

THE GEAR  
of THETA TAU



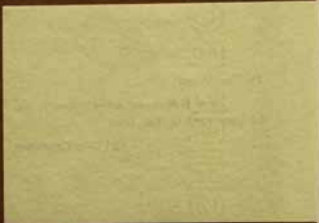
1911



To The Alumni:-

Send \$1.00 to your active chapter to pay  
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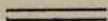
1911 Gear Committee.



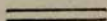




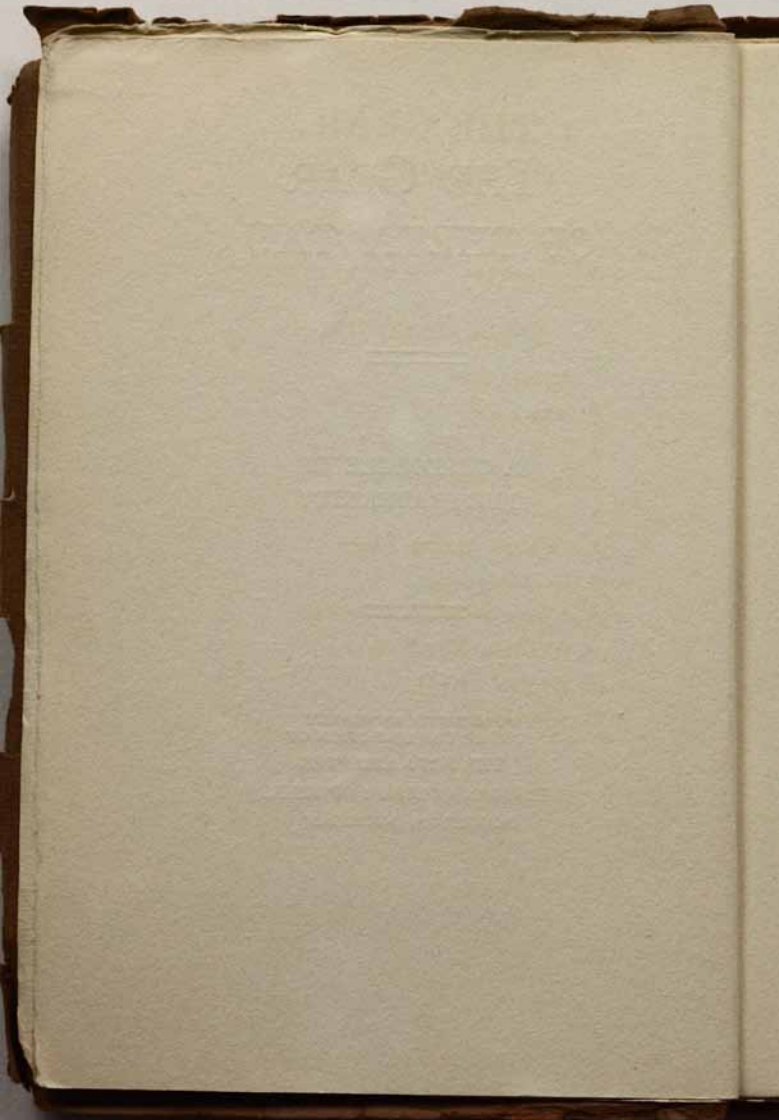
# THE GEAR OF THETA TAU



A CHRONICLE OF  
THE FRATERNITY



PUBLISHED ANNUALLY  
UNDER THE DIRECTION OF  
THE BETA CHAPTER  
MICHIGAN COLLEGE OF MINES  
HOUGHTON, MICHIGAN





# THE GEAR OF THETA TAU

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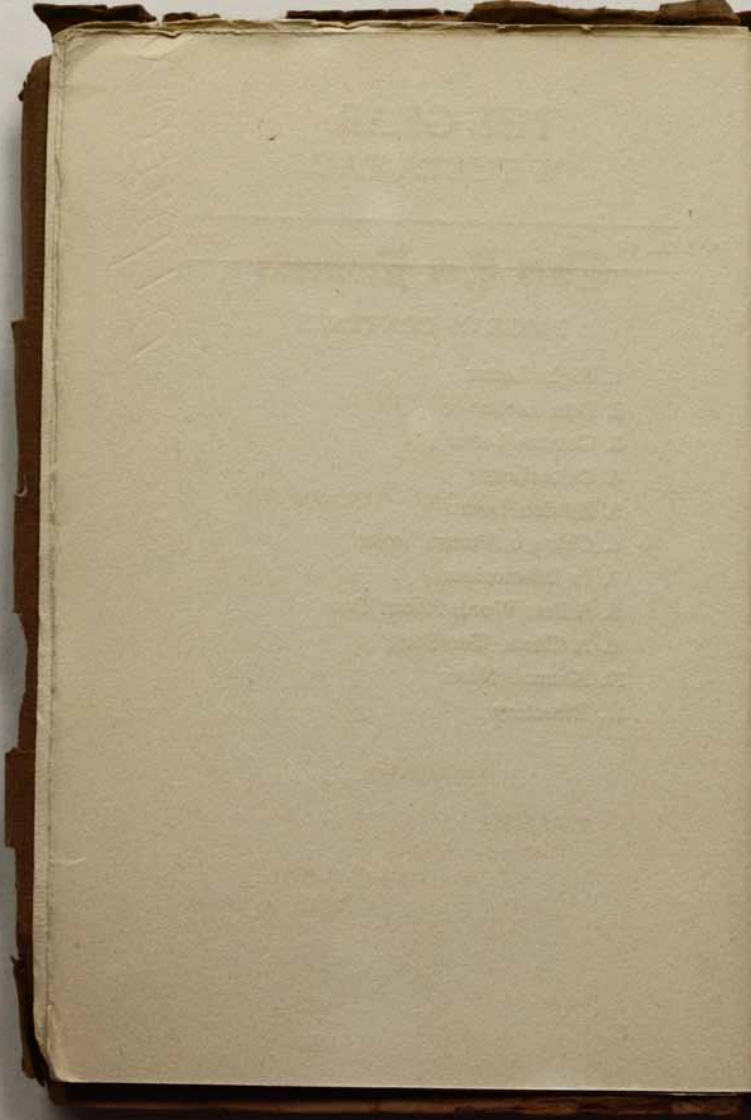
VOL. IV

1911

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# Theta Tau Fraternity

FOUNDED  
AT  
UNIVERSITY OF MINNESOTA

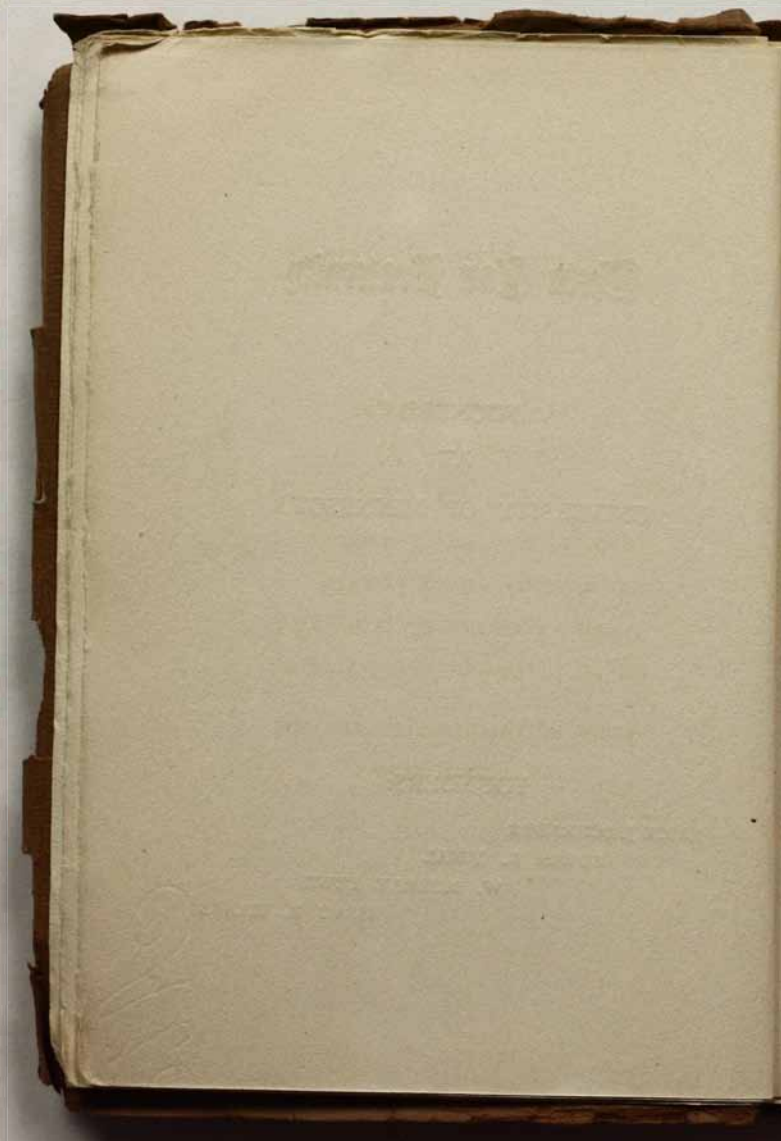
## FOUNDERS:

ERICK J. SCHRADER

EDWIN L. VINAL

W. MURRAY LEWIS

ISSAC B. HANKS



GRAND OFFICERS  
OF THETA TAU

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GRAND REGENT, ERIC J. SCHRADER

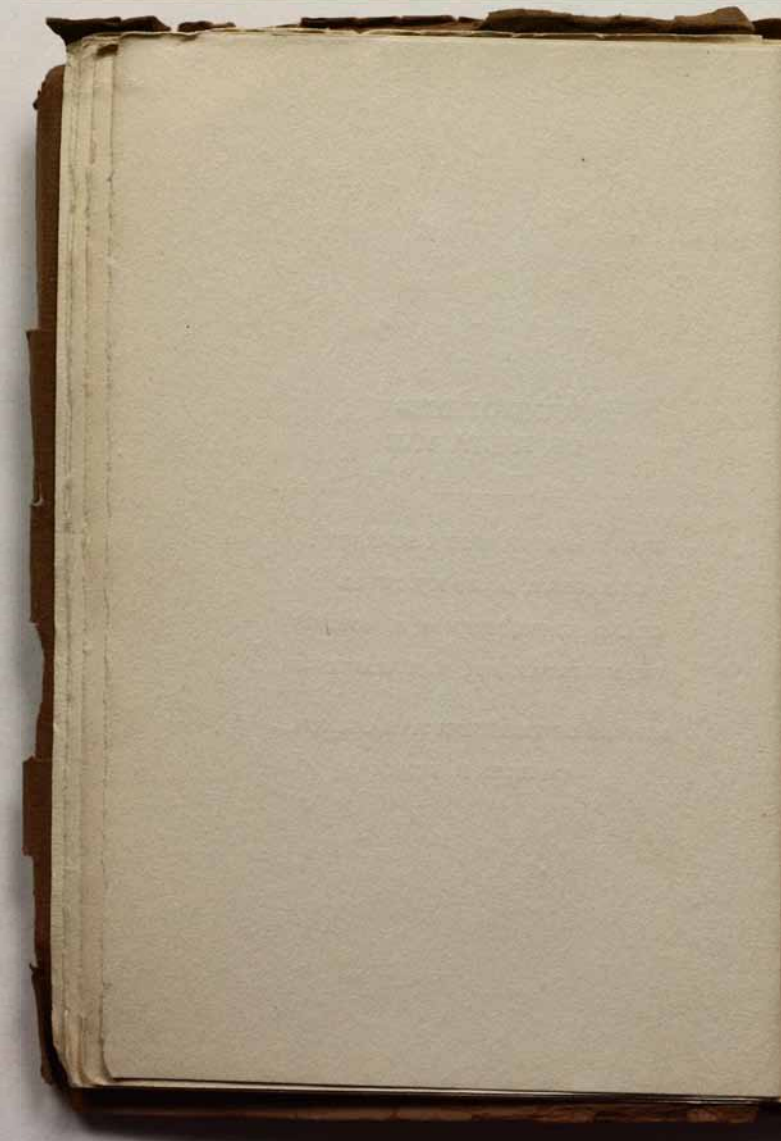
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## THE ALPHA CHAPTER

Brodie	McEnary	Fields	Adams	Sawyer	Quinn	Milne
Prouty	Curtiss	Bush	Lewis	Abbott	Haglin	Ellstrom
Kasper	Johnson	Jones	Sneve	Hill	Riegal	Hurley



## THE ALPHA CHAPTER

### UNIVERSITY OF MINNESOTA

Dear Brothers:—

Alpha wishes to take this opportunity to express to her sister chapters her appreciation of the work they have been doing in the past year for Theta Tau. To Beta belongs a great deal of credit for her work on the GEAR both for this year and the preceeding issues. The publication of such a book must require a great deal of time and energy and judging from past issues we know that the 1911 GEAR will be one of which we may all be proud.

