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The GEAR



Fall, 1931

VOLUME TO

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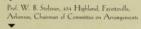


FALL, 1951

VOLUME XXI NUMBER 1

10th Biennial Convention

Held with Upsilon Chapter, Fayetteville, Arkansas, December 29th to 31st



HEN the cream of the fraternity gathers at a national convention to transact important business and enjoy the fellowship for which Theta noted, we see one of the most inspiring moments in the fraternity's history. No one has ever gone away from a national convention without this distinct feeling of inspiration and respect for his fraternity. Any Theta Tau who can possibly attend the 10th biennial convention will never regret the experience. Alumni and actives should take advantage of this opportunity to see a national convention, expectingly those who live fairly close as I hand.

We are advised by Brother Jamison that Fayetteville, a city of 10,000 inhabitants, is situated in the northwest corner of Arkansas on the Frisco Railroad and U. S. highway No. 71. Other highways are gravelled.

All members of Theta Tau will be welcome, and those who can attend are urged to be there.

The GEAR of THETA TAU

OFFICIAL PUBLICATION OF THE FRATERNITY

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

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WILLIAM THOMAS PULYER
HAROLD VICTOR PATTERSON
JOHN LLOVID NEWCOMS
WALTER SHELDON RODMAN
KINNICH DICKEY
FRED COFFMAN
ALPHA CHAPTER HOUSE
CHI GRAFTER

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MT. FUGI - JAPAN

Japan Turns a Corner

A commentary on the life and people of Present

By W. W. PARKINSON, Pi '23, Engineer, Missionary, and Student

ATE one evening I stood beside one of Japan' many cansls and watched a large black cow pulling a heavily loaded wagen over a rocky road. Beside the wagen strode an old Japanese workman and behand the man torted a small boy. Under his arm the workman carried a bright new trieycle. Because Japanese life is like that, it is hard to describe. There is always the new

There is always the new and the old and it is hard to keep them straight. You have to write about the man who drives the cow and the boy who rides the tricycle. And you so often find the two mixed, with the old man carrying the tricycle, and sometimes with the boy driving a cow.

In nearly every field of life this is self evident. In agriculture, industry, transportation, philosophy, religion, cooking, art, amusement—always the part that has come down from old Japan and the part that has come since the country was opened to foreigners at the middle of last century. As I begin to write, the bells of Tokyo toll out the minutes of the great earthquake of eight years ago. It is twelve o'clock on September first. In that earthquake Yokohama and Tokyo lost over a hundred thousand lives and more than eleven and a half billion yen in property. Rebuilt, these cities are tangible evidence of the revolution that has, and its taking place

in Japan. New Tokyo is not representative of Japan, but to Japan it represents a new standard and it is in terms of this new standard that Japan is coming to measure its life.

What is rebuilt Tokyo like? In part it is like many busy western cities. In it the clerk, shopkeep-

er and laborer, unless they sleep over their shops, ride to work in street cars and electric trains. The banker, company president and manager is driven in his own car by his own chauffeur. They go to small, one story shops, low rambling office buildings and petty manufacturing places; but they also go to eight story office buildings, de-

• Engineer, missionary, student!

The editors were confident that such a man would be unusually qualified to write for THE GEAR. This fascinating article from Brother Parkinson fully justifies that confidence. partment stores that look like Wanamaker's, well built factories, and banks that can be equaled only in the larger cities of the west. These people ride to work over paved streets, through parks, past traffic cops and



The Heart of Modern Tokio

traffic jams, as do their American prototypes. In the evening most of them return to Jpanese bouses with sliding doors that give full ventilation when opened and no ventilation at all when they are shut for the night. But the smaller part, including nearly all of those who ride in automobiles, on up before attractive western style houses that, except for the high walls around them, would appear at home in the better class American commuting town.

No, this is not Japan, decidedly nottinish the story one would have to tell of towns and villages with dirty streets and open severs, thatched roofed houses, polluted streams and fields that smell to high heaven. But these places look to Tokyo as their model and will come as near the standard as economy will permit

But what is back of this? To list such things tells no more about Japanese life than you would say about my own American town by musing on the fact that there are no street cars.

In effect, the Meiji restoration was a revolution. There was little bloodshed, but power changed hands. Only a limited number of the great feudal families have been able to stand the change and hold their prominence in the nation's life. It was the lower class of soldiers that was best trained in practical affairs, and therefore best suited for places of responsibility. They became the builders of new Japan. The merchant class had been the class too low in society to have a family name, but their trade prepared them for modern business. The best known name in present day Japan is the former trade name of a family ranked too low, because it was a merchant family, to have a family name,

The magic wand that has been waved over Japan is science, and the magician is the engineer. Science became king. It was to science that the people of a generation ago looked for salvation, and to which many still look. Science was the bringer of hope. It brought optimism to replace ori-



Children Carrying a Shrine Through Tokyo Streets

ental pessimism. Science was looked to, to create the possessions, culture, and prestige demanded by a proud people. It and the world war almost performed this miracle.

I was listening one day to a young student rake religion over the coals on the ground that it presupposed freedom of the will When I asked him why he was so convinced that men had no freedom of will, he said that science had shown that there was no such thing. I suggested that science was a method of study and that scientific investigation had also brought out considerable evidence against his theory. At this he was somewhat upset, not because I had disagreed with him but because it had been suggested that science might be uncertain in its conclusions. To him science seemed a sort of god, omnicient, infallible.

This attitude toward science is, on the whole, disappearing. Science can not remain a deity because experience has shown its weaknesses. It has not proven omnipotent. Some tasks have remained beyond its power. It has failed to give a solution to several of Japan's most pressing difficulties.

Science and industry have brought wealth to Japan, but they have not removed poverty. They have enter of the power of the

To what then is Japan looking? Lett melescribe a scene as seen partly by a friend of mine, and partly by wyself. On a spring afternoon of this year a group of Japanese were seen to gather in a side street protected from public view. At a given hour they produced banners and began a parade to and along the main street. They kicked at a few gates as a way of showing their feelings and distributed handbills as they went along. On the next corner stood a pots box and, as they approached it, the host pots proper body out in front stop them. This was fair game, and with considerable enthusiasm they paid the police system for at least one third degree. The cop was well bear they are the before he managed to jump a passing taxis and flee to the next possing taxis and flee to the next possing taxis and the to the next possing taxis and the to the next possing taxis and there they are the possing taxis and there they are the possing taxis and there they are they are the possible that the possible that the possible they are the possible that the po

They were a group of communists and the scene is spoken of as a demonstration. What were they asking? For food. What did they hope to gain? Publicity and glory for the cause of communism. Were they criminals? No, they were laborers, most of them quite young, following the only cause that held out to them any hope for themselves and their families.

How did it end? As so many others, similar to it, have ended in the past ten years. The system of spies and plain clothes men began its sure work. Three hours later they were bringing them in one after another They were put temporarily in and about a little shack on the corner of the street where we could all see and learn our lessons. They sat and handaged up each other's cuts and bruises. They had not asked for, nor received mercy. By some superhuman effort they would endure the torture of the third degree coming in a few days. The scene on the street, the arrest, even the trial would boost their cause and win for it followers. That was enough. They had not lived in vain. Today they were helplessly beaten; someday they would win.

These communists do not represent Japan. No one knows just how many they number, but they are a persecuted and despised minority. Since 1923 the police have arrested several thousand in four major round ups. Their actual strength can not be measured by that figure. There are thousands of Japanes students and



Over 1200 Years Old, this Group of Temple Buildings Contain the Oldest Wooden Buildings in the World

young people who are studying communism and are sympathetic toward it, but who are very careful to keep their names clear. Even the slightext suspicion is enough to merit dismissal from school and the loss of all chances for a good position.

Why this radicalism in a country that enshrines its ancestors and clings to the divine origin of its emperor? The issues and causes are mainly econcinic. Whatever the outcome, there is no one more involved than the engineer. When it has been decided for whom the engineer works, much of the question will have been settled.

Hard times have aggrerated a situation in which labor had already become class conscious and dissarisfied. To these must be added the dissarisfied student. Every year Japan graduates theusands of students from her colleges and universities. In recent years perhaps half of these have had to wait one or several years, and only a very limited number get the kind of jobs they want. It is these groups which they want. It is these groups which form the most profitable recruiting grounds for the communists.

Radical Japan has weighed capitalism and found it wanting. It sees capitalism as the exploiter of human life for its own votories, and as the exploiter of science for the few rather than for humanity. Of course this sounds Russian and Japanese radicals would not have reached these convictions so soon without outside help. There is no doubt that each organization and re-organization has been aided by people outside of Japan. This help is, no doubt, more unofficial than official, and comes from the Third International rather than from governmental Russia, but behind it is the experience of minds trained in propaganda and in revolution.



The Pagoda at One of Japan's Famous Buddhist Temples

Efforts to combat this tide of dangerous thought would be more fruitful if America had been able to keep her head above water. But business depressions, and especially unemployment, in the United States, are taken as final evidence that the end of capitalism is near. There is nothing of which the communist is so confident as he is of the failure of capitalism and the ultimate triumph of his own cause.

The government uses every known antidote against this radical thought. Education is strained and distilled to remove all trace of liberal-minded-ness where the issue involves social institutions. Education is then seasoned with literature, philosophy and religion intended to produce patriotism and contentment.

Japan is far from communistic. Communism will influence the future economy of Japan, as it will influence the future economy of the world. But whatever Japan may adopt into her life, one may be sure that she will nationalize it and make it Japanese. She did this with Chinese culture and Buddhism; she is doing it now with western culture and Christianity. This tendency to adopt new culture to her own genius is shown in one branch of communism that seeks to build a national communistic state around the person of the emperor. This is a conception as foreign to the Russian communist as pulling a jinricksha is to a New York taxi driver. But it is true

Such movements touch only a small part of the nation. That Japan changes, but not too fast, is shown by the loyalty to old institutions in modern surroundings. It is the time of the fall festivals. At almost any state Shinto shrine can be seen a religious practice as old as human history. The festival itself resembles a small town carnival, given for the

to the traditions of Japan

benefit of the local fire department, with the additional feature of a ruligious shrine before which each visitor will bow after he has thrown a few pennies into the shrine treasury. On these festival days the enshrined deity will be taken from the main shrine in a small portable shrine carried on the shoulders of a dozen votories of the deity.

This shrine reminds one of the Ark of the Covenant carried by the ancient Israelites, and it fulfills the same religious function. In it rudes the detry and with it go the benefits of the presence of the detry. It is carried through the neighboring streets, bestowing a blessing upon the houses it passes. It may even be carried into the yard of some especially worthy nature.

To the westerner this seems just another opportunity to pat one's self on the back and rejoice that we have brechen away from the simple ways of the past. No one is more conscious of this blessing than the westerner living in the orient where the past is always present, and always to be tonetended with. But the gain is not all on one side. There are cultural and spiritual values in the customs we have lone foreotten.

What other country ever had Japan's opportunity of choosing pan's opportunity of choosing me the old the things it would keep, knowing that all the rest will all the rest will swept away in a tide of changing deas. Which of his father's things will the boy who owns the tricycle keep for his own use? No one knows ket his is certain; if he does not use the this is certain; if he does not use the cove to pull his own wagon, he will put it in a shrine where it will be forever remembers.

Applied Paleontology

The Service Rendered by the Paleontologist to the Engineering Profession

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By HUBERT G. SCHENCK, Epsilon '29 Assistant Professor of Geology, Stanford University

mized the technical

aspects of the paper

in order to give the

lay reader an idea of

the work of the pale-

ontologist.

PALEONTOLOGY has been applied to engineering projects for about 132 years—since the days of William Smith, who prepared goologic maps of parts of Yorkshire, Derbyshire, and other districts in England.

He showed that each of the various rock formations delineated on his maps was characterized by the fossils in it, and that if he were given some fossils he could tell from which formation each had been collected. He received the Wollaston medal of the Geological Society of London in 1831 for his accomplishments, and subsequent generations have regarded him as the father of stratigraphic palentology.

In March, 1931, there were 235 members enrolled in the Society of Economic Paleontologists in this country. The majority of these were connected with oil companies. The present business depression, however, has driven many of these into other work, but there are possibly still more than

a hundred practicing paleontologists

Many of the members of Theta Tau know very well the type of work these men carry on. Yet there are many who do not, and to those who

have not specialized in • For the benefit of geology this article is adthose of us beyond dressed. Some of the apthe pale of paleontoplications of paleontology logy.Brother Schenck and the relation between in this article sets forth some of the applicaengineering and this scitions and practical ence are the points hereuses of this science in in discussed, and in illpresentday problems. ustration several actual At the request of the cases will be cited. Editors, he has mini-

A number of wells were being drilled for oil in the San Joaquin Valley, California, in a part of that wide plain where alluvium is thick. In order to determine whether the

geological structure was favorable or not, the concern drilling the wells had to find the same stratum or strata in several wells, each of which was cored from top to bottom. The corsamples of the first boring showed sand, gravel, and clay for over a thousand set when the surface; then there came a white shale a few feet thick; then a hundred feet or so of sandstone; then another white shale; then more sandstone. Three other borings showed the same succession of of beds with one notable exception: only one white shale bed was present. The problem before the drillers, only ously, was this: Did the white shale beds in well No. 1 represent two separate strata, or only one stratum which all been repeated by failuring! If two distinct beds were present, which of these thoughts of the present, which

Melotira granulata, one of the fresh-water diatoms found in a diatomaccous shale cored by a well in the San Joaquin Valley. California. The actual specimens can not be distinguished by the naked eye. There are three individuals in this chain; each individual is about 0.054 millimeters in length.

Fig. 1

white shale of the other three wall? This problem was solved by the paleontologists in co-operation with the company's geologist. The first shale bed in Well No. 1 proved to be a distounceous shale which water. The lower white shale in Well No. 1 and the white shales in the other borings were also distounceous, but they were laid down in marine waters. The correlation of strata was thus made simple, due to the paleontologist's ability to discriminate between freshwater (Fig. 1) and marine diatoms (Fig. 2).

In another part of the country, coal miners had been following a seam, but one day it ended abruptly at a fault. Should they search for it at a higher or a lower level? Fossils told them, through the paleon-tologist, the relative ages of the strata on the two sides of the fault, and by going to a lower level the same seam was nicked un once more.

In the case of the wells, the fossils permitted an interpretation of the conditions under which the shales were deposited, whereas in the second case, the paleontologist used the fossils as did William Smith merely as time-pieces to tell the ages of the coal seam and enclosing strata.

How can conditions in the past ages be determined? Application of the formula that "The Present is the Key to the Past" is the answer. When we study the distribution of presentday organisms, we find that certain ones have definite habitats, and even those forms that are distributed throughout the world today live only under certain conditions. With most organisms it is true that each species lived in its own ecologic niche, and some naturalists will go so far as to say, "Name the organism and I will tell you its habitat" and I know of one bacteriologist who once said,"Produce the environment and you will produce the organism."

The three following illustrations will explain why those interested in geographic distribution of organisms feel that there is such a marked relation between living beings and their environment. The bacteriologist who made the emphatic statement just mentioned once read a description of a species of bacterium known only in a certain part of Asia. He wondered if he could get the species to California. Therefore, on the roof of his laboratory he formed an environment exactly like that where the Asiatic form was said to live, and lot in a few weeks he had the Asiatic bacterium in America!



Fig. 2

Some marine Cretaceous diatoms from California. Magnification may be judged by the fact that the length of the specimen shown in Fig. 9 is only .0309 mm. These minute plants with siliceous skeletons occur in the Moreno shale in Moreno Gulch, Fesno County. (From Hanna, Occ, Papers Calif. Acad. Sci. vol. 13, pl. 3, 1927.)

The second illustration is this: for a number of years we have been collecting minute shells from the beach at low tide on the ocean shore near San Francisco, and also from the beach of

San Francisco Bay. The peninsula separating these two environments is only about nine or ten miles wide. The shells from the two beaches are totally unlike, with but a few minor excentions. Other bays along the coast, however, have the same or similar small shells as those inside San Francisco Bay, and they are, thus, unlike those of other open coasts. If given an unknown assemblage consequently we can say whether it comes from a bay or from the shore facing the open sea, much as a fisherman can tell whether a fish comes from fresh or salt water. It may be remarked, in passing, that the shells from San Francisco Bay include those found in one of the oil-bearing formations in the San Joaquin Valley.

The third illustration is another one to show that environmental conditions may be deduced from organisms. Every year I give each of my students a sample about which they know nothing. Their problem is to identify the shells in the sample and by comparison with previously described species. whose occurrences are known, they are to determine the depth of water and bottom temperature of the locality from which the sample was obtained. Their conclusions regarding the temperature of the water are usually accurate to within a few degrees, and the depth of water fairly correct. That such investigations are useful in unravelling the history of the earth is apparent.

This principle—that of telling past conditions by comparisons with the present—is not new. It has long been known that if you find in a rock the remains of a giraffe and numerous palm leaves the formation was not laid down under arctic conditions. It is also an old story that more accurate reculturs are obtainable when the fossils are from the younger formations, since those organisms that have no close relatives among the living species are not subject to such direct analysis as has been possible in the instances cited above. On the other hand, such studies have not received as much attention in most circles as have those dealing with the other branches of paleon-tology, acut as showe dealing with the other branches of paleon-tology, acut as showe dealing with cology, acut as showe dealing with some dealing with experience of different species.

Now, how does one tell the age of the strata from the entombed fossils? Here is how it works out in practice:

Let us suppose that fossils are received by the plaentologist from two localities. From Locality A come specimens 1, 2, and 3. From Locality B are specimens 4, 5, and 6. First, the specimens must be identified. Considerable training and experience enter into this. Next, the time range of each species is ascertained, and the data are then plotted, actually or mentally, on a chart somewhat like this:

Geologic Age	Time Range of Specimens
	123456
Recent	
Pleistocene	
Pliocene	
Miocene	
Oligocene	
Eocene	

It is apparent that the formation at Locality A (specimens 1, 2, 3) is lower Oligocene in age, whereas that at Locality B (specimens 4, 5, 6) is lower Miocene. Note that no one specimen gave the exact final answer.

Many paleontologists have been content, and still are content today, to say instead of "lower Oligocene" and "lower Miocene" merely "Oligocene" and "Miocene," and this is quite sufficient for many purposes. Yet more precision is necessary sometimes. During the drilling of an oil well, for instance, it is desirable to know when dangerous gas pressures or a water sand might be encountered. If the paleontologist can estimate the distance to these horizons he performs a valuable service, and if he can positively identify a given formation in a boring, his decision may be of considerable financial importance. Thus, the disposition of several hundred thousand dollars depends upon the exact age determination of a geological formation in the Bolsa Chica, "Ferguson No. 1" in Kettleman Hills, California.

Such a determination of age in a well core calls for the recognition of thin zones carrying certain assemblages of fossils. The sequence of there by study of samples from nearby wells or from an examination of the same zones where they outcrop at the surface.

Many times the estimate of the distance from the surface down to a given horizon in a well is done satisfactorily by the goologist without the use of fossils, but in other instances paleontologic advice must be resorted

Demands for precision, then, have made many paleontologists record the stratigraphic position of fossils much more exactly than has been done heretofore. Of course, there is no implication here that some paleontologists have never been precise. In the past, however, and today too, many collectors have been satisfied with say. "This fossil comes from the XYZ limstone." Such a statement is not statement is not ficiently complete, because the desired data should include a statement so to exactly how many feet above the base of the limestone the fossil was collected, as well as its exact geographical location.



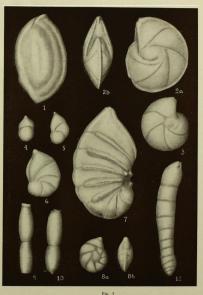
Fig. 4

Core tample from the Richfield Oil Company's well, the "Tapo No. 42," Simi Field, Ventura County, California, depth 2084-2102 feet. Soloriz, the parts of the shell that have been reconstructed are white. The specimen is 1½ inche long. The small circular feet of sell at "D" inche long. The small circular feet of sell at "D" Discoyylinia, 3 forminister. Numerous other Eccent fossils occur in the same rock. Preservation of fossils in core samples is often much better than in sutrace samples.

My conviction is that engineering has a beneficial effect upon paleontology in that it points out the value of more mathematically precise placement of fossils in the various formations. Such exactitude is difficult and sometimes even impossible, but still it is a goal for all, because careful determination of the stratigraphic occurrences of fossils is important for those who are interested in evolution and in establishing synchronism of geologic events throughout the world. In evolutionary studies, where it is found that the ancestors of living species often occur as fossils, or in extinct groups, the ancestors occur in older (lower) strata than their descendants. Yet I know of at least two complicated genealogies of certain mollusks in which their evolution is shown as modified trees, with the ancestral form (roots) occurring in what was thought to be the older rocks. Detailed geologic studies showed, alas, that the rocks carrying the supposedly simple "ancestors" are in reality younger than their more complex "descendants"!

