THE GEAR OF THETA TAU

OFFICIAL ORGAN OF THE FRATERNITY



DIRECTORY NUMBER





THE GEAR OF THE TATAU

OFFICIAL ORGAN OF THE FRATERNITY.

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Council of Theta Tau.

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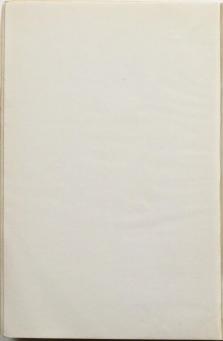
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PREFACE.

This Directory number, the seventh annual issue of The Gear, is published somewhat later than the customary date on account of the desire of the officers of Theta Tau and the editor to include the names of the new members of Theta Chapter at Columbia University; and full data regarding the other seven older chapters, which data in some cases was delayed.

Editing this issue has been a pleasure on account of the co-operation of the Associate Editors and the individual officers and other members.

It becomes the duty of each member to communicate to the editor at least once each year noting changes and omissions in data regarding himself. The success of the Directory is otherwise impossible.





A SKETCH OF THE FRATERNITY By ERICH J. SCHRADER, '05.

Grand Regent.

N October fifteenth, 1914. Theta Tau will be ten years old. Its growth during the first decade has been steady as shown by the fact that there are now eight Active Chapters located at the principal colleges in the United States and

four Alumni Associations. All composed of men. real men, who are doing credit to their fraternity and themselves

Alpha Chapter at Minnesota was founded by E. L. Schrader, E. L. Vinal, W. M. Lewis and I. B. Hanks on October fifteenth, 1904. It was then known as Hammer & Tongs; and the badge was a gold skull with a hammer and pair of tongs crossed: on the forehead were the letters Theta and Tau in black enamel.

THE OFFICIAL BADGE



Old Style Present Design

Beta Chapter, formerly The Rhombohedron Club, at the Michigan College of Mines at Houghton. was established on March 26, 1906. This chapter published The Gear for five years prior to 1913, has had its own chapter house for some time and enjoys

the reputation of being a strong unit in Theta Tau.

At Golden, Colorado, the Square Set Club was granted a charter as Gamma Chapter on November 8th, 1907, due largely to the work of W. M. Lewis, one of the founders at Minnesota. Gamma has contributed many of our strong alumni; and is a strong organization at the Colorado School of Mines. The first alumni organization was formed at

Douglas, Arizona, under the name of The Southwestern Alumni Association, on December 24th, 1908.

In 1910 the Chicago Alumni Association came into existence; the national organization of Hammer & Tongs was strengthened, and the business management systematized.

The first national convention was held in 1911 at the University of Minnesota. Brothers Rigby and Snyder represented Beta, Marshall and Dunn, Gamma, Schrader the S-W Alumni Association, and Farnam and Kingsly represented Alpha.

At this convention the name was changed from Harmer & Tongs to THETA TAU; the badge, which resembled that of several other organizations, was declared not especially significant; and the policy of the fraternity was definitely defined as engineering, not that of any one branch of the profession.

A petition from Sigma Kappa Álpha at the Case School of Applied Science in Cleveland was presented to the convention and granted. So on May 23d, 1911, Delta Chapter was established. It occupies its own house and has been prosperous from the start.

Epsilon Chapter at the University of California, at Berkeley, was established on May 4th, 1911, from a local organization founded by F. S. Hudson, Ralph Countryman and Dr. Geo. D. Louderback. Its members have always been strong in scholastic lines and student activities.

Zeta Chapter, formerly Tunnel and Shaft, at the

University of Kansas, Lawrence, Kansas, was established on April 17th, 1912. Its chief organizer was Ross I. Parker, present member of the Executive Council.

The Twin City Alumni Association came into existence February 3d, 1912, with headquarters in

Minneapolis.

Eta Chapter, at the Massachusetts Institute of Technology, in Boston, was established on March 23d, 1912, the charter being granted to the Delta Club organized by E. M. Marshall, Gamma '11; Dale R. McEnary, Alpha ex. '14 and Chas. F. Haglin, Alpha ex. '13.

The second convention was held in Houghton under the auspices of Beta Chapter. Meetings were held in the commodious chapter house. Brothers Walling, Hopkins and Schrader of the Executive Council, delegates from the seven chapters and three alumni associations, and several alumni were present.

The Gear, which had become a burden for Beta Chapter, was turned over to a national committee

which appointed J. E. Haynes, Alpha '08, first Editor in Chief.

Much business was transacted at this convention and many difficulties incident to running the national fraternity were settled.

traternity were settled

On October 15th, 1913, the Cleveland Alumni Association was chartered, a live body of fifteen alumni who helped Delta Chapter in getting its present house.

Theta Chapter, at Columbia University in New York, was chartered on May 7th, bringing the roll of chapters up to eight, which with the four alumni bodies totals twelve units in Theta Tau Fraternity.

THE OFFICIAL BADGE.

Of course every active member of our fraterity, and all the alumni who have graduated since the new badge was adopted have one; but only a small percentage of the members who finished college before it was adopted have ordered new ones. This causes considerable confusion, as new members are not familiar with the old badge, and old members are not familiar with the new one.

A cut of the two is shown in this issue; but this will help matters only temporarily. The only way to relieve the situation satisfactorily is for each member who hasn't done so already, to order a new badge as soon as he can. The badge as shown costs \$6.50. Checks may be made payable to Hoover & Smith Co., or B. B. Walling.

Let me urge every one to attend to this as soon as possible. All orders go through the Grand Treasurer.

BENJ. B. WALLING, Alpha '09 Grand Treasurer.

nd Treasurer.

624 Plymouth Bldg., Minneapolis, Minn.

"SAN FRANCISCO IN 1915"

M N behalf of Epsilon Chapter its Convention Committee desires to make the following preliminary announcement of plans for the 1915 Convention, Any suggestions or criticisms from the active chapters or alumni will be welcomed.

The suggested date is September 8-11 inclusive, the business meetings to be held in Berkeley, California. It is proposed that the Grand Officers meet on the 7th and prepare the business so that it can be acted upon without delay by the Convention.

Several short trips will be arranged to be taken during the convention period and their purpose shall be not only to give the visiting brothers an opportunity to visit some of the interesting points of which there are many, but particularly to get those from far distant parts of the country into closer acquaintance and develop the spirit of fellowship and brotherhood.

It is hoped, therefore, that during the convention days all should plan to be together as much as possible.

While the Exposition will be a great attraction in 1915, no special Theta Tau trip is planned to the Fair during the convention time, because it is felt that the time would be too limited to get more than a general view, and the great crowds and numerous distractions would not allow general social spirit to prevail. We urge those who wish to visit the Fair—and that means all undoubtedly—to come early or plan to stay the week after the Convention, and not try to take the time from the convention days and in just so much weaken the good the Convention can do all of us. Headouarters will be in Berkeley.

Saturday night the Convention Banquet will be held, probably in San Francisco, and an all day trip will be proposed for Sunday for those so inclined an excellent suggestion is a trip to Santa Cruz and the Big Trees.

If you have not already done so, start your plans now to attend the Convention. You cannot afford to miss the Theta Tau doings, you will want to see the Fair, so plan to stay at least a week or two.

Next spring the committee will send a circular letter explaining the matured plans for the Convention.

> GEORGE D. LOUDERBACK, J. B. ORYNSKI, C. E. WALDNER.

Committee for 1915 Convention. Berkeley, Cal., April 30, 1914. Address communications, care of Geo. D. Louderback, University of California, Berkeley, California.

A PARAGRAPH FROM PARKER.

Keep the Chapter standards up, and keep on pushing. If we live up to the Theta Tau ideals to the best of our ability we will keep on "Getting there."

ROSS I. PARKER, Zeta '12, Member of Executive Council.

10 Wash. Ave., Schenectady, N. Y.

ALPHA CHAPTER. Established Oct. 15, 1904. University of Minnesota, Minneapolis, Minn.

Minneapolis, Minn.
By RICHARD E. LUTZ, '15, Associate Editor.

HORTLY after the last letter to *The Gear*Alpha conducted a special initiation when
four new brothers were welcomed into the
fraternity.—Geo. A. Geib, W. L. Mahoney,
C. W. Stone and Bliss S. Cleveland. Of these, two

did not return last fall but will be back next year. In May, 1913, the University men gayee a University Circus for the benefit of the Men's Union. For weeks the campus was besieged with banners and literature proclaiming the date and place of the so-

called circus.

For the menagerie each fraternity furnished an animal. Alpha's contribution was a camel, which was really appreciated most by those who supplied the motive power.

"Rufe" Milne graduated in June; and several other brothers who graduated from the four year course expect to return for the post senior year. At the opening of the college year of 1913 we missed

"Rufe" and brothers Geib and Cleveland.

Nine men were pledged: S. S. Loeffler, J. A. Colvin, D. S. Helmick, D. N. Gittinau, C. H. DeVey, W. C. Settle, F. A. Cutler, L. W. Casper and D. C. Sullivan. Initiation took place in November who our number was increased to thirty-three—the largest number Alpha has had for some time.