To members of Theta Tau this year has been one which will long be remembered. Those of us who were fortunate enough to be able to attend the First National Convention of our Fraternity, to talk and study together concerning her welfare and the problems that are confronting her cannot but feel the added zeal and enthusiasm which such a meeting must bring. We of Alpha feel that we know our sister chapters better than ever before. During the last few months we have been brought closely in touch with our Brothers of Gamma and Beta. Consulting with each other, outlining and planning for the future of Theta Tau; listening to the advice and counsel of our beloved President whose keen mind and strong hand have led us safely through the early years of our existence, have made us realize as never before the common purpose for which we all are striving and they are the deep-seated principles of Theta Tau.

Although at the present it takes a good imagination to see Alpha's new house, yet it is quite possible that next year will find us comfortably situated. During

the past year, we have been holding our meetings in the various Academic Fraternity Houses so that we have not wanted for a good place to meet. After the business session a lunch is always served. "Kap" or Jack Adams then beats the music box to the tune of "Every Little Movement". The gang gathers around and we sing the old songs until at a late hour we wend our way homeward(?).

After our Spring rushing party held last April, six fine men were pledged and on April 22nd at the S. A. E. House the following candidates were initiated into the mysteries of Theta Tau: Jack Hurley, A. E. Elfstrum, Louis F. Riegal, James S. Brodie and Herald Wasson. On May 6th Roswell W. Prouty was admitted to membership.

From this time to the end of the year "Study and Grind" seemed to be our motto and most of our time was spent preparing to meet those dreaded finals. However before the men disbanded for the summer a farewell party was held at the Kaiserhof in honor of our graduating Brothers who were soon to leave us to swell the list of our loyal alumni.

The first meeting of the new year was held at the Chi Psi House. Nineteen old men were found to have returned to the fold, our first efforts were naturally directed toward rushing and the evening of October 6th found twelve promising young engineers entering into the fun of a rousing old HAMMER AND TONGS rushing party. From these the following young men were pledged and afterwards initiated: Charles Haglin, Howard Fields, Max Quinn, John Lewis, Dale McEnary and Rufus Milne.

During the third week in November we enjoyed a short visit from Brother Klepetko of Beta. Brother Klepetko is for HAMMER AND TONGS every day in the week, and we only wish that his stay could have been

longer. After a short business session held at the Chi Psi on February 2nd, Brother "May" Fields told us of his adventures in South America. Brother Fields after taking his freshmen year in Civil Engineering at Minnesota went to Cerro de Pasco, Peru, where he remained for two years in the employ of the Cerro de Pasco Mining Co. and it was indeed a treat to hear of his many experiences in this far-off country from so interesting a talker as himself. Brother Fields is now enrolled in the Minnesota School of Mines.

The week ending February 25th was devoted principally to business connected with the convention and the entertainment of the delegates. It was a pleasure to meet these men and to know them. Although the facilities for entertaining the visiting brothers were not as good as they might have been had we been living in a Chapter House, yet we did our humble best and hope to be better situated when the convention is again held in Minneapolis. We were especially glad to have Brother Schrader with us during the Convention and afterward. Erich is still here but expects to leave soon for Sonora, Mex., as the Insurrectionists are hovering dangerously near to his mine. We expect to have a little party for him at the Kaiserhof before he goes, there to forget all our troubles in an evening spent in merriment.

At the Psi U. House on March 15th was held our Spring rushing party. Sixteen outside men were present from the Engineering and Mining Colleges. Of these five were pledged: Walter Olson, Edward Kopper, Greely Ladd, Hal West and Charles Vorck. On April 5th initiation was held at the S. A. E. House when the above pledges were initiated with the exception of Mr. Vorck who is a Freshman Miner and will be initiated next year. After the initiation ceremonies the evening was fittingly closed with a feed and toasts, Brother



Schrader acting as toastmaster. Brothers Timberley, Jacques, Brockway, Walling and Haynes of the alumni were present.

Brother Sneve was fortunate enough to be able to attend Beta's initiation and banquet with Brother Schrader on March 25th. Jack says "that as entertainers the Beta boys are hard to beat" and "Lordy what a banquet!" Jack also brought back a Theta Tau song from Houghton, which is making quite a hit here at Alpha. It would be a great thing if the other chapters would follow Beta's example and get busy on some new songs. There is nothing that could stir up real enthusiasm at our gatherings like some good HAMMER AND TONGS songs.

In regard to Alpha's success this year would say that she still holds her old place at Minnesota and things are still coming her way. In college activities HAMMER AND TONGS *men have been prominent as usual.*

Jack Adams still holds the title of Intercollegiate Tennis Champion.

Marvin Barnum is a member of the Board of Governors of the Minnesota Union, and was elected to Grey Friars last Spring. Grey Friars is a society whose members are elected from the most prominent men around the college.

Jack Bush won his "M" in track this year.

Julian Farnum is the prize fusser of the campus.

Stanley Hill is captain of the Minnesota track team, member of the Grey Friars and of the Men's Union.

Paul Johnson is a captain of the Cadet Corps, officer in the Rod and Transit Club, the Properties Play, and Engineer for the May Fete.

A. E. Elfstrum is business manager of the Minnesota Engineer and officer in the Rod and Transit Club.

Louis Reigal is President of the Gyroscope Club.

Rufus Milne is assistant business manager of the

Minnesota Engineer.

Joe Perry was chairman of the Pan Hellenic Party and Member of the Minnesota Union Board of Governors.

"Cy" Sawyer is prominent in basket ball and is Vice-President of the Athletic Board of Control.

Jack Sneve is a member of the Grey Friars.

Charles Haglin is Business manager of the Gopher and treasurer of the Junior Ball Association.

Dale McEnary is also on the Gopher Board.

At our business meetings there are one or more of our alumni present yet considering the number of the alumni that live in the Twin Cities the turn out is very small. Our regular meeting nights are the second and fourth Thursdays of each month, and the place of meeting may easily be found by calling up any Academic Fraternity House having members in HAMMER AND TONGS. The active members of Alpha especially urge every alumni to attend meetings whenever possible for we need your help and co-operation. During this school year we have had visits from Brothers Schrader, Timberley, DuToit, Jevne, Leach, Walling, Lewis, Maginnis, Haynes, Cowin, Furber, Brockway, Jacques, Starrett and Strong.

Alpha is very much pleased with the new badge. It not only possesses features which distinguish it absolutely from all other fraternity badges but is a very pleasing design.

Regarding the installation of our new chapters at the Case School of Applied Science and the University of California, which will soon take place, we will be more than pleased to welcome them into the bonds of Theta Tau and offer them our heartiest congratulations and best wishes for the future. May they enter our Brotherhood with a true appreciation of the responsibilities and duties which they will be called upon to as-

sume both as a Chapter and as individual members. We offer our love and best wishes to Beta, Gamma, the Chicago and Southwestern Alumni Associations and extend to all Brothers passing through the Twin Cities an invitation to stop off and play with us a while.

Yours in Theta Tau,

ALPHA.

No. of members .....	86
Honorary .....	2
Active .....	27

Address all correspondence to T. H. Curtis, 1009  
Univ. Ave., S. E. Minneapolis, Minn.

## CHAPTER ROLL.

53—Jack E. Bush	1912.
54—Neil S. Kingsley	1911
55—Jack S. Sneve	1911.
58—Joe B. Perry	1911.
61—Paul Johnson	1911.
62—W. W. Jones	1911.
63—Walter F. Kasper	1911.
64—Thos. H. Curtis	1912.
65—Julian P. Farnum	1911.
66—Eldreth L. Sawyer	1911.
67—T. S. Abbott	1911.
68—John W. Adams	1911.
69—Marvin C. Barnum	1911.
70—A. Stanley Hill	1911.
72—A. E. Elfstrum	1911.
73—Louis F. Riegal	1911.
74—John J. Hurley	1911.
76—Roswell W. Prouty	1912.
77—John W. Lewis	1912.
78—Dale R. McEnary	1913.
79—M. F. Quinn	1912.
81—Howard H. Fields	1913.
82—Chas. F. Haglin Jr.	1913.
83—Walter Olson	1912.
84—Hal R. West	1913.
85—Edward Kopper Jr.	1913.
86—Greely Ladd	1913.

## PLEDGES.

Charles R. Vorch	1914.
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## THE BETA CHAPTER

Rigby	Hood	Fellman	Case	Turner	VanValkenburgh	Gould	Hughes	MacLachlan	Elliot	Newkirk
Burt	Worley	Stilwell	Murphy	Ferris	Ballard	McNabb	Perkins	Klepetko	Snyder	Crocker
					Newell	Schlauter	Schaber			
					Blackmar					



## THE BETA CHAPTER

MICHIGAN COLLEGE OF MINES

Dear Brothers:—

It is with great pleasure that we of Beta take this annually recurring opportunity of extending greetings to our sister chapters. Throughout the year we have the other chapters continually in mind and our best wishes are for their success. We enjoy this opportunity of putting these wishes into words. May any previous reverses, met with in spite of diligent effort, be but a spur to greater efforts in the future. May the triumphs of the past be but a faint foretaste of the achievements of the future.

The year which has passed since the last issue of the GEAR has been a busy one for Beta and Beta's members. We will try to give you some idea of how things have gone.

The great event of our chapter life during last Spring was the initiation and banquet held April 23rd. Brothers Blackmar and McLachlan were the initiates and the banquet was the usual great success. The following is the program of toasts responded to:

Toastmaster	W. R. Cook.
Welcome .....	J. B. Armitage.
Mining Engineer .....	W. A. Rigby.
Getting the "25" .....	J. R. Scott
Alumni .....	J. A. Barr.

### *Impromptus.*

The following week was the last before the Spring recess. The mine trip to the Iron Country follows the Spring recess and from the beginning of that trip until the opening of the Fall term our Chapter life is necessarily somewhat broken up. Last Spring eleven of the

brothers took the Iron Country trip. Then came the long Summer term during the last half of which six of the fellows took the geology field trip. On the evening of August 6th., just before the geology trip, we initiated Brother Hood and had a party at the house.

During September we enjoyed our vacation and the fellows scattered all over the country, Brothers Case and Rigby being the only active men left in Houghton. On September 14th Brother Church Sheldon sprang a surprise on the rest of the bunch by being quietly married to Miss Josephine Coughlin of Hancock. Casey and Rigby learned of the event in time to get to the train on which the newly married couple left and extend the congratulations and best wishes of the Chapter.

About the first of October the fellows began arriving in Houghton for the Fall term. Classes began October 4th. At the first Chapter meeting of the year, held on the evening of October 3rd, we found ourselves nineteen strong to start the year. We missed greatly those who had left the active chapter since the last meeting, but every man who did return determined to do his best to make it a banner year for Beta Chapter and the Fraternity. Our first thought was about new men. We bid seven men and pledged them all as follows: Brothers Fellman, Thiellicke, Murphy, Elliott, Newell, Hughes and Perkins.

During the first week of school there was the usual amount of haircutting, the honors being about equally divided between the Freshmen and Sophomores. On Saturday night of the first week the haughty Seniors had the privilege of patrolling the field while the other two classes met in the rush and tried to tie each other up. The sides were about equal in number, but through better organization and knowing each other better the Sophomores won by the score of 23 to 8. All the week following the football teams of the two

classes practiced diligently, the Freshmen being coached by Brother Ferris and the Sophomores by Brother Snyder. The game, which was pulled off after the usual parade on October 15th., was won by the Sophomores, 3 to 0. The Sophomores' score resulted from a drop-kick from Brother Murphy's good right foot. Brothers Van Valkenburgh, Wortley, Schaber, Case, Elliott and Thielicke also played on the Sophomore team, while Brothers Perkins, Hughes and Newell lined up with the Freshmen. The class rivalry ended the following Saturday evening with a basketball game which was pulled off as a feature of the first College Smoker of the year. The Freshmen, with some good material under the efficient instruction of Brother Klepetko, expected to win this last contest but were nosed out by the score of 20 to 18. The Sophomores' victory was largely due to the fast work of Brothers Schaber and Murphy. Brothers Hughes and Perkins put up a good game on the Freshman team.

