THE GEAR

OF THETA TAU



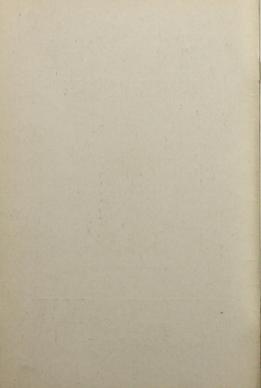
HOTEL LASALLE

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The GEAR of



FALL, 1937

Theta Tau Fraternity

Founded at the University of Minnesota October 15, 1904

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Chapters

2 Alpha, Founded October 15, 1904 University of Minnesota	2 1	Separate of
(Chapter house) 324 Walnut St., S. E., Minneapolis, Minn. 2 BETA, Established March 26, 1906 - Michigan College of Mining and Tech.	2 (G	(45)
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3 Zeta, Established April 17, 1912 University of Kansas (Chapter house) 1140 Louisiana St., Lawrence, Kansas		
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(Chapter house) R. F. D. No. 3, Charlottesville, Virginia	21	vamers 1
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c/o Dean of School of Engineering, George Washington University,	9	

c/o Dean of School of Engineering, George Washington University,
Washington, D. C.

PLAN TO ATTEND

Theta Tau's

THIRTEENTH BIENNIAL CONVENTION

HOTEL LASALLE — CHICAGO December 29, 30, 31, 1937



HOTEL LASALLE 13th Biennial Convention Headquarters

Local arrangements in charge of the Chicago Alumni Association of which G. L. Jackson, Phi '26, is president and J. B. Finch, Alpha '30, is secretary. Their addresses:

G. L. Jackson: 2228 E. 70th St., Chicago, Illinois J. B. Finch: 25th and Madison St., Bellwood, Illinois

Brazil==the Unbelievable

Most refreshing indeed it is these days to read of a nation whose internal and foreign affairs are progressing so smoothly that its government is able to reduce rather than to increase its debt. Add to that the fact that its commerce, industry and agriculture are growing so fast that its people want and need large numbers of immigrants and you have, we submit, anation that is accomplishing almost unbelievable things in this year of 1937.

Such is really the case in the United States of Brazil we learn through Brother Pala. Woodruff who is now completing a two and one-half wood on the brazil was now completing a two and one-half country. Brother Woodruff, in country. Brother Woodruff, in Grant W

From this literature we are informed that the Republic of the United States of Brazil occupies nearly half the continent of South America with an area of about three and a quarter milition square miles. It is divided intellectually since square miles. It is divided into the Federal District (the capitol city of Rio de Janeiro and its environs), sixteen coastal states and four interior states. The population of the whole country is approximately forty-seven millions.

Although Rio de Janeiro is the largest city of Brazil, Sao Paulo, where Brother Woodruff makes his headquarters is a city of more than a million population. Quoting from one of the brochures Brother Woodruff sent with his letter, "Sao Paulo, the Capitol City of the State (of Sao Paulo) is situated on the left bank of the river Tiete. at a height of 3000 feet, and has a population of over a million inhabitants. The town was founded in 1554 by the Iesuit Father de Anchieta on the 25th of January, the date of the conversion of St. Paul. Sao Paulo, the industrial metropolis of Brazil is often called the 'Chicago of South America'. Here you will find one of the most energetic and progressive places in the world.-Lying in the center of the vast coffee-producing district of Bra-



Missionary Woodruff

zil, Sao Paulo is an excellent point from which to visit the coffee fazendas." It is this great coffee producing area surrounding Sao Paulo which is mainly responsible for that city's remarkable growth. Since Brazil produces about twothirds of the world's coffee supply, this product is easily the most important in Brazilian trade. Cotton, cocoa, hides and meat, rubber, tobacco and sugar are other major export commodities. The United States is Brazil's best customer and contributes the largest share of her imports. Germany, Argentina and Great Britain, however, are each giving the United States a close race for the honor of leading saleman to Brazil. The most importthe Federal Minister of Labor asking that steps be taken immediately to increase immigration and thus permit that State to meet its pressing problem of a labor shortage. This shortage has been estimated at various figures, ranging from 100,000 to 300,000 people. Whatever the exact amount may be fact is established that there is an acute need of revising immigration laws if the country is to continue its present march of economic progress."

Among the many photographs sent



Rio de Janeiro, capitol and largest city of Brazil

ant imports are wheat, machinery and tools, iron and steel and automobiles.

That Brazil is not entirely free from some of our own troubles is indicated by the fact that a plan to restrict future plantings of coffectrees is a very live issue three. However, the labor situation appears to be quite on the other side of the picture as evidenced by the following quartation from a recent issue of "Brazilian Business", a bulletin of the American Chambers of Commerce for Brazilian "Indicative of the encouraging state of affairs was the memorial seat by the San Paulo State Government to

with his letter, some of which are reproduced on these pages, are two which offer proof that Brother Woodruff is a careful reader of his GEAR. These are pictures of the largest all wood suspension bridge in Brazil and appended to them is a request that we pass these on to Brother Edward F. Berry, our "bridge collector". (Brother Berry's interesting hobby of collecting unusual information about bridges was mentioned in an article appearing in the Spring, 1937, issue of THE GEAR.) Concerning this particular bridge in Brazil, Brother Woodruff reports that it was built two years

ago by a German engineer with the assistance of a good Theta Tau— Brother Gotthilf Bauer

Brother Woodruff's letter is as follows:

Kirche Jesu Christi der Heiligen der Letzten Tage Brasilianische Mission

"I am about to be called into the interior again in further persuance of my missionary duties, so am anxious to get this off to you before then.

"My work, as you may gather from this stationery, is that of being a our opportunities at home-and how well off we generally are.

You may notice this letter head is written in German. So it is. Our job is to preach the Gospel in German in a nation that speaks Portugues. Consequently, we become familiar with both — with German being favored—in our work. I enjoy my contacts with both races of people and value my experiences here.

Our time is too well taken for any of us to feel that even five minutes is wholly our own. We have a great



A Theta Tau helped design this largest all wood bridge in Brazil

Latter Day Saint Missionary for the time being. We eligible members of the Church of Jesus Christ of Latter Day Saints are called from our headquarters at Salt Lake City to go out and preach the gospel of Christ for two and one-half years. We are sent or called to go to all parts of the world. It fell my lot to be called to serve in Brazil. This work we do without remuneration. I have about six months more to serve, then will be released to return to the U. S. A. or do what I like. Most, or nearly all. of the missionaries return home because at the conclusion of such foreign service we can more fully appreciate

work to do and come to feel that our two and one-half year assignments fly by altogether too fast. We are like the sailor who, on his shore leave, goes rowing in the park. We are supposed to have Saturday off but it is usually spent in getting ready for Sundayour biggest day. Our time is well spent. The United States of Brazil is doing its best to catch up or do as its big brother up north. The City of Sao Paulo is said to be "the greatest industrial center of Latin America" and is really up to date and to the tourist presents a good mixture of American and European culture, architecture, and commerce. By the way,



Foreground: Sao Paulo Railway

reinforced concrete work is going over

It has been my pleasure to travel through most of the country or region luing between Rio de Janeiro and Uruguay Not only have I travelled but have lived in various places throughout this region and have found it quite enjoyable. It has afforded me many profitable experiences, some of which were riding on the world's most unique railway the San Paulo Railway ascending to the top of Rio de Janeiro's famous Sugar Loaf, visiting South America's largest saw mill. walking over the largest all wood suspension bridge in Brazil and last but not least observing people in this part of the world at their daily tasks of living by work and play,"

The Golden Mile==Lake View & Star Limited, Kalgoorlie Charles O. Thielicke, Beta '12

Few people interested in mining can be unfamiliar with the name Kalgoorlie, which lies 375 miles east and slightly north of Perth (the capitol of Western Australia) and at an altitude of 1240 feet.

Owing to its remarkable telluride deposits it is of special interest to the mining profession.

The average rainfall is between four and seven inches, but scarcely ever exceeds eight inches. During the winter months (July, August, and September) an overcoat can be worn with comfort except at midday. Even in summer the nights are usually cook though the shade temperature during December, January and February is often as high as 115°.

Dust storms, which rage for days at a time, brush, and blow flies are stored in some of the natural darwhacks, me some of the natural darwhacks, Western Australia is a really pleasant place to live, for it possess many advantages: first and foremost rich gold fields, a progressive population, excellent towns, and a healthy climate. From the above description the

general aspect of the country would be that of an African desert. Far from it, as nearly the whole of this section is covered with Fi-tree and Mulga (species of flowering acacia), Salmen gum and gilmet wood (Eucalyptus). Sandal wood is found in isolated spots.

Up to 1903, the question of obtain-

ing in adequate water supply for miniing purpose presented no little culty. The water of the country generally is excessively salty, almost in fact to the point of saturation and had it it not been for the energetic adequates of densing plants along the main roads the development of the country would have been postponed indefinitely. Condensed water sold for approximately trust the proposition of the country would be the proposition of the proposition of the country would give the protein the proposition of the country would give the protein the proposition of the country would give the protein the proposition of the proposition of the protein the proposition of the proposition of the protein the pr

ten shillings per one hundred gallons. The present source of supply for Kalgoorlie is at Mundaring, in the DarStoping has now reached a depth of 3400 feet and development is at the 3800-foot horizon.

The rill, cut and fill system is used in most places, although some shrinkage work is done in the upper level

and in isolated sections of the group.

About 50,000 tons of ore per month are treated. Run of mine ore is crushed in seven and one-half ton Gates Gyratory Crushers followed by Symons Cone and shorthead.

Grinding is done in two stages, primary mills in open circuit, over cor-



Van Tongren Dust Collector Chas. D. Thielicke Sluicing operations

ling Range, some thirty miles east of Perth, where a reservoir was constructed with a capacity of five billion gallons. The water from the supply is pumped in eight successive stages for a distance of 351 miles through a thirty-inch pipe. This huge scheme was completed at the end of 1902 and from that date on ample supply of fresh water to the mines was assured.

For mining and treatment purposes the cost is five shillings per thousand gallons, domestic purposes, seven shillings per thousand gallons. Water costs us slightly over a shilling per ton of ore treated. duroy strakes to secondary mills in closed circuit with classifiers. Pulp in bulk is floated for a pyrite-telluride concentrate which is roasted in Edwards furnaces and cyanided.

The population of Kalgoorlie is about 25,000 and for amusement and recreation we have two well appointed race courses, two sport fields for football, a trotting ground for night trots, a whipper course, cricket, bockey, soccer and lacrosse, an eighteen hole golf course, three bowling greens, at least thirty tennis courts, and a swimming pool. Baseball was introduced at the mine last year. The cricket players usually make good baseballey.

Accrediting of Engineering Curricula

R. W. Warner, Zeta '18

tivity.

NE of the most encouraging things of recent years in regard to the engineering profession as a whole has been the increasing will-

ingness on the part of the leaders of the various branches of the profession to sit down and talk things over for their common good. As a result of this generous spirit of co-operation, in 1932 was formed the Engineers' Council for Professional Development or E. C. P. D. as alphabetically known. By exact definition it is "A conference of engineering bodies organized to en-

hance the professional status of the engineer through the co-operative support of those national organizations directly representing the professional, technical, educational and legislative phases of an engineer's life." It is composed of representatives of the American Society of Civil Engineers. American Institute of Mining and Metallurgical Engineers, American Society of Mechanical Engineers, American Institute of Electrical Engineers. American Institute of Chemical Engineers. Society for the Promotion of

Engineering Education, and National Council of State Boards of Engineering Examiners.

A program was carefully and logic-

One phase of the important and significant work of E. C. P. D. is herein described by Brother Warner, Professor and head of Electrical Engineering at the University of Kansas. Brother Warner, as a member of the Delegatory Committee of the Seventh Region. has been in close touch with the accrediting of engineering curricula and gives an interesting account of this ac-

ally established and is being carried out through the agency of four major committees composed of many of the ablest engineers of the country. This program deals with the four principal stages of an engineer's career. They are as follows: 1, pre college; 2. training in engineering school; 3. early experience as a iunior engineer: 4. professional practice.

The committee assigned to each stage immediately started to work and already there is much to show for their efforts.

In connection with the second item of the program, it was obvious that in order for the engineer to have the proper place in the technical and social world his training in the engineering school must be adequate. Engineering schools already had curricula established and it seemed that much good could be accomplished from a study of these curricula. Accordingly, a nation-wide survey of engineering curricula was undertaken. Such curricula as seemed satisfactory were to be accredited as such.

A committee on Enginering Schools, headed by Dr. Karl T. Compton, president of the Massechuests Institute of Technology, was given the seemingly stupendous task of examing and inspecting all the enginening and inspecting all the engineering exhools of the country, the chief purpose being to identify and recognize those institutions which offer engineering curricula of satisfactory character and content. The country was sub-divided into seven regions and sub-committees formed to visit the schools within their respective regions.

A somewhat secondary purpose of this inspection and accrediting program was to assist the schools in bettering their programs of study and in bringing them up to what was recognized as standard in both quality and quantity. As a result of the program, many schools of the country have already been enabled to make extensive improvements in their curricula.

Visitation and inspection by members of a committee were entirely voluntary on the part of the engineering schools. While they were apprised of the program and invited to apply for inspection, the initiative was up to the school themselves. It is significant to note that probably not a single engineering school of any prominence in the country failed to apply for inspection of at least several engineering curricula. Some applied to the country of the country of the could correct what they considered certain weaknesses in their curricula.

While accrediting was applied only to curricula leading to degrees, the principal service departments such as mathematics, chemistry, physics, English, and applied mechanics were also inspected and complete accrediting of the engineering curricula was contingent upon the approval of these service courses. In the main, six major curricula were considered: chemical, civil, electrical, mechanical, metallurgical and mining engineering, next proposed of the control of the control was expecialized curricula were considered where the local conditions and engineering content seemed to justify it.



Prof. R. W. Warner, Zeta '18

Both quantity and quality of the engineering content was considered. Quantitative information was obtained by means of a uniform questionnaire sent to all schools that had applied for accrediting. Catalogs and other publications were also considered. From this material information was gathered as to the organization of both school and department, the responsibility as to budgets and policies, the financial stability of the institution, appropriations of the past few years, the investment in buildings, libraries and laboratories, the salary scales, teaching loads, staff training, trend of enrollment, entrance requirements, and requirements for graduation in each curricula. Certain minima were established for service work English, mathematics, applied mechanics, economics, chemistry, drawing, etc.

All qualitative criteria had to be determined by an actual visit of the delegatory committee of E. C. P. D. Such committees were composed of both engineering teachers and practicing engineers who had followed a sufficiently broad course of activity as to be able to judge education programs compensately.

Each institution was informed some weeks ahead of the exact date of the visit of the committee so that samples of work done, examination papers, instruction sheets, reports, text books, design problems, etc. might be collected.

It was a policy on the part of the major committee that hospitality acceptable from the institution being visited would be limited to luncheon on the day of the visit and then only when convenient to the institution.

Upon arrival the Regional Chairman, with members of the committee, met for a short conference with the president or dean. Following this the committee separated and visited individually or in pairs the various departments under consideration. Samples of work done by the students were inspected and the text books used were examined. The qualifications, experience, interests and productivity of the staff were determined and as far as possible the general actitude of the staff toward therein work.

Following this inspection, the chair-

man ressembled his committee and discussed their findings and recommendations. Then the committee again mer with the president or dean and heads of the departments and further discussed the findings of the committee members. Also, at this time attention was called to any essential deficiencies and recommendations were made as to how they might be corrected. No indication was made as to the final recommendation of accorditing.

When all of the schools of the region had been visited, the entire committee again met and formulated their recommendations to the main committee. These took any of the following forms: 1, to accredit; 2, to accredit provisionally; 3, to defer accrediting: 4, not to accredit.

This part of the entire program is practically complete. A total of 129 schools have been visited and 625 curricula inspected. Of these, 373 were accredited by E.C.P.D. unconditionally, 73 provisionally, 8 deferred and 171 not accredited. Thirty-cipht types of curricula were submitted of which 21 were accredited.

It is not intended that this accrediting program will stop here but that a re-check of all curricula will be made from time to time to insure that the standards now existing will be maintained.

One result of this program may be the elimination of a certain type of school which advertises the preparation of a student for one of the professions in only a year or two regardless of previous training or entrance requirements.

The list of accredited curricula is expected to be of much assistance to state licensing or registering boards for professional engineers. It should serve as a guide to them in evaluating the scholastic training of a man applying for state or national licensing. This particular procedure relates to the fourth stage in the complete program of E. C. P. D.; ie., the public recognition and attainment of a legal status by the engineer.

The third stage in the engineer's career—experience as a junior engineer
—is receiving much attention from E.
C. P. D. Plans for the development
of the junior engineer are under way,
self-analysis methods are being developed and local sections of junior
engineers are being oreganized.

Student selection and guidance—the

first phase of the E. C. P. D. program —is being carefully studied because it is obvious that correct and intelligent selection at the start is most effective in building up an able and effective profession. Much literature is being distributed, local guidance committees are being formed and certain tests have been tried.

A program such as that of E, C. P. D., backed by the leading engineering societies of the country and guided by the best ability of the profession at large, is certain to show results that unquestionably will greatly enhance the social as well as professional status of the engineer.

ROOMMATES CONTEST

Roommates are supposed to quarrel. That is, the supposed tradition is that roommates quarrel; but George Jenkin, Gamma '38, and Tom Trumbull are some kind of exceptions. They quarreled all right, but it was a friendly sort of spat aired in a campus election.

You see, both George and Tom were mominated as candidates for the president of the Colorado School of Mines student body. Said Roommate Tom to Roommate George, "Here's where friendship ceases."

Well, the end of the story is that Jenkin won and his roommate, Trumbull, did in public and on the Mines campus raise the hand of George Jenkin and cry, "The winnah!"

But for roommates it didn't turn out so bad after all, because Tom Trumbull came out second best which entitles him to the position of vicepresident. . . And so between them, these two roommates will run the student government this coming term.

-From Colorado School of Mines Magazine



Trumbull and "winnah" Jenkin

Industrial Marketing Research

R. L. Goetzenberger, Alpha '14

ANY industries requiring technical consideration of product manufacture and related processes are being confronted with

the necessity of fundamental changes in their marketing methods. Upon the engineering school graduates these create new demands which will be more pronounced as time passes. Technical skill during the past has been devoted largely to invention, design, fabrication, and operation of products. Ingenious equipment combined

with cleverly engineered manufacturing processes have been devised. We have learned how to design and operate machinery with a high productive yield and a low production cost.