Dr. William F. Holman, the unanimous choice of the chapter, was initiated in January as an honorary member. All of us have known and liked Dr. Holman ever since he came to the Department of Mathematics: and we are overioved to feel now that



ALPHA CHAPTER 1913-14.

Sullivan Capser Hooghtaling Cutter Johnson Daveg Haynes and Stone Hemical Lutz. Coller Localler Gentled Reckwoll for Coller Localler Gentled Reckwoll Chipman Trist Wentz Hewitt Zeher (Hon.) Holman (Hon.) Gentzenberger Kruse Mahones Urquhart Curtis



he is our brother in Theta Tau. With Professors Zelner and Holman we have the pick of Minnesota's

Engineering faculty.

This year Alpha has clung to the tradition of

giving a party on "Friday the thirteenth." On February 13th the brothers gamboled on the slippery floor until all were ready for the "Home Sweet Home."

Sullivan and Stone left college at mid year; but

expect to be back next fall.

This Spring a movement was started for a house; the brothers have taken hold of the proposition so zealously that we will undoubtedly have a house of our own at the opening of the next college year. A building fund will provide for the permanent abode of Alpha, but in the meantime while the fund is growing we will be content with a rented house.

The Annual Banquet was held Aoril 22d at the

University Club; and was attended by the Active Chapter and a goodly delegation of T. C. A. A members. Speeches by brothers Zelner and Holman were the chief features of the evening. Everyone was well pleased and sorry to leave when the time came. Of, the seven men elected to Tan. Beta. Pl.

from the server men elected to 1au Beta Fi from the senior class four were Theta Taus. The men of Alpha have been in many University activities and are in the principal University organizations.

ties and are in the principal University organizations.

Alpha sends her greetings to the alumni and sister chapters and extends a cordial invitation to each member to visit at any time.

ALPHA.

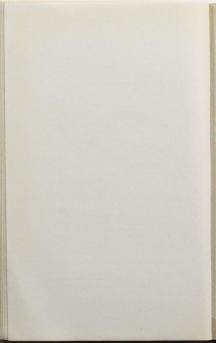
Apartments, 319 14th Ave. S. E., Minneapolis, Minn.

CLINTON B. SMITH.

LINTON B. SMITH was born in Rockford, Ill., April 3, 1880, and at the time of his death, July 6, 1913, was 33 years, 3 months and 3 days old, a peculiar combination of numbers. He early moved to Grand Forks, N. D., and gained his B. A. degree at the State University there, and then chose the University of Minnesota for his Electrical Engineering course, graduating as a member of the 1905 class. He was also a charter member of the Theta Tau and always wore his pin thereof with great pride. From the U. of M. he went directly to Butte. Mont., working with the Missouri River Power Co., and holding a responsible position while an electric light plant was being constructed to distribute power obtained from Canyon Ferry, the first of a series of dams that have secured immense electrical power from the Missouri River. He was sent to Hauser Lake and worked there on the construction of the second dam which later went out so disastrously. He was then sent to Helena in the employ of the same company, where he remained until 1909 when he resigned to go to the Pacific Slope and was first associated with the Portland Light and Railway Co., and later with the Pacific Power and Light Co. Part of the time he had charge of the drafting department and later gave nine months or more to perfecting an index system of the work and property of the company that is said to be a hand book for the office. At the last he was working with a dictaphone to simplify the stenographic work. He was very systematic and resourceful, of excellent judgment of men and methods. always to be relied on and was universally liked by



CLINTON BESLY SMITH. Alpha Chapter, 1880-1913.



his office associates and friends in the community where he lived.

His tragic death occurred July 6, 1913, during an attempt to climb Mt. St. Helens, Wash, when a party of four were overtaken and lost in a blizzard that suddenly came upon them just when the top was reached. They attempted the descent but were separated, two making it almost miraculously, Clinton and his wife, (Iris B. Newkirk of Minneapolis), both being killed, the by a fall, fracturing his skud and she being killed, be by a fall, fracturing his skud and she for them lasted over a week and was entered into by men from his own company, members of the Maxamas (a mountain climbing club), foresters, lumbermen and residents of the foothills and surrounding country, and will never be forgotten by those who participated or by those who waited.

ALPHA ALUMNI PERSONALS.

F. W. Buck, '09, married Gladys Gilbert of Superior, Wisconsin, September 3d last.

T. H. Curtis, '12, is with the Montana Reservoir & Irrigation Co., box 115, Helena, Mont.

E. E. Grygla, '08, is placer mining, leasing, No. 142 Manhattan, Nev.

W. H. Wheeler, '06, now personally controls the use of the C. A. P. Turner patents in the Western United States, with agencies in Colorado, Utah, Washington and Montana.

O. S. Zelner, '05, Mich., announces the birth of a daughter. He was appointed Chairman of the Intra-Mural Athletic Comm. Feb. 5, 1914.

BETA CHAPTER Established March 26, 1906. Michigan College of Mines. Houghton, Mich. By J. R. WILKINSON, '14. Associate Editor.

TA Chapter extends greetings and best wishes to her alumni and sister chapters. We are in the midst of a successful year. and hope that our brothers in other chapters, and those not in school have been blessed with equal

good fortune and prosperity.

There was little activity during the summer term last year. The first year men took surveying as usual under the direction of Capt. Sperr. Professor Houle was on leave of absence and the course was handled by Mr. Wold and Mr. Peterson. mechanics in the house displayed their ability over in the Mechanical building; while the geologists were with Professor Seaman as usual. On April 14th, 1913, we initiated C. J. Rash-

leigh; and on July 14th we held our summer initiation at which time brothers Allen, Hicks and Shields

were initiated

At the opening of school last Fall, 43 freshmen appeared. During the first week, hair cutting on the part of the freshmen and sophomores, was a nightly occurrence. The annual Freshman-Sophomore football game was won by the freshmen by a close score. However, the sophomores came back strong in the basketball game and won handily. On the third Saturday the Fall Smoker was held in the Gymnasium building. Between the smokes and the short addresses by some faculty members and a few students the evening was well spent.

Beta began a vigorous rushing campaign at the



Drike Rashielly Cramer McBertz A CHAPTER 1913-14.
Glibba Walter Morden Steinbach Wiggins and Hinchen Morden Schrieben Wiggins and Hinchen Morden Schrieben Wiggins Schrieben Wiggins Schrieben Steinbach Wiggins Schrieben Steinbach Wiggins Williamson Foreignin. Schrieben Fowering Chark Milliamson Compiler.



beginning of the Fall term. Within a short time we had pledged nine men,—C. F. Cramer, L. N. Brown, G. A. Apell, A. Kendall, R. King, M. L. Bradt, J. P. Schemmel, D. I. Dobson and H. H. Hopkins, (Flint, Mich.).

On November 13th at the Douglass House the initiation banquet was held. B. B. Ellis, Alpha, was the only alumnus present. The banquet was a huge success. All the arrangements were made by brother

Schreiber who acted as toastmaster.

The following toasts were responded to:
"Welcome" Bro. Loveland
"Our Home" Bro. Hinckley
"Other Chapters" Bro. Ellis
"Engineering" Bro. Wiggins

"Engineering". . . . Bro. Wiggins
The toasts were ably responded to; the impromptus were excellent; and the singing and general all
round good fellowship was there from beginning to
end.

From then until Christmas everybody was hard at work with the usual routine school work. The freshmen had by that time made an attempt at ab-

sorbing all the A2.

Although most of the brothers went home during the Christmas vacation, those remaining did their best to bring out the Christmas cheer by starting and finishing "Overflow" meetings, and late B. S. sessions at home. On January 6th, school reopened; five new men were pledged during the winter term. I. B. McLean was initiated March 30th. The

annual Spring initiation was held on April 11th. Those initiated were: C. E. Mills, C. W. Nicolson, J. C. Clarke, D. D. Fraser, C. G. Sheldon was the only alumnus present. After the initiation we adjourned to the Douglass House where a feast was provided.

After the inner man was satisfied, brother Love-

land, who acted as toastmaster, introduced the speakers:

"Welcome" Bro. Rashleigh
"Professional Frats" Bro. H. F. Mills
"Work" Bro. Wilkinson
"Theta Tau" Bro. Gibbs.

Several brothers were called upon for impromptu speeches and responded with pleasing talks.

At the beginning of the Spring term there were 29 men in the active chapter, the largest number

active at one time in the history of Beta.

The success of athletics at M. C. M. this year

was due to the untiring efforts of brother Wiggins, who was appointed Chairman of the Athletic Committee and Manager of the basketball team. The basketball squad was composed of eight men, six of whom were Theta Tau members. Brothers Coughin, Rowell and Rashleigh were on the squad again this year; and the new men were brothers Gibbs, Clarke and Nicolson.

The team took the annual Iron Country trip on Washington's birthday and played two games. At Marquette they were defeated the first time during 1914, the score being 42-16. But on March 28th they defeated Marquette by a score of 62-23 on the Colege Gymnasim floor. This game, the last of the senson, was witnessed by a large crowd. Scholl of 12 rames based this year nine were won.