The election of officers of the Students' Organization was held Monday afternoon, October 24th. There had been an unusual amount of pre-election work by one candidate for President and up until the eleventh hour he seemed to have the field to himself. On the Friday evening before the election, however, Brother Klepetko decided to run. There followed a hustling rapid fire campaign led by Brothers Snyder and Ferris. Brother Rigby made the nominating speech and Brother Newkirk supported the nomination. We were all much elated when the result of the ballot showed that Brother Klepetko had won by the vote of 100 to 93. It was the first time that a fraternity man running openly under his own colors had ever been elected.

On Friday night November 11th the neophytes were put through a few stunts to impress upon them some of the qualities that an engineer and an HAMMER



AND TONGS man should have. They were initiated the following evening. The initiation was followed by an unusually enjoyable banquet. One of the best things about it was that we had Brothers Andrews, Armitage, Potter and Shedwick of our alumni present with us. The program of toasts follows:

Toastmaster	J. R. Scott.
The Initiates .....	E. H. Snyder
The Dope Collector .....	J. I. Ballard
Any Little Girl .....	H. M. Turner
The Boss .....	Ernest Klepetko
The Eternal Question .....	W. A. Rigby.

*Impromptus.*

The rest of the term passed off quietly and as serenely as hard study would allow. The only respite was the Thanksgiving holiday of three days. During that time several of the fellows went deer hunting. Brother Scott and Van Valkenburgh were successful enough on their hunt to rouse the game warden to activity and we thought for awhile that we would have to bail them out. However, Brother Van appeased the official's wrath by buying a twenty-five dollar non-resident's license. The only way we can account for Scotty's escape is by laying it to his never failing ability to hand out a strong line of talk. We enjoyed the venison very much if it was dear.

During the Fall and winter Brother Snyder and some of the rest of us nearly demolished our typewriter in writing letters about holding an HAMMER AND TONGS Convention. We wanted a Convention held during the holidays to settle several matters. On November 17th Brother Klepetko went to Minneapolis and talked the matter over with the Alpha Brothers. We put a lot of time and work on the matter in many ways. The Convention was finally held at Minneapolis on February 23rd., 24th. and 25th. What occurred there

is now pretty well known. While Beta did not get all the things she wanted at that meeting still we feel that enough good was accomplished to reward abundantly the effort we put forth. Brothers Snyder and Rigby were our delegates and brought back glowing reports of the way they were treated by the Alpha Chapter. It was a great pleasure for them to meet the Alpha Brothers and Gamma's delegates, Brothers Marshall and Dunn. But the light and life of the Convention was Brother Schrader, our Grand Regent. Without his presence little would have been accomplished.

On March 25th. we held our Spring initiation and banquet, Brothers Schlotter, Burt, Gilchrist and Metcalf being the initiates. The feature of the occasion was the presence of Brother Schrader who conducted the initiation, the new ritual being used for the first time. Brother Sneve of Alpha was also here which made the affair the more enjoyable. We wish that we might have entertained all the other chapters. Toasts were responded to as follows:

Toastmaster Ernest Klepetko.

Welcome .....	W. T. McNabb
Retrospection .....	N. D. Murphy
Looking Forward .....	D. L. Newkirk
Joys of Life at Beta .....	A. L. Ferris
Alpha .....	J. S. Sneve.
Alumni .....	E. J. Schrader.

*Impromptus.*

Ever since Christmas the chief interest outside of school work has been in the musical comedy "In Tobero" which is being put on by the student body. The first performance will be given Monday evening May 1st. at the Kerredge Theatre in Hancock. That being the week of the Spring opening recess the performance will be put on in the following cities of the Upper Peninsula that week: Marquette, Escanaba, Iron Moun-

tain, Ishpeming and Calumet. The prologue of the play shows a bunch of M. C. M. students returning from a dance. One of them is much dejected because he is about to take the count as far as his college course is concerned. After being kidded by the others for a while they go to bed and leave him reading. He falls asleep and dreams. The other three acts are what he dreams and portrays him in a mining camp in Tobero, a Central American state, leading a revolution and doing sundry things in a typical comic opera style. At the time of the writing of this letter all indications point to a great success both financially and otherwise. Whatever success it does meet with will be almost entirely due to the untiring efforts of Brother Schaber. He got the thing started, picked the cast and choruses, taught all the dances and conducted all the rehearsals beside taking the leading lady's part. One of the best things in the show is a song "Here's to our M. C. M." at the end of the third act both words and music of which are by Brother Schaber. Brother Gould has the leading male role while Brothers Van Valkenburgh, Stilwill, Klepetko and Rigby are also in the cast. Brothers McNabb, Newell, Hughes, Murphy, Blackmar, Metcalf and Elliott are in the different choruses while Brothers Fellman, Schlotter and Wortley are in the orchestra. There are about fifty fellows in the company. The proceeds are to go toward putting a swimming tank in the Gymnasium.

There are many other things that should be mentioned in this letter. During the year Brothers McNabb, Stilwill and Case have been taken into Tau Beta Pi. The basketball team had a very successful year under the management of Brother Ferris and the leadership of Brother Newkirk as Captain. Brothers Schaber, McLachlan and Klepetko were on the team. Brothers Perkins and Murphy made strong bids for places on



the five. There is now in the hands of a publisher an HAMMER AND TONGS song composed by Brother Blackmar which is very good. No doubt many of the Brothers will want copies of it.

During the year the affairs of the house have been under the management of Brother Rigby as Steward. While the house has not been as full as last year still he has been able to show a fair margin of profit. Last Spring we secured a modification of our contract from the sellers so that the payments on the house are somewhat easier. Even so the house is a big undertaking. So far we have been able to meet payments out of profits on the house. The trying feature is going to be to provide for maintainance and repairs. However, there is no doubt but that the old indomitable Beta spirit will work the matter out in time.

This reviews the past year. Looking forward to the next the Reunion looms big before us. The College hopes to have from 500 to 1000 old M. C. M. men back in Houghton at that time. We want to make it the occasion of a Beta reunion also. We hope that all of our alumni coming back at that time will make our house their headquarters. We want as many of you as possible to live here in the house for a week. Your presence will be an inspiration to the active members here. There will not be a great number of the active chapter here at that time and we will give you the house. We hope that you will compel us to put in cots and hammocks and set the table several times for each meal. It would accomodate us in this matter, though, if you would let us know if you want to stay here at the house so that we can plan accordingly.

By the time this issue of the GEAR is out of press Delta and Epsilon chapters will have been installed at Case and California. Beta extends a hearty welcome to these new sister chapters. You have come in on the

rising tide of our affairs. With the efforts of five chapters working together this Fraternity cannot but prosper and grow strong. In closing this letter we wish to record the prophecy, which voices our heartfelt wish, that the coming year will be the best that Theta Tau has ever had.

BETA CHAPTER.



No. of Members .....	99.
Honorary .....	0.
Active .....	29.

Address all correspondence to Beta Chapter of  
Theta Tau, 233 College Ave., Houghton, Mich.

### CHAPTER ROLL.

41—Bertram E. Crocker	1911.
60—Edward H. Snyder	1911.
66—Wm. T. McNabb	1911.
67—Edward H. Stilwill	1911.
69—Dan L. Newkirk	1912.
71—John I. Ballard	1911.
73—Edgar H. Gould	1911.
74—James R. Scott	1911.
75—R. R. Van Valkenburgh	'12.
76—Harry M. Turner	1911.
77—William A. Rigby	1912.
78—Russell B. Wortley	1912.
79—Charles F. Schaber	1912.
80—Albert L. Ferris	1911.
82—Ernest Klepetko	1911.
85—Raymond A. Case	1912.
86—Don C. Blackmar	1912.
87—Ben H. McLachlan	1911.
88—Kedzie K. Hood	1912.
89—Carl M. Fellman	1911.
91—Norbert D. Murphy	1912.
92—Gordon D. Elliott	1912.
93—Fenn B. Newell	1913.
94—William L. Hughes	1913.
95—John C. Perkins	1913.
96—Lawrence C. Schlotter	'13
97—Curtis F. Burt	1912.
98—Arch Gilchrist	1912.
99—John C. Metcalf	1913.



## THE GAMMA CHAPTER

Walker	Matheson	Calvert	Bicknell	Dick	Hilsdale	Ramsey	Garnet
McHugh	Harvey	Dittus	Lannon	Dunn	Thomas	Dyrenforth	Kissock
May	Herres	Hill	Douglas		Marshall		

## THE GAMMA CHAPTER.

COLORADO SCHOOL OF MINES.

Greetings Brothers:—

It is with a great deal of pleasure that we renew our acquaintances and make the acquaintance of the men who have come into HAMMER AND TONGS since the last issue of the GEAR.

In February, Brother Schrader, on his way to the Convention in Minneapolis, stopped over in Golden and we had the pleasure of listening to one of the enthusiastic members of our fraternity. We discussed at some length with Brother Schrader the future course of HAMMER AND TONGS. He has the interest of the fraternity at heart and we are to congratulate ourselves that he was chosen the leader of the National Fraternity of HAMMER AND TONGS.

Last fall ten of the '11 men returned to school and in October eleven new men were initiated. The festivities were held in Woodman Hall, and after the first part of the evening everyone had a good time.

Thus far this year we have not been able to get back to our Scientific meetings owing to the large amount of time devoted to the discussion of the questions that have been before the fraternity of late. The social meetings have all been carried off as scheduled and gain in popularity with each succeeding "occasion".

The chapter picture was taken in Denver on Sunday, March 5th with all members present. We consider that we were very fortunate because, as a rule, it is almost impossible to get everyone to the photographers at one time.

On February 4th the chapter went down to Denver in a body to attend a banquet. Contrary to the prece-

dent established last year we did not give a dance but decided on this banquet instead. The early part of the evening was spent at the Broadway Theatre, the attraction being the "Arcadians", and at 11.30 P. M. we gathered at a little French cafe' on 14th Street. From that time on, as some novelists describe such things, the night was made hideous with our yells. On April 1st the Juniors banquet the Seniors as a send off for the Senior trip.

The new men this year have proved up to the standard of Theta Tau. Brothers Ramsey, Hill and Hilsdale were elected to Tau Beta Pi and with Brother Lannon, who is also a member, this brings our representation up to four men. Brother Garnett is President of the Senior class and as such is the leader of the student body. Brother Calvert is Captain of next years football team, Brother Kissonock acted as captain and manager of this years championship basketball team, and Brother Thomas is managing the baseball team this Spring. We are also represented on all of the athletic teams.

Following up new ideas and the demand for specialization in the Mining and Metallurgical field the Trustees of the school, assisted by the President and the faculty, have made a radical change in the courses offered to students. With the graduation of the class of 1912, the old order of things will give way to the new and the degree E. Met. will be a thing of history. The courses to be offered to the class of 1913 and all future classes will be Metal Mining, Coal Mining, Mining Geology and Metallurgy, all leading to the degree of E. M. qualified by the course completed, as for instance, a student who shall have completed the metallurgy course will receive an E. M. in Metallurgy. It is generally conceded that this will be for the betterment and increased popularity of the school.



Thus far this year we have received visits from five of our alumni. Brother Bryan visited Golden in January, going from here to old Mexico. Brothers Schafer and Benjousky came up from the vicinity of Durango, Colo., where they are leasing. Brother Lesh spent a few days in Golden during February and then went on to the Porcupine district of Ontario. Brother East spent some time in Denver last winter but is now located in Painter, Wyo.

The question of a chapter house has not come up this year. This is due to the fact that most of the men are located in fraternity houses and also that the Internal Club, of which all the students are members, offers such splendid opportunities for social gatherings.

In February we received the sad news of Brother A. M. Rupert's death at Silverton, Colo., in January. Brother Rupert was working alone and living in a small cabin in the hills. A severe storm that snowed him in, when he was ill with a cold, proved hardships that were too great to overcome when he was finally found. Those that knew him will mourn the loss of a good fellow and a staunch friend.