There are many other instances, on the other hand, where the paleontologist has predicted that simpler fossil forms would be discovered in older rocks, and in more cases than one these predictions have come true, just as the predictions of the chemist regarding the periodic table have been fulfilled. In other words, stage of evolution, provided it has gone hand in hand with other evidence, has been utilized successfully to determine the relative ages of strata. The more minute the subdisvisions of the geologic column the more exact are these age determinations. It is of more than human interest to say that the Iurassic strata that William Smith first studied in England have been recognized-almost zone for zone-on this continent.

The discoveries of ancient mammals at various localities throughout the



Some Eocene Froaminifera from near Martinez, California. Magnification may be computed by the reader: the length of the specimen shown in Fig. 7 is one millimeter. These are all marine fossils with calcareous shells. Non-marine Foraminifera are not known to possess calcareous skeletons. The fossils illustrated here are from a formation that has been regarded as lower Eocene for many years, its age having been established by its stratigraphic position and molluscan fossils. (From Cushman-Barksdale, Cont. Dept. Geol. Stanford Univ., vol. 1, pl. 11,

world have been of tremendous interest to man and his inagination, and museum-goers have for years gazed at the skeletons of gigantic reptiles that were once rulers of land and sea. As schoolboys we have been intrigued by photographs of the large tree-ferns that once flourished in the Appalachian region before there were any mountains there, and the monstrous insects that used to better a proper search as the search that used to better a proper search as the search as the state of the search as the search as the search as the search as the state of the search as t watery areas filled us with awe. When it comes to applying paleontology to engineering projects, though, such large objects are seldom if ever studied. The molliusk, brachiopods, foraminifers, datoms, ostracodes, and bryozonas command more attention. So much concentrated effort has been lately devoted to the microscopic fossils that one might announce the establishment of a new science—Microphaleontology.

RHO ALUMNUS RECEIVES MAFFITT CUP

At the recent meeting of the American Waterworks Association in Greensboro, N. C., R. D. Beam, Rho '26, was for the second time presented with the Maffitt Cup which is given yearly to that person who obtains the most members for the association.

Incidentally Brother Beam did not allow his graduation in 1926 to deter him from being what we call in college an "activities man". He is at present Assistant Engineer for the North Carolina Board of Health; Engineer on the North Carolina Board of Equilization; a member of the Raleigh Post of the American Legion; Chairman of the Membership Committee, N. C. section of the American Waterworks Association: Chairman of the Finance Committee, Raleigh Engineer's Club: Chairman of the Entertainment Committee Raleigh Lodge A. F. and A. M.: Chairman of the Committee on Engineering Projects, N. C. Society of Engineers: Member of the Executive Committee, N. C. Sewage Works Association: President of Alumni Governing Board for N. C. Beta Chapter, Sigma Phi Epsilon fraternity; and Member of N. C. Examining Board for Heating and Plumbing Contractors. We can not refrain from wondering whether Brother Beam plays solitaire in his spare time.

The Theta Tau cup at the University of Alabama for the past college year was won by Brother Guthrie S. Mabrey. This cup is given each year to the most outstanding senior in the College of Engineering and the award is made by the Dean and two other faculty members.

The following members called on the Grand Scribe, Erich J. Schrader, during the past summer: E. H. Rott, Epsilon '25; R. C. Eisenhauer, Epsilon '13; Joseph David, Beta '16; Wm. Marshall, Lambda '32; H. L. Baldwin, Hon. Lambda; C. M. Heron, Epsilon '11; E. D. Gardner, Lambda '06; D. R. Judd, Theta '26; and H. L. McNeil, Gamma '24.

Don't hesitate to get married just because you want to have your own way all the time; after you're married there is nothing to prevent you from keeping right on wanting it.

In Memoriam

The Executive Council Wishes to Express its Deep Sorrow At the Passing of Brother Joseph R. Mosby, Mu '28, About Whom Details are not Available at This Time.



PHILLIP O. LONGYEAR, Epsilon '23

PHILLIP O. LONGYEAR, 35, World war flying ace and crack glider pilot for the former Ferron Gliding School of Berkeley, was killed on April 22. 1931, when his glider crashed in a vegetable field three miles east of San Iose, Longvear, who moved to San Jose two months previous when Major Hall Ferron transferred his school to San Iose, was attempting to set an endurance gliding record, and had been up one hour and ten minutes when the rudder of his motorless plane fell off, sending the glider into a nose dive, 200 feet off the ground. He was taken from the wreckage alive, but was dead on arrival at the San Jose Hospital. Mrs. Longyear and their two year old daughter were waiting at the San Jose airport at the time of the accident.

Phillip Longvear was born in Hibbing, Minnsosta, on January 23, 1396. His early education was obtained in the Minnapolis public schools and in the Adronack-Florida School. He entered Williams College with the class of 1918, and left during his Junior year to join the Ambulance service of the A. E. F., in which he gave service at Montdidler, Soissons, Oise-Alsne, Champagne, and in the Army of Occupation. He was awarded with of Corola Control of the Control free. Upon returning from France, the received an A. B. degree from Williams Callege. He studied minning enginering for six months at Columbia University and for three years at the University of California where the received a degree of B. S. (mining) in 1923. He was a member of the Williams chapter of Beta Theta Pi, of the Epulon chapter of Theta Taylor the American Institute of Mining and of the Aviation Post of the American Legion at Los Annelses.

After leaving the University of California, he spent four years with the Miami Copper Company at Miami, Arizona, where he met Hildred I. Taylor whom he later married. He then spent two years with the Anglo-Chilean Consolidated Nitrate Corporation at Marie Elena. Chile.

His familiarity with plane table surveying led him, while in Chile, to the invention of a position indicating apparatus which should be a distinct aid to aerial navigation. By means of this apparatus, which depends on the alignment of three radio loop aerials with three broadcasting stations, the pilot is able to watch an indicator automatically trace out his flight across a map before him, and note at any instant his exact position and direction of flight without reference to the ground. The practical usefulness of the Longvear postion indicating apparatus will be realized when commercial aviation becomes sufficiently developed to warrant the establishment and maintenance of an extensive network of radio broadcasting stations along the principal air-

After his daughter, Hildred Ruth, was born, in March 1929, he returned was born, in March 1929, he returned to the United States to engage in the busined States to engage in the tion, and to perfect his direction final paparatus. For nearly a sensociated with Major Paul Ferro ni conducting a glader school, first under thier joint direction at Berkeley, California direction at Berkeley, California later under his own management at San Jose, California.

Services were held on April 27, 1931, at the Little Church of Flowers, Glendale, California, and the interment followed on April 28, 1931, when planes from the Aviation Post of the American Legion circled above Forest Lawn Memorial Park in tribute to their comrade of the sky.

Besides his wife and daughter, Mr. Longvear is survived by his parents, Mr. and Mrs. Edmund Joseph Longyear of Altadena, California, (formerly of Minneapolis); by a sister, Mrs. Ralph Haswell Lutz of Stanford University. California: and by four brothers. Clyde Stanley Longvear of Los Angeles, California, Robert Davis, Longvear of Minneapolis, Minnesota, Richard Patten Longvear, a student at the University of Minnesota, and Edmud Joseph Longyear, Jr., who is attending the California Institute of Technology. To them Theta Tau extends its whole hearted sympathy.



JOHN JOSEPH MAHONEY, Gamma '19

JOHN JOSEPH MAHONEY, son of Margaret and Timothy Mahoney, was born in Denver, Colorado, on May 9, 1897, and died on February 25, 1929, at the age of thirty-one.

His early education was received in Denver where he attended the public school and the Manual Training High School. While in high school, he became Assistant in Chemistry, President of the Senior Class, and Captain of the football team, on which he played for his last years there.

In September, 1915, he entered the Colorado School of Mines. During his first year, he pledged Kappa Sigma, General fraternity, and played on the Freshman Team. He was severely injured in practice on the Varsity

Team in October of his Sophomore year. During his Junior year, he became affiliated with Gamma chapter of Theta Tau. At the end of his Junior year, he left school for the army, entered the Machine Gun Corps, and was about to embark for Siberia with this corps when the armistice was signed. His marriage in 1920 cut short his college career.

He entered the employ of the Metropolitan Life Insurance Company and at the time of his death was Assistant Manager of the Denver Branch.

Theta Tau unites in extending its sincere sympathy to relatives and friends of our deceased Brother John Joseph Mahoney.



WILLIAM THOMAS PULVER, Gamma '30

WILLIAM THOMAS PULVER, son of Mr. and Mrs. I. A. Pulver, was born on July 11, 1906, in Red Oak, Iowa, but lived most of his life in Denver. His sudden death was a shock to his relatives and friends. Although he had been ill for some time as a result of an attack of appendicitis, his condition was greatly improved and he had been out of bed for some time. Apparently a complete recovery was but a matter of time when complications set in, bringing death within a few hours. He was a graduate of South High School and the youngest alumnus of the Colorado School of Mines at Golden, Colorado, where he was graduated last May.

During his four years at Mines, Pulver was one of the most popular men on the campus. He was a member of Sigma Phi Epsilon, Theta Tau, and Blue Key fraternities, and the "M" club, and was an succiate was an succiate was a succeive ming and Metallurgical Engineers, ining and Metallurgical Engineers by 1930. He served one year a set tant football manager and in his juniory year he made his letter in swimming. He was a frequent contributor not only to the school and the paper but also to several technical journals.

After graduating from Mines as a petroleum engineer, he took a position with the Humble Oil Company at Baytown, Texas, and was making splendid progress in his work at the time of his death on April 19, 1931.

The passing of Brother Pulver has been a severe loss to his relatives, friends, and Brothers in Theta Tau.



HAROLD VICTOR PATTERSON, Phi '33

HAROLD VICTOR PATTERSON, age 20, son of Mrs. H. E. Patterson, died at midnight on Wednesday, May 27, 1931, at the family home, 1030 South Buckeye Street, Kokomo, Indiana. He had been ill but a short time when heart trouble caused his death.

Brother Patterson was born in Kokomo on April 30, 1911, and lived there all of his life. He graduated from Kokomo High School in 1929 with high honors and attended Purdue University for the last two years. He was majoring in Chemistry at Purdue and was a member of Phi Chapter of Theta Tau. Brother Patterson was an active member of the Main Street Methodist Church. His father died in 1921.

His exemplary life was an inspiration to all his friends with whom he was very popular. He was devoted to his home as was evidenced by his loyalty to his mother and sister. Theta Tau wishes to express heart-felt sympathy to the relatives and friends of Brother Patterson.

WALTER JAY MANN, Iota '18

WALTER JAY MANN came to the Missouri School of Mines in September, 1916 and left college in March, 1918 to go to work. He was a member of lota chapter of Theta Tau fraternity and also of Pi Kappa Alpha. In August, 1918, he went to work for the Interstate Callahan Company in Northern Idaho and remained there until September, 1920, during which

period he had risen to the position of flotation Superintendent. He was forty-four years of age at that time. He afterwards lived in Stockton, California, but all trace of him was lost until his death was reported in 1930.

Theta Tau wishes to express sympathy to the friends and relatives of Brother Mann.

LEE H. PARISH, Epsilon '27

LEE H. PARISH was born at Beaumont, Texas on January 22, 1903, and was killed in an automobile accident at St. Elmo, Illinois, on October 5, 1930.

His early education was received at Colver Military Academy, at Tulsa High School, and at the F. W. Parker school at San Diego where he graduated in 1922. He entered the University of California in August 1922 and graduated (in mining) in May, 1927. At California, he was a member of Beta Theta Pi and Theta Tau fraternities.

At the time of his death, which occurred shortly after his marriage, he was employed as an engineer for the Spartan Air Craft Company.

His brothers in Theta Tau extend sincere sympathy to those relatives and friends who feel his loss most keenly.

The GEAR of THETA TAU

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

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A JOB FOR THETA TAU

THE recent survey of the economic status of engineers made by the American Society of Mechanical Engineers has attracted considerable notice and comment among the profession. This survey included reports on 1930 earnings from more than 9000 mechanical engineers representing all branches of work in which such engineers are commonly engaged. The statistics show that at ages of 25 to 35 the college graduate earns an average of \$500 more annually than does the untrained man. Above 35 the advantage of the college man rises to \$1000 yearly-with certain exceptions. It is the exceptions that are of most interest, particularly to those who would avoid the lower salaries. The exceptions, the committee finds, are those who do not "combine with technical skill a generous capacity to deal with and manage men and affairs "

Thus we see that the successful engineer is at least in part an executive. It is therefore incubent on those who would succeed in the profession to learn to engineer men as well as engineer materials.

The engineering of materials must be learned from text books or personal instruction. It demands concentrated study. This is where the college graduate gains his advantage. For four years his main, and frequently his only business, is learning to engineer materials. Sometimes he is so engrossed in this study that he entriely neglects the other factors and so loses out on the side of management of men and affairs.

We believe that it is just here that the Engineering Fraternities fit in. Through them a student has an opportunity to broaden his cultural life. learn to get along well with his fellows and develop a bit of managerial ability. It is obvious that colleges do not, and presumably they can not, instruct students in the engineering of men. Fraternities, on the other hand, if operated in the correct way, can do just this sort of job. Men who guide the chapter as officers have excellent opportunities to develop a measure of managerial or executive ability. Committee work offers other possibilities. But most important of all, every man in the chapter should be encouraged to lead in some school activity. This means the younger men in the chapter should be guided into the activities to which they are best adapted and then urged to develop leadership in those activities.

One fraternity in a large Middle-

West University can boast that the college year book has been edited by one of its members every year of the past ten years. This record has been built up by starting one or two likely frohmen in this field each year and seeing that one of them develops the necessary leadership to carn selection as editori-n-chief by the time he is eligible for the position. While this, perhaps, is an unusual case, it illustrates the point that men can be trained to leadership if they are put under pressure or if sufficient incentives soffered.

We submit that the Society's report is evidence that such pressure or incentive is well worth while and suggest that each chapter of Theta Tau consider what it can do to increase its values to its individual members through effort along these lines.

THANK YOU

A Pasty from Omicron chapter, of which one of the editors was a member, stayed for a few days last summer at the Phi chapter house. On behalf of this party, the editors wish to thank Brother Guinnup and those younger Brothers who did everything possible to make the stay comfortable and enjoyable. The hospitality extended to us was whole-hearted and unhesitating, and although we were not surprised we were nevertheless greatly pleased.

ON TO FAYETTEVILLE

EVERY two years Theta Tau takes a brief respite from the routine and gathers together its officers, delegates and as many other members as possible in a grand conclave to take inventory, check progress, and lay plans for the future. This "pause that refreshes" is more than refreshing; it is stimulating and inspiring. Every man who attends can hardly fail to leave with a new and greater enthusiasm for the fraternity and a better understanding of its ideals and tenets.

This year our Tenth Biennial Convention will be held in Fayetteville, Arkanass with Upsilon Chapter as host. Although Upsilon is not the newest, it is one of Theta Tau's newer chapters and with all the spirit and vigor of youth is planning to show the fraternity what a Convention really should be. Arrange now to be among those present on December 29, 30, and 31.

LIFE SUBSCRIPTIONS

NEEDLESS to say, THI GEAR office has not been swamped with application for Life Subscriptions. However, we are encouraged with every subscriptions that does come in and are not discharged the learner of the heartened that their number is not greater. Present economic conditions do not promote a rapid expansion of the permanent subscription plan. In-vestments of almost all types are go-ing begging so our gilt-edged (at least our covers are gold embelliant) persposition is not suffering from an uncommon malaytering from an uncommon malaytering.

However, we especially urge you graduates of the 1931 classes who have not already done so to send in your applications for Life Subscriptions at the reduced rate allowed you. The special offer to actives who were initiated before the Life Subscription and the send of t

obtain The Gean for life upon payment of five dollars. Applications should be addressed to the Grand Treasurer, Prof. Jamison Vawter, 217 Engineering Hall, University of Illinois. Urbana, Illinois.

CONGRATULATIONS, SCRIBES

For the first time in several years, every chapter of Theta Tau is represented by a chapter letter in The Gear. Always before one or two chapters have had a scribe who was negligent or dilatory in his duties and his chapter has gone unrepresented.

It is not hard to imagine the feelings of an alumnus who can find in THE GEAR no letter nor alumni notes from his chapter. He feels cheated and disappointed and probably is inclined to blame the editors.

We are, therefore, considerably pleased with this year's crop of chapter scribes. All chapters have apparently chosen men who are responsible and alert; and whether or not you may believe in signs, we believe that this little incident bespeaks a wide-awake and business-like convention in December.

BETA ALUMNUS RECEIVES NOBLE PRIZE

Announcement has just been made of the award of the Alfred Noble Prize, for the year 1931, to Prof. C. T. Eddy, Beta '26, of the Michingley, College of Mining and Technology, at Houghton, Michigan. This is the first award of this prize, which is accompanied by five hundred dollars in eash, and should be of interest along profession, in the progression of the engineering profession.

The prize is awarded upon the recommendation of a committee consisting of representatives from the American Society of Civil Engineers, the American Institute of Mining and Metallurgical Engineers, the American Society of Mechanical Engineers, the American Institute of Electrical Engineers, and the Western Society of Engineers. The award is made for a technical paper of particular merit written by a member of one of these Societies, and accepted for publication before the author has reached the age of thirty years. Professor Eddy's paper on Arsenic Elimination in the Reverberatory Refining of Native Copper, to be published in the Transactions of the American Institute of Mining and Metallurgical Engineers, of which he is a member, was adjudged worthy of the first award. The presentation will take place at a future meeting of the Institute, and the prize will be given to Professor Eddy by a representative of the American Society of Civil Engineers, the trustee of the fund.

In some states it's against the law for a wife to go through her husband's pockets at night; in other states it's a waste of time.

College Prof.: "Son, the incongruous

exigencies of imperialistic oligarchy are often coalesced materially by gargantuan diplomacy."

Son: "You are correct. In that case may I use the family car tonight?"—Union Electric Magazine.

Theta Taus Honored at University of Virginia

JOHN LLOYD NEWCOMB, Pi the University of Virginia, has recently been appointed as acting president of that institution. Dr. Newcomb is a member of Theta Tau, Pi



IOUN LLOYD NEWCOMB

Kappa Alpha, Lambda Pi, Phi Beta Kappa, Tau Beta Pi, T. I. L. K. A., and Raven. He received his bachelor's degree from William and Mary College and his C. E. from the University of Virginia. He joined the Virginia Faculty in 1905, became head of the Givil Engineering Department in 1910, Dean of the Engineering College in 1925, and Assistant to the President in 1926. Upon the death of the late Dr. Edwin A. Alderman, president of the University, he was honored by being chosen to fill the vacancy.

Walter Sheldon Rodman, Pi Honorary, head of the Electrical Engineering Department, has been chosen as acting Dean to succeed Brother Newcomb. Brother Rodman is a member of Theta Tau, Phi Sigma Kappa, Phi Beta Kappa, Sigma Xi, Tau Beta Pi, Phi Kappa Phi, Lambda Pi, Pi Gamma Mu, and Raven. He received his B. S. and M. S. degrees, at Rhode Island State College, and S. M. at M. I. T. After teaching at Rhode Island State College and holding the Salonstall Fellowship at M. I. T., he came to the University of Virginia in 1910 as Adjunct Professor of Electrical Engi-



WALTER SHELDON RODMAN

neering. He became an Associate Professor in 1913 and full Professor in 1917.

Theta Tau congratulates these two Brothers upon their steady advancement which has won for them the high positions to which they have attained.

Kenneth Dickey, Gamma '31 Chosen as Typical Miner at Colorado School of Mines

THE HIGHEST tribute that can be paid a senior at the Colorado School of Mines is for him to be chosen "Typical Miner". Every spring the student body confers this honor upon some outstanding man in the graduating class. The "Typical Miner" represents achievement. The man is picked because of his personality, his athletic prowess, his school spirit, and his popularity with his fellow students. Gamma chapter is therefore very proud of the fact that during the five years that a "Typical Miner" has been elected, four memhers of Theta Tau have won the hon-

Clement Weintz, '27, was the first "Typical Miner". He is an A. T. O., Tau Beta Pi, and member of Blue Key. While at Mines, he was active on the campus, and was baseball manager.

Robert "Red" Wells, '29, was the next mamber of Gamma chapter to be chosen. One of the most outstanding athletes ever at Mines, Red executed in foorball, baskerball, and baseball. He played at center and end on the gridiron, and won All-Conference mention for swerzel years. He expectationed the baskerball team his senior year, and played first base for the Oredigger mine. Besides his athletic abilities, Wells was also a scholar, and was a member of Tau Beta Pi. Kappa Sigmas is his general fraternity.

In 1930, Lawton "Sock" Conger again brought honor upon Theta Tau. Not an athlete, Conger was prominent in student activities. He was an ardent member of Blue Key, and did much in promoting school spirit. His fellow students elected him president of the Student Council, and in spite of his many activities he won election to Tau Beta P is as result of his school to Tau Beta P is as a result of his school



lastic endeavors. He also is a Kappa Sigma.

"Ken" Dickey, '31, is the latest Theta Tau to become "Tspical Miner". Being a star athlete, he won letters in football, basketball, and baseball. He was president of Blue Key, president of Alpha Tau Omega, and president of the Student Council. As the first Mines representative at the annual meeting of the National Student Federation of America in Atlanta, he gained national recognition for Mines.