Out of four men elected to Tan Beta Pi this spring, three were Theta Tans,—brothers Hicks, Allen and Mills. Brother Wilkinson was elected during the Fall term. H. & T. men have been in the majority among the "Tan Bates" during the past year which speaks well for the men of Beta. The Honorable J. M. Longvear, of Marquette, gave the Class Day address in the college cymnasium. Anvil 16th.

His subject was, "Coal Mining North of the Arctic Circle." The lecture was illustrated by slides made from photographs taken by Mr. Longyear; they were exceptionally good, showing many interesting sights about Spitzbergen, or "No Mans Land," while the remarks in explanation by Mr. Longvear added greatly to the interest. During the evening the college orchestra, led by brother H. F. Mills, rendered several selections.

The following Theta Tau men will receive diplomas this year: Wiggins, Hinckley, Schreiber, Mills, Rashleigh, Steinbach, Wilkinson, Gibbs, Love-

land and Rowell.

At the annual Senior Banquet, brother Wiggins acted as toastmaster; brother Schreiber responded to the toast of "College Days," and brother Wikinson to "Engineering."

Theta Tau House, 233 College Ave., Houghton, Mich.

BETA ALUMNI PERSONALS

Bro. "May" Feilds was married to Miss Irma Rodi the 7th of April at Cordova, Alaska. Drop us a line "May." Bro. Burt is still at the Highland Boy mine at

Bingham, Utah. We get a letter from Curtis occa-

sionally. Bro. B. B. Ellis Alpha, who has been in our vicinity for a year or more in charge of the E. J. Longyear interests, has left the Copper Country and is now in the Southwest

Bro. Jas. A. Barr is still with the International Agricultural Corporation at Mt. Pleasant, Tenn. He is author of "Drag Line Excavators" Engr. Assn. of the South XXIV No. 4 and was just elected Director of Congresses at the Panama-Pacific Exposition. Bro. C. G. Sheldon is now Deputy County sur-

vevor of Ontanogon county.

Bro. P. E. Hinckley has accepted a position as

engineer for a mine on the Mesaba Range.

Bro. C. J. Rashleigh left Saturday, the 25th of

April, for Tooele, Utah, where he has accepted a position with International Smelting Co., to work in their testing laboratory.

Bro. "Butch" Mills goes to Lorreto, Mich. He

has accepted a position as engineer for the Lorreto Iron Mining Co.

Bro. Dan Newkirk is now the proud possessor

of a baby daughter.

Bro. "Larry" Schlotter is now in Alliance, Ohio.

Bro. "Brig" Chaffin has left Mullen, Idaho, and

is located in Superior, Ariz.

Bro. I. I. Ballard, '10, has an heir, I. B. Ballard.

born Jan. 10, 1914.

Bro. D. C. Blackman, '12, married Irma Grosse of Saginaw, Sept. 4th, at Phoenix, Ariz.

Bro. J. C. Metcalf, '13, married Leonora Coughlin, and was promoted to Chief Engineer, Veteran

Mine, Kimberly, Nevada.

The following addresses have been chanced: J. Torbert, Tracy City, Tenn., K. K. Koontz, State Land Office, Phoenix, Ariz., W. B. Longan, A. S. & R. Co., Charcas, S. L. P. Mexico; P. H. Wilsinson, La Colorado, via Santa Ana, Sonora, Mexico.

HARRY RICE EDWARDS. 1887-1913

Our late Brother Harry Rice Edwards, commonly known as "Beck" Edwards, was born in Houghton, Dec. 6, 1887. His early life was spent in Houghton, where he attended the public schools, graduating from the grammar school. He then entered High School, but left during his sophomore year and secured a job underground at the Lake Mine, which job he held to the Wisconsin School of Mines to take up preparatory work for entering the M. C. M. He entered the M. C. M. in the fall of 1910 and

took up the regular Freshman work and it was in his sophomore year that he became a member of Theta Tau at the regular fail initiation, Nov. 11, 1911. He continued his school work into January, 1913, taking only two weeks work of the winter term, when he quit school because of his failing health and took a few weeks' rest in bed, gaining in strength greatly.

He left Houghton about March 1st, making one of a party on a trip to Panama. Returning from Panama, he went directly to Globe, Ariz., but the climatic conditions being unfavorable, he went to Silver City, New Mexico, and entered a sanitarium. About two weeks later he died very suddenly before his parents could reach him. This was April 27, 1913.

His death came as a great shock to everyone as he was one of the most widely known and best liked

students in college.

He made friends easily and won their admiration and love by his frank open manner and more especially did he win the love and admiration of his brothers in Theta Tau.

GAMMA CHAPTER Established Nov. 8 1907 Colorado School of Mines. Golden Colorado

By H. H. DELAITTEE, '15, Associate Editor.

HE men whom Gamma has initiated since last vear are: Lionel Brooke, E. V. Graybeal, T. W. Callahan, J. H. Woolf, E. A. Strong, E. R. Wilfley, H. S. McKnight, S. J. Burris. I. R. Shanley, B. C. Essig and D. C. Dodge.

Socially, Gamma has been very lax this year on account of so many members being in training some part of the year. We had a banquet at the Brown Palace hotel in Denver on December 3d at which there were present three alumni and all of the active members.

Athletically "Mines" has done wonderfully for the small number of men available. Our football team, which averaged only 154 pounds, was beaten only once during the whole year. Our basket ball team tied for second place, but was adjudged the strongest team in the state at the end of the season; they got a poor start. Brother Litchfield managed the basket ball team;

and brother Snedaker the football team. Brother Burris was Captain of the basket ball team. Brother Luke is president of the Senior class, and brother

Essig president of the Junior class.

Brothers Strong and McKnight have been elected to Tau Beta Pi, the latter being also captain-elect of the football team. Brothers Brooke, Pearce, Woolf, Shanley and Dodge have also held positions on the baseball or football teams.

The senior class left April 20th for an inspection trip to the larger mills and mines of Montana, Utah



Wilfley ER. 1913



and Colorado and will return about May 21st. As eleven of the members of Gamma chapter are seniors, the number of actives at present in Golden is small seven in all. Brother Burns has been forced by sickness to return home. For seven months of the year Camma flourishes with a chapter roll of from eighteen to twenty-two men; but Gamma begins and ends each year with a small roll.

Just a word about the Colorado School of Mines before closing. Dr. V. C. Alderson has been succeeded by Acting President Haldane; and Dr. Chauvenet has been elected President Emeritus. Under the able directions of these two men the school has undergone marked improvement. New schedules have been arranged which provide for the same amount of work to be covered as before; but allow more time out of the classroom.

The course in Chemical Engineering was found to be inefficient and was dropped. All indications are to the effect that next year's enrollment will be the largest in six years.

Gamma extends a cordial invitation to all its brothers to pay us a visit.

GAMMA.

H. H. DeLaittre, in care of Dr. Garvin, Golden, Colo.

CAMMA ALLIMNI PERSONALS

W. R. Brown, '10, is author of "Blast Hole Drilling in Open Pit Mining," Keystone Magazine: reprinted in M. & St. P. and C. S. M. Magazines. B N Kilhourn '13 is with the International

author, with the late Prof. Avrton, of "The Thermal

Smelting & Refining Co., in Tooele, Utah. M. H. Kilgour, '08, 16 Exchg. Pl., N. Y., is

Emissivity of Thin Wires in Air," printed in Transactions of the Royal Society; joint-author with Mr. Geinel in "The Electrician" Series: author of part 1 of Electrical Distribution"; and of many articles in the various technical iournals. W. M. Lewis, '09, married Florence M. Case of

Hartford, Nov. 8th; present address care of Stone & Webster, Bristol, Conn.

E. M. Marshall, '12, married Helen Loughlin in Santa Fe. N. M., January 1st, 1914.

E. R. Ramsey, '12, married Eleanor C, Leonard in Denver, November 2d last.

Lyon Smith, '10, announces the birth of a son, Edward R Smith 2d, born October 24th. In the Eng. & Min. Journal, March 22, 1913, is an article, "Refining at Pittsburgh Silver Peak Mill," by Bro. Smith.

ONE OF KUMKE'S.

Cousin Jack running machine in drift. Rock very hard. Superintendent comes down and wants him to take contract at \$8.00 a foot.

C. J.—"Height dollars a foot not enough, you. Rock's too 'ard, you!"

Supt.—"Yes, but it'll get softer a little farther in."

C. J .- "Dammy, son, I don't see thy tracks coming out o' there. How'st thee know?





DELTA CHAPTER, 1913-14. Sprowl Braum Collier Greenslade

DELTA CHAPTER.

Established May 23, 1911. Case School of Applied Science,

Cleveland, Ohio.
By Robert P. Heston, '15, Associate Editor.

HIS year has been a decidedly auspicious one for Delta from many points of view. First and foremost we were able to realize our long cherished hopes for a chapter house. Prior to this year our roll of out-of-town men was not large enough to permit the extension of our quarters beyond a suite of four rooms, but at present there are eight members in the house, which number will be increased one in the near future. We have a matron who leaves nothing to be desired toward a matron who leaves nothing to be desired toward

satisfying the inner man.

