The University Self-Survey Committee, under the chairmanship of Dean T. C. Blegen, has suggested that predictions of 34,000 to 37,000 students for 1965, and 41,000 to 45,000 for 1970, "are not unrealistic." This implies there would need to be a *net increase* of faculty members of about 33 per cent over 1955-56 by 1965, and about a 50 per cent increase by 1970.

In light of these shortages, every practicable means must be used to supplement and extend the services of the teaching faculty. As the Educational Policies Commission states, "There can be no single solution to the problem." In what ways can the University of Minnesota increase its supply of teaching personnel?

1. *More intensive recruitment in colleges:* A vigorous, systematic, and sustained campaign of recruitment must be undertaken to convince especially able undergraduate and graduate students of the many real satisfactions in college teaching as a career. Faculty members and lay groups must join forces in this campaign. The success in dramatizing the needs of the

elementary and secondary schools in recent years shows what can be accomplished by sustained effort.

2. *Recruitment from other sources of supply:* There are in almost every community of any size numbers of people who would be competent to teach college but who are not now doing so. One major source is married women, many of whom could be available on a part-time basis. Another source is from foreign nationals displaced by the war and other upheavals, many of whom have been highly educated.

Still another only partially tapped source of supply (except in medical and dental schools) consists of persons from other professions and from business who possess the required competencies and who might be persuaded to teach on a part-time basis. Retired military officers also might be available and interested in

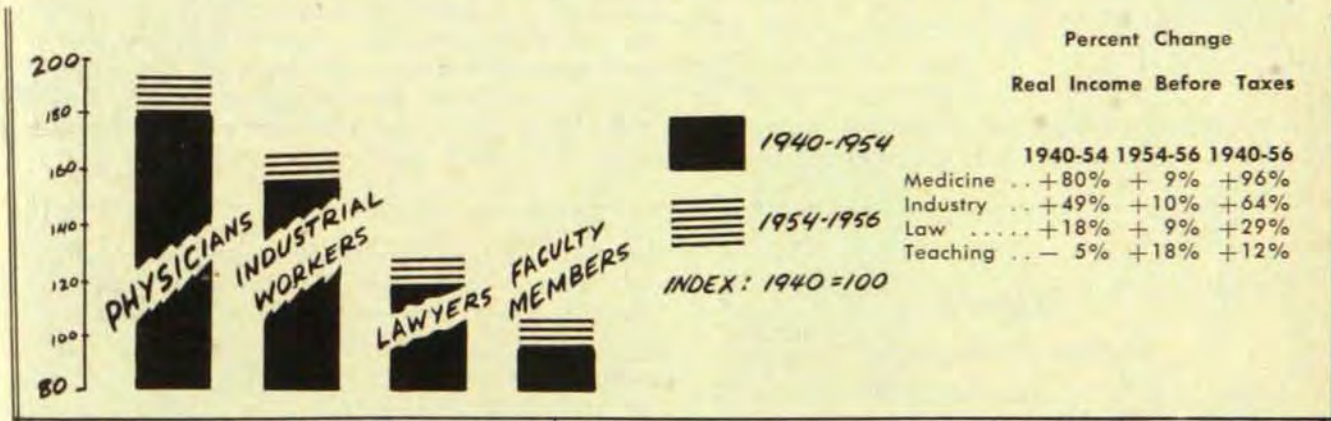
some situations. But it does not substitute for the individual teacher any more than instruction by radio and motion pictures did when they were introduced on the educational scene, with very similar claims.

There is no adequate substitute for the personal

Teachers fight losing battle with statistics

relationship between student and teacher. We must, therefore, avoid procedures which seem to alleviate

Comparison of Adjustments in Incomes During 16 Years.



DATA: Council for Financial Aid to Education, U. S. Dept. of Commerce, U. S. Dept. of Labor, National Association of Education Research Dept., McGraw-Hill Dept. of Economics.

supplementing their retirement allowances with part or full-time college teaching.

3. *Relieving faculty of routine duties:* Some duties of faculty members involve routine matters which could in many instances be performed by clerical workers. The time and effort thus saved could be devoted by the faculty to teaching and other scholarly activities. If this possibility were explored more fully, it might have the same effect of extending the scope of truly professional level activities of college faculties. The elimination of many routine duties has been accomplished through the provision of nursing and related aids in medical services and the preparation of technical aids in engineering.

4. *Adoption of different instructional methods:* There has been much talk about increasing the scope of a college teacher's operations by means of TV. Some experiments have indicated that under carefully controlled conditions a single teacher may indeed reach a larger audience. The use of TV will surely help in

the teacher shortage but which may actually impair the quality of teaching and learning.

5. *Extension of retirement age for faculty:* The recent trend toward reducing the retirement age in many occupations has much to commend it. But with critical shortages of competent personnel looming in a wide variety of fields, the earlier and even the compulsory retirement ages are often being questioned. Some University faculty members, after reaching the compulsory retirement age of 68, have taken academic positions elsewhere and have given years of distinguished service. In the light of this situation, the University is currently considering a revised policy for selective extension, on an annual renewable basis, of faculty retirements.

6. *More flexible class schedules:* Critics of American higher education have long pointed out that college degrees in this country seem to be attained more on a time-serving and credit-accumulation basis than on a demonstration of learning or proficiency. They

contrast our system with European procedures in which students carry much greater responsibility for

Departmental Tea

From Classics to Physics, from English to Art,

The message is coming to do their full part,
So boil the tea briskly, be sure it boils long,
Then brew it and stew it until it is strong,
And get the bread slices and lard them with ghee,
The American Sahib is coming to tea!

But don't rinse the teapot — it's served a long time —

Add buffalo milk there instead of a lime,
With five lumps of sugar to make it real sweet,
And betel nut chewing as part of the treat;
So scrounge for some teaspoons wherever they be,
The American Sahib is coming to tea!

directing their own education. While these approaches are not broadly transferable to the American scene, it

may be quite readily agreed that the American student, especially at the upper division level, could be given considerable increased individual responsibility for independent study and learning. Thus regular classes might meet less frequently, but it must be recognized that the directing of individual study often requires more, rather than less, faculty time.

In this same connection, it might be desirable and feasible to consider the summer period as a regular academic quarter. Both faculty and student vacations could be staggered throughout the year to make more effective use of faculty personnel and physical facilities.

These are some of the adaptations which are being increasingly tried and considered in the light of the impending shortage of college teachers.

It is imperative that further plans must be made immediately, before the oncoming wave of enrollments reduces efforts to the level of frantic expediency.

Superficial remedies may actually cause greater problems or a deterioration of teaching standards for the future. It is, therefore, crucially important for the University of Minnesota to retain its distinguished role in research and teaching, through which it continuously improves the culture, economy, and well-being of the State which supports it.

Hirsch

(continued from page 9)

none. And, as AEC Commissioner Libby has said, perhaps "we accept risk as payment for our pleasures, our comforts and our material progress." However, it may not be amiss to point out that, more important than pleasures, comforts and material progress — more important even than the deep-seated ideological differences between East and West, between tyranny and democracy, is the overriding issue of the biological survival of mankind.

If such survival is considered, it becomes obvious that historic logic and perspective demand that some sort of compromise be found between East and West. A similar trend was expressed in the recent declaration of the German physicists who have stated that possession of the hydrogen bomb by both sides is an unreliable way of securing peace and freedom in the long run and that the danger would be deadly in case of failure.

Loken

(Continued from page 8)

incidence of leukemia among people receiving a higher dosage of background radiation have produced negative results.

In regard to genetic damage, scientists — particular-

ly those who are interested in the problem of radiation hazard — realize that *no amount of radiation* is considered safe. However, we have been exposed to environmental radiation since the beginning of time with but few observable effects. For example, it has been estimated that no more than 10 percent of the observed congenital defects may result from natural radiation.

At present, we are observing in the newborn an estimated two percent with congenital abnormalities. Therefore, under existing levels of strontium-90, we might anticipate an increase in abnormal offspring of *four thousandths percent*. This figure needs to be compared to the estimated two percent of congenital abnormalities now observed in the newborn. It must be admitted that, under present circumstances, the role of strontium-90 in genetic damage appears to be very small indeed.

As a recent report from the Northwestern National Life Insurance company noted, the average person receives about 30 times as much radiation from medical x-rays during his reproductive lifetime as the estimated amount he will receive in the same period from bomb testing.

In view of these facts, our questions now are: (1) Is the risk of genetic damage from fallout so serious that we must halt the development of nuclear power which promises us great improvement in our economy? (2) Is the risk so great as to halt our development and stockpiling of nuclear missiles and, ultimately, jeopardize the security of our nation?

On the basis of present evidence, I don't think so.

Season's

Greetings

During this Christmas season, our peace in the free world is disturbed by fearful rumblings.