Fraternity Unity

A brief but important word from Grand Vice Regent Fred Coffman

Brothers in Theta Tau, Greetings:

URING the past year it has been my privilege and pleasure to visit a few of our chapters of both types—house and non-house. At each institution peculiar local condi-

tions exerted considerable influence upon that particular chapter, and to a great extent determined its strength. Howev-

er, from all my observations one salient fact seemed to stand out, and that is, most of our chapters are suffering from the lack of a close bond between the chapter itself and its alumni. Several of our isolated chapters are "starving" from lack of outside contacts. They rarely have a visit from an alumnus of a sister chapter and their own alumni return only on "Homecoming Day," or some similar occasion. Even then he forgets to visit his chapter unless it happens to have a house.

Some of the chapters located in thickly populated areas or near centers of great industrial activity can not give the address of its last year's graduates, to say nothing of the whereabouts of those who have left four or five years before. The active chapters lay the foundation for a strong organization by selecting those men that fulfill the high standards set by Theta Tau, but unbescontact is maintained between alumni and actives after graduation the organization can nor prosper and will practically fail in its purpose. A foundation with no superstructure is of little use to auyone whether it be in a building or a fraternity chapter. The fault is not alone

that of the actives or of the alumnibut both. Actives do something of interest that will make your alumni come back! Alumni, maintain contact with your chapter! If you can't visit them, write and give your address and details of your work. The chapter appreciates your efforts and will thrill in your success in true Theta Tau style! If in submitting this brief

message I can be instrumental in causing one more chapter to issue a chapter letter or in some other manner make and maintain a closer

******** bond with its alumni then I shall feel that the space I have just consumed in this issue of THE GEAR shall not have been used in vain. I close with the wish that each of you may be enjoying prosperity and all the good things of life.

Yours in H. & T.,

FRED COFFMAN.

Report on the Russian Situation

THE following exerpts from a report of a special committee of the Board of Directors of the American Institute of Mining and Metallurgical Engineers was approved by the Board, and ordred published, at its March 20 meeting:

When contemplating whether or not to accept employment with the Soviet Government, the engineer should consider the following:

First. General Observations.

The Government in Russia is undertaking an experiment completely at variance with accepted American procedure by methods wholly contrary to American ideals. The country has a form of government comparable to the most drastic type of martial law as Americans understand that term. Industrial conscription forces every individual into service.

The Soviet Government is seeking to industrialize in the next few years a backward country under a program which if completed will place Russian industrial production on a plane with or above the present production of the United States in the major basic industries—a plane which has been attained only by decades of orderly progress. The first step of their program is the Five-Year Plan now in course of execution. The Soviet Government proposes to accomplish its aims not through private initiative, but through direct Government action.

The carrying out of this program is resulting in the reduction of the standard of living of the Russian people to a pitiful level. In order to obtain the maximum exports to pay for needed imports of equipment and machinery and for the service of foreign technical experts, etc., etc., the Soviet Government is deliberately reducing the domestic consumption of the Russian people by drastic rationing to a point of bare subsistance.

The success of the plan is abolutely constitul for the continuation of the Saviet regime and nothing—not even human life—is a barrier to their efforts to force the plan to a success. A wholly artificial condition of living has been created. Individual initiative and the reward for effort are completely submerged under the despotic discipline and drastic penalties. Second. Living Conditions.

(a) Food, generally speaking, is scarce; some, of very poor quality. It is extremely expensive unless bought at Government food card. While conditions are not uniform throughout Russia, in Moscow and Leningrad long lines of people are obliged to stand in front of these stores waiting to enter. When the foot of the line finally moves up to the counter many of the articles are sold out for the day. As a result, some of the people get in line during the night so as to be somewhere near its head in the morning.

In certain places the Government has opened special stores for foreign employees. Accounts differ as to how satisfactory conditions are in these stores. Undoubtedly these vary in different districts. In some districts such stores start out well, but soon little difference is discernible between these stores and those established for the native Russian conditions.

The importation of food as a gener-

al proposition is forbidden unless it is agreed upon in the employment contract or arranged for by the contractor or the head of a group. Here again, opinions differ as to whether importation of food is feasible, even if agreed upon. One contractor claimed that packages addressed in his care always arrived and in good condition. An engineer who was individually employed informed a member of this committee, however, that one-half of the packages sent to him did not arrive, and that most of the balance had been opened, resulting in missing articles. This apparently indicates the advantage of employment of engineers by large American engineering firms or contractors, rather than the taking of independent employment.

- (b) Housing conditions. In cities such as Moscow there is a great shortage of accommodations. In other districts there is said to be no shortage.
- (c) Articles of clothing, shoes, etc., are difficult of purchase, of poor quality and expensive, throughout Russia.
- (d) Other conditions, such as medical attendance, hospitals, etc., vary greatly in different parts of Russia, but nowhere are these facilities said to be good, except possibly those provided by some American contractors or engineering organizations operating on a large job. Such organizations may have established hospitals and hired foreign doctors, much as they might hire foreign engineers.

To summarize the above as regards living conditions: Individuals proceeding to Russia at this time must be prepared to assume the role of pioneers, i.e., stand hardships and discomforts

not met with in other countries. Such conditions can be tolerated by some, but others will find them unbearable. They may find themselves impaired in health, become discouraged and unhappy, resulting in regret for their decision to leave a peaceful civilized country despite the opportunity for more pay than now attainable at home. Without question, an engineer should not take children into Russia. Most people familiar with conditions there strongly advise against the taking of wives, unless they be strong, healthy, robust individuals, accustomed to discomforts and inclined to enjoy overcoming difficulties and the fighting of adverse conditions.

It would be well before accepting employment to confer with several engineers who have worked in Russia under comparable conditions. Third. Legal Status and Personal

Safety

(a) An individual accepting employment under the Soviets must appreciate that he is working for an autocratic government. The United States has no diplomatic relations with Russia and there is no United States Ambassador or Consul to whom he can appeal if he feels himself wronged.

Adequate reasons may develop for the breaking of a contract, but still the government has the arbitrary power to take sway passports and food card, or prevent the employee from leaving the country. In such case great difficulty may be experienced in subsisting. The engineer may be fined or forced to do menial work in punishment for alleged breaking of his contract. — Mining and Metallargy

Letters From the Chapters

ALPHA

The beginning of school this year inds Alpha chapter well situated in a new house with an active membership of nineteen and three pledges, and striving for an active membership of twenty-five. The house, which is about fifteen years old, was bought primarily for its location, and has

'33; Charles W. Britzius, C. E., '33; C. Warren Fox, Chem. E., '33; Roy H. Farchmin, M. E., '32; and Sidney R. Mitchell, C. E., '34.

At the completion of the Fall Quarter elections, the officers for the coming school year were elected as follows: Clifford O. Anderson, Re-



Alpha Chapter House

been completely renovated. It is diedally situated close to the engineering campus on a street that promises to become a professional fraternity row. Under the leadership of Brothhas been organized that serves a real meed for the chapter, and has already "taken hold" by furnishing the house with a new set of curtains and shades.

In the Spring Quarter the following men were initiated: J. Hebden Willox, E. E., '32; Mirza F. Gregg, M. E., gent; George B. Brimhall, Vice-Regent; Roy H. Farchmin, Scribe; J. Hebden Willox, Treasurer; C. Warren Fox, Marshal; Mirza F. Gregg, Inner Guard; James E. Dowd, Outer Guard; and Allan A. Hutchings, Corresponding Secretary.

Although we have been rather hard hit by the inactivity of six Brothers, chiefly in the School of Mines, we have already had two smokers and expect shortly to pledge several of the promising new students in the School of Mines. At the first smoker, we were very fortunate in having Professor Comstock, Honorary, in the School of Mines, with us to display some of his very mysterious and everamusing tricks, and Brother McLean, Alpha '29, to give us a very realistic and vivid picture of life in Africa.

Our annual Fall Quarter initiation has just been completed, and we are proud to have with us in membership the following men: Ray H. O'Dell, Aero. E., '22; George F. Hupp, M. E., '33; Robert F. Barthelmy, Aero. E., '34; Roy S. Dynesius, E. E., '34; Collouis Gerischer, C. E., '34; Robert C. G. Techner, Aero. E., '34; Richard E. Schuett, C. E., '34; Richard E. Schuett, C. E., '34; Michard E. Schuett, C. E., '34; and Rolf G. Swanson, M. E., '34.

Of paramount importance in the activities of Alpha this Fall was our annual Founder's Day Banquet, held at the Andrews Hotel, Minneapolis, Brother Clifford Anderson acting as the toastmaster, after summarizing the activities of the Chapter for the year 1930-31, called on several of the Alumni for a few words. Walt Wheeler, Alpha '06: Professor Comstock, Honorary; Paul Laurence, Alpha '11; Lyndon Foley, Alpha '18; and Willis McLean, Alpha '29; responded with a few words about the earlier history of the chapter and a few thoughts of inspiration. We were pleased to welcome and have with us as visitors, Brothers Slagle and Woodward from Omicron chapter, who told us about the activities of Omicron. Following the banquet, a meeting of the Theta Tau Association, Inc. was held for the purpose of electing officers and discussing new business. Fred Teske, Alpha '26, was

elected delegate at large to the convention by the Twin City Alumni Association.

Endeavoring to keep up the high scholastic standards set by Alpha the year before, the chapter has done very well by maintaining a 1.22 average for second place among the engineering fraternities on the campus. We are all set to boost our average higher than ever this year, and win back that coveted first place. In connection with honorary schol-

astic groups on the campans we as present have two members in Pi Tan Sigma, Honorary Mechanical Engineering, Brother Clifford Anderson, who is the president of the organization, and Morris Knight. In Phoenix, a Junior All-University honor society, we have John Balley, Rudolph Hanson and Robert Ramsdell were both elected in the Spring of last year to Plumb Bob, a Smior Engineering Honorary organization.

Alpha's representatives in extracurricular activities are numerous. George Weigel is Vice-President of the A. S. C. E., and Clifford Anderson is Secretary-Treasurer of the Technical Commission, and President of the A. S. M. E. Morris Knight is Vice-President of the A. S. M. E., and James Dowd is our delegate to the Inter-Professional Fraternity Council and also had charge of our booth at the Freshman Carnival this Fall. Vice-Regent, George Brimhall, Vice-President of the Union Board of Governors, and Brother John Bailey is active in arranging many important All-University functions. All of these men hold important positions of responsibility.

For those militaristically inclined, we have cadet captains Mirza Gregg in Mortar and Ball, and Allan Hutchings in Scabbard and Blade—both members of the Coast Artillery Corps.

Oh yest sports come in for their share in our activities for the present year, and it is an important part, too. Borother Charles Britzius is Captain and number one man on the tennis team; Brother Louis Gerisher is on the football squad; and as usual we have teams entered in the intrumural sports of touchball, golf, and tennis. Although we have not any immediate prospects for a championship loving cup to add to our collection, just give our newer Brothers a chancel This year, due in a large measure to the depression which is so general, we are fortunate in having with us some recent Alumin registered in the Graduate School, who take an active interest in the new house, and love to boast how differently things were run in their time. Francis Biltz, Rudolph Hanson, Joseph Skovholt, and Roy Grover, all of Alpha '31, are either living with us or paying us their regards.

ALLEN A. HUTCHINGS, '33

Minneapolis, Minnesota, Oct. 30, 1931

BETA

Beta began this school year with twenty active members. At the Spring initiation, the following men were initiated: Charles W. Hawn, Mining, '34, Pontiac; and Jimes E. Westwater, Mining, '34, Detroit. Those initiated this Fall were: Weller M. Webb, Jr., Chemical, '34, Ironwood; Jimes L. Wilson, Givil, '34, Belding; and John M. Sanabria, Electrical, '34, Lurium.

Last Spring the following were elected to hold office for the present school year: Clyde S, Williams, Regent; Charles M, Baker, Vice-Regent; Frederick M, Foster, Scribe; Albert Joseph Pepin, Treasurer; H, Jess Crecine, Marshal; Henry H, Zwart, Inner Guard; Keith Spencer, Outer Guard.

During the Summer months, considerable work was done on the chapter house and grounds. Since the house is in the best condition it has ever been, we have every reason to be proud of it.

Beta as usual is exceedingly active

in campus functions—the Brothers holding prominent positions in practically every college organization.

Two of our members, Brother Albert Joseph Pepin, '32, and Frederick M. Foster, '32, were initiated into Tau Beta Pi at the regular Spring election.

Beta is proud to announce that Brother Corbin T. Eddy, '25, has been awarded the Nobel prize for the outstanding Junior paper among engering societies. The title of the paper which gave him the award is "Arenie Elimination in the Reverberatory Refining of Native Copper." Brother Eddy is an assistant professor of metallurgy and is head of the department of physical metallurgy at the Michigan College of Mining and Technology.

Among the social events sponsored by Beta last Spring were the initiation banquet and a dance held at the Onigaming Yacht Club, besides a number of impromptus and informal dances at the chapter house.

Founders' Day was observed by a

banquet in the house; all the actives and many alumni members were present. Appropriate talks for the occasion were given by Prof. James Fisher and Roy Drier. In closing, Beta chapter extends to all chapters its best wishes for a successful school year.

-F. M. Foster, '32

Houghton, Michigan, Oct. 18, 1931

GAMMA

Gamma chapter of Theta Tau entered the first semester of this school year with twenty-five active members. The officers, installed at the regular meeting of the last school year, were as follows: Regent, Brothre Pressett; Vice-Regent, Brother Austin; Treasurer, Brother Bennett; and Scribe, Brother Rice.

The following pledges were selected after careful consideration of a list of about twice as many men and pledged early in October; F. McClure, F. Thayer, P. A. Lewis, W. Rump, Scuart, S. Schans; Clark Moore, D. Smith, T. Giggey, Norman, and Le-Roy. The pledging was conducted in the usual manner peculiar to this chapter. Initiation, followed by a banquet, will be held in the near future, in Denvet.

Pending the termination of the football season, the activities of this chapter are few. The annual polo game between the Theta Tau and Sigma Gamma fraternities, held during the half of the Homecoming into the lange, was won by Theta Tau, Brother Knill being the outstanding star. Several Alumni members returned for this event, promise turned for this event, promise "31, and C. I. Barker, 31.

Brothers George Gallagher, and Clayton Kerr, have returned to school this year after several year's absence and are taking active interest in Gamma chapter.

M. E. VOLIN

Golden, Colorado, November 11, 1931

DELTA

The closing of school last year marked the successful conclusion of a year's work on the part of the Brothers of Delta chapter. We were very well represented in scholarship as well as in service, due in a large part to our high requirements.

By way of connecting this letter with the last one, I will mention all honors that the Brothers in Theta Tau received after the last letter was dispatched. Brothers Binder and Parsons were elected to Sigma Xi. The bent of Tau Beta Pi was worn by Brothers Bastian, Binder, Gray, Kikstadt, and Weppner; our present Regent Dana D. Leslie was elected this Fall, along with Brother Hannum.

In April the officers for the present year were elected as follows: Dana Dale Leslie, Regent; Allen Henry Glasenapp, Vice-Regent; Maynard Wait McMillan, Scribe; Ralph Erick Erickson, Treasurer; Fred Allen Webber, Corresponding Secretary; Donald H. Dempcy, Marshal; Charles Marten Hannum, Inner Guard; and John Hildinger Baird, Outer Guard.

The present chapter is strong with eleven actives and is functioning as a healthy chapter should. In order to show this strength, I will attempt to introduce each member to you.

First let me present our Regent, D. D. Leslie, who is a member of Tau Beta Pi, also the track and basketball squads. Brother Kikstadt is a member of Tau Beta Pi, track squad, and the glee club. Brother Baker is basketball manager, and a member of the glee club, and tennis team. Brother Webber is on the staff of the News Service, President of the Case Club Board of Managers, and a member of the wrestling and swimming squads. Brother Baird is a member of the glee club, and is on the staff of the News Service. Brother Erickson is manager of the News Service, and is a member of the Case Tech. Staff, the glee club, the Board of Managers, and the Athletic Association. Brother Glasenapp is one of the main threats of our smooth running football machine. Brother Dempcy is on the baskethall team, President of the Senior Class, and a member of the glee club. Brother Barth wins track meets single handed, and is a member of the glee handed, and is a member of the properties of the control of the case Tech, Student President of the Athletic Association, and a member of the glee club.

The chapter lost one man in Howard Fell who had to go to Austria for his health. This loss is greatly felt by the Brothers, and we wish him bon yovage and a speedy recovery.

The chapter wishes to express its appreciation for the great help Dr. F. R. Van Horn always gives us when any problems arise.

In closing, Delta chapter expresses to all the chapters best wishes for a successful year in every line of endeavor.

W. M. McMillan, '32

Cleveland, Ohio, Nov. 1, 1931

EPSILON

Epsilon chapter began its activities of the semester with an open house. At that time, we were fortunate in discovering an unexpectedly large number of men of the calibber we require in Theta Tau. Consequently, at the Fall initiation we were able to initiate thirteen new men: Richard Beramcamp, George Fleming, George Guthrie, William Hickey, Kenneth Uston, William Latrobe, Miguel di Laviaga, Vincent Richards, Earnest Schultz, Alfred Snedden, Samuel

Wells, Arthur Werner, and Robert Van Fleet.

They belief the unluckness of their number at the banquer which followed at the Athens Club in OAkland. The dinner was very good, and we soon found ourselves in that happy and contented frame of mind which is essential for the true appreciation of after-dinner speakers—these included Dr. G. D. Louderback, '96, who gave us his impressions of early conferences; Dr. C. Anderson, who spoke of some later conferences and the stories they told; Harold C. Lloyd; and all of our thirteen new initiates.

At two other meetings held during this semester, the chapter was addressed by Dean Probert, Hon. '97, and by Dr. C. Anderson.

A. A. FITCH

Berkeley, California, Oct. 30, 1931

ZETA

Zeta chapter is taking an active part in the affairs of the "Engine School" and the University in general this Fall. After finishing third in intramural athletic sports among the "hill" fraternities last Spring, Zeta is planning on giving someone a real battle for the trophy this year. Brother Dennis Pearce is our intramural manager, and we are already getting off to a fair start. On the Men's Student Council, Brother Eugene Manning is the Engineering School Representative. Brother Clair Wood is President of the Engineering Council, which includes also Brothers Bonjour and Manning. In Tau Beta Pi, Brother Irving Coffman is President, Brother Charles Clutz is Corresponding Secretary, Brother Robert Glore is Recording Secretary, and Brother Clair Wood is Treasurer. In the Engineering Societies, Brother Coffman is President and Brother Ross Bryan is Vice - President of the A. S. C. E.; Brother Clutz is Vice-President and Brother Robert Glore is Secretary of the A. S. M. E.; and Brother Leroy Sharp is Treasurer of the A. I. E. E.

Initiation was held on October 25 for the following men: Arthur Banks, Elec. '33; Ross Bryan, Civil, '33; Marcus Johnson, Mech. '33; Clayton Ott, Mining, '34; Arthur Rendleman, Mech. '34; Stephen Deming, Civil '32; and Ralph Wilson, Mech. '33. These men were a worthy addition to our chapter roll.

Since the opening of school in the Fall, Zeta chapter has pledged five likely looking men. They were Maurice Bruzilius, Mech. '34; Edwin Elliott, Elec. '34; Theodore Dwyer, Elec. '34; Robin Hood, Ind. '36; and Franklin White, Elec. '36.

The fourth annual Theta Tau
"Smoker" for the freshmen was held
on Oct. 8. A large crowd of freshmen engineers was present and many
valuable acquisitances were made.
The "Smoker" is fast becoming a regular part of our yearly program. We
are convinced that it offers the best
means of making a good contact with
the freshmen of the engineering
school.

The Fall party was held at the chapter house on Oct. 24. Brothers Logan Wooley, Charles Moske, and Bert Flatt from Kansas City and "Ash" Galbeath and his wife from Topeka were our guests. We picked a great night for the party and everyone had a big time.

During the weekend of the Kansas Aggie game, we were visited by quite a number of our alumni. Brothers Fell, Campbell, Wooley, and Flatt were over from Kansas City; Brother Bump drove up from Parsons, where he is working for the Kansas Gas and Electric Co.; Brother Galbreath stopped in for a short visit; and a

former pledge, Cool, also spent the weekend with us. We were certainly glad to have some of our older men back to talk things over.

During the past year, there has been some agitation concerning the fact that Signa Tau, honorary engineering fraternity, was competitive with Theta Tau here at Kansas. After a thorough investigation of the manner in which Sigma Tau selects its members, the Executive Council declared that it is no longer competitive with Theta Tau at Kansas. The

We are indeed proud to announce the fact that our Regent, Donald Bonjour, was married to Miss Helen West of Manhattan, on Oct. 17. We all join in congratulating "Frenchie" and wishing him the best of luck. He will be graduated at mid-year, and we hope a good job is waiting for our newly married man.