Scarcely a decade ago many leaders of companies engaged in the production and distribution of industrial products were primarily technical men. Now we find that most of thee organizations are guided by engineers who have applied engineering methods to commercial situations. Although technically trained, success has come mainly through their ability to understand customers and markets, and how best to serve them economically. Therefore, it is logical to assume that each year a greater number of technical graduates will be thrown into

closer contact with problems relating to markets and distribution. These call for knowledge and training in the fundamental principles of scientific marketing as related to industrial products.

Firms who have sponsored and practiced scientific marketing are the business leaders of today. They

have placed the name of their products at the top of their fields because they have learned that customers are the real masters of the markets, and hence consult their masters' wishes at every opportunity.

Marketing research has been authorizatively defined as "the study of all problems relating to the transfer and sale of goods and services from producer to consumer." First of all and essentially, it is "study". Therefore, it is differentiated from any casual or superficial inquiry. It is a planned, orderly, and malytical consideration of every conceivable factor which might effect the point or situation at issue.

The application of scientific research principles to the marketing of manufactured products is explained in this article by Brother Goetzenberger, who, from his Vice-President's chair at the Brown at the second of the Brown at the second of the from experience. Another interesting outlet for the engineer's talent is suggested. It is this concept or study as the essence of marketing research that calls for a formulated technique as the means of reaching uniformly reliable conclusions. However, it must be flexible in application and must concern principles because, in accordance with the definition, it must concern "all problems" involved in the marketing process.

Contribution of Scientific Marketing

Broadly speaking, marketing research contributes directly to business in at least six specific ways:

- It keeps a business in touch with its markets. As an interpreter of markets, the policies and practices of industrial concerns are guided in the right direction. Therefore, it overcomes the danger that organizations, especially the larger ones, will lose the feel of their markets.
- will lose the feel of their markets.

 2. It eliminates waste in marketing methods. The effectiveness of different methods employed by the business is measured and those found inefficient are eliminated.
- 3. It develops new sources of profit by revealing additional uses for established or modified products or by discovering new markets or needs for new products. Also, it ascertains the size and the status of markets, as well as the relative importance of competitors.
- It constitutes an insurance against unanticipated changes in the market which might make a product or an industry obsolete.
- 5. It can be used for sales promotion purposes. Many business firms are now using the results of their analysis work as a direct means of soliciting sales. This use is, of course, a by-product of scientific methods and should not be con-

- fused with its more fundamental contributions to business.
- It injects enthusiasm into an organization. With the conviction that a company bases its marketing activities on scientific knowledge of the market, employees acquire confidence which stimulates enthusiasm.

Stages of Procedure

In a most abbreviated manner, there are listed below the stages of procedure



Scientific Marketer Goetzenberger

which, because applied science is involved, are considered flexible standards by many employing the technique of marketing research to their business enterprises.

- 1. Preparation.
- (a) Analysis of the problem.
- (b) Planning of procedure.2. Execution of Program.
 - (a) Development of question-
 - (b) Collection of data.
 - (c) Organization of data.

- 3 Summation.
 - (a) Interpretation.
 (b) Presentation of results.
 - 4. Extension of Research Service.
 - (a) Application.
 - (b) Emendation.

Personnel Characteristics

Since we are treating with a factual science and require intimate knowledge of diversified engineering, careful consideration must be given to the selection of man-power. The habits of accuracy in all operations—or intellectual honesty—of open-mindedness—of suspended judgment—and of criticism, including self-criticism, are attributes that characterize the ideal scientific mind which when combined with a sales perspective identifies the successful leader of marketing research.

In any brief on the technique of maketing research, there is danger of making it appear too scientific in scope. In conclusion, I would like to stress that the scientific method is the engineer's guide to the simple, direct, logical, and sound resolution of the problem. Moreover, for those who prefer to limit the use of the term "research" to the pure sciences, the subject of the paper might be more appropriately written as "Orderly Marketing—The Route to Greater Profits."

Surveying Along the Mississippi

Excerpt from story in Iowa Transit by Maynard Dix, Omicron '37

The second day of June arrived, meaning that the last of the final examinations for the Junior class was over and also that the day had come for Ray Stearns, "Red" Arendts. "Rolly" Krebil and I (all Omicron '37) to report to the District Engineer's office at the Rock Island Arsenal to begin our surveying job on the Mississippi River. After the final papers had been filled out and other sundry duties performed at the Arsenal, we were immediately taken to Le Claire, Iowa, where the quarterboat, which was to be our home and headquarters for the summer, was docked.

"Our" quarterboat was of the ordinary variety of rather recent vintage, which, for the information of those not nautically-minded, consisted of a two-decked houseboat complete with all living facilities and capable of accommodating forty-five persons. After boarding we selected our bunks, which were all located on the upper deck along with shower rooms and lavatories. The next move, of course, was the complete inspection of the boat. On the lower deck we found the kitchen, dining hall, storerooms and office. The exterior of the boat was rather gaudily decorated; the color scheme was cream with red trimming; the usual flags were flying -"Old Glory" and the Engineers' flag (which by the way, we were told offered ultimate protection against any and all warrant servers, law students and such). Alongside the boat and lashed to it was a dunnage barge used to store supplies and equipment, such as coal, gasoline, cutting tools, etc. Included in the equipment of the outfit were two gasoline powered motor launches, an outboard motor boat, and several skiffs, all of which were used for transportation of the men on the river.

In all there were forty-two living on the quarterboat, thirty-five working in the field, six employed in the kitchen, and one in charge of the office. Eight parties composed of four members each,—topographer, recorder and two rodmen, were employed in the topographical work. A three-memberd party ran all the necessary horizontal and vertical control. "Red", "Rolly", and I worked in the topographical parties and Ray held membership in the control party.

The purpose of the survey of the river is to provide the government with topographical maps of the river banks and silands to be used in connection with the Lock and Dam project which is being carried on in order to eventually make the Mississippi River a satisfactorily navigable stream. The maps drawn showed two-foot contour lines, all stationary buildings and structures, and the water line of the river in the particular area being surveved.

Aside from the regular duties of the day, we had many interesting experiences which dealt with anything but Civil Engineering. A few of these stand out as highlights of our summer.

The afternoon that our motor boat sheared its propeller pin in killing a nineten-and-a-half pound fish which we recovered and proudly displayed and immediately photographed for evidence sake; the day we bravely rid the countryside of one of its deadly two-foot rattle snakes with the aid of several machettes, sticks and logs of various sizes, and innumerable rocks; the eighty-five milet trip lasting a day



Dix Stearns Arendts Krebil "Army Engineers"

and a night we made up the river in the quarterboat when it was moved to a new site of operation; all were experiences not to be easily forgotten.

Sq., we "army engineers" returned to school with our heads filled with assorted P.I.'s, P.O.T.'s, and H.I.'s and with the resounding echo of "rod up" in our ears, confident that we had gained much in actual technical experience and had spent a very enjoyable summer as well.

W. W. Dartnell, Nu '22, an Authority on Coal Mining

Last year, a serious-minded young coal operator who sat on the speakers' platform at the American Mining Congress annual coalmining convention was responsible for the smooth manner in which all papers were delivered and commented on. The young operator was W. W. Dartnell, of the Valley Camp Coal Company. And because of his success in handling this important part of the convention, he was entrusted with a greater responsibility for 1937—chairman of the important committee on arrangements.

Thus, when the American Mining Congress meeting got under way on May 17, his watchfulness and meticulous care made certain that every event was handled with efficiency, courtesy, tact, and fairness.

William Wallace Dartnell was born in Fort Wayne, Indiana, June 8, 1898, the son of William Ernest and Carrie Alice Hall Dartnell. His mother traced her ancestry back to "May-



Mining authority Dartnell

flower" stock, while his father was a native of Croydon, England. Incidentally, Mr. Dartnell's father arrived in the United States at the age of 15 and has just recently retired from the Pennsylvania Railroad after many years of service.

Formal schooling began at Fort Wayne Kindergarten when Wallace was four years old. Later he attended public school in Pittsburgh, and graduated from high school at Carnegie, Pennsylvania.

His proximity to the mines determined his career and he matriculated ar Carnegie Institute of Technology, received his B.S. in Mining Engineerreceived his B.S. in Mining Engineering. Brother Wallace's first taste of mining was obtained during high school days when he helped out at the Acceptable of the Section of the Section

Following graduation in 1922, he went on a three months' tour of American mines, covering 12,000 miles and viewing practically every type of mining operation. In September, he returned to accept a position with J. A. Paisley, president of the Valley Camp Coal Company, one of the outstanding coal men of the country. Mr. Paisley promised to teach him coal mining "from the ground up." When Wallace reported for work at the Connelsville Mine No. 1 at Morgantown, West Virginia, he discovered "from the ground up" meant a start by loading earth. Under Mr. Paisley, he learned coal mining and rapidly won his spurs in his chosen profession, rising to the position of division engineer in 1926.

In 1926 he left for Russia and was employed in the Ukraine as engineer for Donugol, the Russian Coal Trust, under the direction of J. F. Joy, chief engineer. He returned to Valley Camp, with headquarters at Charleston, after six months in Russia. He was made chief engineer at Wheling in 1929 and manager of mines, northern division, in 1934. He is now an independent engineer in Morgantown, West Virginia.

Just before leaving for Russia in 1926, Mr. Dartnell and Miss Virginia Morrow were married at Wenonah, New Jersey. They make their home at Morgantown, West Virginia, with their three girls-Virginia, Miriam, and Eleanor.

No one could always be as serious as Brother Wallace is at work and at American Mining Congress meetings. Thus, he enjoys his hobbies of nature study and Sunday cooking.

In addition to Theta Tau, Brother Wallace is a member of the American Mining Congress.

Henry T. Putz, Gamma '32, Discovers Spot Where Mickey Mouse is Scorned

Mining on the Witwaterstand is considerably simplified in regard to the location of the values to be mined. The Reef, as the ore is known, consists of three main beds varying in width from about 4 inches to 6 feet. In a few cases diamond drilling is done to determine the values beforehand but in many cases the location of the shaft is decided upon and the plan of the workings made out on results obtained by previous experiences of mining operations in this district.

The northerly reef is known as the Main Reef, the center bed, known as the Reef Leader, being just to the south of the Main Reef which is so close to it that it appears to be a part of the Main Reef in some localities. The third reef is known as the South Reef and is located about 70 to 100 feer south of the Main Reef Leader.

The bedding planes of these reefs have been tilted so that the beds are dipping to the south at an angle of 70° in the western portion of this region to about 10°-15° in the eastern portion.

The mining methods have been developed to suit this particular formation and it would impress even the most experienced engineer to learn the cremendous amount of work done in the most modern manner.

In this district approximately 300,000 native boys are employed and

approximately 40,000 white men. Certain regulations are enforced by the government to protect the life and

the government to protect the life and health of those employed. A white man must be in charge of the working place but not until he has satisfied an examining board that he can be made responsible.

Johannesburg, a city about the size of Denver, Colorado, is located in the center of this district and furnishes all the entertainment for the workers that any other modern city could supply.

A very noticeable feature of the mine employees is that their dress belies their employment. When away from the mine the majority of the miners would be taken for business men. They do not, in most cases, present the gruff, slovenly manner characteristic of the mining industry. They can be seen mixing with the best of some control of the mining industry. They can be seen mixing with the best of some control of the mining industry. They can be seen mixing with the best of some control of the mining industry. They can be seen mixing with the best of some mining min

If one were to judge from the number of motor cars parked at the mine one would get the impression that all the employees were extremely well paid, as it is difficult to find a spot to park one's car.

The natives are obtained from the various tribes in South Africa through agents employed by the Witwaterrund Native Labor Association. Their periods of employment range generally from six months to a few years, consequently there is a continual movement of natives to and from this district. They must be trained and instructed in their work and the dangers accompanying underground work, and because of their short period of employment and primitive mentality in most cases, this is no small task and is well manaeed by those in charse.

To me, the native is most interesting, as his emotions are not a a rule influenced by the modern life. He is genuine unless his contact with civilization as we know it has made him otherwise. The native who has lived and served within the bounds of civilization most of his life seems to have learned all the evil theroof and, with few exceptions, none of the good things. Consequently the native fresh from his tribe, although clumys and troublesome, generally receives preference over one who has lived his life away from his tribe.

They are placed in compounds somewhat in the style of barracks and are supplied with food. Once each week they are entertained by talking piccures out in the open space or court within the compound. Although the majority do not understand the American language they prefer the talkies to the salent pictures which were once evaluated by an interpreter.

Strange as it may seem, they have no use for Mickey Mouse, as cartoon pictures are obviously not real. They prefer the rough riding, gun totin' cowboy pictures. The real he-man and great lover are great favorites with the boys. They are at a loss, however, to understand how Jack, as the hero is known, can appear the following week without a trace of the beroic battles of the week before. Experience has taught the compound manager than a screen is not safe when the villain arouses the boys. Consequently a whitewashed wall now serves as a screen and the picture is stopped when the temper of the boys reaches an active stage.

Richard L. Templin, Zeta '15, Wins Rowland Prize

Consistently outstanding as a member of Theta Tau is Richard I. Templin, graduate of the University of Kanass and Chief Engineer of Tests of the Aluminum Company of America. New Kensington, Pa. His most recent achievement was the winning, with A. V. Karpev, of the Thomas Fitch Rowland prize for their paper entitled "Model of Calderwood Arch Dam." The award was made by the American Society of Civil Engineers. Mr. Karpow is a designing engineer of the Aluminum Company of Americas Brother Templin is located at the Aluminum Research Laboratories which are operated by the Aluminum Company and are situated 18 miles up the Allegheny River from the Company's headquarters in Pittsbureh.

The Calderwood Dam, at Calderwood, Tenn, was built by the Aluminum Company because large amounts of electric power are necessary for the production of aluminum. The dam was designed by competent engineers and erected several years ago. When stress and deflection measurements were made subsequently, they did not check with the calculations made preceding the erection of the dam.

Brother Tempin, who was in charge of the field tests made on Calderwood Dam, was asked to assist in planning and carrying out extensive model tests of this same dam. He and Mr. Karpov decided to build a model dam on the made. From the new measurements could easily be made. From the accumulated information many data were obtained which will be invaluable in the designing of future arch dams. It was also discovered that the Calderwood Dam as built is actually stronger than necessary.

Dick Templin has been testing engineer for the past 18 years. Give him an article, tell him what you want to learn about it, and he will test it for you and tell you all about it. Sometimes these tests are so difficult that testing equipment is not even available. If this is the case, Dick goes to the manufacturers of laboratory equipment and tells them the sort of machine he needs. Should the specification be so fine that the manufacturers besitate to guarantee the accuracy of the finished product, there is still another way out for Dick. He then has the well-equipped instrument shop build the equipment for him under his direction. And Dick doesn't take a chance. His primary standards of weights and measures are all periodically tied in with those of the National Bureau of Standards at Washington, D C

It may be that he obtained his passion for accuracy from the straight shooting he did when a member of the University rifle team years ago, but engineering was in his blood ever since he can remember. Born in Minneapolis, Kansas, the son of a merchant, he was educated in the public schools there, and entered the University of Kansas in 1911, where he enrolled in the civil engineering

Dick was treasurer of the sophomore class, president of the Student Civil Engineering Society, and a charter member of the Kansas Alpha chapter of Tau Beta Pi. He was also a member of Acacia.



Prize winner Templin

After receiving a bachelor of science degree in civil engineering in 1915, Brother Templin next attended the University of Illinois, where, two years later, he received an M.S. degree in theoretical and applied mechanics. He was a research fellow in the Engineering Experiment Station there and was elected to membership in Siema Xi.

During summer vacations in his college years, Dick worked in the copper mines at Morenci, Arizona, with the maintenance of way division of the Atchison, Topeka, and Santa Fe Railroad in Colorado and New Mexico, and as a structural engineer with the Kansas City Terminal Company, Kan-

sas City, Missouri,

After receiving his degree from Illinois, Dick was employed by Illinois, Dick was employed by Mational Bureau of Standards in Washington in 1917. He left the bureau two years later to take up his present position. He is responsible for the standards, methods and apparatus used in mechanical testing throughout the Aluminum Company of America and its subsidiaries which have forcetten different mechanical testing laboratories.

Dick Templin is a member of and takes an active part in the American Society of Civil Engineers, the American Society for Metals, the American Society for Testing Materials, the Engineers' Society of Western Pennsylvania, the University Club of Pitsburgh, and the Masonic Order. He likes hunting and fishing, serves a deceptive ball at tennis, and spends the winter months bowling duck pins.

Brother Templin was married on June 20, 1919, to Miss Mabel Jane Harper, daughter of Mr. and Mrs. John Ferguson Harper of Frankfort, Kansas. They have two boys, Richard L. Jr., 17, and Gordon Harper, 12.

Annual Professional Interfraternity Conference Meeting Held in Chicago

On October 23, 1937, some sixty delegates of the Professional Inter-fraternity Conference met in Chicago. The sessions were presided over by Dr. M. C. Rogers of Alpha Chi Sigma who delivered a fine address, outlined the objectives of the Conference and reviewed the progress which has been made in recent vears.

The report of Secretary-Treasurer H. G. Wright revealed twenty-seven members, the largest number in the history of the organization. Twentyfour member fraternities had delegates

in attendance

Dean of Men Fred H. Turner of Illinois spoke on "The Future of College Fraternities" and Harrold P. Flint, National Secretary of Tau Kappa Epsion, discussed the "Organization of the National Fraternity." Both addresses were well received. The Conference urged the co-operation of other like bodies in properly classifying the hundreds of Greek letter societies according to the recognized fields of honor, professional, etc.

The following papers were presented and discussed:

"Taxes and the College Fraternity", by Rayford W. Lemley, Delta Theta Phi, Law,

"The Resident Alumni Adviser", by Dr. P. G. Putterbaugh, Delta

Sigma Delta, Dental.
"Chapter By-Laws", by Don A.
Jenkins, Phi Beta Gamma, Law.
"Function of the Professional Frat-

ernity", A Symposium Conducted by V. W. Meloche, Alpha Chi Sigma, Chemistry.

"Professional Fraternity Magazines", by Paul M. Cook, Phi Delta Kappa, Education.

"An Undergraduate Looks at the Professional Interfraternity Conference", by M. H. Fairchild, Alpha Chi Sigma, Chemistry. "Relationships of the Professions— Education and Professional Training", by Arthur D. Wright, Kappa Phi Kappa, Education.

"Membership Costs and Their Effects", by J. D. Sparks, Alpha Kappa Psi, Commerce.

"Chapter Programs—What Should They Contain?" by W. A. Rundquist, Sigma Phi Delta.

At the close of the meeting the following officers were elected for the coming biennium:

President, Dr. P. G. Putterbaugh, Delta Sigma Delta, Dentistry, 55 E. Washington Street, Chicago, Illinois.