The leaders of our nation have said that greater emphasis must be placed upon higher education and research if we would stay free. These two—higher education and research—(coupled with our faith) appear to be the only combination equal to today's problems.

President Eisenhower said recently, "We have need not only of Einsteins and Steinmetzs, but also of Washingtons and Emersons." This is something to aspire to.

Our great University is given a tremendous lift by your constructive support in thought and action. The immeasurable help of you, your alumni clubs and alumni associations must be redoubled to meet the new challenges we are facing.

This effort will be underscored by our everlasting wish for "Peace on earth, good will toward men."



Seif Strand



In black robes with ermine-style trim, panel votes by dropping beans into silver urn. (The black bean has the same implication as the 'black-ball.') On opposite page: Bittner, (second from left) is congratulated on award.

Recognition for some very modern achievements was given this summer to John Bittner, University of Minnesota professor of cancer biology. But the ceremony at which the honorary doctor's degree was conferred was marked with all the medieval pomp and dignity of Sixteenth Century Italy.

It was a ceremony that began when a panel of black-robed professors filed into the Great Hall of the University of Perugia, Italy, on July 28 to weigh the merits of three tuxedo-clad men as candidates for honorary doctorates in medicine and surgery for research in medicine and surgery. Bittner, one of the candidates, recently gave his impressions of a ceremony that has not changed since the 16th century.

The University cancer biologist was the first of the three candidates to take the "examination" for the degree, presenting a paper outlining his work in cancer research. Copies of the speech had been printed in Italian, so the panel of judges could follow the text.

According to the ceremony, the professors had the right to question Bittner. "None of them did," he said, "and I was escorted to a corridor outside the Great Hall, where the presentations were made. Then the

Italy honors cancer biologist in medieval ceremony

panel voted on whether or not I should be given the degree."

Silver trays containing black and white beans were passed to members of the judging panel. The professors took one of each, and voted by dropping beans into a silver urn. "A black bean meant you couldn't get the degree," Bittner said. The youngest professor on the staff traditionally passes the urn and counts the votes.

After the voting, Bittner was called back into the room and seated while the other two candidates were examined. The ceremony took over two hours, according to Bittner.

When all three had been approved, they were escorted to three doctor's chairs located at the back

of the room. Then they were formally congratulated on having attained the degree by Prof. Giuseppe Ermini, rector magnificus of the university. He presented each with a leather-bound copy of the history of the University of Perugia and kissed them on both cheeks.

In the next step of the degree presentation, they were presented with the university seal ring. "They are heavy gold rings," Bittner said, "and years ago would have been used to impress the wax seal on letters."

As the final step, the degree candidates were invested with the University of Perugia gown, toga, diadem and stole. Bittner, who had to purchase another suitcase to bring

home his new possessions, said the black corded-silk gown weighs more than 12 pounds. The seal of the university is woven into the stole in red and gold thread on a black background.

One of the other candidates, Prof. Alexander Haddow, director of the cancer institute in London, England, commented: "Well, in England they would loan the gown to the candidate, in Scotland they would rent it. But here they give it."

Bittner and his family attended the ceremony under the sponsorship of both the University of Perugia and the University of Minnesota. He received two tickets on the Colombo, flagship of the Italian line, from the University of Perugia and a travel grant from the University of Minnesota.

Honored with Bittner and Haddow was Dr. Leonell C. Strong, director of biological research, Ros-

Pomp in Old Perugia

well Park Memorial Institute, Buffalo, N.Y. Notable for its formality, the ceremony this year marked the first time two men from the same family have received degrees concurrently. Strong is Bittner's brother-in-law, and the man under whom he began his cancer research in 1921 while still an undergraduate at St. Stephens College. At that time Strong was a professor of biology.

The degrees were conferred at an international symposium on mammary cancer, attended by more than 185 representatives from 18 countries.

Although Bittner says the ceremony at Perugia was the most impressive one in which he has been a participant, he has received sev-

DECEMBER, 1957



eral other commendations. He received the Comfort Crookshank Award for Cancer Research in 1951 from the Middlesex Hospital Medical School of London, the first such award to be presented. He attained another "first" last year, when he

was presented with the Bertner Foundation Award for outstanding achievement by the University of Texas M. D. Hospital and Tumor Institute. Bittner was the first recipient who had not received his without an M.D. degree.

Both Lilleheis Busy in Europe

Among other Minnesotans who went to Europe last summer was Katherine Lindberg Lillehei '43RN '50BSEd who, in accompanying her husband, Dr. C. Walton Lillehei, to Europe, managed to schedule a stopover in Stockholm to meet her parents who were visiting their home city after being away for 57 years.

While Dr. Lillehei was absorbed in lectures on the dry-heart surgery he helped perfect, Mrs. L. participated in her first Midsummer Day festival.

The Lillehei circuit (June 12 to July 4) included Belgium, Sweden, Norway, Switzerland and France. Dr. Lillehei made the lectures at the request of the European medical groups involved and in conjunction with the U. S. Dept. of State.

From Asia to Africa Alums Are There



Col. Helmer A. Holstrom '32BCE exercises one of his last official duties as commanding officer of U.S. Army Engineer Depot at Toul, France, before assuming the post of Corps Engineer, XVIIIth Airborne Corps, Fort Bragg, N.C.

Some Minnesota alumni have such a yen to travel that they seek careers which will lead them all over the world. It may be as an army officer, a trained nurse, a teacher or as a government representative for the International Cooperation Administration (ICA). The profession may vary but the objective usually is the same — public service. Among the alumni scattered throughout the world is Doni Dombeck, a public health nurse who has traveled through most of America and Europe since she received her BS and her nursing degree from the University in 1952. Currently she is an embassy nurse employed by the American foreign service in New Dehli, India. Despite their love of traveling, however, most alumni still consider Minnesota their home. That's why Dr. Conrad H. Hammer and his family have returned to St. James, Minn., after spending five years in Iraq where Dr. Hammer was the head of the International Cooperation Administration's agricultural division. He received his BA in 1954 from the University.

First Lt. Paul R. Giel, '55BSEd, left, receives congratulations and a certificate of achievement in Germany from Lt. Col. Wayne J. Moe. Giel, former University star halfback and All American, was commended for outstanding service as manager and coach of the Seventh Army Special Troops baseball and football team. He entered the Army in Nov. of 1955 and was last stationed at Aberdeen Proving Ground, Md. Before entering the Army, Giel was a pitcher for the New York Giants baseball team.



Gustaf Edlund '55BA has been named administrative assistant for Goodyear International Corporation in Stockholm, Sweden.



Explaining the nursing curriculum to three prospective students is Evelyn Johnson '37BSEd '37GN, who has returned from Iraq after four years as chief nurse of the Public Health Division of ICA.



Appointed to Safdarjang Hospital, India, is Vimla Sud '55MSD.



Robert Donahugh '53MA arrives at Istanbul, Turkey, where he will teach at Robert American College.

Training technicians for the Iraqi agricultural development program is Dr. Otto Younge '34PhD, professor of agronomy, who was in Iraq for 18 months under the ICA.



Three Recommended for Senate

Three alumni to represent the MAA on senate committees have been presented for approval to the University Senate.

Included in the group are Mrs.



R. Kyle



H. Hill



Mrs. McCune

George H. McCune '33PhD, Mpls., to be seated with MAA's present representative on the committee for student affairs, Deborah Dahl Prof-

fitt '38BSEd, Mpls.; Hibbert M. Hill '23BSCE, Mpls., as the new representative for the committee on athletics to serve with Lawrence (Duke) E. Johnson '29BArchE, Mpls.; and Richard E. Kyle '25BA '27LLB, White Bear Lake, to fill the vacancy on the committee for military affairs. Richard A. Rohleder '46BA '47BBA '50LLB is the other alumni association representative on that committee at present.

Mrs. Proffitt, Johnson and Rohleder were named to senate committees last year and still have another year of service.

1927 E. Engineers Come Home Nov. 2

More than one half of the 1927 graduating class in electrical engineering convened for their 30th anniversary on Homecoming Day in Minneapolis.

Engineers who gathered from all over the country were organized by J. H. Dubois, vice president of Mycalex Corp. of America, Clinton, New Jersey.

The program for the 25 engineers and their wives was coordinated locally by Gus Johnson, vice president of Northern States Power Co., Mpls., and MAA ExSecy Ed Haislet.

College Costs

An office of education survey showed that the expenses of an undergraduate student in private colleges average about \$2,000 a year. In 1939-40, average annual cost was \$1,023. For students in public colleges, average annual costs total \$1,500, compared with \$747 in 1939-40. The survey covers such expenses

Eau Claire Alum Hear Space Story

One hundred six alumni of the Eau Claire area heard Prof. John Akerman, head of aeronautical engineering, discuss space travel at the first gathering of the newly formed group in the Hotel Eau Claire recently.