With twenty-one men in the house and a group of very able pledges, Zeta has made a good start on the year; and with the return at the beginning of next semester of several men who were active in the fraternity last year, we should have a strong, progressive organization for this school year.

CHARLES CLUTZ, '32

Lawrence, Kansas, Nov. 1, 1931

THETA

A little over two months ago, Theta chapter held its first meeting. The entire active membership of thirteen was present. We also had with us our old friends from the faculty-T. H. "Pop" Harrington, Ted Baumeister, and Al Hinckley. Our usual weekly meetings have been very well attended and plans have been pushed forward toward an active and successful year under the leadership of Heaton B. Heffelfinger, Regent; C. I. Kirkland, Ir., Vice-Regent: Norman Hixson, Scribe; Richard H. Ludeman. Treasurer: and Vincent Madison. Corresponding Secretary.

The Columbia engineering school has shown a decided increase in registration this year under the very active leadership of our new dean, J. W. Barker. Theta chapter has taken full recognition of this by increased activities and participation in school affairs. Brother C. J. Kirkland, Jr., is chairman of the student council and four of the remaining eleven members are Brothers. Brother Heffelfinger is in charge of the social activities conduced by the board.

We are glad to announce the marriage of Brother Millward W. Heath on Friday, October twenty-third.

Theta has been particularly honored by the election to Tau Beta Pi of Brothers Blatterman and Hixson.

Theta chapter is working hard towards an active and successful year. May we extend to all other chapters of Theta Tau our greetings and our sincere best wishes.

Fraternally Yours,

NORMAN HIXSON

New York City, November 7, 1931

IOTA

lota chapter has started the school year with an unusual number of men active on the campus. Although our number of active members is rather small, numbering sixteen, practically all of them are active in one way or another in the numerous phases of activity on the campus.

A. S. Macke and Rex Monroe have been elected to Phi Kappa Phi, James Offutt and E. O. Crawford have been elected to Tau Beta Pi. Macke and Monroe, being active also in Tau Beta Pi, bring our representatives in that organization up to four. Monroe is president of that organization. Brother Frank Malik is captain of the football team, and to date has been pulling the team through a very successful season. F. M. Thoroughman was elected to act as Cadet Major of the local R. O. T. C. unit. His military bearing and deep voice have acclaimed him much success in that role. Fred Schmitt has been quite successful in the Campus politics, having been elected president of the interfraternity council and reelected president of the St. Pats Board. Jim Offutt is editor in chief of the Missouri Miner, a weekly publication of the school. In that capacity, Brother Offutt has been scooping and all the other things that a good editor does. A. J. Williams is another of our representatives on the football team. He is also secretarytreasurer of the American Society of Civil Engineers.

We all mourn the loss of our good Regent Richardson, who on the twentieth of September was brought quietly to the ground by the twang of the bow and the unerring flight of the arrow of ole Dan Cupid. lota chapter congratulates Brother Richardson on his marriage to Miss Katherine Jane Clark of New York.

lota chapter boasts of thirteen new pledges that have been selected from a promising group of upper classmen on the Campus. Those pledged are as follows: B. K. Miller, S. M. Molloy, Floyd Birt, O. M. Andres, Dick Bertram, George Koch, William Lenz, A. H. Hesse, Benjamin Cross, R. A. Parker, John Sturm, Mark Hinton, and A. W. Hanov.

lota chapter was quite fortunate and was duly commended in bringing Dean Anson Marston, past president of the American Society of Givil Engineers, to the School of Mines on Nov. 12. It is our desire to be able to bring more men of that caliber to M. S. M., and to direct more attention to lots chapter of Theta Tay

E. O. CRAWFORD, '32

KAPPA

Now that the general routine of school work is well under way, Kappa chapter is looking forward to a very successful year here at the University of Illinois.

At the last meeting of the first

semester of last year, the new officers were elected as follows: "Shorty" Monnier being elected Regent; J. S. King, Vice-Regent; "Dick" Heberling, Marshal; "Art" Kowitz, Treasurer; M. R. Derby, Scribe; and "Phil" Anderson, Corresponding Secretary.

Under Brother Monnier's guiding hand, we held some very interesting meetings, having speakers from not only the Engineering college but also from other colleges in the University. This plan proved to be very successful and the same plan is being followed this year.

On March 27, Kappa chapter held a formal dince at the Acasie house. A large crowd attended, including members of the Acasie house. As far as we know, there were no irregularities at the dance, except that Brother King's young lady-friend became plastered (with mudy), while in the act tend (with mudy), while in the act of alighting from his automobile (Chevy). However, he nonchalantly went about his business of content of the Brothers except the to her of the Brothers except the to her house to try to find new attire.

In June, Kappa chapter graduated twenty-six men, representing every department of the College of Engineering. Fifteen of these men have positions, three are back doing graduate work, and one man went to Yale.

This Fall, we started the school year with twenty-five active members, but without our Brother Regent, Shorty Monnier. Brother King assumed the responsibilities of guiding the chapter until the elections are held in January. On October 28, a rushing smoker was held at the Chi Beta house and twenty-five men were entertained. From these Sophomores ally Juniors, we expect to pledge eight and to pick some others during the second semester.

At our next regular meeting, Professor T. C. Shedd, Associate Professor of Structural Engineering, will be initiated as an Honorary member. With the initiation of Prof. Shedd, Kappa chapter will have nine faculty memhers.

As may be realized from the following list of activities. Theta Tau men of Kappa chapter are taking active parts in campus activities: Brother Dick Heberling is now holding down the Senior Interscholastic Circus Managership very successfully. Brother E. E. Stephens is one of the two Junior football managers. Brother Ioe Tiffany has succeded Brother Don Johnstone to the Editorship of the Technograph, the Engineering journal of the University. He was sent east recently by the magazine for a meeting of the Editors of engineering publications. Brother Geo. Leutwiler is the President of the Student branch of the A. S. M. E. Brother Chuck Woodfill is the Cadet Lt. Colonel of the Engineer Corps of the University brigade, and is President of Scabbard and Blade here. Brother Fred Mast is being initiated into Blade this fall.

M. R. DERRY, '32

Champaign, Illinois, November 3, 1931

LAMBDA

Lambda chapter has started the year with sixteen members. Those who left us by graduation are as follows: Edgar M. Barker, Donald Burnett, Harold Bradford, Harper Cowles, Reed Ferguson, Milton Rideout, Lowell Painter, Arnold Marston, Kenneth Cropper, Aubrey E. Porter, Leo B. Hogan, Fred Thomas, and Hackett K. Olsen. Members returning are as follows: Leland K. Irvine, James M. Orr. Ir., William Hague, Ellis Christensen, Eugene Merrill, William R. Marshall, Walter Price, John C. O'Neill, George A. Koehler, Charles A. Buell, Robert Kirkman, Earl Johnson, Heber Peterson, Clark Jacobson, Jim Hague, and Phillip Elsey.

The school year closed last Spring with two big events: the Eleventh Annual Installation and Birthday Banquet, and the annual Spring Formal Dinner Dance. At the installation, we were honored by the presence of Brother Erick J. Schrader, whose talk on the progress of Theta Tau was met with much approval. Before the installation of officers, a formal initiation took place, and we initiated Brothers Roscoe E. Van Kiew, Clark Jacobsen, James A. Hague, Heber E. Peterson, and Phillip J. Elsey. After the initiation, the installation of the new officers took place. The retiring officers were Brothers Edwin Barker, Regent; Harold Bradford, Vice-Regent; Harper Cowles, Scribe; Donald Burnett, Treasurer; Hackett Olsen, Marshal; Blair Scott, Inner Guard; Courtney Campbell, Outer Guard. The new officers are Brothers Charles A. Buell, Regent; William R. Marshall, Vice-Regent; George A. Koeller, Scribe; James M. Orr, Jr., Treasurer; Eugene Merrill, Marshal; Walter Price, Inner guard; and Boer et Kirkman, Outer guard. After the banquet, responses were given benguet; responses were developed by Brothers Schrader, E. Barker, C. Buell, R. A. Hart, M. Hogan, Richard Lyman, and the new initiates. Brother Merrill acred as tosstimaster.

The other funcion; namely, the Annual Spring Formal Dinner Dance was held on May 9, 1931, at the University Club. The music and entertainment were second to none, and those not having a good time were not at the party.

We have heard from several of our Brothers who graduated last Spring and find that approximately seventyfive per cent of them have been placed.

We placed three men in this year's offices of the Utah Engineering Society at the U. of U. Brothers Orr, Marshall, and Merrill took the offices of President, Vice-President, and Athletic Manager. Brother Marshall is also President of the Senior Class at the University this year.

Among those graduating who attained membership in the Honorary Scholastic Fraternity, Phi Kappa Phi, we had the following representatives from Theta Tau: Reed Ferguson and Lowell Painter.

Yours for a worthwhile year,

GEORGE A. KOEHLER

Salt Lake City, Utah, Nov. 1, 1931

MII

Shortly before the close of school last May, Mu chapter of Theta Tau presented the College of Engineering with a beautiful electric clock. It was placed in the new smoking room of Comer Hall, the Engineering building. A letter of thanks was reconstructed from George J. Davis, Jr., Dean of the College of Engineering. We feel sure that this clock is greatly appreciated by the suddents as it is the only clock in any school building on the cammus.

Theta Tau rounded out, what we withink, a very successful year in May by electing the following officers for the coming year: J. Alden Simpson, Regent; Robert Fleming, Vice Regent; Frank Garrett, Serble; C. M. Hamilton, Treasurer. Upon the opening of school, we were very dispronited to learn that Alden Simponic ould not be with us this year. We elected Robert Fleming, Regent, and Barton L. Harris, Vice Regent.

To. C. cade officers were announced. Theta Tau feels honored in having pledged G. W. Taylor, selected Major of the first Engineer Battalion, and A. L. Terry, Major of the second Battalion. Frank Garrett was selected first Lieutenant. All three are members of Scabbard and Blade.

Theta Tau is well represented in various honors on the campus. Frank

Garrett, C. D. Kaeffer, and A. A. Farrell are pledges of Tau Beta P. Taylor is a member of Tau Beta P. and president of the senior Engineering class. J. F. Guilmartin is vice-president of the Junior class.

Two weeks ago, Theta Tau had its Semi-annual smoker. There were about fifty selected guests present. Dr. B. A. Wooten, the head of the physics department, gave the main talk. There were several other short talks given by members. Bullock's Black Buddies jug band furnished the music for the occasion.

The later part of September, Muchapter learned of the death of Joseph R. Mosby. Joe was an outstanding member of Theta Tau, being Regent in 1928. He was also an outstanding man on the University of Alabama campus. He was a member of the A club, manager of the basketball team, member of the Jasons, and president of Delta Kappa Epsilon, general fracturity. He also had many other honors. Joe became ill in the fall of 1929, leaving school at Christant that year. He remained ill until his death in September.

This year we have thirteen active members back and expect to initiate a number of men before Christmas.

BARTON L. HARRIS

University, Alabama, November 12, 1931

NU

Nu chapter extends greetings and best wishes to all the Brothers in Theta Tau.

Although the semester is barely a

month old at Carnegie, Nu chapter is well on its way to what looks like a good year. The first social event of the chapter this year was the Founders' Day Banquet, held on October 15, celebrating Theta Tau's twenty-seventh birthday. This affair, which marks our first official observance of Founders' Day, was a great success, and we intend to repeat it annually.

We are working on plans at present to publish a Nu chapter news bulletin, to contain interesting news of active and alumni members. There has been a desire for this sort of thing for a long time, and now it is to be a reality.

Other plans for the coming year include the inauguration of a scholastic award to be made by Nu chapter to a student in the College of Engineering.

Ten men were initiated into Na last Spring. They were as follows: Bros. Smith, M. Jones, Miller, Lundgren, and Westin, in mechanical engineering; Neff, Wigton, and Uffelman in electrical; Matteson, in civil; and Zimser, in metallurgical engineering. There are now twenty-five active members, with two hundred and one total initiates, on our chapter roll.

Theta Tau men represent many and varied activities on our campus. In the honoraries, we have: Robert Oliver Holmes, Evans, and Jack Edgar

Morris, in Tau Beta Pi; Wigton and Stuart J. Myers, in Eta Kappa Nu; Miles Albert Kinley, Jack Edgar Morris, and Harry D. Kolb, in Scabbard and Blade. Bro. Kolb edits the school newspaper, and upholds our literary prestige with Bro. Kinley, who manages business affairs for the Pubbet. Carnegie's comic publication. Our two "Joneses" are active in allied fields. Bro. W. Iones being manager of the Kiltie Band while Bro, M. Jones plays center on the football team. Several members are officers of the local R. O. T. C. Furthering the diversification of activities, Bro. Wigton leads the local branch of A. I. E. E., while in still another field, Bros. Evans and Matteson teach mathematics in the evening school.

These various citations are nothing of a boast, but certainly they show that Theta Tau is growing on the Carnegie campus, and that is just what we want—take it from Brother Daniels, our hard-working, and highly esteemed Honorary member.

Nu chapter joins in wishing all of you good luck and happy landings.

E. L. JARRETT, '32

Pittsburgh, Pennsylvania, Oct. 28, 1931

OMICRON

Total nu	imber of	initiates							179
Number	of Acti	ves							31
Number	initiated	this col	lege	ve	ar				10

Thus far this year Omicron seems to be on the way to a successful school year. The new officers elected at the Spring election were as follows: R. I. Classen, Regent; Leo J. Aschenbrenner, Vice-Regent; Harold A. Peterson, Treasurer; and K. M. Smith, Scribe.

Many of our Brothers have won individual honors. First, Brother Max Stanley, '26, was elected to a full membership in Sigma Xi. Leo Aschenbrenner was elected to A. F. I., and then to "top it off" he was elected President of the organization. This

is the second year in succession that the President of A. F. I. has been a Theta Tau. Brother Chet I. Mead held that office last year. In the A. S. of E. elections, L. J. Aschenbrenner was elected President; C. Hauge, Vice-President: and H. A. Peterson. Treasurer. In the Tau Beta Pi elections, R. I. Claassen was elected President, and Brother Peterson, Secretary, C. F. Phelps was taken in as a new member. Brothers Aschenbrenner and Peterson were elected to R. E. I., and E. A. Cerny was elected to represent the Engineering College on the Union Board. In the class elections, W. P. Jones and I. G. Gearheart were elected President and Treasurer, respectively, of the sophomore class; and A. S. Lundy was elected Secretary of the Seniors.

In athletics, E. L. Kringle was awarded a major 'I' in gymnastics, and K. M. Smith won a minor 'I' in swimming. The chapter remembers how close the Brothers came to winning the Inter-fraternity baskethall championship, and they are out early this season to take all the honors in sight.

Raymond E. Ebert, '25, who was

affiliated with Chi Delta Sigma before it merged with Omicron chapter of Theta Tau, was formally initiated at the Fall initiation.

Brother Hauge failed to return to school this year in favor of attending the Military Academy at West Point, and from all reports it is "great stuff."

At our last professional meeting, Prof. R. R. Whipple of the E. E. Dept. gave a very interesting talk on Geo-Physics. These meetings are had about once a month, and they are very beneficial in that they permit the fellows to come in contact with men who have had much practical experience.

We have had one informal party this year and it proved a huge success due to the efforts of Brother Young and his committee. Everyone is looking forward to several more good parties.

Omicron feels that the coming year is going to be a very successful one and it extends heartiest wishes to all other chapters and alumni.

EDW. A. CERNY, '33

Iowa City, Iowa, Nov. 1, 1931

Pi chapter has opened the 1931-32 school year with renewed enthusiasmit Homecoming Day of the University was celebrated on October 15. The Theta Tan Virginian, Pi's news bulletin, was sent to alumni of this chapter in the property of the

By action of a special meeting of the Rector and Board of Visitors, Dr. John Lloyd Newcomb, Pi Hon., was named acting president of the University of Virginia, due to the death of our beloved president, Dr. Edwin A. Alderman, this past Spring. Dr. Newcomb was dean of engineering, and his vacany is being filled by Acting Dean Walter S. Rodman, Pi Hon, who has been a professor of Electrical Engineering at this university for some time.

As a result of the annual Spring bidding, Pic hapter is pleased to announce to its Brothers the following new members: Edward J. Merow, Little Valley, New York; William Dunnington, Lynchburg, Virginia; J. Curran McGhee, Alexandria, Virginia, and S. Lewis Liomberger, Roanoke, Virginia. We are planning our Fall bid day to be around November.

Brother R. W. Talley was elected Vice-President of the Engineering School for the current year. Brother Thornhill will be presented with a gold gavel charm at the next chapter meeting in commemoration of his praiseworthy efforts as Regent of the chapter during the past year. Brother Lionberger was elected to membership in Tau Bata Pi, several weeks ago.

The officers of Pi chapter for the current year are as follows: Richard W. Talley, Regent; William K. Price, Vice-Regent; S. Lewis Lionberger, Scribe; and Walter S. Gard, Treasurer.

Fraternally yours, S. Lewis Lionberger University, Virginia, Oct. 28, 1931

RHO

Rho chapter extends hearty greetings to all Brothers. Now that the general routine of school work is thoroughly fixed in our minds, the members of Rho chapter are preparing for and looking forward to a very successful year. The Brothers back in school this year are as follows: Henry A. Ricks, Regent; T. L. Hadges, Vice-Regent; Frazier M. Edwards, Scribe; Carroll L. Mann, Treasurer; A. R. Lijzsard, Marshal; Robert G. Richarson, Inner Guard; Frank W. Gorham, Outer Guard; L. O. Franklin; L. G. Atkinson; L. D. Murphy; Daniel E. McDonald; G. S. Pato; and Archie B. Freeman, '30, who is back in school teaching and working on a Masters Degree.

We all had a very pleasant surprise the other day. Brothers Charles B. Turner, Jr., and William Justice Whitaker came back to pay us a few days' visit. Their visit reminds me of the fact that all of our Brothers who graduated last Spring have good positions.

Since it would be a long and difficult task to give the activities of each one of our Brothers, I will just name some of the activities and positions which we are represented in; namely, Scabbard and Blade, Golden Chain, a Senior Honor Society, Military, Blue Key, Pine Burr, Varsiy-Football, Track, Smitr 'Part' (high-est honor of the Engineering School), Rifle Team, Watsugon, Monogram Club, House of Student Government, and President of Senior Class. Every member is a leader in some prominent organization on the campus.

At the present time, we are pushing onward on our program started last Fall to create more college spirit.

We are now furnishing a chapter room for our social and business gatherings. This is our preliminary step towards a house for next year. Rho chapter heartily welcomes Brothers from other chapters, and is especially anxious to establish contact with all alumni. Any information as to their whereabouts will be appreciated.

F. M. EDWARDS, '32 Raleigh, N. C., Oct. 29, 1931

SIGMA

The beginning of another Fall Quarter in the college year brings with it the return of twenty-four active members of Sigma chapter. Included in this number are several Brothers who have been absent during the past year or two.

The chapter house is again to be found at 1965 Indianola Avenue. For those alumni Brothers who have not honored us with a visit during the past year, we invite you to do so while the house is still in a good state of repair.

The guidance of the chapter affairs for the coming year has been placed in the hands of Bro. "Charley" Lucal. With the earnest cooperation of the entire chapter, we should have another big year at Sigma.

Although the close of last school year left us with an unusually large pledge organization, only about fifty percent of these men returned to school this fall. Of the nine pledge returning this year, we are planning to initiate four of them Saturday, October 31. They are as follows: Geo. K. Dumbauld, Harlan A. Messner, Charles N. Hay, and Paul M. Finher. We expect big things from this small groups.

The pledge organization has recently added greatly to the interior decorations of our chapter house by the presentation of a lamp and a fine lounging chair. Although some of the Brothers are too busy to indulge in the art of "lounging", the gift is none the less appreciated.

Since the last issue of THE GEAR, we have had the misfortune to eight Brothers through the process of graduation. This "high-mindeform of graduation of the process of the

Brother Lucal-is also at the helm of A. I. E. E. in the capacity of Senior Chairman. He is assisted by two other Theta Tau men—Bros. Simon and Moyer who are Senior Vice-Chairman and Sec'y. Treas. respectively.

It has fallen to the lot of Bro. Cole to uphold the honor of Theta Tau in the Military Department. Yesterday he displayed for the first time through diamonds on each shoulder, which means that he now is a Colonel in the Field Artillery of the Cadet Corps. In addition to this, he is president of the Engineers' Council.

Bro. McKnight was voted the most valuable man in the Industrial Engineering Department and received a handsome loving cup for this achievement. Bros. Leydorf and Beer are back in school working on their Master of Science degrees.

Bros. Ashmeade is also back in school after having received his Master's degree last Spring. We believe that his goal is a Doctor's degree, but he won't admit it.

Bro. Curtis LeMay, who has been commissioned as a 2nd Lieutenant in the Army Air Corps, is temporarily stationed at Norton Field. He is making the most of his opportunities by going to school in the forenoon. All those Brothers who have completed their advanced R. O. T. C. training have accepted Bro. LeMay's invitation to see the campus from the air.

