The GEAR of THETA TAU

January, 1927

The GEAR *of* THETA TAU

JANUARY, 1927

VOLUME XVI NUMBER 1

AN EMPLOYMENT BUREAU ESTABLISHED

At the Service of Theta Taus

THE Sixth Biennial Convention resolved that the Fraternity should be of assistance to its members in obtaining employment and to put prospective employers into touch with qualified men.

To serve these needs one of the national officers was designated as manager of the service bureau to be established.

Members of the Fraternity are engaged in many lines of engineering, or in business in which engineering has an important function. Many of them hold responsible positions, and are often in need of men for their staffs, or hear of good opportunities with other reliable concerns.

To serve our members in this way is part of that practical idealism which our founders proclaimed as a policy of Theta Tau.

Members of the Fraternity seeking positions of any kind should send in complete information about themselves, furnish an address where they can always be reached by mail or wire, give a detailed account of what experience they have had, and indicate the line of work they are most interested in.

The service of the bureau is open to all members in good standing in the Fraternity. To avoid possible delay applicants are advised to get a statement from their chapter to this effect.

Alumni are urged to notify the bureau of any openings for employment of which they get knowledge. Alumni who periodically employ certain classes of engineers are urged to furnish the bureau with information about it so that any graduates interested can apply on time. The Fraternity wishes to help the younger alumni but it also wishes to put possible employers in touch with qualified engineering graduates of personal worthiness.

Address All Communications to

PROF. H. L. BALDWIN

Care of University of Utah

SALT LAKE CITY, UTAH

The GEAR *of* THETA TAU

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DONALD D. CURTIS, OMICRON '19

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VOLUME XVI JANUARY, 1927 NUMBER 1

CONTENTS

ILLUSTRATIONS

Theta Tau Fraternity

Founded at the University of Minnesota
October 15, 1904

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W. MURRAY LEWIS — ELWIN L. VINAL

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Southwestern—Charles A. Kumke, P. O. Box N, Ray, Arizona.
Twin City—James A. Colvin, Care of Northern States Power Co., South Fifth Street, Minneapolis, Minnesota.

CHAPTERS

ALPHA, *Founded October 15, 1904* - - - University of Minnesota
406 11th Ave. S. E., Minneapolis, Minn.

BETA, *Established March 26, 1906* - - - Michigan College of Mines
Care of Prof. James Fisher, Houghton, Mich.

GAMMA, *Established November 8, 1907* - - Colorado School of Mines
P. O. Box 12, Golden, Colo.

DELTA, *Established May 23, 1911* - - Case School of Applied Science
Case School of Applied Science, Cleveland, Ohio

EPSILON, *Established May 4, 1911* - - - University of California
Box, Hearst Mining Bldg., University of California, Berkeley, Calif.

ZETA, *Established April 17, 1912* - - - - University of Kansas
1409 Tennessee Street, Lawrence, Kansas

ETA, *Established March 23, 1912* Massachusetts Institute of Technology
Care of Prof. James Jack, M. I. T., Cambridge, Mass.

THETA, *Established May 7, 1914* - - - - Columbia University
Care of Prof. T. H. Harrington, Columbia University, New York City

IOTA, *Established February 5, 1916* - - - Missouri School of Mines
P. O. Box 629, Rolla, Missouri

KAPPA, *Established March 25, 1916* - - - - University of Illinois
P. O. Box 581, Station A, Champaign, Illinois

LAMBDA, *Established May 29, 1920* - - - - University of Utah
P. O. Box 101, University of Utah, Salt Lake City, Utah

MU, *Established January 3, 1922* - - - - University of Alabama
P. O. Box 724, University, Alabama

NU, *Established January 1, 1922* - - Carnegie Institute of Technology
P. O. Box 114, Carnegie Institute of Technology, Pittsburgh, Pa.

XI, *Established January 13, 1923* - - - - University of Wisconsin
Room 208 Engineering Building, Madison, Wisconsin

OMICRON, *Established February 3, 1923* - - - University of Iowa
715 Iowa Avenue, Iowa City, Iowa

PI, *Established May 26, 1923* - - - - - - University of Virginia
P. O. Box 449, University, Virginia

RHO, *Established February 16, 1924* N. C. State College of Ag. and Eng.
P. O. Box 378, State College Station, Raleigh, N. C.

SIGMA, *Established November 29, 1924* - - - Ohio State University
259 East Lane Avenue, Columbus, Ohio

TAU, *Established December 12, 1925* - - - - Syracuse University
P. O. Box 11, University Station, Syracuse, New York

AIRPLANE VIEW OF SYRACUSE CAMPUS

SYRACUSE UNIVERSITY AND COLLEGE OF APPLIED SCIENCE

SYRACUSE UNIVERSITY was founded in 1870. It is the successor to Genesee College located at Lima, N. Y., near Rochester. Genesee College was founded about 1850 and after about twenty years the authorities of the college decided that it could progress more rapidly if it were located in a city. A convention was held in Syracuse in 1866 and it was decided to move the college to Syracuse. While the University has been in existence only a little over forty years it has grown from a single college to eleven colleges and six schools, and this advancement has placed Syracuse on a high plane in the educational field.

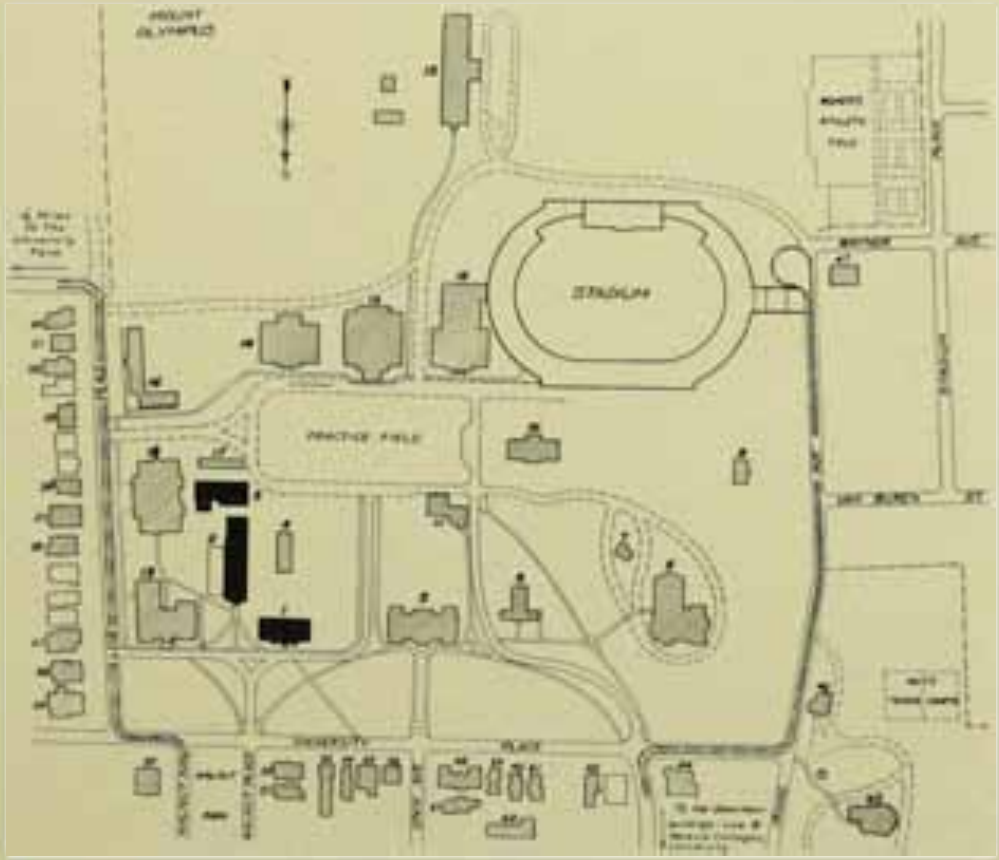
The campus, containing about one hundred acres, is situated on the heights in the southeastern part of the city and commands an extensive view of the city and outlying country. In the central part of the campus the Hall of Languages is located. This was the first building to be erected and for the first twenty years of the University's life most of the college work was done there.

The College of Medicine was formerly the medical department of Hobart College at Geneva, N. Y. It was removed to Syracuse in 1872 and occupies a building in the central part of the city.

About 1890 four new buildings were added all of which were located on the campus. Among these were the Library, a gift of Andrew Carnegie, and the Fine Arts building, put up by John Crouse, a prominent citizen of Syracuse and a trustee of the University at that time. The Crouse College of Fine Arts is perhaps the most beautiful building on the campus. It is constructed of red sandstone in the Gothic style of architecture. It can be seen from almost any place in the city and stands as a lasting memorial to the man who built it.

In 1894, James Roscoe Day became chancellor and served in that capacity for twenty-eight years during which time the University expanded quite rapidly. During his administration most of the colleges were founded and most of the buildings were constructed. Due to his foresightedness a large office building was put up in the central part of the city and this was soon filled with tenants. This is called the University building and is one of the largest office buildings in the city. It was also through Dr. Day's influence that the New York State City College of Forestry was located at Syracuse. The state erected a fine building and heating plant for this college, which also has a Summer Camp on Cranberry Lake, in the Adirondacks. This college is one of the best if not the best school of its kind in the world. Besides the ones mentioned there are fourteen other buildings and of course the stadium which seats about 35,000 people.

Both the colleges of Law and Medicine are located in the central part of the city, affording students there greater opportunities for study. Just off the campus is Teachers College, located in beautiful grounds, the building itself



MAP OF SYRACUSE CAMPUS

1. Main Building; 2. Machinery Hall; 3. University Power House; 4. Shop; 5. College of Liberal Arts; 6. Administration Building; 7. Observatory; 8. College of Fine Arts; 9. Photography Building; 10. Steele Hall—Physics; 11. Women's Gymnasium; 12. Men's Gymnasium; 13. Library; 14. Brown Hall—Chemistry; 15. College of Forestry; 16. Sims Hall—Men's Dormitory; 17. Conservatory—Botanical; 18. Colleges of Agriculture, Business Administration, Home Economics; 19. Lyman Hall—Natural History; 20–26. Fraternities and Sororities; 27–34. Women's Dormitories; 35. University Book Store; 36–42. Women's Dormitories; 43. Dormitory Store; 44. Fraternity; 45. Teachers' College; 46. Shop; 47. Orange Publishing Company

being an old castle which has been remodeled to accommodate classes. However, the grounds still retain much of the medieval atmosphere as far as looks are concerned. This castle was one of the stations on the "Underground Railway" during the Civil War. Within the next few years the new Syracuse Memorial Hospital is to be put up on the grounds. This will be one of the finest medical centers in the country. A nurses' home is also being built and a new building put up for the College of Medicine. This new medical center will without a doubt mean much to the University and to the city.

Chancellor Day resigned in 1922, being succeeded by Dr. Charles W. Flint, who came from the presidency of Cornell College located at Mt. Vernon, Iowa. In the four years Dr. Flint has been here much has been done in repairing the buildings, removing the university debt and in raising the scholastic standing of the school. This latter affair has been receiving the attention of the administration to a very great degree especially during the last year and it tends to make Syracuse, not a place where diplomas are given away, but rather a place where a person has to work for what he gets. The results of this are already very noticeable and everyone believes that during the next few years the scholastic standing of Syracuse will be much higher than it has ever been before. It was also largely through Dr. Flint's efforts that the new medical center is being built near the university. While speaking of some of the men who have been at the head of this university it is interesting to note that E. O. Haven, who was chancellor from 1874 to 1880, had before that time served in the senate of the state of Massachusetts, had been president of the University of Michigan for six years and of Northwestern for three years.

Some wonder and question why Syracuse University has grown as it has. The fact that Syracuse, the central city of the state, is easily accessible from all parts of the state and country, makes it an exceptionally favorable locality for a college. This together with the fact that the University has been under the direction of very able men, seems best to answer the question.

It was in June, 1900, that Chancellor Day announced that Lyman C. Smith promised buildings for a college of engineering at Syracuse, and on November 1st of that year the ground was broken for the main building. The college entered its new home in 1902. Machinery Hall, containing the shops and some of the laboratories, was not opened until 1907.

Lyman Cornelius Smith, our founder, was one of the leading citizens of central New York. He was nationally known as a pioneer in the typewriter industries through the several companies which he and his brothers organized for the manufacturing of that product. In Syracuse, his home community, he was highly regarded for his advanced civic spirit and for his kindly philanthropy. He was a trustee of the university for fourteen years, being vice-president of the board at the time of his death in 1910. As Mr. Smith's major interest was in industry it was natural that he should wish to help men in preparing themselves for those fields of activity pertaining to applied science. There have been about 1400 men graduated from the college and everyone feels that if this man were living today, he would feel highly justified in having done what he did toward founding the college which bears his name.