Lloyd Larson '49BBA, master of ceremonies, introduced the slate of officers nominated under the chairmanship of Bill Bunde '49BBA. The newly-elected board of directors include:

Marjorie Mitchell Barnes '31BSEd, Richard J. Lewis '16BSAg, Manley B. Monsen '24BS (EE), Sidney B. Russell '30MD, Jack A. Stromwell '50BA, all of Eau Claire; Lucille Lilinthal Nutter, Chippewa Falls; and Gordon A. Van deBerg, '39BBA, Menomonie.

The board will elect officers for the new unit.

as tuition, books and supplies as well as room and board, clothing, travel and recreation.

The Real Mac Guf

Those of you who knew Professor Joseph Warren Beach will be pleased to hear about the annual lectureship which has been established at the University in his memory.

As you recall, Professor Beach was a member of the English department for over 40 years and department chairman from 1943 until he retired in 1948. His specialty was contemporary poetry but his talent extended into the field of literary criticism as well as into the novel.

The purpose of the newly-created lectureship will be to invite a noted speaker to the campus each year. The guest will be a lecturer in the field of literature, preferably expert in contemporary poetry, fiction or criticism. The lectures will start during the academic year of 1958-59.

The project will be a most welcome addition to our English department as well as stimulating to the intellectual pursuits of our faculty, graduate students and undergraduates. As a living tribute to Joseph Warren Beach, these guest speakers will provide an annual spark of great significance to the scholars in the field Beach so well represented. Overall, the lectureship is a wonderful complement to our University and one that will leave a distinguished mark through the coming years.

For these reasons, this sort of lasting memorial to a great teacher and alumnus is exciting news and I feel certain that you will be as thrilled with this development as were all of us here at the University.

A major portion of the financial success of the Joseph Warren Beach Lectures has been assured through the generous financial support already given by members of the Beach family and friends. If you would care to assist in making these lectures even more successful, you may send your contribution to the University in care of this office.

COPHER GRAD

Busy Clubs Elect New Executives

Twelve alumni clubs around the state and nation have reported the election of officers for the coming year.

The new executives are:

Chisholm MAA — Mrs. Marian Spector '32BBA, president; Mrs. Dario Rolle '49BSMJT, secretary-treasurer;

Aitkin County MAA — D. J. Murphy '10DDS, president; Mrs. C. H. Warner '31BSEd, vice president; Mrs. John T. Galarneault '37BA, secretary-treasurer;

Wadena MAA — Miles Rowe '30FS '38BSAg, president; Mrs. William Halme, vice president; Mrs. Ronald Everson '52BA, secretary-treasurer;

Winona MAA — Dr. Louis Wilson '52MD, acting president; Miss Mae

A. Sweeney '34BSEd, '38MA, secretary; Thomas Underdahl '45-'46, treasurer;

Douglas County MAA — Bernard Sonstegaard '48BSAg, president; Mrs. Hugh Robards '17BA, vice president; Rev. Henry Hoover '53BA, secretary; Mrs. Ivan Hedine, treasurer;

Pipestone MAA — Helen Harrop Evans '21BS (HE), president; Walter Korsrud '55MA, vice president; Miss B. Jones, secretary-treasurer;

Des Moines MAA — William B. Grismer '49BA, president; Herbert T. Shave '46BArchE, vice president; Richard F. Henderson '51BA, secretary-treasurer;

Fox River Valley MAA — Ray Bennett '47BA, president; Don Luebke '36BBA, vice president; Freeman Nichols '31BME, secretary-treasurer; Howard Palmer '22BCE, historian;

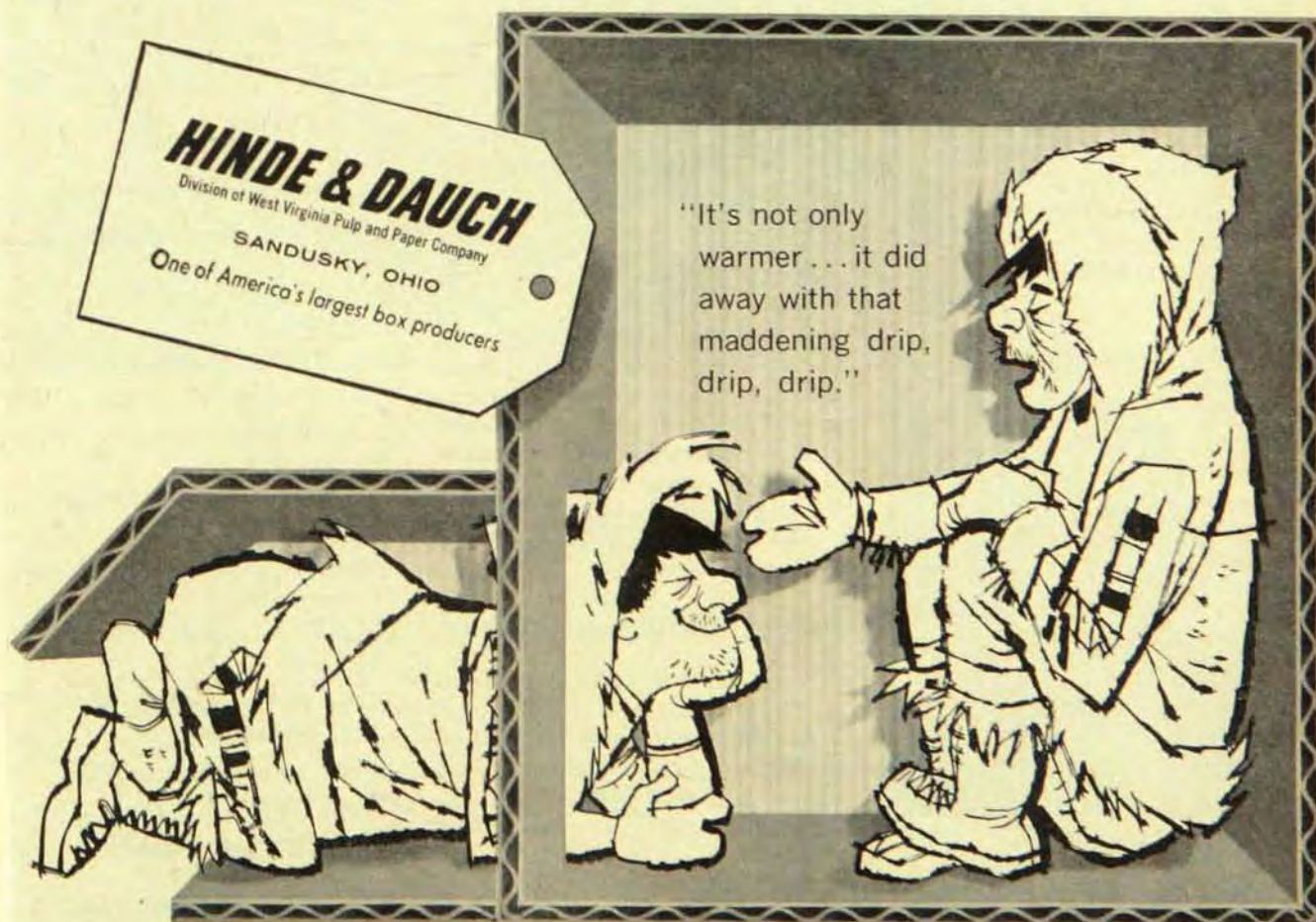
Tulsa MAA — Dr. Walter Sethney '34BA, president; William Erdahl '31BA, vice president; Don Johnson, secretary; George Sykora '36-'37, treasurer;

Washington, D. C. MAA — Jerome J. Keating '30BA, president; Fred W. Little '27BS, vice president; Thelma A. Dreis '23BA, treasurer; Margareth Jorgensen '23BSEd, secretary;

Detroit Alumnae Club — Mrs. William McLeod, president; Mrs. Robert Hefty, vice president; Mrs. Arthur Burry, secretary; Mrs. M. J. Patterson, treasurer.

Mountain Lake MAA — Roger Lehman '56BS, president; James Crawford '51BSAg, vice president; Lowell Wenberg '55DDS, secretary.

Juan C. Orendain '18-21 will head the Philippines chapter of the Minnesota Alumni association in the coming year.



Constituents Boost MAA Clubs

Ray Chisholm
Ass't Secretary

The past five years have seen a growth—both in number and spirit—the alumni club programs within the state. Each year more local or county wide clubs are holding annual meetings with speakers from the faculty. Alumni are getting more *University conscious*.

With the accelerated growth of the University's physical plant and in the faculty and staff and number of students, a new factor is entering the picture—the breaking down of the various colleges into constituent groups. Reunions and class gatherings were getting to be meaningless. A class of 3,000 to 5,000 holding a reunion luncheon and getting a turnout of less than 1% to 2% seemed to tend to decrease alumni interest in the University. Obviously a mutual interest factor was of paramount importance.