Gamma extends to Alpha, Beta and the Alumni most cordial good wishes and continued prosperity in Theta Tau.

GAMMA CHAPTER.

No. of Members ..... 50.

Active ..... 21.

Honorary ..... 0.

Address all correspondence to Donald Dyrenforth,  
S. A. E. House, Golden, Colo.

#### CHAPTER ROLL.

E. J. Dittus	1911.
J. V. Harvey	1911.
W. C. Douglas	1911.
P. M. McHugh	1911.
J. A. Lannon	1911.
S. M. Walker	1912.
E. M. Marshall	1911.
K. H. Matheson	1911.
T. H. Garnett	1911.
Otto Herres Jr.	1911.
C. R. Hill	1912.
Donald Dyrenforth	1912.
L. C. Thomas	1912.
J. L. Dunn	1912.
C. E. Calvert	1912.
J. E. Dick	1912.
Alan Kissock	1912.
E. R. Ramsey	1912.
A. J. May Jr.	1912.
W. O. P. Hilsdale	1912.
F. P. Bicknell	1912.



## THE DELTA CHAPTER

Strong	Heston	Bever	Hartley	Arms	Hanson	Buddle	Caine
Taylor	Frisbie	Vickery	McLaughlin	Haeberle	Strand	Riddle	Stein

## DELTA CHAPTER.

### CASE SCHOOL OF APPLIED SCIENCE.

Dear Brothers:—

We of Delta unite in sending our sincerest fraternal greetings and best wishes for a most successful year, during which we hope we may become better acquainted with you, and you with us. Since in point of time this letter is a bit "ex post facto", our history as Delta Chapter is still to be made, but as S. K. A. and still earlier as M. S. we have undergone nearly every trial that could beset a fledgling local, and I will try briefly to outline our past career to you.

On January 21, 1909, Brothers Alderson and Kohler, '09, held a meeting of their closest friends among the mining students, and a little later M. S. was launched upon the fraternal world at Case as a professional mining fraternity, with Brothers Alderson, Kohler, Wallis, Kline, Troppman, Hasse, Severin and Kuzell as charter members. In October of the same year our home on Marlborough Road was secured and we felt quite well set up. The question of nationalization next arose, and at joint meetings in November and December, 1909, with representatives from similar locals in the University of Minnesota and South Dakota School of Mines, a national professional mining fraternity was evolved under the name of Sigma Kappa Alpha. Within one short year, however, our hopes were shattered, for the Case chapter alone proved strong enough to maintain a worthy existence. We were at once a local national.

Dissappointed, but not disheartened by this catastrophe we kept working to strengthen ourselves for the test to which we hoped we might some time achieve: that of successfully petitioning some well founded na-



tional engineering fraternity. An invitation was received to try for a general fraternity, but quickly refused for we were convinced of the greater value of a professional fraternity, and of the added strength with a unity of purpose in being all miners.

A letter from Brother Alderson down in New Mexico reached us in August 1910, in which he told of conversations with a Mr. Cameron regarding the HAMMER AND TONGS. Brother Cameron, as we are now honored in addressing him, had so impressed Aldy with the value of HAMMER AND TONGS, that he requested us to investigate with a view of petitioning. Brother Alderson's word has ever been law to us, so we "hopped to it". Our findings were sent in a circular letter to our Alumni and when their unanimous opinion of "Go ahead" had been received, our petition was framed up, signed and sent.

The visit of Messrs. Klepetko, Hughes and Perkins in January was a source of genuine pleasure to us and we tried to show ourselves not only as men, but also as a fraternity in which each man counted only by his usefulness to the whole. For their kind commendation, we are deeply indebted, and are only too glad to say that they made a distinct hit with us. As representatives of Theta Tau, they left a mighty fine impression of the sort of fellowship you stand for.

In every possible way, fellows, Delta thanks you for the kind, truly courteous and manly way in which you have carried out your relations with us, for you have made us feel a deeper respect for the dignity and worth of Theta Tau, and a desire to be in closer fellowship with every man in it.

As to our worthiness of the honor conferred upon us, I can but give a list of the men who have reflected credit upon their fraternity, and wish that they might do even more.

In the class of 1910, Brothers Wallis, Kline, Kuzell and Fugman made T. B. II. Bro. Wallis being President his senior year. For good original thesis work, Brothers Wallis, Kline and Fugman also received Sigma Xi. This year Brothers Strand and Taylor are our bright and shining lights. It might be of interest to note here that in order to encourage scholarship and lend a richer meaning to the "key", Delta has the custom of presenting to all its members who may earn it, that coveted piece of jewelry.

In athletics Brothers Kline and McLaughlin have won their letters in football, and Bro. Kline a second one in baseball. Bro. Caine is out on the baseball squad this Spring, while Brothers Vickery and Strong are making bids for the track team. During the winter months Bro. Taylor represented us on the hockey team. Bro. Strand, beside being a pretty player, is manager of the tennis team this year, and so expects little trouble in winning his place.

Because of our great majority in the mining department, it is hardly modest to brag about carrying the PICK AND SHOVEL CLUB election, but the fact of Bro. Riddle's being unanimously chosen for the presidency for next year, shows that his own popularity had something to do with it.

We did not give a dance this year, but compromised with a big initiation banquet in Finley's Cave, March 26th. Twenty two were present including three alumni, and what with a wonderfully good dinner and toasts all around, it was well along into the "wee sma" before we broke up.

Our year now is nearly finished, and while the underclassmen are happily anticipating the practice term trips, the seniors are feverishly grinding out theses and looking around for that \$100.00 position. Our juniors spend the month of June in the mines and mills

throughout Colorado; the Sophs put in the time surveying a Pennsylvania coal mine; the Freshmen do topographical work around Cleveland. With our classes so far scattered in this way, we surely will met some of our Brothers somewhere, and when that meeting does happen, we can assure you that Delta will be there with the heartiest of "glad hands".

DELTA.

No. of Members ..... 30.

Active ..... 21.

Honorary ..... 0.

Address all correspondence to Lynn Riddle, 10813  
Marlborough Road.

#### CHAPTER ROLL.

9—Donald Baldwin Frisbie	1911.
10—Melville Willis Vickery	1911.
11—Adelbert Robert McLaughlin	1911
12—Carl Frederick Haeberle	1911.
14—Will Tomlins Hartley	1911.
15—Charles Seeley Arms	1912.
16—Otto Carl Budde	1912.
17—Royal Dinsmore Malm	1912.
18—Carlisle Henry Strand	1911.
19—Edward Anderson Taylor	1911.
20—Frederick Earl Caine	1912.
21—Lynn Barnes Riddle	1912.
22—Earl Roscoe Stein	1911.
23—M. Roy Strong	1912.
24—George Peter Hansen	1913
25—Clarence Alfred Bever	1913.
26—Robert Perry Heston	1914.
27—Bernard Daniel Schramm	1912.
28—Otto Ferdinand Schramm	1912.
29—George Raymond MacInnis	1913.
30—John Sam Applegate	1914.

#### PLEDGES.

Wilfred N. Brewer ex-1911.







## THE EPSILON CHAPTER

Dear Brothers:—

In this, our first letter to the GEAR, a short history of the founding of Epsilon Chapter will probably be the most interesting thing we can give.

For several years the need of a closer union among the Miners of California has been felt. In January 1911, eight seniors together with one faculty man got together and organized the local society which was later to become Epsilon Chapter of Theta Tau. These men were Prof. Geo. D. Louderback, R. Countryman, F. S. Hudson, Guy Goodwin, C. M. Staples, Chas. M. Heron, Geo. B. Dillingham, Walter E. Schroeder and R. R. Vail. In our first efforts towards organization we were aided both by the advice and personal efforts of George C. Gester '08 and Robert Pack '08.

Our plan was to hold semi-monthly meetings, the principal business being the reading of technical papers by the members and an informal discussion of these. We planned to assure harmony and a certain amount of fraternal fellowship by a careful choice of members.

Acting along these lines we chose the following Seniors: Geo. M. Collins, Wilbur L. Moody, Ralph B. High, A. D. Wilcox, Geo. D. Smith, Ernst Behr and N. John Lund.

Feeling the need of a closer bond and the assurance of a permanent organization, we decided to petition the Theta Tau Fraternity. The petitioners were the above named men with the exception of Pack and Gester who were out of town and unable to attend the meetings.

At a later meeting the following men of the Class

of 1912 were elected: S. B. Davis, Geoffrey Buddle, Frederick G. Tickell, Percy Thompson, Burdette A. Otis, John R. Suman, Wolcott P. Stanton.

Two meetings were held at which technical papers were read by Geo. D. Smith and R. R. Vail, which were greatly enjoyed by those present.

It was early in "Ex." season that we received the news that our petition was granted. Bro. Schrader arrived right in the middle of "Exes." Elaborate preparations for installation were impossible not only because they interfered with studies but because many of the seniors were rehearsing for their Extravaganza.

The installation took place on the afternoon of Thursday, May 4th and the initiation of the juniors on the following evening.

Buddle left for his home in New Zealand the week previous so will be initiated next term.

We have our plans all made for next year and expect it to be a very prosperous one.

In closing we wish to extend to our sister Chapters and Alumni best wishes for a prosperous year.

EPSILON.

No. of Members .....	24
Active .....	24
Honorary .....	0

Address all correspondence to Frank S. Hudson  
2735 Derby St., Berkeley, Cal.

#### CHAPTER ROLL.

- 1—Ralph Countryman.
- 2—Frank S. Hudson.
- 3—Walter H. Schroeder.
- 4—N. John Lund.
- 5—A. D. Wilcox.
- 6—Charron M. Staples.
- 7—Geo. D. Louderback.
- 8—Geo. B. Dillingham.
- 9—Geo. D. Smith Jr.
- 10—Randolph R. Vail.
- 11—Guy I. Goodman.
- 12—W. L. Moody.
- 13—Chas. M. Heron.
- 14—Geo. M. Collins.
- 15—Ernst E. Behr.
- 16—Ralph B. High.
- 17—Wolcott P. Stanton.
- 18—Percy W. Thompson.
- 19—Stephen Howell Gester.
- 20—Sherwin B. Davis.
- 21—John Robert Suma.
- 22—Burdett A. Otis.
- 23—Frederick C. Tickell.
- 24—Graham Blair Moody.

## THE CHICAGO ALUMNI ASSOCIATION

Dear Brothers:—

The activity of the Chicago Alumni Association has been hindered a good deal this year by the continued absence of many of its members. In spite of this we have enlarged our membership list until we now boast of twenty-seven members. The number of visitors during the past year has been large and usually found

The annual meeting in December was delayed un-  
a few of us in the city to help get acquainted.  
til March 11th., to suit the convenience of more of the  
members. At the postponed meeting the following of-  
ficers were elected for the year of nineteen eleven:

President H. H. Hopkins Jr.

164 No. Dearborn St., Chicago.

Vice-President Ceth D. Peacock,  
Hailey, Idaho.

Secretary C. B. Cameron,  
95—32nd St., Milwaukee, Wis.

This Chapter was organized mainly for sociability among members of the Fraternity and it is earnestly hoped that anyone coming through Chicago will take advantage of this. During the past year we have had many gatherings—we will have many more and cordially invite you to make known your visits.

With the best wishes for the success and prosperity of every Chapter.

Fraternally Yours,

CHICAGO ALUMNI ASSOCIATION.



In Memoriam

Ely C. Wood, Beta '09

A. M. Rupert, Gamma '11



## ELY C. WOOD

Ely C. Wood, Beta '09, was born in Peoria, Ill., October 29th, 1886. The early years of his life were spent in Mexico where the family had moved while he was an infant, his father being interested in mines.

When he reached a school age he was sent North to Peoria, Ill., where he received his grammar and prepschool education. He entered Bradley Polytechnic Institute and graduated from the academic department in 1906. While at Bradley he was elected to Pi Omicron Kappa and Alpha Phi fraternities. He was prominent in school activities, a good athlete and an exceedingly popular man.

In the fall of 1906 he entered the Michigan College of Mines and obtained the degrees of Bachelor of Science and Engineer of Mines with the class of 1909.

While at Houghton he was elected to the fraternity of Theta Tau in which he took an active interest even to the time of his death. He took great interest in school athletics and played on the baseball and basketball teams. As a student Brother Wood established a record for close application to his work and for ability to grasp essentials. He was popular with his classmates and beloved by his fraternity brothers.