William Kent was the first dean of engineering and acted in that capacity until he resigned in 1908. He is probably best known, to mechanical engineers especially, for the handbook which he published. Dr. Shephard acted as dean until 1911 when he was succeeded by Wm. P. Graham who was dean until 1922 when he was appointed vice-chancellor of the University. Our present dean, Brother Louis Mitchell, came to the campus seventeen years ago as a professor of civil engineering. He is a graduate of Purdue and received his master's degree from M. I. T. and Harvard. In Dean Mitchell's five years at the head of the college, much has been done to strengthen the engineering courses and the course in administrative engineering has been added to the curriculum.

The college now offers five courses: Civil, Electrical, Mechanical, Chemical and Administrative Engineering. Little need be said about the first three courses as they are about the same as in any other school. The first year all the courses are the same and then they branch off into their separate fields at the beginning of the sophomore year. The chemical engineering course tends to lay a foundation for taking up plant work in the chemical line. The laboratories are well equipped for carrying on the typical operations of industry and for the study of processes on a semi-commercial basis. Then included in the course is some of the mechanical and electrical work which is intended to give a broader scope in the engineering field.

BUILDINGS OF L. C. SMITH COLLEGE OF APPLIED SCIENCE, SYRACUSE UNIVERSITY
On Left, Machinery Hall; on Right, Main Building

The purpose of the administrative course is to train men for positions where technical training is desirable but which are hardly within the scope of professional engineering. Some of the advanced technical courses are therefore omitted and business courses put in place of them. There is also a chance to take elective subjects in the other departments of the university. This course

is not intended as a short cut to positions of responsibility but it does give a man valuable training if he wishes to enter industrial, public utility, or commercial fields.

The laboratories and shops, while not the most complete or most magnificent in existence, are very well equipped and serve their purpose well. There is an excellent summer camp for surveying practice located on a lake about fifty miles from the city. The city of Syracuse, being a large industrial center, affords many opportunities for students to study with first hand information. Trips of inspection are taken as part of the courses in the last two years. Besides local trips the men also go to Schenectady, New York, Buffalo, Pittsburgh, and other places that may be on the route of travel.

The faculty is composed of about fifty members some of whom are from

TAU CHAPTER, SPRING 1926

BACK ROW (left to right): May, Thalman, Jenter, Cramer, Graves, Sutton.
MIDDLE ROW: Woese, Grove, Merry, Whitehurst, Kirkpatrick, Noble, Bleah.
FRONT ROW: Stearns, Garshurt, Berry, Mitchell, Acheson, Frink.

other colleges. Many members of the faculty besides teaching act as consulting engineers for some of the plants in the city. Then there are experts from the industries here who give special lectures on engineering subjects. Students are also given a chance to join the Technology Club of Syracuse and attend the lectures offered by that society.

The college, as part of a university group, probably possesses somewhat of an advantage in its social and cultural influences over a purely technical school. In many courses students are given instruction by the teachers of other colleges, obtaining a chance to mingle with different groups of people. This is apparently necessary, to a very much greater extent than engineers have the chance to associate with others in the classroom, if we take for granted what one of the psychology professors stated the other day—namely, that coeducation was necessary to give the proper cultural training to the college student. He then proceeded to cite as an example of this supposed lack of culture, the way in which the engineers cheer for the coeds as they pass the college building. While we do not try to defend the cheering, still we think Syracuse coeds are worth cheering for, and consequently have to be

the "goat" for such articles as do appear from time to time. The engineers, however, do have a chance, in common with the other students, to share in the culture and recreation offered by the university, which probably tends to give a broader scope of life in general.

The College of Applied Science is proud of the fact that it is the only college in the university having the honor system in classroom work and in examinations. No professors are present during quizzes or formal examinations and all matters of discipline and enforcement are acted on by a committee of class representatives. The system was established in 1915 by a student vote and has met with very great success. A Theta Tau man is now president of the committee which also has four other Theta Tau men in its membership.

The number of students in engineering here is somewhat limited, and while we have only about 250 men it is admitted that these few have more spirit than any other group on the campus of three or four times that size. As an article stated last year, "The engineers present the last stand for the good old days when college was college and not a social fiasco; when frosh were frosh and not be-furcuated, be-derbied and be-moustached, even, good for nothing snobs. Applied Science always thought a pail of water made a freshman's hair grow and a pair of clippers saved many a haircut." This, however, has been done away with to a very great extent in the past few years, but still the engineers feel the frosh have a place and succeed in keeping them there better than most of the other colleges do. We believe this gives a much better college spirit, and this is proved by the fact that whenever a pep-meeting is held the engineers have always come in a body and make more noise than all the rest of the university put together. Applied Science also has a reputation that when it undertakes anything it "puts it across," whether as a group or in separate bodies.

And so with a background of real spirit among real, live men Theta Tau has found itself taking an active part in the affairs of the College of Applied Science at Syracuse. Our local predecessor, Tau Delta Sigma was founded in 1905 with the object in view of becoming national after suitable expansion. In 1916 it had three chapters—Syracuse, Brown, and Lehigh. The latter two died out during the war and were not revived. However Tau Delta Sigma continued an important organization at Syracuse and was desirous of uniting with a national fraternity. Some of the Theta Tau alumni visited Syracuse and found conditions such that they were pleased to recommend our petition to Theta Tau. The petition was accepted, much to the gratification of the members, and Tau chapter was formally granted its charter December 12 of last year.

The one big social event of the year for the engineers alone, is the Engineer's Banquet. Every year this was put on by the men of Tau Delta Sigma and has met with very great success as practically all the students and many of the alumni always attend. This year Theta Tau will have charge of this and we are already looking forward to it with great expectations.

Since Tau chapter is only about a year old, most of the time so far has been spent in getting well organized. About fifteen men returned to school this fall and we expect to have an initiation before Christmas. A new local professional engineering fraternity has sprung up here during the last year

and is operating under the name of Theta Pi. So far they have not offered us much competition. Anyway, we are off to a very good start and hope to have a successful year, our second as members of Theta Tau, in making Tau a live wire chapter locally and nationally. At present the scholastic standing of the chapter is good, several of the men being either members or pledges of Tau Beta Pi. Willis Clark has just finished his last season as regular halfback on the football team. Ken Gray will be out for hockey when winter sets in and in the spring will be on the lacrosse team as defensive captain. Bill MacAlpine is cheermaster this year and through his efforts much has been done to improve the cheering here in Syracuse. Ken Cramer rowed No. 2 in the varsity shell at the Intercollegiate Regatta at Poughkeepsie last June when the varsity placed third after having led both Washington and Navy for part of the race.

As to athletics in general at Syracuse, little need be said. The football team had a fairly successful season although it lost to Army and Georgetown and was tied by Colgate. The basketball season, if it lives up to expectations will be one of the best the university has ever known. Last year Syracuse lost but one game and practically the whole team is back again this year so prospects for the season are very bright. The baseball team, to be captained this year by Vic Hanson, should be better than usual, and of course nothing but the best is ever expected of the lacrosse team. Just a word about Vic Hanson who is without doubt the greatest athlete ever turned out at Syracuse. He is the only three sports captain in any university, being captain of the football team and All-American end this year; captain, high scorer of the country and All-American forward of the basketball team last year and second-baseman and captain-elect of the baseball team this year—a record of which any man may be proud and a man of whom any university may be proud. One thing interesting to note about athletics here is the fact that scholarship comes before athletics and that last year several of the best men were kept from participation in any athletics due to their low scholastic standing.

While it has been impossible to write an article including all aspects of life at Syracuse, the history of the university, or a full description of the athletic program, we have tried to give briefly some idea of these things and of the relation of Applied Science to the university as a whole and of Tau chapter of Theta Tau to the college in which it is located. And so we hope that through this article the men in other chapters and the alumni of Theta Tau may come to know Syracuse a little better than they did before.

E. A. Holbrook, Kappa, Dean of the Mining College at Penn State College was one of the speakers at the presentation of a memorial tablet to H. E. Stock at the University of Illinois on May 2nd.

William W. Wertzbaugher, O. '28, was elected to Phi Beta Kappa, honorary scholastic fraternity, at the Fall meeting. It is so rarely that an engineer at Iowa is elected that it is especially noteworthy. Brother Wertzbaugher is to be congratulated.

AIRPLANE VIEW OF FORT SNELLING-MENDOTA BRIDGE

EMPLOYMENT OPPORTUNITY

An alumnus of Theta Tau who is superintendent of an important mining division in Mexico needs a mine captain for a silver mine having about 800 tons daily production. The mine is near Pachuca in an excellent location. Applicant must be American, speak fair Spanish, and understand heavy ground, square set timbering, and cut and fill methods. Prefers a married man with experience in Mexico. Salary will depend on qualifications. Details can be obtained by wiring or writing Bro. H. L. Baldwin, University of Utah, Salt Lake City, Utah. A Theta Tau *in good standing* is wanted for this position and in applying to Bro. Baldwin chapter and class must be given. In applying to the prospective employer give history, experience, and references.

FORT SNELLING-MENDOTA BRIDGE

ON November 8th the Fort Snelling-Mendota Bridge was officially opened to traffic. The field staff began location surveys for the project in July, 1923. Construction of the connecting highways began in November, 1923 and of the bridge itself in April, 1924.

The bridge is dedicated to the One Hundred and Fifty-first Field Artillery, United States Army, which was the Minnesota National Guard Unit in the World War, under the command of Col. George E. Leach, present Mayor of Minneapolis. The chairman of the Hennepin County Board of Commissioners under whose authority the bridge was undertaken, is George H. Mallon, a veteran of the World War, the Spanish American War, and the Boxer Rebellion in China.—holder of the Congressional Medal of Honor.

The engineers were Walter H. Wheeler and C. A. P. Turner Company associated. The design, location, supervision of construction of the bridge and the connecting highways, were under the personal direction of Brother Walter H. Wheeler, Alpha '06.

The bridge is, so far as known, the longest concrete bridge in the world. It spans the Minnesota River which is a navigable stream, requiring by the standards of the War Department, a clearance of 66 feet above normal high water for a width of 160 feet. The bridge is 60 feet 8 inches wide over all, 4119 feet long, 120 feet high above the water, has foundations sunk to bed rock ranging from 55 to 90 feet, with an average depth of 70 feet.

The cost of the bridge alone was about $2,000,000, and with the five miles of paved highway included in the project, cost about $2,400,000. The cost per square foot of deck area complete was approximately $8, which is from a half to two-thirds the cost of any comparable bridge built in this country in the last ten years. There were about 76,000 cubic yards of concrete, 25,000 tons of reinforcing steel and 750 tons of structural steel used in the bridge. Material and equipment, including material for temporary construction, amounted to about 10,000 carloads.

On the opposite page is an airplane view of the bridge taken just after the opening of the bridge to traffic. The construction trestle which has now been removed can be seen on the near side of the bridge. The Milwaukee R. R. crossing may be seen under the third arch from the Mendota end which is the nearer to the observer. After making a long curve the road crosses again under the eighth arch. The main line of the C. St. P. M. & O. R. R. from the Twin Cities to Omaha and Kansas City crosses under the first span.

Brother Wheeler is to be congratulated upon the achievement of a most successful piece of large engineering work.

In Memoriam

The Executive Council Wishes To Express Its Deep Sorrow At The Passing Of The Following Brothers, About Whom Details Are Not Available At This Time

Paul Neer, Gamma '09
Guy P. Watson, Gamma '10
Max Travis Hoftus, Gamma '17
Chester M. Knepper, Gamma '17
J. Stewart Henderson, Gamma '21
Carleton Richardson, Gamma '23
Edwin R. Kisie, Beta '22 (ex-Nu)

I hear them say our little life's 'a day'—
That, born with light, at dusk it dies away.
I hear them say that Death is that life's night;
That we but wax and wane with changing light.
O, Blind! The day's not yet; this life of ours
Is still the night's slow retinue of hours;
Its sorrows, nightmares, phantasms of the shade,
Its pleasures, dreams that only form to fade.
Our life's a night through which we blindly grope,
With outstretched palms, hoping 'gainst failing hope.
Death ushers in the dawn of life's true day.
Though gray the eve, so is the morning gray—
Be thou uplift, O heart! Death's visage wan
Is lightrd not with twilight, but with dawn.