Vice-President. A. L. Doud, Ir.,

Delta Theta Phi, Law, Douds, Iowa.

Secretary-Treasurer, H. G. Wright, Delta Sigma Pi, Commerce, 222 W. Adams Street, Chicago, Ill.

Members of the Executive Committee, the foregoing officers, and: Dr. Marvin C. Rogers, Alpha Chi Sigma, Chemistry, University of Minnesota, Division of Chemical Engineering, Minneapolis, Minn. Paul M. Cook, Phi Delta Kappa, Education, 1180 E. 63rd Street, Chicago, Illinois.

Dr. Ralph W. Elliott, Phi Rho Sigma, Medicine, 10515 Carnegie Avenue, Cleveland, Ohio.

H. H. Hopkins, Theta Tau, Engineering, 1724 W. Fulton Street, Chicago, Illinois.

Letters

Dear Brother Howe:

I thoroughly enjoy each copy of Tree Geax
and agree with you that most of the readers
would be interested in an article about the
Philippine Islands. I would like to prepare
an article of interest to all but am afraid that
my main subject will be mining. However,
I will attempt to make as many "side trips'
as will be of interest. Should you can be
delter or bould up the article as written fail

I am at present acting as consulting engineer for the Sunta Cecilia Mining Ca., both with Mindrans Goldfieldd Mining Ca., both with Mindrans Medica Mining Ca., both with Medica Mining Ca., both with the sunta management of the sunta management of

Thanks for your co-operation, Brother Osborn. We shall look forward to your article. 857 S. Washington St. Van Wert, Ohio

Dear Brother Howe:

I just finished looking through a few old copies of Tist Gaxa and was then reminded that you do not have my correct address. I was married last June and ann ow teaching and am Goach of Athletics in the Kidge High School, Jvan Wert, Ohis. This is my accord year at this school and am gettings with the control of the contr

I am looking forward to my next GEAR and hope Phi Chapter, along with all the rest, has a banner year.

> Yours in H & T, NORMAN MOSER, Phi '36

We are pulling for you, Norm. Hope you succeed in transforming the potential energy of your teams into kinetic energy in a goalward direction. May 13, 1937

Dear Brother Howe:

You did an excellent job in your method of presenting my article on technical publishing in the spring issue of THE GEAR of That Tau. In fact, the entire magazine is well deited, skillfully laid out and handsomely printed. I congratulate you on the quality of your editorial work.

Could you let me have about three additional copies of the spring number? Even though I have followed the business of writing articles for years, I am sufficiently flattered by the appearance of the article in the magazine to want to send copies to several friends and members of the family.

Thank you for your trouble in giving the article a first-rate presentation.

Yours in H & T,
VINCENT B. SMITH

Coming from a professional editor your opinion carries much weight. We are only too glad to comply with your request, since, like you, we like to show our stuff to intimate friends. Thanks for your whole hearted cooperation, Brother Smith.

> Building 602, Wing 5 Naval Air Station Pensacola, Florida

Dear Brothers Mercer and Howe:
Enclosed herewith is the address to which
I wish you would send my copy of THE
GEAR. I've been here since the first of Sep-

tember and am trying to become one of Uncle Sam's aviators. It is great sport. Here's hoping for a bigger and better Gear. Yours in H & T,

Yours in H & T, HAROLD C. FOSTER, Omega '37

Happy landings, Brother Foster. Let us know when you change that address.

Dear Brothers in Theta Tau: Long will I remember the criticisms of our

conjoyable convention at Chicago in late 1933 which brought about the editorial rejuvenation of the magazine. I still maintain that I personally preferred the old red cover with the symbols on the front, but I do commend you very highly for the delightful changes in editorial policies.

In September of this year I joined the teaching staff here at Texas A. & M. as

Associate Professor in Petroleum Production Engineering, leaving the more rugged life of the field petroleum engineer to the younger souls who may not mind its long and exacting hours. My work here is most enjoyable. Harold Vance, UC '23, is head of the department, and A. B. Stevens, UC '27, a brother in Theta Tau, is professor in rounding

out the departmental staff.

There are many, many Theta Taus widely scattered over this general vicinity, most of whom are from Eosilon Chapter.

Please extend my personal greetings to the Grand Officers, especially to Brother Erich Schrader. In closing, I extend warm personal greetings to yourselves.

Yours in H & T,

JACK P. Hays, Epsilon '34

Well do we remember your staunch support at the Eleventh Biennial Convention, Jack. We are much pleased to hear of your change of occupation. Of course, we assume you could still take it, if you wanted to.

458 Hillside Avenue Rochester, New York Dear Brothers Mercer and Howe:

I have moved to the address given above from 9 Granger Place and hope to stay put for a while. Please send THE GEAR to me here.

Pve enjoyed The Gear more than ever since leaving school. It certainly is a big help to the men who have graduated but who still like to know what's going on in the home chapter.

Yours in H & T, Howard B. Edwards, Pi '36

Glad THE GEAR is to some extent fulfilling its primary objective, Brother Edwards.

> 940 S. Concord St. Los Angeles, California

Dear Brothers:

I have been trying to find the address of a Theta Tau man but to date I have received no reply and thought you might know. He is William Warren, Epsilon '50, and as far as I know is General Manager for the Oriental Tin Company somewhere in The Federated

Has the fraternity begun work on a new directory or is this still considered too much of a thing to undertake at this time? Also, is the fall number of THE GEAR out yet or going to be soon? It is my intention to subscribe yearly until I can take a life subscription. Kindly send my mail to the above address, my new location.

Yours in H & T, HOMER D. ERWIN, Epsilon '29

Our files show only Brother Warren's home address which is, of course, obsolete. Perhaps some reader can help you. It is quite likely that the coming convention will take action on a new directory. Cotopaxi Exploration Co, Casilla 272 Latacunga, Ecuador

Dear Brothers Mercer and Howe:

Will you please send my copies of THE GEAR to the above address? I am doing a bit of everything in the engi-

neering line, and also am getting a "line" on foreign work.

My Spanish doesn't bother me at all, but it certainly bothers the natives!

Yours in H & T.

FRANK TRASK, IR., Psi '36

Excerpts From Letters to the Grand Scribe

Schuyler B. Henry, Epsilon '23, CASOC, Bahrein Island, Persian Gulf, via Baghdad, Iraq.

"Dammam Camp, Saudi Arabia."

You know—when I left Arabia during the summer of 1935 I had no intention whatever of returning, all of which goes to show that we don't have much of an idea as to what is in store for us in this little old world.

The original "gang" has scattered but I am glad to say that one has returned after

am glad to say that one has returned after a year in Alaska, that is, R. C. (Dick) Kerr, Epsilon '17. He was here about two years in charge of the aerial reconnaissance and photographic program and this trip he is ramrodding the seismographic work which is just getting under way.

See Committee of the Committee of the Streetleptine 22) is now in charge of the Shreetport Office; Art Brown (Epillon 26) is on development work in South Texas; Tom Kach (Epillon 24) as you must know, it in the Durch Eart Indies; it is removed that the Durch Eart Indies; it is removed that trip into Evithiopia; Fred Davies (Alpha 16) is now connected with the recently exganized California-Texas Corporation and is located in the New York office; and my brother Pit (Epillon 29) has just returned on the himself of terreture to vescreak.

Great changes have taken place here since I first mapped this structure in 1933. At that time it was about the most God forsaken parch of rocks and sand that one could imagine; today it is really not so bad. The building program included the erection of an adequate electric plant, warchouse, tool houses, commissary, ice plant, and hospital. The program culminated with the erection of four single-men air-conditioned cottages and eight

air-conditioned married quarters. Our married quarters are something to be really proud of-with exterior stucco and Mansfield tile interiors. The space between the wall studding has been packed with Rock Wool (spun glass) for insulating purposes and the floors are all cement. All married quarters are furnished with an abundance of gas for cooking and heating. Each house is equipped with individual Frigidaire cooling and de-humidifying units for living and bed rooms. All this has certainly taken most of the unpleasantness out of our Arabian summers-at least indoors. My wife and youngster came out last April and we have passed up the regular summer vacation on the grounds that we are more comfortable here than any place we could go for the local three weeks of vacation. There remains now the factor of isolation. To date there have been only two American women here but five additional wives are now en route and are scheduled to arrive about October first. This will help greatly. Negotiations are now under way for permission to bring in radios and phonographs for private These, from an Arab point of view, are works of the Devil and very much taboo.

Our Bahrein field is turning out much better than was at first anticipated. The refinery should be completed before the first of the year. The recent combination of California Standard and The Texas Company for the marketing standard California-Trass Corporation was undoubtedly a most satisfactory arrangement for all concerned, giving S.O.C. mearby exhibithed marketing facilities and Texas Company an adequate supply of pertol-com products for her extensive foregon marketing facilities and for the control of the production of the control of the control of the production of the

Clayton Ott, Zeta '34, Balete, Masbate, P. I. Since I last wrote to you my opinion of the islands has changed considerably and I find that I like it much better. For the past month I have been operating a property here on Masbate and I like the idea of settling down for a while. We have an option and I am trying to find out whether or not the prospect is worth while. Numerous open cuts and runnels have been driven. The property is in a district which has three producine mines, one of which is the largest operation in the islands, the Masbate Consolidated now having a 3,000 ton mill. I would appreciate a list of the alumni in the islands. It is usually pretty lonesome in Manila and I would like to meet some of them.

Willis L. McLean, Alpha '26, Paracale, Camarines Norte, P. I.

We had a very nice trip over, arriving in Manila on February 14. We were in Manila a few days and then came out here where I am in charge of the development work being done on one property and also have to examine other properties in this vicinity. I expect to leave here at 4 a.m. tomorrow to look at a property that requires an automobile trip, then a boat trip, and then a long hike to reach it. The heavy overburden and the vegetation make it difficult to prospect in this country. The temperature here scems much like Tucson in the summer, much moisture and warm nights. I really like it here and wish to thank you for the help you gave me in securing the job. Send my mail to the 5th Floor, Filipinas Building, Manila,

Post card from Dick Russell

Dear Erich: Sailed May 21 from Sayannah to Oslo, 13 days on luxurious Norwegian freighter. Went around North Cape, south through Finland, arriving here two months ago. Went to Moscow, Rostov, across Caucasus to Tiflis and down into southern Armenia, next to Mt. Ararat. Returned along Black Sea to Gagy and Sochi. Was member No. 1 (in serial order) at the Congress. Gave the first paper in the Petroleum section, followed by Howe, Changed plans, went to Nova Zembla instead of Siberia. Had a 3000 mile trip, first Americans to land on Nova Zembla, made 12 ports, saw plenty of ice and glaciers, even got snowed on while climbing a mountain. Sailed from Archangle, returned to Murmansk. Will be in Finland tomorrow night and have a month in Sweden and Norway. This is the most interesting country on earth. We have had a wonderful time. Yours in H & T, DICK RUSSELL

In Alemoriam

WALTER REILLY, Mu '33 Walter Reilly, after graduating from the University of Alabama, was engaged with his father in the contracting business until April 27, 1934. His death was due to an accident while driving to Patterson, N. I. Further details are not known at present.

W. J. PERKINS, Beta '07

W. J. Perkins graduated with the class of 1907 from the Michigan College of Mining with the degree of B.S., E.M. He was also a member of Theta Tau and Kappa Sigma while he attended the University of Wisconsin prior to his enrollment at Houghton.

For a number of years after gradua-

tion Brother Perkins was connected with iron mining in northern Wisconsin and later became a sales engineer. By 1931 he had established a sales agency, called the Perkins Machinery Company, for several machinery manufacturers.

Brother Perkins died very suddenly on May 2, 1933, and left a widow, one son and one daughter. Mrs. Perkins and the children still live in Milwaukee at 1228 Maryland Avenue.

EDWARD CHARLES WHEELER. Gamma '30

Edward Charles Wheeler, superintendent of the mill of Shenandoah-Dives Mining Company at Silverton. Colorado, died at Silverton on September 10. Brother Wheeler was the son of E. C. Wheeler, chairman of the Public Utilities Commission of Colorado, and a grandson of Walter Wheeler, a pioneer engineer of Ouray, in that State. He was an alumnus of the Colorado School of Mines and joined the Shenandoah-Dives organization in 1931. Word has been received of the death of the following Brothers, but additional facts are not available:

Carence C. Stevenson, Lambda

Francis Hodgson Geib, Iota '18 P. D. Kern, Iota '18

R. N. STUBBS, Iota '21

Message From Grand Regent Hopkins

In referring to the value of a frattertive membership, many are inclined to stress it as particularly advantageous to the young graduate. While this is an important fact, the later years have a very definite value to any alumnus, which should not be overlooked. There are many cases where an alumnus has benefited materially over a period of years due to his membership in Theta Tau.

While no fraternity is organized as change of favors between members which will result in definite benefits to each. Like everything else in life, this cannot be a one-sided proposition. Alumni contacts should not be ignored at any period, as the very principles upon which a fraternity is founded teach the policy of mutual help.

If there are any members who heats tate to develop their contacts with other men of Theta Tau let them not forger that good friends are among to greatest assets in life. Initiation into such a group, in itself, but is an opportunity to meet many men optomon ground which can easily develop into firm and fast friendships. In such a circle there is the privilege of giving which affords equal satisfaction with that of receiving favors.

The devotion of many of our older alumni to young graduates is worthly of the highest praise. They reap, as a reward, the great satisfaction of having helped someone in need. It is for an even balance of "give and take" that we strive and we feel satured to the continued co-operation of our older alumni.



Grand Regent Hopkins

The GEAR of THETA TAU

P. L. Mercer, Omicron '21 and J. W. Howe, Omicron '24

211 ENGINEERING HALL IOWA CITY, IOWA

Subscription \$1.00 a Year Life Subscription \$15.00

VOLUME XXVII FALL, 1937 NUMBER 1

IS IT SIGNIFICANT?

Since the article on Brazil was prepared for this issue the government of that nation has ended its seven year effort to control coffee prices. This coffee control program, while intended to hold native production to near current consumption levels, was also, in co-operation with other large coffeeproducing nations, attempting to carry the cost of balancing world supply with demand. Since 1931 over 52,000,000 bags of coffee, at 132.24 lbs, per bag have been destroyed. For this, and to defray other control costs, every bag of coffee exported from Brazil was taxed \$2.70 when the cost of production itself was averaging only \$1.50. A generation ago Brazil sold the world 25,000,000 bags of coffee annually, but in recent years sales have amounted to only twelve to fourteen million bags. It is expected that with removal of control a drastic reduction in the export tax will be made and the government will take other remedial measures to assist the growers in disposing of the huge 1937-1938 coffee crop estimated to total 24,000,000 to 26,000,000 bags.

So once again we find "managed economy" to be a pretty slippery device and at least for a while the coffee producers will revert to the age old law of supply and demand for determining prices. After all, perhaps it is no less wise to sell the full crop at lower prices than to burn part of it

and sell the remainder at higher unit costs but for little different total money consideration. This collapse in the coffee industry is worthy of study in this country in connection with control of various commodity prices by restriction of production and by limitation of foreign trade.

AN OPPORTUNITY

We have yet to see a Theta Tau return from a national convention feeling uninspired or disinterested in his fraternity. Without exception those who attend value the experience highly and are better Theta Taus for having attended. It seems timely to remind all chapters and alumni of these facts in view of the coming convention. Chapters in the middle west should make an effort to have as large a delegation present as possible. Train fare allowance to the delegate will usually buy gas and oil for an automobile which can transport four or five men. These men will, of course, incur bills for food and lodging (and probably entertainment) but none will regret the expenditure. Theta Tau conventions present a well balanced mixture of work, play, and good fellowship which makes them red letter occasions for all who attend.

We therefore urge all who can to promote trips to Chicago on December 29-30. We'll be seeing you at the Thirteenth Annual Convention—you will be unlucky if you miss it!

Additions to Membership

ALPHA

416 Richard M. Coulston, Des Moines, Iowa

417 Donald N. Duncanson, Minneapolis,

Minn.
418 Donald R. Gimse, Virginia, Minn.
419 Orville G. Lundstrom, St. Paul, Minn.