Mutual interest, we reasoned, would naturally exist for those who have majored in the same general field. Thus, by organizing the colleges into constituent groups and having them plan annual meetings on a college rather than a class basis, this factor would enter in.

It is too early to say that the plan is a panacea for all class or college

The first constituent group, the Alumni Association of the Institute of Technology, was set up four years ago. The plan is working for these alumni. They have had four successful annual meetings and have started an afternoon panel discussion which has been acclaimed as exceptional. The college of education and the business school also have organized alumni groups and are constantly expanding their programs. Three other colleges are in the process of organizing on a constituent basis this year while several others are sounding out the possibilities of organizing.

Each constituent group has an elected body of officers and board of directors which meets once a month or every six weeks to discuss problems and take action for the membership. The president of the constituent group meets with the MAA board of directors and thus has a voice in overall alumni affairs.

With an increase in interest at their own college level, alumni have shown an increased interest in the affairs of the University as a whole.

The forming of the alumni into constituent groups appears to strengthen our club program throughout the state. Through their own colleges, more and more alumni are becoming aware of the impact of the University on all facets of state economy and just what the University means to the future of the state of Minnesota.

This is a long range program that can't miss.

Law Alumni Scholarships

Two University of Minnesota students have been awarded \$350 first-year law school scholarships from the Wilbur L. Cherry memorial fund which was established by law alumni in memory of the former law professor.

Recipients are Michael A. Olson, South St. Paul, and Ronald E. Martell, Minneapolis.

Mackall Appointed To GUF Board

Henry C. Mackall '06BA, Minneapolis attorney, has been appointed to the Greater University Fund board of trustees, MAA president Leif Strand announced.



Henry C. Mackall

Mackall, senior member of the firm of Mackall, Crouse, Moore, Helmey & Palmer, will replace C. R. Carlson, Jr., '23BSAg '24MS

who has been promoted to the vice presidency of Deere & Co., Moline, Ill. Carlson was named to the board last year.

Mackall is active in professional and community groups. He served as chairman of the 50th anniversary of his class reunion held on campus in 1956 and as 1957 reunion chairman of the graduates of more than 50 years ago.

New Life Members

- William J. Adamson '56BA
Rochester, Minn.
- Herbert G. Croom '42BSAgE '52MS
Morris, Minn.
- Raymond Herman Jackson '54BA
Lancaster, Calif.
- Robert M. Thurn '23BS (Pharm)
Minneapolis, Minn.
- Lambert C. Keeley '33BS (Pharm)
Crosby, Minn.
- Arthur O. Hermodson '50BME
Hammond, Ind.
- George W. Grissom '28DDS
Long Island, N.Y.
- Mrs. George W. Grissom '30BS
Long Island, N.Y.
- Glenora A. Sommer '34BSEd
Minneapolis, Minn.
- Marvin R. Sward '43BAeroE
Hollywood, Calif.



Ray Chisholm

reunion problems but indications are that it is a step in the right direction.



SANTA'S HELPERS. Telephone operators Carolyn M. Kraatz and Arlene P. Halgin, of New York City, symbolize the country-wide spirit of Christmas giving.

Telephone Folks Will Play Santa for Thousands of Kids

As you read this, telephone operators all over the country are dressing thousands of dolls for distribution to children's homes and hospitals at Christmas.

Throughout the Bell System, thousands of other telephone men and women are col-

lecting food, candy, toys and dollars for those less fortunate than themselves.

It's a telephone tradition—and a natural one. The spirit of service and the spirit of Christmas are close together. And telephone folks try to be good citizens all year 'round.

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School of Business Adm. Reorganized

Reorganization of the University of Minnesota School of Business Administration has been authorized by the Board of Regents.

Upon recommendation of Dean Richard L. Kozelka of the school, a department of business administration and a department of economics were established. The Industrial Relations Center, already within the school, also will be administered as a separate unit.

Reuel O. Lund, an associate professor of business administration, will become assistant dean of the school; Professor Robert J. Holloway, business administration head; and Professor Walter W. Heller, economics head. Professor Dale Yoder will retain his position as director of the Industrial Relations Center.

Dr. R. D. Casey Advises Florida Universities

Dr. Ralph D. Casey, University of Minnesota school of journalism director, met with Florida university system board of control officials and a Florida newspaper group in Tallahassee recently to plan an inquiry of journalism education in Florida universities.

Chosen by the board to participate in the inquiry, Professor Casey will serve with Dean N. N. Luxon of the University of North Carolina school of journalism and Herbert Brucker, Hartford (Conn.) *Courant* editor.

The board seeks findings on the present and future needs of journalism education and the adequacy of instructional programs and facilities at the State University of Florida, Tallahassee, and the University of Florida, Gainesville. The board is responsible for long-range planning, control and evaluation of entire university system.

'Statehood' Theme Adopted for 1958

The theme "Minnesota Statehood Centennial" has been adopted by the Union Board of Governors.

This means that all Union sponsored programs during the period from January to June of 1958, will carry out the Centennial theme.

Larry De Witt, Business Administration junior, and Board program chairman, said that just a few of the possibilities of such a program would be Centennial style shows, a creative arts festival geared to the Centennial, forums on outstanding Minnesotans and playwright contests.

This idea was also presented by members of the Centennial Commission in their program. Peter Popovich, state representative from St. Paul and Centennial Commission chairman, asked the Union Board and guests (presidents of leading campus organizations) to join with the Centennial Commission to work in a common partnership for a successful Centennial.

Clifford Sommer, Centennial statewide sports committee chairman, said that the greatest thing about University organizations and their leaders was that "you haven't learned that things can't be done — you just go out and do them."

Dean A. Spilhaus Enroute to Antarctica

Dean Athelstan Spilhaus of the University of Minnesota's Institute of Technology left in mid-November for a trip to Antarctica — and perhaps the South Pole — by way of Paris, Thailand and New Zealand.

He will visit Antarctica as a member of the executive committee of the United States International Geophysical Year program, a committee of the National Academy of Sciences.

Dean Spilhaus, delegate to the 49th session of the executive board of UNESCO which met in Paris recently, has announced that he will resign from his UNESCO post. He had been U.S. representative since 1954.

From Bangkok, the University scientist will fly to Christchurch,

Registration Lottery Eliminates Lineup

The all-night lines of students anxious to secure early SLA tallying dates are now a thing of the past. A new "lottery" system of assigning dates allows students to obtain their tally reservations by drawing a dated slip from a box.

As in previous quarters, the tally reservation system will provide a means of spreading registration for classes over a three-week period. Special provisions have been made to extend the privilege of receiving an earlier tallying date to students who draw slips dated later than Dec. 1 in three cases: if they have unchangeable work hours; if they have an inflexible course schedule, and if they belong to a car pool from outside the Twin Cities.

Carpenters and Joiners Award 7 Scholarships

Seven University of Minnesota students have been awarded scholarships from the Twin Cities Carpenters-District Council of United Brotherhood of Carpenters and Joiners of America.

Winners are Elmer Koch, Phyllis Stenerson, Kenneth D. Johnson, Mary Goodoien, and Karin Swanson, all of Minneapolis; Helen Berg, and Ruth Poucher, both of St. Paul.

New Zealand, early in December. He will wait there for air transportation to McMurdo Sound in Antarctica. After visiting as many Antarctic stations as possible, including the South Pole station, he will return to the United States about January 1.

Director Predicts

More Vet Ed Benefits

The next Congress may "extend educational benefits for veterans as part of a larger program of strengthening the United States educational position," William B. Otterness, director of the University Veterans Counseling Center, predicted.

Otterness recalled efforts made by the last Congress to extend the Veteran's Administration (VA) education program. In light of the recent Russian scientific advances, he is certain these developments will "stimulate discussion on extending benefits" in the next Congress.

"The shortage of trained personnel which now confronts us would have been even more critical than it is," he said, "without veteran's benefits and counseling."

Regents Approve Ag Institute Librarian

H. Don Ferris, Martin Branch, Tenn., has been appointed librarian for the Institute of Agriculture on the St. Paul campus of the University of Minnesota.

His appointment was approved by the University Board of Regents at a recent meeting. He succeeds

Twenty Honored in Arts College

Seventeen University of Minnesota seniors and three faculty members were honored as part of SLA Day activities on campus. This is the first year outstanding students and faculty in the college of science, literature and the arts have been recognized during the University's annual "SLA Week."

Clarke A. Chambers, associate professor of history; Paul L. Holmer, philosophy professor; and Kenneth MacCorquodale, psychology professor, were honored as the college's outstanding faculty members of the year. Faculty selections were made by a student committee from nominations submitted by individual students.

The outstanding students, presented with certificates at a coffee hour in Coffman Memorial Union, were selected on the basis of scholarship. Each SLA department was invited to nominate a student majoring in its subject. All those selected have a scholastic average of 2.4 (of a possible 3.0).