—*Norris*

RALPH BROWN, LAMBDA '25

April 4, 1901—August 16, 1926

THETA TAU FRATERNITY lost one of its true and worthy members when our dearly beloved Brother Ralph Brown was called Home on August 16, 1926, following an operation for appendicitis. Brother Brown was loved and respected by all who had the pleasure of knowing him and he was a true friend, a worthy companion and a real pal with high ideals, commendable character and pleasing personality.

He was born in Eureka, Utah, on April 4, 1901; attended public schools in Salt Lake City; graduating from the Salt Lake High School (West Side High) in 1919; entered the University of Utah in 1920 and received his B. S. in Mechanical Engineering in 1925.

During his college life he was a good scholar and took an active part in student affairs, being a member of the Engineering Society, the Arrow Club (a sophomore honorary society) and Theta Tau. He was chairman of the senior class St. Patrick's Day committee and a member of the Knights of St. Patrick (senior engineer society). He was a clever baseball player, being prominent in Salt Lake amateur teams, and enjoyed all outdoor sports, especially liking skiing, tobogganing and hunting.

After leaving college he entered the service of the Baldwin Radio Corporation in Salt Lake and was advancing rapidly at the time of his untimely death, his employers predicting a great future for him in the radio field. He was a member of Argenta Lodge No. 3, F. and A. M., in Salt Lake City.

Brother Brown is survived by his bride of four months, nee Miss Donna Stark of Moab, Utah; his mother, Mrs. F. W. Newton of Salt Lake; and a sister.

FRANCIS GEORGE BULMAN, EPSILON '25

October 18, 1895—September 26, 1926

Francis George Bulman, of Epsilon Chapter, was born in Philadelphia, Pennsylvania, October 18, 1895. At the age of four he went to Wem, and later Liverpool, England, where he attended the Morrison and Sefton Park Schools.

Shortly after the outbreak of the war, in September, 1914, he joined the British Army and served two and a half years in the Royal Army Medical Corps, sixteen months of the service being in France. He was invalided home suffering from shell shock and double fracture of the left arm.

In September, 1918, he joined the United States Air Service and was sent again to France to the 488th Aero Squadron, and was returned to America for discharge in 1919, going to Detroit, Michigan. Later he was attacked by tuberculosis and went to Los Angeles, California, where he started vocational training in Mining and Geology at the University of Southern California in 1921, transferring to Stanford in 1922, and to the University of California in January, 1923.

He was initiated into Theta Tau, September 9, 1924 (Epsilon, No. 213), became an active and valuable worker in the chapter, and was elected Inner Guard for his second semester.

The following April tuberculosis again flared up and forced him to leave college. He made a brave fight against it, and throughout his struggle remained cheerful and kept in constant touch with the Chapter through letters and personal visits. The condition in which the war had left him made it impossible for him to shake off the disease, and he passed away September 26, 1926.

In 1925 he married Hilda Louise Swithenbank, and is survived by his wife and his mother, Mrs. Nina Bolman.

The men of Epsilon Chapter feel that they have lost a sincerely loyal brother, a cheerful companion, and a hard and conscientious worker. He sacrificed his life for the Allied Cause in the war as truly as if he had been killed in action; his fight was longer and harder. His spirit was the ideal spirit of Theta Tau.

ALBERT A. COOPER, ALPHA '27
May 24, 1903—August 15, 1926

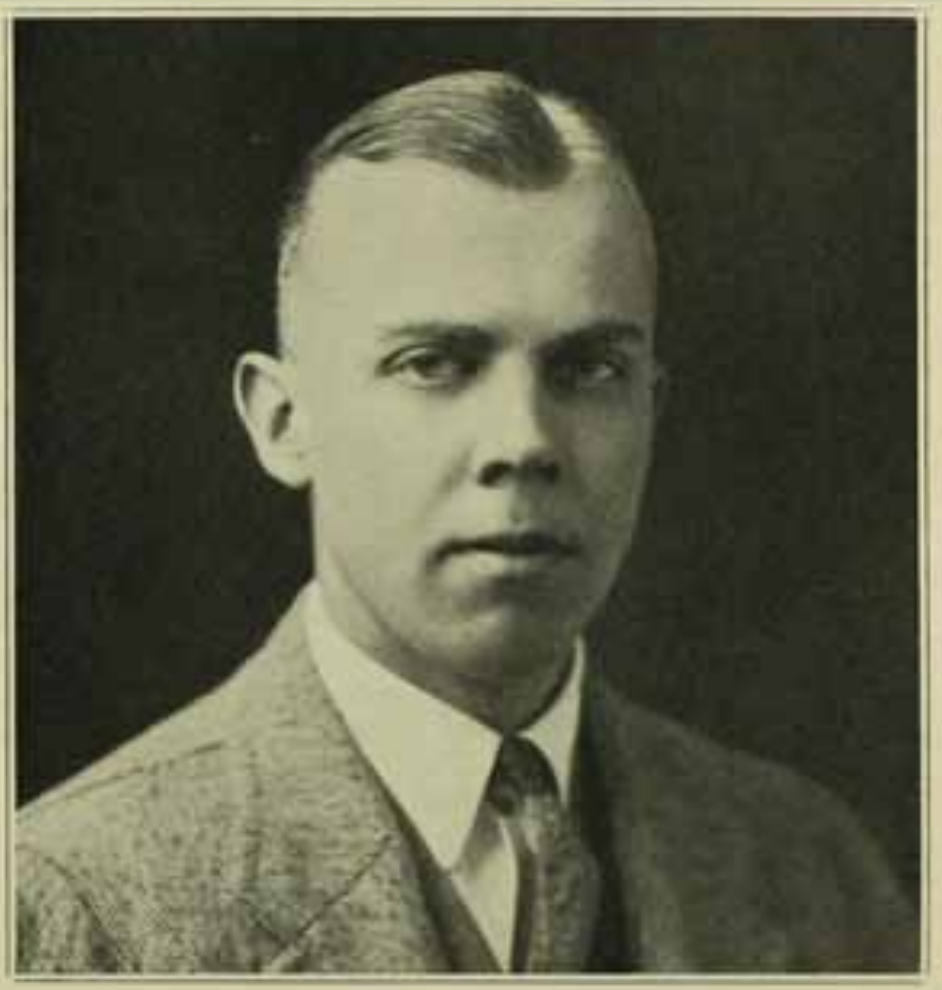
A life full of promise was ended when Albert Cooper was drowned August 15, 1926, in Lake Minnetonka, Minnesota. With his mother he was visiting relatives at Maplewood. Apparently the tragedy was caused by cramps or some sudden violent physical failure, since a row-boat which Brother Cooper had taken with him was only a short distance away.

Brother Cooper was born May 24, 1903, in Cedar Rapids, Iowa. He lived there with his parents, attending the city schools where he made an excellent record as a student. He graduated from Washington High in 1921 and worked two years with the J. G. Cherry Company, a high grade manufacturing concern.

In the University of Minnesota Brother Cooper made an impressive record. Starting with the class of 1923 in the college of engineering, he was designated as one of the first fifteen men of his class last spring. He was elected to Tau Beta Pi, honorary engineering fraternity; Pi Tau Sigma, honorary mechanical engineering fraternity; Scabbard and Blade, honorary military fraternity; and Mortar and Ball, honorary men's senior society. He was vice-president of the junior engineering class last year and was elected mechanical engineers' representative on the Board of Directors of the Engineers' Bookstore for the coming year.

Brother Cooper was initiated into Alpha Chapter of Theta Tau on March 5, 1925, as No. 264. That he was one of the most popular men of Alpha is evidenced by the fact that he was steward at the time of his death. Brothers of Alpha Chapter feel his loss most keenly.

Surviving Brother Cooper are two brothers and the mother, Mrs. A. T. Cooper. Albert's death is the third in the immediate family in a few months—the father, A. T. Cooper, an attorney, having died a few months previously, and the maternal grandmother having died two months before. Theta Tau extends sincere sympathy to the relatives.



WALTER ALFRED REMY, THETA '27
April 12, 1904—April 2, 1926

Walter Alfred Remy died on April 2, 1926, after a short illness from influenza and pneumonia. Walter was born April 12, 1904, and for the last twenty years had claimed Bronxville, New York, as his home. After finishing preparatory school at Yonkers High, he entered Columbia in 1920. He graduated from the College in 1924 and entered the Engineering School with the class of 1927.

He had actively participated in rowing activities in his senior year in college, being stroke of the varsity crew. The previous year he had been on the Junior Varsity crew. Besides rowing he played on the Junior Varsity football team.

His most vital interest lay in the field of radio, in which he was prominent in amateur circles. His experimental achievements had attracted wide attention.

In 1921 he organized the Bronxville Radio Club, of which he was president until 1924. For three consecutive summers he worked as engineer for the Radio Corporation of America in their research laboratories at Riverhead, L. I., the last year (1925) as chief engineer in charge of the construction of an elaborate commercial set which the company was building for its own use. Three of his inventions were patented by the Radio Corporation, one of which was used last January in the tests for transcontinental broadcasting. Just before his last illness he had completed for the Pacent Electric Company the model of a short wave transmitter, which he tested in his own laboratory on March 20, communicating with stations in South Africa and Australia. He also had worked out some original ideas in an extended paper, "Field Measurements in Radio," which was read by his classmate, J. Kelly Johnson, at the annual convention of the American Institute of Electrical Engineers in New York, April 23. In 1922 he published a practical "Radio Primer" (R. T. Goodwin, New York), and also contributed articles to *Popular Radio*.

Walt was secretary of Theta Chapter, a member of Alpha Chi Rho Fraternity, member of the Senior Society of Dumbbells in the Engineering School, charter member of the Columbia University Radio Club, president of the Engineering Section of Columbia University, and member of the Columbia University Club.

RALPH E. JOHNSTON, ALPHA '16
October 18, 1892—February 17, 1924

Ralph E. Johnston was born in St. Paul, Minnesota, October 18, 1892. He was educated in the public schools, graduating from St. Paul Central High School. He entered Hamline University, where he met Helen A. Duran, who later became his wife. After one year at Hamline, Ralph entered the Engineering College of the University of Minnesota.

While he devoted himself diligently to his studies, he was able to take part in University activities, being elected as Engineering representative on the Board of the *Minnesota Daily*, and selected by his classmates to impersonate the Supreme Knight on the annual Engineers' Day in 1916.

Ralph was a member of Phi Gamma Delta and Theta Tau fraternities, endeavoring at all times to instill a high degree of conduct, sportsmanship, and scholarship in his brother members.

Upon the declaration of war in 1917, Ralph was appointed to the first Officers' Training Camp at Fort Snelling and was commissioned as a 2nd Lieutenant of Engineers. During the training camp he married and was accompanied by his wife when he was ordered to Camp Dodge for duty. After several months at Camp Dodge he resigned his commission to enter the U. S. Forests' Products Laboratory at Madison, Wisconsin, where he was engaged in testing of woods and materials for airplane construction.

Following the war, Ralph joined the Kalman Steel Co., in St. Paul, being employed as estimator. He was transferred to the Chicago office and was shortly promoted to Chief Estimator.

In 1922, a son was born. The mother contracted pneumonia and died, leaving a three-day-old son. This boy was taken by his grandparents, Mr. and Mrs. J. G. Johnston of St. Paul, who are raising him.

The loss of his wife was a terrific blow to Ralph, and he strove to cover up his sorrow by giving more of his time and energy to his work. His ability and energy were rewarded by his being placed in charge of a new office in Detroit, Michigan, of the Kalman Steel Co.

In January, 1924, Ralph contracted a cold. He endeavored to carry on, but pneumonia developed; for a month he put up a hard fight, but the odds were too great and on February 17, 1924, he passed away, leaving relatives, friends and business acquaintances who alike mourned the loss of an honest, upright and Christian man.

FRATERNITY CHAPTER HEARS DR. HOVGAARD

MEMBERS of The Eta Chapter of Theta Tau, Professional Engineering Fraternity, were addressed by William Hovgaard, Professor of Naval Design and Construction, at its first formal dinner meeting held last Thursday evening. He spoke on, "The Pre-Columbian Discovery of This Continent," in which subject he has made complete expositions up to the date of the voyages of the Norsemen to America.—*Newspaper Clipping.*

MU CHAPTER has this year inaugurated at the University of Alabama the plan of awarding a loving cup to the senior of the College of Engineering who has proven himself the outstanding man of the class. The committee of award is composed of four engineering faculty men who will make their decision on the basis of five factors of excellence.