A number of Alumni dropped in during the Summer. Among them were Brothers Ullery, Jordan, Allison, Fiedler, Bozeman, Webster, and Mace. Since the beginning of this Fall Quarter, we have had visits from Bros. Knorr, Spangler, Fenneman, Cook, Fenton, and Smith. We wish that each could make more extended and frequent visits.

With the Homecoming game only two weeks hence, our thoughts are again turned to the Brothers who have much bistory for Theta Tulmendiately after the Navy game, the Central Ohio Alumni Asan, the Central Ohio Alumni Asan officers in the chapter house. The other house of the chapter house the chapter house the chapter house. The chapter house that the Chitenden Hotel. We all greatly appreciate a visit from any or all of our Alumni at this time.

C. E. OSBORN

Columus, Ohio, Oct. 26, 1931

TAU

Through the pages of THE GEAR, Tau chapter extends fraternal greetines to all Brothers in Theta Tau. Seventeen active members have returned to school this year. Because of the late opening of the college, the Fraternity Rushing Week was not until the early part of October; so we have not pledged any men as yet. However, the chapter has had one rushing party and one businees meeting up to the present time. About the fifteenth of November, we expect to have our formal pledging. We intend to take fifteen men from the Junior and Senior classes. Since this number will constitute our quota for this Fall, no sophomores will be pledged.

Our program for the year has not been definitely decided upon as yet, but we shall sponsor the engineer's banquet next Spring as has been our custom for a number of years. He the chapter can overcome the may difficulties which stand in its way, it will hold an engineer's dunce, a function which has not taken place at this school for the last ten years. The annual initiation banquet will be held in the Spring. The chapter also plans to hold several educational meetings at which members of the faculty or practicing engineers will speak.

On Friday, Oct. 23, 1931, at the annual Freshman Engineer's Party, Tau chapter presented the college with a bronze plaque. Brother Frank, Vice-Regent, made the presentation address. This plaque will be hung in the main hall of the college and will have engraved on it each year the

name of the most outstanding senior in the Engineering College. The custom of selecting the representative man from each graduating class is three years old, and two of the three men honored were members of Tau chapter. They were G. M. DeYoe, '29 and C. O. Bird, '31.

Many of Tau's members have attained scholarist honors and have participated in extra-curricular activities. Brother Neubert is on the varsity football squad, Brother Hannum is the drum major of the university band, and Brother Tompkins is a member of the university senate. The following named Brothers are listed with the groups in which they are taking part: Carroll, Reed, Brightman, Klotz, and Backman in Tsu Beta Pi; Carroll, Reed, and Backman in Pi Mu Epsilon; Collins and Backman in Scabbard and Blade; and Travers and Reed in Sigma Jota Epsilon.

The officers of the chapter for this year are as follows: J. G. Carroll, Jr., Regent; L. Q. Frank, Vice-Regent; Burton C. Fowler, Treasurer; and John F. Backman, Scribe.

The chapter wishes to acknowledge the receipt of many news letters from chapters of the fraternity. If any of you happen to be in Syracuse, don't fail to come to the Engineering College and call on us. We are always glad to meet Brothers from the other chapters of the fraternity.

Good luck to all of you for the coming year.

Syracuse, New York, Oct. 29, 1931

J. E. BACKMAN, '32

UPSILON

Two years ago, Brother K. F. Schophesster, Upsilon's delegate to the biennial convention in Minneapolis, asked that the next national meeting be held at Payetteville. It has not at this writing been definitely decided where this meeting is to be held, but we are hoping that the final decision will send all trains to Arkansas are are making our plans accordingly.

We opened the year with fourteen active members, and have recently pledged the following men: J. B. Baker, Edwin Dean, Leon Hirshorn, Goy Kirkley, Gerald Sisk, Walter Pittman, Bester B. Owen, John Carnahan, Norris O'Neal, Joe P. Marlar, Robert Osborne, David Thornberry, and Arvin Wellborn. Owen is a Tau Beta Pi man. A number of electrical engineering students went to the convention of the A. I. E. E. at Kanasa City, Missouri, last week. While in that part of the country, Brothers Albrecht, Jamison, Nelson, and Thomasson drove over to Lawrence for a brief visit at Zeta chapter. They regereted that they could not stay for Zeta's party but had to leave early in order to return to Esyetteville before the

expiration of their leave of absence. Theta Tau men hold the following offices in engineering student activities: chairman student branch A. S. C. E., chairman student branch A. I. E. E., president General Engineering Society, president Tau Beta Pi.

Brother Diffey has been pledged by

Tau Beta Pi; Brothers Albrecht and Nelson are members of that fraternity.

Officers for this year are: J. Hugh Nelson, Regent; Harold D. Albrecht, Vice-Regent; Dan B. Jamison, Seribe; Haskell G. Wilson, Treasurer; Robt. L. Atkins, Inner Guard; and Karl N. Reid, Outer Guard. Upsilon extends hearty greetings to all chapters and a sincere invitation to visit us during the Christmas holidays if the convention comes to Fayettevillle.

DAN B. JAMISON. '31

Fayetteville, Ark., Oct. 27, 1931

PHI

Phi chapter held its Fall initiation Friday night, October the twentythird. The following men were initiated: L. B. Wocholski, M. E., '32; H. J. Gagen, M. E., '32; P. M. Schere, M. E., '34; H. J. Barth, C. E., '34; and F. D. Sonderto, F. E. '33.

and E. D. Sandretto, E. E., '33.

On the twenty-fifth our initiation banquer was followed by an after dinner speech by A. A. Potter, Dean of the Engineering Schools. This also comprised our first professional meeting of the year.

Brother Guinnup and Brother Chandler who were out of school last year because of an operation and an injury, respectively, have returned to school this year. Brothers Hallowell and Stradling who received their degrees from the E. E. School last year have returned this year, and hope to receive degrees from the M. E. School at the end of the year.

This year Phi chapter is trying a new activity—inter-fraternity debating. We hope that this activity may be developed very soon. Of course,

we still have teams in the inter-fraternity athletic contests. Brother Bower is making an excellent Athletic Manager.

We have improved our scholastic standing over last year and hope to make the top this year. Scholastic honors have been received by the following men: D. R. Ward, W. J. Neuhauser, and L. B. Wocholski in Pi Tau Sigma; L. H. Frew, and Richard Lowry in Catalyst, Chemical Honor-

ary.

On November 14, the date of the Homecoming game with lowa, we will hold our annual Fall informal dance at the Lafayette Country Clab.

Our officers for this year are as follows: Russell Max Adkins, Regent; Frederick George Zwinger, Vice-Regent; Wilbur Clarence Oah, Scribe, William John Neuhauser, Treasurer; Herman Edward Antle, Steward; and Donald R. Ward, House Manager.

W. C. Osha

West Lafayette, Ind., Nov. 1, 1931

CHI

Believe it or not but this will be a banner year for Chi chapter. A meeting of the officers the day of registration and a banquet the third day after makes this easy to believe. Plans are going forward for a banquet on Founder's Day and a dance on Friday, November the thirteenth. Meetings are to be held on the first and third Tuesday of each month, with every other meeting open unless a later change is made. A feature of the meetings this year will be a short program by each Brother. Frank Losee will present a silver cun

E. and a 1st Lieutenant in Scabbard and Blade.

Mark Clardy has a fellowship with the U. S. Bureau of Mines.

Edward Novelle and Delos Gardner are members of the football squad playing at half and guard respectively.



BOTTOM ROW-Prof. Jimerson, Harding, Norton, Magee, Angeny, Waidler, Prof. Borquist BACK ROW-Brown, Clason, McBride, Kiernan, Losee, Young, Houston

to the Brother whose program is judged the best. There is also a prize for the worst program, and what a prize!

Earl Bennett of last year's senior class won the highest honor any member of that class can win, the Freeman Award. The principle requisite for the award is scholarship, but leadership and all around ability are important factors, too.

Following is an account of the more active members for this school year:

Elgin Sanders is editor of The Desert, the school annual, and is also campus electrician.

Frank Losee is vice-president of the student body, president of the A. A. Robert Houston has a fellowship with the C. E. department, and he is also campus civil engineer.

William Norton is president of the A. S. C. E., president of the Delta Sigma Lambda fraternity, and an assistant in the C. E. department.

F. Angeny is warden at the Phi Delta Theta house.

W. A. Brown is vice-president of both Tau Beta Pi and the A. S. C. E. He also held a U. S. Bureau of Public Roads appointment this summer.

Delmar Fisher is president of Phi Gamma Delta.

Robert Harding is secretary of Tau Beta Pi and an assistant in the irrigation department. Peter Kiernan is a first sergeant in Scabbard and Blade.

William Steenbergen is professor of Agricultural Engineering in the Aggie College. Charles McCash and William Steenbergen have been married. The chapter joins in wishing them success and great happiness.

W. C. WAIDLER

Since the last issue of THE GEAR, Tucson, Arizona, October 13, 1931

Recent Initiates

ALPHA

- 354 JOHNSON, K. R., Minneapolis, Minn.
- 355 Britzius, C. W., Minneapolis, Minn.
- 356 GREGG, M. F., Minneapolis, Minn. 357 FARCHMIN, R. H., Howard Lake,
- Minn. 358 MITCHELL, S. R., St. Paul, Minn.
- 359 Fox, C. W., St. Paul, Minn.
- 360 WILLOX, J. H., Duluth, Minn.
- 361 JOHNSON, WESLEY H., St. Paul, Minn.
- 362 BARTHELEMY, ROBERT FRANCIS, St. Paul, Minn. 363 Schuett, Richard E., White
- Bear Lake, Minn. 364 DYNESIUS, ROY SWANSON, Two
- Harbors, Minn. 365 ODELL, RAYMOND H., Minnea-
- polis, Minn.
 366 Bossen, Roger George, Minne-
- apolis, Minn.
 367 HUPP, GEORGE FRED, Minneapolis, Minn.
- 368 SWANSON, ROLF GUNNAR, Two Harbors, Minn.
- 369 GRAEBNER, ROBERT CARL, St. Paul, Minn.
- 370 GERISCHER, LOUIS, St. Paul, Minn.

BETA

- 344 HANN, C. W., Pontiac, Mich. 345 WESTWATER, J. M., Detroit,
- 345 WESTWATER, J. M., Detroit Mich.

- 346 Sanabria, John Marshall, Laurium, Mich.
- 347 WEBB, JR., WALTER MELVIN, Ironwood, Mich.
 - 348 Wilson, James Lee, Belding, Mich.

EPSILO:

- 322 SMITH, L. A., Berkeley, Calif.
- 323 BOWIE, A. P., Oakland, Calif. 324 McClelland, T. H., Oakland,
- Calif. 325 FITCH, A. A., London, England.
- 326 REVELLE, R. R. D., Pasadena,
- 327 HYATT, W., Los Angeles, Calif.
- 328 BAKER, R. E., San Francisco, Calif.
- 329 Bradley, J. D., San Francisco, Calif.
- 330 Bradley, L. M., Berkeley, Calif.

ZETA

- 300 GREEN, HARRY J., Kansas City, Mo.
 301 BOEHM, E. A., Kansas City, Mo.
- 302 GLORE, R. F., Kansas City, Kan.
- 303 WILSON, RALPH N., Kansas City, Mo. 304 RENDLEMAN, GEORGE ARTHUR,
 - Olathe, Kan.
 305 BRYAN, ROSS HENRY, Crawford,
- Kan. 306 Banks, Arthur Grant, Law-
- 306 Banks, Arthur Grant, Lawrence, Kan.

307 JOHNSON, D. MARCUS, Florence,

308 OTT, CLAYTON BAKER, Kansas City, Mo. 309 Deming, Stephen Arthur,

309 Deming, Stephen Arthur, Kansas City, Mo.

THETA

169 BLATTERMAN, P. H., Larchmont, N. Y.

170 BROWN, R. T., Passaic, N. J. 171 Hixson, A. N., Leonia, N. J.

172 LUDEMAN, R. H., Brooklyn, N. Y.

173 STRINGER, W.M., Brooklyn, N. Y. 174 VOORHIS, H. A., Jersey City, N. J.

LAMBDA

270 ELSEY, P. J., Willard, Utah.

271 PETERSON, H. E., Murray, Utah.
272 JACOBSEN, S. C., Salt Lake City,
Utah.

273 VAN LIEW, R. E., Salt Lake City, Utah.

Utah. 274 Hague, J. A., Salt Lake City, Utah.

NU

192 MATTERSON, A. R. L., Butler,

193 WESTIN, H. C., Turtlecreek, Pa.

194 WIGTON, W. B., Butler, Pa.

195 SMITH, R. R., Dover, Ohio. 196 LUNDGREN, I. H., Youngstown,

Ohio. 197 JONES, M. L., Toledo, Ohio. 198 MILLER, H. P., JR., Brooklyn,

N. Y. 199 Uffelman, W. R., Pittsburgh,

Penn.

200 NEFF, H. F., Neffs, Ohio.

201 ZINSSER, H. F., Pittsburgh, Pa.

OMICRON

165 HORN, E. O. T., Davenport,

166 NIEMEYER, D. D., Waverly, Iowa.

167 LOHSE, E., Schleswig, Iowa. 168 KEHE, H. J., Waverly, Iowa.

168 KEHE, Tl. J., Waverly, IOWa. 169 McClaren, L. C., Correctionville, Iowa.

RHC

148 ATKINSON, LELAND GUY, Wadesboro, N. C.

149 Evans, Albert Homer, Lexington, N. C.

150 Lippard, Arthur Ralph, Salisbury, N. C.

151 Franklin, Louis Octavius, Orange, N. J.

152 Murphy, Lionel Darrell, Davis, N. C.

SIGMA

136 KREMSER, F. A., Lakewood, Ohio. 137 Gagnier, C. E., Youngstown,

Ohio.

138 SANDERS, L. A., Clyde, Ohio.

139 BUCKLEY, J. A., Cleveland Hts., Ohio.

TAU

101 Brightman, E., Syracuse, N. Y.

102 KLOTZ, H. J., Syracuse, N. Y. 103 MOULTON, R. G., Brewerton,

N. Y. 104 RUTLEDGE, J. D., Syracuse, N. Y.

DITT

88 BOWER, H. F., Fort Wayne, Ind.

89 WINEMILLER, E., Logansport, Ind.

90 WOCHOLSKI LEONARD BENEDICT Michigan City, Ind.

91 SCHERER, PAUL MICHAEL, Hammond Ind 92 BARTH, HOWARD JAMES, Ver-

sailles. Ind. 93 GAGEN, HENRY JOHN, Lafavette,

94 SANDRETTO, ERNEST DOMINIC.

Joliet. Ill.

45 BUTLER, JR., G. M., Tucson, Ariz.

46 FRAPS, E. P., Tucson, Ariz. 47 Houston, G. B., Tucson, Ariz,

48 NORTON, W. F., Miami, Ariz.

49 NOVELL, E. W., Monrovia, Calif.

50 ANGENY, F. G., Phoenix, Ariz. 51 CLASON, G. O., Bisbee, Ariz.

52 Young, S. A., Douglas, Ariz, 53 STEENBERGEN, W. A., Tucson,

Alpha Chi Sigma, chemical professional fraternity, has a membership of 8.566, and includes in this total 683 life subscribers to The Hexagon. The payment of \$20 brings the magazine for life. The payment of an additional \$30 makes the member a fully paid Reserve Trust Fund subscriber There are 119 who have made the \$50 payment. The reserve now totals over \$33,000.

Triangle has adopted a plan whereby all those members initiated after September, 1931, will be life subscribers to Triangle Review. The response to the first circular sent to the alumni, which appeal was made recently, was very favorable. Thirty-six members remitted \$25 each, while fifteen others made partial payments, a total of \$1,009 being collected.

Tau Beta Pi held its annual Convention in Cleveland during the early days of October. As in past years, Theta Tau was well represented among the delegates. Theta Tau members present included P. W. Ott, Sigma '17, President of Tau Beta Pi, and F. W. Marquis, Sigma, Vice President of Tau Beta Pi, during the past college year. Dr. Frank R. Van Horn, Delta, delivered an address of welcome on behalf of Phi Beta Kappa. Brothers Kent R. Van Horn, Delta '26, and H. D. Churchill, Delta '15, attended as alumni from Cleveland. Active delegates included Brothers M. W. Heath, Theta '32; I. J. Coffman, Zeta '32; H. D. Albrecht, Upsilon '32; Edward Backman, Tau '32. D. D. Leslie, Regent of Delta chapter of Theta Tau and H. I. Kikstadt, Delta '32, also attended the Convention. In a late issue of the Bent of Tau Beta Pi, a news item stated that one of the chapters of Tau Beta Pi reported that over fifty per cent of its members were also members of the local chapter of Theta

Alumni Notes

ALPHA

ISAAC B. HANKS, '07 is Business Counsellor at Spokane, Wash.

ROLLO J. COBBAN, '09, is manager of the Westinghouse Electric and Mfg. Co., 1 Montgomery St., San Francisco, Calif.

WILFRED E. CONLEY, '10, is with the Ill. Engr. National Lamp Works of General Electric Co., and can be addressed at 543 Terminal Tower Bldg., Cleveland, Ohio.

MAJ. MILO P. Fox, '10, is O. Dist. Engr. with the Engr. Corps, Trust Co. Bldg., Galveston, Texas. R. V. HAUSER, '10, can be addressed

R. V. HAUSER, '10, can be addressed at his home at 263 Shenandoah Terrace, Portland, Oregon.

GEORGE W. JEVNE, '10, is a Const. Supt. and can be addressed at 2404 W. Seventh St., Los Angeles, Calif.

EDWARD W. LEACH, '10, is now Manager of Minnesota Mines for Pickands Mather Company at Hibbing, Minnesota.

KENNETH D. HAUSER, '11, can be addressed at his home on 1079 Westover Road, Portland, Oregon.

W. W. Jones, '11, is a Consulting Engineer and can be addressed at his home at Route No. 10, Box 275, Milwaukie, Oregon.

Roswell W. Prouty, '12, who is in Russia, can be addressed at Tzwetmetzoloto, Centr-Vetoshnyi per 15, Moscow, U. S. S. R.

Max F. Quinn, '12, is with the Estaca Mining Co., Contra Estaca, Sinaloa, Mexico.

James S. Brodie, '13, is now Chief Engineer for the Federal Barge Lines of the Inland Waterways Corporation. CAPT. HENRY J. MATCHETT, '13, can be addressed at the Inf. School, Ft. Benning, Georgia.

HARVARD S. ROCKWELL, '14, is Mfg. Agent, Steel Bldg. Products, 418 Corn Exchange Bldg., Minneapolis, Minn.

GEORGE ALBERT GEIB, '15, is Construction Engineer in the Supervising Architect's Office of the U. S. Government at Saint Paul, Minnesota.

FLETCHER ROCKWOOD, '15, can be addressed at 1410 Yeon Bldg., Portland, Oregon.

FRED A. DAVIES, '16, can be addressed care The California Co., Marvin Bldg., Dallas, Texas.

THOMAS K. LEONARD, '16, is with Larson & McLauren at 5212 York Ave., South, Minneapolis, Minn. EDWIN J. ANDERSON, '17, is Works Manager at the Attica Works of

the Westinghouse Electric and Mfg. Co. RICHARD C. DENNIS, '17, can be addressed Room 950, 25 Broadway.

Lyndon L. Foley, '18, Geologist at Tulsa, Oklahoma, for the Mid-Kansas Oil and Gas Company, gave us a very interesting talk on Oil Prospecting and its Development at our Annual Founders' Day Banquer.

OLIVER S. HAGERMAN, '18, has been made Engineer of the American Light & Traction Company. He is living at 1436 Edgewood Lane, Winnetka, Illinois.

1st Lt. Edw. H. Coe, '19, is at the University of Kansas, Lawrence Kansas.

- LEONARD F. McKenzie, '20, is Supt. of Construction, McKenzie-Hague Co., 422 Corn Exchange Bldg., Minneapolis, Minn.
- LESLIE L. HALLIDAY, '21, is at 720 G Street, N. E., Brainerd, Minn. IRVING H. MARSHMAN, '23, is in the
- IRVING H. Marshman, '23, is in the Attorney-Patent Div. of the General Electric Co., Schenectady, N. Y.
- RAYMOND D. SPENCER, '23, is with the American States Water Service Co. at 1140 Western Pacific Bldg., Los Angeles, Calif.
- JOHN H. MOORE, '24, who is with the Northern States Power Co., now lives at 1714 Johnson Street, N. E., Minneapolis, Minnesota.
- PHILIP F. HARTMAN, '25, is with the Goodyear Tire & Rubber Co. He can be addressed at 1903 W. Pershing Road, Chicago, Ill.
- RAYMOND W. KELLER, '25, is in the Illuminating Engineering Dept. of the Ohio Edison Co., and can be addressed at 37 East Casilly, Springfield, Ohio.
- RICHARD V. MALMGREN, '25, can be addressed Ind. Engr., Standard Oil Co., Whiting, Ind.
- EVERETT B. STEVENS, '25, is with the Wm. Bros. Boiler & Mfg. Co., Lower Nicollet Island, Minneapolis, Minn.
- OTTO L. JENSEN, '26, is with the Public Service Co. of No. Ill. He can be addressed at 911 Church St., Evanston, Ill.
- ROBERT H. KRANZFELDER, '26, is Technical Service Engr. for the Universal Atlas Cement Co. at 836 Security Bldg., Minneapolis, Minn. FRED C. TESKE, Jr., '26, is in the
- Fred C. Teske, Jr., '26, is in the Bridge Dept. of the Soo Line Ry., Minneapolis, Minn.