420	Millard A. Troxell, Hawarden, Iowa	386	J. Marshall Nye, Wichita, Kansas	
	BETA	387	Lyle L. Paxson, Burr Oak, Kansas	
		388	Hale D. Ritchie, Wichita, Kansas	
419	Robert W. Polderman, Kalamazoo, Mich.	389	Harvey S. Steele, Sabetha, Kansas	
420	Austin D. Berry, Belding, Mich.	390	Harold I. Taylor, Kansas City, Mo.	
421	John D. Andrew, Houghton, Mich.	391	Kenneth W. Willey, Eureka, Kansas	
422	Donald J. Kievit, Toledo, Ohio	392	Bill Witt, Wichita, Kansas	
423	Arthur Eklund, Jr., Rockford, Ill.	393	Vernon A. May, Longton, Kansas	
	EPSILON		THETA	
425	Ross M. Phillips, San Diego, Calif.	235	Ernest C. Lawson, Jr., Huntington, W.	
426	Marvin A. Sirbu, San Francisco, Calif.		Va.	
427	Marshall C. Turner, West Los Angeles, Calif.	236	Victor W. J. Franceschini, New York City	
428	William B. Nelson, Ahadena, Calif.	237	Henry P. Ozimek, Newark, N. J.	
429	Jack William Hay, Los Angeles, Calif.	238	Eugene J. Kalil, New London, Conn.	
430	Richard H. Merriam, San Marcos, Calif.		IOTA	
431	Robert B. Grant, Nuero, Calif.			
432	Robert S. Knowles, New York, N. Y.	350	Charles L. Clayton, Rolla, Mo.	
433	William C. Hawk, Santa Ana, Calif.	351	William F. Oberbeck, Chesterfield, Mo.	
434	Ivan F. Wilson, Monrovia, Calif.	352	Robert L. Mann, Rolla, Mo.	
435	Donald O. Nelson, Berkeley, Calif.	353	John R. Post, Parma, Mo. Homer B. Stokes, Malden, Mo.	
436	Harold W. Baker, Jr., San Diego, Calif.	234	Homer B. Stokes, Maiden, Mo.	
437	E. Allen McClure, Taft, Calif.		KAPPA	
438	Robert K. Byerts, Los Angeles, Calif.			
439	James B. Cathcart, Jr., San Francisco, Calif.	444	H. R. Whildon, Big Rock, Ill. W. W. Nagel, Dundee, Ill.	
440	Edward M. Wheeler, Berkeley, Calif.	446	Leonard C. Lindblom, Chicago, Ill.	
441	Daniel Stanley Johnston, Gridley, Calif.	447	S. E. Frisbie, Aurora, Ill.	
442	Charles F. Hunkins, Hollister, Calif.	448	Robert G. Spelbrink, St. Louis, Mo.	
443	James D. Huston, Jr., Imperial, Calif.	449	Lyle C. Atwood, Rockford, Ill.	
444	Theodore Olsen, Mojave, Calif.	450	Maurice K. Carr, Avon, Ill.	
445	William E. Rowe, Oakland, Calif.	451	Robert J. Williamson, Mt. Carroll, Ill.	
446	John R. Struthers, Berkeley, Calif.	452	Francis Usalis, Maywood, Ill.	
447	Dallas H. Gray, Jr., Berkeley, Calif.		LAMBDA	
448	Roy Turner, San Luis Obispo, Calif. Porter E. Thompson, Long Beach, Calif.			
449	John N. Adkins, Sacramento, Calif.	366	Daniel L. Maxwell, Elko County, Nevada	
451	John H. Brineman, San Diego, Calif.	367	James Adamson, Salt Lake City, Utah	
77.1	Joint 11. Dimenian, oan Diego, Com.	368	Malcolm E. Wilson, Salt Lake City, Utah Richard D. Shilling, Salt Lake City,	
	ZETA	369	Utah	
370	Axel W. Anderson, Iola, Kansas	370	Ivor Pickering, Copperton, Utah	
371	Donald A. Barnett, Olathe, Kansas	371	Bob Shilling, Salt Lake City, Utah	
372	Charles M. Grant, Jr., Topeka, Kansas Herman Janzen, Hillsboro, Kansas	372	Richard S. Treseder, Salt Lake City, Utah	
374	Samuel L. McKinney, Madison, Kansas John P. Ritchie, Wichita, Kansas	373	Hazelton R. Nebeker, Salt Lake City, Utah	
376	George W. Russell, Jr., Overland Park,	374	H. Theodore Sumsion, Chester, Utah	
	Kansas	375	M. Lafayette Lee, Farmington, Utah	
377	Louis P. Smithmeyer, Topeka, Kansas	376	Elliot S. Airmet, Salt Lake City, Utah	
378	Martin K. Thomen, Jr., Orange, Texas	377	H. Dean Wilsted, Salt Lake City, Utah	
379	Frederick A. Thudium, Baldwin, Kansas	378	Ernest R. Sewell, Salt Lake City, Utah	

380 F. Montgomery Veatch, Jr., Kansas City,

James E. Busher, Lawrence, Kansas
 John E. C. Elliot, Coffeyville, Kansas
 Donald L. Flanders, Ellsworth, Kansas
 Leo H. Johnstone, Jr., Bartlesville, Okla.
 George H. Larson, Lindsborg, Kansas

381 James E. Busher, Lawrence, Kansas

MII

218 H. B. Hansen, Cochrane, Alabama 219 Herschel Livingston, Kellyton, Alabama 220 Kenneth D. Byrd, Tuscaloosa, Alabama 221 E. D. Burwell, Ir., Huntsville, Alabama 222 John H. Light, Summit Point, West Va. William G. Reynolds, Cottondale, Ala. 224 Ronald DeHoff, Flushing, New York 225 Gregory J. Skinner, Tuscaloosa, Alabama

280 Donald E. Armstrong, Wilkinsburgh, Pa. 281 Clem C. Bauman, Akron, Ohio Ioseph H. Copp, Middletown, Ohio 282 281 George W. Cost, Clifton, Springs, N. Y. 284 Clarence H. Daniel, Euclid, Ohio 285 Nicholas J. Dwaresky, South River, N. J.

286 Charles J. Geiss, Homestead, Penn. 287 Samuel R. Giordano, Swissvale, Penn. Paul R. Watson, Pittsburgh, Penn. 288 Robert G. Weber, Youngstown, Ohio Clarence H. Weissenstein, Wilkinsburgh, 290

Penn. Alfred H. Geisler, Pittsburgh, Penn. 292 David G. Edwards, Oakmont, Penn. 293 Keith R. Cunningham, Tarentum, Penn. 294 Leonard Hardis, Bronx, New York

295 John G. Kura, Pittsburgh, Penn. Sam C. Scalzo, Oakmont, Penn. 296 Fred W. Shaffer, Pittsburgh, Penn. Arthur F. Tuthill, Long Island, New 298

OMICRON

James W. Bowman, Downey, Iowa William R. Winkelholz, Rochester, N. Y. 222 Raymond G. Stearns, Iowa City, Iowa Eldron C. Arendts, Des Moines, Iowa 224 Maynard D. Dix, Cedar Falls, Iowa Richard E. Melson, Rolfe, Iowa

188 Charles F. Bild, Arlington, Va. Churchill Chalkley, Richmond, Va. John K. Mallard, Norfolk, Va. Richard M. Stafford, Summit, N. J. John T. Ward, Norfolk, Va. Archer L. Jones, Hampton, Va.

RHO

204 Henry B. Smith, New Bern, N. C. 205 I. C. Sloan, Ir., Portsmouth, Va. Sidney D. Rogers, Wilmington, N. C. 206 Hubert Lee Morgan, Jr., Canton, N. C. Charles L. Woody, Spruce Pine, N. C. 208 209 W. A. Edwards, Ir., Princeton, N. C. 210 R. A. Anton, Portsmouth, Va.

SIGMA

198 John E. Houser, Marion, Ohio Albert M. Ankrom, Belmont, Ohio 200 Vaughn E. Haywood, Columbus, Ohio Howard E. Castielioni, North Haven,

Paul C. Hartman, Middletown, Ohio Iack R. Sanborn, Renton, Ohio 204 Robert P. Stone, Columbus, Ohio

TAU

Richard I. Taylor, Syracuse, N. Y. Aldo Artiglio, Buffalo, N. Y.

Robert P. Gehring, Batavia, N. Y. DeForest Edward Sanford, Phoenix, N.

Thomas A. Linnenbrink, Cranford, N. I.

140 Ralph R. Teetor, Hagerstown, Indiana

Neil E. Boreouist, Tucson, Ariz, William F. Knight, Florence, Ariz. Kenneth W. Hammes, Racine, Wis.

138 Otto I. Beicek, Ingleside, Ill. William I. Thomas, Globe, Arizona Frederic B. Clark, Jr., Englewood, N. J. 140 John B. McPherson, Warren, Ariz. 141

142

Frederick C. Roberts, Phoenix, Ariz-

76 Charles Beckstrom, Winnett, Mont.

77 Roy A. McCready, Butte, Mont. 78 Clarence G. Schrader, Browning, Mont. T. F. Luebben, Dillion, Mont. 80 Raymond A. Nelson, Great Falls, Mont.

Virgil Chamberlain, Great Falls, Mont, Sherman Lang, Butte, Mont, Arth Connors, Butte, Mont,

OMEGA

Jens F. Soc. Kimballton, Iowa 101 Otis B. Fenner, Esmond, South Dakota

Lawrence I. Serbousek, Okoboio, S. D. Paul B. Donaldson, Rapid City, S. D. Sylvester B. Dickey, Ir., Worthington, Minn.

Maurice L. Cleland, Parker, S. D. Morton C. Smith, Selby, S. D.

GAMMA BETA

64 Charles F. Gareau, Washington, D. C. 65 George M. Lohnes, Washington, D. C.

Lawrence W. Froyd, Arlington, Va. Russell W. Carr, Mt. Ranier, Md.

George O. Sanford (Honorary), Arlineton. Va.

Letters From the Chapters

Alpha Guards Volleyball Championship



Alpha Chapter began the fall quarter by initiating five new pledges: ville Lundstrom, Richard Coulston, Donald Gimse, and Millard Troxell in an impressive ceremony

Founders' Day Banquet, bringing our active membership up to sixteen. We are concentrating our rushing in a series of technical professional meetings. The basis of the plan is the individual rushing of the various engineering departments. Our technical meetings consist of lectures and technical moving pictures conducted in an informal "smoker" atmosphere.

This fall Alpha has entered into volleyball and badminton in the intramural sports calendar. We are particularly interested in vollevball since we won the All-University

Championship last year. Officers for this year are: Regent, Robert B. Aslesen: Vice-Regent, Daniel O'Keeffe: Scribe, Robert Hodeman: Treasurer, Harry A Larson: Corresponding Secretary, Lloyd A Lewis; Marshal, Clifford Ohman; Inner Guard

Reino Ranta; and Outer Guard, Raymond Bree LLOYD A. LEWIS

November 1, 1937

Beta Acquires Permanent Trophy



Though we lost a good many men last year through graduation, Beta Chapter started the new four actives, and since then we have added one more, Arthur E. Eklund, Jr. At present we have four men pledged: Harold Hupfer, Jim Van

Effen, George Saunders, and Harry Carsons. The outcome of the election of officers held last spring is as follows: Carl Biork, Regent: John Manger, Vice-Regent; Ronald Campbell, Scribe and Corresponding Secretary; George Turner, Steward; and Paul Harrington, Treas-

Our Founders' Day Banquet this year was well attended by alumni and active members, and though there was no definie program, it developed into an interesting group discussion of everything in general. Our next meeting. October 25, is to be a professional meeting and we have invited Brother Lonacre, a member of the faculty, to tell us about the geophysical work he did this summer in British The covered Army Trophy, which was al-

most ours several times, finally belongs to us-It must be won three consecutive years by an organization before it can be kept permanently. Needless to say, we are proud to have it in our possession. At the summer camp session, Tau Nu Tau, honorary military fraternity, pledged Brother George Turner. Brother John Manger, also a member of Tau Nu Tau has been appointed General Chairman for the Fall Military Ball. While on the subject of army, it would be advisable to mention that Brother Bill Gribble, who left school to

enter West Point, is doing very well there. We seem to be quite well represented on the managerial end of campus activities this year. Brother Pete Ambrosiani is business manager of the Lode and Keweenawan, with Brothers Manger and Campbell on the Keweenawan staff, and Brothers Hascall and Eklund on the Lode Staff, acting in the capacity of advertising and managing-editor heads respec-

Brother Harrington prides himself on being president of the Glee Club, and Brother Ferguson likes being Treasurer of Alpha Sigma Mu. Brother Campbell is also a member of Alpha Sigma Mu, having been recently initiated. On the student council Brother Manger holds the position of Secretary.

With the football season well under way, we find Brothers Baxter, Eklund, Ambrosiani, and Hupfer coming home late for dinner every night. Brother Baxter is a guard and Eklund is a tackle. Ambrosiani and Hupfer are manager and assistant manager respectively. Brother Harrington will manage the basketball team this winter, with Brothers Eklund, Krobn Van Effen, Biork, and Kievit holding down certain positions on the squad. The intramural sports have just gotten under way, but have not progressed enough as vet to have any results for publication. However, we expect Beta to be fighting for top Cant. Bronk

October 22, 1917

Gamma Drills Rocks Retween Halves

GOLDEN. COL ORADO

Gamma Chapter here in Golden, Colorado, inaugurated what we hope is to be another successful semester when Regent Jenkin presided at a dinner meeting held at the

Kappa Sie House on October 5, 1937. All old members returned except one, Tench Swartz. We also had two men return who had been active but were not in school last semester. These men are Tom Baker and Carl Madebach

Gamma Chapter lost a friend and adviser

when Brother Boatright resigned his position on the Mines Faculty to do consulting work Gamma Chapter take this opportunity to thank Professor Boatright for his advice and assistance to this chapter during his years ar Mines

We pledged six good men this fall. They are: Marvin Katzenstein, Robert Blair, Donald Salsbury, Walter Redmond, Charles DeLong, and Mac Dye. All these men are active or the campus and we are very proud of them We expect to have our formal initiation at

the Park Lane Hotel in Denver with possibly a dinner and a closed dance afterward. Brother Robert Evans has made quite a name for himself and for Theta Tau in that he has been elected president of his class, in a member of the Senior Council, president of his social fraternity, and is mentioned in Who's

Who in American Colleges. In the past the Theta Taus have played the Sig Gams a round of polo beween halves changed and a rock-drilling contest was substituted. The Sig Gams have been trying for

a long time to find something that they can beat us at, and at last they found it, I'm sorry to say. Their man won but it was a lot of fun anyway.

The chapter will welcome any news from its alumni and also from other chapters. ROBERT HUNDHAUSEN

November 1, 1937

Delta Orients Freshmen



Delta Chapter started twenty-eight actives, all of whom are participating in the various activities on the campus. Since the last issue of THE GEAR the following men have been initiated: Carl

Carlson, William Crawford, Arnold Haynam, ard Reed, Donald Snow, Richard Vanderhoof, Herman Weiss, Ralph Willison, and Bill Winslow.

A very novel summer vacation was enjoyed by Brother Bob Neville, who with his brother, made a ten-week bicycle trip through England and the Continent. The 2000 miles that the two cyclists travelled took them through England, Wales, Belgium, the Netherlands, France, Germany and Switzerland, Brother Neville reports an exciting trip, but was disappointed in the Paris Exposition because he couldn't find a single hot dog stand.

Officers for the present year are: Regent. John Looney, Vice-Regent, Alfred Jepson; Scribe, William Reimenschneider; Treasurer, Seth Osgood; Inner Guard, Charles Horsburgh; Outer Guard, John Graham; and Corresponding Secretary, William Seaver.

A new program has been planned by the officers which will include a series of meetings directed toward the orientation of freshmen. With the co-operation of the departmental engineering societies, it is hoped that freshmen will become better acquainted with the various engineering fields before they choose their particular profession.

The Annual All Case Rally and Banquet sponsored by Delta Chapter, was held October 23 at the Case Club. After the banouet, which was followed by numerous and witty toasts, the student body held a torch light parade and rally for the annual Case-

Western Reserve fooball classic. WILLIAM B. SEAVER

November 13, 1937

Epsilon Yearns For the Isle of Bali



With a new high membership Epsilon, with 23 actives and 16 pledges, has embarked on what promises to be one of its most successful years. Officers for the fall term

are Regent, James Joubert; Vice-Regent, Al Repecka; Scribe, Richard Mielenz; Tressurer, Ian Lawrence; Corresponding Secretary, Ivan

The semester's program was started off with an open house on September 21, with Professor Howel Williams giving an informal tember 22 and October 20, and arrangements have been completed for a dance to be held at the Athens Club in San Francisco on No-

The rost publicated member of Epilon this year has been Vard Stockton, steller guard on the Rose Bowl bound (we hope) California eleven. Stockton has been outstanding on the Bear line this season, and has been highly prised by players and cosche on opposing teams. Other Epilon men active in sports include jack thry, monther forbull letterman, ready in a contract of the public contract of



Back row: Pabst, Grant, Fowler, Byerly, J. Wilson, Adkins, Bryan, Struthers, Sirbu, Rowe, Repecka, I. Wilson, Anderson Second row: Williams, Baker, Brineman, Brown, McClure, Gregory, Mielenz, M. Turner, R.

Turner, Mertiam, Joubert Front row: Hill, Catheart, Lawrence, Gray, Huston, Thompson, Johnston, Olsen, Byerts

lecture on his last year's geological journeys in the South Sea Islands. Members were entertained by a glowing description of the charms of the tropical islands and their native inhabitants, particularly on the Isle of Buli. An early rush of Cal geologists and miners to Bali was nearly precipitated.

Sixteen pledges were initiated in a formal ceremony held on October 9, followed by the semi-annual banquet at the Horel Oakland. Master of Ceremonies was Dean Probert, whose timely remarks did much to enliven the evening. Principal speaker was H. L. Baldwin, Lambda, who is now a harbor engineer engaged on "Treasurer Island" in the San Francisco Bay.

Luncheon meetings have been held on Sep-

Publicity struck at another member this year, Pledge Allen McClure, who was the lucky winner of \$1000 in a World Series pool. Shades of the Irish Sweepstakes!

Epsilon men in honor societies include Adkins, Gregory, and Meilenz in Phi Beta Kappa; J. Wilson, Adkins, Gregory, and Meilenz in Sigma Xi; and Hill in Tau Beta Pi.

Mwy of our members are quite prominent in chool activities, including Knowles, Senior Class President; Wheeler, Chairman of Wheeler and Torch; Hunkins and Lawrence in Schabard and Blade; Stockton in Skull and Key; Sirbu and Lawrence on the Engineer's Council and Huston, Junior manager of the crew.

October 28, 1937

Zeta Starts With 49 Actives

LAWRENCE

Zeta Chapter began the year in its new house at 1140 Louisiana Street. We now have 42 actives, 13 of whom were initiated Sunday, October 17.

These include: James Basher, Don Flanders, John Elliot, Leo Johnstone, George Larson, Vernon May, Marshall Nye, Lyle Passon, Dean Ritchie, Sam Steele, Harold Taylor, Kenneth Willey, William Witt. At present we have nine pledges, seven of whom were pledged this year. Our pledging campaign is just getting in full swing following the fall smoker held Cotober 5.

Following formal initiation on October 17 the twenty-sixth annual Founders' Day Banquet was held in the Memorial Union dining

On October 26 Zeta elected its new officers. They are: Regent, George W. Russell; Vice-Regent, Hugh Magruder; Scribe, Axel An-

Zeta Chapter is holding its own in scholastic achievements, and has had seven men elected to Signa Tau. These men are: Axel Anderson, Martin Thomen, Sam Steele Montgomery Veatch, Fred Thudium, Proctor Ritchie, and Fleming Scofield. Harold I. Taylor was elected to Tau Beta Pi.

On November 5 the Theta Tau engineers will lay aside their slide rules and suede jac-



"A fine decoration" required of Zeta initiates

kets to don stiff shirts and bow ties to attend their fall formal party. Maestro for the occasion will be Louie Kuhn and his band, whose music will be broadcast from the Memorial Union Ballroom between 10:00 and 10:30 over station WREN. LESTER A. HAUG

November 1, 1937

Theta Has Snappy Personnel



With a smile and a hearty handshake Theta greets its brothers throughout the nation. It cheerfully reports that at Columbia University Theta Tau, in beginning

Theta Tau, in beginning another year of activities, will probably continue to play the role of one of the most energetic and accomplished organizations in the School of Engineering.

Losing ten men by graduation last year,

the chapter opened the year with thirteen active members. They are all engaged at present in carrying out the ambitious programs which the board of officers has laid out for the coming year. Already thirteen new men have been pledged, and a smoker held in their honor turned out to be a hlarious success. Indications are that the fall dance will bubble with smoothness and fun.