GARNET

THERE are several varieties of garnet: Oriental garnet of blood-red, the Syrian of violet-red, the Ceylon of vinous-red, the hyacinth (*la belle* of the Italians) of ruddy brown. The almandite, a rich cherry, claret, or blood-red color, is the precious garnet. The chemical basis of all the leading varieties is the same: a silicate of iron and aluminum. Usually they are found in crystals.

The name garnet is said to be derived from the Latin *granatus*, meaning "like a grain," because of the resemblance of the crystals in size and color to the seeds of the pomegranate. The garnets of ancient Rome came from Asia Minor; today garnets are found in the Alps, Australia, Brazil, and South Africa.

The American garnets, known as Montana, Arizona, or New Mexico rubies, are unsurpassed for value and beauty. The almandite garnet is the official stone used in Theta Tau badges.

CHAPTER LETTERS

EPSILON

Epsilon Chapter has had twenty active members during the Fall semester. Two men who are graduating at Christmas,—V. J. Collins and H. C. Pyle,—will reduce our numbers until the Spring initiation.

We have at this time four very fine pledges. They are J. D. Cerkel, F. W. Anderson, A. M. Tweedt, and V. L. Vander Hoof.

The Fall initiation was held on September 18th, and was followed by a banquet at the Clift Hotel in San Francisco. The initiated were du Bois Eastman, James Bradley and Mason Hill.

Two open meetings were held during the semester. These meetings are held every semester for the purpose of introducing desirable men to the chapter members. The functions are usually confined to dinner and after-meal talks by competent and interesting speakers.

The semester has been a successful one for Epsilon Chapter, but was saddened by the death of Brother F. W. Bulman.

LEE H. PARISH

Berkeley, California, December 17, 1926

ZETA

Greetings Brothers:—

Zeta Chapter has enjoyed the usual round of affairs since the last publication of the GEAR; and in this letter we shall endeavor to enlighten you concerning them.

To begin with, let us say that we have had four initiations and have initiated eight active members and one honorary member since last Spring. The honorary member whom we initiated was Mr. John Lyle Harrington. The following men have become members: Donald Buckley, Daniel Bump, George Cash, Loring Hanson, Wayne Luff, Lloyd Muller, Louis Feil, and Carrol Kester. With the addition of these men to our active chapter, we have been strengthened considerably.

We purchased a house two years ago and with our rooms filled and our tables filled we are carrying the weight of our finances very well and in the course of a few years we expect to be the proud owner of a home we can call our own, and one that we can come back to and know that we can always look on as a home. The beginning of this school year found several of the men doing some very good work in as much as they were painting and cleaning the house for the reception of the remainder of the men, . It might be well to add here, that last Spring the chapter house was endangered for a short while due to a small fire which was started through some faulty wiring in the basement. This was a trying time on some of the men, as they were down to their "last suit" and had they lost same in the fire, they would have been compelled to give up the idea of graduating. However, that wonderful display of level-headedness, which is so well known among Theta Taus, prevailed and the damages were small and the casualties none.

In every organized body it becomes necessary that some one take the leadership of the body and lead it through its troubles to a successful end. We have

organized two such leadership bodies within our chapter and we believe that they have proven successful to the extent that their purposes be outlined at this time. The first body that was formed is known as the "Advisory Board" and the members are two men from the faculty and six men from the house. There has been one member of the faculty who has shown keen interest in the organization, and to him we have looked when in trouble and to show our appreciation of his time, that he has so willingly given us; we have placed him as the leader of this newly formed advisory board. This faculty member is Professor W. C. McNown of the Civil Engineering department. The purpose of this body is to guide the chapter in all of its financial dealings and to instruct the officers of the chapter in any legal matters which come up. This board has taken the responsibility from the shoulders of a few and placed it on the shoulders of many. The other body that was formed is known as the "Cabinet" and its members are all of the officers of the chapter and one Junior and one Sophomore member. The purpose of this cabinet is to discuss all of the matters of the fraternity that are of interest and weigh the value of each. The cabinet meets just before each fraternity meeting and in this manner only the things that are really of importance, are brought up during the meeting, and the idea of arguments and debates during the meeting is eliminated. Then too the meetings are shortened and more is accomplished, and all in all the members are in better spirits when the meeting adjourns.

In activities on the Hill, Theta Tau has three new men wearing the Bent of Tau Beta Pi: George Cash, a Junior, and Bill Baum and Paul Swanson, Seniors. Then we have Robert Boggs as a member of Sachem, a Senior men's honorary society. Last year we were given the honor of having a Theta Tau, Wallace James, win the all school honor award. This nets Theta Tau two of the three men that have been given this award.

Our pledges number nineteen and we are going after more. We have adopted the policy of pledging Freshmen this year. This was done to keep pace with our competitors. One of our pledges has been given an appointment to West Point and we hope to make him a member before he leaves our ranks. This pledge is Donald Little of Kansas City, Kansas. The following are the names of our pledges: Carl Addington, John Berry, Donald Black, Donald Bonjour, Roy Dent, Edward Farmer, Carlito Griswold, Stuart Hazzard, Manley Hood, Hugh Jarrett, Wilson Kinney, Donald Little, Robert McCrum, Fred Miller, Millar Troup, Everett Vaughn, Logan Wolley, Clyde Campbell, and Lee Van Deusen.

With the beginning of each school year, we give a smoker for all the freshmen of the Engineering school and from these men we are able to select some very good pledging material. Our smoker this year was attended by some seventy men and with the smokes and eats every one enjoyed himself for the evening. November 6th we gave our annual Fall party and it proved a success both socially and financially. Then on the night of December 10th our Christmas party, better known as the "Red Dawg Inn" party, was given at the chapter house and every one who attended seemed to enjoy the music, eats, and decorations. We still have two more social functions this year and then our social activities will come to a close. These remaining affairs are the "Spring Formal" and our Founders Day Banquet. At this time the

chapter wishes to extend to all Theta Taus a cordial invitation to attend either of the above functions, the date of which will be announced later.

Zeta of Theta Tau House Corporation is still functioning successfully under the leadership of the following officers: E. F. Kindsvater, President, Lewis Brotherson, 1st Vice-President; G. E. Rose, 2nd Vice-President; John Bunn, Treasurer; and George C. Shaal, Secretary. This corporation is keeping the house filled with good furniture and in all is showing keen interest toward the chapter.

It seems that the members of Zeta chapter have a target placed over their left breast and invite the Archer, Dan Cupid, to hit said target. Since the last GEAR the following men from Zeta have been married: Maxson Kennedy, Francis Slichter, Harold Jimmerson, Lewis Brotherson, Elvin Luff, Everett Carlson, and R. A. King.

H. H. HINES

Lawrence, Kansas, December 15, 1926

Total number of Honorary Members	4
Total number of Initiates	232
Total number of Actives	23
Total number initiated this year	5
Total number of pledges	19

New initiates since last GEAR—

J. L. Harrington, Honorary 227; Donald Buckley, Active 224; Daniel L. Bump, Active 225; George H. Cash, Active 226; Loring O. Hanson, Active 228; Wayne E. Luff, Active 229; Lloyd E. Muller, Active 230; Louis G. Feil, Active 231; Carrol D. Kester, Active 232.

THETA

Total number of initiates	70
Number of actives	12
Number to be initiated December 17	5

Of the twenty-six brothers active last Spring, twelve have returned to school this Fall. Besides this large depletion in our numbers we have been somewhat hampered by the resolution adopted last year to exclude all members of the first year class from membership. The reason for the passage of this resolution is briefly as follows: The Engineering School is organized on a graduate school basis so that the first year of engineering coincides with the last year of college. In the interest of the chapter it was thought best to limit election to the graduates of the college. This rule was not to affect transferees from other colleges.

However, rushing has proceeded favorably and we now have five pledges who will be initiated on December 17th. The men who will take the oath are Triska, Smith, Foster, Lincleroth, and Finlay. At the Fall election of Tau Beta Pi, Triska and Foster were elected to membership. Finlay transferred from LaFayette and Foster from the University of Texas.

Hank Sherman has been elected president of the senior class and Kelly Johnson, Carl Theobald, Olney Cook, and Joe Triska have been elected to the Honor Committee. Kelly is the chairman and Joe the secretary.

Phi Lambda Upsilon has seen fit to honor Jos Triska with election. Hank Sherman is already a member.

Art Hyde played on the Varsity football team and won his letter this Fall. Art is now out for the track team and is also the president of the Engineering Society.

Alumni Notes

Duke Howell, '26, is with Kirshman and Wakefield Company. His address is 235 West 75th St., New York City.

Ed Ferreira, '26, is doing research work at Columbia for the U. S. Steel Co.

Norm Porske, '26, after staying with the Metropolitan Life Insurance Co. for a short time is now with the Public Service Commission as a Junior Engineer.

Dan Hornett, '25, is with the Pacent Electric Co.

Last year's class is rather honored in having three of its men selected as instructors. George Wascheck, Frank Winkler, and Charlie Ince are now members of the faculty. George and Frank are with the Electrical and Charlie with the Metallurgy departments.

JOHN BALET

Columbia University, New York City, December 16, 1926

IOTA

Nineteen active members returned to Iota Chapter this fall giving both a quantity and quality aspect to the activities of the chapter during the ensuing year. N. O. Kraft, Regent, J. F. Smith, Vice-Regent, L. H. Cutter, Treasurer, H. M. Diers, Scribe, T. P. Smith, Marshal are the presiding officers for the Iota Chapter's 1926-27 college year.

Dr. H. A. Buehler, Missouri State Geologist, and honorary Iota member was the speaker of the evening at the chapter's first open meeting on October 10. The Panama Canal and its problems formed the basis of an instructive discussion of engineering work. The manner in which American engineers solved the difficulties in this colossal undertaking, combatting landslides, disease, and discouraging setbacks gave the large attendance a practical view of the work entailed in forming the meeting place of the two oceans. Photographs taken in a personal tour during the construction period by Dr. Buehler were used in explaining a number of interesting points of the well delivered discourse.

The eight pledges of the fall semester were intiated November 10 in the chapter room in the Metallurgy Building. Louis Burg, John Brickner, R. W. Couch, M. B. Layne, G. T. McCrorey, W. B. Machin, F. E. Sewell, and E. F. Thatcher were the members of the Junior class who became actives of Iota Chapter at the initiation ceremony.

EDWARD R. CUSHING

Rolla, Missouri, December 19, 1926

LAMBDA

Lambda Chapter has been striving to maintain her reputation on the campus this year as in former years. Our only two competitors, Sigma Gamma Epsilon and Alpha Chi Sigma have given us no competition and we

have gotten the men we desired. To date, all has been rosy and it looks like a big year ahead.

The installation of officers was held at the Commercial Club and was well attended by both alumni and actives. Brother Schrader was present and probably the attraction for a number of the alumni. After a fine supper, during the course of which Brother Jacobsen acted as toastmaster, a few words were heard from all those present. Our Founder brother was the feature speaker of the evening and presented a welcome and complete outline of the organization, history, and present status of the fraternity.

All the officers except Fred Thackwell returned to school this fall and have been actively engaged in school work and activities. Brother Thackwell's absence was keenly felt as he had taken his position seriously and had put all the books and financial matters in excellent shape. Brother Forrester was elected to fill the vacancy and has handled the work very successfully.

The first official duty of importance, handled by the new officers, was an initiation. This affair was very unsuccessful and was disheartening to the officers.. Extensive plans were made for a large crowd and the intiation took place May 23rd at 2:00 o'clock p. m. in the Emery House auditorium. Four alumni and six actives were present to initiate four pledges. However, the initiation was carried out and the following men were taken into Theta Tau:

R. Sidney Trinnamon, Lambda No. 47; J. D. Forrester, Lambda No. 66; Arthur C. Deck, Lambda No. 161; J. W. Thatcher, Lambda No. 192.

The first three men were given numbers which had been held for alumni as Brother Baldwin had instructed the chapter to fill any vacancies in its roll book. All of these men, except Thatcher, are back with the chapter this year. Brother Thatcher is now attending the California Institute of Technology and continuing his excellent scholastic record.

The chapter has always held weekly meetings on Monday afternoons, immediately following the close of school. It was decided that such an arrangement was neither convenient nor desirable so meetings are now being held bi-weekly, following dinner at Shay's Cafeteria. The plan has worked very satisfactorily and practically a hundred per cent attendance proves its convenience.