Honored as the college's four outstanding students were Frederick W. Galvin, St. Paul mathematics

major, and Ellen M. Huse, St. Paul English major; and Mrs. Sarah G. Kille, Minneapolis classics major, and Sheldon W. Simon, Minneapolis political science major.

Other seniors honored were Raymond W. Allard, White Bear Lake, physics; Barbara Barton, Hopkins, international relations; Karen Bolder, Wayzata, humanities; Miriam S. Butwin, St. Paul, art; Joanne D'Andrea, Keewatin, psychology; Robert B. Forrest, Minneapolis, chemistry; Myrna Greene, Minneapolis, music; Henry E. Kalb, Rochester, Romance languages; Herman P. Langner, Minneapolis, German; George W. Margot, Minneapolis, botany; Carl E. Norman, Cokato, geology; Lawrence Van Tassel, St. Louis Park, journalism; and Richard A. Willson, Edina, interdepartmental.

Harald Ostvold, who left the University recently for a position with the Public Library of New York, N.Y.

Ferris will take up his position here Dec. 1. He has been librarian at the University of Tennessee for the past six years.

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Long height, short experience

Basketballers Open Against S.M.U.

By WILL SHAPIRA

Minnesota Daily Sports Editor

The 1957-58 edition of Minnesota basketball promises to be short on experience. But, it will be long on height. For once, Gopher coach Ozzie Cowles has assembled some really big boys. They open the season against Southern Methodist Dec. 2.

Look at these: 6-3 and springy George Kline; 6-7 Ron Johnson; 6-7 Warren Jeppesen; 6-9 Dave Griffin — you have to go back quite a ways in Gopher basketball history to find as formidable a forward line as this, height-wise.

(Last year, basketball experts agreed that lack of height was a serious drawback.)

Along with this year's towering front line is a good back-court nucleus, headed by junior Whitey Johnson. The modest Wisconsin lad broke in as a sophomore last year and promptly moved veteran Buck Lindsley out of the picture for virtually the entire season.

He's got another soph running with him, in turn, this season: Marlo Miller, a "mere" six-footer but one who can rebound with the best because of a good spring and a build like a young horse.

It's for sure that the Gophers will be highly fortunate if they finish as high as they did last year when they rallied to get third place after bowing out of the title picture rather early.

Minnesota hasn't won a Big Ten cage title in 20 years. This probably won't be the year either (it all sounds too much like the football



George Kline



W. Jeppesen

scene and the Rose Bowl dearth, doesn't it?). But if the present crew of Gopher youngsters develops as it should, who knows where they'll finish in the next few years?

One thing that can't be expected this year is the amazing shooting percentage the Gophers racked up from all positions on the floor last season.

Then, Minnesota tied the school scoring record while, individually, Kline broke loose for 40 points

against Iowa to set a new Minnesota record.

Besides Capt. Kline and the other Gophers listed, here are a few others that might figure considerably in the Gopher scheme of things:

Tom Benson, footballer Mike Wright, Waldo Narr, Dave Pflipsen, Larry Morris, Larry Exel, and Dick Bracher.

The season opens in early December with a couple good non-league foes including SMU and Iowa State.

GOPHER GRAD

Decorations Slow Homecoming Traffic

Everybody got into the act last month when Minnesota celebrated its 43rd Homecoming.

Returning alumni watched the Gophers "Hoe Down the Hoosiers" in the Minnesota-Indiana game. Traffic crawled at a snail's pace near campus, as motorists slowed down for a look at the decorations that transformed the campus religious organizations, dormitories, fraternities and sororities into a "Homecoming Wonderland."

Houses III & IV of Pioneer Hall completed the first display, and also encouraged participation by challenging the other houses to build displays. The University band, under the direction of Gale Sperry, assistant bandmaster, presented a new show, substituting maneuvers and popular marches in place of the usual pageants.

Winners of the All-University Congress contest to name the song leaders was Donald Alsop, New Ulm, Minn. for his entry, "Ski-U-Mettes. Lorraine Schueller, Fulda, Minn., submitted the winning cheer leader name, "Gopher Rousers."

1957-58 Basketball Schedule

Home Games

Dec. 2	South. Methodist U.
Dec. 5	Iowa State
Dec. 14	Alumni-Varsity
Dec. 30	Yale
Jan. 4	Purdue
Jan. 25	Iowa
Feb. 3	Indiana
Feb. 10	Michigan
Feb. 15	Northwestern
Feb. 24	Wisconsin
Mar. 1	Ohio State

Games Away

Jan. 6	Kansas State
Jan. 13	Indiana
Jan. 18	Ohio State
Jan. 27	Northwestern
Feb. 1	Michigan State
Feb. 8	Wisconsin
Feb. 17	Illinois
Feb. 22	Purdue

Grid Greats of Yesteryear



Meeting with Doc Clarence Spears (right), football coach during one of the golden eras of Minnesota football, are three team captains of that era. From left to right are Herbert Joesting, '27; George Gibson, '28, and Roger Wheeler, '26. The occasion was a 1927 Doc Spears football reunion held in conjunction with the Minnesota-Michigan football game on Oct. 26.

Will Shapira (Webster)

Definitions in Season

Football fundamentals: anything that accounts for winning a game.

Football formation: anything that accounts for losing a game.

Football "special": a mobile bar.

"Fearless forecasts": worried guesses.

Pacific Coast Conference: two-month contest to see which team can stay eligible longest.

Rose Bowl: free vacation for the Big Ten representative.

Rose Bowl: punishment for the team that has the audacity to win the PCC title.

All-America Teams: unjust affirmation of late-summer guesses.

Football fever: mass hysteria, usually accompanied by wishful thinking, followed by disillusionment.

Orange Bowl: Oklahoma's semi-annual vacation site.

Iowa City: a football stadium, surrounded by a state of nothingness, inhabited by ferocious football players.

Punt: An offensive weapon for some teams; a backsliding device for others.

Split-T: Minnesota's offense everywhere but on the field.

Ivy League football: where nice guys finish first . . . and last . . . and in between.

Hustle: playing hard with a 20-point lead.

Underdogs: eventual winners of most games.

Upset: when the team picked as the pre-game favorite wins.

Football ratings: analysis of the popularity of victories by good teams over poor teams.

Pre-season Big Ten favorite: the team least likely to finish first.

Around and About With Alumni

'24

Milton M. Miller '24MS, chairman of the department of sanitary science at the University of Denver, was recently named recipient of the annual service award given by the National Association of Sanitarians.

Frederick R. Kappel '24BSEE has been elected to the board of trustees of the Presbyterian Hospital in New York City. Kappel, who was elected president, chief executive officer and a director of American Telephone and Telegraph last September, is former president of the Western Electric Co.

'26

Dr. Lawrence R. Hafstad '26BSEE was recently informed of the results of research he conducted 10 years ago, when it was announced that the Bomarc, a long range anti-aircraft missile powered by ramjet engines, is ready for use. Now chief of General Motors research division, Hafstad directed the research to develop the Bomarc's engines. The newest weapon in America's push-button arsenal, the guided missile can destroy enemy aircraft 200 miles from the firing point.

'27

Dr. Walter H. Dumke '27BS has been appointed chairman of the Colorado School of Mines chemistry department's newly-formed executive committee. He formerly worked as an engineer and chemist for Gates Rubber Co. in Denver and the U.S. Bureau of Reclamation.

Col. Elmer A. Lodmell '26MB, '27MD was recently awarded a commendation Ribbon with Metal Pendant for his work at Walter Reed Army hospital in Washington, D.C. Now retired after serving a four-year tour as chief of the radiological service at the hospital, Col. Lodmell is currently practicing radiology in Greensboro, N.C.

'29

Fred Hovde '29BSChE, president of Purdue University, was presented with the North Star award by Gov. Orville Freeman in October. The award, presented for "outstanding achievement," is sponsored by the Minneapolis Chamber of Commerce and Maurice L. Rothschild-Young-Quinlan Co.

Dr. Thomas E. Dredge '26BS, '28MB, '29MD, director of professional services at the St. Cloud Veterans Administration hospital since April of 1954, has been appointed manager of the Veterans Administration hospital at Tomah, Wis.

Eddie Albert '27-'29 recently arrived in England to star in his first British film, "Orders To Kill," an Anthony Havelock-Allan—Anthony Asquith production. Rec-

ognized as one of Hollywood's most outstanding actors, he has appeared in numerous radio shows, on Broadway and in such films as "Attack" and "Teahouse of the August Moon."

'31

Col. William D. Graham '30BS, '30MD, '31MD is currently attending a ten-month course at the Army War College, Carlisle Barracks, Pa.

'33

W. R. Lund '33EM has been named production manager of Shell Oil Company's New Orleans exploration and production area. Prior to his new assignment, he was area production manager in Calgary, Canada.