- STUART L. BAILEY, '27, is Jr. Partner of the Jansky & Bailey Radio Engineers, 922 National Press Bldg., Washington, D. C.
- LLOYD V. BERKNER, '27, is with the Radio Div. of the U. S. Bureau of Standards, Washington, D. C. LAURENCE V. JOHNSON, '27, is Asst.
 - Engr. Soo Line Ry. at 1520 Soo Line Bldg., Minneapolis, Minn.
- MAURICE MUNGER, '27, is an Instructor at the University of Delaware, Newark, Del.
- HAROLD E. MURRAY, '27, is now working with the Management and Engineering Corporation of Dubuque, Iowa. His little daughter, Peggy Jean, is now around two years old.
- EINAR O. PEARSON, '27, is now at 702 N. Monroe St., Peoria, Ill.
- HAROLD T. PEARSON, '27, is in Easton, Washington.
 ROBERT A. GERLICHER, '28, is Chem.
- Engr. for the B. F. Goodrich Rubber Co., and can be addressed at 56 Balch, Akron, Ohio.
- HUGO GUSTAFSON, '28, can be addressed care Goodrich Rubber Co., Akron, Ohio.
- LEROY M. ABRAHAMSON, '29, is Engineer of the Wisconsin Light & Power Co., Sheboygan, Wisconsin, and can be addressed at 616 North Fifth Street.
- A. Don Alderson, '29, is located at Marquette, Michigan, and is engaged in constructing an ore dock for the Soo Line Railroad.
- DONALD G. FELTHOUS, '29, can be addressed care K. B. Hall Mfg. Rep., 355 Everett Street, Portland, Ore-
- GORDON C. HARRIS, '29, who is with the General Electric Co., Schenectady, New York, now has two daughters.

Walter R. Krueger, '29, is in the New York City Bell Telephone Laboratory.

WILLIS MCLEAN, '29, is back in school after a two year's stay in Africa. He is a frequent visitor at the house while working for his Master's Degree in Geology.

PAUL A. SANDERS, '29, is with the B. F. Goodrich Rubber Co., New

York City.

REX ANDERSON, '30, who is now with the U. S. Bureau of Public Roads at Washington, D. C., was married this summer to Lavinia Payne of Lakefield, Minnesota.

RAYMOND V. ENGLUND, '30, Illuminating Engineer at the Commonwealth Edison Co. in Chicago, was married on October 24th to Ruby Johnson of Minneapolis at the bride's home. Jim Finch, '30, was his right hand man during the ceremony, and helped keep his knees from trembling at the altary.

WILLIAM A. ECKLEY, '30, is taking his Master's Degree in Mechanical Engineering at the University of Minnesota.

ROBERT W. FRIIS, '30, is with the Bell Tel. Labs. Inc., 463 West Street, New York City.

MORRIS J. HAUGE, '30, is with the Westinghouse Electric and Mfg. Co., East Pittsburg, Pennsylvania.

RAYMOND E. HERTEL, '30, is with the U. S. Bureau of Public Roads, Washington, D. C.

Hugo V. Kojola, 30, is with the

Union Carbide Co., Indianapolis, Ind.

RAY E. KULLBERG, '30, is in the Design Department of the Kullberg Manufacturing Co., Minneapolis.

CLARENCE A. KUTZ,'30, is Min. Engr. with the New Cornelia Mines Co., Aio. Arizona

WARREN C. MIELKE, '30, can be addressed care General Electric Co., Erie, Pa

ROBERT C. RAMSDELL, '30, is now working for the Minnesota Highway Department at Milaca, Minnesota.

ADOLPH G. RINGER, '30, is with the Ingersoll Rand Co. of Phillipsburg, New Jersey.

GEORGE F. SNODGRASS, '30, is working for the U. S. Engineers at Sioux City, Iowa.

KARL SOMMERMEYER, '30, whose address is 1115 Lunt Avenue, Chicago, is working for Brown, Jackson, Boelther, and Dienner, of Chicago, Illinois, and is studying Patent Law at night school.

WILLIAM F. THOMPSON, '30, formerly with the Westinghouse Electric and Mfg. Co., is now working for his uncle in the Colorado Public Service Company, Denyer, Colorado.

EDWARD H. FINCH, '31, was married this summer and is taking the Student's Course at the Northern States Power Co.

RUDOLPH M. HANSON, '31, is in the Student Department of the Northern States Power Company, Minneapolis.

BETA

ALBERT J. HOULE, Hon. '96, can be addressed at Box 927, Clifton, Ariz. JAMES TREMBATH, '08, is at 130 Church Street, Grass Valley, California.

Walker B. Longan, '09, can be addressed either at 324 American Bank Bldg., Los Angeles, Calif., or at his home there at 777 South Westmoreland Ave.

- ERNEST KLEPETKO, '11, can be addressed care American Express Co., 83 Grand Rue, Montreux, Switzerland.
- CHAS. G. THIELECKE, '12, is with the Lake View & Star Ltd., Finiston, Western Australia.
- R. R. VAN VALKENBURGH, '13, is Mgr. for the Globe Union Mfg. Co., B St. and Erie Ave., Philadelphia, Pa.
- DURAND A. HALL, Ex. '14, after a year's absence in North Carolina, has returned to his home, 98 El Camino Real, Berkeley, California.
- GEORGE SCHREIBER, '14, is now Supt. of Cameron Mines, Inc., Cripple Creek, Colorado.
- CLYDE W. NICHOLSON, '16, is Mgr. of the Canam Metals Co. at Joplin, Mo.
- 1st. Lt. Harry S. Aldrich, '17, C. A. C., can be addressed care Military Attache, American Legation, Peiping, China.
- SINCLAIR H. LORAIN, '17, can be addressed Copper Mountain, B. C., Canada.
- CARL W. ABRAHAMSON, '21, is now living at 220 Elm St., West, Sudbury, Ontario, Canada.
- JAMES I. CORBETT, '22, can be addressed U. S. Engr. Office, Postal Telegraph Bldg., Kansas City, Mo. 1ST LT. LESTER VOCKE, '22, can be
 - addressed 82nd F. A., Ft. Bliss, Texas.
 - EDWARD J. HUYGE, JR., '23, can be addressed at his home at 1055 Terrace Ave., Grand Rapids, Michigan.

- LLOVD E. DAUME, who attended school in '24 and since has been engaged in Mining and Civil Engineering in Mexico and the west and later Chief Surveyor in the Detroit River Tunnel during construction, has returned to school and is taking active part in Beta chapter.
- ELDRED E. WARNER, '25, is the Kansas City Rep. of the Ingersoll Rand Co., 1600 Baltimore Ave., Kansas City, Mo.
- JOHN DUCLOS BARDILL, '27, can be addressed Cia. Minera de Penoles, S. A. Fundicion No. 2, Monterey, N. L., Mexico.
- LLOYD J. SEESTEDT, '28, can be addresed at the Romulus Gray Iron Foundry, Romulus, Michigan.
- LYLE P. TONNE, '28, is now attending Northern State Teachers College at Marquette, Mich. and expects to obtain his A. B. in '32. WILLIAM B. GERTZ, '29, is an instruct-
- or in Metallurgical Research at the Mich. Coll. of Mining and Tech. BERNARD J. WERKOWSKI, '30, is working for the Globe Union Manufacturing Company in Milwaukee.
- HARRY W. THOMAS, JR., '31, is now engaged as an auto salesman in Birmingham, Michigan.
- GRIFFITH N. THRESHER, '31, who was married last spring, has a position in Iron Mountain, Mich.
- RICHARD WOODS SWINEHEART, '31, is engaged in research for the Dow Chemical Co., at Midland, Michigan.
- PAUL E. YOUNG, '31, is located at Kirkland Lake, Ontario, Canada, with a gold mining company.

GAMMA

- ALAN KISSOCK, '12, is with the V. P. Climax Molybdenum Co., 295 Madison Ave., New York City.
- EDMUND W. WESTERVELT, '13, is at 725 West 28th St., Los Angeles, Calif.
- RUSSELL P. LUKE, '14, is with the South American Development Co. Hiss address is Apt. 655, Guayaquil, Ecuador, S. A.
- HUGH S. McKNIGHT, '15, is Manager of Works, of the Canadian Copper Refineries, Montreal, Que., Canada.
- WAYNE A. HARROD, '16, is Min. Engr. at 547 South Alexandria Ave., Los Angeles, Calif.
- FLETCHER H. WOOD, '16, is with the Standard Oil Co., of Indiana, 910 South Michigan Ave., Chicago, Ill.
- LINCOLN EHNBOM, '17, who has been Assistant General Mgr. of the Piermont Mines at Aurum, Nevada, is now in Grand Junction, Colorado, at 355 Main Street.
- LEE K. WORTH, '17, is with the Stanolind Oil & Gas Co., Hamilton Bldg., Wichita Falls, Texas.
- WILLIAM A. CONLEY, '19, is a mining engineer with the A. S. & R. Co. He can be addressed at Apartado No. 6, Compostela, Nayarit, Mexico.
- VICTOR J. LYNCH, '20, is now with the Patino Mines & Enterprise Cons. at Llallagua, Bolivia, S. A.
- OTIS E. KEOUGH, '21, is Concentration Engineer for the International Smelting Co., Tooele, Utah.
- Louis W. Prentiss, '21, is 1st Lt. 13th Engrs., Ft. Humphrey, Va.
- THOMAS G. FOULKES, '22, now lives at 1126 North New St., Bethlehem, Pa. He is still in the Research

- Dept. of the Bethlehem Steel Co. DAVID L. JONES, '22, can be addressed at 384 South High, Denver, Colorado.
- LUTE J. PARKINSON, '22, is an Engr. for the Anglo-American Corp., S. Africa Ltd., Box 4587, Johannesburg, Transvaal, S. Africa.
- HENRY H. PRATLEY, '22, is now with the Ohio Oil Co. at Bakersfield, California.
- ALLEN HAMBLY, '23, is with the U. S. Patent Office in Washington, D. C.
- FREDERICK L. TYLER, '23, is Mgr. of the Chicago Pneumatic Tool Co., in Houston, Texas. His office is in the Merchants & Mfg. Bldg.
- DANIEL C. FROBES, '24, is now with Gardner-Denver Co., 414 Fletcher American Bldg., Indianapolis, Ind. GEORGE G. GALLAGHER, Ex. '24, has
- returned to Golden and will complete his college course. ELMER E. LINBURG, '24, is now Business Manager for the Gas Utilities
- Co. in Columbus, Ohio.

 R. L. McGlaren, Ex. '25, can be addressed at Box 623, Victor, Colorado.
- JOEL G. STANFORD, '25, is in the College of Law, Columbia University, New York.
- WM. D. WEIMAR, '25, is now living in Apt. 2, 1604 West 39th St., Los Angeles, Calif. He is in the Plant Dept. of the Southern California Telephone Co.
- LEROY T. BROWN, '26, can be addressed at Minas de Matahambre, Matahambre, Province de Pinar del Rio, Cuba.
- Arnold S. Bunte, '26, who has been with the Shell Co. is now Consulting Geologist at Troup, Texas.

HAROLD CRONIN, '26, is with the Geological Survey of New Mexico making his headquarters in Santa Fe, New Mexico.

M. PARKE HUNTINGTON, '26, is with the Standard Oil Co. His address is Box 511, Steamboat Springs, Colo. JOHN H. O'CONNOR, '26, is now

John H. O'Connor, '26, is now Manager of the Russia and India Railroad and can be addressed care Ministry of Public Works, Teheran, Persia. He was in Persia a few years ago, and since that time has been in Buenos Aires, Argentina.

FREDERICK B. KINLEY, '27, was appointed Assistant General Mgr. for the Ingersoll-Rand Co. in India last spring. His address is care Ingersoll Rand Co. Ltd., 15 Clive Street, Cal-

cutta, India.

CLEMENT A. WEINTZ, '27, is taking post-graduate work at the University of Colorado this year. His address is 1639 Ninth St., Boulder, Colo.

ARTHUR Y. BARNEY, Ex. '28, is at 1325 East 14th Ave., Denver, Colo. Douglas Shaw, '28, announces the birth of a son. Douglas Morgan

Shaw, Jr., on July 16, 1931, at Pilares de Nacozari, Sonora, Mexico. Marvin Marsil, '29, is in the sales department of the American Rolling Mills Co. at Middletown, Ohio.

BEN ZWICK, '29, can be addressed

in care of Tropical Oil Co., Apartado No. 30, Barrnaca Bermeja, Colombia, S. A.

KENNETH BOWIE, '30, is with the Empire Gas & Fuel Co. at Ashur, Oklahoma.

Lawton Conger, '30, is Junior Engineer with the Surface Combustion Co. He lives at 3610 Woodmont Road, Toledo, Ohio.

JACK COOLBAUGH, '30, is taking postgraduate work at the University of Calif.

HAROLD E. EADS, '30, was married in January, 1931, to Miss Dorothy Walsh of Denver, Colo.

DAN GRISWOLD, '30, was married to Miss Maud Walton of Lexington, N. C., this past summer. He is with the U. S. Smelting Refining & Mining Co. at Lexington.

A. REAMER PATTEN, '30, announces the birth of a son on June 18, 1931. Brother Patten is at present with the Texas Production Co. at Hamilton, Colorado.

MAX C. SHEBLE, Jr., '30, is now with the Westark Construction Co., at Bryan, Texas.

KENNETH DICKEY, '31, was elected as the "Typical Miner" of the class of 1931, the highest honor that can be conferred by the students of the Colorado School of Mines on one of their number.

DELTA

GEO. P. HANSEN, Ex. '13, is Gen. Supt. of the Gulf States Steel Co., Brown Marx Bldg., Birmingham, Ala.

DR. ROBERT ANDERSON, '14, who was McFallen Medalist in 1925, is Consulting Engineer in Cleveland, Ohio. His address is 1272 W. 112th St., N. W., Cleveland, Ohio. Capt. Russell M. Greenslade, '15, can be addressed at Air Corp., Chanute Field, Rantoul, Ill.

VINCENT A. KAUFMANN, '24, is at 3205 Blaisdell Ave., Minneapolis, Minn.

CHARLES A. DAVIES, '30, has moved to 135 Cambridge Ave., Dayton, Ohio. JOSEPH W. SKOVHOLT, '31, is a construction engineer in the Assembly Department of the Karadio Corporration, Minneapolis.

HARRY L. THORSON, '31, will be located with the General Electric Co. in Chicago, Illinois, this December. IRVING E. SOMMERMEYER, '31, is an Ensign in the U. S. Navy with the Fleet Base Force at San Diego, California.

EPSILON

FRANK H. PROBERT, Hon., '97, Dean of the College of Mining at the University of California, delivered the Commencement address at the Missouri School of Mines & Metallurey on May 23, 1931.

WALTER A. ENGLISH, '10, is with the Superior Oil Co. of Calif., 1100 National City Bank Bldg., Los An-

geles, Calif.

CHARLES M. HERON, '11, is a Min. Engr. and can be addressed at 345 South Serano Ave., Los Angeles, Calif.

RANDOLPH R. VAIL, '11, can be addressed at Box 134, East Rand, Transvaal, South Africa.

JOHN R. SUMAN, '12, Vice President of the Humble Oil & Refining Co., delivered an address to the newly installed student branch of the American Institute of Mining Engineers at the University of Texas. FRANK L. WILSON, '12, can be ad-

dressed at Room 1025, 551 Fifth Ave., New York City.

WM. D. McMillan, '13, can be addressed at 175 Avenue Moliere, Brussels, Belgium.

DONALD H. McLAUGHLIN, '14, has been doing geological work for the Homestake Mining Co. during the past summer, making examinations in California and Canada.

ELLSWORTH Y. DOUGHERTY, '15, is Min. Engr. for the Huronian Min. & Finance Co., 1206 Star Bldg., Toronto, Ont., Canada. JOHN B. KERR, '15, is Pet. Geologist at Foreman, Ark.

EMERSON M. BUTTERWORTH, '16, can be addressed at Nederlandsche Pacific Pet., Maatschappij, Batavia, Java, D. E. I.

HUBERT L. PASCOE, '20, is with the Auto Camp Garage, Inc. 32-44 West Broadway, Salt Lake City, Utah.

GEORGE LEROY KLINGAMAN, '21, is at 1323 Valencia St., Los Angeles, Calif.

JOHN MINOR ROGERS, '21, is the Engineer in charge of the Mining Dept. for the Hayden, Stone & Co., 25 Broad St., New York City. His home is in Flushing, New York.

HUBERT R. THORNBURGH, '21, is with the Gulf Refining Co. of La. His address is Box 1731, Shreveport, La.

ARTHUR B. YATES, '22, recently received a Ph. D. at Harvard and is now geologist for the International Nickel Co. of Canada, at Copper Cliff, Ontario, Can.

GEO. O. SCARFE, '23, can be addressed at 712 The Alameda, Berkeley, Calif.

GEORGES VORBE, '23, is District Geologist for the Texas Pacific Coal & Oil Co. He can be addressed at Box 866, Midland, Texas.

GLOYD M. WILES, '23, is Investigation Engr., Dept. of Inspection, Bell Telephone Labs. Inc., 463 West St., N. Y. City.

- JAMES B. CHAMBERLAIN, '24, is at 97 Linda Ave., Oakland, Calif.
- WILFRID G. DONALDSON, '24, is Geologist for the Caracoles Tin Co. of Bolivia, Casilla 674, La Paz, Bolivia.
- EDGAR A. BOADWAY, '25, is in charge of the property of the Engineers Exploration Co. at Silver City, Idaho.
- ALAN PROBERT, '25, is with the U. S. Smelting Co. at Midvale, Utah.
- JOSEPH D. CERKEL, JR., '27, is assistant petroleum engineer in the Conservation Branch of the U. S. G. S. and is located at Thermopolis, Wyoming.
- WM. HENRY COREY, '29, is now in the Producing Dept. of the Standard Oil Co. of Calif., Standard Oil Bldg., Los Angeles, Calif.

ZETA

- RICHARD B. WARD, '13, is with the U. S. Reclamation Service, Denver, Colorado. PROFESSOR OSCAR A. DINGMAN, '14
- has begun an adventurous search for gold in the Missouri River. NATHAN W. BROWN, '15, can be ad-
- dressed at 5703 Cabanne, St. Louis, Mo. MALCOLM L. McCUNE, '15, can be
- MALCOLM L. McCUNE, '15, can be addressed at 909 Atlas Bldg., Tulsa, Okla.
- CHARLES J. PAINTER, '15, can be addressed at 149 West Second South, Salt Lake Gity, Utah. He is V. P. and Cons. Engr. for the Waterworks Equipment Co. in Salt Lake City.
- ARTHUR W. TEMPLIN, '16, can be addressed 434 West Bldg., Houston, Texas.
 - ALBERT R. BARTELL, '17, can be addressed Clariton, Iowa. RAY E. DEAVER, '17, is Dist. Traffic
- Supt., Amer. Tel. & Tel., New York City. JAMES W. ORTON, '17, is Filteration
- Engineer for the Detroit Water Board. He can be addressed at 12366 Cloverlawn, Detroit, Michigan.

- ARNOLD A. BELL, '18, can be addressed Dupont Rep., Ironwood, Michigan.
- Jos. S. LaMer, '19, can be addressed Somerset Rd., West Norwood, New Jersey.
- J. JAY JAKOSKY, '20, is General Mgr. for the International Geophysical Co., Architects Bldg., Los Angeles, Calif.
- ROBT. M. RUTLEDGE, '22, can be addressed at 508 Ellis Bldg., Phoenix, Ariz.
- 1st. Lt. August E. Schanze, '22, can be addressed 6th Inf. Jefferson Bks., Mo.
- Dannie Bear, '23, can be addressed at Harper, Kansas.
- WM. W. BREHM, '23, is at 314 West 28th St., New York City. HAROLD D. HERNDON, '23, can be ad-
- dressed in care of Empire Gas & Fuel Co., Oil Hill, Kans. G. EDMUND ROSE, '23, can be ad-
- dressed care S. W. Bell Tel. Co., Kansas City, Mo.
- ALEX S. KENNEDY, '25, is with the Link Belt Co., 436 Dwight Bldg., K. C., Mo.
- CLIFFORD G. DAVIS, '26, can be addressed care Kansas City Southern Ry., Frontenac, Kansas.

MAXSON H. KENNEDY, '26, is with the Continental Supply Co., Eldorado, Kansas. ROBERT S. PATTERSON, '27, is with Black and Veatch, Kansas City, Missouri, and can be addressed at 4903 Main St.