This Fall on October 16th, the Intermountain Alumni Association entertained the chapter at its Annual Founder's Day Banquet. The dinner was held at the Newhouse Hotel and was enjoyed by a fine turnout.

There has been but one initiation so far this year. This was held at Shay's Cafeteria and was one of the most successful ever held by the chapter. A one hundred per cent attendance by the actives and about an equal number of alumni made an imposing group for the candidates to face. The following are the names and chapter numbers of those initiated:

A. Z. Richards, Lambda No. 193; R. A. Hart, Lambda No. 194; C. L. Berry, Jr., Lambda No. 196; Roy E. Lundquist, Lambda No. 197; G. Courtney Campbell, Lambda No. 198; Walter E. Seyfarth, Lambda No. 199; George M. Jones, Lambda No. 200; Barr Waddoups Smedley, Lambda No. 201; Paul E. Wilson, Lambda No. 202.

Of these men, the first three were members of the U-Tech Club which was granted the Theta Tau Charter, while the rest are undergraduates of the engineering school. Brother Richards is a member of the firm of Cald-

well and Richards, Civil Engineers, Brother Hart is well known as a drainage engineer and Brother Berry is actively engaged in mining circles.

On December 11th Brother Hayden entertained the chapter with a formal dance in the lounge of the Belvedere Apartments. This turned out to be a very delightful social affair and was well attended by the actives and a few alumni.

The active chapter has at present an enrollment of twenty-one active members and five pledges. This number will be further increased by other initiations during the year. The members are prominent in school activities and the chapter is well represented on the campus.

Brother Lyon has starred as a regular guard on the school's championship football team. He is now in Honolulu where the team will play the University of Hawaii.

Brother Hogan is president of the Senior Class and the Engineering Society.

Brother Hartmann is president of the student chapter of the American Society of Civil Engineers. Brother Wilson holds the same position in the Mechanical Engineers' Society, and Brother Farrell is president of the A. I. E. E.

MERVIN B. HOGAN

OMICRON

Total number of initiates	103
Total number of actives	38
Number initiated this college year	14

Number	Names	Number	Names
90	Merion H. Jensen	97	Halwyn R. Smith
91	Robert C. Mathis	98	Wm. W. Wertzbaugher
92	Thomas I. McLane, Jr.	99	Duane C. McCann
93	Thomas Coke Carson	100	W. Waldo Towne
94	W. Cleo Tock	101	Donald L. Thomas
95	J. Stuart Meyers	102	Francis L. Kline
96	Charles J. Vierck	103	Floyd E. Schnieder

Omicron started what promises to be its most successful year with 25 actives and 12 pledges. On October 10 ten of these pledges became active. A careful survey of the available material for members was started immediately, and as a result 14 promising men were pledged. Of this number 4 upper classmen were initiated on December 19. Brother Williams found it necessary to leave school because of illness leaving the chapter with 38 actives and 12 pledges. The roll is abnormally large at present, but by next year it will be somewhat smaller.

The chapter is again occupying the house at 715 Iowa Avenue and finds it very satisfactory. At present there are 29 men staying at the house and a like number taking meals regularly. The living conditions are a little cramped, but no serious inconvenience is suffered. The house serves as an ideal headquarters for meetings and other activities and is instrumental in building up the unity of the chapter.

Omicron is slowly but surely creeping out of debt. The large number of men taking meals and lodging at the house results in a fair profit each month and recently enough was saved to pay off a $275 note that had been hanging fire for several years. It is hoped to finish the year with all back bills paid in full.

A series of professional meetings has been inaugurated and are attended both by actives and pledges. The custom of having the speaker as a dinner guest on the evening of meeting is being continued. On October 26 Dean Rienow spoke on "The Fraternity System at Iowa", and on December 14 Brother Kittredge of the Civil Engineering staff spoke on "Highway Finance". Several other members of the faculty have signified their desire to speak at our future meetings.

Omicron is very prominent in activities upon the campus this year. Brothers Folwell, DeWalt, Lewis, E. P. Schuleen, E. T. Schuleen, Towne, and Meyers are members of Tau Beta Pi, and Folwell is president of the organization. Brothers Carlson and Edwards are president and vice-president respectively of the Associated Students of Applied Science. Beatty is president of the Senior class, and Kline holds a like office of the Junior class. Pledges Kunzman and Hamil are the respective presidents of the Sophomores and Freshmen. Several of the lesser class offices are also held by Omicron men. Folwell is one of the twelve men in the University belonging to A. F. I. honorary senior organization. Wertzbaugher was recently elected into Phi Beta Kappa by virtue of his good record for three years of liberal arts previous to taking up engineering. Lewis is publication manager of The Transit and Anderson is Editor in Chief.

In athletics the coming track season is viewed with interest by Omicron in as much as Brother Boyles is Captain and also Big Ten pole vault champion. Beatty is a member of the one mile relay team and a hurdler of no mean repute. Folwell is also a member of the one mile relay team and a dash man. Elliott made a creditable showing on the cross-country team and is being groomed for the mile run. Miller was on the football squad until forced out with injuries, and Edwards is again making a strong bid for a position on the gym team. Pledge Ashton is rapidly developing into a breaststroker on the swimming team.

Realizing that an engineer must not neglect his social life, the chapter plans on holding at least three parties during the year. The first one was held on the evening before Homecoming and was pronounced a success by all of the 70 couples present. Another dance during the winter is being planned and also one for spring.

The spirit of friendship existing between the engineering fraternities was augmented by the holding of a joint dance on December 11. The party is to be an annual affair known as the "Techni Ball" and is sponsored by Theta Tau, Triangle, and Kappa Eta Kappa. The lack of cooperation between the fraternities in school affairs of other years has been completely done away with and all are working for a bigger and better engineering school.

Through news letters and the answers to them the chapter keeps in fairly good touch with activities of alumni. George Ashton is now with the McClintock Marshall Co. of Chicago. Joe Dean has shifted his scene of activities from Sioux City to Des Moines where he connected with the

Menning-McCord Co. Dick Thompson has accepted a position with the County Board of Health at Nashville, Tenn. Fred DeKlotz has left the Blaw-Knox Co. and is back again with the Pittsburgh-Des Moines Co. at Pittsburgh. Larry Fry is now with the Central Station Institute at Joliet, Ill. Hap Howe is connected with the Rock Island Bridge Company, and Slagle has left the oil business at St. Louis and is back with the Illinois Highway Commission. Pete Phelps is now in Chicago with the American Blower Co.

Since the last issue several men have fallen before the attacks of cupid. Brothers Van Gorp, '26, Hess, '25, Ware, '26, Brockman, '25, and Freyder, '25 have already taken the fatal step and we understand that several others are about to do so.

ERNEST T. SCHULEEN

Iowa City, December 20, 1926

RHO

(This letter came a few days too late for publication in the Spring 1926 GEAR*—Editor.)*

Since the last issue of the GEAR was published Rho has been very busy. Returning from the Christmas vacation with the idea of placing Rho on the active side of the book, immediate steps were taken to carry out these plans.

RHO CHAPTER

STANDING: Davis, Sutton, Williams, Anthony, Steed, Mountcastle, Kendall, Moody, Dickerson, Harrelson.
SEATED: Sumner, Jones, York, Beam, Potter, Moffit, Griffith, Weedon, Luther, Stuart, Currie, Jones.

On January 27 nine pledges were initiated. These men are very active in the Engineering School and much is expected of them.

The third annual Installation Banquet was held on February 16 at the Tavern Club. Dr. H. B. Shaw, Professor of Engineering Research, and Professor Harry Tucker, Head of the Highway Engineering Department, were the speakers of the evening. A number of the alumni were present and all enjoyed the meeting.

On April 21 a smoker was held in order to meet new prospects, and out of the men present Rho has pledged seven very good men. These men will be initiated May 5.

We were especially glad to have Brother Coffman as a visitor April 23. While here he gave us several interesting talks about the Fraternity.

For some time Rho has been advocating an Engineering Dance, and at last our plans are being realized. The dance will be given May 8 with Theta Tau as its sponsor.

Exams are beginning to creep upon us, and, in their gentle way, are telling us that the year is nearly over. A very successful year for Theta Tau, with plans for a greater year in '26-27.

F. W. Harel.

Raleigh, North Carolina, May 3, 1926

SIGMA

We started the present school year with twenty-four actives and six pledges but five of these pledges were initiated at the end of the third week of the quarter. However seven more men have been pledged. This brings the total number of initiates in Sigma chapter up to seventy-three. The names and chapter numbers of the men initiated this quarter are as follows:

E. W. Davis, (68); L. W. Kale, (69); G. W. Trout, (70); A. H. Falter, (71); R. H. Rice, (72); and J. W. Boch, '23, (73).

Brother Boch, a member of the old Engineers Club, was initiated the day of the Homecoming football game. There remain only two members of the Engineers Club yet to be initiated and we are making arrangements to have this taken care of as soon as possible.

The Homecoming Dance was held at the York Country Club the evening after the Ohio State-Michigan football game. Some of the alumni attended the game and then joined in the dancing with us in the evening. The fact that the dance was very successful was largely due to the efforts of Brother Meiter, chairman of the Social Committee.

Two smokers have been held this quarter to entertain prospective pledges.

We have also had three after-dinner talks this quarter. One of them was by Mr. Tang of the Electrical Engineering Department, one by Prof. Henderson of the Psychology Department and also the sports announcer for the University radio station, WEAO, and the other by Prof. Pryor of the Civil Engineering Department.

This year we are printing a monthly bulletin. This enables the chapter to keep in touch with the alumni much better than it otherwise would.

Theta Tau is quite active on the campus. Brother Knorr is President of the A. S. C. E. Brother Mick is President of the Engineers Council and

Brothers Crouch and Stansberry are also members of the Council. Brother Trout is the Sophomore representative of the Engineering College on the Student Council. Brother Meiter was selected as the A. S. M. E. delegate to its National Convention at New York City the week of December 6. Brother Kalb is on the Honor Roll of the Electrical Engineering Department. The chapter is also well represented among the officers of the R. O. T. C. unit.

Brother Geo. E. Borst, Kappa, was a visitor at the chapter house during the past Summer. Brother John O'Connor, Gamma, visited us this Fall, enroute to South America from Mexico. We were very glad to have them with us.

Prof. H. E. Nold is doing some special work at the University Experiment Station this quarter for the American Ceramic Industries Society. He is making a survey of the State of Ohio as to the magnitude of its clay mining and manufacture. Clay mining is the second largest mining industry in Ohio.

Our Regent, Brother White, surprised all of us by getting married on December 3. His wife is the former Miss Erma Shrimplin. We have also received the announcement of the marriage of Brother W. L. Anderson, '25, on November 23.

Brother C. R. Ross, '24, is State Field Superintendent of Construction for the Ohio State Highway Department.

WALTON O. LEEDY

Columbus, Ohio, December 15, 1926

TAU

We had fifteen active members return to school this fall. Our first meeting of this school year was held on the first Thursday of October. At the first two or three meetings plans were formulated for the years activities. Two smokers have been held for the purpose of looking over new men. At one smoker, when it came time for refreshments, the doughnuts were all right but the cider proved to be somewhat on the way towards young vinegar. The meeting however proved to be a success. We have pledged three seniors, five juniors, and three sophomores. These men will be initiated immediately after the holidays. Of course the utmost of care has been taken in getting new men and we believe we have chosen men who will add much to the strength of our organization.

At recent meetings we have been having two or three men give "thumb-nail sketches" of their lives. These are brief, extemporaneous, histories of the men's lives, and they have proven very interesting and entertaining. Plans are also being made to have luncheons frequently so that the chapter may get together in a social way more than in the past. Inasmuch as we have no house, we feel the necessity of some such plan and hope it will prove satisfactory.

Many of the members are taking part in University activities this fall. Brother Frink is the representative from the engineering college to the Senior Council this year. Sam Clark has just finished his third and last year as regular halfback on the football team. Besides playing regularly on the football and lacrosse teams Clark is one of the best students in the senior class

in the engineering college. Louis Bizik, who will be initiated in January, is another first class student who has made letters in football, boxing, and lacrosse. Ken Gray also sports the university colors this year as captain of hockey and defense captain of lacrosse. Noble was elected to Tau Beta Pi this fall and Stearns who is also a Tau Beta Pi man was elected to Phi Kappa Phi.

We expect that this year as a whole will be a very profitable one and although our accomplishments thus far have not been so great as they might be, we feel that after our new men are initiated much more will be done.

Tau chapter wishes to extend its heartiest greetings to the rest of the chapters and hopes that the year for all may be very successful.