The new governing board is made up of a particularly able group. Andrew Checkovich, Regent, is one of Columbia University's outstanding athletes. Sometimes known as "Gulliver" because of his massive physique, he entered Columbia College as a member of the Claw of '36. He became a member of the variety football squad in his sophomore year and for two years played first string center. He was a member of the famous Rose Bowl Team and is probably one of the best centers the Columbia team has had. In 1935 he entered the School of Engineering and last year he received his second degree,



Rose Bowl "Gulliver" Checkovich

B.S. in engineering. He is now working toward a Maxer's degree and was recontielected to Phi Lambda Upsilon, honorary chemical fractority. He also holds down the position of treasurer on the Student Council. In his spare moments Andrew has been able to establish himself as the light heavyweight bosine champion of the school.

Albert L. Chudoba, Vice-Regent, well known for his active participation in social affairs, has been a member of Student Council several times and is a member of Tau Beta Pi.

David E. Bilton, Treaturer, is also working toward his third degree at Columbia. He is an entertainer par excellence. He is known to the whole student body for his comical impersonations with ukelele accompaniment. Jose R. Bijarano, Seribe, is Mexican by birth and parentage. Doing graduate work, he is an assistant on the faculty of Engineering and editor of the year book. He is a member of Tau Beta P in and 6 Epillon Chi.

honorary electrochemical fraternity. Norman C. Britz, Corresponding Secretary, is known to be quite a cut-up. The enviable reputation left by his brother some years ago

is being outdone by "Shorty."

Among the rank and file probably two
names stand out. Howard M. Stobel has
travelled all over the world as a radio operator.
It is a favorite pastime to have him tell of
his adventures in India or Mozambique (and
of the girls in every port). Howie was forced
to be out of school last year, finding himself
stranded on the other side of the world when

the session began. He is also a member of Tau Beta Pi. Eugene (Bunky) Kalil is known as the "Flying Arab" in recognition of his pole

"Flying Arab" in recognition of his pole vaulting prowess. For three years a member of the variety track team, he says that he is not modest but he admits that he is going over his head when he clears the bar at more than thirteen and a half feet. He is also an accomplished artist and last year contributed heavily in the year book with caricature and postrait steeding.

Tota Pledges to Work on Alumni File

ROLLA ROLLA

with only nineteen active members after commencement last spring. Officers are: E. B. Lanier, Regent; H. L. Prange, Vice - Regent; W. P. Ruemmler, Scribe; and R. C. Seibel, Treasurer.

The membership will be increased shortly as about twelve men are to be pledged this week. as about twelve men are to be pledged this week. The pledges were invited so that the members polegies were invited so that the members could become better acquainted with them. It is planned to have the initiation followed by a banquet about November 18. For their pledge work the prospective members are to compile a file of the names of the alumni of lota Chapter, together with a many addresses.

Inta has been rather inactive this fall so far but will probably get started before long. Last year the idea of a student forum was ministed by Broche Bochenek, and sponsored by Iosa Chapter. The object of the forum was to give the student body a chance to discuss various current topics on the campus, the student body a chance to discuss various current topics on the campus. In the case of the campus of the case of the case led to the formation of a student government. Idea take pride in her part in the exabilishment of this much needed government which

hts been so successful.

The scholastic standing of Iota is being well maintained. Brothers Lanier, Seibel, and Rueminler are active members of Tau Beta Pi and Brothers Ellis, Short, and Stokes are pledges.

October 25, 1937



Back row: Prange, Machins, Carroll, Post, Phillips, Oberbeck Second row: Ellis, Clayton, Moore, Siebel, Robertson Front row: Evans, Ruemmler, Mueller, Lanier, Short, Stokes, Wilkey

Kappa Believes in "Better Late Than Never"

(This letter, received after publication of the Spring GEAR, is printed in the absence of a fall letter.)



On January 21 we initiated eight new members. They are: W. W. Nagel, R. J. Williamson, M. K. Carr, L. C. At-wood, F. Usalis, R. Spelbrink, S. E. Frisbie, and L. C. Lindbloom. We now have sixteen active We have meetings twice a month

and have had some interesting speakers this

Kappa Chapter took an active part in the biennial Engineering Open House which took

place April 17. Under the supervision of our faculty adviser, Mr. T. I. Dolan, we operated a laboratory showing various types and transformations of vibrations. We think that our demonstration added interest to the Engineer-

ing exhibit. Our new officers, elected on February 25, are: W. Walsh, Regent; R. F. Batt, Vice-Regent; G. R. Johnson, Treasurer; L. C. Atwood, Scribe; and H. R. Whildin, Corresponding Secretary.

H. R. WHILDIN

April 30, 1937

Lambda Starts Library Fund



At Lambda's spring initiation last May 2nd, SALT LAKE CITY itiated. This brought our active roll to a total of thirty-nine men. The chapter officers installed at that time are William

L. Bulkley, Regent: Ray Morgan, Vice-Regent: Wilford G. Winholtz, Treasurer; and Robert F. Wevher, Scribe,



Reading left to right (not by rows): Regent Bulkley, Vice-Regent Morgan, Treseder, Prof. Parmley, Collins, Nebeker, Dean Ketchum, Edwards, Adamson, Prof. Beckstrand, Sumsion, Maxwell, Scribe Weyher.

Just before the beginning of the fall term Erich J. Schrader, Grand Scribe, visited with the regent and scribe. Brother Schrader found all the records in good shape, and was pleased to note that there would be twenty-four actives and five pledges returning for the 1937-38 school year.

The Founders' Day Banquet will be held on the 6th of November, and it promises to be an occasion to be long remembered by those who attend. Brother Ed Snyder, Beta Chapter, has arranged to have the banquet at the Alta Club and he will go hunting to provide DUCK for the main course.

At a recent meeting a resolution was adopted to obtain money for a library fund. Each graduating senior is to give one dollar and fifty cents to the fund. For every dollar and a half thus contributed the chapter treasury will give one dollar to the fund. The books will be put on a separate shelf in the University Engineering Library, and will be marked with a bookplate designating Theta Tau as the donor.

Theta Tau men were honored by the following appointments in the University Reserve Officers' Training Corps field artillery regiment; Frederick A. Harris, Cadet Colonel in command of the regiment; Malcolm Colins, Cadet Lieutenant Colonel; Gene S. Edwards, Cadet Captain; and Joseph C. Smith, Cadet First Lieutenant.

ROBERT F. WEYHER October 27, 1937

Mu Likes Sunday Suppers



Mu Chapter started the year off by sponsoring a series of exhibits in a window in Comer Hall Engineering Lounge. Large engineering concerns in the state were asked for their co-operation in furnishing ma-

The first exhibit was a pep talk to engineers urging them to support and uphold the College of Engineering. The second exhibit was based on "Hydro-Power Developments in Alabama." The present exhibit shows "Recent Developments in the Rell Liboratories"

The members of Mu Chapter are at present enjoying Sunday night suppers every other week. At these suppers business is carried out, interesting topics are discussed, and guests are received. These suppers are held in the Blue Lantern Tea Room. Any of our alumni or any members of Theta Tau in Tuscaloous on Sunday night are welcome to attend our suppers.

The chapter consists of sixteen actives and fourteen pledges. The new pledges are Donald Bennick, Pat Morgan, D. H. McCondichie, Earl Maurer, Dan Vernon, James Argo, Norman S. Crump, Joe Wottsman, Ernest George, Milton Love, Richard Tracy, Frank Srickney.

Bill Tonge, and Cliff Benham. These pledges will be initiated on November 9. The present officers of Mu Chapter are Re-

gent, Carl Adams, who is serving his second term; Vice-Regent, Jake Nolen; Scribe, H. B. Hanson; Corresponding Secretary, Charles Coleman; and Treavurer, William Reynolds.

Mu Chapter is proud to have amone its members some of the outstanding men in the Alabama College of Engineering, Among our ranks we have many presidents of various organizations: Carl Adams heads Tau Beta Pi and represents the College of Engineering on the Executive Committee; Jake Nolen is president of Jasons, Senior Honor Society, and chairman of St. Pats Committee; H. B. of the Senior Class, and president of Chi Beta Phi: Henry Lankanau is chairman of A. I. Ch. E.; and Gregory Skinner heads Scabbard and Blade. Besides these major offices Mu Chapter's men hold many minor positions. Two of our boys are in Jasons and two are in Omicron Delta Kappa, national leadership fraternity. Four of the six men in Tau Beta Pi are Theta Taus.

Mu Chapter plans a year of continuous activity. Our next major function after the initiation will be a Christmas Party.

H. B. Hanson October 28, 1937

Omicron Comes Out Fighting



This fall when we of Omicron returned to the Iowa campus to take up the unfinished work we found ourselves in the ring with our backs to the ropes. Out of the

23 active members who were with us last year If of them either graduated or for some good reason did not return to school this semester. With this melleut of 8 actives and a group of 8 pledges from last year we launched a very matrician pledging campaign. Although the campaign has little more than begun we are happy to report that it has already produced gratifying results. Our goal is 20 new men by the end of this sumetter and we now have

During the second week of October we initiated six new men into the fraternity: Raymond Stearns, Richard Melson, Maynard Dix, Eldron Arendts, Roland Krebil and William Winkelholz. (Incidentally, during probation week these pledges failed to impress the actives with their attempts to cry like growing cabbages). These boys weathered probation wake in real sportsmanlike fashion. They are very active on the lowa campus, of good scholastic standing, and in every way worthly hears to the distinction of Theta Tau Brotherhears to the distinction of Theta Tau Brother-

At the present there are 14 actives and 14 pelegis at Onicino. The actives are Hidron Arendus, James Bowman, Maynard Dix, Ro-John Krehl, Fredric Kubhis, Garland Robinson, Roberto Lopez, Lester Sanger, Gerard Somon, Raymond Serams, Paul Weeks, Stephen Westaby, William Wankelbolz and Richelbortoner, Melon. Brothers Beston and Aschenbromer, turn in February to believe the front ranks in the woods sensester.

The pledges are: Elwood Arendts, Verne Anthony, Royal Weir, Ralph Arnold, Charles Coffee, George Fewson, Robert Fewson, Alvin Green, Glen Kellogg, Henry Hardaway, Robert Humphries, Charles Kippenhan, Roderick

Wheaton, and John Postlewait.

Omicron is under the able leadership of Regent Paul Weber this semester. He is the moving force behind the previously mentioned ambitious pledging campaign. Brother Weber

moving force behind the previously mentioned ambitious pledging campaign. Brother Weber is supported by the following officers: Stephen Westaby, Vice-Regent; Lester Sanger, Scribe; Fredric Kubias, Marshal, Roberto Lopez, Inner Guard; and James Bowman, Outer Guard.

Brother Winkelhalz is tressurer of the Associated Students of Engineering and also a member of Tan Beta Fr. Brother Sezzens is member of Tan Beta Fr. Brother Sezzens in Transit Bazed. Brother Krebli was recently elected president of the local student branch of the American Society of Crul Engineer. organization. Brother Simon is a saxuphome player with Verte Kell's orchestra. Besides playing a sax, Jerry is again Seeward for the proceedings and handles the chapper finance. like a second Baruch. Pledge Coffee blows the trumpet in Len Carrol's orchestra.

This past summer Brothers Dix, Arendts, Stearns and Krebil worked with the government engineers doing topographical surveying on the Mississippi River Nine-Foot Channel Project. Brother Bowman and Pledge Hardaway were doing survey work for the Rock Island Railroad this summer.

Brother Lopez spent the summer in his native Panama Canal Zone. He was employed by the Panamanian Government on the construction of a stadium for the Central and South American Olympic Games to be held in Panama City in February. 1918.

The major social event for this sensester at Omicron well be an informal party to be held at the chapter house on the evening of Friday, November 26; music by Dusty Keaton's etchestra. Any Theta Tau man who happens to be in Iowa City on that date cordially invited to attend this party.

October 25, 1937

Pi is Sitting Pretty

Pi Chapter sees a bright future as it starts that forty-one members lead by Regent Hebret Landis, Vice-Regent Roy Franke, Scribe

Charles Bild, Treasurer Vernon Quarles, Corresponding Secretary Churchill Chalkley, and House Manager Philip Ball.

The following twenty-four men were formilly initiated this fall: Ed Dunn, Doug Hamm, Cal Muse, Charlie Batchelder, Joe Cragwall, Hugh Crigler, Monroe Warren, Steward O'Rear, Gratten Colvin, Hugh Bache, Wendall Malbon, Jack Sidebottom, Curtis Hannum, Buck Edwards, Ogden Willis, Frank Nichols, Phil Ball, Bob Gillspie, Brace Lauri-



Pi pledges at Homecomine

ault, Bill Shippen, Jerry Thomas, Arthur Tuthill, Ed Boswell, and Pat Patterson.

and, ray nowed, and rel retered to the return of several admin including the number one charter member Leroy Harmon, Others who returned are: Robert Gopper, Harmon, Paul Ferpatrick, Berth Glerch, Harmon, Paul Ferpatrick, Berth Glerch, Lard Martin, William Carruthers, and Archer Jones. The returning alumni were entertained by a football game, Opening Dances, and a marty as the chanter house.

Our student-faculty smoker for this fall was held October 24, and the discussion ranged from ultracentrifuges to wildcats. These smokers are enjoyed each year, and the informal discussion brings about a closer relationship between the students and the

Inculty. The May Thea. Ten boy with conceptable of the University Gle Clab, and protone of the University Gle Clab, and Brother Nichols is one of its outstanding members. In the University Band we find Borden's Ward, Mills, and Warran. Borthers See the Company of the Company of the spectroly mumbers of the budestall, being spectroly mumbers of the budestall, being brother March Company of the probability of the processing processing



Pi Chapter House

heads the Aviation Club; and Brother Dorrier is president of Delta Upsilon. In Tau Beta Pi we are represented by Brothers Olsen, Cowgill, Quarles, Mason, Dorrier, Oliverio, and Bild. Brothers Olsen, Cowgill and Quarles

Bild. Brothers Olsen, Cowgill and Quarles are also members of the Raven Society.

When time can be spared from slide rule

slipping and these numerous extra-curricular activities the members of Pi Chapter relax by playing billiards or harmonizing to the accompaniment of Brother Nichols' guitar. C. F. Billo

October 29, 1937

Rho Gets Stronger Daily

RALEIGH 3 St.

Rho Chapter of Theta Tau at North Carolina State College has at the present time eleven members. Plans are now under way to pledge new

members. All of the active members of this chapter are seniors. The officers for the ensuing school year are: H. B. Smith, Regent; S. D. Rogers, Vice-Regent; Frank Zigler, Treasurer; and R. F. X. Anton, Scribe.

Treasurer; and R. F. X. Anton, Scribe. All of the members are actively engaged in extra-curricular activities. Brother G. R. Killam is editor of The Southern Engineer, assisted by Brothers Smith, Edwards, Rogers and Morgan. This engineering publication was resurrected by Brother Delamar and is

being carried on by his Brothers of Theta Tau.

This year, as in previous years, Rho Chapter has furnished the colored cards used by the R. O. T. C. Cadet Corps on Homecoming Day. By the acceptance of this responsibility

Rho Chapter shows its loyalty to State College. The following is a list of some of our men and their outranding activities; H. B. Smith, Tan Bers Pir, C. L. Woody, Pine Burr; S. D. Rogers, Upsilon Sigma Alpha; W. A. Edwards and G. R. Killam, Engineers' County, H. L. Morgan, wreetling team; and G. R. Killam, Rajman S. Killam and H. B. Smith, Gamma Sizma Ep-

silon. All of the active members belong to their respective student chapters of professional societies. Brothers Killiam and Edwards are societies. The professional societies and the A.S. C.E. respectively. Brother Edwards is also president of the North Carolian Section of Student Chapters of the A.S. C.E. Rho Chapter is gaining ground by leap and bounds. It is the purpose of every most of the profession of the Students of the Carolian Students of the Studen

ROBERT F. X. ANTON

October 30, 1937

Sigma Slicks Up the House

Sigma got off to 3 good start this fall by having the house redecorated invide and out and it is already helping on the pledging intuation. We have nine pledges and many more fine protection of the pledging intuation to be provided in the pledging intuation. We have nine pledges and many more fine protective prove of contratinging prospective yeldes. The

pose of entertaining prospective pledges. The ast smoker was held Saturday afternoon October 9. Very good entertainment was furnished by the Southern California-Ohio State football game, bridge, and a buffet lunch. Later in the evening the furniture was moved out and the rugs rolled back, making room for a radio house dance, chaperoned by Brother and Mrs. Wall. Our efforts in pledeine have been principally toward outstanding freshmen and sophomores. We are attempting to prepare a goodly number of sophomores to replace approximately nine men to be lost by graduation this year. While freshmen will not be initiated this year, they will be thoroughly trained for membership the fall quarter of their sophomore year.

There are twenty-one actives in the chapter at the present time. Norman E. Schoewe is serving in the capacity of Regent for the second year; Randle B. Hickman is Vice-Regent; Robert G. Derrenberger, Treasurer; Elbert J. Boebinger, Scribe; Paul Hartman, Marshal; Carl D. Fischer, Corresponding Servatay; and Albert M. Ankom, Steward.

Our actives again remain ahead in extracurricular activities this year. Albert M. Ankrom is president of the Quadrangle Jesters. the Engineering Quadrangh Dramuit Society, Thent Tan, for the third connective your, has had the honor of having one of its member the effect of the Ohio State Engineer, the College of Engineering magazine. This has already shown that the magazine is definitely tops in publications. Other Then Tan supporting Shane on the stuff are: El-Tan supporting Shane on the stuff are: El-Robert G. Derruberger, humer editor; and Reyrand G. Schimtt and Albert M. Arkson are on the editoral stuff. Junes M. Robinson to the party claim is averign on the solitons.

We have five members on the Engineers' Council: Carl D. Fischer, president; Albert M. Ankrom, secretary-treasurer; and Elbert J. Boebinger, Richard D. Sloane and Ellsworth Kimmel are also on the staff.

Brothers Robinson and Sloane are members of Tau Beta Pi. Members in Texnikoi, honorary engineering fraternity for extra-curricular activities, are Brothers Robinson, Boebinger,

and Fischer.

At the present time we are making his plans and preparations for Homocoming, Nowember 13. The dance, following the Illinois-Ohio State forball game, will be held at the Sence Hotel. The largest turn-out of alumni for any social event ever held is expected. Letters have been sent to all alumni of Signa Chapter urging them to be present and from all reports and replies we are going to have a very successful dance.

October 29, 1937

Tau Starts the Ball Rolling



Syracuse University's Tau Chapter is taking an increasingly important part in activities as the years roll on. Though the school term has just begun, Theta Tau "on

great deal toward starting the ball rolling.

The annual Engineers' Party, an informal get-together staged to impress the freshmen with the University's spirit of good-fellowship, has been placed entirely in the hands of Tac Chapter. From what we've heard and seen of are success is a certainty. Broother Wads-

worth is in charge of the orchestra and is doing well. Many Theta Taus will have an active part in the program.