In the fall of 1909 he entered the employ of the El Rayo Mines Co. near Santa Barbara, Chiu, Mex. His first position was that of surveyor but he soon rose to the position of Mine Captain and it was in the performance of the duties of that office that he met his death.

On Saturday, May 21st, 1910, he was superintending the clearing of a choked chute, when a mass of

ore suddenly loosened, caught him in the slide and buried him under tons of rock at the bottom of the chute.

His body was taken to Peoria, Ill., where it was buried in the family lot on May 27th, 1911.

### A. M. RUPERT

Bro. A. M. Rupert, Gamma '11, entered the Colorado School of Mines in the fall of 1907, from Geneva, N. Y. He was elected to Theta Tau and initiated by the Gamma Chapter. As a member of this Chapter he took great interest in his fraternity and in the school. In the spring of 1910 he took up the lease of a claim near Silverton, Colo. and lived in a little prospector's shack in the hills. A severe snowstorm in January caught him unawares while suffering from a cold, the subsequent exposure and lack of medical aid developed the fatal pneumonia. Bro. Rupert's body was found some two or three days later by a rescuing party.

## A FEW WORDS ABOUT CASE.

Case School of Applied Science was founded in 1880 by the endowment of Leonard Case, for the purpose of giving the working lads of Cleveland a chance for a technical education. From this broad minded but rather restrictive impulse the school has rapidly grown from one department into six, and from six students to five hundred and fifty. There are seven buildings on a beautiful campus just opposite Wade Park, and adjoining the grounds of Adelbert College of Western Reserve University.

A donation from Mr. John D. Rockefeller enabled the trustees to erect and equip a handsome mining building, which was further improved in 1910 by the finishing of four research laboratories, to aid in carrying out the work of the Case Fellowships. These Fellowships are a recently inaugurated institution whereby Case graduates in the employ of any manufacturing concern may have the privilege of the facilities of the laboratories of the school to carry out research along whatsoever lines the company may desire, the results of all work accomplished to be the joint property of the school and the outside company.

For student use we have an almost model chemical laboratory, assay laboratory, drawing room, recitation and lecture rooms. In what we call the mill room we have a complete concentrating plant from the Gates to the Frue Vanner, which the Juniors give a 48 to 64 hour try-out every year. A light three stamp Allis Chalmers stamp mill and amalgamating plates are also used in the ore treatment course. The seniors get a chance to show how much metallurgy they have absorb-

ed by working two and three day runs with a Bruckner Roaster and twenty foot, shaft type, water jacketed, lead or copper blast furnace.

The course itself, as given by Dr. A. W. Smith is essentially chemical and metallurgical, for with our easy access to the furnaces and plants all over this part of the country, that phase of the profession is capable of the best of detailed inspection. The practice term trips, on the other hand, give us the mine and field work, and give the fellows a broader outlook toward the whole field of mining and metallurgical work.



### THETA TAU SONG.

Songs and traditions are the product of old age and a glorious existence. Our fraternity tho' still young has inspired Bro. Don C. Blackmar to an expression of his esteem for it in verse and music.

The song conveys the true spirit of love and loyalty of a Theta Tau brother to his fraternity and every one that has heard it sung, is enthusiastic over it. We regret we are unable to publish the music with the verse.

Our H. and T. we cherish thee,  
And ever in our memory,  
We keep thy signs and symbols fast,  
Stored up midst loved things we've amassed.  
The Hammer and the Tongs and Gear,  
These emblems we hold dear,—  
And our good fraternal law  
We live, and "Theta Tau."

#### *Chorus.*

Come all H. and T. men, drink the toast again,  
Here's to our brothers, still young in years,  
Here's to our alumni, our real engineers.  
Every one be merry, what if the world seems wrong.  
We'll each help the other, we're each someones brother  
In good old Hammer and Tongs.



## ALUMNI NEWS.

W. B. Atkinson, '10, is in the Mechanical Department of the Minnesota & Ontario Power Co. at International Falls, Minn. "Billy" was married in St. Paul during the Christmas holidays to Miss Jach Brockbank of Philadelphia, Pa.

C. D. Batson, '07, is on the Board of Water Commission in St. Paul, Minn.

A. E. Brockway, '09, has charge of the sales department of the Minneapolis Agency of the Westinghouse Electric Co.

Fred Buck, '09, is a bonafide "Captain of Industry". He is at the head of the Buck Spring Oxy-Hydrogen Blow-Pipe Co. with headquarters at Duluth, Minn.

R. C. Cobban, '09, is sales-manager of Westinghouse Electric Co. at Butte, Mont.

L. B. Curtis, '09, has returned from the western coast to stay. He is with the Stone & Webster Engineering Co. at Minneapolis. 'Tis said that "Lin" is soon going to have one of the fairer sex at the other end of his breakfast table.

James Cowan, '07, is business manager for the C. A. P. Turner Constructing Co. at Minneapolis. He is going west to open an office for this company at San Francisco, Calif. soon, and incidentally is going to join the benedictine ranks.

Geo. Du Toit, '10, is in the Mechanical Department of the Minneapolis Steel & Machinery Co. at Minneapolis.

Kenneth Duncan, '10, after trotting the globe considerably, has accepted a position as mining engineer at Ely, Minn.

"Mike" Fox, Ex. '10, is one of the "ranking five" of his class at the West Point Military Academy.

P. P. Furber, '07, has charge of all steel construction in the office of C. A. P. Turner Construction Co. at Minneapolis. He has acquired the habit of staying at home nights and saving his money, but we hope there is no woman in the case.

I. B. Hanks, Ex. '07, is at the head of a lumber concern at Minot, N. Dak.

"Ken" Hauser and his brother Rupert, '10, and "Bill" McGinnis, Ex. '11, are out on railroad construction with the Hauser-Foley Contracting Co. Rupert is going to marry Miss Myrtle Wick, of St. Paul, Minn. in June.

Robert Jacques, '09, is now taking his second year in the Law School at the University of Minnesota.

G. Jevne, '10, is also employed by the C. A. P. Turner Co. in their office at Minneapolis. He has had a varied experience in the Reclamation Service and as a Hydraulic Engineer but has settled down at last. There is no woman in the case either.

J. J. Kennedy, '08, is down in the midst of the Mexican Revolution, engaged in the mining business with Brother Schrader, and is very much alive at the present writing.

H. H. Knowlton, '08, has finished his work in Costa Rica, and is now engaged in railroad construction in Montana.

George Krushke, '09, is sales-manager of the General Electric Co. at Minneapolis, with headquarters at the Rogers Hotel.

Arthur Larkin, '08, is Superintendent of the Republic Creosote Co. at Mobile, Ala.

Ed. Leach, '10, showed his pleasant countenance around here for a few days during the Christmas holidays, and then went back to his work with the United

States Engineers on River and Harbor Improvements at Ashburne, Missouri. "Eddy" is still single.

Randolph McRae, '07, is mining engineer for Davidson & McRae Co. at Toronto, Canada.

Erich Schrader, '05, is engaged in the mining business in Sonora, Mexico. He left his work in that district for over a month this spring, and we all know the enormous task he undertook and accomplished to put our fraternity on a most solid footing and start it on the high road to success, while with us here in Minneapolis at our convention. Now let us as alumni and active men help him make Theta Tau as solid as Gibraltar. This I know is all the reward he wants for his untiring efforts.

Fred Sheffield, '09, is constructing a system of short lines in the logging districts in northern Minnesota for the International Bridge and Terminal Co. "Fred-die" is still single but not for any length of time. He came over three hundred miles to attend our Junior Ball, and we were surely glad to see his smiling face once more.

George Shepard, '09, is with the United States Engineers, with offices in the Federal Bldg. at St. Paul, Minn. He met with a sad accident while coasting one evening, but is now on the high road to recovery.

Howard Starrett, '09, attended one of our meetings lately. He is at Fairmont, Minn. with the Fairmont Machine Co.

J. L. Strong, '08, gave us his able assistance at our convention, and a good toast at our banquet. He is still with the Oliver Mining Co. at Duluth, Minn.

W. D. Timperley, '10, a good plugger for Alpha and Theta Tau in general, is with the Crown Iron Works Co. at Minneapolis. They say "Bill" is contemplating joining the ranks of the benedicts.

Ben Walling, '09, is manager of the Northwestern



School Supply Co. of this city, and is Alpha's right hand man. He is ready to do us a good turn whenever called upon.

Donald Westbrook, after a long canoe trip through the lakes of northern Minnesota last summer, settled down in Hibbing, Minnesota, where he was engaged by the Oliver Mining Co.

Walter Wheeler, '06, is engaged in business with his father, and can be found in his office in the Palace Bldg. at Minneapolis. He married Miss Eva Blaisdell of Minneapolis a short while before Christmas.

Oscar Woodrich, '08, has entered the contracting firm of which his father is the head, with offices in the Lumber Exchange in Minneapolis. "Peggy's" first contract was drawn up in the form of a marriage certificate, Miss Helen Brown being the "party of the second part". This took place in October 1910.

W. W. Spring, '07, is interested in the Buck Spring Oxy-Hydrogen Blow Pipe Co., with Brother Buck at Duluth, Minn.

George Anderson, Beta '06, was located at Republic, Mich., where he installed several pumps for the Erie Mine. We can't say where he is now, but it's Detroit or Chicago, with odds in favor of "Chi".

E. A. Hellberg, Beta '10, is Assistant Engineer at the Aragon Mine, Norway, Mich. He is also a damn tightwad for we haven't had a letter from him since he left us last September. Come on, "Eddie", give the Council Bluff mail trains a chance to catch up, and write us a letter.

"Bub" Hicks, Beta '08, is teaching the heathen Chinese the rudiments of mining. "Bub" was one of the half dozen men from the United States who were secured by the Imperial Chinese Government to fill positions in the mining college of the new University of Chentu.

H. H. Hopkins, Jr., Beta '09, has been busier than the barnyard hens, and we have just discovered what it was all about. "Hoppie" was married on April 26th to Irene Gregg Harper of Chicago. Brother Hopkins and wife will be at home after June 1st, 1011 Ainslee Avenue, Chicago, Ill.

C. A. Kumke, Beta '06, is chief engineer for the Mines Development Company at Kirkland, Arizona. He is a very active member and also Secretary of the Southwestern Alumni Association of the Michigan College of Mines.

"Billy" Carrol, Beta '09, after wandering around Mexico for a couple of months in bad company ("Percy Dallas") has finally settled once more and is to be found in San Luis Potosi, Mexico with cia Metalurgia Mexicana. They say "Billy don't like the Mexican bastiles." In spite of these he made connections with W. B. Longan at Monterrey, N. L., Mexico about the middle of April. Both of these men are just as strong for HAMMER AND TONGS now as they were when they left us two years ago, and neither have forgotten that a little advice occasionally helps the active men a good deal. "Walk" was laid up with rheumatism for several months and returned to Kansas City to convalesce, but from the above you will see he is back on the job in the land of revolutions.

Earl Luce, Beta '10, holds a position as engineer with the G. R. & I. R. R. and is located at Grand Rapids, Mich. They say "Runt" is the best bridge builder that ever went through school without M and M.

G. H. Morgan wrote us in January from Youngston, Ohio. We are expecting "Brownie" back for the reunion next August.

G. A. Morrison, Beta '04, is Assistant Superintendent of the Jabere Company at Mina, Mexico.

C. B. Cameron, Beta '10, expects to go south again



very soon. "Burch" was located at Bessemer, Ala. for a while but the mines where he was working closed, and he returned to Milwaukee. He has been employed at Port Washington during the past Winter.

W. R. Cook, Beta '10, accepted a position a year ago as chemist with the Castile Mining Company at Wakefield, Mich. He is now Assistant Superintendent. That is going some.

R. B. Earling, Beta '08, has severed his connections with the Superior and Boston Copper Company, and is now Chief Engineer for the Ray Central Mining Company at Ray, Ariz.

J. I. Ballard, Beta '10, has accepted a position as Assistant Engineer with the Quincy Mining Company, and is now located on the hill.

"Tony" Benson, Beta '03, is still on the job at Virginia, Minn. "Tony" was Toastmaster at the M. C. M. Alumni banquet held in that city last Winter. He is now boosting the big reunion, and expects to load a couple of special trains with M. C. M. "grads." from the Mesaba range next August.