MORRELL H. BLESH

Syracuse, New York, December 16, 1926

E. S. BORQUIST, Lambda '11, has become a member of the engineering faculty at the University of Arizona.

JOHN R. SUMAN, Epsilon '11, was defeated by only eight votes for President of the American Association of Petroleum Geologists held at Dallas, Texas, last spring and at which the attendance was nearly 800. Brother Suman is with the Rio Bravo Oil Co., at Houston, Texas.

B. O. PICKARD, Beta '06, who is in charge of the station of the U. S. Bureau of Mines at Berkeley, California, gave a lecture on mine fires to the Crucible Club of the Mining School at the University of Nevada last Spring.

DEAN F. H. PROBERT, Epsilon, of the Mining College at the University of California, addressed the San Francisco section of the A. I. M. E. on "Some Problems in the Mining Industry."

W. C. DOUGLAS, Gamma '11, is General Superintendent of the Kennecott Copper Co., at Kennecott, Alaska.

R. B. EARLING, Beta '08, is Assistant Manager of the Hammon Cons. Goldfields at Nome, Alaska. This is one of the most important gold dredging enterprises in the world.

DONALD H. MCLAUGHLIN, Epsilon '11, is Prof. of Mining Engineering at Harvard University, Cambridge, Mass.

A. J. WEINIG, Gamma '08, is in charge of the Mines Experimental Station at Golden, Colorado.

THOMAS H. VARLEY, Lambda '07, is Director of the Bureau of Mines station at Salt Lake City, Utah.

JOHN C. FEELEY, JR., Epsilon '14, is a manager of the Minas del Tajo at Bolanos, Jalisco, Mexico. This is an important silver-lead mine employing over 400 men.

DANIEL C. BEYERS, Iota '19, is Field Engineer for the Fairbanks Exploration Co. at Fairbanks, Alaska. This is a gold dredging enterprise controlled by the U. S. Smelting, Refining & Mining Co.

INTERMOUNTAIN ALUMNI ASSOCIATION

THE editor's office is in receipt of an attractive blue folder describing the twenty-second anniversary Founders Day Banquet of the Intermountain Alumni Association and Lambda Chapter of Theta Tau, held October 16, 1926, at the Newhouse Hotel, Salt Lake City. This is a custom which the I. A. A. and Lambda together have observed for a number of years. Such contacts as this are grateful breaks in the routine of engineers' lives, and these groups are to be commended upon their activities.

In the folder is given the menu, which but for lack of space would be copied here. It was enough to satisfy even the taste of an engineer's wife. We could not resist the temptation to reprint the after-dinner program.

Intermountain Alumni Association
Newhouse Hotel, Salt Lake City
October 16, 1926

Community Singing — Not led at all—not even by CLAUDE C. CORNWALL

Progress This Year . . . . . HOWARD BARKER, C. C.

Fraternity Membership—Structural vs. Dead Timber
H. G. HALL, Top Kick

Instrumental Trio
MRS. H. G. HALL, ROSS RAMSEY, CLIFTON JACOBSEN

Diversion
Gypsy Belle . . . . . BETTY HALL
Peacock Dance . . . . . PHOEBE SNOW

Vocal Selection . . . . . RONALD APGOOD

Loud Speakers (no amplifiers required)
HOWARD L. (LUCKY) BALDWIN, WM. H. (BILL) KELSEY

Lambda Chapter . . . . . MERVIN B. HOGAN, Regent

K. P. Duty at Random Under Direction of Mess Sergeant, LYNN RAYBOULD

The secretary printed in the folder some half-dozen letters, mostly renewals of dues from I. A. A. men. Mention was made, in one letter, of the circular introducing the Lambda graduates of '26. This circular which the I. A. A. gets out each spring is for the purpose of acquainting prospective employers in the fraternity with the capabilities and experience of the Lambda men who are ready to accept employment. Such practice is in our opinion within the province of Theta Tau and could well be adopted by others of the alumni associations.

The folder contains alumni notes to the extent of some statement about every Lambda graduate given in order, by initiation numbers. Many of these have been used in the GEAR's section of alumni notes.

All in all it appears that this affair must have been a tremendous success and that the Intermountain Alumni Association is functioning as such a body should. Congratulations.

TWIN CITY ALUMNI ASSOCIATION

October 15, 1926, was the date of the most successful get-together of alumni and actives of Alpha in the memory of the younger alumni. The occasion was, of course, the annual Founder's Day Banquet which was held at the Nicollet Hotel, Minneapolis. It was the largest Founder's Day banquet ever sponsored by Alpha Chapter. Thirty-one alumni members and all of the actives were present. This large turn-out of alumni was mainly due to the efforts of Brother Seth Witts who continued to call up graduates until they either left town or promised to come.

The first thing on the program was a large feed, with music. After the dinner Brother Dr. Holman presided as toastmaster. He called on Brothers Colvin, Comstock, Wheeler, and Zelner for short speeches. After these more or less formal talks, several other men were called on.

Brother Grettum brought up the question as to whether or not an engineer should stick to technical work after graduating or whether he should accept an opportunity to develop himself along managerial lines. Naturally considerable discussion followed this question but no decision could be reached by the judges.

Another question which aroused considerable discussion was whether or not an engineering student should specialize along some particular line or whether he should take as much general engineering as possible. As before, no decision was reached, but everyone present felt better acquainted with the others after hearing them present their viewpoints. The alumni and actives were in much closer touch with each other than before the banquet.

Before the party dispersed, it was the unanimous wish of those present that a telegram of appreciation be sent to Brother Schrader telling him that our thoughts were with him on this memorable date.

One thing greatly appreciated by the members of the Twin City Alumni Association is the fact that the actives are making it a point to invite some of the alumni to the house for Sunday dinners, every now and then. The spirit that pervades the house on these occasions is a most hospitable one, and this, together with the fact that several alumni members and their families are invited each time, makes the occasion,—when they are to be invited over,—looked forward to by all members of the T. C. A. A.

Grant Bergsland, M. E. '23, was married on August 21 to Miss Myrtle Graff, at West Salem, Wisconsin. Grant is Master Mechanic for the Wisconsin Railway Light and Power Company at LaCrosse, Wisconsin.

James A. Colvin, M. E. '15, announced the arrival of a daughter October 11th.

Sandor Hougan, E. E. '20, answered a call of the wanderlust again and is now travelling through California.

E. Y. Dougherty, Epsilon '15, is Superintendent of the Noble Electric Steel Co. at Heroult, California.

R. J. Anderson, Delta '14, spent two months traveling on the Pacific Coast this summer.

Rowland B. King, Beta '15, has been in Alaska on mine examination work.

METALLURGY OF ALUMINIUM AND ALUMINIUM ALLOYS

By Robert J. Anderson, B. Sc., Met. E.

[Delta '14, Past Grand Inner Guard]
Consulting Metallurgical Engineer

Formerly Metallurgical Engineer, United States Bureau of Mines; Lecturer in Metallography, Carnegie Institute of Technology; Research Metallurgist, Bureau of Aircraft Production; Instructor in Metallurgy, Missouri School of Mines, etc.

Henry Carey Baird & Company, Inc., New York. 6¼ by 9¼ inches; 944 pages; 295 illustrations; cloth; price $10.00.

(Abstract by the Gear *Editor)*

The author of this book, Brother Robert J. Anderson, who was formerly in charge of aluminium investigation of the U. S. Bureau of Mines, is a well-known consulting metallurgical engineer and technical specialist on aluminium. He has prepared upwards of one hundred technical papers on alumnium and aluminium alloys. His extensive experience covers all branches of the industry and he has brought together the fruits of this experience in the above important volume.

This book covers the subject in a most comprehensive way and is invaluable to the metallurgical industry. The only book on the subject published in the last thirty years, it covers the subject from the mining of bauxite to the uses and applications of the metal and its alloys. An up-to-date work dealing with aluminium metallurgy was sorely needed.

Written with a view to being practical, the book gives the more theoretical aspects of the subject as well, and is suitable for use as a comprehensive text for metallurgical courses in colleges. It will be found a great help to metallurgical engineers and foundrymen, automotive and mechanical engineers and to others interested in specific applications of aluminium.

The origin, occurrence, and distribution of aluminium ores and mining methods are taken up in an early chapter, while the production of aluminium itself by modern electrolytic methods is also discussed. The production of aluminium had been treated very inadequately in previous literature and the information given on it will be found of great value to producers of the metal. The chapter on physical and chemical properties alone is worth the price of the book, since it gathers data which has hitherto been widely scattered in the literature.

The founding of aluminium alloys, which has assumed much importance in the automotive industry and elsewhere, is discussed in detail, and foundrymen will find valuable information on the successful production of castings. The chapter on mechanical treatment of aluminium alloys for the production of sheets, forgings, bars, and other finished and semi-finished manufactures will be found valuable by rolling mill managers. The annealing of cold rolled aluminium sheet is described, and considerable attention is given to the heat treatment of some aluminium alloys, particularly duralumin. The latest information on this remarkable alloy is presented. Metal workers, will find the chapters on soldering and welding, and on working, spinning, and machining, of great value.

Among the many commendable features of the book, the extensive bibliography is one of the outstanding.

REVIEW

Ernest A. Hersam, Hon. Epsilon
Professor of Metallurgy, University of California

A NEW, good book, by excellence, makes the world so much the richer. "The Metallurgy of Aluminium and Aluminium Alloys", written by Robert J. Anderson and published by Henry Carey Baird and Company, is an excellent book. By its creation, the author has brought something of value to all people.

It is not ink, paper, style, nor orderliness that makes a book excellent, nor is it truth, which all good books contain. These are but unwrought substance. The essence of a literary contribution in science is resource. The resource takes form when quickened into being, in the mind of a receptive reader, by the ink and paper and truth and order, and the necessary something that a worthy book contains. It becomes an inspiration in the attainment of science and of men.

In these days of many books, busy men, and demands for time beyond the means of anyone, there is no neutral ground of quality for a book to occupy. Either it is a resource and is a good book, or it is an obstacle and is bad. But there are many ways of being good. Some books are fair weather craft, broad in beam, transporting a heavy cargo. They carry much at short distances. Good books on progressive industry are all like this. Other books seem to be suited for all time. They are built firmer in human origination and promise inspiration as far forward as we may look. This book is a scientific book and its aim is service.

Science and industry, in their progress, do not carry forward for their service a heavy library. The writer of a scientific work must derive his satisfaction from something other than the material accomplishment of a book itself. Of course the book is legible, grammatical, enjoyable, dependable, serviceable, and beautiful. There are nine hundred octavo pages of this. Moreover, if anyone requires to learn anything about aluminium here is the convenient means. There are pictures and the standard allurements of the publisher to produce a book that will pay its way, and the book is fairly convenient to hold while using it. What is very real in the achievement, however, is that it brings many people to a position abreast with the times in the knowledge of aluminium.

We had hoped to find, and we do find, in the method of treatment by this author, that the book reaches down into the past and connects to its statements the authority of the world's published experience, and that it becomes a bond in the endless chain of future contributions. A bibliography, such as this book contain, justifies the existence of a book. We are indebted to Mr. Anderson for a sound piece of work on the whole subject of aluminium for which science has patiently waited many years.

Travis P. Lane, Epsilon '17, is Superintendent of the Alaska Paladium Co. at Salt Chuck, Alaska.

T. H. Hinckley, Hon. Alpha, spent the summer traveling in Europe and revisiting France where he stayed two "quiet" years in 1917 and 1918.

NEW PUBLICATIONS

Geology and Ore Deposits of the Ducktown Tennessee Mining District. By W. H. Emmons, Alpha. Pp. 139. U. S. Geological Survey.

A Concrete Pavement Detailed as a Floor Is Detailed. By Walter H. Wheeler, Alpha '06. *Engineering News-Record*, Vol. 96, No. 13, p. 518.

Rock Drill Lubrication. By I. M. Marshall, Kappa. *Engineering and Mining Journal*, July 3, 1926.

Lessons from the Fire in the Argonaut Mine. By B. O. Pickard, Beta '07. Bulletin 363, U. S. Bureau of Mines.

Relations of Metalliferous Lode Systems to Igneous Intrusives. By W. H. Emmons, Alpha. Pamphlet 1571-I, American Institute of Mining Engineers.

Some Mechanical Properties of Duralumin Sheet as Affected by Heat Treatment. By Robert J. Anderson, Delta '14. Transactions 1926, American Society for Testing Materials.