'34

Arvel B. Klessig '34BCE was recently appointed district engineer of the Asphalt Institute, College Park, Md.

'36

Vernal Alfred LeVoiur '36BSED has been designated chartered life underwriter by the American College of Life Underwriters.

Dr. Frederick C. Kruger '35BA, '36MA has been promoted to director of mining and exploration for International Minerals & Chemical Corp., Chicago.

'37

Eilene M. Donner '30BED, '37MA, principal of the Kalamaki Elementary School, Athens, Greece, was recently named "Personality of the Month" by the Athens "Mercury."

Evelyn Johnsen '37GN, '37BSED recently returned to the United States after spending four years in Iraq as chief nurse of the Public Health division of the International Cooperation Administration Mission to Iraq.

'40

J. B. Fagot '40BBA has been appointed vice president of Omar Incorporated, house-to-house bakery. He will be responsible for all personnel and industrial relations functions throughout the company, including manufacturing plants in Omaha, Nebraska, Milwaukee, Wisconsin, Indianapolis, Indiana and Columbus, Ohio.

'17

Harold R. Searles '17BS, extension dairyman for 35 years at the University, in June received the annual \$1,000 DeLaval Separator company award for outstanding service to dairy farmers. He is currently a professor of dairy extension.

'23

Sidney Swensrud '23BS, retired in May as chairman of the Board of Gulf Oil.

'32

Dr. Harold W. Thatcher '30BS, '31MB,

'32MD, received recognition in the May 18 issue of the Chicago Daily Tribune as "one of the Chicago south side's distinguished skin specialists."

'34

Col. Gottlieb L. Orth '31BS, '33MB, '34MD received a Certificate of Achievement in June for his outstanding service as chief of the preventive medicine division of the Surgeon's Office, U. S. Army Forces, Far East and Eighth U. S. Army at Camp Zama, Japan.

'36

Dr. Grace M. Roth '31BS, '36MS, '36PhD recently helped organize a symposium on peripheral vascular diseases to be presented by the Minnesota Heart Association and the Mayo Foundation at Rochester.

'32

Barbara Sampson '32BSHE arranged frozen food demonstrations in June for the International Trade Fair behind the Iron Curtain in Poznan, Poland. She is home economist for the Birds Eye Division of General Foods.

'34

Sheldon W. Peterson '34BA recently transferred from KLZ radio stations in Denver, Colorado, to WTCN radio and TV in Minneapolis and St. Paul.

Phyllis Stark '34BSED is author of "I Chose a Parson," published by Oxford University Press in September.

'39

Orrilla Richardson '39BA, '52MS, formerly home editor of The Dakota Farmer magazine at Aberdeen, S. D., was appointed associate editor of the Midland Cooperator Oct. 1.

'41

Dr. Roland Strolle '41MA has been appointed head of the department of education, School of Education, Western Michigan University. Prior to his new appointment, he served since 1949 as head of the division of School Organization and Plant for the Department of Public Instruction at Lansing, Michigan.



Roland Strolle

Edward Landes '41BBA was recently appointed manager of Sales District 12 of the Data Processing Division of International Business Machines Corporation. He will be responsible for the data processing sales and service activities of IBM branch offices in Minnesota, Iowa, Nebraska, North and South Dakota and Wisconsin.

GOPHER GRAD

'45

Phil Clark '45BA has been named garden editor of "Living for Young Homemakers."

'46

Robert S. Aries '46MA, New York consultant for Chemonomics, Inc., recently returned from a visit to Japan at the invitation of Japanese chemical industrialists.

Evelyn Harne '46BS, state 4-H club agent at the University, has been promoted to assistant state 4-H club leader.

Mrs. Merlin Krenik '46GN, '46PHN is employed as public health nurse for Le Sueur country.

Dr. Edward M. Litin '43BS, '45MB, '46MD, a member of the section of psychiatry of the Mayo Clinic, Rochester, was elected secretary-treasurer of the Minnesota Psychiatric Society at the annual meeting of the organization in June.

Darrel G. Hoffman was appointed as personnel director by the J. R. Watkins Co. in August. Prior to his new appointment he was employed by the Univac Division of Sperry Rand Corp., St. Paul.

'47

Dr. C. Allen Good '44BA, '46MB, '47MD, '47PhD was recently elected sec-

retary of the American Roentgen Ray Society. Associated with the Mayo Clinic's department of radiology, he was named to secretaryship of medical group at the 58th annual meeting held in October in Washington, D. C. He is also currently a member of the Mayo Clinic board.

'48

Richard P. Jones '48BA, vice president and account executive for Keystone Advertising, Inc., Minneapolis, recently represented his company at the 1957 presentation of Putman Awards in Philadelphia. The annual national competition awards recipients for the best use of industrial advertising.

Hyam Segell '47BSL, '48LLB recently took over his new duties as assistant U. S. district attorney for Minnesota. He was formerly Ramsey county district court public defender.

Elmer W. Schwittek '48BEE has been named engineering section head at Stromberg-Darlson, Rochester, N. Y.

Owen B. Stubben '41BA, '45MAA is currently serving on the staff of the Health and Sanitation Division at the United States Operations Mission to the Philippines.

Mrs. Bernice Theissen Elert '48BS, St. Paul, was presented with the 1957 Kimble Medical Technology Research award at



Mrs. B. Elert

the annual convention of the American Society of Medical Technologists, held in Chicago in June. Mrs. Elert was honored for her development of techniques which enable doctors to make more effective use of Curare, a potent drug used to reduce the amount of anaesthetics needed in operations, to shorten muscle spasms in bone fractures, and to soften convulsions in electro-shock therapy."

Paul S. Jorgensen '48BSEd has been appointed an instructor in education in the division of philosophy, religion, psychology and education at Carleton College, Northfield, Minn.

Glen Fevig '45BCE, '48MChemE was recently promoted to section head in the Upjohn Co. department of chemical process research and development, Kalamazoo.

SPECIAL REPORT

Mr. ROLLINS WM. MILLER, JR. NEW YORK LIFE AGENT
at WASHINGTON, D. C.

BORN: June 11, 1921.

EDUCATION: Georgetown University, Foreign Service School, B.S., 1950.

MILITARY: U.S. Marine Corps—Tech. Sgt., January '42 to November '45.

PREVIOUS EMPLOYMENT: March '48 to Sept. '48—U.S. State Dept. Oct. '48 to June '49—Secretary, Dept. of Physics, Georgetown University. March '50 to Aug. '50—Sales Trainee, Manufacturer of Electronic Business Machines. August '50 to August '51—Salesman, Business Machines.

REMARKS: Rollins Wm. Miller, Jr., joined New York Life's Washington, D.C., office on August 1, 1951. Each year since, this personable ex-Marine's sales volume has qualified him for membership either in the Company's President's Council or Top Club. He is a Life and Qualifying Member of the industry-wide Million Dollar Round Table. This impressive record makes it seem certain that even greater success lies ahead for Bill Miller, as a New York Life representative.

Note

Bill Miller, after six years as a New York Life representative, is already well established in a career that can offer security, substantial income, and the deep satisfaction of helping others. If you'd like to know more about such a career

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**University
of
Minnesota**

**Correspondence Study
Department
Minneapolis 14**

John F. Johnson '42BChE, '48PhD has been named a section head in the chemicals research division of Esso Research and Engineering Co. at Linden, N. J.

'49

Thomas Seymour Lee '49PhD is recipient of one of four \$1,000 Quantrell Awards for excellence in undergraduate teaching presented this year at the University of Chicago.

Dale Benson '49BBA has been appointed manager of a newly-created employee development section of Archer-Daniels-Midland, Minneapolis, Minn.

Frank W. Lackie '49BS has been named actuary for Group Health Mutual, Inc., Minneapolis, Minn. For six years prior to his new appointment he had served as supervisor of actuarial research for Northwestern National Life Insurance Co.

'52

William G. Boyce '49BS, '52Med has been appointed assistant professor of art and educational curator of Tweed gallery at the University of Minnesota, Duluth Branch.

'50

Elgin F. Gunderson '50BBA has been assigned to Crocker-Anglo National Bank's Redding office in San Francisco, Calif., as assistant manager.

Dr. Howard A. Andersen '40BS, '42MB, '43MD, '50MS, consultant in medicine in the Mayo Clinic, Rochester, Minn., and instructor in medicine in the Mayo Foundation Graduate School, University of Minnesota, has been elected secretary-treasurer of the Alumni Association of the Mayo Foundation.

Gloria Ann Marra '50BA and Alan H. Rice '50BBA were married last April in New York.

'51

Norman H. Russell '51PhD was recently promoted to full professor from associate professor of biology at Grinnell College, Grinnell, Iowa.