P. D. Brown, Beta '09, writes us from Zacateras, Mexico. "Brownie" was a conspicuous figure at the (?) Y. M. C. A. (?) Mexico City for several months last Fall.

J. A. Barr, Beta '07, is with the Charleston, S. C. Mining and Manufacturing Company at Mt. Pleasant, Tenn. as Consulting Engineer. "Jimmy" always finds time to write his Chapter a letter occasionally.

"Corby" Crabbe is back in Detroit. He was with George Anderson for awhile at Republic, Mich. They say Corby's chief expense is no longer ladies hosiery.

"Hap" Alsip is still hibernating in the wilds of Ontario, but has promised to come back for the M. C. M. reunion. Certain Houghton manufacturing companies are making special preparations for just such fellows

as "Hap".

"Dutch" Andrews spent November and December last in Houghton and vicinity, and was with us off and on throughout those months. He is now erecting a mill and cyanide plant at the Ora Belle Mine, Hart, Cal.

"Jnob" Armitage, Beta '10, is head draftsman in the office of Mr. Merriam, Geologist for the Oliver Mining Co. "Jack" was with us last November for our Fall banquet.

Fred Parkhurst, Beta '04, is in politics up to his neck, as well as a whole lot of other things. He is now City Engineer for Niagara Falls, N. Y.

C. D. Peacock was called home from Hailey, Idaho, in March by the death of his father. "Picks" has returned to work, but we are looking forward to seeing him next August.

B. O. Pickard, Beta '07, was married on December 19th to Miss Hazel Solley of San Francisco. "Pick" and his wife are now living in Douglas, Arizona, where the firm of Worthington and Pickard is located.

G. O. Randolph, Beta '07, is in the Porcupine District, Ontario, where "Randy" is Gen'l Mgr. of the Porcupine Tisdale Mining Co. George spent several days with us during the Christmas holidays.

A. L. Smith, Beta '06, is located at Wakefield, Mich., and writes to look for him in August at the big reunion.

W. J. Shedwick, Jr. left Mexico last summer and tried his luck in the Iron Mines at Michigan, but found the weather was too cold in this vicinity and left for lower regions again. "Cassie" was one of the alumni who were with us at our Fall banquet.

C. G. Sheldon, Beta '10, joined the ranks of the Benedicts last September. He married Miss Josephine Coughlin of Hancock, Mich. Church and his wife are living in Santa Rita, New Mexico, where he has a posi-

tion with the Chino Copper Co.

James Trembath, Beta '08, is at Elk City, Idaho, where he is engaged making examinations and reports.

H. P. Steinbach, Beta '06, was married on November 23rd to Miss Malmen of Houghton. Brother Steinbach and wife are now at Kinney, Minn, where he has a position as Superintendent of the Kinney Mine.

R. B. Wagner, Beta '10, has a position as First Assistant Engineer for the Superior and Boston Copper Co. "Wag" did some work for the U. S. G. S. last Summer and got a good send off from the chief in charge.

T. J. Welcker, Beta '11, has been everything from office boy to engineer for the Utah Mine at Fish Springs, Utah. We expect "Ted" with us again next year.

O. Potter is Superintendent of the Superior Copper Co., Superior, Mich. "Pot" calls on us occasionally and is on the job all the time for Beta's House Fund Company.

A. H. Meuche, Beta '05, has severed his connections with Longyear & Hodge and is now consulting engineer at Houghton, Mich.

J. F. Simpson, Beta '09, is engineer for the Toluca Coal Co., Hammond, Ind. "Jimmy" is also going to be with us for the reunion.

F. W. Varney is Manager of the Mille Mine, Bellevue, Idaho. Fred married Miss Nelle Williams of Salt Lake City last July, and has been living at Bellevue since that time. He will be with us next August.

Fred Riggs, Beta '10, is attending the University les, Cal. He is one of the most enthusiastic men for of Indiana. He wrote us a dandy big letter last Winter, just the kind we like to get.

T. J. Douglas, Rhom. '03, is located in Los Angeles Theta Tau that we have heard from, and our South-



western Brothers should see to it that he is properly brought into the folds in the near future.

H. M. Merry, Rhom. '07, is digging the real stuff out in the sage brush along the Snake River. We don't know Merry personally, but from the letters he writes, we can recommend him to any of the brothers who have prospects they would like to sell.

Bay Staples, Beta '08, is Supt. of the Staples Lumber Company at Wycliffe, B. C. Bay is a strong backer of Theta Tau, and as strong an enemy of "Reciprocity".

J. E. Wagner, Beta '08, is back in Bodie, Cal. with the Standard Consolidated Mining Company.

C. E. Welker, Beta '10, is construction engineer with the Standard Oil Company at Charleston, W. V.

H. W. Wing, Beta '08 is somewhere in California. "Chick" is a hard man to keep track of (?) and we wish any of the brothers who cross his trail would put us on.

R. W. Wenk, Beta '10, tired of the squaws and pine trees of Mechipecotin is now to be found driving a water wagon on Los Angeles "Great White Way".

C. M. Fellman, Beta '11 has accepted a position as chemist with the Castile Mining Company at Ramsey, Mich. Charlie is the first 1911 Beta man to go after the pay check.

Charles Thielicke, Beta '12, has gone to Alaska, where he will do assessment work on a number of mining claims.

Brother C. E. Dyer, Gamma '10, is with the Daly West Company, Park City, Utah.

Brother L. P. Clapp, Gamma '08, has not visited the United States since he left for his home in Australia in the fall of 1908. He is assaying for the Electrical Refining Company, an English concern in Port Kembla, New South Wales, Australia.

Brother C. W. Glasgow, Gamma '10, is located at the Hill Top Mine, Leadville, Colo.

Brothers P. H. Carpenter, Gamma '10, and W. R. Brown, Gamma '10, are employed by the Guggenheims. "Carp" in Ogden, Utah, and Brown in Ruth, Nevada.

For the first time in the history of the Colorado School of Mines, an alumni reunion is to be held in Golden during graduation week. Until this year, such a gathering has been looked upon as out of the question, but the Alumni Association in Denver has advertised and is pushing things to the best of its ability, so we are expecting a large delegation of "Old Grads" and among them Theta Tau should be well represented.

#### ALUMNI NOTES (DELTA).

Brother Alderson is with the Ducktown people at Isabella, Tenn.

Brother Kohler is at present in the Cast Dept. of the Illinois Steel at Gary, but expects to get into the metallurgical laboratory as soon as it is opened.

Brothers Kuzell and Fugman are at the Boston and Montana Smelter of the Anaconda Co., Great Falls, Mont.

Brothers Wallis and Severin are doing research work in cyaniding for the Dow Chemical Co. of Midland, Mich.

Brother Troppman is with the Tennessee Coal and Iron Co. at Ensley, Ala.

Brother Kline, after playing hostler to a string of open hearths in Youngstown for a year, decided that a job in the Fostoria Glass Specialty Co. was more to his liking.



### THE EDITOR'S PAGE.

This issue of the GEAR makes the fourth. In four years the GEAR has grown from a little pamphlet containing the letters of three Chapters to its present proportions, this growing has paralleled that of the Fraternity.

The effect of this expansion has been most decidedly felt in the increased cost of publishing the GEAR.

Heretofore, the expense of publishing this little magazine has been borne by the active chapters, aided by the contributions that a few of the alumni have made. Very few of the alumni have appreciated their indebtedness to the active men, and realized that this expense was a big drain on the treasury of the active chapters, but in spite of this the chapters have carried this burden without a murmur, however the time has come when they can no longer stand the expense and all of our alumni have got to dig up. To many, the dollar they could send in for the GEAR would be the only occasion on which they have recognized the existence of their Fraternity since leaving school, it is certainly encouraging to an active Chapter to feel that it has a lot of alumni that are either too lazy to recognize its existence or that do not give a damn. A vast majority of our alumni have set back and accepted their copy of the GEAR without as much as a polite acknowledgement.

To the alumni that have been loyal, both in matters pertaining to the GEAR and in other things the active men are truly thankful and it is due to the interest they have shown and by their encouragement that the many things done have been done.

With this issue the old method of financing the GEAR will be abandoned and hereafter such alumni as want a copy of the GEAR will have to subscribe for it. In the back of this book will be found a subscription card, fill it out and mail it to The GEAR of THETA TAU, 233 College Ave., Houghton, Mich.

The many events of the year and the rapidity with which they have followed each other has doubtless left many of our alumni in a dazed state of mind. A brief review may help clear things up.

Last year a movement was started to change the badge of the fraternity, the reasons for this were stated in last year's GEAR. New designs were submitted to the Chapters and one has been adopted which for beauty of design and appropriateness challenges that of any fraternity. The new badges can be secured by sending your orders to your Chapter's treasurer.

For sometime past Bro. Schrader has been writing a new ritual and revising the constitution. These were submitted to the Chapter's at the Minneapolis convention in February and at this time adopted after some minor alterations had been made. The difference between the new constitution and the old one is that the wording of a good many of the articles has been clarified and their function better defined. The ritual is almost entirely new and every alumnus should seek an opportunity to become acquainted with it.

One thing that will be most felt by our alumni is the change in name from Hammer and Tongs to Theta Tau. This may come as a blow to many of the old men who for sentimental reason would cling to the former name. But a change in name does not mean a change in spirit and they will find that they can be just as true and loyal brothers under Theta Tau as they have been under Hammer and Tongs.

Last and of most importance has been the grant-

ing of two charters: Delta, to the S. K. A. (local) at Case School of Applied Science, and Epsilon, to a body of petitioners at the University of California. In both instances the petitioners were carefully investigated and the findings were more than satisfactory. If it would not be committing a breach of confidence we would delight in publishing some of the very complimentary things said by men in other colleges concerning the men who are the Charter members of our twin Chapters. Theta Tau is to be congratulated on these two new members.

The above unburnished outline of the year's activities we hope will give the alumni an idea of what has been accomplished and will stir up renewed interest in the work of the active chapters.

Kick in early with your order for new pins. Get one so you will know what it looks like and be able to recognize one on a Brother.

Don't be afraid to let your Chapter know where you are and what you are doing. By all means keep the GEAR posted of your whereabouts.

Beta has used a system of bi-monthly letters for keeping her alumni posted on fraternity affairs. It would be a good idea for other Chapters to adopt and they will find it a whole lot easier to keep tab on their alumni.

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 1024 N. Main St., Pueblo, Colo.  
 Kappa Beta Phi, Tau Beta Pi, Sigma Alpha Epsilon.
- LEACH, EDWARD W.                      C. E.                      Alpha '10  
 Winona, Minn.  
 With U. S. R. S. Ashburn, Mo.
- LARKIN, A. E.                                  Alpha '08  
 1634 Carrel Ave., St. Paul, Minn.  
 Supt. Republic Creasoting Co., Mpls. Factory,  
 Minneapolis, Minn.  
 Beta Theta Pi.

- LESH, H. B. E. M. Gamma '10  
 909 West Ave., New York, N. Y.  
 Porcupine, Ontario.  
 Sigma Nu.
- LEWIS, JOHN WHITTNEY Student Alpha '12  
 1721 University Ave., Minneapolis, Minn.  
 Psi Upsilon.
- LEWIS, WM. MURRAY E. M., E. Met. Trans. Gamma '09  
 642 Portland Ave., St. Paul, Minn.  
 Const. Eng., C.—of Hon. C. E. Lewis,  
 State Capitol, St. Paul, Minn.
- LONGAN, WALKER B. B. S., E. M. Beta '09  
 3916 McGee St., Kansas City, Mo.  
 C.—of Mazapil Copper Co. Ltd., Concepcion  
 Del Oro, Zac., Mex.
- LOWELL, JAMES B. E. M. Gamma '08  
 24 Brattle St., Worcester, Mass.  
 C.—of Geo. A. Fuller Co., Boston, Mass.  
 Phi Gamma Delta, Tau Beta Pi.
- LUCE, E. P. Beta '10  
 1028—5th Ave., Grand Rapids, Mich.  
 Ass't. in Eng. Dept., G. R. & I. R. R.,  
 Grand Rapids, Mich.
- MACINNES, GEORGE RAYMOND Delta '13  
 6206 Wakefield Ave., Cleveland, Ohio.
- MACKILLICAN, JAMES ANGUS B. S. Beta '06  
 330 Oak St., Escanaba, Mich.  
 Unknown.
- MALM, ROYAL DINSMORE Delta '12  
 1448 East—115th St., Cleveland, Ohio.  
 Pick & Shovel Club.
- MATHESON, K. H. Gamma '11  
 Hugo, Colo  
 Kappa Sigma.