How the U. S. Board of Tax Appeals Handles Disputed Valuation Cases. By A. Werner Lawson, Epsilon '12 (Associate of Wilson & Wagner, Washington, D. C.), *Engineering and Mining Journal*, July 31, 1926.

Geology and Oil Resources of the Puente Hills Region, Southern California. By Walter A. English, Epsilon '10. Bulletin 768, United States Geological Survey, Washington, D. C.

Selective Flotation. By A. J. Weinig, Gamma '08. *Mining and Metallurgy*, November, 1926.

Replacement of Aluminous Rocks. By E. Y. Dougherty, Epsilon '15. *Engineering and Mining Journal*, September 4, 1926.

Magnetic Concentration of Flue Dust in the Birmingham District. By B. W. Gandrud, Alpha '21; F. D. Devaney, Alpha '23; and Mr. Oscar Lee. Bureau of Mines Serial No. 2761.

American Glass Sands, Their Properties and Preparation. By Charles R. Fettke, Nu '10. Transactions of A. I. M. E., Vol. LXIII.

Origin of the Colemanite Deposits of California. By Wm. F. Foshag, Epsilon '19. Economic Geology, Vol. 16.

The Recovery of Copper by Leaching, Ohio Copper Co. of Utah. By Arvid E. Anderson, Lambda '20. Transactions A. I. M. E., Vol. LXIII.

Geology and Oil Resources of Part of Los Angeles and Ventura Counties, California. By W. S. W. Kew, Epsilon '13. Bulletin 753, United States Geological Survey, Washington, D. C.

Increasing the Production of Petroleum by Increasing the Diameter of Wells. By Lester C. Uren, Epsilon '11. A. I. M. E., Vol. LXIII.

Significance of Fluid Level in Oil-Well Pumping. By Lester C. Uren, Epsilon '11. A. I. M. E., Vol. LXIII.

Manufacture of Ferrophosphorus at Rockdale, Tennessee. By James A. Barr, Beta '07. Transactions A. I. M. E., Vol. LXIII.

CLIMATES OF CALIFORNIA. By Richard Joel Russell, Epsilon '19. University of California Publication, Geography, September, 1926.

CASTINGS FORMED ON CORRODED METALS AND ALLOYS, AND X-RAY EVIDENCE VERSUS THE AMORPHOUSMETAL HYPOTHESIS. By R. J. Anderson, Delta '14, and associates. Transactions A. I. M. E., Vol. LXIII.

CONSUMPTION OF REAGENTS USED IN FLOTATION, 1925. By Thomas Varley, Lambda '07. Serial Bulletin No. 2777 by the U. S. Bureau of Mines, Department of Commerce, Washington, D. C. Brother Varley is Superintendent of the station of the Bureau of Mines in Salt Lake City and is considered an authority on the uses of flotation in the recovery of minerals from ores.

HORIZONTAL OFFSETS ALONG THE HAYWARD FAULT. By R. J. Russell, Epsilon '19. *Journal of Geology*, September-October, 1926.

A HIGH HONOR

THE JAMES DOUGLAS MEDAL has been awarded by the American Institute of Mining & Metallurgical Engineers to Dr. Zay Jeffries, Hon. Delta, for his work in non-ferrous metallurgy. The award was established in honor of Dr. James Douglas a former President of the Institute and this is the fifth time it has been awarded. It is considered one of the highest honors that can be given to anyone for technical accomplishments.

ALPHA'S BIRTHDAY GIFT

PREVIOUSLY, proper mention has not been given to an interesting event of Alpha Chapter. At the Founders Day Banquet in October, 1924, the active members of Alpha were given a surprise by the alumni with a gift of about four hundred dollars in celebration of the 20th birthday of the Fraternity. A large number of the alumni contributed as no one was permitted to give more than $10.00. The remittances were accompanied by letters of greeting which were read at the banquet. One alumnus in the interior of the Belgian Congo was unable to send a check so he enclosed a Belgian Congo Bank Note. All in all it was a very welcome gift and stimulated the interest of all active members in the chapter and the Fraternity. A gift of this nature which came unsolicited should have been especially agreeable to the chapter.

EIGHT members of Epsilon chapter were at the University of California Geological Summer Camp, 15 miles east of Ventura, California, which was in charge of Brother N. L. Taliaferro, Epsilon '12, Associate Professor of Geology. The work done consisted of mapping the Oak Ridge Mountains, a couple of square miles to each party of two men. This is in the vicinity of producing oil fields.

THE COLLEGE WORLD

CONFIRMING a referendum chapter vote pursuant to its 62nd general convention held at the Blackstone Hotel, Chicago, in February, 1926, Theta Xi has become a general social fraternity. Since 1864 the national policy of the fraternity has been to confine its membership to students of engineering and science. During the last fifteen years there has been a gradual conservative trend toward generalization, the culmination of which was expressed in an overwhelming majority of votes for the above action. This will be of interest to chapters of Theta Tau.

Triangle has granted a charter to Gamma Epsilon, a local civil engineering fraternity at the University of Kansas. Gamma Epsilon, organized two years ago, has been negotiating with Triangle for some time. Installation date was set for January, 1927. Triangle, a general engineering fraternity, social in purpose, was founded at the University of Illinois; its eleven chapters are located in the larger mid-west schools. Several chapters of Theta Tau find Triangle their closest competitor.

Armour Institute in Chicago ceases this month to be an independent institution, having been merged with Northwestern University. For the sake of the memory of its founder, Philip D. Armour, the elder, as well as for that of the long and honorable roll of alumni of the institute, the school will be designated as Armour College of Engineering of Northwestern University. —*Banta's Greek Exchange*.

A new national professional engineering fraternity has entered the field, Sigma Phi Delta. Chapters are at the University of Southern California and the University of South Dakota. The fraternity is recently organized; its ideals are essentially those of Theta Tau. The GEAR is in receipt of a copy of the official publication, *The Castle*. It is a well-organized, pleasing paper which is getting the right start.

An item of interest to all members of Theta Tau will be the published proposal to change the name of the Michigan College of Mines to the Michigan Colleges of Mines and Technology. The present president of the school is not a mining engineer and while mining engineering will of course always be the most important subject taught, at least for a long period to come, it is proposed to give the other principal courses in engineering and thus relieve some of the pressure on the Universities of Michigan and Wisconsin which now draw many pupils from northern Michigan. The change in name is to be proposed to the next session of the legislature in Michigan and the general opinion seems to be that it will be adopted.

The GEAR *of* THETA TAU

OFFICIAL PUBLICATION OF THE FRATERNITY

DONALD D. CURTIS, OMICRON '19
EDITOR AND BUSINESS MANAGER
101N ENGINEERING HALL . . . . . IOWA CITY, IOWA

Subscription $2.00 a Year *Business Card $1.00 a Year*

VOLUME XVI JANUARY, 1927 NUMBER 1

The GEAR is late. For this the editor apologizes, and passes no buck, other than to blame circumstances over which he had no control. The next issue will make its appearance the middle of April if prompt and proper co-operation is given by the chapters. To that end the following suggestions are offered:

REGENTS, be sure that associate editors are on the job; if one who has been appointed does not function, oust him and impress another into service.

SCRIBES, see that the associate editor has proper and complete information to report on official matters, such as resoultions and death notices, which need presentation to the rest of the chapters through the GEAR.

TREASURERS, send to the Grand Treasurer promptly all financial report forms correctly and completely filled out so that the GEAR editor, who gets information on active subscribers through the duplicates, may have data for mailing your chapter its quota of magazines.

ASSOCIATE EDITORS, answer requests from the editor as soon as possible; observe and record all news items of interest to Theta Tau; get all information possible on alumni; make your chapter letters to the point, complete (but not too long), descriptive of professional activities.

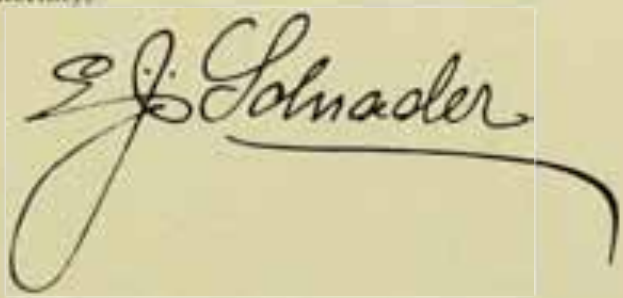
Elsewhere in this number of the GEAR is recorded a list of names of Theta Taus who are deceased. The editor regrets the lack of more adequate statements. As soon as knowledge is procured, more complete notices will be prepared. It is requested that any information available about these brothers be reported to the GEAR office at the earliest possible moment.

The matter of professional cards is open for consideration. In this issue of the GEAR you will find only seven cards printed, cards which have been sent to the editor in the last two weeks. It appears to us that the GEAR should contain rather an extensive list of cards which would describe the services our alumni are prepared to render. We do not regard this so much as advertising as fraternity news and helpfulness. In mentioning advertising it may be well to state that the rate charged for professional cards is something less than a quarter the rate charged outside advertisers. If you know anyone whom you think should have a card inserted, speak to him or inform the editor.

DEPARTMENT OF THE EXECUTIVE COUNCIL

FROM THE GRAND SCRIBE

I have received the annual flood of Christmas cards and greetings from alumni and members of active chapters. It is going to be impossible for me to answer all of these immediately but I will do so as soon as I can. I want to use the columns of THE GEAR to thank you all for your good wishes and return them many times. May 1927 be a most prosperous and happy year for all members of our Fraternity.



A COMMUNICATION FROM THE GRAND MARSHAL

To Brothers in Theta Tau.

Greetings:

Practically all men initiated into Theta Tau during the past two years have received shingles (signed membership certificates). The issuing of shingles has become a routine process thoroughly understood by nearly all of the active chapters. Form E is filled out at the pledging of a candidate, the Scribe adds certain data at the time of initiation, folds the form, document style, so that it fits a large stamped envelope, and sends it to the Grand Marshal by first-class registered mail. After some delay, occasioned by the fact that the geographical distribution of the persons concerned is such that each shingle must make the equivalent of three or four transcontinental trips, a shingle is returned to the chapter for each Form E blank received. Chapters replenish their stocks of Form E by request to the Grand Marshal.

Chapters holding initiations late in the Spring term often send their requests for shingles so late that it is impracticable to return shingles before the opening of the Fall term. From the standpoint of issuing shingles such initiations are a constant source of annoyance. They are also bad from the standpoint of alumni personnel. Newly initiated brothers often fail to return to school, leaving with such short acquaintanceship that the purpose, ideals, and memories of Theta Tau fade almost as rapidly from their minds as their presence does from ours. Constitutional provisions have remedied this situation to some extent but such initiations must be eliminated entirely to end it.

But few applications for shingles have come directly from alumni. In a measure this is the result of negligence but it is probably more largely due to uncertainty on the part of alumni as to how to avail themselves of the shingle privilege. The following instructions are therefore directed to alumni who have not received shingles:

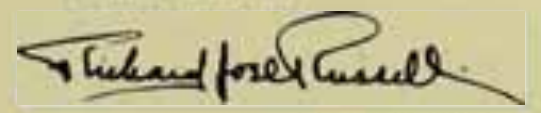
1. Send to your chapter for a Form E blank. (You might also send some notes for their chapter letter, or for the Gear, at the same time.) If your chapter fails to respond, make the request to the Grand Marshal directly.
2. Fill out your part of the blank and return it to the Scribe of your chapter. He will certify as to your membership and will send the blank to the Grand Marshal. Your shingle will be mailed to you, not to your chapter.
3. If your initiation number (on your Badge) is one of the following, or is higher, your shingle has already been paid for. If it is lower send one dollar with your request. Each member who receives a shingle will be sent, without further charge, an Alumni Membership Card and The Manual of Theta Tau as soon as these are issued;

   Alpha, 217; Beta, 235; Gamma, 168; Delta, 140; Epsilon, 178; Zeta, 151; Eta, 156; Theta, 70; Iota, 94; Kappa, 143; Lambda, 98; Mu, 20; Nu, Xi, Omicron, Pi, Rho, Sigma, and Tau, 1.

In view of the fact that letters are still being sent to my former address I wish again to call attention to my removal to Lubbock, Texas, care of Texas Technological College.

Wishing you every success, I am

Yours in H. & T.



Grand Marshal.