Our efforts to lengthen the chapter roll have been rewarded by the addition of nine new men, brothers Abbey, Greenslade, Braum, Moree, Cotton, Main, Heena and Churchill. Brother MacInnes '13, who dropped out last year, returned after the mid-year examinations. Brother Rose '16 wandered from the fold and is at present studying at Ohio State. Brothre Fortune 16 was forced to leave school on account representations of the state of the second of the Lavin. '14 adjournet's second company at Barton, Chio. Brother Cotton did not return after the mid-year, but says his return next 'Eall' is assured.

Thus we record our gains and losses to find that the balance is still on the credit side. Considering that just a year ago are broadened our policy from maining and metallurgy to general engineering, due to the limited cligible list we found we were compelled to draw from, our own broveres this wear has been

decidedly encouraging.

The relation of the Fraternity's position in the school to the individual standing of the members has been impressed on the men. This year three Juniors, brothers Kline, Diemer and Churchill were elected to Tau Beta Pi. In the school Senate the fraternity representative, brother Badger; is president and brother Anderson, senator from Tau Beta Pi, is secretary and treasurer. Brother Heston is the Pick and Shovel senator.

Since our broadening out from the Mining departmen only three of the members hold offices in the Fick and Shovel club. Our representatives in the musical clubs this year were brothers Greenslade, Main and Diemer. In football, brother Perkins received his letter on the Varsity while brothers Kline and Applegate were presented with class jerseys for work on the scrub team. Our prospects this year for

the basketball team are also good.

At our December banquet for the new men held at the Colonial Hotel the festal board was graced by the presence of eleven alumni from whom the fifteen active men received some very helpful advice and encouragement in their efforts to become efficient engineers. As the graduates have assisted us to a great extent in furnishing the new house the main topic of most of the speeches of the active men was extending thanks to the alumni. By the discussions that arose during the evening the real value of the chapter banquet as a combined meeting of the alumni men and actives for talking over the fraternity affairs was clearly shown. The general air of good fellowship that prevails at such functions is an excellent way of impressing on the initiates the bond that exists between the men

A few of the alumni living in the city organized the Cleveland Alumni Association for the purpose of assisting the active men in their work of building up

the chapter, and for establishing a fund with which to buy a house at some future time. As the organization became stronger financially definite steps were taken toward helping the active chapter to find a suitable house and complete the furnishing of it. The result of the operations of the association showed last Fall when we returned to school and found that a house had been leased for a year, and enough furnishings bought to give us a good start. When our roll of out-of-town men had increased to a suitable number we started a table. This progress of the chapter would have been impossible if it had not been for our alumni. The chapter was delighted when the efforts of the Delta Alumni Association were rewarded by a charter as an organization known as the Cleveland Alumni Association.

Delta Chapter wishes to take this opportunity to thank her alumni for the excellent results they have accomplished and for the road they have opened up for the active men to push the chapter to a place in the first rank at Case.

This year has probably been the most difficult one in the history of our organization, but the transition stage has passed and Delta Chapter will be more fully equipped next year to meet the problems that face a good healthy fraternity.

In closing Delta wishes to assure all Theta Tau men a hearty wecome in Cleveland, and to extend to her sister chapters her most sincere hopes for a pleasant and prosperous year to come.

DELTA.

Theta Tau House, 2153 Fairmount Road, Cleveland, Ohio.

DELTA ALUMNI PERSONALS.

"Chuck" (C. S.) Arms is one of the few who have staved by their chosen professions. He is Assistant Metallographist for the Willys-Overland Co. in Toledo. Incidentally he entered the state of matrimony last summer.

O. C. Budde, '12, has turned the tables: he is on the faculty of East High School in Cleveland.

F. E. Caine, '12, is pounding rock for the Caine Stone Co., of Cleveland,

C. W. Cotton, Ex. '15, had some difficulty with the faculty this year but will be with us next Fall.

F. G. Fortune, Ex. '16, struck a two-months' absence last Fall which queered his school work only temporarily, we hope.

Don B. Frisbie, '11, is head of a coal company of his own in Toledo. He has recently become a proud

father. Vic. C. Fugman, '10, left the unsettled region of

Sand Coulee, Mont., and is with the Natl, Electrical Lamp Assn. of Ceveland. C. F. Haeberle, '11, is a real chemist with the Grasselli Chemical Co., of Cleveland. We always

knew he would come to no good end.

"Jerry" (G. P.) Hansen, Ex. '13, is still officiating at the Central Furnace of the Am. Steel & Wire Co., in Cleveland. "Heck" W. T. Hartley, '11, certainly must find

Dunkirk, N. Y., a very attractive place as he seldom journeys to Cleveland. He is with the Crucible

Steel Co.

Al. C. Hasse, '10, has deserted the ranks and is attending the Cleveland Law School.

Z. C. Kline, 10, has been transferred from the Niles plant of the Natl. Electrical Lamp Assn. to Pawtucket, R. I. He was married last summer.

"Chief" (C. F.) Koehler, '09, has weathered the reorganization of the Garford Co., in Elyria and is Metallurgist with the new Willys-Knight Co., according to the latest reports.

C. R. Kuzzell, '10, is doing smelter work with the Anaconda Copper Co., at Great Falls, Mont. We received an announcement of his wedding early in the year.

Tommy Lavan, Ex. '14, decided after a thorough trial that he was not intended for coal mining and is pursuing his fortune in the Sixth City.

"Swiggin" (A. R.) McLaughlin, '11, never ceases to aspire to John D.'s position. At any rate he is still wedded to his Standard Oil job in Cleveland.

"Romey" (R. D) Malm, '12, is one of the head engineers with some hydraulic power company in Rutland, Vt. He sends us photographs to prove it. He is on the up-grade and going strong.

He is on the up-grade and going strong.

"Eddy" (J. E.) Moses, Ex. '15, left the Emma
Furnace to take over his father's hardware store. He

was always a hard proposition.

Lynn B. Riddle, '12, is still extracting oil from the depths at Casper, Wyo., as far as we know. Why so reticent, Lynn?

Howard Rose, Ex. '16, took a turn for the worse and jumped to Ohio State, but we hear he is making good.

B. D. Schramm, '11, and Otto F. Schramm, '12, are doing time at the Am. Steel Foundries Co., at Alliance, O. We imagine that Otto is working for B. D.

J. C. Scott, Ex. '14, is finishing his literary course at Western Reserve University. Two years' of hard study (?) has not detracted from his breezy disposition.

"Pick" (Carl) Severin, '10, was given a respite from his labor of extracting gold at Victor, Colo., last Fall and made us a visit

"Roscoe" (E. R.) Stein, '11, athough we dislike to admit it, is a regular chemist of the Dow Chemical

Co., at Midland, Mich.

"Liz" (C. H.) Strand, '11, has remained faithful to the course at Case, and is Metallurgist for the Pennsylvania Railroad at Altoona, Pa.

"Roy" (M. R.) Strong, '13, was recently trans-

ferred from the Cleveland to the Pittsburgh offices of the Pennsylvania R. R. We certainly miss him at our Saturday night "500" games. E. A. Taylor, '11, has decided not to return to

Terlingua, Texas, not because of the war, but on account of his receiving the position of Chief Chemist of the Grasselli Chemical Co., at Cleveland,

"Mellis" (M. W.) Vickery, '11, has redoubled his efforts to become a great lawyer ever since one of the Freshmen sold him a sixty-cent Calabash for a dollar. He expects to take the bar examination soon





EPSILON CHAPTER 1913-14.

Inn Tallatern Organic Smith Smith Campbell Davis Brighman Waldner Meta-scaringbell Membell Campbell Cam

Feeley

Louderback McM L. W. Orynski EPSILON CHAPTER.
Established May 4, 1911.
University of California,
Berkeley, California.

By W. D. McMillan, '13, Associate Editor. INCE the last issue of The Gear, Epsilon Chapter has had a very busy and prosperous year, and we take great pleasure in sending our annual greetings to the sister chapters and

alumni of Theta Tau.

At the close of the Spring semester of 1913, we initiated seven new members from among the graduates and upper classmen. The initiation was held at the Phi Sigma Kappa House, and the men taken in were: John Orynski, '14: Len Orynski, '14: Clarence Waldner, '13; 'Reg' Stoner, '12; Jack Feeley, '14: Donald McLaughlin, '14, and Frank Tolf, '13. On the following Saturday night a banquet was held in Oakland.

Last August we began the present college year with fifteen active members. We continued the custom of holding meetings bimonthly, and having technical papers read by the members at the conclusion of the routine business. These talks are always of great interest to the fellows, as they are along lines in which we are all interested. In connection with this, I might say that we all wish that more of the alumni would write us of their experiences on getting out into the engineering world. A short letter to the chapter once in a while would surely be appreciated. In December five new mew re initiated. This

initiation was held at the Beta Theta Pi House. Those taken in were: Frank Smith, 14; Jack Kerr, '14; 'Bill' Geis, '15; W. D. McMillan, 13, and A. K. Hegeman, '14. Three weeks later we took in Robt. W. Pack, '08, who was one of the original members of

the local from which this chapter was formed. Immediately following this initiation, which was held in Bacon Hall, we adjourned to Oakland, where Bro. Craig had arranged a very enjoyable little banquet for us at the Cafe Kessler. This banquet will long be remembered by those present, as a number of the charter members of Epsilon were there, and they told us of the early history of this chapter.