ETA

- Capt. Walter L. Medding, '17, can be addressed 2nd Engrs., Ft. Logan, Colo. J. Sidney Marine, '18, has changed
- his address to 500 Fifth Ave., N. Y. City. EDWIN D. RYER, '20, is now living at
- 2540 Yorkshire Road, Birmingham, Mich. WM. C. ROBERTSON, '22, has announced his engagement to Miss
- Mary Paxton Chamberlain of New York City. KENNETH SAWYER LORD, '26, is District Manager (Sales) for the Re-

- liance Elec. & Eng. Co. His mailing address is 1209 Webb-Crawford Bldg., Birmingham, Ala.
- RALPH T. JOPE, '28, has sent notice of his engagement to Miss Florence E. Clayton of Morrisville, Pa.
- CHAS. S. TOPPING, '28, has returned from Venezuela and is now temporarily at Dobbs Ferry, N. Y.
- ROBT. S. RILEY, '29, has announced his engagement to Miss Katherine W. Lilly of Baltimore. He is with the Pratt & Whitney Aircraft Co. at Hartford, Conn.

THETA

- EDW. I. WILLIAMS, '14, is Spec. Rep. for the P. R. Mallory Co., and his address is 3029 E. Washington St., Indianapolis, Ind.
- James T. Kemp, '16, is Tech. Supervisor, Ansonia Branch, American Brass Co., Ansonia, Conn.
- ROBT. V. NORRIS, JR., '17, is Auditor of Operations, Jeddo, Pa.
- CLIFTON T. ARMSTRONG, '18, is Secyof the Rainbow Mines, Inc., Terlingua, Texas.
- WALTER L. FOSTER, '21, is Asst. General Sales Mgr. of the Celluloid Corp., 10 East 40th St., New York City.
- JOHN E. NORTON, '21, is with the Ingersoll Rand Co. at Johannesburgh, Transvaal, South Africa.

- HORATIO POTTER, '21, can be addressed in care of R. S. Bull, 6115 Waterman Ave., St. Louis, Mo.
 - for the Carter Oil Co., and his address is Box 2045, Tulsa, Okla.
- D. J. POPE, '23, can be addressed Cia. Minera Asarco., Charcas, S. L. P., Mexico.
- CHAS. R. INCE, '26, is Asst. Sales Mgr. for the St. Joseph Lead Co., 250 Park Ave., New York City.
- DOUGLASS R. JUDD, '26, engineer for the Hardinge Co., has been transferred to the San Francisco office in the Russ Building.
- ALFRED D. HINCKLEY, '27, has a son of recent birth.
- ROBT. B. DICKSON, '29, is Min. Engr.

- for the American Bureau of Metal Statistics, 33 Rector St., New York City.
- GEORGE R. GOHN, Jr., '29, is with the Bell Telephone Labs., Inc., 463 West St., New York City.
- DON O. NOEL, JR., '29, is Engineer for the Metals Disintegrating Co. at Elizabeth, N. J.
- STEPHEN R. BRADLEY, '31, is engaged in work in Pennsylvania.
- Forest Grant, '31, is engaged in supervising the laying of gas mains in Brooklyn.
- GEORGE WILKINS, '31, is now doing research work in the chemical engineering laboratories on the subject of agitation.

IOTA

- FRED GROTTS, '16, is with the Hubbard Steel Foundry in East Chicago, Indiana.
- CARL G. STIFEL, '16, was married on June 17, 1931, to Miss Alma Clark of St. Louis, Mo. They are living at 625 Skinker Blvd., St. Louis, Mo.
- THEO. C. GERBER, '17, is Capt. Ord.
 Dept. at the Army Industrial College, Washington, D. C.
- MARK L. TERRY, '20, can be addressed at 1110 S. Ochese St., Wewoka, Okla.
- BERYL E. CHARLES, '21, can be addressed at 416 Charles St., Salina, Kansas.
- HERMAN J. MUTZ, '21, received a Professional Degree at the Commencement of the Mo. School of Mines & Metallurgy. He is Asst. Supt. of Mines for the International Nickel Co. at Copper Cliff, Ont., Canada.
- STANLEY HAYES, '22, is now electrical engineer for the Youngblood Hotel Corp. at Enid, Okla.
- WM. H. METZGER, '22, is with the Hinckle Construction Co. at Mason City, Iowa.
- WAYNE S. FRAME, '23, announces the birth of a daughter, Donna Jane, born on March 20, 1931. He is now with the Union Electric Light & Power Co., Eldon, Mo.

- GUY V. MARTIN, '23, received a Masters Degree at the Commencement of the Mo. School of Mines & Metallurgy.
- VANCE H. WEBSTER, '23, announces the birth of a son, Marvin Dwayne, on April 29, 1931. He is now minister of the Calvary Baptist Church at Fargo, N. D.
- JOSEPH WORLEY, '23, was awarded a Professional Degree at the Commencement of the Mo. School of Mines & Metallurgy.
- JOSEPH O. HUNT, '24, received a Professional Degree at the Commencement of the Mo. School of Mines & Metallurgy.
- DWIGHT L. MOODIE, '24, is Sales Engineer for the A. K. Howell Co., 1222 Syndicate Trust Bldg., St. Louis, Mo. His home is at 6823 Virginia Ave., St. Louis, Mo.
- DONALD R. BAKER, '25, announces the birth of a son, Robert Christensen, on May 21, 1931. He is with the Cities Service Co. in Oklahoma City, Okla.
- W. IRWIN SHORT, '26, can be addressed Engr. Dept. Uniontown Center, University of Pittsburgh, Uniontown, Pa.
- CABANNE SMITH, '26, is an Engineer for the Midwest Piping & Supply Co., 1450 S. Second St., St. Louis, Mo.

RALPH E. HILPERT, '27, is Engineer for the Silurian Oil Co., 508 Wright Bldg., Tulsa, Okla.

JAMES F. SMITH, '27, is with the Met. Great Falls Reduction Dept., A. C. M. Co., Great Falls, Mont.

HOWARD HISTED, '28, received a Professional Degree at the Commencement of the Mo. School of Mines & Metallurgy. He is an engineer for the Shenandoah Dives Co., Silverton, Colorado.

EDWARD A. GODAT, JR., '29, is Engr. of the Cerro de Pasco Copper Corp., Oroya, Peru, S. A.

EARL GREGORY, '29, is with the Bucyrus-Eric Co. in South Milwauke, Wisconsin.

THOMAS J. DOVER, JR., '50, and Miss Esther Kidd were married in Ilkton, Maryland, on April 11, 1931. He is with the General Cable Co. and lives at 215 Woodbridge Ave., Metuchen, New Jersey.

RUEL L. KIRKPATRICK, '30, can be addressed at 1339 Dixon Ave., Gainesville, Texas.

ville, Texas.

Virgal, F. Ancell, '31, is with the Jones & Laughlin Steel Co., and can be addressed at 113 Jone Street, Aliquippa, Pa.

BEMIS S. FOLLOWILL, '31, has accepted a fellowship at the University of Alabama.

Joseph F. Frewer, '31, is at 4823 Page Ave., St. Louis, Mo.

RAYMOND J. HAFFNER, '31, is with the U. S. Engineers, and can be addressed at 1229 Shawmut Place, St. Louis, Mo.

ERFERT W. HELLIG, '31, is with the Illinois Highway Dept., Metropolitan Bldg., East St. Louis, Illinois.

HENRY R. HERRON, '31, was married to Miss Isabel Stuart of Mexico, Mo. on June 27, 1931. They are living in Vandalia, Mo., where he is ceramic engineer for the Harbison-Walker Refractories Co.

WM. H. MAKIN, JR., '31, is at 801 Atlantic Ave., Pt. Pleasant, N. J. JOSEPH E. SCALLY, '31, can be addressed at 4055 Humphrey St., St.

Louis, Mo.
GORDON R. THROGMORTON, '31, can
be addressed care A. W. Throgmorton, Greenville, Ky.

WALTER J. WARE, '31, is at the U. S. Engineers Office, Kansas City, Mo. REX Z. WILLIAMS, '31, is an Instructor in Mechanics at the Missouri School of Mines & Metallurey.

KAPPA

CAPT. KENNETH B. BUSH, '16, can be addressed A. G. D., A. G. O., Washington, D. C. RONALD E. FOULKE, '18, is at 407

Calumet Ave., Aurora, Ill.
Capt. Daniel W. Hickey, Jr., '18,

can be addressed 4th C. A., Ft. Amador, Canal Zone.

HARRY REICHELDERFER, '18, is at Fort Sam Houston, Texas.

Wм. Bowersock, '19, is at 7730 Colfax Ave., Chicago, Ill.

HARRY G. HAAKE, '20, is at 1450 Mirasol Ave., Los Angeles, Calif. RALPH B. JOHNSON, '20, can be addressed at 2501 Shepard Drive, Houston, Texas.

ERNEST M. McEvers, '20, can be addressed at 33 N. Third St., Colum-

bus, Ohio.
CHAS. N. BARTLETT, '21, is at 6841

Harper Ave., Chicago, Ill. RALPH L. McCLELLAND, '22, is at 167 Seventh St., Hinsdale, Ill. RUSSELL F. WHARTON, '22, is at 1523 Price Street, Rockford, Ill.

HENRY U. ARNING, '24, can be addressed at 1375 E. Sixth St., Cleveland, Ohio.

GARDNER O. BATES, '24, can be addressed at 4520 N. Hamilton, Chicago, Ill.

GEO. W. ROBINSON, '24, is at 167 W. Grove St., East Orange, New Jersey.

sey.

J. R. WELSH, '24, can be addressed at 103 East Healey, Champaign, Ill.

JAS. A. BLAIR, '25, is at 727 Wisteria

Ave., Pittsburgh, Pa.

Carl A. Borgerson, '25, has been located at 1422 Belle Plaine Ave., Chicago, Ill.

JOHN C. HAPPENNY, '25, can be addressed care Central & SW Utilities, Allen Bldg., Dallas, Texas.

HERBERT A. JACKEL, '25, is at 655 S. Grandview Ave., Dubuque, Iowa. JAS. R. BRODERICK, '26, can be addressed at 217 N. Ninth St., Springfield. III.

DONALD E. PETERSON, '28, can be addressed at 6250 N. Oakley Ave., Chicago, Ill.

LAMBDA

THOMAS P. BILLINGS, '06, is Min. Engr. for the U. S. Smelting, Ref. & Min. Co., 904 Newhouse Bldg., Salt Lake City. Utah.

HOWARD L. BALDWIN, Hon. '07, Past Grand Outer Guard, who is with the San Francisco Harbor Commission as Civil Engineer, has changed his permanent address to 30 Lunado Way, San Francisco, Calif.

WILLIAM H. KELSEY, '11, is Supt. of the Combined Metals Reduction Co. at Bauer, Utah.

ARVID E. ANDERSON, '19, is living at 22 Lyon Place, Elizabeth, N. J. JOHN E. HAYWARD, '20, is with the

JOHN E. HAYWARD, '20, is with the Aetna Ins. Co., and can be addressed at 333 Pine St., San Francisco, Calif.

GEO. R. WATKINS, '20, can be addressed care U. S. Smelting, Ref. & Mining Co., Newhouse Bldg., Salt Lake City, Utah.

THOS. C. ADAMS, '22, is Professor of Civil Engineering at the University of Utah. He can be addressed at 124 F St., Salt Lake City. Jos. P. CAULFIELD, '22, is with the Hudson Bay Mining Co., 500 Royal Bank Bldg., Winnipeg, Canada.

WM. A. SMITH, '22, can be addressed care L. A. & S. L. R. R., Union Depot, Salt Lake City, Utah.

BRENTON W. JENNINGS, '24, is Engr. for the Utah Oil Ref. Co., and can be addressed at 540 E. First South Salt Lake City.

Andrew Lee Christensen, '25, is with the V. P. Baggs Livestock Co., Baggs, Wyoming.

EDW. V. HARDY, '25, can be addressed care Silver King Coalition Mine, A. S. & R. Co., Park City, Utah.

HAROLD R. WEST, Ex. '25, is with the Idaho Power Co., Pocatello, Idaho. HARDIN A. WHITNEY, Ex. '25, is with the Anaconda Copper Co., Great Falls, Montana.

MARCUS CALLAHAN, '26, is with the Anglo-Chilean Nitrate Corp, Tocopilla, Chili, S. A.

ALFRED M. FUNK, '27, is Asst. Foreman, General Electric Co., No. 8 Halley Ave., Reedhurst, Eric, Pa. KENNETH S. GREEN, '27, can be addressed care Highway Dept., Box 12, Sentinel, Ariz.

CLARENCE W. HARTMAN, '27, is with

the Mt. States Tel. & Tel. Co., Salt Lake City.

WM. M. HAYDEN, '28, is with the Tech. Dept. American Brass Co., Waterbury, Conn.

COURTNEY CAMPBELL, '30, is with the Utah Gas and Coke.

HACKETT OLSEN, '30, is assistant County Engineer, Wayne County, Iowa. HAROLD BRADFORD, '31, is working under the supervision of Brother Dorsey A. Lyon. Bradford has won a Fellowship in Metallurgical research.

KENNETH CROPPER, '31, is employed in the Walker Mine, Calif. The talk Brother Cropper gave on Student Employment last fall to the Utah Chapter of the A. S. M. M. E. was published in the Mining and Mctallurgy magazine.

MU

ROBT. B. DUGGER, '24, is with the Pacific Western Oil Co., Goleta, Cal.

NU

Donser A. Lvon, Hon. '98, has resigned as chief of the Bureau of Mines station in Salt Lake City to become Director of the Utah State Engineering Station there. He will now devote his whole time to the State University's program of service to the Mineral Industry.

EDWARD STEIDLE, '11, is Dean of the School of Mineral Industries, State College, Pa., and Director of the Mineral Industries Exp. Station.

WILLIAM W. DARTNELL, '22, is at Springdale Heights, Elm Grove, Wheeling, West Virginia.

PAUL F. MAUER, 22, can be addressed at 204 Pennsylvania Ave., Martinsburg, West Virginia.

JOHN F. NATION, '22, is located at 285 Marietta St., Atlanta, Georgia. FRANCIS G. KREDEL, '23, is a Roll Shop Foreman for the Corrigan Mc-Kinney Steel Co., Cleveland, Ohio. ALEXIS H. TOSTESON, '23, is a sales engineer, and his address is 142 Kavanaugh Place, Wawatosa, Wisconsin.

CHARLES N. WITHEROW, '23, is now research engineer for E. J. Lavino & Co., Philadelphia, Pa.

WALTER F. KAUFMAN, '24, is a Patent Attorney in Lancaster, Pa. THEO. F. LOUGHRY, '24, can be ad-

dressed at 2375 Dorr St., Toledo, Ohio. Jos. C. Major, '24, is employed by the Goodyear Tire & Rubber Co.

at Akron.

JOHN C. MEIKLE, '24, is Secretary
to the Secretary of Labor at Washington, D. C.

ALBERT C. MINETTI, '24, who is with the U. S. Engineers at Pittsburgh, was recently married to Miss Mary Mitchell of Washington, Pa.

- PAUL F. SCHUCKER, '24, is a statistician for Speyer & Co., Investment Bankers.
- JOHN D. JAREMA, '25, is with the Andian National Corp., Ltd., Apartado 130, Cartagena, Colombia,
- S. A. GEORGE EDWARD SLYE, '25, can be reached at 94 McKee St., East Hartford, Connecticut.
- LOUIS C. LUSTENBERGER, '26, is in chain store research for the W. T. Grant Co.
- JOSEPH B. RADDIN, '26, is a fullfledged M. D. and is practicing in Philadelphia.
- Lewis D. Richards, '26, is working for the Hudson Coal Co. at Scranton, Pa. VINCENT B. SMITH, '26, is an assis-
- for the McGraw-Hill Publishing
 Co.
- Frank L. Wagner, '26, is a sales engineer for the Armstrong Cork and Insurance Co.
- LYLE R. SHEPPARD, '27, has been working on the 1,000 mile 24 inch gas line from Texas to Chicago.

- PAUL M. WILLIAMS, '27, can be addressed at Room 1724, 230 S. Clark St., Chicago, Ill.
- Donald H. Callen, '28, is Field Engineer for the Byllesby Eng. and Management Co., 435 Sixth Ave., Pittburgh, Pa. He lives at 2919 Lanpark St., Pittsburgh.
- DONALD L. PUTT, '28, is a Lieutenant in the U. S. Army Air Corps, and is stationed at Selfridge Field.
- GERALD L. SEIBERT, '28, is employed by the Cleveland Union Terminal
- AMBROS W. STAUDT, '28, is a research chemist with the Du Pont Cellophane Co.
- ARTHUR V. WIEBEL, '28, is with the Seabord By-Product Coke Co. of Kearny, N. I.
- JOHN W. LUOMA, '29, is an iron roll metallurgist for the Hubbard Steel Foundary Co. GEORGE M. WILE, '29, is in the fire
- insurance business at Brookline, Mass. DAVID K. TOMER, '30, is with the Koppers Erecting Corporation, Ev-

OMICRON

erett. Mass.

- CARL MENZER, '21, announced his marriage during the summer. He has recently added to his list of honors by being elected vice-president of the National Association of College and University Broadcasters.
- 1st. Lt. James F. Phillips, '22, is a C. E. at Wright Field, Dayton, Ohio.
- Don Haines, '23, is still at 922 N. Sheridan Road, Waukegan, Ill.
- Russell A. Hastings, '23, is now living at 120 Elmwood Ave., Evanston, Ill.

- CHESTER I. MEAD, '23, took his M. D. degree last spring and is now interning at the Montreal General Hospital in Montreal, Canada.
- FRED W. DEKLOTZ, '25, is now the proud father of a baby boy, Fred, Junior.
 - DICK VAN GORP, '26, has a baby girl, Janet Dorothy, born on Oct. 8, 1931.
 - Waldo Towne, '27, was married on Aug. 26, in Waterloo, Iowa to Miss Cora Elaine DeHaai of Armour, S.

FRANK EDWARDS, '28, visited the chapter recently and a very good visit has been reported by the chapter.

JOHN H. FOLWELL, '28, is the proud father of a boy, John Howard, Jr., born on April 21, 1931. Brother Folwell is now living at 263 Flower City Park, Rochester, N. Y.

LLOYD L. HESKETT, '28, can be addressed Rm. 400, Special Maintenance Dept., Telephone Bldg., Des Moines, Iowa.

MARSHALL HURD, '28, is the father of a son, Gordon Paul, born on October 2, 1931.

JOHN D. LYKINS, '28, is now with the Hydro Engineering & Chemical Co. of N. J., which is a subsidiary of the Standard Oil Co. of N. J. and can be addressed at 405 Westminster Ave., Apt. 15, Elizabeth, N. J.

MARVIN J. REID, '28, can be addressed at 409 Raines Park, Rochester,

DONALD L. THOMAS, '28, is now located in Mason City, Iowa, and is selling gas home heating.

WILBUR H. WICKHAM, '28, was married during the summer. He is in the Testing Dept. of the Commonwealth Edison Co. and his address is now 5220 Harper Ave., Chicago, III

Ill.

EARL J. FLANAGAN, '29, still has his
old job with Public Service and can
be addressed at 112 W. Ninth St.,

Streator, Ill. BYRON G. KUNZMAN, '29, is rooming with Francis L. Kline, '28, in Des

with Francis L. Kline, '28, in Des Moines. Brother Kunzman is still with the N. W. Bell Telephone Co. Brother Kline is still with the Des Moines Gas Co. and is now in the Home Heating Dept.

PAUL ARVIDSON, '30, was married on July 3, in Papillion, Neb. to Miss Naomi Barbara Savage of Chillicothe, Mo.

MERION H. JENSEN, '30, is still with the Bell Telephone Co., Sioux City,

JOHN MCINTYRE, '30, has been making lowa City rather regularly for the football games this fall. He has been holding down his old job as field telephone reporter for Doc Menzer at the games. He is in the City Engineer's Office at Cedar Rapids, Iowa. Brother McIntyre was married during the summer.

JOSEPH OSCAR SHEROD, '30, is still with Du Pont Co., and is now located in Hannibal, Missouri. His street address is 619 Bird Street.

CARL E. ("SOCKS") RANTZOW, '31, is working for the Management and Engineering Corp. on a transmission line survey from McGregor to Post-

L. W. SMITH, '31, announced his marriage during the summer.

ART STANLEY, '31, announced his engagement at the end of last school year.

MAURICE ARTHUR TANNER, '31, is with the U. S. Engineers, Rock Island, Ill.

BROTHER FRANK ("WACK") WELLS, '31, gives his official address as 606 Safety Building, Rock Island, Ill. He is doing survey work for the U. S. Engineers and (he says) "no cavorting around evenings."

DI

WILLIAM T. STRALEY, '22, married a Virginia girl. They are living at 637 N. Wilcox Ave., Los Angeles, California.

TIMOTHY HENRY MURPHY, '23, is with the Airway Engineering Dept. of Westinghouse, and can be addressed at the Clover Club, 6744 Penn. Ave., Pittshurg, Pennsylvania.