As soon as the party is out of the way, arrangements for the All-Engineers' Dance

must be completed, with Theta Tau in charge.

Then, there's fall rushing and initiation, always an important event on the University's calendar of acivities. This year promises to be greater than ever.

Later on, under the supervision of Tau Chapter, the Engineers' Banquet, probably the most important function of the year in the College of Applied Science, will be held.

Theta Tau at Syracuse also holds a private

dinner-dance for its members during the school year. Interest in this affair is mount-

ing year by year.

Our annual election of officers was held last spring, and for the school year 1997-38 they are: Frederick L. Wise, Regent; Lloyd T. Cheney, Vice-Regent; William F. Boyle, Jr., Scribe; and Arthur J. Wadsworth, Treas-

urer. Brother Wise is also President of the Student Body.

Student Body.

Tau Chapter points proudly to her present twenty-six actives and one pledge, who just about run things "on the hill", despite keen competition from a hundred or more other active organizations.

WILLIAM F. BOYLE, JR. October 18, 1937

Phi Luxuriates in New Furniture



With an interesting and varied program of sports and activities before it and vastly improved housing conditions behind it, Phi is looking forward to this school year with a great deal of pleasure. The

deal of pleasure. The purchase of new furniture last spring and the many improvements of this fall have put our house into the best condition it has been in

for some time.

We have a real gain this year, consisting of 16 actives and 10 pledges. Five of the pledges are sophomores and are soon to be initiated. Brother Sid Matthews, who has been out of school for four years, is back with us again. We also have with us transfer from Gamma Chapter, Brother Hoyt Larison.

Naturally we are quite proud to report that three of our pledges are out for football, and that the other pledges are spending their evennines working out for the swimming team. the baseball team, military activities, and various other extra-curricular activities. Our actives are busying themselves with basketball training, military, honorary, and other activities. They're not doing so bad socially,

Our officers for this year are as follows: Regent, Harmon Steach; Vice-Regent, Jack Vanderford; Scribe, Wayne Milne; Treasurer, Nick Barsha; Steward, Bob Mankin; and

House Manager, Zachary Yadońsky. Fellowing Pardue's victory over Carnegie Tech on the 9th of October, Phi held a radio dance in honor of our alumni who were back for Homecoming. In addition to having a good "swing" time we were able to find our several things concerning our alumni. They were, by the way, quite pleased with the

condition of the house.

Although it is a little early to do any forecasting, we feel certain that Phi is going
places this year.

October 21, 1937

Chi Acquires Building Site



Chi Chapter started off the year with the same officers that were installed last spring: Samuel Tucker, Regent; Edward Young, Vice-Regent; Harold Spires, Scribe; Elliot Cushing, Treas-

Corresponding Scoretary. Under this leadership and with the strong support of all the actives, thi enjoyed an unusually successful spring semester and shows all the signs of continued uccess for this year. We have a cate of the signs of the signs of the signs of the thin the lot of the signs of the signs of the thin the lot of the signs of the signs of the thin the lot of the signs of the signs of the thin the lot of the signs o have one pledge from last year and have not yet had fall pledging.

yet had fall pledgene. Our of art this were has The outeraiding to Thompser, had on October 24th in the Denoter Hord. This dark was chosen to that our allumin could be here for both the basquet and the Artonou-Cortomary football game, and sall very over for the basquet. The speech of the evening was given by Boother F. Carlyler Roberts. State Sanitary Engineer of Artonou. His distant on opportunities and Brought was one over angle on this interesting subject. Brought E. S. Borguint, Professor of Crit Begioter. E. S. Borguint, Professor of Crit Begioter.



Front 100: Minton, Knight, Houghton, Cannon, Tucker, Moos, Dixon Second 100: Bejeck, Pierce, Lamothe, Sohrin, Young, Spires, Hammes, McLean, Gohring Back 100: Borgquist, McPherson, Cushing, Thomas, Borgquist, Clark, Polk, Jimerson

ing and most active Theta. Tus associated with Chi Chapter, made an excellent toustnaster and even told us one of his Swedsh stories, the control of the control of the control of the top of the control of the control of the styles himself an "ornery member." John McNary made tenport for the Southwestern gave a short account of himself and his activities. Brother H. A. Jimeron gave the report of the Building Corporation. Actives the control of the Building Corporation. Actives the property of the Building Corporation. Actives the control of the Building Corporation. Actives

The biggest news of the year is that Chi Chapter is proudly displaying the charter of its Building Corporation. Last spring, with prices of land skyrocketing in Tucson, Brothers limerson and Borgouist were authorized by the chapter to buy us a suitable lot for a chapter house. They were fortunate enough to find us a lot just across the street from the campus and quite near the Mines and Engineering Building. On the payment of \$100 down we became landowners and found it necessary to organize a legal building corporation. At a meeting held on May 18th the chapter considered the tentative organization which had been worked out by the above Brothers and a lawyer, and voted to adopt it with suggested minor changes. Expenses of incorporation, which cost us \$100, were paid by the active chapter. All of the accumulated Tomb Fund can now be used for payments on the lot. All this has been made possible by payment on the Tomb Fund by many of our actives as well as alumni. If the present rate of payment continues we may expect to own the lot outright before very long, and can begin to look forward to the time when we can build a chapter house.

As usal Tieta Tau mn zer in muye campus activities. Heriod Spirce, Archar Disson, and Alion Cannon are members of Example activities. A series of the Archard Spirce and Alion Cannon are members of pelogies of the organization include Ellier Canhon, Doyle Houghton, and John Kittenbook. We are very proud of these bouthers of the Cannon Ca

An interesting program of meeting is being arranged this year, at which it is planned to have speaker on many other subjects beside a being a state of the property of the pro

October 28, 1937

ALTON H. CANNON

Psi Recuperating From Graduation Trouble



Psi Chapter is starting out what it hopes will be a banner year with 23 active members and 17 pledges. Officers of the chapter for the year

were elected last spring and are as follows: Regent, John Molleran, Vice-Regent, Kal Hypppa; Scribe, Bob Blake; Treasurer, Charles Beckstrom; Corresponding Secretary, Tom Greene; Inner Guard, Kent Loughran; Outer Guard, Max Rudin; Marshal.

Roy McCready.

The chapter was hit pretty hard by graduation last year. Twelve of the actives left via the graduation route. However, the chapter initiated several men and thus recuperated from its great blow. The men initiated are:

Roy McCready, Thomas Luebben. Clarence.

Schrader, Sherman Lang, Ray Nelson, Virgil Chamberlain, Charles Lyden, and Arthur Connors.

On October 23 alumni, actives and pledges gathered to celebrate Founders' Day. The party came a week late due to the fact that

some of the boys of the chapter had to put in their first shift in the mines as guests on the payroll of ye well known mining company. The party was held at Echo Lake Lodge. A dandy time was had by all. It seems that the boys vowed that they would make up for the week lots, and they certainly

This year the chapter plans to sponsor some sort of an award for scholarship. Nope, this sin't done with the idea in mind that we are afraid that some of the boys might flunk out if some action isn't taken 'cause Psi Chapter was among the leaders in scholarship last

Bill Tretheway was elected by the student body at the School of Mines to head the A. S. S. M. for the year 1937-1938. Brothers Blike and Mitchell are now sporting 'better halfs'. Gorge Hensen has the honor of editing the School of Mines Magazine, Gluck Auf. Goorge is considering getting together with Brothers Howe and Mercer and having a consolution party.

Omega Tops Campus in Brain and Brawn



Omega Chapter started the present school year with a new home and house mother. Our new chouse is located closer to the school, it accommo-

dates mere men, and in every way we believe we have a very satisfactory chapter house. Our beloved "Ma" Lundin decided last sprine, after having been house mother for several years, that it was time for a rest. We all thought Mrs. Lundin was the 'hope' as a house mother and we felt lost for a time without her. However, Mrs. Mackler, mother without her. However, Mrs. Mackler, mother of Brother Don Mackler, in milang, it is not a supplied to the contract of the contractive in a difficult lob.

Two new officers were appointed at the beginning of the school term. Borther M. Smith at Marthal, succeeding Brother Burles, and Brother Dickey as Inner Guard, succeeding the Burles Burles and Street, assured by Brother Dovids St. Vice-Regard, Brother Gurles and Brother Burles and Foreston, Brother Stanly as Series, Brother Quinney as Duree Guard, and Brother Burles and Company Serverary. Brother Transle met Burles and Burles Bu

troubles of individual members. Omega now has twenty-three actives and twenty-three pledges. The new Brothers initiated last March were Smith, Dickey, Serbouste, Soc. Cleland, Donaldson, and Fenner. Seven new Brothers were initiated Cottober 31. They are Brothers Mal Gilbrough, James Scott, Raymond Spears, Robert J. Davis, Harold Howet, Clint Harding, and Burton Lindley. The initiation again took place at midnight followed

by a bacquet at the Alex Johnson Hotel. Omega Chapter lost twelve men last spring with the graduation of Brothers Allen, Atwater, Biopham, Bohae, Burleon, Fred Davis, Ferguson, Flint, Foster, Gremmels, Heald, and Whitham. Froether Bruegeman is staying out of school a year to replenish the "old sock" before completing his education, and Brother Dom Mteckler came back after a year with the Red Owl Stores and the State Park

Service.

Omega Chapter did quite well in the school activities last year. The intramural sports cup was reclaimed and won by a good sired margin of points over our competitors. Brother Smith was the high point man of the school, receiving an all time high of seventy-six points. The Engineers' Circus Day Program was taken "hands down" by Theta Tau's

act. We had a chorus composed of several Rean Brummels coupled up with what feminine beauty we could produce with reluctant Brothers, paint and borrowed dresses. "Miss" Heald, captain of last year's football souad protested loudly at suggestions for the removal of a twenty-hair mustache. The leads were taken by Brothers Whitham and Soe, Brother Soe being the feminine lead. The act consisted of dancing and singing, the singing being heard only at intermittent intervals as the roar of the crowd subsided. The prize of ten dollars was used as funds for a nicnic

at Canyon Lake. The outstanding honor bestowed upon our chapter was the award of the Sigma Tau cup for having the highest grade point average of

any organization in school. We are very proud of our success as we had to top such organizations as the Chem Society, A. S. C. E., and Drill and Crucible Club in order to win the award. Our grade point average was 1.69. Brother M. Smith is now president of Tau Chapter of Siema Tau and Brother Donaldson is an active member.

Omcea has a fine start for the coming school year. We are taking an active part in being extended for dinner every evening to one or two prospective pledges. We feel that another big year is in store for us.

ROBERT R. DAVIS

November 1, 1937

Gamma Beta Recommends Exercise



its activities this fall under the able leadership of George Rhine, our new Regent. Elec-ted with Brother Rhine last May were Charles Mikuszewski, Vice-Regent and Bernard Ben-

At present Gamma Beta has twenty-three actives and one pledee. On November 6 we are having a smoker at one of the local hotels to entertain a group of about thirty George Washington engineering students who are promising pledge material. We hope to initiate about eight men in December, when we hold the first of our two initiations a

On October 16 Gamma Betas were our in force to celebrate Founders' Day with a banquet at the Hay-Adams House. Before the banquet George Otis Sanford, Superintendent of Maintenance and Operations of the U. S. Bureau of Reclamation, was initiated as an honorary member. Brother Sanford has been, for the past several years, a real help to our chapter and to the engineering organizations at George Washington through his co-operation, interest, and loval support of all activities. Gamma Beta is proud of her honorary member and expects great things of him. The initiation ceremony was conducted by Brother Rhine and our past Regents and was

very impressive. The banquet itself and the following speeches suitably and ably commemorated Founders' Day.

Members of Gamma Beta, as usual, are very active in the student affairs of the Engineering School. Brother Jack Beane is social chairman of the Engineers' Council and is now feverishly making plans for the Engineers' Ball to be held in February. Brother I. Harold Link is president of Siema Tau and Brothers Gareau and Mikuszewski are secretary and treasurer respectively of this organization. Brother George Lohnes is chairman of the A. I. E. E. and Brother Lawrence Frovd is president of A. S. M. E. and treasurer of the Engineers' Council. Gamma Beta has a total of five men on the Council this year. Last April, which was Japanese Cherry Blossom time in Washington, Gamma Beta had its annual spring dance at the Hotel Continental with the alumni and pledges as their guests. It was a spontaneous affair and

very successful. At our last meeting our Regent, Brother Rhine, was elected delegate to the national convention to be held in December. All of us feel that Brother Rhine can well be trusted to represent us. In the event that he breaks a leg, etc., Gamma Beta has an equally competent man as alternate in Brother Edward

A. Baker. It is possible for Regent Rhine to suffer injury (we hope he doesn't) as he is one of the outstanding backs on Gamma Beta's B. & B. Skins, which is our touch football team. The Black & Blue Skins play once a week primarily in the interests of health (?). We suggest this form of exercise to all of our brothers who feel the need of one form or another. It does the trick. We regret that as yet we have no picture of Brother Rhine

Feeling a windy touch after all of the above, let me close by saving that all members of Gamma Beta are working hard to keep Theta Tau the most respected fraternity on the campus in all fields.

RAYMOND N. MATSON October 27, 1937

Twin City Alumni Association Has Fine Founders' Day

Brother Robert Ramsdell, the president of the Twin City Alumni Association has resigned to go into the farm machinery business in Benson, Minnesota. Brother Hugo Erickson, the former Vice-President, was electformed the Principle of the Prancis J. Bittle Vice-Fresident to finish out the term. Brother Francis J. Bittle was elected Vice-President.

Francis J. Biltz was elected Vice-President. We celebrated Foundars' Day on October 15. Our banquet was held at "The Center for Continuation Study" a new building on the campus. There were about sixty men present. Professor E. H. Comstock, honorary, was toastmaster. The active chapter held formal initiation for five new men after the banquet.

The Twin City alumni held four meetings last year. The first was at the Founder? Day Banquet, the second in February, at which time pictures of Minnecotic 1936 football games were shown. In March we held a joint meeting with the Minneapolis Engineer's Club in an inspection trip of the Minneapoli Honeywell Hart Regulation Company and had a dinner at the plant. Our spring meeting was held at the charter house in May.

Intermountain Alumni Association Assists Lambda in Rounding Up Alumni Addresses

We do not espouse the doctrine of reincarnation, but we do contend that there has been a return from the near dead of the

Intermountain Alumni Association.

To prove this contention we point to the new officers elected last May and now under

full steam.

George M. Jones, President. The man has made the name "Caterpillar" as famous in

the West as Schlitz is in Milwaukee.

Max Kennard, Vice-President. Who heard
of Snyder in mining circles before he hired

Max? Alton Sorenson, Secretary-Treasurer. Held over because the I. A. A. could not get along without him.

Clark Jacobsen, Assistant Secretary. The man behind or under G. M. C. Trucks. Richard S. Reinhold, Member. Last year's Regent of the active chapter at Utah. The annual Founders' Day Banquet will be held November 6 at the Alta Club. Brother Ed Snyder, Beta Chapter, has arranged for the banquet and will shoot Duck for the main course. Ed points out that when he says that

the banquet and will shoot Duck for the main course. Ed points out that when he says that dinner will be served at 7:00, he means 6:30 and not 7:01. Lambda Chapter has been co-operating with

Lumbda Chapter has been co-operating with the Intermountain Alumni Association and an earnest effort is being made to get the names and addresses of the members up-to-date. Practically all of Lambda's alumni have been located. As you are well aware, many men in the engineering profession change their addresses frequently, and it is almost impossible to keep track of them without a card to let us know of their whereabout.

October 25, 1937

Chicago Alumni Association Clicking

The Theta Tau Alumni Association of Chicago held its annual Founders' Day Banquet on October 14 to start the resumption of meetings for the year.

The speaker of the evening was Brother Van Pelt, Beta '22, who is the Assistant Director of the Museum of Science and Industry here in Chicago. Brother Van Pelt gave us a very interesting and instructive tall on the Museum, its philosophy and program.

We hold meetings about every six weeks during the winter months and last year want had several very interesting meetings including one last May with twelve members of Psi Chapter of the Montana School of Mines who were in Chicago for an inspection trip. For the coming meeting a very good program has been outlined by the officers and directors.

At the present time we are making a special effort to build up our active mailing list of Boothers living in or near Chicago and would appreciate any help the active chapters can give us of recent graduates who are now located here. If you live here now and wish to get on our mailing list write or call either G. L. Jackson, 2228 E. 70th Sx., Chicago, Ill., Phone-Dox. 4755, or James B. Finch, 21th & Maddon Sx., Bellwood, Ill., Phone-Manfield

Alumni News

ALPHA

ROSWELL W. PROUTY, '12, has returned from an extended trip to Central America, after examining mining properties there. His present address is 1635 North Allen Avenue, Glendale, California.

EDWARD KOPPER, '14, is Vice-President of the Gould Storage Battery Corporation, 227 Garvey Court, Chicago, Illinois.

K. A. JOHNSTON, '20, superintendent of the Lafayette Flurospar Company, Mexico, Kentucky, recently spent several weeks on vacation in northern Minnesota.

CYRIL D. JENSEN, '21, lives at 611 Norway Place, Bethlehem, Pa. ALEXANDER M. GOW, '24, now lives at 312

ALEXANDER M. Gow, '24, now lives at 312 Benton Street, Jefferson City, Missouri. ALVA J. HALEY, '25, has left South America and is now at 74 N. Cleveland Avenue, St.

Paul, Minnesota.
Willis MacLean, '28, has come through with a new address. This time its c/o Develop-

ments Inc., 5th Floor, Filipinas Building, Manila, P. L.

Fame came to one Invino Sommemmyre, '31, last spring when he was featured in a ful page article in the Chicago Tribune. It seems that Irving is a pilot with the United Air Lines, and has managed to make quite a name for himself. At present he is living at 347 South Harvey Avenue, Oak Park, Illionio

JOHN DANCHERTSEN, '33, has deserted the Shell Petroleum Corporation staff and is now with Lane-Wells Company, Oklahoma City, Oklahoma.

HERBERT A. SWIFT, '34, informs us that his mail goes to 4231½ W. 28th St., Los Angeles, California.

Ronald Robertson, '37, is now with the Cia. Aramayo de Mines en Bolivie, Casilla 674, La Paz, Bolivia, S. A.