In January we began the present semester with everybody back for work with the exception of Don Billick, '13, who left for the mines in Nevada, and A. R. Whitman, '11, who went to Ontario to accept the position of Chief Geologist with the Porcupine

Mines Co. Limited.

We immediately began looking over the available material to take the place of the men graduating in May. The result was that the following men were initiated on March 17th: E. L. Packard, U. of Wash, '12; Rhoades, '15; Vander Leck, '15; Hendricks, '15; Fertherton, '15, and Rocca, '15. The initiation was held at the Beta Theta Pi House, and was followed by a little feed.

On March 25th we held our mid-semester banquet at the Cafe Kessler. These little "get-together" parties are always a great success, and our only regret is that there are not more alumni living around here who could be with us at these gatherings.

At the recent election of membership to Sigma Xi Society, Bro. McLaughlin was honored with membership in the society. Bros. Hegeman and Feeley

made Tau Beta Pi this year.

Last semester Bro. Waldner was President of the Mining Association, while this semester the job is being ably held down by Bro. McLaughlin. "Bill" Geis has been Assistant Yell Leader this year.

Following the commendable custom set by some of the other chapters, this year we sent out a letter to all of our alumni telling them a little about the chapter and asking them to let us hear from them. Next year we expect to send out a better letter than the last and we sincerely hope that more of the alumni will write to us.

This brings us up to date, and in closing want to say that we are busy making preparations for the convention to be held here in 1915. The exact date has not been set yet, but it will be in either August or September. The presence of all the graduates at this convention cannot be too strongly urged. So in making your plans for 1915, be sure to include the Theta Tau convention in Berkeley.

With best wishes and success to all Theta Tau men, we remain in H. & T.

EPSILON.

Prof. G. D. Louderback, Bacon Hall, U. of Cal., Berkeley, Cal.

EPSILON ALUMNI PERSONALS

Alfred R. Whitman, '11, is now Chief Geologist for the McIntyre-Porcupine Mines Limited at Schumacher, Ontario. Their problem is mainly the underground location of new ore bodies and the recovery of those lost by complex faulting. He is author of "A Tin Mine Near Spokane, Washington" (M. & S. Press. July) and "The Vadose Synthesis of Pyrites" (Econ. Geol., Aug., 1913).

"Kon" White, '13, is with the Engineering Department of the Alaska Gold Mining Co., at Juneau, Alaska. Frank Wilson, '12, is Metallurgical Chemist for

the Afterthought Copper Co., at Ingot, Cal. He married Flora A. Wall. Dec. 25th, 1912; and is the author of several articles in various mining magazines on "Zinc Recovery from Sulphide Ores by the Ammonium-Carbon Process."

John R. Suman, '12, is Chief Engineer and Assistant Superintendent for the Rio Bravo Oil Co, Texas, and has charge of all constructing work relative to their two fields in Texas and their Welsh field in Louisians.

Roy Morse, '13, after being night chemist for the

H. C. & S. Co., at their Purnene Mill, Terr. of Hawaii, for six months, is now acting as head chemist at the same place.

Oliver Young, '13, is in the Mill and Cyanide Plant for El Tigre Mining Co., Sonora, Mex.

Chas. M. Heron, '11, is Superintendent for the above company.

"Art" Eaton, '13, has charge of the collection and installation of a permanent mining exhibit in the State Exposition Building at Los Angeles. Address State Exposition Building, Los Angeles.

Ralph Countryman, '11, is surveying and making a geological map of the Spread Eagle Mine, a group of fifty claims recently acquired by the Mammoth

Copper Co., Cal.
N. J. Lund, '11, was married on Dec. 15th, to

Miss Gladys Peterson of Berkeley. He is now manager of the Central Creamery Co.'s plant at Cambria, Cal.

Fred C. Tickell '11 is in the Mineralogy De-

Fred G. Tickell, '11, is in the Mineralogy Department at U. of C.

Ernst E. Behr, '11, is in business in Los Angeles

—The Spaulding Co.

Harry Coles, '13, is in the Valuation Department of the Pacific Tel. and Tel. Co., S. F.

"Tucky" Taliaferro, '13, is Assistant in the Geology Department at this university.

Frank Hudson, '11, is still putting in his time as

geologist for the S. P. R. R. Co. Address: Derby St., Berkeley, Cal.

Dr. Geo. D. Louderback, U. of Cal., '96, is Associate Professor of Geology at the University of California, vice president of the Pacific Scientific Society, and secretary of the Geological Society.

"Fritz" Davis, '12, is giving several courses at

this university in the Geology Department. Geo. B. Dillingham, '11, is General Manager for

Geo. B. Dillingham, '11, is General Manager for the San Vicente Mining Co., San Vicente, Sinaloa, Mex.

W. L. Moody, '11, is geologist for the Southern

Pacific R. R. Co., Flood Bldg., San Francisco.
G. C. Gester, '08, and S. H. Gester, '12, are also

G. C. Gester, '08, and S. H. Gester, '12, are also geologists for the above company.

"Reg" Stoner, '12, is assistant geologist for the Standard Oil Co., at Bakersfield, Cal. Address is 602 Standard Oil Bldg., S. F.

Geo. D. Smith, Jr., '11, married Eleanor G. Hart of Berkeley, November 11th; their home is in Carson, Nevada. ZETA CHAPTER. Established April 17, 1912. University of Kansas, Lawrence, Kansas.

By RICHARD L. TEMPLIN, '15, Associate Editor.

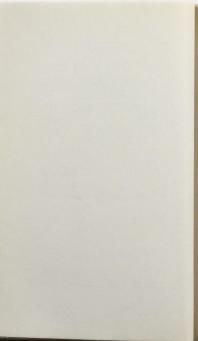
ETA Chapter extends the sincerest of greetings to all Brothers of Theta Tau and wishes them the best of success for the coming year. The present year has been a prosperous one for this chapter. We now have twenty-three active members and two pledges. In the middle of the second semester last spring (1913), the following men were initiated: F. L. Nutting, L. H. Dodd, J. O. Moffett and Malcolm Mc-Cune. At the first of the year two more were initiated, N. W. Brown and C. T. Geiger. Following the mid-year examinations the following men were initiated; J. L. Hunt, W. A. Burton, O. A. Dingman, D. E. Ackers, R. L. Templin, Alfred Harris, E. T. Newcomer and C. J. Painter. H. E. Wheelock and C. L. Van Detrib being belegies at present.

All the members of Zeta Chapter take an active part in the school life and are not lacking in school honors. Ackers is on the Engineers' Dance Committee, Brown is treasurer of the Engineering school and was just elected to the senior honorary society known as Skull and K, Burton is a star foothall player and was chosen as tackle on the all Missouring school and a member of Skull and K, also is engineering editor of the Kansas Jayhawker or school annual, Dodd is president of the Men's Student Kinnear is a member of the Ara and Skull and Kinnear is a member of the Ara and Skull and the Missouries of the Sachens, an honorary senior society, and was in the senior play: be is also fraternive editor society.



ZETA CHAPTER 1913-14.

Painter Ackers Butler Fairchild Kinnear Burton Newcomer Nutting Brown Dodd Parker Prof. Rice, Angevine Murphy Painter Dingman Hunt Geiger McCane Tempin Seger Wheelock Harris Biss



of the Jayhawker. Murphy was Student's Day speaker for the Engineers. Carl Painter is a member of the Glee Club and Skull and K. Charles Painter is on the varsity base ball team. James Parker is a varsity football man and a member of the Sachems.

Angevine is chairman of the Mechanical Engineering Society. Fairchilds is member of the Skull and K.

The graduates of last year were R. J. Bodman, Chas. M. Coats, H. H. Campion, R. N. Hoffman, W. F. Price, B. A. Ruth, R. B. Ward, and E. A. Van Houten. The following men did not return to school this year, but we hope to have them with us next year: C. B. Hostetler, J. O. Moffett and C. W. Tholen.

One of Zeta's favorite ways of getting in touch with the engineering school and faculty is to give informal smokers and invite the faculty and possible initiates. These smokers have done much toward a closer relationship and better understanding between the school and Zeta chapter, both of whom are thereby aided. The first of the smokers was given in December at the Sigma Alpha Epsilon House. A large number of men including faculty members and Dean of the school, were present. Informal talks were given and light refreshments served. The second smoker was held in April. The whole faculty were invited and talks concerning the advancement of closer relationship between instructors and students, and Engineer's Day were given by both Brothers and faculty members.

It now seems a surety that Zeta chapter will have a house of its own next year. Owing to our large percentage of other fraternity members we have heretofore been unable to have a house, but now we

have enough men willing to go into a house, so hope to have a permanent home here next year.