- MARSHALL, EMORY M. Gamma '11  
1210—8th St., Des Moines, Iowa.  
Phi Gamma Delta.
- MAY, A. J. JR. Student Gamma '12  
Golden, Colo.
- MARSHALL, GEORGE BOWEN B. S. Beta '07  
442 E. 136 St., New York, N. Y.  
C.—of The Aguacote Mines, San Motcio,  
Costa Rica.
- McENARY, DALE R. Student Alpha '13  
2324 Pleasant Ave. S., Minneapolis, Minn.  
Alpha Delta Phi.
- MCGINNIS, WM. H. C. E. Alpha '10  
510—15th Ave. S. E., Minneapolis, Minn.  
With Grant, Smith & Co. Contractors,  
St. Paul, Minn.  
Delta Tau Delta.
- McHUGH, PHIL M. Student Gamma '11  
809 S. Kline St., Aberdeen, S. Dak.  
Sigma Alpha Epsilon, Kappa Beta Phi.
- McLACHLAN, BENJAMIN HARRISON Student Beta '11  
24 E. 114 Place, Chicago, Ill.
- McLAUGHLIN, ADELBERT ROBERT . Student Delta '11  
1958 E. 93rd St., Cleveland, Ohio.  
Pick & Shovel Club.
- McNABB, WILLIAM THEODORE Student Beta '11  
316 Sand Beach Ave., Bad Axe, Mich.  
Tau Beta Pi.
- McRAE, RANDOLPH E. M. Alpha '07  
Davidson & McRae, Toronto, Canada.  
Alpha Delta Phi.
- METCALF, JOHN CLAFLIN Student Beta '13  
83 Stedman St., Brookline, Mass.
- MEUCHE, ALFRED H. B. S., E. M. Beta '05  
Houghton, Mich.  
Tau Beta Pi.

- MELNE, RUFUS H. Student Alpha '13  
312 N. Main St., Crookston, Minn.
- MINER, ROBERT I. Alpha '10  
3022 Dupont Ave. S., Minneapolis, Minn.  
Instructor Buffalo High School, Buffalo, N. Y.  
Sigma Chi.
- MORGAN, G. H. B. S. E. M. Beta '08  
1010 Bryson Park, Youngstown, Ohio.
- MORRISON, GEORGE ADELBERT B. S. E. M. Beta '04  
2111 Morgan Ave., Morgan Park, Ill.  
Ass't. Supt., Jabre Co., Campania De Minas  
De Mexico, Mina, Mexico.
- MOWERY, C. W. C. E. Alpha '08  
1124—21st Ave. N., Minneapolis, Minn.  
Resident Engr., N. P. R. R., Northtown, Minn.  
C.—of L. M. Perkins, Engr. M. of Way.  
St. Paul, Minn.
- MURPHY, NORBERT DANIEL Student Beta '12  
318—6th St., Calumet, Mich.
- NEER, PAUL Gamma '09  
Golden, Colo.  
San Jaunita, Honduras.
- NEWELL, FENN BAILEY Student Beta '13  
287 Washington Ave., Providence, R. I.
- NEWKIRK, DANIEL LEIGHTON Student Beta '13  
123 Maybury Grand Ave., Detroit, Mich.  
Tau Beta Pi.
- PALMER, PORTEOUS B. Alpha '09  
923 Grand Ave., St. Paul, Minn.  
C.—of R. M. Neely Co., St. Paul, Minn.  
Beta Theta Pi.
- PARKHURST, FREDERICK S. JR. B. S. E. M. Beta '04  
522 Cedar Ave., Niagara Falls, N. Y.  
City Eng., Convention Hall, Niagara Falls,  
New York.



- PEACOCK, C D. B. S. E. M. Beta '08  
731 E. 50th St., Chicago, Ill.  
Hailey, Idaho
- PERKINS, JOHN COWLE Student Beta '13  
3601 Clinton Ave., Cleveland, Ohio.
- PERKINS, WILLIAM J. B. S. E. M. Beta '07  
Norway, Mich.  
Sullivan Machinery Co., Ishpeming, Mich.  
Kappa Sigma.
- PERRY, JOE B. Student Alpha '11  
Minneapolis, Minn.
- PHILLIPS, ROBERT BAILEY Beta '06  
214 Durango St., El Paso, Texas.
- PICKARD, BYRON O. B. S. E. M. Beta '07  
6002 Lincoln Ave., Omaha, Nebraska.  
Consulting Engineer, Douglass, Arizona.
- POTTER, OCHA Beta  
Houghton, Mich.  
Supt. Superior Copper Co., Houghton, Mich.  
Tau Beta Pi.
- PROUTY, ROSWELL W. Student Alpha '12  
478 Ashland Ave., St. Paul, Minn.  
Chi Psi.
- QUINN, M. F. Student Alpha '12  
E. 819 Sharp Ave., Spokane, Wash.  
Sigma Alpha Epsilon.
- RAMSEY, E. R. Student Gamma '12  
2373 Albion St., Denver, Colo.  
Sigma Alpha Epsilon.
- RANDOLPH, GEORGE O. B. S. E. M. Beta '07  
Box 37, Porcupine, Ontario.  
Gen'l Mgr. Porcupine Tisdale Mining Co.,  
Porcupine, Ontario.
- RIDDLE, LYNN BARNES Student Delta '12  
411—5th St., Marietta, Ohio.  
Alpha Sigma Phi, Pick & Shovel Club.

RIGBY, WILLIAM ARTHUR	Student	Beta '12
Mt. Vernon, Iowa.		
RIEGEL, LOUIS F.	Student	Alpha '11
Rochester, Minn.		
RIGGS, FRED		Beta '10
323 W. State St., Princeton, Ind.		
RIKER, EUGENE ALFRED		Beta '10
725 Church St., Flint, Mich.		
Olivet, Mich. Student.		
ROSE, WILLIAM A.	E. M.	Alpha '06
125 Cedar St., Hibbing, Minn.		
C.—of Oliver Mining Co., Hibbing, Minn.		
Delta Tau Delta.		
RUPERT, A. M.	Deceased	Gamma '11
RUSSELL, DONALD O.	E. M.	Gamma '09
Mining Engineer, Kuala Lumpus, Selanger,		
Federated Malay States.		
Tau Beta Pi.		
SAWYER, ELDTRETH L.	Student	Gamma '11
1506 Emerson Ave. N., Minneapolis, Minn.		
Phi Gamma Delta.		
SCHABER, CHARLES F.	Student	Beta '11
434 Williams St., Jackson, Mich.		
Theta Xi.		
SCHAFER, LOUIS	E. M.	Gamma '09
Lake City, Colo.		
Hesperus, Colo.		
Kappa Sigma, Tau Beta Pi.		
SCHLOTTER, LAWRENCE CLIFFORD	Student	Beta '13
Alliance, Ohio.		
Sigma Nu.		
SCHRADER, E. J.	E. M.	Alpha '05
694 Marshall Ave., St. Paul, Minn.		
Mgr. San Miguel Gold Mining Co.		
La Palma via Pesqueira, Sonora, Mexico.		

- SCHRAMM, BERNHARD DANIEL      Student      Delta '11  
 2715 Scovill Ave., Cleveland, Ohio.  
 Pick & Shovel Club.
- SCHRAMM, OTTO FERDINAND      Student      Delta '12  
 2715 Scovill Ave., Cleveland, Ohio.  
 Pick & Shovel Club.
- SCOTT, JAMES RALPH      Student      Beta '11  
 615 N. Farragut St., Bay City, Mich.
- SEVERIN, CARL      Delta '10  
 10519 Wilbur Ave., Cleveland, Ohio.  
 Pick & Shovel Club.
- SHEDWICK, WILLIAM J.      Beta '09  
 618 W. 34th St., Philadelphia, Pa.
- SHELDON, CHURCHILL GEAR      Beta '10  
 R. F. D. 2, Grand Rapids, Mich.  
 Chino Copper Co., Santa Rita, N. Mexico.
- SHEFFIELD, F. W.      C. E.      Alpha '09  
 209 S. Ash St., Crookston, Minn.  
 North Minnesota Terminal Co.  
 International Falls, Minn.  
 Phi Gamma Delta.
- SHEPARD, GEORGE M.      C. E.      Alpha '09  
 Kenyon, Minn.  
 U. S. Surveyor, Mississippi River Improvement  
 233 Federal Bldg., St. Paul, Minn.  
 Tau Beta Pi, Sigma Xi.
- SIMPSON, JAMES F.      B. S. E. M.      Beta '09  
 6157 Crescent Road, Chicago, Ill.  
 Engineer, Hammond, Ind.  
 Kappa Sigma.
- SKAVLEM, H. A.      E. M.      Gamma '10  
 C.—of Hollinger Mine, Aura Lake, Ont. Can.  
 Tau Beta Pi.
- SMITH, CLINTON B.      E. E.      Alpha '05  
 Portland, Oregon.

- SMITH, ALFRED L.                      B. S. E. M.                      Beta '06  
 148 W. Lawrence St., Pontiac, Mich.  
 Mining Engineer, Box 274, Wakefield, Mich.
- SMITH, LYON    Gamma '09  
 1547 Beacon St., Brookline, Mass.  
 Florence Goldfield Mining Co., Goldfield, Nev.  
 Kappa Sigma.
- SNEVE, JACK STICKNEY                      Student                      Alpha '11  
 142 Mississippi River Blvd., St. Paul, Minn.  
 Chi Psi.
- SNYDER, EDWARD HARRISON                      Student                      Beta '11  
 903 First Ave., Salt Lake City, Utah.  
 Tau Beta Pi.
- STARRETT, HOWARD M.                      M. E.                      Alpha '09  
 818—7th St. S. E. Minneapolis, Minn.  
 Supt. of Shops, Fairmont Machinery Co.  
 Fairmont, Minn.  
 Phi Gamma Delta.
- STEINBACH, HARRY P.                      B. S. E. M.                      Beta '06  
 L'Anse, Mich.  
 Supt. Kinney Mine, Kinney, Minn.
- STILWILL, EDWARD HERBERT                      Student                      Beta '11  
 163 Maybury Ave., Detroit, Mich.  
 Tau Beta Pi.
- STRAND, CARLYLE HENRY                      Student                      Delta '11  
 1327 E. 112th St., Cleveland, Ohio.  
 Tau Beta Pi, Theta Nu Epsilon, Pick & Shovel Club.
- STRONG, J. S.    Alpha '08  
 C.—of Oliver Mining Co., Duluth, Minn.
- STRONG, M. ROY    Student                      Delta '12  
 9807 Gaylord Ave., Cleveland, Ohio.  
 Pick & Shovel Club, Sigma Chi.
- STEIN, EARLE ROSCOE                      Student                      Delta '11  
 1500 Mass. Ave., Lakewood, Ohio.  
 Pick & Shovel Club.





- TURNER, HARRY MILTON      Student      Beta '11  
 341 Houston Ave., Crookston, Minn.  
 Kappa Sigma.
- VAN VALKENBURGH, ROBERT RAY      Student      Beta '12  
 Wenatchee, Wash. C.—of V. & W. Co.
- VARNEY, FRED WARNER      Beta '08  
 Evanston, Wyo.  
 611 McCormich Bldg., Salt Lake City, Utah.
- VICKERY, MELWILLE WILLIS      Student      Delta '11  
 1640 East 84th St., Cleveland, Ohio.  
 Pick & Shovel Club.
- VINAL, E. L.      Alpha '05  
 New Bedford, Mass.  
 Engr. U. S. G. S., New Bedford, Mass.
- WAGNER, J. E.      B. S. E. M.      Beta '08  
 Belding, Mich.  
 Bodie, Cal.
- WAGNER, RALPH B.      B. S. E. M.      Beta '10  
 181 Hastings St., Grands Rapids, Mich.  
 Superior & Boston Copper Co., Globe, Ariz.  
 Tau Beta Pi.
- WALKER, STANLEY M.      Student      Gamma '12  
 1257 Broadway, Denver, Colo.  
 Beta Theta Pi.
- WALLING, B. B.      E. E.      Alpha '09  
 331 14th St., Minneapolis, Minn.  
 Northwestern School Supply Co.  
 Mgr. University Store.  
 Supt. Sweeny Mining & Engr. Co.,  
 Baxter Springs, Kansas.
- WANVIG, CHESTER O.      Beta '12  
 404 Webster Place, Milwaukee, Wis.  
 Wallace, Smith & Co., 78 W. Water St.,  
 Milwaukee, Wis.  
 Tau Beta Pi.