'52

Thomas C. Oliver '52BME recently was appointed assistant superintendent of the Gilbert, Minn., open pit mine in the Eastern District operations of U. S. Steel's Oliver Iron Mining Division.

R. Keyworth '50BA, '52MA received the PhD degree from Ohio State University in August.

Richard S. Larson '50BS, '52LLB has joined the firm of Wheeler, Fredrikson, Hoke & Larson, Minneapolis, Minn., as a senior partner.

'53

Dr. Donald Swenson '49BA, '50BSMd, '52MB, '53MD began practicing as a pediatrician in Mankato, Minn., a year ago.

James P. Streltz '51BS, '53MA, formerly manager of the Chisholm Memorial Hospital, has taken over full-time duties as manager of the Mesaba Clinic.

'54

Dr. Hugh Livingston '52MS, '54PhD has received an appointment in the agricultural department of the Kenya government. He is posted at one of the husbandry stations in the Mau Mau district, where he works on the crossing of European cattle with native stock.

Dr. Carlo M. Ignoffo '54MS has joined the Iowa Wesleyan College faculty as an assistant to the head of the department of biology and chairman of the division of the natural sciences.

'55

ValRay Kohner '54ALA, '55BA is currently executive secretary of the Minnesota United Nations Association.

J. A. Rolloff '55BS, University Fulbright scholar, is working with rural youth clubs at Canterbury Agricultural College, Lincoln, in Christchurch, New Zealand. Prior to assuming his new position, he was employed as an agricultural consultant in Japan.

Mrs. Effie Lou Sluyter '55MA has been appointed director of nursing services at University Hospitals, University of Missouri School of Medicine.

Danny F. Huebner '55BAeroE was awarded a master of science degree recently at the California Institute of Technology.

LaDale Lorenz '55BSEd has been hired by the Northfield, Minn., school board as supervisor of the coordinator co-operative student work program and occupational relations class instructor. He will also teach a class in business law.

Karl P. Kraemer '55BA is currently a first lieutenant in the U. S. Air Force, flying cargo planes from Dover Air Force Base in Delaware to Europe.

'56

Secreta Nancy Pink '56BA is among the 51 first year students at the Woman's Medical College of Pennsylvania in Philadelphia.

Roberta Ratcliff '56MA, a former Miami University staff member, recently accepted a position as an editorial assistant for the Miami University president's office.

Donald J. Hagen '56BA has been assigned as an assistant engineer to the processing machinery department of Allis-Chalmers Manufacturing Co., Milwaukee, Wisc.

Susan Hanna Hill '56 was married in June to Harold Moulton Grey in Palo Alto, Calif.

ANOTHER NORTHROP "FIRST"

F-89 Scorpion fires "Genie" Nuclear Missile

HAWTHORNE, CALIF.—Prominent in the summer's bustling stream of world news was an item of lasting importance crediting Northrop with another "first" in air defense. This was Operation Genie, the first test firing of an air-to-air missile with an atomic warhead.



To carry out this crucial operation, an aircraft with unusually high stability and airframe integrity was indicated. In choosing the Northrop F-89 Scorpion all-weather interceptor as the firing vehicle for Genie, the Air Force acknowledged the Scorpion's capabilities and at the same time entrusted a difficult project to the Northrop team, an engineering force noted for its ability to deliver.

Northrop engineers, scientists and technicians modified several F-89's to meet Operation Genie's critical specifications. The missile-firing plane was outfitted to handle the weapon and equipped for guidance to the target with split-second accuracy. Another F-89 was provided with special instruments to record blast effects and radiation. The entire project dovetailed with thousands of related USAF activities, culminating in the history-making flash over the Atomic Energy Commission's Nevada test site on July 19th, 1957.

Proven on countless occasions, the ability of Northrop engineers to solve critical problems and to maintain effective liaison throughout the development of an involved weapon system was reaffirmed in Operation Genie.

ELECTRICAL ENGINEERS

The circuit must be complete or no significant part will function. Accordingly, without the ability of highly experienced electrical engineers, no missile, supersonic weapon, or space vehicle could exist. There is no function more vital to today's technology than electrical engineering. This is evident in the continued increase in the utilization of electrical and electronic components in the development of weapon systems, communications, navigation, fire control radar and instrument systems.

Today, electrical engineers at Northrop find many interesting challenges on projects for which Northrop has become world-famous. These include the Snark SM-62, only intercontinental guided missile in active production, the new USAF Northrop T-38 supersonic twin-jet advanced trainer, and many other projects in the missile and aircraft field.

Northrop engineers are now enjoying the matchless facilities of the new Engineering Science Center where they work with the most advanced equipment in the aircraft and missile industry. Salary and company-paid benefits are at top level. Advancement is rapid. If you are an electrical engineer with outstanding qualifications, you are invited to discuss your future with the Manager of Engineering Industrial Relations.



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BUILDERS OF THE WORLD'S FIRST INTERCONTINENTAL GUIDED MISSILE

Lecture Given Honoring Rigler

Dr. Leo C. Rigler '17BS '19MB '20MD, formerly of the University medical school faculty, was honored recently during a continuation center course in cardiovascular radiology at the University. As a part of the course, Dr. Dickenson W. Richards, Lemberg professor of medicine, Columbia University, presented the Leo G. Rigler lecture in recognition of the radiologist who came from California to participate in the course. Dr. Rigler is now consultant and director of education, Cedars of Lebanon Hospital, and visiting professor of radiology, University of California at Los Angeles.



Leo Rigler

Colorado Professor Wins Top Honor

David Wield Robertson '20NS '28PhD, head of the Colorado A & M College Agronomy Department, received the University outstanding achievement award recently at a dinner meeting in the Campus Club.

The award was presented by Dean Emeritus C. H. Bailey, former head of the Institute of Agriculture.

Robertson is internationally known for his research in barley genetics, maintaining breeding and genetic stocks of major crops so that they may be available for future breeding work.

FIRST CHEERLEADER of the University was the late John E. Campbell '01MD, South St. Paul. A loyal alumnus, Dr. Campbell was killed in an auto accident on Nov. 24, 1936.

They Sell for Lenkurt



These four University engineering graduates are helping develop, produce, and sell telephone communications equipment for Lenkurt Electric Co. Edwin J. Rudisuhle '40BEE, third from left, heads Lenkurt's Mexico City plant; while, left to right, Robert F. Gellerman '56 BEE, Harry J. Lewenstein '49 BEE and Robert C. Herrick '49BEE are connected with the headquarters plant in San Carlos, Calif. Dan G. Haney '52BBA, not pictured, also works at the San Carlos plant, which is 20 miles south of San Francisco.

Education is the Overseas Mission Service Performed by Husband-Wife Teams

Two husband and wife teams, all of whom are graduates of the University of Minnesota, have been commissioned for overseas missionary service by the Methodist church.

Mr. and Mrs. George W. Parrott will return to Japan as educational missionaries. They were both Methodist missionaries to Japan from 1948 to 1953.

Parrott received a bachelor of science degree in education in 1948 and a master's degree in educational psychology in 1956.

While in Japan for the previous missionary term, Parrott taught at To-O-Gijuku Boys' High School at Hirosaki. On his return to this country, he taught from 1954 to 1956 in the public schools of Mound. In the summer of 1955, Parrott was supply pastor of the Methodist church at Eden Prairie, Minn.

A native of Alexandria, Mrs. Parrott is a 1949 graduate of the University of Minnesota with a bachelor's degree in pre-social work.

The Parrotts have been doing special study at the Garrett Biblical

Institute, Evanston, Ill., since September.

John T. Schevenius, a former civil engineer for the Minnesota Highway Department and a former Methodist pastor in Minneapolis, will go to Southern Rhodesia, Africa, as a building engineer. Mrs. Schevenius, daughter of the Rev. and Mrs. T. M. Amstutz, missionaries to India of the Christian and Missionary Alliance Church, will be a laboratory technician.

A native of Minneapolis, Schevenius attended the University of Minnesota and Bethel Seminary in St. Paul. He received a civil engineering degree from the University in 1950.

From 1950 until 1956, Schevenius was a civil engineer in highway construction planning for the Minnesota Highway Department. As a lay minister, he was pastor of the Asbury Methodist Church in Minneapolis. He is a member of the American Society of Civil Engineers.

Mrs. Schevenius received a bachelor of arts degree in bacteriology in 1950. She had previously attended Asbury College, Wilmore, Ky.

ACTION SHOT OF A
NEW ENGLAND LIFE AGENT



Jack Langan discusses additions to Inter-County's pension plan

Jack Langan joined the Byrnes Agency of New England Life in 1952, the year after he graduated from Fordham. Since then he's been able to help more than twenty-five companies install pension plans. None of these plans has given him more personal satisfaction than the one he sold to the Inter-County Title Guaranty & Mortgage Company.