Last fall Bro. Rice entertained the chapter most royally with a delightful dimer at his home. At this dinner was Bro. R. I. Parker of the Executive Council. One of the greatest events of the year was our Founder's Day banquet commemorating the founding of Zeta chapter. The banquet was held at the Eldridge House and was attended by all members with Bro. Rice as toastmaster.

Following this were talks and toasts, then a hearty goodnight.

Zeta chapter has regular meeting every two weeks at the various fraternity houses. At the meetings a regular routine business is first gone through, then follows a technical talk and paper. The talks are by our experienced men on work they have done, and the papers are prepared by men who have posted themselves on the given subjects. After the papers a general discussion of momentous affairs and facts of general interest, is held. Following this comes the adjournment to "eats" at the College Inn.

Our new officers for the next half year are Bro. F. L. Nutting, Regent; Bro. Malcolm McCune, Vice Regent; Bro. R. L. Templin, Scribe; Bro. J. L. Bliss, Treasurer; Bro. Carl Painter, Corresponding Secretary.

The following alumni have visited us during the year: Bros J. P. Boesche, H. H. Campion, F. E. Johnson, J. O. Moffett, R. I. Parker, C. W. Tholen and R. B. Ward. It is a hope of some of our members to meet distant Brothers at San Francisco in 1915. Wishing the Brothers of Theta Tau the best of success we solicit your further correspondence.

ZETA CHAPTER.

Prof. H. A. Rice, U. of Kansas, Lawrence, Kansas.

ZETA ALUMNI PERSONALS.

Oliver L. Andrews, '12, is with the Detroit Copper Co., Morenci, Ariz. John P. Boesche, '12, is with the division engin-

eer of the A. T. & S. F. R. R. at Chanute, Kans.

Russell J. Bodman, '12, is a bridge draftsman with the L. S. & M. S. R. R., at 9289 Hough Court, Cleveland, O.

H. H. Campion, '13, is with the Westinghouse Electric Co., his address is 419 Ross Ave., Wilkinsburg, Pa.

R. N. Hoffman, '13, is with a copper mining company at Chiquiacamata, Chile, (via Antofogasta).

C. B. Hostetler, '14, is with a mining company at Morenci, Ariz. F. E. Johnston, '12, is at 1001 N. 6th St., Ft.

Smith, Ark.

A. H. Mangelsdorf, '12, is with a mining company at Morenci, Ariz.

J. O. Moffett, '14, is engaged in concrete construction work in St. Louis, Mo. His address is 1527 Minerva Ave.

R. I. Parker, '12, is with the General Electric Co. His address is 10 Washington St., Schenectady, N. Y. Wm. F. Price, '13, is in the signal department of the A. T. & S. F. R. R. His address is 123 E. Tenth

St., Topeka, Kan.
H. H. Staley, '14, finished school in the middle of the year and is now at his home in Richmond, Kansas.

Chas. W. Tholne, '14, has been transferred from Kansas City to 428 Linden St., Camden, N. J., where he is with an engineering company.

R. B. Ward, '13, is engaged in irrigation work at Nampa, Idaho.

Chas. M. Coats, '13, is with a mining company at Jerome, Ariz.

H. A. Rice, is now head of the Dept. of Mathematics in the U. of Kansas; he was recently elected President of the Kansas Engineering Society, a state organization.





EDWIN A. VAN HOUTEN.

Zeta Chapter,
1889-1914.

EDWIN A. VAN HOUTEN.

1889-1914.

The members of Theta Tau were terribly shocked by the news of the sudden death of Brother Edwin A. Van Houten, who died at Chicago the morning of February 6th, 1914, following an operation for appendicitis. Brother Van Houten's brilliant record in Zeta chapter and in the University was still fresh in our minds. He graduated with high honors last June and was entering upon a career that promised to bring much honor to the fraternity.

Edwin A. Van Houten was born at Topeka, Kan-

sas, Jan. 2, 1889. He graduated from the public schools of that city and entered the University of Kansas in the fall of 1909. He was initiated into the fratternity on April 17, 1912, and was always a strong and tireless worker for the best interests of Theta Tau.

In college activities Brother Van Houten was unusually prominent. During his four years at the University he served as secretary of the engineering school, president of the Student branch of the American Society of Mechanical Engineers, chairman of the junior social committee. He was a member of the Good Government Club, the Friars, the Senior Society of Sachems, the Phi Kappa Pši fraternity, and Sigma Xi, the honorary scientific fraternity.

HERBERT L. WILSON.

1890-1913.

Herbert L. Wilson was born at Lyndon, Kanasa, Nov. 9, 1890. At this place he attended the public schools and after graduation therefrom he entered the University of Kanasa in the fall of 1908. He was one of the charter members of Zeta Chapter and while being of a retiring disposition was very much liked by all who knew him. He was a very good student, was a member of the honorary scientific society Sigma Xi, and gave every promise of becoming one of the foremost engineers. He received his degree of B. S. in June, 1912, after which he went to work for the A. T. & S. F. R. R.

He died in August, 1913, while working for the Santa Fe, and was buried at Lyndon, Kansas.





Jean Baird Bannster Dean Reber DeFermery Worthington McEnary Snow Alexander Lord O'Donnell Lord Jerome Sutherk

ETA CHAPTER. Established March 23, 1912. Massachusetts Institute of Technology

Boston, Mass.
By Habold Worthington, '14, Associate Editor.

T IS with greatest pleasure that we welcome this opportunity of greeting our brothers in Theta Tau.

Eta Chapter has nothing but good news to tell.

The Spring initiation and banquet took place April

14th. Four men were taken in from 1915 and four from 1916. These with the six men initiated in the Fall brought our active membership up to thirty-six.

Professor Harrison W. Smith became our first honorary member. He is a graduate of Harvard and M. I. T., a man of wide interests and cultivation, being a member of the electrical faculty of the Institute and an extensive traveler in the unexplored countries of the world. Tales of his experiences with the natives of Borneo are intensely interesting, as are also many trophies that he has brought from there.

Of the new men taken in this year, Camp and Worthington are graduates of Yale, 1912, and Beaton

and O'Donnell of Princeton, 1913.

Theta Tau has been very active in college life. We have six men in Osiris, the senior honorary society; and four on the Institute Committee, the undergraduate governing body of the Institute. We have two members on the board of Technique, the annual publication; the president of the Mining Society; threamanger of the Waller Chlo. In athletics we have two men on the wrestling team which has not been two men on the wrestling team which has not been beaten for two years, and this year won the New Eng-

land championship; the captains of next year's track and hockey teams; the manager of the track team this year and several men on the team.

The business meetings have been held at 97 St. Stephens St., and the dinners, which take place every three weeks, at the Hotel Westminster. At the dinners papers on the following subjects have been read:

Submarine Construction. Wireless Telegraphy.

Lighthouse Construction. The National Road.

On March 19th Regent Fiske gave a dance to the members of Theta Tau at his home in Auborndale. The brothers turned out in force each bringing a more beautiful girl than the last. Professor Smith was an interested member of the party. He was heard to remark that the last time he had danced was when he gave an exhibition of the several dances before a large gathering of savages in one of the South Sea Islands. We imagine that he got many new ideas and would now be able to beat the heathens at their own game. The evening was a great success.

On account of the uncertain state of affairs at the Lustitute due to the fact that it is going to move to Cambridge in a year or two, no definite arrangements have been made to procure quarters. We hope for permanent quaters when once we get to the other side of the river.

Many of us hope to be in "SAN FRANCISCO IN 1915," and there get to know the brothers personally. Until then we wish you the best of luck and success.

ETA.

Harold Worthington, 91 Westland Ave., Boston, Mass. THETA CHAPTER. Established May 7, 1914. Columbia University New York, N. Y.

Theta Chapter, chartered May 7th, just as The Gear goes to press, is composed of fifteen members of the Senior Mining Society and students of the Department of Mining and Metallurgy,

I. W. Hadsell is captain of the Varsity crew, and

chairman of the Class Dinner Committee.

T. H. Barrett is captain of the Varsity swimming team. H. E. Bird is class secretary and was elected to

Tau Beta Pi. C. M. Brister earned his B. S. at Virginia Mili-

tary Institute in 1911. D. G. Campbell is a member of Tau Beta Pi,

Sigma Xi and the Varsity hockey squad. W. W. Colguhoun, a member of Tau Beta Pi, is captain of the Varsity soccer team and chairman of the Honor System committee.

L. V. Lee has been identified with several varsity organizations including the Show Cast, Show Chorus

and Players Club.

C. F. MacCarthy has been a member of the crews, the Class Dinner committees and chairman of the rules committee. He is chairman of the Board of Student Representatives and Y. M. C. A. recorder.

I. S. Miller, oarsman, was also on the Sophomore

Dinner Committee.

G. S. Patterson, member of Tau Beta Pi, was on the Varsity wrestling team two years and is vice-president of the class.

J. W. Pulleyn has many honors including membership in the crews, swimming team, finance committee, class book committee, dinner committee and Senior Society of Nacoms.

C. B. Sadtler, Tau Beta Pi member, is president of the Mining and Metallurgical Society and belongs

to the Varsity wrestling team.