BETA

- George A. Morrison, '05, has moved again, and is now consulting engineer for Goldale Mines Ltd., Kirkland Lake, Ontario, Canada. F. W. VARNEY, '08, is general superintendent
- at the Mindanao Mother Lode Mine, Suriagao, P. I., for the Engineering Equipment & Supply Co. C. E. CHAPEIN. '15, gives his permanent ad-
- C. E. CHAFFIN, '13, gives his permanent address as care of the General Engineering Co., Salt Lake City, Utah.
- It was reported to us that A. L. SEAMAN, '22, lives at 512 Prospect Avenue, Bethlehem, Pa., but is now somewhere in South America.
- W. R. ATKINS, '32, notifies us that he lives at 706 North Main Street, Ishpeming, Michigan.
- ROBERT J. WIEDER, '36, left October 4 for Llallagua, Bolivia, where he is employed by the Patino Mines and Enterprises.

- It seems that Dan Cupid has taken several Beta Boys in hand. Those to take the fatal step were: A. J. CECLABER, '29; C. D. PASSENHEIM, '34; C. S. WILLIAMS, '31; W. H. LANGE, '36; F. J. VERVILE, '34; and A. N. SMITH, '28. Congratulations, boys.

GAMMA

- S. POVER WARREN, Hom., is now manager of the Bryan Mining Co. at Simon, Nevada, which operates the Simon Silver-Lead Mine.
- W. V. DECAMP, '08, should be addressed c/o
 Cia. Minera de Oruro, Oruro, Bolivia, S. A.
 H. A. KRUGER, '09, Construction Superintend-
- ns changed his address to 629 Woodbury Road, Glendale, California.

 THEODORE D. BENJOVSKY, '09, is now manager of the Peerless Mining & Milling Co., Silver City. New Mexico. The mine is in

the Central Mining District near Central,

New Mexico. STANLEY M. WALKER, '11, has been appointed general superintendent of the Lakeside Mon-

arch Mining Co. at Delle, Utah.

DONALD D. DYRENFORTH, '12, now manages
the metallurgical division of The Dorr
Company, Copper Building, Denver, Colo-

rado.

EUGENE SNEDAKER, '14, works with the Ohio
Copper Co. at Lark, Utah.

HAROLD E. MUNN, '17, is now with the Mt.
Isa Mines Ltd., Mount Isa, Queensland,

HENRY G. SCHNEIDER, '18, Oil Producer, has moved to Dallas, Texas, and lives at 4223 University Blvd.

ROGER F. WHITE, '18, is now with the Selected Dredging Investments, Ltd., 58 Sutter

Street, San Francisco, California.

Otts E. Keough, '21, is away off in darkest
Africa with the American Cyanamid Co.,
c/o Fraser & Chalmers, S. A. Ltd. His
mail goes to Box 619 Johannesburg, Trans-

vaal, South Africa. HARRY M. FISKE, '21, has been made manager of the Ingersoll-Rand Co., 1460 East 4th

Street, Los Angeles, California. George D. Thomas, '21, geologist for the Shell Petroleum Corp., has his headquarters now in the Slattery Bldg., Shreveport, La.

T. G. FOULKES, '22, resides at 531 Linden Street, Bethlehem, Pa. H. HART PRATLEY, '22, party chief for the

Western Geophysical Company, resides at 1331 North Pacific Street, Glendale, California

E. B. BUNTE, '22, now resides at 222 Wall Street, Bethlehem, Pa. H. M. STOCK, '22, has changed his home-

H. M. STOCK, '22, has changed his nomestead to 1309 Platinum Street, Butte, Montana.
HUGH M. CONNORS, '22, now works with the

Hugh M. Connors, 22, now works with the Homestake Gold Mines, 335-A Crystal Arcade, Escolta, Manila, P. I.

DONALD C. GREGG, '22, is connected with Union Management, 9 Plaza Moraga, Manila,

CHARLES F. JORDEN, JR., '23, is General Superintendent for the American Smelting & Refining Co., Santa Barbara, Chihuahua, Mexico.

RONALD F. CRAWFORD, '23, left New York City in March for Guatemala, Central America, where he can be addressed at Americal 426 Guatemala City.

Apartado 426, Guatemala City.

LUTE J. PARKINSON, '25, receiving his mail
at Box 616, Kimberly, C. P., South Africa,
is now Assistant General Manager of De-

Beers Consolidated Mines, Ltd.
WILLIAM MeWHORTER, '23, works as an engineer for the U. S. Potash Co. at Carlsbad,
New Mexico.

George W. Mitchell, '23, has become manager of the Matachewan Consolidated Mines, Ltd., at Matachewan, Ontario, Canada. Howard F. Keller, '24, is general superin-

tendent for Cia Minera de Penoles at Balsas, Guerrero, Mexico.

E. E. Linburg, '24, has left the Indiana Gas Utilities Co. and is now with the Metero-Edison Company, Easton, Pa.

De Byrox R ROATRICHT '25, has resigned as head of the petroleum engineering department of the Colorado School of Mines to join the firm of Parker, Foran and Canode, consulting petroleum and natural gas engineers with offices in Austin and Corous Christi, Texas, Dr. Boatright is opening a third office for the company in Houston, Texas. He was on leave of absence last year to do special work for this firm. Dr. Boatright received his P.E. degree in 1925, and M.Sc. in 1928. He received his Ph.D. from the University of Colorado in 1936. For a number of years he was chapter adviser to Gamma Chapter and took much interest in the chapter and the frat-

EARLE B. BLICKENSTAFF, '25, lives at 1131-A East Elk Street, Glendale, California. MAXWILL L. McCORMACK, '26, district man-

ager for Ingersoll-Rand, has moved to 685

ROBERT A. ANDERSON, ex '26, manager of the Penn-Lincoln Hotel, informs us that his address is Wilkinsburg, Pittsburgh, Pa. HUGO RIECKEN, '28, is engineer for the Continental Oil Co., Lance Creek, Wyoming. DOUCLAS M. SHAW, '28, lives at 307 16th

Terrace, Warren, Arizona, and works for Phelps-Dodge Co. THOMAS L. WELLS, '28, resigned as manager of Matachewan Cons. Mines Ltd. at Matachewan, Ontario, at the end of January

and is now conducting a general consulting business at 24 King Street, West, Toronto, Ontario, Canada. T. F. Adams, '29, has offices as a consulting

geologist at 211 South 13th Street, Lincoln, Nebraska. CHARLES H. JENKINS, '29, is now with the

Myles Salt Co. at Weeks, Louisiana.

HERBERT NYE, '51, is superintendent of the Arica Mine (Fay Securities Company of Los Angeles) at Rice, California.

J. GILBERT MARSHALL, '31, superintendent for Midwest Refineries, Inc., has moved to 219 State Street, Alma, Michigan.

State Street, Aima, aimman. Louis Bartholomers, '32, completed his contract with the South American Development Co. in Ecuador, and is now at 238 South Monroe Street, Denver, Colorado.

JOHN COOLBAUGH, '32, technical representative for the American Cyanamid & Chemical Corp., has been transferred to Azuza, Calif. EUGENE PRESSET, '32, who is with the Columbia Steel Co., has been transferred from Sunnyside to Columbia, Utah.

FRANK LINDEMAN, JR., '33, engineer for the Stanolind Oil & Gas Co. is in the main office at Tulsa, Oklahoma,

EDGAR C. NORMAN, '33, can be addressed at P O Box 253 Chinook Montana

MELDON E. VOLIN, '33, gets his pay checks from the Harbra Mines, Cisco, Utah, where

he is assistant mine manager. C. E. Osborn, '33, is way off in Manila doing consulting work for Alunan, Hernaez & Co., and receives his mail c/o Santa Cecilia Mining Co., 456 Dasmarinas,

SHERMAN W. JOHNSON, '34, earns his bread and butter as mine superintendent of the Frisco Silver Lead Co., near Frisco, Utah, via Milford.

T. E. Giggey, '14, was married on September 12, 1937, to Miss Hazel Beins in Aurora, Nebraska. Brother Giggey is sales engineer in the rock drill department of the Ingersoll-Rand Co. His home is at 11411/2 South Norton Avenue, Los Angeles, Cali-

DENT LAY, '35, receives all mail at 2355 Clermont Street, Denver, Colorado. Dent works with the Acetelyne Service Co.

IOHN ZADRA, '35, listened to wedding bells with Miss Marvel Mae McCarty of Chevenne, Wyoming, on June 26. The happy couple lives at 210 Broadway, Pueblo, Colorado. John is metallurgist for the Colorado Fuel & Iron Co.

LEROY HALL, '35, is now at the Sociedad Empresa de Estano de Araca, Viloco, via Eucalyptus, Bolivia, S. A. The mine is located at the high altitude of from 15,000 to 17,000 feet and is noted as the home of the largest tin crystals in the world. Most of the mine haulage is by aerial tramways.

There are eight of these, the largest carrying the are to a mill 2 000 feet below. THOMAS P. TURCHAN, '35, is superintendent of the Catanduanes Gold Mines Co., Inc.,

Virac. Albay. P. I. IOSEPH B. KENNEDY, '35, is ecologist for the

Prairie Oil Co. and lives at 321-C-Southwest, Ardmore, Oklahoma,

H. LEROY BECKMAN, '35, is roustabout of

the West Texas Division, Humble Oil & Refining Co., Andrews, Texas, FRANK D. THAYER, '36, in the mill of the Chino branch of Nevada Cons. Copper Co. has changed his address to Box 853. Hurley. New Mexico.

GEORGE RIPLEY, '36, works in the metallurgical department of the Hercules Powder Co., Hercules, California,

GEORGE H. ADAMS, '36, gets his pay checks from the Riverside Portland Cement Co., Riverside, California.

CARL E. MORRIS, '36, is erection engineer for Allis Chalmers Mfg. Co., c/o John Menetti & Sons, Salta, Republica Argentina, S. A. MORGAN LEONARD, '16, is with the Brader

Copper Co., Rancagua, Chile, South America RICHARD M. BRADLEY, '36, is with the Empire Oil & Gas Co. at Hutchinson, Kansas NORMAN FOSKETT, '36, makes his home at

182 Stiles Street, Elizabeth, N. L. and works with the Standard Oil Co. of New Jersey at their Bayway Lefinery. GENE MEYER, '37, before going to Southard,

Oklahoma, took the fatal step with Miss Dorothy Johnson of Miles City, Montana. HOWARD A. SAWITZKE, '37, is with the Carnegie-Illinois Steel Corporation and gets his mail at 7715 South Shore Drive, Chicago,

E. I. ALDERFIR, ex '37, has returned to Denver after three years spent with the Hoe Mt. Mining and Milling Co. in Alabama.

DELTA

ROBERT I. ANDERSON, '14, has published a book entitled "Secondary Aluminum". Brother Anderson earns his livelihood as a consulting engineer. J. F. Davis, '32, is now living at 4107 Porter

Ave., Knoxville, Tenn. AUSTIN G. NAUERT, '36, is now with the

American Tel. & Tel. Co., Long Lines Traffic Dept., 209 West 7th Street, Cincinnati, Ohio.

CHARLES S. SMITH, IR., '37, informs us that his mailing address is now the Department of Physics, M. I. T., Cambridge, Mass.

EPSILON

WILLIAM D. McMillan, '13, works at the American Girl Mine, Ogilby, California, ROBERT T. DONALD, Epsilon '18, formerly geologist for Cusi Mexicana, has been made mine superintendent of the Negociacon

Minera de San Rafael y Anexas, Pachuca Hidalgo, Mexico. LEONARD W. HENRY, '20, is with the Stand-

ard Oil Co. at Maracaibo, Venezuela, S. A. GEORGE L. KLINGAMAN, '21, is now with the Standard Oil Co. of Texas, 1313 Petroleum Bldg., Houston, Texas.

J. H. ASIUEY, '22, has returned to the Factnillo Co. Fresnillo, Zacatecas, Mexico, from the Cia 'on Carlos of which he has been superintendent.

superintendent.
FRED C. GREEN '23, is assistant superintendent of the Arthur plan of the Utah Copper
Co. at Garfield, Utah.

SCHUYLER B. HENRY, '23, is again with the Standard Oil Co. of California in Arabia. His address is c/o Standard Oil Co. of California, Al Kobar, Saudi Arabia, via

California, Al Kobar, Saudi Arabia, via Bagdad and Bareihn Island. JAMES B. CHAMBERLAIN, '24, is with the Cia Aramayo de Mines en Bolivie, Casilla 674.

La Paz, Bolivia, S. A. Homer D. Erwin, '29, has returned to the United States and is living at 940 S. Con-

cord St., Los Angeles, Calif.

CLARENCE VAN GUNDY, '31, is now working in Bakersfield. California, for the Shell Oil

Co.

COADELL DURKELL, '31, took the fatal step with Miss Helen Spinning, and is now with the Richfield Oil Co. in Taft, California. He spent last year as Instructor of Geology

at the University of California.

ROBERT R. COATES, '31, recently married, has
a position as Assistant Professor of Geology
in the University of Alaska, Fairbanks,
Alaska. He writes that the caribou hunt-

ing is excellent.

ing address is c/o Petroleum Engineering Department, College Station, Texas. CHARLES LINDSAY, '35, was recently passing

around cigars as the result of a blessed event. WILLIAM McFadden, '55, is doing geophysical

work for the Standard Oil Co. in Bakersfield, California. JOHN N. ANDREGG, '36, is Junior Engineer

for the Fairbanks Exploration Co. in Fairbanks, Alaska.

George F. Reen, '37, is now engineer for the Hallnor Mine in the mining camp of Porcupine, near Timmins, Ontario, Canada. George Binnious, '37, is with the Braden

Copper Co., Rancagua, Chile.

SARGENT REYNOLDS, '37, recently listened to
a wedding tune. He is now engaged in
petroleum engineering at Taft. California.

petroleum engineering at Taft, California, WILLIAM MOSHTR, '37, is now in Brownfield, Texas, where he is doing geophysical work for the Standard Oil Co. of Texas. His

for the Mandard Oil Co. of Texas. Fits address is Box 1037, Brownfield, Texas. Gallin H. Sturction, "37, gives his address as Balik Papan, S. E. Borneo.

MILAN ARTHUR, '37, is on the petroleum engineering staff of the Standard Oil Co. in Los Angeles, California.

W. J. CLOUGH, '37, informs us that he is now in Peru. Mail goes to Cerro de Pasco Copper Corp. at Morococha.

ROBERT FOWLER, '37, was recently made a proud papa. Bob is engaged in petroleum engineering at Taft, California.

ZETA

A DINGMAN, '14, has been advanced to the rank of Associate Professor of Mining at the Montana School of Mines. CLAYTON OTT, '34, gets his mail c/o De-

velopments Inc., 5th Floor, Filipinas Bldg., Manila, P. I.

HOWARD E. MILLER, '35, informs us that his

address is now 4459 West Pine Blvd., St. Louis, Missouri. Max F. Lamm, '36, sent in his address as

Max F. Lamm, '36, sent in his address at 721 East Lincoln Street, Wellington, Kansas, Lewis W. Benz, '37, tells us that his mail goes to P. O. Box 202, Madison, Kansas, Victor Koelzer, '37, is taking graduate work in the University of lowa, lowa Gity.

ETA

HOWARD McCLINTIC, JR., '19, who has been in the structural steel business for over twelve years, is now Vice-President of the littsburgh Piping and Equipment Company of Pittsburgh, Pa.

ROBERT HACKETT, '19, is with Nichols & Co. in Boston, Mass.

H. J. Horn, Jr., '22, has taken headquarters at 1056 Broad Street, Newark, N. J. J. F. Bennett, '30, has been transferred to the Goodyear factory in Australia, and his

the Goodyear factory in Australia, and his mail goes to Box 16, Granville, New South Wales, Australia.

THETA

T. H. BARRETT, '14, gives 3320 Cabrillo Street, San Francisco, California, as his permanent address. Temporarily he is at Hotel Plandome, Salt Lake City, Utah, KARL F. KLEIN, '16, has resigned his position

as general superintendent of the Cia. Minera Carlota, Santiago, Chile, and will be at

L. N. PLEIN, '21, who has been with the U. S Bureau of Mines has been transferred to the National Bituminous Coal Commission.

Washington, D. C.

Thera's 1937 graduates are well located. Their addresses follow: IOHN H. BERGER Stamford, Conn. KHATCHIK DONELIAN

IOHN E. DUMARESO

CHARTES O. HUGHES

KURT MASSPELLER

WILDERT F. RATH CLARK B. RISLER

EDWARD G. UNDERHILL

GOSDON MACVEAN, '23, manages the Mining Department of the Mine Safety Appliance Co., Braddock & Meade Streets, Pittsburgh,

ROBERT S. JOYCE, '23, is manager for the Mine Safety Appliance Co. in El Paso, Texas, but for the present his mailing address will be the main office of the company in Pittsburgh, Pa.

H. B. HEFFELFINGER, '32, writes that his mailing address is Mendenhall P. O., Chester County, Pa.

3 Prospect St.

133-03 41st St.

Flushing, N. Y.

McKeesport, Pa. 2124 Highland Ave.

White Plains, N. Y.

644 Riverside Drive New York City

2108 Versailles Ave.

Business Address American Cyanamid Co. Am. District Tel. Co. Hoguet, Neary & Campbell 90 Broad St., N. Y. C. Carnegie-Illinois Steel Pittsburgh, Pa. Birmingham, Ala. Elizabeth, N. I. Westinghouse E. & M. Co.

Bloomfield, N. I. Westinghouse E. & M. Co. E. Pittsburgh, Pa. Pittsburgh, Pa.

893 Westfield Ave. Elizabeth, N. I. 55-79 Boulevard N. Bergen, N. J. 1318 Singer Place Wilkinsburg, Pa. 2108 Versailles Ave. McKeesport, Pa. 301 Cobert St. Brooklyn, N. Y.

IOTA

CHARLES H. FULTON, Hon., has resigned from the directorship of the Missouri School of Mines and Metallurgy, and has been appointed research professor in metallurgy. His address is P. O. Box 562, Rolla, Missouri. ROBERT S. BURG, '16, is now living at 173

South Anita, Brentwood Heights, California. JOHN H. G. REILLY, '17, has been promoted to the position of general superintendent of mines for the Cia de Real del Monte v Pachuca, at Pachuca, Hidalgo, Mexico.

LEO E. SHIRE, '25, is with the Andian Na-tional Corporation, Ltd., Apartado 130, Cartagena, Colombia, S. A.

SAMUEL E. CRAIG, '26, is with the Combined Metals Production Co., P. O. Box 874, Tooele, Utah. THEODORE HERMAN, '27, informs us that his

mail is to go to 1721 W. North St., Bethlehem, Pa.

R. E. HILPERT, '27, has settled down in Tulsa, Oklahoma, and works for Dowell, Inc.

THEODORE C. GERBER, '28, is a Major in the Department of Military Science, Lehigh

JAMES K. RICHARDSON, '32, works in Climax, Colorado, with the Climax Molybdenum Co. REX MONROE, '32, is Cracking Plant Inspector, Shell Petroleum Corp., East Chicago,

EDGAR C. LONG, '32, has been transferred to Waco, Mo., where he is with the St. Louis Smelting & Refining Co.