- WALLIS, ROY CLARENCE Delta '10  
Girard, Ohio.  
Midland, Mich. C.—of Dow Chemical Co.  
Tau Beta Pi, Sigma Xi, Pick & Shovel Club.
- WANVIG, JOHN D. B. S. E. M. Beta '08  
404 Webster Place, Milwaukee, Wis.  
Supt. Superior & Boston Copper Co.  
Globe, Ariz.
- WASLEY, W. A. E. Met. Gamma '09  
1018 13th St., Greeley, Colo.  
Miami Copper Co., Miami, Ariz., Box 100.  
Beta Theta Pi.
- WASSON, HAROLD JESSE Alpha '13  
La Porte City, Iowa.  
Bisbee, Ariz.  
Sigma Alpha Epsilon.
- WATSON, G. P. E. Met. Gamma '10  
Greeley, Colo.  
McGill, Nevada.
- WEISEL, GEO. F. Alpha '07  
3113 3rd Ave. So., Minneapolis, Minn.  
Mgr. Mann Lumber Co., Henderson, Mont.  
Delta Upsilon.
- WELCKER, THEODORE J. Beta '11  
867 3rd Ave., Salt Lake City, Utah.  
Fish Springs, Utah.
- WELKER, GEO. E. B. S. E. M. Beta '10  
112 Moran St., Oil City, Pa.  
United Fuel Gas Co., Charlestown, W. Va.  
Omicron Pi Omicron.
- WENK, RALPH WALDO Beta '10  
712 Marinette Ave., Marinette, Wis.  
664 Benton Blvd., Los Angeles, Cal.  
Kappa Sigma.
- WEST, J. R. E. M. Gamma '10  
Greeley, Colo.

- WESBROOK, DONALD M. M. E. Alpha '10  
 906 5th St. S. E., Minneapolis, Minn.  
 Oliver Iron Mining Co., Hibbing, Minn.  
 Chi Psi, Tau Beta Pi, Sigma Xi.
- WHEELER, WALTER H. E. M. Alpha '06  
 Construction Engr., 820 Palace Bldg.,  
 Minneapolis, Minn.  
 Alpha Delta Phi.
- WILKINSON, PAUL HARRIS B. S. E. M. Beta '05  
 North Yakima, Wash. C.—of A. C. Wilkinson.  
 Shannon Copper Co., Clifton, Ariz.
- WING, HOMER WILLIAM Beta '08  
 538 W. Main St., Ionia, Mich.
- WOODRICH, OSCAR F. C. E. Alpha '08  
 77 Spruce Place, Minneapolis, Minn.  
 Contractor. Lumber Exchange Bldg.,  
 Minneapolis, Minn.  
 Sigma Chi.
- WORTLEY, RUSSELL B. Student Beta '12  
 Houghton, Mich.
- WRIGHT, H. H. M. E. Alpha '09  
 Farmington, Minn.  
 Marshalltown, Iowa, Box 94.  
 Zeta Psi.

## RHOMBOHEDRONS

- BISHOP, G. C. Deceased Rhom.
- COSSAR, GEORGE CARTER Rhom. '06  
 East Craig, Corstorphine, Scotland.
- DOUGLAS, THOMAS J. JR. B. S. Rhom. '03  
 900 New Hampshire Ave., Los Angeles, Cal.  
 407 Grant Bldg., Los Angeles, Cal.
- MERRY, HENRY MONROE Rhom. '07  
 205 Hawthorne Road, Baltimore, Md.
- YOUNG, J. W. Rhom. '05  
 873 Summit Ave., Milwaukee, Wis.



## MEMBERS OF EPSILON CHAPTER.

- |  |                   |
|--|-------------------|
| 1—RALPH COUNTRYMAN                         | 1911              |
| 653 Chetwood Street, Oakland, Cal.         |                   |
| 2316 Bowditch Street, Berkeley, Cal.       |                   |
| Theta Delta Chi.                           |                   |
| 2—FRANK S. HUDSON                          | 1911              |
| 2735 Derby St., Berkeley, Cal.             |                   |
| Phi Gamma Delta.                           |                   |
| 3—WALTER H. SCHROEDER                      | 1910              |
| 1312 S. Figueroa Street, Los Angeles, Cal. |                   |
| 2431 Durant Ave., Berkeley, Cal.           |                   |
| Phi Delta Theta.                           |                   |
| 4—N. JOHN LUND                             | 1911              |
| Ferndale, Cal.                             |                   |
| 2536 Bancroft, Berkeley, Cal.              |                   |
| 5—A. D. WILCOX                             | 1911              |
| 405 W. Park Street, Portland, Oregon.      |                   |
| 2523 Hillegrass Ave., Berkeley, Cal.       |                   |
| Sigma Phi Epsilon.                         |                   |
| 6—CHARRON M. STAPLES                       | 1910              |
| Box 203, Ashland, Oregon.                  |                   |
| 2634 Bancroft Way, Berkeley, Cal.          |                   |
| Acasia, Tau Beta Pi.                       |                   |
| 7—GEO. D. LOUDERBACK                       | B. S. Ph. D. 1896 |
| 2713 Derby Street, Berkeley, Cal.          |                   |
| Sigma Xi.                                  |                   |
| 8—GEO. B. DILLINGHAM                       | 1911              |
| 2401 Durant Ave., Berkeley, Cal.           |                   |
| Phi Delta Theta.                           |                   |
| 9—GEO. D. SMITH JR.                        | 1911              |
| 1541 Larkin Street, San Francisco, Cal.    |                   |
| 10—RANDOLPH R. VAIL                        | 1911              |
| 2601 Durant Ave., Berkeley, Cal.           |                   |
| Delta Tau Delta.                           |                   |

- |  |      |
|--|------|
| 11—GUY I. GOODWIN                        | 1910 |
| Santa Maria, Cal.                        |      |
| 2627 Ridge Road, Berkeley, Cal.          |      |
| Phi Kappa Psi.                           |      |
| 12—W. L. MOODY                           | 1911 |
| 216 E. Ave. 42, Los Angeles, Cal.        |      |
| 2826 Garden Street, Berkeley, Cal.       |      |
| Tau Beta Pi. Sigma Xi.                   |      |
| 13—CHAS. M. HERON                        | 1911 |
| 2426 Virginia Street, Berkeley, Cal.     |      |
| Phi Kappa Sigma.                         |      |
| 14—GEO. M. COLLINS                       | 1911 |
| Los Gatos, Cal.                          |      |
| 2147 Addison Street.                     |      |
| Tau Beta Pi.                             |      |
| 15—ERNST E. BEHR                         | 1910 |
| B. S.                                    |      |
| 432 Arlington St., Pasadena, Cal.        |      |
| Beta Theta Pi.                           |      |
| 16—RALPH B. HIGH                         | 1911 |
| 306 Van Buren Ave., Oakland, Cal.        |      |
| Phi Kappa Psi.                           |      |
| 17—WOLCOTT P. STANTON                    | 1912 |
| 2255 Vallejo Street, San Francisco, Cal. |      |
| 2330 Telegraph Ave., Berkeley, Cal.      |      |
| Delta Kappa Epsilon.                     |      |
| 18—PERCY W. THOMPSON                     | 1912 |
| South Pasadena, Cal.                     |      |
| 1533 Arch Street, Berkeley, Cal.         |      |
| 19—STEPHEN HOWELL GESTER                 | 1912 |
| 2800 Derby Street, Berkeley, Cal.        |      |
| 20—SHERWIN B. DAVIS                      | 1912 |
| 2415 Dwight Way, Berkeley, Cal.          |      |
| Sigma Chi. Tau Beta Pi.                  |      |
| 21—JOHN ROBERT SUMA                      | 1912 |
| Hollywood, Cal.                          |      |

2601 Channing Way, Berkeley, Cal.  
Delta Upsilon.

22—BURDETT A. OTIS 1912

San Jacinto, Cal.  
2316 Bowditch Street, Berkeley, Cal.  
Theta Delta Chi.

23—FREDERICK G. TICKELL 1912

1320 18th Street, Sacramento, Cal.  
2601 Durant Ave., Berkeley, Cal.

24—GRAHAM BLAIR MOODY 1913

215 E. Ave. 42, Los Angeles, Cal.  
2646 Dwight Way, Berkeley, Cal.

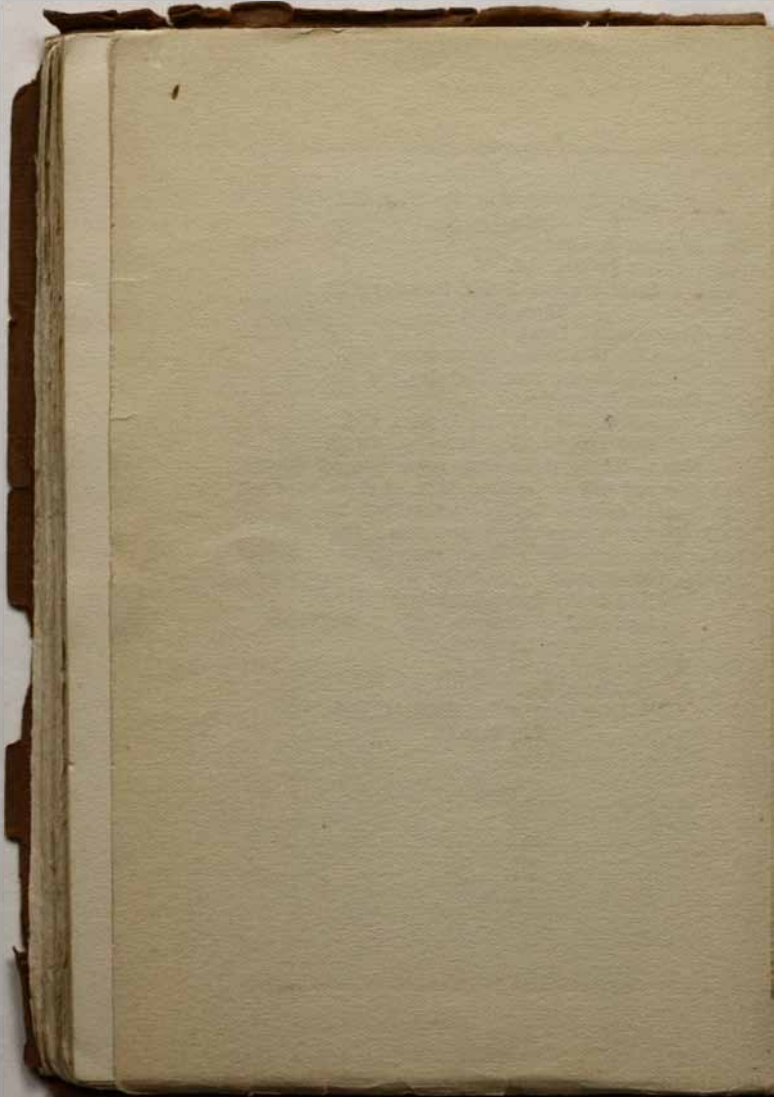
Note:—Of the above about seven men get through this year and will not return. Most of these have not yet found a definite location so that their records will be incomplete among alumni members. The following two records can however be put among alumni records:

GEO. D. LOUDERBACK B. S. Ph. D. Epsilon 1896

2713 Derby Street, Berkeley, Cal.  
Asst. Prof. of Geology, Univ. of California.  
Sigma Xi.

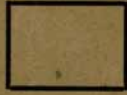
GEO. M. COLLINS B. S. Epsilon 1911

Los Gatos, Cal.  
% Utah Copper Co., Garfield, Utah.  
Tau Beta Pi.





Post Card



THE GEAR of Theta Tau.

233 College Ave.,

HOUGHTON, MICH.

BROTHERS:

Send me ..... copy of the 1912 Gear for which I promise  
to pay the price of \$1.00 per Copy.

(signed) .....