WARNING TO ALL CHAPTERS

It is reported that certain individuals who claim that they represent a so-called "National Fraternity Directory" have approached various chapters of fraternities with the claim that they wish to help the fraternities (and make money for themselves). Chapters should use great care in all such matters and remember that the national officers are qualified and authorized to speak for Theta Tau. Refer all such requests to the Grand Regent and save your money. Theta Tau is anxious as well as willing to participate in any movement which is for the good of all college fraternities, but the necessary investigation can best be carried out by the national officers who will in a large measure be guided by the policy of the Interfraternity Conference.

E. J. Schrader, Grand Scribe.

ALUMNI NOTES

J. Hamilton Ashley, Epsilon '22, was married in Santa Ana, California, to Ida Helene Griset, on October 12, 1926. Mrs. Ashley was graduated from the Southern Branch of the University of California last Spring. Brother Arlo M. Sperry, Epsilon '18, was best man. Ashley is night mine foreman for the Montezuma Copper Co. at Pilares de Nacozari, Sonora, Mexico.

Walter H. Wheeler, Alpha '08, in the "Letters to the Editor" column of Engineering News-Record, February 11, 1926, describes the testing of an old flat-slab concrete warehouse floor, and makes some pointed conclusions as to limitations placed on the design of such structural members by governing bodies.

In a letter to the editor of the Engineering News-Record, September 16, 1926, Mr. Wheeler discusses the question "Can Steel or Concrete be Erected More Rapidly?"

Robert J. Anderson, Delta '14, and a past Grand Officer of Theta Tau has become president of the firm of Robert J. Anderson, Inc. specializing in the metallurgy of aluminium and having a new commercial testing laboratory at 2416-38 BeekmanStreet, Cincinnati, Ohio, completely equipped for chemical analyses, mechanical tests, metallography and radiology of metals. Dr. Anderson is an authority in his special field of work and our best wishes go to his new venture.

Charles A. Kumke, Beta '05, has been made General Superintendent of the Ray Consolidated Copper Co. at Ray, Arizona. This is one of the largest copper mines in the southwest. Brother Kumke was one of the first men initiated at Beta Chapter and the fraternity is gratified at his professional success as a mine operator.

C. Douglas Barnes, Lambda '20, is studying for a Ph. D. in Chemistry at the University of California.

Carlton D. Hulin, Epsilon '20, is now Chief Geologist for the Compania Real Del Monte y Pachuca, in Pachuca, Hidalgo, Mexico. This company is controlled by the United States Smelting, Refining & Mining Co. Before going to Mexico Brother Hulin completed a geologic study of the Sunnyside Mine in Colorado for the company. Brother Hulin is the author of a bulletin by the California State Mining Bureau of the geology and ore-deposits in the Randsburg district of California which is accepted as the standard work on the economic geology of that mining region.

George D. Smith, Jr., Epsilon '11, left the mining engineering field a few years ago to enter the construction business in San Francisco. He first built the Canterbury Hotel and now has just completed the magnificent Mark Hopkins Hotel in San Francisco. He is President and General Manager of both companies operating these two hotels which are the best of high-class hotels on the Pacific Coast.

Algernon T. Gibson, Eta '13, who has been President of the Lawrence Warehouse Co. of San Francisco for some years, has recently been made the President of a huge warehouse consolidation which expects to operate in all of the western country.

Otto H. Herres, Gamma '11, is Assistant Manager of the Utah Fuel Co. with headquarters in Salt Lake City. He was elected President of the Salt Lake City chapter of the American Institute of Mining & Metallurgical Engineers at their last election.

Charles F. Smith, Lambda '24, and Alton H. Sorenson, Lambda '26, are both taking graduate work at the University of Illinois.

Rene J. Mechin, Gamma '19, has taken charge of the New York Zinc Co. at Edwards, N. Y. which is controlled by the St. Joe Lead Co.

Merle Heitzman, Gamma '17, is Superintendent of the Silver King Coalition Mining Co. at Park City, Utah. This is one of the great silver-lead mines of the west.

Carl E. Painter, Zeta '14, is Vice-President of the Waterworks Equipment Co. of Salt Lake City.

Theodore Welcker, Beta '11, is Salesman for the Sullivan Machinery Co. of Salt Lake City.

John H. Sampson, Jr., Lambda '25, is 2nd Lt. in the 82nd Field Artillery, El Paso, Texas.

Lloyd Snedaker, Lambda '27, is attending the University of Michigan at Ann Arbor this year.

Arlo M. Sperry, Epsilon '18, who has been on the engineering staff of the Comstock Merger Mining Co. at Virginia City, Nevada, has left for Mexico and is to be with the Mexican Corporation, at Fresnillo, Zacatecas, Mexico.

Brothers R. H. Ormsbee, Theta '15, and A. M. Sperry, Epsilon, '18, were the dinner guests of E. J. Schrader, Alpha '05, in Reno, Nevada, in celebration of Founders Day.

Rex P. Oliveros, Gamma '17, is now gas engineer with the Steere Engineering Co., General Motors Bldg., Detroit, Michigan. He is making his headquarters in San Francisco and has just completed the building of a large gas plant at Marysville, California. On his way east for Christmas he stopped off in Reno for a day and had a few hour's visit with the Grand Scribe.

Pierce W. Ketchum, Lambda '22, received his doctor's degree at the University of Illinois last Spring and is now teaching at the University of Illinois.

Darvin J. Pope, Theta '23, has been made Assistant Superintendent of the Parral unit of the Asarco Mining Co. (American Smelting & Refining Co.) at Parral, Chih, Mexico.

W. S. (Buck) Morris, Rho, is at present out in Oklahoma with a position as Refining Engineer with one of the oil companies.

George C. Cox, '17, Rho, is connected with the Electrical Engineering Department at North Carolina State. George has recently been promoted to the rank of Major in the Reserves. At the present time he has his thesis in the hands of the authorities for a Master's degree in Engineering.

D. B. Jenkins, Rho '22, has taken up the bonds of matrimony in addition to his position as draftsman, and reports the birth of a daughter in September, 1925.

E. R. Commander, Rho '23, is now connected with the Alabama Power Company, Anniston, Alabama, as Superintendent of Local Operations Eastern Division.

Henry H. Shelor, E. E., Rho '25, is connected with the Southern Bell Telephone and Telegraph Company in Sumpter, S. C.

J. C. Richert, Jr., E. E., Rho '24, is Local Manager at Wadesboro, N. C. for the Yadkin River Power Company. He was married last June.

J. J. Davis, Rho '24, is teaching in the Texas A. and M. College.

B. P. Barber, C. E., Rho '24, is holding a position as Assistant Resident Engineer in Hendersonville, N. C.

W. L. West, Rho '24, is at present working in Wilmington as an Architectural Draftsman.

F. W. Hargrove, Rho, No. 50, is Field Engineer for the Phoenix Utility Company with his headquarters in St. Augustine, Fla.

G. W. Wray, E. E., Rho '25, is connected with the Southern Bell Telephone and Telegraph Company in Columbia, S. C.

James F. Wooten, E. E., Rho '24, is with the Brooklyn Edison Company, Brooklyn, N. Y. as Inspector.

A. J. Alport, Zeta '22, is now located in Kansas City at 4005 College Ave., where he holds a position with a firm of building contractors.

Glenn L. Alt, Zeta '16, is now an assistant professor in Civil Engineering at the University of Michigan.

Harold W. Anderson, Zeta '21, is still on the faculty at the University of Kansas. He was promoted this year and now holds the title of Assistant Professor in Electrical Engineering.

Leland C. Angevine, Zeta '14, is now manager of the Water and Electric Department of the Municipal Utilities Co., McPherson, Kansas.

J. Lloyd Barron, Zeta '23, is now an Instructor in the Department of Sanitary Engineering at the University of Kansas, and is living at 1127 Ohio Street, Lawrence, Kansas.

Albert R. Bartell, Zeta '17, is now an engineer in the office of Black Hawk Company, at Waterloo, Iowa.

Floyd J. Beechly, Zeta '24, is at large so far as the chapter records are concerned. Any information from him or about him will be appreciated.

Fay Ashley Bennett, Zeta '23, is now located at 3229 Central St., Kansas City, Mo.

George R. Benz, Zeta, No. 192 is working for the Phillips Petroleum Co., at Bartlesville, Oklahoma.

Waldo G. Bowman, Zeta '23, is now employed as an Editorial Assistant, with the Engineering News-Record, and may be found at 47 Gramercy Park, New York City.

Lewis H. Brotherson, Zeta, No. 163 is now superintendent of Buildings and Grounds, for the Kansas City, Kansas Public School System. Address, 2032 N. 32nd St.

Joseph P. Buckhannan, Zeta '17, is living at Room 251, Michigan Central Station, Detroit, Michigan.

John W. Bunn, Zeta '21, is now Freshman Varsity Coach, in the Athletic Department of the University of Kansas. Address, 746 Alabama St., Lawrence, Kansas.

Everett E. Carlson, Zeta '22, is branch manager for the Powers Heat Regulator Company in St. Louis.

Ted J. Cambern, Zeta, No. 178, is employed by Harrington, Howard & Ash. Address, 651 Gilman, Palo Alto, California.

Willard A. Burton, Zeta '16, is now a Resident Engineer, for Black and Veatch, in the Mutual Building at Kansas City, Mo.

Richard J. Russell, Epsilon '19, Grand Marshal, attended the Geological Society convention at Madison, Wisconsin, December 28th and 29th. On his way he visited Iota (Rolla, Missouri), Zeta (Lawrence, Kansas), and Jamison Vawter, Zeta '16, Grand Treasurer at Urbana, Ill. On his return he visited Omicron and the Gear editor at Iowa City.

Erich J. Schrader, Alpha '05, Grand Scribe, Past Grand Regent, has in the past five years been doing consulting and managing only. He is doing a large amount of mine examination work.

Wayne H. Bentley, Zeta, No. 172, is managing a lumber yard at Great Bend, Kansas.

Vern Price, Omicron '22, is with the Iowa Southern Utilities Company with headquarters at Centerville, Iowa. He is at present acting in charge of their overhead transmission line work.

Paul L. Mercer, Omicron '21, M. S. '22, called on the editor during the holidays. He is at present Assistant Engineer with the Mississippi River Power Company, living at 704 Orleans Ave., Keokuk, Iowa.

The name of Chester I. Mead Omicron '22, who is Iowa line coach stands beside that of Devine, Locke, Brookins, and Laude as one of the most modest Hawkeye athletes. He was guard on the championship football teams of 1921 and 1922, and so modest that he did not mind if credit for playing all of the classic Yale game went to another man. Press reports from New Haven after that 6 to 0 Iowa victory carried the name of Kriz, a substitute in the Hawkeye line-up at the right guard position. When, on the Monday after the game, the Hawkeyes, heroes of the campus, returned to Iowa City, Mead was asked why he did not play. "I played all of the game," was his reply. "But what's the use of mentioning it as long as some man was in there doing the work."

Verner R. Muth, Omicron '22, M. S. '23, has accepted a position as sales engineer with the Philip Carey Company of Cincinnati, Ohio. He has recently been Hydraulic Designer for the Utilities Power and Light Corporation.

T. Lorimer Herrick, Omicron '23, M. S. '24, was married December 27th at "The Little Brown Church in the Vale" to Miss May McPherson (or maybe it was Margaret: they're twins and the editor doesn't know; probably Larry does). Brother Herrick called on the editor.

Gordon R. Lunt, Omicron '21, is sales engineer for the Pittsburgh-Des Moines Steel Company. His address is 706 15th St., Des Moines. Herbert Howe, Omicron '26, is working at Rock Island. He spent a very enjoyable Christmas visiting his brother, Joseph Howe, Omicron '24, who is working for the Mississippi River Power Company and is stationed at Keokuk, Iowa.

Charles M. Coats, Zeta '13, is reported as residing at 430 Thompson Ave., Eldorado, Arkansas.

Lawrence E. Cole, Zeta '16, is employed by the U. S. Metal Refining Co., at Carteret, New Jersey.

Paul D. Cornelius, Zeta '23, is now a Sales Engineer for the Sullivan Machinery Co., and is located at 582 Market St., San Francisco, California.

To All Members of Theta Tau
Fraternal Greeting:

You are hereby officially informed that

Mr. Donald E. Harpfer
Ohio State '26
(Sigma Chapter Roll No. 44)
is no longer a member of this Fraternity

Take due notice of this and govern yourselves accordingly.

Fraternally yours,
ERICH J. SCHRADER
Grand Scribe

Theta Tau Professional Cards

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If you have no subscribed to the GEAR (this year's subscribers will also get the general directory as soon as it is issued) clip this, fill in the blanks, attach $2, and mail to the editor.

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