W. W. COGHILL, '33, gets his pay checks from the Ozark Chemical Co., Monahans,

T. W. HUNT, '33, writes that his present address is Box 1051, Binghamton, New York. J. Douglas Martin, Jr., '33, gets his mail c/o Geophysical Research Corp., P. O. Box

T. G. LaFollette, '33, makes his home at 703 Avenue C, Fort Madison, Iowa.

W. L. Holz, '37, works with the Gulf Oil

Co and his address is Box 1072. Maud. Oklahoma.

S. S. Post. '37, is with the General Electric Co. His mail goes to 1054 University Place, Schenectady, New York.

WALTER RUDER, '37, makes his home at the Aluminum Club, New Kensington, Pa.

WILLIAM BUSCH, '37, is now a student assistant at Columbia University. Mail goes to 816 John Jay Hall, Columbia University, New York City. Bill is also studying for

LAMBDA

GEORGE F. STOTT, '15, has left Eureka. Nevada, and is now in Painesdale, Michigan. HIRAM W. CLARK, '17, is District Sales Manager for the Iron Fireman Corp., 705 Denver National Bank Building, Denver, Colo-

rado. MAURICE E. ROCHE, '19, is with the Hudson Bay Mining & Smelting Co., Flin Flon,

Manitoba, Canada. REES W. DAVIS, '19, operates the power plant

for the Hudson Bay Mining & Smeltine Co., Flin Flon, Manitoba, Canada. A. HAROLD BLAKE, '20, earns his living as an

assistant professor of Mechanical Engineerine at the University of Utah. A. D. DUNYAN, '22, is mining in Park City,

Utah, and lives at 23 H Street, Salt Lake City, Utah. Dr. THOMAS C. ADAMS, '22, head of the De-

partment of Civil Engineering at the University of Utah, is on sabbatical leave this

JOHN W. COPE, '23, for nine years with the University of Utah as an associate professor of mechanical engineering, has accepted a Purdue University.

T. G. MARTIN, '24, is with the Eastman Oilwell Survey Co., Long Beach, California. Professor Mervin B. Hogan, '27, is on sabbatical leave from the Mechanical Engineering Department here. He has accepted a

fellowship at Yale University. WILLIAM M. HAYDEN, '28, is with The American Brass Company. His address is Villa Rosa Bonheur, Palisades Avenue, Spuy-

ten Duyvil, New York, W. B. JACOBSEN, '28, formerly instructor in his master's degree.

metallurey at the Colorado School of Mines, is now located in Ouray, Colorado, M. MALTSEFF, '28, writes that he is to be found at 1466 17th Avenue, San Francisco,

MAX I. KENNARD, '33, has been temporarily transferred from the Combined Metals Re-

duction Company's plant at Stockton, Utah, to their property at Pioche, Nevada. He is in charge of construction of some new company houses.

ROBERT H. KIRKMAN, '33, has moved from Garden Grove, California, to 5602 Campo Walk, Lone Beach, California, IOSEPH A. WHEELWRICHT, '35, told his boss,

Bill Kelsey, '11, that he wanted two days off to get married. Adrian got married, but he didn't come back for ten days. He is with the Combined Metals Reduction Company at Stockton, Utah.

HAROLD F. GREENE, '35, informs us that 'effective immediately" his address is \$1 Wade St., Bridgeport, Conn.

RAY BOWEN, '35, is working for the Nevada Consolidated Copper Company at Ruth, Nevada. This summer Ray married the best secretary that the head of the Utah Engineering Experiment Station ever had. DUANE O. WRIGHT, '36, can be reached by

writing the Forest Service, Logan, Utah. JOHN S. DUDER, '37, receives all callers at 117 L. Street, Salt Lake City, Utah.

RICHARD S. REINHOLD, '37, Lambda's Regent last year is with the Structural Steel and Forge in Salt Lake City. Dick was always known as a woman hater among fellow engineers until last year. He met the "right" girl and was married in less than a month after graduation.

MU

M. M. BROYLES, '28, makes his home at 1212 Lorain Avenue, Bethlehem, Pennsylvania. JOHN H. LIGHT, '38, says that "until further notice" his address will be, Reserve Officers' Training Corps Camp, Engineer Company, Fort Benning, Georgia.

NII

WILLIAM A. SMITH, JR., '33, wants it known that his present address is 24 Baker Street, Lynn, Mass.

W. A. OWENS, '34, informs us that his mail goes to 1121 Portland, East End, Pittsburgh, Pennsylvania. T. W. DANA, '35, writes that he is now at

the home office of the General Electric

Company, Illuminating Engineering Laboratory, Schenectady, N. Y. His work now is in the field of illuminating engineering for streets and highways.

ROBERT C. McMaster, '36, writes that his address is now California Institute of Technology, E. E. Department, Pasadena, California.

XI

GEORGE REED, '24, is an associate engineer for the Public Works Administration in Washington, D. C. With his family he lives at 1650 Harvard Street, N.W., Washington, D. C. CHARLES D. HIGHLEYMAN, '27, is electrical engineer with the Indiana-Michigan Power Co., of South Bend, Indiana.

OMICRON

RALPH W. VAN '25, is out to found an alumni club at Lehigh University He organized a Founders' Day dinner on October 14th. If it can be done Van will do it. His present address is 623 15th Avenue, Bethlehen, Pennsylvania.

HOWARD NOBLE, '54, receives all visitors at Room 1313, 1 Ware Washington, Black

Room 2133, 111 West Washington Blvd., Chicago, Illinois. Howard is with the Container Corporation of America, in their Patent Attorney Department. N. J. STIVER, '35, is working "some place in the engineering department" of the Firestone Rubber Co.

W. W. SHEROD, '36, plans to take the fatal step in June. Here's to you, Bill. Lyle Vestermark, '36, works for the International Filter Company. It seems that the

company is training him for sales work.

JOHN PERRY, '37, writes that his mail goes
to Room 511, 605 West Washington Blvd.,
Chicago, Illinois. John is selling for Wal-

PI

lace & Tiernan.

BOB COPPER, '37, living in Lyndhurst, Virginia, works in Waynesboro, Virginia. BARTH GILCRIST, '37, sells electrical equipment for Page Williamson Company, Charlotte, N. C.

Interest of the Action of the

J. HINSLEY RUCKER, '37, is doing graduate work at the University of Cincinnati. JACK SWING, '37, works for the Champion Paper and Fiber Co. Jack's mail goes to P. O. Box 943, Canton, N. C. ARCHER JONES, '37, works for the Newport

ARCHER JONES, 37, works for the Newport News Ship Building and Dry Dock Company. Archer's mail goes to 25 Maneto Avenue, Hampton, Va.

JOE COWGILL, '37, and PERCY HURT, '37, are doing graduate work at M. I. T. JAMES S. WILLIAMS, '37, is scheduled to

AMES S. WILLIAMS, '37, is scheduled to "march up the aisle" with Miss Cam Butterworth in the near future.

SIGMA

ROBERT M. KALB, '27, hangs out at 474 N. Maple Avenue, E. Orange, N. J. EMMETT E. KNORR, '27, is president of the Central Ohio Alumni Association, 60½ W. Northwood Avenue, Columbus, Ohio.

TED KAUER, '28, lives in Bexley, Ohio, on ROOSEVEL Avenue. JACOB S. DECKER, '28, works for the Electric Autolite Co., Toledo, Ohio.

Jack Dumbauld, '29, gets mail at 17 West Oakland Avenue, Columbus, Ohio. FRANCIS W. DAVIS, '29, 231 Clinton Heights Avenue, Columbus, Ohio, is teaching photography at the Ohio State University. HOWARD ALLISON, '29, receives all communi-

cations at Box 253, Pittsfield, Mass.
CHARLES H. ALTVATER, '29, makes his headquarters at 1066 Lilley Ave., Columbus.

Ohio.

ELY G. FENTON, '29, is reached through the
U. S. Engineer Office, 925 New Federal

Bldg., Pittsburgh, Pa. Francis M. Hageman, '32, 1237 Covington Avenue, Piqua, Ohio. That's all we know about Francis.

FRED BARBER, '32, Garden Road, Columbus, Ohio. No more news, Fred?

GEORGE DUMBAULD, '34, lives at 6327 Walnut Street, Pittsburgh, Pa. R. A. Morrison, '34, was recently made a

proud papa. October 14 was the day and the baby was a girl, Barbara Lynne. LESTER KNAPPE, '34, lives in Cleveland, Ohio.

at 2316 Canterbury Rd.

ARDEN R. HACKER, '34, lives at 375 Sumatra

Avenue, Akron, Ohio. Myron O. Jensen, '34, was recently visited by the stork. Myron is working for T. V. A. His address is 19 Cornelia Street, Ashville, N. C.

ALBERT R. MORRISON, '35, writes that his present mailing address is 342 14th Avenue, Columbus, Ohio. Bert is a chemical engineer with the Ohio State Department of Health.

Chearles Griffetth, '35, is now employed in Chicago by the Chicago Twist Drill Works. His mail goes to 411 W. Ontario Street. WAYNE C. FISCHER, '35, teaches at Wyomiss-

ing Polytechnic, Reading, Pennsylvania. Last spring Wayne and Miss Marjorie Watters of Eaton, Ohio, "walked down the bailet." The happy couple is now living at 2054 Cleveland Avenue, West Lawn, Pennsylvania.

HOWARD M. CRUSEY, '36, 220 East Jefferson, Ft. Wayne, Indiana, is employed by General Electric.

JOE SULLIVAN, '36, is working in Corning, N. Y., for the Corning Glass Co. WILLIAM R. ELIIS, '37, makes his home at 1013 Latimer Avenue, Ambridge, Pa. LOST: DON WOLFORD. Help! Help!

TAU

C. ALLAN GILMOUR, '32, writes that his address is 96 Hardsion Road, Rochester, N. Y. ROBERT FLOVD, '37, informs us that his mailing and permanent addresses are the summing, namely, 386½ E. Warren Street, Elmira, New York.
ROBERT W. OERFEL, '37, hangs his hat at 230. W. Pleanant Avenue, Syracuse, New

York.

RICHARD H. FREYBERG, JR., '37, gives his permanent address as 630 East Lincoln Avenue, Mt. Vernon, New York. Guess his mailing address is the same.

HAROLD D. HASTINGS, '37, works for the Columbia Broadcasting System, 485 Madison Avenue, New York City.

PHI

NORMAN R. MOSER, '36, tells us that his mail is to go to 857 South Washington Street, Van Wert, Ohio.

CHI

EDWARD P. MATHEWSON, Hon., professor of mining administration at the University of Arizona, has been given a leave of absence and is now consultant for Nielson & Co. Inc., Manila, Philippine Islands. George D. Gardner, '32, is now with Niel-

SEORGE D. GARDNER, '32, is now with Nielson & Co., Inc., at Batu-Gajah, Perak, Federated Malay States.

HENRY D. CLARK, '32, and the Mrs. have announced a blessed event on August 12. There is now a Henry Decker Clark, III. Henry, II, is with the Neilson Mining Co. at Baguio, Mountain Province, P. I.

G. M. BUTLER, JR., '33, recently received his Ph.D. degree at Massachusetts Institute of Technology. He is married and has a job with an alloy metal company in New York City.

ALEX EDELEN, '33, listened to a wedding tune in Phoenix, Arizona, on October 20, with Helen Dunbar of San Diego. Alex is with the American Smelting and Refining Co. at Potoso, Mexico.

FRANK LAMB, '33, is in Ecuador with Bob Bacon, '33, but recently was on leave and took the fatal step in New York.

Town C. Miston, Ju., '35, has been transferred to the Niagara Falls, New York, plant of the Transium Alloy Mfg. Co. as research associate. For the past two years David has been at Hot Springs, Arkansas, as manager of the Arkansas Mining Cor-

portions, 3), write to us faithfully for every Founder. Day from Gusyaquil, Ecuador. He tells us his letter must travel from his mising camp to the Port by auto, mule, train, and river bust, and mail is somewhat uncertain. The railread from Gusyaquil Quins, while right on the equation, is "cold as the devil" because it is 10,000 feet in elevation. At present Bob is acting chief geologist and is working on

is acting chief geologist and is working on a model to solve a fault problem. G. M. Burtler, Jin., '34, last year a graduate student at M. I. T., is employed by the

Ludlow Steel Co., Dunkirk, New York.
FRANK KELLER, '14, is serving as planning
engineer with the Soil Conservation Service
at Safford. He reports birth of a son on
March 18 last, and tells us the birthaby
was ordered for March 17, St. Pat's Day,
but that the son was delayed one day because St. Pat was too busy at Tucson on
the 17th.

PITT TURNER, '35, was married September 18th to Miss Betty Finlayson in Chicago.

Congrats!
GEORGE M. POTTER, '35, is mill shift foreman
of the Cia. Unifacada del Cerro de Potosi,
Potosi, Bolivia, South America.

W. F. Sloan, '36, is engineer for the Andes Copper Mining Co., Portrerillos, Chile, South America.

HARLAND LANE, '36, is with the Westinghouse Company at East Pittsburgh, Pennsylvania. He is a great booster for his company and assures us Westinghouse products

are the best in the world.
WILLIAM R. TURNER, ex '36, has just com-

pleted his aviation training at Pensacola, Florida, with the Navy, and has been transferred to Panama for active duty. JOHN D. HILLER, '37, receives all visitors at

JOHN D. HILLER, '37, receives all visitors at 1200 E. 7th Street, Tucson, Arizona. Albert H. Buehman, '37, says his mail goes

to Box 230, Tucson, Arizona.

Tom Conroy, '37, makes his home on Star
Route, Pearce, Arizona.

Route, Pearce, Arizona.

EDMOND F. MARUM, '37, hears from the outside world c/o U. S. Reclamation Service,

Bartlett Dam. Cave Creek, Arizona.

WILLIAM M. CROZER, '37, has headquarters at 301 West 2nd Street, Winslow, Arizona.

THOMAS E. HALL, '37, lives in Litchfield Park, Arizona. PETE KHERNAN, '34, ED MARUM, '37, HOW-ARD FINK, '37, and LEON MAGES, '34, are

all working with the U. S. Bureau of Reclamation on construction of the Bart-lett Dam north of Phoenix. This is the highest multiple arch dam in the world. HENRY S. RAYMOND, '37, lives at 2229 North 7th Street, Phoenix, Arizona.

Among the alumni present at the Founder' Day Banquet and the Arizona-Centenary football game, October 24, were David C. Minton, John L. Anderson, Robert Heineman, Peter R. Kiernan, William Corec, Clyde Houston, William Hardwick, John Hiller, John W. Montgomery, Arthur Davis, and Richard Bennett. Many others sent messages of regret at being unable to attend.

PS!

JOHN J. STEADMAN, '32, has moved from Carson City, Nevada, to the Butte Highlands Mine. His address is c/o the Butte Highlands Mining Company, Butte, Montana.

RALPH UTT, '33, is manager of the western office of the Denver Equipment Co., Cunard Bldg., 103 Market Street, San Francisco,

Cont. WOODY, '33, formerly with Hamilton at the Marietta Mining Company is now mill superintendent at the Butte Highlands Mining Company near Butte. Woody receives his mail c/o the Butte Highlands Mining Company, Butte, Montana.

JOHN D. McAULIFFE, '33, has gone from Fort Peck, Montana, to Morococha, Peru, S. A., where he is engineer for the Cerro de Pasco Mining Company.

ETTORE PERETTI, '34, now Dr. Peretti, instructor in the metallurgy department at the School of Mines, was married last June. Address: Apartment B, School of Mines Residence Hall, Butte, Montana.

Dave PIPER, '34, walked down the aisle recently with Ruth Davis. Dave is with the Engineering Department of the A.C.M. at Butte, Montana.

WALTER HAMILTON, '34, who took the trouble to write the editors a long letter denying that he was superintendent of the Marietta Mining Company, now admits that he has been made superintendent. We call our shots, Walt.

JACK RABBITT, '35, is now the head of a mineral collection project of the National Youth Administration. He may be reached c/o Montana School of Mines at Butte.

c/o Montana School of Mines at Butte. Roy Hammond, '35, it has been reported, is now chief engineer at the Badger State Mine, Butte, Montana.

MEL WILLIAMS, '36, after wandering to Jarbidge, Nevada, and Butte, Montana, is back with the Dayton Consolidated Mines at

Silver City, Nevada.

ALBERT W. SCHLECHTEN, '37, is assistant in the department of mining engineering at the Masuchusetts Institute of Technology.

Cambridge, Mass. Ambert J. Rambosek, '37, is junior engineer for the North Lily Mining Co., Eureka, Utah.

SEWARD PRATER, '37, is now with the Republic Steel Corp., Chicago, Illinois, LEO GALLAGHER, '37, is sampling at the Anselmo in Butte.

"PITCH" DAVISON, '37, has left the Jardine Mining Company and has gone back to his

first love, South America. Bon Lawson, '37, is attending the Ingersoll-Rand Training School in Athens, New York. It is reported that he is looking forward to going to China for the Company sometime after the first of the year. Now, do be careful, Bob.

GEORGE A. DAYSON, '37, is now with the Jardine Mining Co. at Jardine, Montana.

RAY MURPHY, '37, is now spending his time selling dynamite. He may be reached at his home in Butte.

OMEGA

Gerald A. Munson, '32, has joined the metallurgical department of the Climax Molybdenum Co., Climax, Colorado. Bernard R. Buus, '35, is now working in

Molybdenum Co., Chimia, Colorado, BENNARD R. BUUS, '55, is now working in the Incandescent Lamp Department of General Electric Company. His mail is to go to 1803 Allendale Avenue, East

Cleveland, Ohio.

EARL ROSENOW, '36, would like to have his mail sent to Apartment 406, 7050 Merrill Avenue, Chicago, Illinois.

WILLIAM J. GREMMILS, '37, writes that his address is 307 Indiana Avenue, Sioux Falls, South Dakota. HAROLD C. FOSTER, '37, informs us that his

mail is sent to Wing 5, Building 602, Naval Air Station, Pensacola, Florida. Wynomam E. Folds, ex '37, wants all mail

sent to 511 W. Hardin Street, Aurora, Illinois.

GAMMA BETA

RICHARD G. RADUE, '31, is now associated with Francis B. Leech in the practice of patent and trade-mark law, Suite 1085, National Press Building, Washington, D. C. FIRMAN P. LYLE, '32, informs us that his mail goes to 605-A Worth St., Pittsburgh, Pa.

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