Newton J. Painter, '23, is Field Supt. of Blast Furnace Gas Cleaners and Sludge Recovery Equipment for the Bartlett Hayward Co., at 2515 Lincoln Bldg., NewYork City. His home address is 411 Todd St., Wilkinsburg, Pennsylvania.

WILLIAM R. Dorsey, Jr., '25, is in the Engineering Dept. of the Chesapeake and Potomac Telephone Co., Ellicott City, Md.

EDWIN T. HOLLAND, '25, has a baby girl two and one-half years old. Brother Holland can be addressed at 1408 East 25th Street, Cleveland, Ohio.

HARRY K. VOUGHT, JR., Ex. '26, who has been on the "lost" list for some years, is in the Inspection Dept. of the Clarence Vought Corp., East Hartford, Conn. This is a division of the United Aircraft and Transportation Co. His home address is 46 Carroll Road, East Hartford, Conn.

WILLIAM W. SYMINGTON, JR., '28, is test engineer for the Glenn L. Martin Co. He can be addressed at 1001 St. Georges Rd., Baltimore, Md.

WILLIAM G. BROWN, '29, can be found at 828 Washington St., Wilmington, Delaware.

EDWARD W. RICHARDS, '29, is Assistant Distribution Engineer of the Eastern Shore Public Service Co. He can be addressed at 316 Camden Ave., Salisbury, Md.

Frank William Rose, Jr., '30, is working with the American Petroleum Inst. at the Bureau of Standards as research engineer. He can be addressed at 1746 Irving St., N. W., Washington, D. C. CLAUDE M. WILKINSON, '30, says

that he is engaged to be married.

He is right of way agent for the
Va. Electric and Power Co. in Richmond.

RHO

- R. Von Biberstein, '21, can be addressed at Box 82, Wilmington, N. C.
- DONALD B. JENKINS, '22, can be addressed care State Highway Commision, Jefferson City, Mo.
- EDWARD A. SUTTON, '26, is in Guernsey, Wyoming.
- WILLIAM W. STUDDERT, '27, is at Washington, N. C.

SIGMA

Franklin Wales Marquis, Hon. '05, is Professor of Mech. Engineering at Ohio State University and can be addressed at 375 W. Eighth Ave., Columbus. Ohio.

CURTIS E. LEMAY, Ex. '29, is 2nd Lt. A. C., Selfridge Field, Mt. Clemens, Mich. EDGAR R. ROBINSON, '29, is married.

JOSEPH LEONARD WEAVER, '30, is married and he and his wife are now in Flinflon. Canada.

GEORGE FREDRIC LEYDORF, '31, is now a proud father.

TAU

EVERETT W. NOBLE, '27, is with the Western Electric Co. as factory planning engineer, 100 Central Ave., Kearney, N. J. He lives at

198 N. Seventh St., Newark, N. J. Donald L. Bibbens, '29, is with the New York Telephone Co.

HAROLD NEAL, '30, can be addressed at 301 Walnut St., Kane, Pa. JULIO VIZCARRONDO, '30, can be addressed at McKinley Street No. 4,

Santurce, Porto Rico.
Kenneth Digney, '31, is working

for a brass company in Syracuse, N. Y.

JOHN T. HENDERSON, '31, has returned to school for graduate work. WALTER EVERSON MOULTON, '31, is back in school taking graduate work.

ARNOLD C. PFAFFHAUSEN, '31, has returned to school for graduate work.

HARRY COMAN WILLIAMS, '31, is connected with a large manufacturing concern near Syracuse.

PH

EARL HART, '22, is in Chicago with the Western Electric Co. He has two sons.

WILLIAM E. GRAY, '23, can be addressed 1909 North St., West Lafavete.

CHESTER A. METZGER, '23, can be addressed a 153 Laporte St., Chicago, Ill.

WILFRID B. WILBUR, '24, is in West Lafayette.

ALVA R. COWELL, '25, can be addressed 640 Homewood Ave., Highland Park, Illinois.

HILTON B. CURRENS, '25, can be addressed at 2816 Ruckle St., Indianapolis, Indiana.

HARRY E. GOTTBERG, '25, is working for the A. R. A. in LaFayette. His family now consists of a wife and two baby girls.

MARK V. KEELER, '25, can be addressed at 501 W. 118th St., Chicago, Ill.

FRANK W. SCOTT, '25, can be addressed at 548 Highland St., Hammond, Indiana.

JOHN P. CHARLES, '26, can be addressed at 63 Williams St., Pontiac, Mich.

HOWARD H. DIETRICH, '26, can be addressed at 320 South 16th St., Richmond, Indiana.

- GEORGE L. JACKSON, '26, is an Asst. Civil Engineer with the Sanitary District of Chicago.
- EDW. E. MILLS, '26, is the Asst. City Civil Engineer at Richmond, Ind.
- PAUL SELDEN STEPHENSON, '26, is at 315½ Main St., Monongehela, Penna.
- QUINCY M. CRATER, '27, is with the Westinghouse Elec., Civic Opera Bldg., Chicago, Ill.
- WILLIAM S. DAVIS, '27, is with the Public Service Co. of Northern Illinois and can be addressed at 1112 S. Cuyler Avenue, Oak Park, Illinois. He has a three year old daughter.
- H. J. Malone, '27, can be addressed at 1826 Berkeley St., Cincinnati, Ohio.
- WILBUR E. ROBBINS, '27, can be addressed at 3220 Cimball Ave., Alton, Ill.
- LESLIE R. RUSSELL, '27, can be addressed at 520 S. Oak Park Ave., Oak Park, Ill.
- DONALD O. BROOKS, '28, is with the General Electric, 230 S. Clark, Chicago, Ill.
 - JAMES F. MENAUGH, '28, is still in the Coal business at Oceloa.
 - ROBERT W. CARSON, '28, is with the Westinghouse Co. at Newark. He is the proud father of a four year old son.
 - Jos. A. Kiovsky, '28, can be addressed at 3900 S. Meridian St., Indianapolis Ind.
 - Sydney L. Smith, '28, is in Versailles, Ind.
 - HAROLD V. WRASSE, '28, is with the Ingersoll Rand Co., Chicago, Ill. JAMES P. BOYD, '29, can be addressed at 126 North East St., Greenfield,
 - Indiana.

 JOSEPH H. CHESAREK, '29, is in the research department of the Frigidaire Corporation in Dayton.

- HARRY E. CURTIS, '29, can be addressed at 126 State House, Indianapolis, Indiana.
 - LYNDON L. DAVENPORT, '29, is working in a power plant in Jeffersonville, Indiana.
- Louis S. Divan, '29, is at 229 Chester Pike, Ridley Park, Pennsylvania.
- ELLSWORTH E. KEISER, '29, is with the Sinclair Refining Co., Whiting, Indiana. MARION H. KAPPS, '29, can be ad-
- dressed at 6374 Globe Ave., Detroit, Mich.
- THOMAS MUELLER, '29, can be addressed at 545 E. 89th Place, Chicago, Ill.
- J. Gus Ropp, '29, is still with the Indiana Bell Telephone Co. in the Plant Department, Indianapolis, Ind.
- JOHN M. SCOTT, '29, can be addressed at 15 E. 23rd St., Indianapolis, Indiana.
- Joe E. Walsmith, '29, Foreman with the Bell Telephone Co. of Indiana, has been transferred to Indianapolis, Ind. Brother Walsmith's address is 119 E. 33rd St.
- HAROLD R. GARMAN, '30, is in Mishawaka, Indiana.
- THOMAS C. HANSON, '30, announces the birth of a daughter, in March, 1931. Brother Hanson is now teaching in the Detroit University.
- WILLIAM R. BENNER, '30, can be addressed Sigma Nu, University of Chicago.
 - Leigh S. Plummer, '30, is in Columbia City, Ind.
 - CARL F. Moss, '30, is soon to start with the Fisher Body Co.
 - HORACE W. ARDUSER, '31, our former Regent, has been unable to find a place for his talent, so he is doing the next best thing by staying at home.

KENNETH WEAVER DIX, '31, is planning on a nice quiet winter at home. LOWELL E. FAWCETT, '31, is working with the Illinois State High-

way Commission.

WINFIELD S. HEATH, '31, is working on his father's farm on week days. ELLIOT R. HALLOWELL, '31, is regis-

tered in the M. E. School. LORENZ JULIAN MAGINSKE, '31, is spending his time at home when he

is not fishing.
WILFORD J. ROBINSON, '31, is with
the Northern Indiana Service Company, located at Michigan City,
Indiana.

ROBERT E. STRADLING, '31, is registered in the M. E. School

CHARLES SYDNEY MITCHELL, '31, is with the Illinois State Highway Commission and is working out of Ioliet.

CHARLES F. TERRELL, '31, is with the Purol Company at Tulsa, Oklahoma.

GILBERT M. WILSON, '31, is located at Evanston, Illinois, with one of the Insull Companies.

DONALD BURT WINSLOW, '31, had not located a job at the time of his last visit at Phi chapter, but he had a few in line.

CHI

FREDERICK F. DENNY, '30, is with the G. E. Co. and his address is 21 N. Ferry St., Schenectady, N. Y. RUSSELL HANSON, '31, is at Flint.

Russell Hanson, '31, is at Flint, Michigan, with the Buick Automobile Co.

LLOYD CLARK HOPKINS, JR., '31, was married early in the summer. He is instructing in the electrical lab. and working on his Master's degree.

JACK H. HOPPER, '30, has been taking the course at the G. E. Co. in Schenectady, N. Y. His most permanent address is Somerton, Ariz.

GARALD KANE, '31, spent the summer in California on a prune ranch and is now reporting for duty with General Electric at Schenectady.

FLOOD KING, '31, is working for the Kansas State Highway Department. CHARLES JAMES MCCASH, '30, is married. He is with the Arizona Highway Dept. and Bureau of Public Roads.

James Leslie Tyson, '31, is working on the Missouri River project for the government.

GLEN WHITE, '31, is employed by the county engineer of Atchinson County.

WALTER B. WILLIAMS, '31, is electrical lab. mechanic and is working on his Master's degree.

JACK WORNER, '31, is working on his Master's degree. He is living in the chapter house. Honors

TAU BETA PI

Beta—Frederick M. Foster, Albert Joseph Pepin.
Gamma—Earl Walter Adams, Ivan George Burrell, James Claude Wilkerson.
Delta—Harold James Kirkstadt.
Zeta—Garold A. Kane.
Theta—Blatterman, Hisson.
Jost—Edwin O, Crawford, James Offutt.

Kappa—Franklin Stewart Brown.

Mu—A. A. Farrell, Frank Barnes Garrett, C. D. Kaeffer, G. W. Taylor. Nu—Henry Evans, Harry Kolb, Jack Edgar Morris.

Omicron—Ralph I. Claasen, Luvern W. Kehe, Carroll Fawcett Phelps, Arthur E. Stanley.

Pi—John E. Blann.
Sigma—Charles Cancik.
Tau—Joseph Carroll.
Upsilon—Diffey.

Chi-Walter A. Brown, Mark Clardy, George D. Gardner, Robert Harding.

SIGMA XI

Delta—William Oakley Binder, Wallace R. Persons. Jota—A. J. Miles. Kappa—Walter Ketting. Omicron—Max Stanley. Sigmea—Carl A. Bryson, Irvin Theodore Fenneman, George F. Leydorf.

PI TAU SIGMA

Alpha—Morris Knight, Ray E. Kullberg. Nu—Albert Criqui, Miles Albert Kinley, George G. Richey. Phi—William John Neuhauser, Don R. Ward, L. B. Wocholski.

ETA KAPPA NU

Alpha-Rudolph M. Hanson.
Delta—Frederick P. McLain.
Nu—Walter Wigton.
Sigma—Harry Eugene Ashmead, Charles Cancik, George F. Leydorf, Robert
Charles Moser. Russell Wilson Steenrod.

PHI KAPPA PHI

Iota—Arthur Samuel Macke, Rex Monroe. Lambda—Reed Ferguson, Lowell Painter. Chi—Elton Dail.

New Publications

ALPHA W. H. EMMONS, Hon.

Geology of Petroleum, Second Edition, published by McGraw-Hill Book Co., New York City.

H. J. WASSON, '14, and Mr. L. W. Mayer. Production Costs as a Factor in Oil

Economics. W. E. HUBBARD, '16, and Mr. H. E.

Petroleum Production in the Texas

Panhandle. B. W. GANRUD, '21 and others The Retreatment of Sayreton jig

middlings on coal washing tables. Reports of Investigations No. 3101, U. S. Bureau of Mines.

B. W. GANRUD, '21, and Messrs, B. M. Bird and C. B. Barmore. Washability studies of the Black Creek bed at Bradford mine, Dix-

iana, Alabama, Reports of Investigations No. 3083 .U. S. Bureau of Mines.

A. M. Gow, '23, and Messrs. R. G. O'Meara and W. T. Schrenk. Compendium on limes in hydrometallurgy and flotation,

Information Circular No. 6423, U. S. Bureau of Mines.

WALTER G. SCOTT, '09, Assist. Supt. Leaching Plant, Slime Leaching Plant at Inspiration,

Arizona Mining Journal, April 15, 1931. W. O. VANDERBURG, '23,

Methods & Costs of Concentrating Tungsten Ores at Atolia, San Bernadino County, California. Information Circular No. 6532,

U. S. Bureau of Mines. W. O. VANDERBURG, '23,

Mining Methods at the Block P Mine of the St. Joseph Lead Co., Hughesville, Montana,

Information Circular No. 6416, U. S. Bureau of Mines.

W. O. VANDERBURG, '23,

Milling methods at the Hughesville concentrator of the St. Joseph Lead Co., Hughesville, Mont., Information Circular No. 6447, U. S. Bureau of Mines.

GAMMA

ALAN KISSOCK, '12,

Molybdenum, Mining and Metallurgy, Nov.,

L. C. FOPEANO, '21, Fire Refining and Casting of Elec-

trolitic Copper, Engineering & Mining Journal,

June 8, 1931.

BYRON B. BOATRIGHT, '22, Theory and Application of Gas Lift Principles.

Petroleum Engineering Handbook, Vol. II, 1931.

BYRON B. BOATRIGHT, '22, The Relation between Gas Energy

and Oil Production. Mining & Metallurgy, Vol. 12,

E. V. BAUSERMAN, Ex. '25, and others, Development and production history on the Salt Flat and other

fault fields of east Texas, Reports of Investigation No. 3059, U. S. Bureau of Mines.

V. L. MATTSON, '26, The Development of Kyanite

Deposits,

Engineering & Mining Journal, August 8, 1931, Abstract from an address delivered to the Southern Appalachian Scientific Society.

DELTA

EDWARD C. KREKEL, '26,

The Physical Properties of Manganese Sulphide with Relation to its
effect in Steel.

Colorado School of Mines Quarterly, Vol. 25, No. 4.

EPSILON

E. A. HERSAM, Hon.

Clastic Form in Size Measurements, Engineering & Mining Journal, May 11, 1931

F. H. PROBERT, Hon. '97, Dean of the College of Mines, University of California.

Our Natural Resource Industries.

L. C. UREN, '11,

An Experimental Study of the Pressure Gradient within the Oil Sand about a High Pressure Producing Wall.

Mining & Metallurgy, Vol. 12, 1931.

JOHN R. SUMAN, '12,

How Petroleum Engineers Can Help the Industry,

Mining & Metallurgy, August, 1931.

F. G. TICKELL, '12,

The Examination of Fragmental Rocks, Stanford University Press, 1931. Price \$5,00.

DONALD H. McLAUGHLIN, '14,
Ore Genesis and Structure of the
Homestake Mine, S. D.
Engineering & Mining Journal,

Oct. 12, 1931.

H. R. THORNBURGH, '22,

Wave Front Diagrams in Seismic Interpretations, American Association of Petroleum Geologists, Bulletin 14, 1930. ALAN PROBERT, '25,

Standardized Sieving Methods,

Engineering & Mining Journal,

April 13, 1931. James Bradley, '28, Mining & Milling at the Spanish

Mine, Mining & Metallurgy, Vol. 12,

No. 298, October 1931.

ERIC J. BRADSHAW, '31,

Petroleum Production in India.

ZETA Jamison Vawter, '16, and Thomas

C. Shedd, Kappa, The Theory of Simple Structures, Published by John Wiley & Sons.

J. J. JAKOSKY, '20, The Use of Geophysics in Gold

Mining,
Arizona Mining Journal, August

J. J. Jakosky, '20, Geophysical Examination of Meteor

Crater, Arizona, Arizona Mining Journal, April 14, 1931

IOTA

H. A. BUEHLER, Hon. State Geologist of Missouri and Vice Pres. of the A. I. M. E.,

Geology and Ore Deposits of the Ozark Regions, Publications A. I. M. E., Oct.

1931. PAUL HATMAKER, '23,

Diatomite as a filler for battery boxes.

Reports of Investigations, No. 3078, U. S. Bureau of Mines. RAY HAFFNER, '31, and Mr. John

Conley, Graphic Solution of Porosity-Saturation Problems,

Intrenational Pertoleum Technology, Vol. 8, No. 6.

THETA

S. E. WOODWORTH, '14, Milling Methods & Costs at the Argonaut Mill, Jackson, California. Information Circular No. 6476,

U. S. Bureau of Mines.
LEO N. PLEIN, '21, and J. W. Paul
A study of falls of roof and coal in
mines of No. 8 field of Eastern
Ohio.

Reports of Investigations, No. 3070, U. S. Bureau of Mines, Washington, D. C.

ALAN MORRIS, '23, Seasonal Variation in Rate of Impingement Corrosion.

> Technical Paper 431, American Institute of Mining Engrs., 1931.

OLD TINSIDES

PROFESSOR HARRY B. CENTER, Boston Univ.

Ay, tear her battered numbers off, Long has she run "on high", And many a Packard voice has cussed To hear her rattling by.

Beneath her we have tugged and sweat, While grease dripped on the floor. The Lizzie of the dusty roads Shall climb the hills no more.

Her mudguards, red with rust, and bent From many a parking crush; Her spark plugs choked, her timer foul, She plowed through mud and slush.

No more she'll bark her coughing way Through city traffic maze; The harpies of the junk yard pick The Ford of bygone days.

Oh, better that her rattling frame Should yield in one grand crash; Her roaring shook the broad highway, Have there her final smash.

Fill to the brim her leaking tank, Open her throttle wide, And give her to the traffic cops, A flivver suicide.

-Boston Post

Lost Theta Tau Alumni

Note: Mail has been returned from the best addresses available for the following:

Alpha Chapter	Epsilon Chapter	Grev. John S., '23
Cleary, Harold F., '22	Davis, Sherwin B., '12	Jones, Geo. M., '27
	Zeta Chapter	Rumph, Lee M., '21 Stephens, Leone R., ex '21
Beta Chapter	Bown, Wm. F. '21	Wadsworth, Darrell B., '26
Alsip, Albert A., '08	Holt, Hobart C., '18	Nu Chapter

Evans, Carl W., '11 'ay, Wm. W., ex '22 liker, Eugene A., '10	Madden, J. Edgar, '18 Nutting, Floyd L., '15	O'Connor, John M., '26 Porterfield, David C., '2
	Eta Chapter	Omicron Chapter
Gamma Chahter		

Gamma Chapter	Benton, Herbert G., '15	Bowman, P. F., '22
Anderson, Robt. A., '27 Auman, Egbert E., '24	Brotherton, Wm. G., '13 Dickson, Benj. A., 22 Polley, Ernest E., ex '15	Eaton, Malcolm, '24 Fisher, Darrell, '25
Clapp, Leroy P., '08 Clothier, Conrad F., '24		Gunderson, Wendal, '26 Rich, Edmund, '22
Davis, Thomas, '25 Gibson, Robt. W., '18	Iota Chapter Burg, Robert, S., '16	Spear, R. B., '31
Graham David I '21		

Robertson, Edw. E., '24 Stuart, Samuel H., '23 Watkins, Marion W., '23 Wright, Kenneth M., '20	Xi Chapter Miller, Noel H., '26 Rye, Frederick S., '26
*	Thayer, F. W., '26
	Stuart, Samuel H., '23 Watkins, Marion W., '23 Wright, Kenneth M., '20

	Tucker, Morrell L., '26	Pi Chapter
Delta Chapter	Lambda Chapter	Weir, Paul L., '23
Arms, Chas. S., '12 Jenks, Karl E., '19	Anderson, C. Milton, '20	

Moseley, Edgar T., '24

Browning, Thos. C., ex '23

Severin, Carl, '10

Sprowl, Norman E., '17

Wherry, Harry B., '23

Browning, Thos. C., ex '21

Rho Chapter

Smith, Perry M., '28

Fredericksen, Louis J., '27

We would greatly appreciate receiving news items that you feel would prove of interest to the readers of THE GERR. New items about brothers, including business promotions, marriages, births, etc., or special articles or papers by members, are of particular interest.





the field of fraternity jewelry has been won only by a rigid adherence to our policy of friendship and good will in our business contacts.

Our task in service is incomplete until each customer has become a loval friend. and adviser.

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