Inter-County is a large organization with offices throughout the nation and Jack worked hard to tailor the plan exactly to their specific requirements. President Thomas H. Quinn (seated at desk in picture above) has been most appreciative. And he is enthusiastic not only about the plan itself, but about the professional assistance Jack continues to offer in servicing it.

Jack enjoys meeting and working with distinguished men like Mr. Quinn. Furthermore, these top executives recognize the value of the services he brings to them and their organizations. That's one important

reason for the continuing satisfaction Jack has found in his career with New England Life.

There's room in the New England Life picture for other ambitious college men who meet our requirements. You get income while you're learning. You can work anywhere in the U. S. A. Your future is full of substantial rewards.

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A. Irving Brinberg, '22, St. Paul
Bruce J. Robinson, '27, Indianapolis
Louis M. Schaller, '29, Minneapolis
Mailand E. Lane, Sr., '32, Minneapolis
Richard H. Luby, '34, Phoenix
Hubert D. Wheeler, '34, Gen. Agt.,
Duluth

Francis L. Lund, CLU, '35, Gen. Agt.,
Minneapolis
Howard D. Burdick, '39, Dallas
Morton C. Mosiman, '40, Minneapolis
Lloyd V. Shold, '42, Duluth
Robert R. Abrahams, '44, Minneapolis
Robert M. Larsen, '47, Minneapolis

Earl H. Mosiman, '47, Minneapolis
Robert D. Myhr, '48, Chicago
Ariel H. Oberg, '48, Los Angeles
Theodore J. Lee, '49, Duluth
H. Larry Wilson, Jr., '52, Minneapolis
John B. Heimkes, '54, Minneapolis
William G. Sullivan, '56, Minneapolis

Summa Cum Laude



Retired Neurologist . . .

Dr. Henry W. Woltman for 26 years as head of the neurology section of Mayo Clinic and neurology professor in the Mayo Foundation, Rochester, Minn. Dr. Woltman, who joined the Mayo staff in 1917, is recognized as outstanding in the country and is an authority on neurological changes associated with pernicious anemia. He has contributed articles to medical publications and is a member of a number of medical and neurological societies. He received his BS in 1911, his MD in 1912 and his PhD in 1917 from the University. He was recently given the University's Outstanding Achievement Award.

Glass Executive . . .

Clinton F. Hegg on being elected to the board of directors of Libbey-Owens-Ford Glass Fibers Co., Toledo, Ohio. From sales representative of the L.O.F. Glass Co. in 1939, he became vice president of the new company formed by a merger with Glass Fibers, Inc. He is a member of the National Sales Executives, Society of Automotive Engineers and other executive associations. During World War II he served in the South Pacific. In 1939 he received his B.Arch.E. from the University.



. . . And Lady Scientist

Dr. Elizabeth Hahnemann Cuthill, 33, on being given special recognition by a nation-wide panel of scientists and engineers for her leadership and scientific contributions. Dr. Cuthill was one of six finalists selected from 37 candidates for the honor. She is head of the Nuclear Reactors Branch, Applied Mathematics Laboratory, David Taylor Model Basin, Washington, D.C. She first joined the Laboratory as a mathematician in 1953 and was appointed to her present position in February of 1957. Dr. Cuthill received her BA from the University of Buffalo in 1944, her MS from Brown University in 1946 and her PhD from the University in 1951.



Grads Before 1900

George S. Johnston, 85, 1891-97 of Minneapolis in October.

Dr. H. A. Erikson, 87, '96BEE, '08PhD, former head of the University department of physics, at his home in Coral Gables, Fla. A widely known scientist and author of "A Journey to the Moon and Back." At the time of his death, he was writing a paper on "The Cyclical Theory of Nature of the Universe."

G. J. DeMars, 78, '98PhmD, last May at Ada, Minn., from a heart attack. A life member of the Minnesota Pharmaceutical Association, he was a druggist in Ada for 30 years.

Dr. A. N. Gunz, 78, '99DPhm, '04MD, in September. A retired physician, he practiced in the Chisago Lakes area of Minnesota for 52 years.

Martha H. Sjoberg '02BA, a mathematics teacher in the St. Paul senior high school system 43 years before her retirement in 1948, in Minneapolis in July.

Dr. Oscar L. Olson '03MA, president emeritus of Luther College, Decorah, Iowa, last November.

Louis Rask '03EE, a year ago. He was a Spanish-American War veteran and a retired General Electric Co. engineer.

W. I. Norton '06LLB, retired vice president of Investors Diversified Services Inc., and a former state legislator for 22 years. During his career as a legislator, from 1912 to 1934, he served as conservative floor leader, parliamentarian, chairman of the powerful rules committee and drafter of important laws. He fought appropriations for the University of Minnesota through the house, including one of \$400,000 for the stage at Northrop auditorium.

Alice E. Green '08BA, a year ago.

A. Amos McGee '08CE of St. Paul.

William H. Gurnee '08LLB, formerly Minnesota assistant attorney general, in San Francisco, Calif.

Albert J. Evans, 71, '08BA in May.

Vera Doris Billings '08BA, of St. Paul.

Dr. William George Strobel, '09BS in Duluth.

Dr. M. O. Patridge '10DDS, retired University of Minnesota dentistry professor, in July after a brief illness. He had retired from the faculty in June after teaching 47 years, one of the longest teaching records in the history of the

University. In addition he maintained a private practice in the Minneapolis Medical Arts center.

Chester L. Nichols, 70, '10LLB at his home in Minneapolis. He had practiced law in the city for 47 years, and was a past president of the Hennepin County Bar association and a member of county, state and national bar associations.

Otto Ramstad '12BA, a former teacher at Humboldt high school, St. Paul, for 28 years.

Laz Barron 1911-'12, a Minneapolis Jewish community leader, this summer. He was a former president of the Standard Club, a charter member of the City of Hope and a member of the University "M" club.

John L. Gleason '08-'12, a year ago.

Dr. A. C. Raymond '13DDS, of a heart attack last April.

Florence Craig '14BA, former Stanford University librarian, in September.

Martha C. Blegen, 68, '14BSHE, retired teacher at Folwell junior high school in Minneapolis.

Dr. Gilbert Kvitrud, 73, '12BS, '14MD of St. Paul this summer.

John C. Hustad, 67, board chairman of The Hustad Co., in Minneapolis in October. He had retired in July as president of the company.

Lloyd Peterson, 63, '16LLB of Santa Barbara, Calif.

Ralph McGrath '16BA, Stillwater, Minn., city attorney for 26 years, this summer.

Matilda Baillif, 73, '09BA, '17MA, in February.

Mabel Anderson '19BSHE, director of the Iowa State College Memorial Union food service for 31 years, in August. She also taught some of the college's courses in institution management and was a part-time instructor on the home economics faculty.

Dr. Guy Leonard Hilleboe, 59, '20BA in Bangalore, India, in May. Since February, 1956, he had been working in India under the Indian-American technical co-operation program.

Raymond Andrews '21LLB at Lindstrom, Minn., in August following a long illness.

Douglas Gilmore Anderson '21BSB recently in Santa Barbara, Calif.

Dr. Howard L. Eder '21BS, '21MB, '22MD, in July in Santa Barbara, Calif.

Dr. Karl S. Palmer, 55, '23DDS, of Saudi Arabia, this summer. Formerly of Minneapolis, he practiced in Bombay, India, from 1923 to 1951, when he went to Aramco Dharan, Saudi Arabia.

Robert Henderson Ridgway, 57, '23EM, former chief of the Ferrous Metals and Alloys Division, Bureau of Mines, a year ago.

Dr. Carl E. Anderson, 63, '21BS, '22MB, '23MD, in October at the Minnesota State Hospital at Moose Lake, where he was resident physician for the past year and a half. He held the title of senior surgeon with the United States Public Health Service.

Dr. John Maurice Culligan, 62, '18BS, '20MB, '21MD, '25MS(Urol.), prominent St. Paul surgeon, in August. He was a member of the American College of Surgeons, the Minnesota State Medical society, the American Medical Association and the Minnesota Academy of Medicine.

John E. Harrigan, 51, '30LLB, Stillwater attorney, in September.

Col. Edward J. Kotrich, 51, '28BA, '30LLB, for many years a Minneapolis attorney, in June at Arlington, Va. He was serving as chairman of the board of review, judge advocate general corps, in Washington at the time of his death.

William Char, 39, '39BBA, in St. Paul last May.

Dr. Ralph H. Larson, 41, '38BA, '40MB, '41MD, Anoka physician, whose body was recovered from Diamond lake near Anoka, where he had been duck hunting.

Rosetta E. Rossoff '46BA, this summer following a lengthy illness.

DeLloyd O. Anderson '49AA, this summer from nephritis.

Donald Miller '48BS, '51MSW in an automobile accident near Eagle, Colo., in July.

Thomas L. Peterson '54BSAg this summer at Sleepy Eye, Minn.

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