E. I. Williams, a member of Tau Beta Pi, was on the Varsity crew, the Board of Student Representatives and was leader of the Glee Club.

R. U. Wood, for two years the coxwain of the Varsity crew, was manager of the University trophy

room also.

S. E. Woodworth belonged to the Glee Club three years and is a member of Notes and Keys. We will look forward to the publication of the

first Chapter Letter and picture of our youngest chapter with great interest.

Address: Ernest Klepetko. 614 W. 113th St.,

N. Y. N. V.

N. I., IV. I.

SOUTHWESTERN ALUMNI ASSOCIATION. Established Dec. 24, 1998

At Douglas, Arizona.

INCE our last letter, the Southwestern bunch has had a good rousing meeting. The meeting was held in Phoenix during the state fair Nov. 6 and 7, and was a great success due to the hard and enthusiastic work of Bro. Kumke with

the assistance of Bros. Koontz and Pickard.

The following brothers were present: Bros. C. A. Kumle, K. K. Koott, B. O. Pickard, W. De Camp, R. B. Phillips, W. G. Sweeney, G. D. Elloxt, A. H. Manglesdorf, and A. L. Ferris. The officers elected for the following year were: President, A. L. Ferris: secretary and treasurer, A. H. Manglesdorf. Since the meeting Bro. Manglesdorf has left the Southwest and the work of the secretary and treasurer turned over to Bro. Ferris.

At the meeting fraternal matters were discussed and Bro. Kumke elected as a delegate to the next national convention. On the evening of Nov. 6 a dinner party was held at the Adams hotel and here some of the newer members first heard some of the famous

stories of Bro. Kumke.

The next meeting will probably be held in the Clifton-Morenci district and it is hoped that as large and enthusiastic a bunch will get together as was at Phoenix.

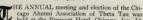
In order to keep in touch with all Theta Tau men in the Southwest, the secretary would appreciate very much if all the chapters would inform him when any of their men leave for here or Mexico.

SOUTHWESTERN ALUMNI ASSOCIATION.

A. L. Ferris, Engr. Shannon Mine, Metcalf, Ariz.

CHICAGO ALUMNI ASSOCIATION

Established 1910. Chicago, Ill.



cago Alumni Association of Theta Tau was held at the Breevort Hotel, Chicago, Jan. 3d, The following members were represented in per-

son or by proxy: G. A. Anderson, J. B. Armitage, J. A. Barr, C. B. Cameron, J. M. Crabb, D. Dyrenforth, E. P. Luce, B. H. McLachlan, W. T. McNabb. C. D. Peacock, C. F. Schaber, L. C. Schlotter, C. G. Sheldon, J. E. Thoms, H. H. Hopkins Jr., J. F. Simpson and P. P. Furber.

The following officers were elected for the year

-								
	H.	H.	Hopkins	Jr.,				President
			Simpson,					Secretary
	P.	P.	Furber.					Treasurer

CHICAGO ALUMNI ASSOCIATION.

H. H. Hopkins Jr., 164 N. Dearborn St., Chicago, Ill.

TWIN CITY ALUMNI ASSOCIATION.

Established Feb. 3, 1912. Minneapolis, Minnesota

HE Twin City Alumni Association of Theta Tau sends greetings and best wishes through this letter to *The Gear*, to all the brothers in Theta Tau.

The executive committee of our Association has been much gratified by the interest that has been shown in the work the past season and the apparent enthusiasm with which the meetings have been attended.

The first meeting of the season was held at the Minneapolis University Club, a program of the work blocked out, and officers elected as follows:

Walter H. Wheeler, President
Jack E. Haynes, Vice-President
Arthur Larkin, Treasurer
Paul A. Johnson, Secretary

To facilitate matters an executive committee was appointed which met from time to time to arrange the details. It was decided to hold the meetings in the business district of the city, at the various offices of the members, and to precede the regular meetings by a dinner and social hour. This plan has seemed effective in bringing up the attendance and stimulating inconsistent of the second o

Only one paper has been read at each meeting, and the committee has aimed to have each a carefully

prepared and finished work. The papers have required from one to one and one-half hours each to present, and in several instances have been illustrated by lantern slides. A list of the papers with the names of the writers follows: Picturesque Yellowstone Park and Its Geology.

Picturesque Yellowstone Park and Its Geology Illustrated.—Iack E. Havnes, Alpha '08.

Logging and the Manufacture of Lumber, Illus-

Logging and the Manufacture of Lumber, Illustrated.—Arthur E. Larkin, Alpha '08.

The Construction and Management of Office

Buildings.—John W. Adams, Alpha '11.
The Concentration of Iron Ores.—Neil S. Kings-

ley, Alpha '11.

On the Curriculum of Engineering Colleges.— Wm. F. Holman, Ph. D.

It is our hope and aim to continually raise our standards and thus increase our membership and interest. We are confident if the Alumni learn to appreciate the great benefits they can derive from attendance at and participation in our Association meetings. there will be not only keen interest in the meetings. but active competition among the members for opportunities to take part in the literary and other work. We know of no other similar organizations that hold out to their members better advantages for general education and broadening knowledge than do Theta Tau Alumni associations, particularly those situated in the large cities of the country, if properly developed. To substantiate this statement we refer to our literary program for the current year and the subjects included therein, presented by men of knowledge, expert in the lines covered.

TWIN CITY ALUMNI ASSOCIATION, Walter H. Wheeler, 822 Palace Bldg., Minneapolis, Minn.

CLEVELAND ALUMNI ASSOCIATION. Established Oct. 15, 1912

Cleveland, Ohio.

ZITHOUGH the Cleveland Alumni Association is the youngest of the associations it has accomplished many important things this past year for the advancement of Delta, and the true spirit of Theta Tau.

We ventured to back the new house project of the active chapter. It did not take long to show what could be accomplished with a little encouragement and support. We now feel that the more we can do for the

chapter the stronger both of us will become.

The regular monthly meetings are well attended;
and we always have some stray alumnus who drops in

and we always have some stray alumnus who drops in from some nearby city or town.

It is a pleasure to visit the Chapter House most

any time and go back to those good old days recalled by listening to the tales of woe or gladness.

The spirit that prevails there now was never before so well shown. It existed but was not aroused.
The chapter, of which the alumni now feel themselves
a part has made remarkable strides. This has been
an incentive to us to get busy and help boost as never
before, everything connected with Theta Tau.

Our circular letter to the alumni has been delaved

Our circular letter to the alumni has been delayed but is now on its way and we hope the delay will be

compensated by the news it contains.

We hope the success this past year will be felt by all those interested in Theta Tau. We are aroused to go after greater things this coming year. We hope that all the chapters and alumni associations may have success, and that this year's publication will be a record breaker.

CLEVELAND ALUMNI ASSOCIATION,

O. C. Budde, Compton Rd. Cleveland Heights, Fairmount, Ohio.

DIRECTORY	
	DELTA
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	ALPHA
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425 Dayton Ave., St. Paul, Minn. Chief Engr. Liberty Bell Mine, Telluride, C	olo
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Engr. Oliver Iron Mining Co., Duluth, N	linn.
201 Wolvin Bldg. Duluth, Minn.	-
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Psi Upsilon.	
Barnesville, Minn.	
Lake Superior Paper Co., Ltd., Sault S	ste Marie,
Ont., Can.	DELTA
BADGER, ALLEN CARL Student	DELTA
Tau Beta Pi.	
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Alpha Delta Phi.	
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BALLARD, JOHN IRWIN B. S., E. M. '10	BETA
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Rata Theta Pi	
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Nor Machinery Co.	D
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Engr. International Agricultural Corp.,	Mt. Pleas-
ant, Tenn. BARRETT, THEODORE H.	
BARRETT, THEODORE H.	THETA
Delta Upsilon.	
Richmond Hill, N. Y.	

52	THE GEAR	
BAI	Care of J. E. Bartlett, Jackson, Mich. Contr., Virginia, Minn.	. '04 Вета
BAT	SON, CHARLES DREWRY C. E. '07 Beta Theta Pi. 912 Goodrich Ave., S. Paul, Minn.	Ацриа
BEA	Mgr. Republic Creosoting Co., Mobile, CH. GEORGE ALBERT '14 Sigma Alpha Epsilon. Ft. Collins, Colo.	ETA
ВЕН	RR, ERNST EDWARD B. S. '10 Beta Theta Pi, Mim Kaph Mim. 295 W. Cal. St., Pasadena, Cal. The Spaulding Co., Los Angeles, Cal.	Epsilon
	SON, ANTHONY FREDERICK E. M. '03	BETA
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BER	YOUSKY, THEODORE D. E. M. '09 Del Norte, Colo. Supt. N. S. Min. & Red. Co., Amado, A	GAMMA riz.
BEV	ER, CLARENCE ALFRED B. S. '13 1796 W. 57th St., Cleveland, O. Otis Steel Co., Cleveland.	DELTA
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BIRE	Box 366, Ely, Nev. O, HENRY E. Phi Kappa Psi.	Тнета
Bisi	Mount Vernon, N. Y. AND, JOHN BROWNSON Sigma Alpha Epsilon.	GAMMA
BLA	Lead, S. Dak. CKMAR, DON C. '12 Charlotte, Mich.	Вета
	Asst. Chief. Engr. Magma Cop. Co., Sup	erior, Ariz.

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Penn. R. R. Co., Philadelphia. BROWN, WALTER REGINALD E. M. '10 Sigma Alpha Epsilon, Tau Beta Pi.	GAMMA
Chief Engr. Nevada Consol, Copper Nev.	Co., Ruth

BRYAN, RUSSELL R. E. Met. '08 GAMMA Kappa Sigma. Hotchkiss, Colo. Chief Chemist, Utah Copper Co., Garfield, Utah. BUCK, FREDERICK WILLIAM M. E. '09 ALPHA Phi Kappa Psi, Tau Beta Pi, Sigma Xi. 1621 E. Superior St. Real Estate, Stryker Manley & Buck, Duluth. Minn. BUDDE, OTTO CARL B. S. '12 DELTA Compton Rd., Clev. Heights, Cleveland, O. Teacher, East High School, Cleveland, O. BUDDLE, GEOFFREY ARMSTRONG '12 EPSILON Tau Beta Pi, Sigma Xi.

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CAMPBELL, DONALD G. Sigma Xi, Tau Beta Pi. Atlanta, Idaho.	Тнета
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CAMPION, HENRY H. B. S. '13 Beta Theta Pi, Skull & K. Westinghouse Elect. Co., Wilkinsburg,	ZETA
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Theta Tau House, Houghton, Mich. CARPENTER, P. H. E. M. '10 Phi Delta Theta, Tau Beta Pi. Sharron, Pa. McGill, Nevada.	GAMMA
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Cashier, Fruit Growers Bank, Payette, Id	laho.

56	THE	GEAR	
CHAPMAN, Chi	WENDELL P. Rho Theta. len City, Minn.	Student	Ацриа
703	4th St. S. E., M	inneapolis. M	inn
CHESBRO,	IVAN A. Stud	ent	BETA
Tau	HARRY DEV		DELTA
CLAPP, LE	N. Main St., Ja ROY P. E. M la Alpha Epsilos I. Zinc Co., Bro	. '08	Gамма
CLARKE, JO	OHN CARLYLE wille, N. Y.		BETA
CLEVELAND		Minneapolis.	Minn. ALPHA
COATS, CH.	ARLES M. B. S. Evergreen, C. ded Verde Co., J.	S. '13	ZETA
COBBAN, R Tau Luve	OLLO E. E. 'O Beta Pi. rne, Minn.	9	Ацриа
Wes	tinghouse E. &	M. Co., But	
257 (RRY LEEDS B. Castro St., San I Tel. & Tel. Co.	Francisco, Ca	Epsilon
COLLER, W	ALTER A. Str Ashland Ave., S	ident	ALPHA
COLLIER, L Tau	LOYD ALBERT Beta Pi.	Student	DELTA
COLLINS, C	E. 93d St., Cleve EEORGE M. B. Beta Pi. Gatos, Cal.	S. '11	Epsilon
Colquidu	V, W. W.		Тнета
Tau	bridge Wells, E MES A. '15 Beta Pi.	ngland.	Ацрна
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COOK. WALLACE RONALD F. M '10	BETA
Phi Kappa Sigma, Tau Beta Pi.	DETA
Asst. Supt. Castile Mining Co. Wakef	ield Mich
Asst. Supt. Castile Mining Co., Wakefi COPELAND, CLARENCE E. E. M. '13	GAMMA
Beta Theta Pi, Tau Beta Pi.	GAMMA
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B. C. Can.	ma beach,
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nett. Cal.	Co., Ken-
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Chi Psi.	ALPHA
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Draft, City Engr. Off., Detroit, Mich.	
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Changan St., Toledo, O.	BETA
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311 E. "C St., Iron Mt., Mich.	
Engr. Inspiration Cons. Copper Co., Mis	
CRUTCHER, E. R. Student	GAMMA
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CURTIS, BENJAMIN JOHN B. S. '13	ALPHA
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Fairmont, Minn.	0
CURTIS, LEROY PERCY E. M. '08	GAMMA
Kappa Sigma.	
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Supt. Mosida Fruit Lands Co., Provo, Ut	ah.

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Sigma Phi Epsilon. Anaheim, Cal.

GAMMA

EPSILON

DIEMER, CLARENCE PETER Student TAB BETA	THE GEAR	59
DILLINGHAM, GEORGE BURGER B. S. 10 EPSILON Phi Delta Theta, Gen. Mgr. San Vicente Mining Co., 812 Crocker Gen. Mgr. San Vicente Mining Co., 812 Crocker 10 Co., 812 Crocker Gen. Mgr. San Vicente Mining Co., 812 Crocker Gen. Mgr. Co. S. 11 Crocker Gen. Mgr. Co. S. 11 Crocker Gen. Mgr. Co. S. Mgr	Tau Beta Pi.	DELTA
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BIOG, San Francisco, Cal. BIOG, San Francisco, Cal. DITTUS, EUWARD J. E. Met. 11 GAMMA DITTUS, EUWARD J. E. Met. 11 GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA GAMMA	DILLINGHAM, GEORGE BURGER B. S. 10	EPSILON
3996 Manheim Rd, Kanasa City, Mo. DITUS, EDWARD J. E. Met. "11 GAMMA DITUS, EDWARD J. E. Met. "11 GAMMA DITUS, EDWARD J. E. Met. "11 GAMMA DITUS, EDWARD J. E. Met. "12 GAMMA DIORO, LESLIE H. "14 ZETA LARGON, KARBAS. DOGG, JR., DAVID C. "15 GAMMA BEAT EAST. BEAT EAST. DOFF, J. LAWRENCE STUDENT SIGNA AJPHA ESSION. DORN, WILLIAM C. E. M. "11 GAMMA DUCLAS, WILLIAM C. E. M. "11 GAMMA SIGNA AJPHA ESSION. DUCLAS, WILLIAM C. E. M. "11 GAMMA DUCLAS, WILLIAM C. E. M. "11 GAMMA DUCLAS, WILLIAM C. E. M. "10 JETA HUBBING, MINN. SUPL. BERNET LIER B. S. E. M. "06 BEAT HUBBING, MINN. SUPL. BERNET LIER B. S. E. M. "10 DUNCAN, KONNETT J. E. M. "10 TAIN BEAT ST. 800 4th St. S. E. Minneapolis, Minn. BOUNCAN, KONNETT J. E. M. "10 TAIN BEAT ST. 800 4th St. S. E. Minneapolis, Minn. Representing R. R., Witherside's Ming. Interests, Representing R. R., Witherside's Ming. Interests, DUNLIAM ROY OWEN. STUDENT	Gen. Mgr. San Vicente Mining Co., 81 Bldg., San Francisco, Cal.	2 Crocker
Phi Kappa Phi. Instructor Colo. School of Miner; Asst. Mgr. C. S. Instructor Colo. School of Miner; Asst. Mgr. C. S. DOBSOBORY COLOR OF CO	DINGMAN, OSCAR ALDRICH '14 3926 Manheim Rd., Kansas City, Mo.	ZETA
Instructor Colo, School of Mines; Asst. Mgr. C. S. M. Test Plant, Golden, Ch. Dorson, Deldos I. '16 33 Colo, Ave., Detroit, Mich. Dogo, Leslie H. '14 Zeta Dogo, Leslie H. '14 Zeta Dogo, Leslie H. '14 Zeta Dogo, Leslie H. '14 Golden, Colo, Dope, J. Lawrence '15 Godden, Colo, Dope, J. Lawrence Student Sigma Alpha Egalon, Wise, Dogo, William Ripery Student Chi Pji, Mu Phi Delta, Dogo Lincoln Ave., St. Paul, Minn. Douclas, William C. E. M. '11 Gommon Chi Pji, Mu Phi Delta, DOUNING, Robert Lee B. S. E. M. '06 Hibbing, Minn. Supt. Bennett Mine, Keewatin, Minn. Drake, Morris Clarker Student Duncan, Kennett Mine, Keewatin, Minn. Drake, Morris Clarker Student Duncan, Kennett Mine, Keewatin, Minn. Brake, Morris Clarker Student Duncan, Kennett Mine, Keewatin, Minn. Brake, Morris Clarker Student Les Beta Duncan, Kennett Mine, Keewatin, Minn. Brake, Morris Clarker Student Les Beta Duncan, Kennett Mine, Keewatin, Minn. Brake, Morris Clarker Student Les Beta Duncan, Kennett Mine, Keewatin, Minn. Brake, Morris Clarker Student Les Beta Duncan, Kennett Mine, Keewatin, Minn. Brake, Morris Clarker Student Les Beta Duncan, Kennett Mine, Keewatin, Minn. Brake, Morris Clarker Student Les Beta Le	DITTUS, EDWARD J. E. Met. '11	GAMMA
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EATON, A	RTHUR B. S. '13	EPSILON
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HICKS, LUTHER REUBEN '13	BETA
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